Regular Town Council Meeting

June 16, 2025
6:00 PM
Town Council Chambers
Chair: Arne Jorgensen

NOTICE: THE VIDEO AND AUDIO FOR THIS MEETING ARE STREAMED TO THE PUBLIC VIA THE INTERNET AND MOBILE DEVICES WITH VIEWS THAT ENCOMPASS ALL AREAS, PARTICIPANTS AND AUDIENCE MEMBERS. PLEASE SILENCE ALL ELECTRONIC DEVICES DURING THE MEETING.

I. ZOOM LINK FOR PUBLIC PARTICIPATION

The Town reserves the right to close Public Comment via Zoom at any time. In-person comment will continue to be taken and written comments can always be submitted to Town Council by emailing electedofficials@jacksonwy.gov.

To join, click link or copy it to your browser: https://us02web.zoom.us/j/84787424182?pwd=YOuERcq5NDTaTM4qlxq0fQCT3C5DqY.1

Or join at zoom.com with Webinar ID: **847 8742 4182** and Password: **83001** or by phone: **+1 346 248 7799**

II. OPENING

A. Call to Order and Roll Call

B. Pledge of Allegiance

C. Land Acknowledgement

D. Announcements/Proclamations

1. Introduction of Tate Coleman, Transit Service Planning and Marketing Coordinator, and Lisa Alverson, Reserve Police Officer

III. PUBLIC COMMENT

This section is reserved for public comment about items not included in this agenda. Public comment is limited to 3 minutes. As a general practice, Council does not discuss, debate, or act on issues raised under public comment. Council may or may not discuss an issue raised under Public Comment later in the meeting during Matters from Mayor and Council at their discretion. If you would like to communicate with Council during the meeting about an item on the agenda, please wait until public comment has been called for that item. Public comment may also be submitted to Council at any time by emailing *electedofficials@jacksonwy.gov*.

IV. CONSENT CALENDAR

All matters listed in this section are considered to be of routine nature by the governing body and will be enacted in one motion, unless it is removed from the consent calendar and considered separately by Council. Public comment may be given on any item.

A. Meeting Minutes

1. May 27, 2025 Special Town Council Meeting
2. June 2, 2025 Special Town Council Meeting

B. Disbursements

C. May Municipal Court Report

D. Request for Information for Electric Vehicle Charging Stations (Tanya Anderson)

E. Valley Springs Sewer Connection Request (E25-0050) (Brian Lenz)

F. Elk Run Thaw Well License Agreement (Lea Colasuonno)

G. Employee Leases at West Snow King and Moose St. (Lynsey Lenamond)

Please note that at any point during the meeting, the Mayor may change the order of items listed on this agenda. In order to ensure that you are present at the time your item of interest is discussed, please join the meeting at the beginning to hear any changes to the schedule or agenda.

V. PUBLIC HEARINGS, DISCUSSION AND/OR POSSIBLE ACTION ITEMS

A. Administration

1. Town of Jackson Fiscal Year 2026 Budget Public Hearing (Tyler Sinclair)

B. Police

1. Special Event: Farmer's Market (Kara Hobby)

C. Planning & Building

1. Three Development Plans for Lots 53, 57, & 58 within the Snow King Master Plan (P24-168, P24-174 & P24-175) (Tyler Valentine)

VI. RESOLUTIONS

A. Resolution 25-12: FY25 Budget Amendment #4 (Kelly Thompson & Tyler Sinclair)

B. Resolution 25-13: FY26 Budget Adoption (Tyler Sinclair)

C. Resolution 25-14: Fee Schedule (Kelly Thompson)

D. Resolution 25-15: FAA Grant for JH Airport (Riley Hovorka & Lea Colasuonno)

E. Resolution 25-16: Dissolution of the Equity Task Force (Susan Scarlata)

VII. ORDINANCES

A. Ordinance W: An Ordinance Amending Title 6 to Include Special Malt Beverage Permits (Second Reading)

B. Ordinance X: An Ordinance Relating to the Public Parking Garage (Second Reading)

C. Ordinance Y: An Ordinance Granting a Franchise to CenturyLink (Lea Colasuonno, First Reading)

VIII. MATTERS FROM MAYOR AND COUNCIL

A. Board and Commission Reports

B. Board of Examiners Appointment (Lynsey Lenamond)

IX. MATTERS FROM THE TOWN MANAGER

A. Town Manager's Report

X. ADJOURN

Please note that at any point during the meeting, the Mayor may change the order of items listed on this agenda. In order to ensure that you are present at the time your item of interest is discussed, please join the meeting at the beginning to hear any changes to the schedule or agenda.

Pledge of Allegiance

I pledge allegiance to the flag of the United States of America, and to the Republic for which it stands, one Nation under God, indivisible, with liberty and justice for all.

Land Acknowledgement

We recognize that the land we are gathering on is the ancestral homeland of the Mountain Shoshone People who stewarded it for thousands of years and that many other tribes also lived upon and cared for this area including the Bannock, Blackfoot, Crow, Eastern Shoshone, Gros Ventre, Nez Perce, Northern Arapaho tribes, and others. With gratitude, we honor Indigenous Peoples, past and present. We also acknowledge the sovereignty of the Native nations closest to Jackson whose land was taken through broken treaties that resulted in the creation of the Wind River and Fort Hall Indian Reservations. We recognize this acknowledgement is simply a first step. The Town of Jackson is committed to continued and informed action to connect with indigenous people.

Employee Introductions

Tate Coleman:

Tate Coleman most recently served as Program Director for the South County Connector transit program in Great Barrington, MA. Tate holds master's degrees in Regional Planning and Civil Engineering from the University of Massachusetts, Amherst, where he also served as a USDOT Dwight D. Eisenhower Graduate Transportation Fellow (2023-2024). Tate has worked and volunteered for the Town of Great Barrington, MA, the Berkshire Regional Transit Authority, and the Berkshire Regional Planning Commission in various capacities for over 5 years.

Lisa Alverson:

Lisa is from Pensacola, Florida. She retired from the Pensacola Police Department in 2021 after 27 years of service. Last year she relocated to Jackson to Jackson to volunteer at the fish hatchery and fell in love with Jackson. She decided to make it her home. She is excited to get back in the saddle, doing what she loves to do best…serving her community and making a difference. Being grateful to work for such a unique city; she is excited to become a part of the highly professional law enforcement in Jackson.

TOWN COUNCIL PROCEEDINGS – UNAPPROVED

MAY 27, 2025 **JACKSON, WYOMING**

The Jackson Town Council met in special session in the Town Hall Council Chambers, located at 150 East Pearl in Jackson, at 1:30 P.M. This meeting was held in-person and through the Zoom platform. Upon roll call the following were found to be present:

TOWN COUNCIL: Mayor Arne Jorgensen, Jonathan Schechter, Devon Viehman, Kevin Regan, and Alyson Spery. *Via Zoom*: Jonathan Schechter.

STAFF: Tyler Sinclair, Roxanne Robinson, Lea Colasuonno, Kelly Thompson, Floren Poliseo, Bruce Abel. Michelle Weber, Lynsey Lenamond, and Riley Hovorka.

FY26 Budget Overview. Tyler Sinclair, Bruce Abel, Lynsey Lenamond, Lea Colasuonno, Michelle Weber, and Roxanne Robinson made staff comment. Council held discussion with staff. Nicole Davis made public comment.

Council recessed at 2:55 p.m. and reconvened at 3:05 p.m.

Discussion continued. No motions were made.

Adjourn. A motion was made by Alyson Spery and seconded by Devon Viehman to adjourn. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried. The meeting adjourned at 4:15 p.m.

TOWN OF JACKSON

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ATTEST: Arne O. Jorgensen, Mayor

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Riley Hovorka, Town Clerk

Minutes: rh. Publish JH News & Guide: June 4, 2025

TOWN COUNCIL PROCEEDINGS - UNAPPROVED

JUNE 2, 2025 **JACKSON, WYOMING**

The Jackson Town Council met in regular session in the Town Hall Council Chambers located at 150 East Pearl in Jackson, at 6:00 P.M. This meeting was held in-person and through the Zoom platform. Upon roll call the following were found to be present:

TOWN COUNCIL: Mayor Arne Jorgensen, Jonathan Schechter, Devon Viehman, Kevin Regan, and Alyson Spery.

STAFF: Tyler Sinclair, Lea Colasuonno, Floren Poliseo, Johnny Ziem, Brian Lenz, Paul Anthony, Andrew Bowen, Tyler Valentine, Michelle Weber, Tanya Anderson, April Norton, Lynsey Lenamond, and Riley Hovorka. *Via Zoom*: Charlotte Frei and Susan Scarlata.

The Pledge of Allegiance was led by Mayor Jorgensen. The Land Acknowledgement was read by Mayor Jorgensen. Mayor Jorgensen proclaimed June 6, 2025 as National Gun Violence Awareness Day and June 2025 as Pride Month.

Public Comment. There was no public comment.

Consent Calendar. A motion was made by Jonathan Schechter and seconded by Devon Viehman to approve the consent calendar including items A-J as presented with the following motions:

A. **Meeting Minutes.** To approve meeting minutes from the May 14, 2025 Special Town Council Meeting - A.M., May 14, 2025 Special Town Council Meeting - P.M., and May 19, 2025 Regular Town Council Meeting

B. **Disbursements.** To approve the disbursements as presented. ACE HARDWARE $787.80; ACTION EXCAVATION $502.84; ALDER ENVIRONMENTAL LLC $7,088.50; ALPHAGRAPHICS $175.51; AMAZON $481.93; AMERICAN PUMP AND DRILLING $29.81; BISON LUMBER $853.54; BLUE SPRUCE CLEANERS,INC $40.54; BORTEK UTILITIES $139.93; BRIGGS UNDERGROUND $62.89; BRIGGS, ERIC L $83.70; CENTURYLINK $13,664.88; CERTIFIED LABORATORIES $905.85; CHARLIE'S PLUMBING OF JH $720.00; CITY OF DRIGGS $1,976.34; CONRAD & BISCHOFF INC. $40,437.61; COOK GRADING AND PAVING, LLC $680,332.87; COPS FOR KIDS JH $7,465.57; DAWSON INFRASTRUCTURE SOLUTIONS $2,055.28; DECKER GLASS $217.25; DIRECT AUTOMOTIVE DIST $171.21; DIVISION OF CHILD SUPPORT ENFORCEMENT $509.23; DOVER DRILLING $33.12; DYNAMIC CONTROLS, LLC $1,799.00; E & S CONSTRUCTION, LLC $143.09; EDUCATION AND OUTREACH COMPANY $989.00; ENERGY LABORATORIES INC. $344.00; ESRI, INC $700.00; EVIDENT $825.00; FALL RIVER PROPANE $703.75; FALL RIVER RURAL ELECTIC $82.60; FC EXCAVATION, LLC $34,151.49; FERGUSON ENTERPRISES, INC $38.79; FIREHOSE SUPPLY $309.70; FLEETPRIDE $119.81; FREEDOM MAILING SERVICE INC. $1,876.21; FREMONT MOTOR CO. $104,804.00; FROG CREEK PARTNERS, LLC $1,596.00; GFOA $50.00; GILLIG LLC $1,600.80; GRAINGER $1,058.83; HALPIN, MICHAEL $56.97; HAZ-TECH DRILLING $11.00; HD FOWLER COMPANY $841.36; HIGH COUNTRY LINEN $1,171.52; INGERG-MILLER $3.96; INTERSTATE BATTERY $1,446.55; JACKSON CURBSIDE INC. $2,881.00; JACKSON GROUP LOCKBOX $553.27; JACKSON HOLE CHILDRENS MUSEUM $100.00; JACKSON HOLE HISTORICAL SOCIET - $2,177.51; JACKSON HOLE NEWS & GUIDE $1,076.47; JACKSON PAINT AND GLASS, INC. $2,155.91; JCB UNDERGROUND $11.97; JKL ASSOCIATES, INC $27.27; JONES SIMKINS $600.00; JORGENSEN ASSOCIATES, PC $90.32; MATTHEWS, TONY $573.33; MERRILL INC $63.52; METROQUIP INC $2,178.70; MSC INDUSTRIAL SUPPLY CO $29.40; NAPA AUTO PARTS INC. $1,500.81; NOBLE TREE INC $24,000.00; NORMAND, JACOB $102.00; OLESON, ZACH $1,500.00; ON SIGHT LAND SURVEYORS INC. $600.00; PALAZZOLO, MICHAEL $77.83; POINT S REXBURG $4,211.70; PREMIER TRUCK- SALT LAKE CITY -$481.13; PREMIER VEHICLE INSTALLATION, INC $711.51; QUADIENT FINANCE USA, INV $2,177.51; RON'S TOWING LLC $325.00; RUSCHILL, RUSSELL $102.00; SEASONS HANDYWORKS AND PROPERTY SERVICES $2,850.00; SHERVIN'S INDEPENDENT OIL $317.79; SHERWIN-WILLIAMS CO. $95.34; SHORELINE CONSULTING $2,272.72; SILVER CREEK SUPPLY $165.64; SOLV BUSINESS SOLUTIONS-SAFEGUARD $526.25; SOSA'S JANITORIAL SERVICE $6,120.00; SPECTRUM $100.01; SPORTWORKS GLOBAL LLC $13,240.20; ST JOHN'S HOSPITAL $130.00; STEPHENS, TALON $77.83; SUNRISE ENVIRONMENTAL $177.90; SUSTAINABLE STRATEGIES DC, LLC $7,500.00; TAYLOR, RILEY $1,267.93; TEN POINT SALES AND MARKETING LLC $984.32; TETON COUNTY FAIR $80,000.00; TETON COUNTY SHERIFF'S-JAIL $1,925.00; TETON MOTORS INC $7,955.91; TETON RENTAL CENTER $66.50; TETON VALLEY NEWS $124.10; THE AFTERMARKET PARTS COMPANY, LLC $1,378.12; TMSC LLC $4,878.47; TRAFFIC SAFETY STORE $296.38; TREFREN,

TRACEY $102.00; USA BLUE BOOK $8,345.77; UTAH SAFETY COUNCIL $250.00; VASIN, PAVEL $100.00; VERIZON WIRELESS $10,298.39; VIRGINIAN VILLAGE CONDO HOA $1,250.00; WEST COAST CODE CONSULTANTS $5,445.00; WESTERN STATE $235.28; WESTWOOD CURTIS $232,098.21; WHITE GLOVE CLEANING, INC. $224.00; WRENCH IT PLUMBING & HEATING INC $555.00

C. **Partial Vacation without Replat at 410 E. Gill Ave. (P25-056).** To acknowledge a Partial Vacation without Replat for LOTS 1, 2 & 3, BLK 5, Gill Addition to the Town of Jackson subject to the Town LDRs, the departmental reviews, minor changes by staff, and this staff report dated June 2, 2025.

D. **Acceptance of Bid for Purchase and Relocation of the Mercer Cabin.** To accept the proposal from Zach Stern to purchase the Mercer Cabin for $100 and relocate it to 234 East Pearl Avenue, and authorize the Mayor to sign the legal documents necessary to effectuate the sale and removal from Karns Meadow.

E. **Amendments to Agreements Governing Compressed Natural Gas Station Located at Lower Valley Energy.** To approve the First Amendment to Ground Lease for Compressed Natural Gas Fueling Station and the First Amendment to Agreement Regarding Compressed Natural Gas Fueling Station, subject to minor changes by staff.

F. **Consideration of Deed Restrictions for Workforce Rental Housing at The Glenwood Units #22, 23, 24 Located at 165 N. Glenwood.** To approve the Restrictions for The Glenwood Workforce Housing located at 165 N. Glenwood Units 22, 23, and 24.

G. **First Amendment to Sweet Spirits Child Care Lease.** To approve the First Amendment to Lease Agreement with Sweet Spirits Child Care LLC, subject to minor changes by staff.

H. **Sublease Agreement for Aspen Drive Employee Housing Unit.** To approve the sublease agreement for a unit on Aspen Drive subject to minor changes by staff.

I. **Parks and Recreation Budget Amendment for Rec Center Sauna.** To approve the use of the Parks and Recreation fund balance (Teton County Fund 19) in the amount of $49,128.00 for the Rec Center sauna replacement.

J. **Payment Processor Parking Access Revenue Control System (PARCS) at Millward/Simpson Garage.** To approve both the Windcave Agreement and the Merchant Agreement, subject to minor changes by staff.

There was no public comment on the consent calendar. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Application for Transfer of a Restaurant Liquor License from ChinaTown Lee Inc. at 850 W. Broadway Suite A. Mayor Jorgensen opened the public hearing. Lynsey Lenamond made staff comment. Council held discussion with staff. There was no public comment. Having considered Wyoming Statute 12-4-104(b) statutory factors for this application, a motion was made by Devon Viehman and seconded by Jonathan Schechter to approve the transfer of the restaurant liquor license from ChinaTown Lee Inc to New Chinatown Restaurant WY LLC at 850 W. Broadway, Suite A, subject to the following conditions, and further direct the Town Clerk's office to issue the license upon confirmation that the conditions of approval have been met within the timeframe set forth in Wyoming Statute 12-4-103(a)(iv):

1. The Clerk's office shall not issue the license until all required Town licenses and permits have been obtained.
2. Any additional minor corrections deemed necessary by staff and the Wyoming Liquor Division.

Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Hitching Post Development Plan (P25-041). Andrew Bowen, Paul Anthony, April Norton, and Brian Lenz made staff comment. Council held discussion with staff. Hal Hutchinson, Sean Ryan, and Kyle Mead commented on behalf of the applicant. There was no public comment. A motion was made by Devon Viehman and seconded by Kevin Regan to approve Development Plan P25-041 for a 72-unit residential development located at 460 East Broadway Avenue, based upon the findings presented in this staff report, the departmental reviews attached, and the conditions of approval listed below:

1. As part of the Building Permit submission, the Applicant shall include a sidewalk design on the south side of East Broadway, either attached or detached, to provide continuous pedestrian

access to Redmond Street to be reviewed and approved by the Town Engineer. This sidewalk shall be constructed prior by the applicant to the issuance of a Certificate of Occupancy.

2. As part of the Building Permit submission, the Applicant shall provide a signage plan or other strategy acceptable to the Planning Director that demonstrates how the 32 off-site parking spaces will be reserved exclusively for the residents of the Hitching Post.
3. To ensure compliance with the standards of the Town of Jackson Land Development Regulations and the Housing Department Rules & Regulations, all dwelling units (Accessory Residential Units) shall be subject to a deed restriction for Workforce Rental housing, in perpetuity, in a form established and approved by the Housing Department. This deed restriction shall be recorded prior to the issuance of a Certificate of Occupancy.
4. All proposed modifications to housing deed restrictions shall be submitted to the Jackson/Teton County Housing Department for final review and approval by the Town Council.

Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Council recessed at 7:44pm and reconvened at 7:51pm.

Three Development Plans for Lots 53, 57, and 58 within the Snow King Master Plan (P24-168, P24-174, P24-175). Tyler Valentine made staff comment. S.R. Mills and Adam Janek commented on Council held discussion with staff. Richard Murray, Kyle Levine, Jenny Herman, and Harry Dannenberg made public comment.

A motion was made by Jonathan Schechter and seconded by Devon Viehman to continue Development Plan P24-168 to the regularly scheduled Town Council meeting on June 16, 2025. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

A motion was made by Jonathan Schechter and seconded by Devon Viehman to continue Development Plan P24-174 to the regularly scheduled Town Council meeting on June 16, 2025. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

A motion was made by Jonathan Schechter and seconded by Devon Viehman to continue Development Plan P24-175 to the regularly scheduled Town Council meeting on June 16, 2025. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Council recessed at 9:31pm and reconvened at 9:37pm.

Resolution 25-11. Rich Ochs made staff comment. Council held discussion with staff. There was no public comment. A motion was made by Devon Viehman and seconded by Kevin Regan to approve Resolution 25-11, adopting the 2025–2030 Region 8 Hazard Mitigation Plan as an official planning document for the Town of Jackson. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Ordinances. A motion was made by Jonathan Schechter and seconded by Devon Viehman to read ordinances in short title. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Ordinance V: An Ordinance Extending the Term of the Franchise Granted to CenturyLink.

AN ORDINANCE AMENDING ORDINANCE 1243 EXTENDING THE TERM OF THE FRANCHISE GRANTED TO QWEST CORPORATION D/B/A CENTURYLINK QC ON BEHALF OF ITSELF TO OPERATE AND MAINTAIN A TELECOMMUNICATIONS SYSTEM FOR THE PURPOSE OF SUPPLYING SERVICE TO THE TOWN OF JACKSON AND GRANTED ON DECEMBER 18, 2019.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING, IN REGULAR SESSION DULY ASSEMBLED, THAT:

There was no public comment. A motion was made by Jonathan Schechter and seconded by Devon Viehman to approve Ordinance V, an ordinance granting an extension of the current CenturyLink Franchise to July 31, 2025, on third reading and designate it Ordinance 1439. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Ordinance W: An Ordinance Amending Title 6 to Include Special Malt Beverage Permits.

AN ORDINANCE AMENDING CHAPTER 6.20, APPLICATION FOR LICENSES AND PERMITS, AND CHAPTER 6.50, SPECIAL 24-HOUR PERMITS, OF TITLE 6, LIQUOR LICENSES AND PERMITS, OF THE MUNICIPAL CODE OF THE TOWN OF JACKSON, WYOMING.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING:

There was no public comment. A motion was made by Devon Viehman and seconded by Kevin Regan to approve Ordinance W on first reading. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Ordinance X: An Ordinance Relating to the Public Parking Garage.

AN ORDINANCE AMENDING TITLE 10, VEHICLES AND TRAFFIC, CHAPTER 10.04, TRAFFIC REGULATIONS—ADOPTION OF UNIFORM ACT, OF THE MUNICIPAL CODE OF THE TOWN OF JACKSON,

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING:

Lea Colasuonno and Charlotte Frei made staff comment. There was no public comment. Council held discussion. A motion was made by Devon Viehman and seconded by Jonathan Schechter to approve Ordinance X on first reading. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Matters from Mayor and Council. Council discussed parking garage rates. Lea Colasuonno made staff comment. A motion was made by Jonathan Schechter and seconded by Alyson Spery to direct staff to adjust the rate schedule for the parking garage with the arm bar system from the hours of 10:00pm to 4:00am with a rate of $2.00 per hour to midnight to 4:00am with a rate of $3.00 per hour. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Town Manager's Report. Tyler Sinclair made staff comment. The Town Manager's report contained updates on temporary sign permits, a letter of support for Friends of Pathways, the Travel and Tourism Board's summer visitor management campaign, pre-application to Land & Water Conservation Fund for development of Karns Meadow, and an open house for FY26 Budget. A motion was made by Jonathan Schechter and seconded by Kevin Regan to approve the Town Manager's Report. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried.

Adjourn. A motion was made by Jonathan Schechter and seconded by Kevin Regan to adjourn. Mayor Jorgensen called for the vote. The vote showed all in favor. The motion carried. The meeting adjourned at 10:05 p.m.

TOWN OF JACKSON

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ATTEST: Arne O. Jorgensen, Mayor

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Riley Hovorka, Town Clerk

Minutes: rh. Publish JH News & Guide: June 18, 2025

Report Criteria:
Detail report.
Invoices with totals above $0 included.
Paid and unpaid invoices included.

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
7072	120WATER	INV011297	COMMS AND PTD MODULE	04/30/2025	9,469.00	.00	
Total 7072:					9,469.00	.00	
328	842-NCPERS GROUP WYOMIN	842062025	PAYROLL DEDUCTIONS	05/01/2025	80.00	80.00	06/04/2025
Total 328:					80.00	80.00	
7509	A & I DISTRIBUTORS	31881-00	meth55 drum deposit	01/10/2025	263.95	.00	
Total 7509:					263.95	.00	
7523	A43 ARCHITECTURE	2507-0525	TOJ PUBLIC WORKS	06/03/2025	3,963.23	.00	
7523	A43 ARCHITECTURE	2508-0525	TOJ TOWN HALL	06/03/2025	862.50	.00	
7523	A43 ARCHITECTURE	2509-0525	675 E HANSON	06/03/2025	5,703.72	.00	
7523	A43 ARCHITECTURE	2511-0525	ADA REVIEW	06/03/2025	2,568.75	.00	
Total 7523:					13,098.20	.00	
6912	ABEL, BRUCE	060625	REIMBURSEMENT	06/06/2025	116.19	.00	
Total 6912:					116.19	.00	
51	ACE HARDWARE	894992	KEYS	01/11/2025	15.96	.00	
51	ACE HARDWARE	895477	STAPLES	01/16/2025	8.99	.00	
51	ACE HARDWARE	895504	AVIATION SNIP STRAINGHT	01/16/2025	38.98	.00	
51	ACE HARDWARE	896219	SNAP TOGGLER,SCREWS AND	01/23/2025	73.46	.00	
51	ACE HARDWARE	896368	TWO TOOL BOX PACKOUT 2DR	01/24/2025	599.96	.00	
51	ACE HARDWARE	900279	WATER JET NOZZLE	03/12/2025	8.99	.00	
51	ACE HARDWARE	900400	COUPLE HOSE	03/13/2025	7.99	.00	
51	ACE HARDWARE	900569	GLASS CLEANER	03/14/2025	2.99	.00	
51	ACE HARDWARE	900889	BUCKET	03/19/2025	7.49	.00	
51	ACE HARDWARE	901148	CREDIT	03/21/2025	11.99-	.00	
51	ACE HARDWARE	901423	SUPPLIES	03/25/2025	37.43	.00	
51	ACE HARDWARE	901466	CHILLY GRIP GLOVES	03/26/2025	11.99	.00	
51	ACE HARDWARE	901513	SUPPLIES	03/26/2025	50.94	.00	
51	ACE HARDWARE	901621	SCREWS	03/27/2025	12.37	.00	
51	ACE HARDWARE	902324	DRILL BIT	04/04/2025	14.99	.00	
51	ACE HARDWARE	902334	DRILL BIT	04/04/2025	8.99	.00	
51	ACE HARDWARE	902732	SUPPLIES	04/09/2025	56.95	.00	
51	ACE HARDWARE	902759	LAWN AND LEAF BAGS	04/09/2025	1,396.00	.00	
51	ACE HARDWARE	904439	SCREWS	04/25/2025	10.99	.00	
51	ACE HARDWARE	906014	MARKING PAINT	05/08/2025	23.98	.00	
51	ACE HARDWARE	906073	MARKING PAINT	05/09/2025	23.98	.00	
51	ACE HARDWARE	906392	FAUCETS	05/12/2025	259.98	.00	
51	ACE HARDWARE	906715	CONNECTORS	05/14/2025	11.99	.00	
51	ACE HARDWARE	906731	CONNECTORS	05/14/2025	14.99	.00	
51	ACE HARDWARE	906832	MARKING PAINT	05/15/2025	35.97	.00	
51	ACE HARDWARE	907084	UTILITY KNIFE,FASTBACK COM	05/17/2025	40.72	.00	
51	ACE HARDWARE	907207	CEMENT	05/19/2025	18.78	.00	
51	ACE HARDWARE	907297	DRILL BIT	05/19/2025	8.99	.00	
51	ACE HARDWARE	907328	MARKING PAINT	05/20/2025	91.12	.00	
51	ACE HARDWARE	907355	GLOVES	05/20/2025	14.48	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
51	ACE HARDWARE	907417	MARKING FLAGS	05/20/2025	13.50	.00	
51	ACE HARDWARE	907436	GOGGLES	05/20/2025	20.98	.00	
51	ACE HARDWARE	907473	CHISEL	05/21/2025	8.99	.00	
51	ACE HARDWARE	907559	CLAMP	05/21/2025	37.98	.00	
51	ACE HARDWARE	907573	MASKING TAPE	05/21/2025	8.99	.00	
51	ACE HARDWARE	907631	PAINT TRAY	05/22/2025	2.49	.00	
51	ACE HARDWARE	907827	Bag trash control	06/09/2025	19.99	.00	
51	ACE HARDWARE	907896	SPRAY SAFETY	05/23/2025	18.00	.00	
51	ACE HARDWARE	908085	STRAY SAFETY RED	05/26/2025	7.99	.00	
51	ACE HARDWARE	908215	SEALANT	05/27/2025	45.36	.00	
51	ACE HARDWARE	908422	TAPE DUCK	05/25/2025	14.99	.00	
Total 51:					3,097.71	.00	
2269	AFLAC	060125	ACCOUNT #y9599	06/01/2025	1,647.35	1,647.35	05/30/2025
Total 2269:					1,647.35	1,647.35	
6900	ALDER ENVIRONMENTAL LLC	4864	PFAS SURFACE WATER TESTIN	06/04/2025	540.63	.00	
Total 6900:					540.63	.00	
5726	AMAZON	1LD7-YNK3-6T	BLACK TONER CARTRIDGE	06/02/2025	767.19	.00	
5726	AMAZON	1Y94-34JV-4W	WIRELESS MICE	06/03/2025	364.71	.00	
Total 5726:					1,131.90	.00	
577	BADGER DAYLIGHTING CORP	2859316	SUPPLY WATER,RECOVERY OF	05/15/2025	2,992.59	.00	
577	BADGER DAYLIGHTING CORP	2860630	BADGER HYDROVAC W OPERA	05/19/2025	3,342.94	.00	
Total 577:					6,335.53	.00	
7296	BLUE COLLAR RESTAURANT G	060325	ALL EMPLOYEE MEETING FOO	06/03/2025	1,625.82	.00	
Total 7296:					1,625.82	.00	
1560	BLUE SPRUCE CLEANERS,INC	043025	PUBLIC WORKS	04/30/2025	63.90	.00	
1560	BLUE SPRUCE CLEANERS,INC	053025	DRY CLEANING PD	05/30/2025	337.20	.00	
1560	BLUE SPRUCE CLEANERS,INC	053025PW	PUBLIC WORKS	05/30/2025	51.12	.00	
Total 1560:					452.22	.00	
7394	BOLAND, ANITA	70125	350 N Millward - July Rent	07/01/2025	2,263.80	.00	
Total 7394:					2,263.80	.00	
6727	BRIGGS, ERIC L	36249	SS7KA	05/15/2025	136.95	.00	
6727	BRIGGS, ERIC L	36401	TORCH	05/22/2025	71.23	.00	
6727	BRIGGS, ERIC L	36404	TOOL	05/22/2025	252.67	.00	
6727	BRIGGS, ERIC L	36531	LIFE TIME TOOLS	05/29/2025	142.61	.00	
6727	BRIGGS, ERIC L	36532	LARGE WORK KNIFE	05/29/2025	59.35	.00	
Total 6727:					662.81	.00	
7077	BURKHOLDER, SHAWN	70125	130 E Kelly • July Rent	07/01/2025	2,039.63	.00	
Total 7077:					2,039.63	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
544	CENTURYLINK	736747417	Monthly 75912352	05/20/2025	91.03	.00	
Total 544:					91.03	.00	
4984	CHAPA STRIPES OF IDAHO	007-029	SNOW KING BIKE PATH STRIPP	04/29/2025	9,000.00	.00	
4984	CHAPA STRIPES OF IDAHO	007-29	MOBILIAZATION SNOW KING WI	04/28/2025	3,100.00	.00	
4984	CHAPA STRIPES OF IDAHO	007-5	WILLOWROAD BIKE PATH STRI	05/05/2025	7,500.00	.00	
4984	CHAPA STRIPES OF IDAHO	007-8	BROADWAY BIKE PATHWAY ST	05/08/2025	11,000.00	.00	
Total 4984:					30,600.00	.00	
5322	CHARGEPOINT, INC	IN340193	garage dc1 and park and rec	05/26/2025	910.00	.00	
Total 5322:					910.00	.00	
6001	CIVICPLUS	330572	MUNICODE FULL SERVICE CO	05/11/2025	4,790.37	.00	
Total 6001:					4,790.37	.00	
7667	COLEMAN, TATE	052725	REIMBURSE FOR RECRUITMEN	05/27/2025	1,000.00	.00	
Total 7667:					1,000.00	.00	
514	CONRAD & BISCHOFF INC.	IN-708281-25	RIDGELINE	05/27/2025	1,377.15	.00	
514	CONRAD & BISCHOFF INC.	IN-710718-25	DEF BULK	05/27/2025	321.14	.00	
Total 514:					1,698.29	.00	
4887	CONTROL SYSTEM TECHNOLO	11550	TROUBLE SHOOTING CIA4 AER	04/22/2025	817.50	.00	
4887	CONTROL SYSTEM TECHNOLO	11581	TROUBLESHOOT WELL 8	05/28/2025	1,267.50	.00	
Total 4887:					2,085.00	.00	
7500	CONWAY, LARS	70125	145 Moose - July Rent	07/01/2025	2,500.00	.00	
Total 7500:					2,500.00	.00	
1691	CORE & MAIN LP	W902546	MACH 10 USG	05/07/2025	8,373.06	.00	
Total 1691:					8,373.06	.00	
5002	CUSTOM ELECTRONIC CONSU	0559	chanber auto	05/29/2025	51,066.61	.00	
Total 5002:					51,066.61	.00	
6829	DARKTRACE HOLDINGS LIMITE	DTGBR01_100	SUBSCRIPTION	06/05/2025	4,102.00	.00	
Total 6829:					4,102.00	.00	
7111	DAWSON INFRASTRUCTURE S	INV215546	SUNFAB BLOWER MOTOR	05/27/2025	5,594.70	.00	
Total 7111:					5,594.70	.00	
7649	DECKER GLASS	IRSW008144	WINDSHIELD	04/29/2025	162.96	162.96	05/30/2025
7649	DECKER GLASS	IRSW008243	WINDSHIELDS	04/29/2025	166.33	166.33	05/30/2025
7649	DECKER GLASS	IRSW008268	WINDSHIELDS	05/01/2025	141.29	141.29	05/30/2025
7649	DECKER GLASS	IRSW008588	WINDSHIELD	05/27/2025	88.72	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 7649:					559.30	470.58	
65	DELCON INC	2419	UNDERGROUND POWER TO W	11/30/2024	6,371.55	.00	
65	DELCON INC	2429	FEMALE ADAPTERS,BELL END	12/09/2024	1,156.11	.00	
Total 65:					7,527.66	.00	
148	DELL	10817314649	VLA ENTERPISES	05/30/2025	82,188.00	.00	
Total 148:					82,188.00	.00	
3881	DEX IMAGING	AR13352645	CONTRACT COPIER	05/22/2025	133.63	.00	
3881	DEX IMAGING	AR13369328	CONTRACT COPIER	05/27/2025	463.65	.00	
Total 3881:					597.28	.00	
7372	DIRECT AUTOMOTIVE DIST	06DZ4428	TRANSMISSION	06/03/2025	171.21	.00	
Total 7372:					171.21	.00	
6883	DIVISION OF CHILD SUPPORT	052925	DCSE CASE #0005405448	05/29/2025	509.23	509.23	05/28/2025
Total 6883:					509.23	509.23	
3408	E.R. OFFICE EXPRESS	23340	copy paper	06/05/2025	158.23	.00	
Total 3408:					158.23	.00	
7446	ELAN ONE CARD	0463 0525	decker	05/25/2025	210.18	210.18	05/25/2025
7446	ELAN ONE CARD	0463 0525	decker	05/25/2025	61.68	61.68	05/25/2025
7446	ELAN ONE CARD	0463 0525	bwi	05/25/2025	242.09	242.09	05/25/2025
7446	ELAN ONE CARD	0463 0525	alalied	05/25/2025	114.14	114.14	05/25/2025
7446	ELAN ONE CARD	0494 0525	audiable	05/25/2025	16.00	16.00	05/25/2025
7446	ELAN ONE CARD	0494 0525	pearl street	05/25/2025	44.83	44.83	05/25/2025
7446	ELAN ONE CARD	0494 0525	rosen hotels	05/25/2025	651.28	651.28	05/25/2025
7446	ELAN ONE CARD	0494 0525	albertsons	05/25/2025	134.80	134.80	05/25/2025
7446	ELAN ONE CARD	0494 0525	dairy queen	05/25/2025	40.99	40.99	05/25/2025
7446	ELAN ONE CARD	0494 0525	hilton	05/25/2025	151.42	151.42	05/25/2025
7446	ELAN ONE CARD	0494 0525	safeways	05/25/2025	60.05	60.05	05/25/2025
7446	ELAN ONE CARD	0494 0525	sweet bee	05/25/2025	1,469.94	1,469.94	05/25/2025
7446	ELAN ONE CARD	0494 0525	albertsons	05/25/2025	134.75	134.75	05/25/2025
7446	ELAN ONE CARD	0494 0525	albertsons	05/25/2025	56.70	56.70	05/25/2025
7446	ELAN ONE CARD	0494 0525	shell	05/25/2025	43.81	43.81	05/25/2025
7446	ELAN ONE CARD	0494 0525	exxon	05/25/2025	34.80	34.80	05/25/2025
7446	ELAN ONE CARD	1944 0525	ALBERTSONS	05/25/2025	42.35	42.35	05/25/2025
7446	ELAN ONE CARD	1944 0525	TARGET	05/25/2025	172.36	172.36	05/25/2025
7446	ELAN ONE CARD	1944 0525	STAPLES	05/25/2025	66.51	66.51	05/25/2025
7446	ELAN ONE CARD	1944 0525	ANTER INN	05/25/2025	132.36	132.36	05/25/2025
7446	ELAN ONE CARD	1944 0525	COCA COLA	05/25/2025	27.00	27.00	05/25/2025
7446	ELAN ONE CARD	1944 0525	UBER	05/25/2025	58.95	58.95	05/25/2025
7446	ELAN ONE CARD	1944 0525	CUTTIES	05/25/2025	88.51	88.51	05/25/2025
7446	ELAN ONE CARD	2280 0525	harrahs	05/25/2025	98.84-	98.84-	05/25/2025
7446	ELAN ONE CARD	2280 0525	hotel.com	05/25/2025	881.60	881.60	05/25/2025
7446	ELAN ONE CARD	2280 0525	albertsons	05/25/2025	26.15	26.15	05/25/2025
7446	ELAN ONE CARD	2280 0525	staples	05/25/2025	64.35	64.35	05/25/2025
7446	ELAN ONE CARD	2901 0525	alita insutries	05/25/2025	718.58	718.58	05/25/2025
7446	ELAN ONE CARD	2901 0525	freight	05/25/2025	196.27	196.27	05/25/2025

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
7446	ELAN ONE CARD	2901 0525	albertsons	05/25/2025	42.96	42.96	05/25/2025
7446	ELAN ONE CARD	2901 0525	eguages	05/25/2025	20.00	20.00	05/25/2025
7446	ELAN ONE CARD	2901 0525	ups	05/25/2025	22.93	22.93	05/25/2025
7446	ELAN ONE CARD	3324 0525	pets place	05/25/2025	103.17	103.17	05/25/2025
7446	ELAN ONE CARD	3324 0525	fish creek	05/25/2025	51.63	51.63	05/25/2025
7446	ELAN ONE CARD	3324 0525	dominos	05/25/2025	21.18	21.18	05/25/2025
7446	ELAN ONE CARD	3324 0525	pets place	05/25/2025	67.18	67.18	05/25/2025
7446	ELAN ONE CARD	3324 0525	smiths	05/25/2025	11.58	11.58	05/25/2025
7446	ELAN ONE CARD	3324 0525	smiths	05/25/2025	79.79	79.79	05/25/2025
7446	ELAN ONE CARD	3324 0525	dominos	05/25/2025	21.18	21.18	05/25/2025
7446	ELAN ONE CARD	3324 0525	smiths	05/25/2025	53.97	53.97	05/25/2025
7446	ELAN ONE CARD	3324 0525	bridger animal	05/25/2025	13.39	13.39	05/25/2025
7446	ELAN ONE CARD	3324 0525	teton tails	05/25/2025	89.98	89.98	05/25/2025
7446	ELAN ONE CARD	3567 0525	pica	05/25/2025	112.75	112.75	05/25/2025
7446	ELAN ONE CARD	3567 0525	silver dollar	05/25/2025	69.93	69.93	05/25/2025
7446	ELAN ONE CARD	3567 0525	wholefoods	05/25/2025	31.03	31.03	05/25/2025
7446	ELAN ONE CARD	3567 0525	event	05/25/2025	450.00	450.00	05/25/2025
7446	ELAN ONE CARD	3840 0525	wyoming.com	05/25/2025	6.88	6.88	05/25/2025
7446	ELAN ONE CARD	3840 0525	spanish group	05/25/2025	105.60	105.60	05/25/2025
7446	ELAN ONE CARD	3840 0525	town of jackson	05/25/2025	1.00	1.00	05/25/2025
7446	ELAN ONE CARD	3840 0525	town of jackson	05/25/2025	1.00	1.00	05/25/2025
7446	ELAN ONE CARD	3840 0525	casper star	05/25/2025	26.99	26.99	05/25/2025
7446	ELAN ONE CARD	3840 0525	mail chimp	05/25/2025	87.75	87.75	05/25/2025
7446	ELAN ONE CARD	3840 0525	new york sub	05/25/2025	151.00	151.00	05/25/2025
7446	ELAN ONE CARD	4059 0525	staples	05/25/2025	231.54	231.54	05/25/2025
7446	ELAN ONE CARD	4059 0525	staples	05/25/2025	13.99-	13.99-	05/25/2025
7446	ELAN ONE CARD	4059 0525	staples	05/25/2025	76.45	76.45	05/25/2025
7446	ELAN ONE CARD	4059 0525	delta	05/25/2025	19.99	19.99	05/25/2025
7446	ELAN ONE CARD	4059 0525	delta	05/25/2025	557.37	557.37	05/25/2025
7446	ELAN ONE CARD	4059 0525	community transportation	05/25/2025	750.00	750.00	05/25/2025
7446	ELAN ONE CARD	4059 0525	target	05/25/2025	18.69	18.69	05/25/2025
7446	ELAN ONE CARD	4059 0525	teton county	05/25/2025	296.66	296.66	05/25/2025
7446	ELAN ONE CARD	4135 0525	supply house	05/25/2025	99.70	99.70	05/25/2025
7446	ELAN ONE CARD	4135 0525	air compressor	05/25/2025	4,145.00	4,145.00	05/25/2025
7446	ELAN ONE CARD	4135 0525	supply house	05/25/2025	108.10	108.10	05/25/2025
7446	ELAN ONE CARD	4135 0525	trudoor	05/25/2025	8.09-	8.09-	05/25/2025
7446	ELAN ONE CARD	4135 0525	trudoor	05/25/2025	143.62	143.62	05/25/2025
7446	ELAN ONE CARD	4277 0525	harbor fireight	05/25/2025	112.83	112.83	05/25/2025
7446	ELAN ONE CARD	4277 0525	harbor freight	05/25/2025	112.83	112.83	05/25/2025
7446	ELAN ONE CARD	4874 0525	teton county	05/25/2025	556.15	556.15	05/25/2025
7446	ELAN ONE CARD	4874 0525	trudoor	05/25/2025	259.67	259.67	05/25/2025
7446	ELAN ONE CARD	4874 0525	mauroces	05/25/2025	110.97	110.97	05/25/2025
7446	ELAN ONE CARD	4874 0525	qualified hardware	05/25/2025	36.38	36.38	05/25/2025
7446	ELAN ONE CARD	4874 0525	trudoor	05/25/2025	11.96-	11.96-	05/25/2025
7446	ELAN ONE CARD	4874 0525	trudoor	05/25/2025	203.85	203.85	05/25/2025
7446	ELAN ONE CARD	4874 0525	jh auto	05/25/2025	378.00	378.00	05/25/2025
7446	ELAN ONE CARD	4874 0525	trudoor	05/25/2025	470.00	470.00	05/25/2025
7446	ELAN ONE CARD	4874 0525	northern hotel	05/25/2025	65.77	65.77	05/25/2025
7446	ELAN ONE CARD	4874 0525	teton county	05/25/2025	43.55	43.55	05/25/2025
7446	ELAN ONE CARD	4874 0525	mauroces	05/25/2025	110.97	110.97	05/25/2025
7446	ELAN ONE CARD	4874 0525	northern hotel	05/25/2025	131.55	131.55	05/25/2025
7446	ELAN ONE CARD	4874 0525	golden threads	05/25/2025	65.00	65.00	05/25/2025
7446	ELAN ONE CARD	4874 0525	northern hotel	05/25/2025	65.77	65.77	05/25/2025
7446	ELAN ONE CARD	4874 0525	northern hotel	05/25/2025	131.55	131.55	05/25/2025
7446	ELAN ONE CARD	4874 0525	qualififed hardware	05/25/2025	2.38-	2.38-	05/25/2025
7446	ELAN ONE CARD	5582 0525	magnolia	05/25/2025	57.88	57.88	05/25/2025
7446	ELAN ONE CARD	5582 0525	united	05/25/2025	69.99	69.99	05/25/2025
7446	ELAN ONE CARD	6480 0525	travel expenses	05/25/2025	304.00	304.00	05/25/2025

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
7446	ELAN ONE CARD	6677 0525	napa	05/25/2025	26.72	26.72	05/25/2025
7446	ELAN ONE CARD	6677 0525	lowers	05/25/2025	2,628.76	2,628.76	05/25/2025
7446	ELAN ONE CARD	6677 0525	guardian lliance	05/25/2025	125.00	125.00	05/25/2025
7446	ELAN ONE CARD	6677 0525	ups	05/25/2025	13.41	13.41	05/25/2025
7446	ELAN ONE CARD	7099 0525	iima	05/25/2025	318.00	318.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	indeed	05/25/2025	290.76	290.76	05/25/2025
7446	ELAN ONE CARD	7099 0525	albertsons	05/25/2025	45.96	45.96	05/25/2025
7446	ELAN ONE CARD	7099 0525	smiths	05/25/2025	36.76	36.76	05/25/2025
7446	ELAN ONE CARD	7099 0525	ls made	05/25/2025	34.45	34.45	05/25/2025
7446	ELAN ONE CARD	7099 0525	walmart	05/25/2025	228.99	228.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	teton clerk	05/25/2025	37.55	37.55	05/25/2025
7446	ELAN ONE CARD	7099 0525	indeed	05/25/2025	140.00	140.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	albertsons	05/25/2025	253.09	253.09	05/25/2025
7446	ELAN ONE CARD	7099 0525	smiths	05/25/2025	55.10	55.10	05/25/2025
7446	ELAN ONE CARD	7099 0525	united	05/25/2025	837.57	837.57	05/25/2025
7446	ELAN ONE CARD	7099 0525	creekside	05/25/2025	25.00	25.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	cheeckr	05/25/2025	101.99	101.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	pearl street	05/25/2025	42.00	42.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	united	05/25/2025	29.99	29.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	pearl street	05/25/2025	100.00	100.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	webstaurant	05/25/2025	72.73	72.73	05/25/2025
7446	ELAN ONE CARD	7099 0525	snake river	05/25/2025	176.85	176.85	05/25/2025
7446	ELAN ONE CARD	7099 0525	united	05/25/2025	30.99	30.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	shell	05/25/2025	8.77	8.77	05/25/2025
7446	ELAN ONE CARD	7099 0525	tj max	05/25/2025	59.87	59.87	05/25/2025
7446	ELAN ONE CARD	7099 0525	united	05/25/2025	29.99	29.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	cutties	05/25/2025	50.00	50.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	goesproducts	05/25/2025	138.55	138.55	05/25/2025
7446	ELAN ONE CARD	7099 0525	creekside	05/25/2025	25.00	25.00	05/25/2025
7446	ELAN ONE CARD	7099 0525	united	05/25/2025	30.99	30.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	gs jj com	05/25/2025	136.40	136.40	05/25/2025
7446	ELAN ONE CARD	7099 0525	cheeckr	05/25/2025	54.99	54.99	05/25/2025
7446	ELAN ONE CARD	7099 0525	pearl street	05/25/2025	97.80	97.80	05/25/2025
7446	ELAN ONE CARD	7130 0525	pinky g	05/25/2025	150.80	150.80	05/25/2025
7446	ELAN ONE CARD	7130 0525	mcdonalds	05/25/2025	18.35	18.35	05/25/2025
7446	ELAN ONE CARD	7130 0525	wendy	05/25/2025	20.20	20.20	05/25/2025
7446	ELAN ONE CARD	7130 0525	exxdon	05/25/2025	12.01	12.01	05/25/2025
7446	ELAN ONE CARD	7130 0525	exxon	05/25/2025	10.46	10.46	05/25/2025
7446	ELAN ONE CARD	7309 0525	STARLINK	05/25/2025	165.00	165.00	05/25/2025
7446	ELAN ONE CARD	7309 0525	UPS	05/25/2025	24.99	24.99	05/25/2025
7446	ELAN ONE CARD	7309 0525	AMAZON	05/25/2025	78.99	78.99	05/25/2025
7446	ELAN ONE CARD	7309 0525	CURB DC TAXI	05/25/2025	21.23	21.23	05/25/2025
7446	ELAN ONE CARD	7309 0525	GARMIN	05/25/2025	64.95	64.95	05/25/2025
7446	ELAN ONE CARD	7309 0525	LA QUINA	05/25/2025	506.00	506.00	05/25/2025
7446	ELAN ONE CARD	7309 0525	DYSON	05/25/2025	90.08	90.08	05/25/2025
7446	ELAN ONE CARD	7309 0525	JH AIRPORT	05/25/2025	215.00	215.00	05/25/2025
7446	ELAN ONE CARD	7309 0525	HILTON	05/25/2025	3,883.84	3,883.84	05/25/2025
7446	ELAN ONE CARD	7309 0525	CLOUD BADING	05/25/2025	479.88	479.88	05/25/2025
7446	ELAN ONE CARD	7309 0525	MAILSOTRM	05/25/2025	199.95	199.95	05/25/2025
7446	ELAN ONE CARD	7309 0525	ASHENAFI CHALI	05/25/2025	21.66	21.66	05/25/2025
7446	ELAN ONE CARD	7309 0525	AUTOPAY DISH	05/25/2025	151.74	151.74	05/25/2025
7446	ELAN ONE CARD	7687 0525	air b and b	05/25/2025	1,044.00	1,044.00	05/25/2025
7446	ELAN ONE CARD	7687 0525	international muni	05/25/2025	600.00	600.00	05/25/2025
7446	ELAN ONE CARD	7687 0525	united	05/25/2025	34.99	34.99	05/25/2025
7446	ELAN ONE CARD	7687 0525	persephonie	05/25/2025	67.02	67.02	05/25/2025
7446	ELAN ONE CARD	7687 0525	united	05/25/2025	34.99	34.99	05/25/2025
7446	ELAN ONE CARD	7687 0525	united	05/25/2025	578.91	578.91	05/25/2025
7446	ELAN ONE CARD	7867 0525	cenex	05/25/2025	31.31	31.31	05/25/2025

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
7446	ELAN ONE CARD	7867 0525	mavericks	05/25/2025	19.01	19.01	05/25/2025
7446	ELAN ONE CARD	7867 0525	cenex	05/25/2025	29.38	29.38	05/25/2025
7446	ELAN ONE CARD	7867 0525	america inn	05/25/2025	243.44	243.44	05/25/2025
7446	ELAN ONE CARD	7867 0525	cenex	05/25/2025	40.58	40.58	05/25/2025
7446	ELAN ONE CARD	7867 0525	optics	05/25/2025	176.55	176.55	05/25/2025
7446	ELAN ONE CARD	7867 0525	mavericks	05/25/2025	33.00	33.00	05/25/2025
7446	ELAN ONE CARD	7867 0525	exxon	05/25/2025	10.54	10.54	05/25/2025
7446	ELAN ONE CARD	7867 0525	mavericks	05/25/2025	18.00	18.00	05/25/2025
7446	ELAN ONE CARD	7867 0525	conco	05/25/2025	34.02	34.02	05/25/2025
7446	ELAN ONE CARD	7867 0525	costco	05/25/2025	49.30	49.30	05/25/2025
7446	ELAN ONE CARD	8506 0525	gat sux travel	05/25/2025	26.74	26.74	05/25/2025
7446	ELAN ONE CARD	8506 0525	texaco	05/25/2025	17.05	17.05	05/25/2025
7446	ELAN ONE CARD	8506 0525	stinker	05/25/2025	30.00	30.00	05/25/2025
7446	ELAN ONE CARD	8506 0525	hilton	05/25/2025	151.53	151.53	05/25/2025
7446	ELAN ONE CARD	8506 0525	jh airport	05/25/2025	125.00	125.00	05/25/2025
7446	ELAN ONE CARD	8506 0525	enterprise	05/25/2025	390.41	390.41	05/25/2025
7446	ELAN ONE CARD	8958 0525	pic n stitch	05/25/2025	21.20	21.20	05/25/2025
7446	ELAN ONE CARD	9251 0525	stillwest	05/25/2025	151.33	151.33	05/25/2025
7446	ELAN ONE CARD	9251 0525	staples	05/25/2025	38.46	38.46	05/25/2025
7446	ELAN ONE CARD	9251 0525	albertsons	05/25/2025	75.79	75.79	05/25/2025
7446	ELAN ONE CARD	9251 0525	staples	05/25/2025	20.98-	20.98-	05/25/2025
7446	ELAN ONE CARD	9251 0525	stillwest	05/25/2025	8,792.50	8,792.50	05/25/2025
7446	ELAN ONE CARD	9251 0525	albertsons	05/25/2025	113.90	113.90	05/25/2025
7446	ELAN ONE CARD	9251 0525	staples	05/25/2025	22.98	22.98	05/25/2025
7446	ELAN ONE CARD	9639 0525	snake river roasting	05/25/2025	16.36	16.36	05/25/2025
7446	ELAN ONE CARD	9639 0525	snake river roasting	05/25/2025	256.68	256.68	05/25/2025
	Total 7446:				42,837.04	42,837.04	
6092	ENERGY 1	52818	FORFCED AIR COOLING	05/25/2025	11,407.27	.00	
	Total 6092:				11,407.27	.00	
1134	ENERGY LABORATORIES INC.	708490	EFFLUENT	05/20/2025	172.00	.00	
1134	ENERGY LABORATORIES INC.	708491	EFFLUENT	05/20/2025	172.00	.00	
1134	ENERGY LABORATORIES INC.	708492	EFFLUENT	05/20/2025	183.00	.00	
1134	ENERGY LABORATORIES INC.	710441	PHOSPHORUS	05/30/2025	183.00	.00	
1134	ENERGY LABORATORIES INC.	711259	EFFLUENT	06/04/2025	172.00	.00	
	Total 1134:				882.00	.00	
6552	ETNA TRADE PARK LLC	70125	Star Valley Bus Storage - July Re	07/01/2025	4,062.00	.00	
	Total 6552:				4,062.00	.00	
81	EVANS CONSTRUCTION INC	254537	concrete 450 snow king	05/23/2025	687.13	.00	
81	EVANS CONSTRUCTION INC	255069	DUMP FEE	05/28/2025	80.00	.00	
	Total 81:				767.13	.00	
7462	EVOLUTION CONSTRUCTION, L	1135	curb cutters,sidewalk and waterw	05/08/2025	550.00	.00	
7462	EVOLUTION CONSTRUCTION, L	1135	curb cutters,sidewalk and waterw	05/08/2025	1,078.00	.00	
7462	EVOLUTION CONSTRUCTION, L	1135	curb cutters,sidewalk and waterw	05/08/2025	850.00	.00	
7462	EVOLUTION CONSTRUCTION, L	1135	curb cutters,sidewalk and waterw	05/08/2025	14,910.00	.00	
	Total 7462:				17,388.00	.00	
6802	FALL RIVER PROPANE	2693764	5450 RICK ROAD	05/15/2025	1,562.12	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
6802	FALL RIVER PROPANE	2697763	5450 S RICKS ROAD	05/15/2025	241.67	.00	
6802	FALL RIVER PROPANE	2697764	5450 S RICKS ROAD	05/15/2025	277.69	.00	
Total 6802:					2,081.48	.00	
3195	FERGUSON ENTERPRISES, IN	3703434	WAX RING	05/19/2025	7.08	.00	
3195	FERGUSON ENTERPRISES, IN	3706798	WAX WING	05/20/2025	7.08	.00	
3195	FERGUSON ENTERPRISES, IN	3724659	REgistration clst fv wi swt kit	05/28/2025	158.72	.00	
Total 3195:					172.88	.00	
4294	FIRE SERVICES OF IDAHO	12621478	ANNUAL ALARM	05/31/2025	420.00	.00	
Total 4294:					420.00	.00	
6779	FOSTER, KYLE	051825	TRAVEL REIMBURSEMENT	05/18/2025	158.64	.00	
Total 6779:					158.64	.00	
7669	FREEBURG LAW	060425	BAIL REFUND CASE 25-03-0229	06/04/2025	2,000.00	2,000.00	06/05/2025
Total 7669:					2,000.00	2,000.00	
7624	GANNETT PEAK SURVEYING, L	1337	ASPEN HILL SURVEYING	05/30/2025	8,750.00	.00	
Total 7624:					8,750.00	.00	
4212	GILLIG LLC	41309835	WINDow fram fixed	05/20/2025	4,068.79	.00	
4212	GILLIG LLC	41311979	BRUSH KIT SEVERE DUTY	05/27/2025	277.08	.00	
Total 4212:					4,345.87	.00	
1609	GRAINGER	9499399260	FITTINGS	05/07/2025	215.80	.00	
Total 1609:					215.80	.00	
4271	GRAND TARGHEE RESORT	060325	MARCH 2025 REIMBURSEMENT	06/03/2025	36,829.00	.00	
Total 4271:					36,829.00	.00	
6794	GRANICUS, LLC	207048	AVIOR	05/30/2025	24,386.37	.00	
Total 6794:					24,386.37	.00	
7672	GRANITE CREEK VALUATION	25-506	upper cache creek	04/30/2025	6,500.00	.00	
Total 7672:					6,500.00	.00	
7497	GRIFFITH PARTNERSHIP LLC	70125	120 Aspen Drive - July Rent	07/01/2025	1,750.00	.00	
7497	GRIFFITH PARTNERSHIP LLC	70125	126 Aspen Dr - July Rent	07/01/2025	1,600.00	.00	
Total 7497:					3,350.00	.00	
7342	HARMONY DESIGN, INC	25047	GARAMAN SAFETY IMPROVEM	04/20/2025	1,687.25	.00	
Total 7342:					1,687.25	.00	
7666	HARRIS, ADAM	053025	RELEASE BOND 465 PINE DRIV	05/30/2025	4,000.00	4,000.00	05/30/2025

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 7666:					4,000.00	4,000.00	
7583	HAYES, BRANDY	060425	TRAVEL EXPENSES	06/04/2025	201.60	.00	
Total 7583:					201.60	.00	
7671	HENSLEY, JACKSON	060425	BAIL REFUND CASE 25-01-0091	06/04/2025	740.00	740.00	06/05/2025
Total 7671:					740.00	740.00	
96	HIGH COUNTRY LINEN	0502731	MATS @ SHELTER	05/07/2025	65.69	.00	
96	HIGH COUNTRY LINEN	0503920	TOWELS,LAUNDRY,MATS	05/14/2025	69.40	.00	
96	HIGH COUNTRY LINEN	0506013	ODOR CONTROL , MAT CLEANI	05/26/2025	53.45	.00	
96	HIGH COUNTRY LINEN	0506474	MATS	05/28/2025	41.47	.00	
96	HIGH COUNTRY LINEN	0507266	TOWELS	06/02/2025	86.44	.00	
96	HIGH COUNTRY LINEN	S0504335	fUNNEL	05/15/2025	6.38	.00	
96	HIGH COUNTRY LINEN	S0504893	OLD BAR MOPS	05/26/2025	37.50	.00	
Total 96:					360.33	.00	
503	HUNT CONSTRUCTION INC	22706	SEWER PLANT DUSTGARD	05/31/2025	6,392.00	.00	
Total 503:					6,392.00	.00	
36	IDAHO STATE TAX COMMISSIO	053125	May withholdings	05/31/2025	9,360.00	9,360.00	05/30/2025
Total 36:					9,360.00	9,360.00	
4677	IDEXX DISTRIBUTION, INC.	3175213210	GAMMA IRRAD	05/07/2025	731.93	.00	
Total 4677:					731.93	.00	
106	INTERSTATE BATTERY	950005878	SRM 24	05/27/2025	115.95	.00	
Total 106:					115.95	.00	
618	IPRO TECH, LLC	INV287723	CONtract	07/01/2024	7,865.00	.00	
Total 618:					7,865.00	.00	
6954	IVY OUTDOOR SERVICES LLC	0000137	MAY TRASH ROUTE	06/02/2025	2,106.00	.00	
6954	IVY OUTDOOR SERVICES LLC	0000139	MAY TRASH ROUTE	06/02/2025	16,972.50	.00	
Total 6954:					19,078.50	.00	
6931	JACKSON DOWNTOWNER, LLC	JKD-1049	START ON DEMAND	05/07/2025	104,017.95	.00	
Total 6931:					104,017.95	.00	
7163	JACKSON GROUP LOCKBOX	696702IF	FILTERS	05/20/2025	755.03	.00	
7163	JACKSON GROUP LOCKBOX	696864IF	KIT BRAKE PAD	05/22/2025	1,495.88	.00	
7163	JACKSON GROUP LOCKBOX	696864IFX1	KIT BRAKE	06/03/2025	1,495.88	.00	
7163	JACKSON GROUP LOCKBOX	696873IF	FILTER AIR PRIMA	05/22/2025	66.70	.00	
Total 7163:					3,813.49	.00	
6477	Jackson Hole Childrens Museum	285-1	4TH QUARTER	05/19/2025	9,900.00	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 6477:					9,900.00	.00	
6474	JACKSON HOLE LAW, PC	2568	LEGAL SERVICES	05/31/2025	3,505.00	.00	
Total 6474:					3,505.00	.00	
131	JACKSON HOLE NEWS & GUID	372721	AD#433963	12/11/2024	226.00	.00	
131	JACKSON HOLE NEWS & GUID	372965	AD#433963	12/18/2024	226.00	.00	
131	JACKSON HOLE NEWS & GUID	373109	AD#434489	12/25/2024	327.75	.00	
131	JACKSON HOLE NEWS & GUID	373111	AD#434516	12/25/2024	401.00	.00	
131	JACKSON HOLE NEWS & GUID	373185	AD 434474	12/25/2024	228.00	.00	
131	JACKSON HOLE NEWS & GUID	373808	AD#434822	01/15/2025	401.00	.00	
131	JACKSON HOLE NEWS & GUID	373943	AD#101141053210	01/22/2025	401.00	.00	
131	JACKSON HOLE NEWS & GUID	374184	AD#434794	01/31/2025	598.40	.00	
131	JACKSON HOLE NEWS & GUID	374308	AD#434768	01/31/2025	200.00	.00	
131	JACKSON HOLE NEWS & GUID	374516	AD#435367	02/12/2025	120.00	.00	
131	JACKSON HOLE NEWS & GUID	375959	AD 436664	04/02/2025	264.00	.00	
131	JACKSON HOLE NEWS & GUID	375960	AD 436665	04/02/2025	678.00	.00	
131	JACKSON HOLE NEWS & GUID	375961	AD 436666	04/02/2025	920.00	.00	
131	JACKSON HOLE NEWS & GUID	376176	AD 436807	04/09/2025	160.00	.00	
131	JACKSON HOLE NEWS & GUID	376372	AD 436977	04/16/2025	95.00	.00	
131	JACKSON HOLE NEWS & GUID	376373	AD 436976	04/16/2025	130.00	.00	
131	JACKSON HOLE NEWS & GUID	376374	AD 436975	04/16/2025	205.00	.00	
131	JACKSON HOLE NEWS & GUID	377145	AD 437797	05/14/2025	285.00	.00	
131	JACKSON HOLE NEWS & GUID	377146	AD 437798	05/14/2025	605.00	.00	
131	JACKSON HOLE NEWS & GUID	377147	AD 437799	05/14/2025	85.00	.00	
131	JACKSON HOLE NEWS & GUID	377396	AD 438046	05/21/2025	235.00	.00	
131	JACKSON HOLE NEWS & GUID	377599	AD 438183	05/28/2025	260.00	.00	
131	JACKSON HOLE NEWS & GUID	377600	AD 438123	05/28/2025	401.00	.00	
131	JACKSON HOLE NEWS & GUID	377602	AD 438274	05/28/2025	65.00	.00	
131	JACKSON HOLE NEWS & GUID	377603	AD 438048	05/28/2025	100.00	.00	
131	JACKSON HOLE NEWS & GUID	377604	AD 438272	05/28/2025	630.00	.00	
131	JACKSON HOLE NEWS & GUID	377605	AD 438273	05/28/2025	150.00	.00	
131	JACKSON HOLE NEWS & GUID	377699	AD 438292	05/28/2025	456.00	.00	
131	JACKSON HOLE NEWS & GUID	377805	AD#437191	05/31/2025	179.10	.00	
Total 131:					9,032.25	.00	
6545	JACKSON HOLE PUBLIC ART	052225	contract	05/22/2025	10,000.00	.00	
6545	JACKSON HOLE PUBLIC ART	052325	contract	05/23/2025	12,000.00	.00	
Total 6545:					22,000.00	.00	
114	JACKSON LUMBER INC	0001088252-0	SAW BLADES	05/06/2025	23.50	.00	
114	JACKSON LUMBER INC	0001088369-0	SPIKES AND CEDAR FENCE	05/07/2025	138.80	.00	
114	JACKSON LUMBER INC	0001088515-0	wrecker sawzall blade	05/07/2025	25.39	.00	
114	JACKSON LUMBER INC	0001088933-0	DIAMOND SAW BLADE,TORX,C	05/08/2025	321.05	.00	
114	JACKSON LUMBER INC	0001089599-0	SPIKES AND CEDAR FENCE	05/12/2025	91.05	.00	
114	JACKSON LUMBER INC	0001090260-0	DIAMOND SAW BLADES	05/13/2025	103.39	.00	
Total 114:					703.18	.00	
115	JACKSON PAINT AND GLASS, I	I138224	CALICO BUS STOP	05/28/2025	5,240.64	.00	
Total 115:					5,240.64	.00	
7125	JACKSON WHOLE FAMILY HEAL	050725	DOY PHYSICAL	05/07/2025	380.00	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 7125:					380.00	.00	
239	JH20 WATER CONDITIONING &	7866	water @ WWTP	06/03/2025	97.50	.00	
Total 239:					97.50	.00	
6263	JIM'S TROPHY ROOM	A30663	WHITE LETTERING	04/29/2025	14.56	.00	
Total 6263:					14.56	.00	
139	JORGENSEN ASSOCIATES, PC	55968	24070 SEWER FLOW	04/22/2025	1,312.50	.00	
139	JORGENSEN ASSOCIATES, PC	TOJ PROJECT	CORE MAINTENANCE APP 25	05/19/2025	15,484.32	.00	
Total 139:					16,796.82	.00	
5537	KEENAN, PETER	70125	Virginian 55-4 - July Rent	07/01/2025	2,357.50	.00	
Total 5537:					2,357.50	.00	
2485	KENWORTH SALES COMPANY	004P64082	FREON	05/20/2025	660.00	.00	
2485	KENWORTH SALES COMPANY	004P64106	REFRIGERANT	05/28/2025	495.42	.00	
Total 2485:					1,155.42	.00	
7675	KGB PRODUCTIONS	10365	PW VIDEO	05/15/2025	4,850.00	.00	
Total 7675:					4,850.00	.00	
7112	KJ'S SERVICES INVESTMENTS	70125	Alpine - July Rent	07/01/2025	2,940.00	.00	
7112	KJ'S SERVICES INVESTMENTS	70125	Alpine - July Internet	07/01/2025	35.00	.00	
Total 7112:					2,975.00	.00	
7593	LEGACY BUSINESS VENTURES	1184	MOLD	05/21/2025	795.00	.00	
Total 7593:					795.00	.00	
155	LEONARD PETROLEUM EQUIP	IFIN222130	TROUBLESHOOTING RUNAWA	05/28/2025	1,242.00	.00	
Total 155:					1,242.00	.00	
5691	LEPCO	61934	BUS WASH	05/23/2025	2,884.63	.00	
Total 5691:					2,884.63	.00	
2224	LOCAL GOV'T LIABILITY POOL	16092	FY26 START Addendum 07/01/25	05/29/2025	15,000.00	.00	
2224	LOCAL GOV'T LIABILITY POOL	16092	Membership Renewal for FY26 07	05/29/2025	139,848.00	.00	
Total 2224:					154,848.00	.00	
156	LOWER VALLEY ENERGY INC	70125	355 W Deloney E5 - July Rent	07/01/2025	3,000.00	.00	
156	LOWER VALLEY ENERGY INC	92050-002 05-	3150 S ADAMS CANYON DR, JA	05/30/2025	190.04	190.04	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-003 05-	SPRUCE DR PUMP HOUSE, JA	05/30/2025	279.03	279.03	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-008 05-	CEMETERY, JACKSON, WY | 20	05/30/2025	20.10	20.10	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-010 05-	ELY SPRINGS RD WELL 6,7,8, J	05/30/2025	1,131.74	1,131.74	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-014 05-	135 E BROADWAY AVE HEAT TA	05/30/2025	19.77	19.77	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-017 05-	WASTE WATER TRTMT INTERM	05/30/2025	28.00	28.00	06/05/2025

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
156	LOWER VALLEY ENERGY INC	92050-019 05-	RANGEVIEW DR LIFT PUMP CO	05/30/2025	79.30	79.30	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-021 05-	150 E PEARL AVE, JACKSON, W	05/30/2025	1,323.05	1,323.05	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-024 05-	1605 BERGER LN SEWER LIFT	05/30/2025	20.95	20.95	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-025 05-	450 W SNOW KING AVE NEW S	05/30/2025	650.85	650.85	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-026 05-	450 W SNOW KING AVE SHOP, J	05/30/2025	260.76	260.76	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-044 05-	610 SNOW KING DR ESTATES B	05/30/2025	151.89	151.89	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-047 05-	WASTE WATER TRTMT UV BLD	05/30/2025	38.00	38.00	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-049 05-	WASTE WATER TRTMT PTB 545	05/30/2025	11,490.64	11,490.64	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-050 05-	2 MG TANK, JACKSON, WY | 200	05/30/2025	20.77	20.77	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-051 05-	WELL #5 KARNS MEADOW DR,	05/30/2025	2,211.71	2,211.71	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-052 05-	675 E BROADWAY AVE WELL #1	05/30/2025	2,742.07	2,742.07	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-053 05-	WELLS #2 & #3, JACKSON, WY	05/30/2025	911.43	911.43	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-054 05-	CITY WELL ELK REF 1, JACKSO	05/30/2025	11.78	11.78	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-055 05-	CITY WELL ELK REF 2, JACKSO	05/30/2025	9.06	9.06	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-056 05-	CITY WELL ELK REF 3, JACKSO	05/30/2025	36.28	36.28	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-059 05-	440 W SNOW KING AVE POLICE	05/30/2025	86.61	86.61	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-060 05-	400 W SNOW KING AVE S GAR,	05/30/2025	225.37	225.37	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-061 05-	400 W SNOW KING AVE PUBLIC	05/30/2025	185.92	185.92	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-074 05-	CRABTREE LN THAW WELL #2,	05/30/2025	26.76	26.76	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-075 05-	HIGH SCHOOL RD THAW WELL	05/30/2025	25.26	25.26	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-077 05-	685 E HANSEN AVE, JACKSON,	05/30/2025	96.65	96.65	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-078 05-	145 W HANSEN AVE FRONT, JA	05/30/2025	141.85	141.85	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-079 05-	145 W HANSEN AVE BACK, JAC	05/30/2025	102.41	102.41	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-082 05-	400 W SNOW KING AVE E STOR	05/30/2025	142.38	142.38	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-089 05-	685 E HANSEN AVE, JACKSON,	05/30/2025	40.36	40.36	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-090 05-	955 MAPLE WAY, JACKSON, WY	05/30/2025	100.20	100.20	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-092 05-	3150 S ADAMS CANYON DR ANI	05/30/2025	224.72	224.72	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-102 05-	145 W HANSEN AVE FRONT, JA	05/30/2025	6.34	6.34	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-105-382	MULTIPLE STREET LIGHTS	05/30/2025	2,732.79	2,732.79	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-106 05-	940 SIMON LN, JACKSON, WY |	05/30/2025	149.19	149.19	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-114 05-3	210 N CACHE ST HOME RANCH	05/30/2025	247.42	247.42	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-126 05-	SPRING WATER LN LIFT STATIO	05/30/2025	35.04	35.04	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-127 05-	3337 S CODY CREEK DR LIFT S	05/30/2025	220.30	220.30	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-131 05-	195 E DELONEY AVE RESTROO	05/30/2025	195.20	195.20	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-132 05-	160 S MILLWARD ST PARKING	05/30/2025	1,765.28	1,765.28	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-134 05-	160 S MILLWARD ST PARKING	05/30/2025	6.34	6.34	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-334 05-	JOSEPHINE LOOP LOT 15 LIFT	05/30/2025	80.47	80.47	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-341 05-	210 N CACHE ST HOME RANCH	05/30/2025	40.36	40.36	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-345 05-	930 SIMON LN, JACKSON, WY |	05/30/2025	135.68	135.68	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-356 05-	55 KARNS MEADOW DR START	05/30/2025	2,143.54	2,143.54	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-357 05-	55 KARNS MEADOW DR START	05/30/2025	1,290.55	1,290.55	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-359 05-	MILLER PARK PARKING LOT CH	05/30/2025	249.96	249.96	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-361 05-	625 W BROADWAY AVE NEW P	05/30/2025	195.79	195.79	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-363 05-	455 VINE ST UTIL, JACKSON, W	05/30/2025	52.93	52.93	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-364 05-	65 VIRGINIAN LN #5, JACKSON,	05/30/2025	46.54	46.54	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-365 05-	65 VIRGINIAN LN #7, JACKSON,	05/30/2025	68.45	68.45	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-367 05-	455 VINE ST APT #3, JACKSON,	05/30/2025	37.60	37.60	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-368 05-	455 VINE ST APT #4, JACKSON,	05/30/2025	57.71	57.71	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-370 05-	2022 WILDFLOWER CT, JACKS	05/30/2025	101.57	101.57	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-371 05-	2022 WILDFLOWER CT, JACKS	05/30/2025	43.39	43.39	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-374 05-	455 VINE ST APT #1, JACKSON,	05/30/2025	59.32	59.32	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-375 05-	155 E PEARL AVE, JACKSON, W	05/30/2025	25.65	25.65	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-376 05-	149 E PEARL AVE, JACKSON, W	05/30/2025	80.93	80.93	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-378 05-	145 E PEARL AVE #A EAST, JAC	05/30/2025	29.17	29.17	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-383 05-	SNOW KING DR WATER TANK C	05/30/2025	19.70	19.70	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-385 05-	85 N SPRING GULCH RD SPRIN	05/30/2025	190.04	190.04	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-388 05-	121 SHERWOOD CT BLDG 2 BU	05/30/2025	30.59	30.59	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-389 05-	1640 MARTIN LN LIFT STATION,	05/30/2025	24.53	24.53	06/05/2025

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
156	LOWER VALLEY ENERGY INC	92050-390 05-	400 W SNOW KING AVE HOUSI	05/30/2025	221.29	221.29	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-391 05-	400 W SNOW KING AVE PARK M	05/30/2025	289.31	289.31	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-392 05-	400 W SNOW KING AVE ADMIN,	05/30/2025	534.58	534.58	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-393 05-	400 W SNOW KING AVE EMPLO	05/30/2025	435.37	435.37	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-395 05-	145 E PEARL AVE #C LOFT, JAC	05/30/2025	48.50	48.50	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-396 05-	145 E PEARL AVE HSE/CMN, JA	05/30/2025	105.69	105.69	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-397 05-	145 E PEARL AVE #B WEST, JA	05/30/2025	51.30	51.30	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-398 05-	155 E PEARL AVE, JACKSON, W	05/30/2025	89.48	89.48	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-399 05-	155 E PEARL AVE, JACKSON, W	05/30/2025	85.88	85.88	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-401 05-	455 VINE ST APT #2, JACKSON,	05/30/2025	41.97	41.97	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-405 05-	3585 S CANADIAN DR, JACKSO	05/30/2025	88.26	88.26	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-406 05-	3585 S CANADIAN DR, JACKSO	05/30/2025	20.99	20.99	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-407 05-	130 E KELLY AVE #23, JACKSO	05/30/2025	41.42	41.42	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-411 05-3	1540 MARTIN LN H-FRAME MET	05/30/2025	23.30	23.30	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-416 05-	350 N MILLWARD ST #5, JACKS	05/30/2025	31.29	31.29	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-418 05-	355 W DELONEY AVE E-5, JACK	05/30/2025	60.46	60.46	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-419 05-	55 VIRGINIAN LN #4, JACKSON,	05/30/2025	64.20	64.20	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-420 05-	355 W DELONEY AVE A-5, JACK	05/30/2025	45.01	45.01	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-422 05-	126 ASPEN DR, JACKSON, WY	05/30/2025	44.61	44.61	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-423 05-	120 ASPEN DR, JACKSON, WY	05/30/2025	40.47	40.47	06/05/2025
156	LOWER VALLEY ENERGY INC	92050-424 05-	69 VIRGINIAN LN #7, JACKSON,	05/30/2025	47.33	47.33	06/05/2025
	Total 156:				38,798.79	35,798.79	
677	MACY'S SERVICES	121237	Cemetery	04/30/2025	64.00	64.00	06/04/2025
677	MACY'S SERVICES	41325	PUMP TRUCK,GREASE PROCE	04/30/2025	3,023.50	.00	
	Total 677:				3,087.50	64.00	
998	METROQUIP INC	121237	CEMETARY	04/30/2025	64.00-	.00	
998	METROQUIP INC	P32595	WLDT STEP	05/29/2025	942.40	.00	
	Total 998:				878.40	.00	
4623	MSC INDUSTRIAL SUPPLY CO	7694809001	SUPPLIES	05/08/2025	277.49	.00	
4623	MSC INDUSTRIAL SUPPLY CO	7694809002	micro circuit	05/15/2025	57.74	.00	
4623	MSC INDUSTRIAL SUPPLY CO	7694823001	SUPPLIES	05/08/2025	288.27	.00	
	Total 4623:				623.50	.00	
257	NAPA AUTO PARTS INC.	277548	JACK	01/02/2025	94.99	.00	
257	NAPA AUTO PARTS INC.	293642	SUPER DUTY GREASE	03/17/2025	13.98	.00	
257	NAPA AUTO PARTS INC.	308350	RESIN KIT	05/22/2025	57.97	.00	
257	NAPA AUTO PARTS INC.	308589	rtu rxt life gal	05/23/2025	20.66	.00	
257	NAPA AUTO PARTS INC.	308613	DEPOSIT	05/23/2025	162.84	.00	
257	NAPA AUTO PARTS INC.	309136	ROTORS	05/27/2025	332.98	.00	
257	NAPA AUTO PARTS INC.	309145	FILTER	05/27/2025	7.78	.00	
257	NAPA AUTO PARTS INC.	309195	syn POWER	05/27/2025	188.91	.00	
257	NAPA AUTO PARTS INC.	309373	ADAPTERS	05/27/2025	5.84	.00	
257	NAPA AUTO PARTS INC.	309509	FUSE	05/28/2025	5.38	.00	
257	NAPA AUTO PARTS INC.	309511	FUSE	05/28/2025	26.90	.00	
257	NAPA AUTO PARTS INC.	309561	FILTERS	05/28/2025	13.32	.00	
257	NAPA AUTO PARTS INC.	310082	hose,mxtxreel	05/30/2025	78.97	.00	
257	NAPA AUTO PARTS INC.	310611	2022 CHEVY SILVERADO FILTE	06/02/2025	36.94	.00	
257	NAPA AUTO PARTS INC.	310643	synow20	06/02/2025	161.91	.00	
257	NAPA AUTO PARTS INC.	310689	air filter	06/02/2025	19.32	.00	
257	NAPA AUTO PARTS INC.	310978	KOOLER KLEEN	06/03/2025	11.38	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 257:					1,240.07	.00	
187	NELSON ENGINEERING	67300	25-036-01 TO WATER AND SEW	05/27/2025	1,317.50	.00	
187	NELSON ENGINEERING	67308	23-302-01 TOJ THAW WELL 10	05/28/2025	1,579.75	.00	
Total 187:					2,897.25	.00	
7674	NORMONT EQUIPMENT	33709	LOCK LEFT BEND CABLE AND L	05/28/2025	415.00	.00	
Total 7674:					415.00	.00	
7242	PITTS, SAMANTHA	052725	MONTHLY REIMBURSEMENT F	05/27/2025	77.83	.00	
Total 7242:					77.83	.00	
7090	PORT53 TECHNOLOGIES, INC	14632	CISCO DUO MFA	05/06/2025	4,968.00	.00	
Total 7090:					4,968.00	.00	
6483	PREMIER TRUCK- SALT LAKE C	775707800	TUBES	06/03/2025	188.52	.00	
Total 6483:					188.52	.00	
6837	PRO-WEST & ASSOC., INC	INV-000000184	PROFESSIONAL SERVICES	05/20/2025	6,250.00	.00	
6837	PRO-WEST & ASSOC., INC	INV-000000184	PROFESSIONAL SERVICES	05/20/2025	6,250.00	.00	
Total 6837:					12,500.00	.00	
7066	R & A SAFETY LLC	46737	DOT MARAC LOEBE	05/21/2025	90.50	.00	
7066	R & A SAFETY LLC	46754	DOT SEAN MONAGHAN	05/23/2025	90.50	.00	
7066	R & A SAFETY LLC	46768	DOT JASON WATKINS	05/28/2025	90.50	.00	
7066	R & A SAFETY LLC	46769	DOT DEREK DEAN	05/28/2025	115.50	.00	
7066	R & A SAFETY LLC	46780	OLIVIA PARK	05/28/2025	90.50	.00	
7066	R & A SAFETY LLC	46787	DOT GREG NELSON	05/30/2025	90.50	.00	
Total 7066:					568.00	.00	
7460	RAMANATHAN, BRINDA	70125	355 W Deloney A5 - July Rent	07/01/2025	2,500.00	.00	
Total 7460:					2,500.00	.00	
7341	RICH, SAMUEL	052725110	DIAG THERMAL IMAGER	05/27/2025	1,617.60	.00	
7341	RICH, SAMUEL	060325364	BLDS SREWDRIVER DB	06/03/2025	250.95	.00	
7341	RICH, SAMUEL	060325366	MIRROW,DRIFT PUNCH,BIT SE	06/02/2025	548.75	.00	
Total 7341:					2,417.30	.00	
2850	RT1 INC	060325	SHIPPING CHARGES	06/03/2025	47.52	.00	
Total 2850:					47.52	.00	
139	JORGENSEN ASSOCIATES, PC	TOJ PROJECT	LOGO FOR TOJ IN BLACK	05/19/2025	4,980.00	.00	
Total 139:					4,980.00	.00	
4831	SCHAEFFER MFG. CO	PXG5862-INV1	SYNTHETIC OIL	05/07/2025	3,638.80	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 4831:					3,638.80	.00	
7203	SCHWARTZ, ANDY	053025	contract	05/30/2025	4,583.33	.00	
Total 7203:					4,583.33	.00	
6483	PREMIER TRUCK- SALT LAKE C	775707800	TREATED POSTS, DOG EAR FE	06/03/2025	1,180.50	.00	
Total 6483:					1,180.50	.00	
4359	SHERWIN-WILLIAMS CO.	3415-5	PAINT	05/28/2025	67.28	.00	
4359	SHERWIN-WILLIAMS CO.	3804-9	PAINT	05/22/2025	536.14	.00	
4359	SHERWIN-WILLIAMS CO.	3844-5	PAINT	05/24/2025	252.60	.00	
Total 4359:					856.02	.00	
7670	SHORT, RANDILYNN	060425	BAIL REFUND CASE 25-03-0748	06/04/2025	1,500.00	1,500.00	06/05/2025
Total 7670:					1,500.00	1,500.00	
4548	SILVER CREEK SUPPLY	0020670772-0	BRASS NIPPLE	05/06/2025	89.82	.00	
4548	SILVER CREEK SUPPLY	0020804064-0	BUSHINGS	05/13/2025	48.23	.00	
4548	SILVER CREEK SUPPLY	0020814954-0	centennial poly	05/13/2025	31.27	31.27	06/04/2025
4548	SILVER CREEK SUPPLY	0020814954-0	centennial poly	05/13/2025	100.00-	100.00-	06/04/2025
Total 4548:					69.32	68.73-	
4720	SILVERSTAR	54639 0625	MONTHLY SERVICES 54639	06/01/2025	2,747.20	.00	
4720	SILVERSTAR	654791 0625	MONTHLY SERVICES 654791	06/01/2025	869.73	.00	
Total 4720:					3,616.93	.00	
7676	SIRCHIE ACQUISITION COMPA	0688430-IN	SUPPLIES FOR INVESTIGATION	04/07/2025	183.70	.00	
Total 7676:					183.70	.00	
5632	SNAKE RIVER MEP COMPLETE,	14581	REPLACE MAU AND FURNACE	05/21/2025	36,764.00	.00	
5632	SNAKE RIVER MEP COMPLETE,	14582	SMOKE DETECTOR	05/21/2025	831.90	.00	
Total 5632:					37,595.90	.00	
7050	SOSA'S JANITORIAL SERVICE	0000159	TOWNHALL	05/30/2025	5,580.00	.00	
7050	SOSA'S JANITORIAL SERVICE	0000160	PEARL STREET	05/03/2025	540.00	.00	
Total 7050:					6,120.00	.00	
7546	SPACE EXPLORATION TECHNO	INV-USA-4478	ROAM UNLIMITED	06/01/2025	165.00	.00	
Total 7546:					165.00	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334644451	EXAM	05/12/2025	235.14	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334644453	EXAM	05/12/2025	81.80	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334644454	EXAM	05/12/2025	24.91	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334644455	EXAM	05/12/2025	53.91	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334644456	EXAM	05/12/2025	162.88	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645391	EXAM	05/27/2025	33.91	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645394	EXAM	05/27/2025	292.64	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
1505	SPRING CREEK ANIMAL HOSPI	5334645395	EXAM	05/27/2025	33.91	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645396	EXAM	05/27/2025	194.17	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645397	EXAM	05/25/2025	56.61	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645398	EXAM	05/27/2025	62.33	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645866	ANIMAL CARE	06/03/2025	33.91	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645867	ANIMAL CARE	06/03/2025	84.73	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645868	ANIMAL CARE	06/03/2025	53.91	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645869	ANIMAL CARE	06/03/2025	13.55	.00	
1505	SPRING CREEK ANIMAL HOSPI	5334645870	SPAY	06/03/2025	181.40	.00	
1505	SPRING CREEK ANIMAL HOSPI	534645393	EXAM	05/27/2025	149.61	.00	
1505	SPRING CREEK ANIMAL HOSPI	8334645392	EXAM	05/27/2025	56.14	.00	
Total 1505:					1,805.46	.00	
6838	SPSC POA - South Park Services	060125	lot fee and water	06/01/2025	303.82	.00	
Total 6838:					303.82	.00	
251	STANDARD PLUMBING SUPPLY	YGM130	HIGH BACK PRES VB RK	05/28/2025	8.12	.00	
251	STANDARD PLUMBING SUPPLY	YPD827	HIGH BACK PRES VB RK	05/15/2025	4.06	.00	
251	STANDARD PLUMBING SUPPLY	YQJ625	HIGH BACK VAC KIT	05/27/2025	12.18	.00	
Total 251:					24.36	.00	
7636	START FRESH CLEANING SERV	012345	cleaning apartment	06/03/2025	683.00	.00	
Total 7636:					683.00	.00	
7088	STONE, KIRK	70125	3585 Canadian • July Rent	07/01/2025	3,087.00	.00	
Total 7088:					3,087.00	.00	
7076	SUSTAINABLE STRATEGIES DC	4476	GRANT SERVICES	06/01/2025	7,500.00	.00	
Total 7076:					7,500.00	.00	
1443	TETON COUNTY CLERK	053125	contribution	05/31/2025	243,267.50	.00	
1443	TETON COUNTY CLERK	053125	contribution	05/31/2025	278,072.33	.00	
1443	TETON COUNTY CLERK	053125	contribution	05/31/2025	49,074.83	.00	
Total 1443:					570,414.66	.00	
581	TETON COUNTY INTEGRATED	10939	EWASTE	05/16/2025	23.00	.00	
581	TETON COUNTY INTEGRATED	723516	DUMP FEE	05/09/2025	279.00	.00	
581	TETON COUNTY INTEGRATED	723965	DUMP FEE	05/12/2025	172.00	.00	
581	TETON COUNTY INTEGRATED	725073	DUMP FEE	05/16/2025	157.00	.00	
Total 581:					631.00	.00	
2362	TETON COUNTY PUBLIC HEALT	25-2597	water testing	05/20/2025	200.00	.00	
Total 2362:					200.00	.00	
6902	TETON COUNTY PUBLIC WORK	040925	TASK WORK ORDER #3 PUBLIC	04/09/2025	108.33	.00	
6902	TETON COUNTY PUBLIC WORK	040925	TASK WORK ORDER #2 STILSO	04/09/2025	12,932.70	.00	
6902	TETON COUNTY PUBLIC WORK	040925	TASK WORK ORDER #5 CONST	04/09/2025	1,569.52	.00	
6902	TETON COUNTY PUBLIC WORK	040925	TASK WORK ORDER #1 GRANT	04/09/2025	5,238.75	.00	
6902	TETON COUNTY PUBLIC WORK	040925	TASK WORK ORDER #2 TRANSI	04/09/2025	25.77	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
6902	TETON COUNTY PUBLIC WORK	042825	TASK WORK ORDER #1 GRANT	04/28/2025	5,786.05	.00	
6902	TETON COUNTY PUBLIC WORK	042825	TASK WORK ORDER #2 TRANSI	04/28/2025	901.66	.00	
6902	TETON COUNTY PUBLIC WORK	042825	TASK WORK ORDER #5 CONST	04/28/2025	3,800.05	.00	
6902	TETON COUNTY PUBLIC WORK	042825	TASK WORK ORDER #2STILSO	04/28/2025	10,520.71	.00	
6902	TETON COUNTY PUBLIC WORK	2025-9	TASK WORK ORDER #5 CONST	05/15/2025	3,549.35	.00	
6902	TETON COUNTY PUBLIC WORK	2025-9	TASK WORK ORDER #2 TRANSI	05/15/2025	183.40	.00	
6902	TETON COUNTY PUBLIC WORK	2025-9	TASK WORK ORDER #2 STILSO	05/15/2025	12,302.28	.00	
6902	TETON COUNTY PUBLIC WORK	2025-9	TASK WORK ORDER #3 PUBLIC	05/15/2025	1,119.95	.00	
6902	TETON COUNTY PUBLIC WORK	2025-9	TASK WORK ORDER #1 GRANT	05/15/2025	3,920.38	.00	
	Total 6902:				61,958.90	.00	
1614	TETON COUNTY-FUND 10	053125	DISPATCH	05/31/2025	54,738.42	.00	
1614	TETON COUNTY-FUND 10	053125A	PATHWAYS May	05/31/2025	12,500.67	.00	
1614	TETON COUNTY-FUND 10	053125B	PLANNING APRIL	05/31/2025	6,381.14	.00	
1614	TETON COUNTY-FUND 10	053125B	PLANNING APRIL	05/31/2025	7,998.97	.00	
	Total 1614:				81,619.20	.00	
3027	TETON COUNTY-FUND 13	053125	MAY 2025 CAPITAL	05/31/2025	9,862.40	.00	
	Total 3027:				9,862.40	.00	
166	TETON COUNTY-FUND 19	053125	may capital	05/31/2025	577.30	.00	
	Total 166:				577.30	.00	
268	TETON MOTORS INC	5113199 1	SENSOR	05/27/2025	171.65	.00	
268	TETON MOTORS INC	5113219 1	shOCK	05/29/2025	299.72	.00	
268	TETON MOTORS INC	5113268 1	RETURNED CORE	06/03/2025	2,000.00-	.00	
	Total 268:				1,528.63-	.00	
3162	TETON TRASH REMOVAL, INC.	25 JUN 376	145 HANSEN TRASH	06/01/2025	114.00	.00	
	Total 3162:				114.00	.00	
3955	THOMSON WEST	852001498	INFORMATION CHARGES	06/01/2025	604.60	.00	
3955	THOMSON WEST	852001498	INFORMATION CHARGES	06/01/2025	604.60	.00	
	Total 3955:				1,209.20	.00	
70	THYSSEN KRUPP ELEVATOR C	3008481262	ANNUAL MAINTENANCE CONT	05/01/2025	4,828.90	.00	
70	THYSSEN KRUPP ELEVATOR C	3008608093	ANNUAL MAINTENANCE CONT	06/01/2025	814.14	.00	
	Total 70:				5,643.04	.00	
6591	T-MOBILE	967529416-06	967529416 ACCOUNT	06/01/2025	31.15	.00	
	Total 6591:				31.15	.00	
6363	TMSC LLC	2025-005-08	TOWN HALL IT ROOM	06/02/2025	10,626.24	.00	
	Total 6363:				10,626.24	.00	
7617	TRANSPORTATION MANAGEME	1156-03	1156 5 YEAR PLAN	05/15/2025	24,106.20	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
Total 7617:					24,106.20	.00	
5038	TREFONAS LAW, P.C.	053125	MAY SERVICES	05/31/2025	1,253.62	.00	
Total 5038:					1,253.62	.00	
4649	ULINE	193266793	STORAGE SHELVING	05/22/2025	1,000.00	.00	
4649	ULINE	193266793	STORAGE SHELVING	05/22/2025	1,814.11	.00	
Total 4649:					2,814.11	.00	
777	UPPER CASE PRINTING INK	3081	WATER CONSERVATION FLYER	05/06/2025	825.00	.00	
Total 777:					825.00	.00	
706	USA BLUE BOOK	INV00705400	HYDRO HITCH	05/08/2025	1,956.90	.00	
706	USA BLUE BOOK	INV00712765	HYDRANT TAGS	05/16/2025	564.95	.00	
706	USA BLUE BOOK	INV00722005	TUBING BENDER	05/28/2025	260.49	.00	
Total 706:					2,782.34	.00	
517	WAM	18209	CONVENTION REGISTRATION	05/19/2025	260.00	.00	
517	WAM	18250	CONVENTION JORGENSEN,TY	05/27/2025	260.00	.00	
517	WAM	18250	CONVENTION JORGENSEN,TY	05/27/2025	260.00	.00	
517	WAM	18250	CONVENTION JORGENSEN,TY	05/27/2025	260.00	.00	
Total 517:					1,040.00	.00	
7550	WBC PROPERTIES	70125	Virginian 69-7 - July Rent	07/01/2025	2,150.00	.00	
Total 7550:					2,150.00	.00	
2802	WESTWOOD CURTIS	060324	2024 W JACKSON WATER PROJ	06/03/2024	9,911.61	.00	
2802	WESTWOOD CURTIS	060324	2024 W JACKSON WATER PROJ	06/03/2024	188,320.62	.00	
2802	WESTWOOD CURTIS	060324	2024 W JACKSON WATER PROJ	06/03/2024	9,911.61-	.00	
Total 2802:					188,320.62	.00	
472	WHITE GLOVE CLEANING, INC.	13076	SNOW KING HOUSING	04/30/2025	400.00	.00	
472	WHITE GLOVE CLEANING, INC.	13098	CLEAN SHELTERS	05/31/2025	2,902.00	.00	
472	WHITE GLOVE CLEANING, INC.	13098	CLEAN SHELTERS	05/31/2025	125.00	.00	
472	WHITE GLOVE CLEANING, INC.	2244B	WSK 2	04/21/2025	299.97	.00	
Total 472:					3,726.97	.00	
6117	WILSON, JOHN	70125	Wildflower Court - July Rent	07/01/2025	2,200.00	.00	
Total 6117:					2,200.00	.00	
4139	WY WORKERS' SAFETY & COM	053125	MAY PREMIUM	05/31/2025	33,595.43	33,595.43	05/30/2025
Total 4139:					33,595.43	33,595.43	
7673	WYoCMA	111	CONFEREENCE TYLER SINCLA	04/01/2025	30.00	.00	
Total 7673:					30.00	.00	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid
4198	WYOMING FIRST AID & SAFETY	9000490	first aid kit resupply	05/28/2025	128.39	.00	
Total 4198:					128.39	.00	
5788	WYOMING GARAGE DOOR, LLC	4013	SERVICE CALL REPLACE BATT	05/27/2025	125.00	.00	
5788	WYOMING GARAGE DOOR, LLC	40174	SERVICE ALL	05/27/2025	125.00	.00	
Total 5788:					250.00	.00	
406	WYOMING LAW ENFORCEMEN	053125	OFFICER EDUCATION TRAININ	05/31/2025	95.00	.00	
Total 406:					95.00	.00	
329	WYOMING RETIREMENT SYST	053125	May contribution	05/31/2025	289,675.56	289,675.56	06/03/2025
Total 329:					289,675.56	289,675.56	
1764	WYOMING.COM INC	2279160	DOMAIN HOSTING	06/05/2025	5.00	.00	
Total 1764:					5.00	.00	
2842	YELLOW IRON WASTE, LLC	020602029946	940 SIMON	05/31/2025	40.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030262	55 KARNS	05/31/2025	160.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030263	155 E PEARL	05/31/2025	152.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030270	400 SNOW KING	05/31/2025	765.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030327	TRASH	05/31/2025	520.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030337	455 VINE	05/31/2025	212.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030373	675 W SNOWKING	05/31/2025	344.00	.00	
2842	YELLOW IRON WASTE, LLC	250602030382	55 KARNS	05/31/2025	192.00	.00	
Total 2842:					2,385.00	.00	
7668	ZANE AUKEE LAW, LLC	052725	REIMBURSE FOR ROBE	06/09/2025	54.90	.00	
7668	ZANE AUKEE LAW, LLC	INV-2540	MAY	05/19/2025	800.00	.00	
Total 7668:					854.90	.00	
Grand Totals:					2,257,739.11	422,209.25	

Vendor	Vendor Name	Invoice Number	Description	Invoice Date	Net Invoice Amount	Amount Paid	Date Paid

Dated: _____

Mayor: _____

City Council: _____

_____

_____

_____

_____

_____

City Recorder: _____

City Treasurer: _____

Report Criteria:

Detail report.

Invoices with totals above $0 included.

Paid and unpaid invoices included.

TOWN OF JACKSON
MUNICIPAL COURT
MONTHLY FINANCE REPORT FOR MAY 2025

During the month of May, the Court received $28,616 in fines, costs, and fees.
330 Cases were closed. 52 (31 parking violations) of those cases were dismissed.
316 new Cases were filed: 225 Parking Violations, 91 Traffic/Ordinance/Criminal summons.

The abbreviations used below are: BF= Bond Forfeiture (includes $10.00 court cost and fees), GP=Guilty Plea and Fine, NC= No Contest Plea and Fine, G=Found Guilty at Trial, NG=Found Not Guilty at Trial,
R=Restitution, CS=Community Service, DP=Deferred Prosecution, D=Dismissed, D-TS= Dismissed with Traffic School,
DA=Deferred Adjudication

CASES CLOSED in May (Parking notices not listed):

CITATION	OFFENSE	DISPOSITION	$
186007153AC	Compulsory Auto Insurance	BF	555
186007526AC	Compulsory Auto Insurance	BF	560
186007438AC	Criminal trespass	BF	250
186007468AC	Criminal trespass	BF	250
186007477AC	Criminal trespass	BF	250
186007634AC	Driver & Passenger Req. to wear seat belt	BF	25
186007638AC	Driver & Passenger Req. to wear seat belt	BF	25
186007655AC	Driver & Passenger Req. to wear seat belt	BF	25
18288P	Expired temporary permit/improper registration	BF	140
186007521AC	Expired temporary permit/improper registration	BF	140
186007637AC	Expired temporary permit/improper registration	BF	140
186007506AC	Failure to display valid license plate, tabs, permits	BF	45
186007445AC	Failure to Maintain Lane	BF	90
186007529AC	Failure to Maintain Lane	BF	90
186007485AC	Failure to Obey Traffic Control Device	BF	140
186007562AC	Failure to Obey Traffic Control Device	BF	140
186007571AC	Following too Close	BF	90
186007596AC	Following too Close	BF	90
186007448AC	Improper Display of Tabs-registration	BF	90
186007542AC	Improper Display of Tabs-registration	BF	90
186006912AC	Limitations on Backing	BF	90
186007564AC	Limitations on Backing	BF	90
186007196AC	Operating Under Suspended or revoked license	BF	440
186007470AC	Operator's Permit Required	BF	150
186007578AC	Operator's Permit Required	BF	750
186006981AC	Public intoxication	BF	175
186007192AC	Public intoxication	BF	175
186007252AC	Public intoxication	BF	175
186007361AC	Public intoxication	BF	175
186007436AC	Public intoxication	BF	175
186007551AC	Public intoxication	BF	175
186007507AC	Speeding 31/25	BF	140
186007263AC	Speeding 37/25	BF	120
186007656AC	Speeding 37/25	BF	120
186007534AC	Speeding 39/25	BF	130
186007478AC	Speeding 39/30	BF	103
186007635AC	Speeding 42/30	BF	130
186007654AC	Speeding 48/25	BF	185
186007498AC	Speeding 49/40	BF	103
186007504AC	Speeding 50/35	BF	135
186007518AC	Speeding 53/40	BF	125
186006905AC	Speeding in a school zone 34/20	BF	305
186007467AC	Speeding urban - 40/30 mph zone	BF	150
186007212AC	Speeding urban - 41/30 mph zone	BF	167
186007510AC	Speeding urban - 45/30 mph zone	BF	195
186007555AC	Speeding urban - 45/30 mph zone	BF	195
186007558AC	Speeding urban - 45/30 mph zone	BF	195
186007495AC	Speeding urban - 47/30 mph zone	BF	209
186007328AC	Speeding urban - 48/30 mph zone	BF	216
186007484AC	Speeding urban - 48/30 mph zone	BF	216
186007528AC	Speeding urban - 49/30 mph zone	BF	223
186007530AC	Speeding urban - 49/30 mph zone	BF	223
186007483AC	Speeding urban - 50/30 mph zone	BF	230
186007318AC	Speeding urban -53/ 30 mph zone	BF	281
186007181AC	Stop Sign Violation	BF	140
186007346AC	Stop Sign Violation	BF	140
186007469AC	Taxi Vehicle Markings and Signage	BF	150
186007533AC	Turning left at intersection	BF	90
186007431AC	Unlawful Contact or Touching	BF	500
186007439AC	Unlawful Contact or Touching	BF	250
186006660AC	Use of cell phone while driving prohibited	BF	75
186007513AC	Use of cell phone while driving prohibited	BF	75
186007586AC	Use of cell phone while driving prohibited	BF	75
186005482AC	Speeding 40/25	D- In accordance with Wyo.R.Cr.P.3.1(a)	0
186007453AC	Compulsory Auto Insurance	D- Per Town's Motion	0
186006519AC	Expired temporary permit/improper registration	D- Per Town's Motion	0
186007457AC	Expired temporary permit/improper registration	D- Per Town's Motion	0
186007198AC	Marijuana: use and/or possession	D- Per Town's Motion	0
186007197AC	Possession/consumption of alcohol- minors (18-20)	D- Per Town's Motion	0

186007362AC	Public intoxication	D- Per Town's Motion	0
186007349AC	Public intoxication	D- Per Town's Motion	0
186007032AC	Stop Sign Violation	D- Per Town's Motion	0
186007269AC	Vehicle shall have at least 2 headlamps	D- Per Town's Motion	0
186007525AC	Compulsory Auto Insurance	D- Provided Valid Information	0
186007703AC	Compulsory Auto Insurance	D- Provided Valid Information	0
186006979AC	Failure to Maintain Lane	D- TS	0
186007509AC	Failure to stop at a red light	D- TS	0
186007324AC	Passing a school Bus	D- TS	0
186007466AC	Speeding 40/25	D- TS	0
186007295AC	Speeding 48/28	D- TS	0
186007491AC	Speeding urban - 49/30 mph zone	D- TS	0
186007359AC	Stop Sign Violation	D- TS	0
186005221AC	1st off win 10 years-Drive/control veh under infl alcohol concentration 0.08% or more	DA- In accordance with WS 7-13-301 Deferred Adjudication	760
11269J	Drive/control veh under infl alcohol concentration 0.08% or more	DA- In accordance with WS 7-13-301 Deferred Adjudication	760
98235N	1st off win 10 years-Drive/control veh under infl alcohol concentration 0.08% or more	GP	810

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular Mtg - Consent
Submitting Department:	Administration	**Presenter:**	Tanya Anderson
Agenda Item:	Request for Information for Electric Vehicle Charging Stations	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Council to consider a Request for Information (RFI) for Electric Vehicle (EV) Charging Stations.

Requested Action.
The requested action is for Council to consider the release of an RFI for EV Charging Stations.

Recommendations.
Staff recommends approving the release of the attached RFI for EV Charging Stations.

Background.
At the March 17, 2025 Town Council Workshop, Council directed staff to draft a plan to initiate user fees at Town-owned EV Charging Stations using the criteria discussed at the meeting, and directed staff to draft a Request for Proposals (RFP) to seek a vendor that will lease and manage current and future Town-owned charging stations and pay the Town of Jackson a portion of the revenue generated. Since then, staff has conducted community engagement around the project, including a workshop at the Jackson Hole Summit on May 15th, and an EV owner's meeting on May 29th, 2025.

Prior to releasing an RFP for EV charging stations and their management, staff is interested in gathering more information about the types of products available, new technologies, and lease and management contracts. Gathering information through an RFI will help staff to draft a more specific and realistic RFP and will increase the likelihood of getting proposals that fit our unique needs. It will also give staff a better estimate of the costs of the goods and services we seek.

Analysis.
Community engagement conducted thus far suggests that most residents are open to the initiation of user fees at Town-owned EV charging stations, but they would like costs to remain low for Level 2 charging stations (approximately 10-16 cents per kilowatt hour) and they are interested in programs that could provide discounts for locals or employees. Most people who attended the community engagement sessions thought that Direct Current (DC) Fast Chargers should cost significantly more than Level 2 chargers, with most suggesting pricing in the 25-35 cent per kilowatt hour (kWh) range. Attendees also suggested that peak periods should cost 1.25 to 1.75 times more than other times, and that there should be an overstay fee charged per minute starting 15 to 30 minutes after the charging session ends to encourage turnover. These suggestions generally align with the direction received from Council.

Fees for service require software, and services such as discount programs, overstay fees, and peak pricing require more advanced software and services. It is likely that there is technology available that staff is unaware of that could support Council's goals while meeting the needs of the community. Additionally, staff is unaware of models where a vendor leases and manages EV charging stations. More information is needed to help staff estimate the cost of this type of program. Staff drafted a RFI to seek information from vendors regarding EV charging technology and software products, and to learn more about lease and management contracts and typical fees. Information gathered will help staff to draft an RFP for installation and management of 20 new EV charging stations, which is scheduled to come before Council for approval this summer.

Possible Alternatives.

- Council could reject the Request for Information as drafted and direct staff to return with Request for Information with a different scope.
- Council could reject the Request for Information and direct staff to move forward with drafting a Request for Proposals without gathering more information about the variety of products and services available.
- Council could direct staff to pause the project.

Comprehensive Plan & Priority Alignment.

Net Zero Resolution

Principle 2.3 – Reduce greenhouse gas emissions through transportation

Transportation accounts for approximately 80% of the total carbon emissions in the community and should be a focus of the community's efforts to reduce energy consumption. Reducing fuels consumed for transportation and using renewable fuels has the greatest potential to reduce the community's overall carbon emissions and consumption of non-renewable resources.

Principle 7.2 - Reduce greenhouse gases from vehicles to below 2012 levels

One of the biggest threats to the health of the ecosystem is climate change. The most significant local contributor to greenhouse gas emissions is surface transportation – the cars, trucks, and buses we use to travel into, within, and out of the community. As stewards of the ecosystem, we will manage our transportation to reduce emissions. Cleaner vehicles, fewer trips, and trips that move more people will be prioritized over strategies focused on reducing congestion.

Town of Jackson Sustainability Plan Goals

- Reduce GHG emissions associated with surface transportation and motors
- Reduce noise pollution
- Reduce energy consumption during peak periods

Town of Jackson Sustainability Plan Targets

- Reduce community-wide GHG emissions attributed to surface transportation 30% by 2030

Town of Jackson Sustainability Plan Strategies:

- Plan for an electric future
- Incentivize electric vehicle charging during off-peak hours

Fiscal Impact.

An RFI seeks information from vendors but does not result in a contract or payments. The primary cost of releasing an RFI is staff time and the cost of advertising the RFI, which is typically a few hundred dollars.

Staff Impact.

The drafting of this RFI and staff report took Ecosystem Stewardship staff approximately 4 hours. It will take the Town Clerk an estimated 2 hours to advertise and release the RFI, and to communicate with responders. It took the Legal Department approximately 1.5 hours to review this staff report and the RFI. It will take staff an estimated 8-10 hours to review information received by vendors.

Attachments or Links.

RFI

Suggested Motion.

I move to approve the release of the RFI for EV charging stations.

REQUEST FOR INFORMATION

Electric Vehicle Charging and Fueling Infrastructure, Technology, and Management

Issued: June 17, 2025

Jackson, Wyoming

Requested By:	Town of Jackson
Due Date:	10:00 am MST July 7, 2025
Response Submission:	via e-mail: clerk@jacksonwy.gov
Contact and Questions:	Tanya Anderson Ecosystem Stewardship Administrator tanderson@jacksonwy.gov

1. INTRODUCTION

This Request for Information (RFI) is issued by the Town of Jackson to gain information to inform the development of a future Request for Proposals (RFP) for Electric Vehicle (EV) Charging Stations. The Town intends to install 20 new EV charging stations on Town-owned property in 5 different locations. Four will be Direct Current Fast Charging (DCFC) stations. 16 will be Level 2 (L2) charging stations. The Town seeks information from qualified vendors and experts to help us better understand the technology that is available for both types of chargers. The future RFP will seek proposals for a firm to complete 35% design plans for the charging stations, submit NEPA paperwork, install the new charging stations, and lease and manage existing and new charging stations. These tasks may be completed by several different firms each applying to complete one or more portions of the project scope, by one firm that can do the full scope of work, or by multiple firms that submit a proposal together.

The Town of Jackson invites interested parties to share information on EV charging station technologies, associated software, management practices, and limitations. The Town is particularly interested in learning about technologies, pricing mechanisms, and management practices that can reduce emissions associated with the consumption of electricity by EV charging stations, such as by reducing charging during periods of peak demand or encouraging charging during periods when clean and renewable energy is available. The Town is also interested in user fee practices that are fair and do not disproportionately impact residents who are unable to charge their vehicles at home, the use of discount programs to support income or employment-qualified individuals, and best practices for encouraging turnover of vehicles at EV charging stations. The Town is also interested in leasing the EV charging stations to a third party that will manage them and is interested in learning more about lease and management contracts.

Please note that this RFI is for informational purposes only, and no contract will be awarded as a result. A firm or organization's response to the RFI – or lack thereof – will have no impact on the evaluation of responses to any subsequent Request For Proposals or Invitation to Bid released. Responses will be used solely for information and planning purposes.

2. BACKGROUND

The Town of Jackson is a community in Northwest Wyoming with just over 10,000 residents. It is the sole municipality within Teton County, Wyoming, whose population, including the Town of Jackson, is just over 23,000 residents. The Town currently owns and maintains 10 L2 charging stations and 2 DCFC stations, which were purchased with Special Purpose Excise Tax funding. Since their installation more than ten years ago, the Town of Jackson has not charged user fees at these stations. The addition of 20 new EV charging stations provides the opportunity for the Town to begin charging user fees, install features that encourage turnover at charging stations, support residents in multi-family housing who cannot charge at home, support local businesses, and reduce emissions.

3. PURPOSE OF THE RFI AND KEY ELEMENTS

The Town of Jackson was recently awarded funding through the Department of Transportation Community Charging and Fueling Infrastructure (CFI) grant that will provide an 80% match for 20 new EV charging stations within the Town. The grant agreement was fully executed on January 17, 2025. The grant requires that the charging stations must have at least four network connected charging ports at each location and be capable of simultaneously charging at least four EVs. The grant also requires that all aspects of the project abide by the following regulations:

- Buy America
- Davis Bacon wage rates
- Brooks Act

To qualify for reimbursement with grant funding, EV charging stations must abide by the following guidelines:

§ 680.106 **(c) Connector Type**

- Each DCFC port must be capable of charging any Combined Charging System (CCS)-compliant vehicle
- Each DCFC port must have at least one permanently attached CCS Type 1 connector
- Each AC Level 2 charging port must have a permanently attached J1772 connector and must charge any J1772-compliant vehicle

§ 680.106 (d) (1) Power Level for DCFC

- Output voltage range of at least 250 volts DC to 920 volts DC

§ 680.106 (d) (2) Power Level for AC L2

- Must have a continuous power delivery rating of at least 6 kW simultaneously across all AC ports
- AC L2 chargers may conduct power sharing and/or participate in smart charge management when the EV charging customer consents to accepting a lower power level.

§ 680.106 (e) Availability

- Stations must be available and accessible to the public at least as frequently as the business operating hours of the site host.

§ 680.106 (f) Payment Methods

Unless charging is permanently provided free of charge to customers, charging stations must:

- Provide for secure payment methods, accessible to persons with disabilities, which at a minimum shall include
    - A contactless payment method that accepts major debit and credit cards, and
    - Either an automated toll-free phone number or short message/messaging system (SMS0 that provides the EV charging customer with the options to initiate a charging session and submit payment
- Not require a membership for use
- Not delay, limit, or curtain power flow to vehicles on the basis of payment method or membership
- Provide access for users that are limited English proficient and accessibility for people with disabilities. Automated toll-free phone numbers and SMS payment options must clearly identify payment access for these populations.

§ 680.108 Interoperability of Electric Vehicle Charging Infrastructure

- Stations must conform to ISO 15188 for vehicle-charger interoperability and be capable of Plug and Charge

§ 680.114 Charging Network Connectivity of EV Charging Infrastructure

- Chargers must conform to OCPP 2.0.1 and OCPI 2.2.1 and be capable of communicating with the grid
- Chargers must be designed to securely switch charging network providers without any changes to hardware

Additionally, charging stations must:

- Comply with manual on Uniform Traffic Control Devices for Streets and Highways
- Display price in kWh
    - Price cannot change during session
- Have an uptime of greater than 97%
- Share data about chargers publicly via API for free
- Be ADA-compliant

In addition to learning about ways to fulfill the requirements of the grant, including ADA compliance, the Town of Jackson is interested in investigating ways to minimize the impact of EV charging stations on the grid and optimize the use of clean energy to charge vehicles. Lower Valley Energy, the local energy cooperative, purchases power from the Bonneville Power Administration. Much of the local electricity supply comes from hydroelectric power, especially in the spring and summer. Electricity demand in Jackson is highest in the winter, when hydroelectric power comprises a smaller portion of the grid. Daily peak demand in Jackson occurs in the morning. Lower Valley Energy does not currently change energy pricing based on the time of day. However, they do charge demand fees based on the highest amount of electricity used in a single 15-minute period during the course of the month. Demand fees can exceed usage fees for kilowatt hours (kWh) used in some Town of Jackson buildings. The Town is interested in reducing electricity consumed during peak

periods to reduce demand fees, while also reducing the amount of electricity that needs supplied by non-renewable resources.

The Town has never charged for the use of our charging stations. In addition to charging a per kWh, the Town is interested in assessing overstay fees to encourage turnover. However, the Town wants the use of EV charging stations to be convenient and safe and may consider waiving overstay fees overnight or during other periods where there may be safety implications or decrease usability. The Town is also interested in investigating options to support local residents through local discount programs, employee benefits, or other programs. Finally, the Town is interested in learning more about signage and maintenance to ensure appropriate use and a high uptime for Town-owned EV charging stations.

4. INFORMATION REQUESTED

To help the Town of Jackson understand the wide range of options and technologies available, we are seeking responses from vendors, software designers, EV charging infrastructure management companies, energy providers, subject matter experts, and other relevant firms and individuals. Respondents are invited to provide information on the following subjects of interest to the Town of Jackson. Information provided should total no more than ten total pages. Respondents may include additional attachments with data sets, images, charts, or other visuals as appropriate.

A) **EV Charging Station models:** What vendors and models of DCFC and L2 stations meet the DOT CFI grant requirement under Buy America and also meet the DOT CFI grant requirements for connector type, power level, payment methods, interoperability, charging network connectivity, and other requirements of the grant?

B) **ADA compliance and accessibility for EV Charging Stations:** How are EV charging stations designed to meet the ADA requirements of the DOT CFI grant? What are best practices for meeting ADA requirements, and how are other communities doing it? How are vendors providing access for people who have limited English proficiency? How are vendors providing payment options that meet the grant requirements?

C) **Smart Charge Management:** What kinds of smart charge management is available and how does it work? How effective is it at reducing peak demand? How effective is it at reducing emissions? Can it be used with any model of EV charging station? What kind of open protocols are needed for smart charge management? What are the limitations of smart charge management?

D) **Overstay Fees:** What are best practices for charging overstay fees? How long after a vehicle is fully charged should they be assessed, and at what rate relative to the cost of charging? What exceptions to overstay fees should be considered?

E) **Discount Programs:** How can communities support access to public EV charging stations for residents who live in locations where they cannot charge at home? Are there examples of discount programs in other communities? How are they set up? What are the benefits and drawbacks of discount programs?

F) **Employee Benefits:** Are there examples of communities that have employee benefit programs that give them access to discounted or free EV charging at public EV charging stations? How are these programs set up? How do businesses join an employee benefit program? How are fees for participation established?

G) **Artificial Intelligence:** How are communities using Artificial Intelligence (AI) to manage EV charging stations? What are the benefits and drawbacks of using AI to manage EV charging stations?

H) **Maintenance:** A 97% up-time is required. What systems are vendors or managers using to ensure that EV charging stations are functioning efficiently? How do customers report problems, and how do vendors or managers respond to those reports? What are the best practices for ensuring swift and effective maintenance in rural locations that may not have a trained workforce available to fix EV charging stations? What are best practices for removing this responsibility from the charging stations owner (the Town), while providing reliable service to users?

I) **Signage:** How are communities effectively signing EV charging stations to notify users of rules and fees? What are effective ways to sign ADA-compliant spots while allowing other users if non-ADA compliant spots are full? What are best practices regarding allowing non-EVs to park in EV charging station parking spots, and non-ADA vehicles to park in some of the accessible spots?

J) **Management:** What models are available for leasing publicly owned EV charging stations to a firm to manage them? What types of services are included in contracts? What are typical fees and contract terms for this type of contract?

5. SUBMITTAL REQUIREMENTS

Responses must be submitted through the Town Clerk, Riley Hovorka, at clerk@jacksonwy.gov and must be compiled into a single .pdf document named "EV Charging Infrastructure Request for Information – [company name]", before the date identified in Section 6. Physical (paper) copies of RFI responses are not allowed.

At a minimum, responses should include the following information:

a) A transmittal cover letter on the Respondent's organization's letterhead, and shall clearly identify the name, title, telephone number, and email address of the person who will serve as the Respondent's representative for all matters relating to the RFI.

b) A brief description of relevant experience or qualifications, such as a list of previously executed projects installing or managing EV charging stations or their software.

c) A narrative that explains the model, technology, software, device or system they would like to share information about.

d) Respondents are asked to respond only to those questions for which they would like to provide an answer.

e) Responses must be in the same sequence and format as listed in Section 4.

If available, respondents should provide drawings, pictures, images, or other visuals that illustrate the concept, or graphs, charts, and other data that illustrates benefits. Information on pricing and cost savings is welcome.

If you have any questions about this RFI, please direct them to the RFI contact, Tanya Anderson, via email at tanderson@jacksonwy.gov during the appropriate period identified in section 6.

6. TIMELINE

The Request for Information (RFI) will proceed on the following schedule:

RFI Released: June 17, 2025

Deadline for Questions: 5:00 PM MST June 23, 2025

Responses Due: 10:00 AM MST July 7, 2025

7. CONDITIONS OF RESPONSE SUBMISSION

- Any and all documents submitted to the Town of Jackson may be deemed public records subject to examination and inspection by third parties. Any material submitted that is to be considered confidential must be clearly marked at such.
- RFI responses will be accepted from any organization interested in designing plans for the charging stations and submitting NEPA paperwork, installing the new charging stations, and leasing and managing existing and new charging stations, or any one or more of those elements.
- All costs incurred in the preparation and presentation of a submitted response, in any way whatsoever, shall be wholly absorbed by the responding party(ies).
- The Town may contact respondents with clarifying questions. Respondents may be asked to provide supplemental information.
- Submission of an RFI response is not a guarantee of a future contract award.

Once the process is complete, the Town of Jackson retains ownership over the report. The firm may use the final product in their reference portfolio. All other uses are subject to Town of Jackson approval.

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular - Consent
Submitting Department:	Public Works	**Presenter:**	Brian Lenz
Agenda Item:	Valley Springs Sewer Connection Request (E25-0050)	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Council to consider a new request for Town wastewater collection and treatment services for an existing/redeveloping property, Valley Springs Ranch (VSR).

Requested Action.
Staff requests Town Council consideration of the applicant's request for Town wastewater collection and treatment services.

Recommendations.
Staff recommends approval of the applicant's request for Town wastewater collection and treatment services subject to 1) the proposed conditions of approval and 2) other necessary contract issues/details as required by the Town Attorney.

Background.
The application presented is a request for Town wastewater services and to establish the conditions for allowing the sewer connections. The development is located outside of the Town's corporate limits. Most of the buildings on the property are already connected to the Town's sewer system, but without a connection and use agreement.

According to the application, "The project location and service area is 1375 Valley Springs Road, Jackson, Wyoming; Owner is BCJ ENTERPRISES LLC. There are currently 10 to 11 existing ranch buildings, including the following: 1) a 1992sf one-story single-family home with a 644sf detached garage, a 1078sf one-story guest house, a 1092sf one-story log cabin, a 266sf one-story building, an equipment building with 936sf of shed adjacent to 936sf of equipment storage, a 900sf barn with loft, a 360sf barn, a 195sf shed, and a 80sf shed." Please refer to the "VSR Sewer Vicinity" map, Figure 1, for the location of the VSR directly north of Rafter J. A map of the site is attached to the staff report for more detail.

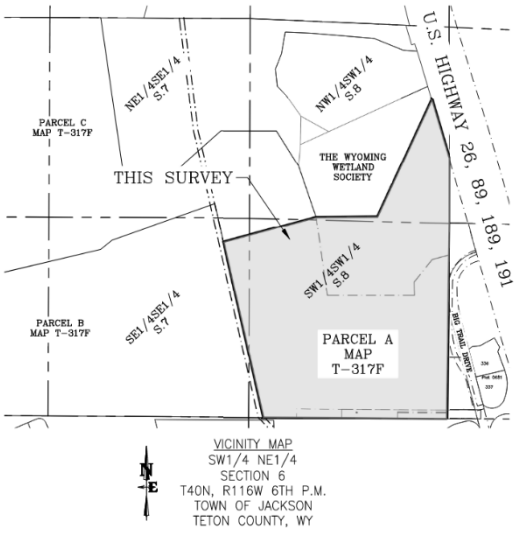


Figure 1 Proposed Indian Springs Ranch service area overview. See the attached file for more detail

The owners are currently seeking to build a new 4548 SF home on the north end of the property, beginning in 2025. From the application, "With the Owner's approvals from Teton County, they have the ability to build several other new buildings onsite, including one 8000sf main house and three 5000sf guest houses (one of which is the proposed 4548sf new main home). To achieve this in the future they will need to either remove two of the existing guest houses – or have them remain, provided that they are designated as historically significant. Given this, a conservative estimate [for total future sewer capacity from the town system] would be to include everything existing, the new 4548sf main house, and the potential addition of and 8000sf home and two 5000sf homes to the connection."

The VSR collection and conveyance system will NOT be owned, operated, or maintained by the Town.

TOWN PROCESS FOR SEWER SERVICE REQUESTS

For all developments that request connection to Town sewer services, are outside the Town corporate limits, and are outside existing contracted service areas, the Town applies the following process.

Step 1: Request for Service

A Miscellaneous Planning Application is filed by an applicant to request Town sewer service(s). Staff review of this application is used by Town Council to make an initial determination on whether to provide services or not. This initial step is based upon preliminary information provided by the applicant and includes staff identifying the conditions of approval that will be further defined in a Connection and Use Agreement (CUA). The Applicant is currently proceeding through Step 1. If Council approves the requests for service, the Applicant will advance to Step 2.

Step 2: Connection and Use Agreements

Staff works with the Applicant (and any other relevant parties) to draft a CUA that includes the conditions of approval identified during Step 1 and other necessary contract terms. If approved by Council, the CUA will be executed and recorded against the property/ies. *The conditions below modify this standard by requiring that the applicant apply for the CUA when they are ready to proceed but within a year of this approval*.

Step 3: Permits to Construct

Prior to construction of any infrastructure connecting to the Town's systems, all fees must be paid and permits for the construction of said infrastructure must be issued by the Town.

Analysis & Key Policy Questions.

Resolution 21-28 was adopted by Council on November 15, 2021. The resolution established the 3-step process for sewer service requests (described above in the prior section of this staff report) and established eight review factors (described below under "Considerations" in this section) for all sewer connection requests outside Town boundaries. As such, staff has considered the following factors in recommending approval:

CONSIDERATIONS

1. Existing Versus New Development
   All but one of the existing buildings is already connected to the Town's wastewater system. The request includes the existing development as well as the approved buildout of the property.

2. Expanded Service Area and Capacity Timeline
   This proposed development was not included in the 2020-2021 Capacity Study and will have impacts on the Town's sewer system that were not considered in the study. This request will reduce the future capacity timeline for the treatment plant and other necessary upgrades.

   The Town's Wastewater Treatment Plant currently has capacity to accept the additional sewage from this development as presented in the application. While the addition of this development will not significantly reduce the amount of time remaining before treatment plant upgrades would be required, it will still reduce that amount of time.

3. Zoning and Development are Consistent with Comprehensive Plan
   The development is a combination of existing and future development and is consistent with the Comprehensive Plan and existing zoning.

4. Deed Restricted and/or Workforce Housing
   There are no existing deed restricted or workforce housing units included in the application service area.

5. Potential For Reduced Environmental Impact
   Connecting development within the VSR to the Town's system will reduce the environmental impact of the development and will prevent septic systems from being installed in areas with groundwater identified as high to very high vulnerability based on the County's water quality study.

6. Geographical Location
   The property is an excellent candidate for connection because it is adjacent to the Town's trunk line and is already connected to our sewer trunk line.

7. Magnitude of Request
   Preference is given to connection requests with minimal impact to the capacity timeline. This request proposes adding up to 2500 gpd.

8. Costs To Upgrade and Impacted User Classes
   The proposed connection costs of improvements and upgrades will be borne by the applicant and at no cost to the Town or current rate payers. Because this area was not considered in the modeling during the recent Capacity Study, the Applicant will be responsible for modeling the impacts the connection would have on facilities downstream of the connection and paying for any and all necessary upgrades required by the connection. Should Council approve this request for sewer service, the Town will work with the Applicant to evaluate and determine any necessary improvements to the Town's sewer and treatment systems.

   The VSR conveyance system will be designed, constructed, operated, and maintained by the applicant.

CONDITIONS OF APPROVAL

If this request for service is approved by Council at this initial step, staff recommends the following conditions of approval:

A. This approval is for a maximum amount of capacity up to 2500 gallons per day for the entire VSR property. It is agreed the applicant's current planned development will discharge less than 2500 gallons per day, and that the applicant will pay capacity fees for only the amount of effluent they will discharge for the current planned development. The applicant shall not discharge more effluent than they have paid for, unless and until the applicant has, from the Town Engineer, advanced written approval and pre-pays for the additional discharge amount. Notwithstanding anything herein, the effluent discharged from the applicant's property may never exceed a capacity of 2500 gallons per day.
B. Pay the review fee of $786 for staff time to review and process this application.
C. A Connection and Use Agreement for Sewer Services must be applied for not more than one year from the date of the motion to approve the request for service.
D. The VSR shall be one customer of the Town.
E. Unless the wastewater discharge can be directly metered, all water supplied to buildings connected to the Town's system shall be metered utilizing meters procured from the Town. Individual metering/billing of each building within the VSR shall be the responsibility of VSR.
F. Prior to construction of any new sewer infrastructure or service connecting to the Town systems and prior to connecting any new development, permits for the construction of said infrastructure must be issued by the Town.
G. Applicant shall be responsible for all costs to design, permit, and construct upgrades determined necessary within or to the Town's systems associated with services for the development, specifically including, but not limited to, compensation for the time of Town employees working on this application, billed at the rate in the adopted fee schedule at the time of the work performed by the Town staff.

Possible Alternatives.

1. Modify the conditions of approval and approve the request to connect.
2. Deny the request to connect.

3. Other.

Comprehensive Plan & Priority Alignment.

This project relates to the Town Comprehensive Plan Common Value #1- Ecosystem Stewardship. Staff has provided the following sections of the Comprehensive Plan for consideration along with this request.

Common Value #1 – Ecosystem Stewardship

- Principle 1.2: Preserve and enhance water and air quality.
  - Policy 1.2.c: Monitor and maintain water quality – calls for monitoring cumulative impacts on water quality and the effectiveness of mitigation efforts and strive to exceed State and Federal requirements for quality and monitoring to enhance water quality in the area.

Fiscal Impact.

Revenue:

- Application and Processing: Fees are billed at the rate in the adopted fee schedule at the time of the application or work performed by the Town staff. Fees associated with construction permits will also be charged at the time of permitting (step 3 in the Town process for sewer service requests)
- Capacity fees: Capacity fees are collected prior to connection that would be determined by the fees established in the Municipal Code at the time of application for the permit to construct the connection.
- Costs: The costs, if any, for labor and material provided by the Town for making the physical connection to the Town system are paid by the applicant as part of their construction permit.
- Ongoing Charges, Fees, rates: The ongoing fiscal impacts thereafter are the wastewater base and usage rates paid to the Town. These amounts are set forth in Title 13 of the Jackson Municipal Code, and are updated regularly for all ratepayers.

Expenditures:

- When additional services are connected to the Town's sewer systems, there is a cumulative impact to the Town's operation and maintenance costs for the wastewater collection and treatment systems and reductions in the Town systems' remaining capacities which correspond to costs for system upgrades.

Staff Impact.

Step 1: Staff time during Step 1 has been 6 hours between Public Works, Planning, Legal and Administration staff.

Step 2: Drafting and Consideration of Connection and Use Agreements for Sewer Services will each have the following impacts.

- CUA Drafting: approximately 4-8 hours for Administration and Public Works, and 4-8 hours for Legal, for a total of 8-16 hours.
- CUA Finalization and Staff Reports: 2-4 Hours for each Administration, Legal, and Public Works for a total of 6 to 12 hours.

Step 3: Connection Permits for a system can take 8-24 hours and each individual connection and additional 4-8 hours.

Staff notes that these requests for service outside the corporate limits of the Town are time intensive, including significant time to review, draft, execute and administer the CUA.

The impact to the Town of providing wastewater service to the Applicant at this time is minimal but contributes to the cumulative impact to Public Works staff who maintain the sewer systems, the Finance Department that handles the billing,

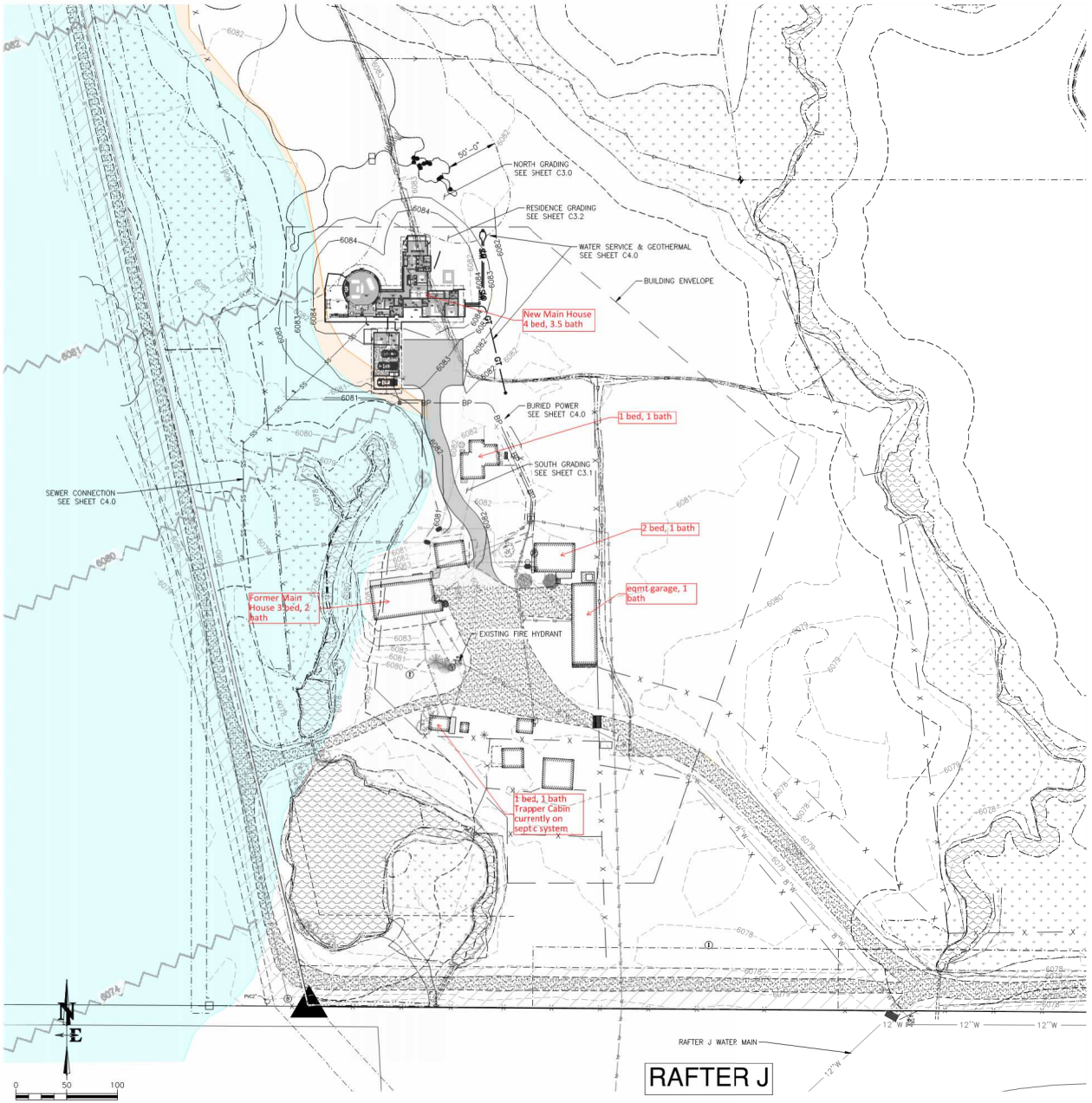
the Legal Department that handles initial and ongoing legal matters involving the Town utilities, and to the Wastewater Treatment Plant capacity as the Town continues to connect more customers both within and outside of Town limits.

Attachments or Links.

- VSR Area Overview (proposed connection area map)
- Application Materials

Suggested Motion.

I move to approve the BCJ Enterprises LLC. request for sewer collection and treatment services subject to the conditions of approval set forth in this staff report.



SITE CONSTRUCTION NOTES & SPECIFICATIONS

CAUTION: UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES (WHETHER FUNCTIONAL OR ABANDONED) WITHIN THE PROJECT AREA ARE SHOWN ON THESE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM CONTRACTORS WORK.

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH WYOMING PUBLIC WORKS STANDARD SPECIFICATIONS (WPWSS) 2023 EDITION AND THESE PLANS.
2. CONTRACTOR REQUIRED TO MEET WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY'S STORMWATER PERMIT REQUIREMENTS.
3. IT IS RECOMMENDED THAT THE CONTRACTOR EMPLOY A SURVEYOR TO PROVIDE STAKING FOR LOCATIONS OF FOUNDATIONS, UTILITIES, DRIVEWAY, AND FOR GRADING WORK.
4. STRIPPED MATERIAL SHALL BE STOCKPILED AT STOCKPILE AREAS, CUT MATERIAL WILL BE PLACED DIRECTLY INTO FILL AREAS OR STOCKPILED.
5. TOPSOIL SHALL BE STOCKPILED SEPARATELY & REUSED TO COVER FINISH SLOPES. IMPORT ADDITIONAL WEED-FREE TOPSOIL IF NECESSARY TO COVER ALL DISTURBED AREAS NOT RECEIVING SURFACING. LEAVE SUBGRADE DOWN 4-6" TO RECEIVE TOPSOIL IN LANDSCAPE AREAS.
6. DUST CONTROL MUST BE ACCOMPLISHED BY WATERING STOCKPILES AND DRY SOILS.
7. CONTRACTOR SHALL PREVENT TRACKING OF SOIL ONTO THE ROAD AND CLEAN ROAD OF SOILS WHEN NECESSARY.
8. INSTALL EROSION CONTROL MEASURES PRIOR TO COMMENCING WITH LAND DISTURBING ACTIVITIES AND MAINTAIN THE DEVICES DURING CONSTRUCTION. IF NECESSARY THE CONTRACTOR SHOULD INSTALL AND MAINTAIN ADDITIONAL EROSION CONTROL MEASURES TO ENSURE THE SITE IS STABILIZED DURING CONSTRUCTION.
9. REVEGETATION SHALL BE NATIVE SEED AND SOD AND SHALL BE IRRIGATED BY OWNER WHEN NECESSARY.
10. CONTRACTOR MUST HAVE A WEED CONTROL PLAN PREPARED BY TETON COUNTY WEED AND PEST OR OTHER WEED SPECIALIST AND IMPLEMENT THE PLAN THROUGHOUT CONSTRUCTION.
11. LAND DISTURBING ACTIVITIES SHALL OCCUR FROM SPRING 2025 THROUGH FALL 2027.
12. CONTRACTOR SHOULD COORDINATE THE INSTALLATION OF WIRE UTILITY SERVICES WITH UTILITY PROVIDERS AND ARRANGE INSTALLATION AND SERVICE CONTRACTS.
13. A GEOTECHNICAL REPORT WAS PREPARED BY NELSON ENGINEERING, DATED MAY 2024. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS FOR FOUNDATION SOILS PREPARATION, FOUNDATION BACKFILL, DRIVEWAY CONSTRUCTION, AND OTHER SOIL PREPARATION FOR SLABS AND UTILITIES.

TETON COUNTY WEED AND PEST MANAGEMENT STRATEGIES

PRE-CONSTRUCTION MANAGEMENT STRATEGIES TO BE PERFORMED BY CONTRACTOR:

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE TETON COUNTY WEED & PEST, OR OTHER QUALIFIED PROFESSIONAL, TO CONDUCT A SITE SPECIFIC INVENTORY OF INVASIVE SPECIES AND CREATE A SPECIES SPECIFIC MANAGEMENT PLAN IN ACCORDANCE WITH TETON COUNTY LDR 5.7.2.

ACTIVE CONSTRUCTION MANAGEMENT STRATEGIES TO BE PERFORMED BY CONTRACTOR:

1. ALL CONSTRUCTION EQUIPMENT TO BE CLEANED PRIOR TO ENTERING THE SITE.
2. SOIL STOCKPILES TO BE ROUTINELY CHECKED AND TREATED FOR INVASIVE SPECIES.
3. DISTURBANCE OUTSIDE OF THE CONSTRUCTION ZONE AND IN AREAS WHERE INVASIVE SPECIES ARE PRESENT SHALL BE MINIMIZED.
4. ALL AREAS OUTSIDE OF THE CONSTRUCTION ZONE SHALL BE KEPT ON ACTIVE MANAGEMENT USING THE CONTROL METHODS PRESCRIBED IN THE SPECIES SPECIFIC MANAGEMENT PLAN CREATED PRIOR TO CONSTRUCTION. THIS AREA SHALL BE MONITORED AND TREATED AT LEAST TWICE EACH GROWING SEASON.

POST-CONSTRUCTION MANAGEMENT STRATEGIES TO BE PERFORMED BY CONTRACTOR:

1. RE-VEGETATION TO OCCUR IMMEDIATELY AFTER CONSTRUCTION IS COMPLETE TO PREVENT THE ESTABLISHMENT OF INVASIVE SPECIES IN DISTURBED AREAS.
2. NURSERY STOCK SHALL BE IN ACCORDANCE WITH W.S. 11-9-101 – 109 (WYOMING NURSERY STOCK LAW), ACCOMPANIED BY A VALID HEALTH CERTIFICATE, AND ACQUIRED THROUGH A DEALER LICENSED BY THE WYOMING DEPARTMENT OF AGRICULTURE. SEEDS SHALL BE IN ACCORDANCE WITH W.S. 11-12-101 – 125 (WYOMING SEED LAW), CERTIFIED WEED FREE, AND ACQUIRED THROUGH A DEALER LICENSED BY THE WYOMING DEPARTMENT OF AGRICULTURE.
3. CERTIFIED WEED FREE STRAW, GRAVEL, AND SOIL SHALL BE UTILIZED WHERE POSSIBLE.
4. TCWP TO BE CONTACTED TO CREATE A POST-CONSTRUCTION INVENTORY.

2-28-25 50% CHECK SET

REV.	DATE	BY
	2/28/2025	
SURVEYED	NELSON ENG	
ENGINEERED	DD	
DRAWN	LB	
CHECKED	DD	
APPROVED	DD	

NELSON ENGINEERING
P.O. BOX 1599, JACKSON WYOMING (307) 733-2087

DRAWING TITLE: OVERALL SITE PLAN

JOB TITLE: VALLEY SPRINGS RANCH
1375 VALLEY SPRINGS ROAD
TETON COUNTY, WY

DRAWING NO: C2.0

JOB NO: 24-060-01

LAYOUT: FINAL-MEMBS - PRINTED-PC3 AutoCAD PDF (General Documentation).pc3 - PAGE SETUP: 24x36_PDF - Publish - DWG VER: 25 - PLOTTED BY: Lane Butler
DWG NAME: S:\Projects\24060\01 Valley Springs Ranch - Client Drawings\Civil\24-060-01 SITE.dwg - AUTOPAC - 4/28/2025 10:07:16 AM

PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave.
P.O. Box 1687
Jackson, WY 83001

ph: (307) 733-0440
www.townofjackson.com

For Office Use Only

Fees Paid_____ Date & Time Received _____

Application #s _____ _____ _____

Please note: *Applications received after 3 PM will be processed the next business day.*

PROJECT.

Name/Description: Valley Springs Ranch Sewer Connection

Physical Address: 1375 Valley Springs Road, Jackson, WY 83001

Lot, Subdivision: Parcel A (MOS T-317F) PIDN: 22-40-16-07-4-00-005

PROPERTY OWNER.

Name: BCJ ENTERPRISES LLC Phone:

Mailing Address: 1375 Valley Springs Road, Jackson, WY ZIP: 83001

E-mail:

APPLICANT/AGENT.

Name: Dave Dufault, Nelson Engineering Phone: 307-733-2087

Mailing Address: PO Box 1599, Jackson, WY ZIP: 83001

E-mail: ddufault@nelsonengineering.net

DESIGNATED PRIMARY CONTACT.

_____Property Owner X_____Applicant/Agent

TYPE OF APPLICATION. *Please check all that apply; review the type of application at www.townofjackson/200/Planning*

Use Permit

_____Basic Use

_____Conditional Use

_____Special Use

Relief from the LDRs

_____Administrative Adjustment

_____Variance

_____Beneficial Use Determination

_____Appeal of an Admin. Decision

Physical Development

_____Sketch Plan

_____Development Plan

_____Design Review

Subdivision/Development Option

_____ Subdivision Plat

_____Boundary Adjustment (replat)

_____Boundary Adjustment (no plat)

_____Development Option Plan

Interpretations

_____Formal Interpretation

_____Zoning Compliance Verification

Amendments to the LDRs

_____LDR Text Amendment

_____Map Amendment

Miscellaneous

X **Other:** sewer connection

_____ Environmental Analysis

PRE-SUBMITTAL STEPS. *To see if pre-submittal steps apply to you, go to www.townofjackson.com/200/Planning and select the relevant application type for requirements. Please submit all required pre-submittal steps with application.*

Pre-application Conference #: _____ Environmental Analysis #: _____

Original Permit #: _____ Date of Neighborhood Meeting: _____

SUBMITTAL REQUIREMENTS. *Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Go to www.townofjackson.com/200/Planning and select the relevant application type for submittal requirements.*

Have you attached the following?

X **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.

X **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. Please see the Letter of Authorization template at http://www.townofjackson.com/DocumentCenter/View/845/LetterOfAuthorization-PDF.

X **Response to Submittal Requirements**. The submittal requirements can be found on the TOJ website for the specific application. If a pre-application conference is required, the submittal requirements will be provided to applicant at the conference. The submittal requirements are at www.townofjackson.com/200/Planning under the relevant application type.

Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.

David Dufault, PE Digitally signed by David Dufault, PE DN: C=US, E=ddufault@nelsonengineering.net, O=NE, OU=Civil, CN="David Dufault, PE" Reason: I am approving this document Date: 2025.03.28 14:25:21-06'00'

Signature of Property Owner or Authorized Applicant/Agent

3/28/25

Date

Dave Dufault, PE

Name Printed

Project Manager

Title

Town of Jackson
150 E Pearl Avenue
PO Box 1687, Jackson, WY 83001
P: (307)733-3932 F: (307)739-0919
www.jacksonwy.gov

Date: March 28, 2025

LETTER OF AUTHORIZATION

NAMING APPLICANT AS OWNER'S AGENT

PRINT full name of property owner as listed on the deed when it is an individual OR print full name and title of President or Principal Officer when the owner listed on the deed is a corporation or an entity other than an individual

Being duly sworn, deposes and says that BCJ Enterprises LLC is the owner in fee of the premises located at:
Name of property owner as listed on deed

Address of Premises: 1375 Valley Springs Road, Jackson, WY 83001

Legal Description: Parcel A (MOS T-317F)
Please attach additional sheet for additional addresses and legal descriptions

And, that the person named as follows: Name of Applicant/agent: Nelson Engineering

Mailing address of Applicant/agent: PO Box 1599, Jackson, WY 83001

Email address of Applicant/agent: ddufault@nelsonengineering.net, slagerman@nelsonengineering.net

Phone Number of Applicant/agent: 307-733-2087

Is authorized to act as property owner's agent and be the applicant for the application(s) checked below for a permit to perform the work specified is this(these) application(s) at the premises listed above:

☐ Development/Subdivision Plat Permit Application ☐ Building Permit Application

☐ Public Right of Way Permit ☐ Grading and Erosion Control Permit ☐ Demolition Permit

☒ Other (describe) Planning Permit Application, SWP Application

Under penalty of perjury, the undersigned swears that the foregoing is true and, if signing on behalf of a corporation, partnership, limited liability company or other entity, the undersigned swears that this authorization is given with the appropriate approval of such entity, if required.

Property Owner Signature

Sole Manager
Title if signed by officer, partner or member of corporation, LLC (secretary or corporate owner) partnership or other non-individual Owner

STATE OF Wyoming)
) SS.
COUNTY OF Teton)

The foregoing instrument was acknowledged before me by Morgan Hartman this 4th day of April. WITNESS my hand and official seal.

SARAH EVANS
Notary Public
State of Wyoming
Commission No. 170441
My Commission Expires: 10/18/2030

Notary Public

My commission expires: 10/18/2030

Checklist for an
APPLICATION FOR A CONNECTION AND USE AGREEMENT FOR WATER AND SEWER SERVICES
Public Works Department
Engineering Division

150 East Pearl Ave.
P.O. Box 1687
Jackson, WY 83001

ph: (307) 733-0440
fax: (307) 734-3563
www.townofjackson.com

APPLICABILITY. *This checklist should be used when applying to the Town of Jackson for consideration of connection to Town Sewer, Water and/or Stormwater infrastructure, or a private extension thereto, through a Connection and Use Agreement for a development, service district, or property outside of the Town's corporate boundary AND not within an existing approved service area.*

When is an *APPLICATION FOR A CONNECTION AND USE AGREEMENT FOR WATER AND SEWER SERVICES* required?

An application to connect and, if approved, the resulting Connection and Use Agreement, are required prior to a development, service district, property, or any individual property within a development or service area, applying for a Town of Jackson / Teton County Sewer and Water Connection permit. *For more detailed information on the process see the PROCESS section of this checklist.*

INSTRUCTIONS. *Use this checklist to provide the information required for review of an application. All items on this checklist should be shown or noted in the application or on the plans, including not applicable items.*

	DESCRIPTION
X	Submit all materials with a Planning Application to the Planning Division, select the *Miscellaneous* option.
X	Town of Jackson Letter of Authorization if applicant is other than the owner.
NA	Letter of Consent from system being connected to, if the proposed connection is not directly to the Town's Infrastructure.

X	ENGINEER'S REPORT. Engineering design report shall include:
	• All materials shall be prepared and sealed by a licensed Wyoming engineer with experience designing municipal water and/or sewer infrastructure.
	• A brief narrative of the proposed project and request of the Town.
	• A description of the service area.
	• Reason for requesting the connection(s). e.g. new development, permit compliance, existing system failure, high ground water, proximity to surface water, geological conditions, etc.
	• Alternatives, if any, considered for sewage collection and treatment and/or water supply. Include any reasons for not pursuing the alternatives or whether the alternative is still being proposed.
	• Proposed schedule for the project.
	• A statement regarding who will pay the costs of design, permitting, construction, operation, maintenance, regulatory compliance, repair, and replacement of the system.
	• Identify the entity that will own the system(s) and be legally responsible for the system(s), i.e. the party that would execute a Connection and Use Agreement with the Town.
	  ○ If applicable, identify the certified operator that will operate the proposed system(s).
	• Information regarding the proposed method of metering.
	• Provide information regarding how customers that are delinquent on paying for services will be handled, e.g. water shutoffs.
	• WATER AND SEWER
	  ○ Current and projected average, maximum day and peak flows for the design of the project, per capita design flows, extraneous flows, and industrial and/or commercial waste flows.
	  ○ Estimated Water Demands
	  ▪ AWWA M22, actual flows, or other approved methodology
	  ○ Estimated Sewer Volumes

	▪ AWWA M22, actual volumes, Wyoming DEQ, Other approved methodology. ○ For estimated demands use the most conservative sewer volumes and/or water demands for the potential service area based on maximum allowed development for the service area at build out. For example, if there are 20 existing hotel rooms but 40 are allowed by development regulations, use 40 rooms for the estimate. ▪ Include estimated volumes and demands from the adjacent properties within 500 feet of the proposed system. ▪ Provide the information separated into the proposed service area and potential future service areas, include a table by parcel for individually metered lots, e.g. lots that connect via an unmetered gravity system. • Anticipated downstream impact on existing sewers, lift stations and treatment facilities. This information shall include existing population, waste loads, existing flows and capacity of downstream facilities. • Sewage Characteristics: ○ For proposed development provide information regarding the anticipated wastewater strengths e.g. Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS); types of use e.g. residential, brewery, industrial, commercial, lodging; and any other expected characteristics. ○ For existing developments provide a summary of any existing wastewater strength or quality monitoring data.
X	PLANS AND MAPS: • Vicinity Map • Map of the Proposed Service Area. ○ Show all properties intended to be served by the proposed system and requested connection. ○ Show all properties within 500 feet of the proposed infrastructure, regardless of whether or not the property intends to connect to the private system at this time. • Water and/or Sewer Plans showing the proposed systems, sizes, and points of connection. • Existing utilities. ○ Identify critical existing infrastructure or infrastructure that will need enlarged or improved e.g. lift stations or undersized mains. • Easements: Existing or proposed required for the system and connection. • Parcel Information: existing, proposed, future boundaries. Provide parcel id, street address, and ownership information. • Scaled drawings with north arrows. • Any other relevant information.
X	PERMITTING: • Provide a list of all applicable local, state, and federal permits required to complete the project and indicate whether they were issued, waived, denied, or pending. ○ Teton County, Wyoming Department of Environmental Quality, Wyoming Department of Transportation, Army Corps of Engineers, VonGontard Agreement (TCSD Munger), private properties, etc. • For an existing system, provide a list of any existing local, state, and federal permits and indicate if the permit is in good standing, under review, citations, fines, or otherwise pertaining to the permit.
X	PRIVATE PROPERTIES AND SYSTEMS: • Provide a list of all private properties that are impacted by the project and any required easements, approvals, land acquisitions, etc. and indicate the status of each. • Provide a list of all private systems required to make the connection and indicate the status of each. Include any and willingness to serve letters, approved permit, etc.

REQUEST FOR SERVICES AND CONNECTION AND USE AGREEMENT PROCESS. *This summary is general and each application may vary depending on the circumstance. Not applicable for properties that are already approved to connect, see Town application for County Sewer and Water Connections Permit.*

	STEP 1:REQUEST TO CONNECT: ○ **CONNECTION TO TOWN INFRASTRUCTURE**: The new Customer makes the application to request for services or additional services using the Planning Application – Miscellaneous Option and this checklist. *Fees for an administrative decision elevated to a public hearing apply.* ○ **CONNECTION THROUGH AN EXISTING PRIVATE SYSTEM(S)**: The new Connectee or the existing Customer/District/Provider may make an application to request services or additional services using the Planning Application – Miscellaneous Option and this checklist. **If the Connectee and not the existing Town Customer makes the application a letter of consent must be included**. *Fees for an administrative decision elevated to a public hearing apply* ○ Staff Review of Application for a Connection and Use Agreement for Water and Sewer Services. ○ Council Review: Request for connection will be presented and reviewed by Council at a regularly scheduled council meeting. ○ Staff issues a final approval letter with any conditions of approval, including expiration of the request, typically a year.
	STEP 2: CONNECTION AND USE AGREEMENT: ○ If Council approves the Request to Connect, Town staff will prepare the Connection and Use Agreement(s) and incorporate any conditions of approval as part of the application. Each utility will be covered by its own agreement. ○ Fees for preparation of the agreement(s) may be applicable as defined in the agreement(s). ○ Applicant will have a chance to review the agreement prior to presenting to Council for approval. ○ Applicant shall be responsible for preparing and paying for all exhibits required for all agreement(s) to the Town's satisfaction. Required exhibits vary by project but typically include a map of the service area, list of parcels within the service area, table of estimated peak demands, conceptual system plans, and / or other relevant information. ○ Council Review: Connection and Use Agreement(s) will be presented for review by Council at a regularly scheduled council meeting. ○ Following Council approval of the Connection and Use Agreement, it will be finalized according to Council approval. ○ Staff will provide the applicant the final agreement(s) for execution. The Mayor will execute the agreement(s) after the applicant. ○ Recordation: The Connection and Use Agreement(s) shall be recorded with the Teton County Clerk against all properties within the approved service area. Applicant shall pay all recording fees.
	STEP 3: PERMIT FOR CONSTRUCTION: *Following execution and recordation of the Connection and Use agreement construction of the proposed connection(s) is permitted as follows:* ○ ToJ SEWER AND WATER CONNECTION PERMIT (SWP) Application for the system if applicable ○ ToJ SEWER AND WATER CONNECTION PERMIT (SWP) Application for the individual properties within the service area, if necessary.

Checklist for an
APPLICATION FOR A CONNECTION AND USE AGREEMENT FOR SEWER SERVICE

PLANNING APPLICATION: Enclosed.

TOWN OF JACKSON LETTER OF AUTHORIZATION: Enclosed.

LETTER OF CONSENT: N/A

ENGINEER'S REPORT:

Brief narrative of the proposed project and request of the Town and reason for request:
The project location and **service area** is 1375 Valley Springs Road, Jackson, Wyoming; Owner is BCJ ENTERPRISES LLC. There are currently 10 to 11 existing ranch buildings, including the following: 1) a 1992sf one-story single-family home with a 644sf detached garage, a 1078sf one-story guest house, a 1092sf one-story log cabin, a 266sf one-story building, an equipment building with 936sf of shed adjacent to 936sf of equipment storage, a 900sf barn with loft, a 360sf barn, a 195sf shed, and a 80sf shed. Please see the enclosed site civil plans and sketches from the Teton County Assessor's Office.

A new 4548sf single-family residence with a detached garage is proposed in addition to the existing structures, to be located on the northern end of the property.

During the due diligence and schematic design phases of the project, an existing connection to the Town of Jackson's sewer interceptor that runs along the west side of the property was discovered. The existing sewered buildings are indeed connected, as confirmed by Macy's Services, who videoed the line and provided mapping for use on the existing site plan. No record or agreement with the Town of Jackson for the connection has been found. The request herein is to formalize the connection, accounting for the existing uses, new main house, and potential build out, through the Town's planning permit request, agreement, and permit process.

With the Owner's approvals from Teton County, they have the ability to build several other new buildings onsite, including one 8000sf main house and three 5000sf guest houses (one of which is the proposed 4548sf new main home). To achieve this in the future they will need to either remove two of the existing guest houses – or have them remain, provided that they are designated as historically significant. Given this, a conservative estimate would be to include everything existing, the new 4548sf main house, and the potential addition of and 8000sf home and two 5000sf homes to the connection.

Reason for requesting the connection:
The request is to bring the existing connection into compliance with the Town's current outside user permitting process and to allow for sewer service for the entire property as a whole. Adding septic systems for any new construction would be possible but based on the proximity to the Town's sewer interceptor, the fact that a tap is already in place, and the location of any proposed septic systems with respect to adjacent constructed wetlands, springs, and surface water – e.g., Flat Creek, Tanner and Adams Springs, Dill and Valley Springs irrigation ditches – it seems that the best solution is connection to centralized sewer. Water service is not a part of the request.

Alternatives, if any, considered for sewage collection and treatment:
As mentioned above, there are no feasible alternatives considering high groundwater.

Proposed schedule for the project:
The main house design has not yet been submitted to Teton County for a building permit, but the schedule is to submit for permit late Spring 2025 with a building window of Summer 2025 to Summer 2027. The new sewer service for the main house would be constructed early in the construction time frame with the earthwork for the driveway and foundation for efficiency even though the waste generating facilities may not utilize the sewerline for another year.

Ownership and Operation:
BCJ ENTERPRISES LLC will pay the costs of design, permitting, construction, operation, maintenance, regulatory compliance, repair, and replacement of the sewer service; and furthermore, they will own the system up to the point of connection and be legally responsible for the service and will execute a Connection and Use Agreement with the Town. Valley Springs Ranch personnel will operate the proposed systems up to the point of connection.

Provide information regarding how customers that are delinquent on paying for services will be handled: N/A

Provide information regarding the proposed method of metering:
For current usage, the Town has been charging a monthly flat rate for the sewer connection. Perhaps a updated flat rate is acceptable, however, metering domestic water usage is understood to be typical for sewer metering. However, multiple private wells on property are proposed for water supply. One well is currently in use and branches to numerous buildings. A master meter in a meter pit would be required for the existing well. The second well to be used is proposed for the proposed new home, and a meter could be installed in the home on the domestic water branch. Applicant requests that Town staff describe procedures for the use of metering from two wells to document wastewater flow billing.

SEWER:

Estimated Sewer Volumes:
The sewer flows/volumes are presented below.

Structure	Avg Day Flow (gpd)	Max Day Flow (gpd)	Peak Day Flow (gpd)
4548sf new main home (4 bed/3.5 bath)	210	350	420
1992sf one-story single-family home (3 bed/2 bath)	168	280	336
1078sf one-story guest house (1 bed/1 bath)	84	140	168
1092sf one-story log cabin (2 bed/1 bath)	126	210	252
266sf one-story bldg (1 bed/1 bath) currently served by septic system	84	140	168
1872sf equipment bldg (1 bath)	42	70	84
Totals:	714	1190	1428

Complete build-out flows/volumes are estimated to be:

Structure	Avg Day Flow (gpd)	Max Day Flow (gpd)	Peak Day Flow (gpd)
4548sf home (4 bed/3.5 bath)	210	350	420
1992sf home (3 bed/2 bath)	168	280	336
1078sf home (1 bed/1 bath)	84	140	168
1092sf log cabin (2 bed/1 bath)	126	210	252
266sf bldg (1 bed/1 bath)	84	140	168
1872sf equipment bldg (1 bath)	42	70	84
8000sf home (assumed 6 bed/5.5 bath)	294	490	588
5000sf home (assumed 4 bed/3.5 bath)	210	350	420
5000sf home (assumed 4 bed/3.5 bath)	210	350	420
Totals:	1428	2380	2856

Sewage Characteristics (Provide information regarding the anticipated wastewater strengths):
Anticipated BOD and TSS are less than 250mg/L; types of use will be residential.

For existing developments provide a summary of any existing wastewater strength or quality monitoring data:
Residential wastewater, no monitoring data is available.

PLANS AND MAPS:

Map of the Proposed Service Area:
Drawings attached, one parcel located at 1375 Valley Spring Road, PIDN 22-40-16-07-4-00-005.

Show all properties intended to be served by the proposed system and requested connection:
Shown on attached.

Show all properties within 500 feet of the proposed infrastructure, regardless of whether or not the property intends to connect to the private system at this time:
N/A, simply a dead-end service on a single parcel with no possible connections within 500 feet of the proposed infrastructure.

Sewer Plans showing the proposed systems, sizes, and points of connection:
Attached.

Existing utilities:
Shown on attached.

Easements (existing or proposed required for the system and connection):
Shown on attached.

Parcel Information (existing, proposed, future boundaries). Provide parcel id, street address, and ownership information.
Shown on attached.

Vicinity Map:
Shown on attached.

Scaled drawings with north arrows:
Attached.

PERMITTING:

Provide a list of all applicable local, state, and federal permits required to complete the project and indicate whether they were issued, waived, denied, or pending (ToJ, Wyoming DEQ, USFS, private properties, etc.):

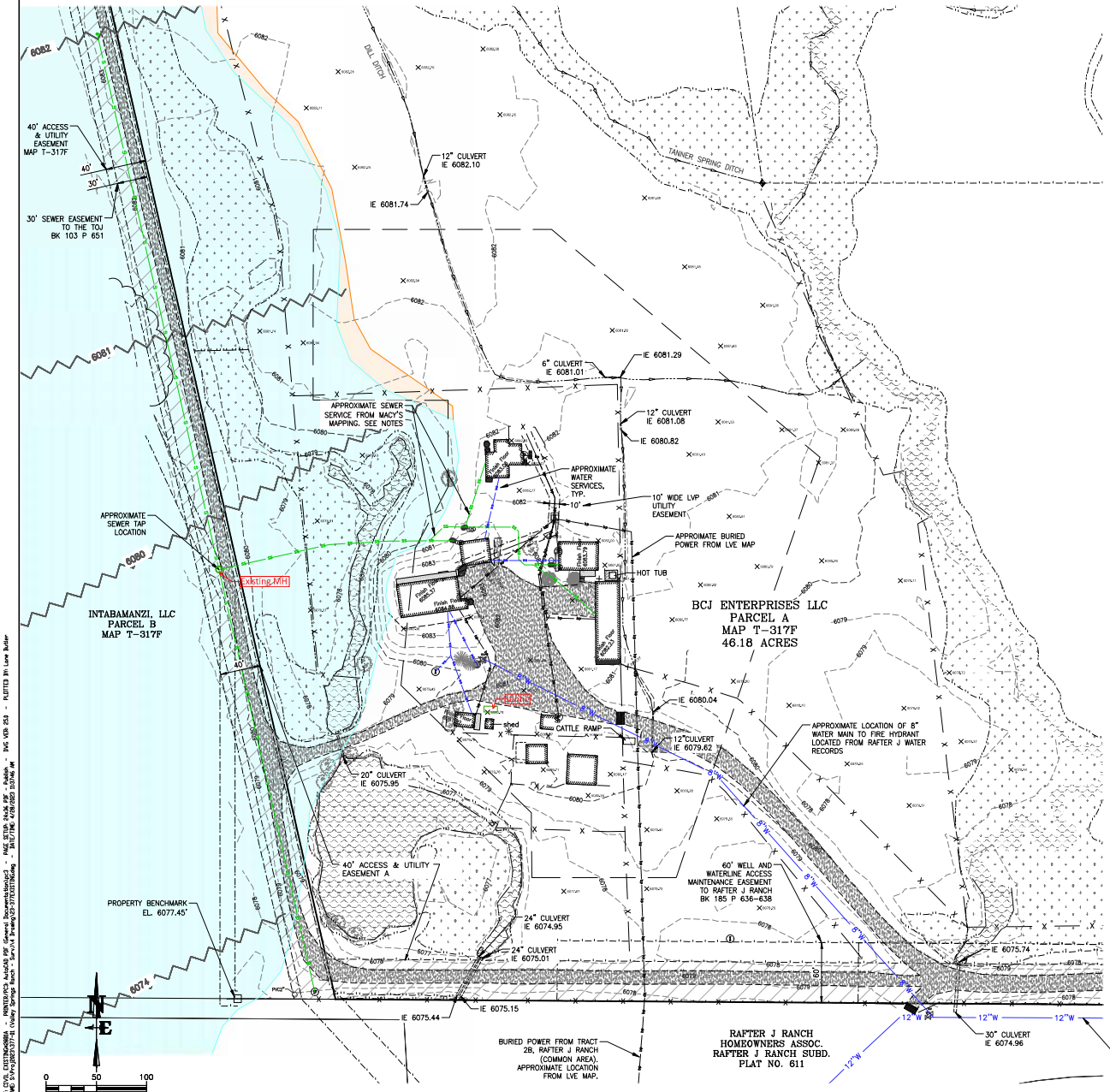
1. Teton County Building Permit: Not yet submitted
2. Teton County Grading and Erosion Control Permit: Not yet submitted
3. Potentially a Wyoming DEQ Permit-to-Construct: Not yet submitted

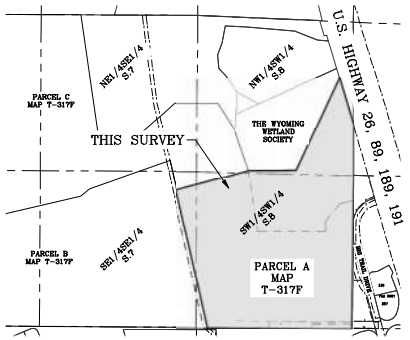
For an existing system, provide a list of any existing local, state, and federal permits and indicate if the permit is in good standing, under review, citations, fines, or otherwise pertaining to the permit.
N/A, cannot locate the existing permit with the Town for the existing connection, but they are a customer in good standing, current paying a flat rate fee.

PRIVATE PROPERTIES AND SYSTEMS:

Provide a list of all private properties that are impacted by the project and any required easements, approvals, land acquisitions, etc. and indicate the status of each: None

Provide a list of all the private systems required to make the connection and indicate the status of each. Include any and willingness to serve letters, approved permit, etc.: N/A





VICINITY MAP
SW1/4 NE1/4
SECTION 6
T40N, R116W 6TH P.M.
TOWN OF JACKSON
TETON COUNTY, WY

NOTE:

THE SITE SURVEY REPRESENTED ON THIS MAP SHOW CONDITIONS DETERMINED BY A FIELD SURVEY MADE ON NOVEMBER 10, 2023. AND MAY NOT REFLECT CHANGES MADE SUBSEQUENT TO THAT DATE.

THE MAP WAS PREPARED WITHOUT BENEFIT OF TITLE REPORT AND IS SUBJECT TO ANY OTHER EASEMENTS, RESTRICTIONS, RESERVATIONS, RIGHTS-OF-WAY, AND CONDITIONS OF SIGHT AND/OR OF RECORD INCLUDING, BUT NOT LIMITED, TO THOSE SHOWN HEREON;

THE PROPERTY LIES WITHIN ZONE AE AND ZONE X OF FIRM PANEL 56039C2908E, DATED SEPT. 16, 2015 AND FIRM PANEL 56039C2916D, DATED AUG. 5, 2010

STRUCTURE SETBACKS PER COUNTY R1 ZONE
50' PUBLIC ROAD
30' PRIVATE ROAD
30' SIDE
30' REAR
50'-150' STREAM, LAKE, POND
15' IRRIGATION DITCH

SITE DEVELOPMENT SETBACKS AND BUILDING SETBACKS SHALL BE VERIFIED WITH THE PLANNING DEPARTMENT IN THE AUTHORITY HAVING JURISDICTION PRIOR TO PLANNING ANY DEVELOPMENT. IT IS ALSO TO BE UNDERSTOOD THAT OTHER APPLICABLE CODES, RESTRICTIONS, COVENANTS AND REGULATIONS APPLICABLE TO DEVELOPMENT AND USE SHOULD BE DETERMINED PRIOR TO PLANNING ANY DEVELOPMENT AS THESE ARE NOT SHOWN ON THIS MAPPING.

NO PUBLIC INFORMATION ON LOCATION OF EXISTING LEACHFIELD WAS LOCATED.

POWER AND WATER UTILITIES HAVE BEEN APPROXIMATED FROM COUNTY RECORD DRAWINGS.

MACY'S PERFORMED A SEWER INVESTIGATION JULY 26, 2024 TO RECORD SEWER ROUTING AND DEPTH FROM THE STRUCTURES ON THE PROPERTY TO THE WESTERN SEWER MAIN TAP. ROUTING HAS BEEN SHOWN ON THIS MAP FROM THE INVESTIGATION RESULTS. THE ROUTING WAS NOT SURVEYED AND IS APPROXIMATE.

LEGEND

- PROPERTY LINE
- ADJACENT BOUNDARY LINE
- EASEMENT LINE
- BUILDING ENVELOPE
- BUILDING
- CENTERLINE OF ROAD
- FLOWLINE OF DITCH
- EDGE OF GRAVEL
- EDGE OF PAVEMENT
- EDGE OF WATER
- FENCE LINE
- TREE LINE
- TOP OF BANK
- JACKSON PEAK VIEW ANGLE
- 6080 BASE FLOOD ELEVATION LINE
- CULVERT
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- FIBER OPTIC VAULT
- FIRE HYDRANT
- FOUND BRASS CAPPED PIPE
- FOUND PIPE
- FOUND REBAR AND CAP 3831
- IRRIGATION BOX
- CO SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SIGN
- SPRINKLER
- TELEPHONE PEDESTAL
- WELL PUMP
- WATER VALVE
- PAVERS
- PAVEMENT
- DECK
- GRAVEL DRIVE
- CONCRETE
- WATER
- TREE - ASPEN
- TREE - DECIDUOUS
- TREE - PINE
- FLOODPLAIN ZONE AE
- FLOODPLAIN ZONE X
- MAPPED WETLANDS

DATE	10/24/2024	REV.
SURVEYED	NELSON ENG.	
ENGINEERED	DD	
DRAWN	LB	
CHECKED	DD	
APPROVED	DD	

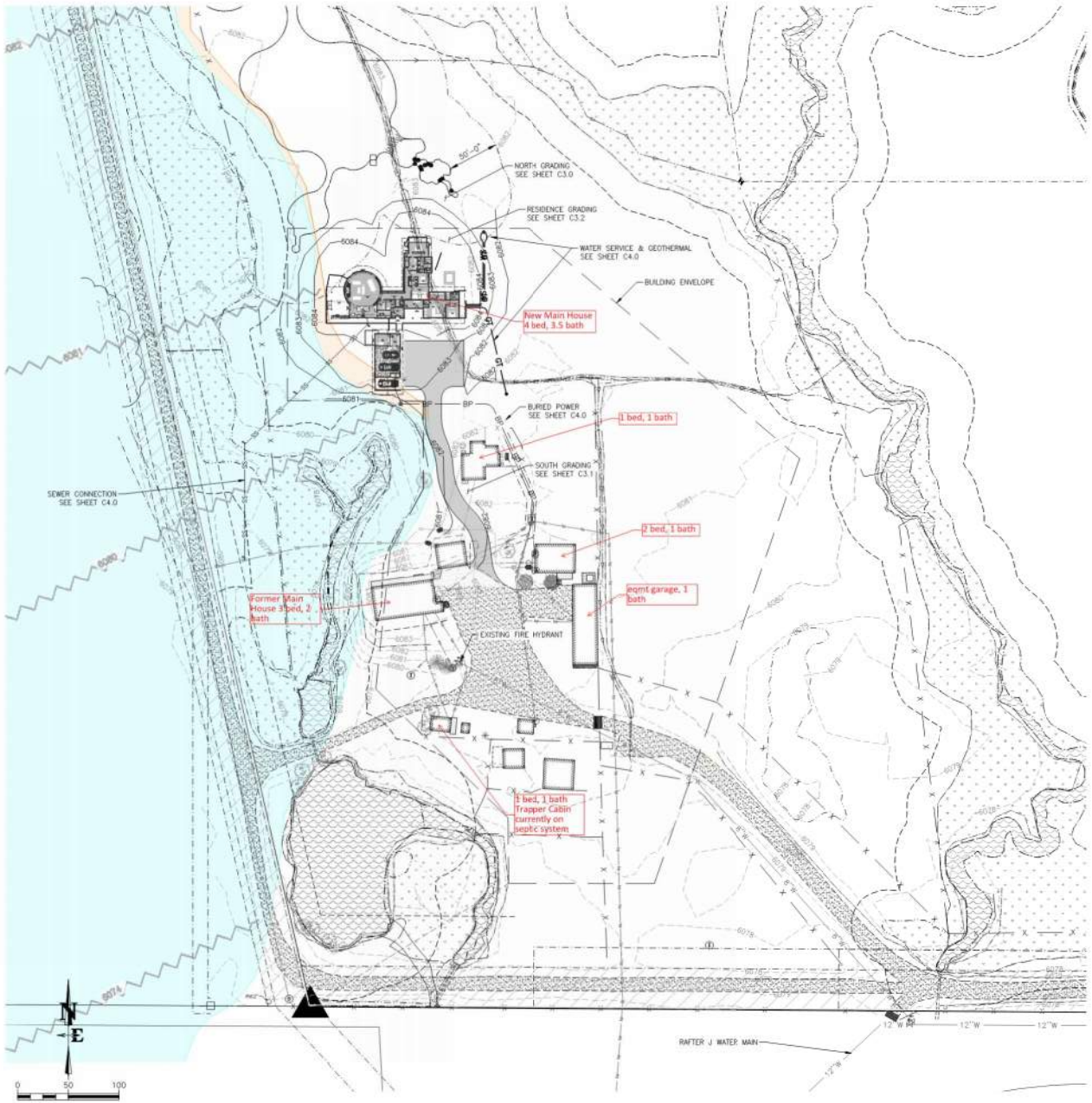
NELSON ENGINEERING
P.O. BOX 1599, JACKSON WYOMING (307) 733-2087

DRAWING TITLE
EXISTING SITE PLAN

JOB TITLE
VALLEY SPRINGS RANCH
1375 VALLEY SPRINGS ROAD
TETON COUNTY, WY

DRAWING NO C1.0

JOB NO 24-060-01



SITE CONSTRUCTION NOTES & SPECIFICATIONS

CAUTION: UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES (WHETHER FUNCTIONAL OR ABANDONED) WITHIN THE PROJECT AREA ARE SHOWN ON THESE CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM CONTRACTORS WORK.

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH WYOMING PUBLIC WORKS STANDARD SPECIFICATIONS (WPWSS) 2023 EDITION AND THESE PLANS.
2. CONTRACTOR REQUIRED TO MEET WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY'S STORMWATER PERMIT REQUIREMENTS.
3. IT IS RECOMMENDED THAT THE CONTRACTOR EMPLOY A SURVEYOR TO PROVIDE STAKING FOR LOCATIONS OF FOUNDATIONS, UTILITIES, DRIVEWAY, AND FOR GRADING WORK.
4. STRIPPED MATERIAL SHALL BE STOCKPILED AT STOCKPILE AREAS, CUT MATERIAL WILL BE PLACED DIRECTLY INTO FILL AREAS OR STOCKPILED.
5. TOPSOIL SHALL BE STOCKPILED SEPARATELY & REUSED TO COVER FINISH SLOPES. IMPORT ADDITIONAL WEED-FREE TOPSOIL IF NECESSARY TO COVER ALL DISTURBED AREAS NOT RECEIVING SURFACING. LEAVE SUBGRADE DOWN 4-6" TO RECEIVE TOPSOIL IN LANDSCAPE AREAS.
6. DUST CONTROL MUST BE ACCOMPLISHED BY WATERING STOCKPILES AND DRY SOILS.
7. CONTRACTOR SHALL PREVENT TRACKING OF SOIL ONTO THE ROAD AND CLEAN ROAD OF SOILS WHEN NECESSARY.
8. INSTALL EROSION CONTROL MEASURES PRIOR TO COMMENCING WITH LAND DISTURBING ACTIVITIES AND MAINTAIN THE DEVICES DURING CONSTRUCTION. IF NECESSARY THE CONTRACTOR SHOULD INSTALL AND MAINTAIN ADDITIONAL EROSION CONTROL MEASURES TO ENSURE THE SITE IS STABILIZED DURING CONSTRUCTION.
9. REVEGETATION SHALL BE NATIVE SEED AND SOD AND SHALL BE IRRIGATED BY OWNER WHEN NECESSARY.
10. CONTRACTOR MUST HAVE A WEED CONTROL PLAN PREPARED BY TETON COUNTY WEED AND PEST OR OTHER WEED SPECIALIST AND IMPLEMENT THE PLAN THROUGHOUT CONSTRUCTION.
11. LAND DISTURBING ACTIVITIES SHALL OCCUR FROM SPRING 2025 THROUGH FALL 2027.
12. CONTRACTOR SHOULD COORDINATE THE INSTALLATION OF WIRE UTILITY SERVICES WITH UTILITY PROVIDERS AND ARRANGE INSTALLATION AND SERVICE CONTRACTS.
13. A GEOTECHNICAL REPORT WAS PREPARED BY NELSON ENGINEERING, DATED MAY 2024. CONTRACTOR SHALL FOLLOW RECOMMENDATIONS FOR FOUNDATION SOILS PREPARATION, FOUNDATION BACKFILL, DRIVEWAY CONSTRUCTION, AND OTHER SOIL PREPARATION FOR SLABS AND UTILITIES.

TETON COUNTY WEED AND PEST MANAGEMENT STRATEGIES

PRE-CONSTRUCTION MANAGEMENT STRATEGIES TO BE PERFORMED BY CONTRACTOR:

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE TETON COUNTY WEED & PEST, OR OTHER QUALIFIED PROFESSIONAL, TO CONDUCT A SITE SPECIFIC INVENTORY OF INVASIVE SPECIES AND CREATE A SPECIES SPECIFIC MANAGEMENT PLAN IN ACCORDANCE WITH TETON COUNTY LDR 5.7.2.

ACTIVE CONSTRUCTION MANAGEMENT STRATEGIES TO BE PERFORMED BY CONTRACTOR:

1. ALL CONSTRUCTION EQUIPMENT TO BE CLEANED PRIOR TO ENTERING THE SITE.
2. SOIL STOCKPILES TO BE ROUTINELY CHECKED AND TREATED FOR INVASIVE SPECIES.
3. DISTURBANCE OUTSIDE OF THE CONSTRUCTION ZONE AND IN AREAS WHERE INVASIVE SPECIES ARE PRESENT SHALL BE MINIMIZED.
4. ALL AREAS OUTSIDE OF THE CONSTRUCTION ZONE SHALL BE KEPT ON ACTIVE MANAGEMENT USING THE CONTROL METHODS PRESCRIBED IN THE SPECIES SPECIFIC MANAGEMENT PLAN CREATED PRIOR TO CONSTRUCTION. THIS AREA SHALL BE MONITORED AND TREATED AT LEAST TWICE EACH GROWING SEASON.

POST-CONSTRUCTION MANAGEMENT STRATEGIES TO BE PERFORMED BY CONTRACTOR:

1. RE-VEGETATION TO OCCUR IMMEDIATELY AFTER CONSTRUCTION IS COMPLETE TO PREVENT THE ESTABLISHMENT OF INVASIVE SPECIES IN DISTURBED AREAS.
2. NURSERY STOCK SHALL BE IN ACCORDANCE WITH W.S. 11-9-101 – 109 (WYOMING NURSERY STOCK LAW), ACCOMPANIED BY A VALID HEALTH CERTIFICATE, AND ACQUIRED THROUGH A DEALER LICENSED BY THE WYOMING DEPARTMENT OF AGRICULTURE. SEEDS SHALL BE IN ACCORDANCE WITH W.S. 11-12-101 – 125 (WYOMING SEED LAW), CERTIFIED WEED FREE, AND ACQUIRED THROUGH A DEALER LICENSED BY THE WYOMING DEPARTMENT OF AGRICULTURE.
3. CERTIFIED WEED FREE STRAW, GRAVEL, AND SOIL SHALL BE UTILIZED WHERE POSSIBLE.
4. TCWP TO BE CONTACTED TO CREATE A POST-CONSTRUCTION INVENTORY.

2-28-25 50% CHECK SET

NELSON ENGINEERING
P.O. BOX 1569, JACKSON WYOMING (307) 733-2087

		DATE
SURVEYED	NELSON ENG	2/28/2025
ENGINEERED	DD	
DRAWN	LB	
CHECKED	DD	
APPROVED	DD	

REV.

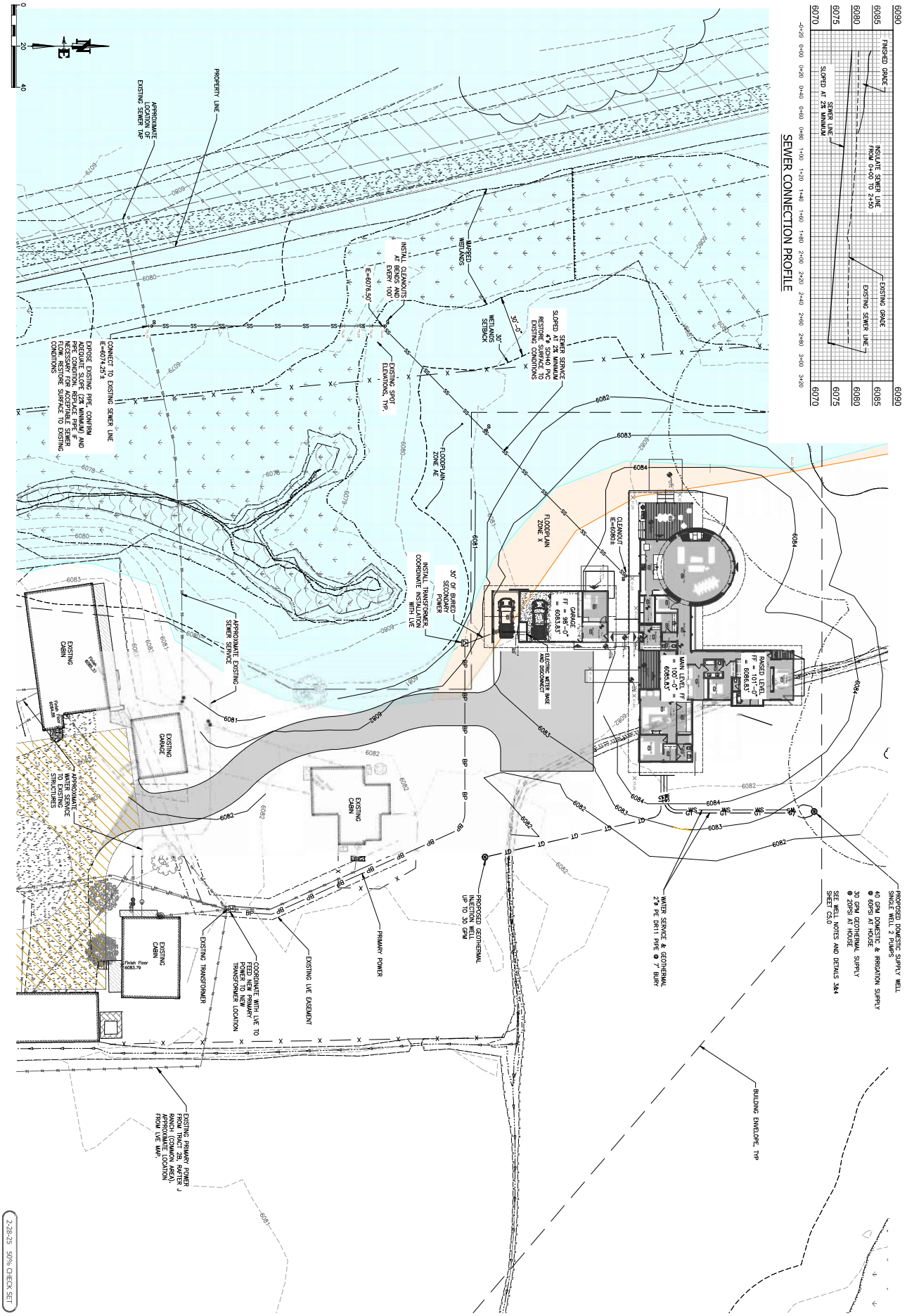
DRAWING TITLE: OVERALL SITE PLAN

JOB TITLE: VALLEY SPRINGS RANCH
1375 VALLEY SPRINGS ROAD
TETON COUNTY, WY

DRAWING NO: C2.0

JOB NO: 24-060-01

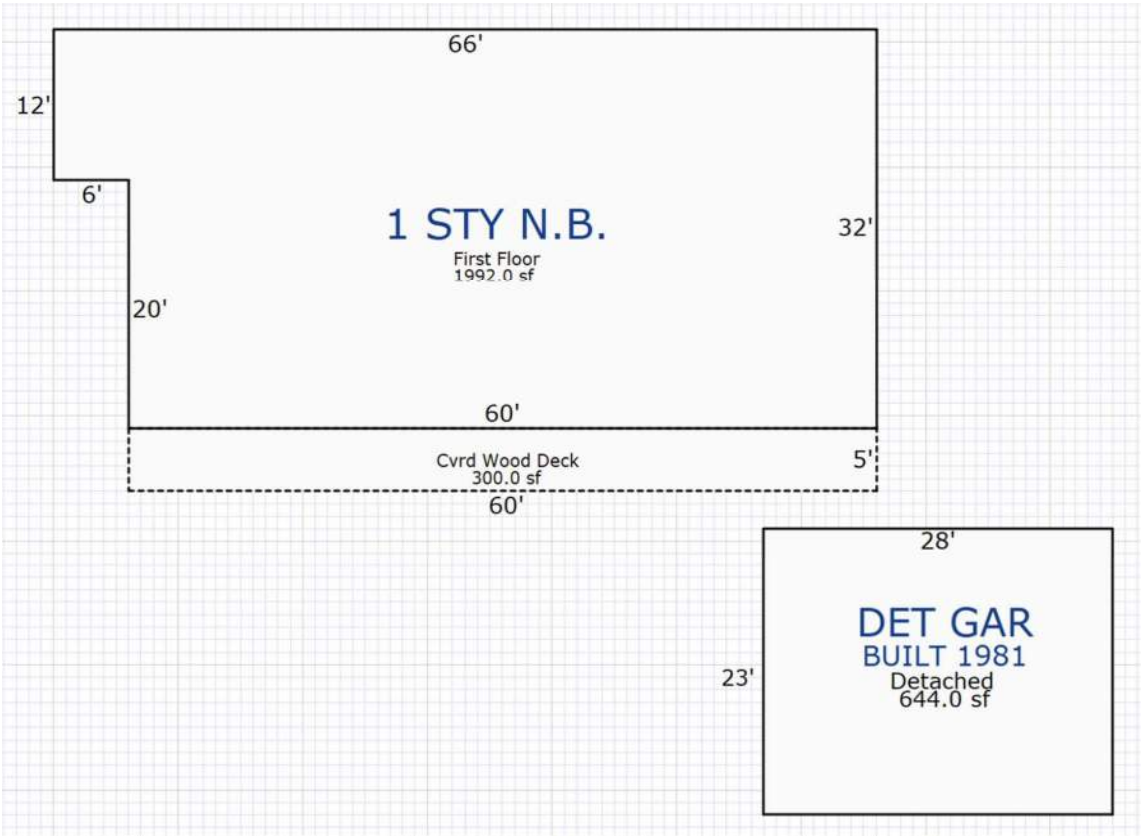
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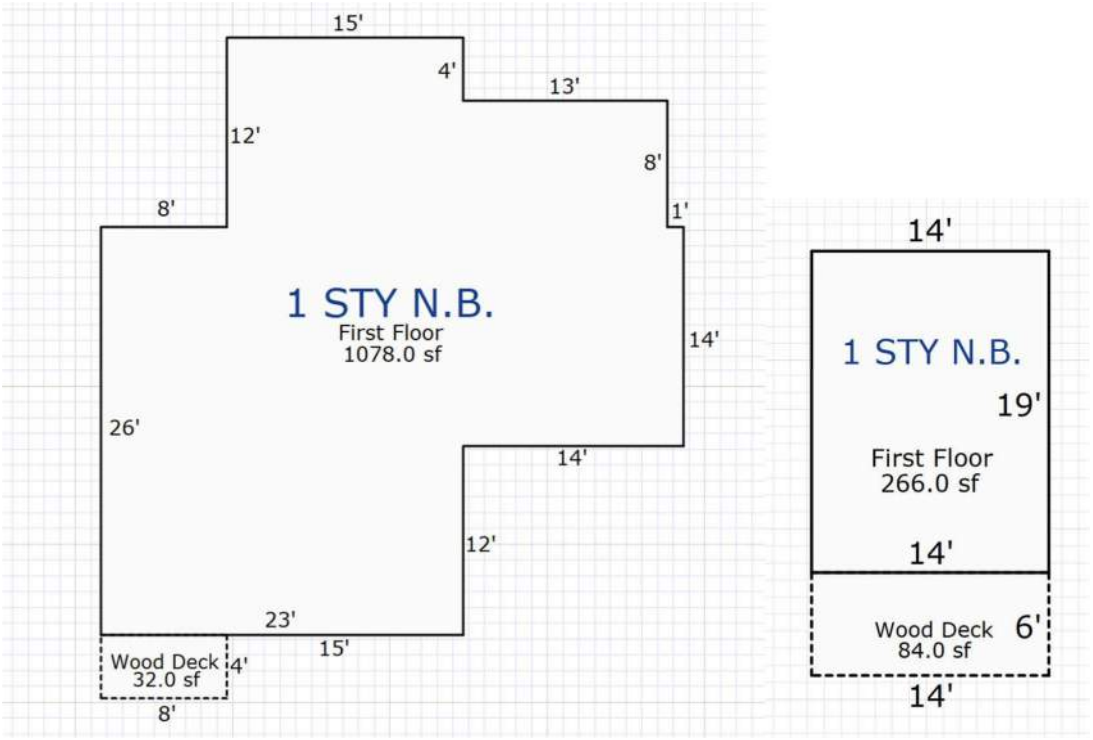


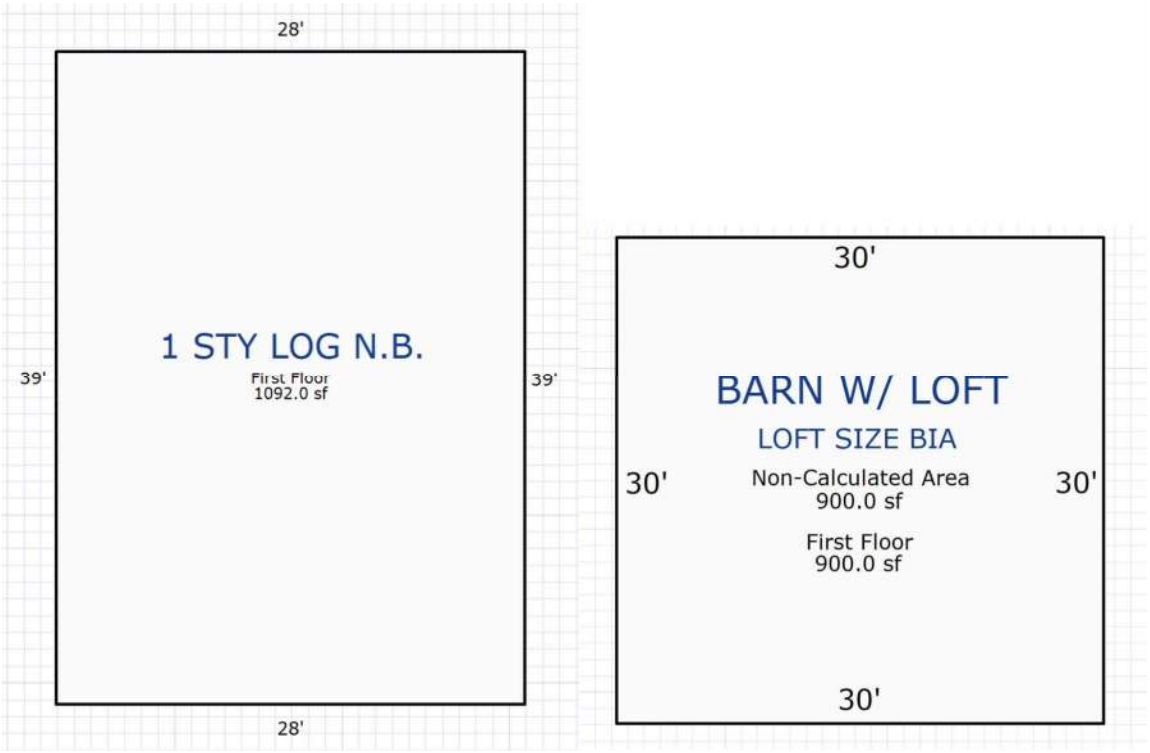
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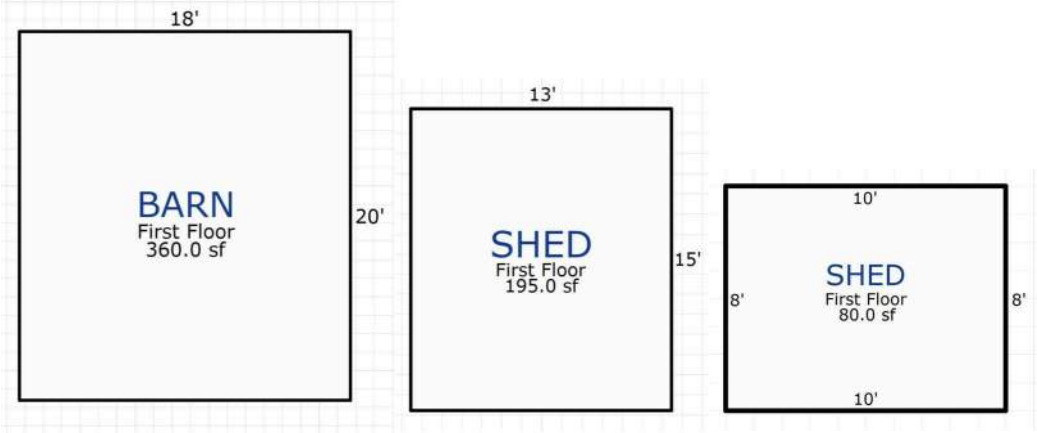
DRAWING NO: C4.0	JOB TITLE: VALLEY SPRINGS RANCH	DRAWING TITLE: UTILITY SITE PLAN	NELSON ENGINEERING	DATE	2/28/2025
JOB NO: 24-060-01	1375 VALLEY SPRINGS ROAD		P.O. BOX 1599, JACKSON WYOMING (307) 733-2087	SURVEYED	NELSON ENG.
	TETON COUNTY, WY			ENGINEERED	DD
				DRAWN	LB
				CHECKED	DD
				APPROVED	DD

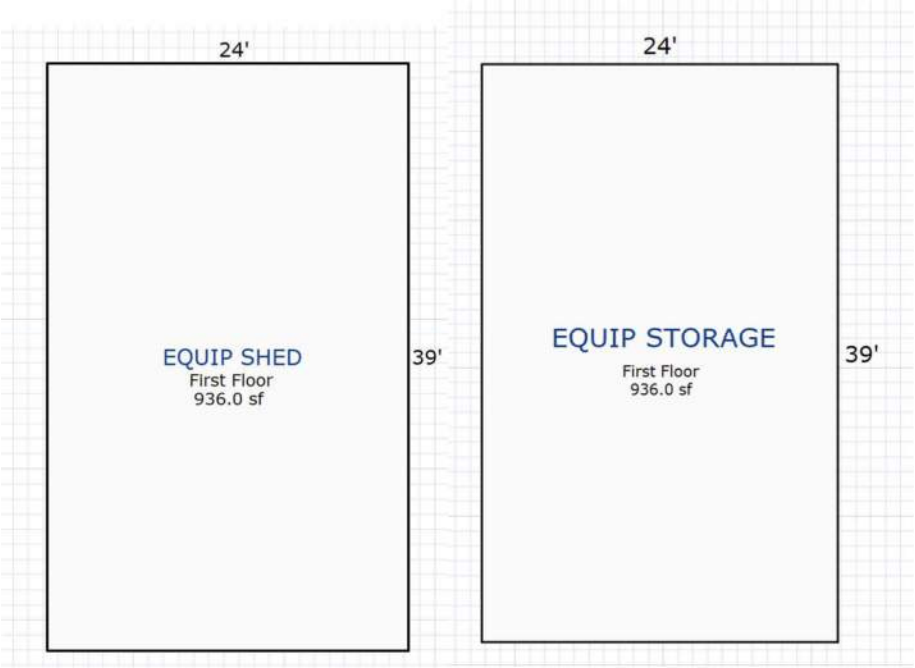
REV.


66'
12'
6'
1 STY N.B.
First Floor
1992.0 sf
32'
20'
60'
Cvrd Wood Deck
300.0 sf
5'
60'
28'
DET GAR
BUILT 1981
Detached
644.0 sf
23'


15'
4'
13'
12'
8'
8'
1'
1 STY N.B.
First Floor
1078.0 sf
14'
26'
14'
12'
23'
15'
Wood Deck
32.0 sf
4'
8'
14'
1 STY N.B.
19'
First Floor
266.0 sf
14'
Wood Deck
84.0 sf
6'
14'


28'
1 STY LOG N.B.
First Floor
1092.0 sf
39'
39'
28'
30'
BARN W/ LOFT
LOFT SIZE BIA
30'
Non-Calculated Area
900.0 sf
30'
First Floor
900.0 sf
30'


18'
BARN
First Floor
360.0 sf
20'
13'
SHED
First Floor
195.0 sf
15'
10'
SHED
First Floor
80.0 sf
8'
8'
10'


24'
EQUIP SHED
First Floor
936.0 sf
39'
24'
EQUIP STORAGE
First Floor
936.0 sf
39'

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Regular – Consent
Submitting Department:	Legal	**Presenter:**	Lea Colasuonno
Agenda Item:	Elk Run Thaw Well License Agreement	**Public Comment:**	Yes

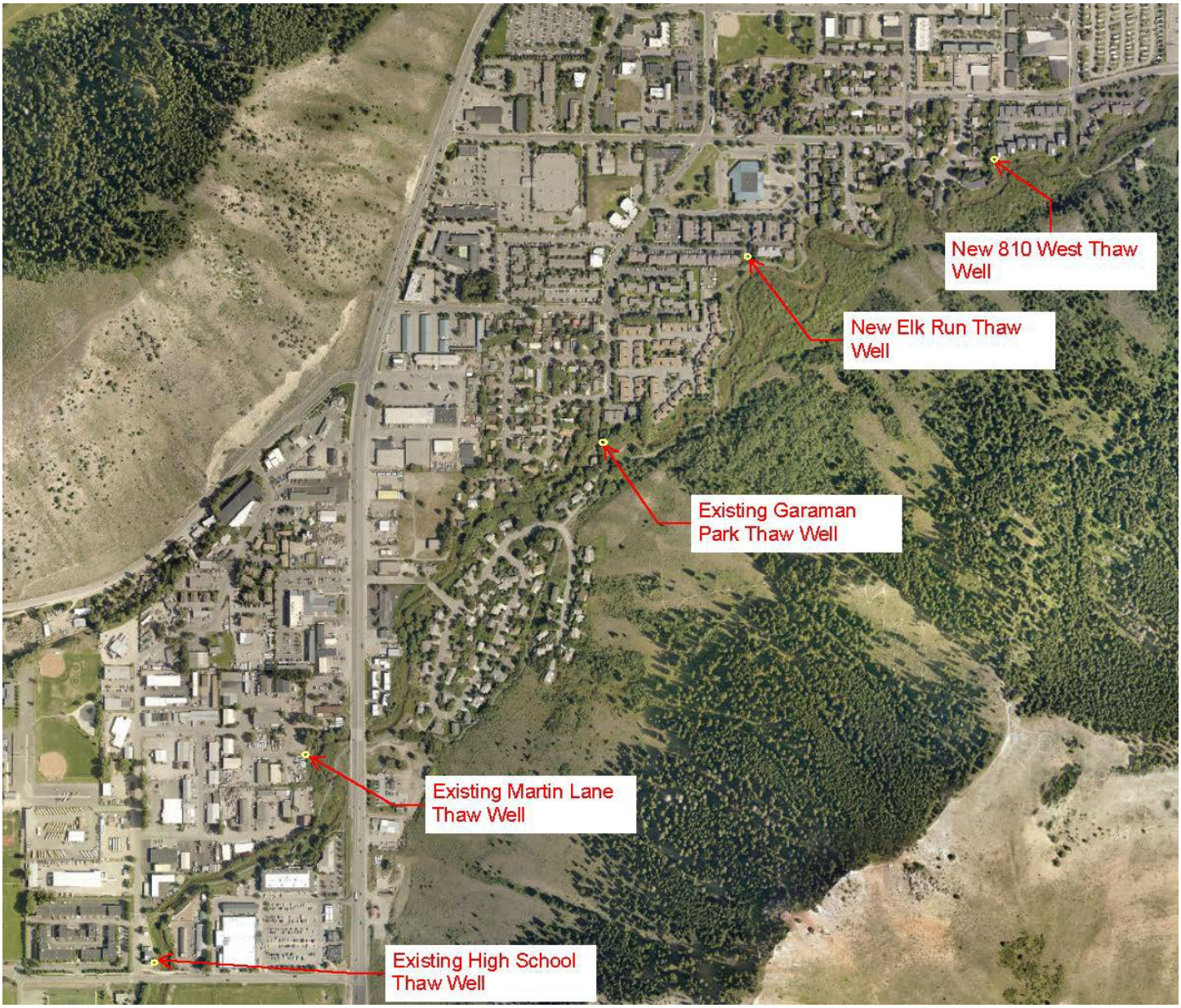
Purpose & Policy Considerations.
The purpose of this item is for the Council to review and consider entering into an Irrevocable License Agreement with the Elk Run Homeowner's Association (HOA) and the Teton Conservation District (TCD) in connection with the construction of a new thaw well.

Requested Action.
Staff request the Council to review and consider entering into an Irrevocable License Agreement with the HOA and TCD.

Recommendations.
Staff recommend the Council approve entering into an Irrevocable License Agreement with the HOA and TCD in connection with the construction of a new thaw well.

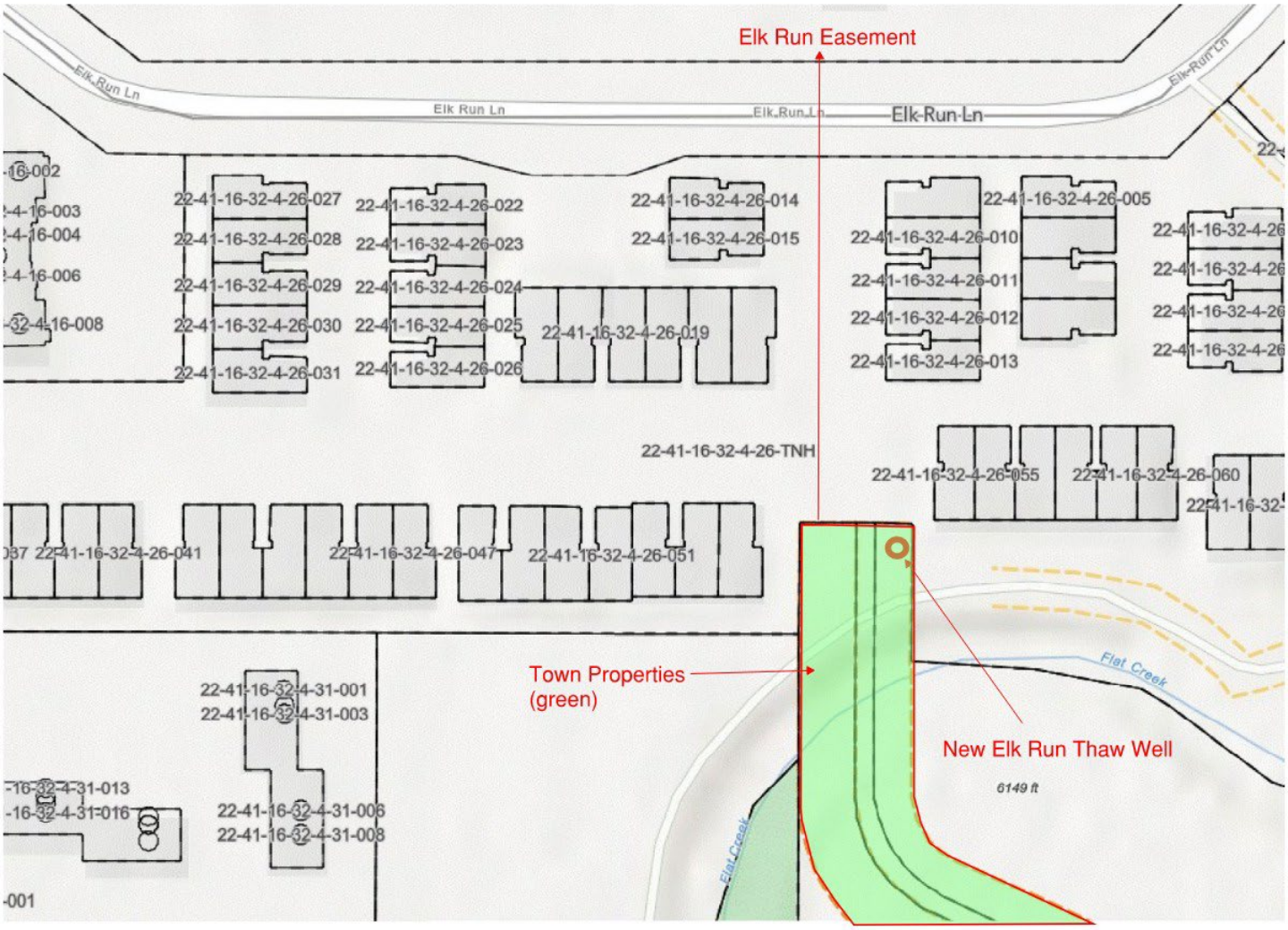
Background.
Flat Creek runs through the Town and, at times during the winter, frazil ice forms in it. Frazil ice, stated concisely and non-scientifically, is a collection of loose, randomly oriented ice crystals, with various shapes, that forms during the winter in open-water areas of creeks and is caused by moving water coupled with cold temperatures causing the water column to become supercooled, and, ultimately, leaving ice formations (anchor ice) throughout the creek that forces water over banks. To mitigate the flooding that occurs as a result of this natural process, all homeowners along Flat Creek formed an improvement district – the Flat Creek Water Improvement District – of which the Town is a part of and in which the Town plays a significant role. This role includes coordinating removal of ice formations to allow water to flow (and not flood the area) as well as owning thaw well infrastructure, and cooperatively managing its administration (via a third-party engineering firm). There are currently three thaw wells employed for use within Flat Creek, two of which have shared costs for maintenance and administration between the Town and the FCWID.

See map on next page.



The Teton Conservation District (TCD) was awarded approximately $500,000 from the Wyoming Office of Homeland Security (which is administering Federal Emergency Management Funds) to construct a thaw well in Flat Creek in two new locations (810 West Thaw Well and Elk Run Thaw Well). However, TCD, pursuant to the grant and its operating policy, will not own the infrastructure permanently. The Town, as is the case with all thaw wells in Flat Creek within the Town, would own the two new thaw wells. The Town has already obtained the necessary approvals for construction of the 810 West Thaw Well (Council approved an amendment to an existing thaw well easement to include Town and TCD).

The proposed location of the Elk Run Thaw Well is on a parcel of real property owned by Town located along the southeast border of the Elk Run Townhomes as marked on the map below as “Town Properties” (Lot 29 is the specific parcel on which the Elk Run thaw well is proposed to be constructed).



Lot 29 is subject to a conservation easement with the Jackson Hole Land Trust (JHLT), which provides for the reservation of the Town's right to "undertake measures within Flat Creek and along its banks as necessary for flood prevention and erosion control and for installation, use and/or maintenance of thaw well." JHLT has been notified of the Town's intention to install a thaw well on Lot 29. The Town is also the beneficiary of an existing roadway and utility easement from the HOA which permits the Town access from Elk Run Lane over and across a roadway within the Elk Run Subdivision marked on the map above. In order to construct and install the Elk Run Thaw Well on the Town's property, TCD requires access to the Elk Run Subdivision roadway and a designated area in the roadway for staging construction equipment. The Town desires to grant TCD access to its roadway easement for the limited purpose of the thaw well construction and the Elk Run Homeowner's Association is amenable to this, leading to the attached Irrevocable License Agreement.

Analysis & Key Policy Questions.

Notably benefit and detriment considerations for this item include:

- ✓ Benefits
  - ☐ TCD was awarded $500,000 of funding for the construction of a new thaw well (i.e., the Town will not have to pay to construct the infrastructure, however please see the Fiscal Impact section for details of the Town's choice to add software to the thaw well)
  - ☐ The new thaw well is expected to mitigate the formation of anchor ice and prevent flooding on Town property (pathways, etc.) as well as private property along Flat Creek

- ☐ FCWID will be responsible for paying all electrical costs related to the use of the new thaw well

✓ Detriments

- ☐ The Town will take on the long-term ownership, maintenance, and replacement costs of the new thaw well post-construction
- ☐ The Town will be responsible for ongoing Department of Environmental Quality (DEQ) reporting and testing for the new thaw well
- ☐ Town will be responsible for adding computer control systems to the new thaw well

Possible Alternatives.

- The Council could elect not to allow TCD to construct and install the thaw well at the Elk Run site, which would likely result in the loss of TCD's funding to construct the thaw well.
- The Council could also elect not to allow TCD access to the Elk Run Roadway easement, which would require TCD to access the thaw well construction site by way of a more costly public access pathway.

Comprehensive Plan & Priority Alignment.

Section 8.1 and 8.2: Timely, efficiently, and safely deliver quality services and facilities in a fiscally responsible and coordinated manner.

Fiscal Impact.

Fiscal impact for this item will include $86,000 for the addition of computer control systems on the new thaw well and, second, costs associated with the Town ultimately owning the thaw well, which will add a marginal cost to the administrative and maintenance costs of the Town's existing thaw well suite. The computer control software was not part of the TCD bid for the thaw well they are constructing and paying for; Town Public Works is electively adding this technology to the well because the Town will ultimately become the operator.

Staff Impact.

The staff impact of this item was felt most keenly in the Legal and Public Works Department, with 35 hours of work in Legal and roughly 3 hours in Public Works.

Attachments or Links.

Irrevocable License Agreement

Suggested Motion.

I move to approve the Irrevocable License Agreement, with minor changes by staff.

IRREVOCABLE LICENSE AGREEMENT

This Irrevocable License Agreement ("***Agreement***") is made and entered into on this ____ day of _____, 20____ ("***Effective Date***") by and between the Town of Jackson, Wyoming, a municipal corporation of the State of Wyoming, its successors and assigns, of P.O. Box 1687, Jackson, Wyoming 83001 ("***Town***"), Teton Conservation District, a duly organized Wyoming Conservation District, its successors and assigns, of P.O. Box 1070, Jackson Wyoming 83001 ("***TCD***"), and the Elk Run Townhouses Owners Association, a Wyoming nonprofit corporation, of P.O. Box 2228, Jackson, WY 83001 ("***Elk Run***").

RECITALS

WHEREAS, Town is the owner of the real property set forth in the Teton County Land Records as PIDN 22-41-16-32-4-00-026 ("***Lot 26***"), PIDN 22-41-16-32-4-00-027 ("***Lot 27***") and PIDN 22-41-16-32-4-00-029 ("***Lot 29***") (collectively, Lot 26, Lot 27 and Lot 29, "***Property***"), as depicted in Exhibit A attached hereto and made a part hereof by this reference.

WHEREAS, Lot 26 and Lot 27 are subject to a "Conservation Easement" between Town and the Jackson Hold Land Trust ("***JHLT***") dated December 27, 2010 ("***Lots 26, 27 Conservation Easement***"), which provides for the permanent conservation of Lot 26 and Lot 27 subject to certain enumerated rights reserved by Town, including, but not limited to, Town's right pursuant to section 3.10 to "undertake measures within Flat Creek and along its banks as necessary for flood prevention and erosion control and for installation, use and/or maintenance of thaw well."

WHEREAS, Lot 29 is subject to a "Conservation Easement" between Town and JHLT dated November 18, 2013, as amended by "Amendment to Conservation Easement" effective September 8, 2015 ("***Lot 29 Conservation Easement***"), which provides for the permanent conservation of Lot 29 subject to certain enumerated rights reserved by Town, including, but not limited to, Town's right to "undertake measures within Flat Creek and along its banks as necessary for flood prevention and erosion control and for installation, use and/or maintenance of thaw well." Lot 26, 27 Conservation Easement and Lot 29 Conservation Easement collectively referred to herein as "***Conservation Easements***."

WHEREAS, Town is a beneficiary as a successor in interest of a roadway and utility easement from Elk Run's predecessor in interest which permits Town access "over and across all roadways within the Elk Run Subdivision" ("***Elk Run Subdivision***") pursuant to an Easement dated September 9, 1981, B116P566-570 ("***Elk Run Easement***").

WHEREAS, Town, its successors and assigns, is a beneficiary of a right-of-way easement running thru the Elk Run Subdivision to maintain and repair underground pipes, mains or sewers and a permanent utility easement over, under and across the tracts described in the easement dated March 10, 1981, B181P874-878 ("***Utility Easement***"; collectively with the Conservation Easements and the Elk Run Easement, the "***Easement Property***").

WHEREAS, with Town's consent, TCD is constructing and installing a utility thaw well and its infrastructure on the Property ("***Project***").

WHEREAS, Town and TCD desire to enter into a limited and temporary irrevocable license agreement to permit TCD to enter upon and utilize the Property, the Easement Property and the Staging Area (as defined below) to construct and install the thaw well and its infrastructure within the Property in accordance with all necessary and required permits and approvals("***License Area***").

WHEREAS, Elk Run, Town and TCD desire to enter into a limited and temporary irrevocable license agreement to permit TCD to access, enter upon, and utilize the real property area identified on Exhibit B attached hereto ("***Staging Area***"), for purposes of vehicle parking, equipment and material storage, and general construction staging in relation to the Project during the construction of the utility thaw well.

WHEREAS, Elk Run further agrees, consents, and acknowledges that TCD will be accessing, constructing, and installing a utility thaw well and its infrastructure on the Property.

WHEREAS, Elk Run acknowledges that the Project and the construction of the utility thaw well will benefit Elk Run and the Elk Run Subdivision owners.

NOW, THEREFORE, for and in consideration of the aforesaid recitals, which are incorporated herein by this reference as if set forth in their entirety below, the duties and obligations set forth below, and other

good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Town, TCD, and Elk Run agree as follows:

1. Grant of License to TCD by Town. Town hereby grants to TCD its officers, officials, employees, agents, representatives, contractors and related personnel, subcontractors and related personnel, licensees, successors, and assigns a non-exclusive irrevocable license during the Term (as defined below) to enter upon and utilize the License Area for: (a) storing equipment and materials; (b) conducting construction activities related to the Project; and (c) any other purposes allowed by the grading and erosion control permits for the Project, as they may be amended from time to time ("***Permit***"). Town shall not unreasonably interfere with TCD's use of the License Area. TCD shall utilize the License Area in accordance with all terms and conditions of the Permit.

2. Grant of License to TCD by Elk Run. Elk Run hereby grants to TCD its officers, officials, employees, agents, representatives, contractors and related personnel, subcontractors and related personnel, licensees, successors, and assigns an exclusive irrevocable license during the Term (as defined below) to access, enter upon, and utilize the Staging Area for vehicle parking, storage of equipment and materials, and general construction staging for the Project. Elk Run shall not unreasonably interfere with TCD's use of the Staging Area. TCD shall utilize the Staging Area in in accordance with all terms and conditions of the Permit and in compliance with all applicable rules, regulations and laws.

3. Term of Licenses. The term of each of the licenses granted herein shall commence on the Effective Date and shall expire on the earlier of the date of final completion of the Project, unless an extension is agreed to in writing by the applicable parties ("***Term***"). At the expiration of the Term, TCD shall remove its materials and equipment from the License Area.

4. Binding Effect. The licenses granted herein shall inure to the benefit of TCD, and TCD's successors and assigns, during the Term. Town acknowledges that the License Area shall be owned, conveyed, encumbered, leased, used, and developed subject to the license granted by the Town herein and the terms and conditions set forth herein, which shall run with the License Area and shall be binding on all parties having or acquiring legal title, possession, or other interest in the License Area, or any part thereof, during the Term. Town and Elk Run acknowledge that the Staging Area shall be owned, conveyed, encumbered, leased, used, and developed subject to the license granted by Town and Elk Run herein and the terms and conditions set forth herein, which shall run with the Staging Area and shall be binding on all parties having or acquiring legal title, possession, or other interest in the Staging Area, or any part thereof, during the Term.

5. Town's Easement Rights. Notwithstanding anything herein to the contrary, it is acknowledged by the parties hereto that Town retains all rights and privileges associated with its pre-existing Conservation Easements, Elk Run Easement, and Utility Easement. The Town hereby consents to the license granted herein by Elk Run to TCD and TCD's use of the Staging Area for this Project.

6. Limitations on TCD's Use. TCD shall exercise the rights granted above with due regard to the rights of others and their use thereof and shall not use the License Area or Staging Area in a way that would impair the respective rights of Town, Elk Run, or others, except as otherwise set forth herein.

7. Notice of Construction. TCD shall give Town and Elk Run advance written notice of at least seven (7) calendar days of its intent to exercise its right under this Agreement to commence work on the Project.

8. Restoration. TCD covenants and warrants that, at its sole cost and expense, the surface of the License Area and Staging Area that is disturbed or damaged by TCD or at TCD's direction, shall be restored prior to the expiration or termination of the Term to an equivalent or better condition than it was found in immediately prior to the commencement of any work done by TCD, its agents, contractors or subcontractors, but excluding trees that were removed as a result of such work. If weather conditions or other circumstances would make such restoration imprudent to complete, then the restoration shall be completed within a time agreed to in writing by the parties.

9. Hazardous Materials. TCD shall not use or deposit or permit the use or deposit of any toxic waste, harmful substances, or hazardous materials, as that term may be defined under federal or state law, on the Licensed Area, the Staging Area or any other portion of the Property. If any discharge, leakage, spillage, emission, or pollution of any type occurs on the Licensed Area or any other portion of the Property as a result of TCD's work, TCD shall provide immediate notice to Town and, at its sole cost and expense, TCD shall undertake all appropriate actions to remediate all property

affected. If any discharge, leakage, spillage, emission, or pollution of any type occurs on the Staging Area as a result of TCD's work, TCD shall provide immediate notice to Elk Run and Town and, at its sole cost and expense, TCD shall undertake all appropriate actions to remediate all property affected.

10. Indemnification.

    a. Town. TCD hereby agrees to indemnify Town and to hold Town harmless from and against, any injury to any party acting on behalf of TCD during any use of the License Area, and any other type of damage to the extent arising from this Agreement being granted. Notwithstanding anything to the contrary herein, TCD shall not be obligated to indemnify or hold harmless Town for any injury, claim or loss to the extent arising from the intentional misconduct, illegal acts, negligent acts or omissions of Town, its successors, assigns, employees, contractors, or any other third party not acting at the direction of or on behalf of TCD. Town will notify TCD in writing within twenty (20) business days of Town receiving notice of any claims against Town arising from or related to the license from which Town is or will be seeking indemnification from TCD. Failure by Town to timely and properly provide to TCD the notice required herein shall automatically extinguish and terminate TCD's duties and obligations set forth herein. Nothing in this Agreement shall alter, amend, modify, or diminish the existing statutory, constitutional, or legal defenses of TCD in relation to such claims under Wyoming law.
    b. Elk Run. TCD hereby agrees to indemnify Elk Run and to hold Elk Run harmless from and against, any injury to any party acting on behalf of TCD during any use of the Staging Area, and any other type of damage to the extent arising from this Agreement being granted. Notwithstanding anything to the contrary herein, TCD shall not be obligated to indemnify or hold harmless Elk Run for any injury, claim or loss to the extent arising from the intentional misconduct, illegal acts, negligent acts or omissions of Elk Run, its successors, assigns, members, employees, contractors, or any other third party not acting at the direction of or on behalf of TCD. Notwithstanding the foregoing, should any third-party seek damages that arise from the Project this license is intended to facilitate, specifically the installation of the thaw well, and the use of any property of Elk Run for Staging for such work, and to the extent that Elk Run is not found to be liable, in part or in whole, for such damages, TCD hereby agrees to indemnify Elk Run and hold Elk Run harmless from and against, any injury to any such damaged third-party. Elk Run will notify TCD in writing within twenty (20) business days of Elk Run receiving notice of any claims against Elk Run arising from or related to the license from which Elk Run is or will be seeking indemnification from TCD. Failure by Elk Run to timely and properly provide to TCD the notice required herein shall automatically extinguish and terminate TCD's duties and obligations set forth herein. Nothing in this Agreement shall alter, amend, modify, or diminish the existing statutory, constitutional, or legal defenses of TCD in relation to such claims under Wyoming law.

11. No Liability for Property, Equipment, or Materials. Town and Elk Run shall have no liability of any kind whatsoever for the loss, theft, or damage of or to any of TCD's or its contractors' property, equipment, or materials placed or installed on the License Area or Staging Area, except to the extent any loss, theft, or damage is a result of the negligent acts or willful misconduct of Town or Elk Run, respectively.

12. Compliance with Laws, Rules, and Regulations. TCD shall comply with and require its employees, agents, and contractors to comply with all applicable laws, ordinance, and regulations, including but not limited to all applicable regulatory, environmental, and safety requirements at TCD's sole cost and expense.

13. Notices. Any notice, request, demand, consent, approval, or other communication required or permitted under this Agreement shall be in writing and shall be deemed duly given (i) when delivered personally to the recipient, (ii) when sent by certified mail, return receipt requested, to the address specified below, or (iii) when sent by email to the email address specified below, provided that the sender has not received a delivery failure notification. A notice sent by email shall be deemed received on the date and time the email is sent, provided that (a) the email is sent to the recipient's designated email address as set forth below, (b) the sender does not receive a bounce-back or delivery failure notification, and (c) if the notice is sent outside of normal business hours (9:00 AM to 6:00 PM on business days), the notice shall be deemed received at 9:00 AM on the following business day.

    To TCD:

Carlin Girard, Executive Director
Teton Conservation District
420 W. Pearl Ave
P.O. Box 1070
Jackson Wyoming 83001
Email: carlin@tetonconservation.org

To Town: Town of Jackson
P.O. Box 1687
Jackson, WY 83001
Email: clerk@jacksonwy.gov

To Elk Run: Elk Run Townhouses Owners Association
P.O. Box 2228
Jackson, WY 83001
Email: _____

Any party may change its address or email address for notice purposes by providing written notice to the other parties in accordance with the terms of this provision.

14. Governing Law; Jurisdiction; Construction. This Agreement shall be constructed, performed, and enforced in accordance with, and governed by, the laws of the State of Wyoming, without giving effect to the principles of conflict of laws thereof. The parties hereto irrevocably elect as the sole judicial forum for the adjudication of any matters arising under or in connection with this Agreement, and consent to the jurisdiction of, the courts of the County of Teton, State of Wyoming, or the United States District Court for the District of Wyoming. This Agreement was negotiated by all of the parties and thus it shall not be construed against or in favor of any party by virtue of which party drafted it or any portion thereof.

15. Severability. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision hereof, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein

16. Section Headings. The headings to the sections of this Agreement are solely for convenience and reference, and are not intended to, and shall not govern, limit, or aid in the construction of any terms or provision contained herein.

17. Entire Agreement and Modification. This Agreement embodies and constitutes the entire agreement with respect to the subject matter contained herein, and no prior or separate agreements between the parties are waived or merged into this Agreement. Neither this Agreement nor any provision hereof may be waived, modified, amended, discharged, or terminated in whole or in part, unless agreed to in writing by the parties.

18. Governmental Immunity. Town and TCD do not waive their governmental immunity by entering into this Agreement, and each fully retains all immunities and defenses provided by law with respect to any action based on or arising out of this Agreement.

19. Authority. The individuals executing this Agreement warrant and represent that they are duly authorized to execute and deliver this Agreement.

[REMAINDER OF PAGE IS INTENTIONALLY BLANK]

TOWN:
TOWN OF JACKSON

_____

By: Arne O. Jorgensen

Its: Mayor

ATTEST:

_____

By: Riley Hovorka
Its: Town Clerk

STATE OF WYOMING)
)ss
COUNTY OF TETON)

This instrument was acknowledged before me on _____, 2025 by Arne O. Jorgensen, as Mayor of the Town of Jackson, and Riley Hovorka, as the Town Clerk of the Town of Jackson who are each personally known to me or have each established their identity and authority to me by reasonable proof.

_____

Notary Public
My commission expires: _____

TCD:

TETON CONSERVATION DISCTRICT

By: _____
Its: _____

STATE OF _____)
) ss.
COUNTY OF _____)

This instrument was acknowledged before me on _____, 2025 by _____, as _____ of _____ who is personally known to me or has established their identity and authority to me by reasonable proof.

_____
Notary Public
My commission expires: _____

ELK RUN:

ELK RUN TOWNHOUSES OWNERS ASSOCIATION

By: _____
Its:_____

STATE OF _____)
) ss.
COUNTY OF _____)

This instrument was acknowledged before me on _____, 2025 by _____, as _____ of _____ who is personally known to me or has established their identity and authority to me by reasonable proof.

_____
Notary Public
My commission expires: _____

ArcGIS Web Map



July 12, 2024

1:1,733

0 0.01 0.02 0.04 mi

0 0.01 0.03 0.06 km

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA,

LIMITS OF DISTURBANCE APPROX. 1,000 SF

DEMO AND RECONSTRUCT FENCE AS NECESSARY

VERTICAL HDPE PIPE ROTATE ELBOW TO ALIGN SPILLWAY WITH TOP OF BANK, SEE 3/C4.0

BACKFILL SPILLWAY WITH COMPACTED IMPORTED PITRUN

CREATE FLOW CHANNEL, REPLACE LARGE BOULDERS AT STREAM EDGE

TOWN OF JACKSON HALPIN PARCEL 4

FLAT CREEK

H PANEL ELECTRICAL POWER AND CONTROLS

METER VAULT SEE SHEET C4.0

WELL SEE SHEET C4.0

TRANSFORMER

PLACE RIPRAP AT SPILLWAY DISCHARGE TO FORM OUTLET CHANNEL, CONFORM TO EXISTING BOULDERS AT WATERS EDGE SEE SECTION A/C3.0

DISCHARGE SPILLWAY SEE SHEET 3/C4.0

INSTALL BOLLARDS SEE SHEET C4.0

10"ø HDPE DISCHARGE LINE TRENCH PER W-100/C4.0

ALL WORK WITHIN PATHWAY SHALL BE CONDUCTED EXPEDITOUSLY. PATHWAY CLOSURE FOR MORE THAN 8 HOURS IS NOT PERMITTED. CONTRACTOR TO PROVIDE APPROVED TEMPORARY MEASURES TO FACILITATE PATHWAY ACCESS WHEN NECESSARY.

APPROX. EDGE OF WATER MARCH 2022

PROPERTY LINE

PATHWAY

APPROX. TOP OF BANK

TOWN OF JACKSON HALPIN PARCEL 2

STAGING AREA ONLY. PRESERVE AND PROTECT ASPHALT AND CURBS CONTRACTOR RESPONSIBLEE FOR REPAIRS FOR DAMAGE TO PAVEMENT AND CURBS

STAGING AREA

TOWN OF JACKSON HALPIN PARCEL 1

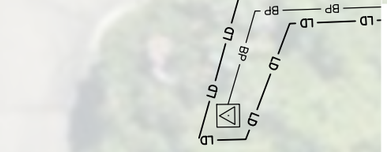
FEMA FLOODWAY BOUNDARY

EXISTING SEWER MANHOLE

THAW WELL FINAL SITE PLAN

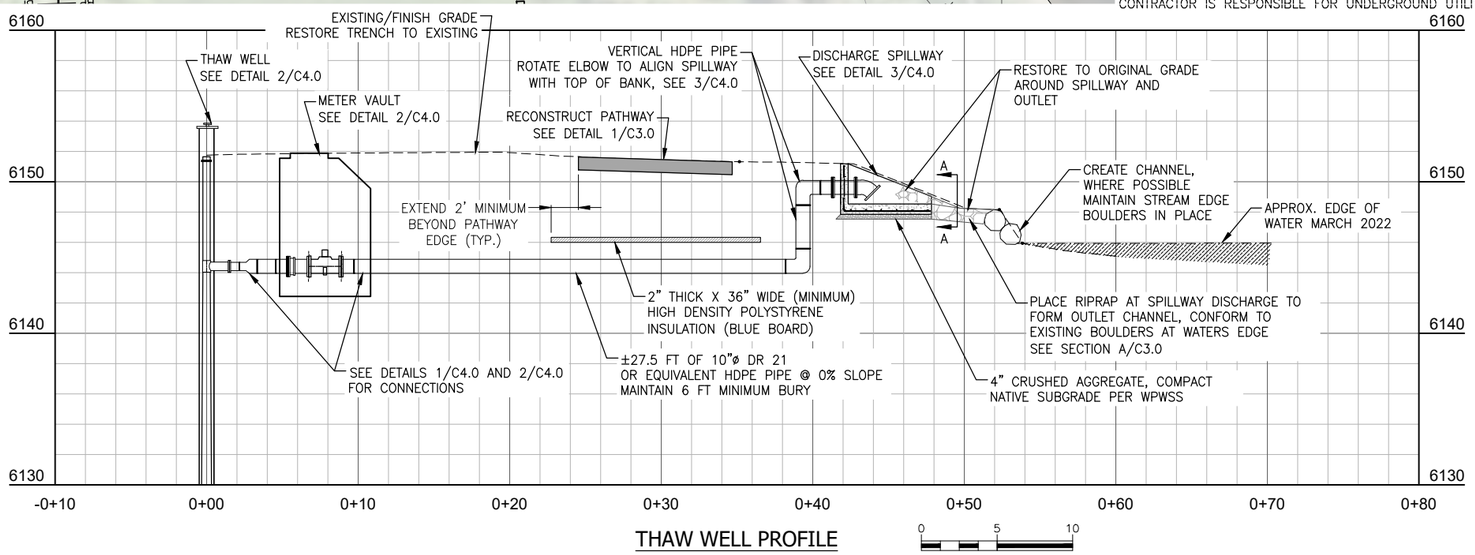
0 5 10

NOTE:
CONTRACTOR IS RESPONSIBLE FOR UNDERGROUND UTILITY LOCATES



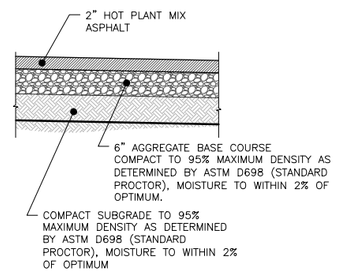
A C3.0 OUTLET CHANNEL SECTION A-A

SCALE: NTS



THAW WELL PROFILE

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1 C3.0 PATHWAY SECTION

SCALE: N.T.S.

NELSON ENGINEERING
P.O. BOX 1599, JACKSON WYOMING (307) 733-2087

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DRAWING TITLE: PLAN AND PROFILE

JOB TITLE: THAW WELL NO. 5 - HALPIN PARCELS
TETON CONSERVATION DISTRICT

DRAWING NO: C3.0

JOB NO: 21-032-02

S:\Proj\2021\032-02 Flat Creek Watershed District Thaw Wells Water Rest\Thaw Well #5 Halpin\Drawings\ThawWell5-3SDA.dwg (C3-FINAL) - Feb 05 2025 04:06:05 pm PLOTTED BY gyr DWG FORMAT: 25D

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Regular Council Meeting - Consent
Submitting Department:	Internal Services	**Presenter:**	Lynsey Lenamond
Agenda Item:	Employee Leases at West Snow King and Moose St.	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Council to consider two employee lease agreements for partial studio housing units at 400 West Snow King Avenue and a lease at a primary leased unit.

Requested Action.
Staff requests Council approve the lease agreements for West Snow King and Moose St. housing as presented.

Recommendations.
Staff recommends Council approve the lease agreements.

Background.
Pursuant to Wyo. Stat. § 15-1-108(a)(v) unless otherwise provided by statute, the mayor shall sign "all bonds, contracts and other obligations to be signed in the name of the city or town." As a result, contracts for the Town are reviewed and considered by the Council. Employee leases and subleases are considered contracts that require Council approval and staff utilizes lease templates prepared and approved by the Town Attorney.

Upon a final offer of employment being made to a new hire, Internal Services informs the employee of available housing options. Once the employee decides to move forward with Town housing and selects the option that best suits them, Internal Services completes the lease information in the template and presents that lease for Council approval.

In order to protect employees from unwanted knowledge of their name and location as it relates to their residence, the Town redacts the name and address information from the lease.

Analysis & Key Policy Questions.

Key Policy Question: Does Council approve of the leases as presented?

If the answer is yes, upon approval from Council, the leases will then be executed and the employee will be able to move into their housing unit.

Possible Alternatives.
Council could:

1) Not approve the lease agreement.
2) Direct staff to negotiate different terms and conditions for the lease agreement.
3) Continue action to the next available meeting.

Delaying approval of the leases would likely result in temporary staffing shortages and may include impacts to service delivery.

Comprehensive Plan & Priority Alignment.
This item is in alignment with Section 5 Local Workforce Housing by providing workforce housing.

Fiscal Impact.
West Snow King housing was constructed by the Town and County and rents charged offset expenses associated with managing/maintaining that facility as well as provide funds for ongoing employee housing projects and initiatives. The Town considers the Housing and Urban Development (HUD) rate for Teton County when setting rents for Town owned units. These units are considered partial studio units because they do not have a kitchen or washer and dryer. The rent currently charged for these units is $1190/month.

Staff Impact.
Staff spent approximately 4 hours drafting the lease as well as preparing and reviewing this staff report, including time spent by the Internal Services and Legal Department.

Attachments or Links.
Employee Lease Agreements

Suggested Motion.
I move to approve the lease agreements for West Snow King and Moose St. housing subject to minor changes by staff including adjustment of the move in date to accommodate employee needs.

TOWN OF JACKSON
WEST SNOW KING RESIDENTIAL LEASE AGREEMENT
(Updated April 2025)

This West Snow King Residential Lease Agreement ("**Lease**") is made and entered into this _10 day of _____June_____, 20_25_, by and between the Town of Jackson, a municipal corporation of the State of Wyoming, ("**Landlord**" or "**Town**") and __[redacted] ("**Tenant**"). Landlord and Tenant are each a "**Party**" to the Lease and are collectively the "**Parties**."

RECITALS

WHEREAS, Landlord is the owner of certain real property, a residential building, and other appurtenances located at 400 West Snow King Avenue, Jackson, Wyoming 83001;

WHEREAS, Landlord desires to lease Unit [redacted]___ in the residential building, which is more particularly described as a _partial studio_____ residential unit, together with all improvements located therein and all common areas of the residential building and real property (collectively the "**Premises"**);

WHEREAS, Tenant desires to lease the Premises; and

WHEREAS, the Parties desire to enter into a written lease agreement providing the terms, covenants and conditions for the lease and occupancy of the Premises by Tenant.

NOW, THEREFORE, in consideration of the mutual covenants, agreements, undertakings and benefits to the parties, the parties agree as follows:

1. LEASE. Landlord agrees to lease to Tenant and Tenant agrees to lease from Landlord the Premises according to the terms and conditions of this Lease.

2. OCCUPANTS. Tenant may occupy and reside in the Premises alone, or with immediate family members, partners, or housemates as agreed to and listed below, or as further modified or agreed to in writing by the Landlord. The rights of any permitted occupants are governed by the terms and conditions of this Lease and such rights shall expire or terminate at the same time the Tenant's rights expire or terminate hereunder.
   i. Name: _____
   ii. Name: _____
   iii. Name: _____

3. TERM. The Lease shall commence on ___June 27___, 20_25 and end on _September 30__, 2025_, both dates inclusive, unless sooner terminated. At the expiration of the initial term, the Lease shall continue on a month-to-month basis in accordance with the terms and conditions hereof until terminated by either party in accordance with the termination section herein.

4. RENT. Tenant agrees to pay Landlord monthly rent in the amount of $1190.00, payment for which will begin on _June 27_____, 20_25_. All subsequent rent payments are due and payable on the first day of each month. Landlord may increase the rent amount once every calendar year. Landlord shall give Tenant at least sixty (60) days written notice prior to any rent increase. In the event the term of the lease begins on a day other than the first day of the month, or the initial term of the lease ends

on a day other than the last day of the month, the rent shall be prorated for as many days as Tenant occupies the Premises for that month.

(_x__) Tenant is an employee of Town. All rental payments, including any late payment fees, shall be paid in accordance with Section 6 below (paycheck deduction).

(___) Tenant is not an employee of Town. All subsequent rent payments are due and payable on the first day of each month. If rent is not paid by the third day of each month ("Grace Period"), a late charge of $50.00 shall be due. Late charges shall continue to accrue after the third day at the rate of $10.00 per day for every day, or portion thereof, that the rent is not paid in full. Any late charges due will be considered additional rent. If a check is returned by Teant's bank for any reason, there will be a $50.00 returned check fee that will be applied and due in addition to the outstanding rent and, if applicable, any late charges. If a check is returned by Tenant's bank for any reason, there will be a $50.00 returned check fee that will be applied and due in addition to the outstanding rent and, if applicable, any late charges. Rent may be paid through the Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department.

All Tenants: If Tenant fails to pay rent or any other fees due and payable under this Lease on or before the applicable due date specified in this Lease, and after the Grace Period has expired, Landlord reserves the right to terminate this Lease and require Tenant to vacate the premises in accordance with Landlord's notice of default as set forth in Section 35. Failure to vacate the Premises may result in legal action for eviction as permitted by Wyoming law.

5. SECURITY DEPOSIT. Tenant shall pay a security deposit equal to one (1) month's rent. The security deposit shall be paid at the time of execution of this Lease, pursuant to a payment plan agreed to in writing by the Landlord, or it may be deducted from the Tenant's paycheck as outlined in Section 6. If the rent amount increases as provided herein, the amount of the security deposit shall increase to reflect the increase in the rent amount. Landlord shall give Tenant at least sixty (60) days written notice prior to the increase of the security deposit. The security deposit increase shall be paid at the time the rent amount increase is implemented, or it may be deducted from the Tenant's paycheck as outlined in Section 6. The security deposit shall be retained by the Landlord to be used for: (i) any damages, other than normal wear and tear, caused by Tenant, (ii) any missing or damaged furnishings, furniture, or items, other than normal wear and tear, from the Premises, (iii) any unpaid rent, fees, or charges, (iv) abandonment of the Premises, (v) cleaning expenses required to return the Premises to as good a condition as it was upon commencement of this Lease, and/or (vi) to the extent permitted by Wyoming law, any other costs or damages sustained by the Landlord by reason of the failure of the Tenant to comply with any terms, provisions, covenants, or agreements contained in this Lease. It is understood that the security deposit is not pre-payment of rent and is not applicable toward the last month's rent. The Landlord shall not be obligated (although it may do so at its option) to apply the security deposit to any unpaid rent, fees, charges, or portion thereof at the termination of the Lease. Landlord shall return that portion of the security deposit not used for one of the above-listed deductions no later than thirty (30) days following vacation of the Premises by Tenant provided that, if the security deposit is being applied to any permissible circumstance, this time period shall be extended by an additional thirty (30) days. Tenant shall be liable for any damages or expenses owed in excess of the security deposit. Landlord shall promptly provide Tenant written notice of the amount owed by Tenant, and Tenant shall pay said amount within three (3) days of notice by remitting payment to the Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department, or at Landlord's election, it may be deducted from the Tenant's paycheck as outlined in Section 6..

6. PAYCHECK DEDUCTION AUTHORIZATION. If Tenant is an employee of the Town, Tenant agrees to the following payment terms, and authorizes the Town, as its employer, to deduct rent, deposits, and fees from their bi-weekly paychecks (each of which is from a "pay period" that is a time frame of fourteen (14) days) as follows:

a. Rent. Half (½) of the rent amount shall be deducted from the Tenant's paycheck with the first pay period of the month, and the second half (½) of the rent shall be deducted from Tenant's paycheck with the second pay period of the month.

b. Security Deposit. If Tenant does not pay the security deposit at the time of the execution of the Lease, or does not pay any increase in the security deposit when required as set forth herein, then $200.00, or an alternative amount authorized by the Landlord, shall be deducted from Tenant's paycheck each month until the security deposit or security deposit increase is paid in full. Half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the first pay period of the month, and the second half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the second pay period of the month.

c. Pet Deposit. If Tenant does not pay the pet deposit at the time of the execution of the Lease, then $200.00, or an alternative amount authorized by the Landlord, shall be deducted from Tenant's paycheck each month until the pet deposit is paid in full. Half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the first pay period of the month, and the second half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the second pay period of the month.

d. Fees. Any fees charged to Tenant shall be deducted from Tenant's paycheck with the pay period following the charged fee.

e. Insufficient Income. If Tenant does not have sufficient income in their paychecks to cover the rent payments, utility costs, the security deposit, or fees as outlined above, the outstanding amount due with each pay period shall be remitted no later than the Monday following the payday for the insufficient paycheck, and in no event shall the entire rent amount be paid later than the twenty fifth day of the month or it will be considered late.

f. Late and Return Check Fees. If rent is not paid in full by the twenty fifth day of the month, a late fee of $50.00 will be applied, and is due in addition to the outstanding rent. Late fees shall continue to accrue after the tenth day at the rate of $10.00 per day for every day, or portion thereof, that the rent is not paid in full. If a check is returned by Tenant's bank for any reason, there will be a $50.00 returned check fee that will be applied and is due in addition to the outstanding rent and, if applicable, any late charges.

g. Final Paycheck. Landlord reserves the right to withhold and deduct from Tenant's final paycheck any unpaid amounts that are overdue including, but not limited to rent, fees, charges, security deposit, damage costs, utilities, or cleaning costs. Landlord may further withhold and deduct from Tenant's final paycheck any rent, charges, or fees that will become due after Tenant's final pay period. If Tenant does not have sufficient income in their final paycheck to cover the amount required to be deducted, then Landlord shall promptly provide Tenant written notice of the outstanding amount owed, and Tenant shall pay the outstanding amount within three (3) days of notice.

h. Outstanding Payments. Any outstanding rent, costs, or fees may be paid through the Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department.

7. CONTINUED EMPLOYMENT. (Check One)

(_x__) A condition precedent to Tenant leasing the Premises is continued employment at full-time or at least thirty (30) hours a week with the Town of Jackson or Teton County, Wyoming, or continued status as an active volunteer or probationary status with the Jackson/Teton County Fire/EMS. If Tenant's employment terminates voluntarily, then the Lease will terminate immediately, and Tenant shall vacate the Premises within thirty (30) days of their last day of work, or by the end date of the Lease, whichever is sooner. If Tenant's employment terminates involuntarily, then the Lease will terminate immediately, and the Tenant will have twenty-four (24) hours from their last day of work to vacate the Premises, unless Landlord agrees in writing to extend the time to vacate.

(___) The Tenant's employment is not a condition precedent to Tenant leasing the Premises.

8. SOLE RESIDENCE. Tenant shall use the Premises only as their sole, year-round residence. Tenant shall not directly own or own through a marriage, partnership, corporation, or any other means any other residential housing unit within the Town of Jackson limits, within Teton County limits, or in any outlying community from which an employee could reasonably commute. By signing this Lease, Tenant affirms they do not own a residential housing unit under any of these circumstances. If Tenant is found to be in violation of this provision, Landlord will provide written notice of the violation and the Lease will terminate immediately. Tenant will have thirty (30) days to vacate the Premises upon termination of the Lease under this provision. This same provision applies to all individuals residing in and occupying the Premises.

9. MOVE IN INSPECTION WORKSHEET. Tenant shall complete and execute a Move In Inspection Worksheet ("Worksheet") within fourteen (14) days of the commencement of the Lease. The Worksheet shall provide a detailed accounting of the condition of the Premises, including, but not limited to, repairs needed, damages, or material defects. If there are any furnishings, furniture, or items contained in the Premises, the Worksheet shall also document an inventory and a detailed accounting of the conditions of such furnishings, furniture, and items. If a Worksheet is not completed by the Tenant in the time specified, this may result in the Tenant being held responsible for all issues noted by Landlord at move out.

10. USE OF PREMISES. Tenant agrees and acknowledges that their use of the Premises is conditioned upon the following:

a. Shall comply with all requirements of any governmental authorities, housing authorities, or homeowner associations concerning the Premises now or hereafter in force.
b. Shall comply with rules or regulations made by Landlord from time-to-time for the safety, care, upkeep, and cleanliness of the Premises.
c. Do not place auxiliary structures of any kind on the Premises without the express written consent of the Landlord.
d. Do not install any satellite dishes, cable, or permanent or semi-permanent communication services on, in, or attached to any portion of the Premises.
e. Do not touch, climb on, access, utilize, or otherwise interfere with any Town or County owned equipment, items, or facilities located adjacent to or in the building.
f. Do not sublease the Premises during the term of this Lease.
g. May not use the Premises as a business address or for the purpose of conducting any type of business, profession, or trade ("Business Activities") without the prior express written consent of the Landlord. If Tenant obtains consent to conduct Business Activities at the Premises, Tenant shall conduct such Business Activities in a manner that is lawful and does not create any nuisance, or interfere with, annoy, or disturb any neighbors or other residents at the Premises. Tenant, at their own expense, shall be responsible for duly procuring and maintaining

any governmental license or permit that is required for the Business Activities. Consent for the Business Activities may be rescinded at any time by providing thirty (30) days written notice to Tenant for Business Activities to cease.

h. Shall keep radios, televisions, stereos, etc., at a level of sound that does not annoy or interfere with other residents or neighbors.
i. Do not permit any liens or security interests be filed against the Premises.

11. NO ILLEGAL OR PROHIBITED CONDUCT. Tenant shall not use or permit the use of the Premises contrary to any federal, state, or local law or engage in any activity in or on the Premises that is illegal under any federal, state, or local law. Nor shall Tenant permit others to engage in illegal activities in or on the Premises. Tenant shall not engage in or permit in or on the Premises disruptive conduct, noisy disturbances, abusive language, intimidating behavior, bullying behavior, threatening behavior, violent acts, any other conduct that jeopardizes the health, safety, and/or welfare of Landlord, Landlord's agents, other tenants, neighbors, or property, or otherwise disturb or interfere with the rights of other tenants or neighbors. If Tenant violates this section, the Lease may be immediately terminated by the Landlord. If Landlord elects to immediately terminate the Lease, Landlord shall provide Tenant written notice of the termination and Tenant will have twenty-four (24) hours from the date of the notice to vacate the Premises, unless Landlord agrees in writing to extend the time to vacate.

12. ALTERATION AND IMPROVEMENTS. Tenant shall not make any alterations or improvements to the Premises without the advanced written consent of the Landlord.

13. REPAIR AND MAINTENANCE. Tenant shall keep the Premises, including the common areas, in as good order as it was at the time of the commencement of this Lease, reasonable wear and tear, damage by elements, accidental fire or other casualty excepted. Tenant will immediately notify Landlord of any damage to the Premises or its contents, or to any inoperable equipment or appliances, and such damage or inoperable equipment or appliance shall be promptly repaired at no expense to the Tenant, except as indicated below. Tenant will be responsible for any damage caused by the Tenant, or Tenant's family members, invitees, or guests. Tenant agrees to be responsible for the following maintenance of the Premises:

a. Keep all windows, glass, window treatments, doors, locks, and hardware in good, clean order and repair.
b. Do not obstruct or cover the windows or doors, with the exception of conventional window treatments.
c. Do not leave windows or doors in an open position during inclement weather.
d. Do not hang laundry, clothing, sheets, etc. from any window, rail, porch, or balcony, nor air or dry any of the same within any yard area.
e. Do not hang any things from the exposed sprinkler system, or otherwise make use of the exposed sprinkler system in any way.
f. Do not cause or permit any locks or hooks to be placed upon any door, except for child locks.
g. Take reasonable precautions to avoid freezing pipes and plumbing fixtures.
h. Keep all lavatories, sinks, toilets, and all other water and plumbing apparatus in good order and repair and use the same only for the purposes for which they were constructed. No sweepings, garbage, sand, rags, ashes, or other substances shall be thrown or deposited therein. Any damage to any such apparatus and the cost of clearing stopped plumbing resulting from misuse shall be borne by Tenant.

Tenant _____

i. Deposit all trash, garbage, rubbish, and refuse in the locations provided therefor and not allow any trash, garbage, rubbish, or refuse to be deposited or permitted to stand on the exterior of any building.
j. Keep the Premises, including the common areas, both inside and out, in good, clean, orderly, and sanitary condition.
k. Do not store or accumulate items along the exterior walls.
l. Do not paint any portion of the Premises without express written consent of Landlord.
m. Do not permit any hazardous, toxic, or flammable substances to be stored or used in or about the Premises.
n. Do not disconnect the smoke/fire alarm and/or any other detectors in the Premises.
o. Utilize the exhaust fans in the bathroom and kitchen areas at a level sufficient to prohibit the growth of mold in these areas or other areas prone to condensation.
p. Do not prop open any exterior doors to the building.
q. Do not prop open the elevator doors.
r. Shall, at Landlord's discretion, be responsible for the arrangement, completion, and funding of any minor repair or maintenance that costs up to $100.00 to complete.

14. SNOW REMOVAL. All snow and ice removal will be provided with no obligation to the Tenant. Tenant shall promptly notify Landlord of any ice or snow issues.

15. YARD MAINTENANCE. All yard maintenance will be provided with no obligation to the Tenant. Tenant shall promptly notify Landlord of any yard issues.

16. UTILITIES. All utilities are included with rent, including internet service. Tenant shall not use the internet service: to generate unsolicited email (i.e. spam or unwanted bulk email); to intentionally or unintentionally generate traffic that is regarded as harmful or invasive to the Network as determined in the sole discretion of the service provider; in a manner that violates any applicable law or regulation, including, but not limited to: the transmission, distribution, or storage of any material that is copyrighted or trademarked, a trade secret or other intellectual property right used without the proper authorization, and material that is deemed obscene by local, state, or federal law or rules; to harass or intimidate or threaten individuals or groups of individuals, which includes, but is not limited to, the transmission or distribution of material that is deemed obscene, defamatory, or that constitutes an illegal threat; or to make fraudulent offers.

17. PROPERTY TAXES. Landlord shall pay all property taxes on the Premises as they become due and payable.

18. CONVENANT OF QUIET ENJOYMENT. Tenant, upon paying rent and performing the covenants upon its part to be performed hereunder, shall peaceably and quietly have, hold, and enjoy the Premises hereby leased during the term hereof. Nonetheless, Tenant acknowledges the residential building is located above the park maintenance facility within the Town's public works yard, and is adjacent to the rodeo grounds and facilities. As such, Tenant understands and agrees there will be sounds associated with the use and maintenance of these facilities, including but not limited to sounds related to heavy equipment, the rodeo, and special events, that may occur at all hours of the day, including during early and late hours.

19. OVERNIGHT GUESTS. Overnight guests may stay in or on the Premises for no more than seven (7) consecutive nights. No overnight visitation by a guest who has visited for a seven (7) night period may occur more than twice during each year of the Lease. For purposes of enforcing these terms, Tenant

agrees to provide current license plate information for the Tenant and all occupants residing in the Premises.

20. ANIMALS. (Check One)

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(___) No pets are allowed except service animals or assistance animals.

(___) Tenant intends to occupy the Premises with a service animal(s) or assistance animal(s). Service animals and assistance animals are allowed in accordance with Wyoming State and Federal law. A pet deposit is not required for a service animal or assistance animal. Tenant may be liable for any damage caused by the service animal or assistance animal to the extent allowed under Wyoming State and Federal law

(_x__) In addition to any service animals or assistance animals, Landlord consents to allow Tenant to have the following pet(s): _none listed_____, in compliance with Jackson Municipal Code § 7.05.020(G). Tenant agrees that no other pet shall be kept on the Premises. The unauthorized presence of any pet will subject Tenant to termination of this Lease pursuant to the termination section herein. Tenant must pay an additional $_1190.00 pet deposit. The pet deposit shall be paid at the time of the execution of this Lease, pursuant to a payment plan agreed to in writing by the Landlord, or it may be deducted from the Tenant's paycheck as outlined in Section 6. The pet deposit is refundable unless there are damages or cleaning costs related to the pet(s). If the cost for the repair of the damages or cleaning exceeds the amount of the pet deposit, then Tenant will be responsible and charged for the additional costs for repair or cleaning. Tenant's pet(s) shall not be loud or disturb any neighbors or other residents in the building.

If Tenant entered the Lease with no pet and later seeks to acquire a pet during the term of the Lease, or if Tenant seeks an additional pet to what Landlord consented to above, advanced written consent from Landlord is required for the pet. Landlord's written consent shall contain an accounting of any additional pet deposit required for the pet, which deposit shall be paid in advance of Tenant keeping the pet on the Premises.

21. SMOKING. No smoking is permitted in or on the Premises at any time.

22. PARKING AND PARKING PASSES. Only one parking space is allowed for the Premises, unless otherwise agreed to in writing by the Landlord. Tenant will be issued a parking pass and shall only park in spaces designated by the Landlord. Tenant shall promptly return the parking pass to Landlord at the end of the Lease. If Tenant is issued a new parking pass for any reason during the term of the Lease, or if Tenant fails to return to Landlord the parking pass at the end of the Lease, Tenant shall be charged a $100.00 fee. If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6. The parking of trailers, RVs, inoperable vehicles, or oversized vehicles that are unable to fit within the designated parking spaces is prohibited.

23. KEYS. Tenant will be issued four (4) keys (2 cards and 2 fobsat the commencement of this Lease.

a. Additional Keys. Tenant may request additional keys at the commencement of this Lease. The fee for an additional card is $8.00 and the fee for an additional fob is $20.00.
b. Lost Keys. Tenant must immediately notify Landlord of a lost key so Landlord may deactivate the key.
c. Recoding or Replacement Keys. If Tenant requires the recoding of a key, or the replacement of a lost, damaged, or inoperative key, Tenant will be charged the following fees:
    1) First instance of recoding or replacement = $25.00 fee.

2) Second instance of recoding or replacement = $50.00 fee.
3) Third or subsequent instance of recoding or replacement = $200.00 fee for each recoding or replacement.

In the event Tenant's key is damaged or inoperative, the fee to recode or replace the key may be waived if the Town's Facilities Manager determines mitigating circumstances exist. If Tenant is a Teton County employee, additional charges may be required by Teton County for a replacement ID card.

d. Return of Keys. Tenant must promptly return the keys to Landlord upon vacating the Premises at the end of the Lease. If all keys are not returned, Tenant will be charged $25.00 per unreturned key.

If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6.

24. LOCKOUTS. If Tenant is locked out of the Premises, Tenant must contact Landlord to gain entry. Tenant will not be charged a fee for the first instance of lockout, but will be charged a fee for each subsequent lockout as follows:

a. Second lockout = $25.00 fee
b. Third lockout = $50.00 fee
c. Four or more lockouts = $200.00 fee for each instance of lockout.

If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6.

25. SMOKE ALARMS.

a. Smoke Alarm Reset Callout. If Landlord is called out to reset a smoke alarm, Tenant will not be charged a fee for the first reset callout, but will be charged a fee for subsequent callouts as follows:
   1) Second reset callout = $25.00 fee
   2) Third reset callout = $50.00 fee
   3) Four or more reset callouts = $200.00 fee for each callout.
b. Smoke Alarm Damage. If Tenant damages a smoke alarm, any costs incurred to repair the smoke alarm will be charged to Tenant as a fee.
c. Smoke Alarm Removal or Disconnection. Tenant shall not remove or disconnect the smoke alarm. If Tenant removes a smoke alarm from its ceiling mount or disconnects a smoke alarm without first obtaining permission from the Town's Facilities Manager, Tenant shall be charged a $200.00 fee.

If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6.

26. INSPECTION/ENTRY. Landlord shall have the right to enter the Premises for reasonable inspections, to make any agreed upon or necessary repairs/improvements, to show the Premises to prospective tenants or contractors, if Landlord believes the Premises have been abandoned, or where other good cause exists to enter. The Landlord shall give Tenant at least twenty-four (24) hours advance notice of entry, except in the event of an emergency or where other good cause exists. For major repairs or improvements that will disrupt the occupancy of the Tenant for more than one (1) day, the Landlord shall give Tenant at least seven (7) days advance notice of entry. Notwithstanding the foregoing, Landlord shall

have the right to enter and inspect the Premises and take appropriate action without advance notice in the event of any emergency, or as allowed under Jackson Municipal Code § 1.08.010.

27. INSURANCE. Landlord shall maintain, at its expense, fire, comprehensive general liability, and extended "all-risk" coverage on the Premises.

28. RENTER'S PERSONAL PROPERTY AND INSURANCE. Landlord shall not be responsible for loss, destruction, or damage to Tenant's personal property regardless of the cause. Tenant has the option to obtain a renter's insurance policy. Landlord shall have no responsibility for the payment of any renter's insurance policy obtained by Tenant.

29. DESTRUCTION OF PREMISES. If the Premises shall be damaged by fire, elements, unavoidable accident, or other casualty, without the fault or negligence of Tenant, and the Premises are not thereby rendered untenantable in whole or in part, Landlord shall promptly, at its expense, cause such damage to be repaired, and the rent shall not be abated. If, by reason of such occurrence, the Premises shall be rendered untenantable only in part, Landlord shall promptly cause the damage to be repaired and the rent, during such period of repair, shall be abated proportionately to the portion of the Premises rendered untenantable. If, by reason of such occurrence, the Premises shall be rendered wholly untenantable, Landlord shall promptly cause such damage to be repaired and the rent, during such period of repair, shall be abated in whole. There shall be no extension of the term of this Lease by reason of such abatement. Notwithstanding the foregoing provisions, if the Premises shall be rendered wholly untenantable by reason of such occurrence and the Premises cannot be repaired within six (6) months from the date such damage occurs, Landlord or Tenant shall at their option have the right to declare the balance of the term of this Lease to be null and void.

30. TERMINATION. Except in the event of any default by Tenant, which termination is governed by Section 35 and state statute, in addition to other termination provisions set forth in different sections of the Lease, either Party may terminate this Lease at any time upon giving thirty (30) days prior written notice. If the Lease is terminated pursuant to this section, or pursuant to any other section of the Lease, Tenant will be responsible for paying rent for the entire month in which they last occupy the Premises, even after they have vacated the Premises. However, if after the Tenant vacates the Premises and the Landlord places another tenant into the Premises during that month, then Tenant will be obligated to pay prorated rent only up to the date the new tenant takes occupancy of the Premises. In the event of any termination, Tenant and any occupants are bound and shall abide by the terms and conditions of this Lease until they vacate the Premises.

31. SURRENDER AND CLEANING. Upon the termination of this Lease, Tenant shall quit and surrender the Premises in as good condition and repair as it was at the date of the commencement of this Lease, reasonable wear and tear excepted. Tenant is responsible for cleaning so that at surrender the Premises are in as good of a condition and repair as at the commencement of this Lease, and, if cleaning is required by the Landlord to meet this standard, Landlord will deduct the cost of such from the security deposit. If the cost of cleaning exceeds the amount of the security deposit, Tenant will be responsible and charged for the additional cleaning costs.

32. BINDING EFFECT. All the terms, covenants and conditions of this Lease shall be binding upon and inure to the benefit of the Parties hereto, their respective heirs, assigns, and legal representatives.

Tenant _____

33. REPRESENTATIONS. It is mutually agreed that no representations, warranties, covenants, or agreements, expressed or implied, have been made other than those set forth herein.

34. WAIVER. The waiver by the Parties of any breach of any term, covenant, or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition on any subsequent breach of the same or any other condition herein contained. None of the terms hereof can be waived by either the of the Parties, except by appropriate written agreement duly executed by both Parties.

35. DEFAULT. Tenant shall be in default if Tenant fails to pay any part of the rent herein provided, or any other sum required by the Lease to be paid at the times or in the manner provided under the Lease or otherwise, or where any covenant, term, or condition of this Lease is materially violated. In the event of a default by Tenant, Landlord may provide Tenant with a notice of default and notice to quit ("**Default Notice**"), at its sole discretion. A Default Notice shall include a request to cure the default within three (3) days of the written notice, and the specific date on which the Lease will terminate if Tenant fails to timely cure the default. If by its nature the default cannot be cured within three (3) days, but Tenant commences the cure within that time period and perfects it thereafter, no immediate termination may be effectuated. If Tenant is in default with respect to the same or substantially same covenant, term, or condition of the Lease two (2) or more times during any three (3) month period during the term of the Lease, notwithstanding any prior cure of default, Landlord may elect to immediately terminate the Lease and Tenant will not have the opportunity to cure the default. If the Lease is terminated pursuant to this section, Landlord shall provide Tenant written notice of the termination and Tenant will have three (3) days from the date of the notice to vacate the Premises, unless Landlord agrees in writing to extend the time to vacate. The Landlord reserves all rights and remedies available to them under the law in the event of default, including commencement of eviction proceedings.

36. INDEMNIFICATION. Landlord shall not be liable for any damage, injury, or loss to person or persons occurring on the Premises unless such act is the result of the negligence of the Landlord. Tenant agrees to hold Landlord harmless from any claims for damages, injury, or loss to person or persons occurring on the Premises, except for damages, injury, or loss caused by the negligence of Landlord.

37. GOVERNMENTAL IMMUNITY. Landlord does not waive their governmental immunity by entering into this Lease, and fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this Lease.

38. ATTORNEY'S FEES. Landlord and Tenant agree that in the event either party incurs court costs or attorney's fees by reason of default or breach by the other party, the prevailing party in any such court action shall be entitled to reasonable attorney's fees and court costs from the other.

39. NOTICES. Any notice, request, demand, consent, approval, or other communication required or permitted under this Agreement shall be in writing and shall be deemed duly given (i) when delivered personally to the recipient, (ii) when sent by certified mail, return receipt requested, to the address specified below, or (iii) when sent by email to the email address specified below, provided that the sender has not received a delivery failure notification. A notice sent by email shall be deemed received on the date and time the email is sent, provided that (a) the email is sent to the recipient's designated email address as set forth below, (b) the sender does not receive a bounce-back or delivery failure notification, and (c) if the notice is sent outside of normal business hours (9:00 AM to 6:00 PM on business days), the notice shall be deemed received at 9:00 AM on the following business day. Either party may change its

address or email address for notice purposes by providing written notice to the other party in accordance with the terms of this provision.

LANDLORD	TENANT
Town of Jackson	_____
P.O. Box 1687	_____
Jackson, WY 83001	_____
employeehousing@jacksonwy.gov	

Tenant Cell Phone: _____
Tenant Email: _____
Tenant Vehicle Make/Model/Description: _____
Tenant Vehicle License Plate State/Number: _____

40. SEVERABILITY. If any part of this Lease shall be construed to be unenforceable, invalid, or illegal, such unenforceability, invalidity, or illegality shall not affect any other provisions and they shall remain in full force and effect.

41. ENTIRE AGREEMENT. This Lease constitutes the complete and entire agreement between the Parties and may be modified only in writing duly signed by the Parties.

42. LAW AND JURISDICTION. This Lease shall be construed in accordance with the laws of the State of Wyoming. Any litigation arising under the terms of the Lease shall be in the state courts of the State of Wyoming, Ninth Judicial District. Any forcible entry and detainer action shall be brought in the Circuit Court of Teton County, Wyoming.

43. CONSTRUCTION. Whenever used, the singular shall include the plural, the plural the singular, and the use of any gender shall include all genders when the context so requires. This Lease was negotiated by both parties and thus it shall not be construed against or in favor or any party by virtue of which party drafted it or any portion thereof.

44. HEADINGS. The headings used in this Lease are for convenience only and are not to be used in its construction.

45. COUNTERPARTS; ELECTRONIC SIGNATURES. This Lease may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, constitute one and the same document. The signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. At the request of either party, each party agrees to execute an original of this Lease as well as any facsimile or other reproduction hereof.

46. INCORPORATION OF RECITALS. All the recitals hereof are incorporated by this reference and are made a part hereof as though set forth at length herein

IN WITNESS WHEREOF, each Party acknowledges they have read and understood all the terms of this Lease and hereby agree to be bound thereby. The Parties further acknowledge that they were under no duress in signing this Lease and had full opportunity to negotiate the terms contained herein and to consult independent counsel.

LANDLORD:
Town of Jackson

_____
By: Arne Jorgensen, Mayor

TENANT:

_____
By: _____

Attest:

_____
Riley Hovorka, Clerk

Tenant _____

TOWN OF JACKSON
WEST SNOW KING RESIDENTIAL LEASE AGREEMENT
(Updated April 2025)

This West Snow King Residential Lease Agreement ("**Lease**") is made and entered into this _10 day of _____June_____, 20_25_, by and between the Town of Jackson, a municipal corporation of the State of Wyoming, ("**Landlord**" or "**Town**") and [redacted] ("**Tenant**"). Landlord and Tenant are each a "**Party**" to the Lease and are collectively the "**Parties**."

RECITALS

WHEREAS, Landlord is the owner of certain real property, a residential building, and other appurtenances located at 400 West Snow King Avenue, Jackson, Wyoming 83001;

WHEREAS, Landlord desires to lease Unit [redacted]_ in the residential building, which is more particularly described as a _partial studio_____ residential unit, together with all improvements located therein and all common areas of the residential building and real property (collectively the "**Premises"**);

WHEREAS, Tenant desires to lease the Premises; and

WHEREAS, the Parties desire to enter into a written lease agreement providing the terms, covenants and conditions for the lease and occupancy of the Premises by Tenant.

NOW, THEREFORE, in consideration of the mutual covenants, agreements, undertakings and benefits to the parties, the parties agree as follows:

1. LEASE. Landlord agrees to lease to Tenant and Tenant agrees to lease from Landlord the Premises according to the terms and conditions of this Lease.

2. OCCUPANTS. Tenant may occupy and reside in the Premises alone, or with immediate family members, partners, or housemates as agreed to and listed below, or as further modified or agreed to in writing by the Landlord. The rights of any permitted occupants are governed by the terms and conditions of this Lease and such rights shall expire or terminate at the same time the Tenant's rights expire or terminate. Tenant:

i. Name: _____
ii. Name: _____
iii. Name: _____

3. TERM. The Lease shall commence on ___June 17___, 20_25 and end on _September 30__, 2025_, both dates inclusive, unless sooner terminated. At the expiration of the initial term, the Lease shall continue on a month-to-month basis in accordance with the terms and conditions hereof until terminated by either party in accordance with the termination section herein.

4. RENT. Tenant agrees to pay Landlord monthly rent in the amount of $1190.00, payment for which will begin on _June 17_____, 20_25_. All subsequent rent payments are due and payable on the first day of each month. Landlord may increase the rent amount once every calendar year. Landlord shall give Tenant at least sixty (60) days written notice prior to any rent increase. In the event the term of the lease begins on a day other than the first day of the month, or the initial term of the lease ends

on a day other than the last day of the month, the rent shall be prorated for as many days as Tenant occupies the Premises for that month.

(_x__) Tenant is an employee of Town. All rental payments, including any late payment fees, shall be paid in accordance with Section 6 below (paycheck deduction).

(___) Tenant is not an employee of Town. All subsequent rent payments are due and payable on the first day of each month. If rent is not paid by the third day of each month ("Grace Period"), a late charge of $50.00 shall be due. Late charges shall continue to accrue after the third day at the rate of $10.00 per day for every day, or portion thereof, that the rent is not paid in full. Any late charges due will be considered additional rent. If a check is returned by Teant's bank for any reason, there will be a $50.00 returned check fee that will be applied and due in addition to the outstanding rent and, if applicable, any late charges. If a check is returned by Tenant's bank for any reason, there will be a $50.00 returned check fee that will be applied and due in addition to the outstanding rent and, if applicable, any late charges. Rent may be paid through the Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department.

All Tenants: If Tenant fails to pay rent or any other fees due and payable under this Lease on or before the applicable due date specified in this Lease, and after the Grace Period has expired, Landlord reserves the right to terminate this Lease and require Tenant to vacate the premises in accordance with Landlord's notice of default as set forth in Section 35. Failure to vacate the Premises may result in legal action for eviction as permitted by Wyoming law.

5. SECURITY DEPOSIT. Tenant shall pay a security deposit equal to one (1) month's rent. The security deposit shall be paid at the time of execution of this Lease, pursuant to a payment plan agreed to in writing by the Landlord, or it may be deducted from the Tenant's paycheck as outlined in Section 6. If the rent amount increases as provided herein, the amount of the security deposit shall increase to reflect the increase in the rent amount. Landlord shall give Tenant at least sixty (60) days written notice prior to the increase of the security deposit. The security deposit increase shall be paid at the time the rent amount increase is implemented, or it may be deducted from the Tenant's paycheck as outlined in Section 6. The security deposit shall be retained by the Landlord to be used for: (i) any damages, other than normal wear and tear, caused by Tenant, (ii) any missing or damaged furnishings, furniture, or items, other than normal wear and tear, from the Premises, (iii) any unpaid rent, fees, or charges, (iv) abandonment of the Premises, (v) cleaning expenses required to return the Premises to as good a condition as it was upon commencement of this Lease, and/or (vi) to the extent permitted by Wyoming law, any other costs or damages sustained by the Landlord by reason of the failure of the Tenant to comply with any terms, provisions, covenants, or agreements contained in this Lease. It is understood that the security deposit is not pre-payment of rent and is not applicable toward the last month's rent. The Landlord shall not be obligated (although it may do so at its option) to apply the security deposit to any unpaid rent, fees, charges, or portion thereof at the termination of the Lease. Landlord shall return that portion of the security deposit not used for one of the above-listed deductions no later than thirty (30) days following vacation of the Premises by Tenant provided that, if the security deposit is being applied to any permissible circumstance, this time period shall be extended by an additional thirty (30) days. Tenant shall be liable for any damages or expenses owed in excess of the security deposit. Landlord shall promptly provide Tenant written notice of the amount owed by Tenant, and Tenant shall pay said amount within three (3) days of notice by remitting payment to the Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department, or at Landlord's election, it may be deducted from the Tenant's paycheck as outlined in Section 6..

6. PAYCHECK DEDUCTION AUTHORIZATION. If Tenant is an employee of the Town, Tenant agrees to the following payment terms, and authorizes the Town, as its employer, to deduct rent, deposits, and fees from their bi-weekly paychecks (each of which is from a "pay period" that is a time frame of fourteen (14) days) as follows:

a. Rent. Half (½) of the rent amount shall be deducted from the Tenant's paycheck with the first pay period of the month, and the second half (½) of the rent shall be deducted from Tenant's paycheck with the second pay period of the month.

b. Security Deposit. If Tenant does not pay the security deposit at the time of the execution of the Lease, or does not pay any increase in the security deposit when required as set forth herein, then $200.00, or an alternative amount authorized by the Landlord, shall be deducted from Tenant's paycheck each month until the security deposit or security deposit increase is paid in full. Half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the first pay period of the month, and the second half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the second pay period of the month.

c. Pet Deposit. If Tenant does not pay the pet deposit at the time of the execution of the Lease, then $200.00, or an alternative amount authorized by the Landlord, shall be deducted from Tenant's paycheck each month until the pet deposit is paid in full. Half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the first pay period of the month, and the second half (½) of this amount ($100.00) shall be deducted from the Tenant's paycheck with the second pay period of the month.

d. Fees. Any fees charged to Tenant shall be deducted from Tenant's paycheck with the pay period following the charged fee.

e. Insufficient Income. If Tenant does not have sufficient income in their paychecks to cover the rent payments, utility costs, the security deposit, or fees as outlined above, the outstanding amount due with each pay period shall be remitted no later than the Monday following the payday for the insufficient paycheck, and in no event shall the entire rent amount be paid later than the twenty fifth day of the month or it will be considered late.

f. Late and Return Check Fees. If rent is not paid in full by the twenty fifth day of the month, a late fee of $50.00 will be applied, and is due in addition to the outstanding rent. Late fees shall continue to accrue after the tenth day at the rate of $10.00 per day for every day, or portion thereof, that the rent is not paid in full. If a check is returned by Tenant's bank for any reason, there will be a $50.00 returned check fee that will be applied and is due in addition to the outstanding rent and, if applicable, any late charges.

g. Final Paycheck. Landlord reserves the right to withhold and deduct from Tenant's final paycheck any unpaid amounts that are overdue including, but not limited to rent, fees, charges, security deposit, damage costs, utilities, or cleaning costs. Landlord may further withhold and deduct from Tenant's final paycheck any rent, charges, or fees that will become due after Tenant's final pay period. If Tenant does not have sufficient income in their final paycheck to cover the amount required to be deducted, then Landlord shall promptly provide Tenant written notice of the outstanding amount owed, and Tenant shall pay the outstanding amount within three (3) days of notice.

h. Outstanding Payments. Any outstanding rent, costs, or fees may be paid through the Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department.

7. CONTINUED EMPLOYMENT. (Check One)

(_x__) A condition precedent to Tenant leasing the Premises is continued employment at full-time or at least thirty (30) hours a week with the Town of Jackson or Teton County, Wyoming, or continued status as an active volunteer or probationary status with the Jackson/Teton County Fire/EMS. If Tenant's employment terminates voluntarily, then the Lease will terminate immediately, and Tenant shall vacate the Premises within thirty (30) days of their last day of work, or by the end date of the Lease, whichever is sooner. If Tenant's employment terminates involuntarily, then the Lease will terminate immediately, and the Tenant will have twenty-four (24) hours from their last day of work to vacate the Premises, unless Landlord agrees in writing to extend the time to vacate.

(___) The Tenant's employment is not a condition precedent to Tenant leasing the Premises.

8. SOLE RESIDENCE. Tenant shall use the Premises only as their sole, year-round residence. Tenant shall not directly own or own through a marriage, partnership, corporation, or any other means any other residential housing unit within the Town of Jackson limits, within Teton County limits, or in any outlying community from which an employee could reasonably commute. By signing this Lease, Tenant affirms they do not own a residential housing unit under any of these circumstances. If Tenant is found to be in violation of this provision, Landlord will provide written notice of the violation and the Lease will terminate immediately. Tenant will have thirty (30) days to vacate the Premises upon termination of the Lease under this provision. This same provision applies to all individuals residing in and occupying the Premises.

9. MOVE IN INSPECTION WORKSHEET. Tenant shall complete and execute a Move In Inspection Worksheet ("Worksheet") within fourteen (14) days of the commencement of the Lease. The Worksheet shall provide a detailed accounting of the condition of the Premises, including, but not limited to, repairs needed, damages, or material defects. If there are any furnishings, furniture, or items contained in the Premises, the Worksheet shall also document an inventory and a detailed accounting of the conditions of such furnishings, furniture, and items. If a Worksheet is not completed by the Tenant in the time specified, this may result in the Tenant being held responsible for all issues noted by Landlord at move out.

10. USE OF PREMISES. Tenant agrees and acknowledges that their use of the Premises is conditioned upon the following:

a. Shall comply with all requirements of any governmental authorities, housing authorities, or homeowner associations concerning the Premises now or hereafter in force.
b. Shall comply with rules or regulations made by Landlord from time-to-time for the safety, care, upkeep, and cleanliness of the Premises.
c. Do not place auxiliary structures of any kind on the Premises without the express written consent of the Landlord.
d. Do not install any satellite dishes, cable, or permanent or semi-permanent communication services on, in, or attached to any portion of the Premises.
e. Do not touch, climb on, access, utilize, or otherwise interfere with any Town or County owned equipment, items, or facilities located adjacent to or in the building.
f. Do not sublease the Premises during the term of this Lease.
g. May not use the Premises as a business address or for the purpose of conducting any type of business, profession, or trade ("Business Activities") without the prior express written consent of the Landlord. If Tenant obtains consent to conduct Business Activities at the Premises, Tenant shall conduct such Business Activities in a manner that is lawful and does not create any nuisance, or interfere with, annoy, or disturb any neighbors or other residents at the Premises. Tenant, at their own expense, shall be responsible for duly procuring and maintaining

any governmental license or permit that is required for the Business Activities. Consent for the Business Activities may be rescinded at any time by providing thirty (30) days written notice to Tenant for Business Activities to cease.

h. Shall keep radios, televisions, stereos, etc., at a level of sound that does not annoy or interfere with other residents or neighbors.
i. Do not permit any liens or security interests be filed against the Premises.

11. NO ILLEGAL OR PROHIBITED CONDUCT. Tenant shall not use or permit the use of the Premises contrary to any federal, state, or local law or engage in any activity in or on the Premises that is illegal under any federal, state, or local law. Nor shall Tenant permit others to engage in illegal activities in or on the Premises. Tenant shall not engage in or permit in or on the Premises disruptive conduct, noisy disturbances, abusive language, intimidating behavior, bullying behavior, threatening behavior, violent acts, any other conduct that jeopardizes the health, safety, and/or welfare of Landlord, Landlord's agents, other tenants, neighbors, or property, or otherwise disturb or interfere with the rights of other tenants or neighbors. If Tenant violates this section, the Lease may be immediately terminated by the Landlord. If Landlord elects to immediately terminate the Lease, Landlord shall provide Tenant written notice of the termination and Tenant will have twenty-four (24) hours from the date of the notice to vacate the Premises, unless Landlord agrees in writing to extend the time to vacate.

12. ALTERATION AND IMPROVEMENTS. Tenant shall not make any alterations or improvements to the Premises without the advanced written consent of the Landlord.

13. REPAIR AND MAINTENANCE. Tenant shall keep the Premises, including the common areas, in as good order as it was at the time of the commencement of this Lease, reasonable wear and tear, damage by elements, accidental fire or other casualty excepted. Tenant will immediately notify Landlord of any damage to the Premises or its contents, or to any inoperable equipment or appliances, and such damage or inoperable equipment or appliance shall be promptly repaired at no expense to the Tenant, except as indicated below. Tenant will be responsible for any damage caused by the Tenant, or Tenant's family members, invitees, or guests. Tenant agrees to be responsible for the following maintenance of the Premises:

a. Keep all windows, glass, window treatments, doors, locks, and hardware in good, clean order and repair.
b. Do not obstruct or cover the windows or doors, with the exception of conventional window treatments.
c. Do not leave windows or doors in an open position during inclement weather.
d. Do not hang laundry, clothing, sheets, etc. from any window, rail, porch, or balcony, nor air or dry any of the same within any yard area.
e. Do not hang any things from the exposed sprinkler system, or otherwise make use of the exposed sprinkler system in any way.
f. Do not cause or permit any locks or hooks to be placed upon any door, except for child locks.
g. Take reasonable precautions to avoid freezing pipes and plumbing fixtures.
h. Keep all lavatories, sinks, toilets, and all other water and plumbing apparatus in good order and repair and use the same only for the purposes for which they were constructed. No sweepings, garbage, sand, rags, ashes, or other substances shall be thrown or deposited therein. Any damage to any such apparatus and the cost of clearing stopped plumbing resulting from misuse shall be borne by Tenant.

i. Deposit all trash, garbage, rubbish, and refuse in the locations provided therefor and not allow any trash, garbage, rubbish, or refuse to be deposited or permitted to stand on the exterior of any building.
j. Keep the Premises, including the common areas, both inside and out, in good, clean, orderly, and sanitary condition.
k. Do not store or accumulate items along the exterior walls.
l. Do not paint any portion of the Premises without express written consent of Landlord.
m. Do not permit any hazardous, toxic, or flammable substances to be stored or used in or about the Premises.
n. Do not disconnect the smoke/fire alarm and/or any other detectors in the Premises.
o. Utilize the exhaust fans in the bathroom and kitchen areas at a level sufficient to prohibit the growth of mold in these areas or other areas prone to condensation.
p. Do not prop open any exterior doors to the building.
q. Do not prop open the elevator doors.
r. Shall, at Landlord's discretion, be responsible for the arrangement, completion, and funding of any minor repair or maintenance that costs up to $100.00 to complete.

14. SNOW REMOVAL. All snow and ice removal will be provided with no obligation to the Tenant. Tenant shall promptly notify Landlord of any ice or snow issues.

15. YARD MAINTENANCE. All yard maintenance will be provided with no obligation to the Tenant. Tenant shall promptly notify Landlord of any yard issues.

16. UTILITIES. All utilities are included with rent, including internet service. Tenant shall not use the internet service: to generate unsolicited email (i.e. spam or unwanted bulk email); to intentionally or unintentionally generate traffic that is regarded as harmful or invasive to the Network as determined in the sole discretion of the service provider; in a manner that violates any applicable law or regulation, including, but not limited to: the transmission, distribution, or storage of any material that is copyrighted or trademarked, a trade secret or other intellectual property right used without the proper authorization, and material that is deemed obscene by local, state, or federal law or rules; to harass or intimidate or threaten individuals or groups of individuals, which includes, but is not limited to, the transmission or distribution of material that is deemed obscene, defamatory, or that constitutes an illegal threat; or to make fraudulent offers.

17. PROPERTY TAXES. Landlord shall pay all property taxes on the Premises as they become due and payable.

18. CONVENANT OF QUIET ENJOYMENT. Tenant, upon paying rent and performing the covenants upon its part to be performed hereunder, shall peaceably and quietly have, hold, and enjoy the Premises hereby leased during the term hereof. Nonetheless, Tenant acknowledges the residential building is located above the park maintenance facility within the Town's public works yard, and is adjacent to the rodeo grounds and facilities. As such, Tenant understands and agrees there will be sounds associated with the use and maintenance of these facilities, including but not limited to sounds related to heavy equipment, the rodeo, and special events, that may occur at all hours of the day, including during early and late hours.

19. OVERNIGHT GUESTS. Overnight guests may stay in or on the Premises for no more than seven (7) consecutive nights. No overnight visitation by a guest who has visited for a seven (7) night period may occur more than twice during each year of the Lease. For purposes of enforcing these terms, Tenant

agrees to provide current license plate information for the Tenant and all occupants residing in the Premises.

20. ANIMALS. (Check One)

.

(___) No pets are allowed except service animals or assistance animals.

(___) Tenant intends to occupy the Premises with a service animal(s) or assistance animal(s). Service animals and assistance animals are allowed in accordance with Wyoming State and Federal law. A pet deposit is not required for a service animal or assistance animal. Tenant may be liable for any damage caused by the service animal or assistance animal to the extent allowed under Wyoming State and Federal law

(_x__) In addition to any service animals or assistance animals, Landlord consents to allow Tenant to have the following pet(s): _none listed_____, in compliance with Jackson Municipal Code § 7.05.020(G). Tenant agrees that no other pet shall be kept on the Premises. The unauthorized presence of any pet will subject Tenant to termination of this Lease pursuant to the termination section herein. Tenant must pay an additional $_1190.00 pet deposit. The pet deposit shall be paid at the time of the execution of this Lease, pursuant to a payment plan agreed to in writing by the Landlord, or it may be deducted from the Tenant's paycheck as outlined in Section 6. The pet deposit is refundable unless there are damages or cleaning costs related to the pet(s). If the cost for the repair of the damages or cleaning exceeds the amount of the pet deposit, then Tenant will be responsible and charged for the additional costs for repair or cleaning. Tenant's pet(s) shall not be loud or disturb any neighbors or other residents in the building.

If Tenant entered the Lease with no pet and later seeks to acquire a pet during the term of the Lease, or if Tenant seeks an additional pet to what Landlord consented to above, advanced written consent from Landlord is required for the pet. Landlord's written consent shall contain an accounting of any additional pet deposit required for the pet, which deposit shall be paid in advance of Tenant keeping the pet on the Premises.

21. SMOKING. No smoking is permitted in or on the Premises at any time.

22. PARKING AND PARKING PASSES. Only one parking space is allowed for the Premises, unless otherwise agreed to in writing by the Landlord. Tenant will be issued a parking pass and shall only park in spaces designated by the Landlord. Tenant shall promptly return the parking pass to Landlord at the end of the Lease. If Tenant is issued a new parking pass for any reason during the term of the Lease, or if Tenant fails to return to Landlord the parking pass at the end of the Lease, Tenant shall be charged a $100.00 fee. If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6. The parking of trailers, RVs, inoperable vehicles, or oversized vehicles that are unable to fit within the designated parking spaces is prohibited.

23. KEYS. Tenant will be issued four (4) keys (2 cards and 2 fobsat the commencement of this Lease.

a. Additional Keys. Tenant may request additional keys at the commencement of this Lease. The fee for an additional card is $8.00 and the fee for an additional fob is $20.00.
b. Lost Keys. Tenant must immediately notify Landlord of a lost key so Landlord may deactivate the key.
c. Recoding or Replacement Keys. If Tenant requires the recoding of a key, or the replacement of a lost, damaged, or inoperative key, Tenant will be charged the following fees:
    1) First instance of recoding or replacement = $25.00 fee.

2) Second instance of recoding or replacement = $50.00 fee.
3) Third or subsequent instance of recoding or replacement = $200.00 fee for each recoding or replacement.

In the event Tenant's key is damaged or inoperative, the fee to recode or replace the key may be waived if the Town's Facilities Manager determines mitigating circumstances exist. If Tenant is a Teton County employee, additional charges may be required by Teton County for a replacement ID card.

d. Return of Keys. Tenant must promptly return the keys to Landlord upon vacating the Premises at the end of the Lease. If all keys are not returned, Tenant will be charged $25.00 per unreturned key.

If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6.

24. LOCKOUTS. If Tenant is locked out of the Premises, Tenant must contact Landlord to gain entry. Tenant will not be charged a fee for the first instance of lockout, but will be charged a fee for each subsequent lockout as follows:

a. Second lockout = $25.00 fee
b. Third lockout = $50.00 fee
c. Four or more lockouts = $200.00 fee for each instance of lockout.

If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6.

25. SMOKE ALARMS.

a. Smoke Alarm Reset Callout. If Landlord is called out to reset a smoke alarm, Tenant will not be charged a fee for the first reset callout, but will be charged a fee for subsequent callouts as follows:
   1) Second reset callout = $25.00 fee
   2) Third reset callout = $50.00 fee
   3) Four or more reset callouts = $200.00 fee for each callout.
b. Smoke Alarm Damage. If Tenant damages a smoke alarm, any costs incurred to repair the smoke alarm will be charged to Tenant as a fee.
c. Smoke Alarm Removal or Disconnection. Tenant shall not remove or disconnect the smoke alarm. If Tenant removes a smoke alarm from its ceiling mount or disconnects a smoke alarm without first obtaining permission from the Town's Facilities Manager, Tenant shall be charged a $200.00 fee.

If Tenant is charged a fee as provided herein, Landlord shall give Tenant written notice of the charged fee. Tenant shall pay the fee with the next rent payment that is due following the written notice, or the fee may be deducted from the Tenant's paycheck as outlined in Section 6.

26. INSPECTION/ENTRY. Landlord shall have the right to enter the Premises for reasonable inspections, to make any agreed upon or necessary repairs/improvements, to show the Premises to prospective tenants or contractors, if Landlord believes the Premises have been abandoned, or where other good cause exists to enter. The Landlord shall give Tenant at least twenty-four (24) hours advance notice of entry, except in the event of an emergency or where other good cause exists. For major repairs or improvements that will disrupt the occupancy of the Tenant for more than one (1) day, the Landlord shall give Tenant at least seven (7) days advance notice of entry. Notwithstanding the foregoing, Landlord shall

have the right to enter and inspect the Premises and take appropriate action without advance notice in the event of any emergency, or as allowed under Jackson Municipal Code § 1.08.010.

27. INSURANCE. Landlord shall maintain, at its expense, fire, comprehensive general liability, and extended "all-risk" coverage on the Premises.

28. RENTER'S PERSONAL PROPERTY AND INSURANCE. Landlord shall not be responsible for loss, destruction, or damage to Tenant's personal property regardless of the cause. Tenant has the option to obtain a renter's insurance policy. Landlord shall have no responsibility for the payment of any renter's insurance policy obtained by Tenant.

29. DESTRUCTION OF PREMISES. If the Premises shall be damaged by fire, elements, unavoidable accident, or other casualty, without the fault or negligence of Tenant, and the Premises are not thereby rendered untenantable in whole or in part, Landlord shall promptly, at its expense, cause such damage to be repaired, and the rent shall not be abated. If, by reason of such occurrence, the Premises shall be rendered untenantable only in part, Landlord shall promptly cause the damage to be repaired and the rent, during such period of repair, shall be abated proportionately to the portion of the Premises rendered untenantable. If, by reason of such occurrence, the Premises shall be rendered wholly untenantable, Landlord shall promptly cause such damage to be repaired and the rent, during such period of repair, shall be abated in whole. There shall be no extension of the term of this Lease by reason of such abatement. Notwithstanding the foregoing provisions, if the Premises shall be rendered wholly untenantable by reason of such occurrence and the Premises cannot be repaired within six (6) months from the date such damage occurs, Landlord or Tenant shall at their option have the right to declare the balance of the term of this Lease to be null and void.

30. TERMINATION. Except in the event of any default by Tenant, which termination is governed by Section 35 and state statute, in addition to other termination provisions set forth in different sections of the Lease, either Party may terminate this Lease at any time upon giving thirty (30) days prior written notice. If the Lease is terminated pursuant to this section, or pursuant to any other section of the Lease, Tenant will be responsible for paying rent for the entire month in which they last occupy the Premises, even after they have vacated the Premises. However, if after the Tenant vacates the Premises and the Landlord places another tenant into the Premises during that month, then Tenant will be obligated to pay prorated rent only up to the date the new tenant takes occupancy of the Premises. In the event of any termination, Tenant and any occupants are bound and shall abide by the terms and conditions of this Lease until they vacate the Premises.

31. SURRENDER AND CLEANING. Upon the termination of this Lease, Tenant shall quit and surrender the Premises in as good condition and repair as it was at the date of the commencement of this Lease, reasonable wear and tear excepted. Tenant is responsible for cleaning so that at surrender the Premises are in as good of a condition and repair as at the commencement of this Lease, and, if cleaning is required by the Landlord to meet this standard, Landlord will deduct the cost of such from the security deposit. If the cost of cleaning exceeds the amount of the security deposit, Tenant will be responsible and charged for the additional cleaning costs.

32. BINDING EFFECT. All the terms, covenants and conditions of this Lease shall be binding upon and inure to the benefit of the Parties hereto, their respective heirs, assigns, and legal representatives.

Tenant _____

33. REPRESENTATIONS. It is mutually agreed that no representations, warranties, covenants, or agreements, expressed or implied, have been made other than those set forth herein.

34. WAIVER. The waiver by the Parties of any breach of any term, covenant, or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition on any subsequent breach of the same or any other condition herein contained. None of the terms hereof can be waived by either the of the Parties, except by appropriate written agreement duly executed by both Parties.

35. DEFAULT. Tenant shall be in default if Tenant fails to pay any part of the rent herein provided, or any other sum required by the Lease to be paid at the times or in the manner provided under the Lease or otherwise, or where any covenant, term, or condition of this Lease is materially violated. In the event of a default by Tenant, Landlord may provide Tenant with a notice of default and notice to quit ("**Default Notice**"), at its sole discretion. A Default Notice shall include a request to cure the default within three (3) days of the written notice, and the specific date on which the Lease will terminate if Tenant fails to timely cure the default. If by its nature the default cannot be cured within three (3) days, but Tenant commences the cure within that time period and perfects it thereafter, no immediate termination may be effectuated. If Tenant is in default with respect to the same or substantially same covenant, term, or condition of the Lease two (2) or more times during any three (3) month period during the term of the Lease, notwithstanding any prior cure of default, Landlord may elect to immediately terminate the Lease and Tenant will not have the opportunity to cure the default. If the Lease is terminated pursuant to this section, Landlord shall provide Tenant written notice of the termination and Tenant will have three (3) days from the date of the notice to vacate the Premises, unless Landlord agrees in writing to extend the time to vacate. The Landlord reserves all rights and remedies available to them under the law in the event of default, including commencement of eviction proceedings.

36. INDEMNIFICATION. Landlord shall not be liable for any damage, injury, or loss to person or persons occurring on the Premises unless such act is the result of the negligence of the Landlord. Tenant agrees to hold Landlord harmless from any claims for damages, injury, or loss to person or persons occurring on the Premises, except for damages, injury, or loss caused by the negligence of Landlord.

37. GOVERNMENTAL IMMUNITY. Landlord does not waive their governmental immunity by entering into this Lease, and fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this Lease.

38. ATTORNEY'S FEES. Landlord and Tenant agree that in the event either party incurs court costs or attorney's fees by reason of default or breach by the other party, the prevailing party in any such court action shall be entitled to reasonable attorney's fees and court costs from the other.

39. NOTICES. Any notice, request, demand, consent, approval, or other communication required or permitted under this Agreement shall be in writing and shall be deemed duly given (i) when delivered personally to the recipient, (ii) when sent by certified mail, return receipt requested, to the address specified below, or (iii) when sent by email to the email address specified below, provided that the sender has not received a delivery failure notification. A notice sent by email shall be deemed received on the date and time the email is sent, provided that (a) the email is sent to the recipient's designated email address as set forth below, (b) the sender does not receive a bounce-back or delivery failure notification, and (c) if the notice is sent outside of normal business hours (9:00 AM to 6:00 PM on business days), the notice shall be deemed received at 9:00 AM on the following business day. Either party may change its

address or email address for notice purposes by providing written notice to the other party in accordance with the terms of this provision.

LANDLORD	TENANT
Town of Jackson	_____
P.O. Box 1687	_____
Jackson, WY 83001	_____
employeehousing@jacksonwy.gov	

Tenant Cell Phone: _____
Tenant Email: _____
Tenant Vehicle Make/Model/Description: _____
Tenant Vehicle License Plate State/Number: _____

40. SEVERABILITY. If any part of this Lease shall be construed to be unenforceable, invalid, or illegal, such unenforceability, invalidity, or illegality shall not affect any other provisions and they shall remain in full force and effect.

41. ENTIRE AGREEMENT. This Lease constitutes the complete and entire agreement between the Parties and may be modified only in writing duly signed by the Parties.

42. LAW AND JURISDICTION. This Lease shall be construed in accordance with the laws of the State of Wyoming. Any litigation arising under the terms of the Lease shall be in the state courts of the State of Wyoming, Ninth Judicial District. Any forcible entry and detainer action shall be brought in the Circuit Court of Teton County, Wyoming.

43. CONSTRUCTION. Whenever used, the singular shall include the plural, the plural the singular, and the use of any gender shall include all genders when the context so requires. This Lease was negotiated by both parties and thus it shall not be construed against or in favor or any party by virtue of which party drafted it or any portion thereof.

44. HEADINGS. The headings used in this Lease are for convenience only and are not to be used in its construction.

45. COUNTERPARTS; ELECTRONIC SIGNATURES. This Lease may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, constitute one and the same document. The signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. At the request of either party, each party agrees to execute an original of this Lease as well as any facsimile or other reproduction hereof.

46. INCORPORATION OF RECITALS. All the recitals hereof are incorporated by this reference and are made a part hereof as though set forth at length herein

IN WITNESS WHEREOF, each Party acknowledges they have read and understood all the terms of this Lease and hereby agree to be bound thereby. The Parties further acknowledge that they were under no duress in signing this Lease and had full opportunity to negotiate the terms contained herein and to consult independent counsel.

LANDLORD:
Town of Jackson

_____
By: Arne Jorgensen, Mayor

TENANT:

_____
By: _____

Attest:

_____
Riley Hovorka, Clerk

Tenant _____

SUBLEASE AGREEMENT

This Sublease Agreement ("**Sublease**") is made and entered into __June 10__, 20_25, by and between the Town of Jackson, a municipal corporation of the State of Wyoming, ("**Sublandlord**" or "Town") and [redacted]_____ ("**Sublessee**"). Sublandlord and Sublessee are each a "**Party**" to the Sublease and are collectively the "**Parties**."

RECITALS

WHEREAS, Sublandlord leases certain real property and improvements located at _____[redacted]_____ ,(collectively the "**Premises"**);

WHEREAS, Sublandlord desires to sublease the Premises as is authorized under the Primary Lease Agreement ("**Primary Lease**") between Sublandlord and primary Landlord ("**Landlord**");

WHEREAS, Sublessee desires to sublease the Premises; and

WHEREAS, the Parties desire to enter into a written agreement providing the terms, covenants and conditions for the sublease and occupancy of the Premises by Sublessee.

NOW, THEREFORE, in consideration of the mutual covenants, agreements, undertakings and benefits to the parties, the parties agree as follows:

1. SUBLEASE. Sublandlord agrees to sublease to Sublessee and Sublessee agrees to sublease from Sublandlord the Premises according to the terms and conditions of this Sublease.

2. OCCUPANTS. Only Sublessee and any individual agreed to and listed below, or as further modified or agreed to in writing by Sublandlord, will occupy and reside in the Premises. The rights of any permitted occupants are governed by the terms and conditions of this Sublease and such rights shall expire or terminate at the same time Sublessee's rights expire or terminate hereunder.

i. Name: _____
ii. Name: _____
iii. Name: _____

3. TERM. The Sublease shall commence on _June 17_____, 20_25__, and end on __September 30_____, 20_25__, both dates inclusive, unless sooner terminated as provided herein. Upon the expiration of the initial one-year term of this Lease, if neither Sublandlord nor Subleasee provides written notice of termination in accordance with the termination provisions set forth in this Lease, the tenancy shall continue on a month-to-month basis. During such month-to-month tenancy, all terms, covenants, and conditions of this Lease shall remain in full force and effect, unless otherwise modified by written agreement signed by both parties. Either party may terminate the month-to-month tenancy by providing the other party with written notice of termination in accordance with the notice period specified in this Lease.

4. RENT. Sublessee agrees to pay Sublandlord monthly rent in the amount of $_1190.00, payment for which will begin on _June 17_____, 20_25___. Sublandlord may increase the rent amount once every calendar year provided Sublandlord gives Sublessee at least sixty (60) days written notice prior to any rent increase. In the event the term of this Subleasebegins on a day other than the first day of the

month, or the initial term of the Sublease ends on a day other than the last day of the month, the rent shall be prorated for as many days as Sublessee occupies the Premises for that month.

(_x__) Sublessee is an employee of Town. All rental payments, including any late payment fees, shall be paid in accordance with Section 6 below (paycheck deduction).

(___) Sublessee is not an employee of Town. All subsequent rent payments are due and payable on the first day of each month. If rent is not paid by the third day of each month ("Grace Period"), a late charge of $50.00 shall be due. Late charges shall continue to accrue after the third day at the rate of $10.00 per day for every day, or portion thereof, that the rent is not paid in full. Any late charges due will be considered additional rent. If a check is returned by Sublessee's bank for any reason, there will be a $50.00 returned check fee that will be applied and due in addition to the outstanding rent and, if applicable, any late charges.

All Sublessees: If Sublessee fails to pay rent or any other fees due and payable under this Sublease on or before the applicable due date specified in this Sublease, and after the Grace Period has expired, Sublandlord reserves the right to terminate this Sublease and require Sublessee to vacate the premises in accordance with Sublandlord's notice of termination and default as set forth in Section 31. Failure to vacate the Premises may result in legal action for eviction as permitted by Wyoming law.

5. SECURITY DEPOSIT. Sublessee shall pay a security deposit equal to one (1) month's rent. The security deposit shall be paid at the time of execution of this Sublease, or it may be deducted from the Sublessee's paycheck as outlined in Section 6. The security deposit shall be retained by the Sublandlord to be used for: (i) any damages, other than normal wear and tear, caused by Sublessee, (ii) any missing or damaged furnishings, furniture, or items, other than normal wear and tear, from the Premises, (iii) any unpaid rent, utility bills, or charges, (iv) abandonment of the Premises, (v) cleaning expenses required to return the Premises to as good a condition as it was upon commencement of this Sublease, and/or (vi) to the extent permitted by Wyoming law, any other costs or damages sustained by the Sublandlord by reason of the failure of the Sublessee to comply with any terms, provisions, covenants, or agreements contained in this sublease. It is understood that the security deposit is not pre-payment of rent and is not applicable toward the last month's rent. The Sublandlord shall not be obligated (although it may do so at its option) to apply the security deposit to any unpaid rent, charges, or portion thereof. Sublandlord shall return that portion of the security deposit not used for one of the above-listed deductions no later than thirty (30) days following vacation of the Premises by Sublessee provided that, if the security deposit is being applied to any permissible circumstance, this time period shall be extended by an additional thirty (30) days. Sublessee shall be liable for any damages or expenses owed in excess of the security deposit. Sublandlord shall promptly provide Sublessee written notice of the amount owed by Sublessee, and Sublessee shall pay said amount within three (3 days of notice by remitting payment to Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department.

6. PAYCHECK DEDUCTION AUTHORIZATION. If Sublessee is an employee of Town, Sublessee agrees and authorizes Town, as its employer, to deduct rent, utility costs, security deposit, and fees from their bi-weekly paychecks (each of which is from a "pay period" that is a time frame of fourteen (14) days) as follows:

a. Rent. Half (½) of the rent amount due for that month shall be deducted from the Sublessee's paycheck with the first pay period of the month, and the second half (½) of the rent for that month shall be deducted from Sublessee's paycheck with the second pay period of the month.
b. Utility costs. If Sublessee is required to reimburse Sublandlord for the costs of utilities, such costs shall be deducted from Sublessee's paycheck with the second pay period of the month.

c. Security Deposit. If Sublessee does not pay the security deposit at the time of execution of the Sublease, then $200.00 shall be deducted from Sublessee's paycheck each month. Half (½) of this amount ($100.00) shall be deducted from the Sublessee's paycheck with the first pay period of the month, and the second half (½) of this amount ($100.00) shall be deducted from the Sublessee's paycheck with the second pay period of the month.

d. Pet Deposit. If Sublessee does not pay the pet deposit at the time of the execution of the Sublease, then $200.00, or an alternative amount authorized by Sublandlord, shall be deducted from Sublessee's paycheck each month until the pet deposit is paid in full. Half (½) of this amount ($100.00) shall be deducted from the Sublessee's paycheck with the first pay period of the month, and the second half (½) of this amount ($100.00) shall be deducted from the Sublessee's paycheck with the second pay period of the month.

e. Fees. Any fees charged to Sublessee shall be deducted from Sublessee's paycheck with the pay period following the charged fee.

f. Insufficient Income. If Sublessee does not have sufficient income in their paychecks to cover the rent payments, utility costs, the security deposit, or fees as outlined above, the outstanding amount due with each pay period shall be remitted by check (unless agreed otherwise by Sublandord) no later than the Monday following the payday for the insufficient paycheck.

g. Late Fees. If rent is not paid in full by the twenty-fifth day of the month, a late fee of $50.00 will be applied, and is due in addition to the outstanding rent. Late charges shall continue to accrue after the twenty-fifth day at the rate of $10.00 per day for every day, or portion thereof, that the rent is not paid in full. If a check is returned by Sublessee's bank for any reason, there will be a $50.00 returned check fee that will be applied and is due in addition to the outstanding rent and, if applicable, any late charges.

h. Final Paycheck. Sublandlord reserves the right to withhold and deduct from Sublessee's final paycheck any unpaid amounts that are overdue including, but not limited to, rent, fees, security deposit, damage costs, utilities, or cleaning costs. Sublandlord may further withhold and deduct from Sublessee's final paycheck any rent that will become due after Sublessee's final pay period. If Sublessee does not have sufficient income in their final paycheck to cover the amount required to be deducted, then Sublandlord shall promptly provide Sublessee written notice of the outstanding amount owed, and Sublessee shall pay the outstanding amount within three (3) days of notice.

i. Failure to Pay Rent. In the event Sublessee fails to pay the rent due and payable on or before the due date specified herein, and after the Grace Period has expired, Sublandlord reserves the right to terminate this Sublease and proceed in accordance with Section 31 herein.

j. Outstanding Payments. Any outstanding rent, costs, or fees may be paid through Town's payment drop box located at the north entrance to Town Hall, by mailing it to Town of Jackson, P.O. Box 1687, Jackson, WY 83001, or by ACH or credit card payment set up through the Town Finance Department.

7. CONTINUED EMPLOYMENT. (Check One)

(__x_) A condition precedent to Sublessee leasing the Premises is continued employment at time or at least thirty (35) hours a week with Town or Teton County, Wyoming, or continued status as an active volunteer or probationary status with the Jackson/Teton County Fire/EMS. If Sublessee's employment terminates voluntarily, then the Sublease will terminate immediately, and Sublessee shall vacate the Premises within fifteen (15) days of their last day of work, or by the end date of the Sublease, whichever is sooner. If Sublessee's employment terminates involuntarily, then the Sublease will terminate immediately, and the Sublessee will have three (3) days from their last day of work to vacate the Premises, unless Sublandlord agrees in writing to extend the time to vacate to fifteen (15) days.

(___) The Sublessee's employment is not a condition precedent to Sublessee leasing the Premises.

8. SOLE RESIDENCE. Sublessee shall use the Premises only as their sole, year-round residence. Sublessee shall not directly own or own through a marriage, partnership, corporation, or any other means any other residential housing unit within the Town of Jackson limits, within Teton County limits, or in any outlying community from which an employee could reasonably commute. By signing this Sublease, Sublessee affirms they do not own a residential housing unit under any of these circumstances. If Sublessee is found to be in violation of this provision, Sublandlord will provide written notice of the violation and the Sublease will terminate the Premises in accordance with Section 31.

9. MOVE IN INSPECTION WORKSHEET. Sublessee shall complete and execute a Move In Inspection Worksheet ("Worksheet") within fourteen (14) days of the commencement of the Sublease. The Worksheet shall provide a detailed accounting of the condition of the Premises, including, but not limited to, repairs needed, damages, or material defects. If there are any furnishings, furniture, or items contained in the Premises, the Worksheet shall also document an inventory and the conditions of such furnishings, furniture, and items. If a Worksheet is not completed by Sublessee in the time specified, this may result in Sublessee being held responsible for any and all issues noted by Sublandlord at move out.

10. USE OF PREMISES. Sublessee agrees and acknowledges that their use of the Premises is conditioned upon the following, and any violation thereof shall be deemed a violation of this Sublease:

a. Do not place auxiliary structures of any kind on the Premises without the express written consent of Sublandlord.
b. Do not sublease the Premises during the term of this Sublease.
c. May not use the Premises as a business address or for the purpose of conducting any type of business, profession, or trade ("Business Activities") without the prior express written consent of Sublandlord. If Sublessee obtains consent to conduct Business Activities at the Premises, Sublessee shall conduct such Business Activities in a manner that is lawful and does not create any nuisance, or interfere with, annoy, or disturb any neighbors or other residents at the Premises. Sublessee, at their own expense, shall be responsible for duly procuring and maintaining any governmental license or permit that is required for the Business Activities. Consent for the Business Activities may be rescinded at any time by providing thirty (30) days written notice to Sublessee for Business Activities to cease.
d. Shall keep radios, televisions, stereos, etc., at a level of sound that does not annoy or interfere with other residents or neighbors.
e. Shall comply with all requirements of any governmental authorities, housing authorities, or homeowner associations concerning the Premises now or hereafter in force.
f. Shall comply with rules or regulations made by Sublandlord from time-to-time for the safety, care, upkeep, and cleanliness of the Premises.
g. Do not install any satellite dishes on the Premises.
h. Do not permit any liens or security interests be filed against the Premises.
i. Promptly deliver to Sublandlord at the end of this Sublease all keys for the Premises.

11. NO ILLEGAL OR PROHIBITED CONDUCT. Sublessee shall not use or permit the use of the Premises contrary to any federal, state, or local law or engage in any activity in or on the Premises that is illegal under any federal, state, or local law. Nor shall Sublessee permit others to engage in illegal activities in or on the Premises. Sublessee shall not engage in or permit in or on the Premises disruptive conduct, noisy disturbances, abusive language, intimidating behavior, bullying behavior, threatening behavior, violent acts, any other conduct that jeopardizes the health, safety, and/or welfare of Sublandlord,

Sublandlord's agents, other tenants, neighbors, or property, or otherwise disturb or interfere with the rights of other tenants or neighbors. If Sublessee violates this section, the Lease may be immediately terminated by the Sublandlord in accordance with Section 31.

12. ALTERATIONS AND IMPROVEMENTS. Sublessee shall not make any alterations or improvements to the Premises without the advance express written consent of Sublandlord.

13. REPAIR AND MAINTENANCE. Sublessee shall keep the interior of the Premises in as good order as it was at the time of the commencement of this Sublease, reasonable wear and tear, damage by elements, accidental fire or other casualty excepted. Sublessee will immediately notify Sublandlord of any damage to the Premises or its contents, or to any inoperable equipment or appliances and such damage or inoperable equipment or appliance shall be promptly repaired at no expense to Sublessee, except as indicated below. Sublessee will be responsible for any damage caused by Sublessee, or Sublessee's family members, invitees, or guests. Sublessee agrees to be responsible for the following maintenance of the Premises, and acknowledges that any violation thereof shall be deemed a violation of this Sublease:

a. Keep all windows, glass, window treatments, doors, locks, and hardware in good, clean order and repair.
b. Do not obstruct or cover the windows or doors, with the exception of conventional window treatments.
c. Do not leave windows or doors in an open position during inclement weather.
d. Do not hang laundry, clothing, sheets, etc. from any window, rail, porch, or balcony, nor air or dry any of same within any yard area.
e. Do not cause or permit any locks or hooks to be placed upon any door, except for child locks.
f. Take reasonable precautions to avoid freezing pipes and plumbing fixtures, including adhering to any preventive measures stipulated by Sublandlord.
g. Keep all lavatories, sinks, toilets, and all other water and plumbing apparatus in good order and repair and use the same only for the purposes for which they were constructed. No sweepings, rubbish, sand, rags, ashes, or other substances shall be thrown or deposited therein. Any damage to any such apparatus and the cost of clearing stopped plumbing resulting from misuse shall be borne by Sublessee.
h. Deposit all trash, garbage, rubbish, and refuse in the locations provided therefor and not allow any trash, garbage, rubbish, or refuse to be deposited or permitted to stand on the exterior of any building.
i. Keep the Premises, both inside and out, in good, clean, orderly, and sanitary condition.
j. Do not paint any portion of the Premises without express written consent of Sublandlord.
k. Do not permit any hazardous, toxic, or flammable substances to be stored or used in or about the Premises.
l. Do not disconnect the smoke/fire alarm and/or any other detectors in the Premises.
m. Promptly deliver to Sublandlord at the end of this Sublease all keys for the Premises.
n. Utilize the exhaust fans in the bathroom and kitchen areas at a level sufficient to prohibit the growth of mold in these areas or other areas prone to condensation.
o. Do not store or accumulate items along the exterior walls.
p. Shall be responsible for the arrangement and cost of rekeying the Premises if Sublessee becomes locked out of the Premises after business hours, which is between 5:00 p.m. and 8:00 a.m. on Monday through Friday and all times on Saturday and Sunday.
q. Shall be responsible for the arrangement, completion, and funding of any minor repair or maintenance that costs up to $100.00 to complete.

14. SNOW REMOVAL. (Check One)

(_x__) All snow removal will be provided with no obligation to Sublessee.

(___) Sublessee is responsible for all ice and snow removal at the Premises from any steps, walkways, entrances, and driveways. Sublandlord will be responsible for any ice and snow removal from the roof.

(___) Sublessee shall have a shared responsibility with any other tenants of a shared housing unit for ice and snow removal at the Premises from any steps, walkways, entrances, and driveways. Sublandlord will be responsible for any ice and snow removal from the roof.

(___) Sublessee shall be responsible for ice and snow removal from the _____. All other removal will be provided with no obligation to Sublessee, including removal from the _____.

15. YARD MAINTENANCE. (Check One)

(_x__) All yard maintenance will be provided with no obligation to Sublessee.

(___) Sublessee is responsible for maintaining the yard, including appropriate mowing and watering of the lawn. If there is a sprinkler system on the Premises, Sublessee may use the sprinkler system to water the lawn. The maintenance and service of the sprinkler system, including the spring startup and winterization of the system, will be provided with no obligation to the Sublessee. Sublessee will be responsible for any repair or damage caused by misuse, abuse, or neglect of the sprinkler system. Sublessee shall promptly notify Sublandlord of any yard or sprinkler system issues.

(___) Sublessee shall have a shared responsibility with any other tenants of a shared housing unit for maintaining the yard, including appropriate mowing and watering of the lawn. If there is a sprinkler system on the Premises, Sublessee may use the sprinkler system to water the lawn. The maintenance and service of the sprinkler system, including the spring startup and winterization of the system, will be provided with no obligation to Sublessee. Sublessee will be responsible for any repair or damage caused by misuse, abuse, or neglect of the sprinkler system. Sublessee shall promptly notify Sublandlord of any yard or sprinkler system issues.

(___) Sublessee shall be responsible for the following yard maintenance: _____. All other yard maintenance will be provided with no obligation to Sublessee.

16. UTILITIES. (Check All That Apply)

(__x_) All utilities are included with rent.

(___) The following utilities are included with rent: _____. Sublessee is responsible and shall pay for any other utilities that may be necessary or desirable.

(___) Sublessee is responsible and shall pay for all utilities that may be necessary or desirable, including but not limited to power, gas, water, sewer, internet, and garbage removal.

(___) If Sublessee is an employee of Town, Sublandlord will maintain the following utilities in Sublandlord's name: _____. Sublandlord will pay the costs for such utilities used by Sublessee directly to the respective company during the term of this Sublease. Sublessee shall reimburse Sublandlord for the costs of the utilities, which will be deducted from their paycheck as outlined herein.

17. CARPET CLEANING. Sublessee shall either clean the carpets with a carpet shampooer/steamer or have the carpets professionally cleaned prior to vacating the Premises. If Sublessee fails to clean the carpets satisfactorily or altogether, Sublandlord reserves the right to deduct from the security deposit the cost to have the carpets professionally cleaned.

18. CONVENANT OF QUIET ENJOYMENT. Sublessee, upon paying rent and performing the covenants upon its part to be performed hereunder, shall peaceably and quietly have, hold and enjoy the Premises hereby leased during the term hereof.

19. OVERNIGHT GUESTS. Overnight guests may stay in or on the Premises for no more than seven (7) consecutive nights. No overnight visitation by a guest who has visited for a seven (7) night period may occur more than twice during each year of the Sublease. For purposes of enforcing these terms, Sublessee agrees to maintain current license plate information for all occupants residing in the unit.

20. ANIMALS. (Check All That Apply)

(__x_) No pets are allowed except service animals or assistance animals.

(___) Sublessee intends to occupy the Premises with a service animal(s) or assistance animal(s). Service animals and assistance animals are allowed in accordance with Wyoming State and Federal law. A pet deposit is not required for a service animal or assistance animal. Sublessee may be liable for any damage caused by the service animal or assistance animal to the extent allowed under Wyoming State and Federal law.

(___) In addition to any service animals or assistance animals, Sublandlord consents to allow Sublessee to have the following pet(s): _____. Sublessee agrees that no other pet shall be kept on the Premises. The unauthorized presence of any pet will subject Sublessee to termination of this Sublease pursuant to the termination section herein. Sublessee must pay an additional $_____.00 pet deposit. The pet deposit shall be paid at the time of the execution of this Sublease, pursuant to a payment plan agreed to in writing by Sublandlord, or it may be deducted from Sublessee's paycheck as outlined in Section 6. The pet deposit is refundable unless there are damages or cleaning costs related to the pet(s). If the cost for the repair of the damages or cleaning exceeds the amount of the pet deposit, then Sublessee will be responsible and charged for the additional costs for repair or cleaning. Sublessee's pet(s) shall not be loud or disturb any neighbors or other residents in the building.

If Sublessee entered the Sublease with no pet and later seeks to acquire a pet during the term of the Sublease, or if Sublessee seeks an additional pet to what Sublandlord consented to above, advanced written consent from Sublandlord is required for the pet. Sublandlord's written consent shall contain an accounting of any additional pet deposit required for the pet, which deposit shall be paid in advance of Sublessee keeping the pet on the Premises.

21. SMOKING. No smoking is permitted in or on the Premises at any time.

22. PARKING. Sublessees shall only park in designated spaces, as follows_____.

23. INSPECTION/ENTRY. Landlord and Sublandlord shall have the right to enter the Premises for reasonable inspections, to make any agreed upon or necessary repairs/improvements, to show the Premises to prospective tenants or contractors, if believed the Premises have been abandoned, or where other good cause exists to enter. Sublessee shall be given at least twenty-four (24) hours advance notice of entry, except in the event of an emergency or where other good cause exists. For major repairs or improvements that will disrupt the occupancy of the Premises for more than one (1) day, Sublessee shall be given at least three (3) days advance notice of entry. Notwithstanding the foregoing, Landlord and Sublandlord shall have the right to enter and inspect the Premises and take appropriate action without advance notice in the event of any emergency.

24. RENTER'S INSURANCE. Landlord and Sublandlord shall not be responsible for loss, destruction, or damage to Sublessee's personal property regardless of the cause. Sublessee has the option to obtain a renter's insurance policy at their own cost.

25. TERMINATION. Except in the event of any default by Sublessee, which termination is governed by Section 31 and state statute and in addition to other termination provisions set forth in different sections of the Lease, either Party may terminate this Sublease at any time upon giving thirty (30) days written notice. If the Sublease is terminated pursuant to this section, or pursuant to any other section of the Sublease, Sublessee will be responsible to pay rent for the entire month in which they last occupy the Premises, even after they have vacated the Premises. However, if after the Sublessee vacates the Premises and the Sublandlord places another sublessee into the Premises during that month, then Sublessee will be obligated to pay prorated rent only up to the date the new sublessee takes occupancy of the Premises. In the event of any termination, Sublessee and any occupants are bound and shall abide by the terms and conditions of this Sublease until they vacate the Premises.

26. PRIMARY LEASE AND TERMINATION OF PRIMARY LEASE. Sublessee hereby agrees to be subject to and bound by the terms and conditions of the Primary Lease between Sublandlord and the Landlord. The Primary Lease is attached hereto, and all of the terms, covenants, and conditions thereof are hereby incorporated herein with the same force and effect as if set forth in full. The Sublease is subordinate to the Primary Lease and any conflicting provisions will be governed by the Primary Lease. In the event the Primary Lease terminates for any reason, this Sublease and all rights of Sublessee in and to the Premises shall automatically terminate on the date the Primary Lease terminates. Sublandlord shall have no liability to Sublessee as a result of such termination.

27. SURRENDER AND CLEANING. Upon the termination of this Sublease, Sublessee shall quit and surrender the Premises in as good condition and repair as it was at the date of the commencement of this Sublease, reasonable wear and tear excepted. Sublessee is responsible for cleaning so that at surrender the Premises are in as good of a condition and repair as at the commencement of this Sublease and, if cleaning is required to meet this standard, Sublandlord will deduct the cost of such from the security deposit. If the cost of cleaning exceeds the amount of the security deposit, Sublessee will be responsible and charged for the additional cleaning costs.

28. BINDING EFFECT. All the terms, covenants and conditions of this Sublease shall be binding upon and inure to the benefit of the Parties hereto, their respective heirs, assigns, and legal representatives.

29. REPRESENTATIONS. It is mutually agreed that no representations, warranties, covenants, or agreements, expressed or implied, have been made other than those set forth herein.

30. WAIVER. The waiver by the Parties of any breach of any term, covenant, or condition herein contained shall not be deemed to be a waiver of such term, covenant or condition or any subsequent breach of the same or any other condition herein contained. None of the terms hereof can be waived by either the of the Parties, except by appropriate written agreement duly executed by both Parties.

31. DEFAULT. Sublessee shall be in default if Sublessee fails to pay any part of the rent herein provided, or any other sum required by the Sublease to be paid at the times or in the manner provided under this Sublease or otherwise, or where any other covenant, term or condition of this Sublease is

materially violated. In the event of a default by Sublessee, Sublandlord may provide Sublessee with a notice of termination and default and notice to quit ("**Default Notice**"), at its sole discretion. A Default Notice shall include a request to cure the default within three (3) days of the written notice, and the specific date on which the lease will terminate if Sublessee fails to timely cure the default. If by its nature the default cannot be cured within three (3) days, but Sublessee commences the cure within that time period and perfects it thereafter, no immediate termination may be effectuated. If Sublessee is in default with respect to the same or substantially same covenant, term, or condition of the Sublease two (2) or more times during any three (3) month period during the term of the Sublease, notwithstanding any prior cure of default, Sublandlord may elect to immediately terminate the Sublease and Sublessee will not have the opportunity to cure the default. If the Sublease is terminated pursuant to this Section, Sublandlord shall provide Sublessee written notice of the termination and Sublessee will have three (3) days from the date of the notice to vacate the Premises, unless Sublandlord agrees in writing to extend the time to vacate. Sublandlord reserves all rights and remedies available to them under the law in the event of default, including commencement of eviction proceedings.

32. INDEMNIFICATION. The Parties shall not be liable for any injury, or loss to person or persons occurring on the Premises unless such act is the result of the negligence of either Party. The Parties agree to jointly hold each other harmless from any claims for damages for any injury or loss to person or persons occurring on the Premises, except for injury or loss caused by the negligence of each respective Party.

33. GOVERNMENTAL IMMUNITY. Sublandlord does not waive their governmental immunity by entering into this Sublease, and fully retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this Sublease.

34. ATTORNEY'S FEES. The Parties agree that in the event either party incurs court costs or attorney's fees by reason of default or breach by the other Party, the prevailing Party in any such court action shall be entitled to reasonable attorney's fees and court costs from the other.

35. NOTICES. Any notice, request, demand, consent, approval, or other communication required or permitted under this Lease shall be in writing and shall be deemed duly given (i) when delivered personally to the recipient, (ii) when sent by certified mail, return receipt requested, to the address specified below, or (iii) when sent by email to the email address specified below, provided that the sender has not received a delivery failure notification. A notice sent by email shall be deemed received on the date and time the email is sent, provided that (a) the email is sent to the recipient's designated email address as set forth below, (b) the sender does not receive a bounce-back or delivery failure notification, and (c) if the notice is sent outside of normal business hours (9:00 AM to 6:00 PM on business days), the notice shall be deemed received at 9:00 AM on the following business day. Either Party may change its address or email address for notice purposes by providing written notice to the other Party in accordance with the terms of this provision.

SUBLESSEE

_____

_____

_____

SUBLANDLORD
Town of Jackson
P.O. Box 1687
Jackson, WY 83001
employeehousing@jacksonwy.gov

Sublessee Cell Phone: _____

Sublessee Email: _____
Sublessee Vehicle Make/Model/Description: _____
Sublessee Vehicle License Plate: _____
Sublessee Vehicle Make/Model/Description: _____
Sublessee Vehicle License Plate: _____

36. SEVERABILITY. If any part of this Sublease shall be construed to be unenforceable, invalid, or illegal, such unenforceability, invalidity, or illegality shall not affect any other provisions and they shall remain in full force and effect.

37. ENTIRE AGREEMENT. This Sublease constitutes the complete and entire agreement between the Parties and may be modified only in writing duly signed by the Parties.

38. LAW AND JURISDICTION. This Sublease shall be construed in accordance with the laws of the State of Wyoming. Any litigation arising under the terms of the Sublease shall be in the state courts of the State of Wyoming, Ninth Judicial District. Any forcible entry and detainer action shall be brought in the Circuit Court of Teton County, Wyoming.

39. CONSTRUCTION. Whenever used, the singular shall include the plural, the plural the singular, and the use of any gender shall include all genders when the context so requires. This Sublease was negotiated by both Parties and thus it shall not be construed against or in favor or any Party by virtue of which Party drafted it or any portion thereof.

40. HEADINGS. The headings used in this Sublease are for convenience only and are not to be used in its construction.

41. COUNTERPARTS; ELECTRONIC SIGNATURES. This Sublease may be executed simultaneously in two or more counterparts, each of which shall be deemed an original and all of which, when taken together, constitute one and the same document. The signature of any Party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method, and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. At the request of either Party, each Party agrees to execute an original of this Sublease as well as any facsimile or other reproduction hereof.

42. INCORPORATION OF RECITALS. All the recitals hereof are incorporated by this reference and are made a part hereof as though set forth at length herein.

IN WITNESS WHEREOF, each Party acknowledges they have read and understood all the terms of this Sublease and hereby agree to be bound thereby. The Parties further acknowledge that they were under no duress in signing this Sublease and had full opportunity to negotiate the terms contained herein and to consult independent counsel.

SUBLESSEE:

_____

By:

_____

_____

SUBLANDLORD:

Town of Jackson

By:

_____

Arne Jorgensen, Mayor

Attest:

_____

Riley Hovorka, Clerk

Sublessee _____

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular Mtg
Submitting Department:	Administration	**Presenter:**	Tyler Sinclair
Agenda Item:	Town of Jackson Fiscal Year 2026 Budget Public Hearing	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Town Council to conduct a public hearing on the Town of Jackson's Fiscal Year 2026 budget.

Requested Action.
Staff requests that the Mayor & Council conduct a public hearing and consider approval of the attached Budget Resolution later in the meeting.

Recommendations.
Staff recommends that the Mayor & Council conduct the public hearing and approve the proposed Budget Resolution later in the meeting.

Background.
The Mayor and Council are required by Statute 16-4-109 and sound fiscal management practice to formally adopt an annual budget. A budget hearing must be held not later than the third Tuesday in June. After holding a public hearing, Council must adopt a budget. The budget then becomes the fiscal road map for management through which policies are implemented for the fiscal year beginning on July 1. By formally adopting the budget, the Mayor and Council are provided with a tool for measuring management's financial stewardship. Council met on April 14, April 21, May 6, May 14, May 27, and June 9, 2025 to review the FY2026 budget. Council and the Board of County Commissioners met on Apil 29, May 14 and June 2, 2025 to review joint department FY2026 budgets.

Analysis.
Town staff continues to work to balance current needs while preparing for a positive future, recognizing our responsibility to future generations. Fiscal transparency is a key priority, and this budget was prepared in accordance with applicable Wyoming Statutes and Town Ordinances. The proposed FY26 budget strives to:

- Investment in the Town's incredible staff to retain and recruit employees who provide quality services on which our community can rely.
- Resources to maintain and protect critical infrastructure including water and sewer.
- Clean drinking water, community safety, and consistent snow plowing.
- Improvements and new infrastructure added to Gregory Lane above and below ground.
- Allocations to support health and human service providers to deliver critical programs.
- A prudent reserve account providing a cushion for unforeseen challenges.

This budget includes a 0.5 Property Tax mill assessment with estimated revenues totaling $436,194. With adoption of the budget, staff will follow the required State procedure and request the County Assessor assess 0.5 property tax mills within the Town of Jackson for Fiscal Year 2026.

Below staff has provided a summary of the proposed Fiscal Year 2026 Budget including all changes directed by Council to date.

TOWN OF JACKSON, WYOMING
ADOPTED BUDGET FOR FISCAL YEAR 2026
ALL FUNDS - FINANCIAL SOURCES AND USES

DESCRIPTION	GENERAL FUND	SPECIAL REVENUE	CAPITAL PROJECTS	ENTERPRISE FUNDS	INTERNAL SERVICE	TOTAL FUNDS
Beginning Fund Balance	**$ 17,050,961**	**$ 14,775,076**	**$ 21,620,901**	**$ 12,879,831**	**$ 2,242,009**	**$ 68,568,778**
Revenues:						
Taxes	12,572,826	-	1,450,000	-	-	14,022,826
Licenses & Permits	1,710,578	142,000	250,000	-	-	2,102,578
Intergovernmental	16,829,671	14,045,917	5,816,695	883,458	-	37,575,741
Charges for Services	953,780	2,233,700	-	7,050,101	8,449,183	18,686,764
Fines & Forfeitures	380,000	-	-	-	-	380,000
Miscellaneous Revenue	1,209,214	1,590,371	661,050	461,760	95,000	4,017,395
Total Revenues	**33,656,069**	**18,011,988**	**8,177,745**	**8,395,319**	**8,544,183**	**76,785,304**
Transfers In	2,637,474	1,763,753	6,209,500	660,000	127,302	11,398,029
Total Sources	**36,293,543**	**19,775,741**	**14,387,245**	**9,055,319**	**8,671,485**	**88,183,333**
Expenditures:						
General Government	9,296,372	709,669	6,364,368	-	6,359,016	22,729,425
Public Safety	13,827,603	20,000	1,449,240	-	281,349	15,578,192
Public Works	4,124,091	-	11,471,451	13,760,429	2,933,622	32,289,593
Community Health & Human Services	1,548,632	-	-	-	-	1,548,632
Community Initiatives	597,200	654,745	-	-	-	1,251,945
Transit	-	17,295,490	78,754	-	-	17,374,244
Culture & Recreation	2,669,010	600,000	694,184	-	-	3,963,194
Debt Service	-	-	-	66,970	-	66,970
Total Expenditures	**32,062,908**	**19,279,904**	**20,057,997**	**13,827,399**	**9,573,987**	**94,802,195**
Transfers Out	6,946,787	1,835,284	695,000	1,920,958	-	11,398,029
Total Uses	**39,009,695**	**21,115,188**	**20,752,997**	**15,748,357**	**9,573,987**	**106,200,224**
Ending Fund Balance	**$ 14,334,809**	**$ 13,435,629**	**$ 15,255,149**	**$ 6,186,793**	**$ 1,339,507**	**$ 50,551,886**
Change in Fund Balance	***(2,716,152)***	***(1,339,447)***	***(6,365,752)***	***(6,693,038)***	***(902,502)***	***(18,016,891)***

Possible Alternatives.

Direct staff to amend the proposed Fiscal Year 2026 Budget

Comprehensive Plan & Priority Alignment.

To successfully implement the Comprehensive Plan, Council must set priorities, be strategic, and be disciplined. A critical component is prioritizing and identifying the necessary level of funding to address desired goals, policies, and strategies, which is all critical to the successful implementation of Town Priorities and the Comprehensive Plan. In addition, many of the programs and strategies called for in the Comprehensive Plan come at an additional cost to the community that current funding levels cannot accommodate. Chapter 8 - Quality Community Service Provision calls for *"Timely, efficient and safe delivery of quality services and facilities in a fiscally responsible and coordinated manner."*

Fiscal Impact.

The adopted budget serves as guide for expenditures in the following fiscal year. The fiscal impact is summarized in the resolution accompanying this staff report.

Staff Impact.

The staff impact of preparing this information is estimated at over 350 hours for all department members participating in preparing budget requests and internal staff meetings.

Attachments or Links.
Resolution 25-13 adopting the Fiscal Year 2026 Budget.

Suggested Motion.

Option 1
No motion, action taken on the Fiscal Year 2026 Budget Resolution later on in the agenda.

OR

Option 2
I move to direct staff to revise Resolution 25-13 adopting the Town of Jackson's Fiscal Year 202 budget as follows:

-

RESOLUTION 25-13

A RESOLUTION ADOPTING THE FISCAL YEAR 2026 BUDGET FOR THE TOWN OF JACKSON, WYOMING.

WHEREAS, the Town of Jackson is subject to the provisions of the Uniform Municipal Fiscal Procedures Act as specified by Wyoming Statutes (W.S. 16-4-101 through 16-4-124); and

WHEREAS, pursuant to the Uniform Municipal Fiscal Procedures Act, the governing body for the Town of Jackson is required, by resolution or ordinance, to make the necessary appropriations and adopt a budget, subject to future amendment, for fiscal year 2026.

NOW, THEREFORE, BE IT RESOLVED, by the Town Council of the Town of Jackson, Wyoming, in regular session duly assembled, that the budget for fiscal year ending June 30, 2026 shall be as follows:

TOWN OF JACKSON, WYOMING
ADOPTED BUDGET FOR FISCAL YEAR 2026
ALL FUNDS - FINANCIAL SOURCES AND USES

DESCRIPTION	GENERAL FUND	SPECIAL REVENUE	CAPITAL PROJECTS	ENTERPRISE FUNDS	INTERNAL SERVICE	TOTAL FUNDS
Beginning Fund Balance	**$17,050,961**	**$14,775,076**	**$21,620,901**	**$12,879,831**	**$ 2,242,009**	**$ 68,568,778**
Revenues:						
Taxes	12,572,826	-	1,450,000	-	-	14,022,826
Licenses & Permits	1,710,578	142,000	250,000	-	-	2,102,578
Intergovernmental	16,829,671	14,045,917	5,816,695	883,458	-	37,575,741
Charges for Services	953,780	2,233,700	-	7,050,101	8,449,183	18,686,764
Fines & Forfeitures	380,000	-	-	-	-	380,000
Miscellaneous Revenue	1,209,214	1,590,371	661,050	461,760	95,000	4,017,395
Total Revenues	**33,656,069**	**18,011,988**	**8,177,745**	**8,395,319**	**8,544,183**	**76,785,304**
Transfers In	2,637,474	1,763,753	6,209,500	660,000	127,302	11,398,029
Total Sources	**36,293,543**	**19,775,741**	**14,387,245**	**9,055,319**	**8,671,485**	**88,183,333**
Expenditures:						
General Government	9,296,372	709,669	6,364,368	-	6,359,016	22,729,425
Public Safety	13,827,603	20,000	1,449,240	-	281,349	15,578,192
Public Works	4,124,091	-	11,471,451	13,760,429	2,933,622	32,289,593
Community Health & Human Services	1,548,632	-	-	-	-	1,548,632
Community Initiatives	597,200	654,745	-	-	-	1,251,945
Transit	-	17,295,490	78,754	-	-	17,374,244
Culture & Recreation	2,669,010	600,000	694,184	-	-	3,963,194
Debt Service	-	-	-	66,970	-	66,970
Total Expenditures	**32,062,908**	**19,279,904**	**20,057,997**	**13,827,399**	**9,573,987**	**94,802,195**
Transfers Out	6,946,787	1,835,284	695,000	1,920,958	-	11,398,029
Total Uses	**39,009,695**	**21,115,188**	**20,752,997**	**15,748,357**	**9,573,987**	**106,200,224**
Ending Fund Balance	**$ 14,334,809**	**$ 13,435,629**	**$ 15,255,149**	**$ 6,186,793**	**$ 1,339,507**	**$ 50,551,886**
Change in Fund Balance	***(2,716,152)***	***(1,339,447)***	***(6,365,752)***	***(6,693,038)***	***(902,502)***	***(18,016,891)***

NOW, THEREFORE, BE IT FURTHER RESOLVED, by the Town Council of the Town of Jackson, the preceding results in the following budgeted appropriations by fund and division for the fiscal year ending June 30, 2026:

General Fund	
General Government	
Mayor & Town Council	$ 559,647
Town Attorney	859,447
Municipal Judge	334,154
Administration	1,297,633
Internal Services	1,366,203
Finance	1,019,239
Communications & Strategic Initiatives	670,124
Information Technology	1,017,088
Planning	1,119,042
Town Facilities	1,053,795
Public Safety	
Police	8,007,791
Fire/EMS (County)	3,146,023
Emergency Management (County)	99,451
Communications Center (County)	970,596
Victim Services	476,201
Animal Shelter/Control	513,058
Building Inspections	614,483
Public Works	
Publice Works Administration	583,233
Streets	2,588,659
Town Engineer	893,596
Yard Operations	58,603
Community Health & Human Services	
Community Health & Human Services	1,548,632
Community Initiatives	
Community Initiatives	597,200
Culture and Recreation	
Parks & Recreation (County)	2,466,545
Pathways	122,584
Memorial Park (Cemetery)	79,881
Transfers Out	6,946,787
Total	$ 39,009,695

Special Revenue Funds	
Affordable Housing	
Community Development	$ 644,985
Parking Exactions	
Community Development	9,760
Park Exactions	
Culture & Recreation	600,000
Employee Housing	
General Government	709,669
Transfers Out	150,038
Animal Care	
Public Safety	20,000
Transfers Out	100,000
Lodging Tax	
Transfers Out	1,118,768
START Bus System	
Administration	1,797,571
Operations	8,107,919
Capital Outlay	7,390,000
Transfers Out	466,478
Total	$ 21,115,188

Capital Projects Funds	
Capital Projects (5th cent)	
Public Works	
Annual Street Maintenance	$ 1,530,000
Annual R&M - Boardwalks	112,200
Annual R&M-Paint Projects	94,554
Vine St 770 LF	544,000
Broadway Inlets At Jean, Gros Ventre	150,000
Broadway ADA	1,150,000
Tree Removal Existing Area	85,000
Placeholder Tbd By Tc Long Term Plannng Direction	50,000
General ROW Improvements	51,000
Seal PD Bay roof leaks	50,000
Public Safety	
Police Department Tasers	24,000
Meridian Barriers	77,000
Dispatch (County)	556,115
Fire/EMS (County)	644,205
Emergency Management	147,920
Culture and Recreation	
Parks & Recreation (County)	237,184
Pathways	
TOJ Bicycle Network Improvements	100,000
E-Bike Safety Improvements	300,000
Bike Racks	7,000
USFWS Connector & North Cache	20,000
Scott Lane-Maple Way Bike/Ped	30,000
Transit	
Build- Jorgenson 1 & 2	78,754
General Government	
UPS Server IT Server Room	25,000
Climate Action Projects	16,500
Council Chambers AV Upgrade	308,000
Bunkhouse Sprinkler System	25,000
EV charging stations - Subaward	4,918,368
EV charging stations - Town	661,500
New Town Hall Generator	350,000
Facilities - commercial/residential exteriors	40,000
GLS Basement Building	20,000
Transfers Out	695,000
2014 SPET	
North Cache Pedestrian Streetscape Improvements ($1,000,000) (Complete	3,000
Gregory Lane Complete St/Drainage	801,697
2019 SPET	
Gregory Lane Complete Street	6,800,000
2022 SPET	
County - Water Quality	50,000
Total	$ 20,752,997
Utility Funds	
Water Utility	
Public Works	
Maintenance and operations	$ 1,700,718
Water wells	364,442
Billing, accounting, & insurance	265,899
Capital outlay	5,209,054
Debt service	66,970
Transfers Out	960,479
Sewage Utility	
Public Works	
Sewage plant operations	914,714
Maintenance and operations	965,133
Billing, accounting, & insurance	258,856
Capital outlay	4,081,613
Transfers Out	960,479
Total	$ 15,748,357

Internal Service Funds	
Employee Insurance	$ 4,164,260
Fleet Management	2,763,622
Central Equipment	485,349
IT Services	2,160,756
Total	$ 9,573,987

PASSED, APPROVED, & ADOPTED this 16th **day of** June **, 2025**
Town of Jackson

By: _____
Arne O. Jorgenson
Mayor

ATTEST:

By: _____
Riley Taylor
Town Clerk

STAFF REPORT

Meeting Date:	June 16th, 2025	**Meeting Title:**	Regular Meeting
Submitting Department:	Police Department	**Presenter:**	Kara Hobby
Agenda Item:	Special Event: Farmers Market	**Public Comment:**	Yes

Purpose & Policy Considerations.
The Town Council has been asked to consider a request from the Jackson Hole Farmers Market to expand the market footprint for the 2025 season. The proposed expansion would add vendor space onto East Broadway Avenue.

Requested Action.
Staff request the Council review and consider taking action on the request.

Recommendations.
Staff recommends approval of the expansion of the Farmer's Market onto East Broadway, provided jersey barriers or meridian barriers are installed for attendee safety and adequate water and electricity can be provided to the expanded area.

Background.
The Farmer's Market has traditionally operated on the south and east sides of the Town Square. Organizers have proposed expanding vendor space due to increased demand. The proposed site plan includes over 60 vendors, expanding east onto Broadway and adjacent streets.

It is worth noting that prior to the COVID-19 pandemic, the Farmers Market operated on East Broadway for approximately 20 years. The proposal would return the market to a footprint that was historically used for two decades.

Analysis.
Feedback was solicited from Town and County departments and while there were concerns about safety and detouring traffic especially to St. John's Health, the proposed layout does not block the roadway entirely, and staff have placed conditions on the application to mitigate these issues. Other considerations include inadequate infrastructure for food vendors, specifically the need for electrical and water to support increased food vendor participation. Furthermore, feedback from Fire/EMS, Streets, Public Works, and Environmental Health — highlighted potential impacts related to emergency response access, parking and utility availability. Any approved expansion will require ongoing collaboration among departments to address these operational concerns.

Public Comment:
One written comment was received in support of the proposed expansion. The commenter shared that participating in the Farmers Market was instrumental in launching their small business, as it provided an accessible and low-risk venue to test a business idea. They noted the difficulty of securing retail space in Jackson and emphasized the value of temporary outdoor opportunities for local entrepreneurs. The comment also cited other post-COVID outdoor uses (e.g., restaurant seating) that have been allowed to continue and urged a fair approach to supporting small vendors. The commenter acknowledged concerns about safety but expressed confidence based on past precedent and compared the market's impact favorably to other downtown events. They concluded by emphasizing the need to create more opportunities for small business growth in the face of ongoing housing and affordability challenges.

Possible Alternatives.
1. Staff Recommendation: Allow the proposed expansion onto East Broadway, contingent upon the Farmers Market organizers coordinating placement and removal of jersey barriers to provide increased safety and be responsible for all associated costs and logistics.
2. Alternative 1: Allow expansion onto Deloney Avenue and Center Street, contingent upon outreach by organizers to adjacent businesses to address access, visibility, and operational concerns.
3. Alternative 2: Allow expansion into the Town Square lawn, contingent upon the Parks and Recreation Department consultation to determine mitigation strategies and any restoration requirements related to turf impact.
4. Alternative 3: Deny the proposed expansion and retain the current Farmers Market layout for the 2025 season.

Comprehensive Plan & Priority Alignment.
This item aligns with Principle 4.4 of the Comprehensive Plan: "Enhance civic spaces, social functions, and environmental amenities to make Town a more desirable Complete Neighborhood." Supporting community events can enhance the social and economic vibrancy of downtown, but must be balanced with public safety, mobility, and operational feasibility.

Fiscal Impact.
Minimal fiscal impact to the Town is expected unless expansion requires additional staffing, traffic control support, or post-event restoration.

Staff Impact.
The Police Department will continue coordinating interdepartmental review and conditions of approval. Additional logistics, monitoring, or enforcement may be required depending on the selected option.

Attachments or Links.
Proposed 2025 Farmers Market Site Plan.

Suggested Motion.
I move to approve the Jackson Hole Farmer's Market's request to expand onto East Broadway, with the condition that the applicant is responsible for all aspects of jersey barrier setup and removal to ensure attendee safety and adequate infrastructure including water and electricity can be provided to the expanded area.

Contact: Kara Hobby, Information Coordinator | SpecialEvents@jacksonwy.gov | 307-733-1430

SPECIAL EVENT CHECKLIST | READ/USE TO ENSURE SUCCESSFUL PROCESS

___ **Submission & Turn-Around Time:** Complete applications with all necessary attachments and Supplementary Permit Applications must be submitted **online** at least **45 days** prior to an event.

___ **Event Lead/Main Contact**: Events must have one individual for the Town to communicate with directly.

___ **Processing & Approval:** Turn-around time for events approved by staff can be as quick as 2 weeks if all documents are submitted and fees are paid. High-Impact events with large footprints and attendance may need to be presented to Town Council and require more time. All fees are due at the time of application and required before full approval and permits are issued.

___ **Permit Fees:** Fees for all permits are dictated by Town Code and cannot be waived. Fees can be paid online when submitting permit applications or over the phone 307-733-1430.

___ **Location/Venue Reservations:** If your event is at a Town Park, other than Town Square, please fill out an application with Parks & Recreation, Teton County School District, or the Fairgrounds prior to submitting a Special Event Application with the Town. You may not need both.

___ **Supplementary Permits:** In addition to this application, you may need other permits for your event. Common permits are listed below but other departments may have additional requirements. The most common are:

1. Alcohol &/or Catering Permit **2.** Exposition License **3.** Noise Permit **4.** Temporary Sign Permit

___ **Event Equipment:** The Town of Jackson does not provide equipment for events. Please secure all equipment through a vendor.

___ **Streetlight on Broadway & Center:** For events on Town Square that need the corner light turned on, contact Rita Holmes at Lower Valley Energy (LVE) to schedule when the light should be turned on and off | Rita Holmes, LVE Member Service Rep.: 307-732-4225 or rholmes@lvenergy.com.

___ **WYDOT Special Event Permit:** Events taking place on Broadway or Cache up to where they intersect at Town Square require event permits from the Wyoming Department of Transportation (WYDOT). Find this on WYDOT's website and submit it with this application.

___ **Supporting Documents:** This application requires a site plan and certificate of insurance are attached to submit.

- **Certificate of Insurance**
- **Event Site-Plan –** Upload a DETAILED site-plan of your event. Include maps or a diagram of the entire event with the street names, venue, and surrounding area. The site-plan must be legible and credible. Consider and include if your event will have food or alcohol, barricades for street closures, amplified sound, signage, or parking. Reference a complete list of things to consider below.

PERMIT FEES:

- Nonprofits: **$30**
- Business/Commercial: **$1,035**
- Expressive Activity: **No Fee**
- Internal/Joint Departments: **No Fee**

INTERNAL USE ONLY

PERMIT FEE STATUS:

_____

DATE PAID: _____

Total Due: $30.00

Contact: Kara Hobby, Information Coordinator | SpecialEvents@jacksonwy.gov | 307-733-3932 Ext. 1110

SPECIAL EVENT PERMIT APPLICATION

SUBMISSION & TIMING: For new events, complete applications with all necessary attachments and Supplementary Permit Applications must be submitted **online** at least **45 days** prior to an event.

ORGANIZER INFORMATION – EVENT LEAD/MAIN CONTACT

Main Contact/Event Lead: Jenny May Shervin

Phone Number: 8056985489 **Email:** jhfmts@gmail.com

EVENT INFORMATION

Event Name: Jackson Hole Farmers Market **Event Location:** Town Square (Deloney, Center &

Event Date(s) / Date Range: Every Saturday June 28th through September 27th

Event Hours: 9am to 1pm **Alternate Location:** NA

Event Set-Up Starts: **Date:** June 28th **Time:** 6:00am

Event Clean-Up Ends: **Date:** September 27th **Time:** 2:00pm

Expected Turnout (Everyone present): **Per Day:** 250 at one time -750 **Total:** 12,000 varies each Saturday

Event Frequency: ____ One-Time Event (One + days, back-to-back) ✔ Event Series (Various dates throughout season)

Event Type: ____ Run/Walk ____ Filming/Photo Session ____ Assembly ____ Biking

____ Parade ____ Concert/Music Festival ____ Educational ____ Other

Event Purpose/Description: Farmers Market

Street, sidewalk, alley or public parking lot closures? ✔ YES ___ NO

Areas Requested for Closure: ✔ Parking Space/s ___ Parking Lot ✔ Street/Alley ___ Sidewalk

Is this a new event or a legacy event? ✔ Legacy Event ___ New Event

Organization/Entity: Jackson Hole Farmers Market

Organization Type: ✔ **Non-Profit** ____ **Public Agency** ___ **Business**

Event Co-Sponsor(s): NA

(If Exposition License is requested, for-profit/commercial Entities must submit a Letter of Event Sponsorship from a nonprofit organization.)

Event Fee: Is your event free of charge or ticketed? ✔ **Free Event** ____ **Ticketed Event**

EVENT SITE-PLAN – REQUIRES DOCUMENT UPLOAD!

Upload a DETAILED site-plan for your event. Include maps or a diagram of the entire event with the names of streets, venue, and surrounding area. The site-plan must be legible, make sense, and include the following, if applicable:

__ Alcohol Vendors (A)
__ Beverage Vendors (BV)
__ Event Parking (EP)
__ First Aid / EMS (FA)
__ Hand Washing Sink (HWS)
__ Portable Toilets (T)
__ Security (P)
__ Tents (X)
__ Amplified Sound/PA System (PA)
__ Bleachers (BL)
__ Fire Extinguishers (EX)
__ Food Vendors (FV)
__ Merchandise Sales (MS)
__ Recycling Receptacles (RR)
__ Stages or Amplified Sound (SO)
__ Trailers, Vehicles, Storage (TR)
__ Barricades (B)
__ Electricity / Generator (EL)
__ Fire Lane (FL)
__ Trash Receptacles (G)
__ Parking Lot Closure (PC)
__ Retail Merchants (RM)
__ Street Closure (SC)
__ Signage (SS)

Please Note:

- Portable restrooms may not be located within 50 feet of any food vendor or brick-and-mortar restaurant.
- ADA sidewalk access and fire hydrants must remain accessible at all times.
- Trash and Recycling must always be next to each other.

CLOSURE REQUESTS

Event leads are responsible for posting and removing "NO PARKING" and "ADA PARKING" signs along streets with parking within the event site 72 hours before their event. Closures must be coordinated with Jackson's Police Department (307-733-1430) at least 2 weeks prior to requested closure dates. All parking, road signs, cones and barricades must be removed immediately after events.

Area of Closure Request:	Date(s)/Date Range:	Time/Time Range:
Deloney Street on Town Square	Saturdays 6/28-9/27	6am -2pm
Center Street on Town Square	Saturdays 6/28-9/27	6am -2pm
Broadway Parking/1 Lane on Town Sq.	Saturdays 6/28-9/27	6am -2pm

RESIDENT &/OR BUSINESS NOTIFICATION

If your Special Event will cause higher-than-usual noise-levels for surrounding residences/business or impact traffic/pedestrian/ resident access and accessibility, event leads must coordinate and distribute 'Notice Letters' with a detailed map and other pertinent information for businesses and residents within a two-block radius of your event.

TOWN & COUNTY SERVICE REQUESTS

Please indicate the Town& County services you are requesting in the four sections below. You will need to coordinate services with individual departments and additional fees may apply.

REQUESTS FOR FIRE/EMS DEPARTMENT | 307-733-4732

Fire/EMS can support events with the following items. Check any that apply.

___ Ambulance ($250/Hour) ___ Fire Engine ___ Medical Services

Detailed Request: _____

_____

*Events are subject to inspection and may need additional permits directly from the Fire/EMS Department.

REQUESTS FOR PARKS & RECREATION DEPARTMENT | 307-732-5755

If your event will be at a public park or ball field, contact the Parks & Recreation Department before filling out this application. Confirm availability and reserve your site through the Parks & Recreation Department directly for all parks except the Town Square. Parks & Rec can support events with the following items. Check any that apply.

___ Bike Lane Bollard Removal ✔ Electricity Access ___ JH20 Water Station

___ Bleachers *(Organizer Responsibility)* ___ Irrigation Locates – *(Any event placing stakes on turf must obtain these.)*

Detailed Request: We have in the past had access to the electricity within the Town Square Park for our few

REQUESTS FOR POLICE DEPARTMENT | 307-733-1430

The Chief of Police determines if police services will be needed at events to maintain life safety. The Chief also determines the number of officers to staff the event. Fees may be associated with the need for additional police services at events. The Police Department can support events with the following items. Check any that apply.

___ Event Security ___ Mounted Horse Patrol ___ Traffic Control ___ Lead Vehicle

___ General Presence ✔ Towing/Ticketing ___ Parking Closure Assistance

___ Street Closure Assistance ___ Other (fill out the 'Detailed Request' section below)

Detailed Request: We post "no parking" signs the Thursday before a market and if there are any cars parked in

REQUESTS FOR PUBLIC WORKS DEPARTMENT | 307-733-3079

Event organizers are responsible for leaving venues clean and trash free. Failure to adequately clean sites & surrounding areas can result in future permit denials. Public Works can support events with the following items. Check any that apply.

___ Street Sweeping ___ Snow Removal ___ Street Marking

Detailed Request: _____

REQUESTS FOR ENVIRONMENTAL HEALTH DEPARTMENT | 307-732-8490

If you are selling food or beverages, you must contact Teton County's Department of Environmental Health prior to your event. Call this department at 307-732-8490 to ensure your event is compliant.

SUPPLEMENTARY PERMITS – AVAILABLE ON THE TOWN'S WEBSITE

Supplementary permits may be necessary depending on the specifics of your event. Please reach out to the contacts listed below with questions about these permits.

24-Hour Alcoholic Beverage Permit
- Lynsey Lenamond, Internal Services Specialist
  lynseylenamond@jacksonwy.gov
  307-733-3932 // Ext. 1116

Exposition License
- Mary Hurst, Finance Office Clerk
  mhurst@jacksonwy.gov
  307-733-3932 // Ext. 1153

Noise Permit
- Police Department Front Desk
  jpdic@jacksonwy.gov
  307-733-1430

Temporary Sign Permit
- Katelyn Page, Associate Planner
  kpage@jacksonwy.gov
  307-733-1430

Note: In addition to these permits, specifics of your event may necessitate requests for other permits from the Police Department, Fire/EMS Department, Parks & Rec, or the Health Department.

Events that do not require a Special Event Permit from the Town may still need Supplementary Permits.

ALCOHOLIC BEVERAGE PERMIT / MALT & CATERING

Are you planning on serving alcohol? ___✔___ YES ____ NO

If "YES," you MUST submit a 24-Hour Alcoholic Beverage Permit Application, found on the 'Permits, Applications & Fees,' page of the Town's website, with this application.

Which entity will be providing the alcohol? Snake River Roasting Company via Bin 22 Liquor License

NOISE PERMIT / AMPLIFIED SOUND

Will your event have amplified sound? ___✔___ YES ____ NO

If "YES," you MUST submit a Noise Permit Application, found on the 'Permits, Applications & Fees' page of the Town's website, with this application.

EXPOSITION LICENSING, FOR ANY SALES DURING EVENT

Are you planning on selling anything at your event: vendors, ticket sales, food or any other sale of goods or services?
___✔___ YES ____ NO

If "YES," you MUST submit an Exposition License Application, found on the 'Permits, Applications & Fees' page of the Town's website, with your event application.

Please note all vendors here:

_____ _____ _____

_____ _____ _____

_____ _____ _____

If you have additional vendors, please upload an additional list with all food vendors when submitting this form.

TEMPORARY SIGN PERMIT, INCLUDING BANNERS

Are you requesting to hang signs or banners? ✔ YES ____ NO

If "YES," you MUST submit a Temporary Sign Permit Application, found on the 'Permits, Applications & Fees' page of the Town's website, with this application.

INSURANCE REQUIREMENTS – REQUIRES DOCUMENT UPLOAD!

Upload a Certificate of Insurance (COI) with your application. It MUST be provided before your event. A COI is required BEFORE your event starts. It must name the "Town of Jackson" as the additional insured including its Officers, Officials, Employees, and Volunteers. It must state that the coverage is primary and non-contributory. Insurance limits must be at least $1,000,000/occurrence and $1,000,000/aggregate. The additional insured language on the certificate may not include any limitations or exclusions. Include alcohol liability if there will be alcohol at the event. COI may be reviewed by the Town Attorney.

PORTABLE RESTROOMS AND SINKS

The Town requires events to provide portable/chemical toilets for all events with 75 or more people. Portable restrooms are required at your event unless you can substantiate the sufficient availability of both ADA accessible and other restroom facilities within your site-plan that will be available to the public during your event. Portable restrooms cannot be placed within 50 feet of any food vendor or businesses that serve food.

Do you plan to provide portable restrooms? ___ YES ✔ NO

If "Yes", please indicate the total number of portable toilets and ADA accessible toilets below –

Total Number of Portable Toilets: _____ **Number of ADA Accessible Portable Toilets**: _____

If "No", please explain: _____

Restroom Company: _____

Restroom Drop-Off/Pick-Up – Date for Drop Off: _____ Time for Drop Off: _____

Date for Pick Up: _____ Time for Pick Up: _____

MERIDIAN BARRIER REQUESTS

The Town does not loan equipment for Special Events except for. We can recommend vendors to create management plans and rent necessary items. Event producers must secure equipment including cones, barriers, barricades, etc. through a 3rd party. If you are one of the following four large, Legacy Events below, please contact the Police Department to coordinate the use of Meridian Barriers:

1. Rendezvous Music Festival
2. Million Dollar Music Festival
3. 4th of July Fireworks
4. Old Bill's Fun Run



SUSTAINABLE EVENT PLANNING

The Town encourages Special Event Leads/Organizers to strive toward sustainability. We partner with Integrated Solid Waste and Recycling (ISWR) to help support events to be as sustainable as possible. Contact the Outreach Coordinator at iswroutreach@tetoncountywy.gov or 307-733-7678 to learn about ways to make your event as 'Green' as it can be.

RECYCLING PLAN

Events are required to have a plan for collecting and removing recyclable materials. Town recycling bins in parks, parking lots, ball fields, sidewalks, and public restrooms may not be included in recycling plans. Recycling bins should be highly visible, well labeled, and located next to trash containers. For large events, we recommend stationing staff or volunteers near the bins to assist attendees. For assistance with creating a Recycling Plan, contact Integrated Solid Waste and Recycling (ISWR) at: iswroutreach@tetoncountywy.gov or 307-733-7678.

Will you use a company for your recycling plan? _____ YES _✔_ NO

If "Yes" which company, will you be use? _____

How many recycling receptacles will they (or you) supply for your event? _____

When will recycling receptacles be delivered? _____

When will recycling receptacles be picked up? _____

Describe your plan for collection and removal of recyclable materials during your special event: _____

_____

_____

Event leads are responsible for cleaning and restoring the site immediately following events. If you believe that no recyclable materials will be generated during your event, please state this in your plan. For a list of recyclables and how they need to be sorted, or more information about where recycling bins are contact ISWR at number/email above.

TRASH REMOVAL PLAN

Events are required to have a plan for collecting and removing trash during and after the event. Town trash cans in parks, parking lots, ball fields, sidewalks, and public restrooms cannot be included in waste removal plans. For help with creating a Trash Removal Plan, contact ISWR at 307-733-7678 or iswroutreach@tetoncountywy.gov.

Please note: Event organizers are encouraged to empty any Town trash cans that are overflowing after their event on or around Town Square.

Will you use a waste hauling company for a trash removal plan? _____ YES _✔_ NO

If "Yes" which company, will you use? _____

How many trash cans will be supplied for your event? _____

When will these trash cans be delivered? _____

When will these trash cans be picked up? _____

Describe your plan for collecting and removing trash during and after your special event: _____

_____

_____

Failure to clean-up after an event will result in a citation and the event being subject to denial of future permit.

SPECIAL EVENT PERMIT APPLICATION ACKNOWLEDGEMENT & SIGNATURE

I have filled out this application in a complete manner and to the best of my knowledge. I understand the expectations before, during, and after the permitted Special Event and agree to comply with all requirements set forth by the Town and Special Events Team.

Event Lead Name: Jenny May Shervin Title: Market Manager

Event Lead Signature: eSigned via SeamlessDocs.com Jenny May Shervin Key: 1fc1c8dc-637d-4f08-bac1-121d7ed30fcc Date: 3/28/25

SPECIAL EVENT | STANDARD CONDITIONS OF APPROVAL

Please review the following standard conditions and restrictions for Town events. Sign to acknowledge you have read, understand, and agree to these conditions even if they do not all apply to your event.

STANDARD CONDITIONS OF APPROVAL FOR ALL SPECIAL EVENTS

GENERAL: The event shall be conducted in a timely, safe and professional manner. All town ordinances, including, but not limited to noise, possession and use of weapons, open fires and animals (including the prohibition of dogs in town parks) apply to all events except where specifically granted relief by Town Council. Event Leads must communicate all conditions, restrictions, prohibitions, and responsibilities to participants, volunteers, vendors, merchants and spectators.

ROAD CLOSURES / PUBLIC PARKING CLOSURES: Event Leads must notify, in advance, all businesses, residences, and organizations affected by street and public parking closures and shall provide advance community radio and/or newspaper announcements about the event and closures. Event Leads shall meet with and coordinate all road closures with the Police Department (PD) and provide an adequate number of volunteers to assist with traffic control and barricade setup/ removal. Event Leads shall also coordinate all road closures with START Bus, Fire/EMS, and the Town's Public Works Department and are responsible for producing, posting, and removing temporary 'No Parking' signs, which must be posted two days prior to closures. Emergency vehicle access lanes must be maintained during the event.

TRASH / CLEAN UP: Event Leads must ensure everything is cleaned-up immediately after the event and be responsible for collecting and removing all refuse generated by the event. Event organizers must supply extra trash and containers and dispose of any trash generated by the event. Event Leads are required to provide recycling containers and remove all recycled material too. Trash and recycling containers should not overflow.

STREETS: Fire department access roads must have and maintain a clear and unobstructed width of 20 feet and unobstructed vertical clearance of at least 13 feet 6 inches to allow for emergency vehicle traffic on ALL open and closed streets. Booths and tents may be erected on either side of a street but must always provide a 20-foot straight lane.

SIDEWALKS: The event cannot block walkways or obstruct pedestrian traffic. Walkways, boardwalks, entrances and ADA ramps cannot be blocked and must remain accessible. Power or sound cords that cross walkways must be taped and secured to avoid a tripping hazard.

POWER / ELECTRICAL: Electrical power is available from Town Square. Event Leads must coordinate all power needs with the Parks & Rec Park Manager 307-733-5057 at least 3 business days before the event. All power and sound cords that cross walkways shall be taped and secured to avoid a tripping hazard. Temporary power shall be subject to inspection.

PORTABLE RESTROOMS: If necessary, Event Leads must provide an adequate number of port-a-potties at the event site and arrange for their removal immediately after the event. Port-a-potties must be placed on paved areas.

INSURANCE: Event Leads and all participating organizations are required to maintain liability insurance in the amount of $1,000,000. Prior to the event, each organization shall provide a certificate of insurance naming the Town of Jackson as an 'Additional Insured' including its Officers, Officials, Employees, and Volunteers and must also state that coverage is primary and non-contributory. The Town Attorney's office may approve all certificates of insurance.

FOOD / VENDING: Event Leads shall obtain necessary food service permits from Teton County Environmental Health. Additional trash receptacles must be provided wherever food is being served and vendors shall not dump hot water or other liquids anywhere. Event Leads are responsible for ensuring that all sales tax receipts are remitted to the Wyoming Department of Revenue (WYDOR) by the 30th of the month following the event and providing a list of all participating vendors, artists, and merchants to the WYDOR and the Town's Finance Department, if requested.

ADDITIONAL PERMIT & LICENSE FEES: Event Leads must pay for all licenses and/or permits prior to the event.

ALCOHOL: Event Leads shall take all measures necessary to comply with applicable alcohol dispensing laws and regulations, including the prevention of sales to and consumption by minors and the prohibition of consumption beyond authorized premises. ID's must be checked and ID bracelet systems may be required. Only 16 ounce or smaller plastic cups may be used for beer and alcohol sales. No alcohol may be served in bottles or glass containers. Event Leads are responsible for being alert to and reporting instances of underage drinking to the Jackson Police Department. Servers must be TIPS trained prior to serving alcohol. No "over serving" or serving to obviously intoxicated persons shall occur, no more than 2 beers may be sold to one person at the same time. No one may leave the event with an open container.

TOWN PARKS: If using them, Event Leads must reserve Public Parks and return all related paperwork and applicable fees, at least 30 days prior to events, to the Parks and Rec Department. Event Leads must protect all turf, grass, and trees and follow all related Parks & Rec recommendations. Vehicles are prohibited on all turf areas of parks and in Town Square. No trees or other forestry may be moved, modified, damaged or destroyed to set up booths, tents, or exhibits. Ropes, signs, booths, banners, or exhibits cannot be secured to any live forestry. Use of Town Square requires a detailed Site Plan that indicates set-up, safety procedures, and turf protection. Irrigation locates are required if stakes are placed in the ground and events may forfeit damage deposits if irrigation equipment is damaged. Per Town Code, no dogs in Town Parks.

TENTS: Irrigation locates are required before tents are erected or stakes or any other items are placed in public parks, including the Town Square. Event Leads shall coordinate all water locates with the Park Manager at 307-732-5793 at least three (3) business days prior to the event. Tents bigger than 200 square feet and not open on all sides must have a permit from the Fire Department. Tents that hold 50 or more occupants must provide the Fire Department with a Site Plan detailing means of egress, seating capacity, and location and type of heating and electrical equipment. Tents must meet the flame propagation performance criteria of National Fire Protection Association (NFPA). Tents, canopies, or membrane structures cannot be located within 20 feet of lot lines, buildings, other tents, parked vehicles or internal combustion engines, or canopies/membrane structures. Combustible materials shall not be located within any tent. Smoking shall not be permitted in tents, canopies, or membrane structures. Approved "No Smoking" signs must be conspicuously posted. All open flame devices are strictly prohibited within tents unless approved by the fire code official. Portable fire extinguishers shall be provided, one minimum, for tents requiring permits with a 75-foot travel distance. Any cooking performed within tents shall require advance approval by the Fire Department. Generators and other internal combustion power sources shall be separated from tents by at least 20 feet and shall be isolated from contact with the public by fencing, enclosure, or other approved means.

FAIR GROUNDS / RODEO GROUNDS: Use of the Rodeo Grounds shall be coordinated through and subject to the approval of the Fair Manager. Anyone camping at the Rodeo Grounds shall indicate what group they are affiliated with by placing a card in the windshield of their vehicle. Campers are reminded that fires are not permitted.

FIREWORKS: Firework displays must be approved by the Fire Chief prior to events. The Fire Department will monitor the potential for wildfire in the firing area. The Department will make recommendations directly to the Event Lead for mitigation and will give final approval the day of the event. The application will be subject to review and approval by Fire/EMS and subject to any additional conditions or restrictions that department requires.

FIRE CODE SECTION 2024: If the answer to any of these questions is yes, an operational fire permit (for $100) is required under the International Fire Code. Get in touch with Fire/EMS to schedule inspections/discuss permitting requirements.

1. Is this event an exhibit or trade show? Y/N
2. Are there fireworks at this event? Y/N
3. Is there any use of open flames or heating at this event? Y/N
4. Are there food trucks at this event? Y/N If yes, please list the vendors
5. If outdoors, is planned attendance 1,000 or more? Y/N
6. Are there any tents over 400sq feet? Y/N
7. Will there be any cooking within tents at this event? Y/N
8. Are there any stages or other big structures? Y/N (stages)

This permit is subject to the standard conditions presented here. It may be revoked or modified by the Town of Jackson at any time, for any reason, including but not limited to not following standard conditions; staff requests; lack of supplementary applications, or noncompliance with Municipal Code.

I have read and understood the standard conditions for events and will act upon any items that need further review.

Event Lead Name: Jenny May Shervin Title: Market Manager

Event Lead Signature: eSigned via SeamlessDocs.com Jenny May Shervin Key: 1fc1c8dc-637d-4f08-bac1-121d7ed30fcc Date: 3/28/25



1.	Cosmic Apple	39.	Knit Together
2.	Cosmic Apple	40.	Jessica's Jellies
3.	Basin Flowers	41.	Yo'Good
4.	Bakers Gonna Bake	42.	Late Bloomer
5.	Mead Ranch	43.	Late Bloomer
6.	La Dolce Vita	44.	Morales Home Made
7.	La Dolce Vita.	45.	Mama Fla
8.	Jackpine Lavender	46.	Mama Fla
9.	Fish Creek Gardens	47.	Kats Family Farm
10.	Tea Hive	48.	TBD
11.	Chasing Paradise	49.	Scott's Bees
12.	Morning Dew Mushrooms	50.	Flynn Ellis
13.	Winter Winds Farm	51.	Little Jennie Ranch
14.	Down Home Eats	52.	Little Jennie Ranch
15.	TBD.	53.	Provisions JH
16.	Canewater Farm	54.	Provisions JH
17.	Canewater Farm	55.	Snake River Roasters
18.	Bear Roots Bitters	56.	Depiero Fish Co.
19.	Elysian Bakery	57.	La Fiera
20.	Grazing Star Ranch		
21.	Weidner Specialties		
22.	Weidner Specialties		
23.	TBD		
24.	Melissahof		
25.	Yellowstone Spice Co.		
26.	Corbridge Berries		
27.	Corbridge Berries		
28.	Haderlie Farms		
29.	Haderlie Farms		
30.	Gomm's Warm Cookies		
31.	Larks Meadow Farms		
32.	Larks Meadow Farms		
33.	Farmer Fred		
34.	Dinner's Ready		
35.	Monte Christo Beef		
36.	Simply Baked		
37.	Squire Farm		
38.	Squire Farm		

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council
Submitting Department:	Planning Department	**Presenter:**	Tyler Valentine
Agenda Item:	Three Development Plans for Lots 53, 57, & 58 within the Snow King Master Plan (P24-168, P24-174 & P24-175)	**Public Comment:**	Yes

This item was continued from the regularly scheduled Town Council meeting on June 2, 2025, due to time constraints. This staff report remains unchanged because no new information was requested from the Town Council, nor was new information presented by the applicant.

Purpose & Policy Considerations.
A Development Plan is required in the Snow King Planned Resort District by the Snow King Master Plan for all new development, thus a separate Development Plan is required to develop Lots 53, 57, & 58 for a total of three individual Development Plans. Although Development Plans are typically reviewed separately with individual staff reports and findings, staff consolidated these three Development Plans into a single report. This approach minimizes redundancy in analyzing common elements of the Master Plan—such as Design Guidelines, Capital Improvements, Phasing, and Land Use—and allows for a more streamlined and cohesive analysis. This is especially true because the three lots share common ownership, road/pedestrian access, housing mitigation requirements, and master site grading.

Requested Action.
The applicant, Northworks Architects, is requesting approval for three Development Plans for the Snow King Condos on Lots 53, 57, & 58 that cumulatively total 240 average peak occupants (APOs or guests), 110,370 sf of above-ground habitable, 175,348 sf total gross square footage (includes basements and non-habitable areas), 60 market short-term rental condominiums, and 12 affordable deed-restricted condominiums within four buildings that each have underground parking. Below is a summary of each lot:

- **ITEM A (P24-168):** The applicant proposes a new three-story, 42,314 sf (habitable) condominium building that consists of 26 market condominium units, 7 affordable deed-restricted condominium units, and 57 parking spaces with a basement parking garage on Lot 53 (553 Upper Snow King Loop).

- **ITEM B (P24-174):** The applicant proposes two new three-story condominium buildings – one 18,552 sf (habitable) and another 24,599 sf (habitable) - that consist of 22 market condominium units, 5 affordable deed-restricted condominium units, and 41 parking spaces within basement parking garages on Lot 57 (510 Upper Snow King Loop).

- **ITEM C (P24-175):** The applicant proposes a new three-story, 24,905 sf (habitable) condominium building that consists of 12 market condominium units and 19 parking spaces with a basement parking garage on Lot 58 (725 Upper Snow King Loop).

Key Policy Questions.
1. Does Council agree with staff's position that the missing section of sidewalk west of the existing Grand View Lodge should be required to be installed according to the Master Plan before completion (i.e., Certificate of Occupancy) of the first building? (Please refer to the analysis on pages 8-9 of the staff report.)

2. Does the Town Council find that all proposed buildings are generally consistent with the Design Guidelines? (Please refer to the analysis on pages 10-11 of the staff report.)
3. Does the Town Council find that the buildings on Lot 57 are generally consistent with the bulk, scale, and character of the existing Grand View Condominiums and Grand View Lodge as intended by the Master Plan? (Please refer to the analysis on pages 14-15 of the staff report.)

Recommendations.

ITEM A (Lot 53) (P24-168): The Planning Director and Planning Commission recommend **approval** of a Development Plan for a new three-story, 42,314 sf condominium building with a basement located on Lot 53 (553 Upper Snow King Loop), subject to the departmental reviews attached hereto and this staff report dated June 2, 2025, and the following conditions:

1. At the time of building permit submittal, Lot 53 shall comply with the long-term bike parking requirements to be consistent with the analysis in this staff report.
2. Prior to issuance of the Certificate of Occupancy, the applicant shall work with Snow King Resort Master Association (SKRMA) to ensure the missing section of sidewalk located to the west of the Grand View Lodge identified in this staff report is constructed as required by the Snow King Master Plan.
3. As part of the building permit submittal, the landscape plan shall ensure that all new Quaking Aspen trees planted north of the building are at least 18' tall and planted at a one-to-one ratio to those trees removed from this same area.

ITEM B (Lot 57) (P24-174): The Planning Director and Planning Commission recommend **approval** of a Development Plan for two new three-story, condominium buildings with a basement, one 18,552 sf and another 24,599 sf, located on Lot 57 (510 Upper Snow King Loop), subject to the departmental reviews attached hereto and this staff report dated June 2, 2025, and the following conditions:

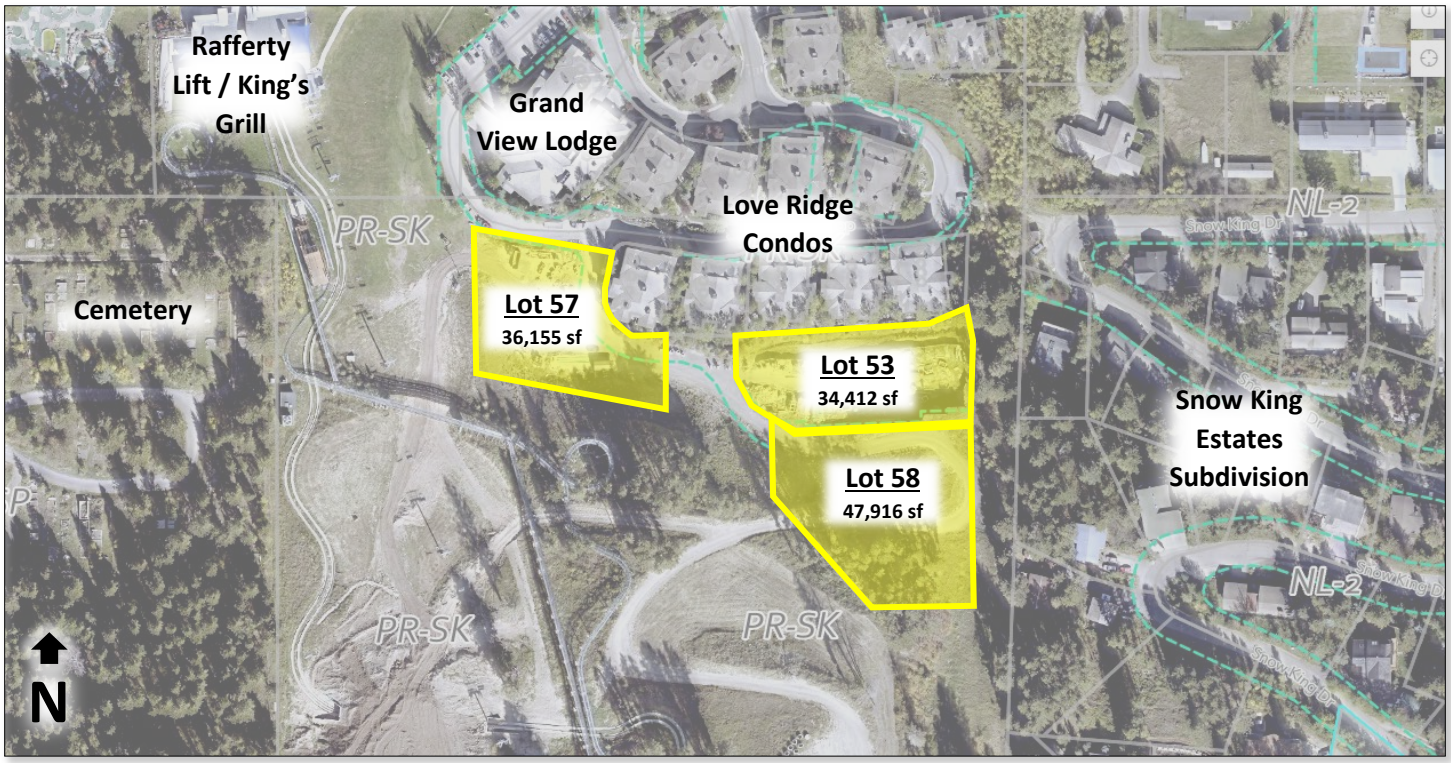
1. At the time of building permit submittal, Lot 57 shall comply with the long-term bike parking requirements to be consistent with the analysis in this staff report.
2. Prior to issuance of the Certificate of Occupancy, the applicant shall work with SKRMA to ensure the missing section of sidewalk located to the west of the Grand View Lodge identified in this staff report is constructed as required by the Snow King Master Plan.

ITEM C (Lot 58) (P24-175): The Planning Director and Planning Commission recommend **approval** of a Development Plan for a new three-story, 24,905 sf condominium building with a basement located on Lot 58 (725 Upper Snow King Loop), subject to the departmental reviews attached hereto and this staff report dated June 2, 2025, and the following conditions:

1. At the time of building permit submittal, Lot 58 shall comply with the long-term bike parking requirements to be consistent with the analysis in this staff report.
2. Prior to issuance of the Certificate of Occupancy, the applicant shall work with SKRMA to ensure the missing section of sidewalk located to the west of the Grand View Lodge identified in this staff report is constructed as required by the Snow King Master Plan.
3. Because the required affordable housing generated from Lot 58 will all be located on Lot 53, a Certificate of Occupancy for Lot 58 shall not be issued until Lot 53 receives its Certificate of Occupancy.

Project Location.

The properties are located at 553 Upper Snow King Loop (LOT 53, GRAND VIEW LODGES 2ND ADDITION), 510 Upper Snow King Loop (LOT 57, GRAND VIEW LODGES 2ND ADDITION), and 725 Upper Snow King Loop (LOT 58, GRAND VIEW LODGES, THIRD ADDITION). An aerial photo is shown below on the following page:



Background/Project Description.

Background

On December 18, 2000, the Jackson Town Council adopted the Snow King Planned Resort District Master Plan (Master Plan). This Master Plan encompasses an area of 62 acres. Pursuant to the Master Plan, there can be 915,000 square feet for above-ground uses and up to 2,460 lodging APOs. An APO, or average peak occupancy, is how the number of nightly guests is calculated within the resort for both hotel/motel and short-term rentals. For example, a hotel unit is assigned an APO of two and a short-term rental unit is assigned an APO of four.

On April 6, 2020, the Town Council amended the Master Plan (P19-201), but there were no changes to the total allowed square footage, APOs, or the allowed uses. One change that did occur was reconfiguring the Master Site Plan from multiple smaller buildings scattered further up the hillside to what is shown today which is one building per lot located farther downhill and closer to Love Ridge and Grand View Lodge. In addition, Lots 53, 57 & 58 used to be located in Sub-Area 4 but were shifted to be part of Sub-Area 3. These site planning efforts were made to locate buildings in more practical locations with generally flatter slopes even though these lots do have some of the steepest slopes within the Master Plan.

The Master Plan is separated into six sub-areas. The proposed project is part of Sub-Area 3, which includes the Grand View Lodge and Conference Center, Grand View & Love Ridge Condos, Simpson Patent Condos, and Lots 53, 57, & 58. All building floor area and APOs developed in Sub-Area 3 shall be deducted from the total building floor area and APO units allowed within the Master Plan. The Master Plan serves as the Sketch Plan for all development projects within the Resort Boundary, and thus the application for a Development Plan for each lot is appropriate at this time. All developments within the Master Plan are reviewed for compliance with the Master Plan and not the Land Development Regulations (LDRs). However, any standards that are not in the Master Plan automatically revert back to the LDRs. All projects within the Resort are first reviewed by the Snow

King Resort Master Association (SKRMA) for compliance with the Master Plan. This project received approval from SKRMA on August 19, 2024 (approval letter attached).

Lots 53, 57, and 58 are vacant lots situated adjacent to each other and located due south (uphill) of Grand View Lodge and Love Ridge Condos. Although the majority of Lots 53 and 57 are relatively flat due to previous man-made grading activities, portions of Lot 57 have man-made slopes above 50%. Lot 58 has the least amount of man-made disturbance, aside from the access/utility road that bisects through the middle and has slopes well above 50%. All three lots are accessible by vehicle only from Upper Snow King Drive, which is a private road owned and maintained by SKRMA. After Lots 53, 57, and 58 are developed, the remaining development to occur within the Master Plan is the development of the KM6 parcel at 330 E. Snow King Avenue and the expansion of the Snow King Hotel and employee housing at 400 E. Snow King Avenue. Below is a sub-area map of the Master Plan depicting Sub-Areas 1-6:



Project Description

The applicant is requesting approval of three Development Plans for the Snow King Condos on Lots 53, 57, & 58 that cumulatively total 240 APOs, 110,370 sf of above-ground habitable, 175,348 sf total gross square footage (includes basements, underground parking, and other non-habitable areas), 60 market short-term rental condominium units, and 12 affordable deed-restricted condominium units. All buildings have daylight basement parking garages that provide a total of 117 parking spaces for the development. Lot 53 is the only building to include units within the daylight basement level. Access to all three lots will be taken from Upper Snow King Loop, which is a private road maintained by SKRMA that dead-ends between Lots 53 and 58. The attached submission packet provides detailed information on the proposed project - site plan, architectural and building elevations, floor plans, landscaping, etc. Below is a breakdown of development on each lot:

Lot 53

- One 53'-10¼" tall, three-story building totaling 104 APOs, 42,314 sf above ground habitable & 71,705 sf gross square footage (includes basement parking garage and basement habitable)
- Basement (57 parking spaces + 7 affordable units)
- 26 short-term rental condominium units – 42,314 sf
- 7 affordable deed-restricted employee housing units – 4,906 sf

Lot 57

- Two, three-story buildings totaling 88 APOs, 43,678 sf above ground habitable & 69,322 sf gross square footage (includes basement parking garage and basement habitable)
- North building (57'-8¼" tall):
    - Total of 18,552 sf above ground habitable & 32,005 sf gross square footage
    - Basement (19 parking spaces)
    - 10 short-term rental condominium units – 18,552 sf
    - 4 affordable deed-restricted employee housing units – 3,719 sf
- South building (55'-½" tall):
    - Total of 24,599 sf above ground habitable & 37,317 sf gross square footage
    - Basement (22 parking spaces)
    - 12 short-term rental condominium units – 24,599 sf
    - 1 affordable deed-restricted employee housing unit – 726 sf

Lot 58

- One 54'-8½" tall, three-story building totaling 48 APOs, 24,905 sf above ground habitable & 34,849 sf gross square footage (includes basement parking garage and basement habitable)
- Basement (19 parking spaces)
- 12 short-term rental condominium units – 24,905 sf

Staff Analysis.

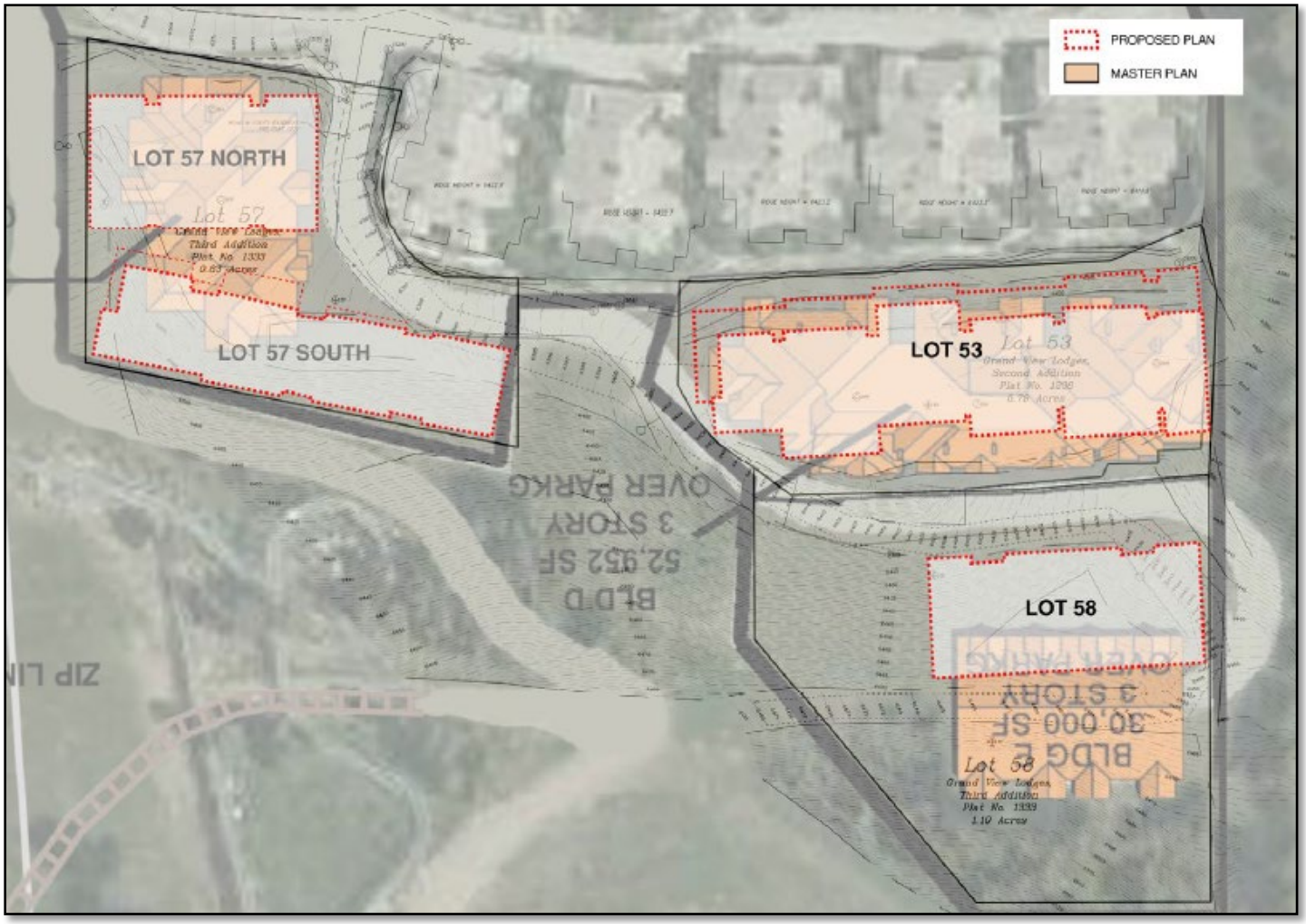
As stated above, the proposed project shall be reviewed for compliance with the Master Plan. However, any standards not addressed in the Master Plan revert to the LDRs (i.e., bike parking, EVSE parking, snow storage, etc.). Below staff has provided a review for each project as it relates to each applicable chapter in the Master Plan. In addition, a link to the complete Master Plan under the Attachments section of this report has been provided. Although these developments are being reviewed under one staff report, the applicant is proposing three separate Development Plans, each of which has their own Master Plan review and findings.

In general, the Master Plan provides a great deal of flexibility and includes far less prescriptive standards compared to the LDRs. This means that interpreting the Master Plan is more subjective in nature, allowing increased architectural freedom to design new buildings, while still emphasizing the need for new development that relates to the existing buildings and overall character. A main theme in the Master Plan – at least as it relates to reviewing for compliance – is focused on compatibility with the existing surrounding development, both in design, open space/landscaping, and pedestrian experience, along with compatibility with the hillside. An important consideration is that from a visual impact standpoint, the proposed developments are within a privately owned Master Plan district, and these buildings will not be visible from Town streets, except partially visible from a few properties along Snow King Drive. Nearly all direct visual impacts would be toward the Love Ridge Condos and Grand View Lodge developments directly to the north. As it relates to the Master Plan's vision for development on Lots 53, 57, & 58, buildings are intended to be larger in bulk and scale than the existing Love Ridge Condos and Grand View Lodge. With that acknowledgement, a main focus for Lots 53, 57, & 58 is how they interface with these existing surrounding developments, specifically the pedestrian experience and landscaping, the spaces and distances between buildings, and how the design, architecture, and materials relate to one another.

Master Site Plan (pages 39-43 of the Master Plan)

The conceptual Master Site Plan chapter provides an overview of how the overall Resort circulation (both pedestrian and vehicular) will function. The conceptual Master Site Plan(s) is broken into two portions, one for the summer season and one for the winter season, showing overall circulation and the relationship of the building envelopes to the outdoor recreation areas described in the plan. More specifically, the chapter then divides the Resort into individual sub-areas and describes the proposed building envelope locations, outdoor recreation areas, and how these allowed uses relate to each other within the sub-area and within the Master Site Plan as a whole. The building envelope locations depicted in the conceptual Master Plan are not intended to be exact but rather serve as a guideline for where future development could generally occur.

The idea is that the conceptual building envelopes would work in conjunction with other Master Plan standards to ensure that new developments interface properly and consistently with surrounding buildings. Specifically for Sub-Area 3, Lots 53, 57, & 58 have no setback requirements, and although the conceptual Master Site Plan shows one building per lot (shown below), the Master Plan allows the development of multiple buildings per lot. Below on the following page is a visual of the conceptual Master Site Plan with conceptual buildings (in orange) and the proposed building locations (dotted red line) from the Master Plan:



Lot 53

Of the three lots, staff finds that Lot 53 is most consistent with the conceptual Master Site Plan. The proposed basement footprint and upper levels include variations of push and pull along the north side of the building that are generally consistent with the building shown on the conceptual Master Site Plan. The push and pull help provide architectural breaks and relief, which are generally consistent with the architectural push and pull on the Love Ridge Condos to the north. Additionally, to address the transition between the existing Love Ridge Condos to the north, the proposed building provides space for adequate landscaping that will help minimize visual impacts to the extent possible. Overall, staff finds that Lot 53 is generally consistent with the conceptual Master Site Plan and finds that the proposed building location is appropriate for this lot.

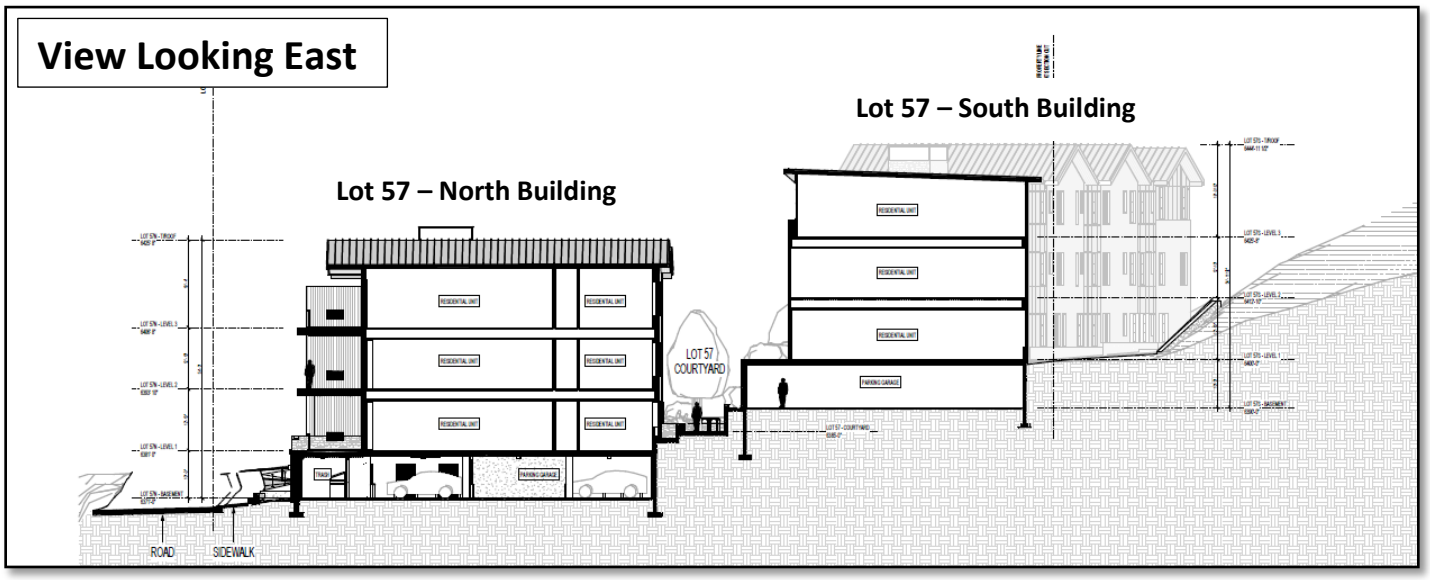
Lot 58

Staff finds that the proposed building on Lot 58, which is located farther downhill (north) than the building shown on the conceptual Master Site Plan, is appropriate because Lot 58 is the steepest of the three lots and shifting the building farther downhill reduces hillside disturbance by decreasing the length of road needed to access it. The building shape is also more of a rectangle and better aligns with the contours of the hillside compared to the building shown in the conceptual Master Site Plan which is more of a square. Staff questions why the original building was shown so high up the hillside where the slopes are steepest, but as previously stated, the conceptual Master Site Plan was not intended to determine the exact location of future development. Additionally, shifting the building further downhill reduces visual impacts from adjacent neighborhoods, namely Snow King Estates to the east. Overall, staff finds that Lot 58 is generally consistent with the conceptual Master Site Plan and finds that the proposed building location is appropriate for this lot.

Lot 57

Amongst the three lots, Lot 57 deviates the most from the conceptual Master Site Plan, specifically because two buildings are proposed instead of one, and because the south building is pushed up against the southern property line and extends nearly to the eastern boundary, which is not explicitly prohibited but was not anticipated by the Master Plan. Although different from the conceptual Master Site Plan, this lot has no setbacks or limits on the number of buildings. The building shown for Lot 57 in the conceptual Master Site Plan illustrated one example of how a building could be situated, knowing it would need to step up the hillside and fit into the surrounding character. While stepping up the hillside can be accomplished in a single building design, multiple buildings can also accomplish the goal of stepping up the hillside, which is what the applicant has proposed. Page 86 of the applicant's submittal shows an east-looking section that demonstrates the stepping up the hillside with two buildings (visual provided below for reference). The proposed two-building plan also provides a visual break between the north and south buildings, allowing views and light to pass through the development from east to west.

Regarding the location of the south building on Lot 57, staff acknowledges that the Master Plan designated development rights on this lot with the understanding that future development would involve significant hillside disturbance due to the existing man-made steep slopes. And given that there were no assigned setbacks or limits on the number of buildings, buildings on Lot 57 can be located as proposed provided the design complies with all other applicable standards in the Master Plan (e.g., Design Guidelines, FAR, LSR, etc.) and is in character with the existing surrounding development. Overall, staff finds that as conditioned, Lot 57 is generally consistent with the proposed building envelope location described in this chapter of the Master Plan for Sub-Area 3.

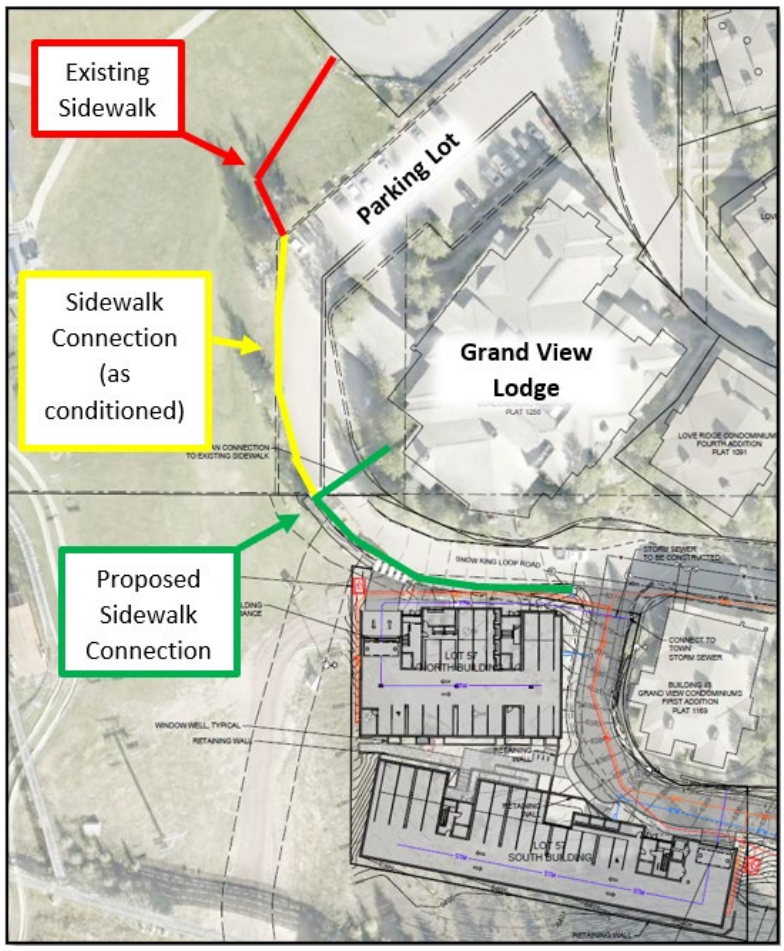


KEY POLICY QUESTION #1:

Does Council agree with staff's position that the missing section of sidewalk west of the existing Grand View Lodge should be required to be installed according to the Master Plan before completion (i.e., Certificate of Occupancy) of the first building?

In addition to building locations, page 42 of the Master Site Plan outlines both existing and proposed pedestrian circulation routes. The Plan identifies a sidewalk along the west side of Upper Snow King Loop that is intended to connect the subject properties to the parking lot adjacent to the Grand View Lodge and Snow King Hotel. The applicant currently proposes new sidewalks that join along Upper Snow King Loop but fall short of completing this connection—redirecting pedestrians into the vehicular courtyard of Grand View Lodge instead. While the

Master Plan does not specify the timing or exact design of pedestrian improvements for each development phase, staff finds that the applicant needs to coordinate with adjacent property owners and SKRMA to extend the sidewalk downhill along the west side of Upper Snow King Loop, completing the link to the existing sidewalk at the Grand View Lodge parking lot. The graphic to the right illustrates the existing sidewalk (red), proposed sidewalk (green), and the intended Master Plan connection (yellow). Because this connection is a required component of the Master Plan and provides the primary downhill pedestrian route, staff believes it must be constructed as part of these developments because these are the last major developments in Subarea 3 of the Resort. Accordingly, staff have added a condition of approval to each Development Plan requiring the applicant to work with SKRMA to complete the missing segment prior to issuance of the first Certificate of Occupancy.



<u>Land Use Plan (pages 44-53 of the Master Plan)</u>
The Land Use Plan and its associated land uses are divided into two broad categories: 1) uses allowed within building envelopes and 2) uses allowed outside the building envelopes. Staff finds that the proposed short-term rental condominiums and affordable workforce condominiums are allowed uses within the Sub-area 3 building envelopes.

The Land Use Plan also includes an example development table to describe the anticipated allocation of square footage and uses by sub-areas in order to calculate impacts such as traffic, parking, employee housing, and utilities at the master plan level. The Master Plan states that the example development table represented only a sample illustration of a possible Master Plan buildout and that precise areas dedicated to each use would be defined at the time of individual Development Plan review. With that said, staff finds that the proposed applications for Lots 53, 57, and 58 are consistent with what was illustrated in the example development plan based on the following analysis of square footage and APOs:

- The Master Plan approved a total of 915,000 sf for above-ground uses in the Resort area. Thus far 334,675 sf have been used, leaving 580,325 sf remaining to be used. The example development table contemplates 252,000 sf for Sub-Area 3, and since Love Ridge Condos and Grand View Lodge have used 143,655 sf, 108,345 sf remains for Lots 53, 57, & 58. The applicant is proposing 110,370 sf, which is 2,025 sf more than the example development table, but is allowed because the Master Plan did not allocate exact floor areas and APOs per sub-area but rather provided examples. Development rights have been privately sold and transferred throughout the Master Plan's history and determining what can be built in each sub-area is determined at the time of Development Plan review. Staff has no concerns over the proposed square footage and finds that the remaining square footage of 469,937 sf would allow for the remaining sub-areas (Sub-Area 1 and Sub-Area 2) that still have development rights to develop consistent with what was contemplated in the Master Plan.

- Regarding APOs, the Master Plan approved a total of 2,460 APOs in the Resort area. Thus far 824 have been used, leaving 1,384 APOs remaining to be used. The example development table contemplates 700 APOs for Sub-Area 3, and since Love Ridge Condos has used 280, 420 APOs are remaining for Lots 53, 57, & 58, and the applicant is proposing 240 APOs. Thus, staff finds that the applicant's proposed APOs comply with the Master Plan. Staff also notes that the remaining APOs after Lots 53, 57, & 58 are developed (i.e., 1,144 APOs remaining) would allow for the remaining sub-areas (Sub-Area 1 and Sub-Area 2) that still have development rights to develop APOs consistent with what was contemplated in the Master Plan.

Design Guidelines (pages 54-65 of the Master Plan)

KEY POLICY DECISION #2

Does the Town Council find that all proposed buildings are generally consistent with the Design Guidelines?

The Master Plan provides a completely separate set of conceptual Design Guidelines from the Town Design Guidelines that apply throughout Town outside of the Resort area. The Master Plan requires that SKRMA review and approve all new developments for consistency with the Master Plan-specific design guidelines prior to Development Plan submittal. The applicant has provided a letter (attached in submittal) confirming that the proposed development on Lots 53, 57, & 58 was reviewed and approved by the SKRMA Board of Directors. In addition, since the 2019 Master Plan Amendment, the Master Plan now also requires that the Town Design Review Committee (DRC) review all new developments for consistency with the Master Plan-specific design guidelines. The DRC reviewed the proposed development of each lot on June 12, 2024, and recommended approval to the Town Council. Below is a 3D contextual rendering of the proposed developments that also show the existing Love Ridge Condos:



After reviewing the proposed development of Lots 53, 57 & 58, staff finds that all proposed buildings comply with the general purposes and conceptual architectural Design Guidelines that govern the Master Plan. In general, the main theme of the conceptual Design Guidelines is striking a balance between control and creativity, to encourage flexibility and creative design on newer buildings while maintaining a sense of cohesiveness and character with existing development. In considering the cohesiveness and character with

existing development, the Love Ridge condos and Grand View Lodge developments play a large role due to their proximity to the subject properties. These existing buildings also served as general guidance for the applicant's use of exterior materials (i.e., stone base, wood siding, etc.), generous deck and balcony spaces, gable roof forms, and large roof overhangs. However, some of the proposed roof forms include reverse shed roofs at the bookends of each building that extend upward, which is not consistent with roof forms at Love Ridge Condos or Grand View Lodge that have hip and gable-style roofs that "waterfall" downward. However, such shed roof forms are not explicitly prohibited, and the applicant's inspiration for them came from the "butterfly" shed roofs on the Raftery Lift / King's Grill building located just northwest of these subject properties. Although the proposed buildings are larger in bulk and scale compared to the adjacent Love Ridge Condo buildings, the Master Plan permits Lots 53, 57 & 58 allow to have three stories over basement, includes no height limit, and contemplates larger buildings based on the example development table in the Master Plan. Overall, staff finds that the proposed development of Lots 53, 57 & 58 complies with the conceptual Design Guidelines.

Dimensional Limitations Plan (pages 66-100 of the Master Plan)

The Dimensional Limitation Plan specifies the dimensional limitations necessary to achieve the overall design theme in the Master Plan and includes floor areas and floor area ratios, densities, landscape ratios, height, setbacks, building envelopes, etc. Below are the specific standards that apply to Lots 53, 57, & 58, which the applicant is complying with, as conditioned:

Standard	Requirement	Lot 53	Lot 57	Lot 58	Complies?
Setbacks	N/A	N/A	N/A	N/A	Yes
LSR (min)	10%	20% LSR 7,245 sf	18% LSR 6,750 sf	57% LSR 27,401 sf	Yes
FAR (max)	Blended FAR Sub-Areas 1-5 = 0.40 x +/-2,700,000 sf (site area) = 1,080,000 sf Sub-Areas 1-4 = 0.60 x +/-2,400,000 sf (site area) = 1,440,000 sf	Complies - total allowed FAR in the Master Plan is 915,000 sf	Complies - total allowed FAR in the Master Plan is 915,000 sf	Complies - total allowed FAR in the Master Plan is 915,000 sf	Yes*
Lodging Capacity (max)	240 APOs for Lots 53, 57, & 58	104 APOs	88 APOs	48 APOs	Yes
Allowed Bulk	One or multiple buildings	1 building	2 buildings	1 building	Yes
Height (max)	N/A	N/A	N/A	N/A	Yes*
Stories (max)	3 stories over basement	3 stories over basement	3 stories over basement	3 stories over basement	Yes

***Floor area in the Master Plan can be shifted from site to site provided that any additional floor added to a site beyond what was contemplated in the Master Plan still results in a project that complies with the intent of the Master Plan and any other applicable standards.**

In addition to the prescriptive standards above, page 70 of the Master Plan provides "Specific Considerations Related to Sub-Area 3" which addresses the bulk, scale, and character of future development of lots 53, 57, & 58 related to existing surrounding development. This specific language (shown below) parallels language in the Master Plan Design Guidelines that new development needs to consider the character of existing surrounding developments, namely Love Ridge Condos and Grand View Lodge.

"The remaining developable lots within Sub-Area 3 consisting of Lots 53, 57, and 58 located to the South of the existing Grand View Condominiums will be developed to fit in with the bulk, scale, and character of the existing Grand View Condominiums and Grand View Lodge. These buildings can be up to three stories in height with a basement and with massing, articulation, openings, and step backs used to reduce bulk and mass. Buildings on these lots may consist of one single building complex or multiple buildings in order to best create a design that fits well with the topography and neighboring condominiums. Parking is to be primarily provided on-site and generally consistent with neighboring development. Active uses, such as retail and services, are permitted on the lower two levels, with lodging, residential or office on upper floors. The minimum landscape surface ratio for these lots is 10%. Sketch plans for buildings on lots 53 and 57 are included with this Master Plan. Both of these buildings were previously approved for construction by the Jackson Town Council. Additional landscape screening around these buildings will be included at the time of development plan submittal for these buildings. At the time of development on any additional lots within this sub-area the developer will be required to provide alternative transportation mode improvements to connect the Master Plan to Cache Creek Drive including paving, bollards, signage and other best practices associated with this connection. Plans for lot 58 must ensure compatibility with the neighborhood to the east at the time of development plan including but not limited to additional landscape screening and architectural design that best incorporates the building into the hillside."

When considering whether the proposed buildings fit with the bulk, scale, and character of the existing Love Ridge Condos and Grand View Lodge, there must be an understanding that Lots 53, 57, & 58 generally allow for larger buildings than the Love Ridge fourplexes based on the floor areas and APOs that were contemplated in the Master Plan. In addition, a theme among all four proposed buildings is the daylight basements, which are allowed, but give the appearance of four stories on certain elevations, and the applicant purposely stepped back the upper levels to help provide visual relief. Staff mentions this theme throughout the proposed development because it is similar to the theme of the 15 Love Ridge Condo buildings, which all have the same design style and were built at the same time. Below staff have provided a review of each lot for consistency with the Specific Considerations Related to Sub-Area 3:

- Lot 53:
  Staff finds that the proposed building is generally consistent with the bulk, scale, and character considerations related to Sub-Area 3. The proposed above-grade habitable square footage of 42,314 sf is over 10,000 sf smaller than what is shown on the conceptual Master Site Plan, which shows a building with 52,952 sf of above-ground habitable. Although the proposed building is much larger than the 15 Love Ridge Condo buildings, each around 8,000 sf (above-grade habitable), the proposed vertical and horizontal push and pull and step backs help reduce the bulk and mass. This is done by stepping the upper three levels back from the daylight basement and stepping the building walls of the upper three levels back from the exterior balconies, giving a three-tier terraced appearance. The use of a stone base, wood siding, and ample outdoor balconies is also a design trait shared by Love Ridge Condos and Grand View Lodge. Although a single building, the circulation towers on the north elevation are recessed back from the wall plane of the units, which further helps break up the building, helping it appear as six attached buildings from certain angles.

Since this lot is already graded and relatively flat, staff finds that the building fits into the existing topography well. Although the daylight basement level does give the appearance of four stories from the north and west elevations, three stories over a daylight basement is permitted, and stepping all three levels back from the basement helps provide visual relief. Staff have also confirmed that the basement complies with the basement definition. The design also leaves ample room between the Love Ridge Condos for landscaping to help screen and soften the new building, and the applicant states that the existing boulder retaining wall along the north will remain and new landscaping will be replanted to maintain the same level of screening. Staff have added a condition of approval requiring the applicant to install new Quaking Aspen trees along the north at a one-to-one ratio to those removed and that are at least 18' tall.

Finally, the Master Plan includes sketch plan-level renderings for Lot 53 (pages 95-96 of the Master Plan). These conceptual renderings were intended to exemplify what a building could look like while acknowledging that the Master Plan provides flexibility to designers to meet the intent and standards of the Master Plan through a more modern approach to design that reflects the time period in which the building was constructed. The sketches were also produced with the original Master Plan back in 2000 and are arguably outdated. The conceptual Design Guidelines even include a statement that *"The world's great cities were not designed by one architect at one time, but rather grew and developed over time with the creative input of many."* Overall, staff find the Lot 53 building is generally consistent with the Specific Considerations Related to Sub-Area 3.

- <u>Lot 57:</u>

  KEY POLICY DECISION #3

  Does the Town Council find that the buildings on Lot 57 are generally consistent with the bulk, scale, and character of the existing Grand View Condominiums and Grand View Lodge as intended by the Master Plan?

  Staff finds that the proposed buildings on Lot 57 are generally consistent with the bulk, scale, and character considerations related to Sub-Area 3. Staff are supportive of the two-building approach because it breaks up the proposed total square footage of 68,823 sf (includes basement) into two buildings. Similar to the buildings on Lots 53 & 58, the Lot 57 buildings include vertical and horizontal push and pull and step backs to help reduce the bulk and mass. The buildings also include a stone base, wood siding, and ample outdoor balconies, which are design traits shared by Love Ridge Condos and Grand View Lodge. Similar to the other buildings on Lots 53 & 57, the daylight basement level does give the appearance of four stories from the north and west elevations, however, three stories over a basement is permitted, and stepping all three levels back from the basement helps provide visual relief. Staff have also confirmed that the basement complies with the basement definition.

  In advance of the first Planning Commission (PC) meeting on April 16, 2025, staff raised character-related concerns regarding the northeast portion of the south building. Specifically, its proximity to the road created a "canyon effect" that appeared more urban in character and inconsistent with surrounding developments, which typically provide greater setbacks and landscaping between buildings and the street. This effect was driven by two primary factors: (1) the south building is proposed in a location not anticipated by the Master Plan, though still permitted, and (2) the applicant is proposing more overall habitable floor area and basement square footage on Lot 57 than envisioned in the conceptual site plan.

While the applicant's proposal complies with all applicable standards— including square footage limits, allowable project overlays (APOs), parking requirements, floor area ratios (FARs), and landscape surface ratios (LSR)—the proposed 43,678 square feet of habitable space exceeds the Master Plan's Example Development Table projection of 25,393 square feet by 18,285 square feet. This increase results from transferring over 10,000 square feet from Lot 53 and over 5,000 square feet from Lot 58, thereby reducing building sizes on those lots. Additionally, approximately 2,500 square feet of new floor area is proposed on Lot 57, which complies with the Master Plan's FAR allowances for this sub-area. Although the Master Plan permits such floor area transfers within the sub-area and does not mandate adherence to the Example Development Table or conceptual Master Site Plan, these adjustments have inadvertently concentrated development on Lot 57. This concentration was a key factor in staff's concerns regarding the south building's need to better align with the bulk, scale, and character of the surrounding neighborhood.

To address the concerns noted above, staff initially recommended a condition of approval requiring the applicant to revise the design and site plan before Town Council review, aiming to reduce the building's bulk and scale and improve its character. However, the PC requested to review these changes themselves before the Council. As a result, the applicant resubmitted updated plans for Lot 57, which the PC reviewed on May 21, 2025 (see PC section below for full discussion). In response to feedback from staff and the PC, the applicant implemented several design revisions, including additional landscaping with taller street trees, a shortened roof overhang above the easternmost third-floor unit and its neighbor to the west, slight reductions in square footage and bedroom counts, revised floor plans to allow for deeper step-backs on the north and side elevations of the easternmost unit, and removal of the third-floor balcony on that unit. These adjustments, along with enhanced landscaping, helped mitigate the canyon-like effect of the earlier design. The updated renderings now show significantly reduced massing at the northeast corner, creating a more traditional building form that steps up and back from the street. Overall, staff finds the revisions generally consistent with the bulk, scale, and character of the surrounding neighborhood.

Similar to Lot 53, the Master Plan includes sketch plan-level renderings for Lot 57 (pages 97-100 of the Master Plan). But again, these conceptual renderings were intended to exemplify what a building could look like while acknowledging that the Master Plan provides flexibility to designers to meet the intent and standards of the Master Plan through a more modern style of design that is current and keeping up with the times. These sketches were also produced with the original Master Plan back in 2000 and are arguably outdated. Staff finds that the proposed materials, outdoor spaces, two-building approach to stepping up the hill, and upper-level step backs from the basement meet the standards and intention of the Master Plan.

- <u>Lot 58:</u>

  Staff finds that the proposed building is generally consistent with the bulk, scale, and character considerations related to Sub-Area 3. The proposed above-grade habitable square footage of 24,905 sf is over 5,000 sf smaller than what is shown on the conceptual Master Site Plan, which shows a building with 30,000 sf of above-ground habitable. The proposed building is similar to the other buildings on Lots 53 & 57 in that the upper three levels are stepped back from the basement level, which gives a slight appearance of stepping up the hillside. The vertical circulation towers along the north elevation are recessed further forward and have flat roofs, which further break up the building wall and help it appear

as four attached building forms from certain angles. The use of a stone base, wood siding, and ample outdoor balconies is also a design trait shared by Love Ridge Condos and Grand View Lodge.

Lot 58 is the steepest of the three lots. To deal with the challenges of developing on steep slopes, the applicant is proposing to lower the grade of the existing road and sink the building into the hillside, which will reduce visual impacts in general, especially from the neighborhood to the east. Sinking the building into the hillside also fits into the topography of the hillside because it involves more cut and reduces the amount of fill that would otherwise be needed if the building pad was propped up from the hillside.

Similar to the other buildings on Lots 53 & 57, the daylight basement level does give the appearance of four stories from the north and west elevations, however, three stories over a basement is permitted, and stepping levels one through three back from the basement helps provide visual relief. Staff have confirmed that the basement complies with the basement definition. Due to this lot's hillside challenges, large retaining walls are needed to support the design, and the applicant is proposing a series of terraced retaining walls to the west of the building which is the most visible (but not to the public) elevation. Although areas for landscaping are limited due to the steep hillside, landscaping and trees will mostly be located within the terraced retaining wall sections. Finally, there are no Sketch Plans for building on Lot 58 in the Master Plan. Development on Lot 58 is envisioned to match the architectural style and design of Lots 53 & 58, which the applicant has accomplished.

Housing Element (pages 101-103 of the Master Plan)

Since the original adoption of the Master Plan in 2000, up until the 2019 Master Plan amendment, affordable workforce housing requirements lived in the Master Plan separate from the LDRs. However, after the 2019 amendment, affordable workforce housing requirements were removed from the Master Plan and required that all affordable workforce housing be provided in accordance with the Jackson LDRs, similar to any other development in town. Based on the proposed 60 short-term rental condominiums, the LDRs require the applicant to provide a total of 12 affordable workforce units in addition to three separate fees-in-lieu for the remaining fractional requirement of each lot that cumulatively totals $814,205.90. Below on the following page is a breakdown of the affordable workforce housing requirement, type, and method for each lot:

	Lot 53	**Lot 57**	**Lot 58**
Required Housing	5.925 units	5.414 units	2.962 units
Units Provided	5 units provided + fee of $381,793.49	5 units provided + fee of $170,783.77	2 units provided + fee of $261,628.64
Type & Method Area Median Income (AMI)			
Unit 1	2-bed, <50% AMI	2-bed, <50% AMI	2-bed, <50% AMI
Unit 2	1-bed, 50-80% AMI	1-bed, 50-80% AMI	1-bed, 80-120% AMI
Unit 3	1-bed, 80-120% AMI	1-bed, 80-120% AMI	
Unit 4	2-bed, 80-120% AMI	2-bed, 80-120% AMI	
Unit 5	3-bed, 80-120% AMI	3-bed, 80-120% AMI	

As proposed, the applicant plans to meet their affordable housing requirement by providing 12 affordable deed-restricted ownership condominium units on-site in addition to paying three fees-in-lieu. Lots 53 and 57 have provided 100% of their required affordable housing on-site. The required affordable housing for Lot 58 is being provided on Lot 53, which is allowed according to the Master Plan. Staff has added a condition of approval that

ensures completion (i.e., Certificate of Occupancy) of Lot 53 before completion of Lot 58 because the LDRs do not allow employee-generating development to be completed before its required units are completed.

Regarding the three fractional housing requirements generated by each lot, which cumulatively add up to 2.403 units, the LDRs do not require the applicant to provide the sum total of fractional housing of each lot because each lot is a separate project with its own Development Plan. Each Development Plan has a housing mitigation plan and findings, and from a housing standpoint, they are viewed separately. Although the applicant can willfully choose to provide more units instead of a fee, the applicant is choosing to pay three separate fees, which is allowed per the LDRs.

Transportation Element (pages 105-148 of the Master Plan)

The Master Plan assumed a total of 1,710 trips per day for residential uses in Sub-Area 3. Based on a Traffic Impact Study of the existing and proposed uses, a total of 1,216 trips per day would occur, which is less than was assumed.

According to the Master Plan (pg. 131), the parking requirements for the proposed uses are as follows:

- 72 condominium units total @ 1 space per unit = 72 spaces required
- Total Parking Proposed: 117 spaces

The applicant has proposed 117 covered parking spaces, some of which are tandem, spread out amongst the four proposed buildings to meet the 72-space requirement. Lot 53 provides 57 spaces, Lot 57 (north building) provides 19 spaces, Lot 57 (south building) provides 22 spaces, and Lot 58 provides 19 spaces. Each building has sufficient parking to meet parking demand per the Master Plan and does not rely on other buildings or lots to satisfy its parking demand. Each building has its own vehicular access directly from Upper Snow King Drive that leads directly into daylight basement parking garages. The only lot with surface parking is Lot 53, which has a small surface parking area (three parking spaces) on the first level that also serves as a required Fire Department turnaround. Based upon the requirements of the Master Plan for parking and access, staff finds that each lot complies and, in some cases, exceeds the applicable standards.

Regarding Electric Vehicle Supply Equipment (EVSE) parking, lodging/residential requires 30% of parking provided to be EVSE capable and 5% of parking provided to be EVSE installed. The applicant is providing compliant EVSE-capable and installed spaces within all four buildings. Below is the required number of EVSE stalls that the applicant is providing:

- Lot 53 (57 spaces provided) = 17 capable + 3 installed.
- Lot 57 - South (22 spaces provided) = 7 capable + 1 installed.
- Lot 57 - North (19 spaces provided) = 6 capable + 1 installed.
- Lot 58 (19 spaces required) = 6 capable + 1 installed.

Regarding bike parking, residential uses of five or more units per lot require 0.75 bike parking spaces per bedroom and 25% must be short-term bike parking and 75% must be long-term bike parking. The applicant has shown compliant short-term bike parking counts for each lot, however, the amount of long-term bike parking storage shown is slightly less than what is required. Staff has added a condition of approval requiring this to be addressed at the time of building permit submittal. Below are the bike parking requirements for each lot, which the applicant will be required to adhere to:

- Lot 53 (70 beds) = 14 short-term and 39 long-term bike parking spaces.
- Lot 57 - South (35 beds) = 7 short-term and 20 long-term bike parking spaces.
- Lot 57 - North (27 beds) = 6 short-term and 21 long-term bike parking spaces.
- Lot 58 (29 beds) = 6 short-term and 16 long-term bike parking spaces.

Capital Improvement Plan (pages 149-171 of the Master Plan)
The Capital Improvement Plan focuses on how the Resort private water, sewer, and stormwater systems will interface and connect to the larger Town of Jackson systems. The applicant has provided an initial Engineering Report that demonstrates the anticipated demand and discharge of the proposed development to be consistent with the assumptions made in the Master Plan. The Town Engineering Department has reviewed the application against the Master Plan and Town Utility requirements and has recommended approval subject to their departmental review. At this time no public capital improvements have been identified.

Phasing and the Snow King Resort Master Association (pages 172-174 of the Master Plan)
The Master Plan in Chapter XI Phasing and the Snow King Resort Master Association states as follows:

> *Snow King will develop the property in phases and in a well-balanced manner. While there is no specific timeline and individual phases will be constructed according to market demand, Snow King will ensure that all facilities required for the convenience of guests, public safety and mitigation of any negative impacts are constructed in a timely and concurrent fashion and follow a logical sequence. As additions are completed, the entire infrastructure and other required performance components for each phase will be in place and performance standards will be adhered to. These components include utilities, parking, housing and transportation elements that will be developed in increments in tune with commercial, lodging and other development. When any of these components are built in excess of the required needs of a particular phase, and in excess of the cumulative needs to date, this excess will be credited towards the requirements of future phases. Final Development Plans for each building or phase will address the specific impacts and required mitigation associated with it.*

Upon review of this specific section with this application and in a 2010 letter to Snow King related to this issue (see attached), staff finds there is no specific timeline that the Master Plan is subject to and thus may proceed as stated "according to market demand". As a result, staff find that the proposed development is compliant with this chapter. In addition, staff finds that the proposed application has mitigated all requirements of the Master Plan on site as part of this application and is not reliant on any future phase of development to gain compliance.

The Land Development Regulations set forth requirements for vesting of the entitlements under the Master Plan. Staff have attached an August 20, 2010, letter stating that the required entitlement requirements have been satisfied (see attached). In addition, in a July 6, 2015, letter the Town stated that:

> *SKRMA is operating in compliance with the Snow King Resort Master Plan. Upon review of the Snow King Resort Master Plan and your March 27, 2015 letter and supporting documentation the Town finds that SKRMA is operating in compliance with the Master Plan as required. Based upon this finding property owners within the Master Plan may apply to the Town for Development Plan approval.*

Regarding the specific phasing plan for Lots 53, 57, & 58, the applicant states that a building permit will be submitted within 18 months of Development Plan approval, likely starting with Lot 57, and each subsequent building permit will be submitted within 18 months of completion of the prior building permit. Staff is supportive of this phasing plan because it allows for a reasonable process to develop each lot.

Planning Commission (PC)
On April 16, 2025, the PC recommended approval of Item A (Lot 53) and Item C (Lot 58), finding that both developments comply with the Master Plan. However, the PC continued Item B (Lot 57) to the May 21, 2025, PC meeting and required the applicant to address Condition #5 before Town Council review. Below was Condition #5:

Condition #5 - Prior to Town Council review, the applicant shall revise the site plan and landscape plan for Lot 57 to include additional landscaping and trees (at least 18' tall) in front of the northeast section of the south building and remove the vehicular turn-out and replace it with additional landscaping and trees (at least 18' tall). In addition, the applicant shall make design changes that further reduce the bulk and scale of the northeast corner of the south building. Suggested changes could include, but are not limited to, removing a section of building on the east side, shifting the building farther south, removing a partial story, shortening the roof overhang above the easternmost third-floor unit, reducing square footage, modifying the floor plans to create larger step-backs on upper units, and/or reducing unit counts.

In response to Condition #5, the applicant made the following changes, which are reflected in the applicant's current submittal:

Change #1 – Bulk and Scale

- The third-floor easternmost unit of the south building was changed from a three-bed unit to a two-bed unit and reduced in size from 1,798 sf to 1,440 sf. The walls of this unit were also pushed south and westward to create larger step backs. These changes also resulted in recessed roof eaves and the removal of the unit's balcony, which reduced massing in front of the second-floor unit below. In addition, the third-floor unit directly west of the unit described above was reduced in size from 1,656 sf to 1,506 sf. The roof eaves were also recessed further back to reduce the bulk and scale.

Change #2 – Landscaping

- The site plan was revised to enhance visual screening between the 57 South building and the northern neighbors by adding more plantings. The vehicular drop-off area was removed and replaced with a landscaped planter featuring trees along the roadway. Additional shrub planting areas were introduced on both sides of the parking garage entrance for the south building. (Civil engineering advised against dense tree plantings in this location to maintain clear visibility for vehicles exiting the driveway.) Tall trees were also added to the east of the electrical transformer to screen it from neighboring properties.

As previously noted above in the Dimensional Limitations Plan section of the Master Plan (pages 66–100) section on pages 17–18, staff determined that the proposed modifications to Lot 57 met Condition #5 and that the buildings were generally consistent with the Master Plan. This analysis was presented to the PC. Following an in-depth discussion, the PC ultimately concluded that the applicant's proposed changes satisfied Condition #5 and voted to recommend approval to the Town Council (5–1). During their discussion, the PC acknowledged that the buildings on Lot 57 are significantly larger than the surrounding development and struggled with interpreting the Master Plan, which calls for general consistency with existing development but also provides a high level of flexibility. While there were concerns regarding the bulk, scale, and character—particularly of the south building—the Commission recognized that the Master Plan allows for considerable flexibility and larger-scale development on this lot. Although the PC found the neighbors' concerns to be understandable, they concluded that the proposed design is permissible under the Master Plan's allowances, despite its greater scale relative to adjacent properties. In their review of all three Development Plans, the PC discussed several key topics:

- **Guest Parking**: The PC suggested the applicant consider adding more guest parking spaces beyond the three proposed south of Lot 53.
- **Affordable Unit Parking**: The applicant clarified that one parking space would be allocated to each one-bedroom affordable unit, and two spaces for each two- and three-bedroom unit.

- **Livability of Affordable Units**: The PC noted that the applicant should explore opportunities to try to enhance the livability of certain affordable units, such as improving access to light and open space, but no conditions were recommended. They also acknowledged that the LDRs permit restricted units to be located anywhere within a building, provided livability standards are met.
- **Pedestrian Connectivity**: The PC recommended improving the pedestrian passage between the north and south buildings on Lot 57 to create a more welcoming connection.
- **Bicycle Parking**: Some PC members encouraged the applicant to incorporate short-term bicycle parking, including charging stations for e-bikes.

Public Comment
Public comment has been received and is attached. In general, the majority of public comments were received by owners in the Grand View & Love Ridge Condos, who in general oppose the overall development. With that said, the majority of the concerns are related to the development of Lot 57 not fitting in with the bulk, scale, and character of the existing surrounding development.

Findings for Development Plan.
ITEM A (Lot 53): All Development Plan proposals may be approved only if all of the following findings are made:

1. *The proposed project is consistent with the desired future character described for the site in the Jackson/Teton County Comprehensive Plan.*

   Not applicable. This finding is not applicable according to the Wyoming Supreme Court.

2. *The proposed project achieves the standards and objective of the Natural Resource Overlay (NRO) and Scenic Resources Overlay (SRO), if applicable.*

   Not applicable. The property is not located within the Natural Resource Overlay (NRO) or Scenic Resources Overlay (SRO).

3. *The proposed project does not have a have a significant impact on public facilities and services, including transportation, portable water and wastewater facilities, parks, schools, police, fire, and EMS facilities.*

   Complies. As conditioned, staff finds that the project will not have a significant impact on public facilities and services. The new project will offer upgraded on-site infrastructure to meet current development standards. In addition, the proposed traffic impacts are within what was contemplated for the Master Plan build-out.

4. *The proposed project complies with the Town of Jackson Design Guidelines, if applicable.*

   Complies. Although the project is not subject to the Town of Jackson Design Guidelines, the Master Plan Design Guidelines do apply and serve a similar purpose to the Town Design Guidelines. As noted in the staff analysis, SKRMA, the Town DRC, and staff find the project to comply with the Master Plan Design Guidelines. Staff also notes that the 2019 Master Plan Amendment started requiring all new projects to be reviewed by the Town DRC, and thus this is the first project in the Master Plan to receive an additional architecture review.

5. *The proposed project complies with all relevant standards of these LDRs and other Town Ordinances.*

Complies. As conditioned, staff finds that the application meets all standards of the LDRs and other Town Ordinances.

6. *The proposed project is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.*

   Complies. As conditioned, staff finds that the project complies with all applicable standards found in the Master Plan, which is the governing pre-approval document for Lot 53.

ITEM B (Lot 57): All Development Plan proposals may be approved only if all of the following findings are made:

1. *The proposed project is consistent with the desired future character described for the site in the Jackson/Teton County Comprehensive Plan.*

   Not applicable. This finding is not applicable according to the Wyoming Supreme Court.

2. *The proposed project achieves the standards and objective of the Natural Resource Overlay (NRO) and Scenic Resources Overlay (SRO), if applicable.*

   Not applicable. The property is not located within the Natural Resource Overlay (NRO) or Scenic Resources Overlay (SRO).

3. *The proposed project does not have a have a significant impact on public facilities and services, including transportation, portable water and wastewater facilities, parks, schools, police, fire, and EMS facilities.*

   Complies. As conditioned, staff finds that the project will not have a significant impact on public facilities and services. The new project will offer upgraded on-site infrastructure to meet current development standards. In addition, the proposed traffic impacts are within what was contemplated for the Master Plan build-out.

4. *The proposed project complies with the Town of Jackson Design Guidelines, if applicable.*

   Complies. Although the project is not subject to the Town of Jackson Design Guidelines, the Master Plan Design Guidelines do apply and serve a similar purpose to the Town Design Guidelines. As noted in the staff analysis, SKRMA, the Town DRC, and staff find the project to comply with the Master Plan Design Guidelines. Staff also notes that the 2019 Master Plan Amendment started requiring all new projects to be reviewed by the Town DRC, and thus this is the first project in the Master Plan to receive an additional architecture review.

5. *The proposed project complies with all relevant standards of these LDRs and other Town Ordinances.*

   Complies. As conditioned, staff finds that the application meets all standards of the LDRs and other Town Ordinances.

6. *The proposed project is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.*

   Complies. As conditioned, staff finds that the project complies with all applicable standards found in the Master Plan, which is the governing pre-approval document for Lot 57.

ITEM C (Lot 58): All Development Plan proposals may be approved only if all of the following findings are made:

1. *The proposed project is consistent with the desired future character described for the site in the Jackson/Teton County Comprehensive Plan.*

   Not applicable. This finding is not applicable according to the Wyoming Supreme Court.

2. *The proposed project achieves the standards and objective of the Natural Resource Overlay (NRO) and Scenic Resources Overlay (SRO), if applicable.*

   Not applicable. The property is not located within the Natural Resource Overlay (NRO) or Scenic Resources Overlay (SRO).

3. *The proposed project does not have a have a significant impact on public facilities and services, including transportation, portable water and wastewater facilities, parks, schools, police, fire, and EMS facilities.*

   Complies. As conditioned, staff finds that the project will not have a significant impact on public facilities and services. The new project will offer upgraded on-site infrastructure to meet current development standards. In addition, the proposed traffic impacts are within what was contemplated for the Master Plan build-out.

4. *The proposed project complies with the Town of Jackson Design Guidelines, if applicable.*

   Complies. Although the project is not subject to the Town of Jackson Design Guidelines, the Master Plan Design Guidelines do apply and serve a similar purpose to the Town Design Guidelines. As noted in the staff analysis, SKRMA, the Town DRC, and staff find the project to comply with the Master Plan Design Guidelines. Staff also notes that the 2019 Master Plan Amendment started requiring all new projects to be reviewed by the Town DRC, and thus this is the first project in the Master Plan to receive an additional architecture review.

5. *The proposed project complies with all relevant standards of these LDRs and other Town Ordinances.*

   Complies. As conditioned, staff finds that the application meets all standards of the LDRs and other Town Ordinances.

6. *The proposed project is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.*

   Complies. As conditioned, staff finds that the proposed application is in conformance with the Master Plan, which is the equivalent to a Sketch Plan in this instance.

Staff Impact.
The amount of staff time to review these Development Plans and staff report drafting is approximately 100-120 hours.

Attachments or Links.
Applicant's Submittal
Department Reviews

Public Comment
Snow King Master Plan link

Suggested Motion.
ITEM A (Lot 53): I move to **approve** Development Plan P24-168 for a new three-story, 43,209 sf condominium building with a basement located on Lot 53 (553 Upper Snow King Loop) based upon the findings and conditions presented in the staff report, the departmental reviews, and subject to this staff report dated June 16, 2025.

ITEM B (Lot 57): I move to **approve** Development Plan P24-174 for two new three-story, condominium buildings with a basement, one 18,552 sf and another 24,599 sf, located on Lot 57 (510 Upper Snow King Loop) based upon the findings and conditions presented in the staff report, the departmental reviews, and subject to this staff report dated June 16, 2025.

ITEM C (Lot 58): I move to **approve** Development Plan P24-175 for a new three-story, 24,905 sf condominium building with a basement located on Lot 58 (725 Upper Snow King Loop), based upon the findings and conditions presented in the staff report, the departmental reviews, and subject to this staff report dated June 16, 2025.

Snow King Condominiums



DEVELOPMENT PLAN REVISED SUBMISSION FOR TOWN COUNCIL MEETING

MAY 16, 2025

NORTHWORKS | BEAR DEVELOPMENT

NORTHWORKS

May 16, 2025

Tyler Valentine, Senior Planner
Town of Jackson

RE: Development Plan for Snow King Resort Lots 53, 57, and 58

Tyler,

We are pleased to submit these three development plan applications for Lots 53, 57, and 58 of the Snow King Resort. In total we propose 110,370 square feet and 240 APOs of development along with 12 affordable housing units spread through 4 buildings. Each building is 3-stories over a basement, with on-site parking. We intend to phase the construction, building Lot 57 first.

Our proposal was approved as consistent with the Snow King Resort Master Plan Design Guidelines by both SKRMA (May 23, 2024) and the Town Design Review Committee (June 12, 2024). SKRMA's approval letter is attached and also attests to the allocation of floor area and APOs from the Master Plan pool to this project. Since our original submission SKRMA has revised its accounting of floor area and APOs and the new accounting is reattached for reference; none of the changes impact Lots 53, 57 & 58.

Because this project is governed by the Snow King Resort Master Plan, the high-level character, location, bulk, and infrastructure have already been approved. Our application demonstrates compliance with the approved Master Plan. A summary of the proposed development relative to the Master Plan requirements is in the table below, with more details on the following pages.

Topic	Master Plan Standard	Lot 53	Lot 57	Lot 58
Location	Build within lot lines	Within Lot 53	Within Lot 57	Within Lot 58
Landscaping	10% LSR (min)	20% LSR 7,245 sf	18% LSR 6,750 sf	57% LSR 27,401 sf
Floor Area	915,000 sf across Resort 334,675 sf exist; 580,325 sf allowed	112,952 sf purchased by owner 110,329 sf proposed		
		42,314 sf	43,110 sf	24,905 sf
Height	3 stories over basement	3 stories over basement	3 stories over basement	3 stories over basement
Bulk	1 building or many	1 building	2 buildings	1 building
Design	SKRMA approval, DRC review	SKRMA and DRC approval	SKRMA and DRC approval	SKRMA and DRC approval
APOs	2,208 across Resort 832 exist; 1,376 allowed	240 APOs purchased by owner 240 APOs proposed		
		104 APOs	88 APOs	48 APOs
Parking	1 space per unit, on-site	1.3/unit, on-site	1.1/unit, on-site	1.6/unit, on-site
Housing	Meet LDR standard	5.925 units req. 5 units on Lot 53 + fee-in-lieu	5.414 units req. 5 units on Lot 57 + fee-in-lieu	2.962 units req. 2 units on Lot 53 + fee-in-lieu

Please let us know if any questions arise during your review.

Sincerely,

Nick Orthmann, Bear Development

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Project Narratives

SITE OVERVIEW

The proposed project is comprised of four condominium buildings across 3 lots, located at Snow King Resort Lots 53, 57 & 58 (Sub-Area #3). These parcels are bounded by Snow King Loop Road and the Grand View Condos to the north and the Cowboy Coaster to the south. For purposes of this application, we are referring to each building as “Lot 53”, “Lot 58”, “Lot 57 North” and “Lot 57 South”.

Each building includes 3 stories of residential condo units above basement parking. The market units will be sold to individual owners, and those individuals can rent the units out short-term at their discretion. Affordable housing units are also included in the project. The goal of this development is to create a strong sense of place between the three lots while also relating to the overall design elements of the Snow King Resort and surrounding context.

	Lot 53	**Lot 57**	**Lot 58**
PIDN	22-41-16-34-3-04-001	22-41-16-34-3-07-001	22-41-16-34-3-07-002
Address	553, Upper Snow King Loop	510, Upper Snow King Loop	725, Upper Snow King Loop
Legal	Lot 53, Grand View Lodges 2nd Addition	Lot 57, Grand View Lodges 3rd Addition	Lot 58, Grand View Lodges 3rd Addition
Zone	PR-SK	PR-SK	PR-SK
Subarea	Master Plan Subarea 3	Master Plan Subarea 3	Master Plan Subarea 3
GSA	34,412 sf	36,155 sf	47,916 sf

The three lots sit on relatively steep terrain with ski-in, ski-out access to the Snow King Ski Resort. The plazas, roads, and interstitial spaces between these four buildings shall be enlivened with plantings and materials that connect to the style of the Snow King Resort and create a safe and welcoming environment. Parking garages will be enclosed with solid garage doors, and pedestrian walking will be encouraged. The buildings will be connected to the surrounding landscape for easy access to the ski slopes and the town center.

In addition to the development proposed on the above sites, access and utilities will be constructed in easements that access the site across SKRMA land. Discussions with SKRMA are ongoing, and agreements will be worked out prior to construction.

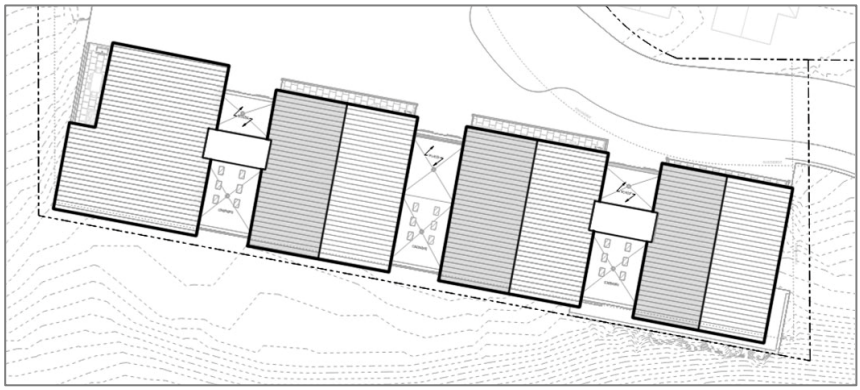
SUMMARY OF DESIGN CHANGES SINCE APRIL 15, 2025, PLANNING COMMISSION

Lot 57 – Summary of New Design Changes Since First Planning Commission Meeting

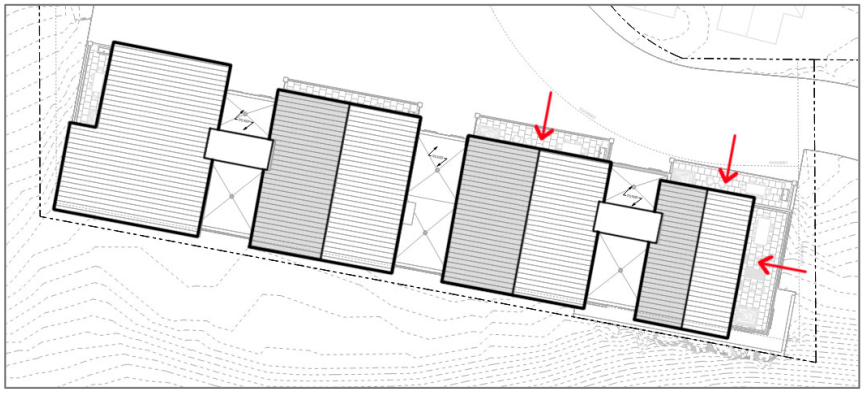
Change 1: Reduced the mass of the Lot 57 South building at the east end. The third floor eastern unit was changed from a 3-bedroom to a 2-bedroom and reduced in square footage. The eastern wall of this unit was pushed westward to create a larger stepback on the eastern façade. This also allowed us to entirely remove the north-facing balcony at that unit, which creates a large stepback at the north façade as well.



Revised Lot 57 South elevation



Previous roof plan



Revised roof plan

Change 2: Increased landscaped planting areas. The site plan was adjusted to add more planting for visual screening between the 57 South building and the neighbors to the north. The vehicular drop-off area was removed and replaced with a green planter with trees along the road. Additional planting areas for shrubs were added on either side of the south building parking garage entry. (Civil engineering advised that dense trees are not safe here because they would reduce visibility for cars turning out of the driveway.) Tall trees were also added east of the electrical transformer to screen it from neighbors.



Lot 57 – Previous Site Plan, revised for Planning Commission



*Lot 57 – **New** Revised Site Plan with added greenery*



View of added landscaping and reduced massing at east end of Lot 57 South Building

SUMMARY OF PREVIOUS DESIGN CHANGES AFTER OCT. 2024 DEVELOPMENT PLAN SUBMISSION, FOR APRIL PLANNING COMMISSION

In response to feedback received on the initial design, the design team has reduced the mass of each building to better align building with neighboring structures, moved the Lot 53 building further south and provided increased landscaping throughout the project site. The changes outlined below show updates to the site and building designs relative to our initial October 2024 Development Plan submission. All the design updates fit within the design guidelines and dimensional limitations of the Snow King Planned Resort District Master Plan.



Revised Aerial Rendering of Lots 57, 53, & 58

Lot 57 – Summary of Design Changes

Change 1: Increased landscaped areas. The sidewalk leading downhill from the 57 South building to the 57 North building was removed, allowing for additional planting to buffer between the North building and the street. The sidewalk to the east of the 57 South building was also removed to introduce more planting, including a planter along the north façade. This will further screen the South building's east entry and driveway. Crosswalks will be used to delineate the pedestrian walking paths from Lot 57 up to Lot 53 and 58.



Lot 57 – Previous Site Plan



Lot 57 – New Site Plan

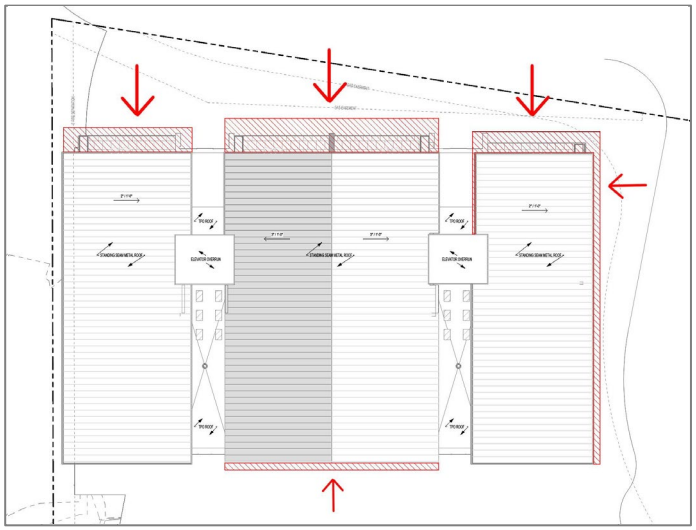
Change 2: North Building roof adjustments. The eastern shed roof was mirrored to slope in the opposite direction, resulting in a lower building height along the facade closest to Grand View. Additionally, all roofs were lowered by 1'-0" in height, and roof overhangs were pulled back to only extend 3'-0" from the exterior wall.



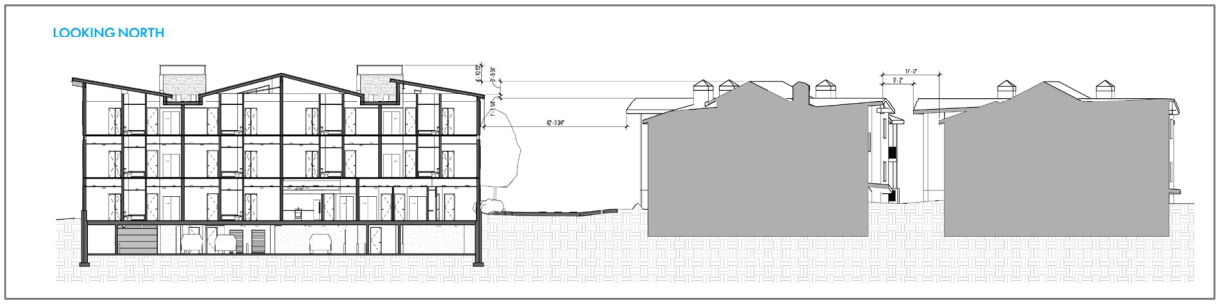
Lot 57 North – Previous Elevation



Lot 57 North – New Elevation

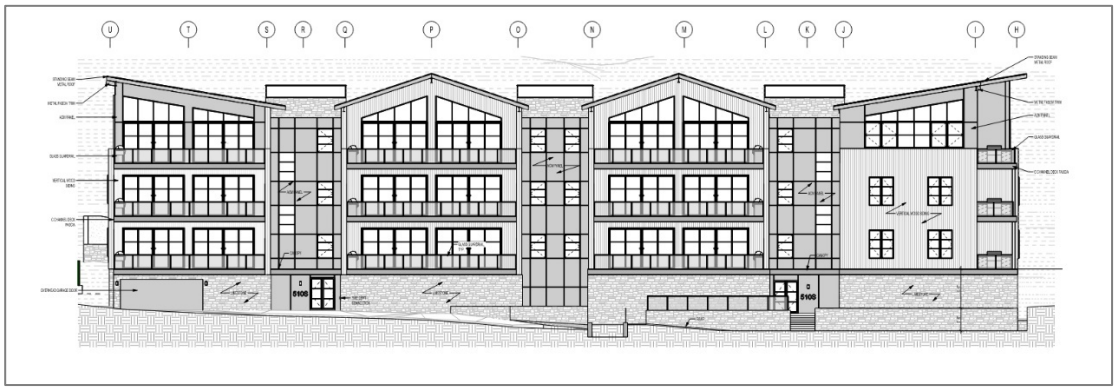


Lot 57 North – Reductions in Roof Footprint Noted in Red

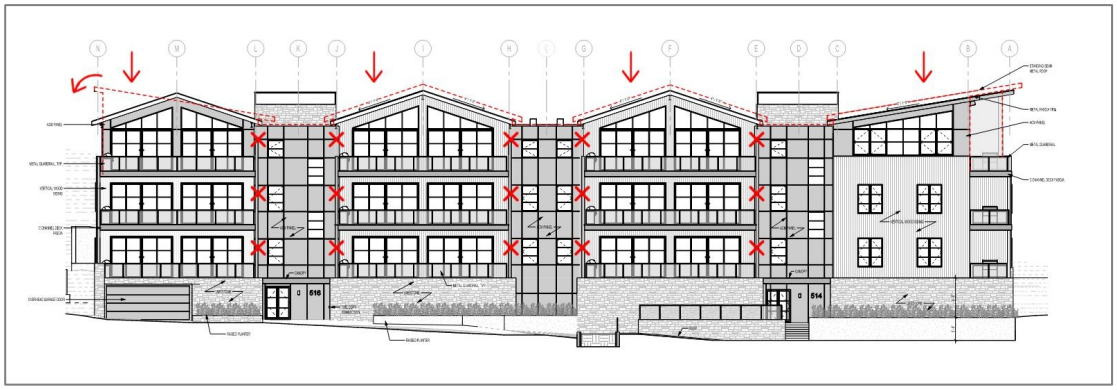


Site Section showing the relationship in heights between Lot 57 North and the adjacent Grand View buildings

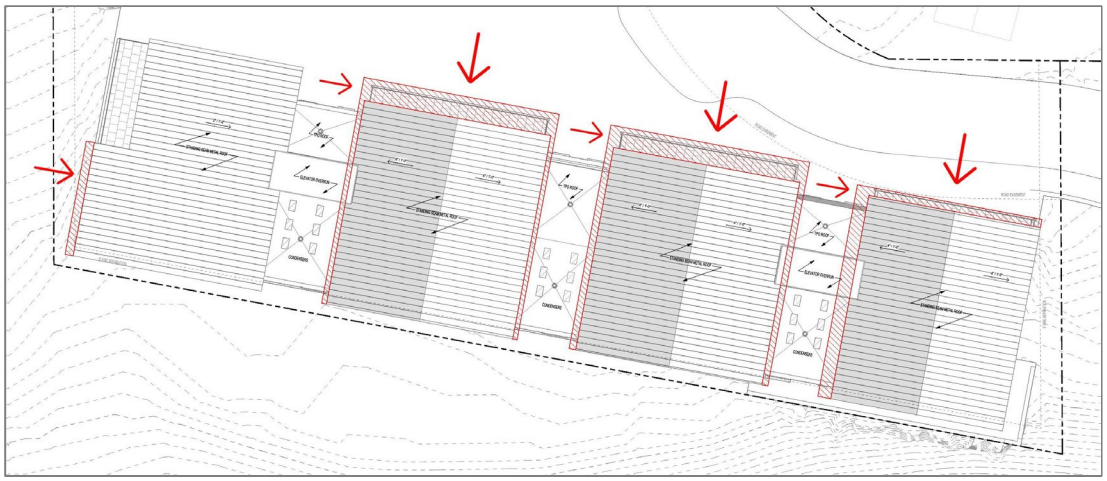
Change 3: South Building roof adjustments. The easternmost roof was changed to a gable roof, which greatly reduces the height of the building at the east façade. Additionally, all roofs were lowered by 1’-0” in height, and roof overhangs were pulled back to only extend 3’-0” from the exterior wall.



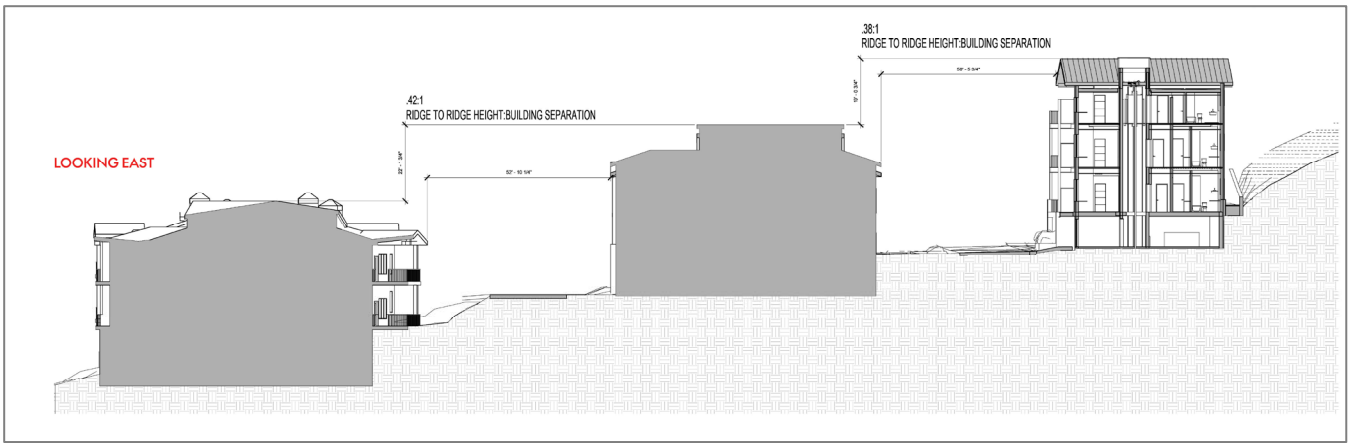
Lot 57 South – Previous Elevation



Lot 57 South – New Elevation



Lot 57 South – Reductions in Roof Footprint Noted in Red



Site Section showing the relationship in heights between Lot 57 South and the downhill Grand View buildings

Change 4: Reduction of solid walls at balconies. As shown in red 'X' labels on the preceding elevation diagrams, both the North and South buildings' balconies were redesigned to be more open-air and less enclosed by solid walls flanking each end.



Lot 57 North – Previous Solid Balcony Walls



Lot 57 North – New Open Balcony Guardrails

Lot 53 – Summary of Design Changes

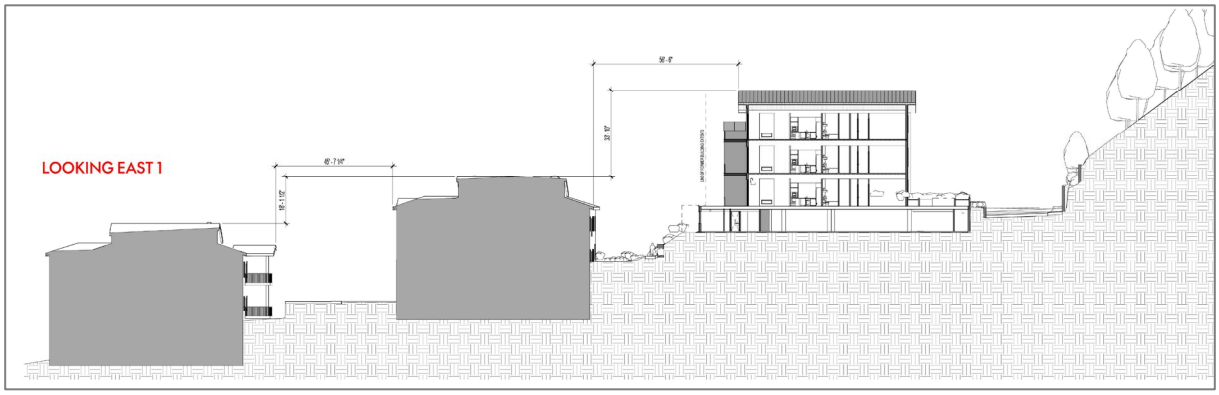
Change 5: Pushed back the entire Lot 53 building away from Grand View. The first, second, and third floor units were pulled south 15'-0" on average and 5'-0" at the central fire truck turnaround. The north basement floor plan was also pulled south an average of 5'-0" to create more space between this building and the neighbors to the north. A secondary retaining wall was removed at the north setback, allowing for additional planting and boulders to mediate the space between the two lots. Linear planter boxes were also added along the north edge of the basement roof to help create a screen between Grand View and the Lot 53 first floor terraces.



Lot 53 – Previous Site Plan



Lot 53 – New Site Plan



Site Section showing the relationship in heights between Lot 53 and the downhill Grand View buildings



Lot 53 – Setbacks and Landscape Buffers Between Lot 53 & Grand View

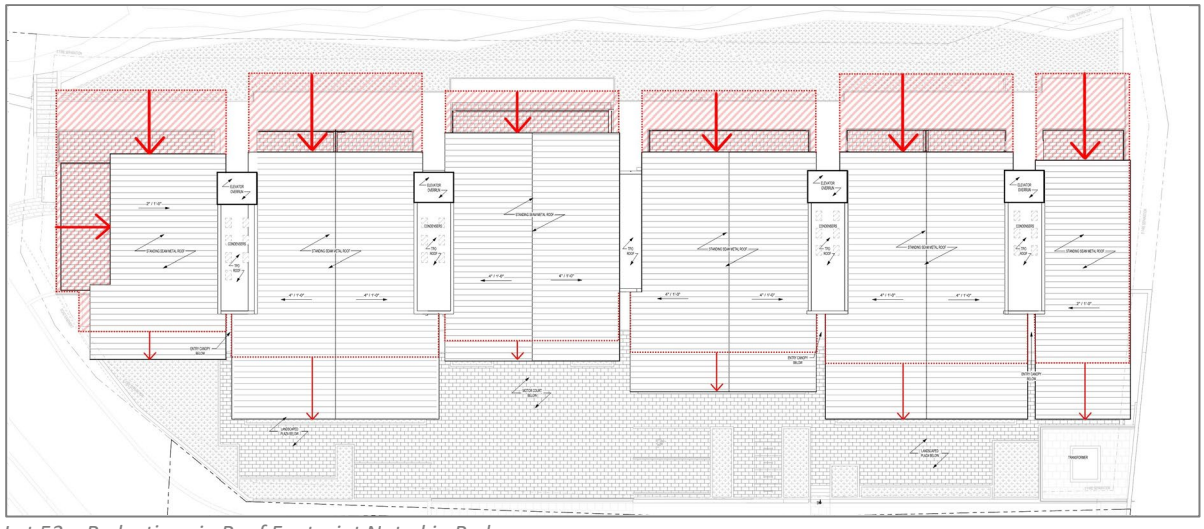
Change 6: Roof adjustments. In additional to pulling the building south, the third floor roofs were also reduced in size and in height. All the gable roofs were lowered by 1’-0” in height, and the shed roofs on the east and west end were lowered by 2’-0”. Additionally, roof overhangs were pulled back to only extend 3’-0” from the exterior walls.



Lot 53 – Previous Elevation



Lot 53 – New Elevation



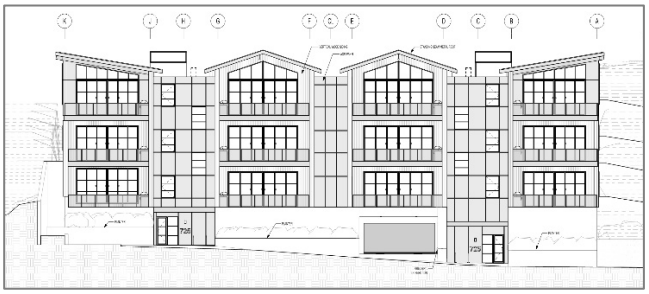
Lot 53 – Reductions in Roof Footprint Noted in Red

Change 7: Western unit stepback. As shown in the roof plan above, the third-floor western unit footprint was adjusted to greatly reduce the visual massing along the west façade. Its western exterior wall was pushed east another 10’-6”, and its roof footprint was also drastically pulled back to reduce the visual overhang.

Change 8: Reduction of solid walls at balconies. As shown in red ‘X’ labels on the preceding elevation diagrams, both the Lot 53 balconies were redesigned to be surrounded by more open-air guardrails and fewer solid walls at each end.

Lot 58 – Summary of Design Changes

Change 9: Reduction of solid walls at balconies. As shown in red ‘X’ labels below, both the Lot 53 balconies were redesigned to be surrounded by more open-air guardrails and fewer solid walls at each end.



Lot 58 – Previous Elevation



Lot 58 – New Elevation

MASTER PLAN COMPLIANCE NARRATIVE

The Snow King Resort Master Plan (Master Plan) that governs development on the subject property was approved in 2019. It establishes the entitlements and development standards for the site, addresses the major questions of development character, location, bulk, and scale, and addresses infrastructure and other considerations on a Resort-wide basis. It also serves as the Sketch Plan for all development within the Resort. The Master Plan has 12 Chapters. Applicability of each chapter to this application is discussed below.

Introduction

While the introduction does not include any standards for new development, it is instructive on how to read and use the various chapters of the Master Plan. In general, Chapters I-III of the Master Plan memorializes the compliance of the Master Plan with the Land Development Regulations and Comprehensive Plan. Chapters IV-X establish standards for new development and are the primary focus of this application. Finally, Chapters XI-XII establish standards for the continued operation of the ski hill and administration of the Resort.

More specifically, the introduction is clear that the site plans are conceptual (p.3). They establish the general location of development, open space, and pedestrian connectivity through lot lines and subarea boundaries. They illustrate the example development used to plan for the overall impact on public infrastructure. Where specific setbacks and heights, setbacks, and other dimensional limitations are required to achieve the desired character, they are specified in Chapter VII, Dimensional Limitations Plan. Where dimensions are not specified, the Master Plan relies on the Design Guidelines in Chapter VI to ensure consistency with the Master Plan (p.5). SKRMA administers the Snow King Design Guidelines with review by the Town DRC (p.54).

I. Statement of Purpose

This Chapter states the purpose of the Master Plan. Demonstration of our proposal's consistency with that purpose is the product of the totality of this application.

II. Consistent with Comp Plan

This Chapter outlines compliance of the Master Plan with the Jackson/Teton County Comprehensive Plan. By demonstrating compliance with the Master Plan, our application is also consistent with the Comprehensive Plan.

III. Compliance with LDRs

This Chapter outlines compliance of the Master Plan with the Town of Jackson Land Development Regulations. By demonstrating compliance with the Master Plan, our application is also consistent with the Land Development Regulations governing Resorts (Div. 4.3). See below for additional demonstration of compliance with the LDRs not addressed by the Master Plan.

IV. Master Site Plans

The Master Plan divides the Resort into subareas. The proposed development is in Subarea 3, which also includes the Love Ridge and Grand View condominiums and the Grand View Lodge. The Master Site Plans establish the lot lines within which the development must occur. While the Master Site Plans depict buildings to illustrate the overall location and scale of development, the bounds of the development location for Subarea 3 are the lot lines with no additional setbacks. Throughout the Master Plan, the site plans are referred to as conceptual except where setbacks are established for specific subarea – no setbacks are established for Subarea 3. The lots are

already set back from neighboring properties. Our proposed buildings are within each lot and, on Lot 58, pulled down the hill to limit disturbance.

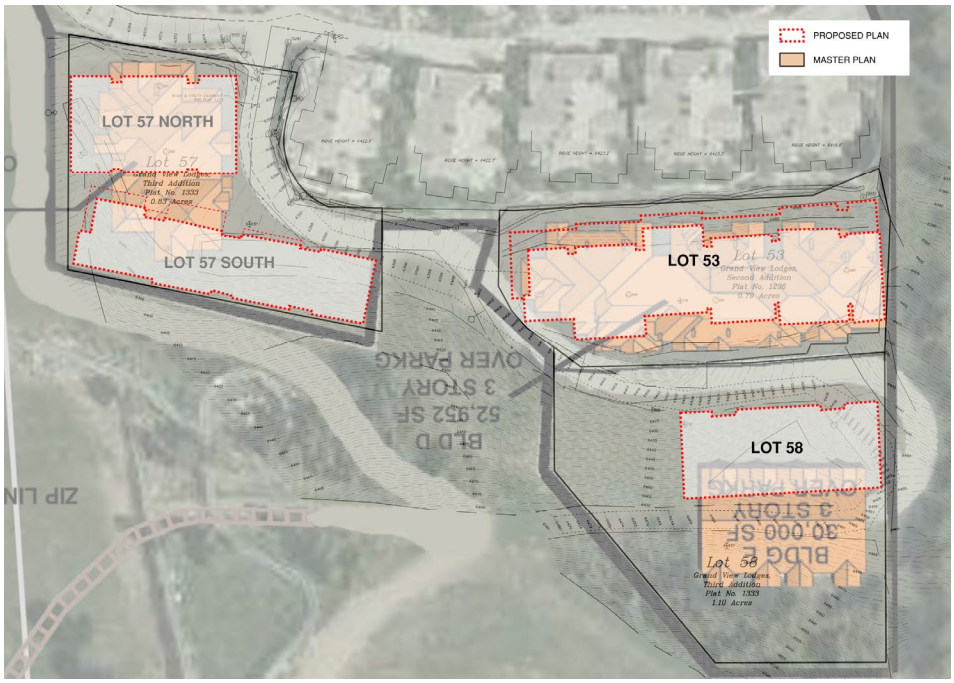


Figure 1 - Proposed site plan overlayed on Master Site Plan

The Master Site Plan also includes a circulation plan that indicates where sidewalks should be provided. Our proposal provides not only the Master Plan sidewalks but additional pedestrian connectivity of the site to the Resort's recreational amenities.

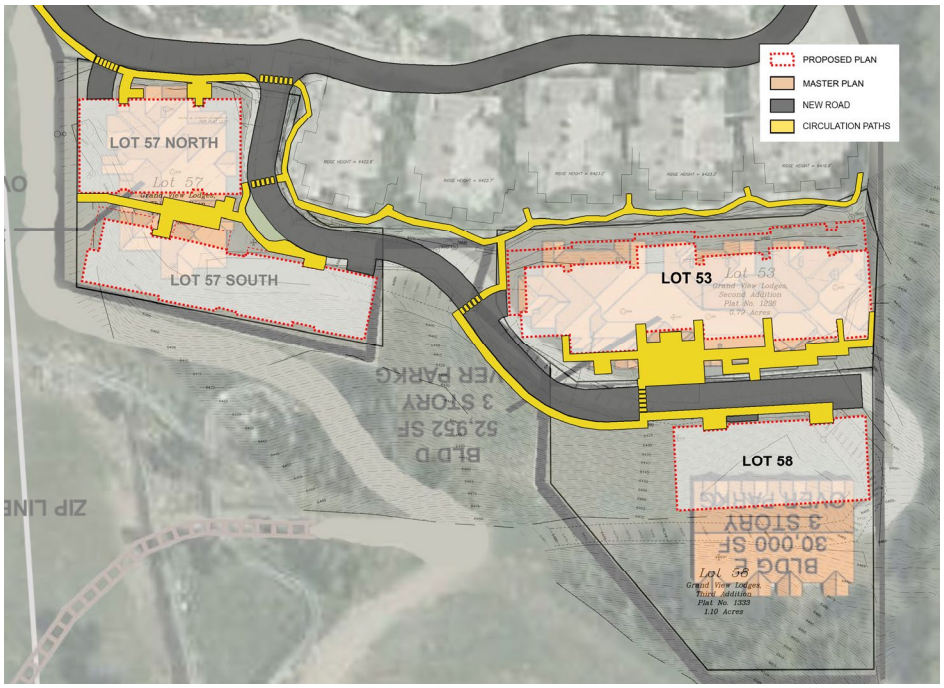


Figure 2 - Proposed pedestrian circulation plan overlayed on Master Sidewalk Plan

V. Land Use Plan

The proposed residential and short-term rental of the market condominiums are each a by-right use in Subarea 3 of the Snow King Master Plan, as is affordable workforce housing (also referred to as "Employee Housing" in the Master Plan). These uses are also the type of development anticipated in the example development table, making the proposal consistent with the resort-wide impact planning done during Master Plan approval. Below is a table showing the mix of market and affordable units by bedroom.

AREA & UNIT MIX OVERVIEW

SITE	FAR SUBTOTAL (SF)	GROSS AREA SUBTOTAL (SF)	# 1 BEDS	# 2 BEDS	# 3 BEDS	# 4 BEDS	MARKET UNIT COUNT	REQ. # OF AFF. UNITS	AFF. 1-BEDS REQ.	AFF. 1-BEDS PROVIDED	AFF. 2-BEDS REQ.	AFF. 2-BEDS PROVIDED	AFF. 3-BEDS REQ.	AFF. 3-BEDS PROVIDED	TOTAL AFF. UNITS REQ.	TOTAL AFF. UNITS PROVIDED	TOTAL REQUIRED PARKING	PARKING PROVIDED	PARKING PROV. INCL. TANDEM
LOT 57 NORTH	18,571	31,957	0	10	0	0	10	5.414	2	2	2	1	1	1	5	4	14	15	19
LOT 57 SOUTH	24,539	36,812	0	5	5	2	12			0		1		0		1	13	14	22
								PHASE 1: LOT 57	2	2	2	2	1	1	5	5			
										AFF. 1-BEDS OK		AFF. 2-BEDS OK		AFF. 3-BEDS OK	TOTAL REQ.	TOTAL AFF. OK			
LOT 53	42,314	71,705	1	18	7	0	26	5.822	2	3	2	3	1	1	5	7	33	42	57
LOT 58	24,905	34,849	0	7	5	0	12	2.962	1	0	1	0	0	0	2	0	12	19	19
								PHASE 2: LOTS 53 & 58	3	3	3	3	1	1	7	7			
										AFF. 1-BEDS OK		AFF. 2-BEDS OK		AFF. 3-BEDS OK	TOTAL REQ.	TOTAL AFF. OK			
									REQ.	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED			
	110,329	175,323	1	40	17	2	60	ALL LOTS TOTAL	5	5	5	5	2	2	12	12	72	90	117
	TOTAL FAR AREA	TOTAL GROSS AREA	1-BEDS	2-BEDS	3-BEDS	4-BEDS	MARKET UNITS			AFF. 1-BEDS OK		AFF. 2-BEDS OK		AFF. 3-BEDS OK	TOTAL REQ.	TOTAL AFF. OK	REQ.	PROVIDED	PROVIDED INCL. TANDEM
			2%	67%	28%	3%													

MAX. SHORT TERM	112,952
OVER/UNDER	-2,623
	UNDER

VI. Design Guidelines

The Master Plan Design Guidelines (not the Town Design Guidelines) govern development in the Resort. The Master Plan Design Guidelines are administered by SKRMA with review by the Town DRC. As required by the Master Plan, the proposal has been approved as consistent with the Master Plan Design Guidelines by both the Snow King Resort Master Association (SKRMA), on May 23, 2024, and the Town of Jackson Design Review Committee (DRC), on June 12, 2024. SKRMA's approval letter is attached. Since the reviews by SKRMA and the DRC, the configuration of the units and Lot 53 entrance has changed slightly – increasing the pedestrian space and further breaking up the massing Lot 53 so that it reads as multiple buildings similar to the neighboring Grand View development.

Below is a detailed description of the project's compliance with the Design Guidelines, which is unchanged from the SKRMA and DRC submittals. See also the Architectural, Civil & Landscape Plans for plans and renderings of the proposed development.

A. Introduction.

The introduction establishes the Snow King Master Plan Design Guidelines (Design Guidelines) as the method by which a proposal is evaluated for compliance with Section 4.3.1.F.7 of the Town of Jackson Land Development Regulations (LDRs). It establishes SKRMA as the administrator of the Design Guidelines and the DRC as a review entity.

B. Design Guidelines. Character and Design Objectives.

Despite its title, Section B applies specifically to the portion of the resort fronting Snow King Avenue and is not applicable to Lots 53, 57, and 58. The general statements regarding pathways and relationship to the ski hill (B.8 and B.9) are addressed later in the guidelines as they apply to Lots 53, 57, and 58 (C.6).

C. Design Guidelines. General Purposes. The general purpose of the design guidelines is to create visual variety while maintaining a sense of cohesiveness- balancing control and connectivity with enough flexibility in choice of materials and style to give life to the resort. New architecture in the Resort is to have, "clean rooflines, taper-sawn shake roofs, and clearly expressed structure." "While rustic character has been adopted for other resorts, a more direct simple architecture that capitalizes on large areas of glass, simple roof forms and tautly detailed elegant materials, will distinguish Snow King from other Jackson experiences."

The proposed development on Lots 53, 57 & 58 achieves this by integrating the materials and forms from the Grand View development with the more recent development at the Rafferty base area and Snow King summit. The vertical elements, recessed forms, stone base, siding, and roof gables all reference Grand View design and massing, while the single-pitch roofs and larger windows on the building ends reference the on-mountain design and desire for simpler forms and more glass.

The remainder of Section C spells out the LDR requirements for the Design Guidelines, which are specified for Snow King in the Sections that follow.

D. Architectural Design Guidelines.

1. Building Form, Massing and Character:

The design fits in with the ToJ context with its simple but elegant architectural forms and materials. The public spaces between buildings shall be comfortable landscaped plazas that encourage pedestrian activity.

> Buildings must feel as if they fit in the context of the Town of Jackson. They should not seem "imported" from someplace else. They must not overwhelm the pedestrian scale. Building masses will be broken down through the use of covered arcades at pedestrian levels and through the use of building envelopes that require the structures to step back away from the street or plaza.

The design references all of the surrounding development in a way that cohesively completes Subarea 3. The vertical elements of the hotel, siting and materials of Grand View and modern roof lines of the Rafferty base are all incorporated into the proposal.

> Architectural forms will be simple and practical, not elaborate. They must reflect an ability to deal with the severe climate and have honesty and directness similar to the best indigenous structures such as barns and sheds, or some of the structures in Yellowstone and Grand Teton National Parks.

The architecture forms reference the Grand View development while also introducing some of the simplicity and practicality incorporated into the more modern development at the base of Rafferty.

> In general, building forms should be used to create definable public spaces between buildings. Buildings affronting plazas should create an edge that defines the space. Buildings on the south side of a plaza step back above the second story to allow light into the plaza. Where building facades face the mountains or non-pedestrian spaces, buildings will be allowed to rise without necessarily stepping back.

The proposal includes an east-west pedestrian experience that begins with a plaza on Lot 53 and extends to the west via sidewalk to another plaza between the buildings on Lot 57 feeding out onto the ski slopes at the base of Rafferty. The south building on Lot 57 is set back from the plaza by pedestrian scale landscape terraces that

provide form for the plaza while setting back the building to provide light. On Lot 58 especially, the building has to be tall enough as viewed from the downhill side so that the retaining wall holding back the hill is not taller than the building itself. The terraced pedestrian experience is what maintains the human scale given the steep slopes. The largest facade, on Lot 53, faces away from the primary pedestrian axis of the development, but includes stepbacks at the first and third floors to provide light to the pedestrian path behind the adjacent Grand View development.

> Buildings should be sited to help shape the spaces around them and to create a sense of "street space" by lining up with adjacent buildings where possible.

The buildings are sited to continue the east-west pattern of Grand View that follows the contours around the hill and breaks mass into separate buildings that step up the hill so that lower buildings hide the lower floors of the buildings above and behind them instead of singular masses running up the hill. Where this is most evident is Lot 57, where the single building shown on the Master Site Plan is broken into 2 buildings that better align and connect the development to Grand View.

> Buildings should employ various architectural devices to help bring the masses to a more friendly, pedestrian scale. Changing materials, breaking the wall line, using different roof forms and adding balconies or projecting bays are some of these devices.

The proposal breaks the development on the 3 lots into four separate buildings, literally breaking the mass, while also employing balconies, varied roof forms and wall recesses that break up the mass further. The development is also socketed into the hillside so that the mass of each building varies on each side.

> Larger buildings may be broken into smaller elements that appear to be an aggregation of smaller buildings. Overly differentiated facades on a single building are to be avoided however.

The vertical recesses along each building's front façade, which range in width between 10 to 18 feet, help to break down each building into a language of aggregated masses separated by recessed gaps. These mirror the Grand View development, where buildings are separated by gaps of a similar scale and, once landscaped, create the same mass-breaking effect.

2. Roofs:

The project's roofs reflect the neighboring architecture, namely: the majority of the roofs, which are gabled, tie into the Love Ridge condos to the north; and a few shed roofs pay homage to the long, sloped roofs of the Snow King Resort Hotel. The majority of roofs are 4:12 gable roofs, with a few shallower shed roofs.

> In order to be sympathetic to the existing Snow King Resort, new buildings must relate to existing architecture by using similar roof forms, generous roof overhangs, and some similar materials such as heavy timber beams holding up roof overhangs.

The roof forms reference the Grand View and Rafferty base area developments.

Primary roofs must be sloped and in keeping with existing roofs, their slopes should predominantly be in the range of 4:12 to 7:12. Flat roofs and parapet roofs will be allowed where they act as connectors from one gabled roof to another and at larger spaces where necessary and not visible from street or plaza levels or where practical for best incorporating structures into the surrounding built environment. Special consideration is to be given to designing roofs in reference with nearby pedestrian uses. Roof materials should be as consistent as possible throughout the Resort.

Gabled roofs throughout each Lot have a 4:12 slope, except at Lot 57, where the gable roof slopes were reduced to 3½:12 at the South building and 3:12 at the North building in order to reduce the overall height. Across all lots, shed roof lines at the edge of each building are 2:12 while referencing the Rafferty base area development.

Large roof overhangs should be held up by heavy timber beams or knee braces. Eave lines should be kept thin to avoid the heavy look of typical cold roof structures with 20" fascias.

Roof overhangs are held up by vertical wood structures that reference the vertical elements of the nearby hotel. Roof lines are kept thin.

3. Exterior Materials: Buildings shall sit on masonry bases, and feel as if they are firmly rooted in the ground. Stone, cultured stone, stucco, synthetic stucco and concrete will withstand the extreme weather conditions and pilling up of snow along the foundations.

   Appropriate materials above the ground level will predominantly be stone, cultured stone, wood siding, wood shingles, heavy timber, logs and glass. Other materials such as brick, stucco, synthetic stucco, oxidized steel, and board-formed concrete will also be allowed to a lesser extent. Buildings should have texture and visible structural purpose.

The buildings sit on stone bases in order to appear “rooted” in the natural hillside environment. Upper stories use wood, metal, and glass to give a lightweight appearance to the structure, and to create a feeling of connection with the surrounding forest. Like its neighbors, this project incorporates natural wood cladding to blend in with the surrounding environment. The warm hues of the stained wood pay homage to the range of wood tones found throughout the Resort. Each building sits on a stone base whose texture references the natural rock found on the mountain while also serving as a contemporary corollary to the stone bases of neighboring buildings. Metal accents on the facades and roofs connect the project to the other modern buildings at the resort.

4. Windows: Windows at the pedestrian level should be as large as possible given the function behind them. For retail and/or hotel frontage windows should represent approximately 75% of the linear frontage.

Ground level windows are larger at pedestrian entries; they are limited at basement garages in order to hide vehicles from sight. Due to the steep nature of the hillside, portions of the 1st and 2nd floors are visible to pedestrians and also use large glassy window openings at residential balconies.

Above the ground floor, there is no minimum requirement of window to wall. In keeping with the existing Snow King Hotel and its available views in all directions, large windows are encouraged. When in heavy walls of stone or concrete, windows should appear to be "punched", and they should have lintels of timber or stone. Metal clad windows, wood windows, and nonreflective aluminum storefront windows are all permitted. Darker colors of the windows are encouraged.

The proposal incorporates large metal-clad windows in all directions very much in keeping with the hotel. Cladding will be black.

Divided light windows, if used, must have real divisions, either true divided light or simulated divided light with metal spacers between the double panes of glass. Snap-in false mountings will not be permitted. Generally larger expanses of glass are preferred to small divisions.

Proposed windows will have real divisions, and the larger expanses of glass match the scale of the glass on the Rafferty base area and Hotel lobby/restaurant windows.

5. Commercial Frontage, Entryways: The proposal does not include retail or hotel storefronts.

6. Decks and Balconies: Decks and balconies add functional amenity to the resort but also become part of the design palette used to add character and create variety on the building exterior. Where possible balconies and decks should be located to take advantage of solar exposure and/or views. Long, linear balconies are not permitted.

Decks and balconies with strong vertical orientation similar to the hotel are a key aspect of the design. They are oriented toward mountain views due to the south aspect of the development being set into the slope. Each residential unit has a generous balcony with views toward the Resort, the town, and Tetons beyond. Balconies are broken up by vertical walls and stepped back portions of the façade to create variety and depth in the massing.

7. Walkways: To promote the sense of a unified resort with pedestrian accessibility, buildings should have covered walkways on facades along which connections can be made to other buildings in the village. Wherever possible these walkways should have retail stores and restaurants and other visually interesting spaces along them. All buildings must take into account pedestrian access to all adjacent buildings and the rest of the Snow King Resort.

Pedestrian accessibility is promoted through outdoor walkways and planted areas that encourage outdoor activity. The proposal connects to the pedestrian paths and sidewalks of the Grand View Lodge and condominiums and moves visitors through two plazas toward the hotel and Rafferty base area. The proposal does not include any retail frontage.

8. Color: The use of color should support and reinforce the overall design theme for Snow King Resort. As a year-round resort, colors chosen must work well in all seasons and help the resort blend with its town context as well as with the natural landscape. Color schemes should be built around natural materials, such as stone and wood. Earth hues, natural colors of foliage, deadfall timber and dried grasses are all appropriate. Primary or bright colors should be used sparingly, as accents to highlight the more muted color schemes. Use of "day glow" colors is not allowed. On wood, stains are preferred over paint.

The overarching warm brown wood tones, interspersed with some gray metal and light concrete tones, will blend in nicely with the environment in all seasons. The proposal employs warm hues of stained wood above stone bases. No bright colors are employed and recessed areas utilize darker colors that pull them back further.

9. Lighting: The lighting systems will serve functional and aesthetic roles that include:
    - Providing security and visual safety
    - Serving as directional indicators for vehicular and pedestrian traffic
    - Providing extended outdoor use time, particularly in pedestrian areas,
    - Reinforcing the identity and character through form, color, and materials of fixtures, visual light quality and placement

    Lighting must be designed and configured in conformance to Town of Jackson standards. Light sources must be shielded so as not to reflect direct light upon adjacent buildings or properties.

Lighting will be designed to comply with Sec. 5.3.1 of the LDRs.

Pedestrian scale lighting: The use of low level light sources at the pedestrian scale to accent or illuminate the ground plane provides a special opportunity to reinforce Snow King's unique identity and character. This is achieved by the use of proper fixtures at lower mounting heights to produce a more intimate effect. At night, the fixtures provide light necessary for safety and visual effect. By day, the fixtures should lend animation and scale to the pedestrian environment. Fixtures at a maximum height of 16 feet will be used for these pedestrian areas. Painted steel will only be used for accent.

Additional pedestrian scale lights may be used including bollard lights at approximately 42" in height, and canister type lights on overhead structures. Lighting for pedestrian areas should be incorporated into the buildings whenever possible.

The lighting design across the site will provide a sense of comfort, safety, and elegance to the project. A combination of low-level pedestrian light sources along pathways and recessed lighting at entry canopies will create a welcoming environment.

9. Disabled Accessibility: Consideration for the disabled must be a part of the design process for any project. Every structure shall be accessible by the disabled through the use of ramps (not to exceed 8%) and/or elevators. All outdoor pedestrian areas must be accessible.

All buildings and walkways will be accessible.

10. Sub Area 2. Specific Guidelines. The proposal is not in Subarea 2.

E. Site Design Guidelines. Plant Palette.

The landscaping and architectural design of site walkways and walls will integrate the building into the hillside; indigenous plantings will screen the building and enhance the shared plazas.

Site design at the Snow King Resort focuses on plant palette and design, pedestrian circulation, site architectural features and the colors and materials that comprise the build environment. Snow King's setting is both urban and rural. On the one hand the in- town location provides a diverse urban design context. This context generally implies that the site design will be dominated by landscape with formal plantings. Conversely, the resort is built into the base of a forested mountain and is bounded by the Bridger-Teton National Forest. This context usually implies a more random or natural site design. The objective will be to intertwine these two design goals, in a transitional manner, without creating confusion.

The landscape plans manage the tension between the urban and rural, formal and natural, tame and wild that are inherent to the site's relationship to town and the Bridger-Teton National forest through the use of inward facing planting spaces that reference the plantings in relationship to the built and urban nature of the site, and views outward from these "internal" planting areas that form a relationship between the on-site landscape outward to the broader context of the surrounding natural landscape. Planting scale and proximity to the pedestrian experience further enhances this relationship with planters and plantings at the pedestrian scale expanding outward to terraced landscaping areas in keeping with the natural slope and scale of plant material surrounding the site.

Just as the resort straddles a seam between the urban and rural environments it is located at the interface of three different plant communities. The lower portions of the site are dominated by the sage/grassland and the Aspen/Chokecherry communities; remnants of these communities still exist along the eastern boundary of the PRD. The higher, moister portions of the site exhibit a Douglas Fir and Spruce plant community.

The landscape plan is developed with a sensitivity to the varying plant communities on and around the site and responds accordingly to, where appropriate, integrate and complement plant species from each of the surrounding distinct plant communities.

Plantings around the resort should mimic these existing communities. Replication of the endemic plants also provides an excellent opportunity to provide visitors with information about the local flora. These plants will also provide an adaptable palette necessary to flourish in the wide variety of moisture, light and temperature conditions, which large buildings create and will also help to weave the rural with the urban environments.

Endemic plants are most suited for use in the climatic and seasonal conditions in which they naturally thrive and are used as such in the landscape design. Plantings of local flora further consider the unique microclimatic conditions created by buildings on the site and are designed in such a way to provide seasonal planting interest year-round throughout the site.

Other planting materials of sufficient caliper will be used to screen and enhance the buildings. In general, the plant material will be in accordance with the Land Development Regulations, except for areas designated as Ski Trails and Outdoor Recreation.

In accordance with the Land Development Regulations, the plant material, landscape plans, and architecture of the buildings on the site seek a symbiotic relationship where each complement and enhance the others, developing visual interests from within and outside of the site, creating, and where appropriate, screening views.

Detailed Landscape Plans will be part of each Final Development Permit Application.

See the Landscape Details. These landscape plans provide plant material in accordance with the Land Development Regulations that enhance the pedestrian experience of the site and buildings, and weaves together the unique urban and rural nature of surroundings.

F. Pathways and Circulation Elements. The proposal includes concrete sidewalks and stairs that connect the development to the existing and planned trail system and the rest of the Resort. The sidewalks encourage visitors to the development to access Resort amenities by foot and provide direct access to the ski hill. The sidewalks connect outdoor plazas on Lots 53 and 57. The open plazas at Lots 53 & 57 are meant to encourage outdoor activity; the ski-in/ski-out nature of the property also encourages pedestrian activity on all 3 lots.

G. Signage. Signage will be provided in non-reflective matte metals that are earth-toned with lighting incorporated. Lighting will comply with Town standards.

VII. Dimensional Limitations

The Master Plan's dimensional limitations include a pool of floor area and lodging capacity, conceptual three-dimensional building envelopes, and sub-area-specific considerations. Where dimensional limitations are not specified, the Design Guidelines are relied upon to achieve the desired character with the conceptual illustrations as guidance for developers, SKRMA, and the Town DRC. For Subarea 3, the only specified dimensional limitations are:

- Overall Master Plan Floor Area and APOs
- An LSR of 10%
- A limit of 3 stories over a basement.

Each is addressed below. Unlike Subareas 2 and 5, the illustrations for Subarea 3 are not dimensioned, emphasizing their conceptual nature for use in relating the Design Guidelines to the site rather than specifying an exact three-dimensional envelope. As discussed above, both SKRMA and the Town DRC have found the proposal consistent with the Design Guidelines and intent of the subarea.

FAR and APOs

Topic	Master Plan Standard	Lot 53	Lot 57	Lot 58
Floor Area	915,000 sf across Resort 334,675 sf exist; 580,325 sf allowed	112,952 sf purchased by owner 110,329 sf proposed		
		42,314 sf	43,110 sf	24,905 sf
APOs	2,208 across Resort 832 exist; 1,376 allowed	240 APOs purchased by owner 240 APOs proposed		
		104 APOs	88 APOs	48 APOs

The Master Plan has a pool of allowed floor area (915,000 sf) and lodging capacity (2,208 APOs) that can be built throughout the Resort. We have purchased 112,952 sf of floor area and 240 APOs for the development of this site. Beyond this development, about 470,000 sf and 1,140 APOs will be left to be developed in the Resort. A more detailed accounting and verification of development rights is included in the SKRMA approval letter and attachments. Since our original submittal, SKRMA has updated its accounting of APOs on other sites within the resort, an updated table of APOs is attached to the resubmittal.

The Master Plan also establishes cumulative FARs for Subareas 1-5 and Subareas 1-4, but they are irrelevant because the allowed floor area from those FARs is greater than the 915,000 sf limit on overall development.

Building Envelope

For an individual development, the Master Plan relies on the concept of three-dimensional building envelopes to define the appropriate bulk and scale. The site of this proposal is tucked into the hillside behind the interface of the resort with the rest of the Town of Jackson, and as a result, the building envelope for this site has limited definition. The Master Plan emphasizes that the building envelopes are intended to be flexible and should be used in coordination with the Design Guidelines. The Master Plan also includes renderings to illustrate how the building envelopes can be implemented for some sites. For Lots 53 and 57, the Master Plan includes undimensioned sketches of previously approved buildings. Please see the Master Plan Analysis section of the Architectural Plans for comparisons of those sketches to our proposal.

Our proposal meets the design guidelines as approved by SKRMA and the DRC, the dimensional limitations as demonstrated throughout the rest of this section, and is consistent with the three-dimensional building envelope illustrations for Lots 53 and 57 as demonstrated in the Architectural Plans.

Subarea 3 Standards – Bulk, scale, mass, and height

Topic	Master Plan Standard	Lot 53	Lot 57	Lot 58
Bulk	1 building or many	1 building	2 buildings	1 building
Height	3 stories over basement	3 stories over basement	3 stories over basement	3 stories over basement

The master plan allows for development on lots 53, 57 & 58 to be in one or many buildings (p. 70). On Lot 57 there are 2 buildings. On Lots 53 and 58, there is one building per lot. The building and unit mix table above in the Land Use section details how the mass is broken up across the buildings.

The Master Plan also limits development in Subarea 3 to three stories above a basement. Each building has three stories above a basement. The floor area allowances of the Master Plan exempt basement floor area and floor area for required housing. The Proposed Design Overview in the Architectural Plans outlines the floor area that is and is not exempt on each level of each building.

Compliance with the definition of basement is demonstrated for each building in the Architectural Plans specific to each lot. That the isolated area around the garage entrance on Lot 58 is taller than 10’ to meet grade is consistent with how underground parking entrances have been accommodated throughout Town. The retaining walls used for site grading are not relevant to the basement definition because their purpose is not to elevate the buildings. They are necessary to accommodate the slope and build a road that meets fire protection standards. The existing grading and retaining wall on Lot 53 are evidence of the fact that the Master Plan has always contemplated site grading and retaining as being necessary. The Master Plan Analysis section of the Architectural Plans demonstrates the site retention that would have been needed under the previously approved development on Lots 53 and 57 and the anticipated development of Lot 58.

Our proposal lowers the buildings from what is suggested in the Master Plan, with the retaining walls representing the infrastructure that was always anticipated by the Master Site Plan. If the building on Lot 58 were

any lower, the retaining wall behind the building would be taller than the building itself. And, with the building on Lot 58 set as low as possible, the buildings below it cannot be lowered without making the road too steep.
The Master Plan Analysis section of the Architectural Plans of the attached drawings illustrates how our proposed building location on Lot 58 reduces the amount of disturbance anticipated by the Master Plan and significantly lowers the building.

Subarea 3 Standards – Parking (LDR Standards also discussed)

SITE	TOTAL REQUIRED PARKING	PARKING PROVIDED	PARKING PROV. INCL. TANDEM	TOTAL # BEDROOMS	REQ. BIKE PARKING	REQ. BIKES, SHORT-TERM (25% x .75/bed)	REQ. BIKES, LONG-TERM (75% x .75/bed)	NOTES
LOT 57 NORTH	14	**15**	**19**	27	21	6	15	EVSE spaces: 6 capable + 1 installed. Short-term bike parking at outdoor spaces; long-term located in garages.
LOT 57 SOUTH	13	**14**	**22**	35	27	7	20	EVSE spaces: 7 capable + 1 installed.
LOT 53	33	**42**	**57**	70	53	14	39	EVSE spaces: 17 capable + 3 installed.
LOT 58	12	**19**	**19**	29	22	6	16	EVSE spaces: 6 capable + 1 installed.
	72 REQ.	**90** PROVIDED	**117** PROVIDED INCL. TANDEM					

Topic	Master Plan Standard	Lot 53	Lot 57 N	Lot 57 S	Lot 58
Vehicle Parking	1 space per unit, on-site	1.3/unit, on-site (1.7 w/tandem)	1.1/unit, on-site (1.4 w/tandem)	1.1/unit, on-site (1.7 w/tandem)	1.6/unit, on-site
	Market Units	26	10	12	12
	Affordable Units	7	4	1	0
Total Spaces		**42** (57 w/tnd.)	**15** (19 w/tnd.)	**14** (22 w/tnd.)	**19**
	Single Spaces	27	11	6	19
	Tandem Spaces	15 (30 spaces)	4 (8 spaces)	8 (16 spaces)	-
	Assigned (Garage)	39	15	14	19
	Guest (Garage)	-	-	-	-
	Guest (Level 1)	3	-	-	-
Topic	LDR Standards				
ADA Total (1/25)		**3** (3 of 42)	**1** (1 of 15)	**1** (1 of 14)	**1** (1 of 19)
	ADA Van (1/8 ADA)	1 (1 of 3)	1 (1 of 1)	1 (1 of 1)	1 (1 of 1)
	ADA Tandem	1	-	-	-
EVSE Total (30%) *of total incl. tandem*		**20** (35% of 57)	**7** (37% of 19)	**8** (36% of 22)	**7** (37% of 19)
	EVSE Capable	17 (30%)	6 (32%)	7 (31%)	6 (32%)
	EVSE Installed (5%)	3 (5%)	1 (5%)	1 (5%)	1 (5%)
Bike Parking Total (0.75/bedroom)		**53** (.76)	**21** (.78)	**27** (.77)	**22** (.76)
	Bedrooms	70 beds	27 beds	35 beds	29 beds
	Short-Term (25%)	14	6	7	6
	Long-Term (75%)	39	15	20	16

The Parking minimum for the site is 1 space per unit, which our proposal exceeds. The Master Plan's parking discussion is largely focused on ensuring that there is ample public/semi-public shared parking in the other Subareas of the Resort to accommodate recreation uses. The intent for Subarea 3 is that development will be parked on-site and neither impact nor contribute to the shared parking elsewhere in the Resort. By exceeding the parking minimum and managing the parking spaces as part of the property management, we more than meet the Master Plan expectations.

Each parking space is numbered and dimensioned In the Architectural Plans for each lot. ADA compliance is also demonstrated on the parking drawings. Which spaces will be EVSE Installed and Capable will be finalized at building permit with final electrical plans.

The required bike parking meets the 25% short-term bike parking requirement for all units because the market condos can be used residentially or as short-term rentals. Short-term bike parking is provided through public spaces that meet the Town's design requirements and can be found on the Landscape Plan for each lot. Long-term bike parking is accommodated in a combination of storage lockers (assuming a maximum of 2 bikes per locker), with the remaining long-term bike storage provided in wall-mounted bike racks where applicable (refer to notes on garage floor plans).

Subarea 3 Standards- Landscaping

Topic	Master Plan Standard	Lot 53	Lot 57	Lot 58
Landscaping	10% LSR (min)	20% LSR 7,245 sf	18% LSR 6,750 sf	57% LSR 27,401 sf

As discussed on page 72 of the Master Plan, hardscape surfaces composing pedestrian plazas, patios, and outdoor function areas are considered landscape surfaces. See the Landscape Plan for additional detail on the landscaping. Note the landscape screening that works with the topography and setting of the development into the hillside to screen the development from the existing neighborhoods to the east.

Subarea 3 Standards – Alternative Transportation

The alternative transportation connection to Cache Creek Drive that is required in the Master Plan has already been completed.

VIII. Housing Element

Applicability

Div. 6.3 of the LDRs applies to the sites with no credits. Required housing is calculated for each development plan in the attached Housing Calculator pages.

Amount, Type and Method of Housing Provision

The Snow King Master Plan allows for required housing to be built anywhere within or outside of the Resort. We will build 7 of the required units on Lot 53 and the other 5 required units on Lot 57. The project will be phased (see Phasing Plan below) so that the required housing is built before or concurrent to the development generating the requirement. In-lieu fees will be paid prior to certificate of occupancy for the fee-generating lot.

See the Housing Calculator for each lot below. The amount, type, and method of housing required on each lot is summarized below:

	Lot 53	Lot 57	Lot 58
Required Housing	5.925	5.414	2.962
Total Units Provided	5 (Lot 53)	5 (Lot 57)	2 (Lot 53)
Type and Method			
1 bed/studio, <50% FMI	$381,588.71	$170,783.77	
2 bed, <50% FMI	1 unit (Lot 53)	1 unit (Lot 57)	1 unit (Lot 53)
1 bed/studio, <80% FMI	1 unit (Lot 53)	1 unit (Lot 57)	
1 bed/studio, <120% FMI	1 unit (Lot 53)	1 unit (Lot 57)	1 unit (Lot 53)
2 bed, <120% FMI	1 unit (Lot 53)	1 unit (Lot 57)	$261,687.53
3 bed, <120% FMI	1 unit (Lot 53)	1 unit (Lot 57)	

Special Restriction

All units are intended to be condominiumized for sale at the designated level of affordability. We will complete the deed restriction worksheet at building permit and sign the deed restrictions prior to certificate of occupancy for the requirement generating units to ensure requirement provision remains at pace with or ahead of requirement generation.

Livability Standards

We are aware of the livability requirements for kitchens, bathrooms, closets, storage, floor coverings, room size, windows, laundry, heating, and parking. We will demonstrate detailed compliance of each unit at building permit as we finalize the design. See Architectural Plans for draft floor plans.

IX. Transportation Element

The Transportation Element focuses on how traffic, transit, and parking throughout the Resort will interface and connect to the larger Town of Jackson transportation system. Our proposal is consistent with the assumed impacts from Subarea 3 buildout. See the Engineering Report for demonstration of how our proposal is consistent with the assumptions made about Subarea 3 in the Master Plan.

X. Capital Improvements Plan

The Capital Improvement Plan focuses on how the Resort water, sewer, and stormwater systems will interface and connect to the larger Town of Jackson systems. Our proposal is consistent with the assumed impacts from Subarea 3 buildout. See the Engineering Report for demonstration of how our proposal is consistent with the assumptions made about Subarea 3 in the Master Plan.

XI. Phasing and SKRMA

The eleventh chapter is about SKRMA's responsibilities and is not relevant to approval of this application.

XII. Community Services Element

The final chapter is about the community services provided by the Resort and is not relevant to approval of this application.

ADDITIONAL LDR COMPLIANCE NARRATIVE

Phasing Plan

While there are three development plans, a single phasing plan is proposed. The first building permit(s) will be submitted within 18 months of development plan approval, and will likely be for Lot 57. Each subsequent building permit(s) will be submitted within 18 months of completion of the prior building permit. The building permits will be sequenced so that the required affordable workforce housing is produced concurrently or prior to the generating development.

Construction Management Plan

Please refer to the Construction Management Plan chapter

Environmental Standards

Master Plan approval demonstrated compliance; no additional Environmental Analysis is required.

Scenic Standards

Exterior lighting compliance will be demonstrated at building permit.

Natural Hazards

Steep Slopes

See Engineering Narrative and Geotechnical Report.

Wildland Urban Interface

Wildland Urban Interface compliance will be demonstrated at building permit.

Grading, Erosion Control, and Stormwater

See Engineering Narrative

Operational Standards

Storage for each unit is provided. There will be no outside storage. Compliance will be managed through property management.

Refuse and recycling facilities are provided in the parking garage of each unit. See the garage floor plan of each building.

Subdivision

The applicant intends to plat the units as condominiums once they are built.

School Exactions

Page 102-103 of the Master Plan exempt short-term rental development from park and school exactions.

Park Exactions

Page 102-103 of the Master Plan exempt short-term rental development from park and school exactions.

Transportation Facilitates

See Engineering Narrative

Utilities

See Engineering Narrative

PROPOSED FINDINGS FOR APPROVAL

A development plan shall be approved upon finding the application:

1. Is consistent with the purposes and organization of the LDRs;

Complies. The purpose of the LDRs, and by extension the Snow King Resort Master Plan, is to implement the Jackson/Teton County Comprehensive Plan and promote the health, safety, and general welfare of the present and future community. is By being consistent with the Master Plan and LDRs, the proposal is consistent with that purpose.

2. Achieves the standards and objective of the Natural Resource Overlay (NRO) and Scenic Resources Overlay (SRO), if applicable;

Complies. The Snow King Resort Master Plan demonstrated compliance with the NRO and SRO. The proposed development is consistent with the Snow King Resort Master Plan.

3. Does not have significant impact on public facilities and services, including transportation, potable water and wastewater facilities, parks, schools, police, fire, and EMS facilities;

Complies. The proposed development is consistent with the transportation, water, wastewater, parks, schools, police, fire, and EMS assumptions of the Snow King Resort Master Plan. The cumulative impact of all development entitled under the Master Plan was evaluated and approved with Master Plan approval.

4. Complies with the Town of Jackson Design Guidelines, if applicable;

Complies. While the Town of Jackson Design Guidelines are not applicable, the proposed development was found to comply with the Snow King Resort Master Plan Design Guidelines by SKRMA on May 23, 2024 and the Town Design Review Committee on June 12, 2024.

5. Complies with all relevant standards of these LDRs and other Town Ordinances; and

Complies. The proposed development complies with all LDRs and Town Ordinances not otherwise addressed by the Snow King Resort Master Plan.

6. Is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.

Complies. The proposed development complies with the Snow King Resort Master Plan. It complies with the Site Plan by being located within Lots 53, 57, and 58. It complies with the land use plan by being residential or short-term rental and affordable employee housing. It complies with the design guidelines as approved by SKRMA (May 23, 2024) and the Town DRC (June 12, 2024). It complies with the dimensional limitations by being 3-stories above basement with at least 10% LSR and within the overall Floor Area and Peak Occupancy allowances for the Resort. It complies with the housing element by providing the required housing on-site. Finally, it complies with the transportation and utility elements by being consistent with the Master Plan assumptions for the cumulative impact of the development of the Resort.

ENGINEERING NARRATIVE

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Introduction

Snow King Condominiums is a proposed development within the Snow King Planned Resort District Master Plan (Sub-Area 3) located at 510, 553 and 725 Upper Snow King Loop Road. Upper Snow King Loop Road is located at the upper end of Grand View/Love Ridge Condo area and is within the Town of Jackson. The properties border lands owned by the Snow King Mountain Resort, LLC and the Grand View Condos. The land included in this proposal is comprised of property owned by affiliates of Bear Real Estate Group, described as Lot 53 of the Grand View Lodges 2nd Addition (553 Upper Snow King Loop Road) and Lots 57 (510 Upper Snow King Loop Road) and 58 (725 Upper Snow King Loop Road) of the Grand View Lodges Third Addition. The total combined property site is approximately 2.72 acres. Lot 57 is separated from Lots 53 and 58 (which are contiguous) by approximately 100' of land owned by Snow King Mountain Resort, LLC. Currently Lots 53 and 57 are used by Snow King Resort for material and equipment storage, while Lot 58 has a road that has historically been used to access Snow King Mountain but has been abandoned. Development of these Lots is governed by the Town of Jackson Land Development Regulations (LDRs) and the Snow King Planned Resort District Master Plan (Master Plan).



Figure 1: Project Vicinity Map

The building program is for a residential condominium development consisting of four buildings spread over the three lots, which includes both short term rental market units and deed restricted affordable units. Unit bedroom breakdown and building square footage is detailed in the Development Plan's Architectural Narrative.

Vehicular access to the three lots from the Town of Jackson street network is from the intersection of Snow King Avenue and Vine Street via Snow King Loop Road and Upper Snow King Loop Road. Snow King Loop Road is a 2-lane paved road, maintained by Snow King Resort Master Association (SKRMA) accessing the Love Ridge and Grand View Condos as well as the Grand View Lodge. Upper Snow King Loop Road is a steep dirt road that has historically provided access up Snow King Mountain. The three lots can be accessed by cyclists and pedestrians from the northwest (Snow King Avenue) and northeast (Cache Creek Drive) using a combination of existing trails, sidewalks and low volume streets.

This Final Development Plan Engineer's Report is intended to provide the engineering basis for the design and discuss engineering related items for the development of the project. Site infrastructure associated with the project is described including the expected infrastructure connections to existing Town of Jackson (TOJ) and SKRMA owned utilities. Design details will advance as the plan moves into construction permitting and construction phases of the project.

Site and Soils Conditions

The project site is located on the north-facing slope of Snow King Mountain and each lot has significant vertical relief with the hill sloping upward to the south. A geotechnical investigation by Jorgensen Geotechnical, LLC was conducted on each parcel in the fall of 2023 and explored Subsurface Soil Conditions and conducted a Geophysical Exploration. The reports of the investigations include Subsurface Preparation recommendations and Slope Stability Modeling for the current design in Attachment A.

Groundwater

The hillside nature of this site does not lend itself to persistent shallow groundwater but its location on the lower reaches of Snow King Mountain makes groundwater related to precipitation and snowmelt likely. Groundwater was encountered during the drilling of test bores performed as part of the Geotechnical Investigation at depths between 27 and 47 ft below ground surface. The proposed building is unlikely to be impacted by static groundwater at these depths, even during the construction of below grade parking structures. Lateral water flow through the soil can be expected from snow melt and stormwater and structures should provide foundation drains to mitigate this moisture.

Parking and Access

Analysis and calculation of parking required for each lot is provided in the Master Plan Compliance Narrative, Section VII – Dimensional Limitations. The parking stalls discussed in that section will be provided in parking garages beneath each of the buildings. All proposed parking meets the dimensional limitation criteria and design standards. Plan views of each parking garage detailing key dimensions, layouts and drainage patterns are provided in the plan set.

Access to the site will be from Snow King Loop Road and Upper Snow King Loop Road, with all parking located in basement garages except a few surface spaces provided for short-term guest parking.

Upper Snow King Loop Road will be realigned and vertically adjusted to meet the Fire Protection Resolution for New Subdivisions, and a Fire Apparatus Turnaround will be provided at the Lot 53 drop off.

With construction and occupancy of Lot 57 happening first, an interim Fire Apparatus Turnaround can be provided near the western property boundary of Lot 53, which will serve until the completion of the final turnaround discussed above.

Lot 53

Two vehicular access points are provided to the Lot 53 Building; the first is directly into the basement garage via a door on the west end of the building. The second is a vehicular drop off/turnaround/courtyard at the first-floor elevation accessed from the access road to the south of the building.

Multi-modal access will be provided to the Lot 53 building from a sidewalk along the south side of Upper Snow King Loop Road, with safe crossing points provided to both the basement door and first floor courtyard. A door into the parking garage will be located near the garage door and individual units will be accessed from the first floor from the courtyard. A dirt walking path will also be provided from the termination point of Upper Snow King Loop Road, near the southeast corner of the building, up to existing grade to the east of the building and along the east face of the building, to the existing sidewalk at the northeast corner of the building.

Lot 57

The two buildings proposed on Lot 57 will have individual garage vehicular access points. The north building will be accessed from Snow King Loop Road, near the northwest corner of the lot and the south building will be accessed from Upper Snow King Loop Road, near the east boundary of the lot.

Multi-modal access will be provided to the Lot 57 buildings via the courtyard between the buildings from a sidewalk along the west side of Upper Snow King Loop Road. Multi-modal access into each garage will also be provided through a separate garage level access door.

Lot 58

The building on Lot 58 will have a vehicular access point from Upper Snow King Loop Road into the garage located approximately in the middle of the north side of the building.

Multi-modal access will be provided to the Lot 58 building from a sidewalk along the south side of Upper Snow King Loop Road. There will be several access points along the north side of the building providing access to both the garage and to stair/elevator towers into the individual units.

Transportation Element

Existing traffic (vehicular and multi-modal) was evaluated as part of the Traffic Impact Study prepared for the Master Plan. Physical counts of traffic were collected and analyzed as part of the Master Plan Traffic Impact Study.

The proposed uses and scale of development on Lots 53, 57 and 58 are consistent with the Master Plan. Trip generation for the project, using the trip generation rates from the Master Plan, is summarized in Table 1.

Table 1 – Trip Generation

Traffic, Trip Generation			
	Number of Units	Unit Type	Trip Generation
Lot 53	26	Condominium	$26\ units * 8.0\ \frac{trips}{unit} = 208\ trips$
	7	Affordable Housing*	$7\ units * 4.0 \frac{trips}{unit} = 28\ trips$
Lot 57	22	Condominium	$22\ units * 8.0\ \frac{trips}{unit} = 176\ trips$
	5	Affordable Housing*	$5\ units * 4.0 \frac{trips}{unit} = 20\ trips$
Lot 58	12	Condominium	$12\ units * 8.0\ \frac{trips}{unit} = 96\ trips$
Subtotal; this Development Plan			

Existing Sub-Area 3	86	Condominium; (assumption)	688 trips
		Total Sub-Area 3	**1,216 trips**
		Assumed Master Plan Sub-Area 3	1,710 trips

*The proposed Affordable Housing in this project is assumed to have a traffic impact similar to "Employee Housing" used in the Master Plan Analysis

This project reflects full buildout of Sub-Area 3 of the Master Plan; based on the Example Development Table, approximately 1,710 trips per day for residential uses was used to perform the Traffic Impact analysis. Based on the above information, the scale of traffic impact is less than was assumed in the master plan.

Grading, Drainage, and Stormwater Management

The access road location and elevation are integral to the building placement on each lot. Providing fire apparatus access to each building, vehicular access to each garage and multi-modal access to the various entrances to each building were key considerations to the site layout and grading. The topography of the site, particularly the steepness of the hillside in the north-south direction is also integral to the grading and building placement on each lot. This consideration resulted in buildings that present a tall elevation from the North and a much smaller elevation from the South.

The current TOJ Land Development Regulations (LDR's) allow post-development stormwater flows to be released from a proposed development at a rate equal to or lower than the pre-development runoff rate. The Master Plan identifies the use of on-site stormwater facilities for storage and controlled release. As previously described, parking for each building is provided in basement garages. The surface of the parking areas will be sloped such that runoff from vehicles will collect at low points through inlet grates and trench drains to route all drainage through a detention system and a controlled progressive discharge prior to release into the public stormwater collection system. Coordination with the mechanical engineering design of the buildings will be required for this effort. Stormwater treatment will be installed in the development area to treat runoff from streets and parking on-site prior to leaving the property.

Preliminary stormwater runoff calculations for each lot for pre and post development are included in Attachment B. These calculations and the grading and stormwater management plans will be refined through the Grading and Erosion Control Permit process as the project develops and as various volume solutions and basin layouts are explored.

This development will utilize the existing storm sewer collection system in Upper Snow King Loop Road which will ultimately discharge into the Town of Jackson system. The routing of this existing system downstream of the development is currently unknown, however this will be determined, and if necessary, the system will be reconfigured to effectively deliver project storm sewer to the Town of Jackson system.

Stormwater design calculations for the 100-year storm are summarized in Table 2. Runoff flowrates and volumes were computed using the modified-rational method and the Intensity-Duration-Frequency Curve Data provided in the TOJ LDRs. Pre and Post Development ground cover coefficients were used with those calculations. Calculations were done separately for each lot.

Table 2 – Stormwater Rational Method Runoff

Stormwater Rational Method Runoff Design Storm Frequency = 100 years			
Lot	Pre-Development Peak Flow Rate (cfs)	Post-Development Peak Flow Rate (cfs)	Water Quantity Storage Required (gal)
Lot 53	0.78	2.37	4,915
Lot 58	1.58	2.48	2,061
Lot 57	0.98	2.49	4,345
Total	**3.35**	**7.34**	**11,321**

Lot 53

Due to the drainage pattern of the proposed improvements on this lot, nearly all the stormwater, including roof drainage, will be captured, routed below grade and stored with a controlled release into the TOJ stormwater system. Positive drainage away from the building will be provided in the landscaped perimeter area though volumes of runoff will be negligible due to the small areas involved and the capture of runoff from developed areas.

Lot 57

Due to the drainage pattern of the proposed improvements on this lot, nearly all the stormwater, besides the road, including roof drainage, will be captured, routed below grade and stored with a controlled release into the TOJ stormwater system. Positive drainage away from the building will be provided in the landscaped perimeter area. Runoff volumes generated on these portions of Lot 57 will be negligible due to the small areas involved and the capture of runoff from developed areas. Runoff from the hillside above the building will be intercepted on the south side of the building using a cutoff ditch and routed around the building to the west. Road drainage will be routed and collected using curb and gutter and existing stormwater inlets which will be adjusted to function with the realigned and regraded roadway.

Lot 58

A large portion of this lot, on the South and West sides of the proposed building will remain undisturbed and drainage patterns will be unchanged. The stormwater in the developed portion of the lot, including roof drainage, will be captured, routed below grade and stored with a controlled release into the TOJ stormwater system. Positive drainage away from the building will be provided in the landscaped perimeter areas immediately adjacent to the building and runoff from the hillside above the building, retaining walls and road will be routed around the development using a combination of surface and subsurface drainage improvements.

Water Supply and Distribution System

Water (domestic and fire) will be supplied to this development by the Snow King Resort Public Water System, a consecutive public water system administered by SKRMA and supplied by the TOJ water system. The system consists of duplex booster pumps located in the garage of Love Ridge Condominium Building 48, an 8" diameter water supply line running uphill to a 110,000 gallon storage tank south/above Lot 58. This system has two fire hydrants in the project vicinity that will be relocated slightly to accommodate the proposed structures and sitework.

Domestic water demand values were developed using 2018 Wyoming DEQ values based on the current building program. Those values are detailed in the Attachment C and summarized in Table 3 below.

Table 3 – Domestic Water Demand

Domestic Water Demand				
	Number of Units	Average TOTAL gpd	Maximum TOTAL gpd	Peak Hour gpm
Lot 53	33	8,750	23,800	66.1
Lot 57	27	7,750	21,080	58.6
Lot 58	12	3,625	9,860	27.4
Subtotal; this Development Plan	**72**	**20,125**	**54,740**	**152.1**
Existing Sub-Area 3	86		60,200	
Total Sub-Area 3			**114,940**	
Assumed Master Plan Sub-Area 3			127,500	

Revised for building program 16 May 2025

Water demand for domestic use was also calculated using the AWWA M22 method and estimated at 75 gpm based on fixture counts for the proposed buildings. The lower value of the M22 is likely due to the peak hour

factor used in the 2018 Wyoming DEQ method (Peak Hour 4) being above average and the irrigation demand not included in the M22 calculation. Large irrigation demand is not expected as part of this development due to limited landscaped areas.

This project reflects full buildout of Sub-Area 3 of the Master Plan; based on the Master Plan Example Development Table, approximately 127,500 gpd (maximum day) domestic water demand for residential uses was used to analyze the availability of water supply. Based on the above information, the scale of the domestic water demand impact on TOJ systems is less than was assumed in the master plan.

The fire suppression system demand was calculated utilizing Appendix B, Table B105.2 and Table 105.1(2) of the 2021 International Fire Code based on building area and Type IIB construction. All buildings will provide a full sprinkler system designed per NFPA 13.

The total water supply available from the SKRMA water system is expected to exceed the total water demanded in a scenario where fire flow is superimposed on the maximum day demand. Water supply and demand calculations are provided in Attachment D.

Wastewater Collection and Treatment Systems

Sanitary sewer will be connected to the existing Town of Jackson sewage collection lines via an extension of the existing sanitary sewer main in Upper Snow King Loop Road and eventually be treated at the TOJ Wastewater Treatment Plant in South Park. The project will extend the existing sewage collection lines approximately 250 lineal feet to a point in Upper Snow King Loop Road in front of the Lot 58 building. The service lines to each building will be the responsibility of the development for operation and maintenance. The sewer system extensions consist of an 8-inch sewer line from an existing manhole near the western property boundary of Lot 53. Each building will connect to the Sanitary sewer main adjacent to the building. Building sewer will be 6" with cleanouts within 5 feet of the building foundation. The building mechanical design plans will show the specific internal layout and location.

Wastewater generation values were developed using 2018 Wyoming DEQ values for the current building program. Those values are detailed in Attachment E and summarized in Table 4 below.

Table 4 – Wastewater Generation

Sanitary Sewer Generation				
	Number of Units	Average TOTAL gpd	Maximum TOTAL gpd	Peak Hour gpm
Lot 53	33	6,300	10,500	29.2
Lot 57	27	5,580	9,300	25.8
Lot 58	12	2,610	4,350	12.1
Subtotal; this Development Plan		**14,490**	**24,150**	**67.1**
Existing Sub-Area 3	86		38,700	
Total Sub-Area 3			**62,850**	
Assumed Master Plan Sub-Area 3			78,750	

Revised for building program 16 May 2025

This project reflects full buildout of Sub-Area 3 of the Master Plan; based on the Master Plan Example Development Table, approximately 78,750 gpd (maximum day) sanitary sewer generation for residential uses was used to analyze the capacity of the TOJ sewer system. Based on the above information, the scale of the sanitary sewer generation impact on TOJ systems is less than was assumed in the master plan and was approved by the Town at the time of Master Plan approval.

The Master Plan discusses various other offsite infrastructure improvements related to buildout of the master plan area and indicates that the Town of Jackson should coordinate with SKRMA on the necessity and timing of these improvements.

Cable Utilities and Gas

Cable utilities and natural gas connections will be coordinated with Lower Valley Energy (Electric and Gas), Century Link Communications (telephone and communication services), Charter Communications (cable television, internet, and other communications), and SilverStar Communications (fiber optic internet). There is an existing Lower Valley 3 phase switch cabinet north of the northeast corner of Lot 53 that will likely serve as the power connection for the project. Service connection pedestals for the other cable utilities, and an existing natural gas main are located along Snow King Loop Road. Utilities will be routed to the proposed building either along a proposed easement on the SKRMA parcel to the east of Lots 53 and 58 or along the Upper Snow King Loop Road. Transformers, meters and service locations are shown on the plans.

Refuse, Trash, and Recycling

Refuse, garbage, and recycling is proposed in a dedicated area within the parking garage level of each building. These areas will not be visible from the exterior of the building and will be inaccessible to wildlife.

Snow Storage

A snow storage area sized to be a minimum of 10% of the area of the plowed off-street parking will be provided for storage of the large amount of snow that can be expected at the bottom of Snow King Mountain. The area between Lots 53 and 58, with a pending snow storage easement from SKRMA, is proposed for snow storage use for all three lots. This will be coordinated with landscaping, fire hydrants, cable utility structures and considered in the design and placement of storm drainage infrastructure.

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DEVELOPMENT PLAN P24-168, 174, 175 submitted 11/8/2024
Response to Town Engineering comments dated 2/3/2025
DEVELOPMENT – Approved with CONDITIONS

Jorgensen Response to Conditions or comments provided in Blue

CONDITIONS OF APPROVAL

A. LDR 5.7.1.D.3
Review and revise the geotechnical reports and provide updated plans and reports with the Building Permit Application as necessary. The applicant is responsible for the cost of any third-party review of the geotechnical analysis.
Geotechnical report will be updated to reflect final building plans at Building Permit Submittal.

B. LDR 5.7.2.A.1
Provide signed and stamped reports from ATLAS. Update Geotechnical Reports for any changes in design or analysis.
Updated ATLAS Report provided in this submittal.

C. LDR 5.7.2.A
Prior to presenting to Town Council, provide a narrative and exhibits that show how the buildings conform to the general natural form and minimize cuts and fills. In particular, forty-foot-deep retaining walls on the south side of Lot 58 provide a significant break in the form and require a large cut without offsetting fill.

Site Design – Constraints

1. The road must extend along the length of the buildings constructed on Lots 53 and 58. Due to the height of the building on Lot 58 above the road elevation, the road width must be 26’ wide for aerial firefighting equipment use (fire department guidance)
2. A fire apparatus turnaround must be provided within 150’ of the end of the road (fire resolution).
3. Road grades on sections of roadway with a horizontal curve radius greater than 100’ may be up for 15% for no more than 200’ (Fire resolution).
4. The maximum elevation delta between the Lot 53 basement FFE and first floor FFE is 10’ (LDRs)

Site Design Logic

1. Assumptions
    a. The building site on Lot 58 will be on the east end of the lot to take advantage of the least steep slopes (minimizing cut and fill to the extent possible).
    b. The building on Lot 53 will sit no higher than the existing “Flat Spot”.
2. The location of the fire apparatus turnaround was set by:
    a. The fire access road must extend to the east end of the easternmost building on Lot 53 or 58 (approximately the east lot line).
        i. The fire apparatus turnaround must be within 150’ of the end of this road. It is proposed at 146’ from the end of the road.
        ii. It is desirable to place the turnaround as far from the end of the road as allowed; to construct the turnaround requires either an extreme cut into the hillside (for the perpendicular leg of the turnaround) or to be constructed on top of the Lot 53 first floor deck (as is proposed).
3. The lot 53 garage elevation was set at 6402’, 3-4’ below the “flat spot” Elevation to limit the perceived height of the building, which has been a major point of contention in town planning and neighbor reviews

a. This in turn made it necessary to set the fire apparatus turnaround elevation at 6412' (one floor above).

Lot 58: cut and south side well

The garage FFE was initially placed to correspond to the end of the road, thus minimizing the cut required to construct this building. Initial negative feedback from TOJ planning department (the comment that it appears the garage entrance was placed to make the building as high as possible) lead the design team to adjust this elevation downward, placing the garage entrance in the middle of the building and at a correspondingly lower elevation. This lead to a larger total cut to construct this building.

Placement of the garage FFE that near the lowest elevation location on the lot lead to several design challenges including the large cut associated with the building and the deep well on the south side of the building to allow for egress from the bedrooms. The well on the back of the building has been designed in a tiered manner to be a more natural form, however the reduction of tier height and the extension of tier width was limited by diminishing returns due to the steep slope above. It was desirable to avoid disturbing the existing forested portion of the lot above the proposed building. According to the project code consultant, MAP:

At Lot 58, each unit is permitted to have access to only one means of egress per IBC Section 1006.3.4, since they are R-2 occupancy, with occupant loads not exceeding 20 people, and the common path of egress through the stairwells does not exceed 125'-0". Because these dwelling units have access to only one exit, Section 1031 requires that all sleeping rooms be provided with at least one emergency escape and rescue opening. These window openings must open onto a public way or a yard or a court and meet minimum dimensional requirements. Additionally, bedrooms are required to have access to natural ventilation and light per IBC Chapter 12.

At Lot 58, the area on the south side of the building would be viewed as a court, as it is enclosed on at least 3 sides. Section 202 defines a court as "an open, uncovered space, unobstructed to the sky, bounded on three or more sides by exterior building walls or other enclosing devices." Per Section 1205.3: A court that is not bounded on one end by a public way or yard must be a minimum 3' in width and 10'-0" in length. The width must be increased by 1' in width and 2' in length for each additional story above 2 stories in height. Additionally, per 1031.5.2, emergency escape and rescue openings below the adjacent grade may open into area wells, which can be equipped with permanently affixed ladder or steps. The ladder or steps shall not be obstructed by the window when it is in an open position. Ladders shall be at least 12 inches wide, 3 inches from the wall, and spaced no more than 18 inches on center; the code does not state a height limit for a ladder.

D. LDR 5.7.2.B.6

Provide details on the interceptor ditches uphill of the developments that are stable and have the capacity for runoff. Clearly define where the runoff is conveyed. For conveyance off-site, see notes on LDR 5.7.2.B.8.

Drainage swales to be provided on the southern sides of Lot 57 South Building and Lot 58 terraced retaining walls. These will convey stormwater and snowmelt around the buildings, discharging to the west of lot 57 and the west of lot 58, which is consistent with existing hillside general drainage flow paths. Swales will be designed to carry the large amount of water expected to run off the hillsides above and ends of swales will provide large cobbles to dissipate flow velocities and prevent erosion. Details to be provided with Building Permit submittal.

E. LDR 5.7.2.B.8

In the absence of a mutual grading easement between adjacent landowners, the tops and toes of cut and fill slopes shall be within the property lines of the proposal.

a. Permit drawings must show grading within the property lines or submit proposed easements with the building permit and show them on the plans, noting that they need to be executed and recorded prior to permit issuance.
b. Prior to permit approval, the easements need to be executed and recorded.
c. Where work is being completed within an existing road and easement, e.g., between Lots 57 and 58, provide a Letter of Authorization from the landowner to do the work. Show the easements clearly on the plans and cite the legal document that creates them.

Mutual grading easements have been discussed and favorably received with Snow King Mountain Resort. Grading and modification to the retaining wall along the north side of Lot 53 have been discussed with Grand View Townhouses. If an agreement cannot be reached with Grand View, construction methods have been discussed to eliminate grading/modifications beyond the Lot 53 property line. Extents of grading and areas of grading easement to be provided with Building Permit submittal.

F. LDR 5.7.2.B.4 / IBC 1807.2
Provide structural calculations and factors of safety for all retaining walls. Stability analyses must demonstrate minimum factors of safety of at least 1.50 under static conditions and 1.10 under seismic loading conditions. Walls with a separation of at least 2H (H of largest of two walls) from face of wall to face of wall should be considered as separate walls. In a terrace of retaining walls, a minimum horizontal separation of H/2 should be maintained, measured from the back of the lower wall to the face of the higher wall. Provide notes on the plans and details that require Special Inspections by the design professional in responsible charge (IBC 1704 and 1705.1.1). Provide guards as required by IBC 1807.2.5 or as needed to protect wildlife.
Structural calculations to be provided with Building Permit submittal. Some terraced walls do not adhere to H/2 separation due to steep hillsides above walls and inability to provide separation without significantly increasing overall height of walls, however lower terraced walls will be designed to account for the influence of terraces above.

G. LDR 5.7.4.B.1
For connection to the downstream storm system, determine the actual path of discharge, certify that the lines and detention areas are clear and functioning, confirm that the new connections align with the original design, and verify that capacity exists in the system.
Investigation of the existing storm system including path of discharge and pipe sizes to be undertaken in the summer of 2025. Exhibit of storm system information will be provided to the Town prior to or at the time of Building Permit submittal. Final design of storm system to consider actual configuration.

H. LDR 5.7.4.B.2.h
Provide pollution abatement treatment prior to any discharge to a stormwater or infiltration system.
Stormwater pollution abatement to be provided prior to discharge to downstream stormwater system. Final design may include abatement for each lot individually or one point of treatment for all (3) lots.

I. LDR 5.7.1.D.4
Grading Pre-Applications are required for each building prior to Building Permit submittal. If all of the necessary information is prepared for all sites and building permits will be submitted within 6 months of the meeting, then one grading pre-application meeting could be used to cover the projects.
Grading Pre-Application conference will be completed prior to Building Permit submittals.

J. LDR 7.2.2.A.1.b
Provide a striping and signage plan for the development.
To be provided with Building Permit submittal.

K. LDR 7.7.2.A/G
Show compliance with ISO, DEQ, and Fire standards for the number of hydrants and hydrants served on 6-inch lines.
To be provided with Building Permit submittal.

L. LDR 7.7.2.A
Provide a will-serve letter from Snow King Resort that clarifies the entity that owns the improvements

and the status of the water tank (e.g., when last cleaned and if the full volume of the tank is in use or if the tank is partitioned for half capacity). Ownership should coincide with the easements and parcels where the utilities are located. Unless isolated and master metered, the water and sewer need to be owned by Snow King Mountain Resort, which owns the system the development is connecting to.
To be provided with Building Permit submittal and DEQ Permit to construct submittal.

M. LDR 7.7.2.A
Provide hydraulic analysis for the development and its flows. The analysis provided was limited to volume—provide the source for the assumed water demands.
To be provided with Building Permit submittal.

N. LDR 7.7.2.G
Provide a letter from the Fire Marshal confirming that the fire supply, protection, and hydrants proposed are acceptable.
To be provided with Building Permit submittal.

O. LDR 7.7.2
Provide size and location of water meters and backflow devices for each building. Adhere to Town Standards for utility connections. Each building must have a single tap at the main, with branched domestic and fire outside of the building and an individual domestic meter for the building. Provide separate meters for irrigation. Reduced Pressure Backflow is required on domestic, irrigation, and fire systems. Locate meters and backflow as close as possible to the point of entry to the building.
To be provided with Building Permit submittal.

P. P. LDR 7.7.3
Town inspection showed that the sewer line is full of dirt and rocks. Provide a note on the plans to isolate/plug the connection to the active sewer before cleaning and inspecting the line. DO NOT DISCHARGE THE DEBRIS INTO THE ACTIVE SEWER. Depending on the line condition, the lines may need to be retested, repaired, or replaced. Provide video inspections to Town Engineering. Check the status of manholes on the access road—ensure they are open, functioning, and accessible.
To be provided with Building Permit submittal.

Q. LDR 7.7.3
Revise wastewater volumes to correspond with Town of Jackson Capacity Fee Max Day, Code 13.08.020.
To be provided with Building Permit submittal.

R. LDR 8.3.3.C.3
For each building, provide a plan for mail delivery that does not have a significant impact on public facilities and services, e.g., mail and parcel room with USPS Caller service, private mail delivery, etc.

S. IBC CHAPTER 11 / ADA ACCESSIBILITY
Provide an accessibility plan. Final design and compliance are required with the Building Permit Application, but the Development Plan needs to show feasibility. Show compliance with accessibility regulations, including but not limited to:

a. 1104.1: At least one accessible route within the site must be provided from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance served.
b. 1104.2: At least one accessible route must connect accessible buildings, accessible facilities, accessible elements, and accessible spaces that are on the same site.
c. 1104.5: Accessible routes must coincide with or be located in the same area as a general circulation path.
d. Prioritize pedestrian access through intersections and curb cuts with elevated sidewalks adhering to ADA standards and show how drainage will be achieved.

Accessible routes are provided from the pullout on Lot 57 to Lot 57 building, note however that the road grade along this section is greater than 5% so sidewalk grade corresponds to road grade. Accessible route provided from unloading zone near Lot 53 Fire Apparatus Turnaround to buildings on Lots 53 and 58. Accessible routes provided from accessible parking stalls in all garages to elevators/units.

PROJECT SPECIFIC COMMENTS

1. LDR 7.6.3.F.1: Development should provide a reasonable connection to Snow King Drive. The Town of Jackson has an easement in the Snow King Estates development between Lots 10 and 11, which was used during construction in 2018-2019. It would be beneficial to both the Town and the Developer to maintain this alternative access in the event of emergencies or construction. The Town would like to coordinate with the developer and Snow King Mountain Resort to see if there is a feasible design that could be implemented to preserve this access.
   Providing roadway access to Snow King drive through easement is not possible while maintaining road grades that comply with Fire Resolution. See C. LDR 5.7.2.A discussion.
2. The Town standard is no longer for concrete collars on surface features in roadways. It is recommended to remove the concrete collar from manhole and water valve details. Show completion with hot or cold mix pavement.
   Revised details to be provided with Building Permit submittal.
3. Our records show that the stormwater from this development routes to Vine Drive and then out to Kelly Ave.
   Noted
4. Is it necessary to replace the entire 8" line uphill of Building 57, or can the new line tie in at the crossing of the existing near station 2+30?
   The water main on Lot 57 must be replaced because it is beneath or too close to the Lot 57 South building foundation. From roughly STA 2+30 up, the line must be replaced due to modification (lowering) of the road grade and reduction of the cover over the line.

Accounting of Master Plan Development Potential

Floor Area

	Master Plan Allowance	Existing at Master Plan Adoption	Master Plan Example & Site Plan	Development Rights Sales	Remaining Potential (Rights - Built)
Subarea 1-5	915,000	334,675	915,000	915,000	580,325
Subarea 1		135,688	331,000	255,688	120,000
Hotel		135,688	135,688	135,688	0
New		0	195,312	120,000	120,000
Subarea 2		0	244,000	250,000	250,000
Subarea 3		143,655	252,000	256,607	112,952
Love Ridge/Grand View		143,655	143,655	143,655	0
Lot 53		0	52,952	52,952	52,952
Lot 57		0	25,393	30,000	30,000
Lot 58		0	30,000	30,000	30,000
Subarea 4 & 5		55,332	88,000	152,705	97,373
One Town Hill		50,398		57,000	6,602
Snow King Mountain Resort		0		95,705	90,771
King Grill/Ticket Office		4,934			
Mountain Sports		0			
Mountain Maintenance		0			

Notes:

- The existing development numbers for the hotel and Love Ridge implied in the Master Plan by subtracting the Master Site Plan from the Example Development match the Town's GIS record of existing development on January 1, 2023.
- The allowed FARs of 0.4 for Subareas 1-5 and 0.6 for Subareas 1-4 are not applicable because the 915,000 sf total limit meets both FARs.
- The existing development was assumed to have been allocated its existing development rights even though there was no “transfer” documented.
- The One Town Hill floor area is based on the approval staff report for the Development Plan. In addition to the counted floor area, 34,112 sf of exempt parking and 4,255 sf of exempt housing are in the building.

Guests (APOs)

	Master Plan Allowance	Existing at Master Plan Adoption	Master Plan Example & Site Plan	Development Rights Sales	Remaining Potential (Rights - Built)
Subarea 1-5	2,208	832	2,208	2,208	1,376
Subarea 1		408	964	808	400
Hotel		408	408	408	0
New		0	556	400	400
Subarea 2		0	400	400	400
Subarea 3		280	700	520	240
Love Ridge/Grand View		280	280	280	0
Lot 53		0		144	144
Lot 57		0	420	50	50
Lot 58		0		46	46
Subarea 4 & 5		144	144	480	336
One Town Hill		144	144	144	
Snow King Mountain Resort		0	0	336	336
King Grill/Ticket Office		0			
Mountain Sports		0			
Mountain Maintenance		0			

Notes:

- The existing Hotel allocation is based on the 204 rooms identified as existing in the Master Plan.
- The One Town Hill allocation is based on 36 units at 4 APO per unit, consistent with the Development Plan unit count and Town building permit record.
- The 280 APO Love Ridge/Grand View allocation is based on SKRMA's accounting of existing APOs less the existing Hotel and One Town Hill allocations. It is generally consistent with the Town's GIS record of existing development on January 1, 2023.

HOUSING CALCULATORS

LOT 57 (NORTH & SOUTH COMBINED)

Housing Mitigation Plan

updated 1/8/21

Development of a new house, hotel, or commercial space generates the need for employees. The construction workforce builds the space, the commercial workforce or residential service workforce works in the space, and first responders are needed to protect the space. Only about 27% of the employees generated by development can afford housing in the community, but the community's "community first" character goal is that 65% of employees live locally. To bridge this affordability gap, each development is required to include affordable workforce housing proportional to the employees it generates. These housing mitigation requirements are established in Division 6.3 of the Land Development Regulations. This worksheet is intended to assist in meeting the requirements for a project. However, an error in the worksheet does not amend the actual standard; if you find an error please notify the Planning Department. Fill in the highlighted cells, all the other cells will autopopulate.

Calculating the Requirement (Sec. 6.3.2 & 6.3.3)

Step 1: Location: Town of Jackson

The applicable regulations vary by jurisdiction please identify the location of your project using the above dropdown options.

The required housing is based on the existing and proposed use of the site. Step 2 is to enter the existing use and Step 3 is to enter the proposed use. Section 6.3.2 of the LDRs establishes the applicability of the affordable workforce housing standards and Section 6.3.3 establishes the specifics on calculation of the requirement. Enter each use in its own row, add rows if needed. If a building has multiple units with the same use, describe each unit in its own row. (For example: if a duplex is composed of a 2,300 sf attached unit and a 1,700 sf attached unit, put each unit in its own row do not put in 4,000 sf of attached single-family.) If a unit type (e.g. apartment floor plan, or commercial tennant space) is replicated exactly multiple times, you may use the "Use Quantity" column to avoid adding multiple rows.

Step 2: Existing Development

Housing is only required for new development. Please describe the existing use of the site so that it can be credited from the housing requirement. The definition of existing use is Section 6.3.2.A.1 of the LDRs. Generally, the existing use to enter is the use with the highest housing requirement that either existed in 1995, or has been permitted since 1995. Please attach proof of existence.

Existing Use (Sec. 6.3.2.A)	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	Housing Required
Short-Term Rental Unit	0.102*bedrooms		0	0	0.000

Existing Workforce Housing Credit: 0.000

Step 3: Proposed Development

Please describe the proposed use of the site to determine if affordable workforce housing is required as part of the development. Describe the end result of the proposed development. (For example: in the case of an addition do not enter the square footage of the addition, enter the size of the unit upon completion of the addition.)

Proposed Use	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	**Housing Required**
Short-Term Rental Unit	0.102*bedrooms	4	2557	2	**0.817**
Short-Term Rental Unit	0.102*bedrooms	3	1947	5	**1.532**
Short-Term Rental Unit	0.102*bedrooms	2	1692	15	**3.064**

Affordable Workforce Housing Required: 5.414 units

Fee-in-Lieu Amount: n/a

If the amount of required affordable workforce housing is less than one unit, you may pay the above fee in-lieu of providing the required housing. If you elect to pay the fee, your Housing Mitgation Plan is complete. If the requirement is greater than one unit, or you would like to provide a unit to meet the requirement, please proceed to the Unit Type Sheet.

Housing Mitigation Plan

updated 1/8/21

Type of Units Required (Sec. 6.3.4)

Step 4: Type of Units Required

The LDRs include a schedule for how many units have to be affordable to each income range and how many units have to have 1, 2, or 3 bedrooms. The LDRs also allow for adjustment, subject to approval by the Housing Director. To propose an adjusted allocation, change the values in the gold cells; the customized allocation must meet the customization rules provided. If a rule is violated, the cell will turn red. See also Section 6.3.4 of the LDRs.

Affordability	LDR Schedule	Proposed	Custom %	Customization Rules
Units Affordable to Households making 50% Median Income	1.414	**1.414**	26%	Custom % shall be ≥ 25%
Units Affordable to Households making 80% Median Income	1.000	**1.000**	18%	Custom % shall be ≥ 19%
Units Affordable to Households making 120% Median Income	3.000	**3.000**	55%	Custom % shall be < 43%
Workforce Units	0.000	**0.000**	0%	Custom % shall be < 13%
Total	5.414	5.414	Proposed total sall be >= Required	

Bedroom Mix	1 Bed/Studio	2 Bedroom	3 Bedroom	Total Units	Total Employees Housed	Customization Rule
LDR Schedule	2.414	2.000	1.000	5.414	9.745	The Proposed total shall be greater than or equal to the Schedule total
Proposed Allocation	**2.414**	**2.000**	**1.000**	5.414	9.600	
Employees per Unit per LDRs	1.45	2.00	2.10	1.80		

Step 5: Distribution of Affordability by Unit Size

The bedroom mix must be proportionaly distributed among the affordability mix. If you modify the distribution (gold cells) the totals must match your allocation totals (they will turn red if they do not). A customized distribution should be within 1 (rounded up or down) of the even distribution displayed (it will turn red if it is not). See also Section 6.3.4 of the LDRs.

Requirement Distribution					Even Distribution		
	1 Bed/Studio	2 Bedroom	3 Bedroom	Total	1 Bed/Studio	2 Bedroom	3 Bedroom
Affordable to 50% Median Income	**0.414**	**1.000**	**0.000**	1.414	0.606	0.606	0.202
Affordable to 80% Median Income	**1.000**	**0.000**	**0.000**	1.000	0.429	0.429	0.143
Affordable to 120% Median Income	**1.000**	**1.000**	**1.000**	3.000	1.286	1.286	0.429
Workforce Restriction	**0.000**	**0.000**	**0.000**	0.000	0.000	0.000	0.000
Total	2.414	2.000	1.000				

Once you have determined the proposed distribution please fill out the Method Sheet regarding how the required housing will be provided.

Housing Mitigation Plan

updated 1/8/21

Method for Providing the Required Units (Sec. 6.3.5)

Step 6: Method of Housing Unit Provision

The LDRs require that unlesss impractical, any housing requirement of 1 unit or greater be provided through consturction of housing. If impractical, the units my be provided by dedication of land, use of a banked unit, or restriction of an existing unit. Only as a last option shall a fee be paid. The distribution of housing types selected in Step 5 is reflected in the chart below. The default method for providing a whole housing unit is on-site construction. If you would like to propose an alternate method, or provide the requirement through various methods, adjust the gold cells. A red cell indicates the adjustment does not match Step 5. The intructions cell indicates the standards that apply to each method. In addition, each unit shall comply with the Jackson Teton/County Housing Department Rules and Regulations. Response to the applicable standards shall be provided with this Housing Mitigation Plan. The in-lieu fee will calculate.

Unit Type	Units	Method	Instructions
2 bed, < 50% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 80% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 120% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
2 bed, < 120% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
3 bed, < 120% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 50% Median Income	0.414	Fee In-Lieu	please document compliance with Sec. 6.3.5.C
Total Units:	**5.414**	**Fee In-Lieu:**	**$170,783.77**

Step 7: Attachments

Please attach to this worksheet any demonstration of existence, independent calculation, rationale for adjustment of unit type, rationale for the proposed method, documentation of the proposed method that is requried by Division 6.3. Please contact the Planning Department with any questions. Information regarding the source of the numbers in this worksheet is available in the Source Sheets.

LOT 53

Housing Mitigation Plan

updated 1/8/21

Development of a new house, hotel, or commercial space generates the need for employees. The construction workforce builds the space, the commercial workforce or residential service workforce works in the space, and first responders are needed to protect the space. Only about 27% of the employees generated by development can afford housing in the community, but the community's "community first" character goal is that 65% of employees live locally. To bridge this affordability gap, each development is required to include affordable workforce housing proportional to the employees it generates. These housing mitigation requirements are established in Division 6.3 of the Land Development Regulations. This worksheet is intended to assist in meeting the requirements for a project. However, an error in the worksheet does not amend the actual standard; if you find an error please notify the Planning Department. Fill in the highlighted cells, all the other cells will autopopulate.

Calculating the Requirement (Sec. 6.3.2 & 6.3.3)

Step 1: Location: Town of Jackson

The applicable regulations vary by jurisdiction please identify the location of your project using the above dropdown options.

The required housing is based on the existing and proposed use of the site. Step 2 is to enter the existing use and Step 3 is to enter the proposed use. Section 6.3.2 of the LDRs establishes the applicability of the affordable workforce housing standards and Section 6.3.3 establishes the specifics on calculation of the requirement. Enter each use in its own row, add rows if needed. If a building has multiple units with the same use, describe each unit in its own row. (For example: if a duplex is composed of a 2,300 sf attached unit and a 1,700 sf attached unit, put each unit in its own row do not put in 4,000 sf of attached single-family.) If a unit type (e.g. apartment floor plan, or commercial tennant space) is replicated exactly multiple times, you may use the "Use Quantity" column to avoid adding multiple rows.

Step 2: Existing Development

Housing is only required for new development. Please describe the existing use of the site so that it can be credited from the housing requirement. The definition of existing use is Section 6.3.2.A.1 of the LDRs. Generally, the existing use to enter is the use with the highest housing requirement that either existed in 1995, or has been permitted since 1995. Please attach proof of existence.

Existing Use (Sec. 6.3.2.A)	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	Housing Required
Short-Term Rental Unit	0.102*bedrooms		0	0	0.000

Existing Workforce Housing Credit: 0.000

Step 3: Proposed Development

Please describe the proposed use of the site to determine if affordable workforce housing is required as part of the development. Describe the end result of the proposed development. (For example: in the case of an addition do not enter the square footage of the addition, enter the size of the unit upon completion of the addition.)

Proposed Use	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	**Housing Required**
Short-Term Rental Unit	0.102*bedrooms	4	2557	0	**0.000**
Short-Term Rental Unit	0.102*bedrooms	3	2124	7	**2.145**
Short-Term Rental Unit	0.102*bedrooms	2	1528	18	**3.677**
Short-Term Rental Unit	0.102*bedrooms	1	1500	1	**0.102**

Affordable Workforce Housing Required: 5.925 units

Fee-in-Lieu Amount: n/a

If the amount of required affordable workforce housing is less than one unit, you may pay the above fee in-lieu of providing the required housing. If you elect to pay the fee, your Housing Mitgation Plan is complete. If the requirement is greater than one unit, or you would like to provide a unit to meet the requirement, please proceed to the Unit Type Sheet.

Type of Units Required (Sec. 6.3.4)

Step 4: Type of Units Required

The LDRs include a schedule for how many units have to be affordable to each income range and how many units have to have 1, 2, or 3 bedrooms. The LDRs also allow for adjustment, subject to approval by the Housing Director. To propose an adjusted allocation, change the values in the gold cells; the customized allocation must meet the customization rules provided. If a rule is violated, the cell will turn red. See also Section 6.3.4 of the LDRs.

Affordability	LDR Schedule	Proposed	Custom %	Customization Rules
Units Affordable to Households making 50% Median Income	1.925	**1.925**	32%	Custom % shall be ≥ 25%
Units Affordable to Households making 80% Median Income	1.000	**1.000**	17%	Custom % shall be ≥ 19%
Units Affordable to Households making 120% Median Income	3.000	**3.000**	51%	Custom % shall be < 43%
Workforce Units	0.000	**0.000**	0%	Custom % shall be < 13%
Total	5.925	5.925	Proposed total sall be >= Required	

Bedroom Mix	1 Bed/Studio	2 Bedroom	3 Bedroom	Total Units	Total Employees Housed	Customization Rule
LDR Schedule	2.925	2.000	1.000	5.925	10.664	The Proposed total shall be greater than or equal to the Schedule total
Proposed Allocation	**2.925**	**2.000**	**1.000**	5.925	10.341	
Employees per Unit per LDRs	1.45	2.00	2.10	1.80		

Step 5: Distribution of Affordability by Unit Size

The bedroom mix must be proportionaly distributed among the affordability mix. If you modify the distribution (gold cells) the totals must match your allocation totals (they will turn red if they do not). A customized distribution should be within 1 (rounded up or down) of the even distribution displayed (it will turn red if it is not). See also Section 6.3.4 of the LDRs.

Requirement Distribution					Even Distribution		
	1 Bed/Studio	2 Bedroom	3 Bedroom	Total	1 Bed/Studio	2 Bedroom	3 Bedroom
Affordable to 50% Median Income	**0.925**	**1.000**	**0.000**	1.925	0.825	0.825	0.275
Affordable to 80% Median Income	**1.000**	**0.000**	**0.000**	1.000	0.429	0.429	0.143
Affordable to 120% Median Income	**1.000**	**1.000**	**1.000**	3.000	1.286	1.286	0.429
Workforce Restriction	**0.000**	**0.000**	**0.000**	0.000	0.000	0.000	0.000
Total	2.925	2.000	1.000				

Once you have determined the proposed distribution please fill out the Method Sheet regarding how the required housing will be provided.

Housing Mitigation Plan

updated 1/8/21

Method for Providing the Required Units (Sec. 6.3.5)

Step 6: Method of Housing Unit Provision

The LDRs require that unlesss impractical, any housing requirement of 1 unit or greater be provided through consturction of housing. If impractical, the units my be provided by dedication of land, use of a banked unit, or restriction of an existing unit. Only as a last option shall a fee be paid. The distribution of housing types selected in Step 5 is reflected in the chart below. The default method for providing a whole housing unit is on-site construction. If you would like to propose an alternate method, or provide the requirement through various methods, adjust the gold cells. A red cell indicates the adjustment does not match Step 5. The intructions cell indicates the standards that apply to each method. In addition, each unit shall comply with the Jackson Teton/County Housing Department Rules and Regulations. Response to the applicable standards shall be provided with this Housing Mitigation Plan. The in-lieu fee will calculate.

Unit Type	Units	Method	Instructions
2 bed, < 50% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 80% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 120% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
2 bed, < 120% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
3 bed, < 120% Median Income	1.000	On-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 50% Median Income	0.925	Fee In-Lieu	please document compliance with Sec. 6.3.5.C
Total Units:	**5.925**	**Fee In-Lieu:**	**$381,588.71**

Step 7: Attachments

Please attach to this worksheet any demonstration of existence, independent calculation, rationale for adjustment of unit type, rationale for the proposed method, documentation of the proposed method that is requried by Division 6.3. Please contact the Planning Department with any questions. Information regarding the source of the numbers in this worksheet is available in the Source Sheets.

LOT 58

Housing Mitigation Plan

updated 1/8/21

Development of a new house, hotel, or commercial space generates the need for employees. The construction workforce builds the space, the commercial workforce or residential service workforce works in the space, and first responders are needed to protect the space. Only about 27% of the employees generated by development can afford housing in the community, but the community's "community first" character goal is that 65% of employees live locally. To bridge this affordability gap, each development is required to include affordable workforce housing proportional to the employees it generates. These housing mitigation requirements are established in Division 6.3 of the Land Development Regulations. This worksheet is intended to assist in meeting the requirements for a project. However, an error in the worksheet does not amend the actual standard; if you find an error please notify the Planning Department. Fill in the highlighted cells, all the other cells will autopopulate.

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Step 1: Location: Town of Jackson

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Step 2: Existing Development

Housing is only required for new development. Please describe the existing use of the site so that it can be credited from the housing requirement. The definition of existing use is Section 6.3.2.A.1 of the LDRs. Generally, the existing use to enter is the use with the highest housing requirement that either existed in 1995, or has been permitted since 1995. Please attach proof of existence.

Existing Use (Sec. 6.3.2.A)	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	Housing Required
Short-Term Rental Unit	0.102*bedrooms		0	0	0.000

Existing Workforce Housing Credit: 0.000

Step 3: Proposed Development

Please describe the proposed use of the site to determine if affordable workforce housing is required as part of the development. Describe the end result of the proposed development. (For example: in the case of an addition do not enter the square footage of the addition, enter the size of the unit upon completion of the addition.)

Proposed Use	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	**Housing Required**
Short-Term Rental Unit	0.102*bedrooms	3	1800	5	**1.532**
Short-Term Rental Unit	0.102*bedrooms	2	2100	7	**1.430**

Affordable Workforce Housing Required: 2.962 units

Fee-in-Lieu Amount: n/a

If the amount of required affordable workforce housing is less than one unit, you may pay the above fee in-lieu of providing the required housing. If you elect to pay the fee, your Housing Mitgation Plan is complete. If the requirement is greater than one unit, or you would like to provide a unit to meet the requirement, please proceed to the Unit Type Sheet.

Type of Units Required (Sec. 6.3.4)

Step 4: Type of Units Required

The LDRs include a schedule for how many units have to be affordable to each income range and how many units have to have 1, 2, or 3 bedrooms. The LDRs also allow for adjustment, subject to approval by the Housing Director. To propose an adjusted allocation, change the values in the gold cells; the customized allocation must meet the customization rules provided. If a rule is violated, the cell will turn red. See also Section 6.3.4 of the LDRs.

Affordability	LDR Schedule	Proposed	Custom %	Customization Rules
Units Affordable to Households making 50% Median Income	1.000	**1.000**	34%	Custom % shall be ≥ 25%
Units Affordable to Households making 80% Median Income	0.000	**0.000**	0%	Custom % shall be ≥ 19%
Units Affordable to Households making 120% Median Income	1.962	**1.962**	66%	Custom % shall be < 43%
Workforce Units	0.000	**0.000**	0%	Custom % shall be < 13%
Total	2.962	2.962	Proposed total sall be >= Required	

Bedroom Mix	1 Bed/Studio	2 Bedroom	3 Bedroom	Total Units	Total Employees Housed	Customization Rule
LDR Schedule	1.000	1.962	0.000	2.962	5.332	The Proposed total shall be greater than or equal to the Schedule total
Proposed Allocation	**1.000**	**1.962**	**0.000**	2.962	5.375	
Employees per Unit per LDRs	1.45	2.00	2.10	1.80		

Step 5: Distribution of Affordability by Unit Size

The bedroom mix must be proportionaly distributed among the affordability mix. If you modify the distribution (gold cells) the totals must match your allocation totals (they will turn red if they do not). A customized distribution should be within 1 (rounded up or down) of the even distribution displayed (it will turn red if it is not). See also Section 6.3.4 of the LDRs.

Requirement Distribution					Even Distribution		
	1 Bed/Studio	2 Bedroom	3 Bedroom	Total	1 Bed/Studio	2 Bedroom	3 Bedroom
Affordable to 50% Median Income	**0.000**	**1.000**	**0.000**	1.000	0.429	0.429	0.143
Affordable to 80% Median Income	**0.000**	**0.000**	**0.000**	0.000	0.000	0.000	0.000
Affordable to 120% Median Income	**1.000**	**0.962**	**0.000**	1.962	0.841	0.841	0.280
Workforce Restriction	**0.000**	**0.000**	**0.000**	0.000	0.000	0.000	0.000
Total	1.000	1.962	0.000				

Once you have determined the proposed distribution please fill out the Method Sheet regarding how the required housing will be provided.

Housing Mitigation Plan

updated 1/8/21

Method for Providing the Required Units (Sec. 6.3.5)

Step 6: Method of Housing Unit Provision

The LDRs require that unlesss impractical, any housing requirement of 1 unit or greater be provided through consturction of housing. If impractical, the units my be provided by dedication of land, use of a banked unit, or restriction of an existing unit. Only as a last option shall a fee be paid. The distribution of housing types selected in Step 5 is reflected in the chart below. The default method for providing a whole housing unit is on-site construction. If you would like to propose an alternate method, or provide the requirement through various methods, adjust the gold cells. A red cell indicates the adjustment does not match Step 5. The intructions cell indicates the standards that apply to each method. In addition, each unit shall comply with the Jackson Teton/County Housing Department Rules and Regulations. Response to the applicable standards shall be provided with this Housing Mitigation Plan. The in-lieu fee will calculate.

Unit Type	Units	Method	Instructions
2 bed, < 50% Median Income	1.000	Off-Site Construction	please document compliance with Sec. 6.3.5.D.1
1 bed, < 120% Median Income	1.000	Off-Site Construction	please document compliance with Sec. 6.3.5.D.1
2 bed, < 120% Median Income	0.962	Fee In-Lieu	please document compliance with Sec. 6.3.5.C
Total Units:	**2.962**	**Fee In-Lieu:**	**$261,687.53**

Step 7: Attachments

Please attach to this worksheet any demonstration of existence, independent calculation, rationale for adjustment of unit type, rationale for the proposed method, documentation of the proposed method that is requried by Division 6.3. Please contact the Planning Department with any questions. Information regarding the source of the numbers in this worksheet is available in the Source Sheets.

NORTHWORKS

Architectural, Civil & Landscape Plans

NORTHWORKS

Existing Site



LEGEND

- PK nail with washer inscribed "PLS 4270"
- reinforcing steel bar without cap
- reinforcing steel bar with 1" diameter aluminum cap inscribed "PLS 4270" with other appropriate markings
- sectional subdivision line
- boundary, subject property
- boundary, adjoining property
- boundary, road right-of-way
- boundary, record road right-of-way
- N25°25'25"E 100.00' — measured bearing & distance or curve geometry
- [N25°25'25"E] [100.00'] — calculated bearing & distance or curve geometry
- (N25°25'25"E) (100.00') — record bearing & distance or curve geometry, Plat 1236 & Plat 1333
- edge of pavement
- top back of curb
- edge of gravel
- sidewalk, concrete
- flowline
- toe of slope
- top of bank
- 6205 — index contour, 5' interval
- 6208 — intermediate contour, 1' interval
- 6207.5 — spot elevation
- sign
- fence, rail
- BH 1 — bore hole
- MW 1 — monitoring well
- TP 1 — geotechnical test pit
- sewer manhole
- S — sanitary sewer line
- storm drain inlet
- storm drain manhole
- STM — storm drain line
- hydrant, fire suppression
- water valve
- W — water line

SCALE: 1 INCH = 30 FEET
THIS SCALE VALID ONLY FOR 36x48 PRINTS

NORTHWORKS
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www.nwkz.com

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JORGENSEN
JACKSON, WYOMING
307.733.5150
www.jorgeng.com

NO.	ISSUED DATE	ISSUED FOR
1	2024-10-29	DEVELOPMENT PLAN REVIEW
2	2025-03-24	DEVELOPMENT PLAN REVISION

PROFESSIONAL SEAL

Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number
C1.1

Drawing Name
EXISTING CONDITIONS

EXISTING SITE CONDITIONS


1


2


3


4


5


6


7

SITE PHOTOS









SITE PHOTOS

SITE CONTEXT

The design team has worked hard to incorporate each building into the hillside as much as possible, and to reduce the visual impact of each building at its down-slope facade.

Each building is sunk as deep into in the hillside as the topography will allow for pedestrian and vehicular access. The uphill side of each building is deeply nestled into the terrain (at Lot 58, almost entirely buried at the south).

At the down-slope elevations, stepped terraced walls with planters help to reduce the vertical impact of the facade. Exposed basement walls are no more than 10 feet high, and material changes are used to further break down the appearance of the facade.



SITE CONTEXT

1. SNOW KING MOUNTAIN RESORT BASE



2. LOVE RIDGE CONDOMINIUMS



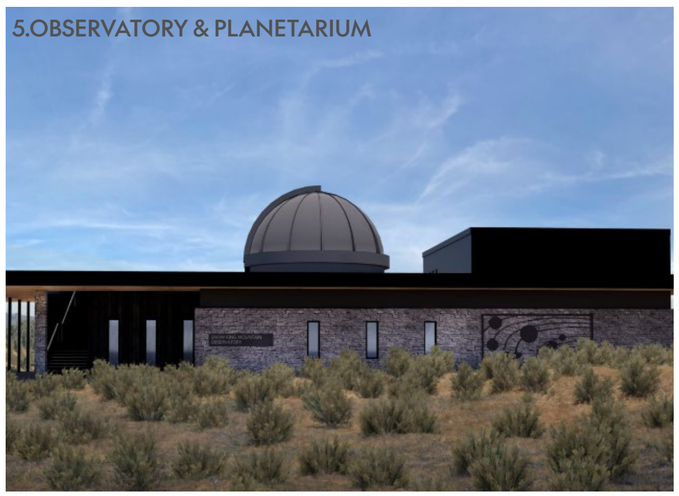
3. ONE TOWN HILL



4. SUMMIT RESTAURANT



5.OBSERVATORY & PLANETARIUM



SURROUNDING CONTEXT

1. Sloped shed roofs, exposed structure on overhangs, modern chimney form, vertical wood siding & “punched” windows

2. Varied siding materials including stone near base and wood siding higher on facade, exposed structure, gabled roof forms and chimney

3. Gabled roof forms, varied siding materials (light and dark), overhangs at base level, dark/metal balconies

4. Flat roof, large overhang, “punched” windows

5. Flat roof, large overhang, varied facade materials including stone and dark wood/metal panels











SURROUNDING CONTEXT

1, 2, 3. Horizontal brown wood siding, green trim windows, gabled roofs, chimneys, garages separate from units

4, 5. Large and varied angled roofs, vertical wood siding, exterior rhythm of balconies with slatted wood railings & vertical wood posts, horizontal bands of windows

NORTHWORKS

Proposed Design Overview



PROPOSED SITE PLAN – LANDSCAPE



GENERAL CONSTRUCTION NOTES

1. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF WYOMING PUBLIC WORKS STANDARD SPECIFICATIONS AND ARTICLE 4 OF THE TOWN OF JACKSON LAND DEVELOPMENT REGULATIONS.
2. EXISTING BASE MAPPING WAS PERFORMED BY JORGENSEN ASSOCIATES, INC.
3. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN A WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY NPDES STORMWATER PERMIT PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITIES.
4. CONTRACTOR SHALL CONSTRUCT EROSION CONTROL STRUCTURES PRIOR TO ANY EARTHWORK OR CONSTRUCTION. CONTROL STRUCTURES SHALL BE CONSTRUCTED AND MAINTAINED BY CONTRACTOR UNTIL VEGETATION IS REESTABLISHED IN DISTURBED AREAS.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL PROMPTLY NOTIFY THE ENGINEER OF ANY VARIATIONS OR DISCREPANCIES.
6. BURIED UTILITIES
   - 6.1. CONTRACTOR SHALL VERIFY LOCATION OF ALL BURIED AND OVERHEAD UTILITIES PRIOR TO ANY EXCAVATION IN THE VICINITY. UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. ENGINEER DOES NOT WARRANT THE ACCURACY NOR COMPLETENESS OF THE INFORMATION SHOWN FOR EXISTING UTILITIES.
   - 6.2. CONTRACTOR SHALL COORDINATE WITH THE PROJECT REPRESENTATIVE TO LOCATE AND AVOID DAMAGE TO ANY FUEL PUMPING FACILITIES, IRRIGATION FACILITIES, WATER UTILITIES, AND STATE MONITORING WELLS AND PIPING.
   - 6.3. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO INSTALLING IMPROVEMENTS.
   - 6.4. CONTRACTOR SHALL NOTIFY WYOMING ONE CALL, 1-800-348-1030, A MINIMUM OF 48 HOURS PRIOR TO EXCAVATION FOR UTILITY LOCATES.
7. ALL EXCAVATION ACTIVITIES SHALL COMPLY WITH PERMIT REQUIREMENTS ISSUED FOR THE PROJECT. CONTRACTOR SHALL REVIEW AND BE RESPONSIBLE FOR PERMIT COMPLIANCE.
8. CONTRACTOR TO CONFIRM STOCKPILE AND STAGING LOCATIONS WITH THE OWNER.
9. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
10. FILL MATERIAL SHALL BE SUITABLE ON-SITE OR IMPORTED MATERIAL WITH ROCKS NO LARGER THAN 6 INCHES IN DIAMETER. LARGER MATERIAL MAY BE PLACED ONLY WHEN AUTHORIZED BY THE ENGINEER.
11. CRUSHED GRAVEL BASE COURSE MATERIAL SHALL BE GRADING H. BASE COURSE SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (AASHTO T-180 - MODIFIED PROCTOR DENSITY).
12. DESTRUCTION AND DAMAGE TO TREES AND OTHER NATURAL VEGETATION SHALL BE MINIMIZED AND ALL DISTURBED SURFACES SHALL BE RESEEDED AS SOON AS PRACTICAL IN ACCORDANCE TO THE REVEGETATION SPECIFICATIONS.
13. STRIP AND SALVAGE TOPSOIL FROM ALL EXCAVATED AREAS.
14. WEEDS SHALL BE CONTROLLED BY SPRAYING, LIMITING DISTURBANCE AREA, OR OTHER MEANS PRIOR TO REVEGETATION AND AFTER REVEGETATION IS COMPLETE.
15. FUGITIVE DUST WILL BE CONTROLLED BY WATERING DURING DRY PERIODS OR AS REQUIRED BY ENGINEER.
16. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED AND PROCESSED ON-SITE ONLY AT LOCATIONS AS DESIGNATED ON THE PLANS.
17. TOPS OF CUT AND FILL SLOPES SHALL BE ROUNDED TO AVOID RAVELING AND EROSION.
18. CUT AND FILL SLOPES SHALL NOT EXCEED 2:1.

WATER AND SEWER UTILITY NOTES

1. WATER AND SEWER INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY, WATER QUALITY DIVISION RULES AND REGULATIONS AND THE TOWN OF JACKSON STANDARDS FOR CONSTRUCTION.
2. CONTRACTOR SHALL NOTIFY THE TOWN OF JACKSON PUBLIC WORKS DEPARTMENT AT PHONE NUMBER (307) 733-3079, PRIOR TO START OF CONSTRUCTION AND PRIOR TO EACH WATER AND SEWER TEST.
3. CONTRACTOR SHALL MAINTAIN WATER AND SEWER SLOPES CONSISTENT WITH THE PLANS. ABRUPT ELEVATION CHANGES ARE NOT PERMITTED AND MAY REQUIRE ADDITIONAL AIR RELEASE VALVES OR BLOW-OFFS AT THE CONTRACTORS EXPENSE.
4. TYPE A TRENCH BACKFILL SHALL APPLY TO ALL PAVED SURFACES AND AROUND ALL APPURTENANCES INCLUDING VALVES, FIRE HYDRANTS AND MANHOLES. TYPE B TRENCH BACKFILL SHALL APPLY TO NON-TRAVELED AREAS. SEE SPECIFICATION WPWSS 02225.
5. CONTINUOUS RIGID TYPE B PIPELINE INSULATION SHALL BE PROVIDED AS SHOWN ON THE TYPICAL TRENCH DETAIL, UNDER ALL TRAVELED AREAS AND AT ALL LOCATIONS WHERE DEPTH OF COVER IS LESS THAN 5 FEET FOR SEWER MAINS AND SERVICES; LESS THAN 7 FEET FOR SEWER FORCE MAINS, WATER MAINS AND SERVICES OR AS SHOWN ON THE PLANS.
6. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN WATER PIPES AND SEWER PIPES/MANHOLES, MEASURED EDGE TO EDGE. MAINTAIN A MINIMUM OF 18 INCHES VERTICAL SEPARATION AT WATER-SEWER PIPE CROSSINGS. WHERE SEWER PIPE CROSSES ABOVE WATER PIPE, SPECIAL CONSTRUCTION IS REQUIRED. SEE TYPICAL DETAILS.
7. WATER SERVICE LINES 4" AND LARGER SHALL BE DUCTILE IRON PIPE, OR APPROVED EQUAL. FITTINGS FOR WATER MAINS SHALL BE DUCTILE IRON, CONFORMING TO AWWA C110 OR C153. MINIMUM DEPTH OF BURY FOR ALL WATER LINES SHALL BE 7'.
8. SANITARY SEWER LINES AND FITTINGS SHALL BE SCHEDULE 40 PVC AND CONFORM TO ASTM D-3034, OR APPROVED EQUAL.

LEGEND

- ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- SNOWMELTED HARDSCAPE
- RETAINING WALL
- 8"W — 8" WATER
- 6"W — 6" WATER
- W — WATER SERVICE
- 8"S — 8" SEWER
- S — SEWER SERVICE
- STM — STORMWATER
- GAS — GAS
- P — POWER
- FIRE HYDRANT
- WATER VALVE
- SEWER MANHOLE
- STORMWATER MANHOLE
- STORM INLET
- TRANSFORMER
- ELECTRIC VAULT

SCALE: 1 INCH = 30 FEET
THIS SCALE VALID ONLY FOR 36x48 PRINTS

NORTHWORKS
185 E. Hansen Avenue
T 307-201-5324
Jackson, Wyoming 83001
www.nwks.com

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JORGENSEN
JACKSON, WYOMING
307.733.5150
www.jorgeng.com

NO.	ISSUED DATE	ISSUED FOR
1	2024-10-29	DEVELOPMENT PLAN REVIEW
2	2025-03-24	DEVELOPMENT PLAN REVISION
3	2025-04-28	DEVELOPMENT PLAN REVISION 2

PROFESSIONAL SEAL

Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number
C1.0

Drawing Name
PROPOSED OVERVIEW

PROPOSED SITE PLAN - CIVIL

AREA & UNIT MIX OVERVIEW

SITE	FAR SUBTOTAL (SF)	GROSS AREA SUBTOTAL (SF)	# 1 BEDS	# 2 BEDS	# 3 BEDS	# 4 BEDS	MARKET UNIT COUNT
LOT 57 NORTH	18,571	31,957	0	10	0	0	10
LOT 57 SOUTH	24,539	36,812	0	5	5	2	12
LOT 53	42,314	71,705	1	18	7	0	26
LOT 58	24,905	34,849	0	7	5	0	12
	110,329	**175,323**	**1**	**40**	**17**	**2**	**60**
	TOTAL FAR AREA	TOTAL GROSS AREA	1-BEDS	2-BEDS	3-BEDS	4-BEDS	MARKET UNITS
			2%	67%	28%	3%	

REQ. # OF AFF. UNITS	AFF. 1-BEDS		AFF. 2-BEDS		AFF. 3-BEDS		TOTAL AFF. UNITS	
	REQ.	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED
5.414	2	**2**	2	**1**	1	**1**	5	**4**
		0		**1**		**0**		**1**
PHASE 1: LOT 57	2	**2**	2	**2**	1	**1**	5	**5**
		AFF. 1-BEDS **OK**		AFF. 2-BEDS **OK**		AFF. 3-BEDS **OK**	TOTAL REQ.	TOTAL AFF. **OK**
5.822	2	**3**	2	**3**	1	**1**	5	**7**
2.962	1	**0**	1	**0**	0	**0**	2	**0**
PHASE 2: LOTS 53 & 58	3	**3**	3	**3**	1	**1**	7	**7**
		AFF. 1-BEDS **OK**		AFF. 2-BEDS **OK**		AFF. 3-BEDS **OK**	TOTAL REQ.	TOTAL AFF. **OK**
	REQ.	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED	REQ.	PROVIDED
ALL LOTS TOTAL	5	**5**	5	**5**	2	**2**	12	**12**
		AFF. 1-BEDS **OK**		AFF. 2-BEDS **OK**		AFF. 3-BEDS **OK**	TOTAL REQ.	TOTAL AFF. **OK**

MAX. SHORT TERM	112,952
OVER/UNDER	*-2,623*
	UNDER

PARKING COUNTS

SITE	TOTAL REQUIRED PARKING	PARKING PROVIDED	PARKING PROV. INCL. TANDEM	TOTAL # BEDROOMS	REQ. BIKE PARKING	REQ. BIKES, SHORT-TERM (25% x .75/bed)	REQ. BIKES, LONG-TERM (75% x .75/bed)	NOTES
LOT 57 NORTH	14	**15**	**19**	27	21	6	15	EVSE spaces: 6 capable + 1 installed. Short-term bike parking at outdoor spaces; long-term located in garages.
LOT 57 SOUTH	13	**14**	**22**	35	27	7	20	EVSE spaces: 7 capable + 1 installed.
LOT 53	33	**42**	**57**	70	53	14	39	EVSE spaces: 17 capable + 3 installed.
LOT 58	12	**19**	**19**	29	22	6	16	EVSE spaces: 6 capable + 1 installed.
	72	**90**	**117**					
	REQ.	PROVIDED	PROVIDED INCL. TANDEM					

OVERALL UNIT MIX SUMMARY

FAR Area Legend

- Market 2-Bedroom
- Market 3-Bedroom
- Market 4-Bedroom
- Market Circulation Stair/Elev
- Market Circulation Corridor
- Market Circulation N/A
- Affordable Studio
- Affordable 1-Bedroom
- Affordable 2-Bedroom
- Affordable 3-Bedroom
- Mechanical
- Parking

LOT 57 NORTH - FAR AREA

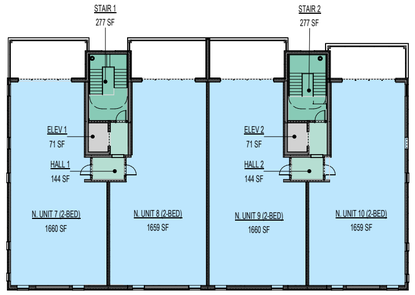
AREA TYPE	ROOM NAME	AREA
T.O. LEVEL 3 SLAB		
Market 2-Bedroom	N. UNIT 10 (2-BED)	1,659 SF
Market 2-Bedroom	N. UNIT 9 (2-BED)	1,660 SF
Market 2-Bedroom	N. UNIT 8 (2-BED)	1,659 SF
Market 2-Bedroom	N. UNIT 7 (2-BED)	1,660 SF
Market Circulation Corridor	HALL 2	144 SF
Market Circulation Corridor	HALL 1	144 SF
Market Circulation Stair/Elev	STAIR 2	277 SF
Market Circulation Stair/Elev	STAIR 1	277 SF
		7,480 SF
T.O. LEVEL 2 SLAB		
Market 2-Bedroom	N. UNIT 6 (2-BED)	1,659 SF
Market 2-Bedroom	N. UNIT 5 (2-BED)	1,660 SF
Market 2-Bedroom	N. UNIT 4 (2-BED)	1,659 SF
Market 2-Bedroom	N. UNIT 3 (2-BED)	1,660 SF
Market Circulation Corridor	N. HALL 2	144 SF
Market Circulation Corridor	N. HALL 1	144 SF
		8,926 SF
T.O. LEVEL 1 SLAB		
Market 2-Bedroom	N. UNIT 2 (2-BED)	1,659 SF
Market 2-Bedroom	N. UNIT 1 (2-BED)	1,660 SF
Market Circulation Corridor	N. HALL 1	144 SF
Market Circulation Stair/Elev	N. STAIR 2	283 SF
Market Circulation Stair/Elev	N. STAIR 1	277 SF
Market Circulation Stair/Elev	N. ELEV 2	71 SF
Market Circulation Stair/Elev	N. ELEV 1	71 SF
		4,165 SF
TOTAL FAR AREA		19,571 SF

LOT 57 NORTH - NOT COUNTED IN FAR

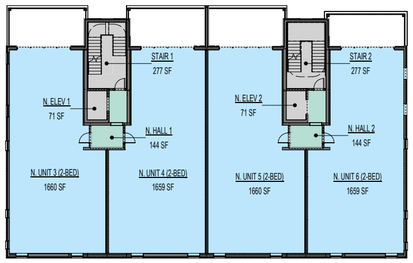
AREA TYPE	ROOM NAME	AREA
T.O. LEVEL 3 SLAB		
Market Circulation N/A	ELEV 1	71 SF
Market Circulation N/A	ELEV 2	71 SF
		142 SF
T.O. LEVEL 2 SLAB		
Market Circulation N/A	N. ELEV 1	71 SF
Market Circulation N/A	N. ELEV 2	71 SF
Market Circulation N/A	STAIR 1	277 SF
Market Circulation N/A	STAIR 2	277 SF
		696 SF
T.O. LEVEL 1 SLAB		
Affordable 1-Bedroom	AFF. UNIT 3	787 SF
Affordable 1-Bedroom	AFF. UNIT 4	800 SF
Affordable 2-Bedroom	AFF. UNIT 1	853 SF
Affordable 3-Bedroom	AFF. UNIT 2	1,317 SF
Market Circulation N/A	AFF. HALL	211 SF
		3,968 SF
T.O. BASEMENT SLAB		
Market Circulation N/A	N. CIRCULATION 1	413 SF
Market Circulation N/A	N. CIRCULATION 2	413 SF
Mechanical	N. MECH	371 SF
Mechanical	N. TRASH	215 SF
Parking	N. PARKING	7,168 SF
		8,580 SF
TOTAL AREA NOT COUNTED TOWARD FAR		13,386 SF

LOT 57 NORTH - GROSS AREA TOTALS

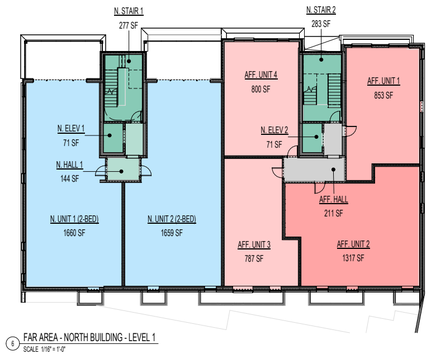
LEVEL	AREA TOTALS BY FLOOR
T.O. LEVEL 3 SLAB	7,622 SF
T.O. LEVEL 2 SLAB	7,622 SF
T.O. LEVEL 1 SLAB	8,133 SF
T.O. BASEMENT SLAB	8,580 SF
TOTAL AREA	31,957 SF



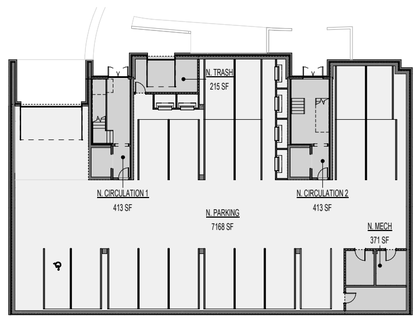
8 FAR AREA - NORTH BUILDING - LEVEL 3
SCALE: 1/16" = 1'-0"



7 FAR AREA - NORTH BUILDING - LEVEL 2
SCALE: 1/16" = 1'-0"



6 FAR AREA - NORTH BUILDING - LEVEL 1
SCALE: 1/16" = 1'-0"



5 FAR AREA - NORTH BUILDING - BASEMENT
SCALE: 1/16" = 1'-0"

FAR Area Legend

- Market 2-Bedroom
- Market 3-Bedroom
- Market 4-Bedroom
- Market Circulation Stair/Elev
- Market Circulation Corridor
- Market Circulation N/A
- Affordable Studio
- Affordable 1-Bedroom
- Affordable 2-Bedroom
- Affordable 3-Bedroom
- Mechanical
- Parking

LOT 57 SOUTH - FAR AREA

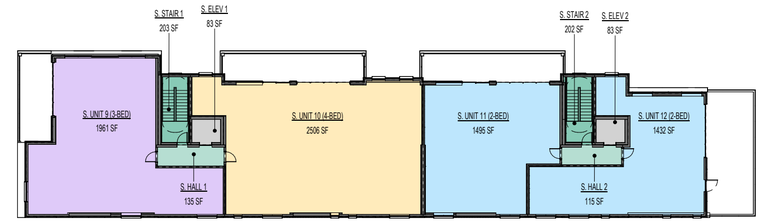
AREA TYPE	ROOM NAME	AREA
T.O. LEVEL 3 SLAB		
Market 2-Bedroom	S. UNIT 12 (2-BED)	1,432 SF
Market 2-Bedroom	S. UNIT 11 (2-BED)	1,495 SF
Market 4-Bedroom	S. UNIT 10 (4-BED)	2,506 SF
Market 2-Bedroom	S. UNIT 9 (3-BED)	1,961 SF
Market Circulation Stair/Elev	S. STAIR 2	202 SF
Market Circulation Stair/Elev	S. STAIR 1	203 SF
Market Circulation Corridor	S. HALL 2	115 SF
Market Circulation Corridor	S. HALL 1	135 SF
		8,049 SF
T.O. LEVEL 2 SLAB		
Market 3-Bedroom	S. UNIT 8 (3-BED)	1,866 SF
Market 2-Bedroom	S. UNIT 7 (2-BED)	1,648 SF
Market 4-Bedroom	S. UNIT 6 (4-BED)	2,506 SF
Market 3-Bedroom	S. UNIT 5 (3-BED)	2,049 SF
Market Circulation Corridor	S. HALL 2	118 SF
Market Circulation Corridor	S. HALL 1	135 SF
		8,322 SF
T.O. LEVEL 1 SLAB		
Market 3-Bedroom	S. UNIT 4 (3-BED)	1,866 SF
Market 2-Bedroom	S. UNIT 3 (2-BED)	1,648 SF
Market 2-Bedroom	S. UNIT 2 (2-BED)	1,773 SF
Market 3-Bedroom	S. UNIT 1 (3-BED)	2,027 SF
Market Circulation Stair/Elev	S. STAIR 2	202 SF
Market Circulation Stair/Elev	S. STAIR 1	203 SF
Market Circulation Corridor	S. HALL 2	118 SF
Market Circulation Corridor	S. HALL 1	165 SF
Market Circulation Stair/Elev	S. ELEV 2	83 SF
Market Circulation Stair/Elev	S. ELEV 1	83 SF
		8,198 SF
TOTAL FAR AREA		24,569 SF

LOT 57 SOUTH - NOT COUNTED IN FAR

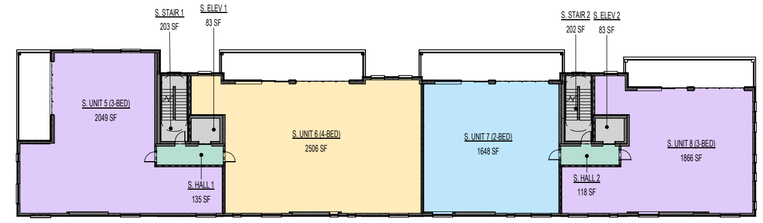
AREA TYPE	ROOM NAME	AREA
T.O. LEVEL 3 SLAB		
Market Circulation N/A	S. ELEV 1	83 SF
Market Circulation N/A	S. ELEV 2	83 SF
		166 SF
T.O. LEVEL 2 SLAB		
Market Circulation N/A	S. ELEV 1	83 SF
Market Circulation N/A	S. ELEV 2	83 SF
Market Circulation N/A	S. STAIR 1	203 SF
Market Circulation N/A	S. STAIR 2	202 SF
		571 SF
T.O. LEVEL 1 SLAB		
Affordable 2-Bedroom	AFF. UNIT 5 (2-BED)	725 SF
		725 SF
T.O. BASEMENT SLAB		
Market Circulation N/A	S. CIRCULATION 1	398 SF
Market Circulation N/A	S. CIRCULATION 2	398 SF
Mechanical	TRASH / MECH	367 SF
Parking	S. PARKING	9,648 SF
		10,811 SF
TOTAL AREA NOT COUNTED TOWARD FAR		12,273 SF

LOT 57 SOUTH - GROSS AREA TOTALS

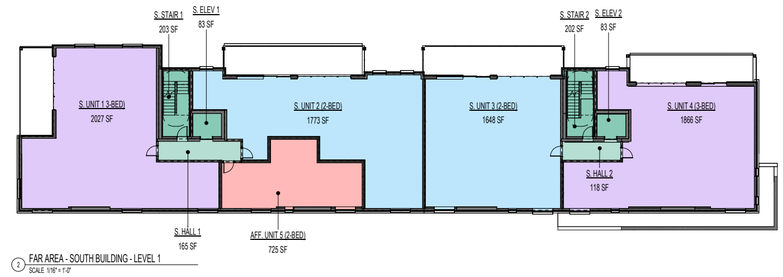
LEVEL	AREA TOTALS BY FLOOR
T.O. LEVEL 3 SLAB	8,215 SF
T.O. LEVEL 2 SLAB	8,893 SF
T.O. LEVEL 1 SLAB	8,893 SF
T.O. BASEMENT SLAB	10,811 SF
TOTAL AREA	36,812 SF



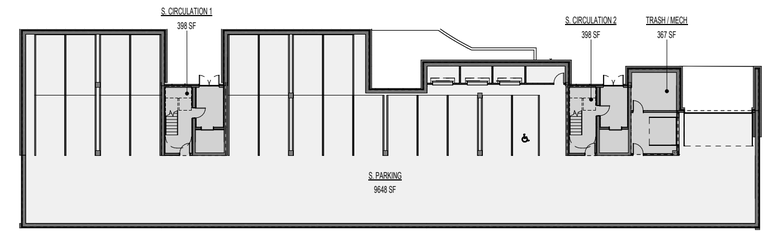
4 FAR AREA - SOUTH BUILDING - LEVEL 3
SCALE: 1/16" = 1'-0"



3 FAR AREA - SOUTH BUILDING - LEVEL 2
SCALE: 1/16" = 1'-0"



2 FAR AREA - SOUTH BUILDING - LEVEL 1
SCALE: 1/16" = 1'-0"



1 FAR AREA - SOUTH BUILDING - GARAGE
SCALE: 1/16" = 1'-0"

0 8 16 32 64

UNIT MIX & F.A.R. AREAS – LOT 57

LOT 53 - FAR AREA SCHEDULE

AREA TYPE	ROOM NAME	AREA
LEVEL 3		
Market 2-Bedroom	UNIT 26 (2-BED)	1,271 SF
Market 2-Bedroom	UNIT 25 (2-BED)	1,371 SF
Market 2-Bedroom	UNIT 24 (2-BED)	1,359 SF
Market 3-Bedroom	UNIT 23 (3-BED)	2,433 SF
Market 3-Bedroom	UNIT 22 (3-BED)	2,302 SF
Market 2-Bedroom	UNIT 21 (2-BED)	1,365 SF
Market 2-Bedroom	UNIT 20 (2-BED)	1,359 SF
Market 3-Bedroom	UNIT 19 (3-BED)	1,269 SF
Market Circulation Stair	STAIR 5	235 SF
Market Circulation Stair	STAIR 4	235 SF
Market Circulation Stair	STAIR 2	232 SF
Market Circulation Stair	STAIR 1	235 SF
Market Circulation Corridor	HALL 5	65 SF
Market Circulation Corridor	HALL 4	65 SF
Market Circulation Corridor	HALL 2	64 SF
Market Circulation Corridor	HALL 1	65 SF
		13,925 SF
LEVEL 2		
Market 2-Bedroom	UNIT 18 (2-BED)	1,277 SF
Market 2-Bedroom	UNIT 17 (2-BED)	1,371 SF
Market 2-Bedroom	UNIT 16 (2-BED)	1,359 SF
Market 3-Bedroom	UNIT 15 (3-BED)	2,434 SF
Market 3-Bedroom	UNIT 14 (3-BED)	2,296 SF
Market 2-Bedroom	UNIT 13 (2-BED)	1,365 SF
Market 2-Bedroom	UNIT 12 (2-BED)	1,359 SF
Market 3-Bedroom	UNIT 11 (3-BED)	1,823 SF
Market Circulation Corridor	HALL 5	65 SF
Market Circulation Corridor	HALL 4	65 SF
Market Circulation Corridor	HALL 2	65 SF
Market Circulation Corridor	HALL 1	65 SF
		13,544 SF
LEVEL 1		
Market 2-Bedroom	UNIT 10 (2-BED)	1,276 SF
Market 2-Bedroom	UNIT 9 (2-BED)	1,371 SF
Market 2-Bedroom	UNIT 8 (2-BED)	1,365 SF
Market 1-Bedroom	UNIT 7 (1-BED+DEN)	1,116 SF
Market 2-Bedroom	UNIT 6 (2-BED)	1,428 SF
Market 2-Bedroom	UNIT 5 (2-BED)	1,078 SF
Market 2-Bedroom	UNIT 4 (2-BED)	1,067 SF
Market 2-Bedroom	UNIT 3 (2-BED)	1,365 SF
Market 2-Bedroom	UNIT 2 (2-BED)	1,359 SF
Market 3-Bedroom	UNIT 1 (3-BED)	1,823 SF
Market Circulation Stair	STAIR 5	235 SF
Market Circulation Stair	STAIR 4	232 SF
Market Circulation Stair	STAIR 2	235 SF
Market Circulation Stair	STAIR 1	235 SF
Market Circulation Corridor	HALL 5	65 SF
Market Circulation Corridor	HALL 4	64 SF
Market Circulation Corridor	HALL 3	81 SF
Market Circulation Corridor	HALL 2	65 SF
Market Circulation Corridor	HALL 1	65 SF
Market Circulation Elevator	ELEV 5	83 SF
Market Circulation Elevator	ELEV 4	81 SF
Market Circulation Elevator	ELEV 2	78 SF
Market Circulation Elevator	ELEV 1	78 SF
		14,845 SF
TOTAL FAR AREA		42,314 SF

LOT 53 - NOT COUNTED TOWARD FAR AREA

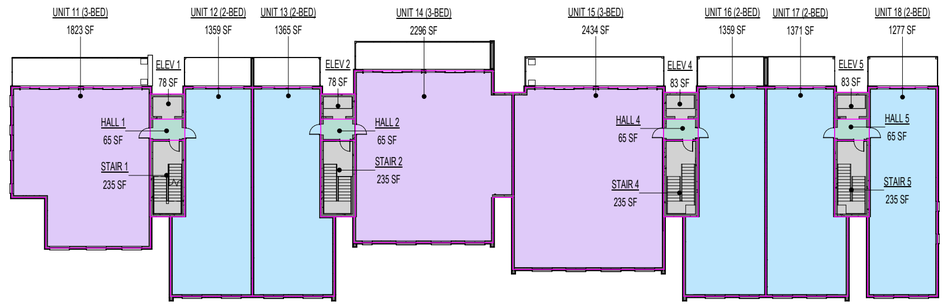
AREA TYPE	ROOM NAME	AREA
LEVEL 3		
Market Circulation N/A	ELEV 1	78 SF
Market Circulation N/A	ELEV 2	76 SF
Market Circulation N/A	ELEV 4	78 SF
Market Circulation N/A	ELEV 5	83 SF
		315 SF
LEVEL 2		
Market Circulation N/A	ELEV 1	78 SF
Market Circulation N/A	ELEV 2	78 SF
Market Circulation N/A	ELEV 4	83 SF
Market Circulation N/A	ELEV 5	83 SF
Market Circulation N/A	STAIR 1	235 SF
Market Circulation N/A	STAIR 2	235 SF
Market Circulation N/A	STAIR 4	235 SF
Market Circulation N/A	STAIR 5	235 SF
		1,262 SF
BASEMENT		
Affordable 1-Bedroom	AFF. UNIT 3 (1-BED)	530 SF
Affordable 1-Bedroom	AFF. UNIT 6 (1-BED)	527 SF
Affordable 1-Bedroom	AFF. UNIT 7 (STUDIO)	490 SF
Affordable 2-Bedroom	AFF. UNIT 1 (2-BED)	832 SF
Affordable 2-Bedroom	AFF. UNIT 2 (2-BED)	817 SF
Affordable 2-Bedroom	AFF. UNIT 5 (2-BED)	706 SF
Affordable 3-Bedroom	AFF. UNIT 4 (3-BED)	1,004 SF
Market 2-Bedroom non-FAR	UNIT 4 (2-BED)	508 SF
Market 2-Bedroom non-FAR	UNIT 5 (2-BED)	553 SF
Market Circulation N/A	ELEV 1	73 SF
Market Circulation N/A	ELEV 2	73 SF
Market Circulation N/A	ELEV 4	75 SF
Market Circulation N/A	ELEV 5	83 SF
Market Circulation N/A	HALL 1	404 SF
Market Circulation N/A	HALL 2	149 SF
Market Circulation N/A	HALL 4	215 SF
Market Circulation N/A	HALL 5	170 SF
Market Circulation N/A	STAIR 1	210 SF
Market Circulation N/A	STAIR 2	206 SF
Market Circulation N/A	STAIR 3	133 SF
Market Circulation N/A	STAIR 4	210 SF
Market Circulation N/A	STAIR 5	210 SF
Mechanical	MECH	443 SF
Parking	PARKING	19,193 SF
		27,814 SF
TOTAL AREA NOT COUNTED TOWARD FAR		29,391 SF

LOT 53 - AREA TOTALS

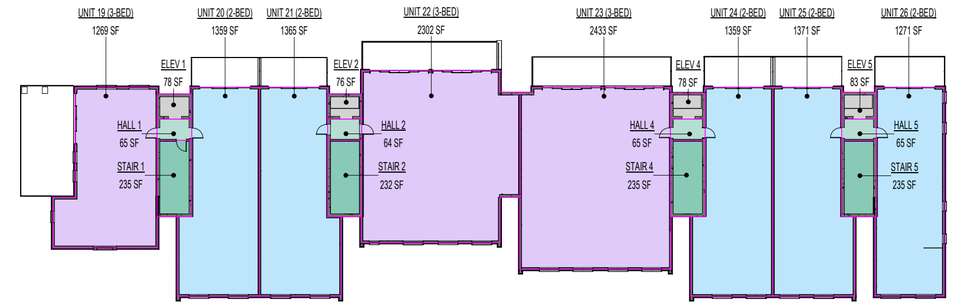
LEVEL	AREA TOTALS BY FLOOR
LEVEL 3	14,240 SF
LEVEL 2	14,806 SF
LEVEL 1	14,845 SF
BASEMENT	27,814 SF
TOTAL AREA	71,705 SF

FAR Area Legend

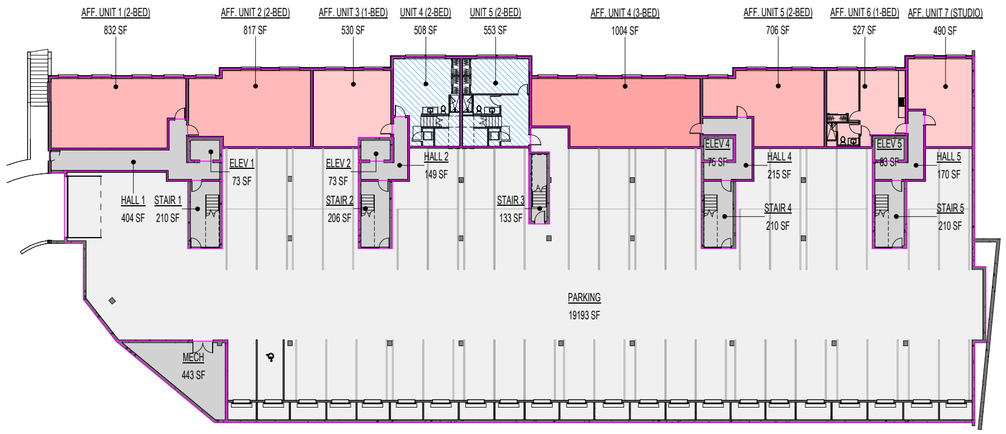
- Market 2-Bedroom
- Market 2-Bedroom non-FAR
- Market 3-Bedroom
- Affordable Studio
- Affordable 1-Bedroom
- Market 1-Bedroom
- Affordable 2-Bedroom
- Affordable 3-Bedroom
- Market Circulation Elevator
- Market Circulation Corridor
- Market Circulation Stair
- Market Circulation N/A
- Mechanical
- Parking



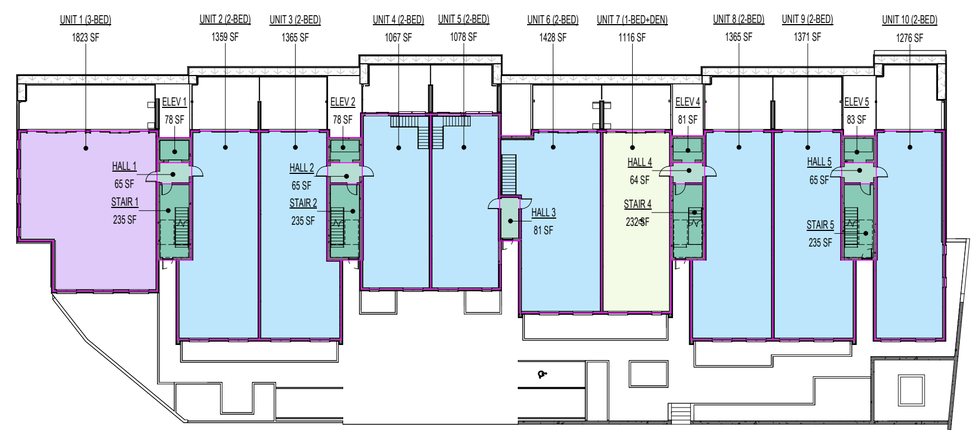
3 LOT 53 - FAR AREA PLAN - 2ND FLOOR
SCALE 1" = 20'-0"



4 LOT 53 - FAR AREA PLAN - 3RD FLOOR
SCALE 1" = 20'-0"



2 LOT 53 - FAR AREA PLAN - BASEMENT
SCALE 1" = 20'-0"



1 LOT 53 - FAR AREA PLAN - 1ST FLOOR
SCALE 1" = 20'-0"

0 10 20 40 80

UNIT MIX & F.A.R. AREAS – LOT 53

LOT 58 - FAR AREA SCHEDULE

AREA TYPE	ROOM NAME	AREA
LEVEL 3		
Market 3-Bedroom	UNIT 12 (3-BED)	2,086 SF
Market 2-Bedroom	UNIT 11 (2-BED)	1,790 SF
Market 2-Bedroom	UNIT 10 (2-BED)	1,790 SF
Market 3-Bedroom	UNIT 9 (3-BED)	2,086 SF
Market Circulation Stair	STAIR 2	197 SF
Market Circulation Stair	STAIR 1	197 SF
Market Circulation Corridor	HALL 2	116 SF
Market Circulation Corridor	HALL 1	116 SF
		8,378 SF
LEVEL 2		
Market 3-Bedroom	UNIT 8 (3-BED)	2,086 SF
Market 2-Bedroom	UNIT 7 (2-BED)	1,790 SF
Market 2-Bedroom	UNIT 6 (2-BED)	1,790 SF
Market 3-Bedroom	UNIT 5 (3-BED)	2,086 SF
Market Circulation Corridor	HALL 2	116 SF
Market Circulation Corridor	HALL 1	116 SF
		7,984 SF
LEVEL 1		
Market 2-Bedroom	UNIT 4 (2-BED)	2,087 SF
Market 2-Bedroom	UNIT 3 (2-BED)	1,790 SF
Market 2-Bedroom	UNIT 2 (2-BED)	1,790 SF
Market 3-Bedroom	UNIT 1 (3-BED)	2,086 SF
Market Circulation Stair	STAIR 2	197 SF
Market Circulation Stair	STAIR 1	197 SF
Market Circulation Corridor	HALL 2	116 SF
Market Circulation Corridor	HALL 1	116 SF
Market Circulation Elevator	ELEV 1	82 SF
Market Circulation Elevator	ELEV 1	82 SF
		8,543 SF
TOTAL FAR AREA		24,905 SF

LOT 58 - NOT COUNTED TOWARD FAR AREA

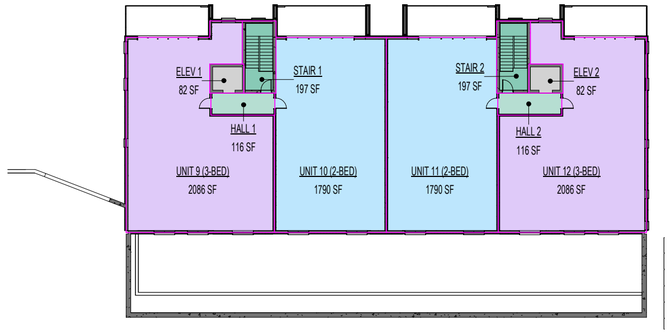
AREA TYPE	ROOM NAME	AREA
LEVEL 3		
Market Circulation N/A	ELEV 1	82 SF
Market Circulation N/A	ELEV 2	82 SF
		164 SF
LEVEL 2		
Market Circulation N/A	ELEV 1	82 SF
Market Circulation N/A	ELEV 2	82 SF
Market Circulation N/A	STAIR 1	197 SF
Market Circulation N/A	STAIR 2	197 SF
		558 SF
BASEMENT		
Market Circulation N/A	ELEV 1	77 SF
Market Circulation N/A	ELEV 2	77 SF
Market Circulation N/A	HALL 1	129 SF
Market Circulation N/A	HALL 2	129 SF
Market Circulation N/A	STAIR 1	196 SF
Market Circulation N/A	STAIR 2	196 SF
Mechanical	MECH	207 SF
Mechanical	TRASH	167 SF
Parking	PARKING GARAGE	8,044 SF
		9,222 SF
TOTAL AREA NOT COUNTED TOWARD FAR		9,944 SF

LOT 58 - AREA TOTALS

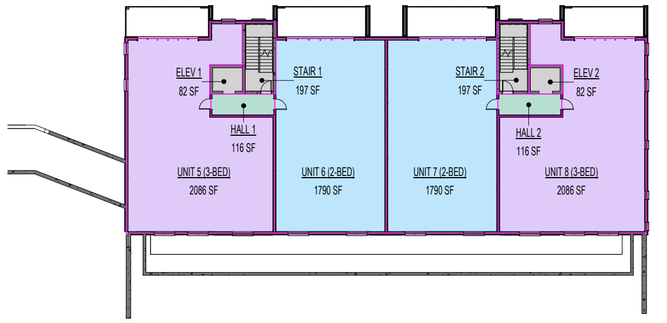
LEVEL	AREA TOTALS BY FLOOR
LEVEL 3	8,542 SF
LEVEL 2	8,542 SF
LEVEL 1	8,543 SF
BASEMENT	9,222 SF
TOTAL AREA	34,849 SF

FAR Area Legend

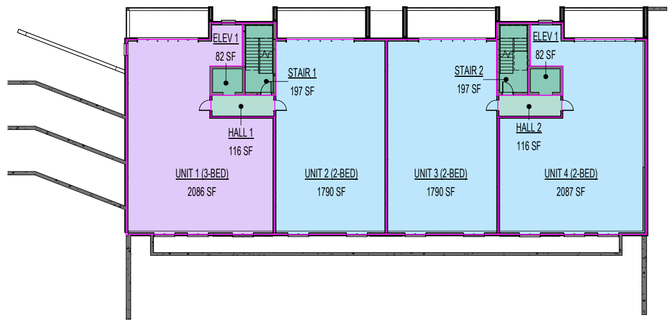
- Market 1-Bedroom
- Market 2-Bedroom
- Market 3-Bedroom
- Market Circulation Elevator
- Market Circulation Corridor
- Market Circulation Stair
- Market Circulation N/A
- Mechanical
- Parking



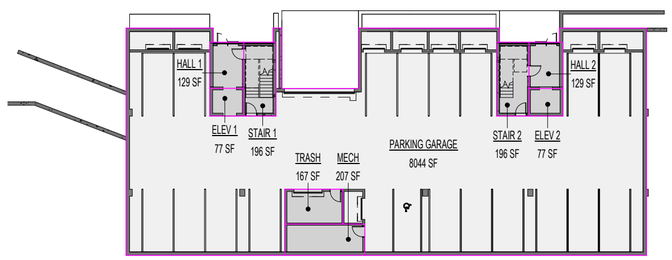
4 LOT 58 - FAR AREA PLAN - 3RD FLOOR
SCALE 1" = 20'-0"



3 LOT 58 - FAR AREA PLAN - 2ND FLOOR
SCALE 1" = 20'-0"



1 LOT 58 - FAR AREA PLAN - 1ST FLOOR
SCALE 1" = 20'-0"



2 LOT 58 - FAR AREA PLAN - BASEMENT
SCALE 1" = 20'-0"

0 10 20 40 80

UNIT MIX & F.A.R. AREAS – LOT 58

NORTHWORKS

Overall Renderings



BLACK METAL WALL AND
ROOF CLADDING



WOOD SIDING
BUILDING WALL CLADDING



SILVERTIP LIMESTONE
BUILDING WALL CLADDING



BOARD FORM CONCRETE
SITE RETAINING WALLS



MATERIAL PALETTE





FULL SITE AERIAL - WINTER





FULL SITE AERIAL - SUMMER





LOT 57 NORTH – RENDERED ELEVATION





LOVE RIDGE CONDOS & LOT 57 NORTH BUILDING





LOT 57 SOUTH RENDERED ELEVATION





LOT 57 COURTYARD





LOT 57 SOUTH BUILDING MASSING REDUCTION





LOT 57 SOUTH BUILDING MASSING REDUCTION





LOT 53 APPROACH





LOT 53 RENDERED ELEVATION





LOT 53 MAIN ENTRY & VEHICULAR DROPOFF





LOT 53 NORTH PATH AT LOVE RIDGE CONDOS





LOT 58 RENDERED ELEVATION

NORTHWORKS

Lot 57



LOT 57 SITE PLAN - LANDSCAPE

IN WINTER, THE ENTIRE MOUNTAIN CASTS A SHADOW ON ITSELF TOWARDS THE NORTH.

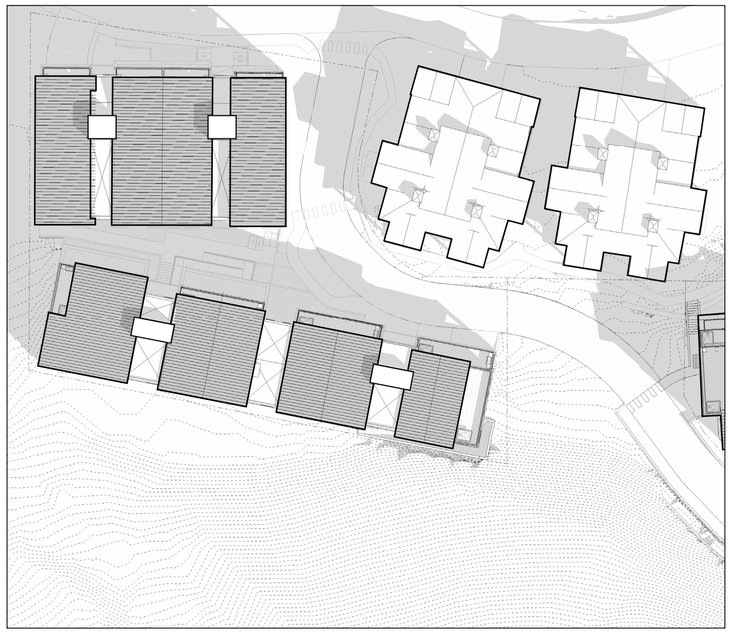
IN SPRING, THE SOUTH BUILDING'S SHADOW BARELY REACHES THE CONDOS TO THE NORTH.

IN SUMMER, PLENTY OF SUNLIGHT REACHES THE SPACE BETWEEN THE BUILDINGS.

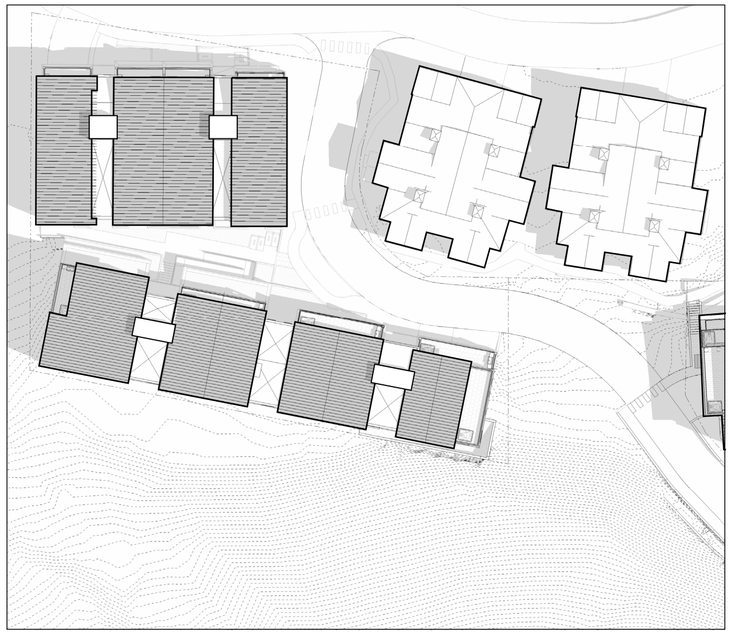
10:00AM



WINTER SOLSTICE (Dec 21, 10:00 AM)



SPRING EQUINOX (Mar 20, 10:00 AM)



SUMMER SOLSTICE (Jun 20, 10:00 AM)

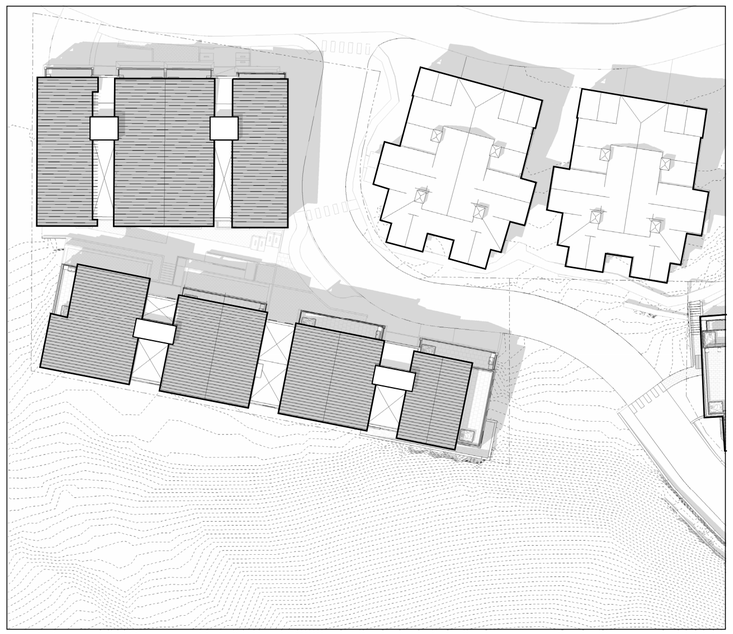
2:00PM



WINTER SOLSTICE (Dec 21, 2:00 PM)



SPRING EQUINOX (Mar 20, 2:00 PM)



SUMMER SOLSTICE (Jun 20, 2:00 PM)

SOLAR ACCESS



LOT 57 SITE PLAN – CIVIL



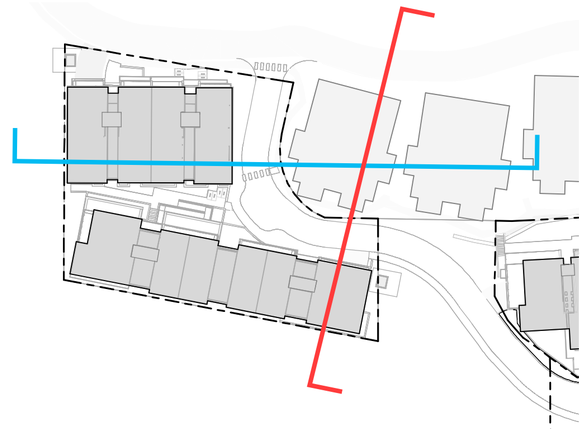
NORTH BUILDING, NORTH ELEVATION

LOT 57 NORTH – RENDERED ELEVATION



SOUTH BUILDING, NORTH ELEVATION

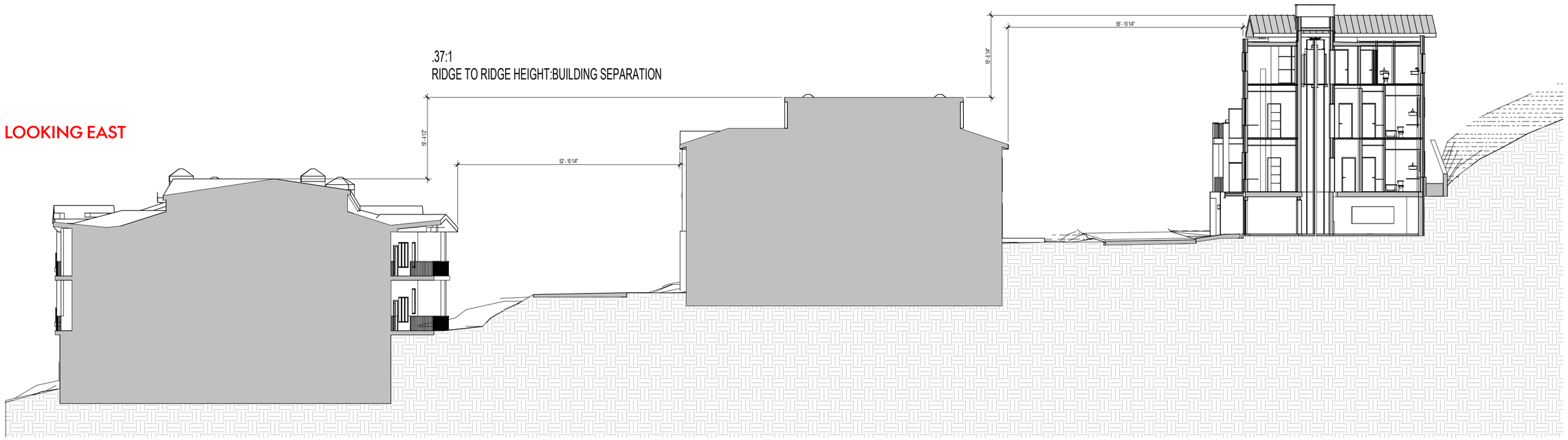
LOT 57 SOUTH – RENDERED ELEVATION



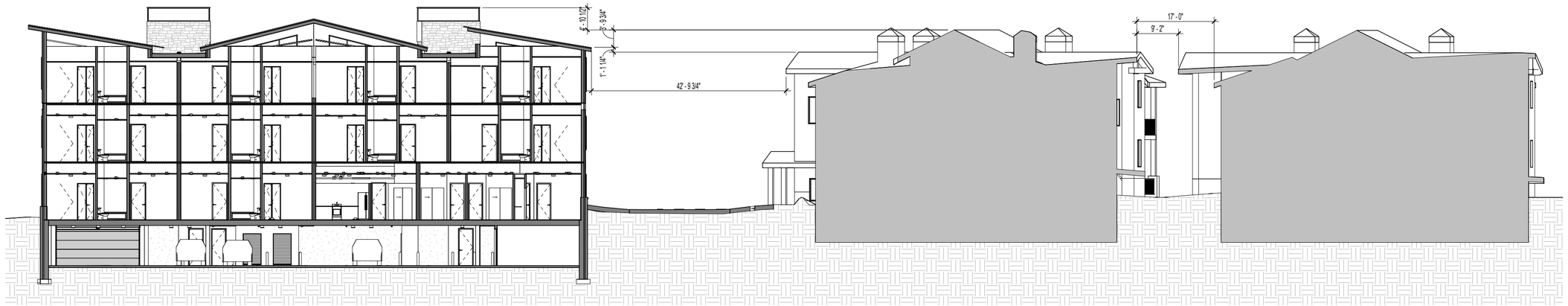
.35:1
RIDGE TO RIDGE HEIGHT:BUILDING SEPARATION

.37:1
RIDGE TO RIDGE HEIGHT:BUILDING SEPARATION

LOOKING EAST



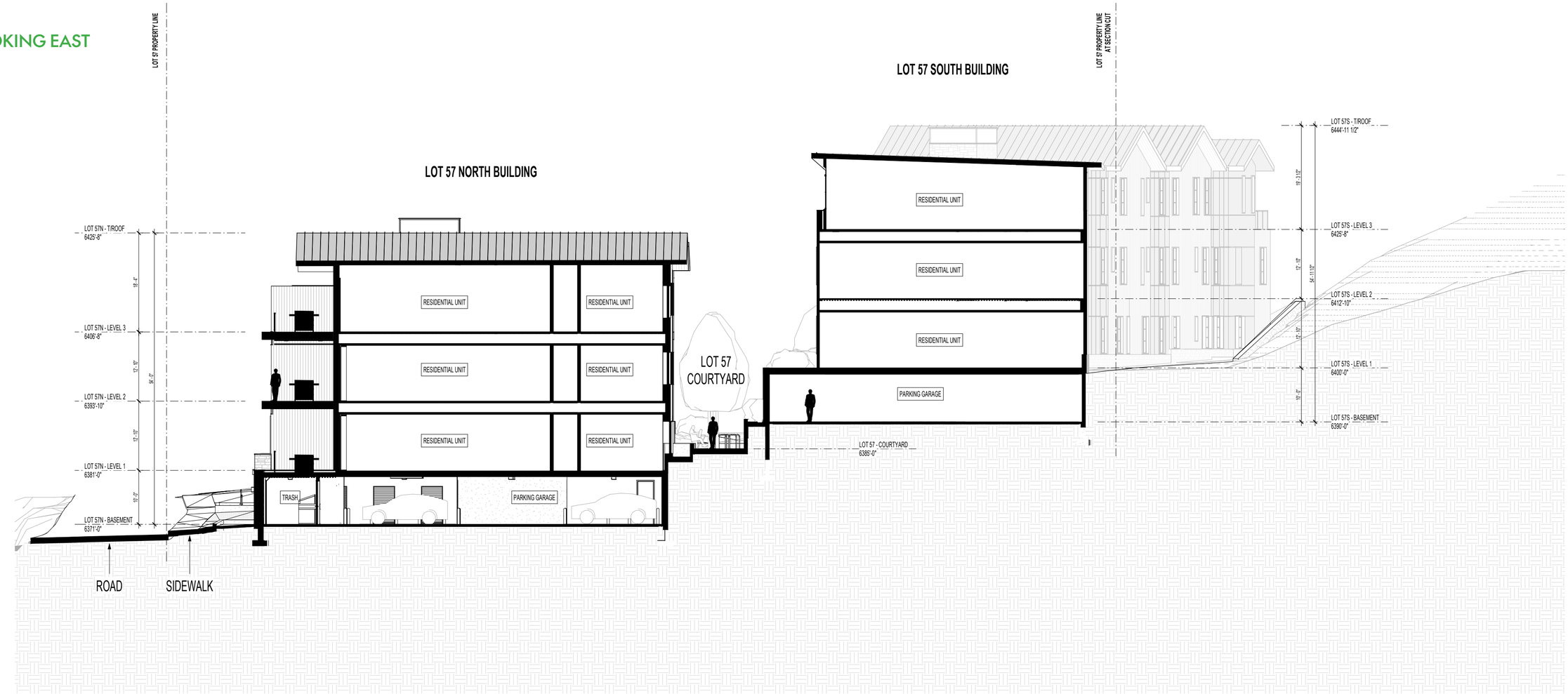
LOOKING NORTH



SITE SECTIONS THROUGH LOVE RIDGE CONDOS & LOT 57



LOOKING EAST



SITE SECTION THROUGH LOT 57 NORTH & SOUTH, LOOKING EAST

SUMMARY

NORTH BUILDING

- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

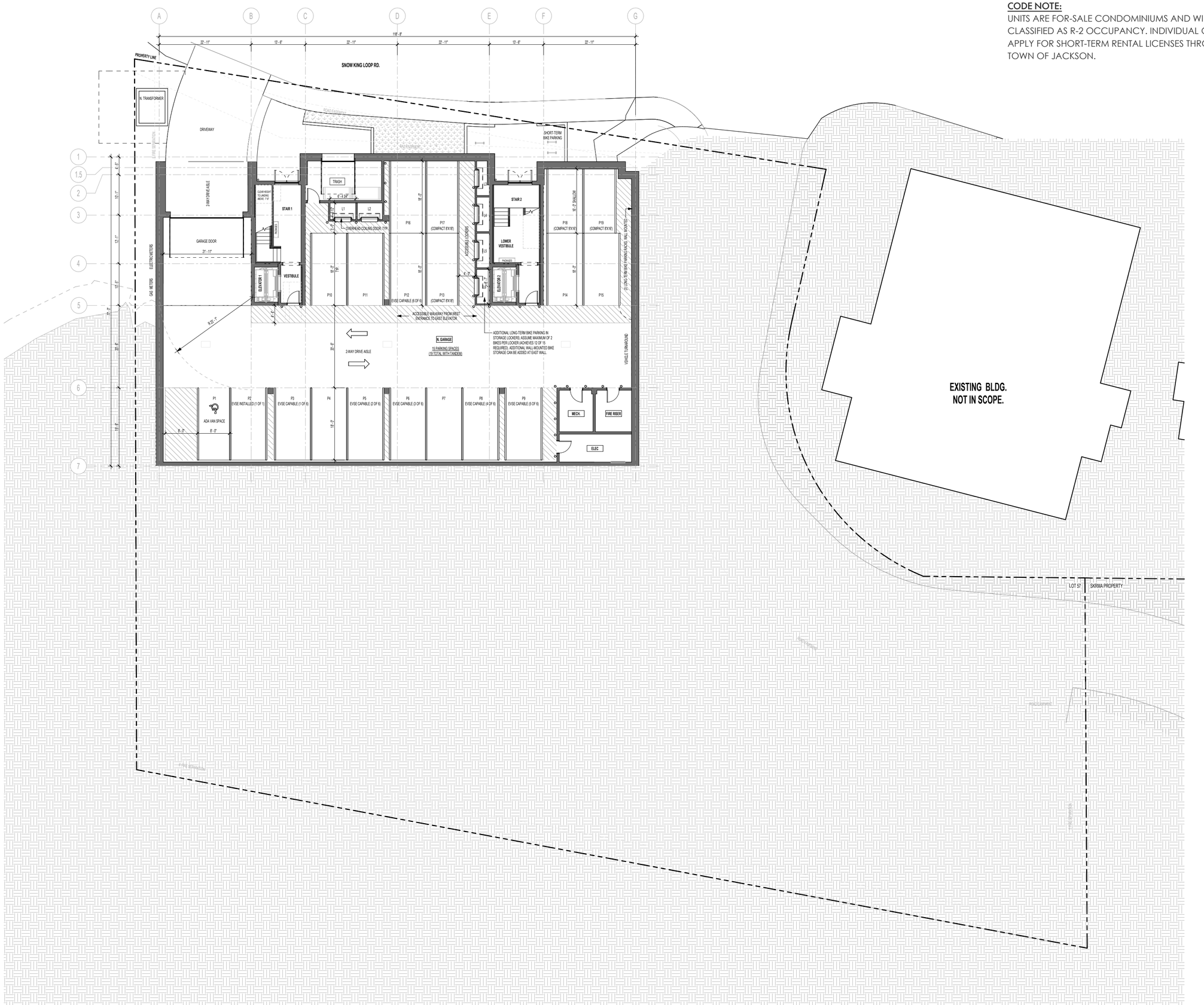
SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

57 NORTH:
BASEMENT

57 SOUTH:
SUBGRADE



SCALE: 1 / 16" = 1' - 0"

LOT 57 PLANS

SUMMARY

NORTH BUILDING

- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

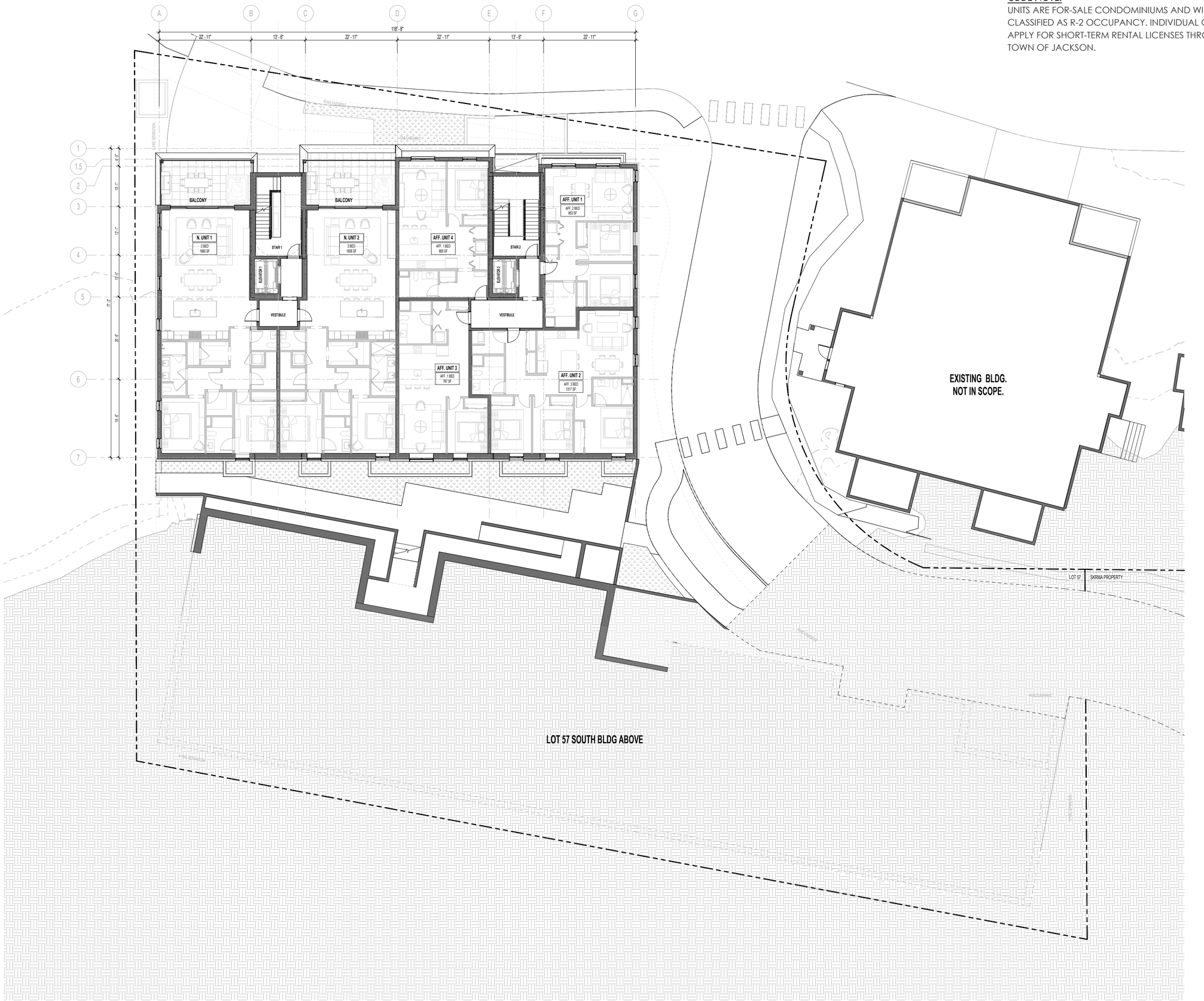
SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

57 NORTH:
LEVEL 1

57 SOUTH:
SUBGRADE



0 4 8 16 32

SCALE: 1 / 16" = 1' - 0"

LOT 57 PLANS

SUMMARY

NORTH BUILDING

- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

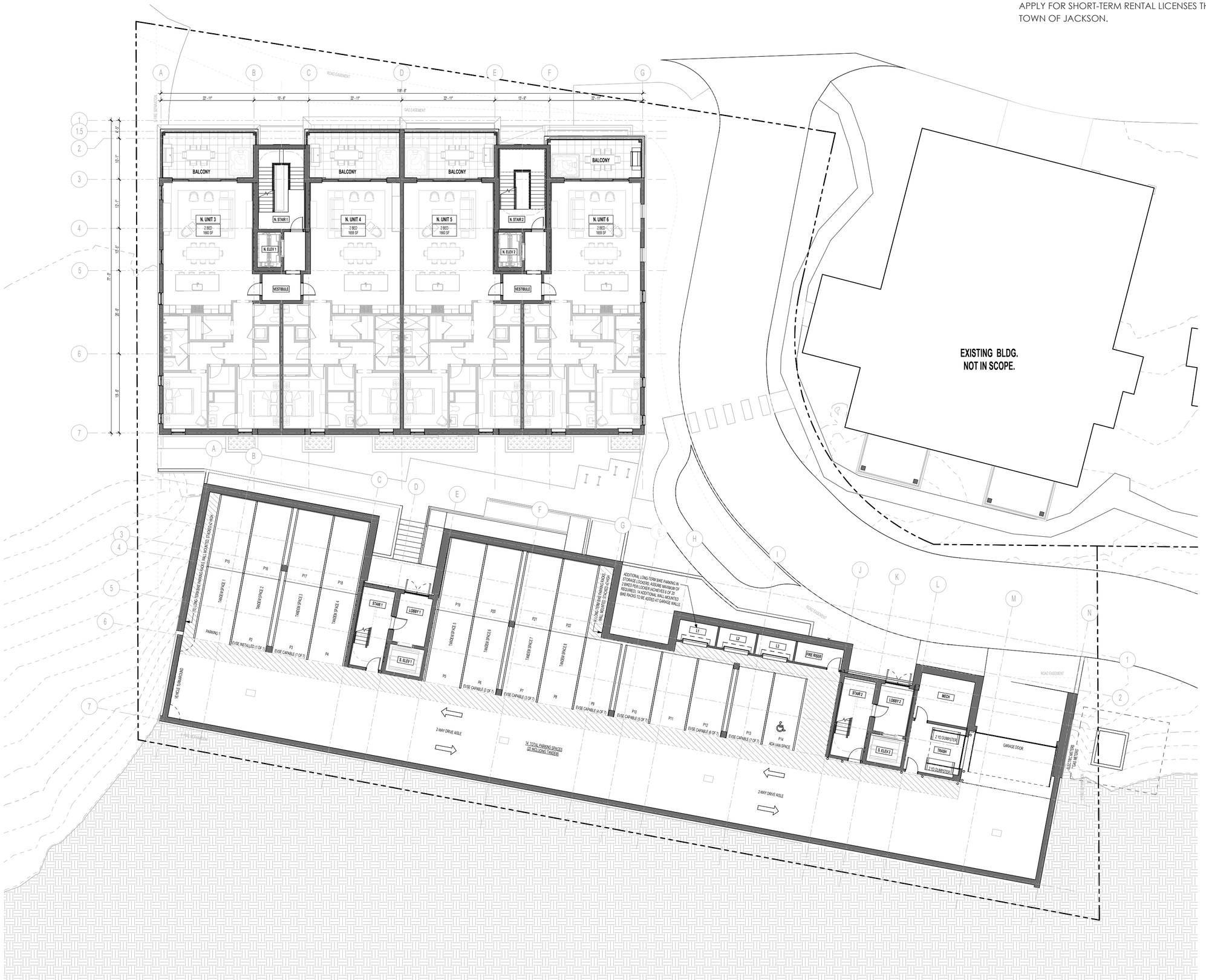
SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

57 NORTH:
LEVEL 2

57 SOUTH:
BASEMENT



LOT 57 PLANS

SCALE: 1 / 16" = 1' - 0"

SUMMARY

NORTH BUILDING

- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

57 NORTH:
LEVEL 3



57 SOUTH:
LEVEL 1

SCALE: 1 / 16" = 1' - 0"

LOT 57 PLANS

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

SUMMARY

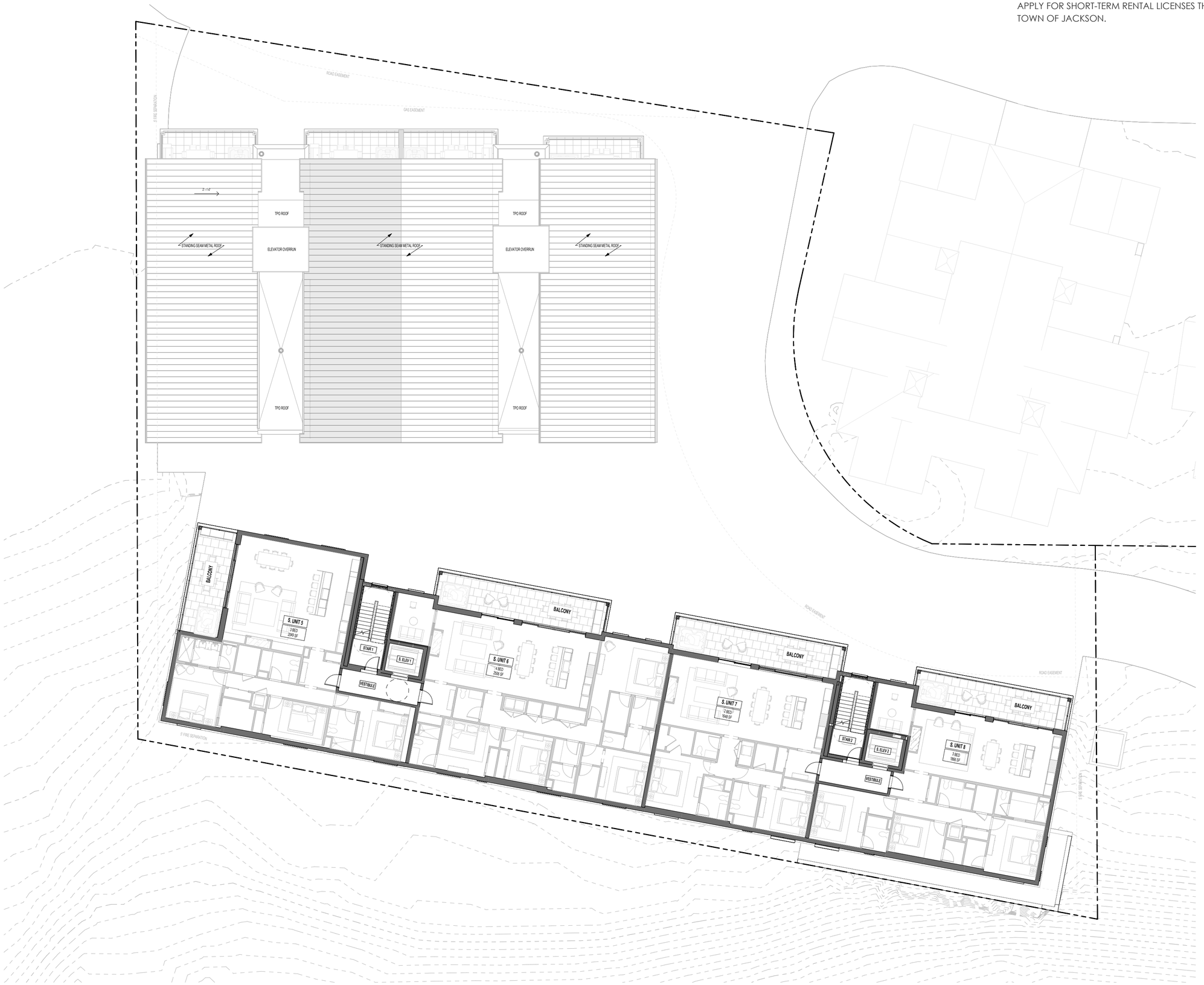
NORTH BUILDING

- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

57 NORTH:
ROOF



57 SOUTH:
LEVEL 2

0 4 8 16 32

SCALE: 1 / 16" = 1' - 0"

LOT 57 PLANS

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

SUMMARY

NORTH BUILDING

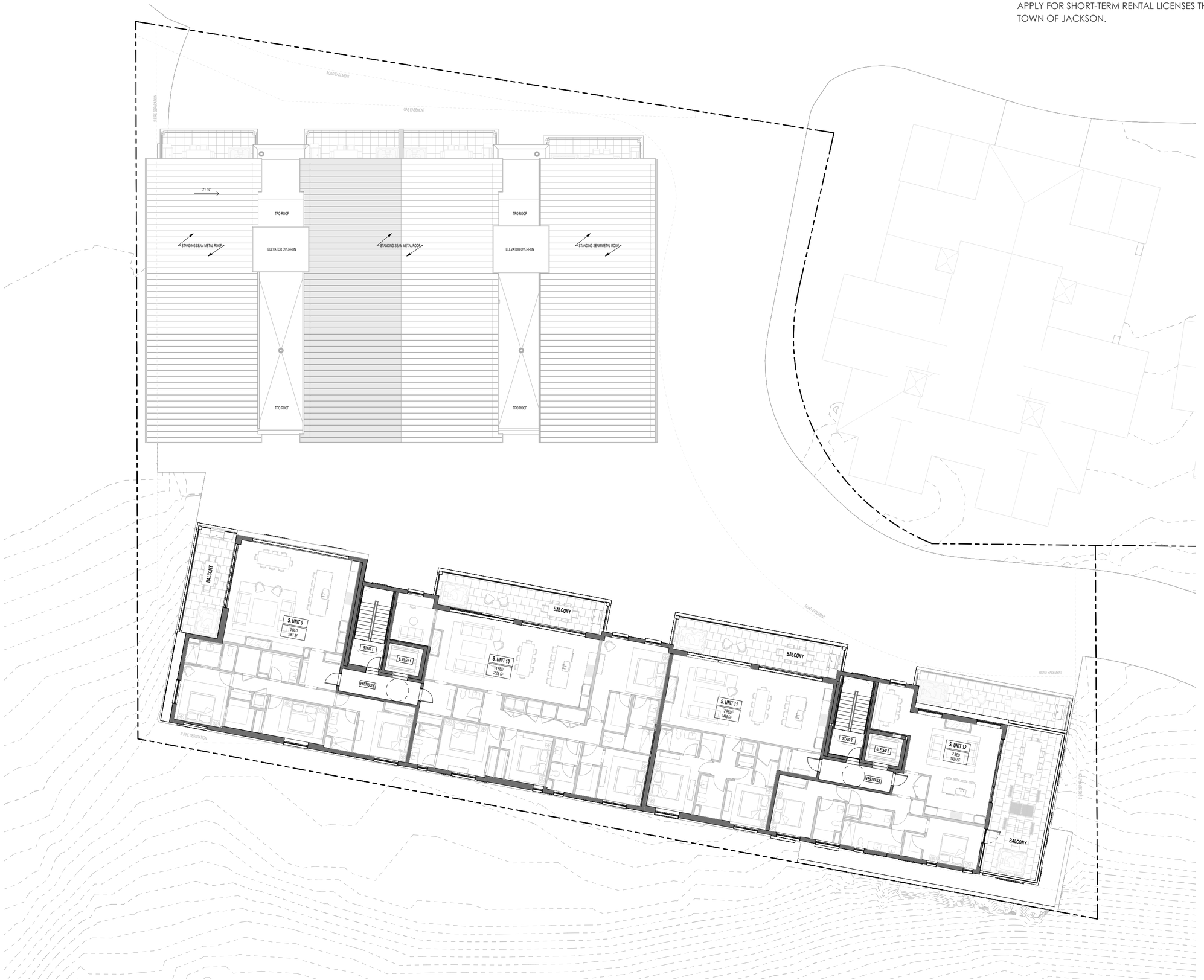
- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

57 NORTH:
ROOF BELOW

57 SOUTH:
LEVEL 3



SCALE: 1 / 16" = 1' - 0"

LOT 57 PLANS

SUMMARY

NORTH BUILDING

- PARKING SPACES : 15
- 2-BEDROOMS: 10
- AFFORDABLE UNITS: 4

SOUTH BUILDING

- PARKING SPACES : 14
- 2-BEDROOMS: 5
- 3-BEDROOMS: 5
- 4-BEDROOMS: 2
- AFFORDABLE UNITS: 1

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

57 NORTH:
ROOF BELOW



57 SOUTH:
LEVEL 3

0 4 8 16 32

SCALE: 1 / 16" = 1' - 0"

LOT 57 PLANS

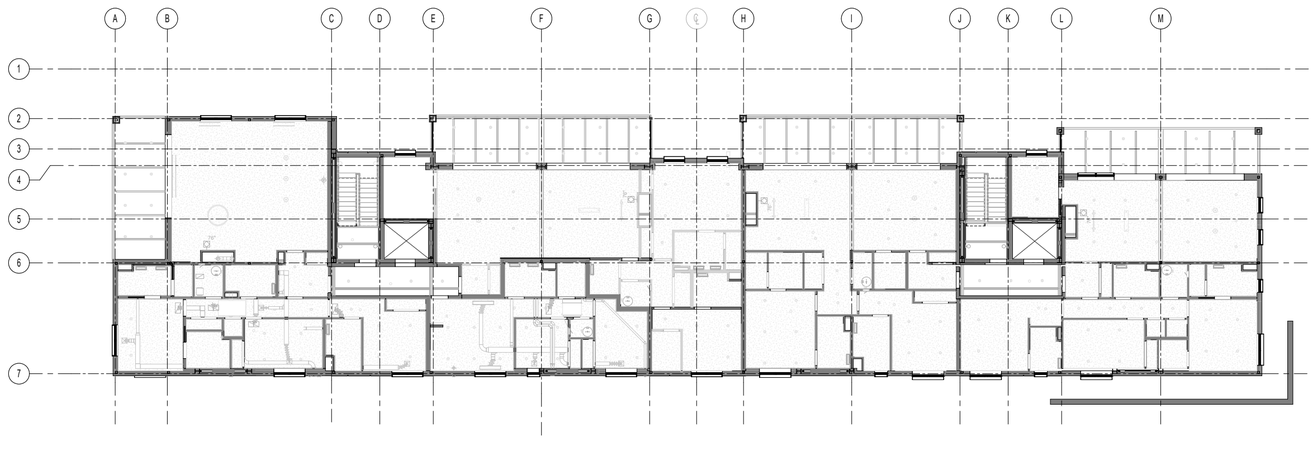
RCP LEGEND	
○	RECESSED LIGHT FIXTURE
□	EXTERIOR LIGHT FIXTURE
═	CEILING-MOUNTED STRIP LIGHT

ELECTRICAL NOTES:
1. ALL ELECTRICAL WORK SHALL FULLY COMPLY WITH CURRENT EDITIONS OF ALL APPLICABLE CODES.
2. GENERAL CONTRACTOR TO COORDINATE WALKTHROUGH WITH OWNER & ARCHITECT TO VERIFY FINAL LOCATIONS OF ALL FIXTURES & SWITCHES PRIOR TO INSTALLATION.
3. ELECTRICIAN TO COORDINATE WITH GENERAL CONTRACTOR, ARCHITECT, & HVAC CONTRACTOR FOR LOCATIONS OF ALL THERMOSTATS & THERMOSTATIC SENSORS.
4. ELECTRICIAN & GENERAL CONTRACTOR TO COORDINATE WORK WITH ALL THIRD-PARTY CONTRACTORS (SECURITY, AUDIO/VIDEO, HOME AUTOMATION AND SIMILAR).

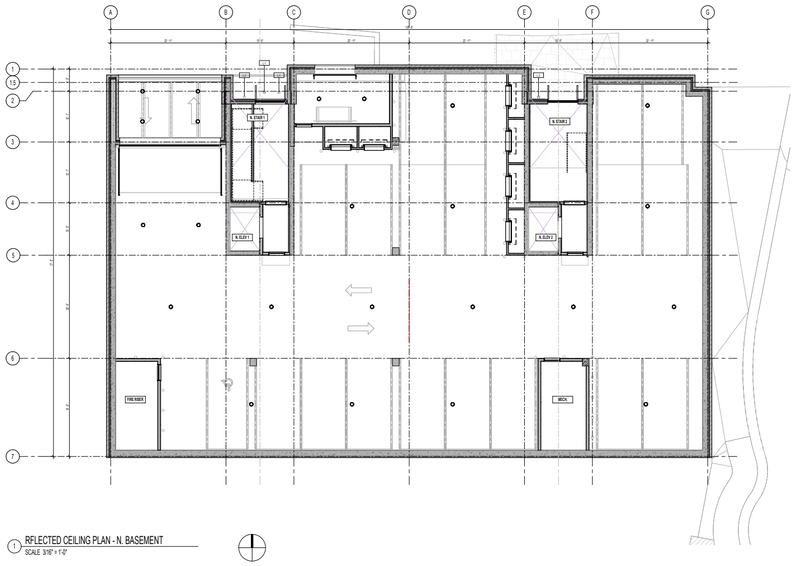
LOW VOLTAGE NOTES:
1. ALL SPEAKER WIRE SHALL BE FOUR CONDUCTOR WIRE (UNLESS OTHERWISE NOTED)
2. ALL SPEAKER WIRED TO SINGLE HOMERUN POINT (UNLESS OTHERWISE NOTED)



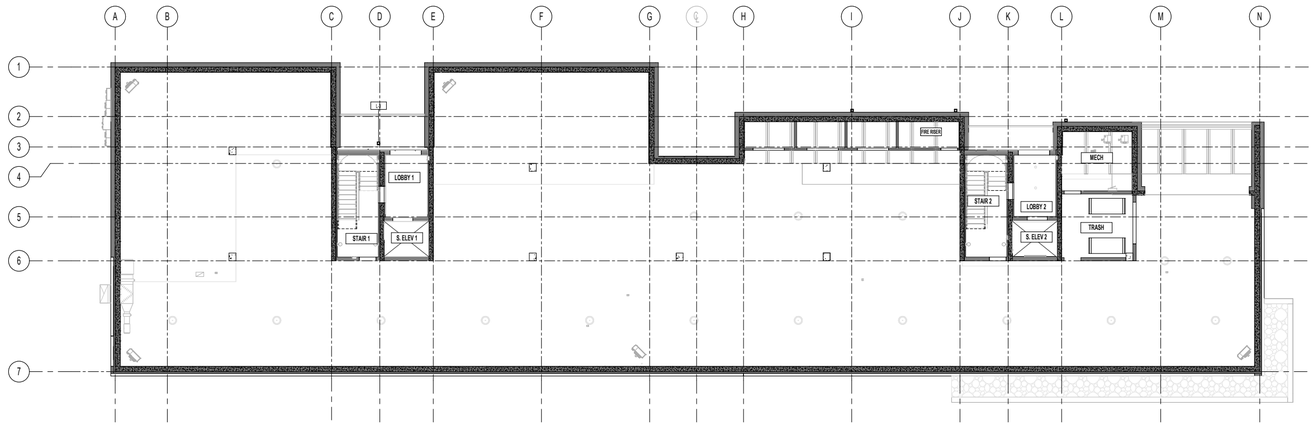
1 REFLECTED CEILING PLAN - N. LEVEL 1
SCALE: 3/16" = 1'-0"



A REFLECTED CEILING PLAN - S. LEVEL 1
SCALE: 1/8" = 1'-0"

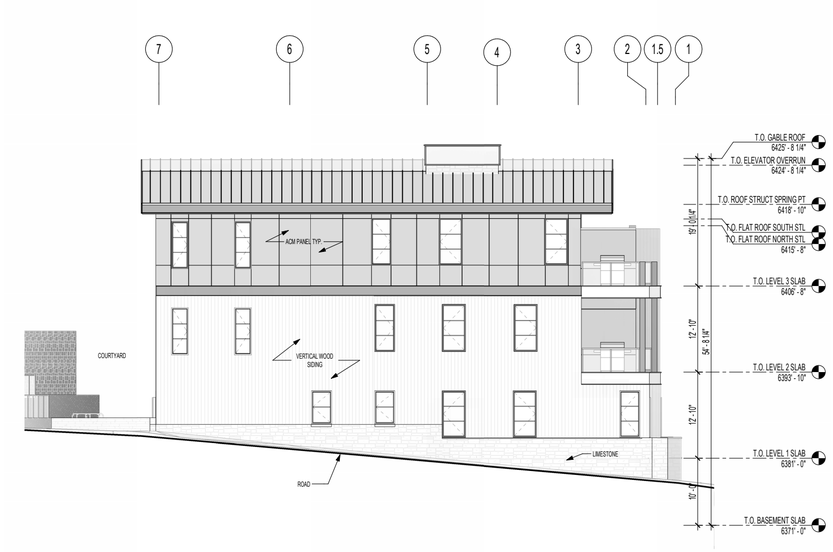


1 RFLECTED CEILING PLAN - N. BASEMENT
SCALE: 3/16" = 1'-0"



A REFLECTED CEILING PLAN - S. BASEMENT
SCALE: 1/8" = 1'-0"

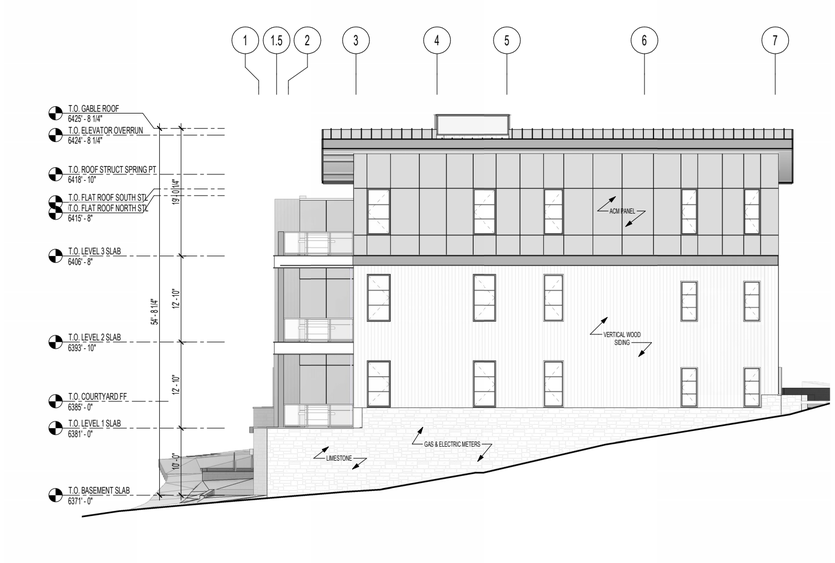
LOT 57 – EXTERIOR LIGHTING PLANS



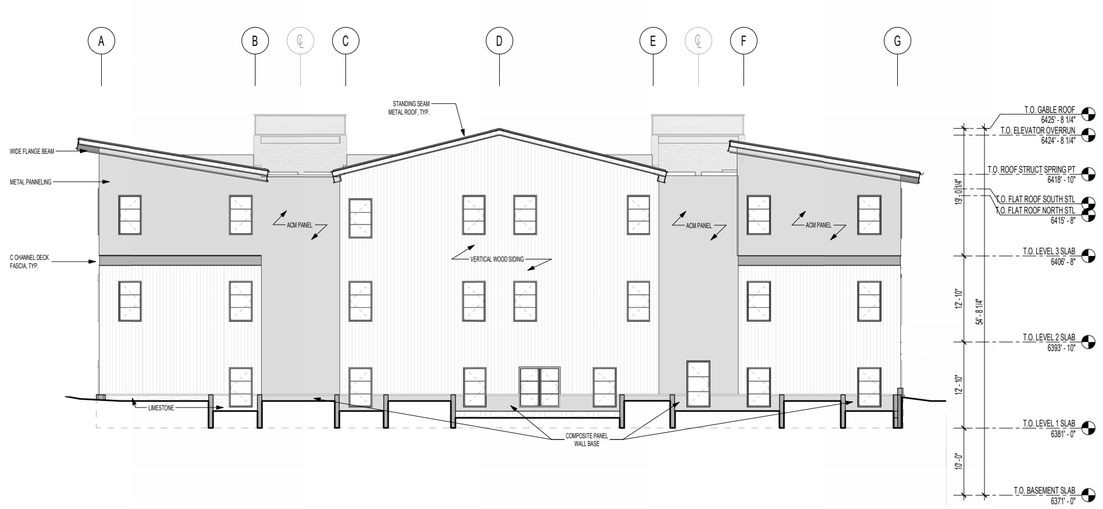
EAST ELEVATION



NORTH ELEVATION



WEST ELEVATION

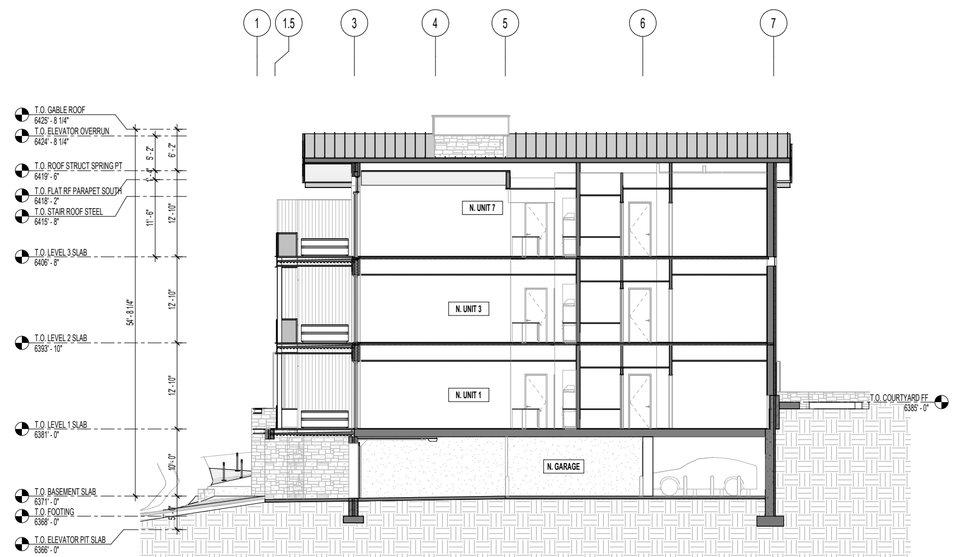


SOUTH ELEVATION

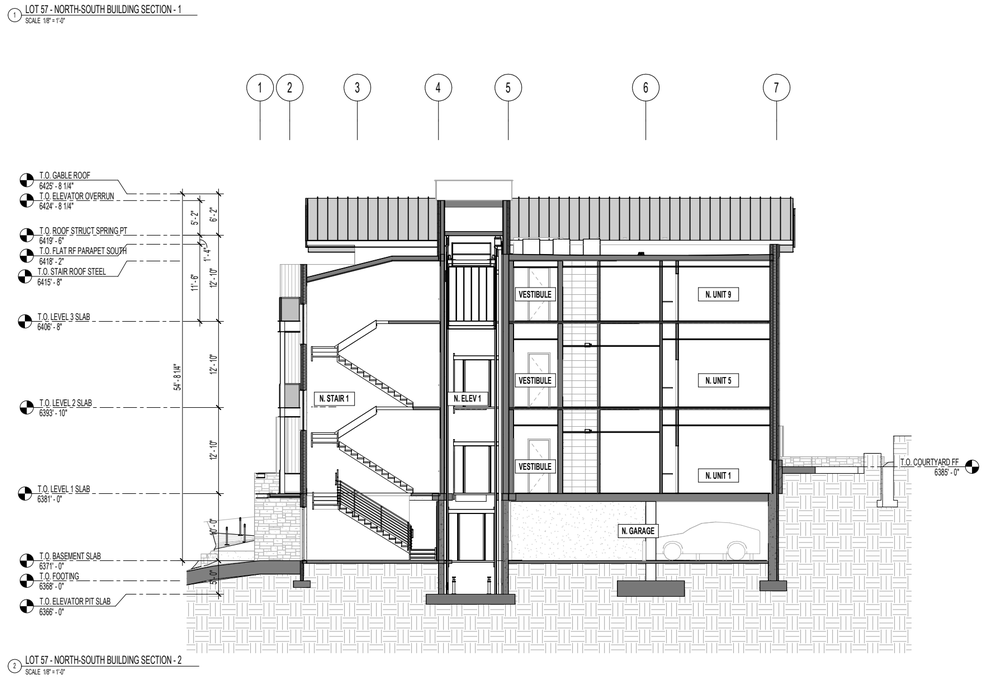
LOT 57 NORTH BUILDING – ELEVATIONS

0 4 8 16 32

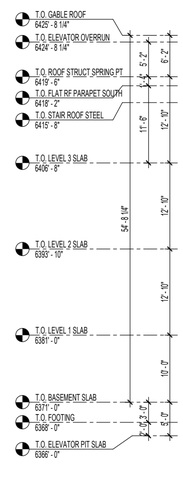
SCALE: 1 / 16" = 1' - 0"



1 LOT 57 - NORTH-SOUTH BUILDING SECTION - 1
SCALE: 1/8" = 1'-0"

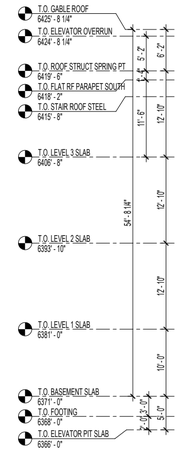


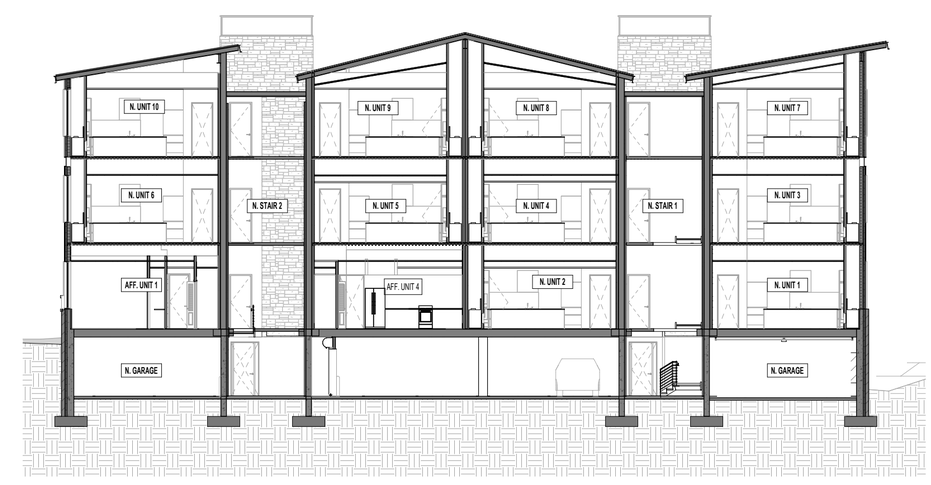
2 LOT 57 - NORTH-SOUTH BUILDING SECTION - 2
SCALE: 1/8" = 1'-0"





1 LOT 57 NORTH - E/W SECTION LOOKING SOUTH - 11
SCALE: 1/8" = 1'-0"



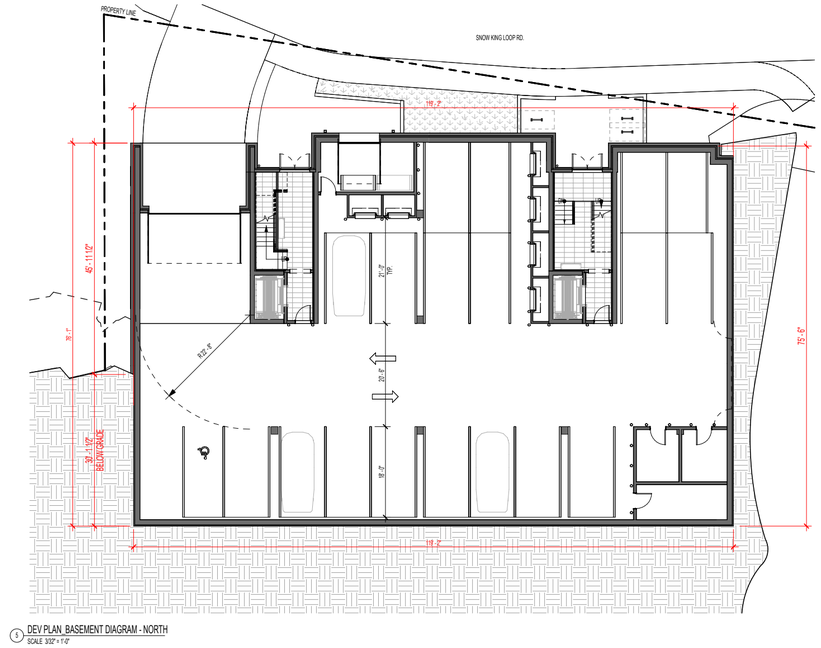


2 LOT 57 NORTH - E/W SECTION LOOKING SOUTH - 1
SCALE: 1/8" = 1'-0"

LOT 57 NORTH BUILDING – BUILDING SECTIONS

0 4 8 16 32

SCALE: 1 / 16" = 1' - 0"

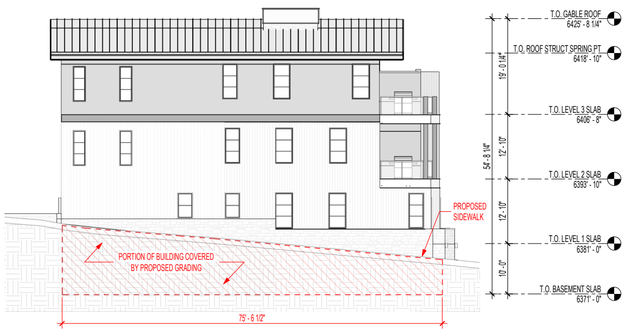


3 DEV PLAN_BASEMENT DIAGRAM - NORTH
SCALE 3/32" = 1'-0"

BASEMENT DEFINITION
1. NO MORE THAN 4'-0" OF WALL FROM THE T/1ST FLOOR SLAB DOWN CAN BE EXPOSED (6'-0" FROM THE T/BASEMENT SLAB MUST BE BELOW GRADE).
2. AT LEAST 50% OF THE PERMITER MUST MEET THIS REQUIREMENT.

LOT 57 NORTH BUILDING
NORTH ELEVATION - 119'-2"
EAST ELEVATION - 75'-6" (75'-6" BELOW GRADE)
SOUTH ELEVATION - 119'-2" (119'-2" BELOW GRADE)
WEST ELEVATION - 76'-1" (30'-1" BELOW GRADE)

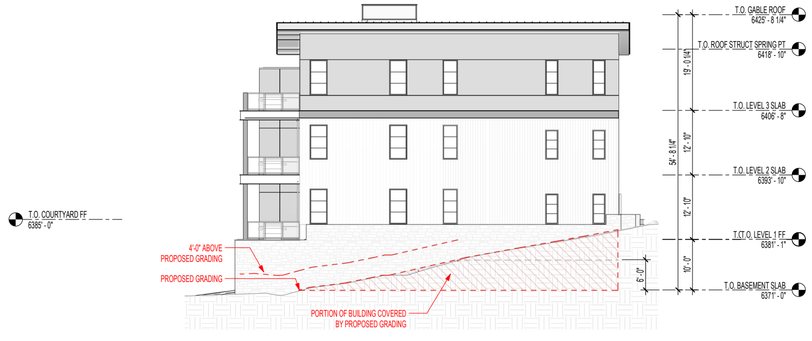
TOTAL PERIMETER = 389'-11" (224'-9" BELOW GRADE)
TOTAL PERCENTAGE BELOW GRADE = 58%



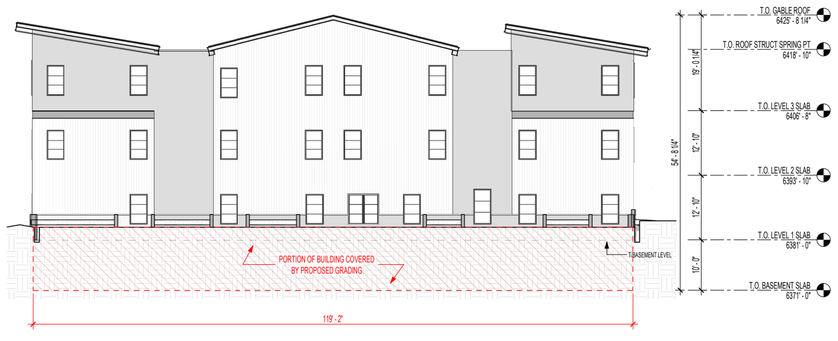
1 NORTH BUILDING BASEMENT DIAGRAM - EAST
SCALE 3/32" = 1'-0"



1 NORTH BUILDING BASEMENT DIAGRAM - NORTH
SCALE 3/32" = 1'-0"



4 NORTH BUILDING BASEMENT DIAGRAM - WEST
SCALE 3/32" = 1'-0"



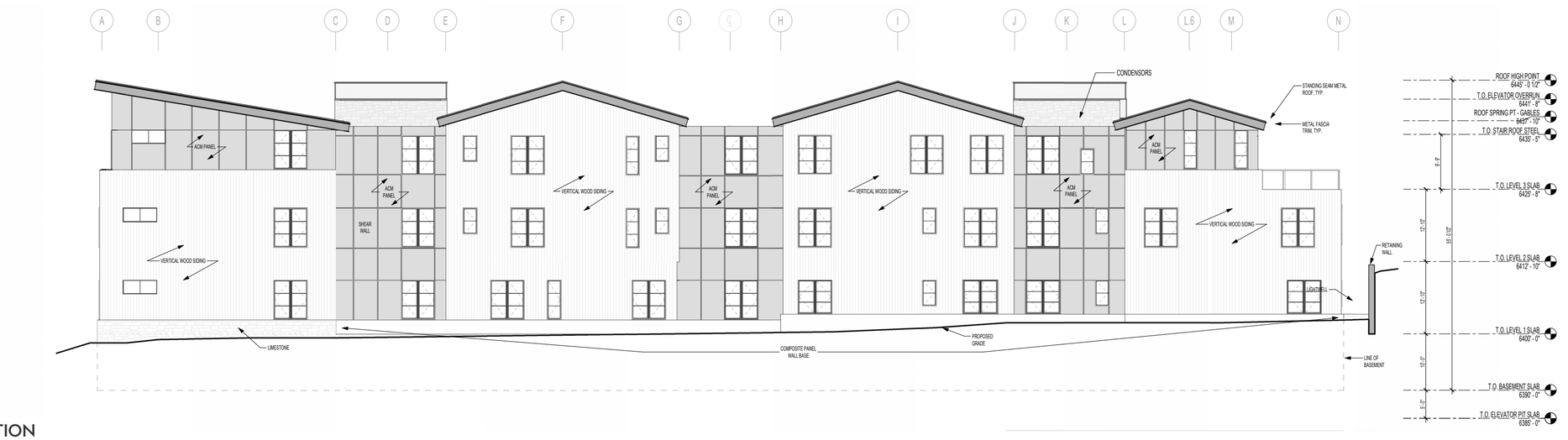
2 NORTH BUILDING BASEMENT DIAGRAM - SOUTH
SCALE 3/32" = 1'-0"

0 4 8 16 32

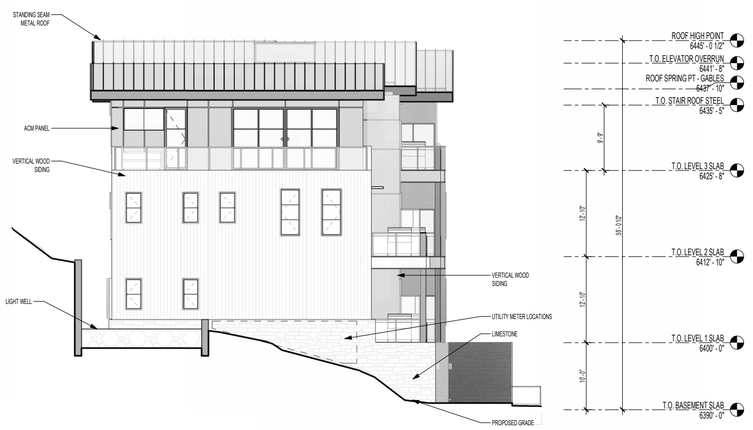
LOT 57 NORTH BUILDING – BASEMENT CALCULATIONS



NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

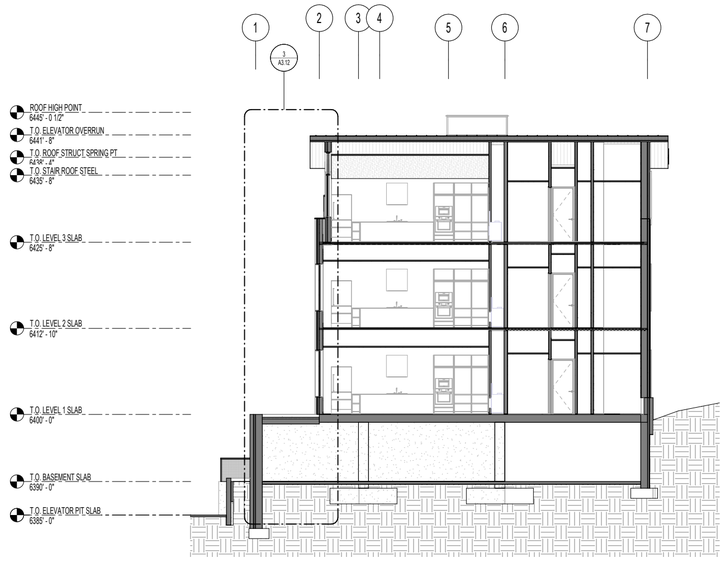
LOT 57 SOUTH BUILDING – ELEVATIONS

0 4 8 16 32

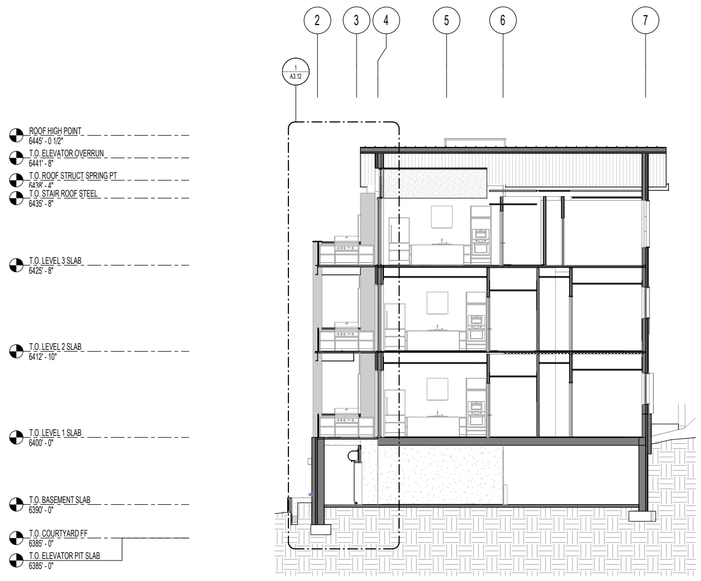
SCALE: 1 / 16" = 1' - 0"



E/W SECTION LOOKING SOUTH



N/S SECTION LOOKING EAST - 1

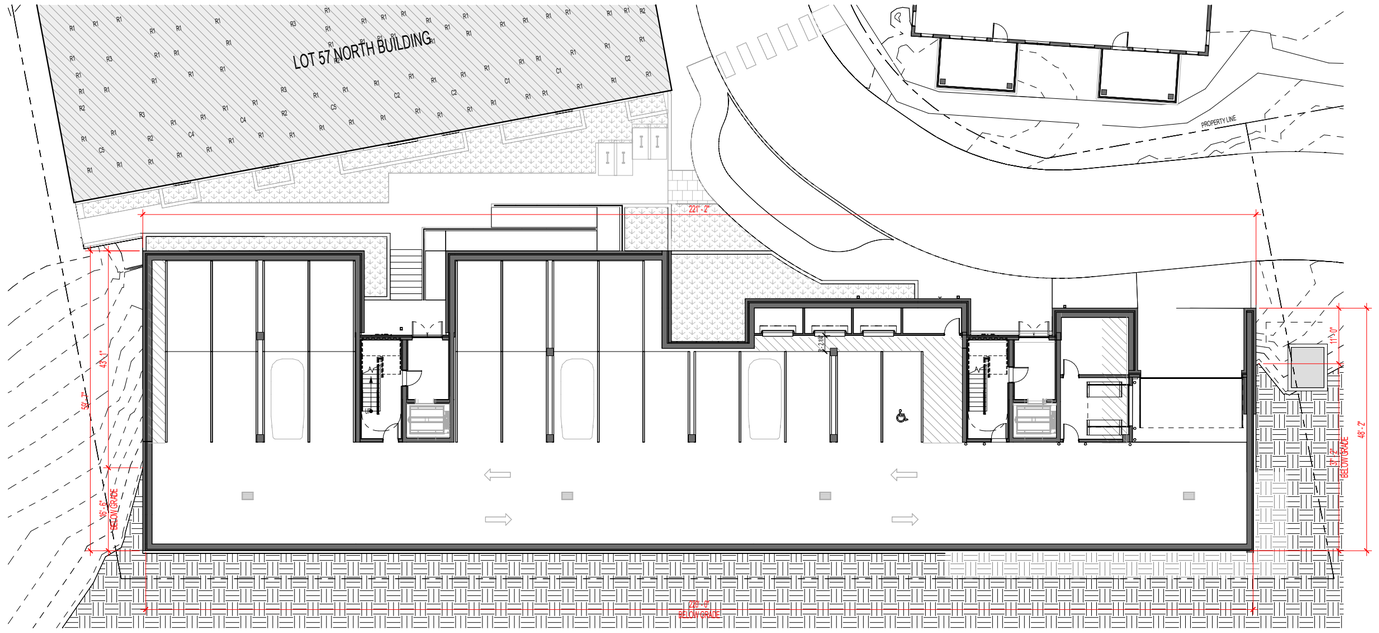


N/S SECTION LOOKING EAST - 2

LOT 57 SOUTH BUILDING – SECTIONS

0 4 8 16 32

SCALE: 1 / 16" = 1' - 0"



5 BASEMENT DIAGRAM - SOUTH
SCALE: 3/32" = 1'-0"

BASEMENT DEFINITION
1. NO MORE THAN 4'-0" OF WALL FROM THE T/1ST FLOOR SLAB DOWN CAN BE EXPOSED (6'-0" FROM THE T/BASEMENT SLAB MUST BE BELOW GRADE).
2. AT LEAST 50% OF THE PERMITER MUST MEET THIS REQUIREMENT.

LOT 57 SOUTH BUILDING
NORTH ELEVATION - 221'-2"
EAST ELEVATION - 48'-2" (37'-2" BELOW GRADE)
SOUTH ELEVATION - 220'-0" (220'-0" BELOW GRADE)
WEST ELEVATION - 59'-7" (16'-6" BELOW GRADE)

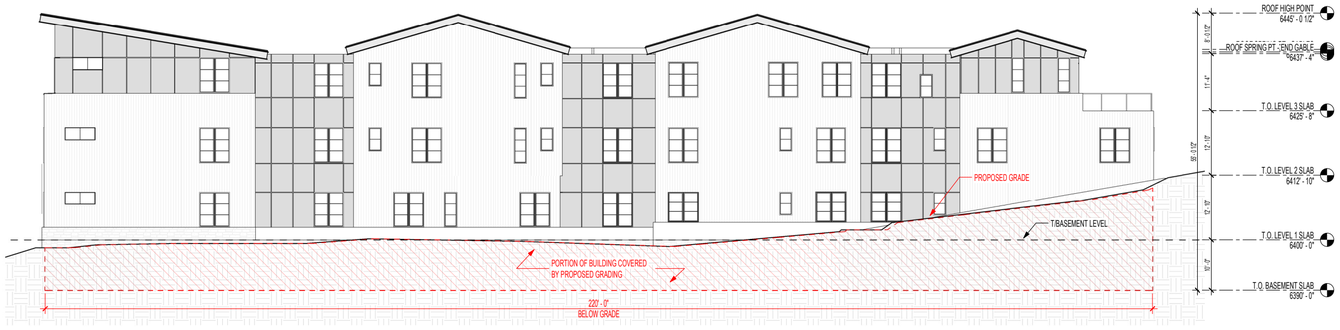
TOTAL PERIMETER = 548'-11" (273'-8" BELOW GRADE)
TOTAL PERCENTAGE BELOW GRADE = 50%



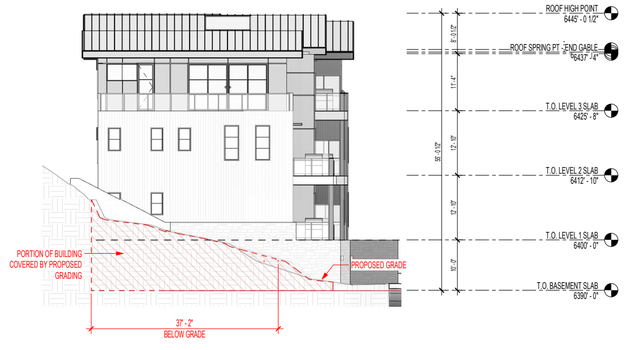
1 SOUTH BUILDING BASEMENT DIAGRAM - NORTH
SCALE: 3/32" = 1'-0"



4 SOUTH BUILDING BASEMENT DIAGRAM - WEST
SCALE: 3/32" = 1'-0"



2 SOUTH BUILDING BASEMENT DIAGRAM - SOUTH
SCALE: 3/32" = 1'-0"



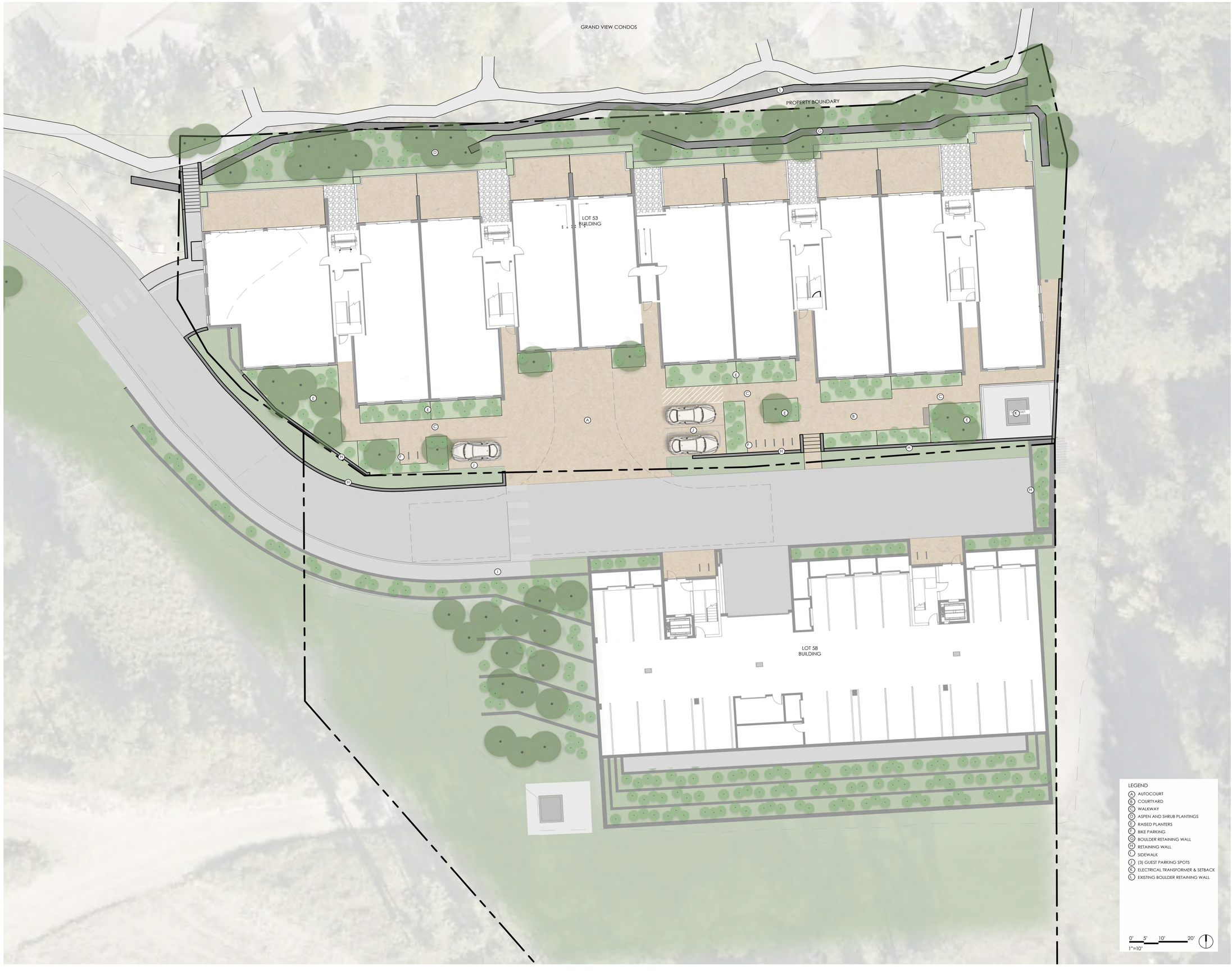
3 SOUTH BUILDING BASEMENT DIAGRAM - EAST
SCALE: 3/32" = 1'-0"

0 4 8 16 32

LOT 57 SOUTH BUILDING – BASEMENT CALCULATIONS

NORTHWORKS

Lot 53



LOT 53 SITE PLAN – LANDSCAPE



LOT 53 SITE PLAN – CIVIL

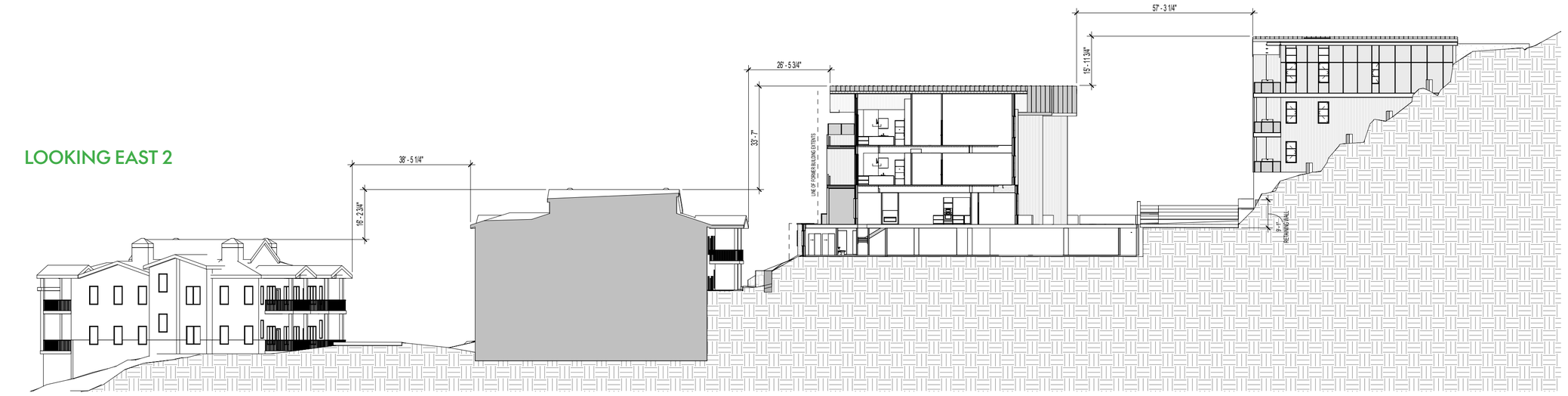


NORTH ELEVATION

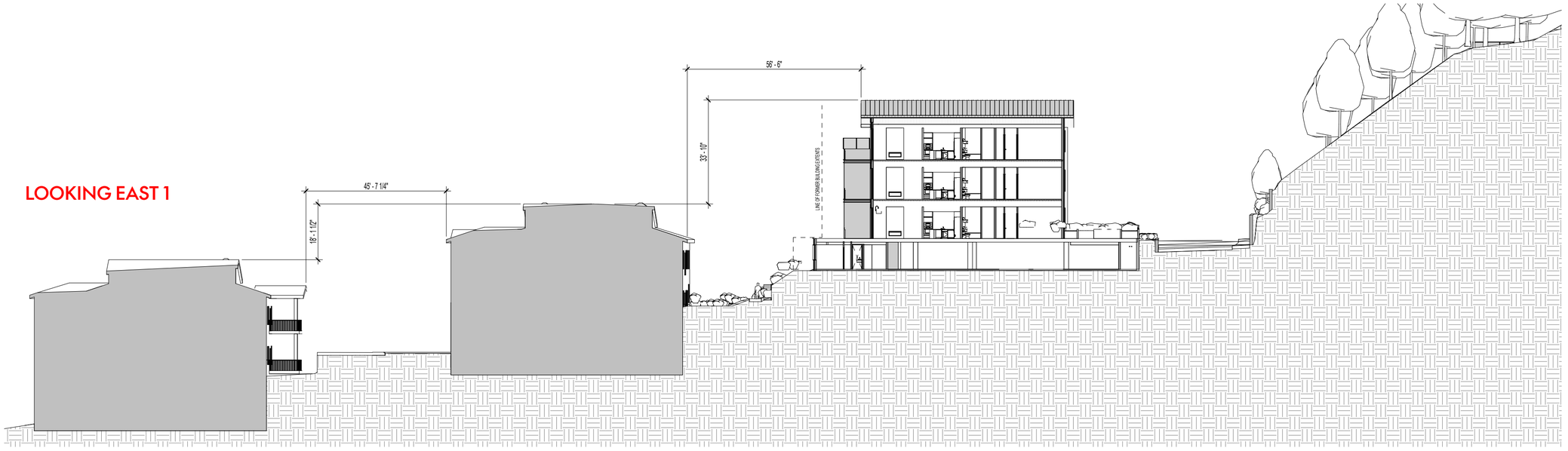
LOT 53 – RENDERED ELEVATION



LOOKING EAST 2



LOOKING EAST 1

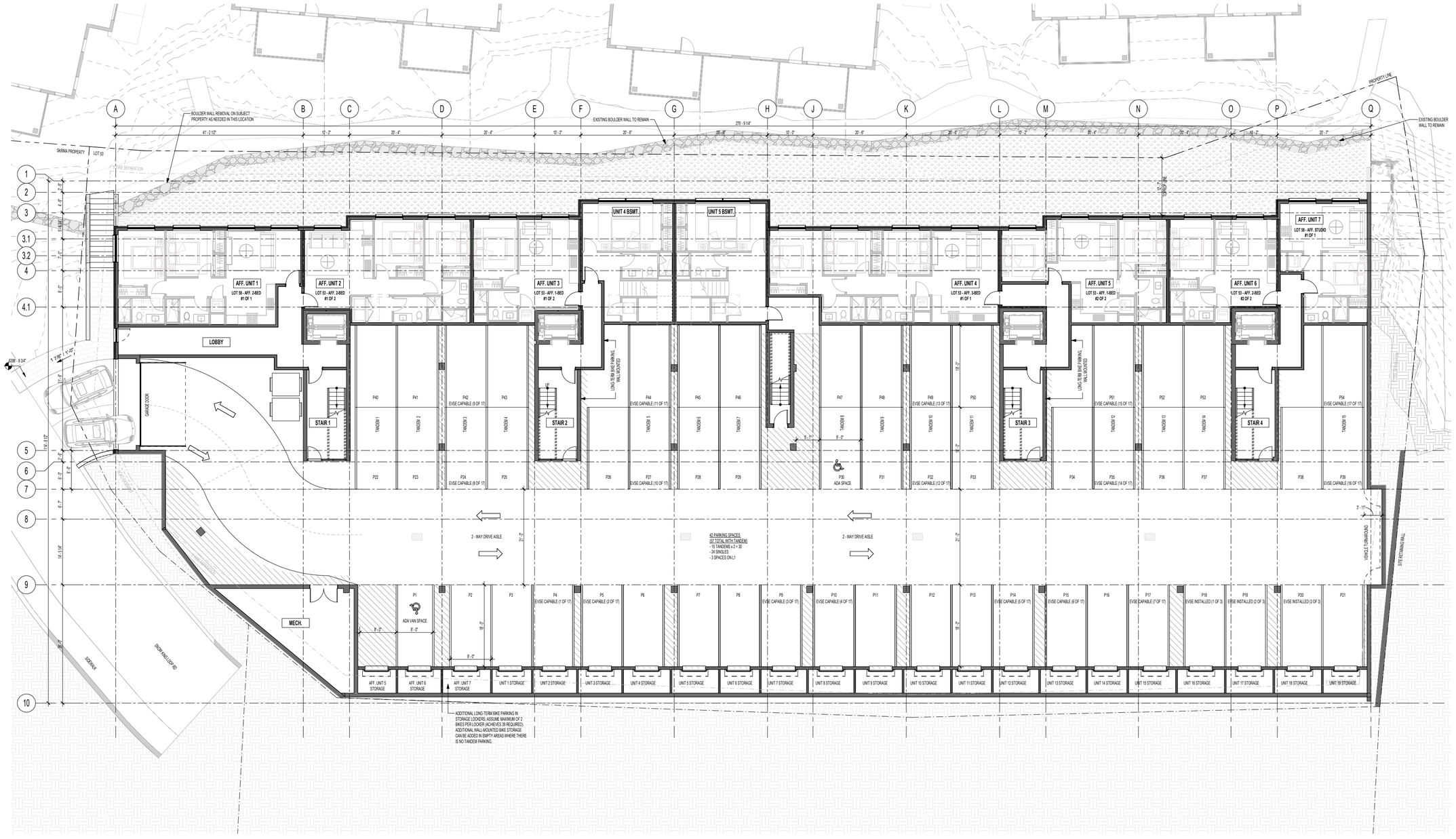


SITE SECTIONS THROUGH LOVE RIDGE CONSOS & LOT 53

LOT 53 SUMMARY

- PARKING SPACES : 43
- 1-BEDROOMS: 1
- 2-BEDROOMS: 18
- 3-BEDROOMS: 7
- AFFORDABLE UNITS: 7

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



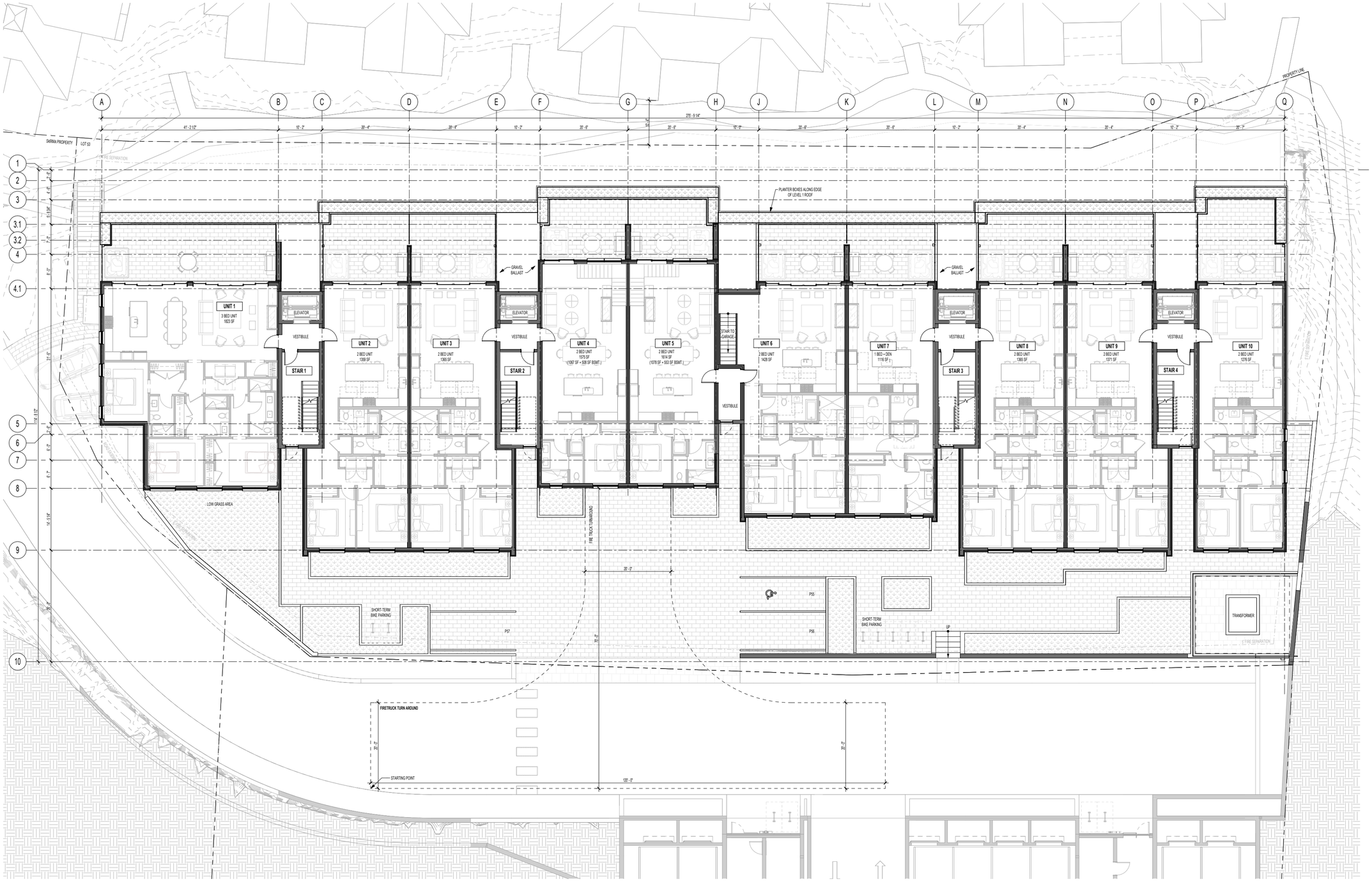
LOT 53 – BASEMENT FLOOR PLAN

SCALE: 1 / 16" = 1' - 0"

LOT 53 SUMMARY

- PARKING SPACES : 43
- 1-BEDROOMS: 1
- 2-BEDROOMS: 18
- 3-BEDROOMS: 7
- AFFORDABLE UNITS: 7

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



0 4 8 16 32

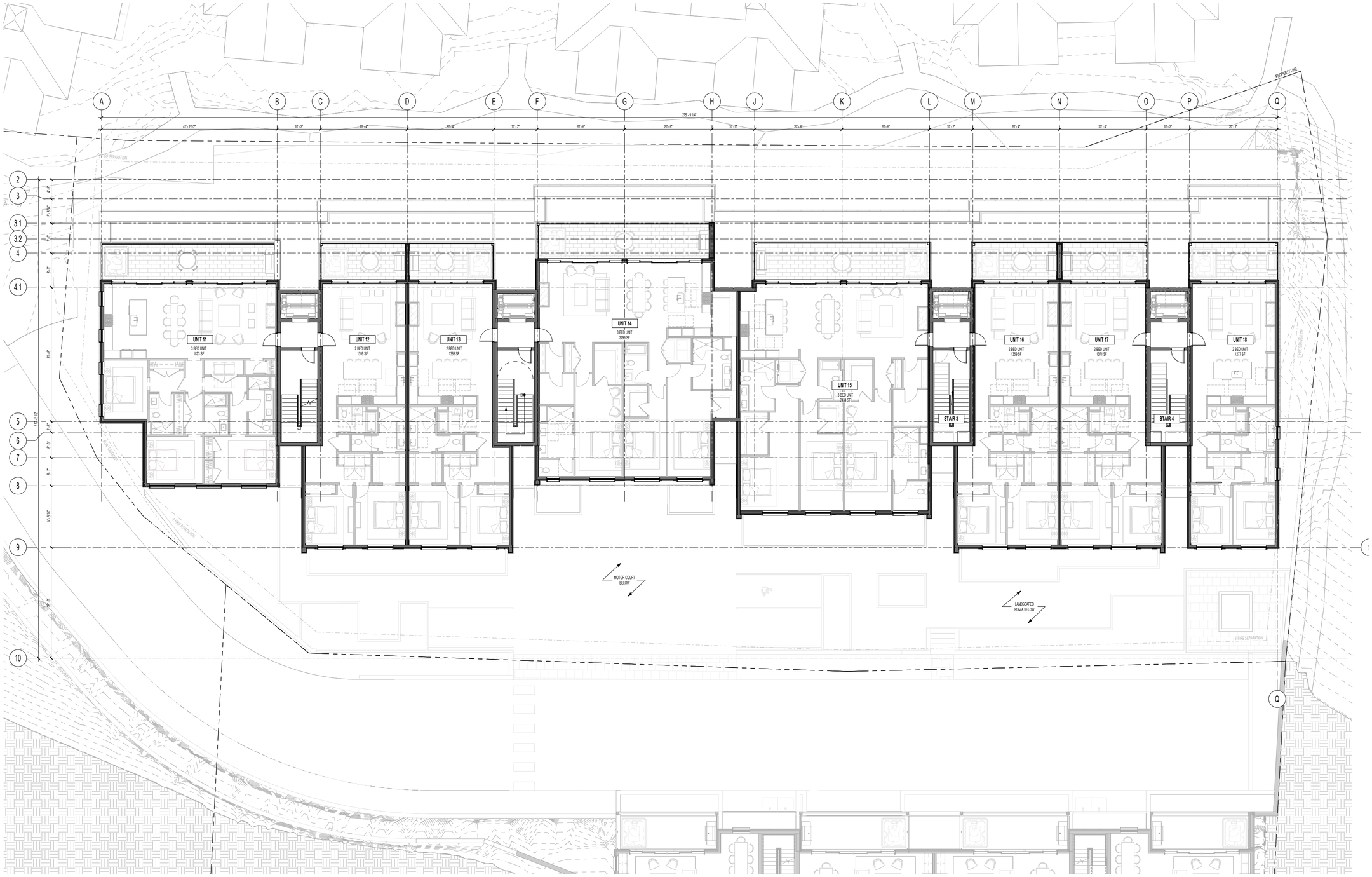
LOT 53 – FIRST FLOOR PLAN

SCALE: 1 / 16" = 1' - 0"

LOT 53 SUMMARY

- PARKING SPACES : 43
- 1-BEDROOMS: 1
- 2-BEDROOMS: 18
- 3-BEDROOMS: 7
- AFFORDABLE UNITS: 7

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



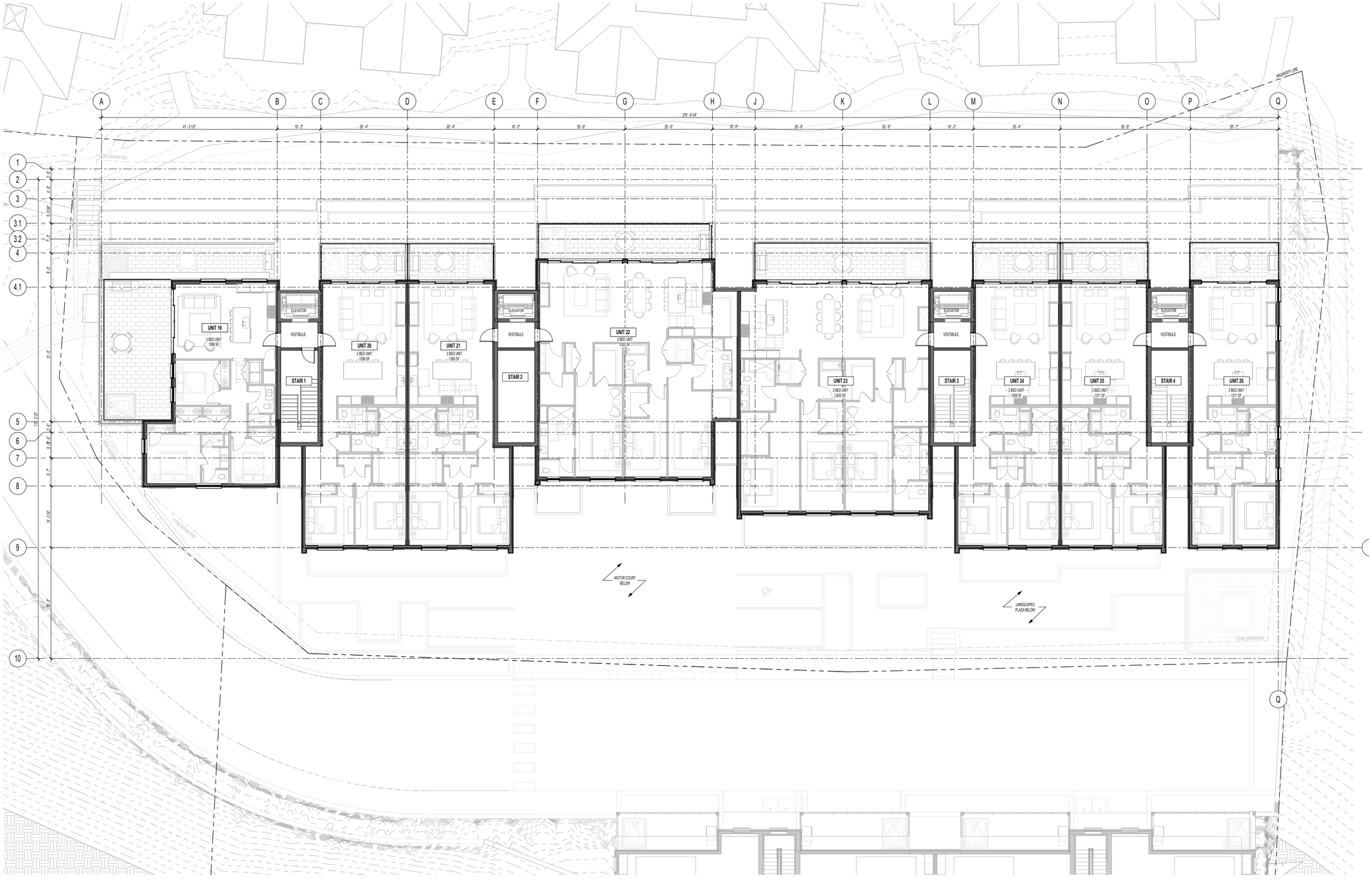
LOT 53 – SECOND FLOOR PLAN

SCALE: 1 / 16" = 1' - 0"

LOT 53 SUMMARY

- PARKING SPACES : 43
- 1-BEDROOMS: 1
- 2-BEDROOMS: 18
- 3-BEDROOMS: 7
- AFFORDABLE UNITS: 7

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



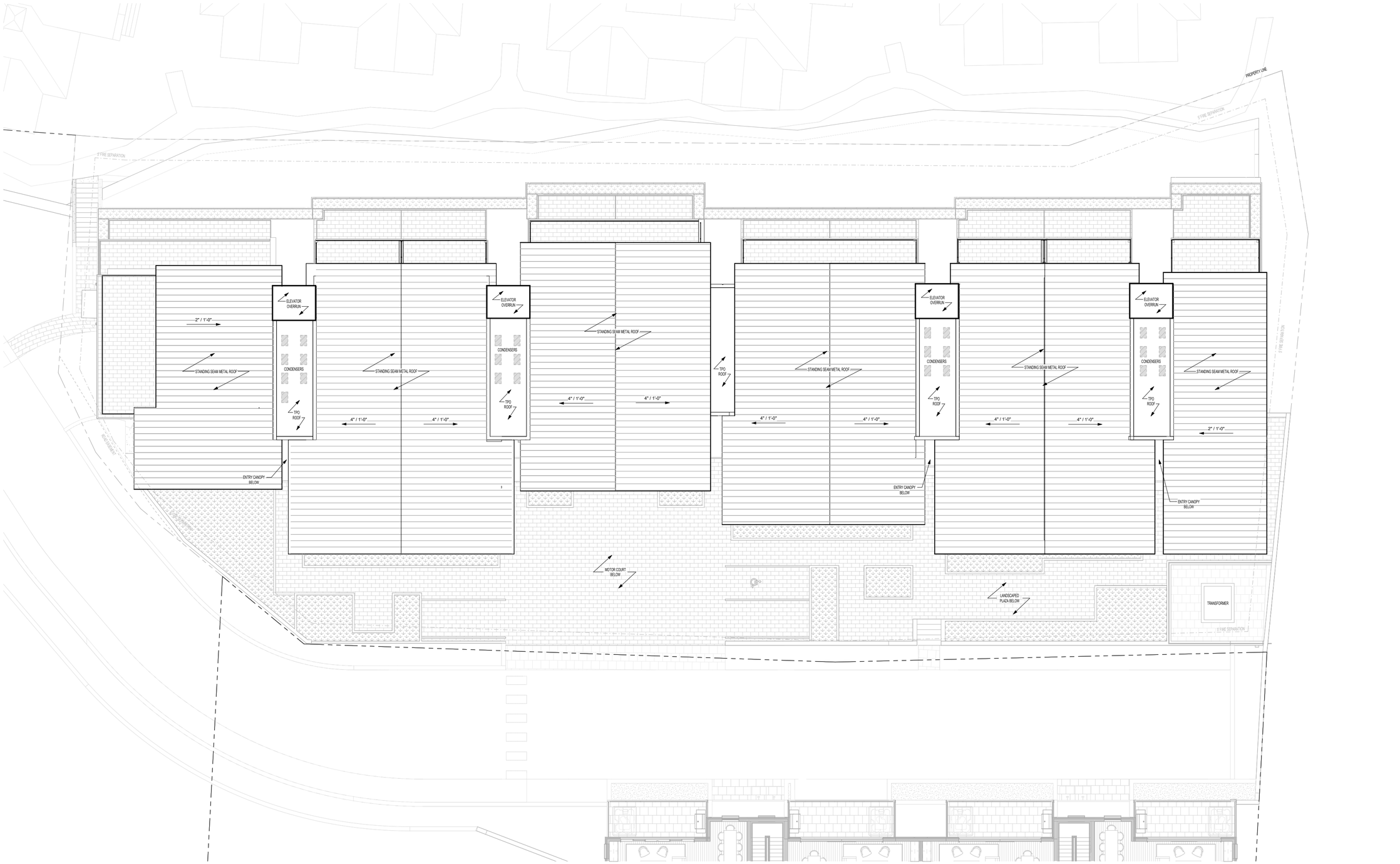
LOT 53 – THIRD FLOOR PLAN

SCALE: 1 / 16" = 1' - 0"

LOT 53 SUMMARY

- PARKING SPACES : 43
- 1-BEDROOMS: 1
- 2-BEDROOMS: 18
- 3-BEDROOMS: 7
- AFFORDABLE UNITS: 7

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.

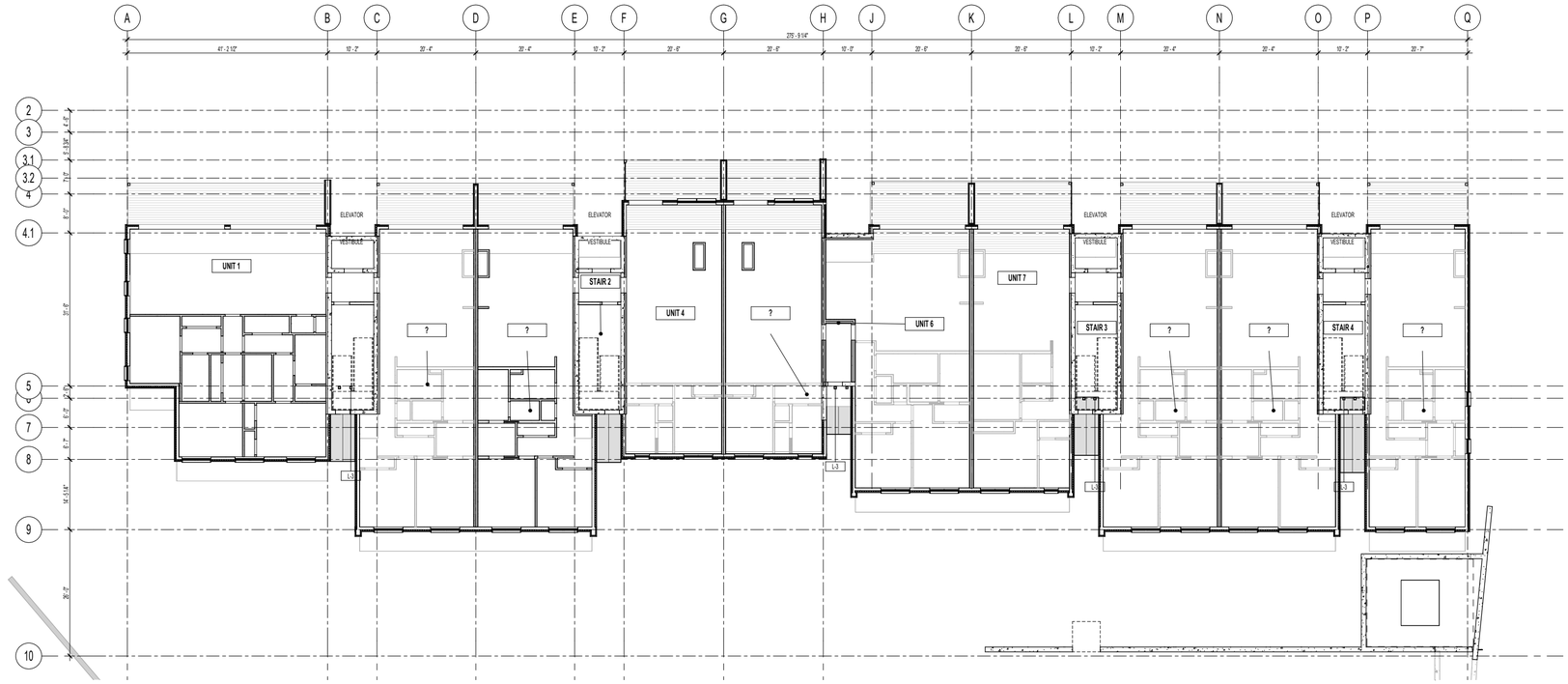


0 4 8 16 32

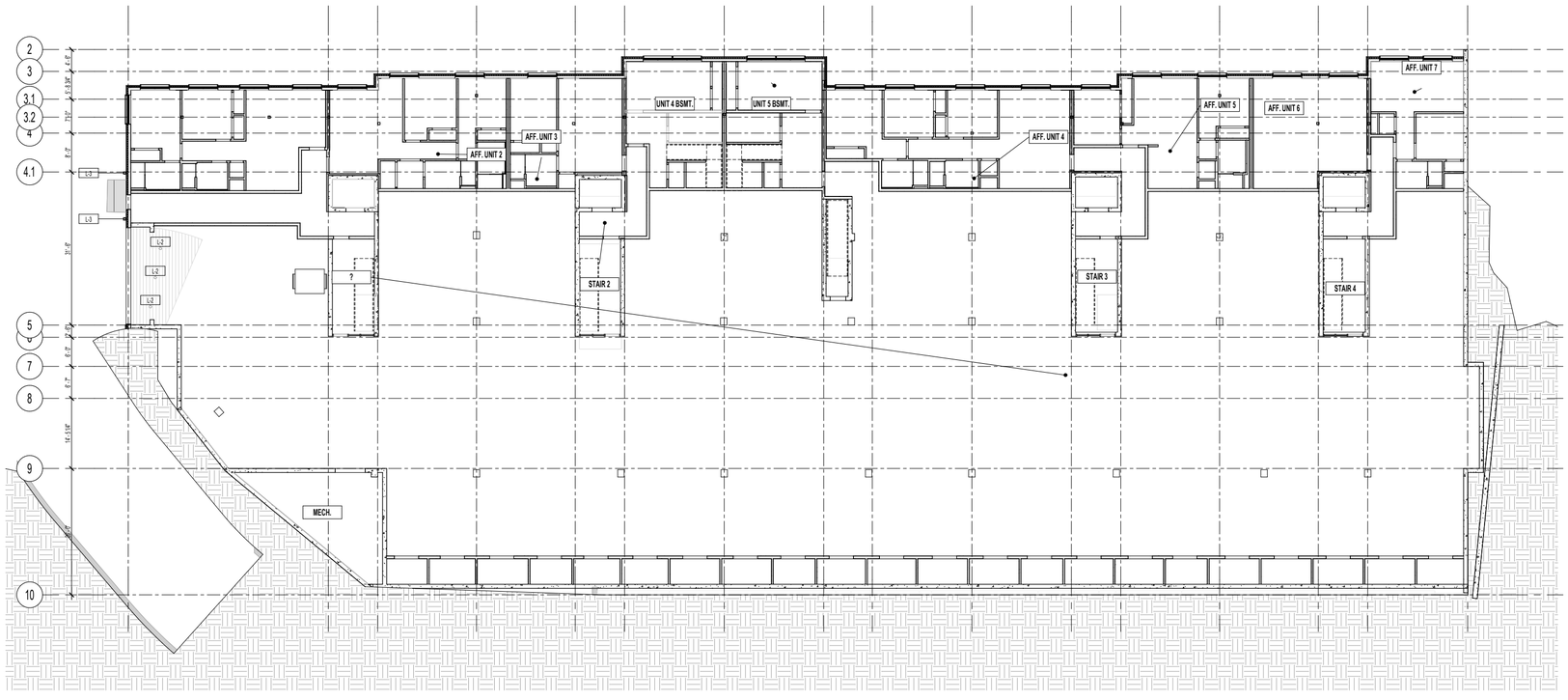
SCALE: 1 / 16" = 1' - 0"

LOT 53 – ROOF PLAN

LEVELS 1-3



BASEMENT



RCP LEGEND	
○	RECESSED LIGHT FIXTURE
□	EXTERIOR LIGHT FIXTURE
▭	CEILING-MOUNTED STRIP LIGHT

ELECTRICAL NOTES:
1. ALL ELECTRICAL WORK SHALL FULLY COMPLY WITH CURRENT EDITIONS OF ALL APPLICABLE CODES.
2. GENERAL CONTRACTOR TO COORDINATE WALKTHROUGH WITH OWNER & ARCHITECT TO VERIFY FINAL LOCATIONS OF ALL FIXTURES & SWITCHES PRIOR TO INSTALLATION.
3. ELECTRICIAN TO COORDINATE WITH GENERAL CONTRACTOR, ARCHITECT, & HVAC CONTRACTOR FOR LOCATIONS OF ALL THERMOSTATS & THERMOSTATIC SENSORS.
4. ELECTRICIAN & GENERAL CONTRACTOR TO COORDINATE WORK WITH ALL THIRD-PARTY CONTRACTORS (SECURITY, AUDIO/VIDEO, HOME AUTOMATION AND SIMILAR).

LOW VOLTAGE NOTES:
1. ALL SPEAKER WIRE SHALL BE FOUR CONDUCTOR WIRE (UNLESS OTHERWISE NOTED)
2. ALL SPEAKER WIRED TO SINGLE HOMERUN POINT (UNLESS OTHERWISE NOTED)

NOTE: INTERIOR LIGHTING NOT SHOWN.

0 4 8 16 32

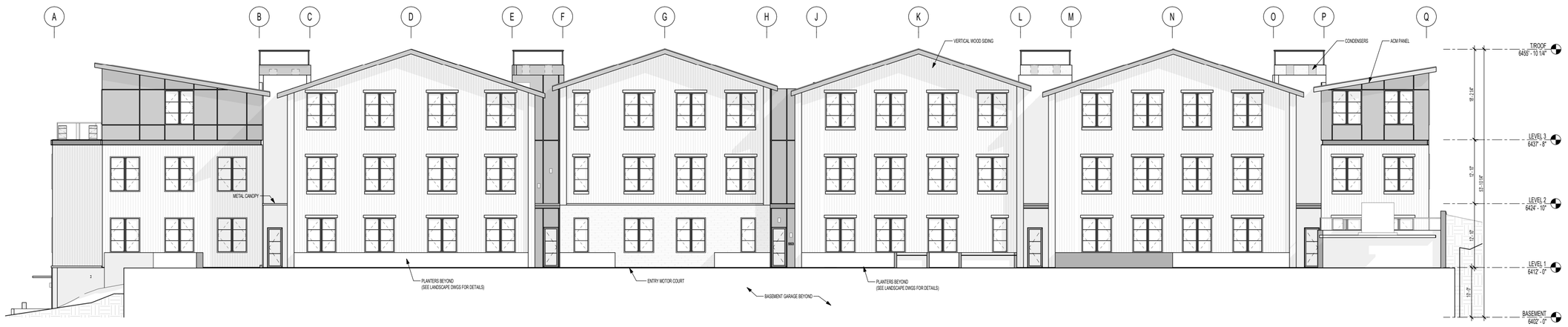
SCALE: 3/64" = 1' - 0"

LOT 53 – EXTERIOR LIGHTING PLANS

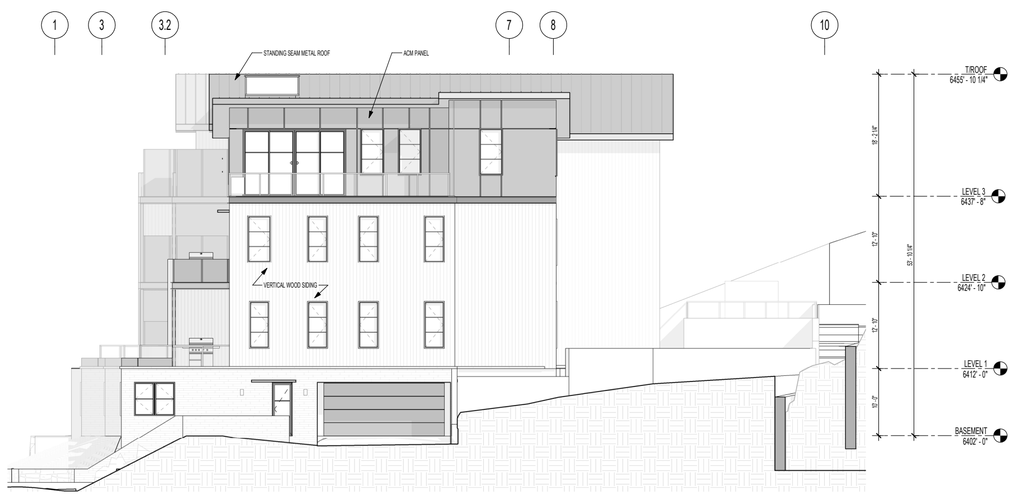
NORTH ELEVATION

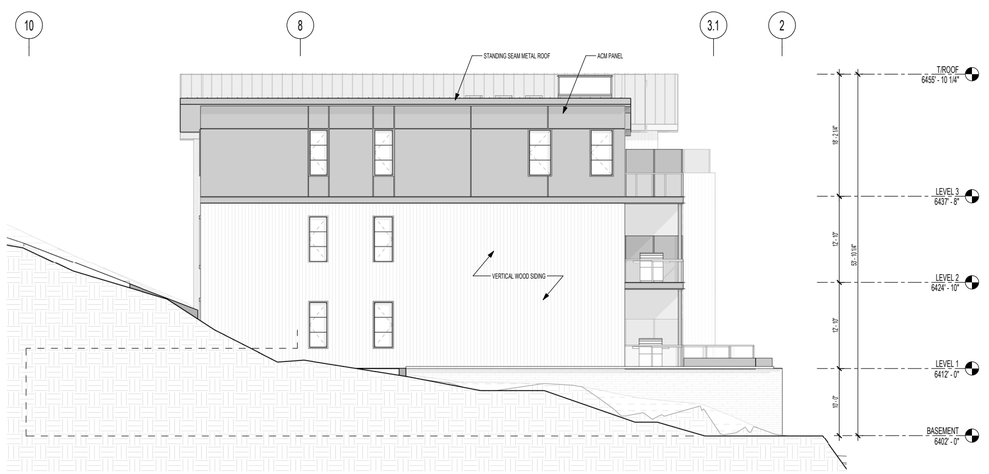


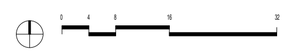
SOUTH ELEVATION



WEST ELEVATION







SCALE: 1 / 16" = 1' - 0"

LOT 53 – ELEVATIONS (REVISED)

E/W SECTION LOOKING SOUTH - 1



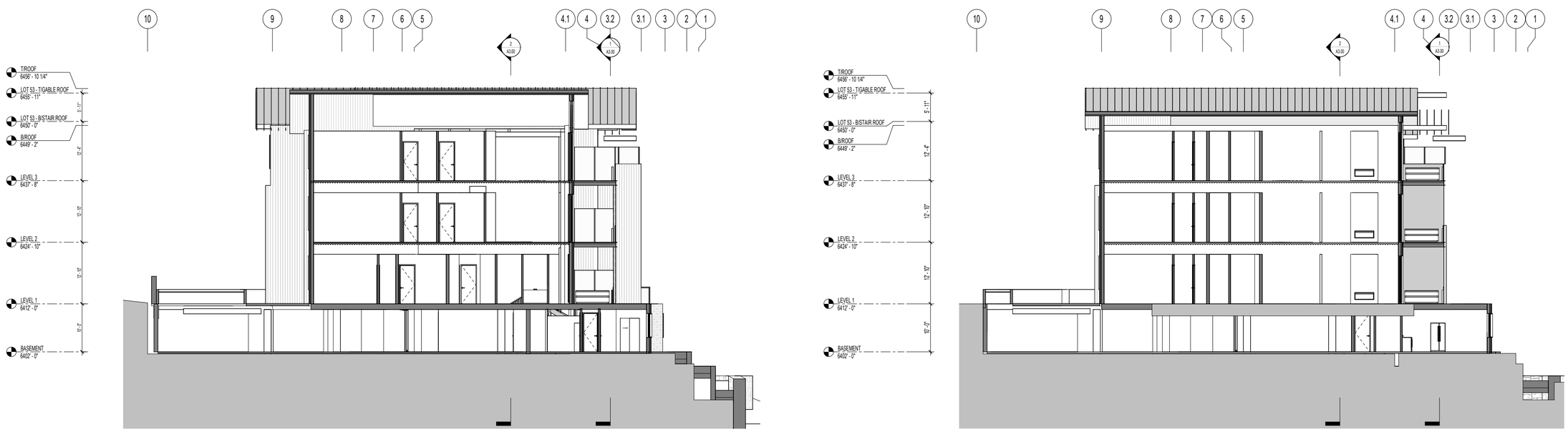
1 LOT 53 - E/W SECTION LOOKING SOUTH - 1
SCALE: 1/8" = 1'-0"

E/W SECTION LOOKING SOUTH - 2

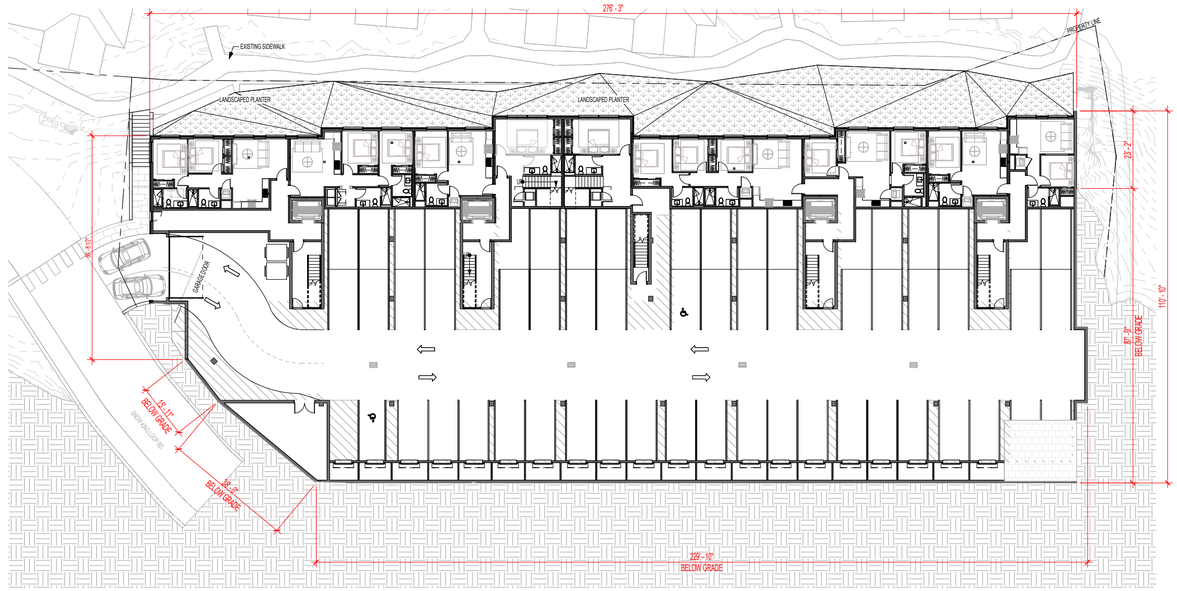


2 LOT 53 - E/W SECTION LOOKING SOUTH - 2
SCALE: 1/8" = 1'-0"

N/S SECTION LOOKING EAST - 1



LOT 53 – BUILDING SECTIONS (REVISED)



5 BASEMENT PLAN DIAGRAM
SCALE: 1/16" = 1'-0"

BASEMENT DEFINITION
1. NO MORE THAN 4'-0" OF WALL FROM THE T/1ST FLOOR SLAB DOWN CAN BE EXPOSED (6'-0" FROM THE T/BASEMENT SLAB MUST BE BELOW GRADE).
2. AT LEAST 50% OF THE PERMITER MUST MEET THIS REQUIREMENT.

LOT 53 SOUTH BUILDING
NORTH ELEVATION - 276'-3"
EAST ELEVATION - 110'-10" (87'-9" BELOW GRADE)
SOUTH ELEVATION - 229'-10" (229'-10" BELOW GRADE)
SOUTHWEST ELEVATION - 53'-11" (53'-11" BELOW GRADE)
WEST ELEVATION - 66'-8 1/2"

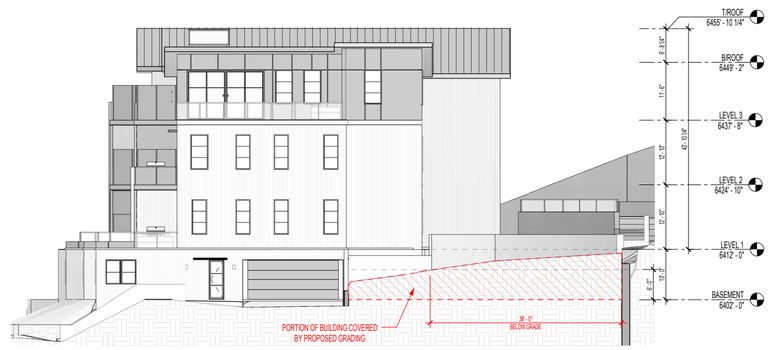
TOTAL PERIMETER = 737'-6 1/2" (371'-6" BELOW GRADE)
TOTAL PERCENTAGE BELOW GRADE = 50%



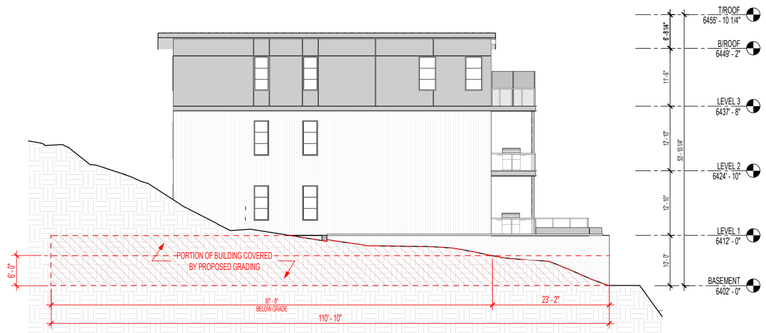
2 BASEMENT DIAGRAM - NORTH
SCALE: 3/32" = 1'-0"



1 BASEMENT DIAGRAM - SOUTH
SCALE: 3/32" = 1'-0"



3 BASEMENT DIAGRAM - WEST
SCALE: 3/32" = 1'-0"



4 BASEMENT DIAGRAM - EAST
SCALE: 3/32" = 1'-0"



LOT 53 – BASEMENT CALCULATIONS

NORTHWORKS

Lot 58

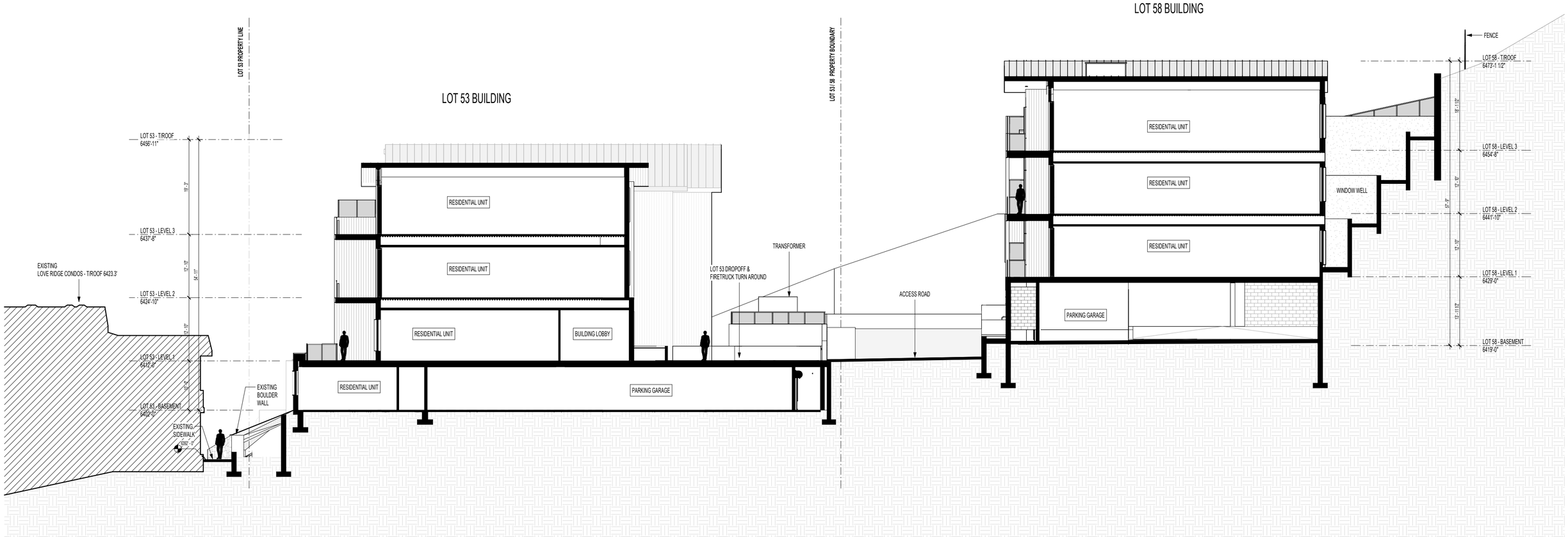


LOT 58 SITE PLAN – LANDSCAPE



LOT 58 SITE PLAN – CIVIL





SITE SECTION THROUGH LOT 53 & LOT 58, LOOKING EAST



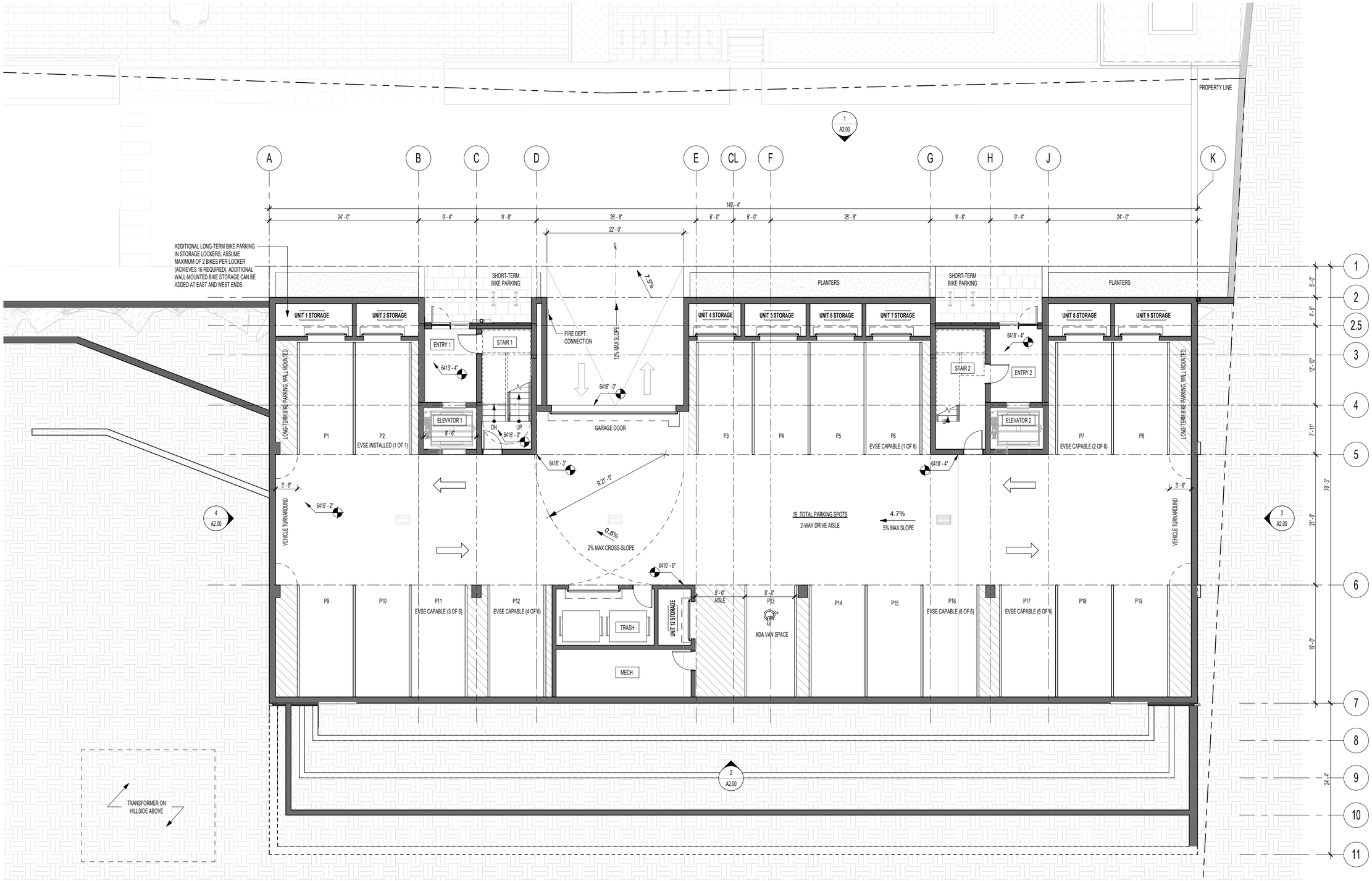
NORTH ELEVATION

LOT 58 – RENDERED ELEVATION

LOT 58 SUMMARY

- PARKING SPACES : 19
- 2-BEDROOMS: 7
- 3-BEDROOMS: 5
- AFFORDABLE UNITS: 0

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



LOT 58 – BASEMENT FLOOR PLAN

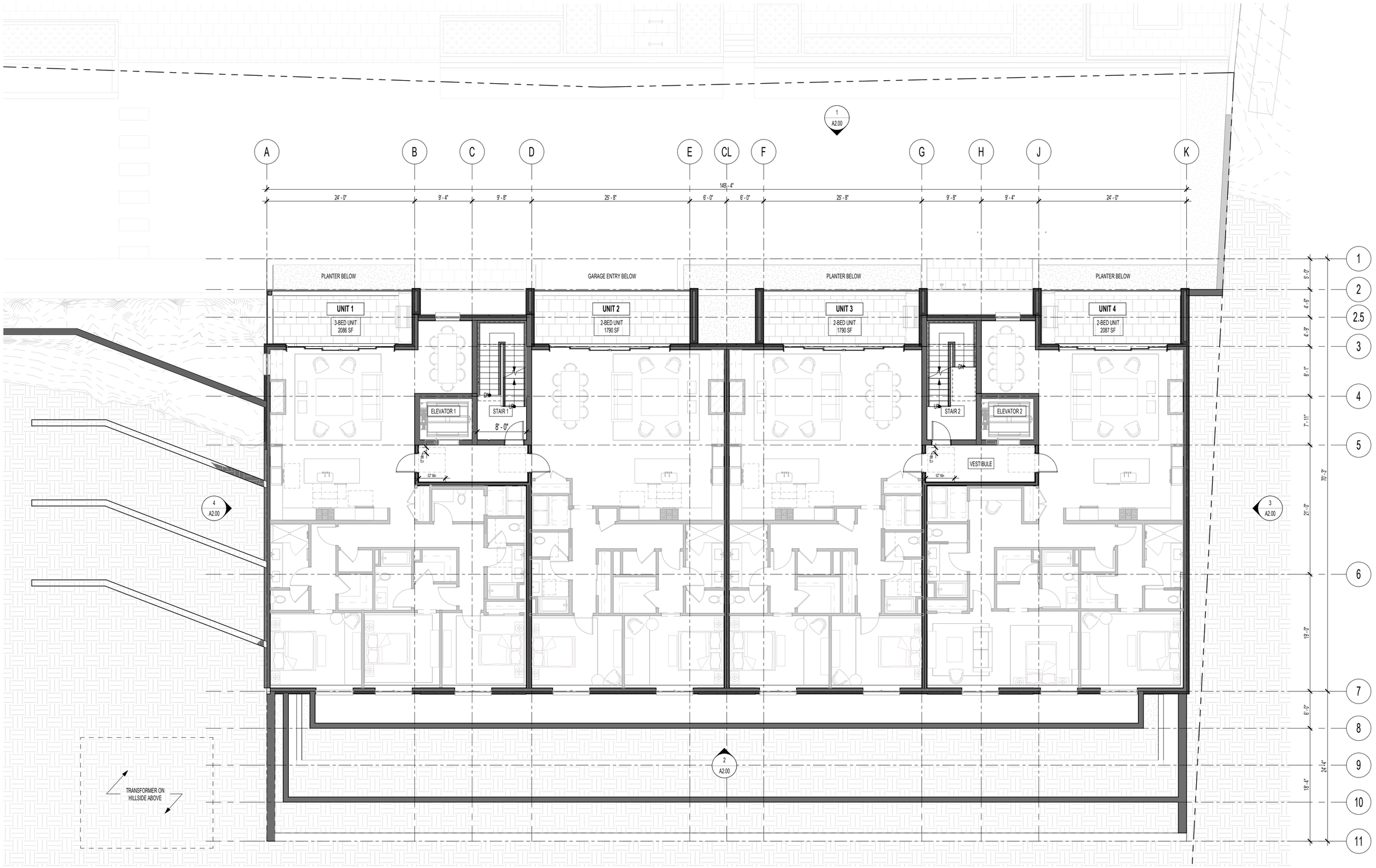
0 4 8 16

SCALE: 3/64" = 1' - 0"

LOT 58 SUMMARY

- PARKING SPACES : 19
- 2-BEDROOMS: 7
- 3-BEDROOMS: 5
- AFFORDABLE UNITS: 0

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



LOT 58 – FIRST FLOOR PLAN

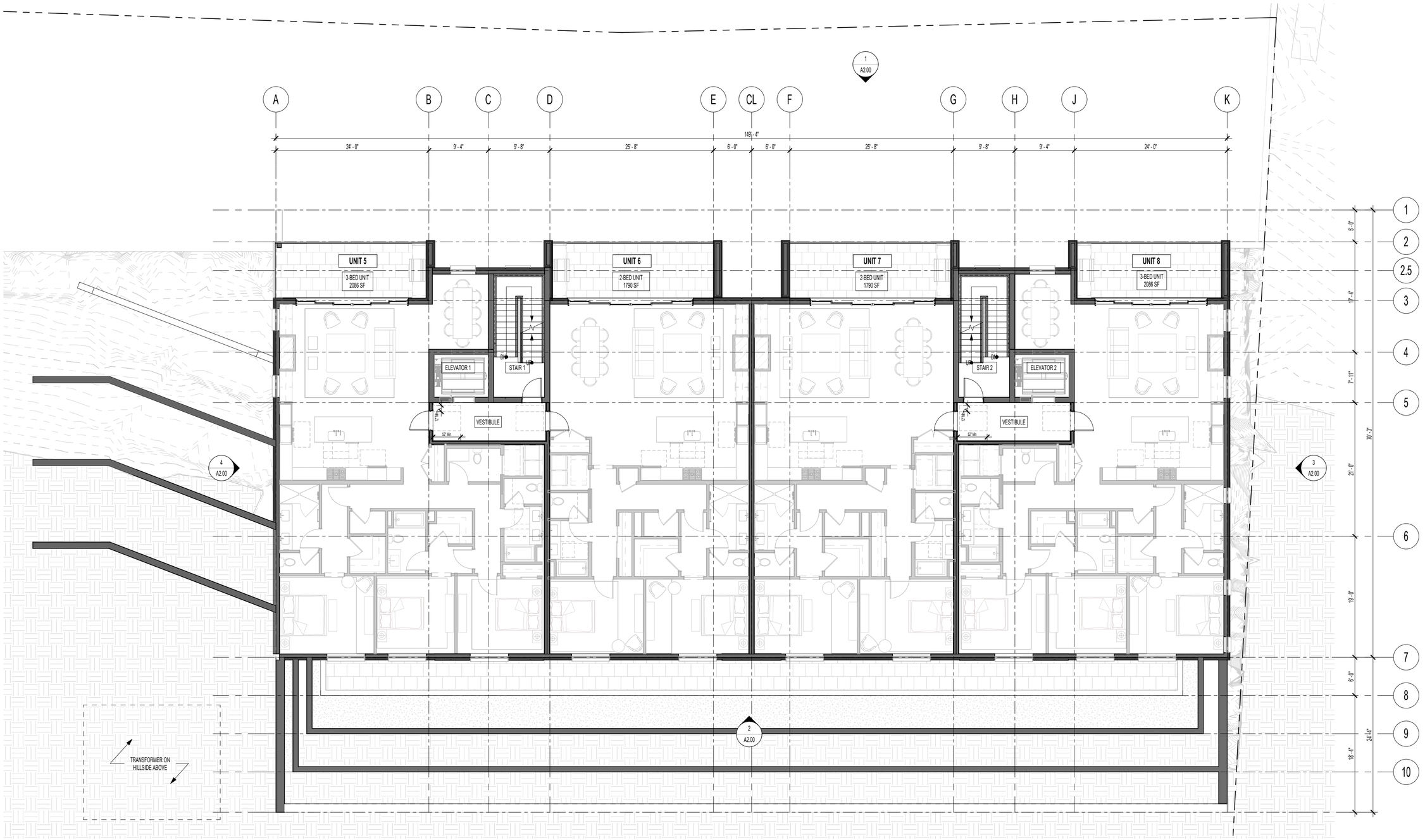
0 4 8 16

SCALE: 3/64" = 1' - 0"

LOT 58 SUMMARY

- PARKING SPACES : 19
- 2-BEDROOMS: 7
- 3-BEDROOMS: 5
- AFFORDABLE UNITS: 0

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



LOT 58 – SECOND FLOOR PLAN

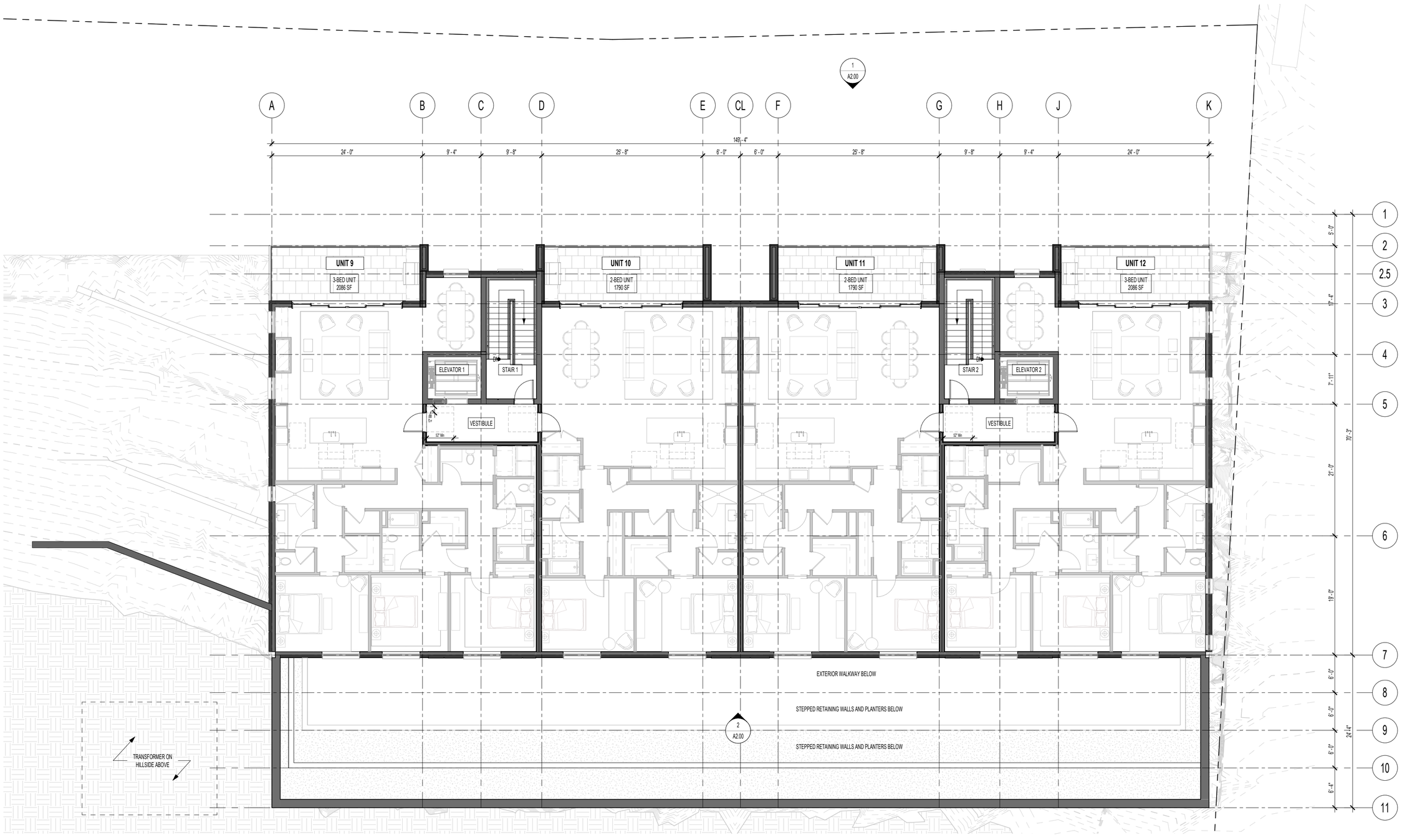
0 4 8 16

SCALE: 3/64" = 1' - 0"

LOT 58 SUMMARY

- PARKING SPACES : 19
- 2-BEDROOMS: 7
- 3-BEDROOMS: 5
- AFFORDABLE UNITS: 0

CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



LOT 58 – THIRD FLOOR PLAN

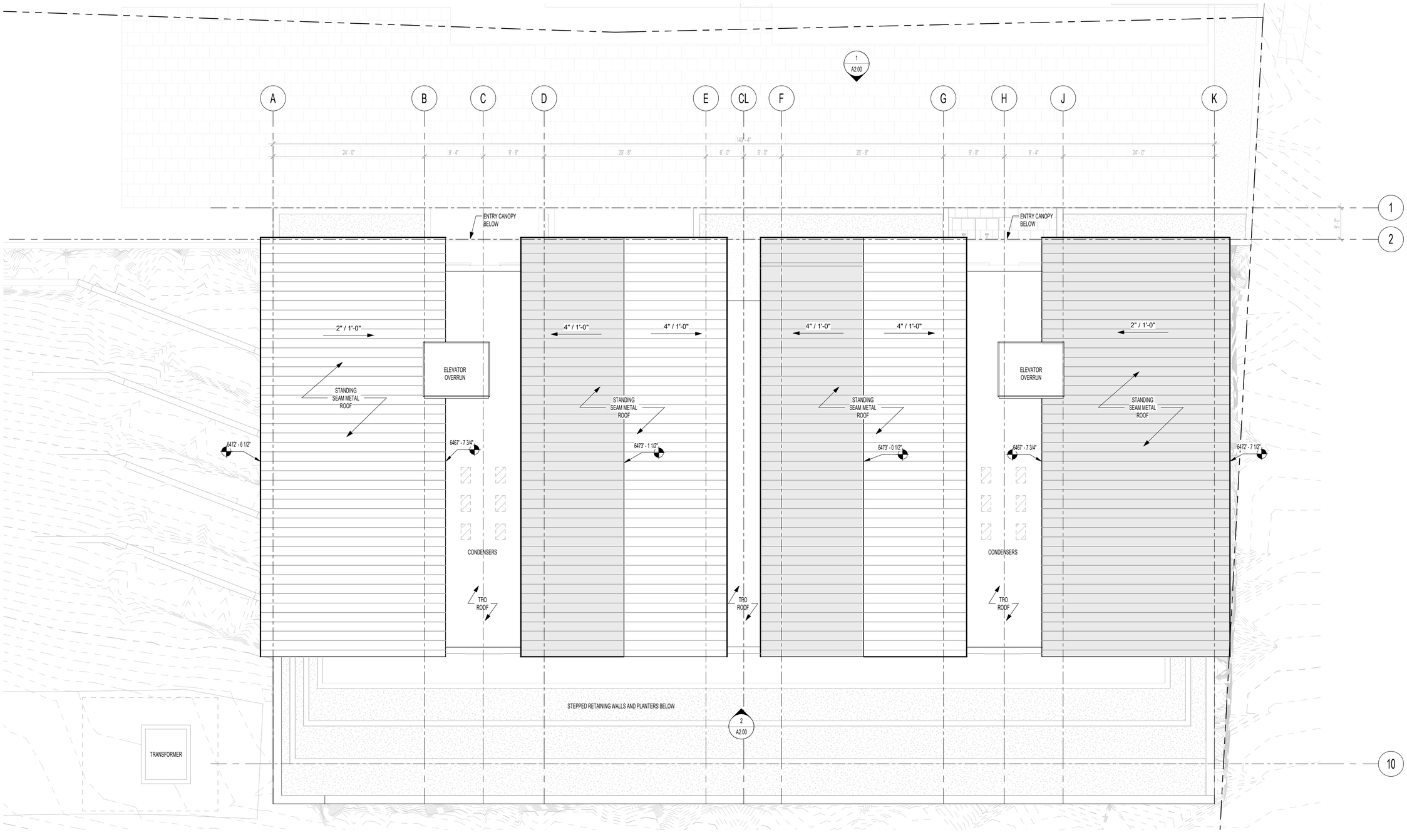
0 4 8 16

SCALE: 3/64" = 1' - 0"

LOT 58 SUMMARY

- PARKING SPACES : 19
- 2-BEDROOMS: 7
- 3-BEDROOMS: 5
- AFFORDABLE UNITS: 0

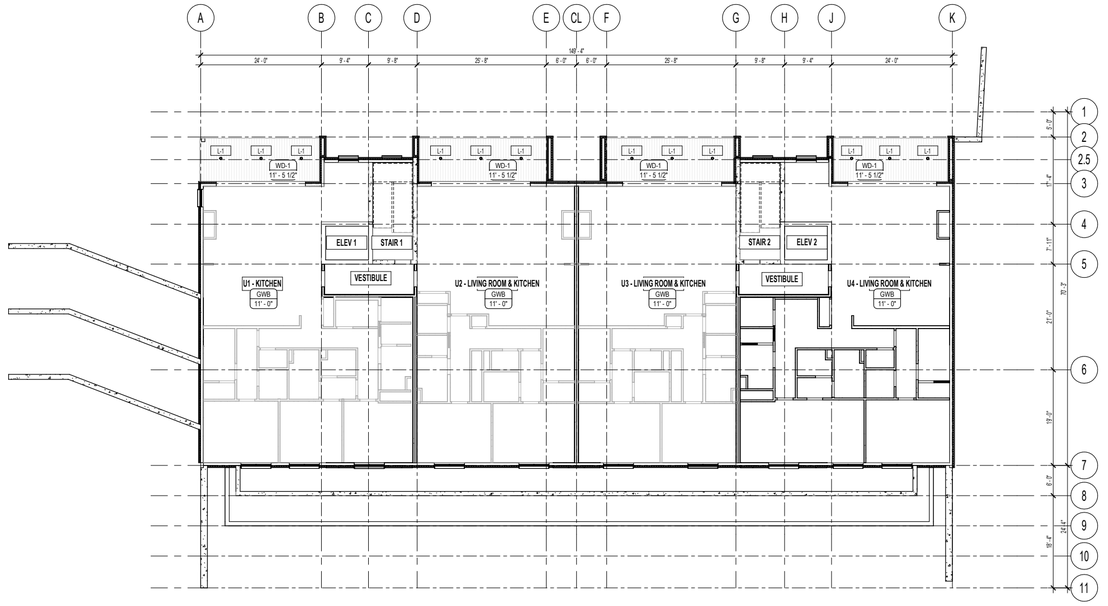
CODE NOTE:
UNITS ARE FOR-SALE CONDOMINIUMS AND WILL BE CLASSIFIED AS R-2 OCCUPANCY. INDIVIDUAL OWNERS MAY APPLY FOR SHORT-TERM RENTAL LICENSES THROUGH THE TOWN OF JACKSON.



LOT 58 – ROOF PLAN

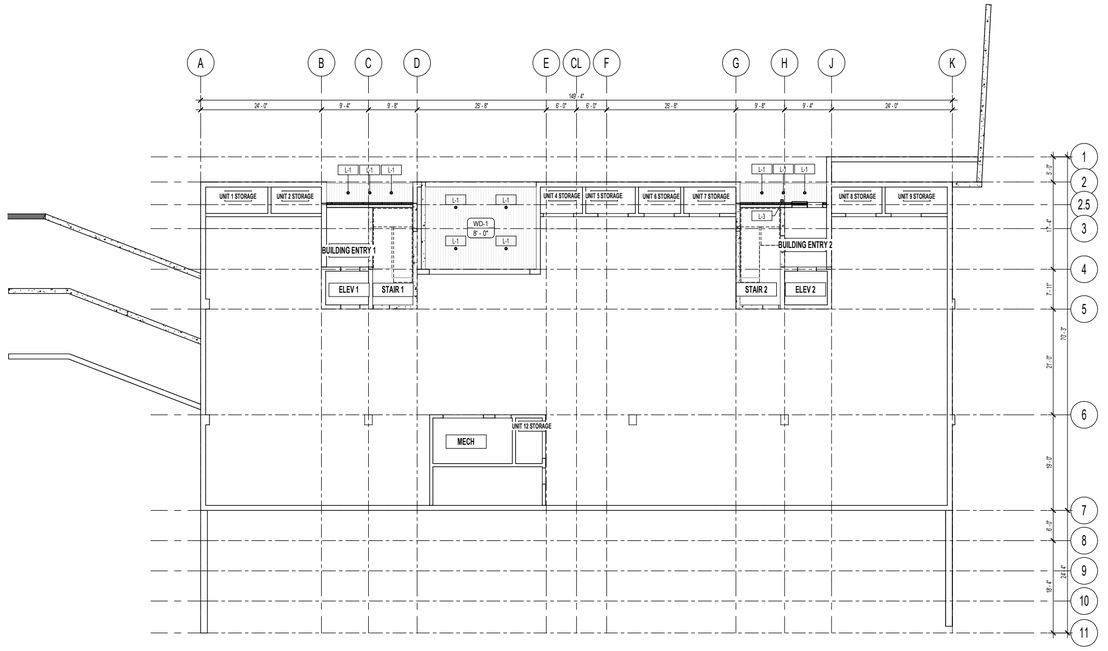
0 4 8 16

SCALE: 3/64" = 1' - 0"



2 REFLECTED CEILING PLAN - 1ST FLOOR PLAN
SCALE 3/32" = 1'-0"

0 4 8 16 32



1 REFLECTED CEILING PLAN - BASEMENT
SCALE 3/32" = 1'-0"

0 4 8 16 32

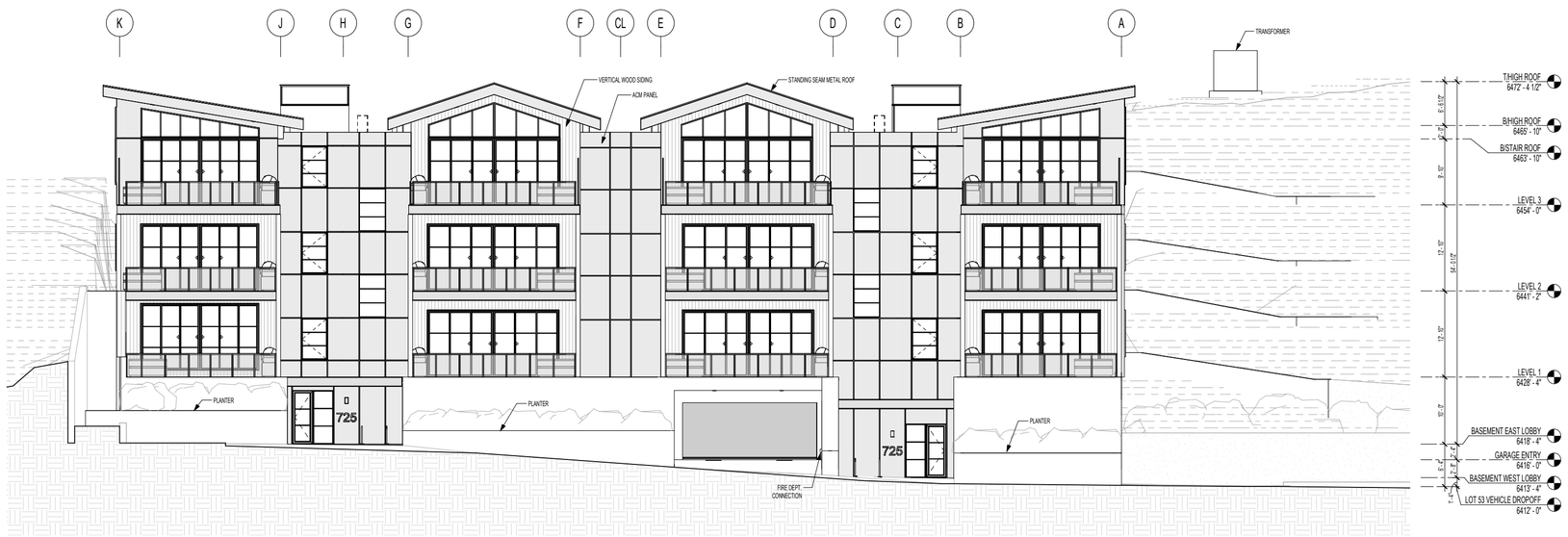
RCP LEGEND	
○	RECESSED LIGHT FIXTURE
▢	EXTERIOR LIGHT FIXTURE
═══	CEILING-MOUNTED STRIP LIGHT

ELECTRICAL NOTES:
1. ALL ELECTRICAL WORK SHALL FULLY COMPLY WITH CURRENT EDITIONS OF ALL APPLICABLE CODES.
2. GENERAL CONTRACTOR TO COORDINATE WALKTHROUGH WITH OWNER & ARCHITECT TO VERIFY FINAL LOCATIONS OF ALL FIXTURES & SWITCHES PRIOR TO INSTALLATION.
3. ELECTRICIAN TO COORDINATE WITH GENERAL CONTRACTOR, ARCHITECT, & HVAC CONTRACTOR FOR LOCATIONS OF ALL THERMOSTATS & THERMOSTATIC SENSORS.
4. ELECTRICIAN & GENERAL CONTRACTOR TO COORDINATE WORK WITH ALL THIRD-PARTY CONTRACTORS (SECURITY, AUDIO/VIDEO, HOME AUTOMATION AND SIMILAR).

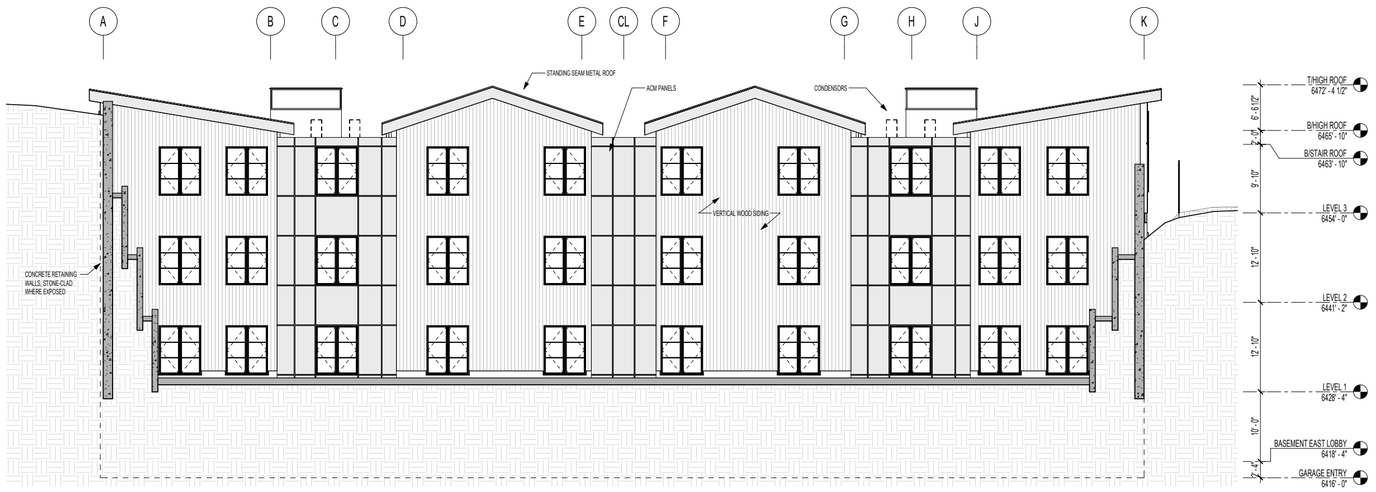
LOW VOLTAGE NOTES:
1. ALL SPEAKER WIRE SHALL BE FOUR CONDUCTOR WIRE (UNLESS OTHERWISE NOTED)
2. ALL SPEAKER WIRED TO SINGLE HOMERUN POINT (UNLESS OTHERWISE NOTED)

NOTE: INTERIOR LIGHTING NOT SHOWN.

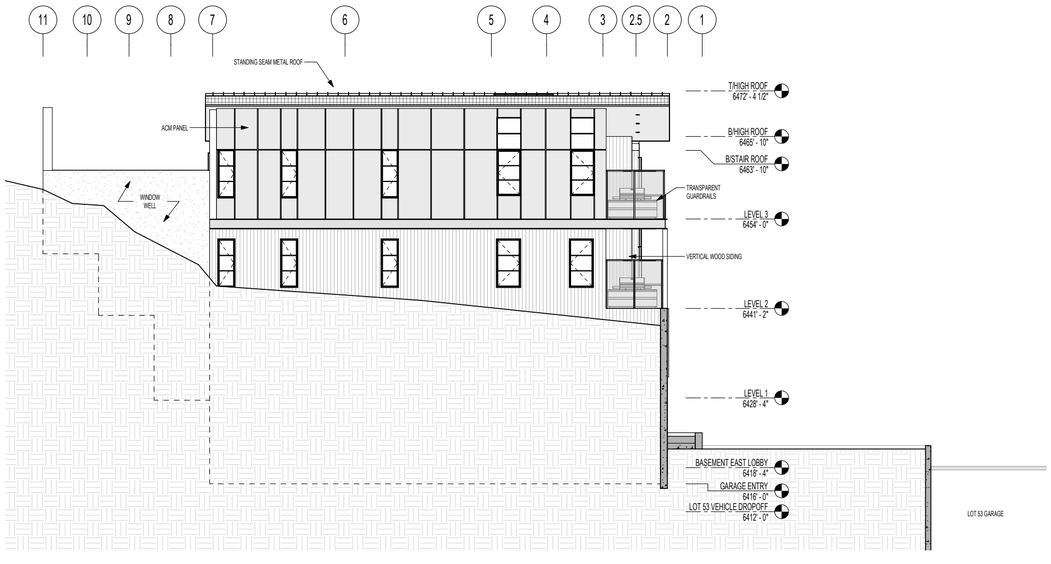
LOT 58 – EXTERIOR LIGHTING PLANS



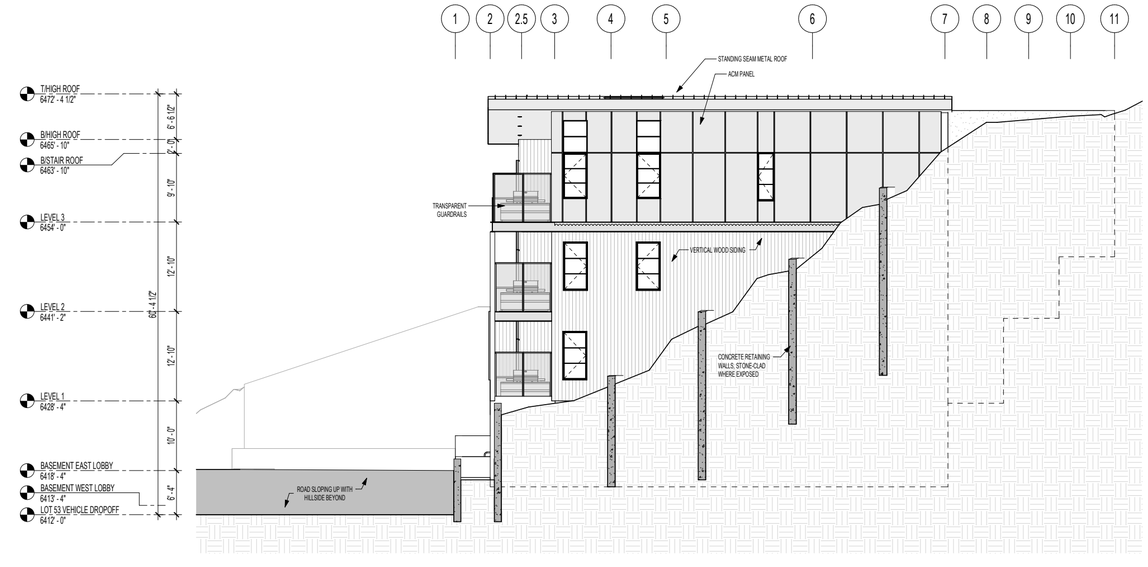
NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

MATERIAL LEGEND

- VERTICAL WOOD SIDING
- HORIZONTAL WOOD SIDING
- ACM PANEL
- BOARD FORM CONCRETE

LOT 58 – ELEVATIONS

SCALE: 1 / 16" = 1' - 0"

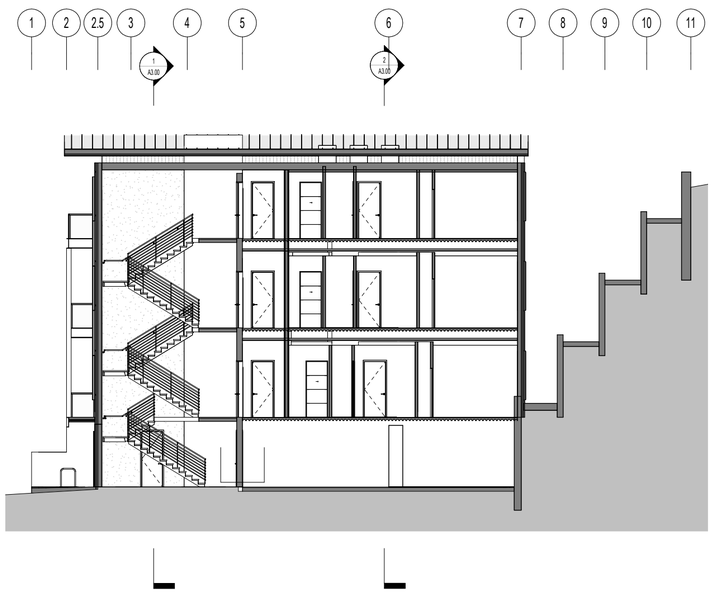
E/W SECTION LOOKING SOUTH - 1



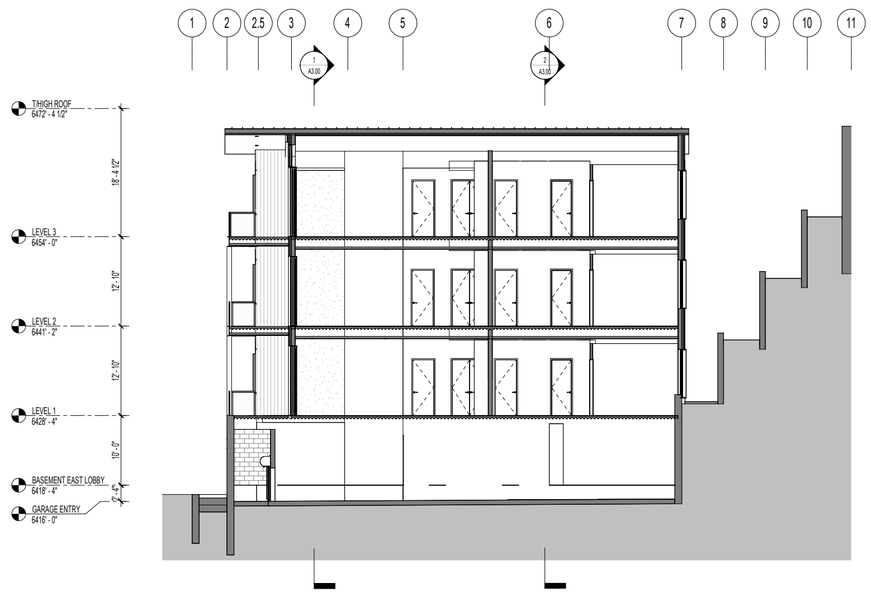
E/W SECTION LOOKING SOUTH - 2



N/S SECTION LOOKING EAST - 1



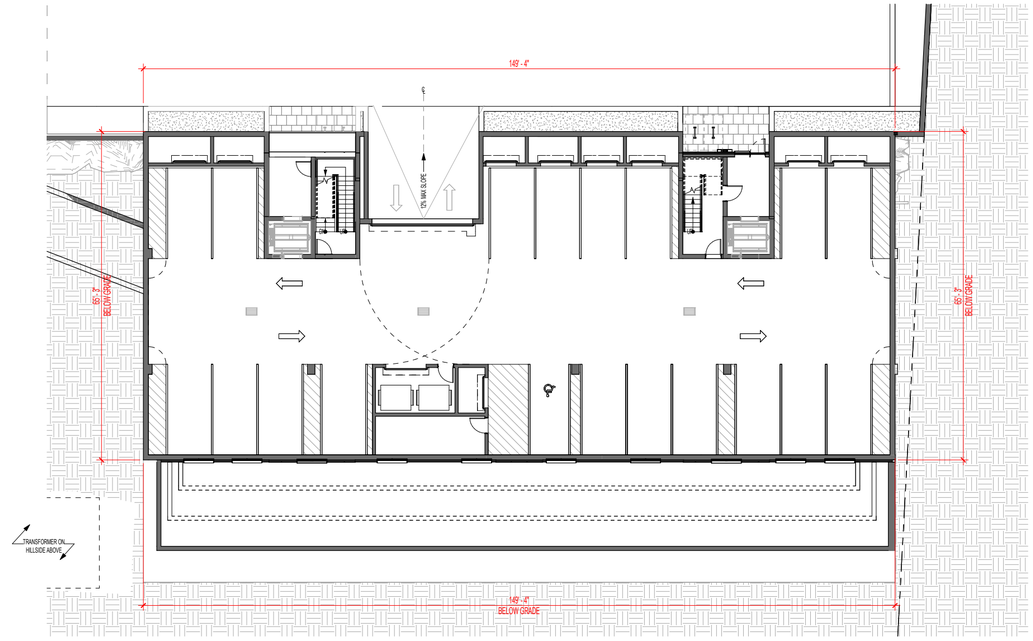
N/S SECTION LOOKING EAST- 2



0 4 8 16 32

SCALE: 1 / 16" = 1' - 0"

LOT 58 – BUILDING SECTIONS



5 BASEMENT DEFINITION PLAN
SCALE: 3/32" = 1'-0"

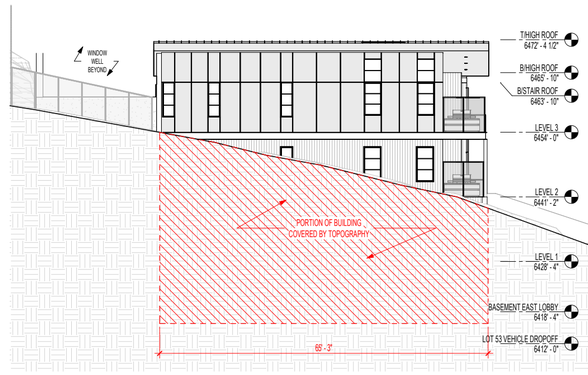
BASEMENT DEFINITION
1. NO MORE THAN 4'-0" OF WALL FROM THE T/1ST FLOOR SLAB DOWN CAN BE EXPOSED (6'-0" FROM THE T/BASEMENT SLAB MUST BE BELOW GRADE).
2. AT LEAST 50% OF THE PERMITER MUST MEET THIS REQUIREMENT.

LOT 58 BUILDING
NORTH ELEVATION - 149'-4"
EAST ELEVATION - 65'-3" (65'-3" BELOW GRADE)
SOUTH ELEVATION - 149'-4" (149'-4" BELOW GRADE)
WEST ELEVATION - 65'-3" (65'-3" BELOW GRADE)

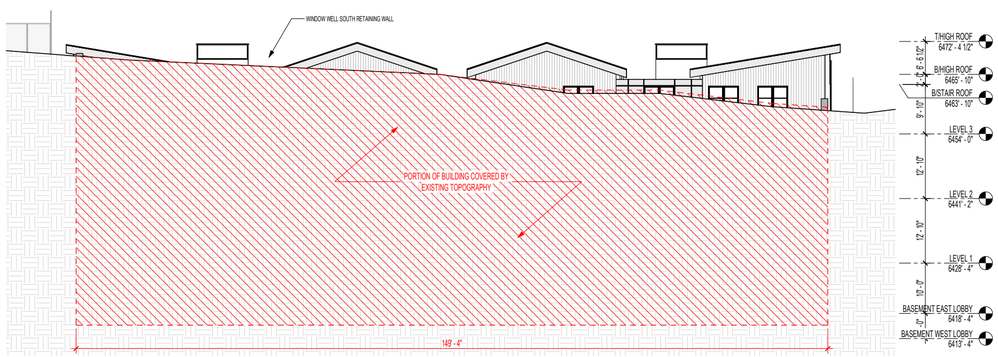
TOTAL PERIMETER = 429'-2" (279'-10" BELOW GRADE)
TOTAL PERCENTAGE BELOW GRADE = 65%



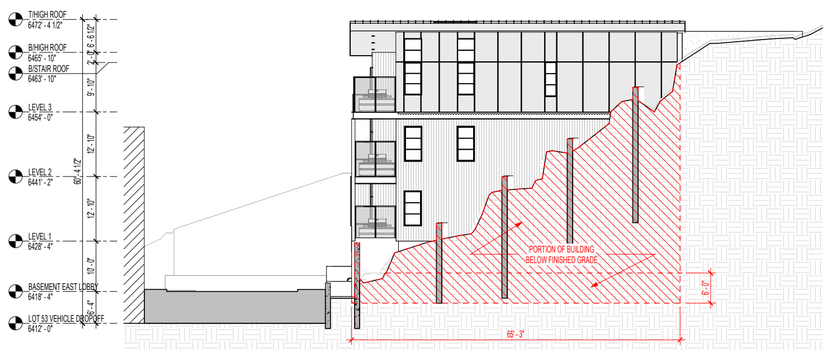
1 BASEMENT DEFINITION - NORTH ELEVATION
SCALE: 3/32" = 1'-0"



3 BASEMENT DEFINITION - EAST ELEVATION
SCALE: 3/32" = 1'-0"



2 BASEMENT DEFINITION - SOUTH ELEVATION
SCALE: 3/32" = 1'-0"



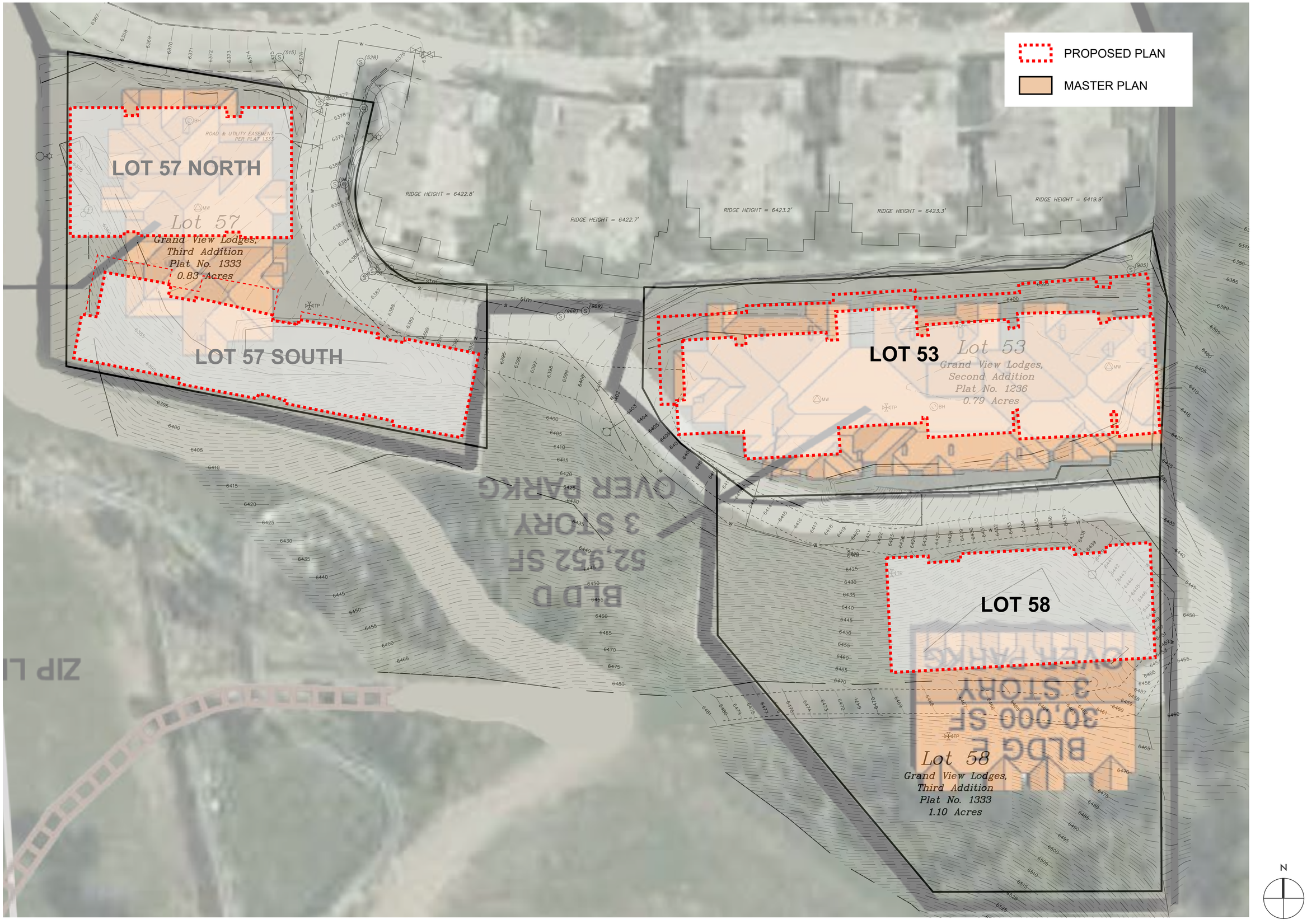
4 BASEMENT DEFINITION - WEST ELEVATION
SCALE: 3/32" = 1'-0"

0 4 8 16 32

LOT 58 – BASEMENT CALCULATIONS

NORTHWORKS

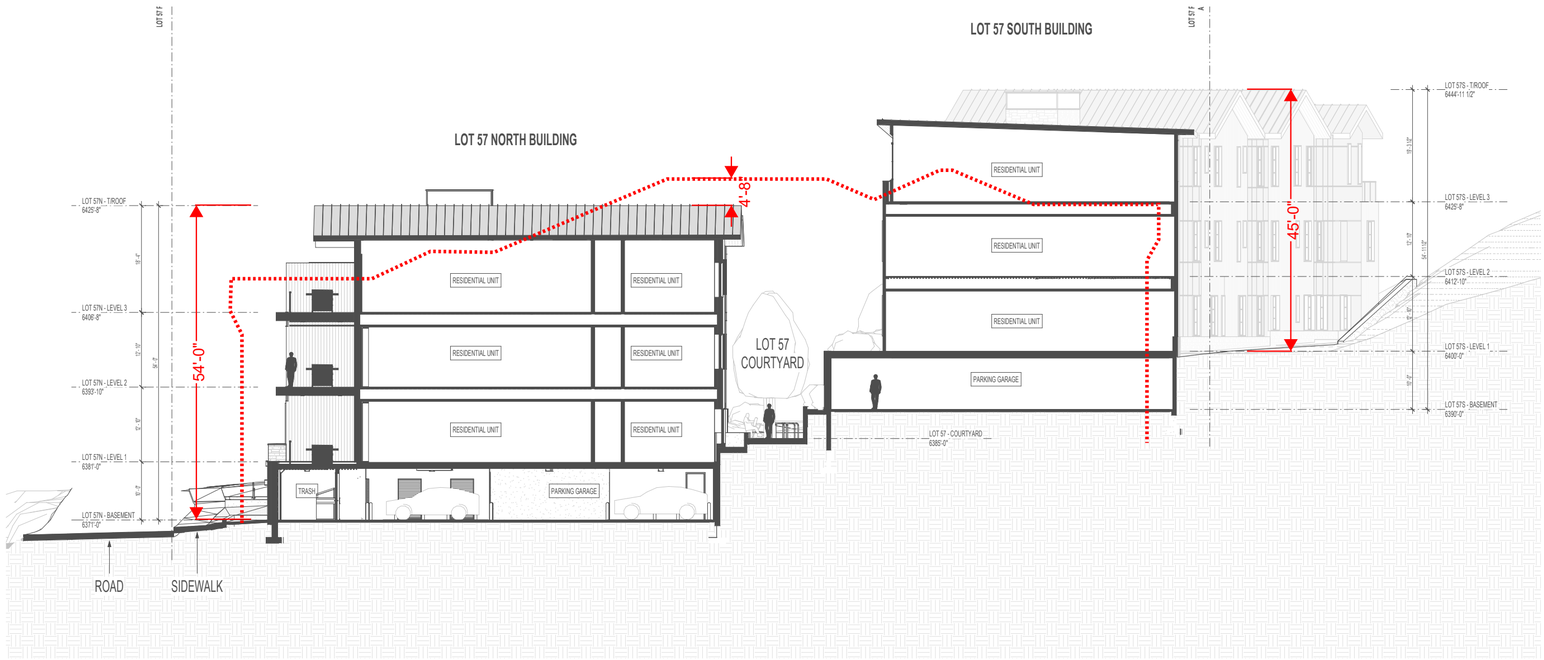
Master Plan Analysis



SITE PLAN OVERLAY – MASTER PLAN & NEW PROPOSAL

MASTER PLAN - WEST ELEVATION





PROPOSED PLAN - WEST ELEVATION

The original Master Plan design for Lot 57 did not account for garage access from the road with allowable road slopes. Our proposal splits the site into 2 buildings to solve this issue, while maintaining a scale that matches that of the original design.

MASTER PLAN - NORTH ELEVATION





PROPOSED PLAN - NORTH ELEVATION

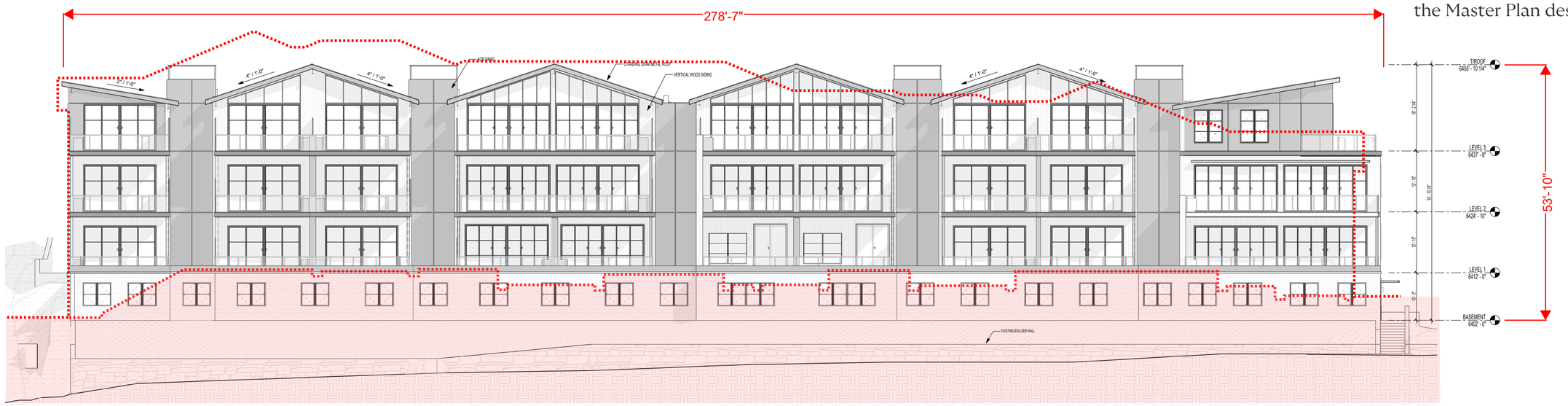
LOT 57 MASTER PLAN VS. NEW PROPOSAL



MASTER PLAN - NORTH ELEVATION

This design would have created a very tall retaining wall along the Love Ridge condos.

The proposed design at Lot 53 is shorter on average than the Master Plan design.

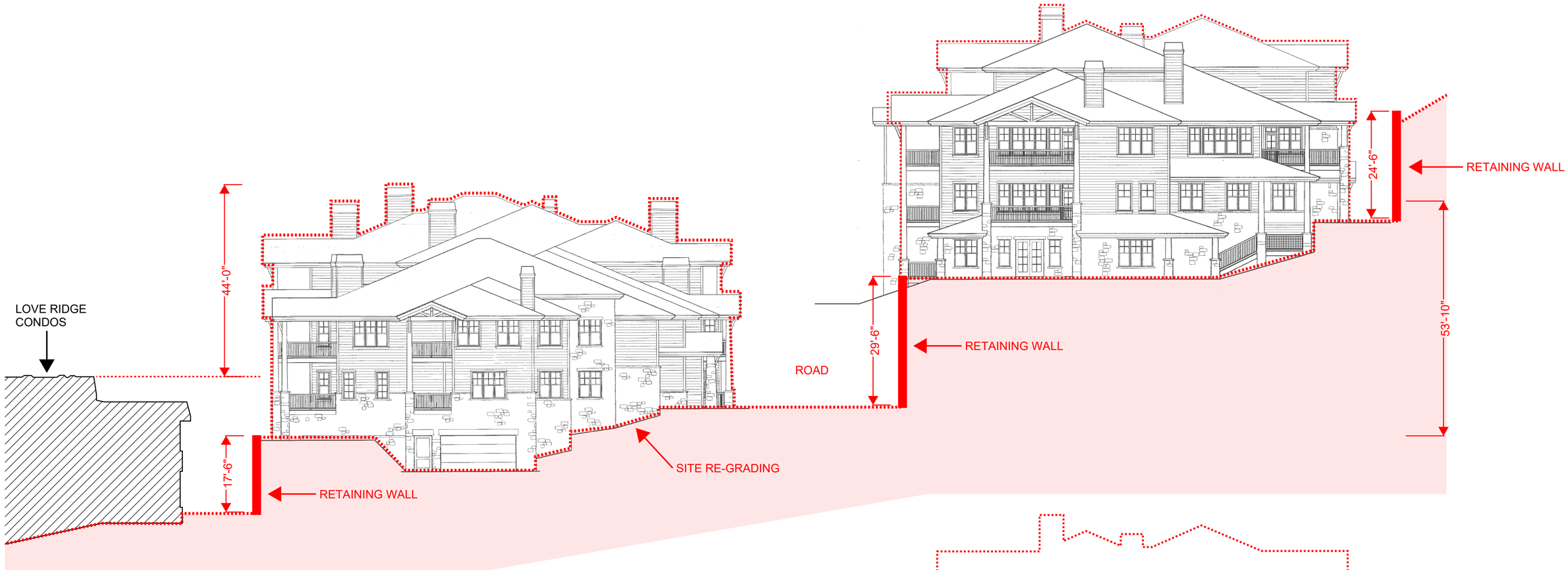


PROPOSED PLAN - NORTH ELEVATION

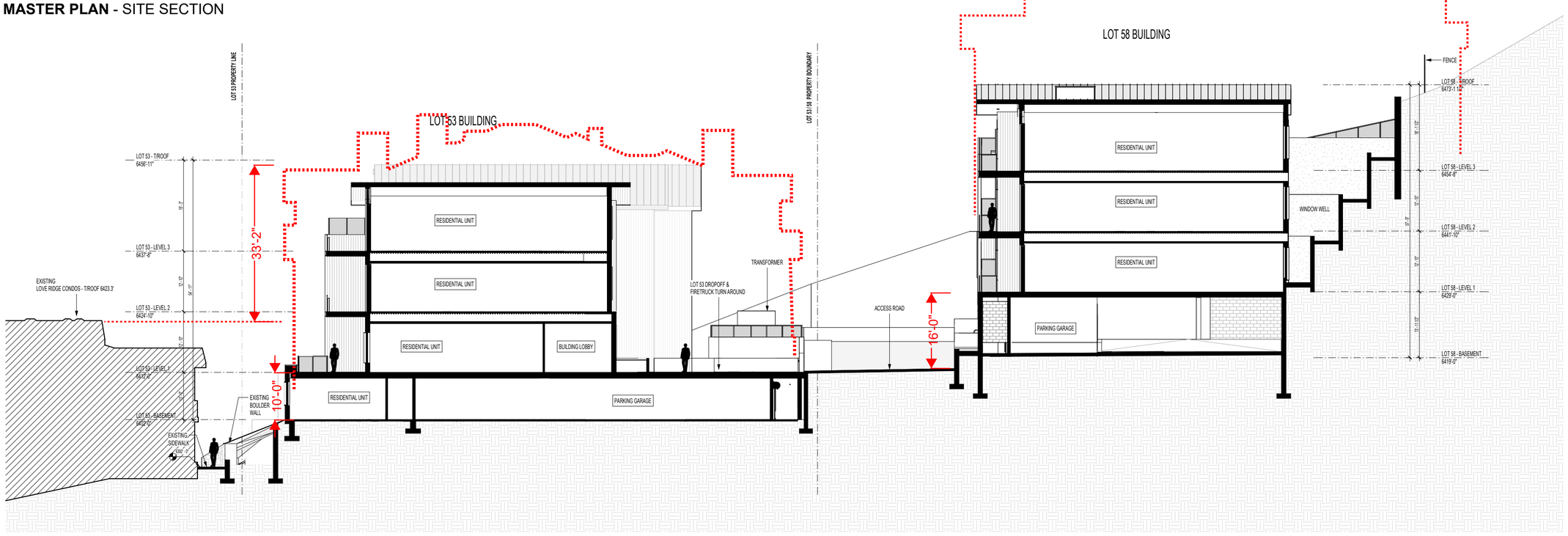


MASTER PLAN - WEST ELEVATION

LOT 53 MASTER PLAN VS. NEW PROPOSAL

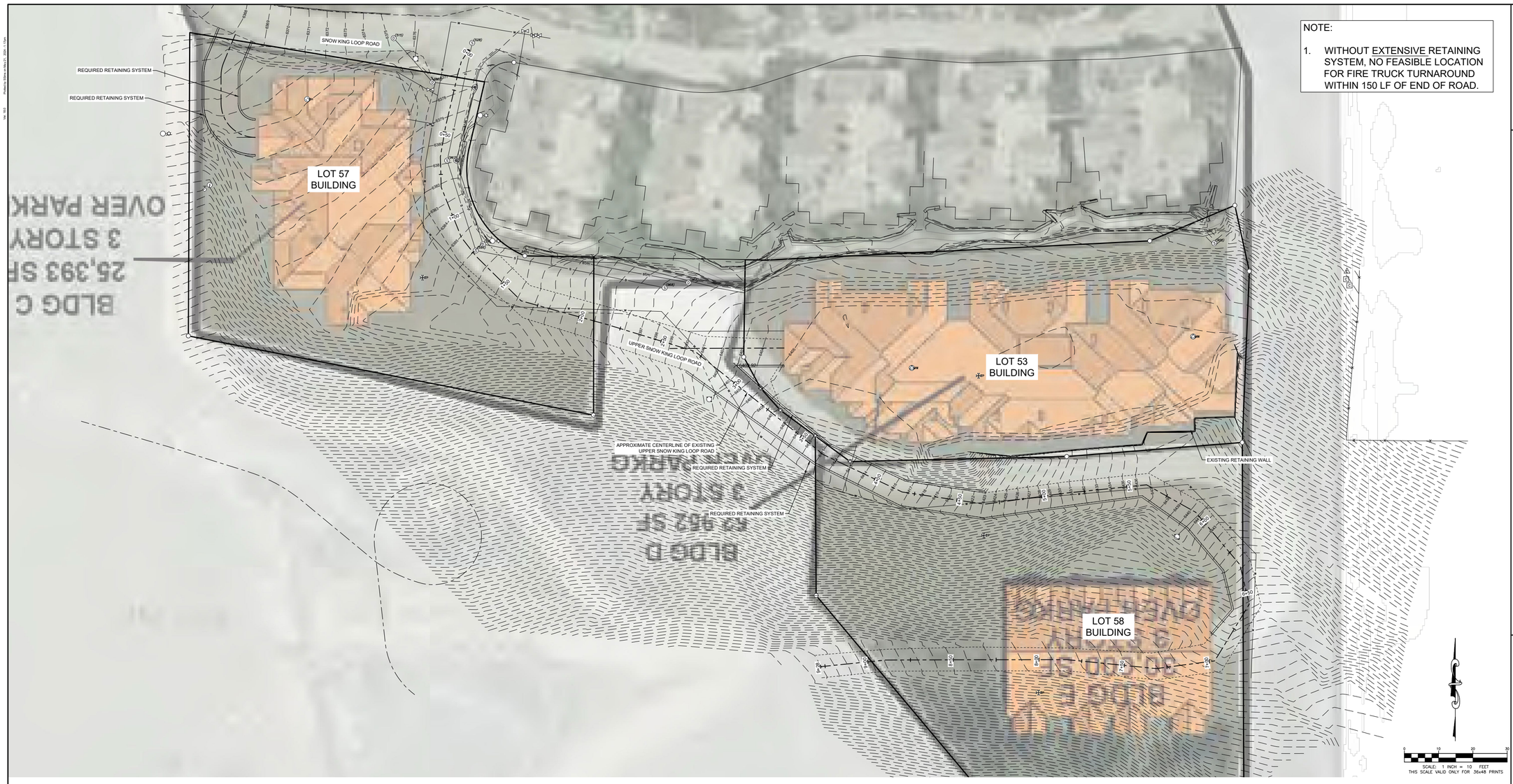


MASTER PLAN - SITE SECTION



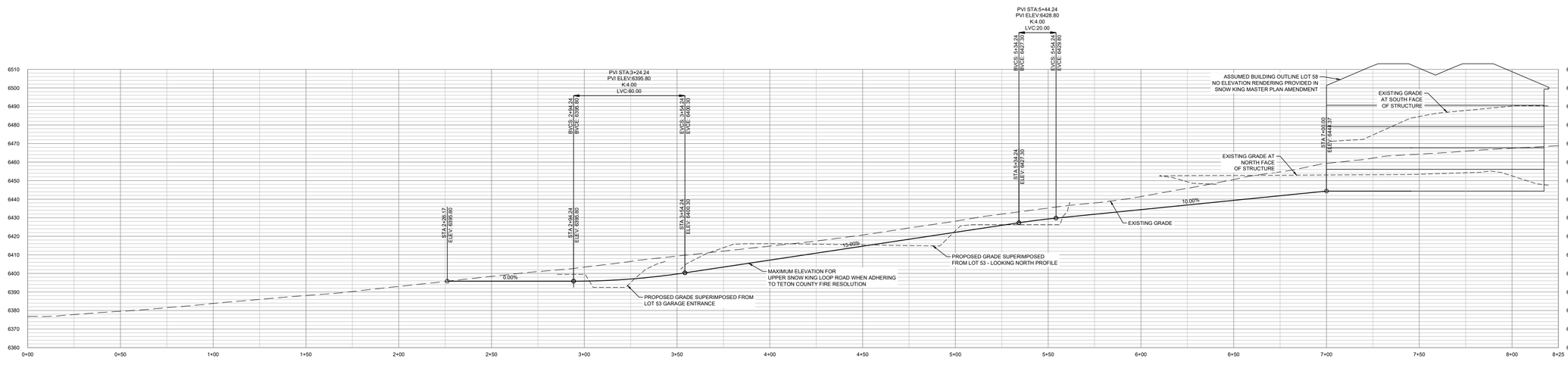
PROPOSED PLAN - SITE SECTION

LOT 53 AND LOT 58 – MASTER PLAN VS. NEW PROPOSAL – SITE SECTION



NOTE:

1. WITHOUT EXTENSIVE RETAINING SYSTEM, NO FEASIBLE LOCATION FOR FIRE TRUCK TURNAROUND WITHIN 150 LF OF END OF ROAD.



=PROFILE=
Upper Snow King Loop Road
SCALE: HORIZONTAL: 1"=10
VERTICAL 1"=10

– PRELIMINARY –
SUBJECT TO CORRECTION
AND APPROVAL

JORGENSEN
KEMMERER, WYOMING
307.877.9093
www.jorgeng.com

PROJECT TITLE:
SNOW KING - BEAR DEVELOPMENT

SHEET TITLE:
SNOW KING MASTER PLAN AMENDMENT - SUB-AREA 3
SITE OVERVIEW ANALYSIS

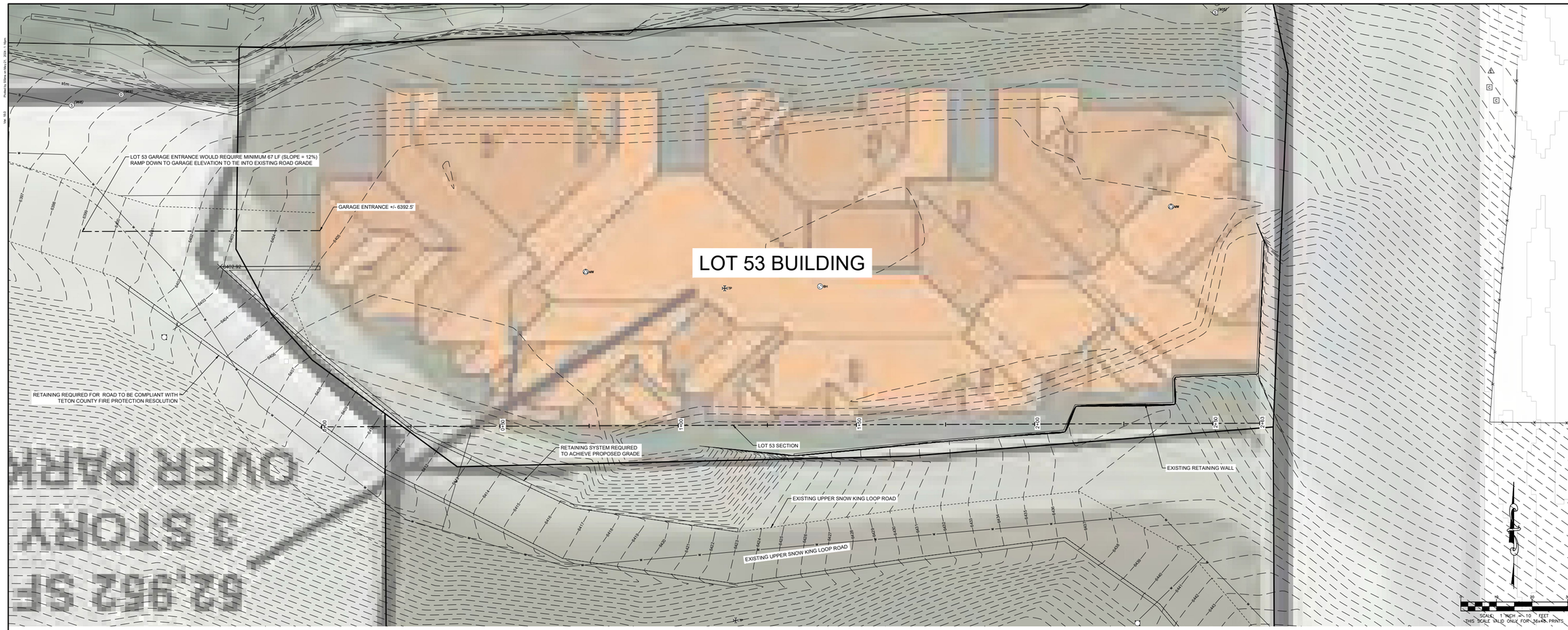
DESIGNED BY:	SS
REVIEWED BY:	JL
PLAN VERSION	DATE
EXHIBIT	2024-05-21

PROJECT NUMBER
23072

SHEET
1

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MASTER PLAN – CIVIL ENGINEER COMMENTARY





=PROFILE=
Lot 53 XS-Looking North
SCALE: HORIZONTAL 1"=10
VERTICAL 1"=10

– PRELIMINARY –
SUBJECT TO CORRECTION AND APPROVAL

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KEMMERER, WYOMING
307.877.9093
www.jorgeng.com

PROJECT TITLE:
SNOW KING - BEAR DEVELOPMENT

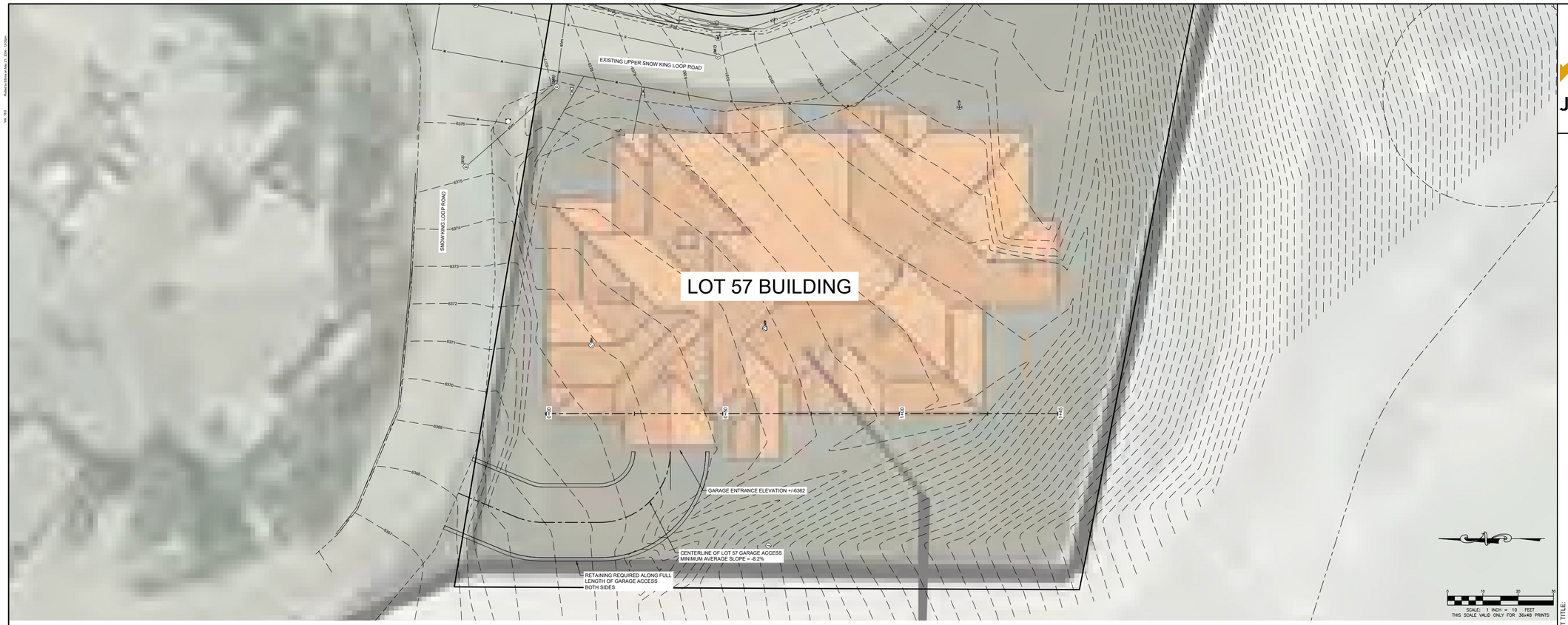
SHEET TITLE:
SNOW KING MASTER PLAN AMENDMENT - SUB-AREA 3
LOT 53 ANALYSIS

DESIGNED BY:	SS
REVIEWED BY:	JL
PLAN VERSION	DATE
EXHIBIT	2024-05-21

PROJECT NUMBER
23072

SHEET
2

MASTER PLAN – CIVIL ENGINEER COMMENTARY





=PROFILE=
Lot 57 - Looking East
SCALE: HORIZONTAL 1"=10
VERTICAL 1"=10

– PRELIMINARY –
SUBJECT TO CORRECTION
AND APPROVAL

JORGENSEN
KEMMERER, WYOMING
307.877.9093
www.jorgeng.com

PROJECT TITLE
SNOW KING - BEAR DEVELOPMENT

SHEET TITLE
SNOW KING MASTER PLAN AMENDMENT - SUB-AREA 3
LOT 57 ANALYSIS

DESIGNED BY:	SS
REVIEWED BY:	JL
PLAN VERSION	DATE
EXHIBIT	2024-05-21

PROJECT NUMBER
23072

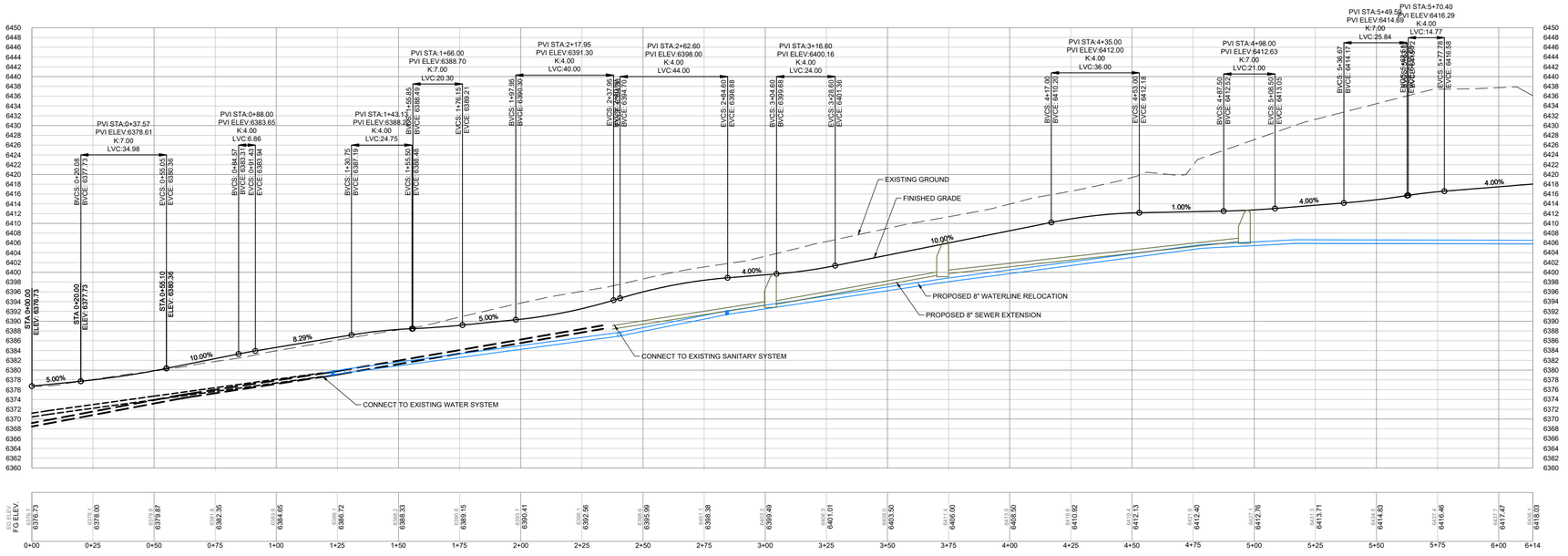
SHEET
3

MASTER PLAN – CIVIL ENGINEER COMMENTARY

NORTHWORKS

Civil & Landscape Details





NOTE:

REFER TO RESPONSE TO TOWN ENGINEERING COMMENTS DATED 2/3/2025, CONDITIONS OF APPROVAL C. LDR 5.7.2.A FOR DISCUSSION OF ROAD STEEPNESS, FIRE APPARATUS TURN AROUND AND DEVELOPMENT ROAD CONNECTION TO THE EAST.

=PROFILE=
UPPER SNOW KING LOOP ROAD
SCALE: HORIZONTAL 1"=20'
VERTICAL 1"=10'

NORTHWORKS
185 E. Hansen Avenue
T 307-201-5324
Jackson, Wyoming 83001
www.nwkz.com

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JORGENSEN
JACKSON, WYOMING
307.733.5150
www.jorgeng.com

NO.	ISSUED DATE	ISSUED FOR
1	2024-10-29	DEVELOPMENT PLAN REVIEW
2	2025-03-24	DEVELOPMENT PLAN REVISION
3	2025-04-28	DEVELOPMENT PLAN REVISION 2

PROFESSIONAL SEAL

Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

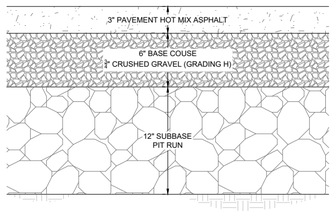
23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number

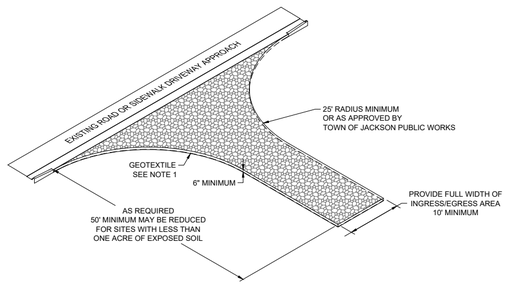
C2.3

Drawing Name

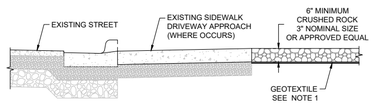
UPPER SNOW KING LOOP PLAN & PROFILE



PAVEMENT SECTION
NOT TO SCALE



CONSTRUCTION ENTRANCE ISOMETRIC VIEW

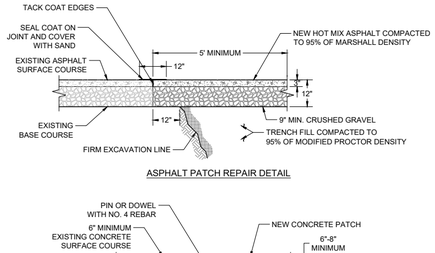


CONSTRUCTION ENTRANCE SECTION

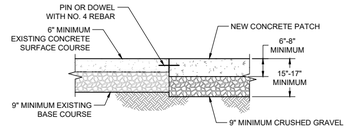
NOTE

1. PLACE CONSTRUCTION GEOTEXTILE FOR SOIL STABILIZATION UNDER THE CRUSHED ROCK FROM THE EDGE OF THE EXISTING ROADWAY OR SIDEWALK TO THE RADIUS RETURNS, OR AS DIRECTED BY PUBLIC WORKS.
2. ENTRANCE SHALL BE REMOVED ABD RECONSTRUCTED AS REQUIRED TO PREVENT EXCESS TRACKING OF MATERIALS INTO RIGHT-OF-WAY, OR WHEN DIRECTED BY THE TOWN PUBLIC WORKS DEPARTMENT.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE TOJ ST-119



ASPHALT PATCH REPAIR DETAIL

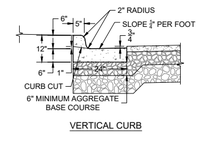


CONCRETE PATCH REPAIR DETAIL

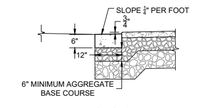
NOTE

1. REPLACEMENT ASPHALT SHALL BE 1" THICKER THAN EXISTING WITH A MINIMUM THICKNESS OF 3".
2. ASPHALT SHALL BE PLACED IN TWO (2) LIFTS, EACH NO LESS THEN ½" IN THICKNESS, AND COMPACTED TO 95% OF MARSHALL DENSITY.
3. BITUMINOUS MATERIAL SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 02545 BITUMINOUS MATERIAL OF WYOMING PUBLIC WORKS STANDARDS AND SPECIFICATIONS.
4. PORTLAND CEMENT CONCRETE PAVEMENT SHALL MEET APPLICABLE REQUIREMENTS OF SECTION 02520, 02776 AND 03304 AS DIRECTED BY TOWN OF JACKSON PUBLIC WORKS DEPARTMENT.

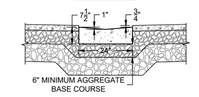
CONCRETE AND ASPHALT PATCH DETAIL
NOT TO SCALE TOJ ST-118



VERTICAL CURB



RIBBON CURB

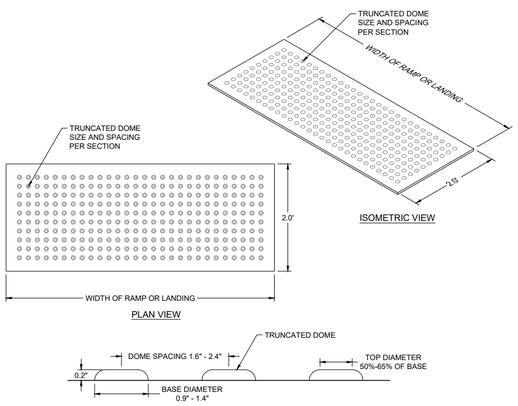


2' WIDE VALLEY GUTTER

NOTE

1. CURBS SHALL CONFORM TO WPWSS SECTION 02525, EXCEPT THAT PORTLAND CEMENT CONCRETE SHALL BE FIBERMESH-REINFORCED CLASS 4000 CONCRETE CONFORMING WITH WPWSS SECTION 03304, PART 2.07.
2. AGGREGATE BASE COURSE SHALL BE SIX INCH MINIMUM THICKNESS, CONFORM TO WPWSS SECTION 02190, PART 2.03, GRADING H, AND BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.
3. REMOVAL AND REPLACEMENT OF CURB SHALL TAKE PLACE IN FULL PANELS.
4. ROLL CURB SHALL NOT BE ALLOWED.

CURB SECTION DETAIL
NOT TO SCALE TOJ ST-110 mod



ISOMETRIC VIEW

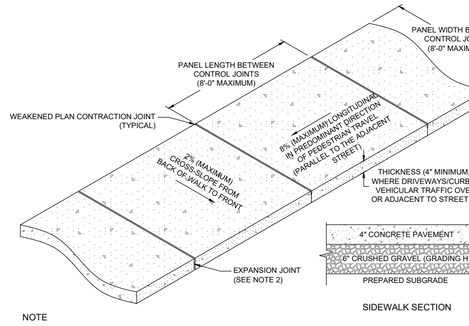
PLAN VIEW

TRUNCATED DOME SECTION

NOTE

1. DETECTABLE WARNING PANELS SHALL BE RED BRICK COLORED CAST IRON
2. PANELS PLACED ON PUBLIC SIDEWALKS SHALL BE PROVIDED BY TOWN OF JACKSON

DETECTABLE WARNING PANEL DETAIL
NOT TO SCALE

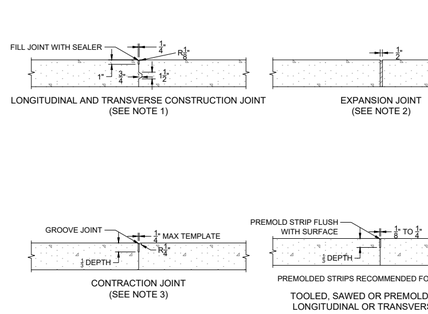


SIDEWALK SECTION

NOTE

1. SIDEWALK SHALL CONFORM TO ALL APPLICABLE ADA STANDARD REQUIREMENTS SIDEWALKS SHALL CONFORM TO WPWSS SECTION 02776, EXCEPT THAT PORTLAND CEMENT CONCRETE SHALL BE FIBERMESH-REINFORCED CLASS 4000 CONCRETE CONFORMING WITH WPWSS SECTION 03304, PART 2.07.
2. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALK AT THE SAME LOCATIONS AS THOSE IN CURB AND GUTTER WHEN SIDEWALK IS ADJACENT TO CURB. (PER WPWSS SECTION 03251, PART 3.04 SPACING SHALL NOT EXCEED 32'-0" ON CENTER.)
3. FOR SIDEWALKS GREATER THAN EIGHT FEET IN WIDTH, A LONGITUDINAL CONTROL JOINT SHALL BE INSTALLED AT THE CENTER OF THE WALK.
4. REMOVAL AND REPLACEMENT OF SIDEWALK SHALL TAKE PLACE IN FULL PANELS.
5. AGGREGATE BASE COURSE SHALL BE FOUR INCH MINIMUM THICKNESS, CONFORM TO WPWSS SECTION 02190, PART 2.03 GRADING H, AND BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.
6. CLEAR VEGETATION AND STRIP TOPSOIL TO SUBGRADE. SCARIFY, CONDITION, AND COMPACT. PROOF ROLL IN THE PRESENCE OF THE ENGINEER
7. MATERIAL STRIPPED TO DEPTH LOWER THAN SUBGRADE SHALL BE REPLACED WITH STRUCTURAL MATERIAL TO SUBGRADE ELEVATION.
8. WHERE UNSUITABLE SUBGRADE SOIL EXISTS, OVER EXCAVATION AND REPLACEMENT WILL BE REQUIRES. GEOGRID MAY BE SUBSTITUTED FOR OVER EXCAVATION UPON APPROVAL FROM GEOTECHNICAL ENGINEER.

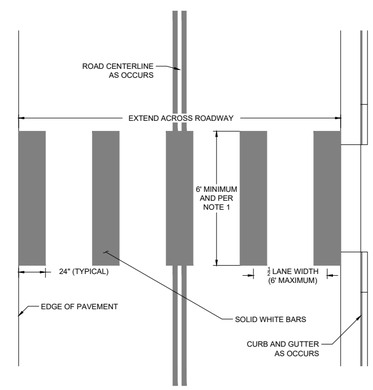
TYPICAL CONCRETE SIDEWALK DETAIL
NOT TO SCALE TOJ ST-127



NOTES

1. KEYWAY FORMED BY FASTENING METAL KEY TO FORM.
2. ¼" PREMOLDED NON-EXTRUDING EXPANSION JOINT MATERIAL TO MEET AASHTO M-59. EXPANSION MATERIAL SHALL BE INSTALLED WHEN ABUTTING EXISTING CONCRETE OR FIXED STRUCTURES SUCH AS INLETS AND DRIVEWAYS, AND EVERY 300' ON LONG STRAIGHT CONCRETE STRETCHES.
3. FORM WITH TEMPLATE OR SAWCUT JOINTS. IF SAWCUT JOINTS ARE USED, THEY SHALL BEGIN AS SOON AS CONCRETE IS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT EXCESSIVE RAVELING AND BEFORE UNCONTROLLABLE CRACKING OCCURS. MAXIMUM DISTANCE BETWEEN JOINTS IS 8'. MINIMUM DISTANCE IS 4'.
4. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALK AT THE SAME LOCATIONS AS THOSE IN CURB AND GUTTER WHEN SIDEWALK IS ADJACENT TO CURB. (PER WPWSS SECTION 03251, PART 3.04 SPACING SHALL NOT EXCEED 32'-0" ON CENTER.)

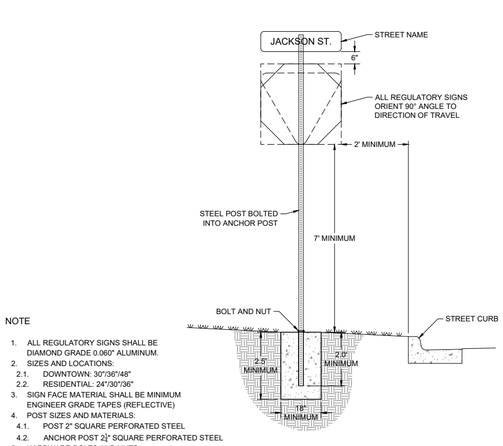
PAVING AND CONCRETE JOINT DETAILS
NOT TO SCALE



CROSSWALK STRIPING DETAIL
NOT TO SCALE TETON COUNTY STANDARD

NOTE

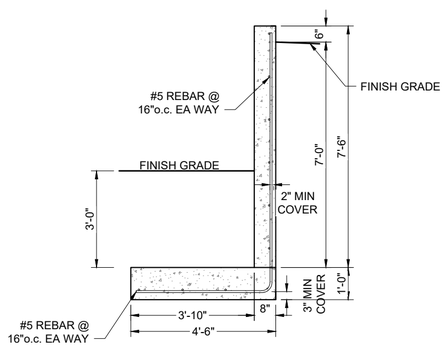
1. CROSSWALK WIDTH SHALL BE 2' WIDER THAN THE WIDEST APPROACH SIDEWALK.
2. TO REDUCE WEAR, SPACE CROSSWALK LINES TO AVOID VEHICLE WHEEL PATHS. GENERALLY LOCATE CROSSWALK LINES AT THE EDGE AND CENTER OF LANES.
3. ROAD SURFACE SHALL BE CLEANED THOROUGHLY WITH A PRESSURE WASHER AND ALLOWED TO DRY COMPLETELY PRIOR TO PAINTING.



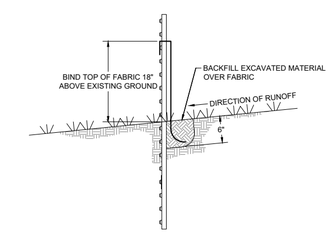
NOTE

1. ALL REGULATORY SIGNS SHALL BE DIAMOND GRADE 0.060" ALUMINUM.
2. SIZES AND LOCATIONS:
   2.1. DOWNTOWN: 30"/36"/48"
   2.2. RESIDENTIAL: 24"/30"/36"
3. SIGN FACE MATERIAL SHALL BE MINIMUM ENGINEER GRADE TAPES (REFLECTIVE)
4. POST SIZES AND MATERIALS:
   4.1. POST 2" SQUARE PERFORATED STEEL
   4.2. ANCHOR POST 2½" SQUARE PERFORATED STEEL
5. HARDWARE-BOLTS AND NUTS.
6. STREET NAMES SHALL BE 6" ABOVE STOP OR YIELD SIGNS.
7. MINIMUM EMBEDMENT OF ANCHOR POST SHALL BE 2' FROM GROUND LEVEL.
8. ALL TRAFFIC SIGNS SHALL MEET THE TOWN OF JACKSON STANDARDS. REFER TO WYDOT SPECIFICATIONS OR MUTCD FOR ITEMS NOT FOUND IN THE TOWN OF JACKSON STANDARDS.

TYPICAL TRAFFIC SIGN DETAIL
NOT TO SCALE



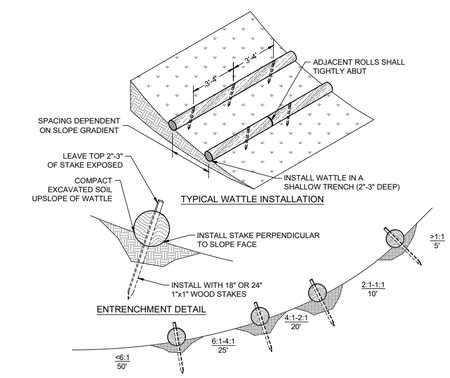
RETAINING WALL DETAIL
NOT TO SCALE



NOTE

1. USE MIRAFI 100X FILTER FABRIC WITH STEEL FENCE POSTS AT 10' ON CENTER OR APPROVED EQUAL.
2. PLACE SILT FENCE DOWN GRADIENT OF CONSTRUCTION OPERATIONS AS SHOWN ON THE PLANS TO CONTROL SILF FROM LEAVING SITE.

SILT FENCE DETAIL
NOT TO SCALE



TYPICAL WATTLE INSTALLATION

TYPICAL WATTLE SPACING BASE ON SLOPE GRADIENT

NOTE

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2"-3" DEEP BY 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHALL BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18"-24" STAKES EVERY 3'-4' AND WITH A STAKE ON EACH END. STAKES SHALL BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2"-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHALL BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.
4. EROSION CONTROL PLAN AND LOCATION OF STRAW WATTLES SHALL BE AS SHOWN ON PLANS OR AS APPROVED BY THE ENGINEER.

TYPICAL STRAW WATTLE DETAIL
NOT TO SCALE

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JORGENSEN
JACKSON, WYOMING
307.733.5150
www.jorgeng.com

NO.	ISSUED DATE	ISSUED FOR
1	2024-10-29	DEVELOPMENT PLAN REVIEW
2	2025-03-24	DEVELOPMENT PLAN REVISION
3	2025-04-28	DEVELOPMENT PLAN REVISION 2

PROFESSIONAL SEAL

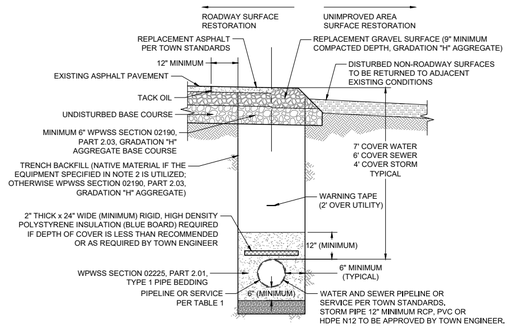
Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number
C3.0

Drawing Name
GRADING DETAILS

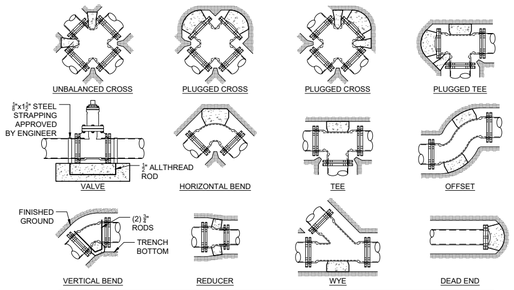


NOTE

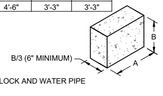
1. TRENCH BACKFILL BELOW THE SURFACE SHALL MEET THE FOLLOWING CRITERIA:
   - 95% MODIFIED PROCTOR DENSITY WITHIN STREET AND ALLEY RIGHTS-OF-WAY.
   - 90% MODIFIED PROCTOR DENSITY OUTSIDE STREET AND ALLEY RIGHTS-OF-WAY.
2. COMPACTION OF NATIVE TRENCH BACKFILL, WITH ALL ROCK LARGER THAN 6" REMOVED, SHALL BE CARRIED OUT IN 2' LIFTS WITH A HOE-PACK OR A VIBRATORY SHEEPS FOOT ROLLER (COMPACTION METHOD AND EQUIPMENT SHALL BE REVIEWED AND APPROVED BY TOWN ENGINEER PRIOR TO BACKFILLING).
3. PIPE BEDDING SHALL BE PLACED IN 6" LIFTS AND THOROUGHLY COMPACTED WITH A JUMPING JACK TO PROVIDE UNIFORM PIPE SUPPORT.
4. UNLESS OTHERWISE DIRECTED, ALL BASE COURSE AND GRAVEL SURFACE REPLACEMENT SHALL BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.
5. ALL TRENCH EXCAVATION SHALL CONFORM TO WYOMING OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (WYOSHA) REGULATIONS.
6. PROVIDE INSULATION WHERE COVER OVER WATER LINES AND FORCE MAINS ARE LESS THAN 7 FEET AND WHERE SANITARY SEWER AND STORM LINES ARE LESS THAN 5 FEET.

PIPE TRENCH DETAIL

NOT TO SCALE — TOJ W-100, SS-100, STM-100



MINIMUM DIMENSIONS FOR THRUST BLOCKING NOTES										
FITTING SIZE	TEES AND PLUGS		90° BENDS		45° BENDS AND WYES		REDUCERS AND 22 1/2° BENDS		11 1/2° BENDS	
	A	B	A	B	A	B	A	B	A	B
4"	1'-7"	1'-2"	1'-9"	1'-6"	1'-8"	0'-10"	1'-7"	0'-6"	0'-6"	0'-6"
6"	2'-0"	1'-11"	2'-5"	2'-2"	1'-10"	1'-7"	1'-9"	0'-10"	1'-0"	0'-6"
8"	2'-8"	2'-6"	3'-2"	3'-0"	2'-5"	2'-1"	1'-9"	1'-6"	1'-0"	1'-0"
10"	3'-4"	3'-3"	4'-0"	3'-10"	3'-0"	2'-9"	2'-2"	1'-11"	1'-6"	1'-0"
12"	4'-0"	3'-10"	4'-8"	4'-8"	3'-8"	3'-3"	2'-7"	2'-3"	2'-0"	1'-0"
14"	5'-5"	3'-10"	6'-6"	4'-11"	4'-9"	3'-5"	3'-5"	2'-5"	2'-0"	1'-6"
20"	5'-0"	5'-0"	6'-0"	6'-0"	5'-0"	4'-0"	3'-6"	3'-0"	3'-0"	2'-0"
24"	6'-0"	6'-0"	7'-0"	7'-0"	5'-0"	5'-0"	4'-6"	3'-0"	3'-0"	3'-0"
30"	7'-6"	7'-6"	8'-0"	8'-0"	6'-3"	6'-3"	4'-9"	4'-6"	3'-3"	3'-3"

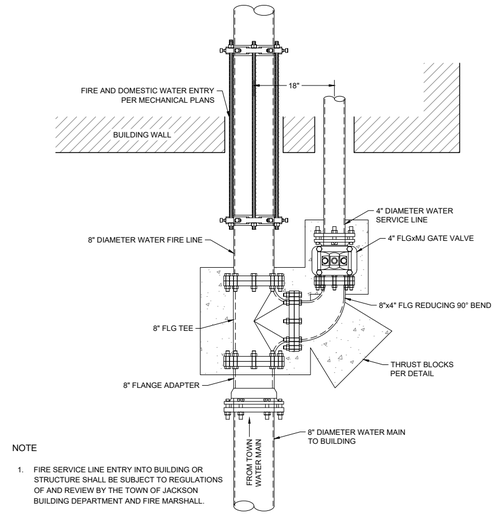


NOTE

1. SIZE BLOCKS SHALL BE A MINIMUM OF 6" THICK
2. ALL BLOCKING SHALL BEAR AGAINST UNDISTRIBUTED MATERIAL
3. DESIGN IS BASED ON 150 PSI MAIN PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
4. 4 MIL POLYETHELENE PLASTIC BOND BREAKER SHALL BE PROVIDED BETWEEN THRUST BLOCK AND WATER PIPE

THRUST BLOCK DETAIL

NOT TO SCALE — TOJ W-111

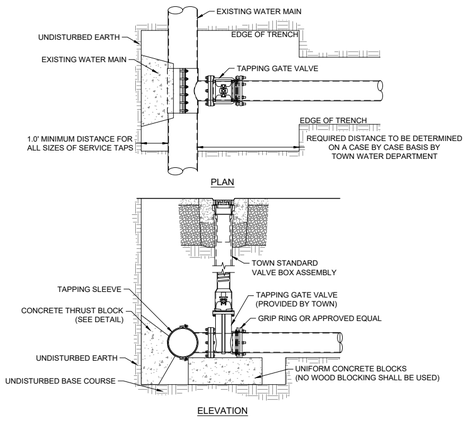


NOTE

1. FIRE SERVICE LINE ENTRY INTO BUILDING OR STRUCTURE SHALL BE SUBJECT TO REGULATIONS OF AND REVIEW BY THE TOWN OF JACKSON BUILDING DEPARTMENT AND FIRE MARSHALL.

WATER CONNECTION DETAIL

NOT TO SCALE

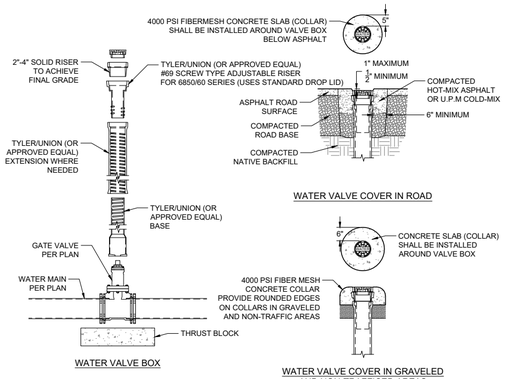


NOTE

1. THE TOWN SHALL COMPLETE THE TAPPING OF THE MAIN. NO OTHER PERSONS SHALL COMPLETE TAP WITHOUT CONSENT OF TOWN. ALL OTHER WATER MAIN WORK SHALL BE THE RESPONSIBILITY OF THE OWNER.
2. TRENCH WILL BE EXCAVATED TO MEET ALL WYOSHA STANDARDS PRIOR TO TAPPING.
3. EXCAVATION OF TAPPING LOCATION SHALL BE APPROVED BY TOJ WATER DEPARTMENT PRIOR TO TAPPING.

WATER MAIN TAPPING DETAIL

NOT TO SCALE — TOJ W-118

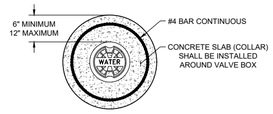


NOTE

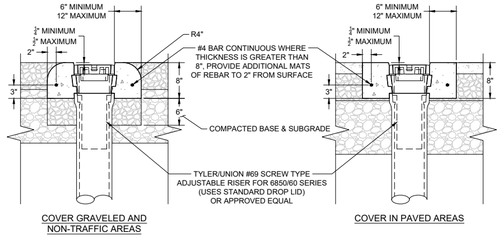
1. ADJUST WATER VALVE BOX UPWARD OR DOWNWARD AS REQUIRED. FINAL ADJUSTMENT SHALL BE MADE AFTER PAVING AND BEFORE SEAL COATING
2. THE TOWN SHALL INSPECT THE VERTICAL ALIGNMENT BEFORE AND AFTER BACKFILLING.
3. MUD PLUGS ARE REQUIRED TO BE PLACED IN ALL VALVE BOXES

WATER GATE VALVE DETAIL

NOT TO SCALE — TOJ W-106



WATER VALVE COVER

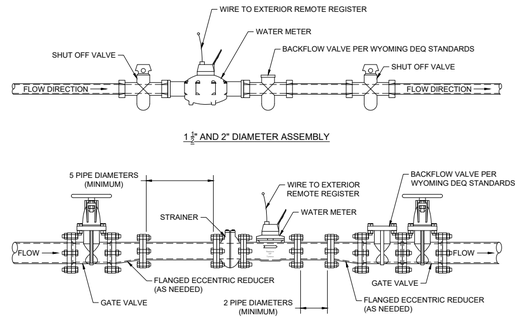


NOTE

1. ADJUST WATER VALVES UPWARD OR DOWNWARD AS REQUIRED.
2. FIBERMESH CONCRETE MAY BE SUBSTITUTED FOR REBAR.

WATER VALVE ADJUSTMENT DETAIL

NOT TO SCALE

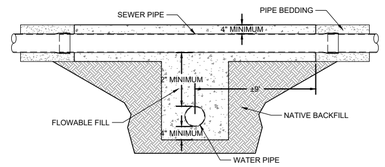


NOTE

1. SERVICE PIPE MATERIAL SHALL MEET ADOPTED PLUMBING CODE REQUIREMENTS.
2. METER SHALL BE INSTALLED IN HORIZONTAL ALIGNMENT ONLY.
3. CONNECTIONS WITHIN THE ASSEMBLY SHALL BE THREADED OR BOLTED FLANGED, AS APPROPRIATE.
4. METER SHALL BE PURCHASED FROM AND SUPPLIED BY THE TOWN OF JACKSON

1 ½" & LARGER WATER METER INSTALLATION DETAIL

NOT TO SCALE — INTERIOR TOJ W-113



NOTE

PARALLEL INSTALLATION:
NORMAL CONDITIONS:
SEWER MAINS AND MANHOLES SHALL BE LAID AT LEAST 10' HORIZONTALLY FROM ANY WATER MAIN WHENEVER POSSIBLE.

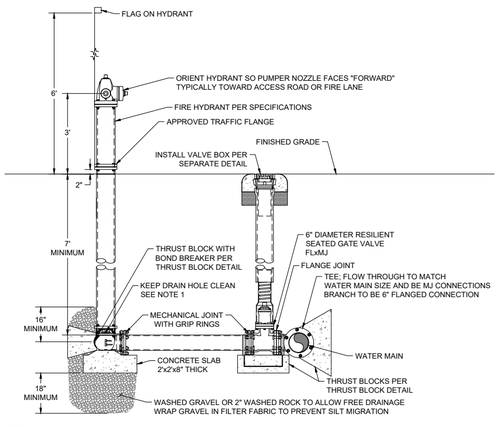
UNUSUAL CONDITIONS:
WHEN LOCAL CONDITIONS PREVENT A HORIZONTAL SEPARATION OF 10 FEET, A SEWER MAIN MAY BE LAID CLOSER TO A WATER MAIN, PROVIDED THAT:
1. THE TOP OF THE SEWER MAIN IS AT LEAST 18" BELOW THE BOTTOM OF THE WATER MAIN;
2. WHERE 18" VERTICAL SEPARATION AS NOTED ABOVE CANNOT BE OBTAINED, THE SEWER MAIN SHALL BE:
   2A. CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION, AND TESTED TO ASSURE WATERTIGHTNESS BY SEWER LINE METHODS, OR;
   2B. PLACED IN A SEPARATE CASING PIPE, OR;
   2C. THE PIPE ENCASED IN CEMENT TREATED FILL (FLOW FILL).

CROSSING:
NORMAL CONDITIONS:
SEWERS CROSSING WATER MAINS SHALL BE LAID BELOW THE WATER MAINS TO PROVIDE A VERTICAL SEPARATION OF AT LEAST 18" WHENEVER POSSIBLE. THE DISTANCE SHALL BE MEASURED BETWEEN THE BOTTOM OF THE WATER MAIN AND THE TOP OF THE SEWER.

UNUSUAL CONDITIONS:
WHEN LOCAL CONDITIONS PREVENT A VERTICAL SEPARATION OF AT LEAST 18" AS NOTED ABOVE, THE FOLLOWING CONSTRUCTION SHALL BE USED:
1. THE SANITARY SEWER, STORM SEWER OR WATER MAIN SHALL BE PLACED IN A SEPARATE CASING PIPE EXTENDING A MINIMUM OF 9' EACH SIDE OF THE CROSSING; OR
2. THE SEWER LINE SHALL BE CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION AND TESTED TO ASSURE WATER TIGHTNESS BY SEWER LINE METHODS, AND SHALL EXTEND A MINIMUM OF 9' EACH SIDE OF THE CROSSING
3. WATER MAINS PASSING UNDER A SEWER LINE SHALL, IN ADDITION TO THE ABOVE REQUIREMENTS, BE PROTECTED BY PROVIDING ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER LINE. SOIL STRUCTURAL SUPPORT SHALL CONSIST OF CEMENT TREATED BACKFILL (FLOW FILL).

WATER SEWER UNUSUAL PROXIMITY DETAIL

NOT TO SCALE

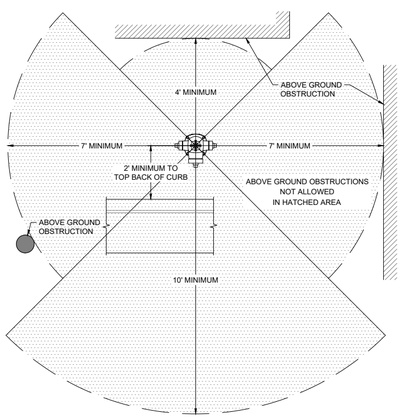


NOTE

1. REFER TO THE FIRE HYDRANT CLEARANCE REQUIREMENTS DETAIL FOR PLACEMENT INFORMATION
2. HYDRANT DRAIN HOLE NOT PERMITTED IF IT IS LOCATED BELOW THE WATER TABLE
3. HYDRANT TO BE LOCATED AS SHOWN ON PLANS

FIRE HYDRANT ASSEMBLY DETAIL

NOT TO SCALE

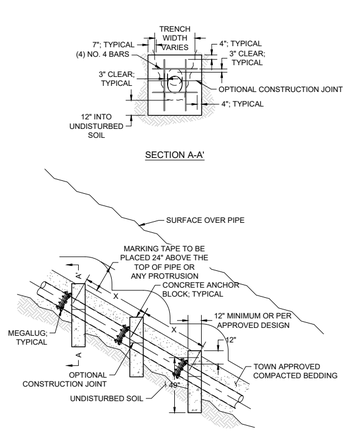


NOTE

1. REFER TO THE FIRE HYDRANT CLEARANCE REQUIREMENTS DETAIL FOR PLACEMENT INFORMATION
2. HYDRANT DRAIN HOLE NOT PERMITTED IF IT IS LOCATED BELOW THE WATER TABLE
3. HYDRANT TO BE LOCATED AS SHOWN ON PLANS

FIRE HYDRANT CLEARANCE REQUIREMENTS

NOT TO SCALE



NOTE

1. DRAINS TO DAYLIGHT ARE TO BE LOCATED ON THE UPHILL SIDE OF CONCRETE BLOCKS.
2. DISTANCE "X" TO BE DETERMINED BY THE ENGINEER AND SUBMITTED TO THE TOWN FOR REVIEW PRIOR TO CONSTRUCTION.

WATER PIPE ANCHOR BLOCK DETAIL

NOT TO SCALE — W-109

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NO.	ISSUED DATE	ISSUED FOR
1	2024-10-29	DEVELOPMENT PLAN REVIEW
2	2025-03-24	DEVELOPMENT PLAN REVISION
3	2025-04-28	DEVELOPMENT PLAN REVISION 2

PROFESSIONAL SEAL

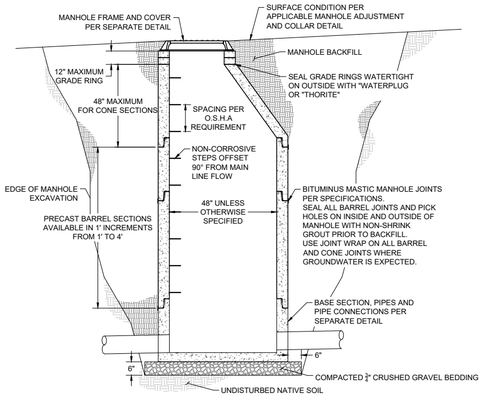
Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number
C3.1

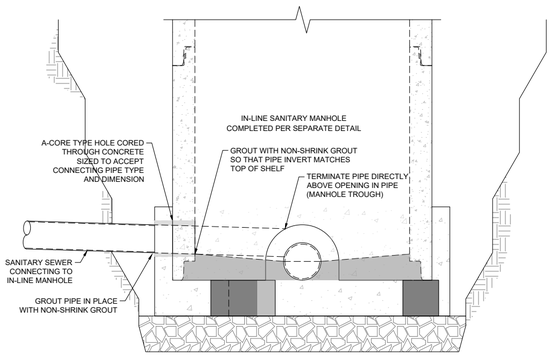
Drawing Name
WATER DETAILS



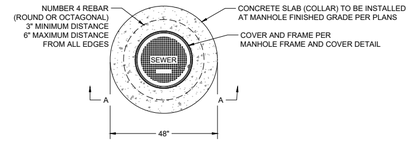
NOTE

1. REINFORCEMENT FOR PRECAST SECTIONS SHALL BE AS PER ASTM C-478.
2. C.I. RING AND COVER HS-20-44 ONE VENT HOLE OR AS SHOWN ON PLAN SHEET.
3. MOUND CRUSHED GRAVEL BASE AROUND TOP OF MANHOLE AT ROAD SURFACING LOCATIONS.
4. ALL SEWER MANHOLE BASES, BARRELS, AND CONES SHALL BE VACUUM TESTED.

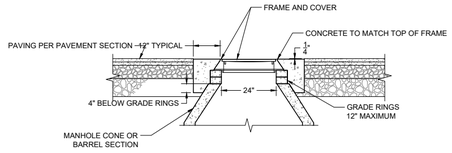
STANDARD MANHOLE CONSTRUCTION DETAIL
NOT TO SCALE



SEWER CONNECTION TO IN-LINE MANHOLE DETAIL
NOT TO SCALE



COVER AND COLLAR PLAN

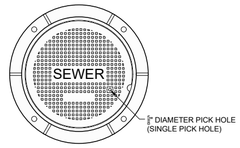


ADJUSTMENT DETAIL SECTION A-A

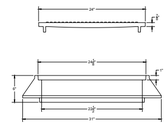
NOTE

1. ADJUST MANHOLE UPWARD WITH ADJUSTING RINGS UNDER FRAME. ADJUST MANHOLE DOWNWARD BY REMOVING A PORTION OF THE MANHOLE RISER AND REBUILDING TO PROPER HEIGHT. SLOPE MANHOLE RING AS REQUIRED TO MATCH STREET GRADE AND CROSS SLOPE. MAKE FINAL MANHOLE ADJUSTMENT AFTER PAVING AND BEFORE SEAL COATING. IF REQUIRED ADJUSTMENT EXCEEDS GRADE RINGS, REMOVE MANHOLE CONE AND ADD OR SUBTRACT BARREL SECTIONS.

MANHOLE ADJUSTMENT & COLLAR IN ASPHALT
NOT TO SCALE



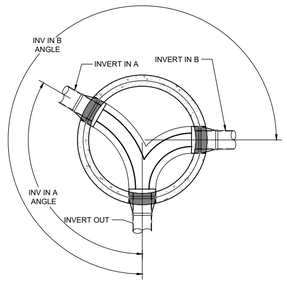
MANHOLE COVER



NOTE

1. MANHOLE FRAME AND COVER SHALL BE MODEL NO. A-1055, AS MANUFACTURED BY D&L SUPPLY OF LINDON, UTAH, MODIFIED AS SHOWN, OR APPROVED SUBSTITUTE.
2. GREY IRON CONFORMS TO ASTM A-48, CLASS 35B. MEETS H-20 WHEEL LOAD.

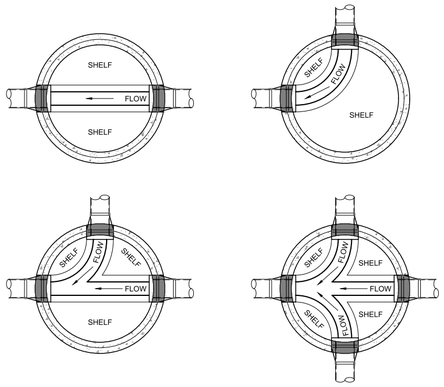
SEWER MANHOLE FRAME AND COVER DETAIL
NOT TO SCALE



NOTE

INVERT IN ANGLES LESS THAN 90° OR GREATER THAN 270° ARE PROHIBITED

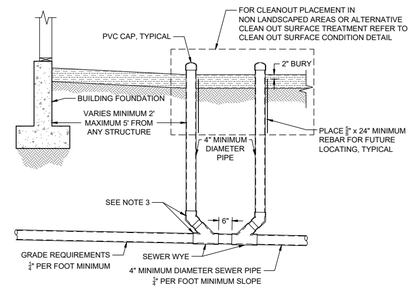
MANHOLE ANGLE MEASUREMENT METHOD



NOTE

1. SLOPE ALL SHELVES TO CHANNEL AT 1" PER FOOT.
2. SLOPE OF CHANNEL SHALL BE 0.1' ACROSS MANHOLE FOR ALL MAIN RUNS. SEE PROFILE SHEETS.
3. MANHOLE INVERTS SHALL MATCH INFLOW AND OUTFLOW PIPE INVERTS
4. 4" SERVICE PIPES ENTERING MANHOLES SHALL HAVE CROWN OF 4" PIPE MATCH CROWN OF MAIN WHERE INVERTS INDICATE.

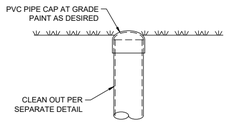
TYPICAL MANHOLE CHANNEL DETAILS
NOT TO SCALE



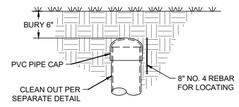
NOTE

1. PRIOR TO BACKFILLING THE TOWN PUBLIC WORKS DEPARTMENT MUST INSPECT ALL PIPE, FITTINGS, COUPLINGS, GRADE AND COMPLETE LEAK TESTING.
2. INSTALL AND COMPACT ALL BACKFILL MATERIAL PER TOWN PUBLIC WORKS DEPARTMENT STANDARD SPECIFICATIONS AND AS SHOWN WITHIN THE TRENCH DETAIL.
3. ALL PVC FITTINGS SHALL MEET ASTM D3034 SPECIFICATIONS, AND SHALL ALSO MEET ASTM D312 SPECIFICATIONS FOR RUBBER GASKETED BELL AND SPIGOT TYPE WITH INTEGRAL BELL.

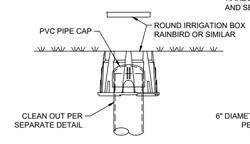
BUILDING CLEANOUT DETAIL
NOT TO SCALE REV TOJ SS-114



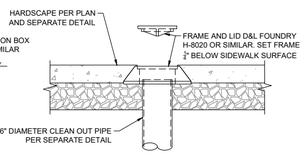
DAYLIGHT IN LANDSCAPE AREA



BURIED IN LANDSCAPE AREA



IRRIGATION BOX IN LANDSCAPE AREA



HARDSCAPE AREA

CLEAN OUT SURFACE CONDITION DETAIL
NOT TO SCALE

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NO.	ISSUED DATE	ISSUED FOR
1	2024-10-29	DEVELOPMENT PLAN REVIEW
2	2025-03-24	DEVELOPMENT PLAN REVISION
3	2025-04-28	DEVELOPMENT PLAN REVISION 2

PROFESSIONAL SEAL

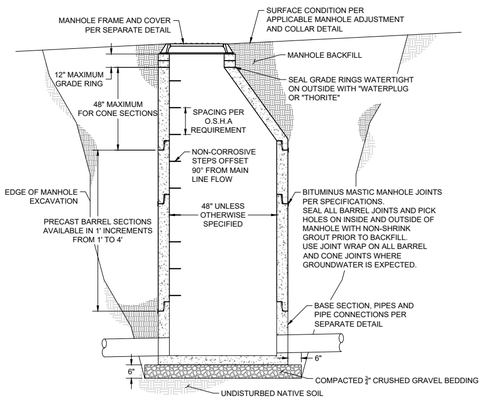
Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number
C3.2

Drawing Name
SEWER DETAILS

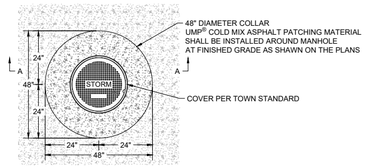


NOTE

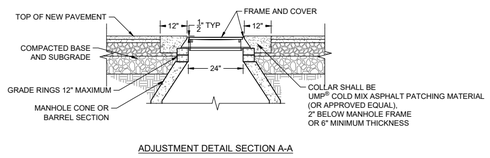
1. REINFORCEMENT FOR PRECAST SECTIONS SHALL BE AS PER ASTM C-478.
2. C.I. RING AND COVER HS-20-44 ONE VENT HOLE OR AS SHOWN ON PLAN SHEET.
3. MOUND CRUSHED GRAVEL BASE AROUND TOP OF MANHOLE AT ROAD SURFACING LOCATIONS.
4. ALL SEWER MANHOLE BASES, BARRELS, AND CONES SHALL BE VACUUM TESTED.

STANDARD MANHOLE CONSTRUCTION DETAIL

NOT TO SCALE



COVER AND COLLAR PLAN



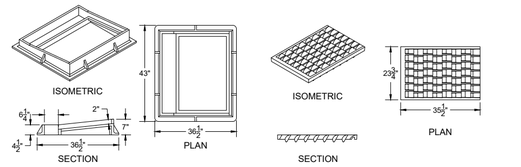
ADJUSTMENT DETAIL SECTION A-A

NOTE

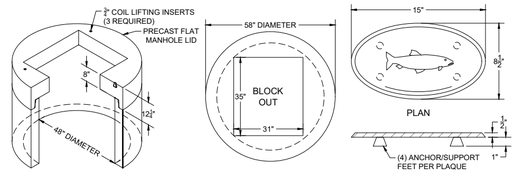
1. ADJUST MANHOLE UPWARD WITH ADJUSTING RINGS UNDER FRAME. ADJUST MANHOLE DOWNWARD BY REMOVING A PORTION OF THE MANHOLE RISER AND REBUILDING TO PROPER HEIGHT. SLOPE MANHOLE RING AS REQUIRED TO MATCH STREET GRADE AND CROSS SLOPE. MAKE FINAL MANHOLE ADJUSTMENT AFTER PAVING AND BEFORE SEAL COATING.
2. IF SEWER MANHOLE IS WITHIN UNPAVED AREA USE TAPERED COLLAR. SEE TOWN SANITARY SEWER DETAIL SS-110.

MANHOLE ADJUSTMENT & COLLAR IN ASPHALT

NOT TO SCALE TOJ STM-103



FRAME



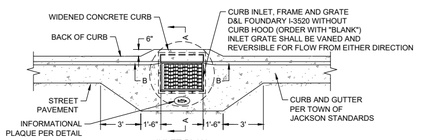
MANHOLE FLAT LID INFORMATIONAL PLAQUE

NOTE

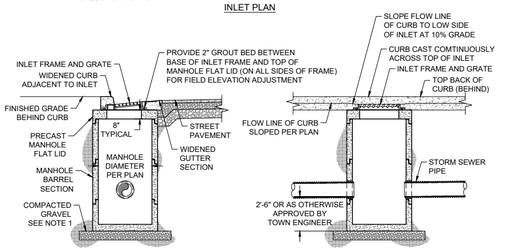
1. INLET GRATE AND FRAME SHALL BE MODEL NOUMBER I-3520 AS MANUFACTURED BY D&L SUPPLY OF LINDON UTAH, OR APPROVED EQUAL.
2. INLET GRATE SHALL BE VANED AND REVERSIBLE FOR EITHER LEFT-TO-RIGHT OR RIGHT-TO-LEFT FLOW.
3. PLAQUE SHALL BE SUBSTANTIALLY AS SHOWN, AS SUPPLIED BY D&L SUPPLY OF LINDON, UTAH, OR APPROVED EQUAL.

INLET FRAME, GRATE, LID AND PLAQUE DETAIL

NOT TO SCALE



INLET PLAN



SECTION B-B SECTION A-A

NOTE

1. GRAVEL SHALL BE EIGHT INCH MINIMUM THICKNESS, CONFORM TO WPWSS SECTION 02190, PART 2.03, GRADING H, AND BE INSTALLED PER WPWSS SECTION 02231, PART 3.03.

CURB INLET WITHOUT HOOD DETAIL

NOT TO SCALE REVISED TOJ STM-101

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3	2025-04-28	DEVELOPMENT PLAN REVISION 2

PROFESSIONAL SEAL

Project
SNOW KING LOOP CONDOMINIUMS

553, 725, & 510 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

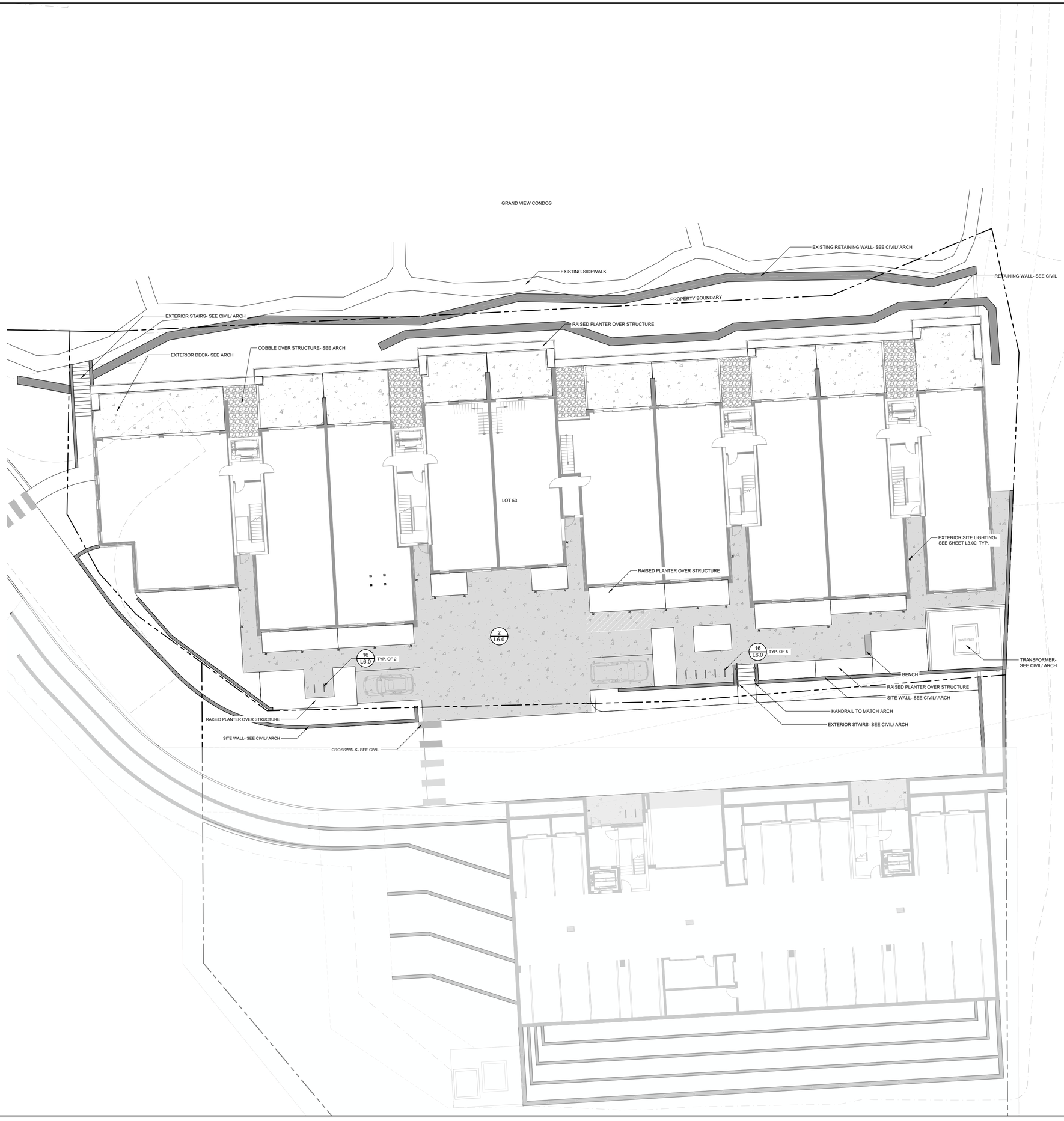
23072	Project No.
SS	Drawn By
JL	Checked By

Discipline & Drawing Number

C3.3

Drawing Name

STORMWATER DETAILS



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

DETAIL REPORT

NUMBER	TITLE
1/L6.0	MORTAR-SET CONCRETE PAVERS
2/L6.0	MORTAR-SET CONCRETE PAVERS W/SNOWMELT
3/L6.0	MORTAR-SET PAVERS
4/L6.0	MORTAR-SET PAVERS W/ SNOWMELT
5/L6.0	PED SLAB TURNDOWN - TYP REINFORCEMENT
6/L6.0	PATH LIGHT IN MORTAR-SET PAVERS
7/L6.0	MORTAR-SET STONE ENTRY - FLUSH CONDITION
8/L6.0	PAVERS / PAVERS W/ SNOWMELT
9/L6.0	EXPANSION JOINT
10/L6.0	MORTAR-SET PAVER ENTRY - FLUSH CONDITION
11/L6.0	CONIFEROUS TREE PLANTING
12/L6.0	SHRUB PLANTING
13/L6.0	ORNAMENTAL GRASS / PERENNIAL PLANTING
14/L6.0	MEADOW SOD
15/L6.0	DECIDUOUS TREE PLANTING
16/L6.0	INVERTED U-STYLE BIKE RACK
17/L6.0	RECESSED WALL LIGHT
18/L6.0	COBBLE MULCH

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

1512 N. Throop Street
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Chicago, Illinois 60642
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NO.	ISSUED DATE	ISSUED FOR
	10/29/2024	DEVELOPMENT PLAN
	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

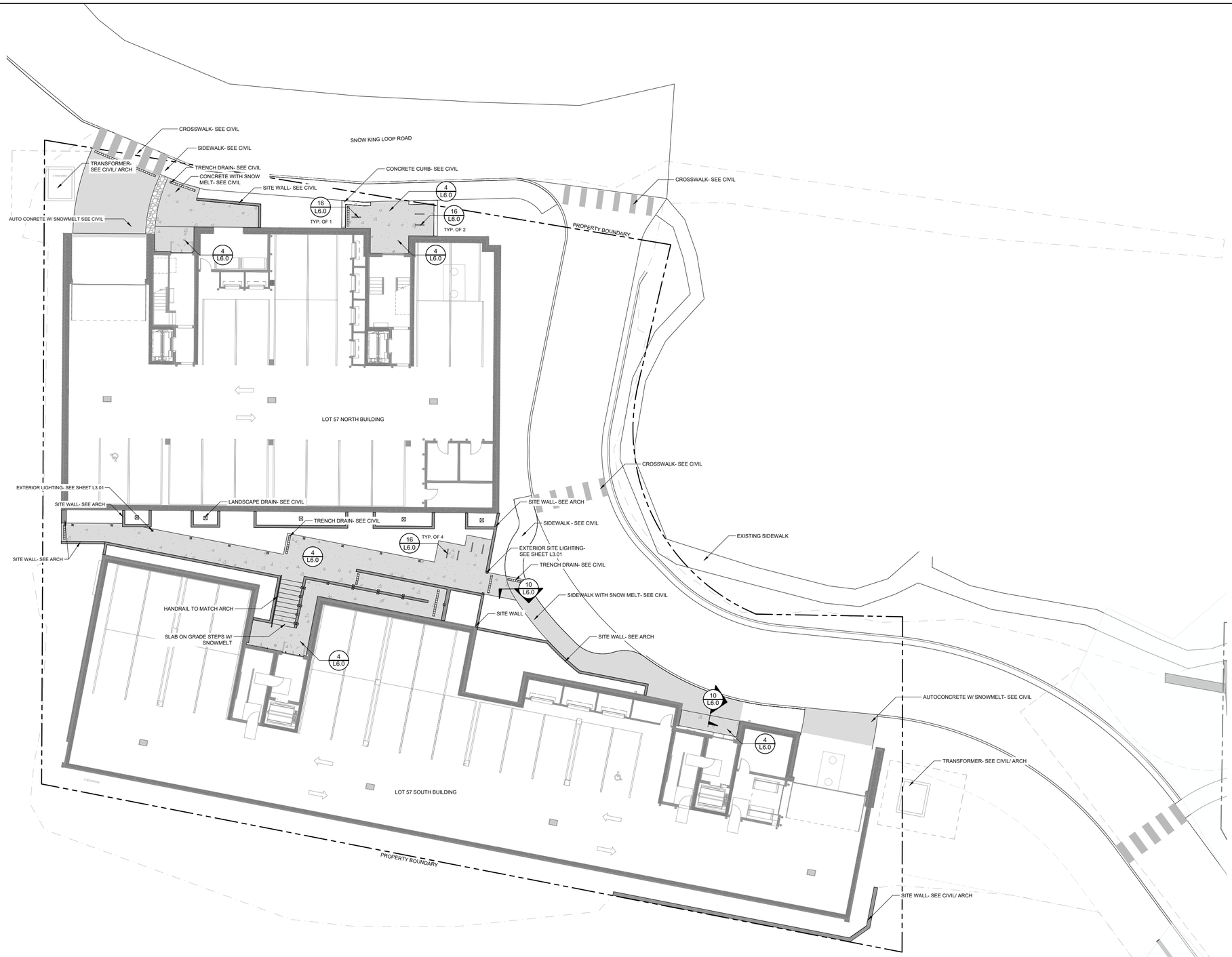
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 53 MATERIALS PLAN

Drawing Name

L2.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

DETAIL REPORT

NUMBER	TITLE
1/L6.0	MORTAR-SET CONCRETE PAVERS
2/L6.0	MORTAR-SET CONCRETE PAVERS W/SNOWMELT
3/L6.0	MORTAR-SET PAVERS
4/L6.0	MORTAR-SET PAVERS W/ SNOWMELT
5/L6.0	PED SLAB TURNDOWN - TYP REINFORCEMENT
6/L6.0	PATH LIGHT IN MORTAR-SET PAVERS
7/L6.0	MORTAR-SET STONE ENTRY - FLUSH CONDITION
8/L6.0	PAVERS / PAVERS W/ SNOWMELT
9/L6.0	EXPANSION JOINT
10/L6.0	MORTAR-SET PAVER ENTRY - FLUSH CONDITION
11/L6.0	CONIFEROUS TREE PLANTING
12/L6.0	SHRUB PLANTING
13/L6.0	ORNAMENTAL GRASS / PERENNIAL PLANTING
14/L6.0	MEADOW SOD
15/L6.0	DECIDUOUS TREE PLANTING
16/L6.0	INVERTED U-STYLE BIKE RACK
17/L6.0	RECESSED WALL LIGHT
18/L6.0	COBBLE MULCH

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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	10/29/2024	DEVELOPMENT PLAN
	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

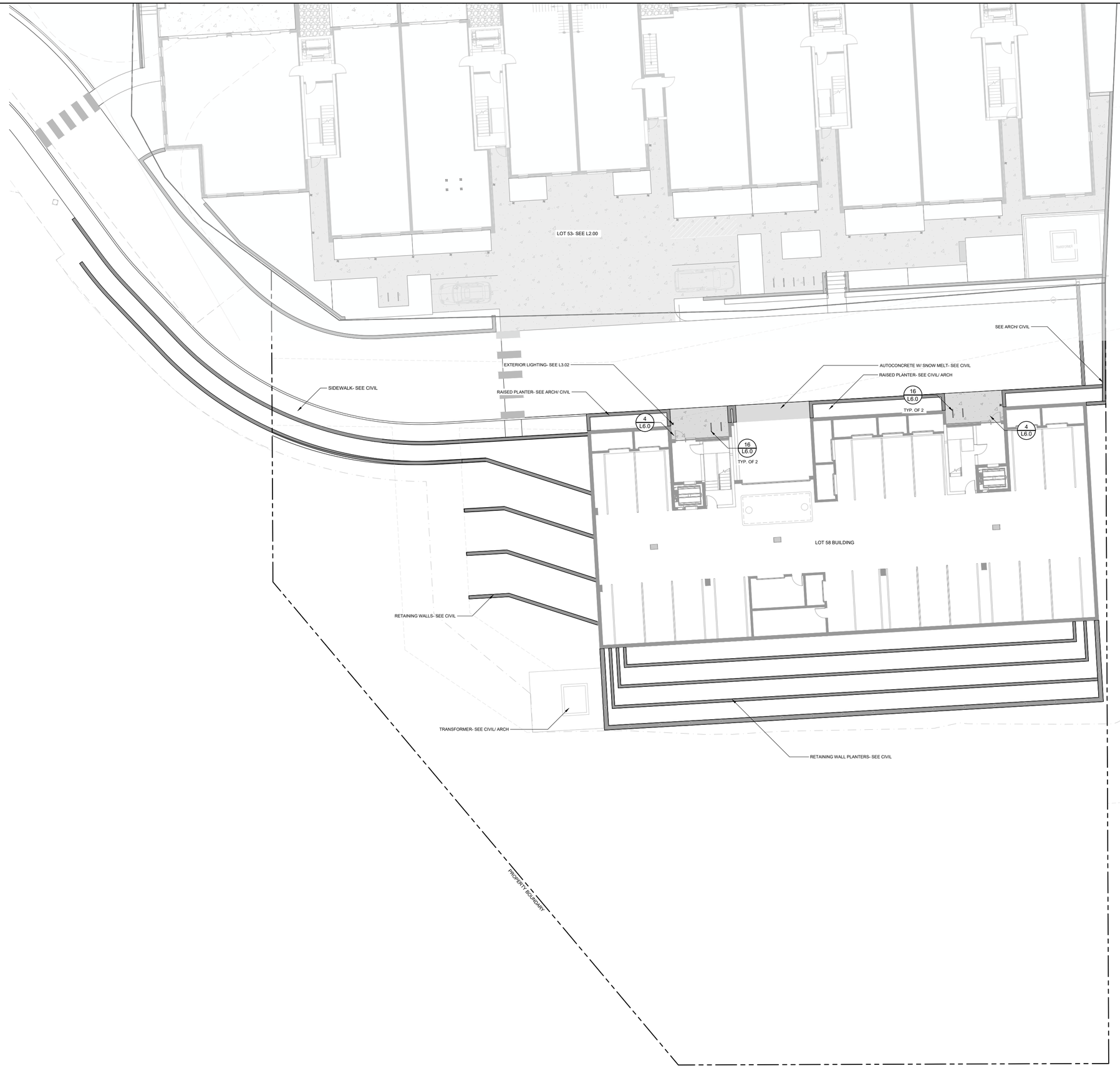
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 57 MATERIALS PLAN

Drawing Name

L2.01



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

DETAIL REPORT

NUMBER	TITLE
1/L6.0	MORTAR-SET CONCRETE PAVERS
2/L6.0	MORTAR-SET CONCRETE PAVERS W/SNOWMELT
3/L6.0	MORTAR-SET PAVERS
4/L6.0	MORTAR-SET PAVERS W/ SNOWMELT
5/L6.0	PED SLAB TURNDOWN - TYP REINFORCEMENT
6/L6.0	PATH LIGHT IN MORTAR-SET PAVERS
7/L6.0	MORTAR-SET STONE ENTRY - FLUSH CONDITION
8/L6.0	PAVERS / PAVERS W/ SNOWMELT
9/L6.0	EXPANSION JOINT
10/L6.0	MORTAR-SET PAVER ENTRY - FLUSH CONDITION
11/L6.0	CONIFEROUS TREE PLANTING
12/L6.0	SHRUB PLANTING
13/L6.0	ORNAMENTAL GRASS / PERENNIAL PLANTING
14/L6.0	MEADOW SOD
15/L6.0	DECIDUOUS TREE PLANTING
16/L6.0	INVERTED U-STYLE BIKE RACK
17/L6.0	RECESSED WALL LIGHT
18/L6.0	COBBLE MULCH

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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	10/29/2024	DEVELOPMENT PLAN
	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

563 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

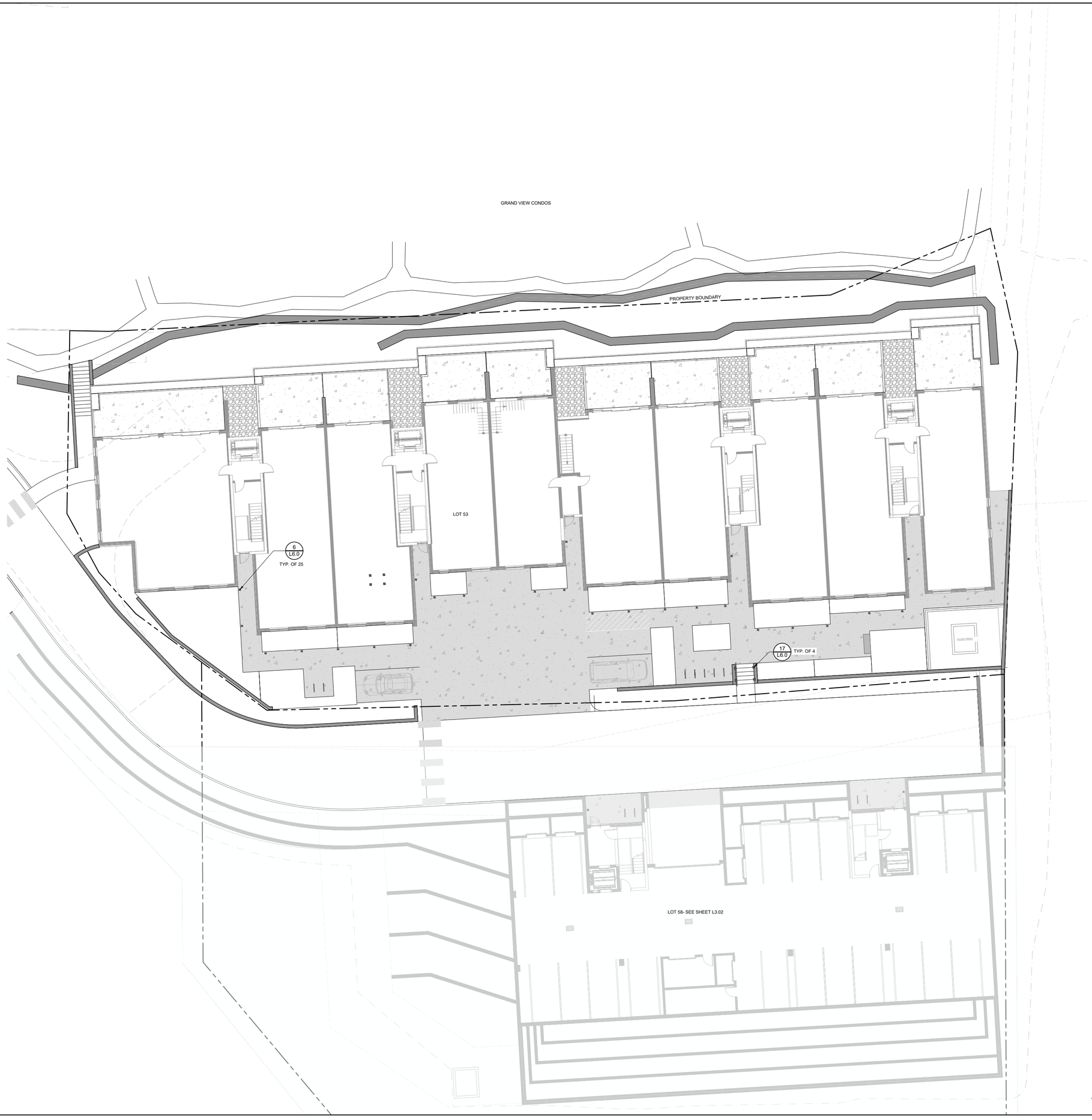
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 58 MATERIALS PLAN

Drawing Name

L2.02



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

SITE LIGHTING SCHEDULE

		QTY	LIGHT COLOR	DETAIL
	BK LIGHTING MINI-MICRO DRIVESTAR (EXACT MODEL, COLOR, FINISH TBD)	4	2700k	6 / L6.0
	BEGA B24202 LED 2.9W (EXACT MODEL, COLOR, FINISH TBD)	18	2700k	17 / L6.0

NOTES:
1. Light symbols are not to scale.
2. See Architecture and Electrical drawings for all circuitry/control/conduit, etc. and ALL exterior lighting associated with the building.

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

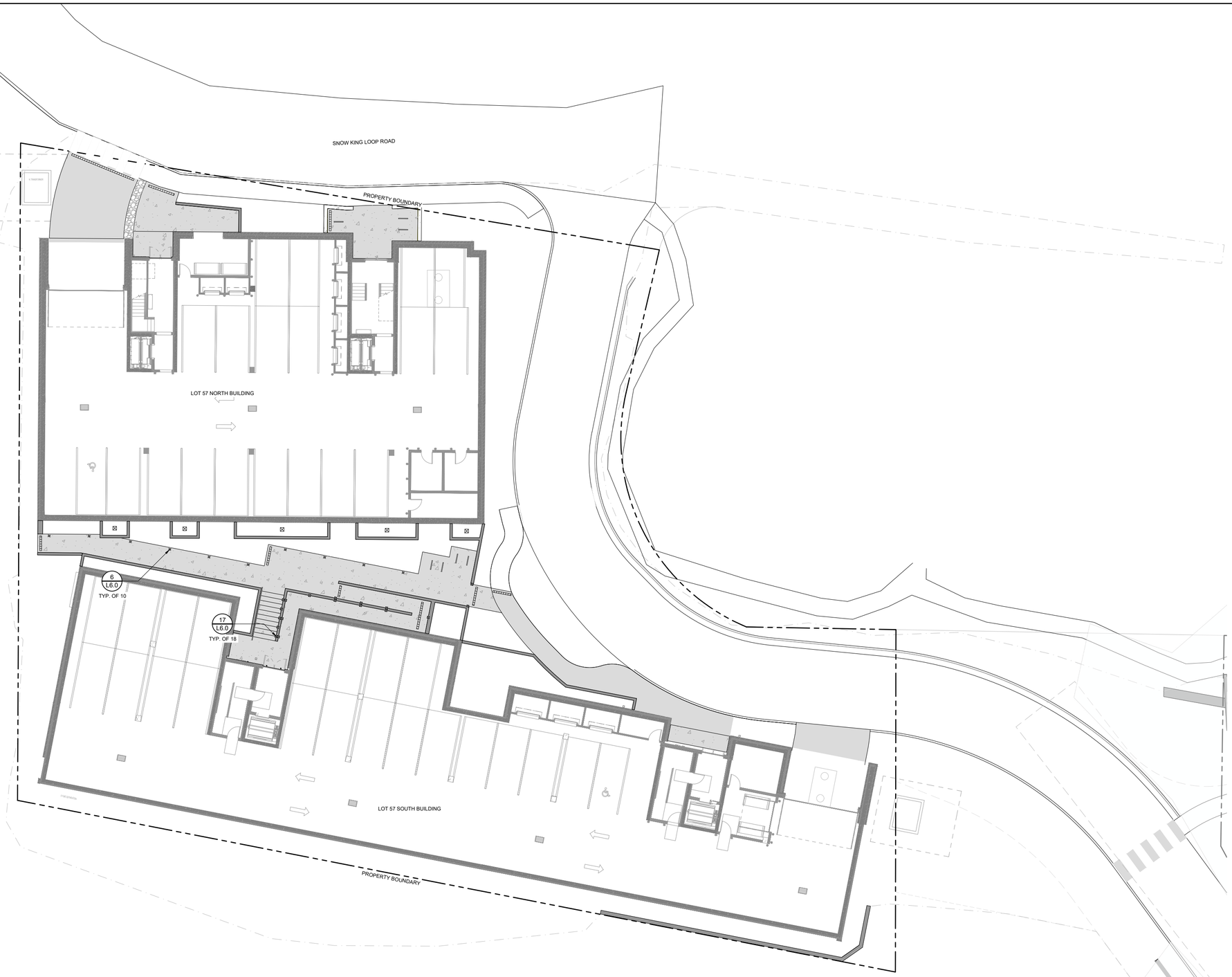
Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number LOT 53
EXTERIOR SITE LIGHTING PLAN

Drawing Name
L3.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

SITE LIGHTING SCHEDULE

		QTY	LIGHT COLOR	DETAIL
	BK LIGHTING MINI-MICRO DRIVESTAR PATHWAY LIGHT (EXACT MODEL, COLOR, FINISH TBD)	10	2700k	6 / L6.0
	BEGA B24202 LED 2.9W (EXACT MODEL, COLOR, FINISH TBD)	18	2700k	17 / L6.0

NOTES:
1. Light symbols are not to scale.
2. See Architecture and Electrical drawings for all circuitry/control/conduit, etc. and ALL exterior lighting associated with the building.

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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www.nwkz.com

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307.739.1001
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NO.	ISSUED DATE	ISSUED FOR
	10/29/2024	DEVELOPMENT PLAN
	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

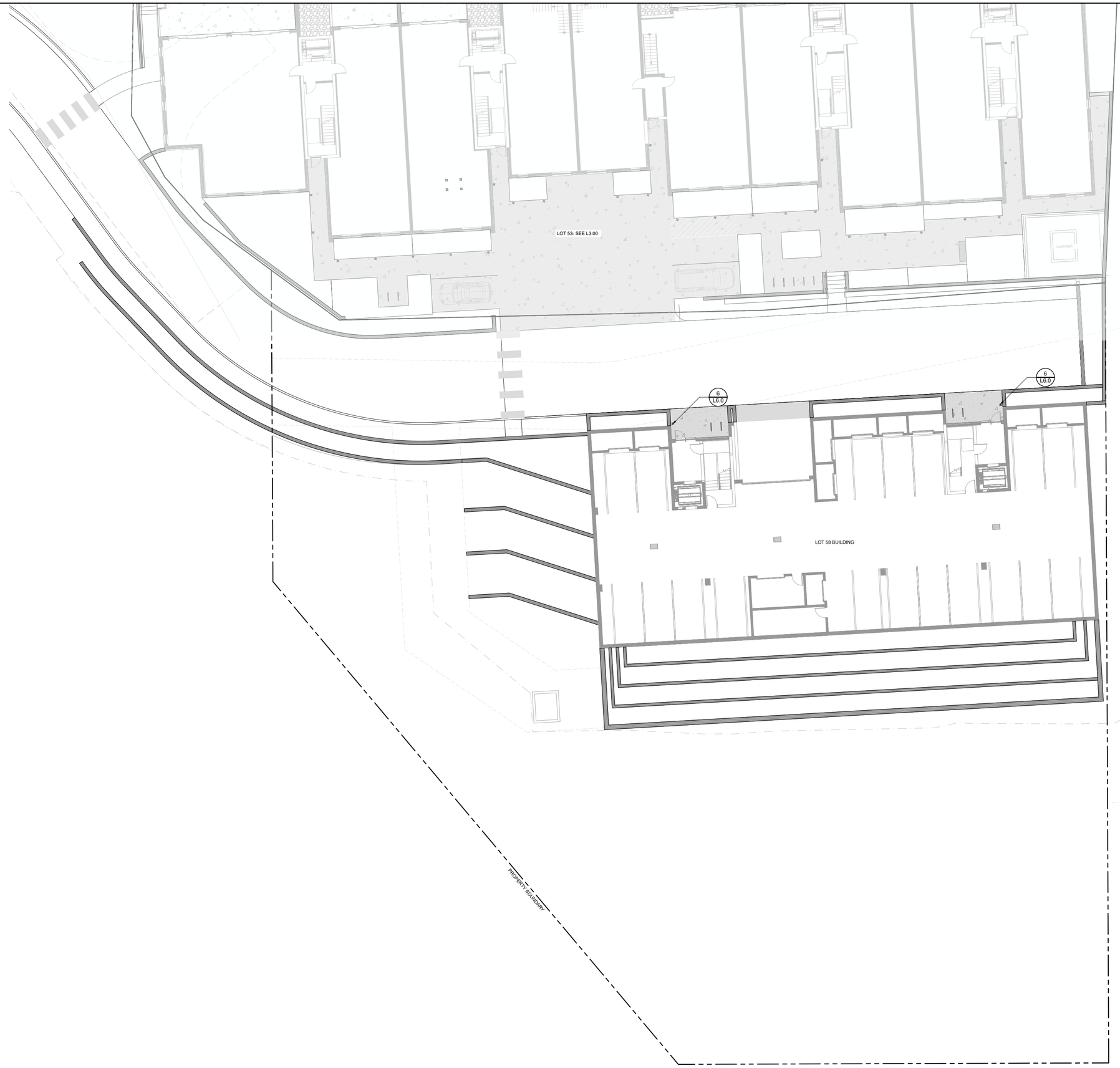
Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.
Drawn By LN
Checked By MK

Discipline & Drawing Number
LOT 57
EXTERIOR SITE LIGHTING PLAN

Drawing Name
L3.01



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

SITE LIGHTING SCHEDULE

	QTY	LIGHT COLOR	DETAIL
BK LIGHTING MINI-MICRO DRIVESTAR (EXACT MODEL, COLOR, FINISH TBD)	2	2700k	6 / L6.0

NOTES:
1. Light symbols are not to scale.
2. See Architecture and Electrical drawings for all circuitry/control/conduit, etc. and ALL exterior lighting associated with the building.

NORTH

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	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

563 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

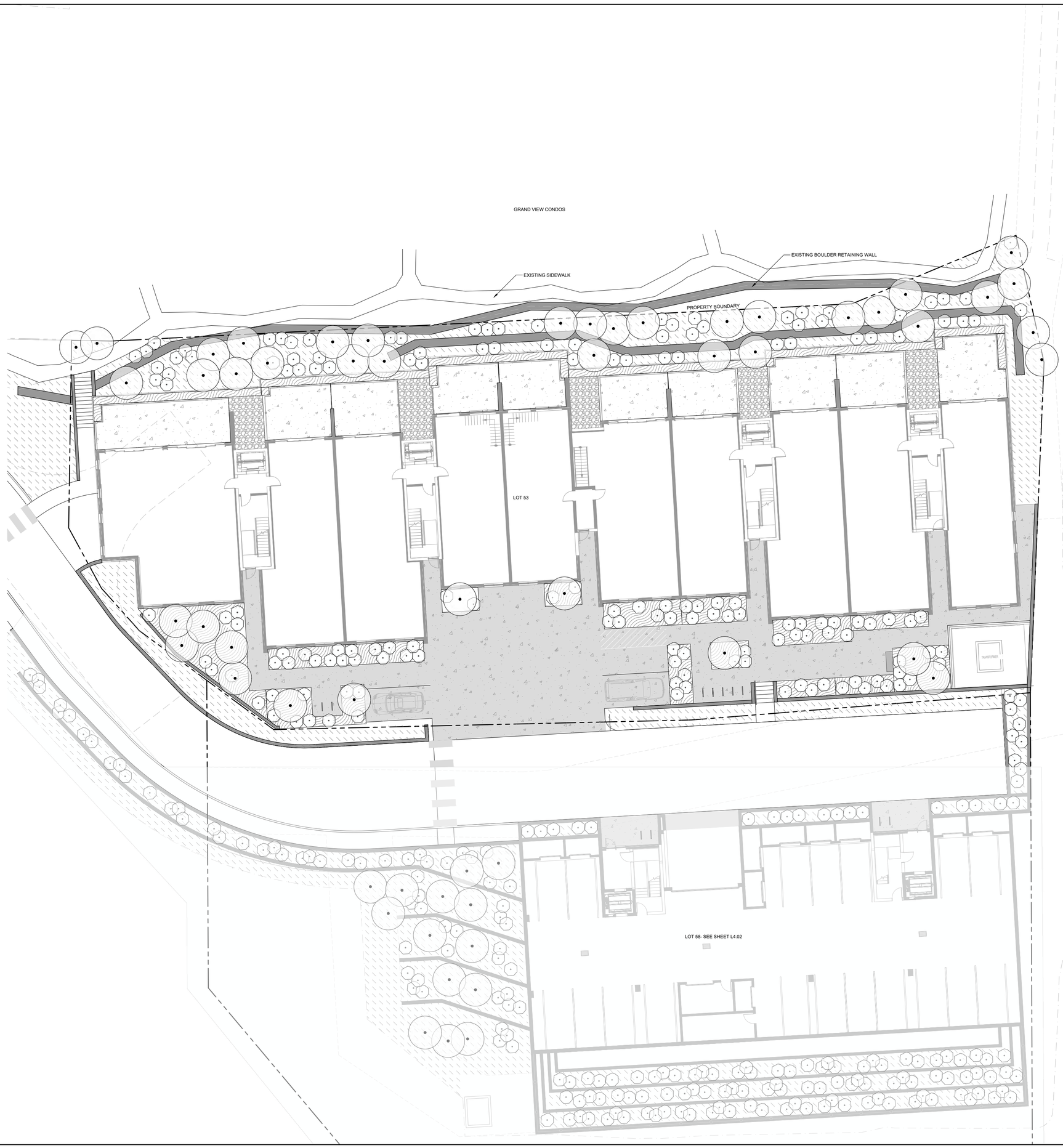
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 58 EXTERIOR SITE LIGHTING PLAN

Drawing Name

L3.02



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

PLANT SCHEDULE- LOT 53

TREES:

	NAME	SIZE	CONT.	QTY
	Quaking Aspen/ Populous tremuloides	3" Cal. 3.5" Cal.	B&B B&B	30 19

SHRUBS:

	Native Shrubs- species TBD	5-6' H	B&B	146

GROUND COVERS:

Native Meadow Sod	SOD	3,060 SF
Perennials and ornamental grasses - Species TBD	1 gal 18" OC	1,245

BIKE PARKING SUMMARY - LOT 53

Required Short-Term Bike Parking Spaces, Lot 53: 14 spaces (4 must accommodate Cargo Bikes)
Proposed Short-Term Bike Parking Spaces, Lot 53: 14 spaces (4 accommodate Cargo Bikes)

LSR SUMMARY - LOT 53

Required LSR, Lot 53: 3,441 SF (34,412 SF x .1)
Proposed LSR, Lot 53: 7,245 SF
Proposed LSR Ratio, Lot 53: .2

PLANTING & IRRIGATION NOTES

1. Refer to Civil Engineer's utility and grading plans. If site conditions vary from what is shown, contact the Landscape Architect and Civil Engineer for direction before proceeding.
2. Verify locations and timing of site improvements installed under other sections. If any part of the work cannot be completed due to site conditions, contact the Landscape Architect for direction before proceeding.
3. Excavation near underground utilities shall be done carefully and, if necessary, by hand. The Contractor is fully responsible for this work and any disruption to utilities or damage to the site and/or improvements shall be repaired immediately at no expense to the Owner.
4. Obtain approval of finish grading from Landscape Architect prior to installing any plant material. The finish grades of planting areas and lawns shall be 1½ inches below adjacent edging or paving. Confirm mulch depth and whether lawns are to be seed or sod.
5. Confirm all plant counts and square footages. Quantities shown are provided as Owner information only. If quantities indicated in the plant list differ from symbols shown on the plans, then the plans shall govern the plant count.
6. Contractor to verify suitability of native or imported topsoil. Suitable topsoil shall be free of roots, plants, sod, stones greater than ½" in any dimension, clay lumps, and other extraneous materials detrimental to plant growth.
7. For areas to receive sod or seed and/or to produce planting soil for areas indicated on details, amend suitable topsoil with organic compost to a ratio of 1 part compost to 4 parts topsoil by volume.
8. Compost shall be organic, well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8.0; moisture content 35 to 55 percent by weight, with organic matter content 50 to 60 percent of dry weight with 16-16-8 nutrient composition. If compost is not 16-16-8 composition, add commercial fertilizer in necessary quantities to meet 16-16-8 nutrient composition. Source: Glacier Gold Compost or approved equal.
9. Contractor to supplement existing native surface topsoil as necessary. Obtain supplemental topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep. Do not obtain from agricultural lands, bogs, or marshes.
10. Compost mulch shall be organic, well-composted, stable, and weed-free organic matter, pH range of 5.5-8.0; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not to exceed 0.5 percent inert contaminants and free of substances toxic to planting, organic matter content 50 to 60 percent of dry weight. Source: Glacier Gold Compost or approved equal.
11. The Landscape Architect shall review all plant materials at the source or nursery or by photographs provided by Contractor prior to shipment. The Landscape Architect reserves the right to reject any unacceptable plant material either at the source or when delivered to the project site.
12. Carefully align and space plant materials as indicated in these notes, drawings, and details. The final location of plant materials is to be approved by the Landscape Architect on site prior to installation. The Contractor is responsible for staking or marking the location of all plant materials on site for review by the Landscape Architect. The Landscape Architect reserves the right to adjust the exact locations of plants on site.
13. All plants shall be planted at the same level with relation to finish grade as they were grown in the field or nursery.
14. All plant material shall be irrigated by a pressurized subsurface irrigation system with automatic controller. All trees, shrubs, and perennials shall be drip irrigated and all turf areas shall be irrigated with a spray or rotor system. Irrigation system shall be design-build by Contractor. Contractor shall provide an irrigation shop-drawing for review by Landscape Architect before proceeding. Contractor shall demonstrate full system coverage prior to acceptance and before plant material installation. Contractor shall provide a reproducible as-built drawing of installed irrigation system at conclusion of project.
15. The irrigation system shall be operational prior to plant installation or temporary irrigation measures shall be provided in the interim. The method of temporary irrigation shall be approved by the Landscape Architect prior to plant material installation.
16. No pruning of existing or newly planted trees or shrubs shall be allowed without the direction and approval of the Landscape Architect.
17. For ball & burlap trees, remove burlap from top 1/3 of rootball and entire wire basket as tree pits are backfilled.
18. All installed trees shall be staked. The Landscape Architect shall review and reserves the right to reject the method and/or installation of tree staking and guying systems prior to acceptance.
19. During construction and prior to final acceptance, Contractor shall observe the project site for the growth of noxious weeds. Contractor shall report the growth of noxious weeds to the Teton County Weed and Pest District Office. Contractor and Owner shall implement a weed control program to control noxious weeds.
20. All disturbed areas not receiving other planting treatment shall be seeded with specified or subdivision-specific seed mix.
21. Apply 16-16-8 fertilizer at the rate of 15 lbs per 1,000 SF and till into top 4" of areas to receive sod or seed.
22. Planting period for seed and sod shall be immediately after finish grading and irrigation installation are accepted but no later than September 30 for sod. Seed shall be installed after September 30 or no later than June 1.
23. Final sod and seed quantities shall be calculated by Contractor based on sod perimeter marked in field by Landscape Architect, and all remaining areas of disturbance for seed.

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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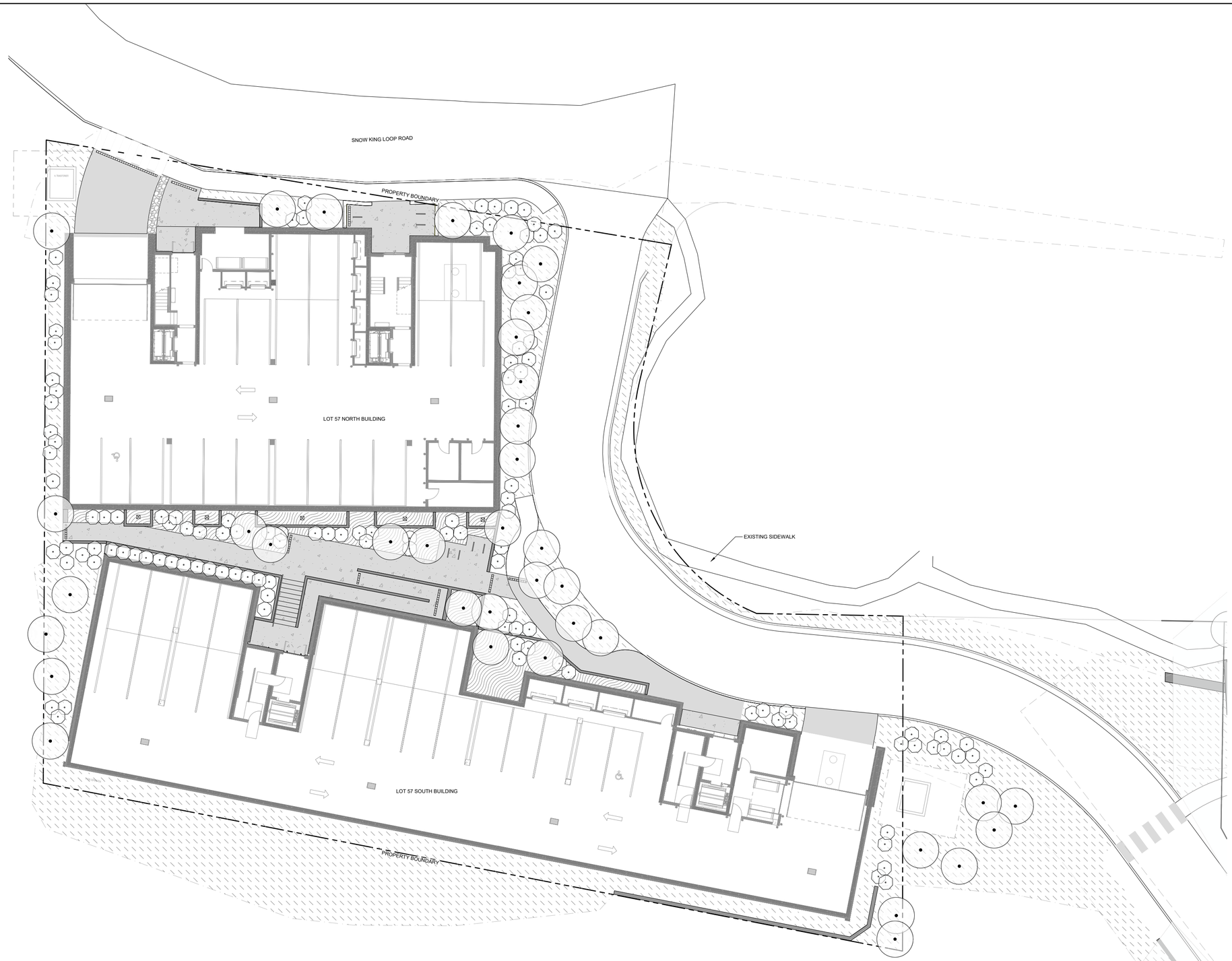
Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number
LOT 53
PLANTING PLAN

Drawing Name
L4.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

PLANT SCHEDULE- LOT 57

TREES:

	NAME	SIZE	CONT.	QTY
	Quaking Aspen/ Populous tremuloides	3" Cal. 3.5" Cal.	B&B B&B	23 15

SHRUBS:

	Native Shrubs- species TBD	5-6' H	B&B	122

GROUND COVERS:

	Native Meadow Sod	SOD	6,815 SF
	Perennials and ornamental grasses - Species TBD	1 gal. 18" OC	510

BIKE PARKING SUMMARY - LOT 57

Required Short-Term Bike Parking Spaces, Lot 57 North: 6 spaces (2 must accommodate Cargo Bikes)
Proposed Short-Term Bike Parking Spaces, Lot 57 North: 6 spaces (4 accommodate Cargo Bikes)

Required Short-Term Bike Parking Spaces, Lot 57 South: 7 spaces (2 must accommodate Cargo Bikes)
Proposed Short-Term Bike Parking Spaces, Lot 57 South: 8 spaces (4 accommodate Cargo Bikes)

LSR SUMMARY - LOT 57

Required LSR, Lot 57: 3,611 SF (36,115 x .1)
Proposed LSR, Lot 57: 6,750 SF
Proposed LSR Ratio, Lot 57: .18

PLANTING & IRRIGATION NOTES

1. Refer to Civil Engineer's utility and grading plans. If site conditions vary from what is shown, contact the Landscape Architect and Civil Engineer for direction before proceeding.
2. Verify locations and timing of site improvements installed under other sections. If any part of the work cannot be completed due to site conditions, contact the Landscape Architect for direction before proceeding.
3. Excavation near underground utilities shall be done carefully and, if necessary, by hand. The Contractor is fully responsible for this work and any disruption to utilities or damage to the site and/or improvements shall be repaired immediately at no expense to the Owner.
4. Obtain approval of finish grading from Landscape Architect prior to installing any plant material. The finish grades of planting areas and lawns shall be 1½ inches below adjacent edging or paving. Confirm mulch depth and whether lawns are to be seed or sod.
5. Confirm all plant counts and square footages. Quantities shown are provided as Owner information only. If quantities indicated in the plant list differ from symbols shown on the plans, then the plans shall govern the plant count.
6. Contractor to verify suitability of native or imported topsoil. Suitable topsoil shall be free of roots, plants, sod, stones greater than ½" in any dimension, clay lumps, and other extraneous materials detrimental to plant growth.
7. For areas to receive sod or seed and/or to produce planting soil for areas indicated on details, amend suitable topsoil with organic compost to a ratio of 1 part compost to 4 parts topsoil by volume.
8. Compost shall be organic, well-composted, stable, and weed-free organic matter; pH range of 5.5 to 8.0; moisture content 35 to 55 percent by weight, with organic matter content 50 to 60 percent of dry weight with 16-16-8 nutrient composition. If compost is not 16-16-8 composition, add commercial fertilizer in necessary quantities to meet 16-16-8 nutrient composition. Source: Glacier Gold Compost or approved equal.
9. Contractor to supplement existing native surface topsoil as necessary. Obtain supplemental topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep. Do not obtain from agricultural lands, bogs, or marshes.
10. Compost mulch shall be organic, well-composted, stable, and weed-free organic matter, pH range of 5.5-8.0; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not to exceed 0.5 percent inert contaminants and free of substances toxic to planing, organic matter content 50 to 60 percent of dry weight. Source: Glacier Gold Compost or approved equal.
11. The Landscape Architect shall review all plant materials at the source or nursery or by photographs provided by Contractor prior to shipment. The Landscape Architect reserves the right to reject any unacceptable plant material either at the source or when delivered to the project site.
12. Carefully align and space plant materials as indicated in these notes, drawings, and details. The final location of plant materials is to be approved by the Landscape Architect on site prior to installation. The Contractor is responsible for staking or marking the location of all plant materials on site for review by the Landscape Architect. The Landscape Architect reserves the right to adjust the exact locations of plants on site.
13. All plants shall be planted at the same level with relation to finish grade as they were grown in the field or nursery.
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18. All installed trees shall be staked. The Landscape Architect shall review and reserves the right to reject the method and/or installation of tree staking and guying systems prior to acceptance.
19. During construction and prior to final acceptance, Contractor shall observe the project site for the growth of noxious weeds. Contractor shall report the growth of noxious weeds to the Teton County Weed and Pest District Office. Contractor and Owner shall implement a weed control program to control noxious weeds.
20. All disturbed areas not receiving other planting treatment shall be seeded with specified or subdivision-specific seed mix.
21. Apply 16-16-8 fertilizer at the rate of 15 lbs per 1,000 SF and till into top 4" of areas to receive sod or seed.
22. Planting period for seed and sod shall be immediately after finish grading and irrigation installation are accepted but no later than September 30 for sod. Seed shall be installed after September 30 or no later than June 1.
23. Final sod and seed quantities shall be calculated by Contractor based on sod perimeter marked in field by Landscape Architect, and all remaining areas of disturbance for seed.

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

953 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

	Project No.	
	Drawn By	LN
	Checked By	MK

Discipline & Drawing Number
LOT 57
PLANTING PLAN

Drawing Name
L4.01



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

PLANT SCHEDULE- LOT 58

TREES:

NAME	SIZE	CONT.	QTY
Quaking Aspen/ Populous tremuloides	3" Cal.	B&B	7
	3.5" Cal.	B&B	7

SHRUBS:

Native Shrubs- species TBD	5-6' H	B&B	165

GROUND COVERS:

Native Meadow Sod		SOD	4,330 SF

BIKE PARKING SUMMARY - LOT 58

Required Short-Term Bike Parking Spaces: 6 spaces (2 must accommodate Cargo Bikes)
Proposed Short-Term Bike Parking Spaces: 8 spaces (8 accommodate Cargo Bikes)

LSR SUMMARY - LOT 58

Required LSR, Lot 58: 4,792 SF (47,916 x .1)
Proposed LSR, Lot 58: 27,401SF
Proposed LSR Ratio, Lot 58: .57

PLANTING & IRRIGATION NOTES

1. Refer to Civil Engineer's utility and grading plans. If site conditions vary from what is shown, contact the Landscape Architect and Civil Engineer for direction before proceeding.
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9. Contractor to supplement existing native surface topsoil as necessary. Obtain supplemental topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep. Do not obtain from agricultural lands, bogs, or marshes.
10. Compost mulch shall be organic, well-composted, stable, and weed-free organic matter, pH range of 5.5-8.0; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not to exceed 0.5 percent inert contaminants and free of substances toxic to planting, organic matter content 50 to 60 percent of dry weight. Source: Glacier Gold Compost or approved equal.
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16. No pruning of existing or newly planted trees or shrubs shall be allowed without the direction and approval of the Landscape Architect.
17. For ball & burlap trees, remove burlap from top 1/3 of rootball and entire wire basket as tree pits are backfilled.
18. All installed trees shall be staked. The Landscape Architect shall review and reserves the right to reject the method and/or installation of tree staking and guying systems prior to acceptance.
19. During construction and prior to final acceptance, Contractor shall observe the project site for the growth of noxious weeds. Contractor shall report the growth of noxious weeds to the Teton County Weed and Pest District Office. Contractor and Owner shall implement a weed control program to control noxious weeds.
20. All disturbed areas not receiving other planting treatment shall be seeded with specified or subdivision-specific seed mix.
21. Apply 16-16-8 fertilizer at the rate of 15 lbs per 1,000 SF and till into top 4" of areas to receive sod or seed.
22. Planting period for seed and sod shall be immediately after finish grading and irrigation installation are accepted but no later than September 30 for sod. Seed shall be installed after September 30 or no later than June 1.
23. Final sod and seed quantities shall be calculated by Contractor based on sod perimeter marked in field by Landscape Architect, and all remaining areas of disturbance for seed.

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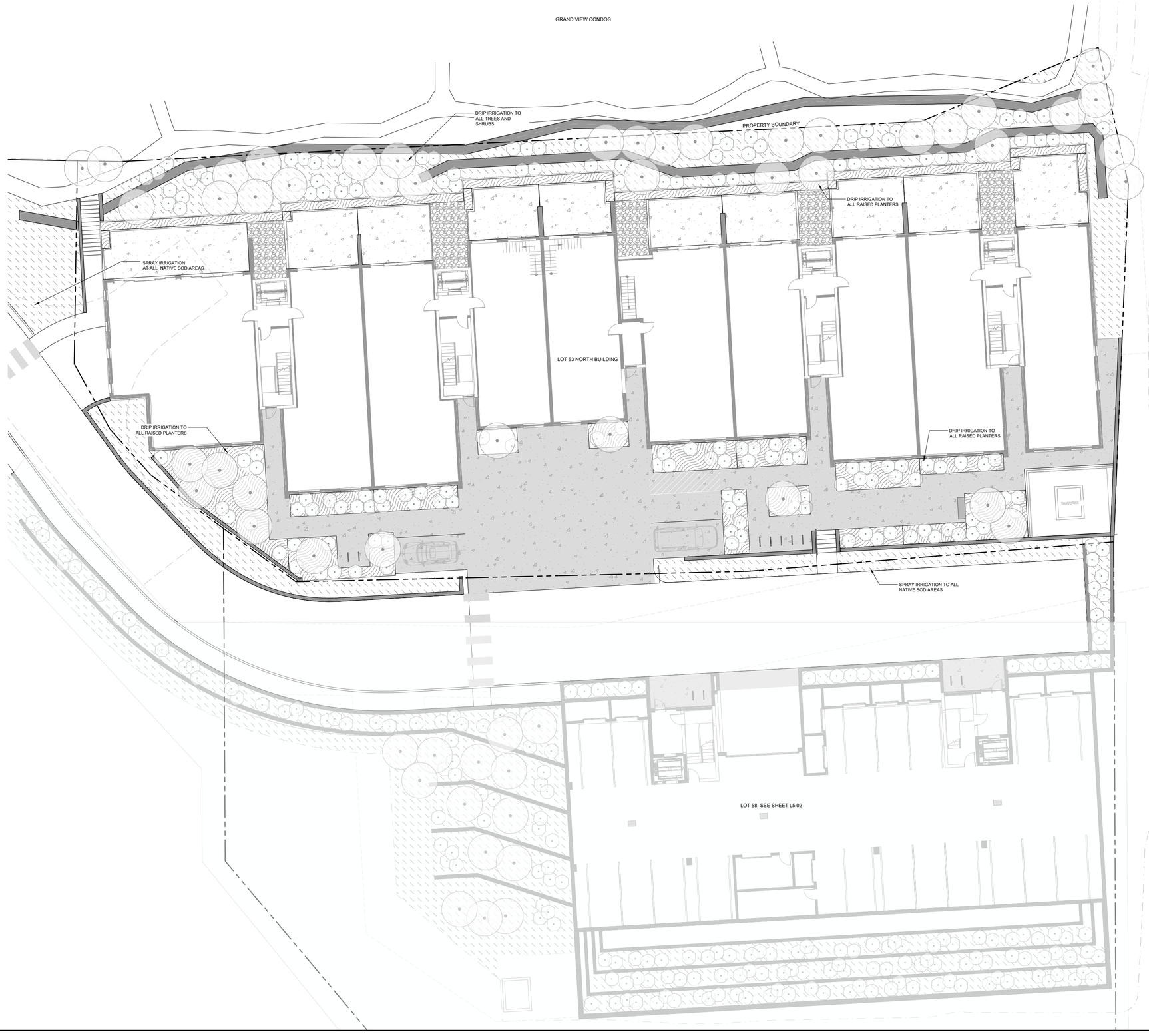
Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number
LOT 58
PLANTING PLAN

Drawing Name
L4.02



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

IRRIGATION NOTES

1. All plant material shall be irrigated by a pressurized subsurface irrigation system with automatic controller. All trees, shrubs, and perennials shall be drip irrigated and all turf areas shall be irrigated with a spray system. Irrigation system shall be design-build by Contractor based on the specifications identified on this irrigation intent plan. Contractor shall provide an irrigation shop-drawing for review by Landscape Architect before proceeding. Contractor shall demonstrate full system coverage prior to acceptance and before plant material installation. Contractor shall provide a reproducible as-built drawing of installed irrigation system at conclusion of project.
2. The irrigation system shall be operational prior to plant installation or temporary irrigation measures shall be provided in the interim. The method of temporary irrigation shall be approved by the Landscape Architect prior to plant material installation.
3. Irrigation Main Line shall be HDPE DR-11, size TBD by contractor based on required GPM and pressure.
4. Irrigation controller shall be located in the mechanical room of the building. Exact location to be determined in coordination with architect, mechanical engineer and landscape architect.
5. Point of irrigation connection and backflow preventer location to be determined in coordination with architect, mechanical engineer and landscape architect. Backflow Preventer specification TBD by landscape contractor and plumber and shall be installed by a licensed plumber and meet all local codes. If backflow preventer is located in an exterior location, an appropriate enclosure (Hot-Box or similar) shall be provided.
6. Irrigation sleeving shall be PVC Class 160 pipe.
7. Irrigation lateral lines shall be #100 NSF.
8. Irrigation spray heads within the native sod areas shall be 12" Rainbird Pop-Up Spray Heads or equal.
9. Qty (2) Netafim drip rings shall be installed at each tree location shown on the plans.
10. Irrigation valves shall be Rain Bird EFB-CO Series valves for all spray zones and Rain Bird XCZ-100-PRF for all drip zones. Utilize a two-wire decoder system for all irrigation valves. Coordinate exact locations with Landscape Architect prior to installation.
11. Install a manual drain valve at the termination of the mainline at all dead ends. Manual drain valve shall be set in a 10" round valve box and shall allow a 3/4" globe valve to be opened to allow the water in the pressurized mainline to be blown out (after water supply is shut off) through the manual drain valve. Following the main line being blown out, each lateral and drip zone can then be winterized.

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

1512 N. Throop Street
T 312-440-9800
Chicago, Illinois 60642
F 312-440-9851
www.nwkd.com

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NO.	ISSUED DATE	ISSUED FOR
	10/29/2024	DEVELOPMENT PLAN
	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

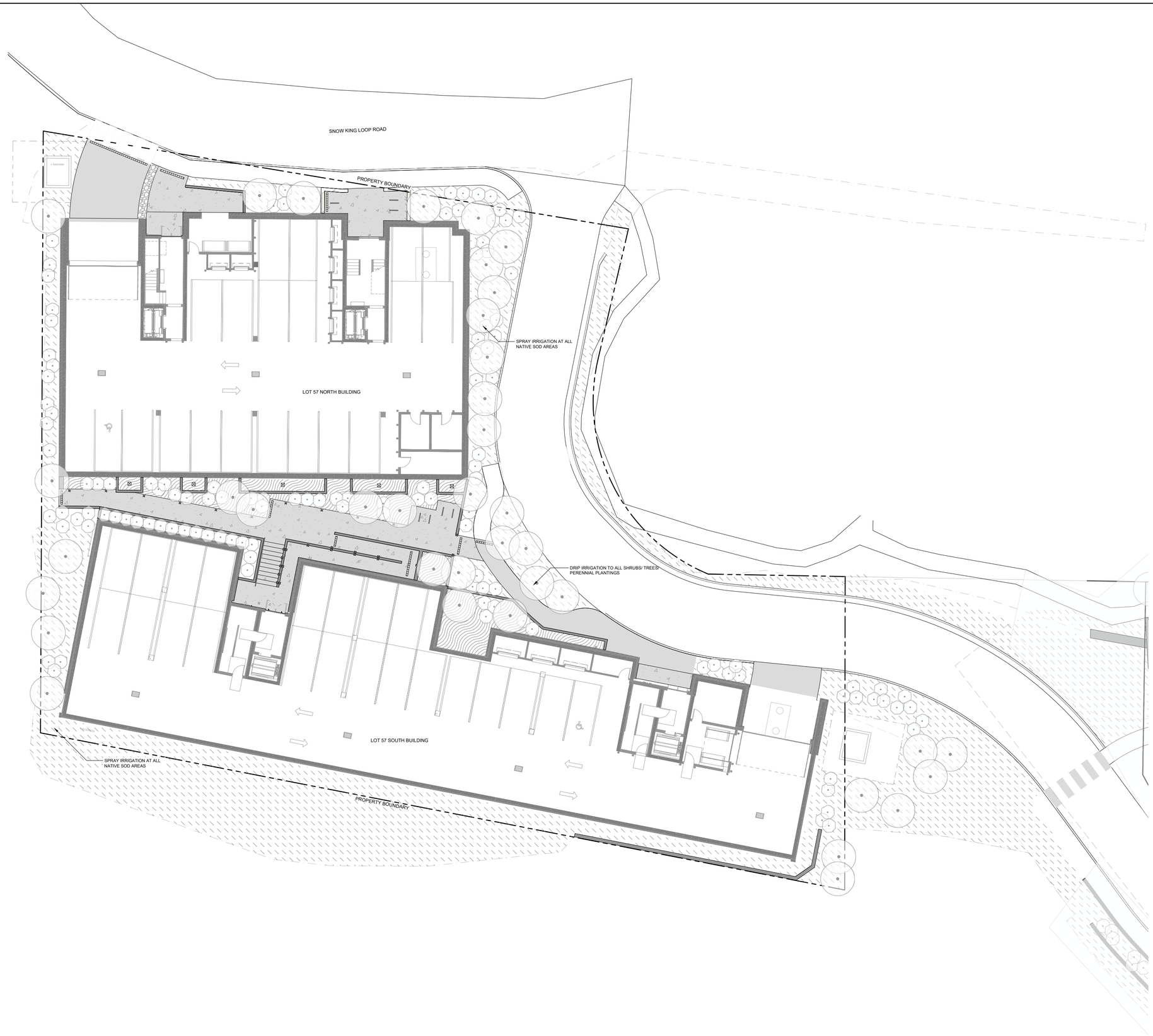
Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number
LOT 53
IRRIGATION PLAN

Drawing Name
L5.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

IRRIGATION NOTES

1. All plant material shall be irrigated by a pressurized subsurface irrigation system with automatic controller. All trees, shrubs, and perennials shall be drip irrigated and all turf areas shall be irrigated with a spray system. Irrigation system shall be design-build by Contractor based on the specifications identified on this irrigation intent plan. Contractor shall provide an irrigation shop-drawing for review by Landscape Architect before proceeding. Contractor shall demonstrate full system coverage prior to acceptance and before plant material installation. Contractor shall provide a reproducible as-built drawing of installed irrigation system at conclusion of project.
2. The irrigation system shall be operational prior to plant installation or temporary irrigation measures shall be provided in the interim. The method of temporary irrigation shall be approved by the Landscape Architect prior to plant material installation.
3. Irrigation Main Line shall be HDPE DR-11, size TBD by contractor based on required GPM and pressure.
4. Irrigation controller shall be located in the mechanical room of the building. Exact location to be determined in coordination with architect, mechanical engineer and landscape architect.
5. Point of irrigation connection and backflow preventer location to be determined in coordination with architect, mechanical engineer and landscape architect. Backflow Preventer specification TBD by landscape contractor and plumber and shall be installed by a licensed plumber and meet all local codes. If backflow preventer is located in an exterior location, an appropriate enclosure (Hot-Box or similar) shall be provided.
6. Irrigation sleeving shall be PVC Class 160 pipe.
7. Irrigation lateral lines shall be #100 NSF.
8. Irrigation spray heads within the native sod areas shall be 12" Rainbird Pop-Up Spray Heads or equal.
9. Qty (2) Netafim drip rings shall be installed at each tree location shown on the plans.
10. Irrigation valves shall be Rain Bird EFB-CO Series valves for all spray zones and Rain Bird XCZ-100-PRF for all drip zones. Utilize a two-wire decoder system for all irrigation valves. Coordinate exact locations with Landscape Architect prior to installation.
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NORTH

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ORIGINAL SCALE: 1"=10'

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	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

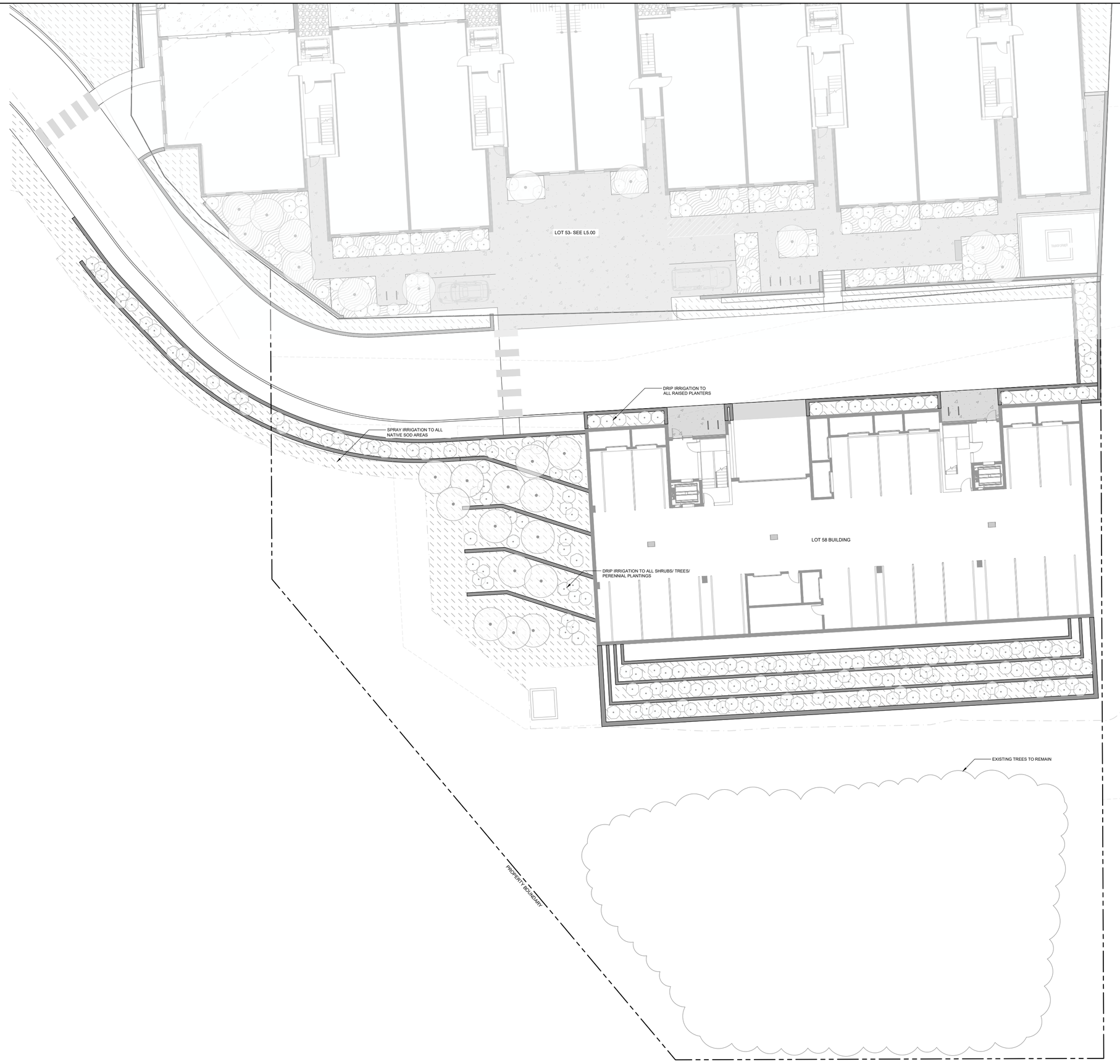
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 57 IRRIGATION PLAN

Drawing Name

L5.01



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- CONCRETE
- CONCRETE WITH SNOWMELT
- COBBLE
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- EXTERIOR SITE LIGHTING
- EXTERIOR SITE DRAINAGE

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NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

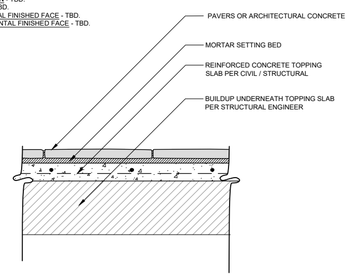
953 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

	Project No.	
	Drawn By	LN
	Checked By	MK

Discipline & Drawing Number
LOT 58
IRRIGATION PLAN

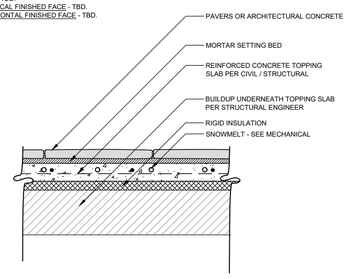
Drawing Name
L5.02

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SIZE - TBD.
VERTICAL FINISHED FACE - TBD.
HORIZONTAL FINISHED FACE - TBD.



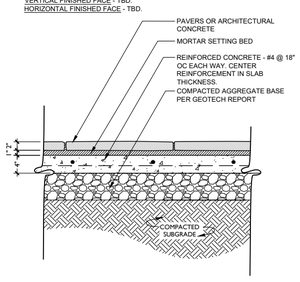
1 MORTAR-SET PAVERS OVER STRUCTURE
1" = 1'-0"

NOTES:
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SIZE - TBD.
VERTICAL FINISHED FACE - TBD.
HORIZONTAL FINISHED FACE - TBD.



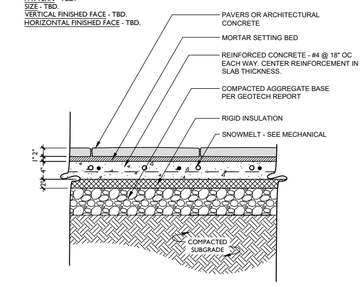
2 MORTAR-SET PAVERS W/SNOWMELT OVER STRUCTURE
1" = 1'-0"

NOTES:
PAVERS - TYPE TBD.
PATTERN - TBD.
SIZE - TBD.
VERTICAL FINISHED FACE - TBD.
HORIZONTAL FINISHED FACE - TBD.

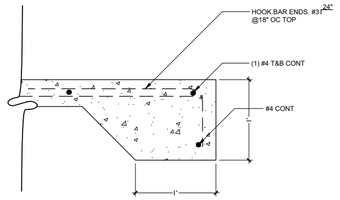


3 MORTAR-SET PAVERS
1" = 1'-0"

NOTES:
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PATTERN - TBD.
SIZE - TBD.
VERTICAL FINISHED FACE - TBD.
HORIZONTAL FINISHED FACE - TBD.

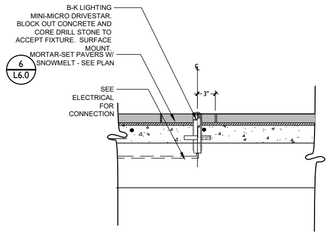


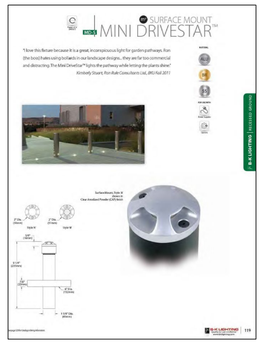
4 MORTAR-SET PAVERS W/ SNOWMELT
1" = 1'-0"



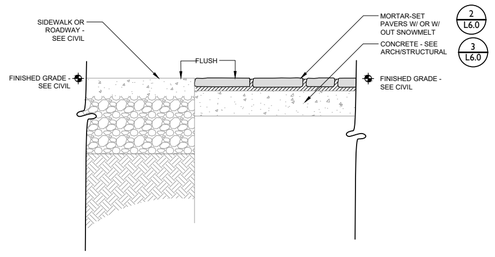
5 PED SLAB TURNDOWN - TYP REINFORCEMENT
1 1/2" = 1'-0"

NOTES:
1. CONTRACTOR TO SEE ELECTRICAL FOR ALL FIXTURE AND CONNECTION INFORMATION
2. CONTRACTOR TO FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION
3. WHEN PATH LIGHT IS INSTALLED ON A STAIR TREAD, LIGHT FIXTURE SHALL BE CENTERED IN TREAD, 3" FROM EDGE OF VERTICAL STRUCTURE.

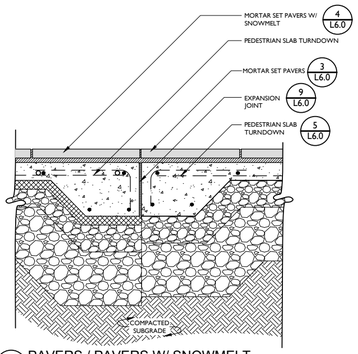




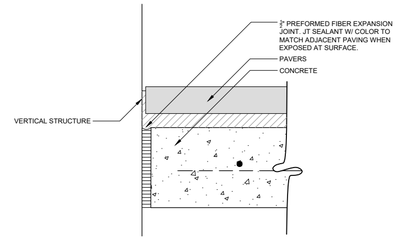
6 PATH LIGHT IN MORTAR-SET PAVERS
1" = 1'-0"



7 MORTAR-SET PAVER ENTRY ABOVE STRUCTURE - FLUSH CONDITION
1" = 1'-0"

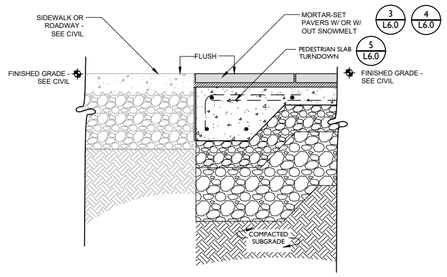


8 PAVERS / PAVERS W/ SNOWMELT
1" = 1'-0"

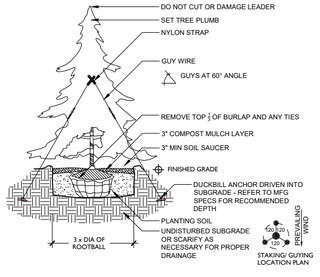


9 EXPANSION JOINT
3" = 1'-0"

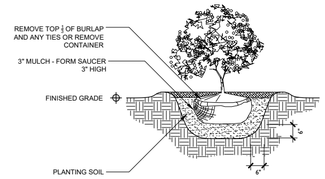
NOTE:
1. SEE CIVIL/ARCH FOR NUMBER OF RISERS AND RISER DIMENSIONS AT EACH STEP LOCATION.



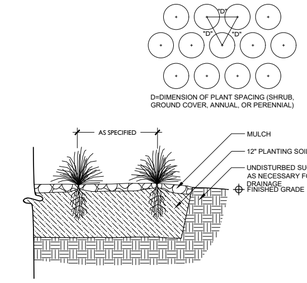
10 MORTAR-SET PAVER ENTRY - FLUSH CONDITION
1" = 1'-0"



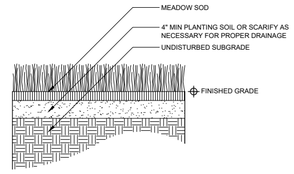
11 CONIFEROUS TREE PLANTING
1/4" = 1'-0"



12 SHRUB PLANTING
1/2" = 1'-0"

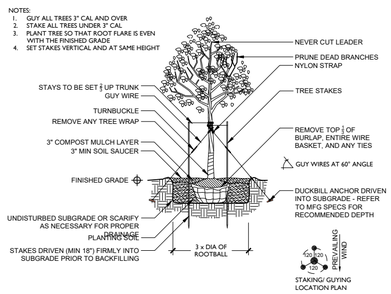


13 ORNAMENTAL GRASS / PERENNIAL PLANTING
1" = 1'-0"



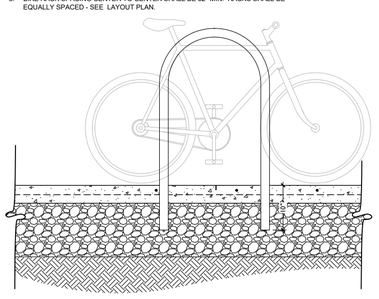
14 MEADOW SOD
1" = 1'-0"

NOTES:
1. GUY ALL TREES 3" CAL AND OVER
2. STAKE ALL TREES UNDER 3" CAL
3. PLANT TREE SO THAT ROOT FLARE IS EVEN WITH THE FINISHED GRADE
4. SET STAKES VERTICAL AND AT SAME HEIGHT

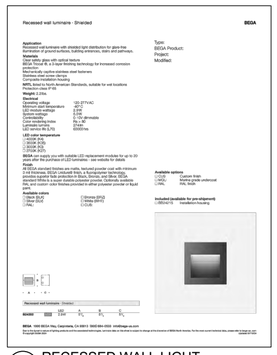


15 DECIDUOUS TREE PLANTING
1/4" = 1'-0"

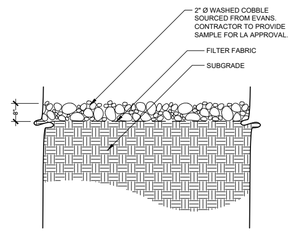
NOTES:
1. DOWNTOWN RACK BY DERO INVERTED U-STYLE BIKE RACK OR APPROVED EQUAL TO BE IN-GROUND MOUNTED PER MFG SPECS
2. FINISH AND GAUGE TBD BY CLIENT AND LANDSCAPE ARCHITECT
3. BIKE RACK SPACING CENTER TO CENTER SHALL BE 32" MIN. RACKS SHALL BE EQUALLY SPACED - SEE LAYOUT PLAN.



16 INVERTED U-STYLE BIKE RACK
1" = 1'-0"



17 RECESSED WALL LIGHT
1" = 1'-0"



18 COBBLE MULCH
1" = 1'-0"

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	03/24/2025	DEVELOPMENT PLAN REVISION
	04/28/2025	DEVELOPMENT PLAN REVISION 2

Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

SITE DETAILS

Drawing Name

L6.00

NORTHWORKS

Construction Management Plan

Shaw Wyoming
460 South Cache
Jackson, WY 83001
TEL: 303-733-8401

SHAW CONSTRUCTION
www.shawwyoming.com

October 28, 2024

Construction Management Plan: Snow King Condos Phase 1 (Lot 57)

Project Scope:

The Snow King Condos Phase 1 will consist of 2 buildings on Lot 57 which will yield 22 market units and 5 affordable units. The Phase 1 buildings square feet total to 43,678 sf. The buildings generally include repeating floor plans with three levels of living area(s) and common stairs and elevators. Parking spaces are included in the building floor plan, with 41 total spaces including designated ADA spaces. Public utilities will include domestic water tie in, sanitary sewer tie in, and storm sewer tie-in. Electricity will be brought to the site and coordinated with Lower Valley Energy and the Town of Jackson as necessary. The estimated start of construction activities is June 1st, 2025 upon approved building permit. The total approximate project duration 36 months, finishing up in approximately June 2028. During construction of Phase 1, Lot 53 (Phase 2) will be used as construction base of operations, snow storage, laydown, and parking. A construction fence will be erected to connect all three lots for safety. This construction management and staging plan will cover and review the stages starting from Mobilization to Completion.

Phase 2 construction management and staging plan will be submitted prior to start of construction of Phase. It includes 2 additional buildings with a total of 38 market units and 7 affordable units in 67,219 sf of Lot 53 & 58.

Public Impact:

Shaw will coordinate with Town of Jackson (TOJ) to identify the properties and businesses most impacted by the construction to create an email contact list, to provide information as the project schedule and work. This list is attached at the end of this submission and includes the TOJ Engineering Division. Shaw will work to minimize any effect on adjacent properties by maintaining proactive communication including giving a minimum 48-hour notice of any closures and after-hours work. Shaw acknowledges that the right-of-way (R.O.W.) is a shared public use area and will coordinate with TOJ and neighbors for special event planning and construction activities that will encroach on the R.O.W. of the surrounding streets. Activities that will affect the Town of Jackson include domestic water tie in and the storm system connection, but impact to the neighbors should be minimal if any. During said activities best practice traffic control practices will be implanted including a well-defined drive aisle, signage at intersections and property boundaries, and personnel for the direction and control of traffic flow. Pedestrian traffic will be re-routed to the opposite side of the street when necessary. The inconvenience to pedestrian traffic should be noted as our entrance will be disrupting the sidewalk. All necessary permits will be obtained prior to any closures including a traffic control plan.

Shaw Wyoming
460 South Cache
Jackson, WY 83001
TEL: 303-733-8401

In the event that intermittent sidewalk closures are required, they will be coordinated with neighboring property owners. Please note that public safety will be best served by temporarily rerouting all pedestrians to the sidewalk on the North side of Snow King Loop Rd. The reasons for this are as follows: 1) Trucks will be entering and exiting the property at most hours of the day. 2) The North sidewalk of Snow King Loop Rd is not impacted by construction. 3) Public Safety is paramount and would not be best served by allowing foot traffic in front of the main construction entrance and exit. The Town has the authority to require modifications to the Construction Management Plan.

Construction Parking:

Contractor shall implement a clear and self-enforcing construction parking plan that does not use or encumber downtown on street and/or public parking lot parking spaces. Contractor will encourage carpooling and bus riding, and when possible, provide shuttles into the project. The site plan as designed will allow for all construction parking, deliveries and staging to the site alone. The size of the site gives ample room for all the parking required for all onsite construction personnel.

Site Logistics, General Staging Plan:

A site logistics and general staging plan is attached to this document. Throughout the entirety of the project staging and parking will be strictly maintained within the project boundary, no offsite yard needs are foreseen for Phase 1. The construction lot will contain the job office trailer, dumpsters, concrete washout, recycling, temporary toilets, and an area designated to snow storage based on the master site plan.

Due to the site steep slopes, site fences will be erected around Lot 57 and the laydown/storage area (Lot 53) separately. The construction fences will be a temporary metal fence with fabric screens. At the south edge of the property, to protect pedestrians & skiers, signage and a wood & fabric fence will be erected. The fence will be placed along the property line around the designated areas of the site, with a silt fence along the inner margin as part of the erosion control BMP's. Worker and vehicle access is minimized to one access point along Snow King Loop Rd to minimize disturbance for the businesses and residences. The vehicle entrance gates will include vehicle tracking control pads as needed and a skid steer with sweeper attachment will remain on site to maintain clean roads. Throughout all stages, trucks arriving or leaving the site will utilize the town truck route.

Construction work hours, unless by special exception, will be Monday-Friday 7AM-7PM and 8AM-5PM during weekends and holidays.

During construction, a tower crane will be utilized. The crane will not encroach on any PROW and will be installed interior to the site itself.

Shaw Wyoming
460 South Cache
Jackson, WY 83001
TEL: 303-733-8401

Parking, Street, and Alley Encroachments:

It is not anticipated that site logistics will require portions of the adjacent street travel lanes (Snow King Loop Rd) to be occupied by construction equipment or staging at different times during the project. The attached Staging Plan shows those areas that will be occupied on a continuous basis and those areas that will be occupied on an intermittent basis throughout the project.

Shaw will coordinate with Town officials and adjacent property owners to minimize the impact of these encroachment activities and to assure all Town rules and permitting procedures are properly followed. The intermittent encroachments for Utility improvements along the surrounding streets will be necessary during construction activities. All necessary permits will be obtained prior to any closures, including a traffic control plan. Site barriers shall not interfere with Town snow removal. Contractor shall be responsible for all snow removal from along the barrier after each time the town plows. Public safety will be held paramount during crane and concrete pumping activities.

Performance Bonds and Guarantees:

All required bonds, guarantees, and warranty to be provided by Owner at prior to permit release. Town to notify Owner of required amounts.

Stormwater Management:

All erosion control measures and BMPs will be implemented per plan as developed by the civil engineer, including inlet protection and perimeter controls. All stormwaters of the site will be managed in accordance to TOJ standards & will not affect TOJ stormwater systems. During any rain event, storm water monitoring and reporting will be recorded. A stabilized entrance with tracking control mats will be installed and maintained at the vehicle access point. Concrete washout location clearly defined and accessible. Temporary toilets will be properly bedded and staked. Gas, diesel, and oils will be stored in proper containment vessels. Spoils piles will be covered and staked. Final measures will be reviewed with the building or grading permit.

Snow Removal:

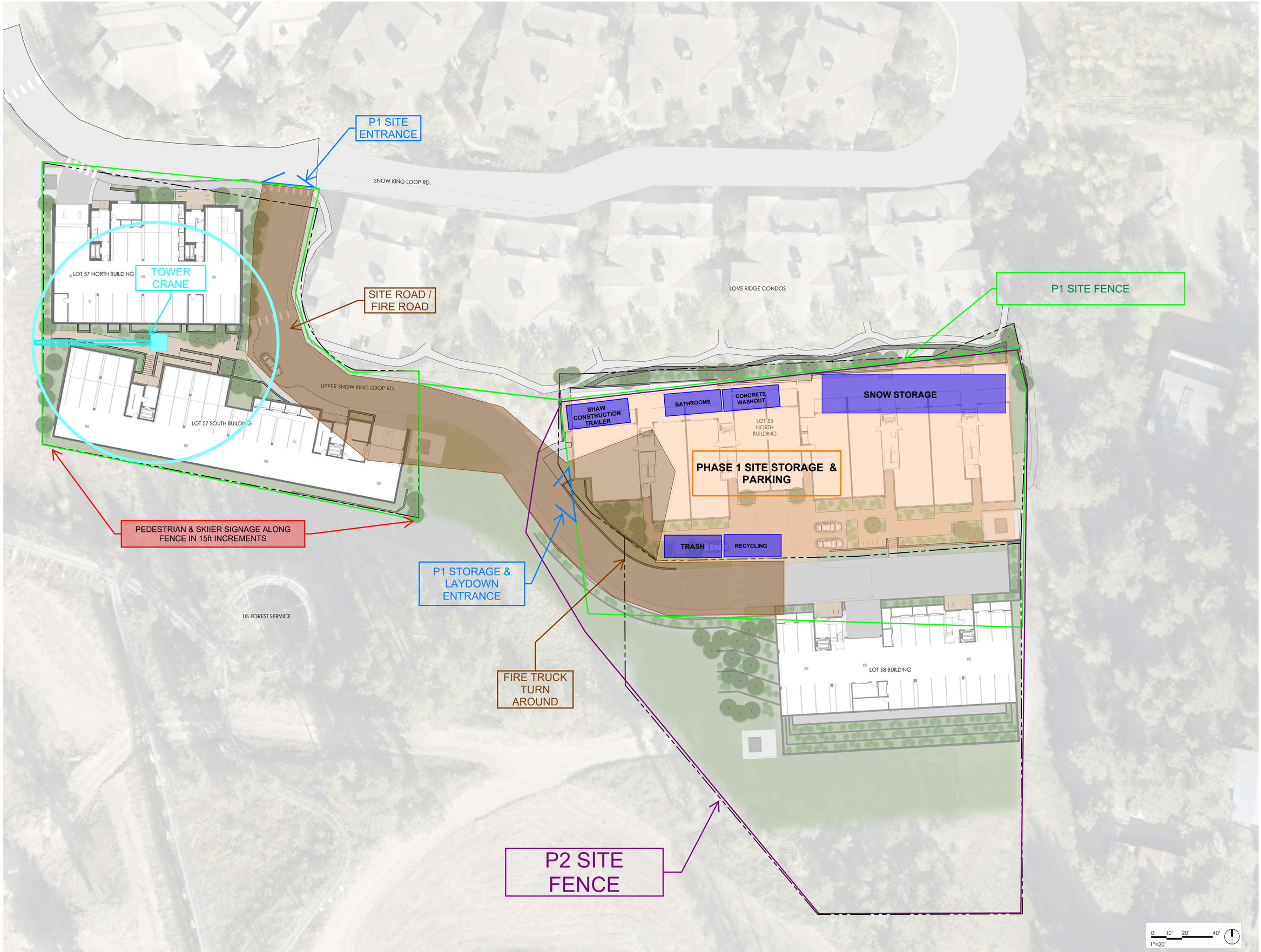
Snow removal within the property will be collected and relocated to the closest locations shown on the site logistics map. Any snow that accumulates along property margins, will be removed after city plows have been through and the snow has accumulated enough to restrict access. Shaw will have the snow removed each time the Town plows. Site barriers shall not interfere with Town snow removal.

Shaw Wyoming
460 South Cache
Jackson, WY 83001
TEL: 303-733-8401

SHAW CONSTRUCTION
www.shawwyoming.com

Neighborhood Contact List

Business Name	Contact Name	Phone	Email
Town of Jackson			townengineering@jacksonwy.gov
Grand View Lodge		(307) 734 3000	
Snow King Mountain Resort		(307) 201-5464	info@Snowkingmountain.Com
Snow King Resort & Condos		(307) 733-5200	


P1 SITE ENTRANCE
SNOW KING LOOP RD.
LOT 57 NORTH BUILDING
TOWER CRANE
SITE ROAD / FIRE ROAD
LOT 57 SOUTH BUILDING
UPPER SNOW KING LOOP RD.
LOVE RIDGE CONDOS
P1 SITE FENCE
SHAW CONSTRUCTION TRAILER
BATHROOMS
CONCRETE WASHOUT
SNOW STORAGE
LOT 53 NORTH BUILDING
PHASE 1 SITE STORAGE & PARKING
TRASH
RECYCLING
PEDESTRIAN & SKIIER SIGNAGE ALONG FENCE IN 15ft INCREMENTS
P1 STORAGE & LAYDOWN ENTRANCE
US FOREST SERVICE
FIRE TRUCK TURN AROUND
LOT 58 BUILDING
P2 SITE FENCE
0' 10' 20' 40'
1"=20'

NORTHWORKS

Engineering Report Attachments

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

BY: SS & JL
Date: 2025-05-16

Average Day Occupancy Rate [1]	50%
Max Day Factor [1], MDF	2.72
Peak Hour Factor [2], PHF	4

WATER DEMAND							
a				b	c=a*b	d=MDF*c	e=d/1440 * PHF
Unit Type			No. of Units	Average gpd/unit	Average TOTAL, gpd	Maximum TOTAL, gpd	PEAK HOUR, gpm
Lot 53							
Condo	1	Bedroom	1	125	125	340	0.9
Affordable	1	Bedroom	3	125	375	1020	2.8
Condo	2	Bedroom	18	125	4500	12240	34.0
Affordable	2	Bedroom	3	125	750	2040	5.7
Condo	3	Bedroom	7	125	2625	7140	19.8
Affordable	3	Bedroom	1	125	375	1020	2.8
Condo	4	Bedroom	0	125	0	0	0.0
Subtotal Domestic Water Demand					8750	23800	66.1
Lot 58							
Condo	1	Bedroom	0	125	0	0	0.0
Condo	2	Bedroom	7	125	1750	4760	13.2
Condo	3	Bedroom	5	125	1875	5100	14.2
Condo	4	Bedroom	0	125	0	0	0.0
Subtotal Domestic Water Demand					3625	9860	27.4
Lot 57 North							
Condo	1	Bedroom	0	125	0	0	0.0
Affordable	1	Bedroom	2	125	250	680	1.9
Condo	2	Bedroom	10	125	2500	6800	18.9
Affordable	2	Bedroom	1	125	250	680	1.9
Condo	3	Bedroom	0	125	0	0	0.0
Affordable	3	Bedroom	1	125	375	1020	2.8
Condo	4	Bedroom	0	125	0	0	0.0
Subtotal Domestic Water Demand					3375	9180	25.5
Lot 57 South							
Condo	1	Bedroom	0	125	0	0	0.0
Affordable	1	Bedroom	0	125	0	0	0.0
Condo	2	Bedroom	5	125	1250	3400	9.4
Affordable	2	Bedroom	1	125	250	680	1.9
Condo	3	Bedroom	5	125	1875	5100	14.2
Affordable	3	Bedroom	0	125	0	0	0.0
Condo	4	Bedroom	2	125	1000	2720	7.6
Subtotal Domestic Water Demand					4375	11900	33.1
Total Domestic Water Demand					20,125	54,740	152.1

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

FIRE SUPPRESSION						
Total Building Size	Building Type	Required Pressure [4]	Required Duration [4]	Total Fire Flow [4]	Sprinkler Reduction [5]	Adjusted Fire Flow [5]
(SF)	(IBC)	(psi)	(hours)	(gpm)	(%)	(gpm)
Lot 53						
73,743	IIB	20	4	6000	75%	1500
Lot 58						
34,849	IIB	20	4	4000	75%	1000
Lot 57 North						
32,455	IIB	20	3	3750	75%	1000
Lot 57 South						
38,378	IIB	20	4	4000	75%	1000

Note:

[1] Based on daily rates from the WYDEQ CH 12, Section 8

[2] Peak Hour Factor based on busiest hour occuring during the busiest quarter of the day.

[3] IFC - Appendix B, Table B105.1, Type II-B

[4] IFC - Appendix B, Section B105.2, 75% reduction for automatic sprinkler systems, minimum 1500 gpm

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

BY: SS & JL
Date: 2025-05-16

WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**
Lot 53					
Condo 1 Bedroom	1	Lavatory Sink	1	1.5	2
		Shower	1	2.5	3
		Bath Tub	1	8	8
		Toilet	1	6	6
		Kitchen Sink	1	1.8	2
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	3
		Utility Sink	0	4	0
Affordable 1 Bedroom	3	Lavatory Sink	1	1.5	5
		Shower	1	2.5	8
		Bath Tub	1	8	24
		Toilet	1	6	18
		Kitchen Sink	1	1.8	5
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	9
		Utility Sink	0	4	0
Condo 2 Bedroom	18	Lavatory Sink	3	1.5	81
		Shower	1	2.5	45
		Bath Tub	1	8	144
		Toilet	2	6	216
		Kitchen Sink	1	1.8	32
		Dishwasher	1	1.3	23
		Laundry (washer)	1	3	54
		Utility Sink	0	4	0
Additional Sinks		Lavatory Sink	12	1.5	18
Additional Toilets		Toilet	5	6	30
Affordable 2 Bedroom	3	Lavatory Sink	2	1.5	9
		Shower	1	2.5	8
		Bath Tub	1	8	24
		Toilet	2	6	36
		Kitchen Sink	1	1.8	5
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	9
		Utility Sink	0	4	0
Condo 3 Bedroom	7	Lavatory Sink	5	1.5	53
		Shower	3	2.5	53
		Bath Tub	1	8	56

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**
		Toilet	3	6	126
		Kitchen Sink	1	1.8	13
		Dishwasher	1	1.3	9
		Laundry (washer)	1	3	21
		Utility Sink	0	4	0
Affordable 3 Bedroom	1	Lavatory Sink	1	1.5	2
		Bath Tub	1	8	8
		Shower	1	2.5	3
		Toilet	1	6	6
		Kitchen Sink	1	1.8	2
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	3
		Utility Sink	0	4	0
Lot 58					
Condo 2 Bedroom	7	Lavatory Sink	3	1.5	32
		Shower	1	2.5	18
		Bath Tub	1	8	56
		Toilet	2	6	84
		Kitchen Sink	1	1.8	13
		Dishwasher	1	1.3	9
		Laundry (washer)	1	3	21
		Utility Sink	0	4	0
Condo 3 Bedroom	5	Lavatory Sink	5	1.5	38
		Shower	3	2.5	38
		Bath Tub	1	8	40
		Toilet	3	6	90
		Kitchen Sink	1	1.8	9
		Dishwasher	1	1.3	7
		Laundry (washer)	1	3	15
		Utility Sink	0	4	0
Lot 57					
Affordable 1 Bedroom	2	Lavatory Sink	1	1.5	3
		Shower	1	2.5	5
		Bath Tub	1	8	16
		Toilet	1	6	12
		Kitchen Sink	1	1.8	4
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	6
		Utility Sink	0	4	0
Condo 2 Bedroom	15	Lavatory Sink	3	1.5	68
		Shower	1	2.5	38

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**
		Bath Tub	1	8	120
		Toilet	2	6	180
		Kitchen Sink	1	1.8	27
		Dishwasher	1	1.3	20
		Laundry (washer)	1	3	45
		Utility Sink	0	4	0
Additional Sinks		Lavatory Sink	3	1.5	5
Affordable 2 Bedroom	2	Lavatory Sink	2	1.5	6
		Shower	1	2.5	5
		Bath Tub	1	8	16
		Toilet	2	6	24
		Kitchen Sink	1	1.8	4
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	6
		Utility Sink	0	4	0
Affordable 3 Bedroom	1	Lavatory Sink	2	1.5	3
		Shower	2	2.5	5
		Bath Tub	1	8	8
		Toilet	2	6	12
		Kitchen Sink	1	1.8	2
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	3
		Utility Sink	0	4	0
Condo 3 Bedroom	5	Lavatory Sink	3	1.5	23
		Shower	2	2.5	25
		Bath Tub	1	8	40
		Toilet	2	6	60
		Kitchen Sink	1	1.8	9
		Dishwasher	1	1.3	7
		Laundry (washer)	1	3	15
		Utility Sink	0	4	0
Condo 4 Bedroom	2	Lavatory Sink	6	1.5	18
		Shower	3	2.5	15
		Bath Tub	1	8	16
		Toilet	3	6	36
		Kitchen Sink	1	1.8	4
		Dishwasher	1	1.3	3
		Laundry (washer)	1	3	6
		Utility Sink	0	4	0

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PO Box 9550
Jackson, WY 83002
307.733.5150

WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**

TOTAL FIXTURE VALUE	2,538
Probable Water Flow Demand (AWWA M22 - Figure 4-3)	75
Design Pressure Adjustment Factor (AWWA M22 - 60 psi)	1.00
Adjusted Probable Demand (gpm)[3]	**75**

Note:

[1] Fixture Value based on AWWA M22

[2] Fixture count based 2024.07.02 program

JORGENSEN

PO Box 9550 | 1315 HWY 89 S., Ste. 201
Jackson, WY 83002
PH: 307.733.5150
www.jorgeng.com

Attachment D: Water System Evaluation

The existing Snow King Resort Public Water System consists of a duplex booster pump located in the garage of Love Ridge Condominium Building 48, at 6,372 feet, a 1,160LF long, 8" diameter water supply line running uphill to a 110,000 gallon storage tank south/above at roughly 6,600 feet.

System Configuration

The following information was drawn from the Grand View Lodges – Phase B Wyoming DEQ Permit to Construct.

Static Headloss:

Water surface elevation in tank, full:

Tank Floor Elevation:	6583.0'
Depth to shutoff:	+ 13.0'
	6596.0'

	6596.0'
Booster Station Elevation:	- 6,372.0'
	224.0'

Friction Loss:

Fittings

Fittings	Number of Fittings
8" Diameter Gate Valve	3
8" Diameter Tee; flow through	5
8" Diameter Tee; branch flow	1
8" Diameter 90° Bend	2
8" Diameter 45° Bend	6
8" Diameter 22.5° Bend	2
8" Diameter 11.25° Bend	2

Minor Head Loss; calculated for various flow scenarios

$$H_m = \frac{K*V^2}{2*g}$$

Flowrate	136 gpm	272 gpm	1,000 gpm	1,190.6 gpm
Minor Losses	0.05 ft-H_2O	0.19 ft-H_2O	2.59 ft-H_2O	3.67 ft-H_2O

Pipe

1,160 LF of 8" Diameter CL-350 Ductile Iron Pipe, Cement Lined

C coefficient	140.0
Inside Diameter	8.43"

Major Head Loss; calculated for various flow scenarios using Flowmaster

Flowrate	136 gpm	272 gpm	1,000 gpm	1,190.6 gpm
Major Losses	0.36' ft-H_2O	1.28 ft-H_2O	14.32 ft-H_2O	19.78 ft-H_2O

System Total Head Loss

Flowrate	136 gpm	272 gpm	1,000 gpm	1,190.6 gpm
Head	224.41' ft-H_2O	225.47 ft-H_2O	240.91 ft-H_2O	247.45 ft-H_2O

Water Available

Storage Tank

The tank provides 110,000 gallons of water storage

Pumped

Using 272 gpm flow scenario, for both pumps operating simultaneously

System Total Head: 45psi = 225.47 ft-H_2O

Pump Intake Head: - 103.83 ft-H_2O

121.64 ft-H_2O → 60.82 ft-H_2O per stage

National Pump M6HC Pump Curve used, 2-stage, 4.400 impeller configuration

Pump flowrate, Q = 155 gpm

System Demands

Existing Demands

Existing Love Ridge Condominiums Water Demand				
	Units No. of Units	Average TOTAL, gpd	Maximum TOTAL, gpd	Peak Hour gpm
Condos	20	10,944	27,072	37.6

Proposed Demands

Domestic Water Demand				
Lot	Units No. of Units	Average TOTAL, gpd	Maximum TOTAL, gpd	Peak Hour gpm
Lot 53	33	8,750	23,800	66.1
Lot 58	12	3,625	9,860	27.4
Lot 57	27	7,750	21,080	58.6
Total	**72**	**20,125**	**54,740**	**152.1**

Fire Flow

Combined fire sprinkler and hydrant flow: 1,000 gpm for 2 hours

System Capacity Analysis

Fire Flow Event: 2-hour duration

Water Supply

Storage Tank; at pump on level, assuming 5,000-gallon operating range between pump on and pump off level

105,000 gallons

Pumped; both booster pumps operating

Pump 1, starts at beginning of fire flow event

$$155\ gpm * 120\ minutes = 18{,}600\ gallons$$

Pump 2, starts when lag pump on level is reached in the tank. Assuming 5,000 gallons to lag pump on, this takes 4 minutes at fire flows

$$155\ gpm * 116\ minutes = 17{,}980\ gallons$$

Total volume of water available: $105{,}000 + 18{,}600 + 17{,}980 = \mathbf{141{,}580\ gallons}$

Water Demands

Existing Domestic Demands

Peak Hour: $37.6\ gpm * 60\ minutes = 2{,}256\ gallons$

Typical hour of maximum day: $27{,}072\ gpd \Big/ 24\ \frac{hours}{day} = 1{,}128\ gallons$

$$2{,}256 + 1{,}128 = 3{,}384\ gallons$$

Proposed Domestic Demands

Peak Hour: $152.1\ gpm * 60\ minutes = 9{,}126\ gallons$

Typical hour of maximum day: $54{,}740\ gpd \Big/ 24\ \frac{hours}{day} = 2{,}281\ gallons$

$$9{,}126 + 2{,}281 = 11{,}407\ gallons$$

Fire Flow, sprinklers and hydrants: $1{,}000\ gpm * 120\ minutes = 120{,}000\ gallons$

Total volume of water demanded: $3{,}384 + 11{,}407 + 120{,}000 = \mathbf{134{,}791\ gallons}$

Total volume of water available exceeds total volume of water demanded

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

BY: SS & JL
Date: 2025-05-16

Average Daily Flow	60%
Peak Hour Factor	4

SANITARY SEWER DEMAND						
Unit Type			No. of Units[2]	Max Flow per Bedroom, gpd[1]	Average TOTAL, gpd	Maximum TOTAL, gpd	PEAK HOUR, gpm
Lot 53							
Condo	1	Bedroom	1	150	90	150	0.4
Affordable	1	Bedroom	3	150	270	450	1.3
Condo	2	Bedroom	18	150	3240	5400	15.0
Affordable	2	Bedroom	3	150	540	900	2.5
Condo	3	Bedroom	7	150	1890	3150	8.8
Affordable	3	Bedroom	1	150	270	450	1.3
Condo	4	Bedroom	0	150	0	0	0.0
SUBTOTAL SANITARY SEWER DEMAND					6300	10500	29.2
Lot 58							
Condo	1	Bedroom	0	150	0	0	0.0
Condo	2	Bedroom	7	150	1260	2100	5.8
Condo	3	Bedroom	5	150	1350	2250	6.3
Condo	4	Bedroom	0	150	0	0	0.0
SUBTOTAL SANITARY SEWER DEMAND					2610	4350	12.1
Lot 57 North							
Condo	1	Bedroom	0	150	0	0	0.0
Affordable	1	Bedroom	2	150	180	300	0.8
Condo	2	Bedroom	10	150	1800	3000	8.3
Affordable	2	Bedroom	1	150	180	300	0.8
Condo	3	Bedroom	0	150	0	0	0.0
Affordable	3	Bedroom	1	150	270	450	1.3
Condo	4	Bedroom	0	150	0	0	0.0
SUBTOTAL SANITARY SEWER DEMAND					2430	4050	11.3
Lot 57 South							
Condo	1	Bedroom	0	150	0	0	0.0
Affordable	1	Bedroom	0	150	0	0	0.0
Condo	2	Bedroom	5	150	900	1500	4.2
Affordable	2	Bedroom	1	150	180	300	0.8
Condo	3	Bedroom	5	150	1350	2250	6.3
Affordable	3	Bedroom	0	150	0	0	0.0
Condo	4	Bedroom	2	150	720	1200	3.3
SUBTOTAL SANITARY SEWER DEMAND					3150	5250	14.6
TOTAL SANITARY SEWER DEMAND					14,490	24,150	67.1

Notes:

[1] *Based on daily flow rates from the WYDEQ CH 11, Part B, Table 1*

[2] *Bedroom count shown based on Development Plan Review, 16 May 2025*

NORTHWORKS

Application Documents

PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave.
P.O. Box 1687
Jackson, WY 83001

ph: (307) 733-0440
www.townofjackson.com

For Office Use Only

Fees Paid_____ Date & Time Received _____

Application #s _____ _____ _____

Please note: *Applications received after 3 PM will be processed the next business day.*

PROJECT.

Name/Description: Snow King Lot 57

Physical Address: 510 Upper Snow King Loop

Lot, Subdivision: LOT 57, GRAND VIEW LODGES, THIRD ADDITION PIDN: 22-41-16-34-3-07-001

PROPERTY OWNER.

Name: BREG SK57A, LLC & BREG SK57B,LLC & BREG SK57C, LLC Phone: (262) 308-2656

Mailing Address: 4011 80th Street, Kenosha, Wisconsin ZIP: 53142

E-mail: northmann@beardevelopment.com

APPLICANT/AGENT.

Name: Joe Bongiorno (Northworks Architects) Phone: (307) 201-5324

Mailing Address: 185 East Hansen Ave. Jackson, WY 83001 ZIP: 83001

E-mail: jbongiorno@nwks.com

DESIGNATED PRIMARY CONTACT.

_____Property Owner X_____Applicant/Agent

TYPE OF APPLICATION. *Please check all that apply; review the type of application at www.townofjackson/200/Planning*

Use Permit

_____Basic Use

_____Conditional Use

_____Special Use

Relief from the LDRs

_____Administrative Adjustment

_____Variance

_____Beneficial Use Determination

_____Appeal of an Admin. Decision

Physical Development

_____Sketch Plan

X_____Development Plan

_____Design Review

Subdivision/Development Option

_____ Subdivision Plat

_____Boundary Adjustment (replat)

_____Boundary Adjustment (no plat)

_____Development Option Plan

Interpretations

_____Formal Interpretation

_____Zoning Compliance Verification

Amendments to the LDRs

_____LDR Text Amendment

_____Map Amendment

Miscellaneous

_____**Other:**_____

_____ Environmental Analysis

PRE-SUBMITTAL STEPS. *To see if pre-submittal steps apply to you, go to www.townofjackson.com/200/Planning and select the relevant application type for requirements. Please submit all required pre-submittal steps with application.*

Pre-application Conference #: P23-010 Environmental Analysis #: _____

Original Permit #: _____ Date of Neighborhood Meeting: _____

SUBMITTAL REQUIREMENTS. *Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Go to www.townofjackson.com/200/Planning and select the relevant application type for submittal requirements.*

Have you attached the following?

X **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.

X **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. Please see the Letter of Authorization template at http://www.townofjackson.com/DocumentCenter/View/845/LetterOfAuthorization-PDF.

X **Response to Submittal Requirements**. The submittal requirements can be found on the TOJ website for the specific application. If a pre-application conference is required, the submittal requirements will be provided to applicant at the conference. The submittal requirements are at www.townofjackson.com/200/Planning under the relevant application type.

Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.

Joe. Bongiorno 10/23/2024

Signature of Property Owner or Authorized Applicant/Agent Date

Joe Bongiorno (Northworks Architects) Senior Architect

Name Printed Title

PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave.
P.O. Box 1687
Jackson, WY 83001

ph: (307) 733-0440
www.townofjackson.com

For Office Use Only

Fees Paid_____ Date & Time Received _____

Application #s _____ _____ _____

Please note: *Applications received after 3 PM will be processed the next business day.*

PROJECT.

Name/Description: Snow King Lot 53

Physical Address: 553 Upper Snow King Loop

Lot, Subdivision: LOT 53, GRAND VIEW LODGES 2ND ADDITION PIDN: 22-41-16-34-3-04-001

PROPERTY OWNER.

Name: BREG SK53, LLC Phone: (262) 308-2656

Mailing Address: 4011 80th Street, Kenosha, Wisconsin ZIP: 53142

E-mail: northmann@beardevelopment.com

APPLICANT/AGENT.

Name: Joe Bongiorno (Northworks Architects) Phone: (307) 201-5324

Mailing Address: 185 East Hansen Ave. Jackson, WY 83001 ZIP: 83001

E-mail: jbongiorno@nwks.com

DESIGNATED PRIMARY CONTACT.

_____Property Owner X_____Applicant/Agent

TYPE OF APPLICATION. *Please check all that apply; review the type of application at www.townofjackson/200/Planning*

Use Permit

_____Basic Use

_____Conditional Use

_____Special Use

Relief from the LDRs

_____Administrative Adjustment

_____Variance

_____Beneficial Use Determination

_____Appeal of an Admin. Decision

Physical Development

_____Sketch Plan

X_____Development Plan

_____Design Review

Subdivision/Development Option

_____ Subdivision Plat

_____Boundary Adjustment (replat)

_____Boundary Adjustment (no plat)

_____Development Option Plan

Interpretations

_____Formal Interpretation

_____Zoning Compliance Verification

Amendments to the LDRs

_____LDR Text Amendment

_____Map Amendment

Miscellaneous

_____**Other:**_____

_____ Environmental Analysis

PRE-SUBMITTAL STEPS. *To see if pre-submittal steps apply to you, go to www.townofjackson.com/200/Planning and select the relevant application type for requirements. Please submit all required pre-submittal steps with application.*

Pre-application Conference #: P23-010 Environmental Analysis #: _____

Original Permit #: _____ Date of Neighborhood Meeting: _____

SUBMITTAL REQUIREMENTS. *Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Go to www.townofjackson.com/200/Planning and select the relevant application type for submittal requirements.*

Have you attached the following?

X **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.

X **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. Please see the Letter of Authorization template at http://www.townofjackson.com/DocumentCenter/View/845/LetterOfAuthorization-PDF.

X **Response to Submittal Requirements**. The submittal requirements can be found on the TOJ website for the specific application. If a pre-application conference is required, the submittal requirements will be provided to applicant at the conference. The submittal requirements are at www.townofjackson.com/200/Planning under the relevant application type.

Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.

Joe. Bongiorno 10/23/2024

Signature of Property Owner or Authorized Applicant/Agent Date

Joe Bongiorno (Northworks Architects) Senior Architect

Name Printed Title

PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave.
P.O. Box 1687
Jackson, WY 83001

ph: (307) 733-0440
www.townofjackson.com

For Office Use Only

Fees Paid_____ Date & Time Received _____

Application #s _____ _____ _____

Please note: *Applications received after 3 PM will be processed the next business day.*

PROJECT.

Name/Description: Snow King Lot 58

Physical Address: 725 Upper Snow King Loop

Lot, Subdivision: LOT 58, GRAND VIEW LODGES, THIRD ADDITION PIDN: 22-41-16-34-3-07-002

PROPERTY OWNER.

Name: BREG SK58, LLC Phone: (262) 308-2656

Mailing Address: 4011 80th Street, Kenosha, Wisconsin ZIP: 53142

E-mail: northmann@beardevelopment.com

APPLICANT/AGENT.

Name: Joe Bongiorno (Northworks Architects) Phone: (307) 201-5324

Mailing Address: 185 East Hansen Ave. Jackson, WY 83001 ZIP: 83001

E-mail: jbongiorno@nwks.com

DESIGNATED PRIMARY CONTACT.

_____Property Owner X_____Applicant/Agent

TYPE OF APPLICATION. *Please check all that apply; review the type of application at www.townofjackson/200/Planning*

Use Permit

_____Basic Use

_____Conditional Use

_____Special Use

Relief from the LDRs

_____Administrative Adjustment

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Interpretations

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_____Zoning Compliance Verification

Amendments to the LDRs

_____LDR Text Amendment

_____Map Amendment

Miscellaneous

_____**Other:**_____

_____ Environmental Analysis

PRE-SUBMITTAL STEPS. *To see if pre-submittal steps apply to you, go to www.townofjackson.com/200/Planning and select the relevant application type for requirements. Please submit all required pre-submittal steps with application.*

Pre-application Conference #: P23-010 Environmental Analysis #: _____

Original Permit #: _____ Date of Neighborhood Meeting: _____

SUBMITTAL REQUIREMENTS. *Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Go to www.townofjackson.com/200/Planning and select the relevant application type for submittal requirements.*

Have you attached the following?

X **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.

X **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. Please see the Letter of Authorization template at http://www.townofjackson.com/DocumentCenter/View/845/LetterOfAuthorization-PDF.

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Note: Information provided by the applicant or other review agencies during the planning process may identify other requirements that were not evident at the time of application submittal or a Pre-Application Conference, if held. Staff may request additional materials during review as needed to determine compliance with the LDRs.

Under penalty of perjury, I hereby certify that I have read this application and associated checklists and state that, to the best of my knowledge, all information submitted in this request is true and correct. I agree to comply with all county and state laws relating to the subject matter of this application, and hereby authorize representatives of Teton County to enter upon the above-mentioned property during normal business hours, after making a reasonable effort to contact the owner/applicant prior to entering.

Joe. Bongiorno 10/23/2024

Signature of Property Owner or Authorized Applicant/Agent Date

Joe Bongiorno (Northworks Architects) Senior Architect

Name Printed Title

Town of Jackson
150 E Pearl Avenue
PO Box 1687, Jackson, WY 83001
P: (307)733-3932 F: (307)739-0919
www.jacksonwy.gov

Date:

LETTER OF AUTHORIZATION

NAMING APPLICANT AS OWNER'S AGENT

PRINT full name of property owner as listed on the deed when it is an individual OR print full name and title of President or Principal Officer when the owner listed on the deed is a corporation or an entity other than an individual

Being duly sworn, deposes and says that BREG SK 53, LLC, BREG SK58, LLC, BREG SK57A, LLC, BREG SK57B, LLC & BREG SK 57C, LLC is the owner in fee of the premises located at:

Name of property owner as listed on deed

Address of Premises: 553 Upper Snow King Loop, 725 Upper Snow King Loop & 510 Upper Snow King Loop

Legal Description: See attached

Please attach additional sheet for additional addresses and legal descriptions

And, that the person named as follows: Name of Applicant/agent: Joe Bongiorno (Northworks Architects)

Mailing address of Applicant/agent: 185 E Hanson Avenue, Jackson, WY 83001

Email address of Applicant/agent: jbongiorno@nwks.com

Phone Number of Applicant/agent: 630-254-9111

Is authorized to act as property owner's agent and be the applicant for the application(s) checked below for a permit to perform the work specified is this(these) application(s) at the premises listed above:

☒ Development/Subdivision Plat Permit Application ☒ Building Permit Application

☒ Public Right of Way Permit ☒ Grading and Erosion Control Permit ☒ Demolition Permit

☒ Other (describe) Design Review Committee Application

Under penalty of perjury, the undersigned swears that the foregoing is true and, if signing on behalf of a corporation, partnership, limited liability company or other entity, the undersigned swears that this authorization is given with the appropriate approval of such entity, if required.

Property Owner Signature

Authorized Member

Title if signed by officer, partner or member of corporation, LLC (secretary or corporate owner) partnership or other non-individual Owner

STATE OF WISCONSIN)
) SS.
COUNTY OF KENOSHA)

The foregoing instrument was acknowledged before me by Stephen R. Mills this 25th day of March. WITNESS my hand and official seal.

Janis E. Hagerty

Notary Public

My commission expires:

JANIS E. HAGERTY
NOTARY PUBLIC - STATE OF WISCONSIN
MY COMMISSION EXPIRES
FEBRUARY 10, 2028

INSERT TITLE REPORTS

Geotechnical Report

REFER TO ADDENDUM

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
P24-168		BUILDING DEPARTMENT COMMENTS	Structures must meet the most current adopted building codes of the Town of Jackson at the time of permitting.		
P24-168		DETERMINATION OF SUFFICIENCY	Please see attached letter.		
P24-168		ENGINEERING DEPARTMENT COMMENTS	See attached PDF.		
P24-168		FIRE DEPARTMENT COMMENTS	Phase 2 (553 Upper Snow King/Lot 53) shall meet the requirements of the current International Fire Code (IFC) including but not limited to the following. 1.) Construction Management Plan shall include an approved, written site safety plan establishing a fire prevention program at the project site throughout all phases of construction per the requirements of the IFC, Section 3303. The plan shall be submitted to this department and approved before a building permit is issued. 2.) Fire apparatus access roads shall be provided and maintained in accordance with the IFC, Sections 503.1.1 - 503.1.3. 3.) A fire permit is required for automatic sprinkler systems. A stamped set of automatic sprinkler plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 4.) A fire permit is required for fire alarm systems. A stamped set of fire alarm plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 5.) Standpipe systems shall be provided in new buildings in accordance with the IFC, Section 905.2 - 905.11. A fire permit is required for standpipe systems. A stamped set of standpipe plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 6.) Provide elevator specifications as it will have an impact on sprinkler and fire alarm requirements. Elevators with Firefighter Emergency Operation are required to have a sump and drain. 7.) Buildings will be subject to requirements for emergency responder communication. Buildings that cannot support the required level of in-building emergency responder communications may require an enhancement system. A signal survey can be scheduled when the project is at a 70-75% build-out. A fire department permit is required for the installation of a radio enhancement system. A plan set shall be submitted for review and approval prior to a permit being issued. 8.) Means of egress illumination per the requirements of the IFC, Section 1008.		
	11/13/2024	LEGAL DEPARTMENT COMMENTS		TVALENTINE@JACKSONWY.GOV	12/06/2024
	12/16/2024	PLANNING DEPARTMENT COMMENTS		LPOTZ@JACKSONWY.GOV	12/16/2024

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
	12/24/2024	PC ROUGH DRAFT		KSLUDER@JACKSONWY.GOV	12/24/2024
	02/03/2025	PARKS AND RECREATION DEPARTMENT COMMENTS		BTLENZ@JACKSONWY.GOV	02/03/2025
		PC PUBLIC NOTICE			
		DETERMINATION OF SUFFICIENCY			
		FINAL REPORT			
		COMPLETE REPORT			
		START DEPARTMENT COMMENTS			
		POLICE DEPARTMENT COMMENTS			
		FINAL LETTER			
		TOWN COUNCIL MEETING			
		COMPLETENESS REVIEW			
		PC FINAL DRAFT			
		TC PUBLIC NOTICE			
		INITIAL REPORT			
		JOINT HOUSING DEPARTMENT COMMENTS			
		PATHWAYS DEPARTMENT COMMENTS			
		PC KEY ISSUES			
		PLANNING COMMISSION REVIEW AND RECOMMENDATION			

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
P24-174		BUILDING DEPARTMENT COMMENTS	Structures must meet the most current adopted building codes of the Town of Jackson at the time of permitting.		
P24-174		DETERMINATION OF SUFFICIENCY	Please see attached letter.		
P24-174		ENGINEERING DEPARTMENT COMMENTS	See attached PDF.		
P24-174		FIRE DEPARTMENT COMMENTS	Phase 1 (510 Upper Snow King/Lot 57 North & South Buildings) shall meet the requirements of the current International Fire Code (IFC) including but not limited to the following. 1.) Construction Management Plan shall include an approved, written site safety plan establishing a fire prevention program at the project site throughout all phases of construction per the requirements of the IFC, Section 3303. The plan shall be submitted to this department and approved before a building permit is issued. 2.) Fire apparatus access roads shall be provided and maintained in accordance with the IFC, Sections 503.1.1 - 503.1.3. 3.) A fire permit is required for automatic sprinkler systems. A stamped set of automatic sprinkler plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 4.) A fire permit is required for fire alarm systems. A stamped set of fire alarm plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 5.) Standpipe systems shall be provided in new buildings in accordance with the IFC, Section 905.2 - 905.11. A fire permit is required for standpipe systems. A stamped set of standpipe plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 6.) Provide elevator specifications as it will have an impact on sprinkler and fire alarm requirements. Elevators with Firefighter Emergency Operation are required to have a sump and drain. 7.) Buildings will be subject to requirements for emergency responder communication. Buildings that cannot support the required level of in-building emergency responder communications may require an enhancement system. A signal survey can be scheduled when the project is at a 70-75% build-out. A fire department permit is required for the installation of a radio enhancement system. A plan set shall be submitted for review and approval prior to a permit being issued. 8.) Means of egress illumination per the requirements of the IFC, Section 1008.		
	11/13/2024	PC PUBLIC NOTICE		TVALENTINE@JACKSONWY.GOV	12/06/2024
	12/16/2024	TC PUBLIC NOTICE		LPOTZ@JACKSONWY.GOV	12/16/2024

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
	12/24/2024	PLANNING DEPARTMENT COMMENTS		KSLUDER@JACKSONWY.GOV	12/24/2024
	02/03/2025	JOINT HOUSING DEPARTMENT COMMENTS		BTLENZ@JACKSONWY.GOV	02/03/2025
		DETERMINATION OF SUFFICIENCY			
		FINAL LETTER			
		PARKS AND RECREATION DEPARTMENT COMMENTS			
		PLANNING COMMISSION REVIEW AND RECOMMENDATION			
		COMPLETENESS REVIEW			
		PC ROUGH DRAFT			
		POLICE DEPARTMENT COMMENTS			
		PC FINAL DRAFT			
		COMPLETE REPORT			
		LEGAL DEPARTMENT COMMENTS			
		INITIAL REPORT			
		TOWN COUNCIL MEETING			
		PC KEY ISSUES			
		START DEPARTMENT COMMENTS			
		FINAL REPORT			

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
		PATHWAYS DEPARTMENT COMMENTS			

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
P24-175		BUILDING DEPARTMENT COMMENTS	Structures must meet the most current adopted building codes of the Town of Jackson at the time of permitting.		
P24-175		DETERMINATION OF SUFFICIENCY	Please see attached letter.		
P24-175		ENGINEERING DEPARTMENT COMMENTS	Please see attached PDF.		
P24-175		FIRE DEPARTMENT COMMENTS	Phase 2 (725 Upper Snow King/Lot 58) shall meet the requirements of the current International Fire Code (IFC) including but not limited to the following. 1.) Construction Management Plan shall include an approved, written site safety plan establishing a fire prevention program at the project site throughout all phases of construction per the requirements of the IFC, Section 3303. The plan shall be submitted to this department and approved before a building permit is issued. 2.) Fire apparatus access roads shall be provided and maintained in accordance with the IFC, Sections 503.1.1 - 503.1.3. 3.) A fire permit is required for automatic sprinkler systems. A stamped set of automatic sprinkler plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 4.) A fire permit is required for fire alarm systems. A stamped set of fire alarm plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 5.) Standpipe systems shall be provided in new buildings in accordance with the IFC, Section 905.2 - 905.11. A fire permit is required for standpipe systems. A stamped set of standpipe plans shall be submitted for review and approval prior to a permit being issued. Inspection and testing shall be scheduled with this office. 6.) Provide elevator specifications as it will have an impact on sprinkler and fire alarm requirements. Elevators with Firefighter Emergency Operation are required to have a sump and drain. 7.) Buildings will be subject to requirements for emergency responder communication. Buildings that cannot support the required level of in-building emergency responder communications may require an enhancement system. A signal survey can be scheduled when the project is at a 70-75% build-out. A fire department permit is required for the installation of a radio enhancement system. A plan set shall be submitted for review and approval prior to a permit being issued. 8.) Means of egress illumination per the requirements of the IFC, Section 1008.		
	11/13/2024	PC FINAL DRAFT		TVALENTINE@JACKSONWY.GOV	12/06/2024
	12/16/2024	PC KEY ISSUES		LPOTZ@JACKSONWY.GOV	12/16/2024
	12/24/2024	FINAL LETTER		KSLUDER@JACKSONWY.GOV	12/24/2024

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
	02/03/2025	PARKS AND RECREATION DEPARTMENT COMMENTS		BTLENZ@JACKSONWY.GOV	02/03/2025
		POLICE DEPARTMENT COMMENTS			
		TOWN COUNCIL MEETING			
		PC PUBLIC NOTICE			
		PC ROUGH DRAFT			
		TC PUBLIC NOTICE			
		PLANNING COMMISSION REVIEW AND RECOMMENDATION			
		PLANNING DEPARTMENT COMMENTS			
		COMPLETE REPORT			
		LEGAL DEPARTMENT COMMENTS			
		FINAL REPORT			
		START DEPARTMENT COMMENTS			
		COMPLETENESS REVIEW			
		JOINT HOUSING DEPARTMENT COMMENTS			
		INITIAL REPORT			
		DETERMINATION OF SUFFICIENCY			

Workflow Notes

Permit Number	Begin Date	Step Type	Text	Created By	End Date
		PATHWAYS DEPARTMENT COMMENTS			

DEVELOPMENT – APPROVED with CONDITIONS

P24-168, 174, 175
ADDRESS: 510-553-725 Upper Snow King Loop
OWNER: BREG SK57A, LLC & BREG SK57B, LLC & BREG SK57C, LLC
APPLICANT: Northworks Architects – Joe Bongiorno

2/3/2025
Jeff Silliman and Brian Lenz, 733-3079

DATE OF SUBMITTAL: 11/8/2024
DATE OF MATERIALS: 10/29/2024 (Civil)

The engineering division has reviewed your application for a **DEVELOPMENT PLAN** submitted on and with application materials as dated above.

Three separate development plans were submitted, our review for all three is consolidated into one review.

The following conditions are being provided for use in preparation of Building Permits. Unless otherwise noted, the items shall be addressed with any resubmittal of the development plan or with the Building Permit. The information for Building Permits should be detailed for final construction documents.

CONDITIONS OF APPROVAL

A. LDR 5.7.1.D.3: Review and revise the geotechnical reports and provide updated plans and reports with the Building Permit Application as necessary. Applicant is responsible for the cost of any third party review of the geotechnical analysis.
B. LDR 5.7.2.A.1: Provide signed and stamped reports from ATLAS. Update Geotechnical Reports for any changes in design or analysis.
C. LDR 5.7.2.A: Prior to presenting to Town Council provide a narrative and exhibits that show how the buildings conform to the general natural form and minimize cuts and fills. In particular, forty-foot-deep-retaining walls on the south side of Lot 58 provide a significant break in the form and require a large cut without offsetting fill.
D. LDR 5.7.2.B.6: Provide detail on the interceptor ditches uphill of the developments that stable and with capacity for the runoff. Clearly define where the runoff is conveyed. For conveyance off site see notes on LDR 5.7.2.B.8.
E. LDR 5.7.2.B.8: In the absence of a mutual grading easement between adjacent landowners, the tops and toes of cut and fill slopes shall be within the property lines of the proposal
    a. Permit drawings must show grading within the property lines or submit proposed easements with the building permit and show them on the plans noting that they need to be executed and recorded prior to permit issuance.
    b. Prior to permit approval the easements need to be executed and recorded.

SUBMITTED

c. Where work is being completed within an existing road and easement, e.g. between Lots 57 and 58, provide a Letter of Authorization from the landowner to do the work. Show the easements clearly on the plans and cite the legal document that creates them.

F. LDR 5.7.2.B.4 / IBC 1807.2: Provide structural calculations and factors of safety for all retaining walls. Stability analyses demonstrating minimum factors of safety of at least 1.50 under static conditions and at least 1.10 under seismic loading conditions. Walls with a separation of at least 2H (H of largest of 2 walls) from face of wall to face of wall should be considered as separate walls. In a terrace of retaining walls, a minimum horizontal separation of H/2 should be maintained as measured from back of lower wall to face of higher wall. Provide notes on the plans and details that require Special Inspections by the design professional in responsible charge, IBC 1704 and 1705.1.1. Provide guards as required by IBC 1807.2.5 or as needed to protect wildlife.

G. LDR 5.7.4.B.1: For connection to the downstream storm system determine the actual path of discharge, certify that the lines and detention are clear and functioning, that the new connections are in accord with the original design, and that capacity exists in the system.

H. LDR 5.7.4.B.2.h: Provide pollution abatement treatment prior to any discharge to a stormwater or infiltration system.

I. LDR 5.7.1.D.4: Grading Pre-Applications required for each building prior to Building Permit submittal. If all of the necessary information is prepared for all sites and building permits will be submitted within 6 months of the meeting then one grading pre-application meeting could be used to cover the projects.

J. LDR 7.2.2.A.1.b: Provide a striping and signage plan for the development.

K. LDR 7.7.2.A/G: Show compliance with ISO, DEQ, and Fire standards for number of hydrants and hydrants served on 6-inch lines.

L. LDR 7.7.2.A: Provide will serve letter from the Snow King [Mountain] Resort that clarifies the entity that owns the improvements and the status of the water tank, e.g. when last cleaned and if the full volume of the tank is in use or if the tank is portioned for half capacity. Ownership should coincide with the easements and parcels where the utilities are located. Unless isolated and master metered the water and sewer need to be owned by Snow King Mountain Resort that owns the system the development is connecting to.

M. LDR 7.7.2.A: Provide hydraulic analysis for the development and its flows. Analysis provided was limited to volume. Provide the source for the assumed water demands.

N. LDR 7.7.2.G: Provide a letter from the Fire Marshall that fire supply, protection, and hydrants proposed are acceptable.

O. LDR 7.7.2: Provide size and location of water meters backflow devices for each building. Adhere to Town Standards for utility connections. Each building to have a single tap at main and branched domestic and fire outside of the building with an individual domestic meter for the building. Provide separate meters for irrigation. Reduced Pressure Backflow required on domestic, irrigation and fire. Locate meters and backflow as close as possible to the point of entry to the building.

P. LDR 7.7.3: Town inspection showed that the sewer line is full of dirt and rocks. Provide a note on the plans to isolate/plug the connection to the active sewer prior to cleaning and inspecting the line. DO NOT DISCHARGE THE DEBRIS INTO THE ACTIVE SEWER. Depending

SUBMITTED

on line condition, the lines may need to be retested, repaired, or replaced. Provide video inspections to Town Engineering. Check status of manholes on access road. Make sure they're open, functioning, and accessible.

Q. LDR 7.7.3: Revise wastewater volumes to correspond with Town of Jackson Capacity Fee Max Day, Code 13.08.020.

R. LDR 8.3.3.C.3: For each building, provide a plan for mail delivery that does not have a significant impact on public facilities and services, e.g. mail and parcel room with USPS Caller service, private mail delivery, etc.

S. IBC CHAPTER 11 / ADA ACCESSIBILITY: Provide an accessibility plan. Final design and compliance is required with the building permit application but the Development plan needs to show that the plan is feasible.

   Show compliance with accessibility regulations including but not limited to:

   a. 1104.1: At least one accessible route within the site shall be provided from public transportation stops, accessible parking, accessible passenger loading zones, and public streets or sidewalks to the accessible building entrance served.
   b. 1104.2: At least one *accessible* route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same *site*.
   c. 1104.5: Accessible routes shall coincide with or be located in the same area as a general circulation path. Where the circulation path is interior, the accessible route shall be interior. Where only one accessible route is provided, the accessible route shall not pass through kitchens, storage rooms, restrooms, closets or similar spaces.
   d. Prioritize pedestrian access through intersections and curb cuts with elevated sidewalks adhering to ADA standards and show how drainage will be achieved.

The following comments are being provided for consideration in preparation of Building Permit documents. They are not compulsory but may add value to the project.

PROJECT SPECIFIC COMMENTS

1. LDR 7.6.3.F.1: Development should provide a reasonable connection to Snow King Drive. The Town of Jackson has an easement in the Snow King Estates development between Lots 10 and 11 that we used during construction in 2018-2019. It would be beneficial to both the Town and the Developer to maintain this alternative access in the event of emergencies or construction. We would like to coordinate with the developer and Snow King Mountain Resort to see if there is a feasible design that could be implemented to preserve this access.
2. The Town standard is no longer for concrete collars on surface features in roadways. Recommend removing concrete collar from manhole and water valve details. Show completion with hot or cold mix pavement.
3. Our records show that the stormwater from this development routes to Vine Drive and then out to Kelly Ave.
4. Is it necessary to replace the entire 8" line uphill of building 57, or can the new line tie in at the crossing of the existing near station 2+30?

SUBMITTED

Blanche Neige LLC
548 Snow King Loop Road
Unit 483
Jackson, WY 83001
kblsf@yahoo.com

April 8, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning and Building Dept.
tvalentine@jacksonwy.gov

Dear Mr. Valentine:

We understand that the Town is evaluating a modified proposal by Bear Development, LLC, to build a multi-unit condominium complex adjacent to the Grand View Condominiums in the Snow King Resort District.

We own unit 483, on the west-facing, top floor of Grand View Building 548. Lot 57 of the proposed development surrounds the west and south sides of Building 548.

We echo the concerns expressed by the Grand View Homeowners' Association, repeat the concerns we stated in our February 20, 2025 letter, and add points specific to the revised plans for Lot 57.

Lot 57's proposed structures are too large and too close to Grand View 548.

- The revised concept for Lot 57 is still not in compliance with the Snow King Master Plan's requirement that new buildings be compatible in bulk, scale and character with Grand View.
- The new plan maximizes sellable square footage on Lot 57 at the expense of the open, bright and understated current setting. Bear proposes two massive, modern structures that would dwarf the single structure previously approved by SKRMA and the Town by reference to footprint, height and proximity to Grand View.
- Prior to purchasing unit 483, we reviewed the approved plans for Lot 57 and took comfort in the expectation of scale-consistent development next door. (*See our February 20, 2025 submission for further reference.*)

- If the two-building concept is approved with the clearances proposed by Bear, the space between Grand View and the new structures will be a close, pedestrian unfriendly and potentially unsafe corridor.

    - Bear's own depictions underscore the lack of harmony with existing buildings and road clearances. For example, roof-to-roof clearance between Grand View 548 and the Love Ridge building downhill is nearly **53 feet**. This distance preserves space, privacy, light, sight lines, median space and clearance for Snow King Loop Road. (*Revised Plan "RP" p. 85.*)

    - Compared to existing structures separated by Snow King Loop Road, clearance between buildings would shrink by as much as 10 feet under Bear's revised plans. Bear envisions roof-to-roof clearance of just **43 feet** between Grand View 548 and the Lot 57 North building, and just **50 feet** between Grand View 548 and the South building, with Upper Snow King Loop Road passing in between. (*RP pp. 85.*) The combined effect will be a sense of increasing constriction as you turn uphill towards Lots 53 and 58. (*RP p. 72.*) The depictions submitted by Bear of this junction omit Grand View 548 to give an artificial sense of space and brightness in this space. (*RP pp. 73-74.*)

    - Separation between Grand View 548 and Lot 57 South could well be less than 50 feet, as the balconies of the new condos appear to extend beyond the building's roofline towards our patios, again impacting relative scale, privacy, light and sound. (*Compare RP pp. 75, 86.*)

    - Bear chose to eliminate sidewalks rather than compromise on square footage. (*RP p. 6.*) Two large buildings do not fit naturally with Lot 57's unusual shape or meet the Master Plan's requirement for harmony with Grand View. Bear celebrates the loss of sidewalks as win for plantings and visual screening, but it is more accurately a result of designing the largest possible structure to the limits of the property line in a constrained space. The Town should closely scrutinize whether the proximity of Lot 57's structures to Grand View is consistent with the Master Plan's mandates to "encourage pedestrian activity," "reduce mass to better align with neighboring structures," and ensure safe ingress and egress.

    - Despite roof line adjustments in the revised plan, Lot 57's South building will be at least **19 feet taller** than Grand View 548, a spatial misalignment that

will be made more obvious by the inadequate horizontal separation discussed above.

- Some of Bear's depictions of Lot 57 plans are incomplete and misleading.

  - Bear produced many renditions showing Lot 57's structures in relation to Grand View, yet not one shows the west-facing perspective down Upper Snow King Loop Road (i.e., between Grand View 548 and Lot 57 South). The Grand View HOA submitted its own rendering of this corridor to emphasize what Bear wants to downplay: the bottleneck and spatial (horizontal and vertical) mismatch that will result by allowing the proposed construction to the lot lines on the south arm of Lot 57 less than 50 feet away from Grand View neighbors' patios.

  - Even without an honest rendering of this tight east-west corridor, aerial images on pages 8, 14 and 62 of the Revised Plan show the horizontal scale disparity between Lot 57 South and Grand View – a disharmony that runs afoul of the Master Plan.

  - The image on page 73 of the Revised Plan is skewed to ignore Grand View, giving an artificial impression of space, light and access. The actual layout would be much tighter, at just 43-50 feet separation according to Bear's own renditions.

The Town should reject the proposed development on Lot 57 outright, or at a minimum disallow the outsized structure on Lot 57's South arm and require more horizontal clearance between Lot 57's North structure and Grand View 548.

Thank you for considering our position.

Respectfully,

Kyle Levine

Kyle B. Levine
for Blanche Neige LLC

Robert P. Warren
550 Snow King Loop, Apt 504
Jackson, Wy 83001

April 8, 2025

Mr. Tyler Valentine
Senior Planner, Town of Jackson Planning and Building Department
Via email to: tvalentine@jacksonwy.gov

RE: Bear Development Proposed Plans for Snow King Condominiums Lots 53, 57, 58

Dear Mr. Valentine,

As a resident of Jackson and an owner of a Grand View Condominium, I want to reiterate my vigorous opposition to the resubmitted application and plans of Bear Development, LLC, a Wisconsin developer (the "Applicant") for Snow King Condominiums, Lots 53, 57 and 58 (the "Plans"). The applicant's newly submitted plans are at sum an obvious transparent attempt to deliberately mislead the Planning and Town Council both by its "revisions" and proffered drawings.

To be specific, as an owner in Grand View Building 550, I again strenuously object to the bulk and scale of Lot 53's proposed building which will tower over my condominium. There is nothing in the Applicant's revised Plans which addresses the fact that as proposed the Lot 53 Building will meaningfully dwarf Grand View building 550. Its "new" Plans simply fail to reduce in any respect the size of the building on Lot 53 – obviously a misguided assessment that it could simply just muscle the Plans through municipal examination by indulging in the misguided presumption that it would not be serious scrutinized.

What brings the Applicant's greed and sleight of hand into clear focus is the way it yet again presents the visible depictions of its Plans. By grossly distorting the size of these buildings in its pictural renditions, the Applicant tacitly acknowledges that it does not want the town to recognize how outsized they are. There is no other reason to misrepresent the size and structure of the

proposed development other than to believe that no one will carefully probe their Plans.

Among other things, the applicant is in direct violation of the Snow King Master Plan in that the Applicant did not provide for any vegetation between their buildings and the sidewalks. To meet the Master Plan's requirement of having room for vegetation next to their building, the Applicant's apparent solution is to now simply eliminate the sidewalks. Pedestrians, therefore, walking up from the hotel or parking to visit one of the 72 condominiums, will need to walk in the road!

Moreover, by its size alone, the Lot 53 building will create a sunless valley between it and my unit. Without a doubt, the Lot 53 building violates the bulk, scale and character of Grand View's master plan upon which I relied when I first purchased my condominium.

Unfortunately, Applicant is an out of state developer with little regard for our community which is evidenced by its total lack of appreciation of how its Plans will impact Jackson and the surrounding Snow King condominium environment. It is abundantly clear from the size and scope of its Plans that the Applicant is merely concerned about how many apartment units, buildings, occupants and vehicles it can pack into Lots 53, 57 and 58.

It is extremely obvious as well that the Applicant's sole objective is simply to make as much money as possible -- to get the largest possible return on its investment -- with utterly no regard for the town of Jackson's surrounding communities, its natural beauty and the substantially increased strain it will place on our municipal services and infrastructure.

Also, the Plans place a huge increasing revenue burden on the citizens of Jackson with an inevitably expanding demand for municipal services like water, sewage, electrical service and traffic control. Also, it is certainly foreseeable that if this proposed project ever caught fire either internally or because of a forest fire, such an out-of-control conflagration would certainly engulf not only the surrounding condominiums, but also the houses and subdivisions below and others close to town – especially if driven by strong winds.

And, if anyone thinks that East and West Snow King Road and US 191 are parking lots between the hours of 3:30 pm and 6:00 pm, then this Plan with all its residents and vehicles, will make these roads at times simply impassable for Jackson residents -- especially those living on either side of these roadways which for many is their only way out.

The Grand View Condominium Association has submitted a letter objection to significant aspects of the Plans and has addressed the Applicant's failure to comply with the requirements of the Snow King Planned Resort District Master Plan. Plainly stated, the Plans are noncompliant with the overall Master Plan and are certainly not in the best interest of the Jackson community.

I again respectfully ask the Town of Jackson to reject the revised proposed Plans outright. We as residents should not aid and abet Applicant's outright greed and allow our town to be despoiled by outsiders who want to forever change the character of our community while lining their own pockets and then simply moving on without looking back! The Snow King Resort District Master Plan must be adhered to and respected.

Thank you for your consideration.

Submitted By,

Robert Warren

Robert P. Warren
550 Snow King Loop, Apt 504
Jackson, Wy 83001

February 19, 2025

Mr. Tyler Valentine
Senior Planner, Town of Jackson Planning and Building Department
Via email to: tvalentine@jacksonwy.gov

RE: Bear Development Proposed Plans for Snow King Condominiums Lots 53, 57, 58

Dear Mr. Valentine,

As a resident of Jackson and an owner of a Grand View Condominium, I stand in vigorous opposition to the application and plans of Bear Development, LLC, a Wisconsin developer (the "Applicant") for Snow King Condominiums, Lots 53, 57 and 58 (the "Plans").

To be specific, as an owner in Grand View Building 550, I strenuously object to the bulk and scale of Lot 53's proposed building which will tower over my condominium. As currently proposed, the Lot 53 Building will be more than twice the size of Building 550. Moreover, by its size alone, the Lot 53 building will create a sun less valley between it and my unit as well as seriously impinging upon my pedestrian walkway. Finally, the Lot 53 building violates the bulk, scale and character of Grand View's master plan upon which I relied when I first purchased my condominium.

Unfortunately, Applicant is an out of state developer with little regard for our community which is evidenced by its total lack of appreciation of how its Plans will impact Jackson and the surrounding Snow King condominium environment. It is abundantly clear from the size and scope of its Plans that

the Applicant is merely concerned about how many apartment units, buildings, occupants and vehicles it can pack into Lots 53, 57 and 58.

The Applicant's sole objective is simply to make as much money as possible -- to get the largest possible return on its investment -- with utterly no regard for the town of Jackson's surrounding communities, its natural beauty and the substantially increased strain it will place on our municipal services.

What brings the Applicant's greed and sleight of hand into clear focus is the way it presents the visible depictions of its Plans. By grossly distorting their size in its pictural renditions, the Applicant tacitly acknowledges that it does not want the town to recognize how outsized buildings are. There is no other reason to misrepresent the size and structure of the proposed development other than to believe that no one will carefully probe their Plans.

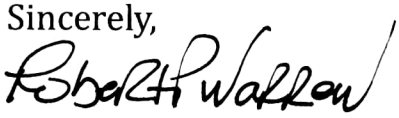
Also, the Plans place a huge increasing revenue burden on the citizens of Jackson with an inevitably expanding demand for municipal services like water, sewage, electrical service and traffic control. Also, it is certainly foreseeable that if this proposed project caught fire either internally or because of a forest fire, such an out-of-control fire would certainly engulf not only the surrounding condominiums, but also the houses and subdivisions below and others close to town – especially if driven by strong winds.

And, if anyone thinks that East and West Snow King Road and US 191 are parking lots between the hours of 3:30 pm and 6:00 pm, then this Plan with all its residents and vehicles, will make these roads at times simply impassable for Jackson residents -- especially those living on either side of these roadways which for many is their only way out.

The Grand View Condominium Association has submitted a letter objection to significant aspects of the Plans and has addressed the Applicant's failure to comply with the requirements of the Snow King Planned Resort District Master Plan. Plainly stated, the Plans are noncompliant with the overall Master Plan and are certainly not in the best interests of the Jackson community.

I respectfully ask the Town of Jackson reject the proposed Plans outright. We as residents should not aid and abet Applicant's outright greed and allow our town to be despoiled by outsiders who want to forever change the character of our community while lining their own pockets and then simply moving on without looking back! Thank you for your consideration.

Sincerely,



Robert P. Warren

From: noreply@civicplus.com
To: Town Council
Subject: Online Form Submittal: Palmers Email the Town Council
Date: Monday, May 26, 2025 6:06:50 AM

Email the Town Council

Email Content:	My wife and I put a substantial amount of our net worth at risk when we purchased Grand View Condo 494 in August of 2020. We decided on that condo because we did our due diligence and reviewed the plans for Lot 57 at Snow King Resort which would prevent unreasonable buildings to be built that were not in bulk, scale, and character with Grand View. This protected our investment and maybe just as importantly, the character of what one would expect in a resort in the historic town of Jackson which I have spent much time in for over 50 years. Now we are seeing that everything that is being requested to be approved for Lot 57 violates everything we read and saw in the Master Plan. When I saw the plan for Lot 57, I was horrified. I thought, “How in the world could this be approved when a reasonable person would not even entertain the thought of having a building that does not meet the specific requirements stated in the Master Plan?” This is a massive building, and in no way, shape or form complies with the Master Plan. I thought one of the reasons that we have a Master Plan was to prevent this very thing from happening. The plan says that any buildings on Lot 57 must be compatible in bulk, scale and character with Grand View. That word “must” is very clear. Of course it requires someone’s judgement to approve or disapprove. To me, this judgement call is as clear as day. How can we say with a straight face that a building that is twice as high as the back of Grand View 548, has nearly four times the number of units, has a footprint that allows no setbacks from property line and extends three times in length versus Grand View buildings, is not in violation of the very plan which is supposed to protect this kind of thing from happening? Therefore, these plans for Lot 57 MUST be rejected so we continue to remain true to the Master Plan which was well thought out and done for a reason.
Your Name:	Chris & Mandy Palmer
Your Company Name:	*Field not completed.*
Your Phone Number:	703-928-3470
Your Email Address:	chris.mandy@cox.net

Your City:	Jackson
Your State:	WY
Your Zip Code:	83002

Email not displaying correctly? View it in your browser.

From: chris.mandy
To: Tyler Valentine
Subject: New Snow King Development
Date: Thursday, February 20, 2025 1:22:50 AM

Mr. Valentine,

As owner of 549 Snow King Loop, Unit 494, I fully support the issues our HOA board has raised regarding the proposed construction behind our units. This proposed construction on Lot 57 obviously violates the restrictions on page 77 to be compatible with Grand View in bulk, scale, and character. If this is allowed to go through, the result would be a towering monstrosity of buildings that diminish the whole look of the mountain and violate well thought out and purposeful restrictions. Please make the right decision on this proposed construction and do not allow it to go through.

Sincerely,
Chris Palmer

From: Deborah Wente
To: Tyler Valentine
Subject: Proposed Snow King development
Date: Thursday, February 20, 2025 8:45:30 AM
Attachments: SK Master Plan - Page 77 .jpg.msg
Lot 57 South-GV 548 .jpg.msg
Lot 57 North-GV 548 .jpg.msg

John and Deborah Wente
548 Snow King Loop Road
Unit 482
Jackson, WY 83001

February 20, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning and Building Department
Tvalentine@jacksonwy.gov

Dear Mr. Valentine,

We understand that the town is evaluating a proposal by Bear Development,LLC to build a multi unit condominium complex adjacent to the Grandview condominiums in the Snow King resort district.

We own Grandview unit 482 which is located on the east side of the building.

Please consider this letter as opposition to the Bear Development plans for lots 53 and 57 of the Snow King Resort. The proposed buildings are massive in comparison to the existing condominiums in our neighborhood. The buildings and retaining wall create significant, negative impacts to Grandview and the surrounding areas and do not meet the master plans requirements

for bulk, scale, or character as explained more fully in the letter from Richard Lurie, President of the Grandview Condominium Association. We ask that these plans be denied until changes are made to bring the proposed development into compliance with the master plan.

In 2006 when we purchased our unit in building 548 of Snow King, we carefully reviewed all associated documentation. This included the Snow King master plan, please see attached. We understood that there would be eventual development near our unit consistent with what was presented in the master plan and approved by the Town of Jackson. As stated in the master plan, units will be developed to fit in with the bulk, scale, and character of the existing Grandview condominiums and Grandview Lodge.

We strenuously object to the current plan. These buildings are much bigger than the current units and are inconsistent with the Snow King master plan. We will completely lose visibility of Snow King Mountain. One of our favorite things is to sit on the back deck and look up at the mountain, there was never any expectation we would lose this privilege. Please reference the attached renderings to demonstrate how overshadowed our building would be with the lot 57 South building as proposed. Our beautiful view of the mountain would now be a view of a garage.

Again, we understand that these properties were planned for development. However, we had absolutely no expectation they would be so completely oversized compared to the current building.

If this development as proposed is allowed to proceed, the Snow King master plan becomes a useless document that no potential

buyer in the Resort District can rely upon.

We respectfully request that the town of Jackson reject the proposed plan.

John and Deborah Wente

Get Outlook for iOS

From: Dennis Law
To: Tyler Valentine
Subject: Bear Development"s Proposed development at Snow King Resort
Date: Thursday, February 20, 2025 11:47:47 AM

Hello Tyler,

My name is Dennis Law, I am writing this letter as an owner, with interest in a number of the condominiums in the Grand View Condominiums, through my father Creed Law's trust.

We strongly object to Bear Development's application for the development of lots 53 and 57 of the Snow King Resort. The proposed buildings are massive and out of place when compared to the existing condominiums in our neighborhood. The buildings and the large retaining wall associated with them will create significant negative impacts to Grand View and the surrounding areas. Furthermore, the proposed development does not appear to meet the Master Plan's requirements for the size, scale, character and design, as explained in more detail by Rich Laurie, President of the Grand View Condominium Association.

We ask that these plans and the associated development be denied until changes are made which will bring the proposed development into compliance with the Master Plan and the surrounding area.

Thank you very much for your consideration.

Sincerely,

Dennis C. Law

Donald O'Shei

548 Snow King Loop, Unit 484
Jackson, WY 83001
415-572-3699
doshei@hotmail.com

Apr 9, 2025

Tyler Valentine

Senior Planner
Town of Jackson Planning and Building Dept.

tvalentine@jacksonwy.gov

Dear Mr. Valentine,

Attached please find my letter of February 19, 2025 laying out a number of objections to the Bear Development, LLC plans for Snow King development. Unfortunately, the minimally revised current proposals not assuaged any of my objections in any meaningful way.

Looking at the revised artists renderings (which are designed, I believe, to minimize the perceived impact of the proposed structures in a manner not at all consistent with the true eventual actual impact) the vertical and horizontal mass of the structure proposed for Lot 57, the mountain modern style and the offsets are a total violation of the agreed Snow King Resort District Master Plan which states:

The remaining developable lots within Sub-Area 3 consisting of Lots 53, 57, and 58 located to the South of the existing Grand View Condominiums will be developed to fit in with the bulk, scale, and character of the existing Grand View Condominiums".

Any contention that this structure follows the master Plan is at best disingenuous and at worst intentionally deceitful. I can only reiterate that the objections I raised in my previous letter remain in full force. I repeat that:

Under no circumstances can these structures be approved or the Master Plan requirements will be rendered meaningless and the existing homeowner's interests will be disregarded and their property values damaged.

Nothing in the revised proposals ameliorates those objections and concerns.

Sincerely yours,



Donald O'Shei

Sincerely yours,



Donald O'Shei

Donald O'Shei

548 Snow King Loop, Unit 484
Jackson, WY 83001
415-572-3699
doshei@hotmail.com

February 19, 2025

Tyler Valentine

Senior Planner
Town of Jackson Planning and Building Dept.

tvalentine@jacksonwy.gov

Dear Mr. Valentine,

I have been following, with great interest the ongoing Bear Development, LLC, fiasco. To say I am deeply concerned is a drastic understatement. I have been the owner of Unit 484 in 548 Snow King Loop for over 15 years. Unit 484 is not a rental property and is my primary residence. During that entire period of 15 years Snow King has used the Lot 57 footprint as an equipment dumping ground and to store leaky diesel fuel tanks, creating an eyesore and negatively impacting our enjoyment, use and value of my property. Whenever I raised these issues, I was reassured that Lots 57 and 58 would be imminently redeveloped from this unsightly use, in accordance with the Snow King Resort District Master Plan and that these negative impacts would be mitigated in a manner "spatially and stylistically consistent with existing condominiums and the Grand View Lodge." We were, in fact, regularly pointed to the approved Master Plan's restrictions and illustrations of approved structures, which, were be relied on to protect our future interests

Imagine my consternation, when I discovered that Bear Development, LLC intended to build facilities that clearly diverge from the past approved renderings and footprints by a egregious amount, in violation of the Snow King Resort District Master Plan and that the improperly constituted Snow King Resort District Board had given its approval of said violation to the detriment of the existing home owners in a back door deal of some kind.

The proposed structure cannot be said to meet the Master Plan requirements in any way. The proposed Lot 57 building towers over the existing units. It's roof is approximately double the height of Unit 548. As seen in the artists rendering it is a four story building facing, across a minimal set back, a two story (from the rear aspect) structure. It is a mountain modern style design facing its western aesthetic "neighbors". It is a total mismatch of character. The non-existent setback places the main "party area" balconies directly across and much too close to the rear residential bedrooms of our unit in a manner guaranteed to raise conflict when ski vacation or summer short term renters decide to entertain themselves or guests. This doesn't even consider traffic impact. Clearly, the developers dealt with this concern for their potential unit owners by having much larger separation on the uphill side of the proposed structures.

I quote the final Snow King Master Plan:

"Specific Considerations Related to Sub-Area 3 (page 70)

The remaining developable lots within Sub-Area 3 consisting of Lots 53, 57, and 58 located to the South of the existing Grand View Condominiums will be developed to fit in with the bulk, scale, and character of the existing Grand View Condominiums"

It is clear to me, and I believe to any uninterested observer, that these proposed structures do not in any way or to any degree fit in with the bulk, scale and character of my property and that they grossly violate both the letter and the spirit of the Master Plan that was approved by the parties and relied on by the existing homeowners.

Under no circumstances can these structures be approved or the Master Plan requirements will be rendered meaningless and the existing homeowner's interests will be disregarded and their property values damaged.

Sincerely yours,



Donald O'Shei

Donald O'Shei

548 Snow King Loop, Unit 484
Jackson, WY 83001
415-572-3699
doshei@hotmail.com

February 19, 2025

Tyler Valentine

Senior Planner
Town of Jackson Planning and Building Dept.

tvalentine@jacksonwy.gov

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Imagine my consternation, when I discovered that Bear Development, LLC intended to build facilities that clearly diverge from the past approved renderings and footprints by a egregious amount, in violation of the Snow King Resort District Master Plan and that the improperly constituted Snow King Resort District Board had given its approval of said violation to the detriment of the existing home owners in a back door deal of some kind.

The proposed structure cannot be said to meet the Master Plan requirements in any way. The proposed Lot 57 building towers over the existing units. It's roof is approximately double the height of Unit 548. As seen in the artists rendering it is a four story building facing, across a minimal set back, a two story (from the rear aspect) structure. It is a mountain modern style design facing its western aesthetic "neighbors". It is a total mismatch of character. The non-existent setback places the main "party area" balconies directly across and much too close to the rear residential bedrooms of our unit in a manner guaranteed to raise conflict when ski vacation or summer short term renters decide to entertain themselves or guests. This doesn't even consider traffic impact. Clearly, the developers dealt with this concern for their potential unit owners by having much larger separation on the uphill side of the proposed structures.

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It is clear to me, and I believe to any uninterested observer, that these proposed structures do not in any way or to any degree fit in with the bulk, scale and character of my property and that they grossly violate both the letter and the spirit of the Master Plan that was approved by the parties and relied on by the existing homeowners.

Under no circumstances can these structures be approved or the Master Plan requirements will be rendered meaningless and the existing homeowner's interests will be disregarded and their property values damaged.

Sincerely yours,



Donald O'Shei

Grand View Homeowners Association

Jackson, Wyoming

May 23, 2025

RE: Revised Bear Development Proposed Plans Lot 57

Town of Jackson - Town Council

The Grand View Condominium Association has reviewed the revised application and plans for Snow King Condominiums Lots 57 submitted by Bear Development, LLC, a Wisconsin developer (the "Applicant"). The Association respectfully submits that the Applicants revised plans continue to fail to comply with the requirements of the Snow King Planned Resort District Master Plan. We take strong opposition to the Planning Commission's approval of the revised Lot 57 plans and plan to present our objections during the Public Comment section of the Town Council Meeting on June 2nd.

The Association's primary objection is to the Lot 57 south building that continues to be incompatible in bulk, scale and character with Grand View Condominiums which is a specifically stated requirement of the Master Plan. See page 70 of Master Plan (page 74 in PDF)

Issue 1: Plans Continue to not Adhere to the Requirements of the Snow King Master Plan

The Master Plan provides a depiction of what was previously approved and could be anticipated and approved for Lot 57 – the "development predictability" that is a key component of the Master Plan. SKRMA always recommends prospective buyers in the Resort District to review the Master Plan to understand what has been approved to be built. The depictions and illustrations show a 25,393 square foot building approved by the Town of Jackson for Lot 57 building (Exhibit 1 below). A very reasonable building is depicted and compatible in bulk, scale and character with Grand View. Buyers of Grand View units therefore made their purchase decision based upon what they saw in the Master Plan.

Instead, the Applicant has decided to move 18,000 sq ft and added a second massive building – over 70% growth of what is approved in the Master Plan. The approval of this lot needs to be based upon as if it were purchased on a standalone basis and without the additional unapproved 18,000 sq ft. Lot 57 was never meant or illustrated to have two buildings on it.

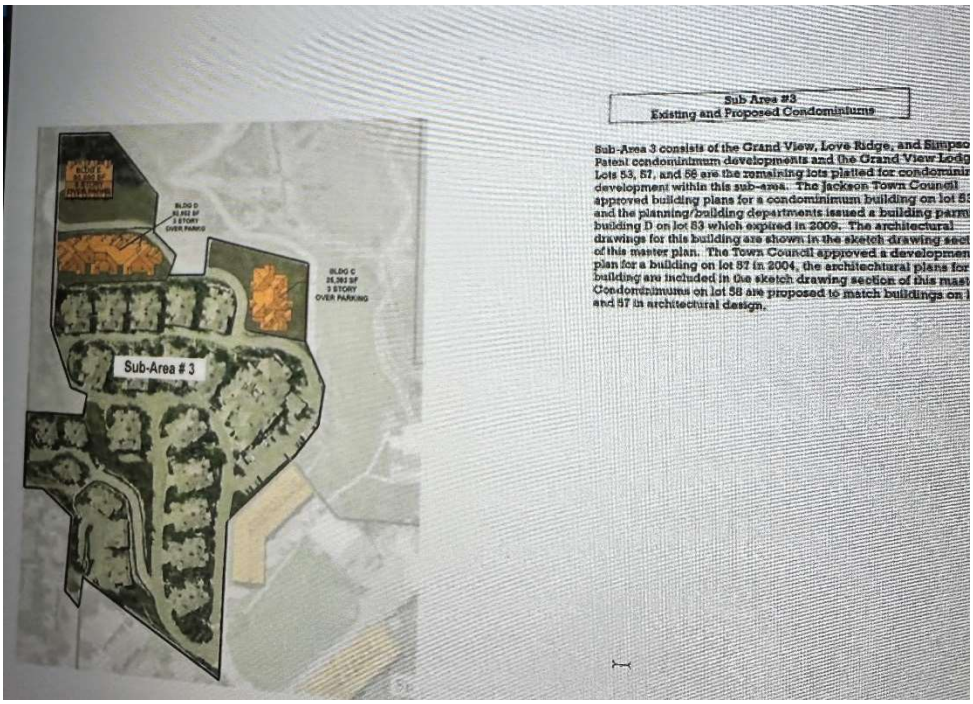


Exhibit 1 Snow King Master Plan illustration for Lot 57 – Single Building

I would also like to make the point that words placed in the Master Plan matter just as much as numbers. When the plan says any buildings on Lot 57 must be compatible in bulk, scale and character with Grand View (Page 70 of the Master Plan), these words matter and it requires a clear judgement call. Fortunately, the call for the Town Council is very easy. The Applicants south building being twice as high as the back of Grand View 548, containing almost four times the number of units, foot print allows no setbacks from property line, no room for sidewalks and extends three times in length than Grand View buildings clearly violate these words.

If the revised Lot 57 plans are approved in their current form, a precedent will be set in the Snow King Resort District to allow for development of a size and character that is not consistent with the Master Plan Design Guidelines and was never contemplated in the Master Plan. Such an approval will create confusion and ambiguity moving forward, and will ultimately undermine the Master Plan itself.

Issue 2: Non-Responsive to Requested Reductions in Bulk and Scale

On the 16th of April, the Applicant's proposed plans for Lot 57 were rejected by the Planning Commission with the specific instructions as follows:

> *In addition, the applicant shall make design changes that further reduce the bulk and scale of the northeast corner of the south building. Suggested changes could include, but are not limited to, removing a section of building on the east side, shifting the building farther south, removing a partial story, shortening the roof overhang above the easternmost third-*

floor unit, reducing square footage, modifying the floor plans to create larger step-backs on upper units, and/or reducing unit counts.

The Applicant's response was woefully inadequate and essentially did almost nothing to address the issues identified:

- A removal of a bedroom of 517 square feet on the fourth floor of a portion of the northeast corner of the south building which represents a 2% reduction, in no way addresses the requirement to reduce the bulk and scale of the south building.

    - **How can a 2% reduction in the size of a building change the decision from it violates the <u>bulk, scale and character</u> requirement in the Master Plan to now it complies with the Master Plan? This is exactly the decision made by Town Planning. It defies logic.**

- The rendering (Page 7) finally provided by the Applicant in the revised package is so deceptive it is essentially dishonest. They created the rendering from a position a considerable distance from the south building to hide its massiveness. It is also an admission, in our opinion, by the Applicant that it <u>does violate the Master Plan</u> as they are trying to hide the actual bulk and scale of the south building with this deceptive rendering.

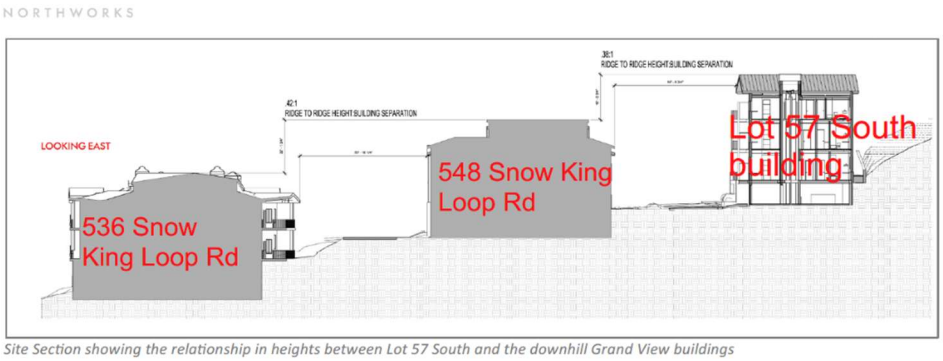
- The rendering produced by Grand View HOA (Exhibit 2) is still an accurate depiction of the bulk and scale of the south building, the total footprint of which has not changed. If you remove the upper left-hand corner single bedroom which is all the Applicant proposed to do in their latest revision, you would not be able to even see the change from the road below.

- The rendering below done to scale shows the south building continues to violated the Master Plan requirement to be compatible with Grand View in bulk, scale and character. Just look at the rendering below. That is Grand View 548 on the right and the extremely large Bear Dev south building on the left. It is 4 stories vs. 2 stories, almost twice as high, totally different scale (15 units vs. 4 units) and a totally different character of building vs. Grand View and the entire residential area of the resort district!



Exhibit 2 Bear Dev south building on left. Grand View 548 on right

Applicant continues to claim the south building is compatible with Grand View in bulk and scale. See Exhibit 3 below produced by the Applicant and which we will show is totally inaccurate. The actual spacing between the Applicant's south building and 548 is shown in Exhibit 2 above which was done from actual drawings. The actual spacing between Grand View 548 and Love Ridge 536 is shown in an actual picture in Exhibit 4 below. Again, the Applicant's depiction of compatibility is deceptive and totally inaccurate.



Site Section showing the relationship in heights between Lot 57 South and the downhill Grand View buildings

Exhibit 3 Applicant's Claim spacing and heights are the same.



Exhibit 4 – Actual view between Love Ridge on left and Grand View on right

Issue 3: Non-Responsive to Pedestrian and Vehicle Issues

We continue to point out the Applicant's unwillingness to address the pedestrian and vehicle issues. The Master Plan specifies that the height of buildings shall not overwhelm people walking beside the buildings and must not overwhelm pedestrian scale. (p. 57, 59)

- A total Canyon effect will result between the south and north buildings. At the closest point, it is estimated that the buildings 55' and 35' respectively with less than 10' between them and at the sidewalk level around 6' between them. The same Canyon effect will be present between the south building and Grand View 548. This is totally pedestrian unfriendly which clearly violates a requirement in the Master Plan

- The Applicant's initial plan was rejected as they had not met the Master Plan requirement to have vegetation next to their buildings. Rather than reduce the size of their buildings, they removed the sidewalks on Lot 57 to meet this requirement. See Exhibit 5 below. Does one actually think pedestrians will cross the road, walk up on the Grand View sidewalk for 50' and then cross back to Lot 57? This is totally unrealistic and actually silly. Foot traffic for 60 condominiums will be walking in the road to get to the Applicant's buildings. Totally unsafe and again a total violation of the required pedestrian accommodations in the Master Plan.

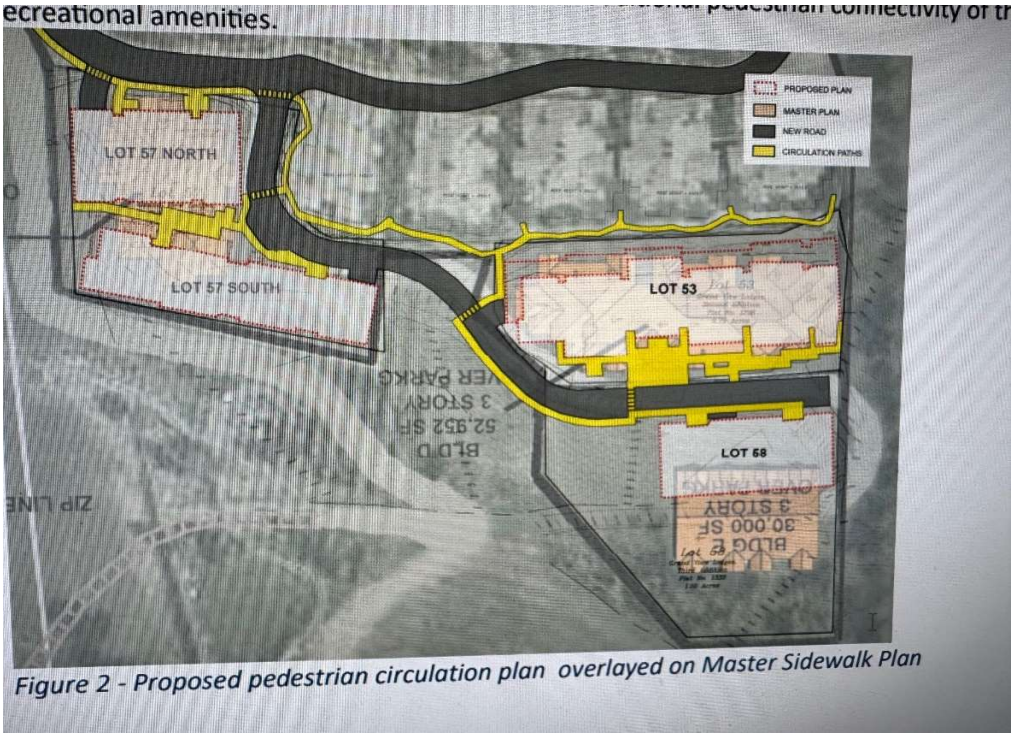


Figure 2 - Proposed pedestrian circulation plan overlayed on Master Sidewalk Plan

Exhibit 5

- The Applicant's movement of 18,000 sq ft and adding a second building is taking up so much of the .83-acre lot there is absolutely no allowance for visitor or service unit parking. Many of the planned units only have one parking space. Visitor and service unit parking will take place all along the road and at opportunistic spots at not only Bear Dev buildings but Grand View/Love Ridge buildings as well.

<u>Summary</u>

The owners in Grand View had relied upon the Master Plan to be followed when they made their purchase decision. It is absolutely unfair to these owners to allow Bear Dev. plans for an unanticipated south building on Lot 57 that towers over their buildings. The bulk, scale, and character of the south building is not compatible with existing development, will dwarf the pedestrian scale in Sub-Area, and is squarely at odds with the Master Plan goals of balance and predictability.

Exhibit 6 is provided to depict how compatible the Applicant's north building is to Grand View with the elimination of the south building. This is how the Master Plan had envisioned Lot 57.



Exhibit 6

With the requested rejection of the plans for Lot 57, the Applicant still has a very viable plan to move forward. They can immediately start with the plans approved for Lots 53 and 58 while they spend the additional time and energy needed to redesign Lot 57 to meet the requirement of the Snow King Master Plan.

Respectfully Submitted,

Rich

Richard Lurie
President
Grand View Condominium Association

Grand View Homeowners Association

Jackson, Wyoming

February 18, 2025

Tyler Valentine
Senior Planner, Town of Jackson Planning and Building Department
Via email to: tvalentine@jacksonwy.gov

RE: Bear Development Proposed Plans for Snow King Condominiums Lots 53, 57, 58

Dear Mr. Valentine,

The Grand View Condominium Association (the "Association") has reviewed the application and plans for Snow King Condominiums Lots 53, 57 and 58 (the "Plans") submitted by Bear Development, LLC, a Wisconsin developer (the "Applicant"). The Association respectfully submits that certain, significant aspects of the Plans fail to comply with the requirements of the Snow King Planned Resort District Master Plan (the "Snow King Master Plan" or the "Master Plan"). The Association's primary objection is to (i) the incompatible size, bulk and scale of the development proposed for Lots 57 and 53, and (ii) the retaining wall proposed for the south side of Lot 53, (all as described in more detail below.

The Association has been urged to consider that the newly submitted Plans are a significant improvement over plans previously submitted by Bear Development that the Town deemed grossly inadequate. However, this is not a relevant factor for the Town's evaluation. The Plans remain noncompliant with the Master Plan as further detailed below and we request the Town of Jackson reject the proposed Plans.

First, SKRMA's approval of the Applicant's plans was Invalid

- SKRMA sent out the Applicant plans for Lots 53, 58 and 57 to all SKRMA members on the 21st of May, 2024. At the SKRMA Board meeting of May 23rd (2 days later), the plans were approved. This allowed only eighteen (18) hours to review a 70-page design plan.
- This is the largest development project in the history of the Resort District, valued at over $200 million and we requested to see a professional independent review of the plans. Our request was ignored
- Grand View Condominium Association then reviewed the plans on their own and found the plans violate the Snow King Master plan as we have articulated in this letter. We conveyed this to SKRMA in writing and they did not respond.

- SKRMA took another vote and again approved the plans with 6 yes votes (3 from Snow King Mountain and 3 from the Snow King Hotel). One no vote was registered by the Residential Class representative.
- We would like to point out the SKRMA Bylaws are in violation of the Snow King Master Plan which calls for the allocation of Board seats based upon assessed valuation. Please see Section XI of the Master Plan. In direct conflict with this requirement, the SKRMA Board's Bylaws stipulate 3 seats to Snow King Mountain and 3 seats to Snow King Hotel and the Residential Class was given just 1 seat.
    - Currently the Residential Class assessed valuation is approximately $15 million.
    - The Snow King Hotel and Conference Center has an assessed valuation of $3.2 million.
    - Snow King Mountain assessed valuation is estimated at $2.9 million.
    - The total for both the Hotel and Mountain comes to $6.2 million and therefore the Residential Class has an assessed valuation of 2.5 times the valuation of the Hotel and Mountain combined.
    - According to the Master plan the Residential Class should have at least twice the number of board seats that are assigned to the Hotel and the Mountain.
- We therefore believe the approval by the SKRMA board is invalid.

Second, the Plans do not Adhere to the Requirements of the Snow King Master Plan.

Background: Properties within the Snow King Planned Resort District are governed by the Master Plan, and all development in these Sub-Areas must comply with the Master Plan's terms and conditions. Both Grand View Condominiums and Lots 53, 57 and 58 lie within Sub-Area 3. The sections of the Master Plan most applicable to the Bear Development project are as follows:

1. One of the main purposes of the Master Plan is to provide the community limits of development predictability. (p. 2)

2. The Master Plan includes Master Site Plans and maps to illustrate proposed development and the site characteristics for each Sub-Area. In these site plans, square footage for the buildings on each of Lots 53, 67, and 58 are planned as follows. (pp. 3, 15)
    - Lot 53 -- 52,952 sf
    - Lot 57 -- 25,393 sf
    - Lot 58 – 30,000 sf

3. A theme in the Master Plan is balance. Balance includes the scale and character of the development and how well it fits into the fabric of the community and the landscape. (p. 30)

4. The Design Guidelines established by the Master Plan require that projects adhere to all of the following:

- Site planning and architecture shall assemble a built environment that connects buildings, spaces and structures through common scale, design, and materials. (p. 57)
- There shall be a visual continuity among the resort structures and design elements…development shall be compatible with the surrounding built and natural environment in both scale and character. (p. 57)
- The height of buildings shall not overwhelm people walking beside the buildings and must not overwhelm pedestrian scale. (p. 57, 59)
- The bulk and scale of individual buildings within the Resort shall achieve compatibility with other structures within the Planned Resort when resort development is completed (p. 58)
- **Specifically stated in the Master Plan, Lots 53, 57, and 58 shall be developed to fit in with the bulk, scale, and character of the existing Grand View Condominiums and Grand View Lodge.** These buildings can be up to three stories in height with a basement and with massing, articulation, openings, and step backs used to reduce bulk and mass. Buildings on these lots may consist of one single building complex or multiple buildings in order to best create a design that fits well with the topography and neighboring condominiums… (p. 70) (emphasis added)
- The Master Plan includes Sketch Plans for Lots 53 and 57 which show buildings that were previously approved by the Town of Jackson as compliant with the Master Plan and represent what was intended/planned for these Lots.

We believe the Applicant is aware his plans do not comply with the Master Plans requirements to be compatible in bulk, scale and character with Grand View and we will provide two examples.

Issue 1. The Lot 53 Building Placement and Spacing does not Comply with the Master Plan

1. In evaluating the Plans for Lot 53, it is critical to note that the renderings as presented in the Bear Development application are inaccurate, insomuch as they fail to show the correct scale of the proposed development. Grand View had asked the Applicant for a rendering showing what the space between the proposed building on Lot 53 and Grand View buildings 550, 551 and 552 will look like. The Applicant provided the attached rendering "Lot 53-GV Rendering." On computing the scale of the rendering, the Grand View buildings are approximately the correct size, but the Applicant's building is actually **TWICE** as high as is depicted in the rendering. This is example 1 of the Applicant's awareness of non-compliance.

2. On page 98 of the Plans, the Applicant provided the only "to scale" drawing with the view of the sidewalk between the proposed building on Lot 53 and the Grand View buildings on the left. (Pages from P24-168, P24-174, P24-175 TransMemo.pdf, attached to this correspondence). From the drawing you can see space between the Lot 53 structure and the Grand View buildings is approximately 24'. In contrast, the space planned between the

proposed Lot 53 building and the Lot 58 building is approximately 75 feet. The minimal, restrictive space between Grand View as compared with the three-times greater space between the buildings on Lot 53 and 58 should not be allowed, as the openings and design do not fit well with the topography or the neighboring condominiums as specifically required under the Master Plan, and create a clear, detrimental impact to Grand View.

Issue 2. The Lot 53 "Retaining Wall" and construction will obstruct access to and from Grand View Condominiums and does not comply with the Master Plan.

1. To maximize the size of their buildings and increase their height, the building plan for Lot 53 has specified a 10' retaining wall on the border between Lots 53 and Grand View (see page 98 of the Plans). This brings the proposed total height of the building on Lot 53 to 64' feet (elevation 6,456 less 6,392), towering 40' over Grand View buildings 550, 551 and 552. The wall is proposed to be built almost touching the sidewalk that runs along the back of the Grand View buildings. A 10-foot-high wall touching the sidewalk where people walk is unacceptable. The wall creates safety issues, access issues, and will interfere with snow removal and ice mitigation, not to mention dwarfing the pedestrian scale emphasized in the Master Plan.

2. The Applicant has specified it plans to close the Grand View sidewalk, which has existed in its current location for close to 20 years, for the duration of the development, and over 90% is on Grand View's property. This closure violates the legal rights of Grand View Owners by cutting off access to the Condominiums along a route that has long been established. Applicant did not discuss placement of the retaining wall along the sidewalk nor obstruction of the sidewalk with the Grand View at any point.

Issue 3: The Plans for Lot 57 are not compatible with the requirements of the Master Plan because the massive buildings planned are approximately two times (2x) what was intended for Lot 57 and are not compatible in bulk, scale and character with the existing Grand View Condominiums or the rest of Sub-Area 3.

1. The proposed buildings on Lot 57 are 57 feet and 4 stories high and contain 27 units. As stated above, the Master Plan provides a depiction of what was previously approved and could be anticipated and approved for Lot 57 – the "development predictability" that is a key component of the Master Plan. SKRMA always recommends prospective buyers in the Resort District to review the Master Plan to understand what has been approved to be built. The depictions and maps show the planned and approved Lot 57 building to be 25,393 square feet (see attachment "Page 77 of Master Plan"). A very reasonable building is depicted and compatible in bulk, scale and character with Grand View. Instead, the Applicant is presenting two massive buildings containing 45,000 square feet – close to double what is included in the Master Plan. See attachment Lot 57 Bear Buildings. To

allow 45,000 sf of development on this Lot would render meaningless the maps and plans in the Master Plan and goal of development predictability.

2. Not only is this bulk, scale and character far beyond what would be considered predicable development under the Master Plan, but the size and massing do not fit with the adjacent Grand View Condominiums, as is required. The five Grand View buildings each contain 4 units, with maximum building heights of approximately 40 feet. Each Grand View Building is approximately 7,200 sf. On a per-acre basis, Lot 57's development is close to 50% more dense than Grand View's. The massive development proposed for Lot 57 is likewise not similar to, or compatible with, the rest of Sub-Area 3 which is comprised of all 3-story, smaller buildings. The new buildings will tower over the older buildings, creating a sharp contrast and a visible break in character.

3. The Lot 57 buildings will tower over the residential buildings to which they are adjacent and will overwhelm people walking beside the buildings and the pedestrian scale, which is specifically disallowed under the Master Plan. The massing, articulation, and step backs do nothing to reduce bulk and mass and fail to consider the pedestrian scale.

4. In light of its concerns about the above size, bulk and scale of the Lot 57 buildings, Grand View asked the Applicant for scaled drawings showing Grand View building 548 with the Applicant buildings on Lot 57. The Applicant refused to provide the requested drawings, (example 2 of Applicant's awareness of non-compliance) and Grand View therefore hired Y2 Consulting and Cratif, at its own expense, to produce renderings requested of Applicant.

    a. The rendering entitled "Lot 57 South-GV 548" is attached to this letter and supports the objections raised in this section. The Lot 57 South building towers 31' over Grand View 548 and is over <u>double the height of Grand View 548 from the ground level.</u> A theme in the Master Plan is balance. Balance includes the scale and character of the development and how well it fits into the fabric of the community and the landscape. This rendering clearly demonstrates the Applicant's total disregard of that requirement.

<u>Summary</u>

The Association understands that the Applicant has a right to build reasonable structures on their three lots. We only request that the buildings comply with the terms, conditions, and intent of the Master Plan. The buildings must be consistent with what was anticipated in the Master Plan (on which owners within the Snow King Resort Area relied) and be compatible with the existing residential construction within Sub Area 3. The bulk, scale, and character of the Lot 57 buildings and the retaining wall on Lot 53 as detailed above are not compatible with existing development, will dwarf the pedestrian scale in Sub-Area, and are squarely at odds with the Master Plan goals of balance and predictability.

We believe compatibility can be obtained by making two changes:

1. The retaining wall as currently specified to raise the property level between Lot 53 and Grand View should not be allowed. The building planned for Lot 53 must be moved south (away from Grand View property) to provide a minimum of 50' between Grand View buildings 550, 551 and 552 and Lot 53 building. This will also allow 50' spacing between the Lot 53 building and Lot 58 building. The current line of trees planted along the stone wall and property line between Grand View and Lot 53 must remain.

2. Only the Lot 57 North building, as proposed and previously approved by the Town of Jackson, may be built as illustrated on Page 77 of the Master Plan. See attached rendering entitled: Lot 57 North – GV 548. Elimination of Lot 57 South building restores balance, scale and character to Lot 57 with Grand View CA and was in clear violation of the Master Plan.

If the Plans are approved in their current form, a precedent is being set in the Snow King Resort District to allow for development of a size and character that is not consistent with the Master Plan Design Guidelines and was never contemplated in the Master Plan. Such an approval will create confusion and ambiguity moving forward, and will ultimately undermine the Master Plan itself.

Respectfully Submitted,

Rich

Richard Lurie
President
Grand View Condominium Association



SIDEWORKS

HDLA

LOT 53
RENDERING

L5.00



LEGEND

- (A) SIDEWALK
- (B) RETAINING WALL PLANTERS
- (C) ASPEN AND NATIVE SHRUB PLANTINGS
- (D) STAIRS

NTS

NORTHWORKS

1512 N. Throop Street
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Chicago, Illinois 60642
www.nwka.com

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HDLA

560 South
Glenwood
P.O. Box 1648
Jackson, WY 83001
307.739.1001

www.hdlajh.com

NO.	ISSUED DATE	ISSUED FOR
	10/02/2024	HOA PLANTING PLAN

Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

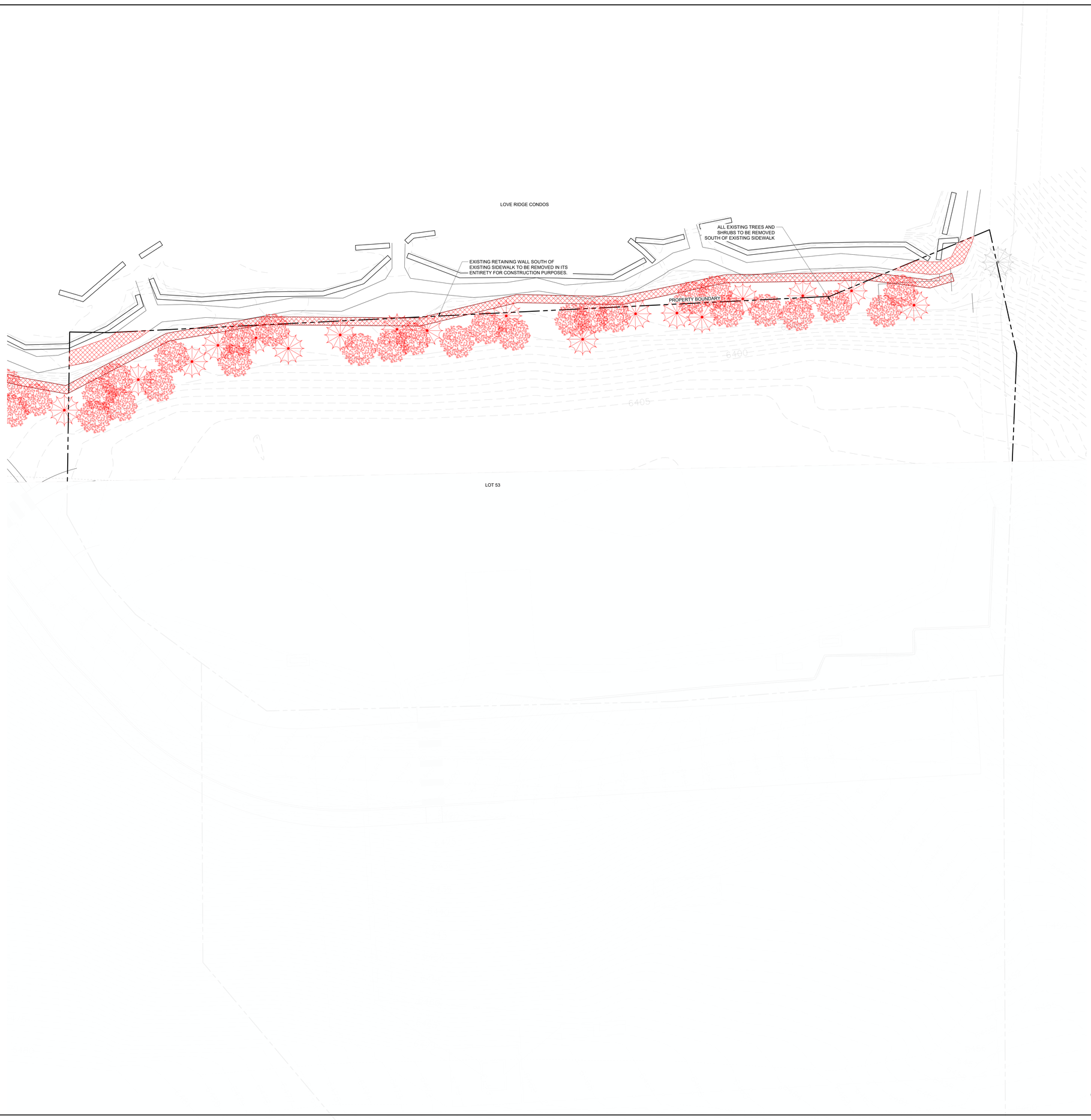
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 53 RENDERED PLAN

Drawing Name

L1.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- PAVERS
- PAVERS WITH SNOWMELT
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- RAISED PLANTERS
- EXTERIOR SITE LIGHTING

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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NO.	ISSUED DATE	ISSUED FOR
	10/02/2024	HOA PLANTING PLAN

Project
SNOW KING LOOP

653 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number
LOT 53
DEMO PLAN

Drawing Name
L2.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- PAVERS
- PAVERS WITH SNOWMELT
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- RAISED PLANTERS
- EXTERIOR SITE LIGHTING

PLANT SCHEDULE- LOT 53

TREES:

NAME	SIZE	CONT.	QTY
Quaking Aspen/ Populous tremuloides	3" Cal.	B&B	26

SHRUBS:

Native Shrubs- species TBD		5-6' H	96

GROUND COVERS:

Native Meadow Sod		SOD	1,650 SF

NORTH

0 5 10 20
ORIGINAL SCALE: 1"=10'

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NO.	ISSUED DATE	ISSUED FOR
	10/02/2024	HOA PLANTING PLAN

Project
SNOW KING LOOP

653 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

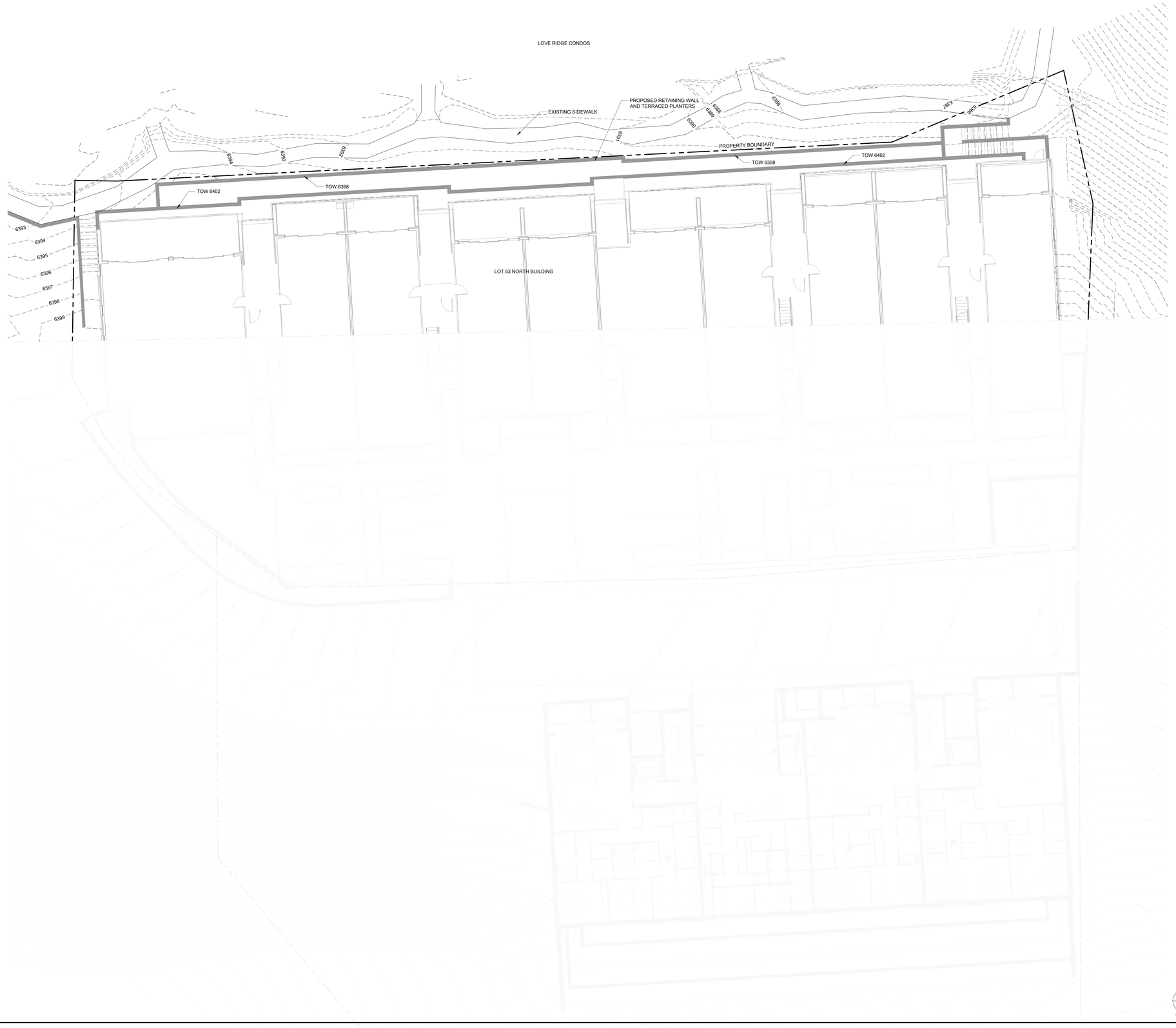
Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 53
PLANTING PLAN

Drawing Name

L3.00



LEGEND

- PROPERTY BOUNDARY
- ROADWAY
- RETAINING WALL
- PAVERS
- PAVERS WITH SNOWMELT
- STEPS
- AUTO CONCRETE
- BIKE PARKING
- RAISED PLANTERS
- EXTERIOR SITE LIGHTING

NORTH

0 5 10 20

ORIGINAL SCALE: 1"=10'

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NO.	ISSUED DATE	ISSUED FOR
	10/02/2024	HOA PLANTING PLAN

Project
SNOW KING LOOP

653 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number

LOT 53
GRADING PLAN

Drawing Name

L4.00



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NO.	ISSUED DATE	ISSUED FOR
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Project
SNOW KING LOOP

553 UPPER SNOW KING LOOP ROAD
JACKSON, WY 83001

Project No.	
Drawn By	LN
Checked By	MK

Discipline & Drawing Number
LOT 53
RENDERING

Drawing Name
L5.00

NORTHWORKS

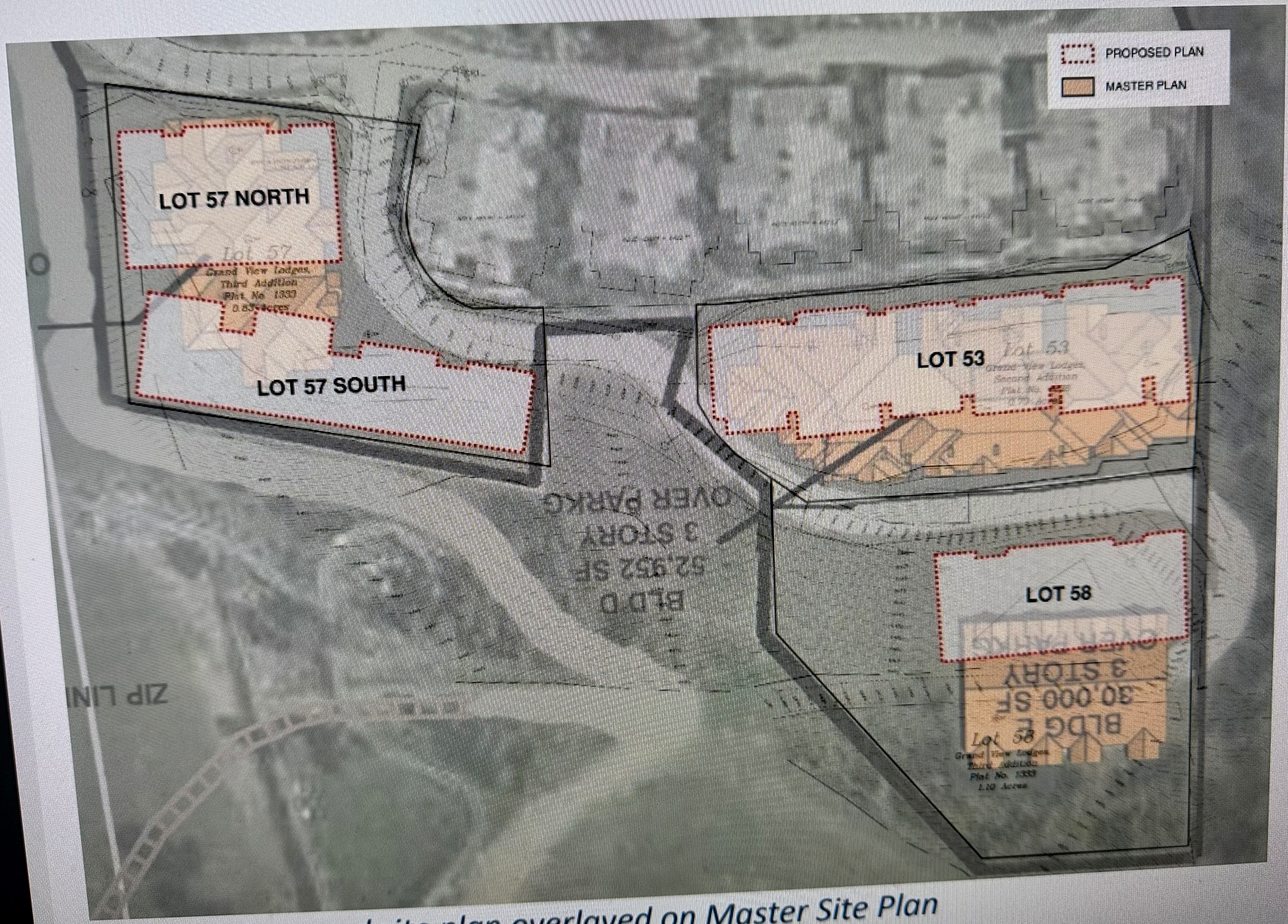
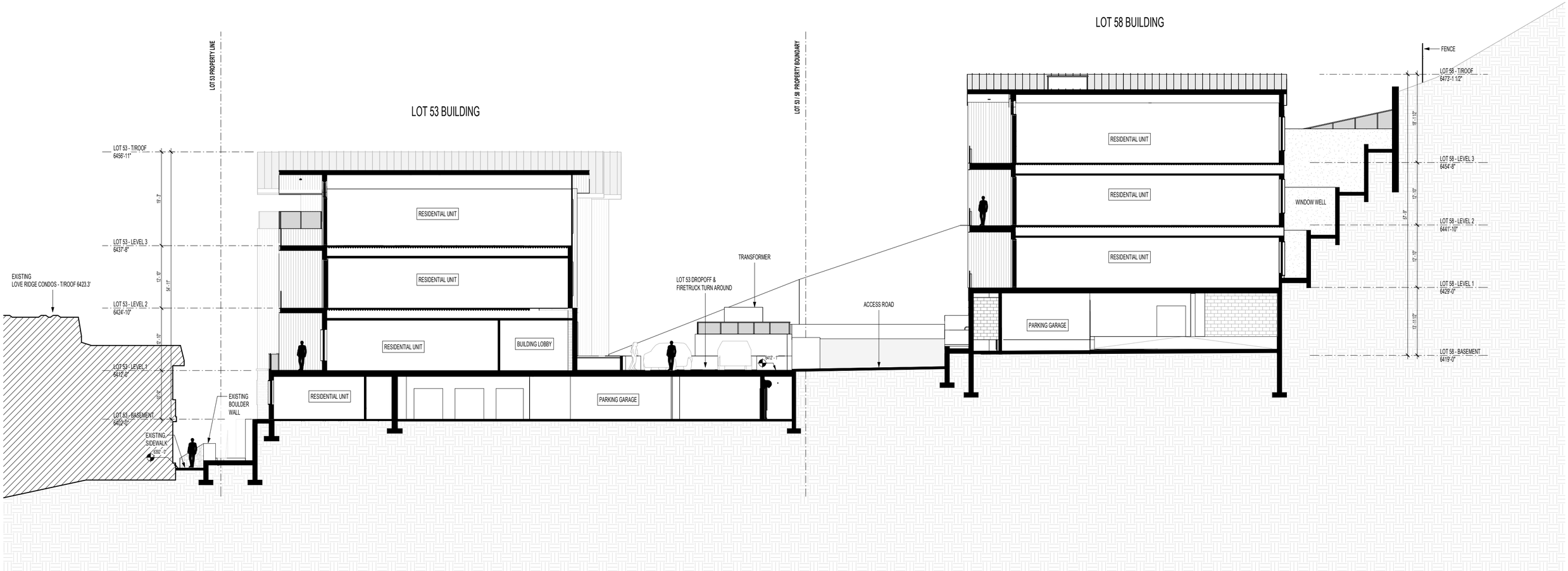


Figure 1 - Proposed site plan overlayed on Master Site Plan

Site Plan also includes a circulation plan that indicates where sidewalks should







SITE SECTION THROUGH LOT 53 & LOT 58, LOOKING EAST



Sub Area #3
Existing and Proposed Condominiums

Sub-Area 3 consists of the Grand View, Love Ridge, and Simpson Patent condominimum developments and the Grand View Lodge. Lots 53, 57, and 58 are the remaining lots platted for condominimum development within this sub-area. The Jackson Town Council approved building plans for a condominimum building on lot 53 and the planning/building departments issued a building parmit for building D on lot 53 which expired in 2009. The architectural drawings for this building are shown in the sketch drawing section of this master plan. The Town Council approved a development plan for a building on lot 57 in 2004, the architechtural plans for this building are included in the sketch drawing section of this master plan. Condominimums on lot 58 are proposed to match buildings on lots 53 and 57 in architectural design.

4 in. of snow Thu

From: harrydannenberg1@gmail.com
To: Tyler Valentine
Cc: Rich LURIE; Jenny Herman
Subject: Bear Development of Snow King Lots 53, 57 and 58
Date: Thursday, February 20, 2025 7:29:49 AM

I am a 10 year property owner and part time resident (summers) in the Love Ridge condominiums located in the Snow King Resort District. I am also a member of the Board of Directors of the Snow King Resort Master Association (SKRMA). I am the residential director of SKRMA representing the interests of the residential homeowners in the resort district.

I am writing to express my strong agreement with the Grand View Condominium Association and the Love Ridge Homes Condominium Association that the proposed development by Bear Development violates the Snow King Planned Resort Master Plan in that it does not fit in with the bulk, scale and character of the existing Grand View Condominiums and Grand View Lodge as required under the Master Plan. Specifically, the Lot 57 South Building , which is proposed to be approximately 60 feet high, will overwhelm the Grand View Condominiums and the entire resort area and this behemoth of a building will overwhelm pedestrians and pedestrian scale in the resort district.

I also agree with Grand View Condominium Association that the retaining wall between Grand View Condominiums and Lot 53 violates the Master Plan and should be moved south as set forth in the letter sent to you by the Grand View Condominium Association. There is no place in the Resort District for such an aggressive form of development with respect to other members of the Snow King Resort community.

I hope that the town takes the correct action and rejects the Bear Development proposal. I believe that the residential community in the Resort Districtto would support reasonable development of lots 53,57 and 58. I do not think there is support from the residential community for the Bear Development proposal.

Harry Dannenberg

Sent from my iPad

From: Jim Maxwell <jim@AGRILANDFARMING.COM>
Sent: Tuesday, February 18, 2025 12:21 PM
To: Tyler Valentine
Subject: Development Plans 553, 510, & 725 Upper Snow King Loop

Dear Mr. Valentine:

I have serious concerns about the proposed ten-foot-high wall immediately south of the buildings 551 and 552 Snow King Loop. I own a condominium in each of these two buildings. Starting in 2007 and continuing through 2015, I served as president of the Grandview Homeowner's Association which includes the twenty condominium units situated immediately to the north of the ten-foot-high wall proposed for construction at the northern most edge of the above referenced projects.

Manuel Lopez, former president of Snow King Resort and the group that formerly owned Lots 53 and 57, and I walked the sidewalk south of our buildings and agreed to the planting of trees south of our sidewalk. This agreement was in response to our **mutual** opinion that a buffer was needed between our existing buildings and whatever would be eventually built on Lot 53. This agreement and mutual expectation were eventually memorialized in the master development plan for the area. The owners of the twenty Grandview Condos would not have supported the master plan had this provision and understanding not been included in such plan. Ignoring the master plan at this point is inappropriate and unacceptable.

The owners of the twenty Grandview Condos have, for many years, had the expectation that our neighbors to the south and the Town of Jackson would continue to recognize the need for a landscaped buffer south of our south sidewalk. Allowing the project to move forward as currently configured would create a very unpleasant area south of our condos and ruin the environment on twenty back decks of these units. It would also violate the master plan on which we have relied.

From: noreply@civicplus.com
To: Town Council
Subject: Online Form Submittal: John and Irene Hammons Email the Town Council
Date: Friday, May 23, 2025 6:13:55 PM

Email the Town Council

Email Content:	As Owners of Grand View Lodge #4930, we are still very opposed to the Bear Development Plan for Lots 53,57 & 58. We strongly endorse the Grand View Homeowners Association correspondence and communications to you as detailed by HOA President Rich Lurie and the Grand View Board. The Bear Development Plan and corrective submissions as requested by the Planning Department are still in violation and do not in anyway comply effectively with the Snow King Master Plan.in Bulk, Size, or Character. We purchased the property with the premise that the development would be in accordance with the Snow King Master Plan. Even details of the future development plan were personally communicated to us by the Owner/Developer at the time of purchase negotiations and definitely had a bearing on our decision. Safety issues also concern us regarding accessibility for emergency and utility service vehicles and guest parking without a proper ingress/egress solution. Also, pedestrian accessibility to the Snow King Mountain amenities is a concern and will have an effect on the Grand View community The overriding, radical, self-serving development plan just does not fit. The Snow King Master Plan has set the criteria and standard for the Grand View Community and should be honored and complied with. Thank you for your consideration.
Your Name:	John & Irene Hammons
Your Company Name:	Windmill Canyon Ranch
Your Phone Number:	6614356459
Your Email Address:	linknspace@roadrunner.com
Your City:	Leona Valley
Your State:	California
Your Zip Code:	93551

Email not displaying correctly? View it in your browser.

From: Deborah Wente <dgwente@outlook.com>
Sent: Tuesday, April 8, 2025 10:36 AM
To: Tyler Valentine
Subject: Re: Proposed Snow King development
Attachments: Bear Building Comparisons.png; Grand View - Love Ridge Building Spacing.jpg; Lot 57 South-GV 548.jpg

John and Deborah Wente
548 Snow King Loop Road
Unit 482
Jackson, WY 83001

April 8, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning and Building Department
Tvalentine@jacksonwy.gov

Dear Mr. Valentine,

Please find an updated letter regarding the Bear Development proposal in the Snow King resort district. You will find that the primary issue concerning our unit at 548 Snow King Loop Road is unchanged.

We own Grandview unit 482 which is located on the east side of the building.

Please consider this letter as opposition to the Bear Development plans for lot 57 of the Snow King Resort. The proposed buildings are massive in comparison to the existing condominiums in our

neighborhood. The buildings create significant, negative impacts to Grandview and the surrounding areas and do not meet the master plans requirements for bulk, scale, or character as explained more fully in the letter from Richard Lurie, President of the Grandview Condominium Association. We ask that the plans for Lot 57 be denied until changes are made to bring the proposed development into compliance with the master plan.

The revised plans submitted by Bear Development have done nothing to address these issues. It is clear their revised plans refuse to reduce by any amount the size of their buildings on Lot 57. To meet the requirement to have room for vegetation next to their building, instead of reducing the size and footprint of their buildings to allow vegetation as required by the Snow King Master Plan, their solution is to eliminate the sidewalks. Pedestrians, therefore, walking up from the hotel or parking to the 72 condominiums have to walk in the road!

In 2006 when we purchased our unit in building 548 of Snow King, we carefully reviewed all associated documentation. This included the Snow King master plan, please see attached. We understood that there would be eventual development near our unit consistent with what was presented in the master plan and approved by the Town of Jackson. As stated in the master plan, units will be developed to fit in with the bulk, scale, and character of the existing Grandview condominiums and Grandview Lodge.

We strenuously object to the current plan. These buildings are much bigger than the current units and are inconsistent with the Snow King master plan. We will completely lose visibility

of Snow King Mountain. One of our favorite things is to sit on the back deck and look up at the mountain, there was never any expectation we would lose this privilege. Please reference the attached renderings to demonstrate how overshadowed our building would be with the lot 57 South building as proposed. Our beautiful view of the mountain would now be a view of a garage.

Again, we understand that these properties were planned for development. However, we had absolutely no expectation they would be so completely oversized compared to the current building.

If this development as proposed is allowed to proceed, the Snow King master plan becomes a useless document that no potential buyer in the Resort District can rely upon.

We respectfully request that the town of Jackson reject the proposed plan.

John and Deborah Wente

Get Outlook for iOS

From: Deborah Wente
To: Tyler Valentine
Subject: Re: Proposed Snow King development
Date: Thursday, February 20, 2025 9:26:01 AM
Attachments: Lot 57 North-GV 548_jpg.msg
Lot 57 South-GV 548_jpg.msg
SK Master Plan - Page 77_jpg.msg

April 7, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning & Building Department
tvalentine@jacksonwy.gov

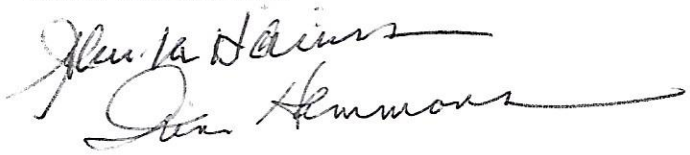
Dear Mr. Valentine:

As Owners of Grandview Lodge #4930, we are still very opposed to the Bear Development Plan for Lots 53, 57 & 58. We strongly endorse the Grand View Homeowners Association correspondence to you as detailed by Rich Lurie. The Bear Development's resubmissions do not in anyway comply effectively with the Snow King Master Plan in bulk, scale or character.

The overriding, radical, self-serving development plan just does not fit. The Snow King Master Plan has set the criteria and standard for the Grand View Community and should be honored and complied with.

Thank you for your consideration.

John & Irene Hammons



From: John Petrakis
To: Tyler Valentine
Cc: Rich Lurie; dlangen@bojh.com; Nicolle Moyer
Subject: RE: Bear Development plans for Lots 53 and 57 of the Snow King Resort
Date: Thursday, April 3, 2025 8:51:30 AM

From: John Petrakis
To: Tyler Valentine
Cc: Rich Lurie; dlangen@bojh.com; Nicolle Moyer
Subject: Bear Development plans for Lots 53 and 57 of the Snow King Resort
Date: Thursday, February 20, 2025 10:36:00 AM

Dear Mr. Valentine – I am owners of Grand View Condominium No. 5140. Please consider this letter as opposition to the Bear Development plans for Lots 53 and 57 of the Snow King Resort. The proposed buildings are massive in comparison to the existing condominiums in our neighborhood. The buildings and retaining wall create significant, negative impacts to Grand View and the surrounding areas and do not meet the Master Plan's requirements for bulk, scale or character, as explained more fully in the letter from Rich Lurie, President of the Grand View Condominium Association. We ask that these plans be denied until changes are made to bring the proposed development into compliance with the Master Plan.

I also strongly agree with all the details of Mr. Lurie letter dated February 17, 2025. But I think it's worth repeating one of Mr. Lurie points in his letter pointing out that the residential representation on the SKRMA board it significantly underrepresented. I further believe that the Town of Jackson should reject this proposal because of all the points in Mr. Lurie's letter but should also make the point that until the SKRMA board is correctly represented the Town of Normal will not approve any development plans in the SKRMA designated area.

Thanks for your consideration.

John Petrakis
309-208-0201

Blanche Neige LLC
548 Snow King Loop Road
Unit 483
Jackson, WY 83001
kblsf@yahoo.com

February 20, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning and Building Dept.
tvalentine@jacksonwy.gov

Dear Mr. Valentine:

We understand that the Town is evaluating a proposal by Bear Development, LLC, to build a multi-unit condominium complex adjacent to the Grand View Condominiums in the Snow King Resort District.

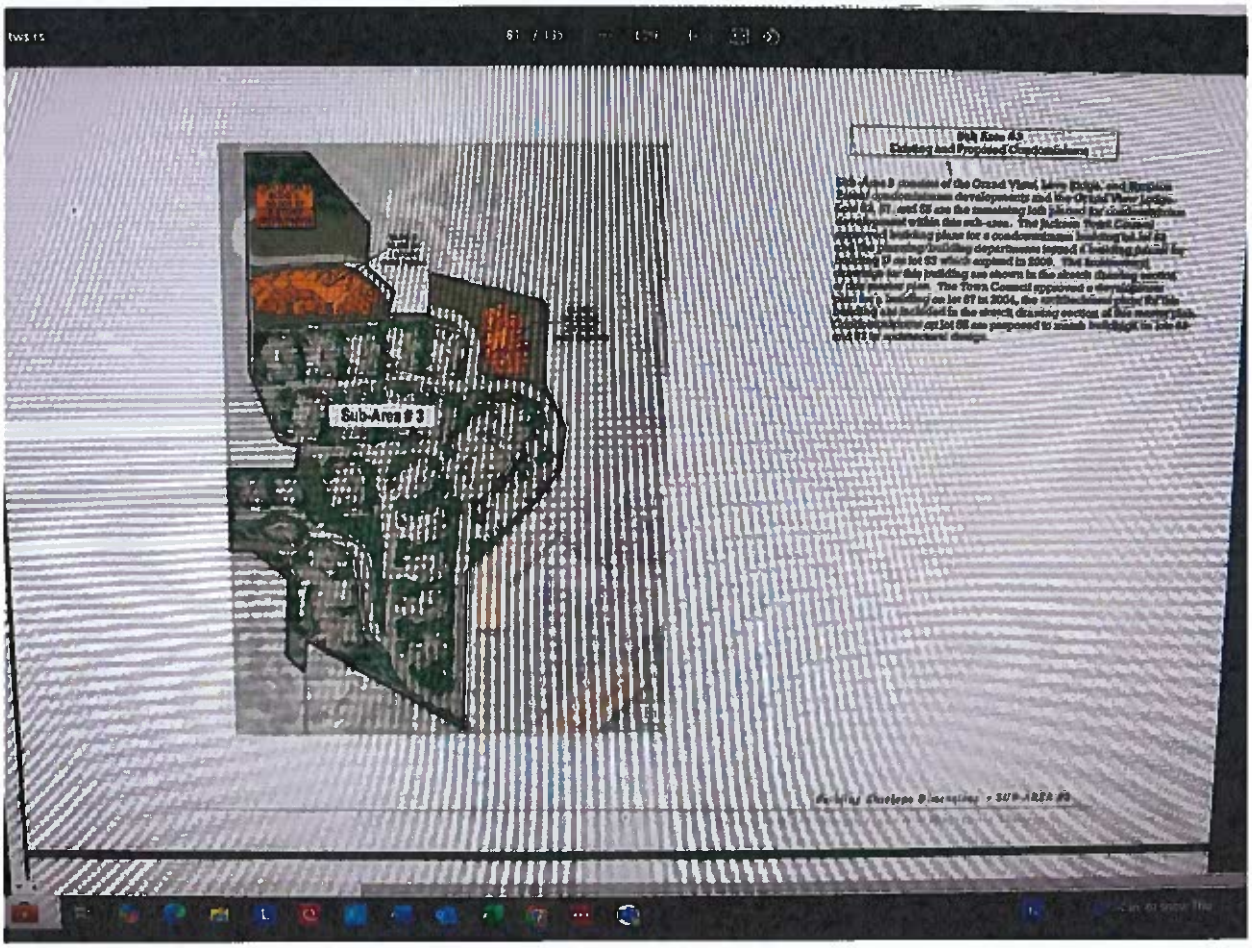
We own Grand View unit 483, which is situated on the west-facing top floor of Building 548 in the southwest corner of our community. Lot 57 of the proposed development encircles the west and south sides of Building 548.

We echo the concerns expressed by the Grand View Homeowners' Association in its February 17, 2025 letter, and want to share several additional concerns particular to Lot 57.

Master Plan terms and Town decisions set public expectations that future development on Lot 57 would be restrained.

We purchased unit 483 in November 2023. During our pre-purchase due diligence, we learned that new development might occur on Lot 57. Accordingly, we reviewed the Snow King Master Plan and minutes of HOA meetings at which SKRMA representatives discussed development prospects, as well as limitations under the Master Plan and Town regulations. As you know, these standards generally require that any new development must be spatially and stylistically consistent with the Grand View community.

We also reviewed the public docket pertaining to Lot 57 and saw renditions of the development concept approved by the Town in 2006 but never built (see image below). Although we were concerned about possible development next door, we were reassured that the Town and SKRMA would apply these standards as a check on developers seeking to change the landscape and density of our mountainside environment, or the neighborhood's appearance from Town.



We were dismayed to learn that SKRMA approved Bear Development's plan – seemingly without regard to the bulk and scale limitations – permitting nearly twice the square footage of that approved in 2006.

The Town should maintain the standards it affirmed in 2021 and 2023.

In our pre-purchase diligence, we found that Bear Development submitted a Zoning Compliance Verification (ZCV) application in May 2023, asking the Planning & Building Department to "clarify development rights and opportunities" on Lots 53, 57 and 58 in light of the Town's 2006 approvals and related determinations in 2021.

In a June 23, 2021 ZCV response (P21-112), the Town had affirmed that future development "must comply" with the requirements to maintain "bulk, scale and character consistency;" "to reduce bulk and mass;" and "to create a design that fits well with the topography and neighboring condominiums." The proposal for Lot 57 meets none of these standards.

The Lot 57 proposal must be rejected or reimagined consistent with the Master Plan and Town precedent.

Bear Development asks to shoehorn two new structures on Lot 57 – one behind Building 548 (and feet away from the Cowboy Coaster) and one beside it. The structures are undoubtedly a high-quality investment in the Snow King resort. However, as seen in the renditions below, the south building would fully occupy the narrow southeast arm of Lot 57 and loom over Building 548. This clear scale mismatch and seemingly inadequate envelope would defeat the requirements of the Master Plan, as reflected in the 2006 approved concept and reaffirmed by the Town's 2021 and 2023 ZCV opinions, and may also raise safety concerns that would be best addressed by other stakeholders.





The Master Plan and Town standards were established in the daylight for prospective buyers and developers to see and rely upon. The Town should maintain these standards and reject Bear Development's proposed 45,000 square feet addition to Lot 57, or at least its towering south structure.

Thank you for considering our position and for maintaining Jackson's and Snow King's unmatched character.

Respectfully,

Kyle B. Levine
for Blanche Neige LLC

Tyler Valentine April 9, 2025
Senior Planner, Town of Jackson Planning and Building Department
Via email to: tvalentine@jacksonwy.gov
RE: Bear Development Proposed Plans for Snow King Condominiums Lots 53, 57, 58

Dear Mr. Valentine,

The Love Ridge Lodge Homes Condominium Association (the "Association") reviewed the updated application and plans received on March 25, 2025 for the Snow King Condominiums on Lots 53, 57 and 58 (the "Plans") summited by Bear Development, LLC (the "Applicant").

The Association submits the following:
Lot 53 and Lot 58 – Plans were improved over the prior submissions with the relocation of the building on lot 53 being at least an additional 20' south and the elimination of the retaining wall. However, since there is a tree line barrier we ask why would they plan to cut down mature trees that are currently planted on the applicant's side of the border? These trees and plants are established and thriving. They provide screening that will be advantageous for both Grand View Condominium residents and the residents of the new development. Removing these mature plantings and then subsequently replacing them with new, young plantings and boulders will cause residents to have clear views of each other with minimal privacy screening for many years.

Lot 57 – With regards to the scale of the building on Lot 57. We agree with Grand View Condominiums' findings that the plans remain noncompliant with the Master Plan as detailed in the attached drawings done by Northworks. We request the Town of Jackson reject the proposed Lot 57 South building.

While updating the plans to meet the requirements of the Snow King Master Plan to have vegetation between the buildings and the sidewalks it appears that sidewalks were eliminated to allow for vegetation. This is unacceptable since there are several months of winter where many pedestrians walk to areas within the resort district. While the roads are plowed routinely, they are not clear for pedestrians and will be a hazard for skiers accessing the mountain or the hotel for restaurants and amenities. Where there are sidewalks areas, there is no mention whether these sidewalks will have a snowmelt system to help keep them clear in winter months. Is that part of the plan?

Sewer and water infrastructure has not been a part of the plans that we've received. Who is responsible for this infrastructure? When the Grand View Condominiums were developed it was determined that an additional pump system was required to provide adequate water pressure for the units as well as fire protection. We have not seen any details of a study for the water system. In addition, we have not seen studies to show that the existing sewer and water lines are sufficient to handle the additional 72 condos. Who is responsible for making sure that the existing infrastructure is adequate for these additional buildings. This is a concern for both Grand View and Love Ridge CA's.

We appreciate the time that the Planning Commission is taking to review these plans and the concerns that perimeter neighbors are voicing.

Jenny Herman
President
Love Ridge Lodge Homes CA

Jenny Herman Cell
817.938.4009

From: Peter Wold
To: Tyler Valentine
Subject: Bear Development at Snow King
Date: Thursday, February 20, 2025 3:24:48 PM

Dear Mr. Valentine,
I own several Grandview Condominiums and Unit 5110 in the Loveridge Condos.
I seldom object to development in Wyoming, but I vehemently object to the Bear Development at Snow King on Lots 53 and 57.
Their plans contradict the Master Plan and simply need to be redone to comply with it. As the project is designed, it would devalue the Loveridge/Grandview area.
Thank you in advance for requiring compliance to the Master Plan.
Sincerely, Peter Wold

From: noreply@civicplus.com
Sent: Monday, April 28, 2025 7:00 AM
To: anne@brilliantlydone.com; k.wilson2582@gmail.com; tomcatsmits@icloud.com; apetri@nwks.com; stephfellowswise@gmail.com; lauraabonich@gmail.com; Town of Jackson Planning Department
Subject: Online Form Submittal: Email the Planning Commission

Email the Planning Commission

Email Content:

Dear Commissioners:

I am writing on behalf of the Grand View Homeowners' Association regarding Bear Development's plan for Snow King Lots 53, 58 and 57. While I appreciated having had the chance to comment by phone at the April 16 meeting, I expected to have the same opportunity as the developers to present slides that may have helped your deliberations. We were very disappointed but respect your reasons for not allowing Public Comments to not allow screen sharing. I would like to therefore supplement my comments with this letter and I will try to find a way to attach the slides I had hoped to share.

I appreciate the Planning staff's keen analysis and the Commission's work to balance the competing interests about the key question before you: whether the bulk, scale and character of the proposed development is consistent with its existing neighbors and complies with the Snow King Master Plan that specially requires that they must. We were pleased that the Commission heard staff's concerns about the character of the development, particularly the canyon effect between Grand View and Lot 57, and granted a continuance to May 21 for closer evaluation of revised plans.

At the meeting, several commissioners acknowledged the unique mass and scale of this project, and the unique challenges of the subjective approach the Commission is called upon to apply here. We maintain that Lot 57 plans are largely incompatible in bulk, scale and character with Grand View. I am sharing the slides I wanted to present at the meeting confident that they will vividly show the impacts of over-aggressive development and the canyon effect clearly identified by the Planning team and confirmed by several Commissioners at the meeting.

In addition to the factors that led to condition 5 on Lot 57's development, we noted several other concerns being voiced at the meeting. We expect that the developers' revised plans will address them fully before the Commission advances the project to Town Council:

· Chair Wilson's preference to see structural shifts to mitigate the canyon effect caused by the excessive verticality of both Lot 57 buildings and specifically Lot 57 South Building which was never anticipated or ever illustrated as a possibility in the Snow King Master Plan.

· Recognition that the current plans have inadequate parking spots for visitors, rideshare services, service providers, etc. – meaning that Snow King Loop Road and Grand View's and Love Ridge's parking areas will carry the burden of increased occupancy. The Commission and staff discussed the challenges of forcing people to park in "informal places," and the "more competitive" parking environment that will result with new short-term rental project proposed by Bear.

· Recognition that fluid pedestrian flow envisioned by the Master Plan will be sacrificed between Grand View and Lot 57 because the developers left inadequate room for sidewalks and landscaping, choosing instead to build to the limits of property lines.

· Concerns about overallocation and density with Bear's plans to shift 18,000 square feet of permitted development to Lot 57 from Lots 53 and 58, resulting in a much larger footprint than might be permitted if Lot 57 were being developed individually, and a substantially larger and scale-incompatible development than that envisioned in the Master Plan and relied upon by Grand View owners when they purchased their properties. While allocation across parcels may be allowed under the Master Plan, it cannot be a free pass to ignore overriding bulk, scale and character requirements.

· The Commission recognized the comments by the Grand View and Love Ridge HOA presidents and asked about the level of cooperation between developers and the HOAs to address neighbors' concerns. Mr. Mills stated that there had been "significant" efforts to build consensus with Grand View. That is not accurate. In fact, Bear refused to develop any

renderings showing their Lot 57 South Building with Grand View 548 which was specifically requested numerous times. We also found Bear had put into their plans the removal of a stone wall that majority resided and was owned by Grand View without ever informing and discussing it with us. After much strong resistance, they relented. To be clear, the HOAs are opposed to Bear's plan because it does not meet the Master Plan requirements and far exceeds the development any of our homeowners reasonably expected. We are not opposed to development as a categorical matter.

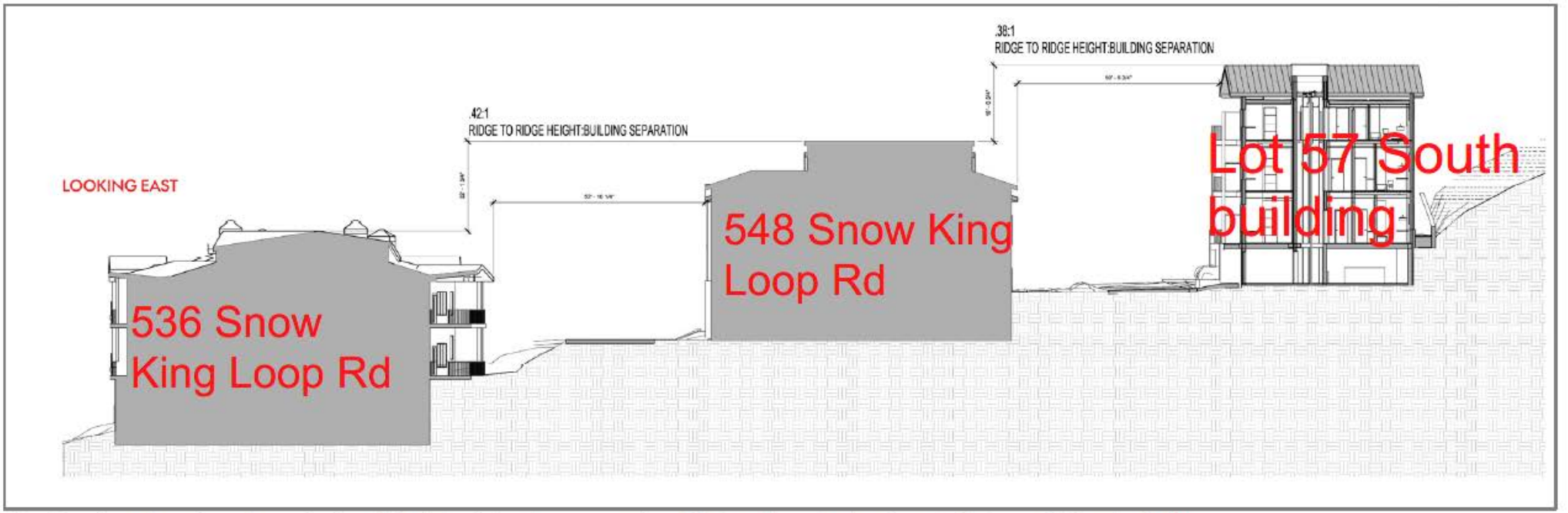
We appreciate your attention and further diligence at the May 21 meeting, understanding that Lot 57 plans cannot and should not advance to Town Council unless the Commission is satisfied that they comply with the Master Plan. In our opinion, the elimination of the never anticipated Sout Building and the redesign of the North Building is the optimum resolution. Plans for Lot 53 and 58 are independent filings and can proceed to Town Council even if Lot 57 plans are delayed for non-compliance with the conditions imposed at the April 16 meeting.

As there is no means to attach the four slides we wished to reference, I will send them to Tyler and have him forward them to the Commission.

Thanks again for the opportunity to share our views and concerns over this important project.

Your Name:	Richard Lurie
Your Company Name:	Grand View Home Owners Association
Your Phone Number:	203-249-0532
Your Email Address:	rlurie@optonline.net
Your City:	Jackson
Your State:	Wyoming
Your Zip Code:	83001

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Site Section showing the relationship in heights between Lot 57 South and the downhill Grand View buildings







From: rlurie@optonline.net
Sent: Saturday, March 29, 2025 6:41 AM
To: Tyler Valentine
Subject: RE: Re-Submittal for Lot 53, 57, 58

Hi Tyler the updated application was sent out to all of Grand View Owners. We are still reviewing and will have our response back to you prior to the 10th, however I can give you this feedback.

Lot 53 – we are OK with the changes and only will request the current line of trees remain. As they say they are planning to replace them, it is very curious why they have to remove them if the new building is now around 20 feet away from them.

Lot 57 – we found their response not serious. They are suggesting that by changing the roof lines and the deck walls that the Lot 57 South building will all of a sudden be compliant with the Snow King Master plan that requires it to be compatible with Grand View in bulk, scale and character. If it is not even close! Their page 9 depiction of the buildings is very deceitful. We asked Nick for further explanation and still waiting for his response.

We also found their solution laughable and insightful to their proposal to meet the requirement to have room for vegetation next to their building. Their solution is to eliminate the sidewalks. Therefore, pedestrians and visitors to 72 condominiums that are arriving by foot have to walk in the road! That was their solution and never considered that putting two extremely large buildings are just not compatible with Lot 57.

Rich

Richard Lurie
Grand View HOA
203-249-0532

From: Tyler Valentine <tvalentine@jacksonwy.gov>
Sent: Wednesday, March 26, 2025 10:26 AM
To: Rich LURIE <rlurie@optonline.net>
Subject: RE: Re-Submittal for Lot 53, 57, 58

Thank you Rich.

-Tyler V

From: Rich LURIE <rlurie@optonline.net>
Sent: Tuesday, March 25, 2025 8:43 PM
To: Tyler Valentine <tvalentine@jacksonwy.gov>
Subject: Re: Re-Submittal for Lot 53, 57, 58

Hi Tyler, thanks. I will send it to all Grand View owners. If there are other owners that should get it, please send it to them.

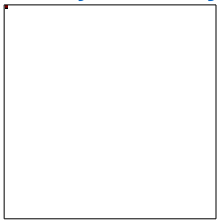
Thanks very much,

Rich

Richard Lurie
R.C. Lurie & Associates
341 Jelliff Mill Road
New Canaan, CT. 06840
203-966-2919
Cell 203-249-0532

> On Mar 26, 2025, at 2:56 AM, Tyler Valentine <tvalentine@jacksonwy.gov> wrote:
>
> I have not yet sent it to others. Are you going to do that or would you like me to?
>
> Comments are due by Thursday, April 10th.
>
> ---
>
> **From:** Rich LURIE <rlurie@optonline.net>
> **Sent:** Tuesday, March 25, 2025 4:50 PM
> **To:** Tyler Valentine <tvalentine@jacksonwy.gov>
> **Subject:** Re: Re-Submittal for Lot 53, 57, 58
>
> Hi Tyler, forgot to ask if the updated submission was sent to all those that submitted comments?
>
> Rich
>
> Richard Lurie
> R.C. Lurie & Associates
> 341 Jelliff Mill Road
> New Canaan, CT. 06840
> 203-966-2919
> Cell 203-249-0532
>
> > On Mar 26, 2025, at 12:55 AM, Tyler Valentine <tvalentine@jacksonwy.gov> wrote:
> >
> > Rich,
> >
> > Attached is the revised submittal for the Snow King Development Plans.

Tyler Valentine
Senior Planner, AICP
Town of Jackson
Phone (307) 733-0440 #1305
tvalentine@jacksonwy.gov
www.jacksonwy.gov



<Snow King Condos - Development Plan Submission - 2025-03-24_pdf>

<~WRD0005.jpg>

From: Susan Houchens
To: Tyler Valentine; Richard Lurie
Subject: Bear Plans for Lot 57
Date: Tuesday, May 27, 2025 5:11:50 PM

We are the owners of Grand View Condominium #522 in building 552. Please consider this letter as opposition to the Bear Development plans for Lot 57 of the Snow King Resort, This proposed building is massive in comparison to the existing buildings in our neighborhood.

When we purchased our Grand View Condominium, we reviewed and relied on Snow King Resort Master Plan to understand what could be built on Lot 57. What we are now being asked to approve for Lot 57 violates everything we read and saw in the Master Plan. This is totally unfair to all the Grand View owners, and these plans must be rejected.

Richard Houchens
Sussan Houchens

From: noreply@civicplus.com
To: Town Council
Subject: Online Form Submittal: Richard Lurie Email the Town Council
Date: Monday, May 26, 2025 1:51:14 PM

Email the Town Council

Email Content:

Dear Jackson Town Council,
I am the owner of unit 4910 in the Grand View 549 building and I would like to submit my personal strong opinion that the Lot 57 south building being proposed by Bear Dev NOT be approved as proposed.

When I purchased my unit, I reviewed the Master Plan and saw a reasonable size building of a little over 25,000 sq ft approved by the Town Council for Lot 57. I was therefore very comfortable in my purchase. No where in the Master Plan was it every illustrated another building could be built where Bear Dev is now proposing the south building. It is totally unreasonable to expect a potential owner to be able to dig through the Master Plan to realize multiple buildings could be built and if the owner of Lot 57 happened to own other lots in the Resort District, they could move additional square footage to this Lot 57 which is exactly what Bear did. One would have to hire an architect or professional planner to figure that out. That is totally unreasonable.

Why would Bear move an additional 18,000 sq ft to Lot 57? The only explanation is he found it cheaper to cram all that extra square footage on the relatively flat Lot 57 than where the plan originally allocated that square footage. He could care less the impact on the existing Grand View owners in the adjacent lot. There is no rational to accommodate this out of town developer at the expense of his neighbors.

Fortunately, the planners who put together the Snow King Master Plan foresaw what could be proposed and put in the Plan very meaningful words to prevent over development. They specifically stated on Page 70 that any buildings on Lot 57 had to be compatible in bulk, scale and character with Grand View condominiums. The words in the Master Plan are just as important as the numbers and these words are clearly being violated by Bear Dev. Their south building is twice as high as the south side of Grand View, contain 4 times the number of units per building and is three times longer than the width of a Grand View building. The building towers over my unit. In my due diligence, no way could I have foreseen what this out of state developer is proposing.

	In addition, the developer as used up so much of the Lot 57 space, he provided no sidewalks or visitor parking. Cramming that south building onto Lot 57 totally changes the entire character of the residential area of the Resort District and we ask the Town Council to reject the developers plans. Rich Richard Lurie Grand View 4910
Your Name:	Richard Lurie
Your Company Name:	Grand View Condominium Association
Your Phone Number:	203-249-0532
Your Email Address:	rlurie@optonline.net
Your City:	Jackson
Your State:	W
Your Zip Code:	83001

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From: sagarling rdeinc.biz <sagarling@rdeinc.biz>
Sent: Thursday, March 27, 2025 10:22 AM
To: Tyler Valentine
Cc: ragarling rdeinc.biz
Subject: Town of Jackson Planning and Building Department-Bear Development

Importance: High

Tyler,

We are owners of Grand View Condominium, 551 Snow King Loop Road, Unit No. 5120. Please consider this letter as opposition to the Bear Development plans for Lots 53 and 57 of the Snow King Resort.

We received the Bear Development updated plans for Lots 53, 58 and 57.

It is curious that the updated plans show a reduced height, but the plans do not reflect the height change, that we can identify.

Three stories above an exposed garage equates to 4 stories, which violates the SKRMA Master Plan. The developer identifies the garages are 51% below grade, but is that truly the case? What is the acceptable point of measurement, three stories from grade or above grade (as defined by the developer)? What will the impact be for the downhill residences with the massive earth moving required to obtain subterrain garage structures? We have not located where the developer, or SKRMA, has addressed the current utilities infrastructure that are currently located in the development area. The 110k gallon water storage tank is connected to the private PWS that services the resort district with a 10” pipeline. The storage tank provides additional water and pressure to the Town of Jackson for emergency firefighting when the Town’s waterline pressure is reduced to 30 psi.

The proposed buildings are massive in comparison to the existing condominiums in our neighborhood. The three massive structures create significant, negative impacts to Grand View Condos and the surrounding HOA communities and do not meet the Master Plan’s requirements for bulk, scale, or character. The viewscape will be permanently afflicted with massive, towering structures which conflict with the current local mountain luxury cabin architectural design embodied by all the Snow King Resort district development.

Sheryl

Sheryl and Roger Garling
R and D Enterprises, Inc.
www.rdeinc.biz
PO Box 3321

Casper, WY 82602
Cell 307.277.3861
Land 307.237.4188
sagarling@rdeinc.biz
ragarling@rdeinc.biz

From:	sagarling rdeinc.biz
To:	Tyler Valentine
Cc:	ragarling rdeinc.biz
Subject:	Town of Jackson Planning and Building Department-Bear Development
Date:	Wednesday, February 19, 2025 1:28:51 PM

Mr. Valentine,

We are owners of Grand View Condominium, 551 Snow King Loop Road, Unit No. 5120. Please consider this letter as opposition to the Bear Development plans for Lots 53 and 57 of the Snow King Resort. The proposed buildings are massive in comparison to the existing condominiums in our neighborhood. The buildings and retaining wall create significant, negative impacts to Grand View and the surrounding areas and do not meet the Master Plan's requirements for bulk, scale, or character, as explained more fully in the letter from Rich Lurie, President of the Grand View Condominium Association. We ask that these plans be denied until changes are made to bring the proposed development into compliance with the Snow King Resort Master Plan.

Respectfully submitted,
Sheryl
President
R and D Enterprises, Inc.

Sheryl and Roger Garling
R and D Enterprises, Inc.
www.rdeinc.biz
PO Box 3321
Casper, WY 82602
Cell 307.277.3861
Land 307.237.4188
sagarling@rdeinc.biz
ragarling@rdeinc.biz

From: Susan Houchens
To: Tyler Valentine; Richard Lurie
Subject: Bear Development
Date: Thursday, February 20, 2025 5:59:18 PM

We are the owners of Grand View Condominium No. 522 in building 552. Please consider this letter as opposition to the Bear Development plans for lots 53 and 57 of the Snow King Resort. The proposed buildings are massive in comparison to the existing condominiums in our neighborhood. The buildings and retaining wall create significant negative impacts to Grand View and the surrounding areas.

When we purchased our Grand View Condominium, we reviewed and relied upon the Snow King Resort Master Plan to understand what could be constructed adjacent to Grand View on Lots 53. 57, and 58. The size, height, and proximity of the proposed Bear Development construction to Grand View far exceeds anything that could have been anticipated under the Master Plan and should not be allowed.

Richard Houchens
Susan Houchens

From: Virginia Wade <gwademd@gmail.com>
Sent: Sunday, February 16, 2025 1:28 PM
To: Tyler Valentine
Subject: Snow King owner 552-521

Dear Tyler Valentine:
As a long-standing homeowner in the valley, I have always taken an interest in project development. Having recently sold a family home on the West Bank, owned from 1998 to April of 2024, I have witnessed many neighborhoods undergo transformation, with tremendous impact to the community. Massive homes,cold beds, they are of no benefit to the community's economy.
We sold our home to be in a Resort
Overlay. We like Snow King, it has the local flavor that has been lost at Teton Village, where parking lots are full and closed, ticket sales are limited, residents are displaced, and as a homeowner not in a resort overlay we were afforded less and less convenience.
When we are not in residence the condo at Snow King can be rented and that contributes to the health and wealth of our community.

In 1998, there was no Snake River Lodge and Spa, no Four Seasons, no Teton Club.
Granite Ridge was just being developed.
There was a time when 2 stories was the limit, and the Four Seasons became the largest building in Wyoming.
I am now the owner of Snow King Loop 552. The 10' retaining wall will do nothing to prevent a slide when a 52,000 sf building is excavated and built to the current proposal on a very steep grade. Drainage in the spring melt doesn't flow through concrete. There are other projects on the sloped terrain in town, they have to be studied. One that comes to mind is Pine Glades.
My row of condos is set apart from those on the lower slope by a road, not a wall.

Increasing the setbacks must be a part of the master plan. Scaling back the height should be considered. It's just too steep.

At the present time there are many projects on the drawing board. They take years to complete. Stop work orders, violations, makes me wonder who approved them in the first place.
The Snake River Bridge project has polarized the community. Tourists who visit Teton Village stay in Teton Village. Going to dinner in town can take upwards of an hour and a half, tee shirt shopping is now an all day commitment. It takes too long to get to the airport.
There is no parking.

Residents don't visit their friends on the other side of the river, skiers stop at Calico and drink booze until the road clears, and there are more massive projects being reviewed that will serve to create gridlock for years.
Talk of widening the Village Road is a nonstarter.
The power lines on the Village Road that snapped a few years ago, causing widespread outages in the valley lasting for days, knocked out the airport power, but the lines were not buried along with the natural gas and fiber optic lines on the Village Road, so where is the widening to occur? Teton Pines? Shooting Star?
What is needed now is serious consideration to every project that comes up for approval.
I read in JH News and Guide a proposal for a north bridge. Money went to build a bike bridge, a treacherous roundabout, a hanger for private planes on the drawing board. Why not a north bridge?

I believe that first and foremost there needs to a a master plan that addresses the congestion. It is a turn off.
Aspen has a moratorium on new builds.
It may be time.

Virginia Wade
Sent from my iPhone

From: Bills GMAIL <william.l.hartmann@gmail.com>
Sent: Wednesday, April 9, 2025 12:54 PM
To: Tyler Valentine
Cc: Debbie Hartmann
Subject: Bear Development Revised Proposed Plans for Snow King Condominium Lots 53, 57 & 58

Tyler Valentine
Senior Planner
Planning & Building Department
Town of Jackson, Wyoming

Dear Mr. Valentine:

We are writing this letter to you as an update to our letter dated February 19, 2025 regarding development plans for Snow King Condominium Lot 57. Lot 57 is directly across from our condominium unit at 548 Snow King Loop.

We have reviewed the modifications to the plans previously submitted by Bear Development.

We do not believe the plans, as modified, and for which Bear Development is now seeking approval, address our objections as previously spelled out in our letter of February 19, 2025.

We continue to object to the **Bulk, Scale and Character** of the Bear Development proposed buildings on Lot 57. We view the changes that Bear Development have proposed to the Buildings on Lot 57 as **minimal** and **not responsive** to the objections that we previously raised. Our objections are very specifically focused on the South Building which we contend is not compliant with the Snow King Master Plan.

We continue to urge you and the Town Council to reject this application and to seek meaningful and responsive modifications, specifically to the Lot 57 buildings, and with particular focus on the non-compliant South Building.

Regards,

William and Deborah Hartmann
548 Snow King Loop, Unit 4810
Sent from my iPad

From: noreply@civicplus.com
To: Town Council
Subject: Online Form Submittal: Hartmanns Email the Town Council
Date: Monday, May 26, 2025 8:23:02 AM

Email the Town Council

Email Content:	I am writing to object to the Bear Development Plans for Snow King Loop, Lot 57. We are the owners of 548 Snow King Loop Unit 481, which is directly impacted by plans on Lot 57. When we purchased our unit we relied upon the Snow King Master Plan which we assumed would be enforced and govern the future development of Lot 57. The revised plans, as submitted by Bear Development, do not comply with the Bulk, Scale and Character language which is contained in the Master Plan. We have objected to each of Bear Development's Lot 57 plans as submitted. This latest proposal from Bear Development is NOT RESPONSIVE TO THE CONCERNS RAISED PREVIOUSLY BY THE COMMISSION. The footprint of the buildings has not changed. The inclusion of the South Building is inconsistent with the Master Plan which included only one building on Lot 57. The Lot 57 development plans are too much building on too little property which is inconsistent with the Bulk, Scale and Character of the rest of Snow King Mountain. We encourage the Town Council to reject the plans for Lot 57 and require a more thoughtful and responsive plan from Bear Developoment.
Your Name:	William and Deborah Hartmann
Your Company Name:	*Field not completed.*
Your Phone Number:	216-470-2101
Your Email Address:	WILLIAM.L.HARTMANN@gmail.com
Your City:	Jackson
Your State:	WY
Your Zip Code:	83001

Email not displaying correctly? View it in your browser.

From:	William Hartmann
To:	Tyler Valentine
Cc:	Debbie
Subject:	Bear Development Proposed Plans for Snow King Condominium Lots 53, 57 & 58
Date:	Wednesday, February 19, 2025 6:19:48 PM
Attachments:	pg 77 Snow King Master Plan.pdf

Tyler Valentine

Senior Planner

Planning & Building Department

Town of Jackson, Wyoming

Dear Mr. Valentine:

We are writing to you regarding a request for approval for three Development Plans for Snow King condominiums which includes Lot 57.

Our unit is directly across from Lot 57 at 548 Snow King Loop.

We strongly oppose the development as proposed by Bear Development and are in full support of the objection filed by the Grand View Condominium Association.

By way of background, we purchased the unit in March 2023. At that time, we reviewed the Snow King Master Plan and were fully aware that at some point, Lot 57 would be developed.

We took comfort in two items contained in the Master Plan.

First, the statement contained in the Master Plan on page 70 that "The remaining developable lots with-in Sub Area 3 consisting of Lots 53, 57 and 58 located to the South of the existing Grand View development to fit in with the **bulk, scale and character** of the existing Grand View Condominiums.

Second, on Page 77 of the Master Plan shows a single, reasonable sized building that was part of the approved Master Plan. The Town Council previously approved a development plan for a building on this lot in 2004. This is directly across from our unit in Grand View 548. The proposed structures, for which approval is being sought, are a significant deviation from what is contained in the Master Plan.

The rendition included in the Grand View Condominium Association shows two buildings, versus one in the Master Plan (please see attached from page 77). It also shows the new buildings, especially the South Building towering over the 548 building. This does not, in our opinion, fit with the bulk, scale and character of Snow King Mountain.

We urge you and the Town Council to seek revisions to the plans for Lot 57, as submitted, to avoid destroying the character of the Grand View Condominiums and to adhere to the Master Plan.

Regards

William and Deborah Hartmann
548 Snow King Loop, Unit 4810

From: chris.mandy@cox.net
To: Tyler Valentine
Subject: Revised Bear Development Proposed Plans Lot 57
Date: Thursday, May 15, 2025 4:29:18 PM

Hello Tyler,

My wife and I put a substantial amount of our net worth at risk when we purchased Grand View Condo 494 in August of 2020. One reason we did this was that the Master Plan for the Snow King Resort had what we thought to be a very solid and well thought out plan that would prevent unreasonable buildings to be built that were not in bulk, scale, and character with Grand View. This protected our investment and maybe just as importantly, the character of what one would expect in a resort in the historic town of Jackson which I have been going to for over 50 years.

When I saw the plan for Lot 57, I was horrified. I thought, "How in the world could this be approved when a reasonable person would not even entertain the thought of having a building that does not meet the specific requirements stated in the Master Plan?" This is a massive building, and in no way, shape or form complies with the Master Plan. I thought one of the reasons that we have a Master Plan was to prevent this very thing from happening. The plan says that any buildings on Lot 57 must be compatible in bulk, scale and character with Grand View. That word "**must**" is very clear. Of course it requires someone's judgement to approve or disapprove. To me, this judgement call is as clear as day. How can we say with a straight face that a building that is twice as high as the back of Grand View 548, has nearly four times the number of units, has a footprint that allows no setbacks from property line and extends three times in length versus Grand View buildings, is not in violation of the very plan which is supposed to protect this kind of thing from happening?

Furthermore, the applicant's response had an attitude of, "Let's see what we can get away with" and thus was very inadequate in addressing the requirement to reduce the bulk and scale of the south building. A 2% reduction???!!!! That is insulting to me as an owner that they would even

present this amendment. How can the applicant claim that the south building is compatible with Grand View in bulk and scale? Their depiction of compatibility is deceptive, inaccurate and has an air of arrogance.

In addition, the applicant has been unwilling to address the pedestrian and vehicle issues. I'm sure you're aware that the Master Plan says that the height of the buildings shall not overwhelm people walking beside the buildings and must not overwhelm pedestrian scale. Well, I for one would be totally overwhelmed by this massive building, not to mention that pedestrians will have to be walking on the road, not in the way that the applicant suggests they will walk. That makes no sense whatsoever, it won't happen, and I think the applicant knows that.

Therefore, I respectfully recommend that the Town of Jackson reject the plans for Lot 57 so we continue to remain true to the Master Plan which was well thought out and done for a reason.

Sincerely,
Chris Palmer

May 15, 2025

To: Town of Jackson Planning Commission
From: K&K on Simpson, LLC
RE: Comment for 180 S. King St. Courthouse Development

To the Members of the Town of Jackson Planning Commission:

The members of K&K on Simpson, LLC ("K&K"), owner of 70/72 E. Simpson Ave., request the following be considered in the application for approval of sketch plan and all future permitting for development of the proposed Courthouse complex to be located at 180 S. King St., Jackson, WY.

Before discussing the details of the proposed Courthouse plan, I would like to point out that the basis for K&K's perspective is largely the result of having been located on East Simpson Ave. for over 43 years. The members of K&K are George and Lea Kuvinka. For 40 years we operated our law office at 70 E. Simpson. Since our retirement, the property has been a mixed-use rental property. We continue to have nearly daily contact with the property as we perform much of the maintenance on the property. From the top of Snow King, you might notice that our property includes the largest and greenest backyard in the area. We have chosen not to develop but, rather, to preserve and renovate. During the same period, there have been several long term major construction projects at the 180 S. King St. location which include the current jail, the Hansen Courthouse and the renovation of the current courthouse.

The comments in this letter are limited to practical matters which I raised at the neighborhood meeting this past winter. Nobody from the Town planning office or commission attended the meeting. We may have opinions regarding the size and necessity for such a large building. However, it appears that there is already a commitment to a single 80,000 square foot building.

1. Construction Noise and Hours. This project is in the fringe between a commercial area and a residential area. 70 E. Simpson is an office and 72 E. Simpson is a residential rental. Many other properties in the area are mixed use or residential. During the previous courthouse remodel, jackhammering was constant for hours each day over lengthy periods of time. Much more noise and disruption will likely occur considering the proposed structure is 80,000 square feet to be constructed over the three years. It would seem appropriate that strict time limits on the days and hours of construction

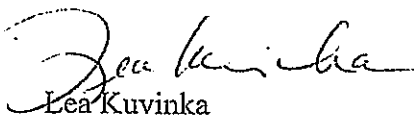
including a maximum number of hours per day during which the noisier activities can occur. For instance, noisier construction activities could be limited to a few hours per day. The contractor should be required to inform those who request notification of a schedule of expected noise and other disruptions on a regular basis before they occur so that businesses can plan their activities and residents know what to expect.

2. Staging. At the neighborhood meeting, there was brief mention of the proposed staging area being in the parking area across from the Hansen Courthouse. This 50'X150' lot seems inadequate for such a large project. My understanding is that some of the parking near the jail and general services building will remain in service further limiting on-site staging. The result of inadequate staging areas will likely be that construction materials will be stored in trailers on the local streets and other areas which interfere with the current use of the streets and sidewalks. A plan for adequate staging should be required which considers the current neighborhood use of these areas.

3. Parking. On any given day, the streets around the current courthouse are solidly parked. Even if the current courthouse offices are moved, the parking problem will not resolve as parking is being pushed into this area. Visitors as well as employees of the commercial area park where limits are more generous. Similar to the current construction area on Pearl Street, street parking will be further limited and pushed in every direction due to closed curb parking. No doubt, the Town staff as well as the neighborhood occupants will find the parking issue an incredible challenge when the construction gets going. One obvious strategy would be to require the contractor to prohibit workers from parking anywhere in the area by providing parking elsewhere with transportation to the construction site. The Town might also consider strategies to redirect visitor and downtown employee parking away from this area. I am sure there are other strategies as well. The point being that this issue needs to be addressed in detail with a specific traffic and parking plan for the area.

We realize there is no way to completely mitigate the effect of an 80,000 square foot building with a three year construction timeline, our request is that the Town do as much as possible to retain the character and quality of our neighborhood, from the design of the project to the disruption the construction process may cause.

Very truly yours,



Lea Kuvinka
On behalf of K&K on Simpson, LLC

Grand View Homeowners Association

Jackson, Wyoming

May 15, 2025

Tyler Valentine
Senior Planner, Town of Jackson Planning and Building Department
Via email to: tvalentine@jacksonwy.gov

RE: Revised Bear Development Proposed Plans Lot 57

Dear Tyler,

The Grand View Condominium Association (the "Association") has reviewed the revised application and plans for Snow King Condominiums Lots 57 submitted by Bear Development, LLC, a Wisconsin developer (the "Applicant"). The Association respectfully submits that the Applicants revised plans continue to fail to comply with the requirements of the Snow King Planned Resort District Master Plan ("Master Plan") and do not address the specific concerns raised by Planning and the Commission on April 16.

The Association's primary objection is to the Lot 57 south building that continues to be incompatible in bulk, scale and character with Grand View Condominiums which is a specifically stated requirement of the Master Plan.

Issue 1: Plans Continue to not Adhere to the Requirements of the Snow King Master Plan

The Master Plan provides a depiction of what was previously approved and could be anticipated and approved for Lot 57 – the "development predictability" that is a key component of the Master Plan. SKRMA always recommends prospective buyers in the Resort District to review the Master Plan to understand what has been approved to be built. The depictions and illustrations show a 25,393 square foot building approved by the Town of Jackson for Lot 57 building (see attachment Exhibit 1). A very reasonable building is depicted and compatible in bulk, scale and character with Grand View. Buyers of Grand View units therefore made their purchase decision based upon what they saw in the Master Plan. Instead, the Applicant has decided to move 18,000 sq ft and added a second massive building – over 70% growth of what is approved in the Master Plan. The approval of this lot needs to be based upon as if it were purchased on a stand alone basis and without the additional unapproved 18,000 sq ft.

We would like to make it clear that our objection to the proposed plans for Lot 57 is totally based upon it not meeting the specific requirements stated in the Master Plan and NOT anything to do with current owners against development or losing their views.

I would also like to make the point that words placed in the Master Plan matter just as much as numbers. When the plan says any buildings on Lot 57 must be compatible in bulk, scale and character with Grand View, this requires a clear judgement call. Fortunately, the call for the Planning Commission is very easy. The Applicants south building being twice as high as the back of Grand View 548, containing almost four times the number of units, foot print allows no setbacks from property line and extends three times in length than Grand View buildings clearly violate these words.

If the revised Lot 57 plans are approved in their current form, a precedent will be set in the Snow King Resort District to allow for development of a size and character that is not consistent with the Master Plan Design Guidelines and was never contemplated in the Master Plan. Such an approval will create confusion and ambiguity moving forward, and will ultimately undermine the Master Plan itself.

Issue 2: Non-Responsive to Requested Reductions in Bulk and Scale

On the 16th of April, the Applicant's proposed plans for Lot 57 were rejected with the specific instructions as follows:

> *In addition, the applicant shall make design changes that further reduce the bulk and scale of the northeast corner of the south building. Suggested changes could include, but are not limited to, removing a section of building on the east side, shifting the building farther south, removing a partial story, shortening the roof overhang above the easternmost third-floor unit, reducing square footage, modifying the floor plans to create larger step-backs on upper units, and/or reducing unit counts.*

The Applicant's response was woefully inadequate and essentially did almost nothing to address the issues identified:

- A removal of a bedroom of 517 square feet on the fourth floor of a portion of the northeast corner of the south building which represents a 2% reduction, in no way addresses the requirement to reduce the bulk and scale of the south building.
- The rendering (Page 7) finally provided by the Applicant in the revised package (which we had continually requested) is so deceptive and dishonest. It is also an admission by the Applicant that it does violate the Master Plan as they are trying to hide the actual bulk and scale of the south building.
- The rendering produced by Grand View HOA (Exhibit 2) is still an accurate depiction of the bulk and scale of the south building, the total footprint of which has not changed. If you remove the upper left-hand corner single bedroom which is all the Applicant is proposing, you would not be able to even see the change from the road below.

- The south building continues to violated the Master Plan requirement to be compatible with Grand View in bulk, scale and character as it clearly does not.

Applicant continues to claim the south building is compatible with Grand View in bulk and scale. See Exhibit 3 produced by the Applicant and which we will show is totally inaccurate. The actual spacing between the Applicant's south building and 548 is shown in Exhibit 2 which was done from actual drawings. The actual spacing between Grand View 548 and Love Ridge 536 is shown in an actual picture in Exhibit 4. Again, the Applicant's depiction of compatibility is deceptive and totally inaccurate.

Issue 3: Non-Responsive to Pedestrian and Vehicle Issues

We continue to point out the Applicant's unwillingness to address the pedestrian and vehicle issues. The Master Plan specifies that the height of buildings shall not overwhelm people walking beside the buildings and must not overwhelm pedestrian scale. (p. 57, 59)

- A total Canyon effect will result between the south and north buildings. At the closest point, it is estimated that the buildings 55' and 35' respectively with less than 10' between them and at the sidewalk level around 6' between them. The same Canyon effect will be present between the south building and Grand View 548. This is totally pedestrian unfriendly which clearly violates a requirement in the Master Plan
- The applicant removed sidewalks on Lot 57 to meet the vegetation requirements along their buildings. The applicant is therefore suggesting pedestrians will use the Grand View sidewalks across the road rather than reduce the building sizes on Lot 57. This is totally unrealistic and actually silly. Does one actually think pedestrians will cross the road, walk up on the Grand View sidewalk and then cross back to Lot 57? Pedestrians will be walking in the road to get to the Applicant's buildings by foot. Totally unsafe and again a total violation of the required pedestrian accommodations in the Master Plan.
- The Applicant's movement of 18,000 sq ft and adding a second building is taking up so much of the .83 acre lot there is absolutely no allowance for visitor or service unit parking. Many of the planned units only have one parking space. Visitor and service unit parking will take place all along the road and at opportunistic spots at not only Bear Dev buildings but Grand View/Love Ridge buildings as well.

Summary

The Applicant's proposed changes in response to the rejection of their original plans for Lot 57 continue to violate the Master Plan and continue to be inconsistent with what was anticipated in the Master Plan and on which owners within the Snow King Resort Area relied. The bulk, scale, and character of the south building is not compatible with existing development, will dwarf the pedestrian scale in Sub-Area, and is squarely at odds with the Master Plan goals of balance and

predictability. Exhibit 5 is provided to depict how compatible the Applicant's north building is to Grand View with the elimination of the south building.

With the requested rejection of the plans for Lot 57, the Applicant still has a very viable plan to move forward. They can immediately start with the plans approved for Lots 53 and 58 while they spend the additional time and energy needed to redesign Lot 57 to meet the requirement of the Snow King Master Plan.

Respectfully Submitted,

Rich

Richard Lurie
President
Grand View Condominium Association

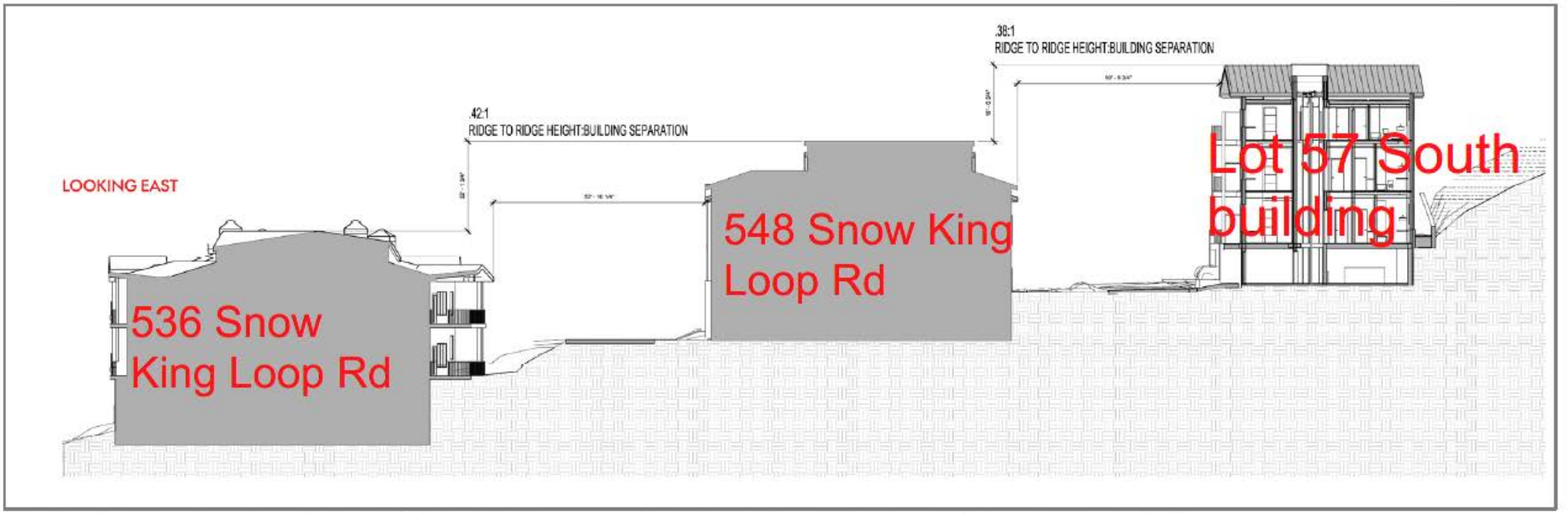


Sub Area #3
Existing and Proposed Condominiums

Sub-Area 3 consists of the Grand View, Love Ridge, and Simpson Patent condominimum developments and the Grand View Lodge. Lots 53, 57, and 58 are the remaining lots platted for condominimum development within this sub-area. The Jackson Town Council approved building plans for a condominimum building on lot 53 and the planning/building departments issued a building parmit for building D on lot 53 which expired in 2009. The architectural drawings for this building are shown in the sketch drawing section of this master plan. The Town Council approved a development plan for a building on lot 57 in 2004, the architechtural plans for this building are included in the sketch drawing section of this master plan. Condominimums on lot 58 are proposed to match buildings on lots 53 and 57 in architectural design.







Site Section showing the relationship in heights between Lot 57 South and the downhill Grand View buildings



From: Harry Dannenberg <harrydannenberg1@icloud.com>
Sent: Thursday, May 15, 2025 8:29 AM
To: Tyler Valentine
Subject: Revised Proposal for Lot 57

I am a 10 year property owner and part time resident (summers) in the Love Ridge Condominiums located in the Snow King Resort District. I am also a member of the Board of Directors of SKRMA. I am the residential director of SKRMA representing the interests of the residential owners in the resort district. As a member of the SKRMA Board I previously voted against approval of the plans by Bear Development with regard to lot 57.

I wrote you on February 20,2025 expressing my agreement with the views of Grand View Condominium Association and Love Ridge Homes Condominium Association that the proposed development by Bear Development violates the Snow King Resort Master Plan because Bear's plans were not compatible with the bulk,scale and character of the existing Grand View Condominiums and Grand View Lodge as required under the Master Plan. I have reviewed the revised submission and plans of Bear Development and I continue to oppose the plan for Lot 57 because it is incompatible in bulk, scale and character of the Grand View Condominiums and Grand View Lodge as required under the Master Plan.

I express my strong agreement with the excellent letters submitted by Rich Lurie, President of Grand View Condominium Association and Kyle Levine, an owner of a unit in Grand View.

I hope the town takes the correct action and rejects the revised proposal for the Lot 57 South Building. This behemoth of a building does not belong in the resort district. Any development of Lot 57 should be along the lines that are described in the Master Plan and approved by the Town Council in 2006. Two large buildings on Lot 57 are not allowed by the Master Plan.

Sincerely, Harry Dannenberg
Sent from my iPad

From: Jenny Herman
To: Tyler Valentine
Subject: Revised Proposal for SKRMA Lot 57
Date: Thursday, May 15, 2025 10:27:27 AM

Mr. Valentine and The Members of the Planning Commission:

My husband and I have owned a Love Ridge condo for 20 years. I am retired and spend a significant amount of time in Jackson throughout the year. Over the past 5 years I have served in some capacity on the HOA Board and for the past 3 years as the HOA board's President. All this to say I am very involved with day-to-day operations and ongoing resolutions that happen when you have 10 buildings with 40 condo units.

Parking: One of our ongoing issues is parking. Each condo is deeded 2 specific parking places in our garage. Each space is marked with the condo unit number. We also have a large sign on the entry doors that states unauthorized vehicles will be towed by Jackson police. None of these are tandem spaces. During busy seasons these spaces are always full. When you have dinner guests, service trucks etc, they have nowhere to park but the roadway. I bring this up because the parking included in the BEAR proposal is not sufficient. Our roadways are much wider and allow for a vehicle to be temporarily parked without impeding traffic. The BEAR proposals have no space for oversized vehicles. We have limited outdoor spaces that can be reserved for oversized vehicles, they have none! This is a huge concern and I have not seen evidence that this was addressed in the original plans or any of the revised plans.

Sidewalks: The revised plan did not address the lack of sidewalks along each building. Yet, they preprot that they are walking distance to town and do not give walkways to traverse on. In the winter, these walkways are needed for a safe way to get across the resort area. In both Love Ridge and Grandview Condos we have heated sidewalk systems and also utilize shovelling to make sure owners and guests have the sidewalks to get around the area. Due to the snow depth and ice build up the roadway is often not safe to walk on. Please mandate that BEAR Development address this issue!

I express a strong agreement with the detailed letters submitted by Rich Lurie, President of Grand View Condominium Association and Kyle Levine, an owner of a unit in Grand View. They provided the technical letters and the negative impact that allowing the current BEAR plan on Lot 57 will create.

It is my hope that the town will take the correct action and **reject the revised BEAR Dev plans for Lot 57**. Please refer back to the 2006 approved plans for Lot 57, those plans were in line with the SKRMA Master Plan.

I regret that I have a personal conflict and thus cannot participate in the Zoom meeting on May 21st. However, I do plan to attend the scheduled Town Council meeting on June 2nd to voice my concerns that have not been addressed with regards to traffic, walkways and parking.

Sincerely,
Jenny Herman
Love Ridge Unit 536

February 14, 2025

Tyler Valentine
Senior Planner, Town of Jackson

RE: Bear Development Proposed Plans for Lots 53, 57, 58
Items P24-168, P24-174 & P24-175

Mr. Valentine,
The Love Ridge Lodge Homes Condominium Association's Board reviewed Bear Development's plans for Lot 57, 53 and 58. After review of the documents and drawings we believe they do not comply with the Snow King Resort District Master Plan. A blatant violation to this Master Plan is shown in the excerpt below. Therefore, we request that the Town of Jackson reject the proposed Bear Development plan.

From page 70 of the Snow King Master Plan:

> The remaining developable lots within Sub-Area 3 consisting of Lots 53,57, and 58 located to the South of the existing Grand View Condominiums will be developed to fit in with the bulk, scale, and character of the existing Grand View Condominiums and Grand View Lodge.

Thank you for your time in carefully reviewing the Bear Development plan in connection to the Snow King Resort District Master Plan. We have 40 individual owners in our HOA and strive to work in the interest of our association for all our owners.

Respectfully,

Jenny A. Herman, President
Love Ridge Lodge Homes Condominium Association

From: Jenny Herman
To: Tyler Valentine
Subject: Revised Proposal for BEAR Development SKRMA Lot 57
Date: Thursday, May 15, 2025 5:11:37 PM

Mr. Valentine and The Planning Commission,

I submitted a letter on behalf of the Love Ridge Lodge Homes HOA on February 20, 2025. Our position has not changed. The proposed development by Bear Development violates the Snow King Resort Master Plan because Bear's plans were not compatible with the bulk,scale and character of the existing Grand View Condominiums and Grand View Lodge as required under the Master Plan.
We have reviewed the revised submission and plans of Bear Development and we continue to oppose the plan for Lot 57 because it is incompatible in bulk, scale and character of the Grand View Condominiums and Grand View Lodge as required under the Master Plan.

In packets that have been previously submitted we encourage all members of the committee to review the submissions by Rich Lurie, President of Grand View Condominium Association and Kyle Levine, an owner of a unit in Grand View.

I hope the town takes the correct action and rejects the revised proposal for the Lot 57 South Building. This behemoth of a building does not belong in the resort district. Any development of Lot 57 should be along the lines that are described in the Master Plan and approved by the Town Council in 2006 and again in 2021.

Sincerely,
Jenny Herman
President, Love Ridge Lodge Homes CA
Mobile: 817.938.4009

From: Jeremie Dufault
To: Tyler Valentine
Subject: Lot 57
Date: Sunday, May 25, 2025 7:24:28 PM

Dear Mr. Valentine, I am the owner of Unit 5030 at 550 Snow King Loop. I have reviewed the plans for Lot 57. The proposed building is not compatible in bulk, scale and character with Grand View Condominiums as required by the approved Master Plan. I reviewed the Master Plan prior to my purchase and determined that any developer of Lot 57 would be legally obligated to build consistent in bulk, scale, and character, and not be allowed to violate the terms of the Master Plan. I respectfully request that you reject the current proposal in support of the reliance and expectations owners like me had when we purchased our units. Thank you, Jeremie

From: noreply@civicplus.com
To: anne@brilliantlydone.com; k.wilson2582@gmail.com; tomcatsmits@icloud.com; apetri@nwks.com; stephfellowswise@gmail.com; lauraabonich@gmail.com; Town of Jackson Planning Department; georgiews4@gmail.com
Subject: Online Form Submittal: Email the Planning Commission
Date: Sunday, May 18, 2025 12:55:20 PM

Email the Planning Commission

Email Content:	As Owners of Grand View Lodge #4930, we are still very opposed to the Bear Development Plan for Lots 53, 57 & 58. We strongly endorse the Grand View Homeowners Association correspondence and communications to you as detailed by our HOA President Richard Lurie and the Grand View Board. The Bear Development's Plan and corrective submissions as requested by the Planning Department are still in violation and do not in anyway comply effectively with the Snow King Master Plan in bulk, size or character. We purchased this property with the premised that the development would be in accordance with the Snow King Master Plan. Even details of the future development plan were personally communicated to us by the Owner/Developer at the time of purchase negotiations and definitely has a bearing on our decision. Safety issues also concern us regarding accessibility for emergency and utility service vehicles and guest parking without a proper ingress/egress solution. The overriding, radical, self-serving development plan just does not fit. The Snow King Master Plan has set the criteria and standard for the Grand View Community and should be honored and complied with. Thank you for your consideration.
Your Name:	John & Irene Hammons
Your Company Name:	Windmill Canyon Ranch
Your Phone Number:	6614356459
Your Email Address:	windmilljh@gmail.com
Your City:	Leona Valley
Your State:	California
Your Zip Code:	93551

Email not displaying correctly? View it in your browser.

From: Deborah Wente <dgwente@outlook.com>
Sent: Sunday, May 11, 2025 9:20 AM
To: Tyler Valentine
Subject: Re: Proposed Snow King development
Attachments: View 3 50% Tree Opacity.jpg; Screenshot 2025-05-11 at 10.17.20 AM.png

John and Deborah Wente
548 Snow King Loop Road
Unit 482
Jackson, WY 83001

May 11, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning and Building Department
Tvalentine@jacksonwy.gov

Dear Mr. Valentine,

Please find an updated letter regarding the Bear Development proposal in the Snow King resort district. You will find that the primary issue concerning our unit at 548 Snow King Loop Road remains unchanged.

We own Grandview unit 482 which is located on the east side of the building.

Please consider this letter as opposition to the Bear Development plans for lot 57 of the Snow King Resort. The proposed buildings remain massive in comparison to the existing condominiums in our neighborhood. The buildings create significant, negative

impacts to Grandview and the surrounding areas and do not meet the master plans requirements for bulk, scale, or character as explained more fully in the letter from Richard Lurie, President of the Grandview Condominium Association. We ask that the plans for Lot 57 be denied until changes are made to bring the proposed development into compliance with the master plan.

The newly revised plans submitted by Bear Development have done little to address these issues. It is clear their revised plans refuse to reduce by any but the most negligible amount the size of their buildings on Lot 57. To meet the requirement to have room for vegetation next to their building, instead of reducing the size and footprint of their buildings to allow vegetation as required by the Snow King Master Plan, their solution is to eliminate the sidewalks. Pedestrians, therefore, walking up from the hotel or parking to the 72 condominiums have to walk in the road. Additionally, there is no accommodation for parking which will also create a negative impact for our unit.

In 2006 when we purchased our unit in building 548 of Snow King, we carefully reviewed all associated documentation. This included the Snow King master plan. We understood that there would be eventual development near our unit consistent with what was presented in the master plan and approved by the Town of Jackson. As stated in the master plan, units will be developed to fit in with the bulk, scale, and character of the existing Grandview condominiums and Grandview Lodge.

We strenuously object to the current plan. These buildings are much bigger than the current units and are inconsistent with the Snow King master plan. We will completely lose visibility

of Snow King Mountain. One of our favorite things is to sit on the back deck and look up at the mountain, there was never any expectation we would lose this privilege. Please reference the attached renderings to demonstrate how overshadowed our building would be with the lot 57 South building as proposed. Our beautiful view of the mountain would now be a view of a garage. We would be surrounded by buildings that are much bigger and bulkier in scale than those currently in place.

Again, we understand that these properties were planned for development. However, we had absolutely no expectation they would be so completely oversized compared to the current building.

If this development as proposed is allowed to proceed, the Snow King master plan becomes a useless document that no potential buyer in the Resort District can rely upon.

We respectfully request that the town of Jackson reject the proposed plan.

John and Deborah Wente

Get Outlook for iOS

April 13, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning & Building Department
tvalentine@jacksonwy.gov

Dear Mr. Valentine:

As Owners of Grandview Lodge #4930, we are still very opposed to the Bear Development Plan for Lots 53, 57 & 58. We strongly endorse the Grand View Homeowners Association correspondence and communications to you as detailed by Rich Lurie and the Grand View Board.. The Bear Development's resubmissions are still in violation and do not in anyway comply effectively with the Snow King Master Plan in bulk, scale or character.

We purchased the property with the premise that the development would be in accordance with the Snow King Master Plan. Even details of this future development plan was personally communicated to us by the Owner/Developer at the time of purchase negotiations and had a bearing on our decision.

Safety issues also concern us regarding accessibility for emergency and utility service vehicles and guest parking without a proper ingress/egress solution.

The overriding, radical, self-serving development plan just does not fit. The Snow King Master Plan has set the criteria and standard for the Grand View Community and should be honored and complied with.

Thank you for your consideration.

John & Irene Hammons



From: noreply@civicplus.com
To: anne@brilliantlydone.com; k.wilson2582@gmail.com; tomcatsmits@icloud.com; apetri@nwks.com; stephfellowswise@gmail.com; lauraabonich@gmail.com; Town of Jackson Planning Department; georgiews4@gmail.com
Subject: Online Form Submittal: Email the Planning Commission
Date: Monday, May 19, 2025 10:17:50 AM

Email the Planning Commission

Email Content:

Kyle Levine
Blanche Neige LLC
548 Snow King Loop Road
Unit 483
Jackson, WY 83001
kblsf@yahoo.com

May 19, 2025

Planning Commission
Town of Jackson, WY
Via online portal

Dear Commissioners:

I'm writing as a property owner in Grand View building 548, which is adjacent to Lot 57 of Bear Development's pending project. I understand that revised plans will reviewed at your May 21 meeting. I respectfully urge you to reject the revised plans or to approve conditionally (as you were poised to do on April 16) so that Lot 57 plans show meaningful bulk and scale changes before Town Council review.

I attended the April 16 meeting by Zoom and appreciated the Commission's well informed and inquisitive approach, agreeing with Planning's recommendation to condition development on changes "geared at reducing the bulk and scale and improving the character" of the south building consistent with the Master Plan. I am surprised and concerned at the apparent lack of effort by Bear to respond to the Commission's clearly stated concerns about bulk, scale and character compatibility. I am also concerned about what appear to be the unmitigated violation of the Master Plan mandates "not overwhelm the pedestrian scale" and "require the structures to step back away from the street or plaza."

The revised plans include the minimal changes to address Condition 5 of your April 16 Resolution, but do not solve the fundamental design flaws under the Master Plan that fueled the

April 16 deliberations and Resolution. The Commission has the authority and responsibility to current property owners to reject the plans or to condition approval on meaningful changes.

1. Canyon Effect / Excessive Verticality and Density

Planning voiced “character-related concerns over the northeast portion of the south building because it is located close to the road and creates a canyon effect, which is more urban and not in character with surrounding developments that include adequate landscaping and space between the road and the buildings.”

Several Commissioners remarked on the large scale of Bear’s two-building, 43,000 sq. ft. plan and the discrepancy with the 28,000 sq. ft. concept shown in the Master Plan and approved by the Town Council in 2006. Bear’s superficial, minimal changes did nothing to fix the real problem you and our neighbors see here – the planned development is too big, to high and too close to Grand View 548

The canyon effect – a result of the verticality noted by Chair Wilson and inadequate spacing or setbacks – remains a serious defect that has not been seriously addressed by Bear. The footprint of Lot 57’s buildings is exactly the same as presented on April 16. Roofline pullbacks four stories above do nothing to mitigate the closeness that will be felt at street level.

I recognize that the Commission needs to reconcile the Master Plan’s desire for design flexibility with the obligation to preserve bulk, scale and character consistency. But what’s technically allowed isn’t necessarily character-consistent. Planning’s April 16 report explains the canyon effect as an instance of this tension. “The cause of this canyon effect is because 1) the south building is proposed in a location that the Master Plan did not anticipate, but otherwise allows, and 2) the applicant is proposing more overall floor area and basement square footage on Lot 57 than shown on the conceptual site plan even though they are compliant with overall square footage, APOs, parking, FARs LSR, etc.” (emphasis added.)

As you discussed, the dense layout proposed by Bear is an unfortunate function of Bear’s ability to mix-and-match allowable square feet among its three parcels and thus exceed the Master Plan concept by 15,000+ sq. ft. while building to the very edge of the northeast property line. The Commission cannot endorse a plan of this density, even if cross-allocation itself is allowed under the Master Plan, because it does not fit with the neighborhood bulk, scale or character. Would this massive development be permitted if Lot 57 were an independent project without the benefit of bonus footprint allocation?

The canyon effect is a function of vertical and horizontal volume. Condition 5 offered solutions for both factors, but Bear did too little to fix the entire problem. Bear removed just 2% of the overall square footage from a portion of the top floor, helping slightly with vertical bulk and scale, but did nothing to change horizontal density driven by the structural footprint. If you don't have time to visit the site to see for yourself how little room there is for the proposed development (especially on the south arm, where the Master Plan anticipated no development), consider these measurements:

o Roof-to-roof clearance is still just 43 feet between Grand View 548 and Lot 57 North, with Upper Snow King Loop running in between.

o Horizontal separation between Grand View 548 and the balconies of Lot 57 South is likely 45-50 feet. The south structure will be built to the very lot lines, so someone at street level or on the patio of a Grand View condominium will perceive three layers of balconies rising steeply above the road. This naturally has light, sound and privacy implications on our neighborhood character.

o The roofline setbacks on the top edge of the south building are a nice concession but have limited practical impact on the canyon effect since Lot 57 South's roof line is 19 feet higher than Grand View's and out of view at street level from most vantage points.

The depiction below illustrates how crowded this passage will feel from the street level.
Bear claims that these tight horizontal clearances are consistent with the separation between Grand View buildings. The critical difference: there is no road running between the Grand View buildings. The better comparison is the separation between Grand View 548 and the Love Ridge building downhill, which is nearly 53 feet and divided by Snow King Loop Road. This is 10 feet more separation than the revised plans would put between Grand View 548 and Lot 57 North.

2. Negative Parking and Walking Experience

Pedestrians and drivers will experience the canyon effect as an unwelcoming sense of constriction as they proceed uphill from Grand View Lodge and turn on Upper Snow King towards Lots 53 and 58. With inadequate parking, pedestrians will inevitably use Upper Snow King to walk uphill from the alley between the Lot 57's two building and Lots 53 and 58. There's no sidewalk because Lot 57 South is so close to the road and has no meaningful setback. This crowded arrangement violates at least two Master Plan principles: ". . . do not overwhelm the pedestrian

scale" and "require the structures to step back away from the street or plaza."

Planning has advised that the Master Plan does not dictate parking capacity, which is an important input to the pedestrian experience. This is unfortunate since Bear has sacrificed parking and walkability for maximum square footage. As you heard on April 16, residents, guests, caretakers, maintenance staff and rideshare drivers without dedicated parking will fend for themselves and compete for parking in Grand View and Love Ridge. Then they will have to walk uphill alongside a four-story building and through a 43-foot wide canyon to their destinations, but not on a sidewalk that should take them along Lot 57 South's entire length. This is a far cry from the welcoming and cohesive pedestrian experience anticipated by the Master Plan.

The depictions included with my May 14 submission illustrate this experience. Note the verticality and density of both Lot 57 buildings and the shadows cast across Upper Snow King Loop.

The street-level perspective looking west between Lot 57 South and Grand View 548 is a striking illustration of the canyon effect . . . even without showing the Lot 57 North building that would loom to the right in the distance. Note that Bear removed the sidewalk in front of the south building so there is even less buffer between structures. I acknowledge that Bear made some bulk reductions on the walls around the balconies.

3. Reliance on Master Plan Terms and Precedent / Expectation of Restraint

I purchased Grand View 548 in 2023. During pre-purchase diligence, I read the relevant Master Plan language. I also found Bear's Zoning Compliance Verification (ZCV) application, asking Planning to clarify development rights and opportunities on Lots 53, 57 and 58 in relation to the approved 2006 concept. Bear's ZCV referenced a 2021 ZCV response in which the Town affirmed that future development "must comply" with the requirements to maintain "bulk, scale and character consistency;" "to reduce bulk and mass;" and "to create a design that fits well with the topography and neighboring condominiums." I appreciate Planning's thoughtful work to enforce these standards in this proceeding.
I relied on these public records and took comfort that the Master Plan would be enforced with any eventual development being generally consistent with the 2006 concept.

Instead, we are faced with the prospect of a behemoth surrounding and towering over two sides of our building with less than 50 feet separation.

This is not an outcome that “we should have seen coming” just because we bought in a resort district. The Master Plan terms, the approved 2006 concepts, Planning’s ZCV interpretations, responsible due diligence, and this Commission’s sound judgment are the public checks on excessive development. We are not opposed to and not surprised by development categorically.

The Master Plan exists so that buyers and developers alike have predictability before investing in the Snow King community. The massive structures proposed by Bear were not predictable because they are clearly at odds with the 2006 concept that is a matter of Jackson’s public record. To quote Planning’s report, the south building is being placed “in a location that the Master Plan did not anticipate” and, even less predictably, would occupy virtually every available foot of the narrow property between the Cowboy Coaster and the road.

I fear that the Master Plan’s goals and prior interpretations will be loosely applied to Lot 57 because the Master Plan is less prescriptive than Town standards, and the Commission feels that they have no choice on May 21 except to advance the plans to Town Council. The Commission has the challenging responsibility to interpret Master Plan standards and precedent subjectively and then decide whether Bear’s plans are not just technically allowable, but also aesthetically suitable based on the bulk, scale and character of the neighborhood. This is not the case for the revised Lot 57 plans. They should be reject or approved conditionally.

4. Conclusion

The Master Plan must have force for those who purchased in Grand View or Love Ridge expecting restrained development and those who are considering buying or developing in Snow King in the future. The Master Plan gives certainly developers flexibility to build new properties, but not at the expense of neighborhood character, pedestrian experience and the other environmental factors set out in the Master Plan. The Commission should reject the current plans, or approve conditionally, requiring Bear to reimagine Lot 57 with compliant structure(s) before advancing to Town Council review.

Thank you for considering these comments.

Respectfully,

Kyle Levine

Your Name:	Kyle Levine
Your Company Name:	Blanche Neige LLC
Your Phone Number:	2063040170
Your Email Address:	kblsf@yahoo.com
Your City:	Jackson
Your State:	WY
Your Zip Code:	83001

Email not displaying correctly? View it in your browser.

Kyle Levine
Blanche Neige LLC
548 Snow King Loop Road
Unit 483
Jackson, WY 83001
kblsf@yahoo.com

May 14, 2025

Tyler Valentine
Senior Planner
Town of Jackson Planning and Building Dept.
tvalentine@jacksonwy.gov

Dear Mr. Valentine:

I'm writing once again as a property owner in Grand View building 548, which is adjacent to Lot 57 of Bear Development's pending project.

I attended the April 16 meeting by Zoom and was pleased that the Commission was engaged and inquisitive, agreeing with Planning's good recommendation to condition development on changes "geared at reducing the bulk and scale and improving the character" of the south building consistent with the Master Plan. I understand that the revised plans will be subject to further review on May 21 and have these additional comments.

The revised plans barely respond to Commission and Planning concerns and do not solve fundamental design flaws under the Master Plan.

1. Canyon Effect / Excessive Verticality and Density

Planning has "character-related concerns over the northeast portion of the south building because it is located close to the road and creates a canyon effect, which is more urban and not in character with surrounding developments that include adequate landscaping and space between the road and the buildings."

Several commissioners remarked on the large scale of Bear's two-building, 43,000 sq. ft. plan and the discrepancy with the 28,000 sq. ft. concept shown in the Master Plan and approved by the Town Council in 2006.

The canyon effect – effectively a result of the verticality noted by Chair Wilson and inadequate spacing or setbacks – remains a serious defect that has not been seriously addressed by Bear. **The footprint of Lot 57's buildings is exactly the same as presented on April 16.** Roofline pullbacks four stories above do nothing to mitigate the closeness that will be felt at street level.

I recognize that the Commission needs to reconcile the Master Plan's desire for design flexibility with the obligation to preserve bulk, scale and character consistency. But what's technically *allowed* isn't necessarily *character-consistent*. Planning's April 16 report explains the canyon effect as an instance of this tension.

> *"The cause of this canyon effect is because 1) the south building is proposed in a location that the Master Plan did not anticipate, but otherwise allows, and 2) the applicant is proposing more overall floor area and basement square footage on Lot 57 than shown on the conceptual site plan even though they are compliant with overall square footage, APOs, parking, FARs LSR, etc." (emphasis added.)*

As you noted, the dense layout proposed by Bear is an unfortunate function of Bear's ability to mix-and-match allowable square feet among its three parcels and thus exceed the Master Plan concept by 15,000+ sq. ft. while building to the very edge of the northeast property line. The Commission cannot endorse a plan of this density, even if cross-allocation itself is allowed under the Master Plan, because it does not fit with the neighborhood bulk, scale or character. Would this massive development be permitted if Lot 57 were an independent project without the benefit of bonus footprint allocation?

The canyon effect is a function of vertical and horizontal volume. Condition 5 offered solutions for both factors. Bear removed just 2% of the overall square footage from a portion of the top floor, helping slightly with vertical bulk and scale, but did nothing to change horizontal density driven by the structural footprint. If you don't have time to visit the site to see for yourself how little room there is for the proposed development (especially on the south arm, where the Master Plan anticipated no development), consider these measurements:

- Roof-to-roof clearance is still just **43 feet** between Grand View 548 and Lot 57 North, with Upper Snow King Loop running in between.

- Horizontal separation between Grand View 548 and the balconies of Lot 57 South is likely **45-50 feet**. Because the south structure will be built to the very lot lines, someone at street level or on the patio of a Grand View

condominium will perceive three layers of balconies rising steeply above the road. This naturally has light, sound and privacy implications on our neighborhood character.

- The roofline setbacks on the top edge of the south building are a nice concession but have limited practical impact on the canyon effect since Lot 57 South's roof line is **19 feet higher** than Grand View's and out of view at street level from most vantage points.

This depiction below illustrates how crowded this passage will feel from the street level.

Bear claims that these tight horizontal clearances are consistent with the separation between Grand View buildings. They ignore a critical difference: there is no road running between the Grand View buildings. The correct comparison is the separation between Grand View 548 and the Love Ridge building downhill, which is nearly **53 feet** and divided by Snow King Loop Road. This is 10 feet more separation than the revised plans would put between Grand View 548 and Lot 57 North.

2. Negative Parking and Walking Experience

Pedestrians and drivers will experience the canyon effect as an unwelcoming sense of constriction as they proceed uphill from Grand View Lodge and turn on Upper Snow King towards Lots 53 and 58. With inadequate parking, pedestrians will inevitably use Upper Snow King to walk uphill from the alley between the Lot 57's two building and Lots 53 and 58. There's no sidewalk because Lot 57 South is so close to the road and has no meaningful setback. This crowded arrangement violates at least two Master Plan principles: "***. . . do not overwhelm the pedestrian scale***" and "***require the structures to step back away from the street or plaza."***

Planning has advised that the Master Plan does not dictate parking capacity, which is an important input to the pedestrian experience. This is fortunate since Bear has sacrificed parking and walkability for maximum square footage. As you heard on April 16, residents, guests, caretakers, maintenance staff and rideshare drivers without dedicated parking will fend for themselves and compete for parking in Grand View and Love Ridge. Then they will have to walk uphill alongside a four-story building and through a 43-foot wide canyon to their destinations, but not via the sidewalk that *should* take them along Lot 57 South's entire length. This is a far cry from the welcoming and cohesive pedestrian experience anticipated by the Master Plan.

The depictions below illustrate this experience. Note the verticality and density of both Lot 57 buildings and the shadows cast across Upper Snow King Loop.



The street-level perspective looking west between Lot 57 South and Grand View 548 is a striking illustration of the canyon effect . . . even without showing the Lot 57 North building that would loom to the right in the distance. Note that Bear removed the sidewalk in front of the south building so there is even less buffer between structures. See page 7 of Bear's revised submission for a view of this corridor based on the current building design.



3. Reliance on Master Plan Terms and Precedent / Expectation of Restraint

I purchased Grand View 548 in 2023. During pre-purchase diligence, I read the relevant Master Plan language. I also found Bear's Zoning Compliance Verification (ZCV) application, asking Planning to clarify development rights and opportunities on Lots 53, 57 and 58 in relation to the approved 2006 concept. Bear's ZCV referenced a 2021 ZCV response in which the Town affirmed that future development "must comply" with the requirements to maintain "bulk, scale and character consistency;" "to reduce bulk and mass;" and "to create a design that fits well with the topography and neighboring condominiums." I appreciate Planning's thoughtful work to enforce these standards in this proceeding.

I relied on these public records and took comfort that the Master Plan would be enforced with any eventual development being generally consistent with the 2006 concept shown below in the upper right.



Instead, we are faced with the prospect of a behemoth surrounding and towering over two sides of our building with less than 50 feet separation.



This is not the outcome that we should have seen coming because we bought in a resort district. The Master Plan terms, the approved 2006 concepts, Planning's ZCV interpretations, responsible due diligence, and this Commission's sound judgment are the public checks on excessive development.

The Master Plan exists so that buyers and developers alike have predictability before investing in the Snow King community. The massive structures proposed by Bear were not predictable because they are clearly at odds with the 2006 concept that is a matter of Jackson's public record. To quote Planning's report, the south building is being placed "in a location that the Master Plan *did not anticipate*" and, even less predictably, would occupy virtually every available foot of the narrow property between the Cowboy Coaster and the road.

I fear that the Master Plan's goals and prior interpretations will be loosely applied to Lot 57 because the Master Plan is less prescriptive than Town standards. The Commission has the challenging responsibility to interpret Master Plan standards and precedent subjectively and then decide whether Bear's plans are not just technically allowable, but also aesthetically suitable based on the bulk, scale and character of the neighborhood. This is not the case for the revised Lot 57 plans.

Conclusion

The Master Plan must have force for those who purchased in Grand View or Love Ridge expecting restrained development and those who are considering buying or developing in Snow King in the future. The Master Plan gives certainly developers flexibility to build new properties, but not at the expense of neighborhood character, pedestrian experience and the other environmental factors set out in the Master Plan. **The Commission should reject the current plans and require Bear to reimagine Lot 57 with compliant structure(s) while development proceeds on Lots 53 and 58.**

Thank you for considering these comments in anticipation of the May 21 meeting.

Respectfully,

Kyle Levine

From: noreply@civicplus.com
To: anne@brilliantlydone.com; k.wilson2582@gmail.com; tomcatsmits@icloud.com; apetri@nwks.com; stephfellowswise@gmail.com; lauraabonich@gmail.com; Town of Jackson Planning Department; georgiews4@gmail.com
Subject: Online Form Submittal: Email the Planning Commission
Date: Tuesday, May 20, 2025 5:50:48 AM

Email the Planning Commission

Email Content:	I am writing to object to the Bear Development Plans for Snow King Loop, Lot 57. We are the owners of 548 Snow King Loop Unit 481, which is directly impacted by plans on Lot 57. When we purchased our unit we relied upon the Snow King Master Plan which we assumed would be enforced and govern the future development t of Lot 57. The revised plans, as submitted by Bear Development, do not comply with e Bulk, Scale and Character language which is contained in the Master Plan. We have objected to each of the Lot 57 plans as submitted. This latest proposal from Bear Development is NOT RESPONSIVE TO THE CONCERNS RAISED BY THE COMMISSION. The footprint of the buildings have not changed. The inclusion of the South Building is inconsistent with the Master Plan which contained only one building. The Lot 57 development plans are too much building on too little property that is inconsistent with the Bulk, Character and Scale of the rest of Snow King. We encourage the Planning Commission to reject the plans for Lot 57 and require a more thoughtful and responsive plan from Bear Development.
Your Name:	William and Deborah Hartmann
Your Company Name:	*Field not completed.*
Your Phone Number:	216-470-2101
Your Email Address:	WILLIAM.L.HARTMANN@gmail.com
Your City:	Jackson
Your State:	WY
Your Zip Code:	83001

Email not displaying correctly? View it in your browser.

From: Bills GMAIL
To: Tyler Valentine
Cc: Rich Lurie
Subject: Beast Development Plans for Lot 57
Date: Thursday, May 15, 2025 5:35:35 PM

Dear Mr Valentine

As you now know, I am a property owner in Grand View building 548 which is directly across from Lot 57. We own unit 481 which is impacted by the Bear Development plans for Lot 57.

When we purchased our unit, we were aware of and relying on the Snow King Master Plan which we assumed would be enforced on future development of Lot 57. We assumed we could rely on the **Bulk, Scale and Character** language which was contained in the Master Plan.

We have objected to the Bear Development plans at each of the previous proposals. This latest proposal from Bear Development is in our opinion Not Responsive to the Concerns Raised by the Commission and Do Not Follow the Master Plan.

Unless and Until Bear Development revises its plans for Lot 57 to reduce the Bulk, Scale and Character of the Buildings (including adhering to the plans for a single building on Lot 57) we will continue to object.

Our objections to the new plans can be highlighted as follows:

The footprint of the Lot 57 buildings is unchanged from the previous proposals

The inclusion of the South Building is inconsistent with the Master Plan

The canyon effect that is created by Lot 57 development is caused by the height and scale (square footage) of the Lot 57 buildings.

Further issues arise as a result of the lack of sidewalk that will force pedestrians in to the roadway. Unlike the rest of Snow King development, this project is jammed in to too small of a space.

In conclusion, the Lot 57 development plans are too much building on too little property that is inconsistent with the Bulk, Scale and Character of the rest of Snow King.

The revised plans do nothing to address our previous objections. We encourage the Planning and Building Commission to reject the plans for Lot 57 and require a more thoughtful and responsive plan from Bear Development.

Thank you for considering our views.

William Hartmann and Deborah Hartmann
548 Snoiw King Loop Unit 481
Sent from my iPad

From: Craig Pepin
To: Town Council
Subject: June 2 meeting, Snow King development
Date: Saturday, May 31, 2025 5:50:21 PM

Dear Town Council,

As a resident of the Grand View condo development of Snow King Resort, I am requesting close scrutiny and rejection of the currently proposed development at Snow King. Please consider the following points:

The height of the proposed development and proximity to the road will lead to a canyon effect when traveling in the neighborhood. Look closely at the renderings provided by the developers. Nowhere else in the town of Jackson is this canyon effect present at two sides of a thoroughfare (Snow King Loop Road).

The developer's proposed buildings on the lowest lot are too close to the road because the lot is being overdeveloping by transferring allowable square footage from two higher properties. Adjacent didewalks are necessary for safe passage of residents, guests and service providers along the road. Additionally, the proposed development does not provide adequate parking. Please consider safety in your decision-making.

If the visual renderings are not sufficiently illustrative, please consider a site visit prior to voting on this important project. This proposed overdevelopment would forever change the neighborhood.

I recognize the right of the developers to build on the property they purchased but urge you to hold them to the standard of fitting into the bulk, scale and character of the community.

Respectfully submitted,

Craig Pepin

This e-mail, including attachments, may include confidential and/or

proprietary information, and may be used only by the person or entity to which it is addressed. If the reader of this e-mail is not the intended recipient or intended recipient's authorized agent, the reader is hereby notified that any dissemination, distribution or copying of this e-mail is prohibited. If you have received this e-mail in error, please notify the sender by replying to this message and delete this e-mail immediately.

From: Georgie Stanley
To: Town Council
Subject: Public Comment
Date: Sunday, June 1, 2025 8:25:06 AM

To Mayor Jorgensen and Town council members Schechter, Viehman, Regan and Spery:

As you may have noticed as a Planning Commissioner I voted 'No' to the Development Plans for Buildings 53, 57N, 57S and 58 in the Snow King Master Plan. As a community member I would like to express why the buildings can be improved.
First, 57S does not fit in with the existing buildings and creates an intimidating canyon effect for the existing neighborhood. As stated in the Snow King Development Plan, 'Architecture. Building design guidelines shall reflect:
a. The communitv's architectural character and themes
b. A human scale, pedestrian-orientation, which are created when:
The height of buildings does not overwhelm people walking beside the buildings; and...' (p. 57). Building 57S is at issue.

The developers shrunk the NE end of the building, but there is more work to be done. 57A will still overwhelm people living and walking along side it. 'The Push and pull' of the stairway/elevator sections of the building actually jutt out and do not minimize the building's mass and scale, but add to it. The stone walls of the basement garage also jut out and create an intimidating castle effect. They do not minimize the mass and scale of the building to fit in with the existing neighborhood by creating a lower profile for the north side of the building. The pinch off at the northwest corner of 57A also impedes flow to the natural amenities so emphasized in the Master Plan. Pedestrians should feel welcome to travel toward the Snow King slopes between 57S and 57N. As it stands now, the space between the two buildings appears to be a cut-off urban dead end. The developers should improve the NW corner, the castle-like retaining walls of the garage and the 'Push and Pulls' of 57S.

The Affordable Housing needs work as well. The developers are getting an advantage in two ways. First, they are able to move Affordable apartments from building to building as if their plan is one cohesive plan. On the other hand they are not being asked to build the total number of apartments for all three buildings together, but are allowed to pay residual amounts for fractions of apartments in each of the three buildings. If added up together for the 4 buildings, the developers would include 2 more Affordable apartments to their plan. The developers should build the total number of apartments for all four buildings and not get an advantage in two ways.

Two of the apartments, Unit 5 in 57S. and Unit 3 in 57N. do not have adequate access to sunlight. Their only windows face a trench on the south side of their building. These apartments should have an east or west window included in their layout and placement. The Affordable apartments in 53 are inadequately placed as their access is only through the parking garage. This is also not respectful or healthy for these future residents. Car exhaust will creep into their living spaces, causing health concerns and foul odors. 'They're better than living in your truck' is not an adequate reason to allow Affordable apartments to be dark and stinky.

The pedestrian flow also needs more work. 'Non-motorized pathways are the backbone of this

mixed use resort.' (p. 33 SKRDMP). Two crosswalks on a hill with an 'S-turn' will not feel/be safe for the majority of the winter. 57N needs to shrink or have a pass through or pass under to allow pedestrians to stay on the west side of the street to move from guest/overflow parking below up to 57S. and to the natural amenities emphasized in Snow King's Master Plan. If landscaping is also necessary to blend the 'bulk and scale' of the existing buildings, then that corner needs to have landscaping and pedestrian access or the building itself can be changed to minimize the canyon effect.

The developers seemed more receptive to E-bike storage and charging areas. I hope they will follow through with those ideas. The NE corner of 57S. does help the existing neighbors' access to Snow King's natural amenities.

These buildings should be made of fire resistant materials and consider evacuation routes in case of a wildfire. Please also consider the added load on the Town's sewer system and water sources when allowing this building to take place. Does this and other development in town and in the county push the timeline up when the sewer system needs to be updated and/or expanded?

Thank you for my opportunity to voice my concerns. I hope you will ask the developers to continue to improve their plan to better blend with the existing buildings in the Snow King neighborhood, better address the guidelines in the Snow King Master Plan and offer better and more Affordable apartments.

Respectfully, Georgie Stanley
875 Cache Creek Drive Jackson, WY

--
Georgie Stanley
PO Box 928
Jackson, WY
208-201-3625

From: noreply@civicplus.com
To: Town Council
Subject: Online Form Submittal: John Petrakis Email the Town Council
Date: Saturday, May 31, 2025 10:38:29 AM

Email the Town Council

Email Content:

Dear Members of the Jackson Town Council,

My name is John Petrakis and approximately 3 years ago I purchased unit 5140 at 551 Snow King loop via my trust Petrakis 2021 Trust. I knew then that there was a possible development behind my building but based on all the due diligence in buying and reviewing plans for Lot 57 I was very comfortable what I saw and then read: Any buildings on Lot 57 had to be compatible in bulk, scale and character with Grand View Condominiums, I was therefore comfortable in my purchase. What I now find being asked to be approved for lot 57 violates everything I read and saw in the Master Plan. This is totally unfair to all the Grand View owners and these plans must be rejected. When I look at the plan produced by Bear on pedestrian walkways its crazy? They took out the sidewalk along their buildings on the west side of the new Upper Snow King Loop Road??

The Applicant's/Bear movement of 18,000 sq ft and adding a second building is taking up so much of the .83-acre lot there is absolutely no allowance for visitor or service unit parking. Many of the planned units only have one parking space. Visitor and service unit parking will take place all along the road and at opportunistic spots at not only Bear Dev buildings but Grand View/Love Ridge buildings as well.

I also don't understand how the Town Council is allowing SKRMA to only give the residents only 1 seat on the SKRMA board when the Residential Class has an assessed valuation of 2.5 times the assessed valuation of the hotel and mountain combined but you have allowed them to have 6 of the 7 seats. In the Snow King Master Plan, it says the voting is to be by assessed valuation, however when the board was established and since the town council has ignored any assessed valuation allocation as allocation of board seats and just did it the way the council wanted?? I think if you allow this to move forward in its current form you are opening the town and council members personally to future lawsuits that could be extremally costly and create ill will and a bad reputation for the town. I don't think that is your intent.

I appreciate your consideration.

Your Name:	John Petrakis
Your Company Name:	*Field not completed.*
Your Phone Number:	3092080201
Your Email Address:	jdp67grmw@outlook.com
Your City:	Jackson
Your State:	Wyoming
Your Zip Code:	83002

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Sub Area #3
Existing and Proposed Condominiums

Sub-Area 3 consists of the Grand View, Love Ridge, and Simp
Patent condominimum developments and the Grand View Lo
Lots 53, 57, and 58 are the remaining lots platted for condomi
development within this sub-area. The Jackson Town Council
approved building plans for a condominimum building on lot
and the planning/building departments issued a building per
building D on lot 53 which expired in 2009. The architectural
drawings for this building are shown in the sketch drawing se
of this master plan. The Town Council approved a developm
plan for a building on lot 57 in 2004, the architechtural plans f
building are included in the sketch drawing section of this ma
Condominimums on lot 58 are proposed to match buildings o
and 57 in architectural design.



Figure 1 - Proposed site plan overlayed on Master Site Plan



howing the relationship in heights between Lot 57 South and the downhill Grand View buildings

creational amenities.

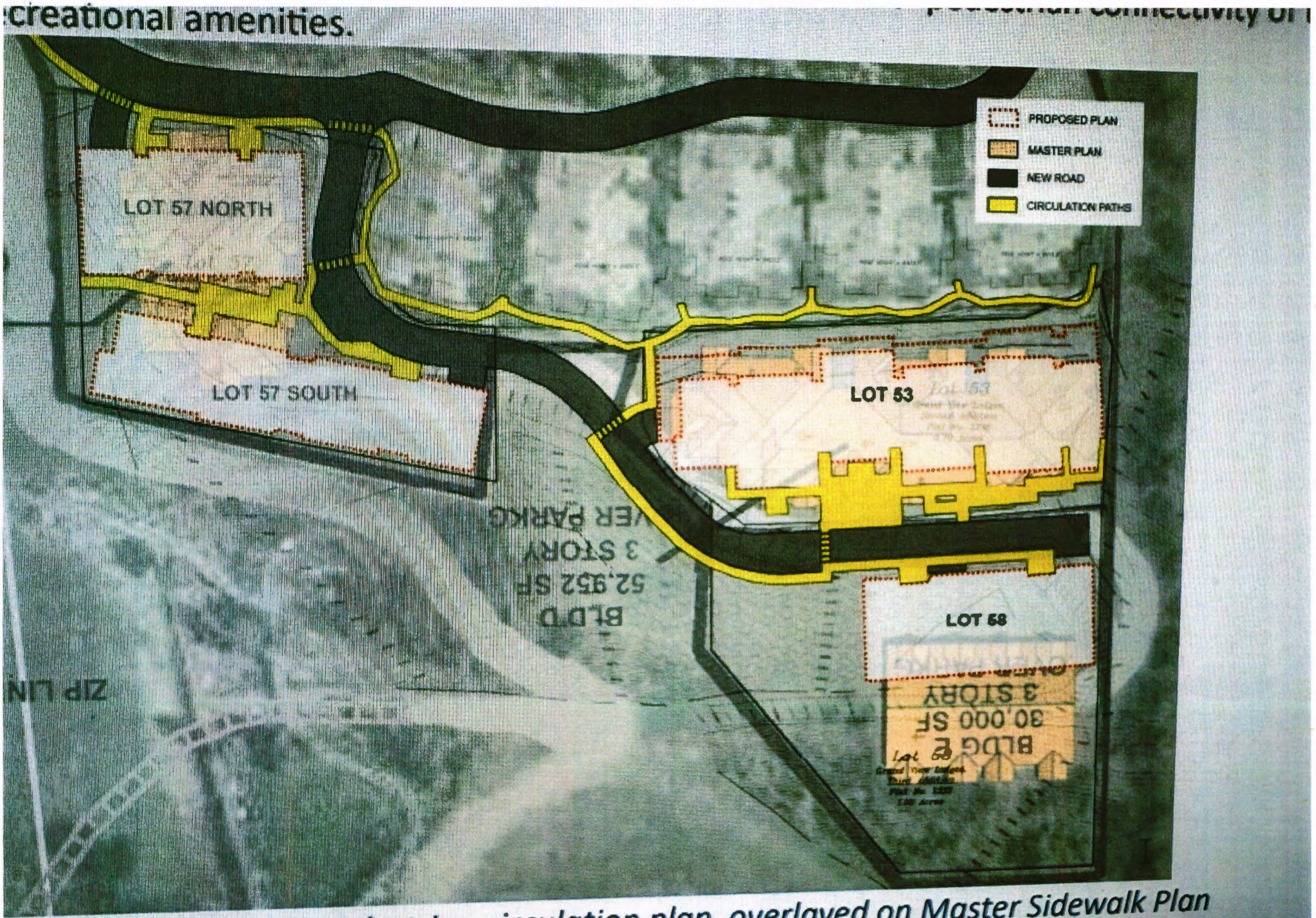


Figure 2 - Proposed pedestrian circulation plan overlayed on Master Sidewalk Plan

From: Craig Pepin
To: Town Council
Subject: June 2 meeting, Snow King development
Date: Saturday, May 31, 2025 5:50:21 PM

Dear Town Council,

As a resident of the Grand View condo development of Snow King Resort, I am requesting close scrutiny and rejection of the currently proposed development at Snow King. Please consider the following points:

The height of the proposed development and proximity to the road will lead to a canyon effect when traveling in the neighborhood. Look closely at the renderings provided by the developers. Nowhere else in the town of Jackson is this canyon effect present at two sides of a thoroughfare (Snow King Loop Road).

The developer's proposed buildings on the lowest lot are too close to the road because the lot is being overdeveloping by transferring allowable square footage from two higher properties. Adjacent didewalks are necessary for safe passage of residents, guests and service providers along the road. Additionally, the proposed development does not provide adequate parking. Please consider safety in your decision-making.

If the visual renderings are not sufficiently illustrative, please consider a site visit prior to voting on this important project. This proposed overdevelopment would forever change the neighborhood.

I recognize the right of the developers to build on the property they purchased but urge you to hold them to the standard of fitting into the bulk, scale and character of the community.

Respectfully submitted,

Craig Pepin

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proprietary information, and may be used only by the person or entity to which it is addressed. If the reader of this e-mail is not the intended recipient or intended recipient's authorized agent, the reader is hereby notified that any dissemination, distribution or copying of this e-mail is prohibited. If you have received this e-mail in error, please notify the sender by replying to this message and delete this e-mail immediately.

From: Georgie Stanley
To: Town Council
Subject: Public Comment
Date: Sunday, June 1, 2025 8:25:06 AM

To Mayor Jorgensen and Town council members Schechter, Viehman, Regan and Spery:

As you may have noticed as a Planning Commissioner I voted 'No' to the Development Plans for Buildings 53, 57N, 57S and 58 in the Snow King Master Plan. As a community member I would like to express why the buildings can be improved.
First, 57S does not fit in with the existing buildings and creates an intimidating canyon effect for the existing neighborhood. As stated in the Snow King Development Plan, 'Architecture. Building design guidelines shall reflect:
a. The communitv's architectural character and themes
b. A human scale, pedestrian-orientation, which are created when:
The height of buildings does not overwhelm people walking beside the buildings; and...' (p. 57). Building 57S is at issue.

The developers shrunk the NE end of the building, but there is more work to be done. 57A will still overwhelm people living and walking along side it. 'The Push and pull' of the stairway/elevator sections of the building actually jutt out and do not minimize the building's mass and scale, but add to it. The stone walls of the basement garage also jut out and create an intimidating castle effect. They do not minimize the mass and scale of the building to fit in with the existing neighborhood by creating a lower profile for the north side of the building. The pinch off at the northwest corner of 57A also impedes flow to the natural amenities so emphasized in the Master Plan. Pedestrians should feel welcome to travel toward the Snow King slopes between 57S and 57N. As it stands now, the space between the two buildings appears to be a cut-off urban dead end. The developers should improve the NW corner, the castle-like retaining walls of the garage and the 'Push and Pulls' of 57S.

The Affordable Housing needs work as well. The developers are getting an advantage in two ways. First, they are able to move Affordable apartments from building to building as if their plan is one cohesive plan. On the other hand they are not being asked to build the total number of apartments for all three buildings together, but are allowed to pay residual amounts for fractions of apartments in each of the three buildings. If added up together for the 4 buildings, the developers would include 2 more Affordable apartments to their plan. The developers should build the total number of apartments for all four buildings and not get an advantage in two ways.

Two of the apartments, Unit 5 in 57S. and Unit 3 in 57N. do not have adequate access to sunlight. Their only windows face a trench on the south side of their building. These apartments should have an east or west window included in their layout and placement. The Affordable apartments in 53 are inadequately placed as their access is only through the parking garage. This is also not respectful or healthy for these future residents. Car exhaust will creep into their living spaces, causing health concerns and foul odors. 'They're better than living in your truck' is not an adequate reason to allow Affordable apartments to be dark and stinky.

The pedestrian flow also needs more work. 'Non-motorized pathways are the backbone of this

mixed use resort.' (p. 33 SKRDMP). Two crosswalks on a hill with an 'S-turn' will not feel/be safe for the majority of the winter. 57N needs to shrink or have a pass through or pass under to allow pedestrians to stay on the west side of the street to move from guest/overflow parking below up to 57S. and to the natural amenities emphasized in Snow King's Master Plan. If landscaping is also necessary to blend the 'bulk and scale' of the existing buildings, then that corner needs to have landscaping and pedestrian access or the building itself can be changed to minimize the canyon effect.

The developers seemed more receptive to E-bike storage and charging areas. I hope they will follow through with those ideas. The NE corner of 57S. does help the existing neighbors' access to Snow King's natural amenities.

These buildings should be made of fire resistant materials and consider evacuation routes in case of a wildfire. Please also consider the added load on the Town's sewer system and water sources when allowing this building to take place. Does this and other development in town and in the county push the timeline up when the sewer system needs to be updated and/or expanded?

Thank you for my opportunity to voice my concerns. I hope you will ask the developers to continue to improve their plan to better blend with the existing buildings in the Snow King neighborhood, better address the guidelines in the Snow King Master Plan and offer better and more Affordable apartments.

Respectfully, Georgie Stanley
875 Cache Creek Drive Jackson, WY

--
Georgie Stanley
PO Box 928
Jackson, WY
208-201-3625

From: noreply@civicplus.com
To: Town Council
Subject: Online Form Submittal: John Petrakis Email the Town Council
Date: Saturday, May 31, 2025 10:38:29 AM

Email the Town Council

Email Content:

Dear Members of the Jackson Town Council,

My name is John Petrakis and approximately 3 years ago I purchased unit 5140 at 551 Snow King loop via my trust Petrakis 2021 Trust. I knew then that there was a possible development behind my building but based on all the due diligence in buying and reviewing plans for Lot 57 I was very comfortable what I saw and then read: Any buildings on Lot 57 had to be compatible in bulk, scale and character with Grand View Condominiums, I was therefore comfortable in my purchase. What I now find being asked to be approved for lot 57 violates everything I read and saw in the Master Plan. This is totally unfair to all the Grand View owners and these plans must be rejected. When I look at the plan produced by Bear on pedestrian walkways its crazy? They took out the sidewalk along their buildings on the west side of the new Upper Snow King Loop Road??

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I appreciate your consideration.

Your Name:	John Petrakis
Your Company Name:	*Field not completed.*
Your Phone Number:	3092080201
Your Email Address:	jdp67grmw@outlook.com
Your City:	Jackson
Your State:	Wyoming
Your Zip Code:	83002

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JORGENSEN
GEOTECHNICAL, LLC

PO Box 9550 | 1315 HWY 89 S., Ste. 201
Jackson, WY 83002
PH: 307.733.5150
www.jorgeng.com

December 20, 2023

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosh, WI 53142

RE: GEOTECHNICAL-ENGINEERING REPORT, BEAR DEVELOPMENT – SNOW KING LOOP LOTS 53 AND 58, TETON COUNTY, WYOMING
PROJECT NO: 23072

Dear Nick,

We are pleased to present this Geotechnical-Engineering Report on our geotechnical site exploration for the proposed development at Lots 53 and 58 on Snow King Loop in Teton County, Wyoming. This report describes site conditions observed during the subsurface exploration, presents engineering analyses and recommendations to support the design and construction of foundation elements, and presents pre-construction and post-construction slope stability analyses.

Jorgensen Geotechnical explored subsurface conditions by drilling seven (7) boreholes and excavating four (4) exploratory test pits throughout Lots 53 and 58. A geophysical exploration was also performed comprising MASW and ReMi exploration techniques. In general, the site is underlain primarily by landslide debris, a chaotic mixture lean clay (CL), clayey gravel (GC), and clayey sands (SC). The site sits on a mapped landslide which likely mobilized prior to the Quaternary period. As such, we assume the soil at the site to be well consolidated. We also observed weathered sandstone bedrock during the subsurface exploration. The weathered bedrock was only observed in one borehole, BH-02, at 67.5-ft below ground surface (bgs), and is assumed to be part of the Cretaceous-age Bacon Ridge Formation (Kb).

Building locations and foundation elevations are based on preliminary design data provided by Hoyt Architecture, dated July 19, 2023. As the design progresses, we will be able to make site-specific recommendations.

If you have any questions about this report, or if we may provide other services to you, please contact us. As the project progresses, we will be available to answer questions for you.

Respectfully submitted,
JORGENSEN GEOTECHNICAL







Bruce Jackson G.I.T.
Geotechnical Design Engineer Technician

Harrison Carter, P.E.
Geotechnical Project Manager

Dominique Brough, P.G.
Geotechnical Project Manager

Geotechnical-Engineering Report

Bear Development – Snow King Loop Lots 53 and 58 | Teton County, Wyoming



43.471263°N, -110.753274°W

December 20, 2023

PREPARED FOR

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosh, WI 53142

PREPARED BY

Jorgensen Geotechnical, LLC
PO Box 9550
1315 HIGHWAY 89 S., Ste. 201
Jackson, WY 83002

PROFESSIONAL GEOLOGIST
DOMINIQUE KIMBERLY BROUGH
PG-4010
12/20/23
WYOMING

Professional Engineer
HARRISON CARTER
17289
Date: 12/20/2023
WYOMING

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Appendix A: Site Exploration Procedures and Subsurface Exploration Logs
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Appendix C: Lab Testing Results
Appendix D: Soil Engineering Parameters
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1.0 INTRODUCTION

Jorgensen Geotechnical, LLC was commissioned by Bear Development, LLC to perform a subsurface surface exploration and geotechnical engineering and analyses for the proposed development for Lots 53 and 58 accessed by Snow King Loop in Teton County, Wyoming. The purposes of the exploration were to provide information and geotechnical-engineering recommendations pertaining to:

- Subsurface soil conditions
- Site preparation and earthwork
- Geophysical exploration
- Seismic site classification per the International Building Code
- Evaluation of settlement and/or collapse potential
- General foundation design and construction recommendations
- Slabs-on-grade design and construction recommendations
- Lateral earth pressures for retaining structures
- Subgrade preparation
- Slope Stability Analyses
    - Existing Conditions
    - Proposed Conditions
    - Proposed Seismic Conditions

A detailed description of the subsurface exploration and graphical logs are shown in Appendix A, Figures in Appendix B, laboratory testing results are included as Appendix C, determination of soil engineering parameters in Appendix D, Calculations for settlement in Appendix E, and Slope Stability Analyses in Appendix F.

2.0 PROJECT DESCRIPTION

The project site is located in Jackson, Wyoming and is situated at the base of Snow King Resort. Preliminary plans were provided by Hoyt Architecture, dated July 19, 2023. The plans indicate the development for lots 53 and 58 will include two housing units: each with a first-floor parking garage area with three floors of living space above.

It is our understanding the project is in the early stages of the design, and the architectural plans are subject to substantial changes. As the project progresses, Jorgensen Geotechnical is available to consult with team members to increase design and construction efficiency based on our understanding of the subsurface conditions and the proposed design.

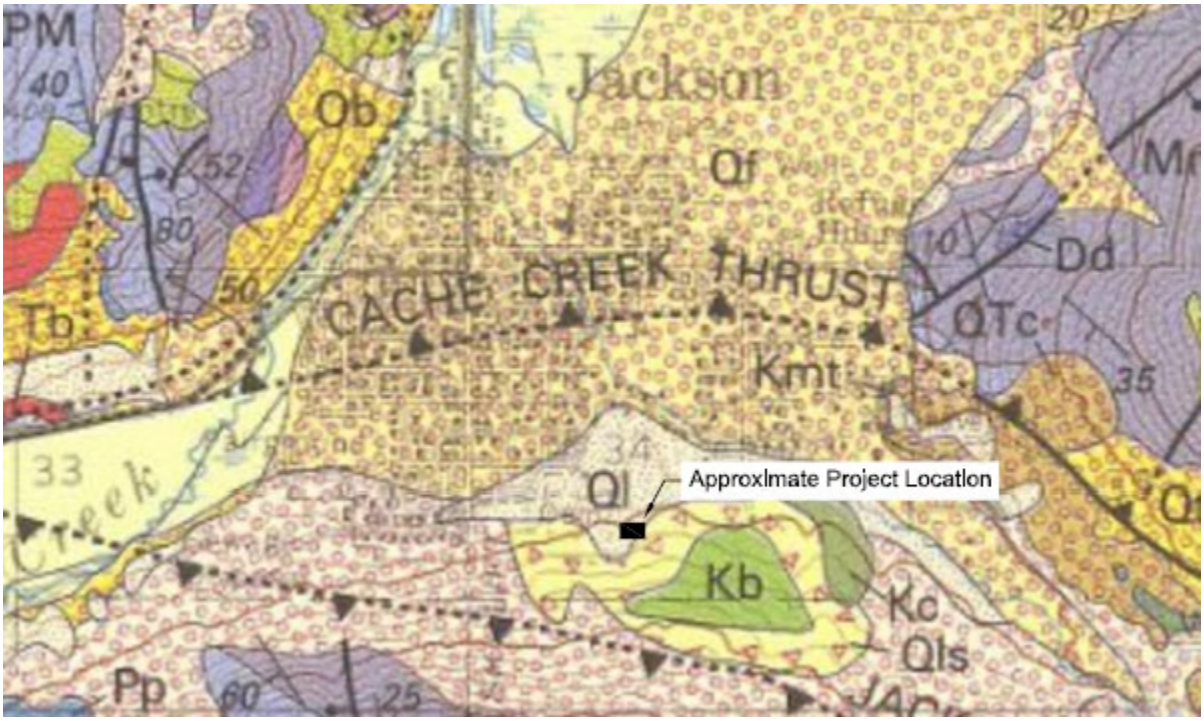


Figure 1: Site Location and Geologic Map

3.0 GEOTECHNICAL EXPLORATION

3.1 Description

JG developed the following description of the site based on field visits, meetings with the project team, our review of available historical aerial imagery, and observations made during the subsurface exploration.

Item	Description
Location and Parcel Information	• Lots 53 and 58 are located at the base of Snow King Resort and are accessed via Snow King Loop. The project area sits at a generalized latitude and longitude of 43.471263°N, -110.753274°W.
Existing Conditions	• The project location slopes from the north upwards to the south and ranges in elevation from approximately 6,400-ft Above Mean Sea Level (AMSL) on the northern boundary of Lot 53, to approximately 6,530-ft AMSL on the southern property boundary of Lot 58. The lots are bisected by a dirt road that provides access for employees at Snow King Resort. • Lot 53 is currently being used for storage by Snow King Resort. • A retaining wall approximately 20-ft tall is present on Lot 53 between the storage area and the access road. This Retaining wall comprises H-piles, lagging, and tie-backs and was built based on construction drawing dated August 13, 2007. • Slopes at the project site range from 10 to 35%.

	• Current utilities at the site include power, gas and water.
Geologic Setting	• The project location is found on the Geologic Map of Grand Teton National Park (Love et. al., 1992), in an area that contains three mapped geologic units including Loess (Ql), a fine-grained, windblown deposit, Landslide Debris (Qls), and the Bacon Ridge Sandstone (Kb). The soils observed from the subsurface exploration seem to be consistent with mapped geology. • The project location sits on a mapped multiple slump/multiple flow landslide, and is understood to be deep seated(WSGS, Wyoming Geologic Hazards Map Tool). A portion of the project site is capped with a wind-blown deposit known as loess which was likely deposited during or after the Pinedale Glaciation Period, or between approximately 30,000 to 10,000 years ago. The mapped loess stratigraphically overlies portions of the mapped landslide unit. • Numerous Quaternary faults (i.e., relatively young and potentially active) are mapped throughout the area. The Teton Fault is mapped approximately 8 miles northwest of the project, at the base of the eastern flank of the Teton Range (Zellman, 2019). Slip rates along the Teton fault is estimated to be between 0.2 and 1.0 mm/year. The Hoback Fault is located approximately 3 miles to the southwest of the project site but is considered old and inactive.

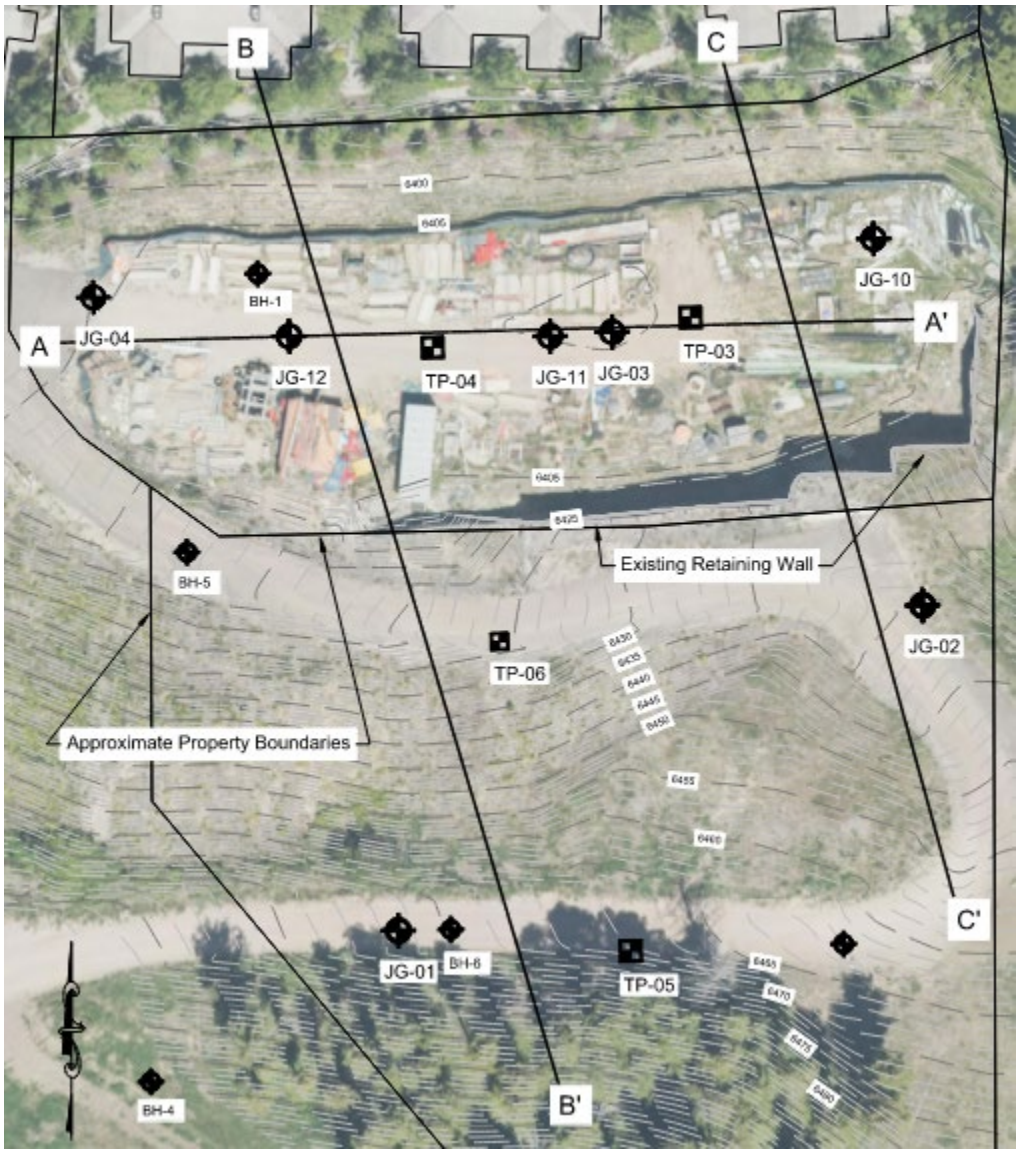


Figure 2: Borehole, Test Pit and Geologic Cross Section Location Map

3.2 Subsurface Soil Conditions

In general, three soil types were encountered during the subsurface exploration:

- **Landslide Debris** – consisting of clayey gravels (GC), lean clays (CL), and clayey sands (SC). The landslide debris soils are assumed to be derived from native colluvium soils prior to mobilization. These landslide debris soils exhibited chaotic deposition, which is also represented in the MASW plots provided by Atlas Geophysics. These results can be found attached to Appendix A.
- **Loess** – consisting of lean clay with sand (CL).
- **Weathered Bedrock** – consisting of soft weathered sandstone of the Bacon Ridge Formation (SC).

Below are three generalized geologic cross-sections spanning both north-south and east-west depicting the subsurface soil conditions and approximate foundation elevations for the buildings on Lots 53 and 58. Cross-section alignments can be found in Figure 2 and complete figures can be found in Appendix B.

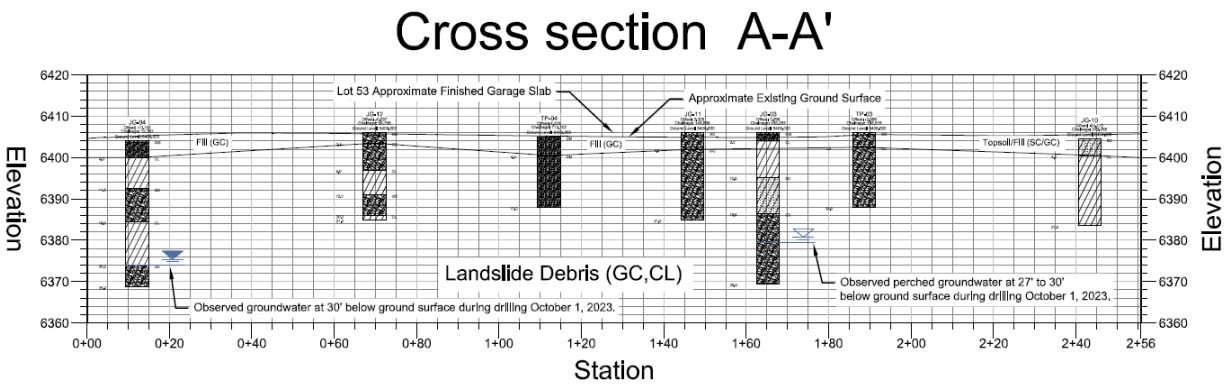


Figure 3: Geologic Cross Section A-A'

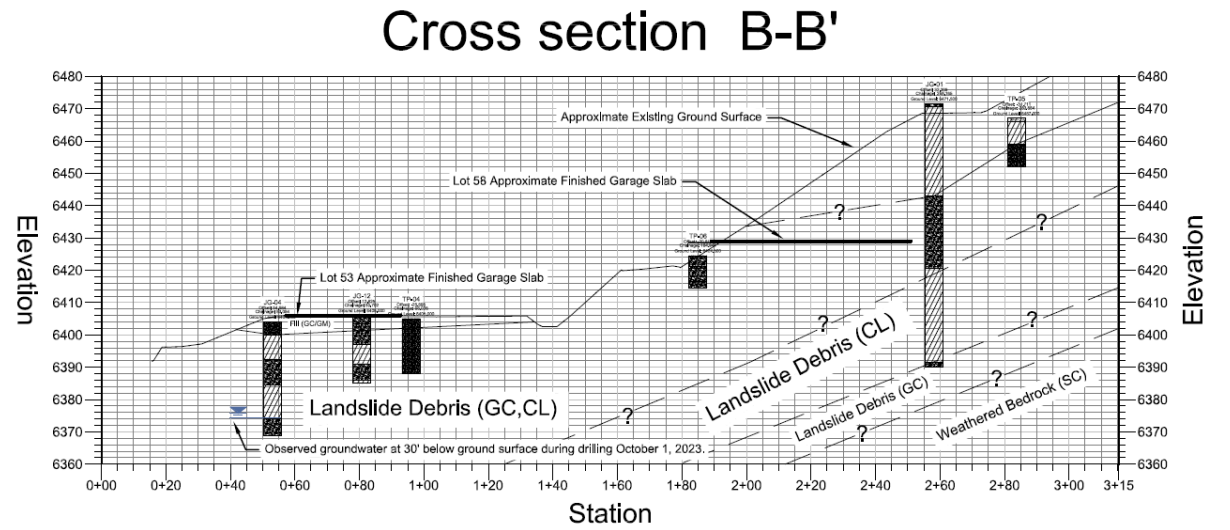


Figure 4: Geologic Cross Section B-B'

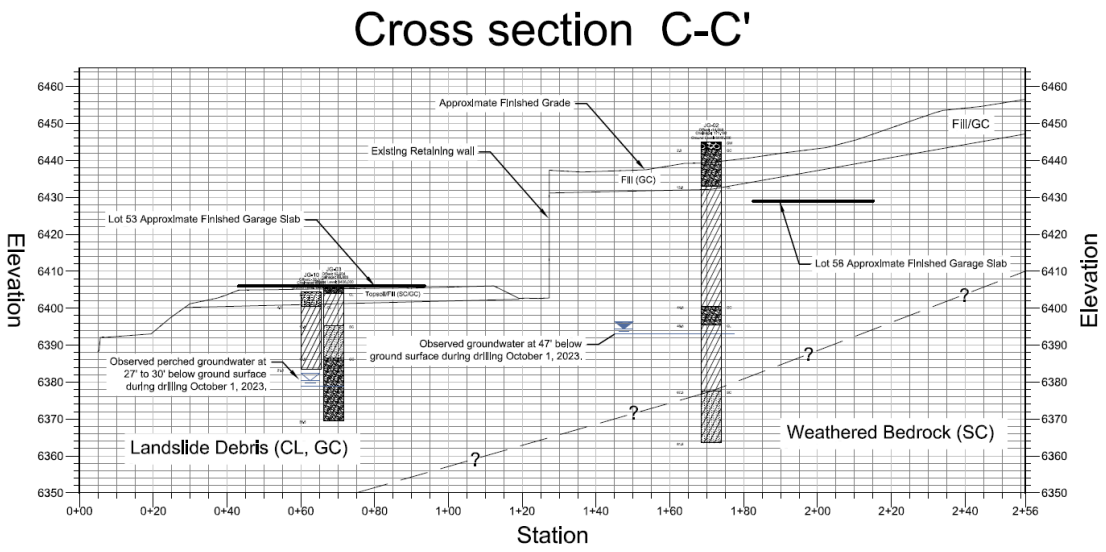


Figure 5: Geologic Cross Section C-C'

The table below describes each soil and rock layer, and detailed borehole logs are represented graphically in Appendix A. **It is important to note that** the borehole exploration techniques used either a 4-inch coring barrel or a 1.5-inch diameter split spoon sampler, limiting the soil that was collected during the drilling effort. It is likely that gravels larger and cobbles 3.0-inches are present but were unable to be logged due to the sampling method. Cobbles and boulders were encountered in the test pits.

Layer	Layer Name	Description	Geotechnical Considerations and Uses
1	**Topsoil/Fill (GC/GM/SC)**	• Observed in all boreholes and test pits • Depths ranging from 1- to 4.5-ft bgs • Classified as a Clayey **Gravel** with Sand, Silty **Gravel** with sand, or a Clayey **Sand** with Gravel. • Both the topsoil and fill are assumed to be derived from native soils • Brown to dark brown • Contains construction debris, including rebar, wood and concrete.	• Undocumented construction fill should be remove from beneath foundations • Non-structural applications
2	**Landslide Debris (GC/CL)**	• Observed in all boreholes and test pits	• Acceptable bearing layer with appropriate subgrade

		• Classified as Clayey **Gravel** with Sand, **Lean Clay**, **Lean Clay** with Sand, Sandy **Lean Clay** with Gravel, • Reddish brown to brownish gray • Coarse-grained soils are loose to very dense • Fine-grained soils are soft to very stiff • **Chaotic deposition, including charcoal fragments** • Observed 15-25% cobbles by volume • 10-55% gravel • 15-30% sand • 25-90% Clay/Silt	improvement methods • Settlement concerns • Structural applications • Non-structural applications
3	**Weathered Bedrock (SC)**	• Observed in BH-02 at 67.5-ft bgs • Classified as Clayey **Sand** • Grayish brown to reddish gray • Very dense • 55% sand • 45% fines	• Unlikely to be reached during construction

3.3 Groundwater

Groundwater was encountered in three boreholes during the subsurface exploration. Groundwater was observed in JG-02 at a depth of 47-ft bgs, JG-04 at a depth of 30-ft bgs, and a region of perched groundwater was encountered in JG-03 ranging from 27- to 30-ft bgs. These groundwater levels were incorporated into our slope stability analysis modeling and are discussed further in Appendix E.

The exploration occurred during a time of year that is considered to take place after peak groundwater levels have occurred, therefore the groundwater levels encountered during the drilling effort are *not* expected to represent peak groundwater levels. Groundwater levels fluctuate in response to seasonal snowmelt, runoff and flow levels in nearby rivers and streams, and is likely most heavily influenced by spring runoff and natural springs uphill. Soil moisture conditions on this site are most likely influenced by surface infiltration due to precipitation, snowmelt, and uphill natural springs. Two groundwater standpipes were installed on Lot 53 as part of the subsurface exploration. These standpipes were installed in JG-10 and JG-12, to total depths of 20 and 21-ft bgs, respectively.

Groundwater data was also presented in the previous Site Investigation Report published by Nelson Engineering, which was dated July, 2021. In this Report, they describe their encounters with perched groundwater to be in relatively thin (<1-ft in thickness) saturated zones. Groundwater measurements taken between 2005 and 2021 typically coincided with these saturated zones. We assume the measured groundwater levels at the site to be heavily influenced by spring runoff and natural springs uphill of the site.

3.4 Earthquakes and Ground Shaking

Jackson, Wyoming is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Montana, and Western Wyoming (Smith and Arabasz, 1991). The Teton fault, located along the eastern margin of the Teton Range, approximately 8-miles northeast of the site, is considered an important structural element of the Intermountain Seismic Belt. Predicted recurrence intervals for maximum credible earthquakes have passed for most of the fault systems capable of generating magnitude 7.5 earthquakes in western Wyoming (Case, 1997), implying the risk of major earthquakes is relatively high. In the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking, liquefaction, or slope movement could potentially cause damage to structures (Smith, et al., 1993).

Shear wave velocity calculated by Atlas Technical Consulting LLC, of Salt Lake City, Utah using ReMi geophysical exploration method for the project site is 1,200 ft/s. The IBC references ASCE 7-16 to determine the ground motion accelerations. Based on subsurface soils, and the results from the geophysical exploration, the site is classified as Site Class C ("Very dense soil and soft rock"). For your convenience, Seismic Design Maps (SEAOC, 2019) values are summarized in Table 3-1: U.S. Seismic Design Maps Summary.

Table 3-1: U.S. Seismic Design Maps Summary

Maximum Considered Earthquake (MCE) Spectral Response Acceleration Parameters			
	Short Period (S_s) =	1.024	
	1-Second Period (S_1) =	0.336	
Site Coefficients and Adjusted MCE Spectral Response Acceleration Parameters			
F_a =	1.2	S_{MS} =	1.229
*F_v =	1.5	*S_{M1} =	0.504
Design Spectral Response Parameters			
	S_{DS} =	0.819	
	*S_{D1} =	0.336	

*Note: Values for F_v, S_{M1}, and S_{D1} were determined in accordance with Section 11.4.4 of ASCE 7-16. Per Section 11.4.8 of ASCE 7-16, if the proposed structure foundation will include seismic isolators or damping systems, a site response analysis shall be performed in accordance with Section 21.1.

The project site is located in an area of moderate seismic activity. The current peak horizontal acceleration (PGA) with a probability of occurrence of 2% in 50 years is approximately 0.454g (USGS, 2014). The site amplification factor at PGA is 1.2, resulting in a site modified peak ground acceleration (PGA_M) of 0.545. This has been applied for the analysis of seismic lateral loading on retaining walls Section 4.3.

The provisions of the IBC are intended to provide uniform levels of performance for structures depending on their intended use and the risk inherent to their failure. The approach adopted in the IBC is intended to provide a uniform margin of safety against collapse at the design motion. The design earthquake ground motion is selected at a ground shaking level that is 2/3 of the maximum considered earthquake (MCE) ground motion, which has a likelihood of exceedance of 2% in 50 years (corresponding to a return period of 2,500 years). The IBC is not intended to prevent damage or loss of

function during a major earthquake; it is intended to reduce the risk of loss of life. Structural design should follow the level of risk tolerable by the Design team.

3.5 Geologic and Geotechnical Hazards

3.5.1 Potential Settlement/Compressible Clays

The primary geotechnical concern at the project site is differential settlement of foundation elements placed on unimproved landslide deposits. Based on the borehole logs, in-situ testing, lab testing, and geophysical exploration, the subgrade soils comprise a range of chaotic mixture of soils, from compressible clays to competent stony soils. The soft clays are expected to experience moderate to severe settlement, while the stony soils are *not* expected to experience substantial settlement. Calculated settlement values are discussed in Section 5.2 and calculation spreadsheets are shown in Appendix E.

3.5.2 Seismic and Fault Related Hazards

The owner should be aware that in the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking could potentially cause damage to structures (Smith et al, 1993). The owners may wish to consider the option of carrying earthquake insurance in addition to homeowner's insurance. Older faults mapped in the immediate vicinity of the property are believed to be old and inactive. Surface rupture due to faulting is very unlikely, and no slope failure is anticipated to occur.

3.5.3 Slope-Related Hazards

In the event of an earthquake or extreme precipitation event, rock fall, debris flows, or avalanches produced from the steep slopes to the south of the development area could potentially cause damage to structures, especially following wildfires. Risk assessment of the slope related hazards was beyond the scope of this Report, but we present slope stability analyses of several slopes captured in the cross section Lot 53 and 58. These are discussed in Section 4.1 and presented in Appendix F.

4.0 GEOTECHNICAL ENGINEERING ANALYSES

4.1 Slope Stability Analyses

The slope stability analyses were performed using SLOPE/W module of Geostudio. We analyzed two sets of geometry for global slope stability, taken from cross sections B-B’ and C-C’. Pre-construction and post-construction external geometry was determined using topographic data provided by Jorgensen Associates, as well as proposed design data provided by Jon Althschuld of Chinook Landscape Architecture, LLC.

Soil-strength parameters were determined using direct testing methods, as well as correlations based on index tests and SPT N-Values. A detailed discussion on soil-strength parameters can be found in Appendix D. The parameters used in the stability analysis are shown in Table 4-2 and Table 4-3. We incorporated a phreatic surface into model based on observed water conditions during the drilling effort. We included surcharge loads to account for future building loads and evaluated seismic conditions using a pseudo-static approach.

Table 4-2: Soil Parameters Used for Slope Stability Analysis B-B'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (CL)	115	100[1]	35
Landslide Debris (GC)	125	50[2]	40
Landslide Debris (GC/CL)	120	100[2]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

Table 4-3: Soil Parameters Used for Slope Stability Analysis C-C'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (GC/CL)	120	100[1]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

4.1.1 Results

Results of the stability analyses are summarized in Table 4-4. Appendix F shows the output of the stability model for Cross-Section B-B' and C-C'.

Table 4-4: Summary of Stability Analyses Results

Cross section	Analysis	FS	Change in FS[1]
B-B'	Pre-construction	1.646	-1.03%
	Post-construction	1.629	
	Post-Construction Seismic	1.173	N/A
C-C'	Pre-construction	2.281	+12.93%
	Post-construction	2.576	
	Post-Construction Seismic	1.753	N/A

1. Negative indicates a reduction in FS from pre-construction to post-construction, while positive indicates an increase in FS from pre-construction to post-construction.

Discussion regarding accepted FS can be found in Appendix F. Changes in Factors of Safety (FS) from pre-construction to post-construction conditions range from -1.03 to 12.93%, though all of the post-construction conditions indicate static FS's above the 1.5 threshold for residential construction ranging from 1.629 to 2.576. Post-construction seismic conditions indicate factors of safety from 1.173 to 1.753, both of which are above the 1.1 FS threshold for maximum allowable permanent seismic deformations of 2 inches (FHWA 2011).

Residual strength results from strain-softening behavior; i.e., soils become weaker with shearing (as in the case of slope movement) decreasing from peak strength to residual strength. Reduced shear strength usually occurs only in soils that have been previously sheared while undisturbed soils typically exist at peak strength. It is possible that sheared soils exist on this site or nearby and exhibit behavior

consistent with residual strength. In this case, seismic slope stability may result in factors of safety less than 1.0. **However, soil shearing was not observed during subsurface exploration at this site. If pockets or layers of soft, weak, or sheared soils are observed during construction, work shall cease, and Jorgensen Geotechnical be notified immediately to evaluate site conditions and review the stability model.**

4.2 Settlement

As described is Section 3.5.1, several different soil types were encountered at the site, all of which represent different levels of settlement potential, increasing the risk of differential settlement which is particularly damaging to structures. Settlement calculations were performed for the compressible clay, and the potentially compressible clayey sands. Because the stony soils contain varying amounts of matrix soils (i.e., clays and sands), estimated settlement is difficult. Though, it is important to note that in general, as the matrix content increases, the risk of settlement increases.

Item	Settlement Analyses – Slopewash	
	Scenario 1	**Scenario 2**
Bearing Layer	**Clay** – Foundation system is placed in direct contact with the clay soils	**Colluvium** - Foundation placed in direct contact with clayey sand soils
Foundation Assumptions	Comprises typical reinforced concrete spread footings	
	Bearing pressure of 3,000 pounds per square foot	
	Buried 3-feet below finished grade	
	Spread footings is 2-feet wide	
Calculated Settlement	3.38-inches	1.67 -inches

The risk of settlement can be reduced by several subgrade improvement methods, of which are discussed below in Section **Error! Reference source not found.**.

4.3 Lateral Earth Pressures

Lateral pressures were calculated using methods suggested by Bowles (1996) for at-rest, active, and passive conditions and are presented in Table 4-5. These values assume a combination of lean clay and clayey gravel landslide debris will be used as non-structural backfill. We have assumed an estimated internal friction angle of 36° and a unit weight of 130 pcf based on experience working with similar soil deposits and laboratory testing. Calculations assume level backfill against foundation walls or retaining walls.

Table 4-5: Lateral Pressure Parameters for Landslide Debris

Condition	Coefficient of Earth Pressures	γK (equivalent fluid pressure)
Static Conditions Level Backfill	K_o = 0.41 K_a = 0.26 K_p = 3.85	54 pcf 34 pcf 501 pcf
Earthquake Conditions	K_{ae} = 0.38	49 pcf

Level Backfill	K_{pe} = 3.46	449 pcf

Lateral earth pressure design will be estimated based on the concept of equivalent fluid pressures, in which the soil pressure-distribution is triangular against the foundation or retaining wall. The following sections summarize each design situation.

4.3.1 Active Pressures

Application	Retaining walls which are allowed to deflect and develop an active soil wedge
Resultant Force Calculation	½ $\gamma K_a H^2$; pounds per horizontal foot of wall
Resultant Force Location	one-third the wall height (1/3 H) above the base
Seismic Coefficient[1]	K_s = 0.338g (r·α·PGA) per the FHWA (2011)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force	½ (γK_{ae} - γK_a) H^2; pounds per horizontal foot of wall
Seismic Resultant Force Location[2]	Applied at 60% of the wall height above the base

1. Discussion and calculations for the Seismic Coefficient can be found in Appendix F.
2. Research has indicated that lateral pressures due to earthquakes are non-hydrostatic in distribution, and the resultant acts above the lower third-point of the wall (Bakeer, et al, 1990).

4.3.2 At-Rest Pressures

Application[1]	Walls which are restrained and not allowed to deflect
Resultant Force Calculation	½ $\gamma K_0 H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Design control of such walls shall be whichever generates the higher resultant force: at-rest pressures or active seismic pressures.

4.3.3 Passive Pressures

Application[1]	Toe of retaining walls where the wall is allowed to move into soil
Resultant Force Calculation	½ $\gamma K_p H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base
Design Control	k_s = 0.338g (r·α·PGA) per the FHWA (2011)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Passive pressure design should neglect loose fill and soil located within the frost zone.

5.0 GEOTECHNICAL RECOMMENDATIONS

5.1 Recommendations Overview

The fine-grained soils encountered at the site exhibit moderate settlement potential as described above in Section 4.2. Typical spread footings are likely to experience settlement greater than 1-inch if placed above the compressible soils. The risk of settlement can be reduced by **ground improvement techniques** such as geosynthetic reinforced fills, or engineered aggregate piers (EAPs). The risk of settlement can also be reduced by incorporating **deep foundation elements** such as driven piles or micropiles into the foundation design. Subgrade improvement methods to reduce the risk of future differential settlement are discussed in Section **Error! Reference source not found.**, below.

Due to the need for a construction shoring system, if mass excavation (i.e., over-ex and replace with geosynthetic reinforced fill) is selected, the shoring system will need to be extended at or below the over-excavation limit, increasing the overall height of the shoring system. Deep foundation elements and aggregate piers would negate the need for mass excavation below the shoring system.

It should be noted that different subgrade improvement methods correspond with different levels of risk reduction. Any subgrade improvement method that leaves problematic soil beneath foundation systems has a higher level of risk than those that do not. Similarly, deep foundation elements greatly reduce the risk of settlement by transferring the foundation load past the problematic soils and into the underlying competent soils. Typically, the cost of a foundation system correlates to the risk reduction (i.e., the more expensive foundation system the more risk reduction).

5.2 Reinforced Fills

Reinforced fill comprise imported soil compacted and interbedded with a pre-determined geosynthetic. The reinforced fill will better distribute the foundation load thereby reducing the load applied to the fine-grained, compressible and reducing the amount of future potential settlement. Exact thickness of a reinforced fill is currently unknown due to the limited design data available, though it can be expected to be four to six fee thick with a geosynthetic layer placed at every 1-ft increment.

5.3 Engineered Aggregate Piers

Engineered aggregate piers are a ground improvement technique that utilize compacted aggregate to reinforce potentially problematic soils. The piers are predrilled with an auger to the full design-depth (or to a refusal condition on competent rock/soil), a select aggregate is dumped into the predrilled hole from the surface, and the aggregate is then compacted with a down hole compactor attached to an excavator. The compaction effort not only compacts the imported aggregate, but also densifies the surrounding native soils. The increased density of the select aggregate as well as the surrounding native soils reduces the potential of future foundation settlement. One major benefit of EAPs compared to deep foundation elements, is the EAPs are a ground improvement technique, therefore the foundation footings do not need to be designed as grade beams as it would need to be for deep foundation elements, but typical spread footings.

Aggregate piers are typically designed and installed by a design-build contractor. Such as Keller, Geotech Foundation Company, and Montana Helical Piers. Jorgensen is available to provide design values and recommendations to the selected contractor for final design and price estimates.

5.4 Deep Foundation Elements

Foundations consisting of grade beams supported by deep foundation elements, such as driven piles or micropiles, typically allow very little vertical movement of structural elements. This option represents the lowest risk of future foundation settlement.

Both micropiles and driven piles are typically designed and installed by a design-build contractor. Jorgensen is available to provide design values and recommendations to the selected contractor for final design and price estimates.

5.5 Earthwork

5.5.1 Site Preparation

Prior to the placement of any fill, concrete slabs, or foundation elements, the site should be cleared and stripped of topsoil and all organic debris. No brush, roots, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill. All exposed subgrade surfaces should be free of mounds and depressions which could prevent uniform compaction. If unexpected fills or obstructions are encountered during site clearing or excavation, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

During the excavation, the equipment may disturb and loosen the surface of the subgrade soils. All disturbed areas should be compacted with a smooth-drum vibratory roller, in vibratory mode with a minimum of three passes, prior to the placement of structural fill and footing construction. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed and approved by a representative of this office.

5.5.2 Excavation and Cut Slope Stability

OSHA regulations (29CFR1926) appear to classify the coarse-grained at the site as Type C soil. For planning and design purposes, simple cut slopes should be no steeper than 1.5H:1V. According to OSHA, any cut slope greater than 20 feet in height requires additional analysis. Shallow groundwater conditions at the site may impact shoring requirements. These recommendations are based on observations made at the time of the site exploration. The contractor shall be responsible for adherence to OSHA and other safety regulations by observing soil conditions at the time of construction.

The design of a temporary construction shoring system is beyond the scope of this report. Jorgensen Geotechnical is available to coordinate with shoring contractors to provide design parameters and local expertise to the project and deliver the most efficient shoring option.

5.5.3 Final Backfilling and Grading

Properly compacted backfill and site drainage are very important to protect subgrade soils and prevent water from flowing to undesirable locations (i.e., to the highway). All soils at the site are acceptable for use as backfill and general site grading. Compaction guidelines for both soil types can be found in Section 5.5.4.

5.5.4 Compaction

Based on our borehole logs, compaction of the on-site soils during construction can be measured by performing a Standard Proctor test per ASTM D698 and performing nuclear density gauge testing during the compaction process. Site soils should be moisture-conditioned and placed in lifts and compacted to a predetermined percentage (typically either 92% or 95%) of the maximum dry density as determined by Standard Proctor testing. Soil should be moisture conditioned to between -2% and +2% of the optimum moisture content (OMC). Fine-grained soils require a sheepsfoot or padfoot roller.

It is important to note, the on-site soils contain fine-grained soils which become difficult to compact if moisture contents become too high. Moisture management of the compacted soils will be paramount to reach adequate densities. Additionally, groundwater may impact the ability to compact the soils during construction.

If imported "pit-run" is used as structural fill or if soils at the site contain more oversized clasts (greater than 3-inches) compaction testing with a nuclear density gauge is usually problematic due to the presence of stones. Therefore, we recommend compacting stony soils using a **method specification**, for which Table 5-1 provides initial guidelines.

Table 5-1: Compaction Parameters for Stony Fill

Compactor Type	Lift Thickness	Maximum Particle Size	Minimum Number of Passes[1]
5-ton vibratory	12 inches	9-inch[2]	3
1.5-ton vibratory	9 inches	6-inch	5
Hand-held	4 inches	4-inch	5

1. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
2. Occasional clasts to 12-inch are permitted, if encountered, but should not be nested.

The method specification may be established as follows:

- The contractor will place fill in loose lifts no greater than specified in the above table for whichever class of compactor is used.
- Fill will be compacted with the *minimum* number of passes specified above. The actual number of passes should be determined by observing compaction after each pass to determine if the surface is non-yielding. If the fill surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
- Once the number of passes is determined, this **method** (unique to the material type, compactor, lift thickness, and number of passes) may be continued for the rest of the project as long as fill material properties and subgrade soil conditions remain the same.

It is important to establish a method specification as early in the construction as possible and apply it consistently for the entirety of the project. JG should observe lift thickness, number of passes, and equipment used during compaction. Additional guidance on construction observations may be found in Section 5.5.6.

5.5.5 Compaction Requirements

We recommend the following requirements for engineered fill materials:

Material Type and Location	Minimum Compaction Requirement	Moisture
Stony soils[1]: All Locations (Structural and Non-Structural Applications)	Non-yielding Condition	Usually 6-8%[2]
Non-stony soils	92% or 95% maximum dry density	+2-2% OMC

1. Stony soil may be imported or site-derived
2. Clean, stony soils are typically moisture insensitive and field observations are usually adequate to estimate when soils achieve the proper moisture.

We recommend compaction of fills be observed and tested during construction. If stony fill is not observed to be in a non-yielding condition or non-stony fills do not achieve the recommended compaction requirements, the area represented by the test should be reworked and retested as required to meet the requirements.

5.5.6 Observation during Construction

Recommendations in this report are contingent upon our involvement. If any unexpected soils or conditions are revealed during construction, this office should be notified immediately to survey the conditions and make necessary modifications. All excavations and foundation subgrades should be observed by a representative of JG prior to fill or concrete placement, especially if questionable materials are exposed. Notice shall be provided at a minimum of 24 hours before the requested observation.
We are able to provide the most value observing site conditions at the following times:

1. Upon completion of site preparation to verify all organics and unsuitable material have been removed, and to verify stony alluvial soils have been reached and structural fills have been prepared in accordance with Sections 5.5.1 and 5.5.4.
2. we can observe placement and compaction of fill and aid in the development of a method specification, Section 5.5.4.
3. We can perform density testing by means of proof rolls and with the use of a Nuclear Density Gauge for structural and non-structural soils.

6.0 LIMITATIONS

This report has been prepared based on a limited amount of data. Actual site conditions may vary. These services have been performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty is made or implied.

This report is site-specific and has been prepared in support of the proposed project. The report is for the sole use of the current property owner and their design and construction team and shall be considered non-transferable to future property owners without the written consent of Jorgensen Geotechnical. Under no circumstances are the figures and text to be used separately.

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APPENDIX A

Site Exploration Procedures and Subsurface Exploration Logs

Field Exploration

Borehole Locations and Elevations

Borehole and test pit locations were determined by Jorgensen Geotechnical (JG) staff to bracket the approximate location of the proposed development. Approximate locations of the boreholes and test pits are presented in Figure 2. The approximate location of each borehole and test pit locations were estimated based on relative proximity to landmarks identifiable on aerial photography. Approximate GPS coordinates for each borehole were also collected in the field. Approximate elevations were based on topographic data from Jorgensen Associates.

Subsurface Exploration Procedure

JG conducted a site exploration at the proposed project site utilizing two different subsurface exploration techniques: geotechnical boreholes and open test pits. During the exploration effort, several disturbed samples from SPTs were collected during the drilling effort as well as bulk disturbed grab samples during the test pit excavation. Shelby tubes were used to collect relatively undisturbed samples of soft material for consolidation testing, shear testing, and index testing. The samples were tested at GCI in Salt Lake City, Utah, and the results are presented in Appendix B. Soil-engineering properties were based on visual classification, direct lab testing results, and accepted correlations based on index test results and SPT blow counts and are discussed further in Appendix D. The subsurface exploration techniques are described below.

Sonic Boreholes

On October 1 and 2, 2023, JG directed and oversaw the drilling of four sonic boreholes; two to 80-feet below the ground surface (bgs) and two to 35-feet bgs using a sonic drill rig operated by Cascade Drilling of West Jordan, Utah. Sonic drilling utilizes high frequency vibrations to advance a core barrel or casing into the subsurface soils while collecting one continuous disturbed sample. At predetermined intervals, standard penetration tests (SPT) were performed to generate blow count values and collect additional disturbed samples.

Hollow Stem Auger Boreholes

Three additional boreholes were completed each to 20-feet bgs on October 25, 2023 using a hollow stem auger (HSA) drilling technique with a Diedrich D120 drill rig operated by SK Geotechnical of Billing, Montana. The HSA drilling technique utilized a 4.25-inch inside diameter hollow auger with a solid stem rod in the center that is removed to perform standard penetration tests every 2.5-feet.

Open Test Pits

On October 31, 2023, JG directed and oversaw the excavation of four open test pits. The test pits were excavated using a Hitachi Zaxis 160 steel tracked excavator operated by FCExcvation. The test pits ranged in depth from 10 to 18-feet bgs. Disturbed bulk samples were collected from pertinent soil layers.

Borehole Logs

Field data were collected in the field digitally using the application pLog on a tablet. Draft logs were reviewed in the office, and final versions are presented below. Blow counts for SPT (field N-values) were adjusted to a standard hammer efficiency of 60% and overburden pressure of one atmosphere as suggested by Youd and Idriss (1997) and Fang (1991), to obtain the adjusted (N1)60 values in blows per foot. Soil type, thickness, consistency, and relative moisture content were observed and documented by Jorgensen Geotechnical staff.

Detailed borehole logs are attached. Site conditions may vary and actual soil conditions may differ from those presented in the borehole logs. The final logs represent JG's interpretation of the subsurface soil conditions. Actual soil conditions may differ from those observed in the boreholes.

In addition to borehole and test pit logs produced by Jorgensen Geotechnical, borehole logs presented in a report produced by Nelson Engineering dated July 28, 2021 were also reviewed to determined subsurface soil conditions and are presented below. Approximate borehole locations performed by Nelson Engineering are presented in Figure 2. Test pit logs presented in a report prepared by Womack and Associated dated June 4, 2012 for the water tank due south of the proposed project site were also reviewed.

Geophysical Exploration

Jorgensen Geotechnical contracted with Atlas Technical Consultants LLC of Salt Lake City to perform a geophysical evaluation at the project site. The primary purpose of the geophysical study was to develop subsurface shear-wave velocity profiles using Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Waves (MASW). The geophysical exploration was performed on October 23 and 24th 2024. One ReMi line and one MASW line were performed at the specific project site (Lots 53 and 58), while the other ReMi and MASW lines were performed on Lot 57.

The ReMi study extended to a maximum depth of 100-ft below the ground surface, allowing us to select a Site Class based on the results. Shear wave velocity for the ReMi line RL-2 performed at lots 53 and 58 produced a shear wave velocity of 1,201 ft/s, classifying the site as a Site Class C per ASCE 7-16

The MASW line ML-2 performed at the project site indicates the upper approximately 20-feet are softer (i.e., slower shear wave velocity), and the soils become denser at approximately 30-feet below the ground surface. Though the soils appear to become denser at 30-feet, the upper 20-feet appear to be chaotic and have portions that are dense, and portions that are soft, consistent with the observations made in the boreholes and test pits.

The full Report from Atlas is attached.



Photo 1: Typical sonic drilling setup/JG--01



Photo 2: Typical sonic drilling bulk sample/Landslide Debris (GC/CL)



Photo 3: Typical hollow stem auger drilling setup/JG-12



Photo 4: Typical SPT sample/JG-10 D3



Photo 5: Typical test pit excavation setup/TP-07



Photo 6: Landslide Debris (GC)/TP-03



Photo 7: Chaotic sorting in Landslide Debris (GC)/TP-03



Photo 8: Charcoal present within landslide debris/TP-03



Photo 9: Large angular cobbles ~'1 to 2' diameter/TP-04 spoils pile

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-01

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Diedrich D120
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471263 **Longitude:** -110.753274 **Elevation:** 6471.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
0			D1				Gravel (GW): Slightly moist to moist, brown, medium dense, clast supported, sub-rounded clasts approximately 50% sand and 50% sub-rounded gravel [FILL]					
1												
2			D2				Gravelly LEAN CLAY with Sand (CL): slightly moist, brownish tan, stiff, 25-30% angular gravel, 15-20% sand, 55-65% fines, [LANDSLIDE DEBRIS]					
3												
4												
5			D3									
6												
7			D4									
8			D5									
9												
10												
11												
12												
13												
14			D6									
15												
16												
17			D7									
18			D8					12		31	16	15
19												
			D9									

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
□ Fines Content (%) 20 40 60 80

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Borehole ID: JG-01

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Diedrich D120
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471263 **Longitude:** -110.753274 **Elevation:** 6471.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) / MC (%) / PL & LL (%) / Fines Content (%)
21							Gravelly LEAN CLAY with Sand (CL): slightly moist, brownish tan, stiff, 25-30% angular gravel, 15-20% sand, 55-65% fines, [LANDSLIDE DEBRIS]						
22			D10										
23													
24													
25			D11										
26													
27													
28			D12	67	11-16-21 38			11		28	16	12	
29							CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, very dense, 50-55% angular gravel, 15-25% sand, 25-30% fines [LANDSLIDE DEBRIS]						
30			D13										
31			D14										
32													
33			D15										
34													
35			D16										
36													
37			D17	56	46-50/5" 94								
38			D18										
39			D19										

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Borehole ID: JG-01

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Diedrich D120
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471263 **Longitude:** -110.753274 **Elevation:** 6471.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) / □ Fines Content (%) 20 40 60 80
41			D20				CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, very dense, 50-55% angular gravel, 15-25% sand, 25-30% fines [LANDSLIDE DEBRIS]						
42			D21										
43			D22										
44			D23										
45			D24										
46			D25										
47		⧗	D26	200	19-50/1" 84								
48													
49													
50													
51							LEAN CLAY, Sandy LEAN CLAY with Gravel, LEAN CLAY with Sand (CL): slightly moist, brownish tan, very stiff, 10-20% gravel, 20-30% sand, 50-90% fines, [LANDSLIDE DEBRIS]						
52													
53													
54													
55													
56			D27					13		33	15	18	●⊢
57													
58													
59			D28										

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Borehole ID: JG-01

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Diedrich D120
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471263 **Longitude:** -110.753274 **Elevation:** 6471.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
61							LEAN CLAY, Sandy LEAN CLAY with Gravel, LEAN CLAY with Sand (CL): slightly moist, brownish tan, very stiff, 10-20% gravel, 20-30% sand, 50-90% fines, [LANDSLIDE DEBRIS]						
62			D29										
63			D30										
64													
65			D31										
66													
67													
68			D32	115	19-31-50/4" 56			10		26	16	10	● ⊢
69			D33										
70			D34										
71			D35										
72													
73			D36					12		38	17	21	● ⊢
74													
75			D37										
76													
77													
78			D38										
79													

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Date Started: Oct 01 2023 **Completed:** Oct 02 2023
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Drilling Method: Sonic
Equipment: Diedrich D120
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471263 **Longitude:** -110.753274 **Elevation:** 6471.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
81			D39	100	9-23-35 35		CLAYEY GRAVEL with Sand (GC): slightly moist, brownish gray, dense, angular 55% gravel, 15% sand, 30% fines [LANDSLIDE DEBRIS]						▲
82													
83													
84													
85													
86													
87													
88													
89													
90													
91													
92													
93													
94													
95													
96													
97													
98													
99													

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) / MC (%) / PL & LL (%) / Fines Content (%)
1			D1				GRAVEL (GW): slightly moist to moist, brown, medium dense, clast supported, approximately 50% sand and 50% sub-rounded gravel [FILL]						
2													
3			D2				CLAYEY GRAVEL with Sand (GC): slightly moist, medium dense, brownish tan, 55% angular gravel, 15% sand, 30% fines [LANDSLIDE DEBRIS]						
4													
5			D3										
6													
7			D4							20	15	5	H
8													
9			D5										
10			D6										
11													
12			D7				LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel, (CL): Slightly moist, reddish brown, soft to medium stiff, homogeneous, 10-20% sub-angular to angular gravel , 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]						
13													
14													
15			D8					12		31	15	16	●⊣
16													
17													
18			D9	0	4-3-3 6								▲
19													

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1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
21			D10				LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel, (CL): Slightly moist, reddish brown, soft to medium stiff, homogeneous, 10-20% sub-angular to angular gravel , 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]						
22													
23			D11					13		29	15	14	● ⊢
24													
25													
26			D12										
27													
28			D13	100	7-12-13 24	2.50							▲
29			D14										
30													
31			D15										
32													
33			D16					15		21	16	5	●
34													
35													
36			D17										
37													
38			D18	93	16-12-15 24								▲
39			D19					16		29	17	12	● ⊢

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Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
▽ At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
41			D20				LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel, (CL): Slightly moist, reddish brown, soft to medium stiff, homogeneous, 10-20% sub-angular to angular gravel , 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]					
42												
43			D21									
44												
45			D22				CLAYEY GRAVEL with Sand (GC): moist to wet, reddish brown to grayish tan, dense, homogeneous, 40-50% angular gravel, 20-30% sand, 30-35% fines [LANDSLIDE DEBRIS]					
46												
47							▽					
48			D23	100	14-25-31 45							
49			D24									
50							LEAN CLAY, LEAN CLAY with Sand (CL): wet, tan to reddish tan, stiff to very stiff, homogeneous, 0-10% angular gravel, 5-35% sand, 60-95% fines [LANDSLIDE DEBRIS]					
51			D25									
52												
53			D26					12		26	14	12
54												
55												
56			D27									
57												
58			D28	100	14-26-36 45							
59			D29									

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
☐ Fines Content (%) 20 40 60 80

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Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) 8 16 24 32 / MC (%) / PL & LL (%) 20 40 60 80 / Fines Content (%) 20 40 60 80
61			D30				LEAN CLAY, LEAN CLAY with Sand (CL): wet, tan to reddish tan, stiff to very stiff, homogeneous, 0-10% angular gravel, 5-35% sand, 60-95% fines [LANDSLIDE DEBRIS]	14		37	14	23	
62													
63			D31										
64													
65			D32					13		31	17	14	
66													
67		⧗	D33	400	50/4" 66								
68			D34				CLAYEY SAND (SC): wet, grayish brown to reddish gray, very dense, 55% sand, 45% fines, ironoxide staining, organic odor [WEATHERED ROCK]						
69													
70			D35							21	16	5	
71													
72			D36										
73													
74													
75			D37										
76			D38										
77													
78			D39										
79													

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Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
▽ At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
81			D40	0	50/2" 59		CLAYEY SAND (SC): wet, grayish brown to reddish gray, very dense, 55% sand, 45% fines, ironoxide staining, organic odor [WEATHERED ROCK]						
82													
83													
84													
85													
86													
87													
88													
89													
90													
91													
92													
93													
94													
95													
96													
97													
98													
99													

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1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-03

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471750 **Longitude:** -110.753041 **Elevation:** 6406.00
Notes: Perched groundwater encountered between 27 and 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1			D1				SILTY GRAVEL with Sand (GM): slightly moist, dark brown, medium dense, 45% sub-rounded to rounded gravel, 25% sand, 30% fines [FILL]					
2							GRAVELLY LEAN CLAY with Sand (CL): slightly moist, brownish tan, soft, approximately 15-25% angular cobbles by volume, matrix supported, 30-35% angular gravel, 15-20% sand, 50% fines [LANDSLIDE DEBRIS]					
3			D2									
4												
5			D3					10		33	14	19
6												
7			D4	93	4-3-4 7							
8												
9			D5									
10			D6									
11							CLAYEY SAND with Gravel (SC): slightly moist, very light brownish tan, dense, approximately 15-25% angular cobbles by volume, matrix supported, 25-30% angular gravel, 30-35% sand, 40-45% fines [LANDSLIDE DEBRIS]					
12												
13			D7									
14												
15			D8					8		30	15	15
16												
17			D9	100	10-17-20 33							
18							CLAYEY GRAVEL with Sand (GC): moist to wet, reddish brown, medium dense, homogenous, approximately 15-25% angular cobbles by volume, matrix supported, 30-55% angular gravel, 20-30% sand, 30-50% fines [LANDSLIDE DEBRIS]					
19			D10									

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Borehole ID: JG-03

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471750 **Longitude:** -110.753041 **Elevation:** 6406.00
Notes: Perched groundwater encountered between 27 and 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D11				CLAYEY GRAVEL with Sand (GC): moist to wet, reddish brown, medium dense, homogenous, approximately 15-25% angular cobbles by volume, matrix supported, 30-55% angular gravel, 20-30% sand, 30-50% fines [LANDSLIDE DEBRIS]					
22												
23			D12					12		35	15	20
24												
25			D13									
26												
27			D14	87	10-11-14 22							
28												
29			D15									
30			D16									
31			D17					11		29	15	14
32												
33												
34			D18									
35			D19	80	20-25-10 17							
36												
37												
38												
39												

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-04

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 30.00 on Oct 02 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 35.2 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471774 **Longitude:** -110.753619 **Elevation:** 6404.00
Notes: Groundwater encountered at 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1			D1				SILTY GRAVEL with Sand (GM): slightly moist, dark brown, medium dense, 45% sub-rounded gravel, 25% sand, 30% fines [FILL]					
2												
3			D2									
4							LEAN CLAY with Gravel (CL): slightly moist, brownish tan, soft, approximately 15-25% angular cobbles by volume, matrix supported, 15-20% angular gravel, 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]					
5			D3									
6												
7			D4	93	2-2-7			12		34	16	18
8			D5		8							
9												
10			D6									
11												
12							CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, dense, approximately 15-25% angular cobbles by volume, matrix supported, 35-55% angular gravel, 15-30% sand, 30-35% fines [LANDSLIDE DEBRIS]					
13			D7									
14												
15			D8					7		19	14	5
16												
17			D9	53	18-27-30							
18					49		LEAN CLAY with Sand (CL): slightly moist, brownish tan, medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-5% angular gravel, 25-30% sand, 65-70% fines [LANDSLIDE DEBRIS]					
19			D10									

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Borehole ID: JG-04

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
▽ At time of drilling 30.00 on Oct 02 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 35.2 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471774 **Longitude:** -110.753619 **Elevation:** 6404.00
Notes: Groundwater encountered at 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D11				LEAN CLAY with Sand (CL): slightly moist, brownish tan, medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-5% angular gravel, 25-30% sand, 65-70% fines [LANDSLIDE DEBRIS]	17				
22												
23			D12							31	17	14
24												
25												
26			D13									
27												
28			D14	87	25-32-12 21							
29			D15									
30			D16									
31			D17				CLAYEY GRAVEL with Sand (GC): wet, grayish brown to reddish gray, very dense, approximately 15-25% angular cobbles by volume, matrix supported, 40-45% angular gravel, 15-20% sand, 40-45% fines [WEATHERED ROCK/LANDSLIDE DEBRIS]	10		33	15	18
32												
33												
34			D18									
35			~~D19~~	400	50/1" 83							
36												
37												
38												
39												

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
□ Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
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Borehole ID: JG-10

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471827 **Longitude:** -110.752751 **Elevation:** 6404.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-2 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1–4							CLAYEY SAND with Gravel (SC): slightly moist, very loose, brown, 20% angular gravel, 55% sand, 20% fines [TOPSOIL/FILL]					
3			D-1	40	1-1-4 4							
4–5							GRAVELLY LEAN CLAY with Sand. LEAN CLAY with Sand, LEAN CLAY (CL): dry, reddish tan, soft to medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-30% angular gravel, 10-20% sand, 50-90% fines, [LANDSLIDE DEBRIS]					
6			D-2	67	5-8-7 11							
8			D-3	60	5-5-6 9					25	16	9
10–11			D-4	67	9-17-12 18							
13			U-1					14		39	15	24
15–16			D-5	83	4-6-8 11			16		38	21	17
18			U-2					14		32	14	18
19												

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-10

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471827 **Longitude:** -110.752751 **Elevation:** 6404.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-2 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / ☐ Fines Content (%) 20 40 60 80
21			D-6	100	5-9-8 14		GRAVELLY LEAN CLAY with Sand. LEAN CLAY with Sand, LEAN CLAY (CL): dry, reddish tan, soft to medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-30% angular gravel, 10-20% sand, 50-90% fines, [LANDSLIDE DEBRIS]						▲
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-11

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471746 **Longitude:** -110.753110 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1–4			D-1	20	11-11-19 26		CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, medium dense, 55% sub-rounded gravel, 25% sand, 20% fines [FILL]					
5–7			D-2	79	5-11-50/5" 50		CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, medium dense to very dense, chaotic sorting, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 30-50% angular gravel, 15-30% sand, 35-40% fines, Charcoal present [LANDSLIDE DEBRIS					
8–9			D-3	90	8-12-14 20			7		22	15	7
10–12			D-4	83	4-9-12 16							
13–15			D-5	100	6-17-23 33							
16–17			D-6	73	10-18-20 31							
18			~~D-7~~	0	50/1" 79							
19			D-8	125	50/5" 77							

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-11

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471746 **Longitude:** -110.753110 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21							CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, medium dense to very dense, chaotic sorting, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 30-50% angular gravel, 15-30% sand, 35-40% fines, Charcoal present [LANDSLIDE DEBRIS					
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
☐ Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-12

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471744 **Longitude:** -110.753401 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-3 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
0							CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, very loose, 55% rounded gravel, 25% sand, 20% fines [FILL]					
3			D-1	60	4-4-3 5		CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, loose to very dense, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 30-35% angular gravel, 25-30% sand, 40-45% fines [LANDSLIDE DEBRIS]					
5			D-2	93	9-19-50/5" 55			10		27	15	12
7			D-3	75	50/5" 78							
9							LEAN CLAY with Sand (CL): dry, tan, medium stiff, 10% angular gravel, 30-40% sand, 50-60% fines, [LANDSLIDE DEBRIS]					
10			D-4	100	6-6-14 15			13		27	17	10
13			D-5	93	4-6-15 17							
15			D-6	100	6-23-29 41		CLAYEY GRAVEL WITH SAND (GC): dry to slightly moist, brown, dense, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 50% angular gravel, 15% sand, 35% fines [LANDSLIDE DEBRIS]					
18			D-7	73	19-16-42 45							

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Borehole ID: JG-12

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471744 **Longitude:** -110.753401 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-3 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D-8	100	6-9-15 20		SANDLY LEAN CLAY with Gravel (CL): dry to slightly moist, brown, medium stiff, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 20-30% angular gravel, 20-30% sand, 50% fines [LANDSLIDE DEBRIS]	11		26	14	12

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
□ Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
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Test Pit ID: TP-03

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471762
Longitude: -110.752954
Elevation: 6406.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

Notes:
No groundwater encountered. Stopped at target depth and limits of excavtator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
0						CLAYEY GRAVEL with Sand(GC): dry to slightly moist, blackish brown, homogeneous, 45% sub-angular gravel, 30% sand, 25% fines, [FILL]						
4						CLAYEY GRAVEL with Sand(GC): dry to slightly moist, brown, clast supported, 25% sub-angular to angular cobbles by volume, remaining 50% angular gravel, 15% sand, 35% fines by mass, Large amounts of charcoal. Chaotic sorting. Layer of CL (-0.5") at 6.5' and 8' [LANDSLIDE DEBRIS]						

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Test Pit ID: TP-04

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471736
Longitude: -110.753241
Elevation: 6405.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160
Notes: No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
1						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, blackish brown, homogeneous, 45% sub-rounded gravel, 30% sand, 25% fines, Chunks of asphalt present, rebar [FILL]						
2												
3												
4												
5						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, clast supported, 15% sub-angular to angular cobbles by volume, remaining 50% angular gravel, 15% sand, 35% fines by mass, Large amounts of charcoal. Chaotic sorting. [LANDSLIDE DEBRIS]						
6												
7												
8												
9												
10												
11												
12			D-1									
13												
14												
15												
16												
17												
18												
19												

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Test Pit ID: TP-05

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471248
Longitude: -110.753015
Elevation: 6467.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Notes:
Contractor: FCE
Equipment: Hitachi Zaxis 160

No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
1						CLAYEY SAND (SC): dry, brown, loose, 15% gravel, 55% sand, 30% fines, [TOPSOIL]						
2						LEAN CLAY with Sand (CL): dry, light whitish tan, pinholed, 5% angular gravel, 15% sand, 80% fines, medium plasticity, Some gravels and cobbles present. Lime stringers present [LOESS]						
3												
4												
5												
6												
7			D-1									
8						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, clast supported, 35% angular cobbles by volume, remaining 50% angular gravel, 15% sand, 35% fines by mass, charcoal. Chaotic sorting. [LANDSLIDE DEBRIS]						
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

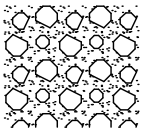
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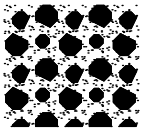
Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471498
Longitude: -110.753164
Elevation: 6424.50
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

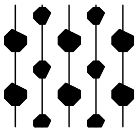
Notes:
No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

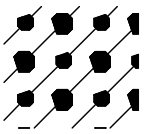
Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
0						CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, 40% angular cobbles by volume, remaining 55% angular gravel, 15% sand, 30% fines by mass, 2-4' cobbles and boulders [LANDSLIDE DEBRIS]						
4						CLAYEY GRAVEL with Sand (GC): slightly moist, dark reddish brown, dense, clast supported, 40% angular cobbles by volume, remaining 55% angular gravel, 15% sand, 30% fines by mass, 2-4' cobbles and boulders. Increased to very dense at bottom of pit. [LANDSLIDE DEBRIS]						
8						CLAYEY GRAVEL with Sand (GC): Dry, reddish brown, very dense, 80% angular cobbles by volume, remaining 55% angular gravel, 20% sand, 25% fines by mass, Appears to be layer of scree/ loose bedrock [LANDSLIDE DEBRIS/WEATHERED BEDROCK]						

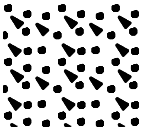
SOIL GRAPHICS

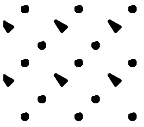
GW 

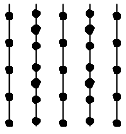
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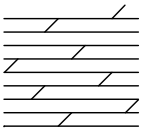
GM 

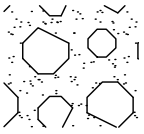
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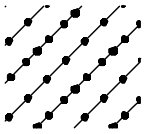
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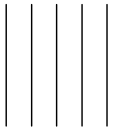
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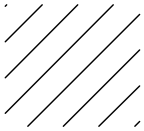
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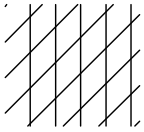
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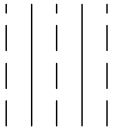
COBBLES/BOULDERS 

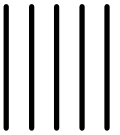
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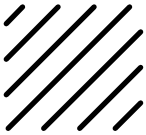
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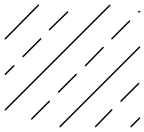
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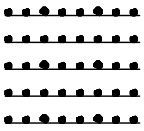
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NOTE: ANGLED DEMARCATIONS ON THE LOGS INDICATE APPROXIMATE OR POORLY DEFINED BOUNDARIES BETWEEN SOIL TYPES.

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PROJECT NAME: **LOT 58 GRAND VIEW LODGES**		**DRILL HOLE No. BH-1**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/11/05 10/12/05**		DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**		DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6408.5**		HOLE DIAMETER: **4"**	
		HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ALUVIAN GRAVEL, COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED ON EXCAVATED CUT SLOPE. SURFICIAL SOILS AT BORING SITE AND IN ADJACENT CUT SLOPES ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER (6' M.D.)*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-5' ARE ROCK CHIPS AND SILTY CLAY FINES*						
		4												
		5						*DRILLING THROUGH ROCK 4.8-6'*						
		6												
		7												
		8												
		9						*CUTTINGS 0-10.1' ARE ROCK CHIPS AND SILTY CLAY FINES*						
		10	X			BH1-1 2" SS	87	*DRY GREY GRAVEL, GP, FILGC, LIMESTONE FRAGMENTS IN MOIST BROWN SILTY SAND MATRIX*			>50			
		11	X											
		12												
		13												*10-20' DR REPORTS INTERVALS OF 1-4" SOFTER MATERIAL. PRIMARILY DRILLING THROUGH ROCK MATERIAL CUTTINGS ARE LIMESTONE FRAGMENTS IN SILTY SAND*
		14												
		15												
		16												
		17												
		18												
		19												
		20	X			BH1-2 2" SS	46	*MOIST BROWN GRAVEL W/ SILT AND SAND, GP-GM, GRAVELS ANGULAR, SILT STIFF. MULTICOLORED GRAVELS HIGHLY WEATHERED*			35			
		21	X											

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CLIENT: **SNOW KING MOUNTAIN RESORT**
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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-1* PAGE: *2 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

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	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	22												DR MOD. TO EASY DRILLING IN 20–22' INTERVAL 8" ROCK 22.3–23'
		23												
		24												
		25				BH1-3 3"CS	25	MOIST BROWN CLAYEY SAND WITH GRAVEL, SC, PP=2.5 TSF, STIFF TO V. STIFF. FRAG. IN SHOE			8			
		26												DR 1–3" INTERVALS BETWEEN CLASTS
		27												
		28						SOME HIGHER PLASTICITY LEAN CLAYS IN CUTTINGS						
		29												
		30				BH1-4 2.5" SS	21	MOIST BROWN CLAYEY SAND WITH GRAVEL, SC, V. STIFF TO HARD, PP=4.0TSF	27	16	10		10	DR EASIER DRILLING FROM 29.5'± WITH LITTLE HAMMER ACTION
		31												
		32						HOLE CAVED TO 20' AFTER 30' SAMPLE						DR EASIER DRILLING FROM 29.5'± WITH LITTLE HAMMER ACTION FREQ. HAMMER PLUGGING 32–40'
		33												
		34												
		35												
		36												
		37												
		38												
		39												
		40						NO SLUFF IN HOLE @40' DIFFICULTY CLEANING HOLE TO REMOVE ROD INDICATES SOME CAVING IN 30–40' INTERVAL.						
		41				BH1-5 2" SS	70	MOIST BROWN CLAYEY SAND, SC, VERY STIFF TO HARD, FINE ANGULAR GRAVELS IN A SANDY CLAY MATRIX. UPPER 2" HIGHER MOISTURE CONTENT, MAY INDICATE SEEPAGE ZONE 40–41'	19	4	30		12	DR GRAVEL AND COBBLE ZONE 42–43' WATER LEVEL 11/3/05
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-1* PAGE: *3 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

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		44						*CUTTINGS ARE MOIST TO WET OLIVE GREEN CLAYEY SAND*						*DR CONT. HAMMER CLOGGING FROM 42'*
		45	X			*BH1-6 2" SS*	*83*	*MOIST OLIVE GREEN CLAYEY SAND, SC, MED. STIFF TO STIFF, SLIGHTLY SANDY LENS WITHIN. SOME CALCIUM CARBONATE STRINGERS.*	*30*	*6*	*16*		*20*	
		46	X											
		47	X											
		48												
		49												
		50												
		51												
		52	X											*AT 52' DR APPROX. 12' OF WATER IN HOLE OVERNIGHT*
		53	X			*BH1-7 2" SS*	*40*	*AS ABOVE BUT GREY BROWN, SOME COAL/ORGANICS, PP=3.5-4.0 TSF.*			*22*			
		54	X					*BOH =52.0'*						
		55						*SET PIEZO (1"PVC) BOTTOM AT 51.1 SLOTTED BOTTOM 10' FILLED ANNULUS WITH SAND TO 38' 1' STICKUP*						
		56												
		57												
		58												
		59												
		60												
		61												
		62												
		63												
		64												
		65												
		66												

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S:\PROJECTS\06-12 GRAND VIEW LODGES\DRILLING\BHBORINGLOG.DWG (BH-1 (2)) FEB 13 2006 10:56:01 AM PLOTTED BY: GYR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-2**	PAGE: **1 OF 5**
DATE STARTED / FINISHED: **10/11/05 10/12/05**	DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6550.3**	HOLE DIAMETER: **4"**	
	HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	FREQ. GRAVEL, COBBLE. AND BOULDER SIZE CLASTS	1–6						*BORING LOCATED ON GRASSY AREA. SURFICIAL SOILS IN ADJACENT ROAD CUT ARE GENERALLY STIFF TO HARD GRAVEL AND SILT MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE. SEVERAL LARGE BOULDERS EXCAVATED FROM NEARBY WATER TANK EXCAVATION.*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		3–5						*CUTTINGS 0–5' ARE MOIST LT BROWN GRAVEL WITH WITH SILT, GP–GM*						*DR FREQ. COBBLES. HAMMER ACTION IS NEARLY CONTINUOUS*
		6												*DR NO GRAVEL/COBBLES FROM 6'±*
	WET TO SATURATED SOILS IN INTERVALS FROM 7'–18'	7–9						*DR VERY SOFT DRILLING 7–9.5' CUTTINGS ARE WET CLAY/SANDY CLAY. APPEARS TO BE A SATURATED ZONE*						
		10–11				BH2-1 2.5" CS	75	*FROM 9.5' SAND CONTENT OF CUTTINGS INCREASING MOIST GREY BROWN CLAY, CL, STIFF TO VERY STIFF, NONUNIFORM PLASTICITY IN SAMPLE.*			15			
		12–14												*DR GRAVELLY DRILLING 12'–13'*
		15–16				BH2-2 2" SS	75	*MOIST TO WET GREY CLAYEY SAND W/GRAVEL, SC, GRAVELS FINE TO MED. SANDS FINE. V. STIFF TO HARD, MEDIUM PLASTICITY*			16			
		17												
		18						*HAMMER PLUGGING FREQ. TO 17' CUTTINGS ARE MOIST CLAYS*						
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	19–21						*ROCKY DRILLING FROM 18' FREQ. HAMMER ACTION ON COBBLE AND GRAVELS. CUTTINGS SLIGHTLY MOIST*						

MATERIAL DESCRIPTION

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	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	22												*DR ROCKY DRILLING FROM 20'*
		23						*CUTTINGS TO 25' ARE GRAVEL/COBBLE FRAGMENTS IN SILT/SILTY CLAY WITH SAND MATRIX*						
		24												
		25	X			BH2-3 2.5"	25	*MOIST GREY SANDY SILT/SANDY CLAY, SC, V. STIFF*			18			
		26	X											*DR WET PLASTIC SOILS CONT. PLUG HAMMER. BORING ADVANCED WITH 1.875" ø NQ CORE FROM 30'*
		27	X											
		28												
		29												
		30						*CORING FROM 30' RETURN LOGGED AS IN"/IN"*						
		31		X				*30-30.8' WET SAT GREY CLAY, CL, WET FROM DRILLING FLUID. WITH 2 3" GRAVEL PARTICLES*						
		32		X			33/36	*30.8-33' MOIST GREY GREEN SANDY SILT, ML, V. STIFF TO HARD. GRADES TO SILTY SAND W RED COLORING SOME INTERVALS. TRACE CLAY. THROUGHOUT. 1 2" SEAM OF V.STIFF MED. PLASTICTY CH 31.0'*						
		33		X										
		34												
		35					2/60	*MOIST GREY SAND W/SILT, SP/SM, SANDS FINE, DENSE, WEAKLY CEMENTED*						
		36												
		37												
		38												
		39												
		40					35/60	*MOIST DENSE GRAY GREEN SAND W/SILT, SP-SM, DENSE, CONTAINS 1/4" THICK STRATA OF DK BROWN SILT W/SAND IN LOWER HALF*						
		41												
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-2* PAGE: *3 OF 5*

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		44					43/60	*MOIST DENSE GRAY GREEN SILTY SAND, SM, SANDS FINE, SILT % INCREASING WITH DEPTH, LOWER 1.5' OF SAMPLE MAY BE SANDY SILT. 3–5 DARKER FINE GRAINED STRATA <1" THICKNESS IN INTERVAL*						
		45												
		46												
		47												
		48												
		49												*48–53 DR VARIABLE RATE OF ADVANCE IND. 6"± STRATA*
		50					60/60	*4" INTERVAL 48.2–48.6 SAT V. SOFT SILTY SAND (DRILLING FLUID). MOIST GRAY GREEN SILT, ML, V. STIFF, OCCASIONAL BLACK ANGULAR FINE GRAVELS.*						
		51						*SAND % INCREASING FROM 51' MOIST GREY GREEN SILTY SAND, SM, SANDS FINE, DENSE*						
		52												
		53												
		54					48/48	*MOIST GREY GREEN SILT, SILTY SAND, ML/SM, WEAKLY CEMENTED SILTSTONE UPPER 6"*						
		55												
		56												
		57					12/12	*AS ABOVE*						
		58												
		59												
		60					12/60	*DR COBBLE AND GRAVEL DRILLING AND LOSS OF DRILLING FLUID FROM APPROX. 58'. POOR RETURN, 2" MINUS SANDTONE GRAVELS AND SILTY SAND. APPEARS TO BE COBBLES IN SILTY SAND MATRIX.*						
		61												
		62												
		63												
		64												
		65					12/20	*BLOCKED OF AT 64.7 BY COBBLE. MED. COARSE GRAVEL SIZE FRAGMENTS QUARTZITE NO WATER RETURN 65.5–66'*						
		66												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-2* PAGE: *4 OF 5*

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		67					14/40	*AS ABOVE.* *CONT. LOSS OF FLUID TO FORMATION*						
		68												
		69					18/30	*GRAVEL SIZE LIMEYSANDSTONE FRAGMENTS, SOME SAND ADHEREING TO GRAVEL SURFACES*						
		70						*BLOCKED OFF BY COBBLE @70.5*						
		71					15/30	*DR HARDER COMPETENT ROCK WITH THIN (<2") SOFTER INTERVALS THROUGHOUT. CONT. WATER LOSS.* *MOIST GREEN SILT W/SAND, ML, HARD, TRACE CLAYS.*						
		72												
		73												
		74					54/60	*UPPER 1' IS SILT W SAND, ML, SAT. SOFT (DRILLING FLUID)* *REMAINDER IS MOIST GREEN SANDY SILT, ML, GRADES TO SILTY SAND IN SOME INTERVALS, SANDS FINE. VERY STIFF TO HARD*						
		75												
		76												
		77												
		78												
		79												
		80					44/60	*UPPER 10" MOIST GREEN SAND W/SILT, SP-SM,* *9" INTERVAL MOIST GREEN THEN BLACK CLAY, CH, MED. TO HIGH PLASTICITY, V. STIFF TO HARD* *16" SAND W SILT AS ABOVE* *GRADES TO MOIST GREEN CLAY, CH, HARD, BOTTOM 4"*						*DR REPORTS RED SEDIMENT IN RETURN FLOW 80-81 NO RED MATERIAL IN CORE*
		81												
		82												
		83												
		84					21/51	*14" MOIST GREEN TAN SILTY SAND/SANDY SILT, DENSE/HARD SANDS FINE* *2" MOIST GREEN CLAY, CH/CL, MED. HIGH PLASTICITY , WITH FINE SAND. V. STIFF TO HARD* *5" COBBLES LARGE GRAVELS IN SILT W SAND MATRIX*						*DR REPORTS LITTLE WATER LOSS 83-88*
		85												
		86												*BIT BLOCKED@87.25 NO RETURN FROM 87.5 DR COBBLE DRILLING*
		87												
		88					18/30							
		89												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-2* PAGE: *5 OF 5*

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		90						*FRACTURED BLUE GREY LIMESTONE, 1" MD*						*DR COBBLES NO RETURN 89.8–93*
		91					14/38	*FRACTURED LIMESTONE AS ABOVE*						
		92												
		93												
		94												
		95					23/30	*LIMESTONE, 7" CONT. CORE, REMAINDER FRACTURED GRAVEL SIZE*						
		96					20/30	*BLACK TO GREY FRACTURED LIMESTONE, 1.5" M.D. SOME SANDY CALY MATRIX. APPEARS TO HAVE WEATHERED SURFACES*						*BLOCKED@96.5*
		97												
		98												*NO REUTRN 98–103 COBBLES WITH SMOOTH INTERVALS (CORING THROUGH LARGER COBBLE)*
		99												
		100					27/60	*CONT. FRACTURED LIMESTON, WITH SANDY CLAY INTERVALS. FRAGS UP TO 3" CORE LENGTH. WEATHERED SURFACES*						
		101												
		102												
		103												
		104												*NO REUTRN 103–108 CONT. COBBLE DRILLING*
		105					40/60	*AS ABOVE TO BOH*						
		106												
		107												
		108						*SET PIEZOMETER 1" ø PVC.* *BOTTOM AT 107.7* *SLOTTED 97.7–107.7* *NO WATER MEASURED ON 11/3/05*						
		109												
		110												
		111												
		112												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
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S:\PROJECTS\2006\126-02 GRAND VIEW GEOTECH\DRAWINGS\LOGS\DWG GBH-2(5).DWG FEB 13 2006 11:06:21 AM PLOTTED BY: GYR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-3** PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/20/05 10/20/05**	DRILLER: **PIEDMONT**
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6445.8**	HOLE DIAMETER: **4"**
	HAMMER TYPE: **140#**

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED UNDISTURBED GROUND. SOILS EXPOSED IN WATERLINE TRENCH TO WEST TO DEPTH OF APPROX. 15' ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE (6' M.D.)*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-10' ARE ROCK CHIPS AND SILTY CLAYEY SAND*						
		4												*10-9.5' DR COBBLES AND GRAVELS WITH MATRIX INTERVALS OF 1" OR LESS THICKNESS*
		5												
		6												
		7												
		8												
		9												
		10	X			BH3-1 2" SS	46	*MOIST LT BROWN SILTY CLAYEY SAND W/GRAVEL, SC-SM, GRAVELS FINE ANGULAR, WITH CALCEROUS STRINGERS. SANDS FINE. GRADES TO SILTY CLAY WITH GRAVEL, STIFF*			34			
		11												
		12												*COBBLES LESS FREQ. FROM 9.5'*
		13												
		14						*DR ROCK, 14.1-16.8'*						
		15												
		16												
		17												
		18												
		19												
		20	X			2" SS	NS				30/0			*DR GRAVEL AND COBBLES FREQ. FROM 20.5'*
		21												

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S:\PROJ\2005\129-12 GRAND VIEW GEOTECH\ENGINEERING\DRIVE (ENGR)\ FEB 13 2006 11:46:48 AM PLOTTED BY: GYR

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-3* PAGE: *2 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22						*CUTTINGS ARE GRAVEL FRAGS AND RED SAND FROM 20'*						
		23												
		24												*WATER LEVEL 11/3/05*
		25												
		26				BH3-2 2"SS	33	*MOIST LT BROWN SILTY CLAY W GRAVEL , CL-ML, FILGC, GRAVELS FINE TO MED. LIMESTONE. STIFF TO VERY STIFF. DRILLING INDICATES HIGHER ROCK % THAN SAMPLE CONTENTS.*			30			*DR FREQ. PLUGGING 25-30' GRAVELLY*
		27												
		28												
		29												
		30												
		31				BH3-3 2.5" SS	100	*MOIST GREY BROWN SILTY SAND W.GRAVEL, SM, SANDS FINE, VERY STIFF*			17			
		32												*DR FREQ. HAMMER PLUGGING 30-35' DUE TO WET SILTY CLAY.*
		33												
		34						*CUTTINGS 35-40' ARE SILTY CLAY, GRAVEL, SILT, AND SAND MIXTURE*						
		35												
		36												
		37												
		38												
		39				BH3-4 2.5" SS	50	*MOIST GREY CLAY, CL HARD. SUSPECT WATER ABOVE IMPERMEABLE CLAY LAYER.*			>50			
		40												
		41				BH3-5 2" SS	58	*MOIST BROWN TO YELLOWBROWN SILTY CLAY W/GRAVEL, CL-ML, SOME COAL, STIFF TO VERY STIFF.*			12			*DR GRAVEL AND COBBLE ZONE 42-43'*
		42				BH3-6 2" SS	100	*MOIST GREY SILT W GRAVEL, ML, FRAGS UP TO 2", V. STIFF TO HARD.*			>50			
		43												
		44												

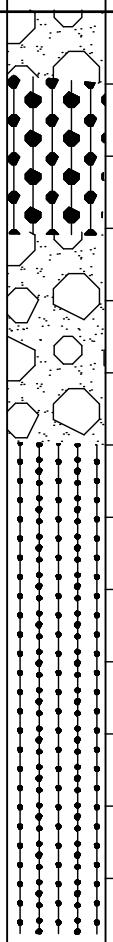
DRILLED BH3A TO 40' WITH DOWNHOLE HAMMER. SET PIEZO BOTTOM AT 33.25 SLOTTED TO 23.25. SAND 33.25-22.0' DRILLED BH3B APPROX. 7' EAST OF BH3A, 3B DRILLED WITH HAMMER TO 42' CASED 3.75"ø TRICONE WITH WATER FROM 42'

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S:\STANDARD\BORINGS\NE_BOREHOLE.PGU JUN 26 2002 09:35:3 AM PLOTTED BY: GREEN

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-3* PAGE: *3 OF 3*



DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
44						This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.						*DR SOFT EASY DRILLING FROM 44–45'*
45												
46												*DR COBBLES 3–6" WITH SOFT INTERVALS 46–49'*
47												
48												
49												*DR SMOOTH DRILLING FROM 49'–BOH*
50												
51	✕			*BH3-7 2" SS*	*100*	*MOIST GREY FINE SILTY SAND, SM, INCLUDES 4" OF CLAY WITH BLACK PEAT/COAL INCLUSIONS, V. STIFF*			*23*			
52	✕											
53												
54												
55												
56	✕			*BH3-8 2" SS*	*100*	*AS ABOVE. V. STIFF, DENSE.*			*20*			
57	✕					*BOH=–55.75'*						
58												
59												
60												
61												
62												
63												
64												
65												
66												

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S:\STANDARDS\BOREHOLE\NE_BOREHOLES.DVG (BOREHOLE.PGL) JUN 28 2002 08:13:53 AM PLOTTED BY: GREEN

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-4**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/22/05 10/23/05**	DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6487.8**	HOLE DIAMETER: **4"**	
	HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED ON UNDISTURBED GROUND. SOILS EXPOSED 50' HIGH CUT SLOPE DOWNSLOPE TO THE NORTH ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE (6' M.D.) SEEPS ARE EVIDENT IN AREA OF CUT FACE DOWNSLOPE OF BORING.*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-6' ARE ROCK CHIPS AND MOIST SILTY CLAYEY SAND*						
		4												*CUTTINGS MOISTURE % INCREASING FROM 6' FEWER ROCKS AND FREQ. BIT PLUGGING.*
		5												
		6												
		7												
		8												
		9	X			BH4-1 2.5" SS	79	*MOIST LT TAN GREEN SILTY SAND, TRACE CLAY, TRACE COAL, HARD.*			35			
		10	X											
		11												
		12												
		13												
		14	X			BH4-2 2" SS	50	*MOIST TO WET RED SILTY CLAYEY GRAVEL W/SAND, MED. PLASTICITY, STIFF TO V. STIFF. MOIST. CHAOTIC, NOT STRATIFIED*			17			*DRILLING WITH 3.75" ø TRICONE AND WATER FROM 15'*
		15	X											
		16												
		17												
		18												
		19												
		20												*DR ROCK 19.5-20.2'*
		21												

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S:\PROJECTS\06-07\TRANSFER STATION GEOTECH\TRANSFER MAIN BUILDING BORING LOGS.DWG GINT-D MAR 14 2005 01:31:31 PM PLOTTED BY:

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-4* PAGE: *2 OF 3*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22												*DR SOFT 20.5–22 DR 50% ROCK WITH 4"–8" INTERVALS OF SOFTER MATERIAL BETWEEN 22–29'*
		23												
		24												
		25												
		26												
		27												
		28												
		29												
▼		30												*WATER LEVEL 11/3/05*
		31												
		32												
		33												
		34						*AT 34' ATTEMPTED SPLIT SPOON, BORING CAVED TO 29' DRILLING WITH CASED 3.75" TRICONE FROM 34' DR SMOOTHER DRILLING AT 35'*						
		35												
		36												
		37												
		38												
		39				BH4-3 2" SS	92	*MOIST TO WET SILT, ML, TAN, MED PLASTICITY. SEAMS .5–1" THICK MAY BE SATURATED. STIFF.*			8			
		40												
		41												*DR COBBLES FROM 39.5 LOSING WATER FROM 40.5*
		42												
		43												
		44												

S:\STANDARD\BORERS\NE_BOREHOLE.DWG (BOREHOLE PLT) JUN 20 2002 09:35:53 AM PLOTTED BY: GREEN

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-4* PAGE: *3 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44						*DR CONT FRACTURED ROCKY DRILLING FROM 39' CUTTINGS ARE ANGULAR LIMETONE/SANDSTONE GRAVEL SIZE FRAGMENTS*						
		45												
		46												
		47												
		48												
		49												
		50												
		51												
		52												
		53						*DR CONT FRACTURED ROCKY DRILLING FROM 39' CUTTINGS ARE ANGULAR BLUE BLACK LIMESTONE/SANDSTONE GRAVEL SIZE FRAGMENTS*						
		54						*MAJORITY OF WATER LOST, 39'–BOH*						
		55						*BOH =55.75*						
		56						*SET PIEZO (¾"PVC) BOTTOM AT 36.1' SLOTTED BOTTOM 6' BENTONITE IN HOLE TO 36.1, SAND TO 20' FILLED ANNULUS WITH SAND TO 38'*						
		57												
		58												
		59												
		60												
		61												
		62												
		63												
		64												
		65												
		66												

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S:\PROJ\2002\130-12 GRAND VIEW GEOTECH\BH\BORINGLOGS.DWG (BH-4 (3)) FEB 13 2006 11:07:07 AM PLOTTED BY: GVR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**		**DRILL HOLE No.** BH-5	PAGE: 1 OF 4
DATE STARTED / FINISHED: 10/24/05 10/25/05		DRILLER: PIEDMONT	
LOGGED BY: GYR/ROLFE		DRILL TYPE: TRACK MOUNT B-50	
BOREHOLE LOCATION/ELEVATION: SEE LOCATION MAP/6409.9		HOLE DIAMETER: 4"	
		HAMMER TYPE: 140#	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		1						*BORING LOCATED AT BASE OF 60' PLUS CUT SLOPE*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-10' ARE MOIST TO WET LT BROWN CLAY, SILTY CLAY WITH SOME GRAVEL FRAGMENTS.*						
		4						*DRILLING INDICATES OCCASIONAL COBBLES*						
		5						*MOIST TO WET PLASTIC SOIL CAUSING FREQ. PLUGGING FROM 4'*						
		6												
		7												
		8												
		9												
		10						*DR ROCK 9.5-11'*						
		11						*WET FROM 11' FREQ. HAMMER PLUGGING*						
		12												
		13												*NO WATER IN HOLE @13' AFTER 28 HOURS*
		14												
		15						*NQ CORING FROM 15' RETURN LOGGED AS IN"/IN"*						
		16					10/36	*MOIST LT BROWN CLAYEY SAND W. GRAVEL, COBBLE FRAG. IN SHOE. V. STIFF TO HARD PP> 3.0 TSF*						
		17												
		18												*18-23 LITTLE WATER LOSS SMOOTH DRILLING W/OCCASIONAL COBBLES*
		19					10/60	*AS ABOVE*						
		20												
		21												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *2 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22												*MINIMAL WATER LOSS 23–28'*
		23												
		24												
		25					19/60	*COBBLE IN BIT. MOIST BROWN CLAYEY SAND, SC, SANDS FINE, CLAY FRACTION MED. TO HIGH PLASTICITY, TRACE GRAVELS, HARD*	29	4				
		26												*SOME WATER LOSS @29' REGAINED BY 30'*
		27												
		28												
		29												*DRILLING IND. SAT. SOFT/LOOSE ZONE 30'±1 28–33 SMOOTH DRILLING W/SOME COBBLES LOWER PORTION*
		30					51/60	*AS ABOVE W/COBBLES TO 6", MOIST TAN BROWN SILTY CLAY W/GRAVELS*						
▼		31						*DRILLER REPORTS SAND LENSE "PUSHING IN ON HOLE" AT 30' HOLE CASED TO 33'*						
		32												
		33												
		34												
		35					18/36	*ALL GRAVEL AND COBBLE FRAGMENTS, LITTLE FINE GRAINED MATERIAL*						*MIN. WATER LOSS 33–40'*
		36						*36–38' MOIST TAN BROWN CLAYEY SAND, SC, TRACE GRAVEL, MED. PLASTIC*						
		37					13/24	*ABUNDANT GRAVEL MOIST TAN TO GREY CLAYEY SAND W/GRAVEL, SC, MED. PLASTICITY*						*DRILLING IND. HIGHER GRAVEL FRACTION THAN IN RETURN FROM 33'*
		38												
		39					15/17	*MOIST BROWN CLAYEY SAND, SC, SANDS FINE, FINES MED. PLASTIC, V.STIFF TO HARD, TRACE GRAVEL*	28	12				
		40												
		41					9/43	*MOIST GREY CLAYEY SAND, W/ GRAVEL AND COBBLES, SC, V. STIFF TO HARD*						
		42												
		43												
		44												

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S:\PROJECTS\2006\126-02 GRAND VIEW LODGES\CAD\BHSBORINGLOG.DWG (BH-5C2) JAN 06 2006 10:56:56 AM PLOTTED BY CYR

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *3 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44												
		45					21/60	*MOIST TAN SILTY TO SANDY CLAY W/GRAVEL, CL, MED. PLASTICITY, V. STIFF TO HARD*						*TAN BROWN RETURN*
		46												
		47												
		48												
		49					13/24	*AS ABOVE*						
		50												*GOOD RETURN*
		51												
		52					15/36	*MOIST TAN BROWN SILTY CLAYEY SAND W/GRAVEL, SC-SM COAL IN SHOE @53' V/ STIFF TO HARD*						
		53												
		54					30/30	*MOIST TAN BROWN SILTY CLAY W/GRAVEL, INTERBEDDED COAL STRATA, V. STIFF, SOME MOTTLEING*						
		55												
		56												
		57					27/30	*AS ABOVE*						
		58												
		59												
		60					14/60	*MOIST BROWN SANDY SILTY CLAY W/GRAVEL, CL-ML, VERY STIFF*						
		61												
		62												
		63												
		64						*63-68 SOME KNOCKING, SOME FAST DRILLING*						
		65						*ORGANICS AT 65'*						
		66												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *4 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		67					34/60	*AS ABOVE TO 65' <u>FIBROUS ORGANIC MATERIAL @65±</u> BELOW ORGANICS IS MOIST BLUE GREY SANDY CLAY/CLAYEY SAND, STIFF TO VERY STIFF, WITH GRAVEL. BOTTOM 1' IS MOIST SILTY SAND/SANDY SILT/HARD/V. DENSE*						
		68												
		69												
		70					37/60	*SILTY SAND AS ABOVE SMOOTH DRILLING OCCASION KNOCKING, MOD FAST DRILLING*						
		71												
		72												*GOOD RETURN BLUE/GREY TO WHITE GREY*
		73												
		74						*<u>ORGANIC DEBRIS</u> MOIST BLUE GREY CLAYEY SAND W/ GRAVEL AND OCCASIONAL LARGE FRAGS OF WHITE LIMESTONE, STIFF TO VERY STIFF, CHARCOAL AND ORGANIC DEBRIS*						
		75					44/48							
		76												
		77												
		78					9/12	*MOIST BLUE GREY SANDY SILT, ML, TRACE GRAVEL LOW PLASTICITY STIFF TO VERY STIFF, CHARCOAL*						
		79												
		80					24/33	*AS ABOVE CHARCOAL IN SHOE*						
		81						*BOH AT 80.75 3/4" PIEZO INSTALLED PULLED CASING, CAVED TO 50' WATER IN BORING ABOVE 50' AS SEEN ON CLOTH TAPE. BENTONITE TO 45.5' BOTTOM OF PIEZO AT 45.5' SLOTTED TO 35.5 SAND TO 35.0' CAVED ABOVE*						
		82												
		83												
		84												
		85												
		86												
		87												
		88					18/30							
		89												

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

S:\PROJECTS\2005\05-12 GRAND VIEW LODGES\ENGINEERING\DRAWINGS\BORINGLOGS\BH-5(4).DWG FEB 13 2006 10:07:36 AM PLOTTED BY: CYR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-6**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **6/24/2021 6/25/2021**	DRILLER: **IME**	
LOGGED BY: **PRUETT**	DRILL TYPE: **TRUCK-MOUNTED CME85**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6466.0'**	HOLE DIAMETER: **8" OD HOLLOW STEM AUGER (HSA)**	
	HAMMER TYPE: **140# AUTO**	

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DEPTH (FT)	SAMPLES DRIVE	SAMPLES UNDISTURBED	SAMPLES BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
1						*BORING LOCATED ON CENTERLINE OF MOUNTAIN ACCESS ROAD W/GRAVEL SURFACE. UPHILL ROAD CUTS EST. 3-7' HEIGHT. STEEP GRASSY SLOPES UPHILL AND DOWNHILL. SURFICIAL SOILS ON CUT SLOPES DRY SILTY/CLAYEY GRAVEL/GRAVELLY SILT/CLAY WITH COBBLES AND BOULDERS.*						*EASY DRILLING WITH INTERMITTENT BIT GRINDING FROM 1'-10'*
2												*2 MINUTES TO DRILL 0'-5'*
3												
4												
5	5			BH6-1 2" SS	83	*5.0'-6.5' MOIST, BROWN/LT BROWN GRAVELLY SILT/SILTY GRAVEL, HARD, ANGULAR LIMESTONE AND SANDSTONE GRAVELS, FILGC*			34			
6	7											*3 MINUTES TO DRILL 5'-10'*
7	11											*HARD DRILLING IN GRAVELS FROM 7'-8'*
8												
9												
10	6			BH6-2 2" SS	61	*10.0'-11.5' MOIST, LT BROWN/GRAY SILTY GRAVEL WITH SAND, DENSE, ANGULAR LIMESTONE GRAVEL FRAGMENTS, FILGC*			34			*MODERATE DRILLING WITH CONSTANT BIT GRINDING ON GRAVELS AND COBBLES FROM 10'-21'*
11	10											*4 MINUTES TO DRILL 10'-15'*
12	12											
13												
14												
15	12			BH6-3 2" SS	67	*15.0'-16.5' SAME AS ABOVE, TRACE SAND, LIMESTONE GRAVEL LODGED IN TIP OF SS*			47			
16	17											*5 MINUTES TO DRILL 15'-20'*
17	17											
18												
19												
20	17			BH6-4 2" SS	78	*20.0'-21.5' 0"-12" SAME AS ABOVE, DENSE, ANGULAR GRAY LIMESTONE AND MINOR YELLOW SANDSTONE GRAVELS, MEDIUM PLASTICITY SILT*			32			
21	15					*12"-14" MOIST, OLIVE GREEN SILTY CLAYEY GRAVEL WITH MINOR SAND*						
	11											

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DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
22	11											
	6			BH6-4B 3" DM	83	22.0'–23.0' MOIST, OLIVE GREEN LEAN CLAY CHAOTICALLY MIXED WITH MINOR GRAY SILTY CLAY, STIFF TO VERY STIFF, MINOR COAL FRAGMENTS, PP>4.0 TSF, ORANGE OXIDATION STAINING IN TIP OF SS	33	15	15	108	18	MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 21'–25'
23	13	X										
24												4 MINUTES TO DRILL 20'–25'
25	3											
	5			BH6-5 2" SS	83	25.0'–26.5' MOIST, GRAY GRAVELLY SILTY CLAY WITH SAND, STIFF, MEDIUM PLASTICITY SILTY CLAY, PP=1–2 TSF, ANGULAR LIMESTONE AND SANDSTONE CLASTS, SANDSTONE CLAST WITH SHELL FOSSIL, ABUNDANT ORANGE OXIDATION STAINING THROUGHOUT			13			SMOOTH EASY DRILLING FROM 25'–30'
26	6											
27												2 MINUTES TO DRILL 25'–30'
28												BIT GRINDING FROM 28'–29'
29	7			BH6-5B 3" DM	83	28.5'–29.5' MOIST, BROWN SILTY CLAYEY/CLAYEY GRAVEL WITH SAND, MEDIUM DENSE, FINE SAND, ANGULAR LIMESTONE FRAGMENTS, FILGC			16			
	14											
30	14			BH6-6 2" SS	67	30.0'–31.5' MOIST, BROWN SILTY GRAVEL WITH SAND, VERY DENSE, FINE SAND, ANGULAR LIMESTONE FRAGMENTS, FILGC, FROM 4"–8" GRAVEL WITH SILT AND SAND LENS, GRAVEL LODGED IN TIP OF SS			51			MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 30'–35'
31	23											5 MINUTES TO DRILL 30'–35'
	24											
32												
33	7											INCREASED BIT GRINDING FROM 33'–35'
	20	X		BH6-6B 3" DM	100	33.0'–34.0' MOIST, OLIVE GREEN CLAYEY GRAVEL WITH SAND, MEDIUM DENSE, ANGULAR LIMESTONE, DOLOMITE, AND SANDSTONE GRAVELS			19			
34												
35	11											HARD DRILLING WITH CONSTANT BIT GRINDING 35'–45'
	18			BH6-7 2" SS	83	35.0'–36.5' TOP HALF–MOIST, OLIVE GREEN CLAYEY GRAVEL WITH SAND BOTTOM HALF–MOIST BROWN SILTY GRAVEL WITH SAND, DENSE, ANGULAR LIMESTONE FRAGMENTS, FILGC			34			
36	16											GRINDING ON COBBLE/BOULDER FROM 39'–39.5' FOR 15 MIN W/ NO PROGRESS. MOVED BH 6' EAST (BH–6B) DRILLED TO 40.4 WHERE GRINDING ON BOULDER FOR 30 MINS W/ MINOR PROGRESS. MOVED BH 7' WEST (BH–6C/ MW) OF ORIGINAL BH
37												
38						MONITORING WELL DRY ON 6/28/2021						
39												
40	23											
	50			BH6-8C 3" DM	67	39.5'–40.5' 0"–3" PULVERIZED LIMESTONE GRAVEL/COBBLE 3"–8" MOIST, SILTY CLAYEY GRAVEL WITH COBBLES, VERY DENSE, FRACTURED GRAY SANDSTONE GRAVEL AT BOS			>50			
41												
42												
43												HARD DRILLING WITH CONSTANT BIT GRINDING 40'–45'
44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-6* PAGE: *3 OF 3*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44												
		45	11			BH6-9 2" SS	117	*45.0'–46.5' 0"–4" MOIST, OLIVE GREEN SANDY LEAN CLAY WITH MINOR GRAVEL, PP>4.0 TSF*			34			*EASY TO MODERATE DRILLING WITH OCCASIONAL BIT GRINDING FROM 45'–47.5'*
		46	20					*4"–21" MOIST, BROWN/GRAY/OLIVE GREEN CHAOTICALLY MIXED GRAVELLY LEAN CLAY/SILTY CLAY/SILT WITH SAND, HARD, PP>4.0 TSF, MINOR ORANGE OXIDATION STAINING, VERTICAL CONTACTS IN BOTTOM 6"*						
			17											
		47												*STIFF SMOOTH DRILLING FROM 47.5'–50'*
		48												
		49												*9 MINUTES TO DRILL 45'–50'*
		50	6					*50.0'–51.5' SAME AS ABOVE, TRACE GRAVELS, VERY STIFF, COAL*						
			12			BH6-10 2" SS	122	*FRAGMENTS IN BOTTOM 6"*			26			
		51	18											*EASY TO MODERATE DRILLING WITH INCREASING BIT GRINDING FROM 50'–55'*
		52												
			15					*52.0'–53.0' SAME AS ABOVE WITH GRAVELS, HARD, COAL FRAGMENTS*						
			50	X		BH6-11 3" DM	67	*THROUGHOUT, TOP PORTION OF SAMPLE IS SATURATED DUE TO SURFACE WATER INFILTRATION FOR THUNDERSTORM INTO DRILL STRING*	25	11	>50	121	15	
		53												
		54												
		55												
			9					*55.0'–56.3' SAME AS ABOVE WITH COAL FRAGMENTS*						
			16			BH6-12 2" SS	94				>50			
		56	50/4"											*MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 55'–60'*
		57												
		58												*6 MINUTES TO DRILL 55'–60'*
		59												
		60	10					*60.0'–61.5' MOIST, GRAY SILTY SAND, DENSE, FINE SAND, FINE GRAVEL*						*INITIAL BORING CAVED TO 22' AFTER HSA REMOVAL*
			18			BH6-13 2" SS	89	*INTERVALS, COAL FRAGMENTS THROUGHOUT*			43			
		61	36											
		62												
			21			BH6-14 3" DM	55	*62.0'–62.9' SAME AS ABOVE, VERY DENSE*			>50			
			50/5"											
		63						*BOH = 62.9'*						
								MONITORING WELL CONSTRUCTION						
		64						*PIPE*						
								37.9 FEET OF 2" DIAMETER SCHEDULE 40 PVC CASING FROM 0.3'–18.2', 20–SLOT SCREEN FROM 18.2'–38.2'						
		65						*BACKFILL*						
								BENTONITE– 0.5'–1.5', SPOILS– 1.5'–16.5', BENTONITE– 16.5'–17.5', SILICA SAND– 17.5'–40', BENTONITE– 40'–49', SPOILS– 49'–62.9'						
		66												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-7**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **6/25/2021**	DRILLER: **IME**	
LOGGED BY: **PRUETT**	DRILL TYPE: **TRUCK-MOUNTED CME85**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6459.0'**	HOLE DIAMETER: **8" OD HOLLOW STEM AUGER (HSA)**	
	HAMMER TYPE: **140# AUTO**	

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DEPTH (FT)	SAMPLES DRIVE	SAMPLES UNDISTURBED	SAMPLES BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
0						*BORING LOCATED ON UPHILL/SOUTH EDGE OF MOUNTAIN ACCESS ROAD. EXCAVATED CUT SLOPES ABOVE, MINOR FILLS DOWNSLOPE SIDE. GRAVEL WITH SAND ROADWAY G.S. STEEP GRASSY SLOPES BOTH UP AND DOWN SLOPES. EXPOSED SOILS IN CUTS ARE DRY SILTY/CLAYEY GRAVEL/GRAVELLY SILT/CLAY WITH COBBLES AND BOULDERS.*						*MODERATE TO HARD DRILLING WITH CONSTANT BIT GRINDING FROM 1'–9'*
4	6			BH7-1 2" SS	89	*4.0'–5.5' MOIST, BROWN AND DK BROWN CLAYEY GRAVEL WITH TRACE SAND, FRACTURED AND ANGULAR GRAVELS, FILGC, MEDIUM DENSE TO DENSE, 4" FRACTURED LIMESTONE COBBLE AT BOS. WATERLINE FILL OF NATIVE SOILS*			30			
5	5											*GRINDING ON COBBLE/BOULDER FROM 5.5'–6.5'*
	11											
9	4			BH7-2 2" SS	78	*9.0'–10.5' MOIST BROWN SILTY GRAVEL WITH TRACE SAND, FRACTURED AND ANGULAR LIMESTONE AND SANDSTONE GRAVELS, FILGC, MEDIUM DENSE, MINOR ORANGE OXIDATION STAINING THROUGHOUT, PULVERIZED LIMESTONE GRAVEL/COBBLE IN TOP 2"*			29			*15 MINUTES TO DRILL 4'–9'*
10	8											
	11											*EASY DRILLING WITH INTERMITTENT BIT GRINDING FROM 9'–19'*
14	5			BH7-3 2" SS	67	*14.0'–15.5' SAME AS ABOVE*			29			*3 MINUTES TO DRILL 9'–14'*
15	9											
	12											*3 MINUTES TO DRILL 14'–19'*
19	7			BH7-4 3" DM	100	*19.0'–20.5' CHAOTICALLY MIXED BROWN/DK BROWN SANDY LEAN CLAY AND GRAY SILTY CLAY WITH MINOR GRAVEL, VERY STIFF, ORANGE OXIDATION STAINING THROUGHOUT, PP>4.0 TSF*	25	14	18	117	14	
20	14	X										
21												

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CLIENT: **SNOW KING MOUNTAIN RESORT**
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-7* PAGE: *2 OF 3*

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		22												*MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 19'–23'*
		23												*GRINDING ON COBBLE FROM 22'–23'*
		24	4											
			7			BH7-5 2" SS	117	*24.0'–25.5' MOIST, BROWN/DK BROWN LEAN CLAY WITH SAND, MINOR GRAVELS, VERY STIFF, MINOR WHITE CALCAREOUS STRINGERS THROUGHOUT, PP=2–3 TSF*			19			*10 MINUTES TO DRILL 19'–24'*
		25	9											
			10											*SMOOTH EASY DRILLING FROM 23'–28'*
		26	17	X		BH7-6 3" DM	100	*25.5'–26.5' MOIST BROWN LEAN CLAY WITH SAND, PP=3–4 TSF, COARSE GRAVEL FRAGMENTS COMPLETELY WEATHERED INTO SAND TO FINE GRAVEL SIZED FRAGMENTS*	35	17	21	101	22	
		27												
		28												
		29	19											*EASY TO MODERATE DRILLING WITH CONSTANT BIT GRINDING FROM 28'–44'*
			28			BH7-7 2" SS	67	*29.0'–30.5' MOIST, BROWN SILTY GRAVEL WITH TRACE SAND, ABUNDANT FRACTURED GRAY LIMESTONE AND SANDSTONE GRAVELS, FILGC, VERY DENSE, ORANGE OXIDATION STAINING IN BOTTOM 6", GRAVEL LODGED IN TIP OF SS*			59			
		30	26											*5 MINUTES TO DRILL 29'–34'*
		31												
		32												
		33												
		34	15											
			23			BH7-8 2" SS	89	*34.0'–35.5' SAME AS ABOVE, NO OXIDATION STAINING, GRAY SANDY SILT LENS FROM 5"–7", GRAVEL LODGED IN TIP OF SS*			63			
		35	39											*4 MINUTES TO DRILL 34'–39'*
		36												
		37												
		38												
		39	17											
			50/5"			BH7-9 2" SS	91	*39.0'–39.9' SAME AS ABOVE, GRAY SANDSTONE GRAVEL LODGED IN TIP OF SS*			>50			
		40												*6 MINUTES TO DRILL 39'–44'*
		41												
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-7* PAGE: *3 OF 3*

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		44	16					*44.0'–45.3' SAME AS ABOVE*						
		45	17			BH7-10 2" SS	69				>50			*HARD DRILLING WITH CONSTANT BIT GRINDING FROM 44'–56.5'*
			50/4"											
		46						*GROUNDWATER MEASURED AT 46.35' ON 6/28/2021*						
		47												*GRINDING ON COBBLE/BOULDER FROM 47'–48'*
		48												*20 MINUTES TO DRILL 44'–49'*
		49	17					*49.0'–50.3' SATURATED FROM 0"–4", MOIST FROM 4"–12", BROWN*						
			36			BH7-11 2" SS	75	*CLAYEY GRAVEL, VERY DENSE, PULVERIZED GRAY SANDSTONE COBBLE*			>50			
		50	50/4"					*FROM 5"–11", FILGC*						*GRINDING ON BOULDER FROM 50'–51.5'*
		51												*24 MINTUES TO DRILL 49'–54'*
		52												
		53												
		54	17					*54.0'–55.5' 0"–3" SATURATED SAND AND GRAVEL HEAVE*						
			36			BH7-12 2" SS	78	*3"–14" CHAOTICALLY MIXED MOIST, GRAY AND BROWN SILTY CLAYEY*			61			
		55	39					*GRAVEL, FRACTURED AND ANGULAR GRAVELS, VERY DENSE, FILGC, TIP OF SS IS SATURATED*						
		56												
		57												*MODERATE SMOOTH DRILLING FROM 56.5'–59'*
		58												
		59	11					*59.0'–60.0' SATURATED TO MOIST, GRAY/DK GRAY SANDY LEAN CLAY,*						
			30			BH7-13 3" DM	75	*VERY STIFF, MOIST CLAY PP>4.0 TSF, CHAOTIC BLACK COAL FRAGMENTS IN BOS*	29	15	21	114	18	
		60						*BOH = 60.0'*						
		61						*MONITORING WELL CONSTRUCTION*						
								PIPE						
		62						*59.4 FEET OF 2" DIAMETER SCHEDULE 40 PVC CASING FROM 0.3'–39.5', 20–SLOT SCREEN FROM 39.5'–59.5'*						
								BACKFILL						
		63						*BENTONITE– 0.5'–1.5', SPOILS– 1.5'–34.5', BENTONITE– 34.5'–37', SILICA SAND– 37'–59.5', BENTONITE– 59.5'–60'*						
		64												
		65												
		66												

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

PROJECT: Town of Jackson, Snow King Water Tank

PIT LOCATION: Southwest of center of tank

TEST PIT: TP- 1

Approximate Pit Dimensions (feet): Length: 40 Width: 15 Depth: 31.5

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6740' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① Clayey GRAVEL and COBBLE: Slightly moist to moist, dark brown, loose to medium dense, ~40% sandy clay is moderately plastic, ~60% angular gravel and cobbles up to 6" diameter, some silt, grades into below over 10" [COLLUVIUM]

② Silty sandy GRAVEL with clay and cobbles: Slightly moist, yellow tan, very slightly plastic, medium dense, few clasts up to 12" diameter, limestone clasts angular to subangular, grades into below [COLLUVIUM]

③ GRAVEL and COBBLE: Dry to slightly moist, reddish gray, fractures/voids lined with calcium carbonate, abundant voids, very loose, limestone, follows topography, consistently overlies olive sandy layer below, calcium carbonate mineralization on clasts, abundant raveling, bottom contact ~35-45 degrees [TALUS]

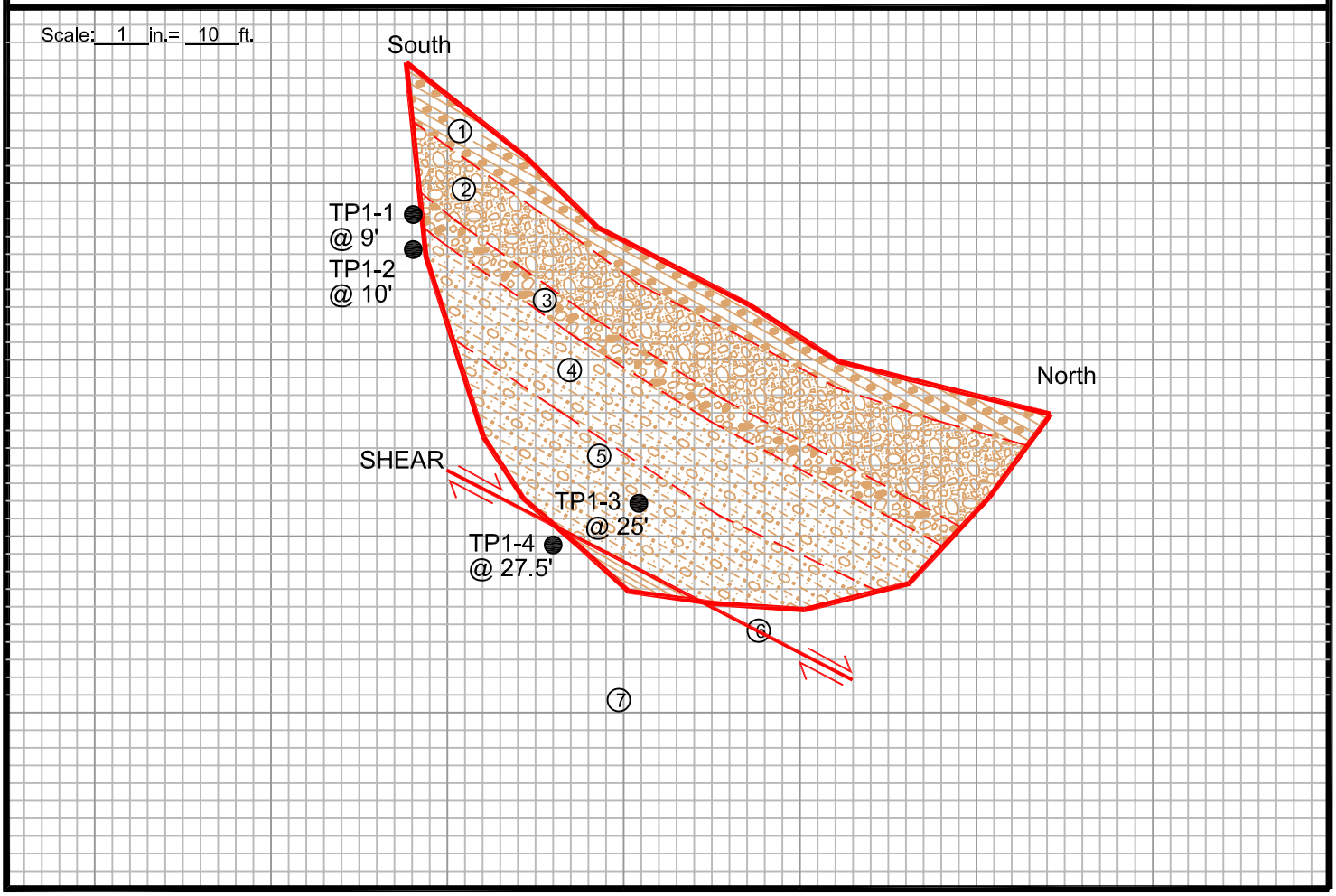
④ Sandy CLAY with gravel and cobble: Slightly moist, olive green, stiff to very stiff, moderately to highly plastic, abundant polished surfaces, irregularly follows silty sandy gravel, cobbles and boulders below contact with material below, varies, ~20% sand, ~15% gravel, ~15% cobble, ~50% sand [LANDSLIDE DEBRIS]

⑤ CLAY and sandy silty GRAVEL and COBBLE: Yellow tan to gray green, intervals of claye and sandy silty gravel and cobbles, few boulders, multiple irregular planar (~bedding) surfaces, angular to subangular boulders up to 2' diameter (mostly limestone), medium dense/very stiff, combination of the olive green sandy clay and the yellow tan silty sandy gravel with clay and cobbles, little consistency with shear orientations, abundant limestone fragments, very irregular contacts [LANDSLIDE DEBRIS]

⑥ CLAY: Pale blue gray, up to 1" thick, soft, moderately plastic, slickensided, dip 30° north [SHEAR ZONE]

⑦ CLAY with sand: Moist, gray, massive, heavily sheared, abundant polished surfaces, highly plastic, darker irregular beds throughout, wavy sheared zone, lots of slickensided surfaces, few coal beds, stiff [LANDSLIDE DEBRIS]

Note: No groundwater observed. Backfilled with spoils. Underlain by stony sandy clay.
Note: Soil Classifications (USCS) based on field descriptions



PROJECT: Town of Jackson, Snow King Water Tank

PIT LOCATION: ~20' northwest of northeast BH-3 (NE 2009)

TEST PIT: TP- 2

Approximate Pit Dimensions (feet): Length: 16 Width: 15 Depth: 12.6

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6711' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① 0.0-1.6ft Clayey sandy GRAVEL and COBBLES: Moist to very moist, medium to dark brown, abundant organics, moderately plastic, angular clasts up to 6" diameter, massive, medium dense [FILL]

② 1.6-2.6ft Sandy CLAY with gravel and cobble: Very moist, dark gray, medium stiff, massive, ~60% clay, ~40% gravel and cobbles up to 6" diameter [TOPSOIL]

③ 2.6-4.8ft Clayey sandy GRAVEL: Very moist, pale brown, medium dense, ~50% fine gravel [COLLUVIUM]

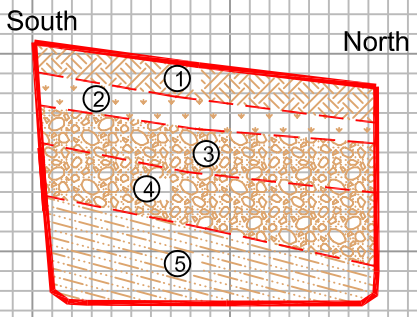
④ 4.8-7.0ft Clayey SAND and GRAVEL: Very moist, pale brown, medium dense, ~50% fine gravel [COLLUVIUM]

⑤ 7.0-12.6ft Sandy CLAY: Moist, green, slightly mottled yellow brown, very stiff, massive, abundant angular to subangular limestone clasts to 1' diameter (most up to 2" diameter) [LANDSLIDE DEBRIS]

Note: No groundwater observed. Backfilled hole with spoils.

Note: Soil Classifications (USCS) based on field descriptions

Scale: 1 in.= 10 ft.



PROJECT: Town of Jackson, Snow King Water Tank

TEST PIT: TP- 3

PIT LOCATION: ~25' east of northeast BH-1 (NE 2009)

Approximate Pit Dimensions (feet): Length: 15 Width: 15 Depth: 11.0

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6762' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① 0.0-1.2ft Silty CLAY with gravel: Moist to very moist, dark brown to blackish brown, abundant organics, highly plastic, soft [TOPSOIL]

② 1.2-3.5ft Gravelly silty CLAY: Buff yellow tan, stiff, ~25-35% gravel to 3" diameter [COLLUVIUM]

③ 3.5-5.0ft Silty CLAY: Moist, greenish brown with yellow mottling, very stiff [LANDSLIDE DEBRIS]

④ 5.0-6.0ft Gravelly silty CLAY: Moist, yellow tan (buff), stiff to very stiff [LANDSLIDE DEBRIS]

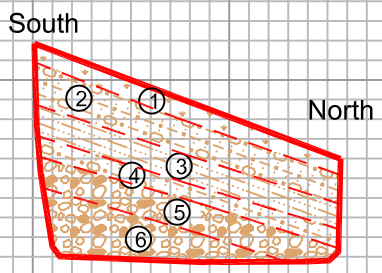
⑤ 6.0-7.5ft Rubble zone: Loose, white precipitates [TALUS]

⑥ 7.5-11.0ft Silty clayey GRAVEL and COBBLE: Yellow brown to red brown, dense, 50-60% clasts up to 8" diameter, oversize [TALUS]

Note: No groundwater observed. Hole standing OK. Backfilled hole with spoils.

Note: Soil Classifications (USCS) based on field descriptions

Scale: 1 in.= 10 ft.





GEOPHYSICAL EVALUATION

SNOW KING

Jackson, Wyoming

PREPARED FOR:

Colter Lane, P.E.
Jorgensen Geotechnical
1315 Highway 89 South, Suite 201
Jackson, Wyoming 83002

PREPARED BY:

Atlas Technical Consultants LLC
358 South 700 East, Suite B518
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January 2, 2024

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January 2, 2024

Atlas No. 11143

MR. COLTER LANE, P.E.
JORGENSEN GEOTECHNICAL
1315 HIGHWAY 89 SOUTH, SUITE 201
JACKSON, WYOMING 83002

Subject: Geophysical Evaluation
Snow King
Jackson, Wyoming

Dear Mr. Lane:

In accordance with your authorization, Atlas has performed a geophysical evaluation pertaining to a portion of the Snow King project located in Jackson, Wyoming. The primary purpose of our study was to develop subsurface shear-wave velocity profiles and characterize subsurface geologic conditions at select locations of the project site. This was accomplished through the collection of Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Wave (MASW) data. Our services were conducted on October 23rd and 24th, 2023. This report presents our methodology, equipment used, analysis, and findings.

We appreciate the opportunity to be of service on this project. Should you have any questions, please contact the undersigned at (310) 951-1993.

Respectfully submitted,
Atlas Technical Consultants LLC

Stephan A. Callas
Project Geophysicist

Patrick F. Lehrmann, P.G., P.Gp.
Principal Geologist/Geophysicist

SAC:ERC:PFL:ds

Distribution: Mr. Colter Lane at CLane@JorgEng.com

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2. SCOPE OF SERVICES 1
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4. STUDY METHODOLOGY 1
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Figure 2 Line Location Map
Figure 3 Site Photographs
Figure 4a ReMi Results (RL-1)
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Figure 5a MASW Profile (ML-1)
Figure 5b MASW Profile (ML-2)

1. INTRODUCTION

In accordance with your authorization, Atlas has performed a geophysical evaluation pertaining to a portion of the Snow King project located in Jackson, Wyoming (Figure 1). The primary purpose of our study was to develop subsurface shear-wave velocity profiles and characterize subsurface geologic conditions at select locations of the project site. This was accomplished through the collection of Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Wave (MASW) data. Our services were conducted on October 23rd and 24th, 2023. This report presents our methodology, equipment used, analysis, and findings.

2. SCOPE OF SERVICES

Our scope of services included:

- Performance of two one-dimensional (1-D) ReMi profiles (RL-1 & RL-2).
- Performance of two 2-D MASW profiles (ML-1 & ML-2).
- Compilation and geophysical analysis of the collected data.
- Preparation of this illustrated report presenting our methodology and findings.

3. SITE AND PROJECT DESCRIPTION

The project site is generally located just southeast of the Snow King Mountain Resort in Jackson, Wyoming (Figure 1). Specifically, the study area is located on the south side of Snow King Loop Road. The locations of the seismic traverses were generally selected by a representative of your office and adjusted when necessary to account for surface conditions. The study area was composed of two graded lots with an access road separating the two lots. The seismic traverses were performed over relatively flat terrain on the east and west sides of the access road. The surface of the site was generally covered with soil, gravel and seasonal vegetation. Additionally, several surface obstructions including construction materials, a firewood pile, snow grooming equipment, vehicles, and temporary fencing were located within the study area boundaries. Figure 2 depicts the approximate locations of the seismic traverses while Figure 3 depicts the general site conditions.

4. STUDY METHODOLOGY

As previously indicated, our evaluation included the performance of two ReMi and two MASW transects. The following sections detail the methods and instrumentations used.

4.1 ReMi

The ReMi technique uses recorded surface waves (specifically Rayleigh waves) that are contained in background noise to develop a shear-wave velocity profile of the study area down to a depth, in this case, of approximately 100 feet. The depth of exploration is dependent on the length of the line and the frequency content of the background noise. The results of the ReMi

method are displayed as a one-dimensional profile which represents the average condition across the length of the line. The ReMi method does not require an increase of material velocity with depth; therefore, low velocity zones (velocity inversions) are detectable with ReMi.

Our ReMi evaluation included the use of a 24-channel Geometrics Geode seismograph and 24, 4.5-Hz vertical component geophones. Geophones were spaced 10 feet apart for a total line length of 230 feet for each line. A total of 22 records, each 32 seconds in duration, were recorded at each location, while 10 records utilized passive data collection of ambient ground vibration noise and 12 utilized an active source. The active source data gathers included generating a seismic signal at both ends of the seismic spread, approximately 10 or 30 feet off the ends of the geophone array. Six active source files were collected at each end of the line. The recorded data was then downloaded to a field computer for post-processing. The data was later processed using Surface Plus 9.1 - Advanced Surface Wave Processing Software (Geogiga Technology Corp., 2020), which uses the refraction microtremor method (Louie, 2001), and other surface wave analysis methods. The program generates phase-velocity dispersion curves for each record and provides an interactive dispersion modeling tool to determine the best fitting model. The result is a one-dimensional shear-wave velocity model of the site with roughly 85 to 95 percent accuracy (Louie, 2001). For situations in which the shear wave velocity values are close to the limit between site class boundary values, Geotechnical consultants should consider the site's subsurface geologic stratigraphy and structure, soil mechanics, and ReMi evaluation results when assessing seismic site classification. Figures 2 and 3 depict the general site conditions in the study area.

4.2 MASW

Surface waves (specifically Rayleigh waves) were recorded along lines ML-1 and ML-2 in order to provide S-wave velocity information for portions of the site (Figure 2). The surface waves were generated by a hammer and plate (shot) and recorded using a 24-channel Geometrics Geode seismograph and 24, 4.5-Hz vertical component geophones. The geophones were coupled to the ground surface using a Geostuff Landstreamer with geophones stationed 4 feet apart and shots conducted off the end of the lines. Prior to the collection of surface wave data, near and far field effects were evaluated for several shot offset distances. The results indicated that an offset shot of 16 feet off the end of the line was optimal for our evaluation.

Three records, each one second long, were recorded at each shot location. After each shot location, the shot location and geophones were moved an integer multiple of the geophone spacing longitudinally along the profile direction and the line was reshot. The number of shots, spread length, and start and end stations are presented in Table 1.

Table 1: MASW Array Geometry

Line No.	No. of Shots	Total Spread Length (feet)	Profile Length/Start and End Stations (feet)
ML-1	21	252	160/(0-160)
ML-2	25	284	192/(0-192)

The recorded MASW data was processed using SurfSeis® (Kansas Geological Survey, 2019), a MASW software program. One dimensional (1-D) shear-wave (S-wave) velocity (Vs) profiles were generated for each shot location, which correspond to the middle of the geophone array. A two-dimensional color gradient model was then created from the 1-D models using the SurfSeis® interpolation scheme. It should be emphasized that the 2-D profile represents the area between the midpoint of the first shot location and the midpoint of the last shot location. The actual model section length and start and end stations for the sections are also listed in Table 1.

5. RESULTS AND CONCLUSIONS

As previously indicated, our evaluation consisted of performing two 1-D ReMi profiles (RL-1 & RL-2) and two 2-D MASW profiles (ML-1 & ML-2) at the project site. Figures 4a and 4b present the ReMi results for RL-1 and RL-2, respectively. Figures 5a and 5b present the MASW results for ML-1 and ML-2, respectively. The analysis of each is detailed below.

5.1 ReMi

The purpose of our ReMi evaluations were to develop shear-wave velocity profiles to be used for design and construction parameters at the project site. Table 2 and Figures 4a and 4b present the results from our ReMi evaluations. It should be noted that the ReMi results represent the average condition across the length of the line. When the 1-D ReMi surface wave velocity results (analogous to shear wave) show an IBC Vs100 velocity value that is close to the "border line" boundary between IBC Site Classes, the project geotechnical consultant of record should be consulted. The geotechnical consultant of record should also consider other existing available site information and whether obtaining additional new geotechnical evaluation data such as boreholes, surface to downhole seismic (ASTM D7400), crosshole seismic (ASTM D4428), and/or additional 1-D ReMi data collections would be needed concerning the site's subsurface geologic stratigraphy and structure, soil mechanics and soil modulus, along with the initial 1-D ReMi evaluation results when assessing the "borderline" IBC Vs100 Seismic Site Class.

Table 2: ReMi Results

Line No.	Depth (feet)	Shear Wave Velocity (feet/second)	Average Shear Wave Velocity (Vs in feet/second)	Site Class (IBC, 2019)
RL-1 (NW-SE)	0-6	618	Vs100' = 1,320 ft/s	C
	6-14	1170		
	14-25	1494		
	25-35	1435		
	35-69	1152		
	69-100	2010		

Line No.	Depth (feet)	Shear Wave Velocity (feet/second)	Average Shear Wave Velocity (Vs in feet/second)	Site Class (IBC, 2019)
RL-2 (W-E)	0-9	390	Vs100' = 1,201 ft/s	C
	9-14	799		
	14-25	1361		
	25-69	1446		
	69-100	2052		

5.2 MASW

Two MASW traverses were conducted as part of our study. Figures 5a and 5b present the S-wave velocity models generated from our analysis of lines ML-1 and ML-2, respectively. Based on the results, it appears that the project site is generally underlain by low-velocity materials in the near-surface and higher velocity materials at depth. Distinct vertical and lateral velocity variations are evident within the models. Specifically, ML-1 appears to contain pockets of low and high velocity materials in the near surface, possibly related to reported landslide deposits. At depth, ML-1 displays a high velocity contact that spans the length of the profile from northwest to southeast. This high velocity contact is generally contained towards the bottom of the profile; however, protrudes closer to the surface between 90 and 120 feet along the x-axis. This high velocity material may represent bedrock contacts. ML-2 displays slightly more homogenous material in the near surface compared to ML-1. At depth, ML-2 displays a moderately high velocity contact that spans the length of the profile from west to east. This moderately high velocity contact is generally contained within 20 and 50 feet below ground surface and may represent weathered bedrock contacts. It should be noted that there were several underground utilities present in the vicinity of ML-1, and possibly ML-2, which could be affecting the results from our evaluation. As a general rule of thumb, the S-wave velocity of a given material might be between approximately 0.4 to 0.6 of the P-wave velocity, depending on the soil/rock type and condition.

6. LIMITATIONS

The field evaluation and geophysical analyses presented in this report have been conducted in general accordance with current practice and the standard of care exercised by consultants performing similar tasks in the project area. No warranty, express or implied, is made regarding the conclusions and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be present. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Atlas should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document. This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

7. SELECTED REFERENCES

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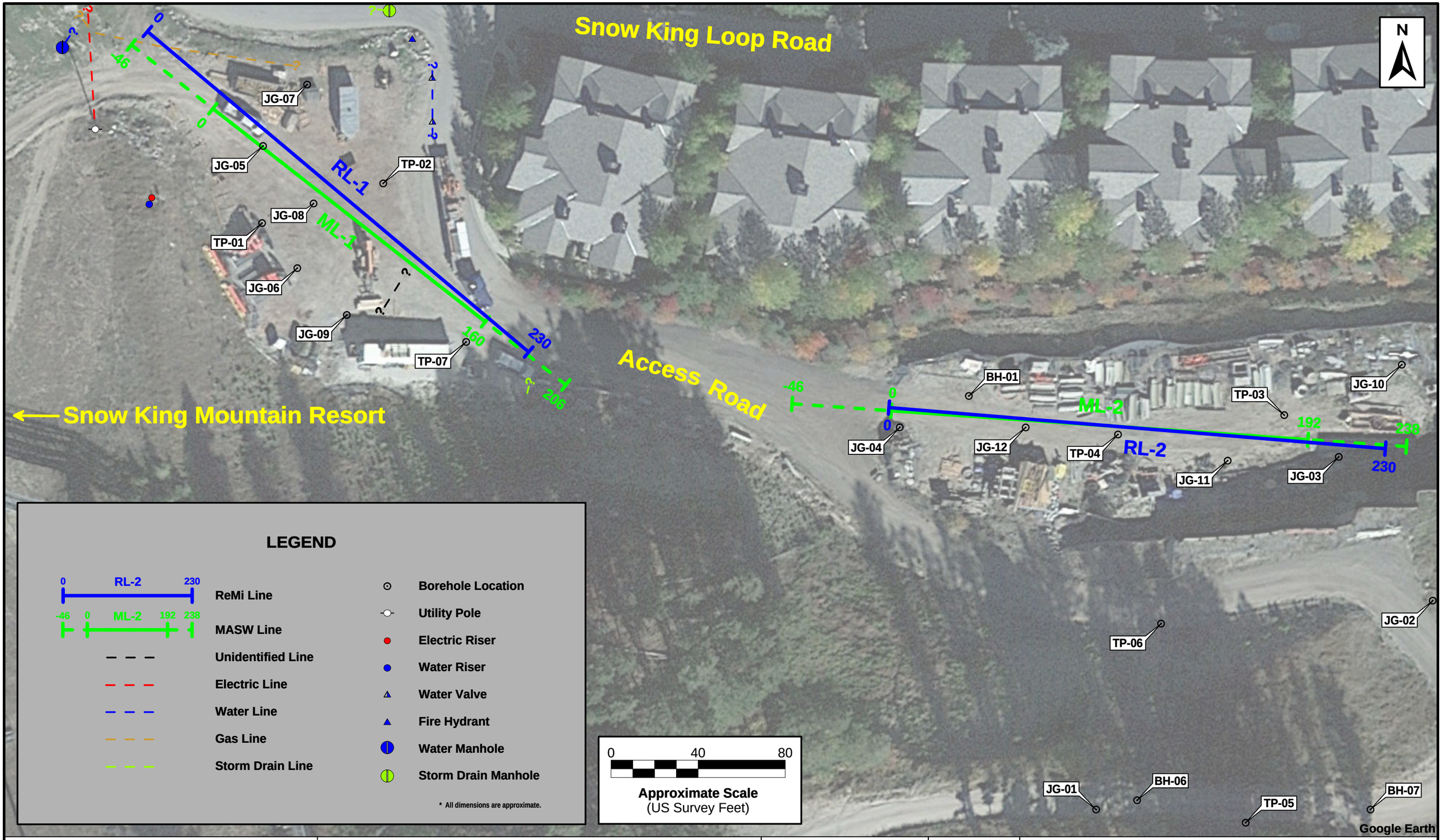
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ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 1	**SITE LOCATION MAP**



LEGEND

- RL-2 (0 – 230): ReMi Line
- ML-2 (-46, 0, 192, 238): MASW Line
- Unidentified Line
- Electric Line
- Water Line
- Gas Line
- Storm Drain Line
- Borehole Location
- Utility Pole
- Electric Riser
- Water Riser
- Water Valve
- Fire Hydrant
- Water Manhole
- Storm Drain Manhole

* All dimensions are approximate.

0 40 80

Approximate Scale
(US Survey Feet)

ATLAS

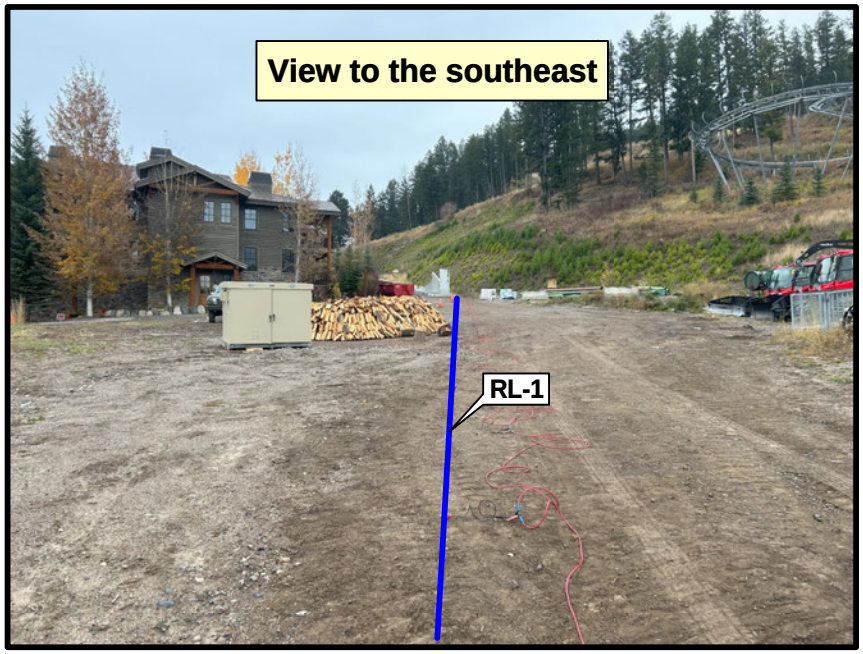
Snow King
Jackson, Wyoming

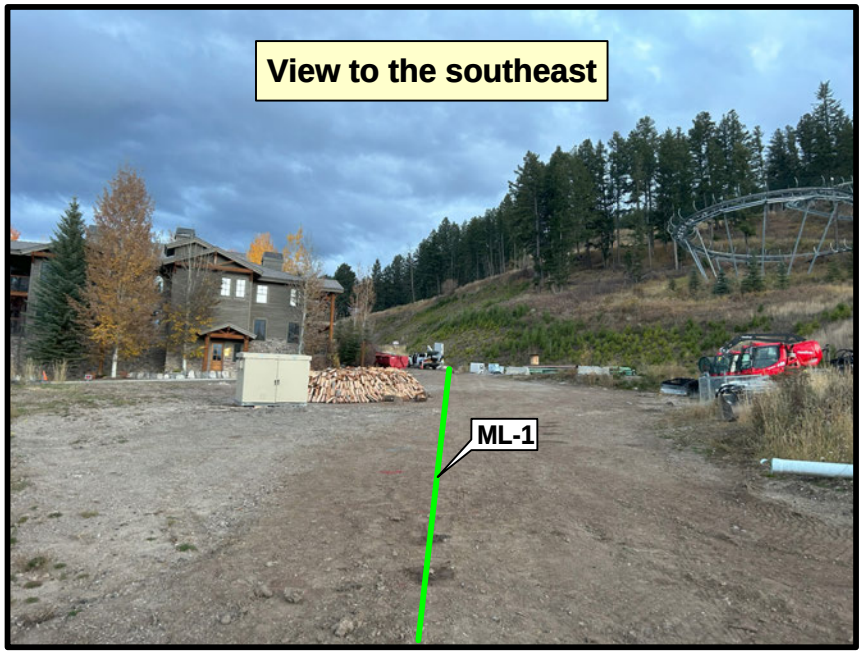
Project No.: 11143

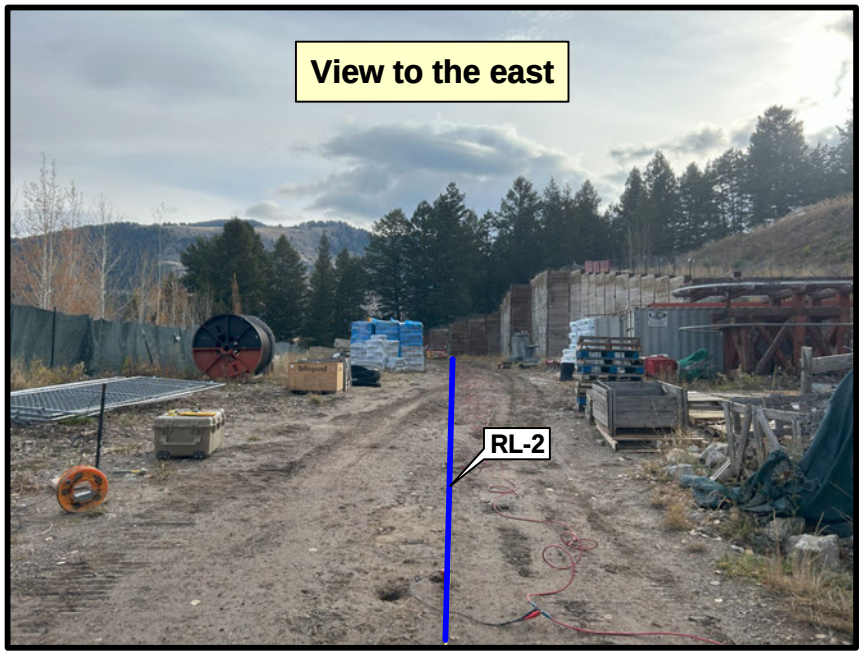
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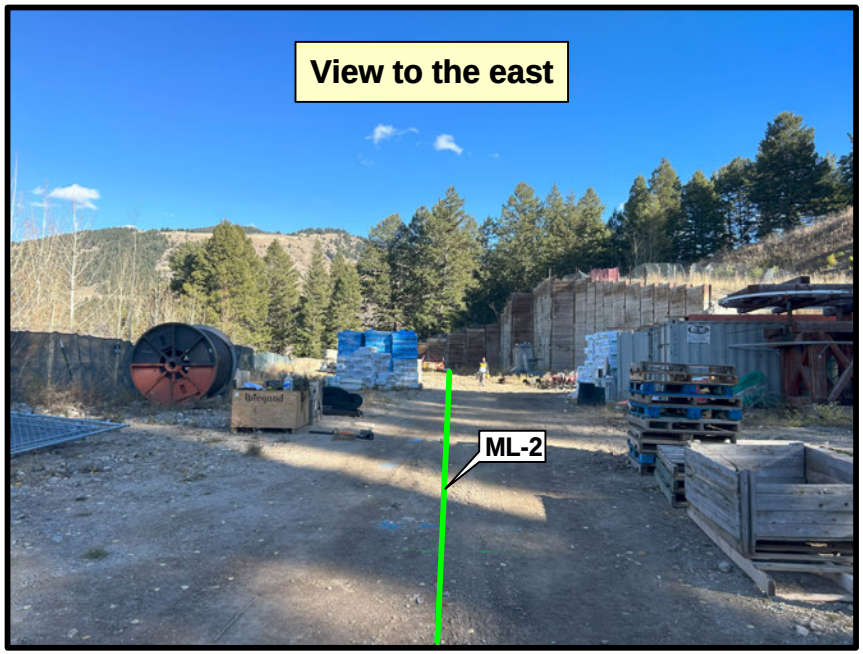
Figure 2

LINE LOCATION MAP



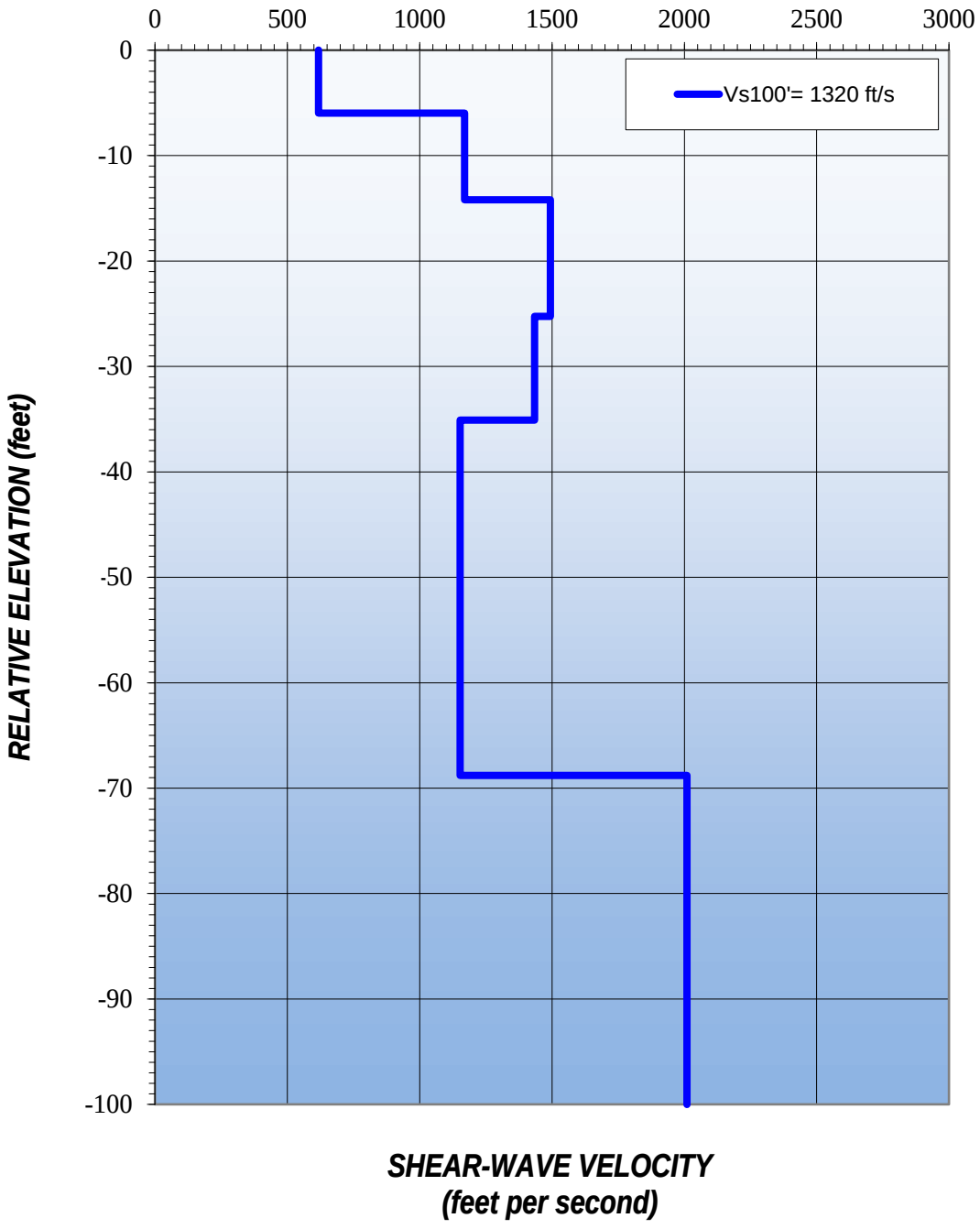




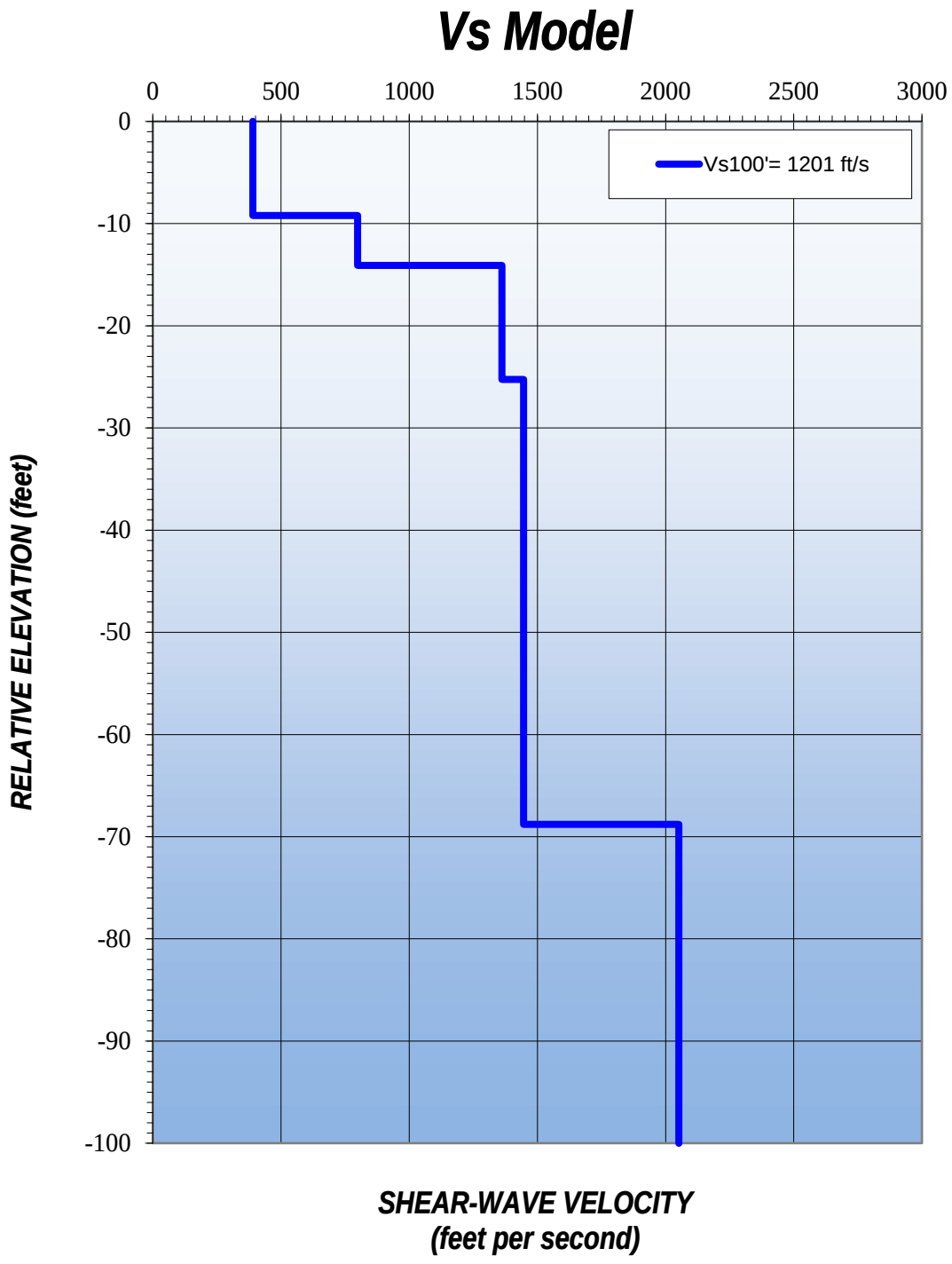


ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 3	**SITE PHOTOGRAPHS**

Vs Model



ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 4a	**ReMi RESULTS** **RL-1**



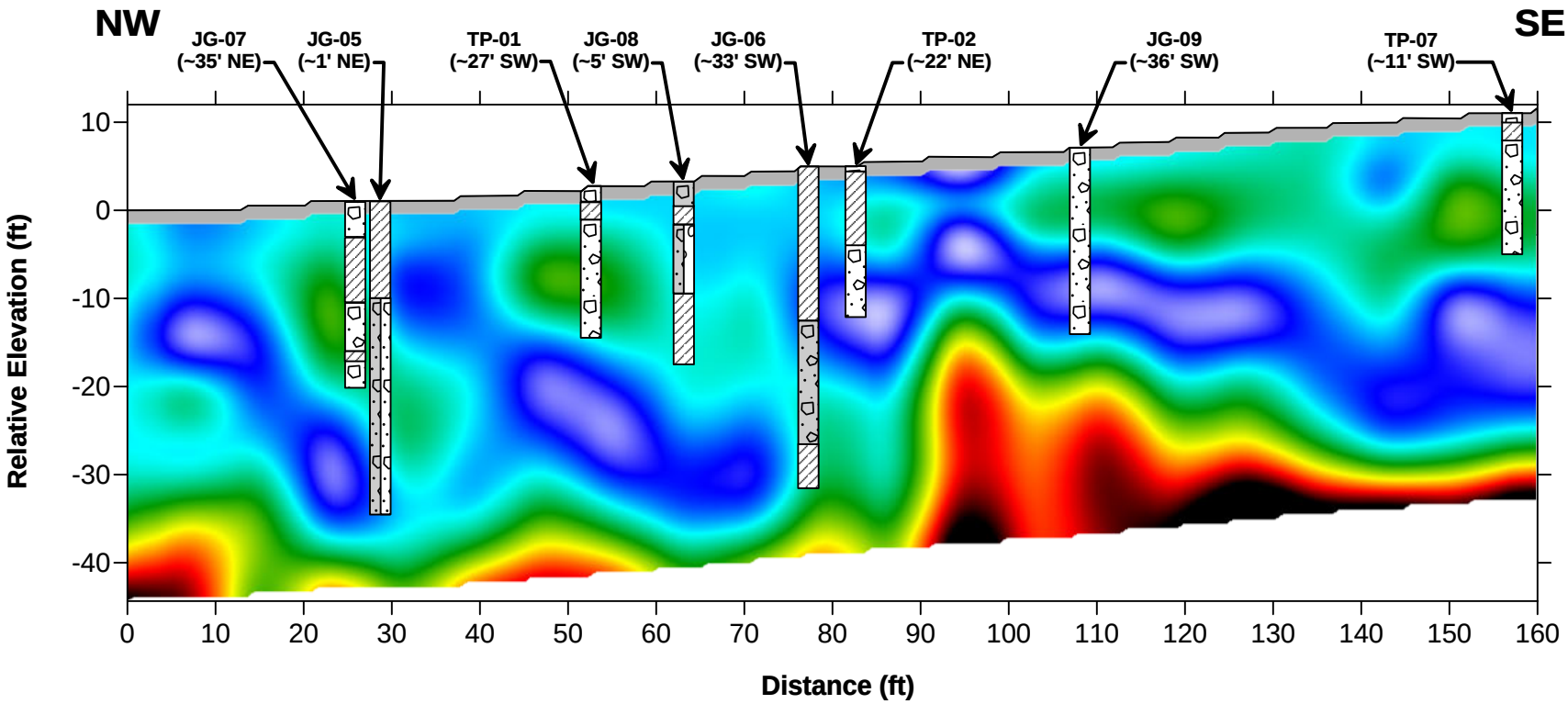
ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 4b	**ReMi RESULTS** **RL-2**

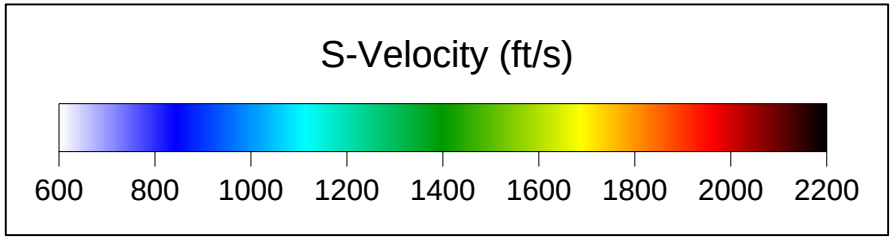
MASW PROFILE
ML-1

LEGEND

CL GM
GP GC

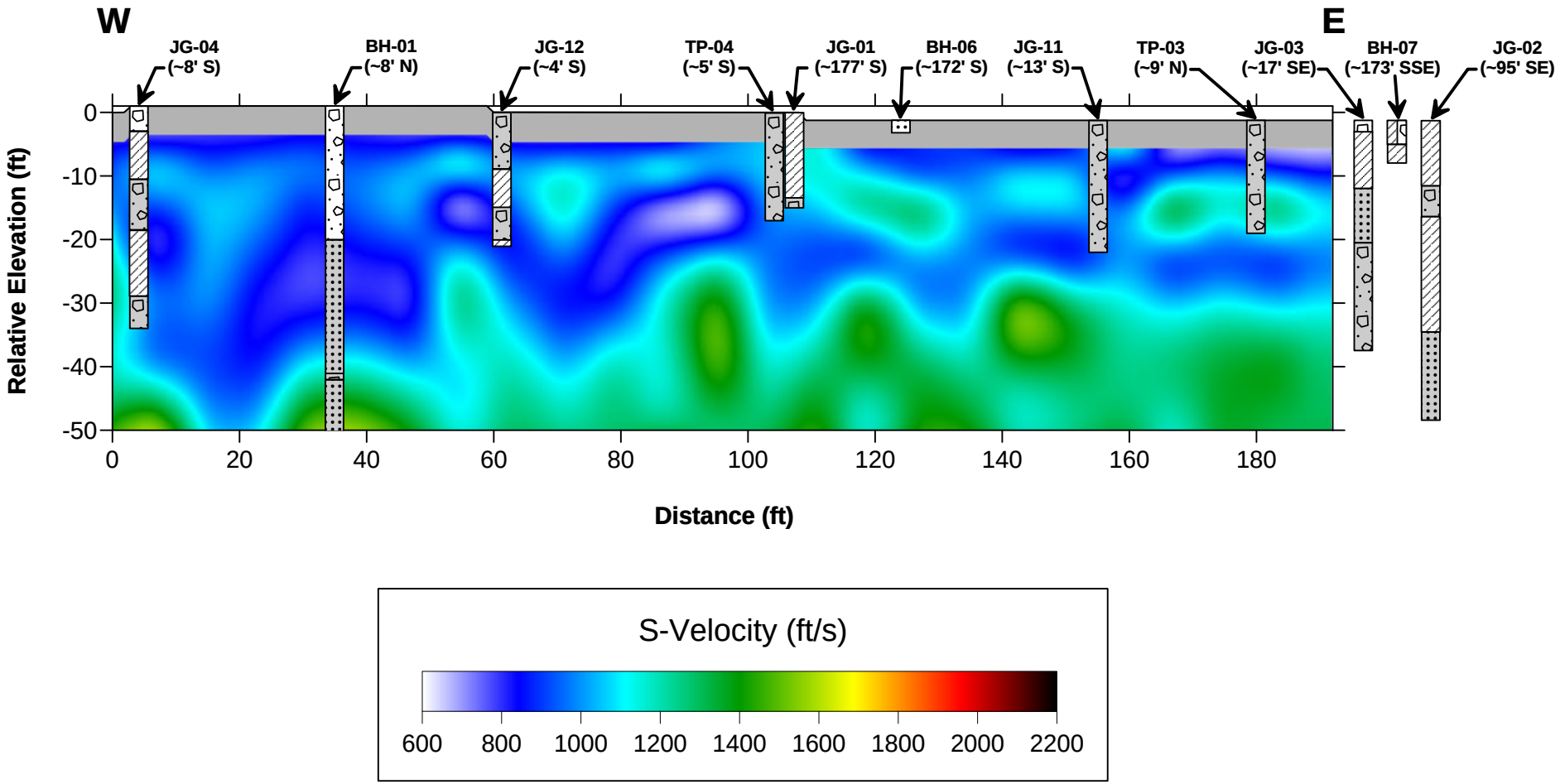
* All dimensions are approximate.
* Borehole data provided by Jorgensen.





ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 5a	**MASW PROFILE ML-1**

MASW PROFILE
ML-2



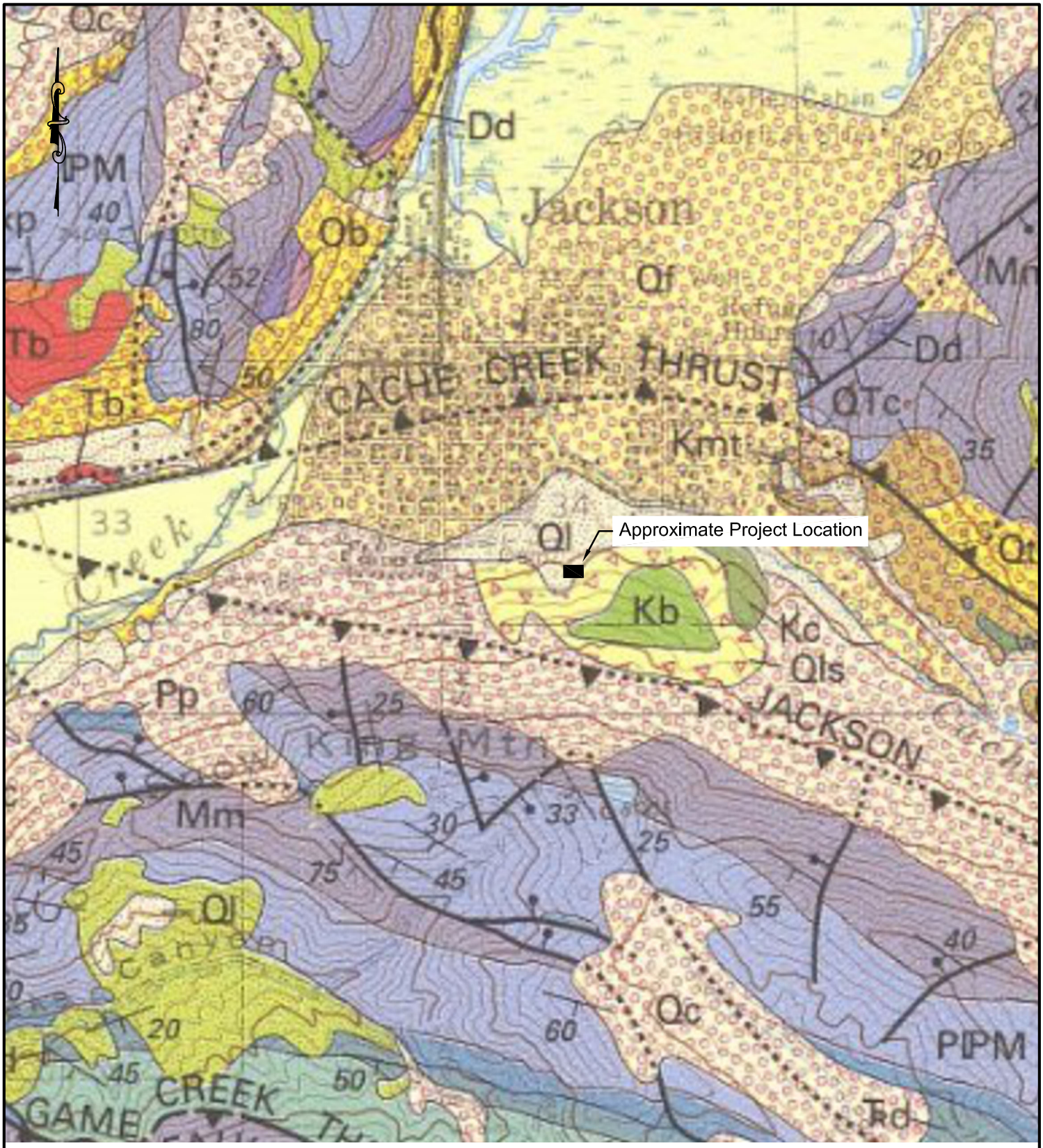
ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 5b	**MASW PROFILE** **ML-2**

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APPENDIX B

Figures



0 2000 4000

SCALE: 1 INCH = 2000 FEET

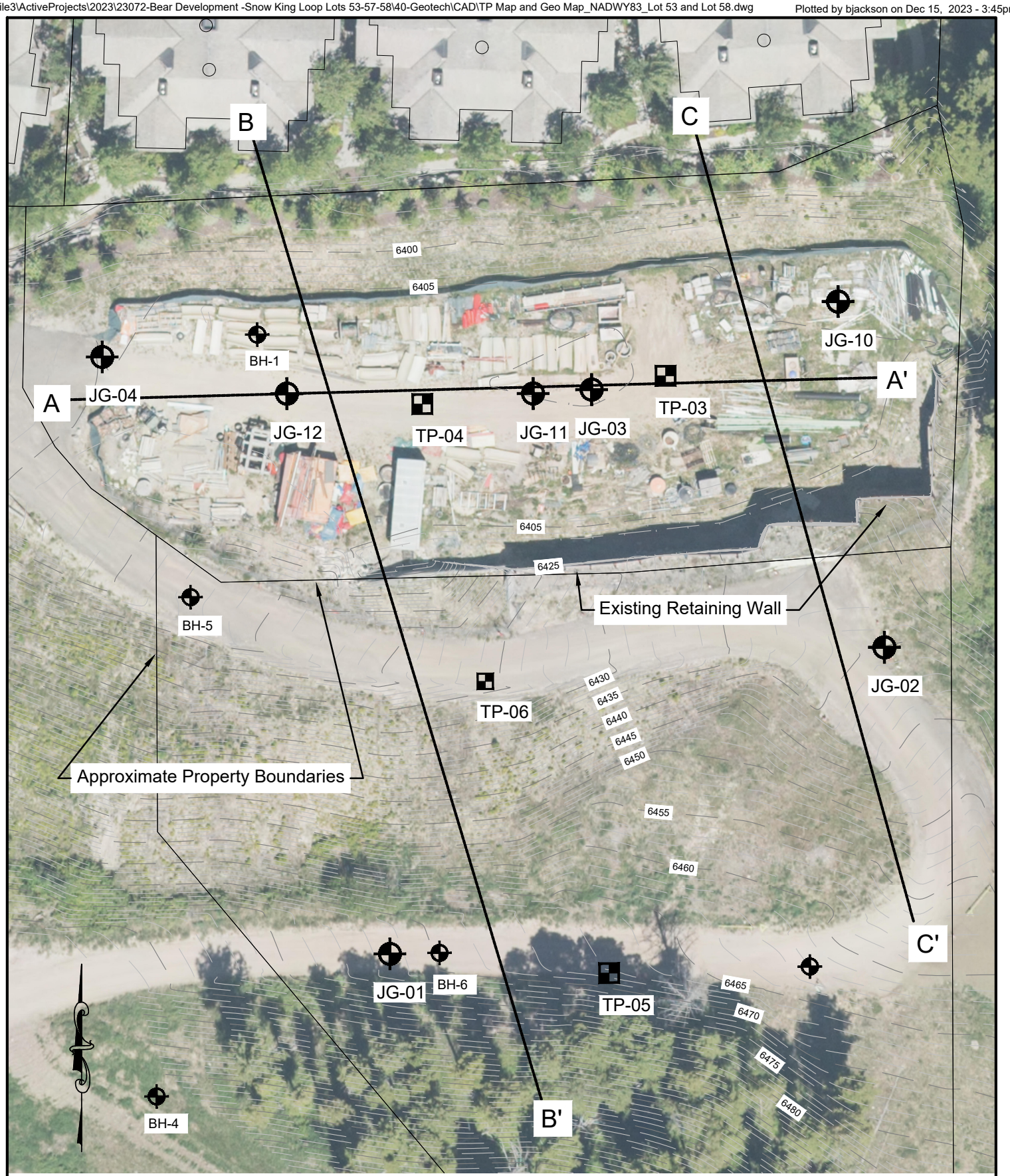
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Map symbols:

Ql - Loess
Qls - Landslide Debris
Kb - Bacon Ridge Sandstone (Upper Cretaceous)

From Love et. al, Geologic Map of Grand Teton National Park, 1992

DRAFTED BY: JBJ REVIEWED BY: HC PROJECT NUMBER 23072	SHEET TITLE: Figure 1 Site Location and Geologic Map	PROJECT TITLE: Geotechincal-Engineering Report Bear Development - Lot 53 and Lot 58 Teton County, Wyoming	JORGENSEN GEOTECHNICAL, LLC PO Box 9550 | 1315 HWY 89 S., Ste. 201 Jackson, WY 83002 PH: 307.733.5150 www.jorgeng.com



0 40 80

SCALE: 1 INCH = 40 FEET
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Borehole (JG-XX), Historic Nelson Engineering Borehole (BH-X), and test pit (TP-XX) locations are approximate and may be surveyed upon request. Existing ground surface topography provided by Jorgensen Associates, taken from topographiuc survey completed November 1, 2023. Aerial imagery provided by Teton County, 2019.

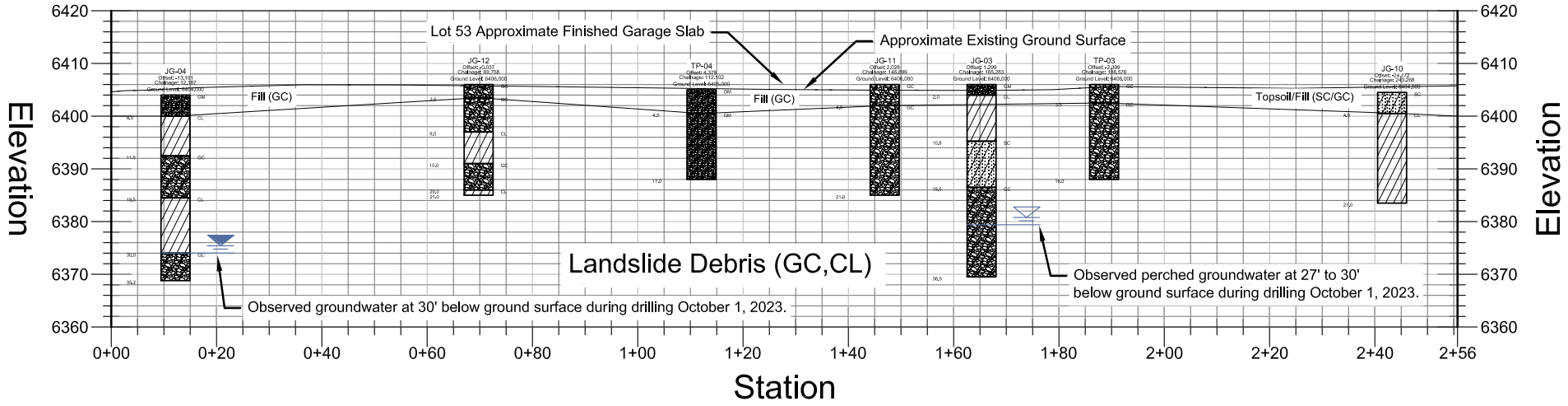
DRAFTED BY:	JBJ
REVIEWED BY:	HC
PROJECT NUMBER	23072

SHEET TITLE:
Figure 2
Borehole, Test Pit and Geologic Cross Section Location Map

PROJECT TITLE:
Geotechnical Engineering Report
Bear Development - Lot 53 and Lot 58
Teton County, Wyoming

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Jackson, WY 83002
PH: 307.733.5150
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Cross section A-A'

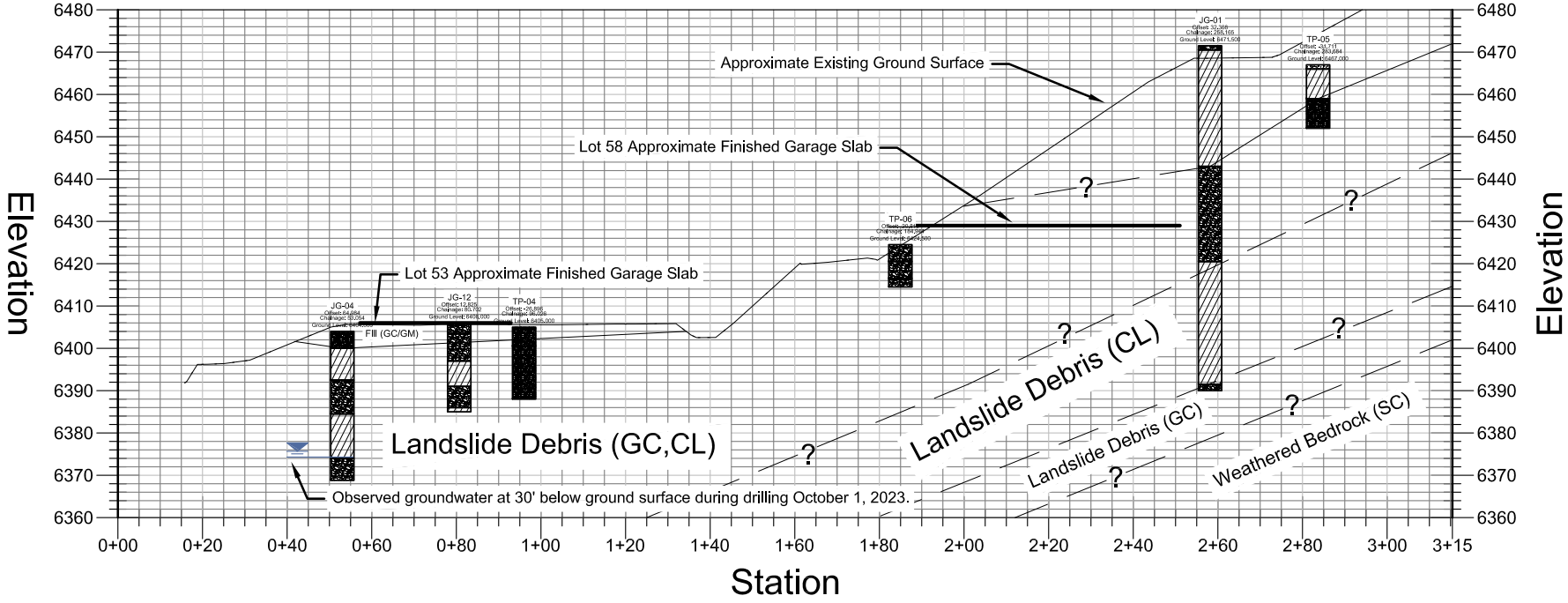


Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

DRAFTED BY: JBJ REVIEWED BY: HC/DB PROJECT NUMBER 23072	SHEET TITLE: Figure 3 Geologic Cross Section A-A'	PROJECT TITLE: Geotechnical-Engineering Report Bear Development - Lot 53 and Lot 58 Teton County, Wyoming	JORGENSEN GEOTECHNICAL, LLC PO Box 9550 | 1315 HWY 89 S., Ste. 201 Jackson, WY 83002 PH: 307.733.5150 www.jorgeng.com

Cross section B-B'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

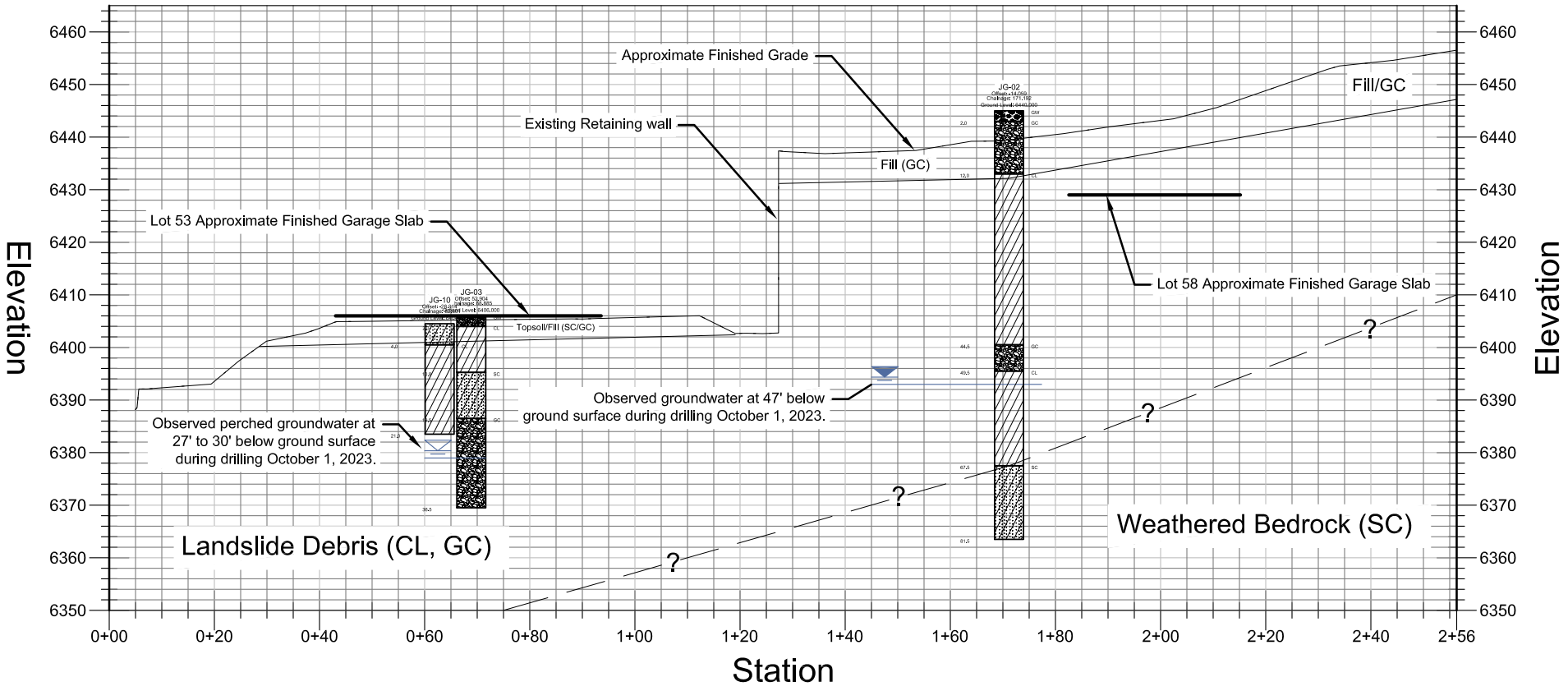
DRAFTED BY:	JBJ
REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 4
Geologic Cross Section B-B'

PROJECT TITLE:
Geotechnical-Engineering Report
Bear Development - Lot 53 and Lot 58
Teton County, Wyoming

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Jackson, WY 83002
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Cross section C-C'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

DRAFTED BY:	JBJ
REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 5
Geologic Cross Section C-C'

PROJECT TITLE:
Geotechnical-Engineering Report
Bear Development - Lot 53 and Lot 58
Teton County, Wyoming

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APPENDIX C

Soils Laboratory Procedures and Results

Laboratory Testing

Laboratory Testing Procedures

Lab samples were submitted for testing at GCI in Salt Lake City, Utah from boreholes JG-01, JG-02, JG-03, JG-04, JG-10, JG-11, and JG-12.

During the October 2023 site exploration for the Development at Lots 53 and 58, JG collected relatively undisturbed (i.e., thin-walled Shelby tubes) and disturbed samples (i.e., split spoon (SPT) samples and sonic drilling grab samples). Of the samples collected, 31 disturbed samples and two relatively undisturbed samples were selected for lab analysis. Laboratory testing included natural moisture content, unit weight, Atterberg limits, grain-size distribution, hydrometer, and consolidation testing.

The laboratory testing program consisted of:

- Twenty Seven (27) Moisture Contents (ASTM D2937/D2216)
- Thirty (30) Atterberg Limits (ASTM D4318)
- Twenty Seven (27) Grain Size Analysis (ASTM D422)
- Four (4) Hydrometer (ASTM D422a)
- Two (2) One Dimension Consolidation (ASTM D2435)

Results are shown on the following pages.

Laboratory Test Results: Detailed Summary

Laboratory testing included index testing for classification per USCS and indirect correlation with engineering parameters, and direct testing of strength. Classification tests – including Atterberg limits and grain-size analysis – have been summarized in table 4-1, with hydrometer tests and consolidation tests summarized in Tables 4-2 and 4-3, respectively. Full laboratory data sheets are attached.

The data herein are provided for informational purposes. Design-build contractors shall be responsible for providing their own analysis of the test results and for development of appropriate design parameters.

Table 4-1: Classification Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	Gravel (%)	Sand (%)	Fines (%)	Moisture Content (%)	Liquid Limit	Plasticity Index
JG-01	D8	18-19	CL	19.0	18.2	62.8	12.3	31	15
JG-01	D12	27-29	CL	27.7	17.1	55.2	11.0	28	12
JG-01	D17	37-38	GC	51.6	22.7	25.7	--	--	--
JG-01	D27	54.5-57	CL	11.9	20.2	67.9	12.6	33	18
JG-01	D32	67-69	CL	20.1	28.0	51.9	10.0	26	10
JG-01	D36	72.5-75	CL	4.5	10.0	85.5	20.7	38	21
JG-02	D4	7-10	GC	--	--	--	--	20	5
JG-02	D8	14.5-16	CL	12.4	20.8	66.8	11.9	31	16
JG-02	D11	22-25	CL	15.6	18.7	65.7	13.3	29	14
JG-02	D16	32-35	CL	13.2	18.2	68.6	14.5	21	5
JG-02	D18	38.5-40	CL	0.0	12.9	87.1	15.5	29	12
JG-02	D22	44.5-47	GC	41.6	27.3	31.1	--	--	--
JG-02	D26	52-55	CL	6.4	31.1	62.5	11.6	16	12
JG-02	D30	60-62	CL	0.2	5.3	94.5	13.7	37	14
JG-02	D32	64.5-67	CL	2.2	94.4	3.4	12.8	31	14
JG-02	D35	69.5-72	SC	--	--	--	--	21	5
JG-03	D3	4.5-7	CL	30.3	19.6	50.1	10.1	33	19
JG-03	D8	14.5-17	SC	28.2	31.4	40.4	8.4	30	15
JG-03	D12	22-25	GC	26.8	26.3	46.9	12.4	35	20
JG-03	D18	30-33	GC	32.7	22.1	45.2	10.8	29	14
JG-04	D4	7-10	CL	15.8	14.6	69.6	21.8	34	18
JG-04	D8	14.5-17	GC	37.4	30.1	32.5	6.8	19	5
JG-04	D12	22-25	CL	3.3	26.8	69.9	16.5	31	14
JG-04	D17	30-33	GC	43.1	15.3	41.6	10.1	33	18
JG-10	D3	7.5-9	CL	--	--	--	--	25	9
JG-10	U1	12.5-14	CL	27.6	21.7	50.7	13.7	39	24
JG-10	D5	15-17	CL	4.7	11.8	83.5	16.1	38	17
JG-10	U2	17.5-19	CL	13.9	19.4	66.7	13.8	32	18
JG-11	D3	7.5-9	GC	33.4	28.0	38.6	7.1	22	7
JG-12	D2	5-6.5	GC	33.9	25.3	40.8	10.2	27	12
JG-12	D4	10-11.5	CL	13.5	32.5	54.0	12.8	27	10
JG-12	D8	20-21.5	CL	23.9	25.5	50.6	10.6	26	12

Table 4-2: Hydrometer Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	Silt Fraction (%)	Clay Fraction (%)
JG-01	D17	37-38	GC	18	7
JG-02	D22	44.5-47	GC	23	8
JG-10	D5	15-17	CL	55	36
JG-11	D4	10-11.5	GC	33	17

Table 4-3: Consolidation Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	C_C
JG-10	U1	12.5-14	CL	0.171
JG-10	U2	17.5-19	CL	0.130

Supplemental Laboratory Data

Select laboratory results presented in a Site Investigation Report for Lots 53 and 58produced by Nelson Engineering dated July 28, 2021, and results presented in a Geotechnical Investigation Report for a project in close proximity to the site produced by Womack and Associates, Inc., dated June 4, 2010 are presented below.

GERHART COLE

PO Box 880
Midvale, Utah 84047
801.849.0055
gerhartcole.com

To:	Mr. Bruce Jackson Jorgensen Engineering 58 South Tyler, PO Box 1519 Pinedale, Wyoming 82941
Project:	Bear Development Snow King Lots 53 and 58
Gerhart Cole Project Number:	23-1725
Client Project Number	23072
Report Date:	November 30, 2023

Attached are the requested laboratory test results. These laboratory results are for the addressee and must be presented in their entirety without alteration, except with permission.

Gerhart Cole's Laboratory is accredited through the AASHTO Accreditation Program. The results provided were tested in general accordance with the referenced standards. Any test methods reported in this document outside the scope of this accreditation are marked with an asterisk in the header of the individual test report.

Gerhart Cole will dispose of samples two (2) weeks after the date above. Please contact us for storage pricing.

Approved By:_____
Zach Gibbs, PE (UT, MI) Laboratory Director

AASHTO ACCREDITED

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-01**	**JG-01**	**JG-01**	**JG-01**	**JG-01**	**JG-02**
	Depth:	**18-19 ft**	**27-29 ft**	**54.5-57 ft**	**67-69 ft**	**72.5-75 ft**	**14.5-16 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**14-Nov-23**	**14-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**
	Laboratory sample description:	**gy - bn clay**	**bn - gy clay**	**gy - dk gy clay**	**dk by - lt bn clay**	**gy - dk gy clay**	**bn - ol bn clay**
Moisture	Wet soil + tare (g)	806.82	1190.54	953.45	847.34	688.39	2264.09
	Dry soil + tare (g)	739.68	1074.24	869.05	788.12	590.77	2068.51
	Tare (g)	195.78	13.84	196.69	195.42	118.16	422.19
	Moisture content, w (%)	12.3	11.0	12.6	10.0	20.7	11.9
Comments							
QC/QA	Tested By:	AT	AT	CML	CML	CML	CML
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-02**	**JG-02**	**JG-02**	**JG-02**	**JG-02**	**JG-02**
	Depth:	**22-25 ft**	**32-35 ft**	**38.5-40 ft**	**52-55 ft**	**60-62 ft**	**64.5-67 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**
	Laboratory sample description:	**bn - ol bn clay**	**bn - dk yl bn clay**	**lt ol bn - ol bn clay**	**gy - ol bn clay**	**lt bn - bn clay**	**lt ol bn - ol bn clay**
Moisture	Wet soil + tare (g)	2104.69	2453.36	448.30	460.49	656.13	566.47
	Dry soil + tare (g)	1908.65	2210.32	405.33	433.20	600.68	516.43
	Tare (g)	438.53	539.41	127.25	197.51	195.80	126.68
	Moisture content, w (%)	13.3	14.5	15.5	11.6	13.7	12.8
Comments							
QC/QA	Tested By:	CML	CML	CML	CML	CML	CML
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	JG-03	JG-03	JG-03	JG-03	JG-04	JG-04
	Depth:	4.5-7 ft	14.5-17 ft	22-25 ft	30-33 ft	7-10 ft	14.5-17 ft
	Date Sampled:	-	-	-	-	-	-
	Date tested:	13-Nov-23	13-Nov-23	13-Nov-23	13-Nov-23	13-Nov-23	13-Nov-23
	Laboratory sample description:	lt bn - bn clay	pl ol bn - bn clay	lt ol bn - bn clay	bn - dk bn clay	lt ol bn - bn clay	pl ol bn - lt bn silt
Moisture	Wet soil + tare (g)	1630.20	872.07	1046.88	943.07	653.16	601.88
	Dry soil + tare (g)	1521.39	813.63	947.50	865.02	571.20	571.25
	Tare (g)	440.15	119.03	144.65	144.19	195.92	118.32
	Moisture content, w (%)	10.1	8.4	12.4	10.8	21.8	6.8
Comments							
QC/QA	Tested By:	JCC	JCC	JCC	JCC	JCC	JCC
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-04**	**JG-04**	**JG-10**	**JG-10**	**JG-10**	**JG-11**
	Depth:	**22-25 ft**	**30-33 ft**	**12.5-14 ft**	**15-17 ft**	**17.5-19 ft**	**7.5-9 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**
	Laboratory sample description:	**ol bn - bn silt**	**lt bn - bn clay**	**ol bn - lt bn clay**	**ol bn - y bn clay**	**ol bn - lt bn clay**	**bn - dk bn clay**
Moisture	Wet soil + tare (g)	555.20	1543.36	1129.47	377.19	860.87	758.29
	Dry soil + tare (g)	493.76	1440.63	1044.36	352.11	758.40	721.07
	Tare (g)	120.66	421.65	422.15	196.80	13.83	194.35
	Moisture content, w (%)	16.5	10.1	13.7	16.1	13.8	7.1
Comments							
QC/QA	Tested By:	JCC	JCC	AT	JCC	AT	JCC
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-12**	**JG-12**	**JG-12**			
	Depth:	**5-7 ft**	**10-12 ft**	**20-21 ft**			
	Date Sampled:	**-**	**-**	**-**			
	Date tested:	**14-Nov-23**	**14-Nov-23**	**14-Nov-23**			
	Laboratory sample description:	**lt ol bn - lt bn clay**	**lt ol bn - lt bn silt**	**lt ol bn - lt bn clay**			
Moisture	Wet soil + tare (g)	902.19	566.12	742.99			
	Dry soil + tare (g)	836.69	514.93	683.22			
	Tare (g)	193.61	116.09	117.11			
	Moisture content, w (%)	10.2	12.8	10.6			
Comments							
QC/QA	Tested By:	AT	AT	AT			
	Reduced By:	CML	CML	CML			
	Reviewed By:	AT	AT	AT			

Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 18-19 ft

Tested by: JC Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - bn clay
As-received water content(%):	12.3	Approximate maximum particle size:	1.5"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

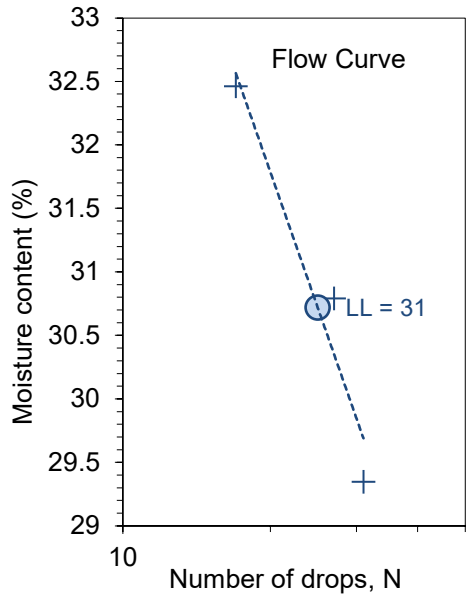
Determination No:	1	2
Wet Soil + Tare (g):	20.94	20.87
Dry Soil + Tare (g):	19.90	19.81
Moisture Loss (g):	1.04	1.06
Tare (g):	13.53	13.42
Dry Soil (g):	6.37	6.39
Moisture Content, w (%):	16.33	16.59

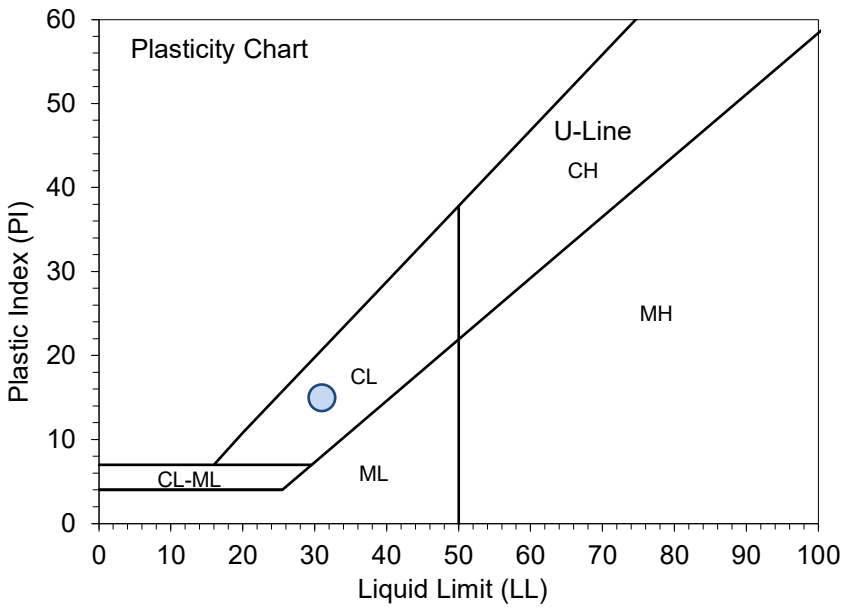
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	27	17
Wet Soil + Tare (g):	23.85	25.34	24.74
Dry Soil + Tare (g):	21.37	22.51	21.75
Moisture Loss (g):	2.48	2.83	2.99
Tare (g):	12.92	13.32	12.54
Dry Soil (g):	8.45	9.19	9.21
Moisture Content, w (%):	29.35	30.79	32.46
One-Point LL:		31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	16
Plasticity Index, PI:	15





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 27-29 ft

Tested by: JC Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - gy clay
As-received water content(%):	11.0	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

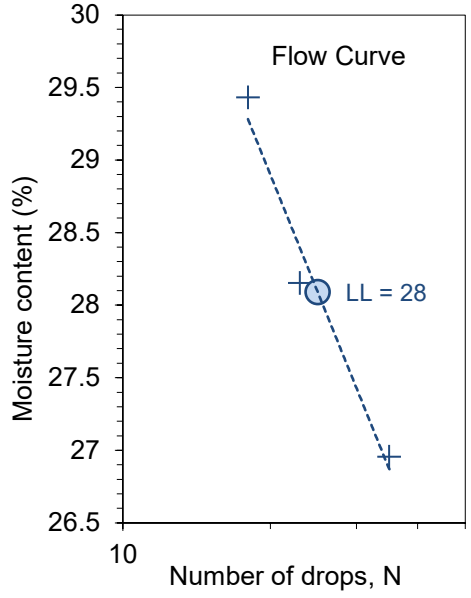
Determination No:	1	2
Wet Soil + Tare (g):	20.76	21.17
Dry Soil + Tare (g):	19.72	20.13
Moisture Loss (g):	1.04	1.04
Tare (g):	13.35	13.69
Dry Soil (g):	6.37	6.44
Moisture Content, w (%):	16.33	16.15

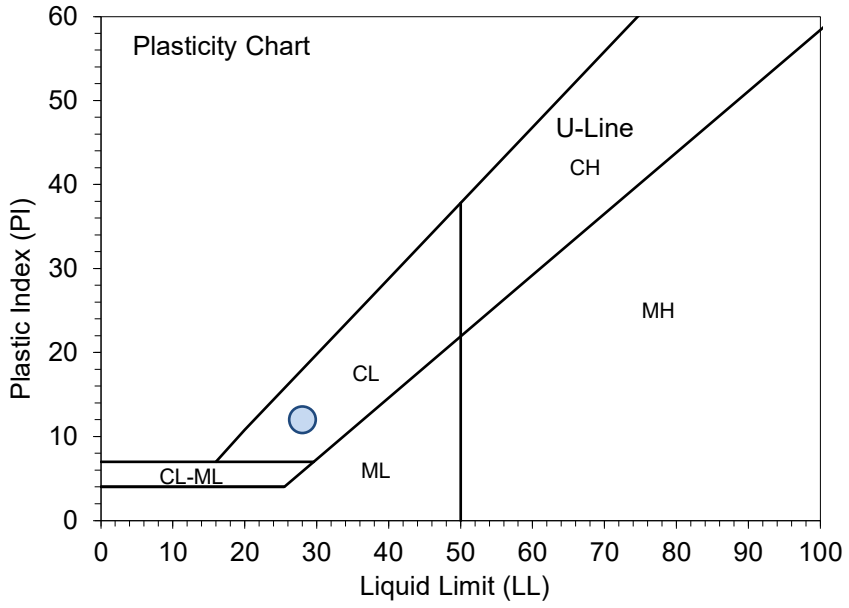
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	23	18
Wet Soil + Tare (g):	25.98	24.87	27.33
Dry Soil + Tare (g):	23.33	22.17	24.16
Moisture Loss (g):	2.65	2.70	3.17
Tare (g):	13.50	12.58	13.39
Dry Soil (g):	9.83	9.59	10.77
Moisture Content, w (%):	26.96	28.15	29.43
One-Point LL:		28	

Results

Liquid Limit, LL:	28
Plastic Limit, PL:	16
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 54.5-57 ft

Tested by: JC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - dk gy clay
As-received water content(%):	12.5	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

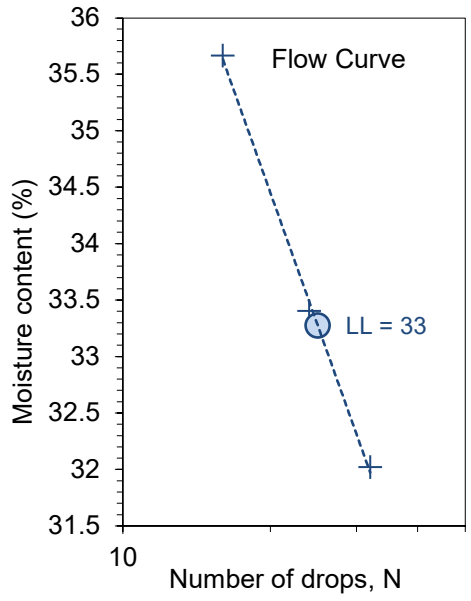
Determination No:	1	2
Wet Soil + Tare (g):	20.65	21.09
Dry Soil + Tare (g):	19.68	20.10
Moisture Loss (g):	0.97	0.99
Tare (g):	13.25	13.55
Dry Soil (g):	6.43	6.55
Moisture Content, w (%):	15.09	15.11

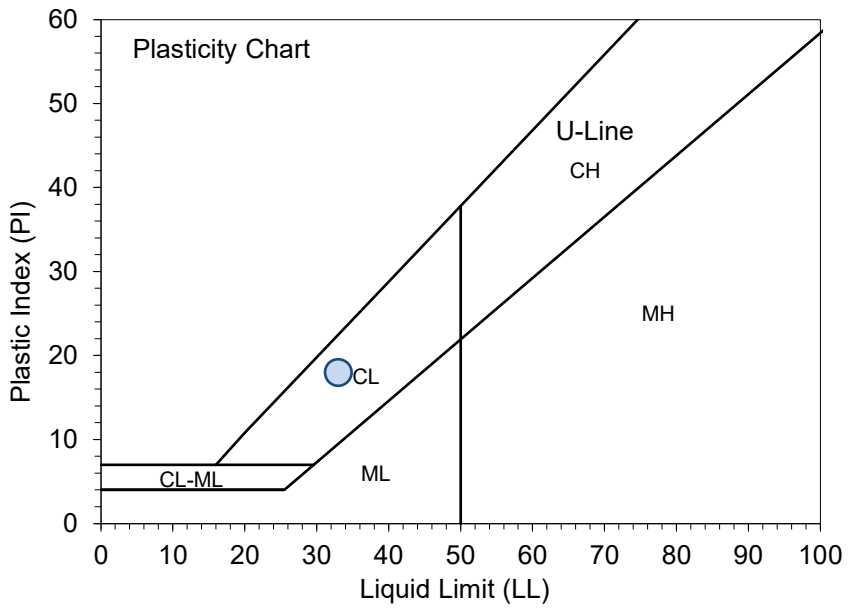
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	32	24	16
Wet Soil + Tare (g):	24.69	24.36	24.92
Dry Soil + Tare (g):	22.00	21.31	21.61
Moisture Loss (g):	2.69	3.05	3.31
Tare (g):	13.60	12.18	12.33
Dry Soil (g):	8.40	9.13	9.28
Moisture Content, w (%):	32.02	33.41	35.67
One-Point LL:		33	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	15
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 67-69 ft

Tested by: JC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	dk gy - lt bn clay
As-received water content(%):	10.0	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

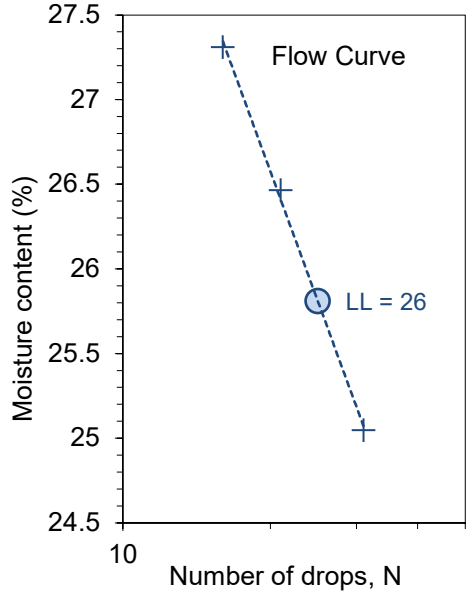
Determination No:	1	2
Wet Soil + Tare (g):	21.01	20.67
Dry Soil + Tare (g):	19.96	19.64
Moisture Loss (g):	1.05	1.03
Tare (g):	13.49	13.07
Dry Soil (g):	6.47	6.57
Moisture Content, w (%):	16.23	15.68

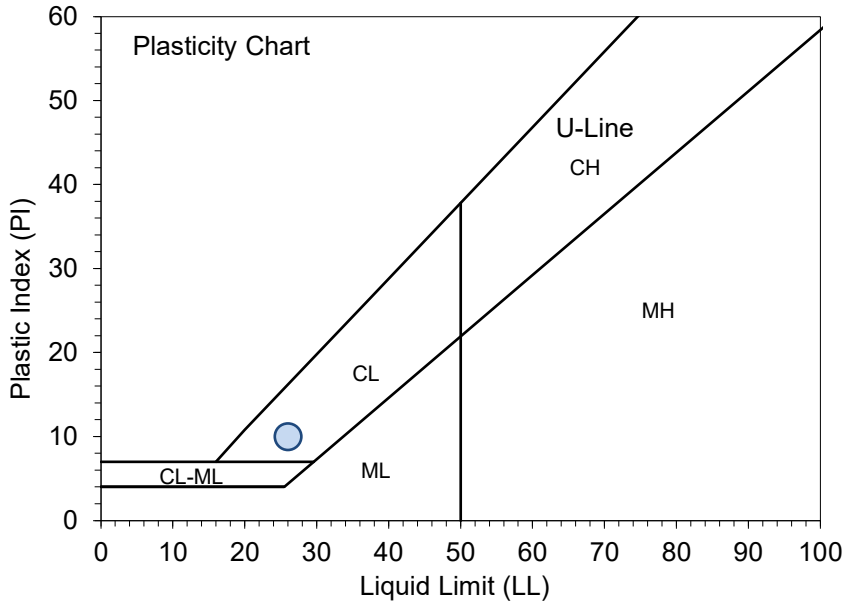
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	21	16
Wet Soil + Tare (g):	26.26	25.37	25.82
Dry Soil + Tare (g):	23.73	22.89	23.22
Moisture Loss (g):	2.53	2.48	2.60
Tare (g):	13.63	13.52	13.70
Dry Soil (g):	10.10	9.37	9.52
Moisture Content, w (%):	25.05	26.47	27.31
One-Point LL:		26	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	16
Plasticity Index, PI:	10





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 72.5-75 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - dk by clay
As-received water content(%):	20.7	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

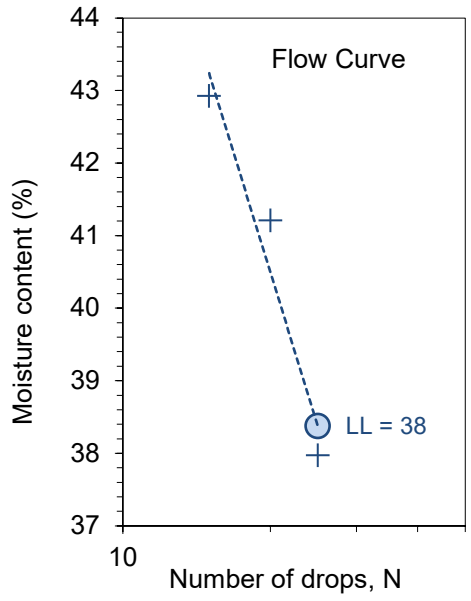
Determination No:	1	2
Wet Soil + Tare (g):	21.19	21.02
Dry Soil + Tare (g):	20.06	19.89
Moisture Loss (g):	1.13	1.13
Tare (g):	13.47	13.48
Dry Soil (g):	6.59	6.41
Moisture Content, w (%):	17.15	17.63

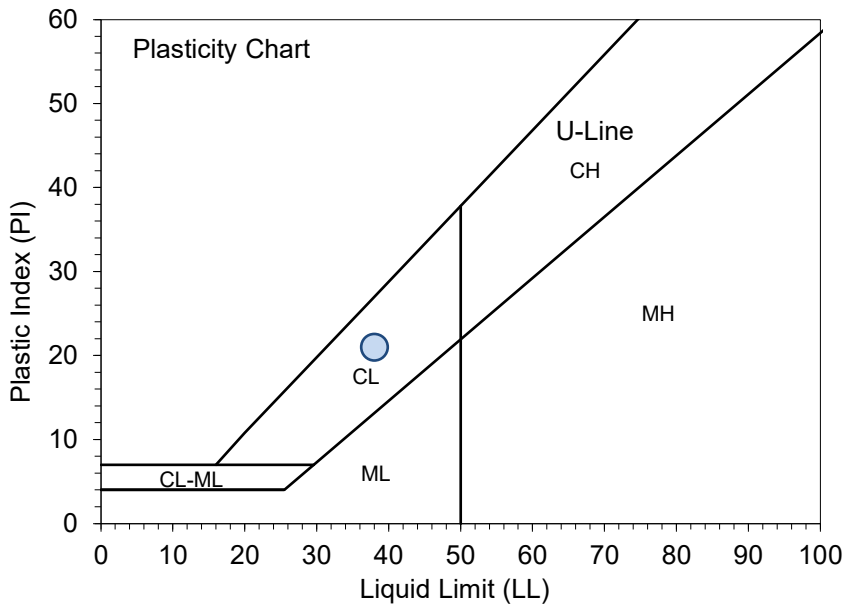
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	25	20	15
Wet Soil + Tare (g):	22.90	24.32	25.41
Dry Soil + Tare (g):	20.31	21.13	21.89
Moisture Loss (g):	2.59	3.19	3.52
Tare (g):	13.49	13.39	13.69
Dry Soil (g):	6.82	7.74	8.20
Moisture Content, w (%):	37.98	41.21	42.93
One-Point LL:	38	40	

Results

Liquid Limit, LL:	38
Plastic Limit, PL:	17
Plasticity Index, PI:	21





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 7-10 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn gravel
As-received water content(%):	Not Requested	Approximate maximum particle size:	1.5"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

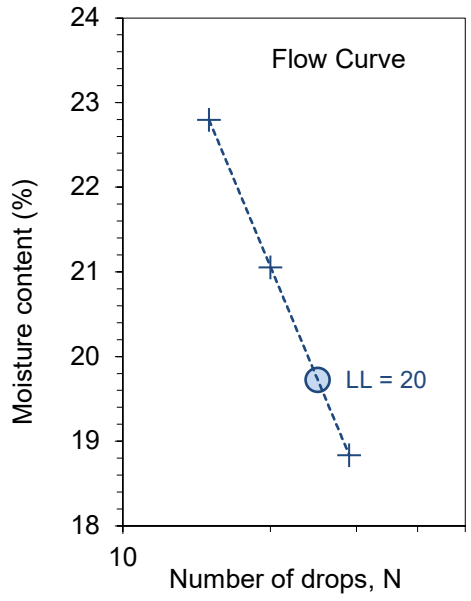
Determination No:	1	2
Wet Soil + Tare (g):	20.22	21.14
Dry Soil + Tare (g):	19.22	20.11
Moisture Loss (g):	1.00	1.03
Tare (g):	12.57	13.32
Dry Soil (g):	6.65	6.79
Moisture Content, w (%):	15.04	15.17

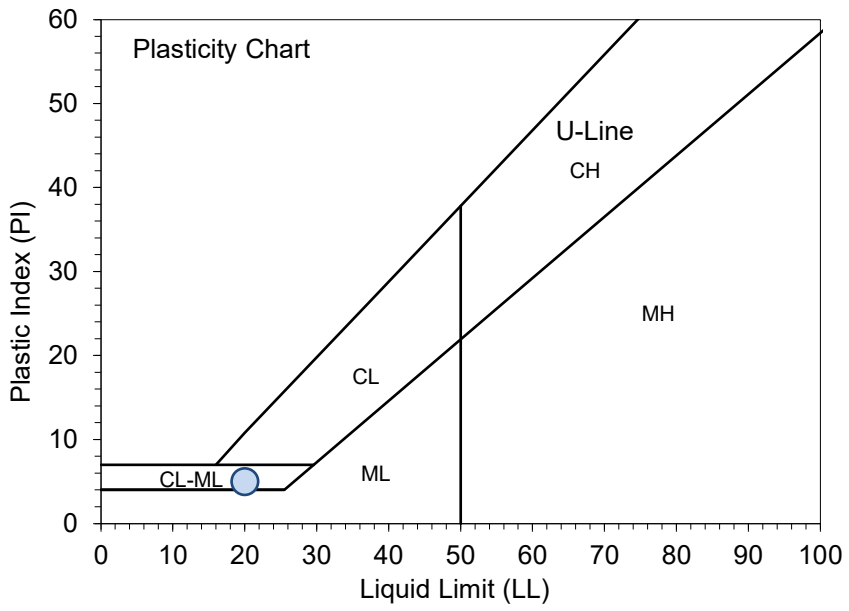
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	20	15
Wet Soil + Tare (g):	26.87	25.20	24.44
Dry Soil + Tare (g):	24.76	23.17	22.29
Moisture Loss (g):	2.11	2.03	2.15
Tare (g):	13.56	13.53	12.86
Dry Soil (g):	11.20	9.64	9.43
Moisture Content, w (%):	18.84	21.06	22.80
One-Point LL:	19	20	

Results

Liquid Limit, LL:	20
Plastic Limit, PL:	15
Plasticity Index, PI:	5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 14.5-16 ft

Tested by: JC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - ol bn clay
As-received water content(%):	11.9	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

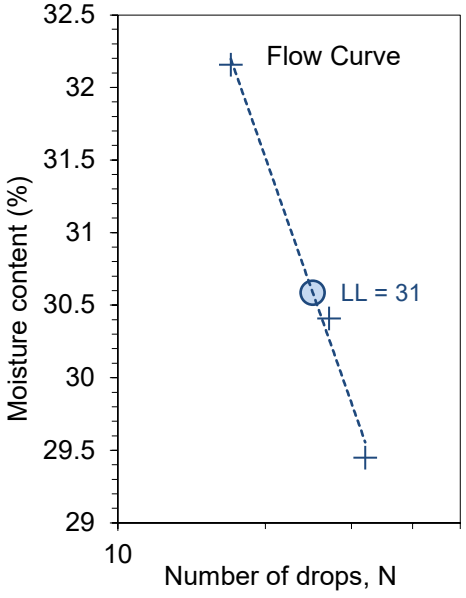
Determination No:	1	2
Wet Soil + Tare (g):	20.91	19.95
Dry Soil + Tare (g):	19.95	19.00
Moisture Loss (g):	0.96	0.95
Tare (g):	13.46	12.46
Dry Soil (g):	6.49	6.54
Moisture Content, w (%):	14.79	14.53

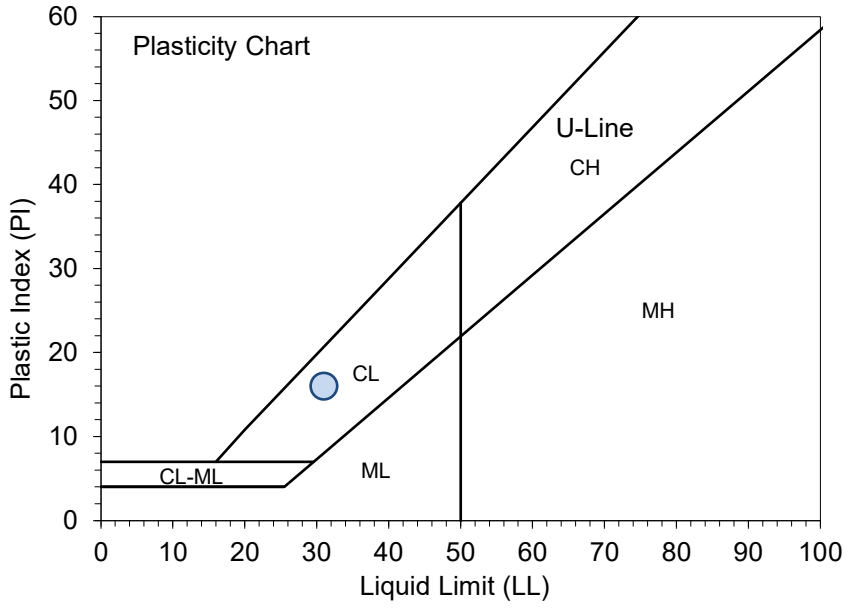
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	32	27	17
Wet Soil + Tare (g):	27.13	25.25	23.71
Dry Soil + Tare (g):	24.02	22.51	20.88
Moisture Loss (g):	3.11	2.74	2.83
Tare (g):	13.46	13.50	12.08
Dry Soil (g):	10.56	9.01	8.80
Moisture Content, w (%):	29.45	30.41	32.16
One-Point LL:		31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	15
Plasticity Index, PI:	16





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - ol bn clay
As-received water content(%):	13.3	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

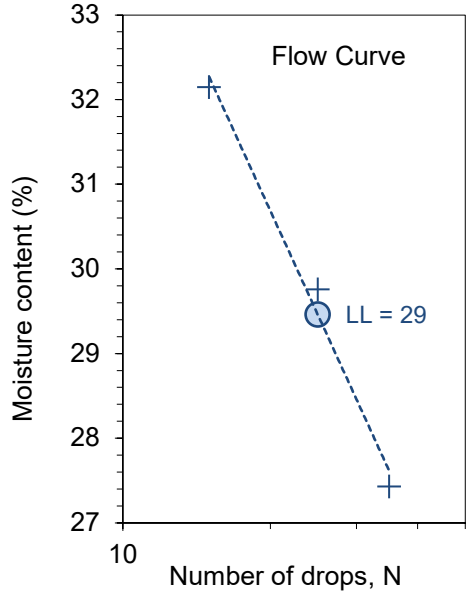
Determination No:	1	2
Wet Soil + Tare (g):	21.43	19.87
Dry Soil + Tare (g):	20.39	18.85
Moisture Loss (g):	1.04	1.02
Tare (g):	13.57	12.08
Dry Soil (g):	6.82	6.77
Moisture Content, w (%):	15.25	15.07

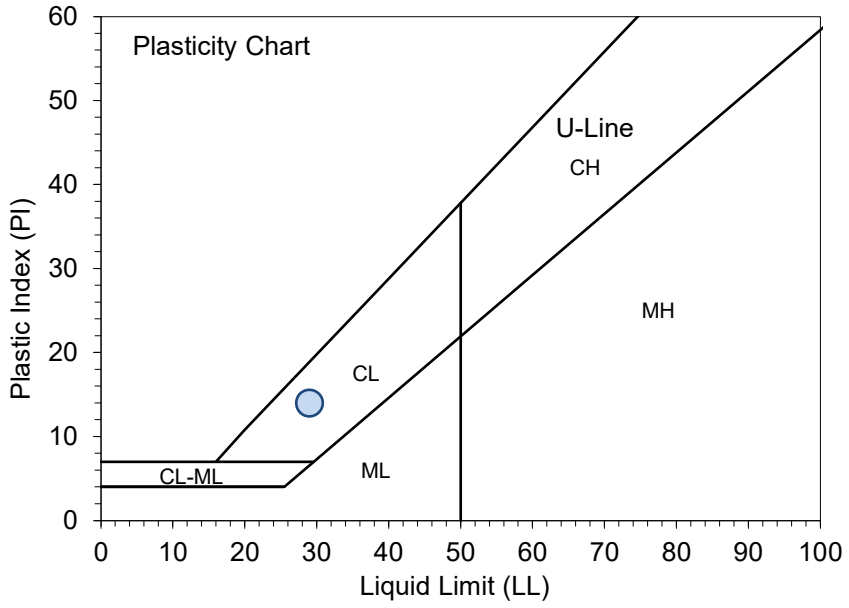
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	25	15
Wet Soil + Tare (g):	22.22	20.57	25.21
Dry Soil + Tare (g):	20.36	18.71	22.22
Moisture Loss (g):	1.86	1.86	2.99
Tare (g):	13.58	12.46	12.92
Dry Soil (g):	6.78	6.25	9.30
Moisture Content, w (%):	27.43	29.76	32.15
One-Point LL:		30	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	15
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 32-35 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk yl bn clay
As-received water content(%):	14.5	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

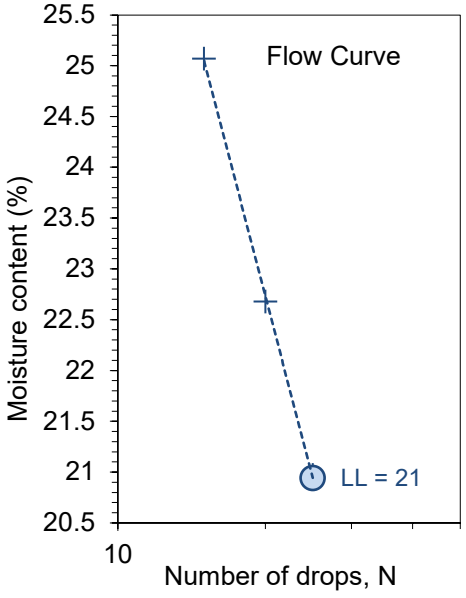
Determination No:	1	2
Wet Soil + Tare (g):	21.05	21.32
Dry Soil + Tare (g):	19.97	20.22
Moisture Loss (g):	1.08	1.10
Tare (g):	13.42	13.54
Dry Soil (g):	6.55	6.68
Moisture Content, w (%):	16.49	16.47

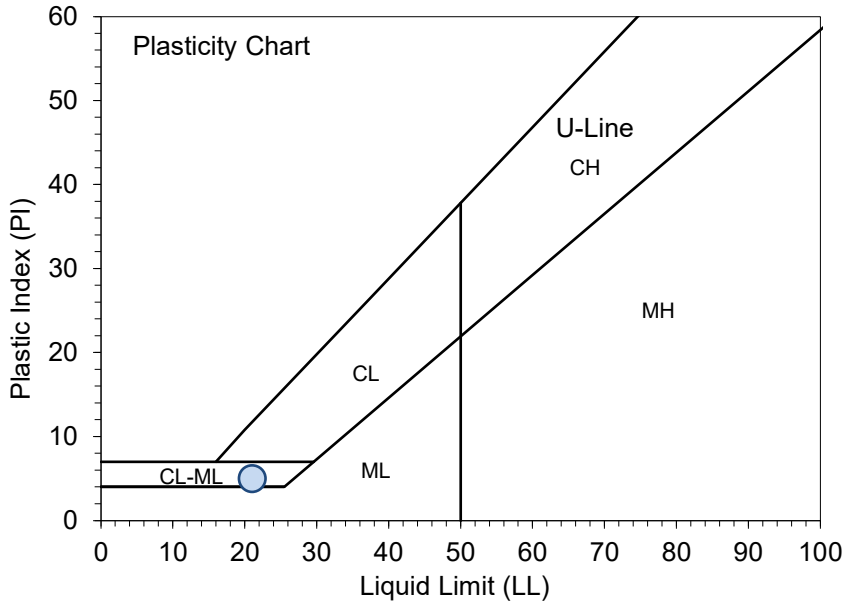
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	25	20	15
Wet Soil + Tare (g):	25.91	24.58	25.44
Dry Soil + Tare (g):	23.76	22.50	22.86
Moisture Loss (g):	2.15	2.08	2.58
Tare (g):	13.51	13.33	12.57
Dry Soil (g):	10.25	9.17	10.29
Moisture Content, w (%):	20.98	22.68	25.07
One-Point LL:	21	22	

Results

Liquid Limit, LL:	21
Plastic Limit, PL:	16
Plasticity Index, PI:	5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 38.5-40 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - ol bn clay
As-received water content(%):	15.5	Approximate maximum particle size:	No. 10
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

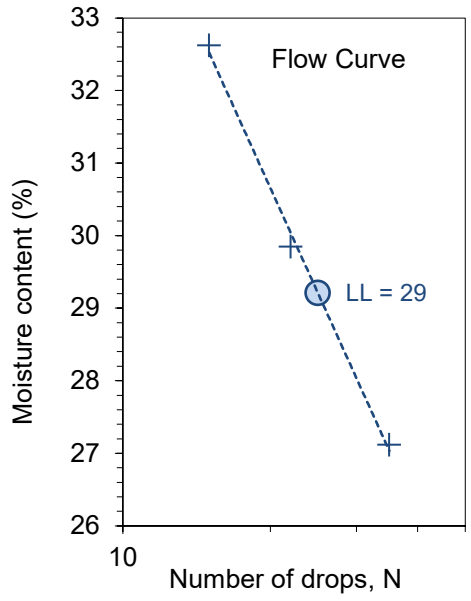
Determination No:	1	2
Wet Soil + Tare (g):	20.84	21.16
Dry Soil + Tare (g):	19.75	20.04
Moisture Loss (g):	1.09	1.12
Tare (g):	13.53	13.60
Dry Soil (g):	6.22	6.44
Moisture Content, w (%):	17.52	17.39

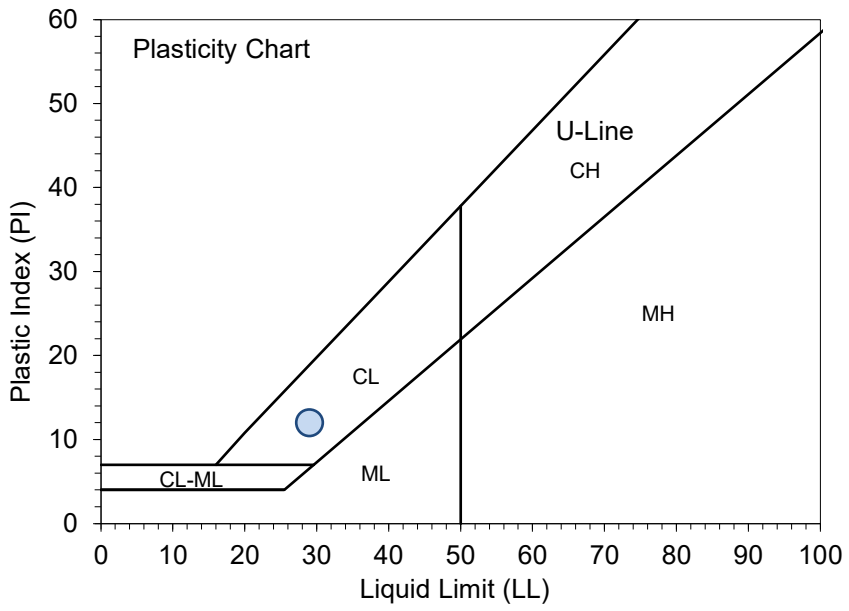
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	22	15
Wet Soil + Tare (g):	24.37	21.89	23.34
Dry Soil + Tare (g):	22.04	19.69	20.88
Moisture Loss (g):	2.33	2.20	2.46
Tare (g):	13.45	12.32	13.34
Dry Soil (g):	8.59	7.37	7.54
Moisture Content, w (%):	27.12	29.85	32.63
One-Point LL:		29	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	17
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 52-55 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - ol bn clay
As-received water content(%):	11.6	Approximate maximum particle size:	No. 10
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

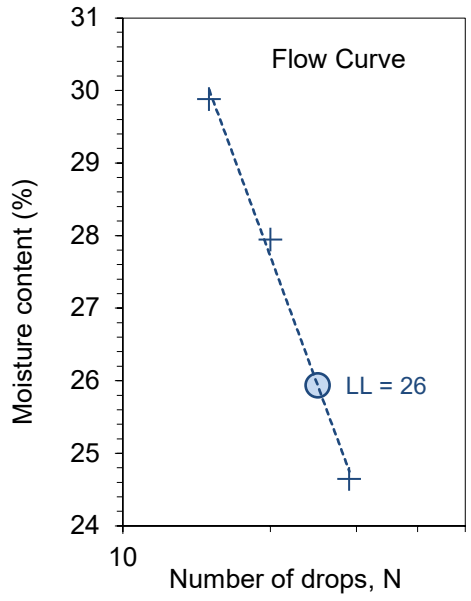
Determination No:	1	2
Wet Soil + Tare (g):	20.78	20.39
Dry Soil + Tare (g):	19.86	19.48
Moisture Loss (g):	0.92	0.91
Tare (g):	13.07	12.86
Dry Soil (g):	6.79	6.62
Moisture Content, w (%):	13.55	13.75

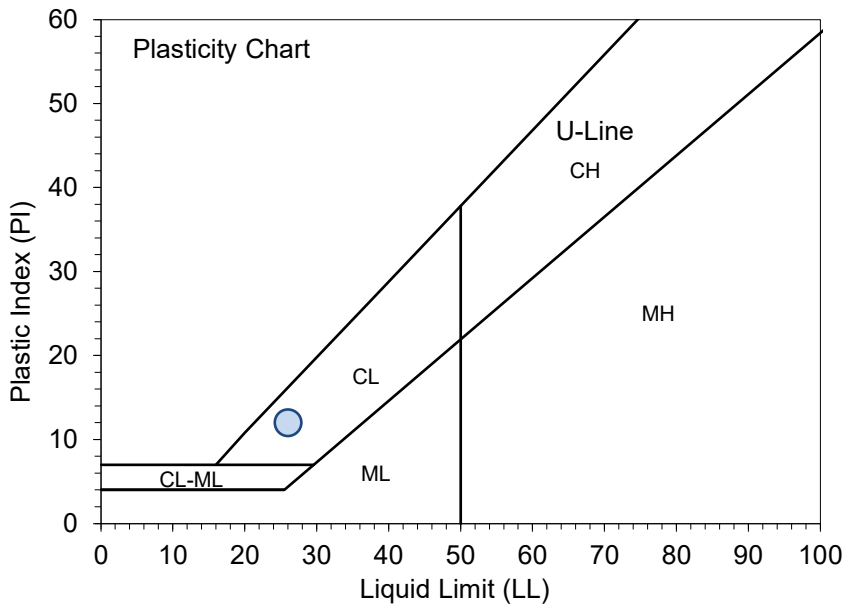
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	20	15
Wet Soil + Tare (g):	26.18	26.47	25.64
Dry Soil + Tare (g):	23.71	23.51	22.84
Moisture Loss (g):	2.47	2.96	2.80
Tare (g):	13.69	12.92	13.47
Dry Soil (g):	10.02	10.59	9.37
Moisture Content, w (%):	24.65	27.95	29.88
One-Point LL:	25	27	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	14
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 60-62 ft

Tested by: PJF Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	13.7	Approximate maximum particle size:	No. 10
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

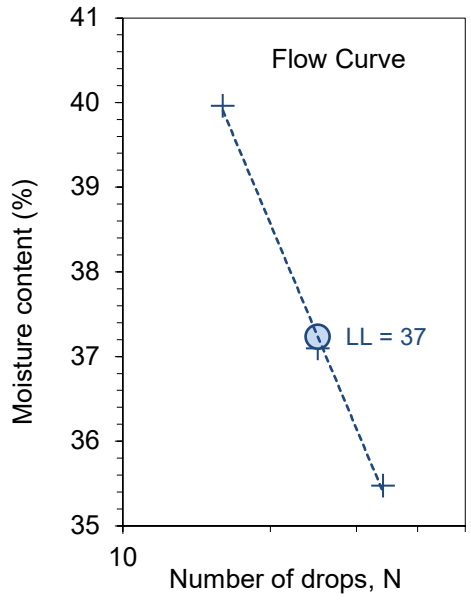
Determination No:	1	2
Wet Soil + Tare (g):	19.85	20.09
Dry Soil + Tare (g):	19.04	19.23
Moisture Loss (g):	0.81	0.86
Tare (g):	13.24	13.20
Dry Soil (g):	5.80	6.03
Moisture Content, w (%):	13.97	14.26

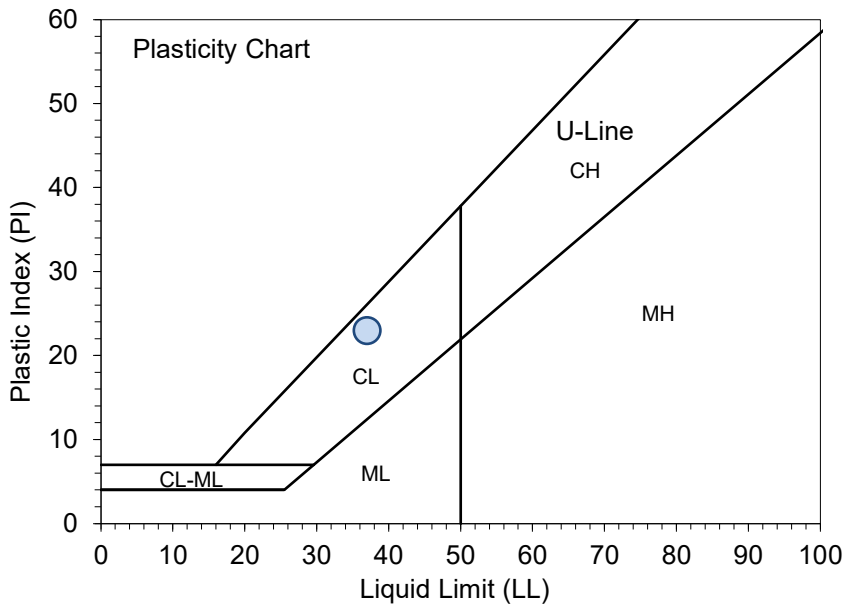
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	34	25	16
Wet Soil + Tare (g):	25.78	25.64	28.95
Dry Soil + Tare (g):	22.31	22.39	24.57
Moisture Loss (g):	3.47	3.25	4.38
Tare (g):	12.53	13.63	13.61
Dry Soil (g):	9.78	8.76	10.96
Moisture Content, w (%):	35.48	37.10	39.96
One-Point LL:		37	

Results

Liquid Limit, LL:	37
Plastic Limit, PL:	14
Plasticity Index, PI:	23





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 64.5-67 ft

Tested by: PJF Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - ol bn clay
As-received water content(%):	12.8	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

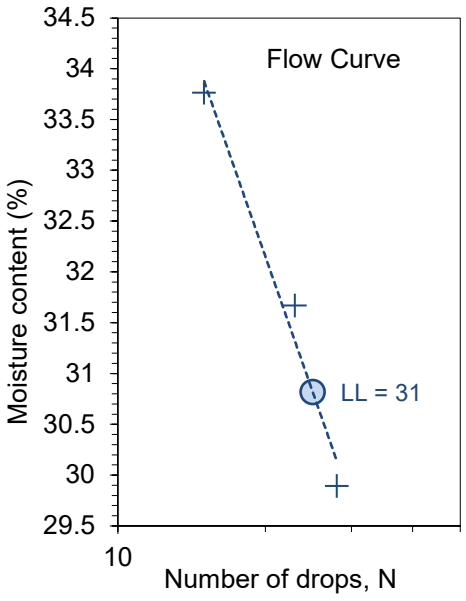
Determination No:	1	2
Wet Soil + Tare (g):	19.92	19.13
Dry Soil + Tare (g):	18.91	18.09
Moisture Loss (g):	1.01	1.04
Tare (g):	12.97	12.20
Dry Soil (g):	5.94	5.89
Moisture Content, w (%):	17.00	17.66

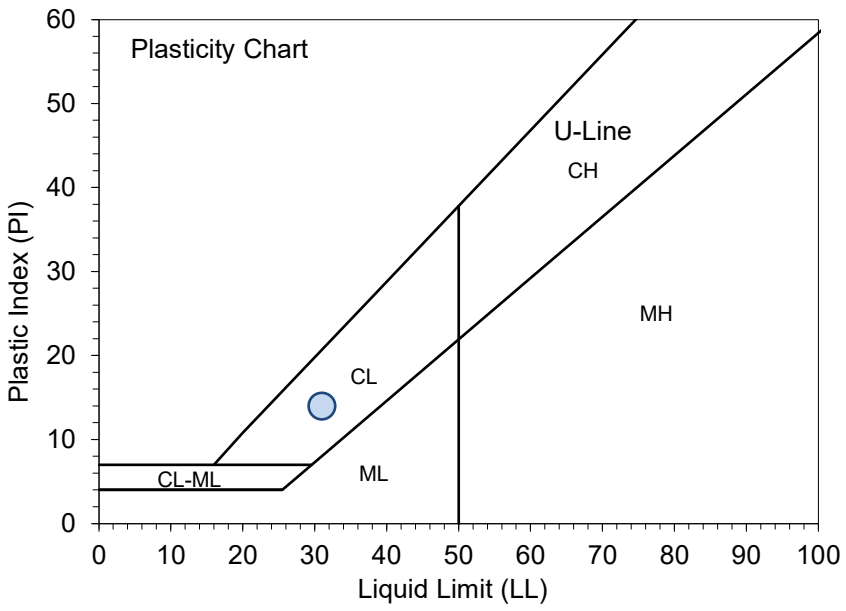
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	28	23	15
Wet Soil + Tare (g):	26.11	26.31	25.75
Dry Soil + Tare (g):	23.21	23.13	22.62
Moisture Loss (g):	2.90	3.18	3.13
Tare (g):	13.51	13.09	13.35
Dry Soil (g):	9.70	10.04	9.27
Moisture Content, w (%):	29.90	31.67	33.76
One-Point LL:	30	31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	17
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 69.5-72 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn gravel
As-received water content(%):	Not Requested	Approximate maximum particle size:	2"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	75
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

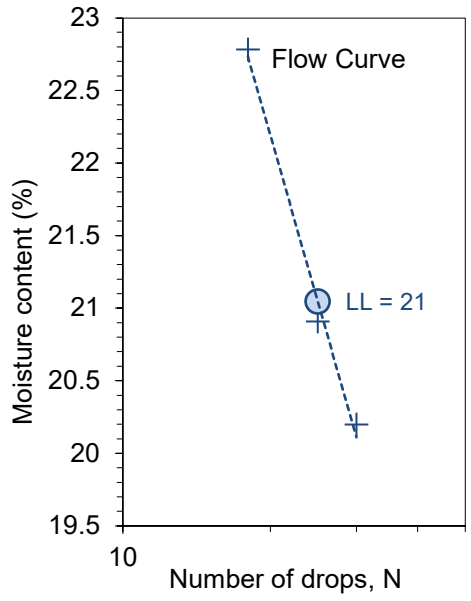
Determination No:	1	2
Wet Soil + Tare (g):	20.46	21.09
Dry Soil + Tare (g):	19.45	20.08
Moisture Loss (g):	1.01	1.01
Tare (g):	12.96	13.57
Dry Soil (g):	6.49	6.51
Moisture Content, w (%):	15.56	15.51

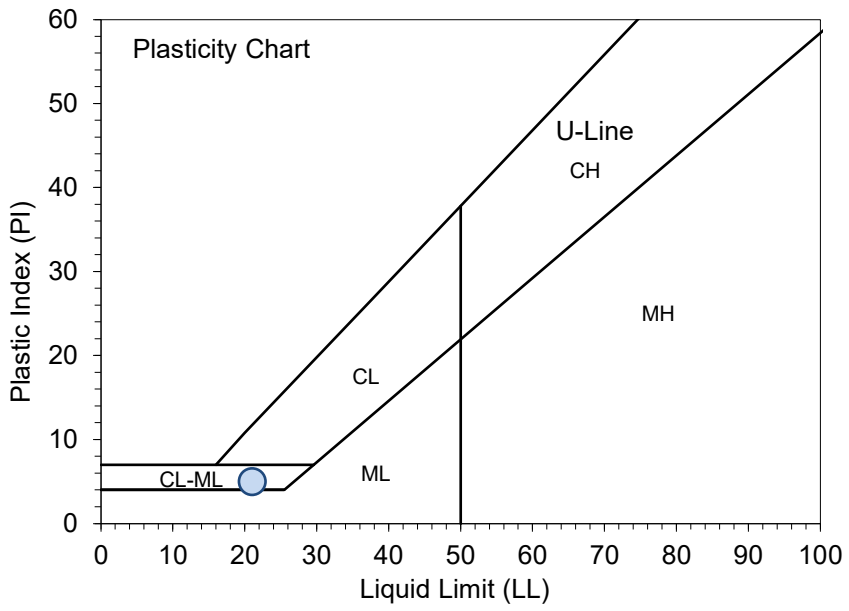
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	25	18
Wet Soil + Tare (g):	24.18	25.29	22.55
Dry Soil + Tare (g):	22.36	23.27	20.75
Moisture Loss (g):	1.82	2.02	1.80
Tare (g):	13.35	13.61	12.85
Dry Soil (g):	9.01	9.66	7.90
Moisture Content, w (%):	20.20	20.91	22.78
One-Point LL:	21	21	

Results

Liquid Limit, LL:	21
Plastic Limit, PL:	16
Plasticity Index, PI:	5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 4.5-7 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	10.1	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

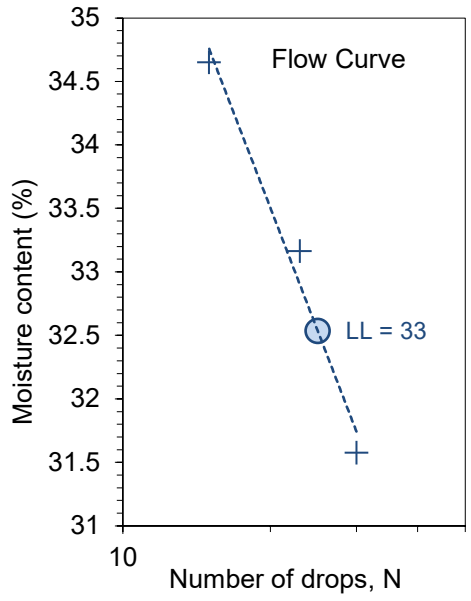
Determination No:	1	2
Wet Soil + Tare (g):	20.63	19.09
Dry Soil + Tare (g):	19.78	18.29
Moisture Loss (g):	0.85	0.80
Tare (g):	13.55	12.54
Dry Soil (g):	6.23	5.75
Moisture Content, w (%):	13.64	13.91

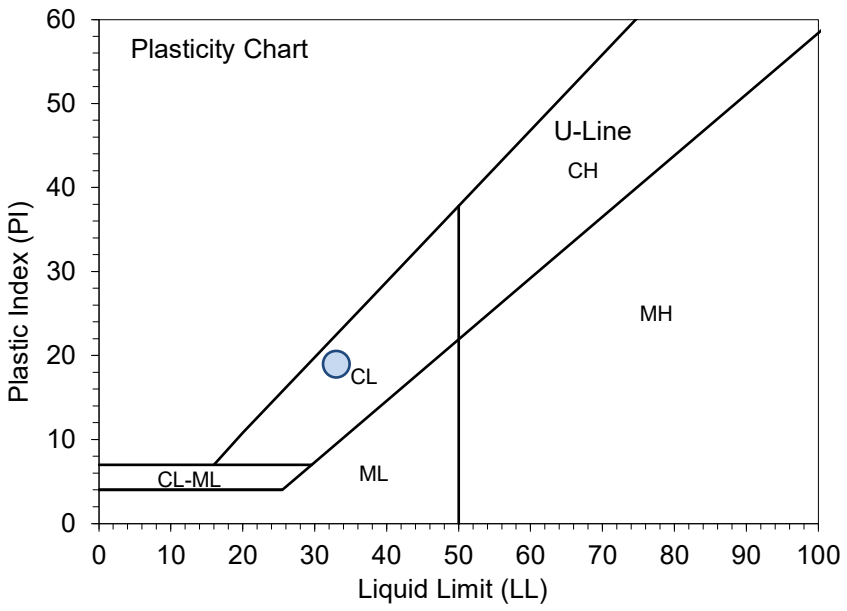
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	23	15
Wet Soil + Tare (g):	27.01	26.81	27.14
Dry Soil + Tare (g):	23.77	23.50	23.64
Moisture Loss (g):	3.24	3.31	3.50
Tare (g):	13.51	13.52	13.54
Dry Soil (g):	10.26	9.98	10.10
Moisture Content, w (%):	31.58	33.17	34.65
One-Point LL:	32	33	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	14
Plasticity Index, PI:	19





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Tested by: MGS Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	pl ol bn - bn clay
As-received water content(%):	8.4	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

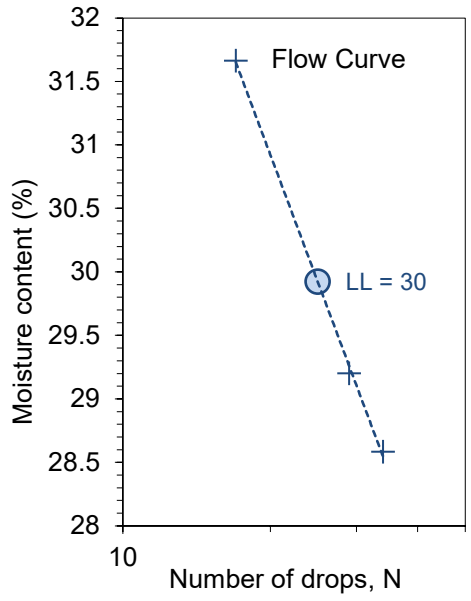
Determination No:	1	2
Wet Soil + Tare (g):	20.68	20.84
Dry Soil + Tare (g):	19.73	19.88
Moisture Loss (g):	0.95	0.96
Tare (g):	13.45	13.56
Dry Soil (g):	6.28	6.32
Moisture Content, w (%):	15.13	15.19

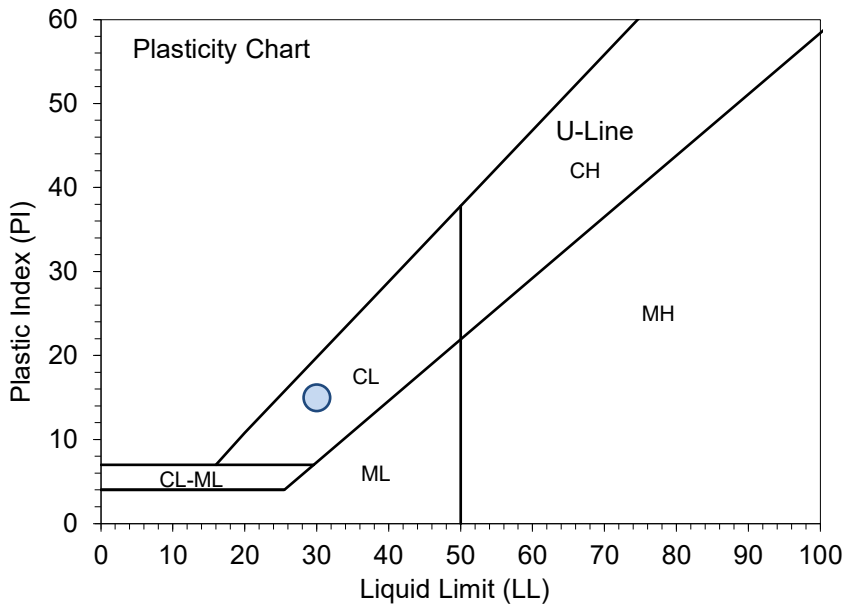
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	34	29	17
Wet Soil + Tare (g):	25.21	28.96	24.78
Dry Soil + Tare (g):	22.32	25.47	22.06
Moisture Loss (g):	2.89	3.49	2.72
Tare (g):	12.21	13.52	13.47
Dry Soil (g):	10.11	11.95	8.59
Moisture Content, w (%):	28.59	29.21	31.66
One-Point LL:		30	

Results

Liquid Limit, LL:	30
Plastic Limit, PL:	15
Plasticity Index, PI:	15





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - bn clay
As-received water content(%):	12.4	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	20
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

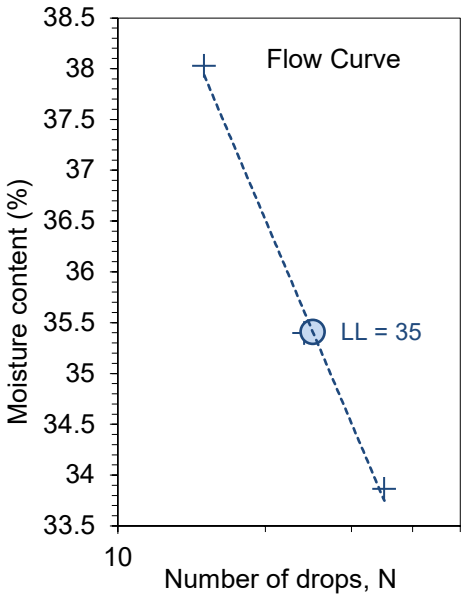
Determination No:	1	2
Wet Soil + Tare (g):	19.21	19.75
Dry Soil + Tare (g):	18.30	18.89
Moisture Loss (g):	0.91	0.86
Tare (g):	12.28	13.22
Dry Soil (g):	6.02	5.67
Moisture Content, w (%):	15.12	15.17

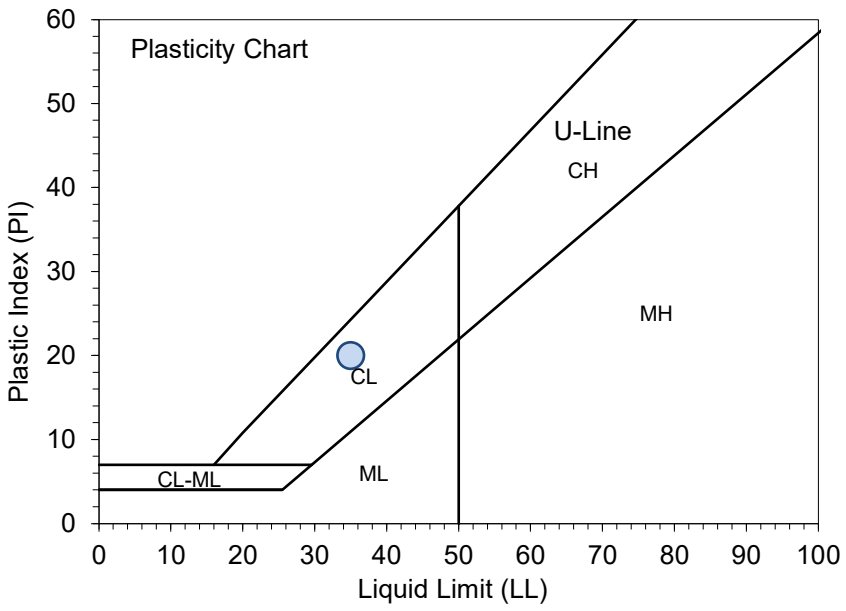
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	24	15
Wet Soil + Tare (g):	26.18	26.09	25.03
Dry Soil + Tare (g):	23.01	22.78	21.90
Moisture Loss (g):	3.17	3.31	3.13
Tare (g):	13.65	13.43	13.67
Dry Soil (g):	9.36	9.35	8.23
Moisture Content, w (%):	33.87	35.40	38.03
One-Point LL:		35	

Results

Liquid Limit, LL:	35
Plastic Limit, PL:	15
Plasticity Index, PI:	20





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 30-33 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn clay
As-received water content(%):	10.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

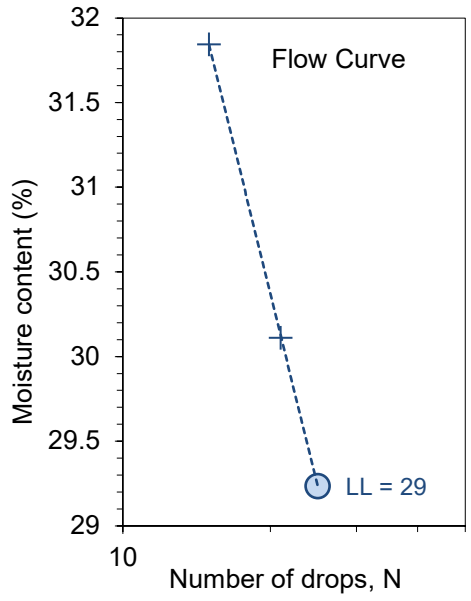
Determination No:	1	2
Wet Soil + Tare (g):	20.40	20.23
Dry Soil + Tare (g):	19.46	19.37
Moisture Loss (g):	0.94	0.86
Tare (g):	13.35	13.51
Dry Soil (g):	6.11	5.86
Moisture Content, w (%):	15.38	14.68

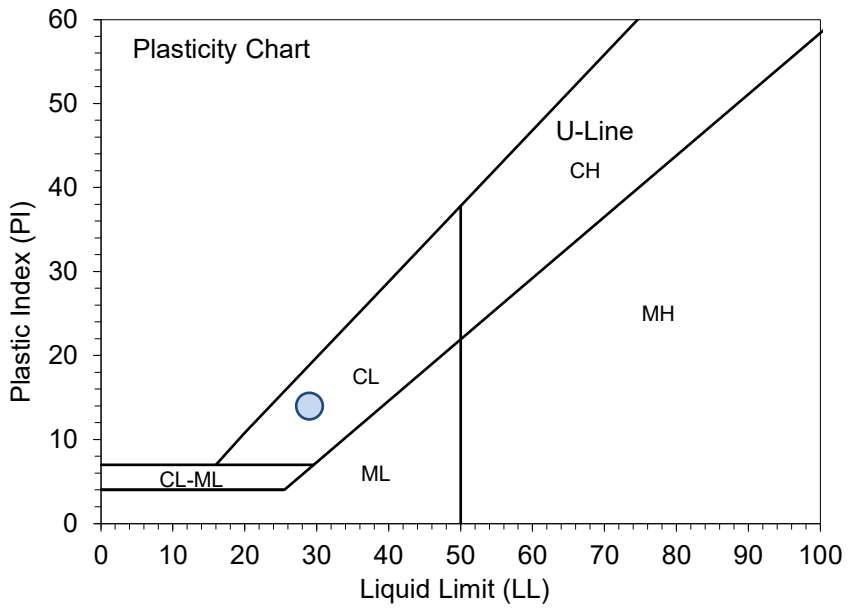
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	25	21	15
Wet Soil + Tare (g):	25.41	25.35	28.60
Dry Soil + Tare (g):	22.55	22.42	24.96
Moisture Loss (g):	2.86	2.93	3.64
Tare (g):	12.77	12.69	13.53
Dry Soil (g):	9.78	9.73	11.43
Moisture Content, w (%):	29.24	30.11	31.85
One-Point LL:	29	29	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	15
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 7-10 ft

Tested by: MGS Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	It ol bn - bn clay
As-received water content(%):	21.8	Approximate maximum particle size:	No. 4
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

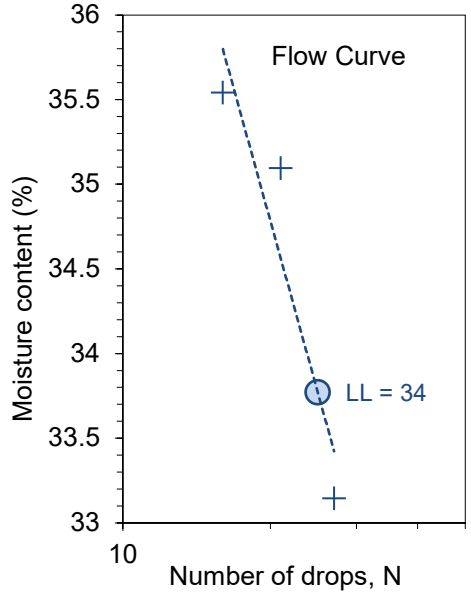
Determination No:	1	2
Wet Soil + Tare (g):	20.44	20.46
Dry Soil + Tare (g):	19.50	19.48
Moisture Loss (g):	0.94	0.98
Tare (g):	13.42	13.24
Dry Soil (g):	6.08	6.24
Moisture Content, w (%):	15.46	15.71

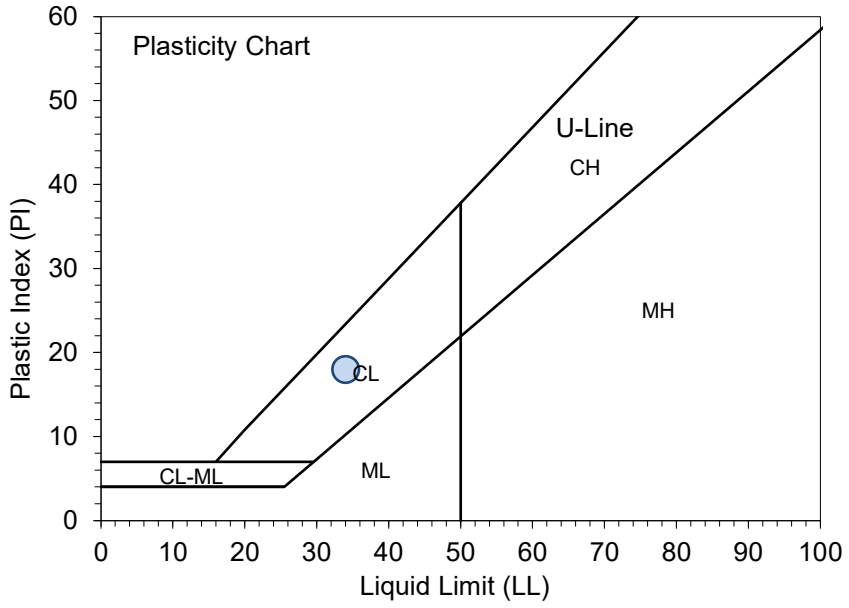
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	27	21	16
Wet Soil + Tare (g):	24.27	26.14	25.99
Dry Soil + Tare (g):	21.30	22.49	22.72
Moisture Loss (g):	2.97	3.65	3.27
Tare (g):	12.34	12.09	13.52
Dry Soil (g):	8.96	10.40	9.20
Moisture Content, w (%):	33.15	35.10	35.54
One-Point LL:	33	34	

Results

Liquid Limit, LL:	34
Plastic Limit, PL:	16
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Tested by: CML Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	pl ol bn - lt bn silt
As-received water content(%):	6.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

Determination No:	1	2
Wet Soil + Tare (g):	21.13	20.64
Dry Soil + Tare (g):	20.21	19.72
Moisture Loss (g):	0.92	0.92
Tare (g):	13.54	12.92
Dry Soil (g):	6.67	6.80
Moisture Content, w (%):	13.79	13.53

Liquid Limit

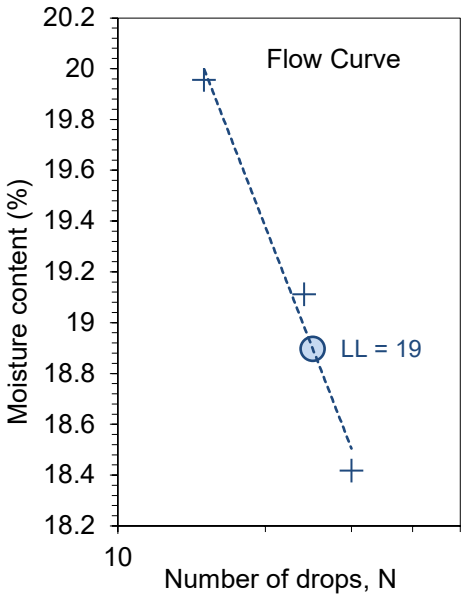
Determination No:	1	2	3
Number of Drops, N:	30	24	15
Wet Soil + Tare (g):	24.37	26.22	24.48
Dry Soil + Tare (g):	22.53	24.15	22.61
Moisture Loss (g):	1.84	2.07	1.87
Tare (g):	12.54	13.32	13.24
Dry Soil (g):	9.99	10.83	9.37
Moisture Content, w (%):	18.42	19.11	19.96
One-Point LL:	19	19	

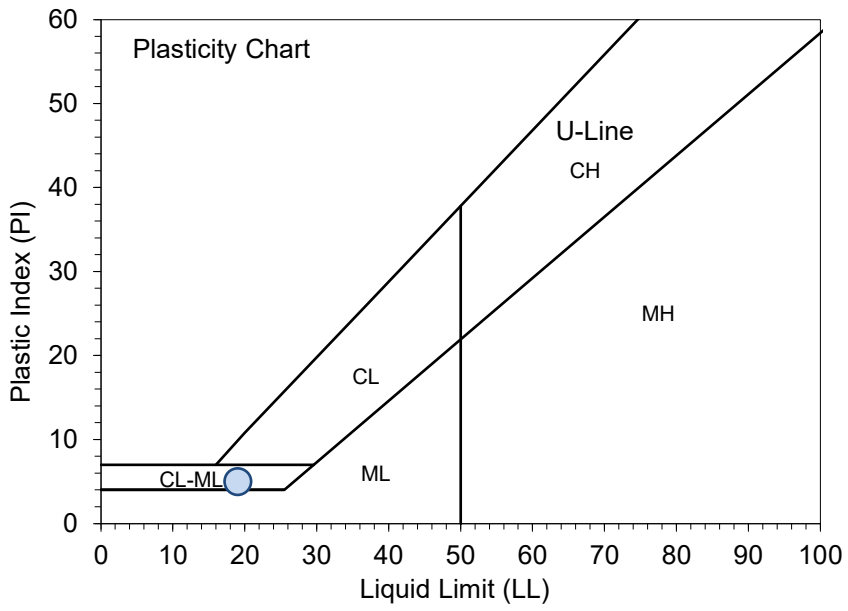
Results

Liquid Limit, LL: 19

Plastic Limit, PL: 14

Plasticity Index, PI: 5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - bn silt
As-received water content(%):	16.5	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

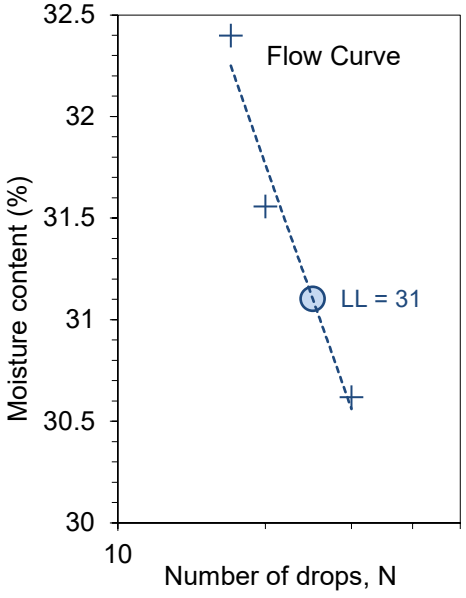
Determination No:	1	2
Wet Soil + Tare (g):	20.25	19.87
Dry Soil + Tare (g):	19.28	18.88
Moisture Loss (g):	0.97	0.99
Tare (g):	13.52	12.94
Dry Soil (g):	5.76	5.94
Moisture Content, w (%):	16.84	16.67

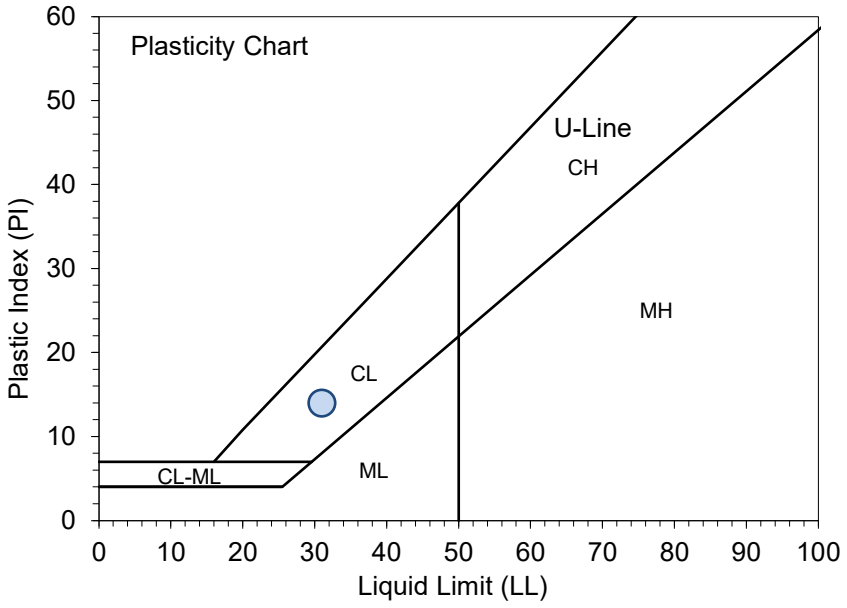
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	20	17
Wet Soil + Tare (g):	26.21	26.45	25.37
Dry Soil + Tare (g):	23.20	23.31	22.48
Moisture Loss (g):	3.01	3.14	2.89
Tare (g):	13.37	13.36	13.56
Dry Soil (g):	9.83	9.95	8.92
Moisture Content, w (%):	30.62	31.56	32.40
One-Point LL:	31	31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	17
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 30-33 ft

Tested by: CML Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	10.1	Approximate maximum particle size:	2"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	25
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

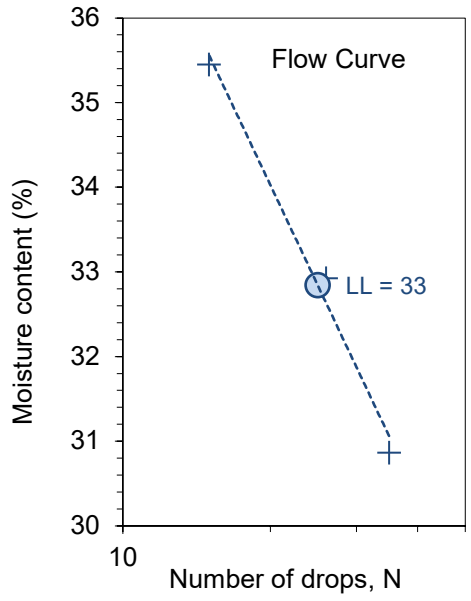
Determination No:	1	2
Wet Soil + Tare (g):	20.99	21.04
Dry Soil + Tare (g):	19.96	20.03
Moisture Loss (g):	1.03	1.01
Tare (g):	13.34	13.41
Dry Soil (g):	6.62	6.62
Moisture Content, w (%):	15.56	15.26

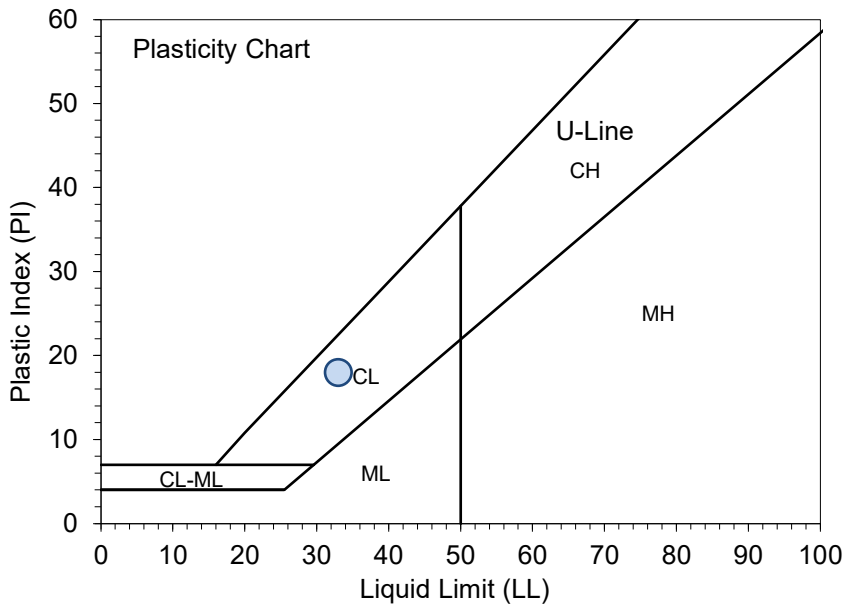
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	26	15
Wet Soil + Tare (g):	25.03	25.76	27.92
Dry Soil + Tare (g):	22.36	22.52	24.13
Moisture Loss (g):	2.67	3.24	3.79
Tare (g):	13.71	12.68	13.44
Dry Soil (g):	8.65	9.84	10.69
Moisture Content, w (%):	30.87	32.93	35.45
One-Point LL:		33	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	15
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn gravel
As-received water content(%):	Not Requested	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	20
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

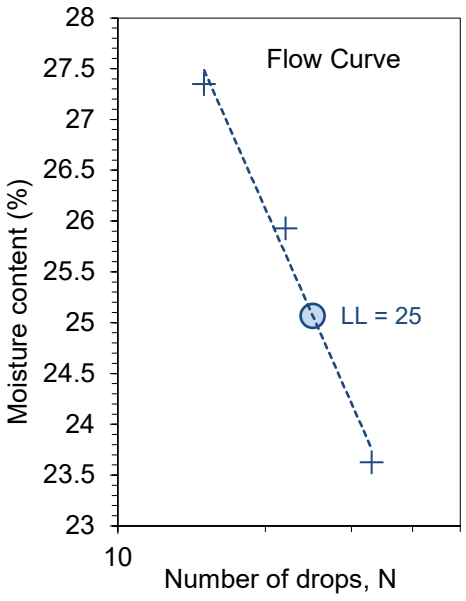
Determination No:	1	2
Wet Soil + Tare (g):	21.15	20.86
Dry Soil + Tare (g):	20.10	19.82
Moisture Loss (g):	1.05	1.04
Tare (g):	13.54	13.35
Dry Soil (g):	6.56	6.47
Moisture Content, w (%):	16.01	16.07

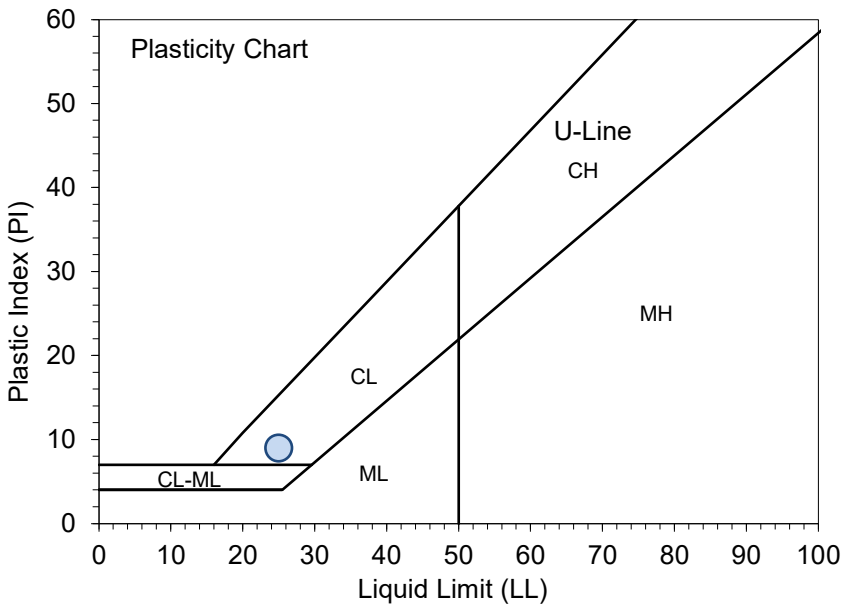
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	33	22	15
Wet Soil + Tare (g):	25.36	27.77	26.44
Dry Soil + Tare (g):	23.03	24.92	23.62
Moisture Loss (g):	2.33	2.85	2.82
Tare (g):	13.17	13.93	13.31
Dry Soil (g):	9.86	10.99	10.31
Moisture Content, w (%):	23.63	25.93	27.35
One-Point LL:		26	

Results

Liquid Limit, LL:	25
Plastic Limit, PL:	16
Plasticity Index, PI:	9





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Tested by: AT Date: 14-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Oven Dry	Laboratory sample description:	ol bn - lt bn clay
As-received water content(%):	13.7	Approximate maximum particle size:	1.5"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

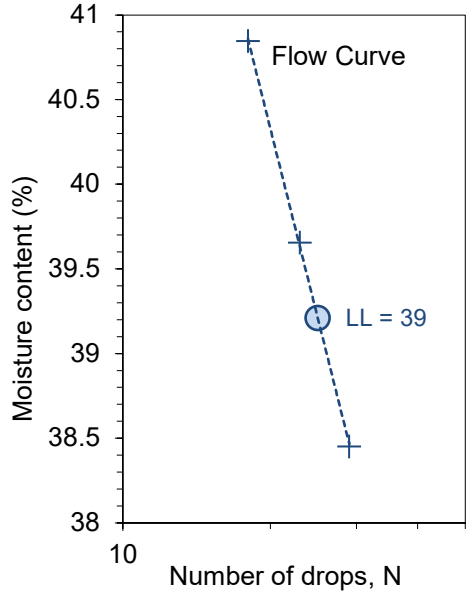
Determination No:	1	2
Wet Soil + Tare (g):	20.12	19.90
Dry Soil + Tare (g):	19.24	19.05
Moisture Loss (g):	0.88	0.85
Tare (g):	13.41	13.55
Dry Soil (g):	5.83	5.50
Moisture Content, w (%):	15.09	15.45

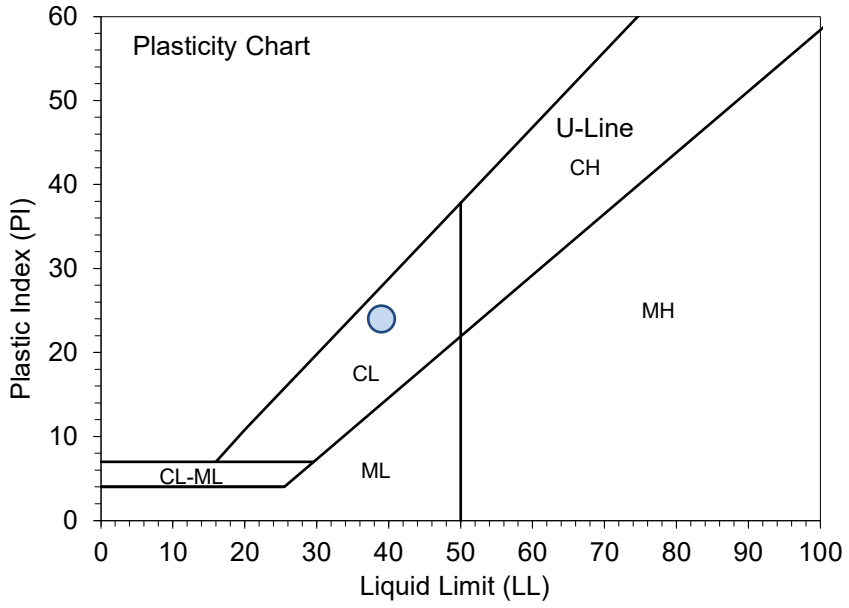
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	23	18
Wet Soil + Tare (g):	25.53	23.25	24.89
Dry Soil + Tare (g):	22.20	20.47	21.61
Moisture Loss (g):	3.33	2.78	3.28
Tare (g):	13.54	13.46	13.58
Dry Soil (g):	8.66	7.01	8.03
Moisture Content, w (%):	38.45	39.66	40.85
One-Point LL:	39	39	

Results

Liquid Limit, LL:	39
Plastic Limit, PL:	15
Plasticity Index, PI:	24





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 15-17 ft

Tested by: AT Date: 13-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - yl bn clay
As-received water content(%):	16.1	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

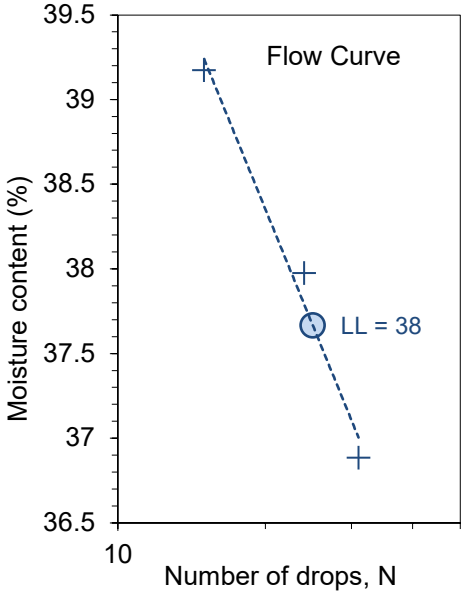
Determination No:	1	2
Wet Soil + Tare (g):	19.43	20.15
Dry Soil + Tare (g):	18.38	18.97
Moisture Loss (g):	1.05	1.18
Tare (g):	13.17	13.33
Dry Soil (g):	5.21	5.64
Moisture Content, w (%):	20.15	20.92

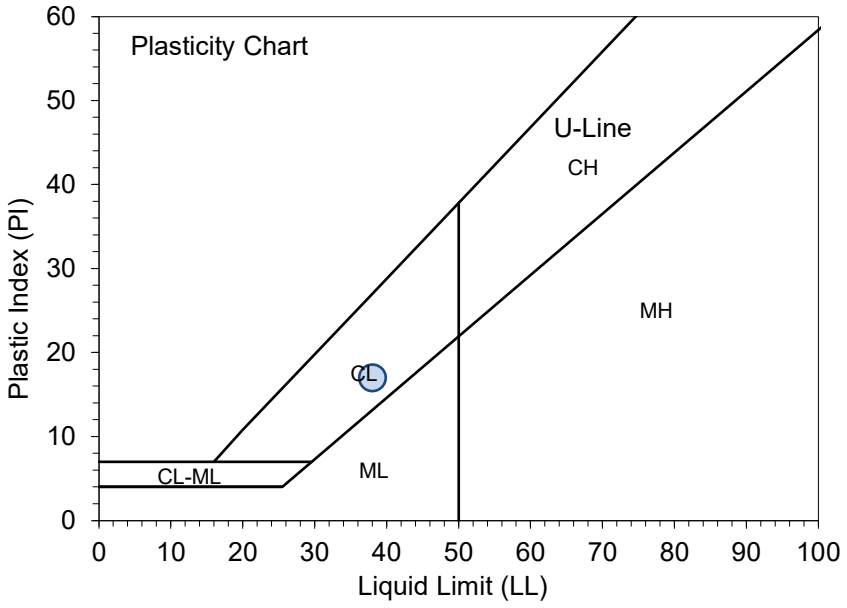
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	24	15
Wet Soil + Tare (g):	24.39	24.09	24.32
Dry Soil + Tare (g):	21.38	21.20	21.28
Moisture Loss (g):	3.01	2.89	3.04
Tare (g):	13.22	13.59	13.52
Dry Soil (g):	8.16	7.61	7.76
Moisture Content, w (%):	36.89	37.98	39.18
One-Point LL:		38	

Results

Liquid Limit, LL:	38
Plastic Limit, PL:	21
Plasticity Index, PI:	17





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 17.5-19 ft

Tested by: AT Date: 14-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - lt bn clay
As-received water content(%):	13.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

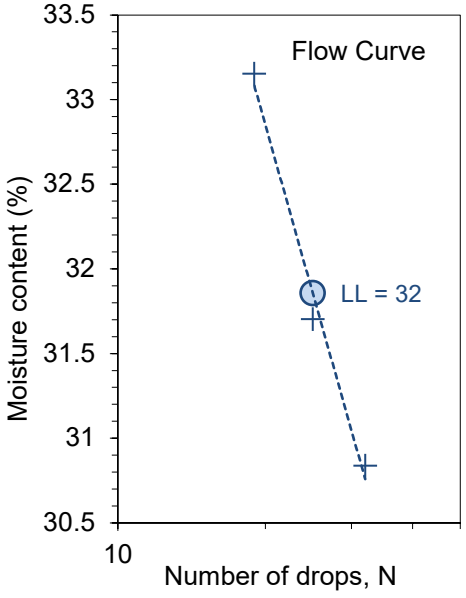
Determination No:	1	2
Wet Soil + Tare (g):	19.95	20.16
Dry Soil + Tare (g):	19.14	19.35
Moisture Loss (g):	0.81	0.81
Tare (g):	13.37	13.72
Dry Soil (g):	5.77	5.63
Moisture Content, w (%):	14.04	14.39

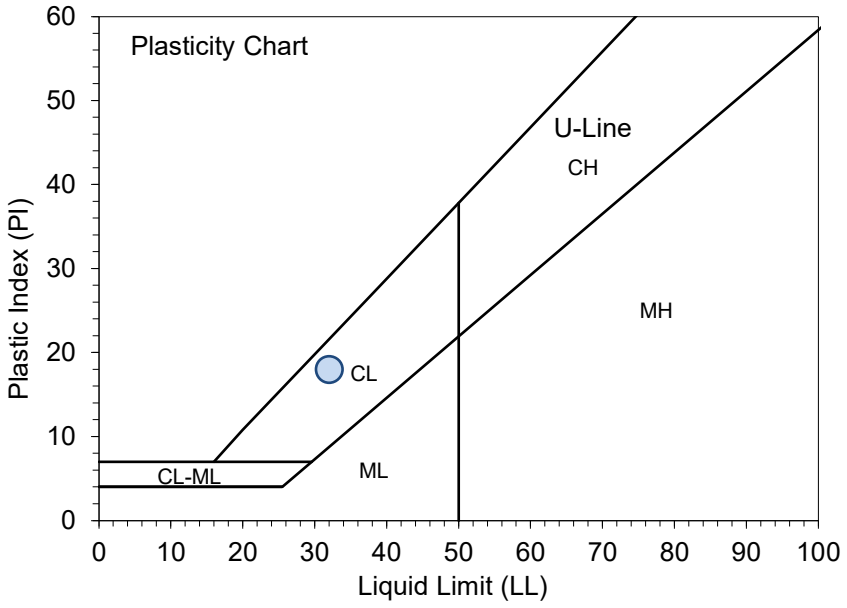
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	32	25	19
Wet Soil + Tare (g):	24.78	24.96	26.04
Dry Soil + Tare (g):	22.10	22.17	22.95
Moisture Loss (g):	2.68	2.79	3.09
Tare (g):	13.41	13.37	13.63
Dry Soil (g):	8.69	8.80	9.32
Moisture Content, w (%):	30.84	31.70	33.15
One-Point LL:		32	

Results

Liquid Limit, LL:	32
Plastic Limit, PL:	14
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-11

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Tested by: CML Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn clay
As-received water content(%):	7.1	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	30
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

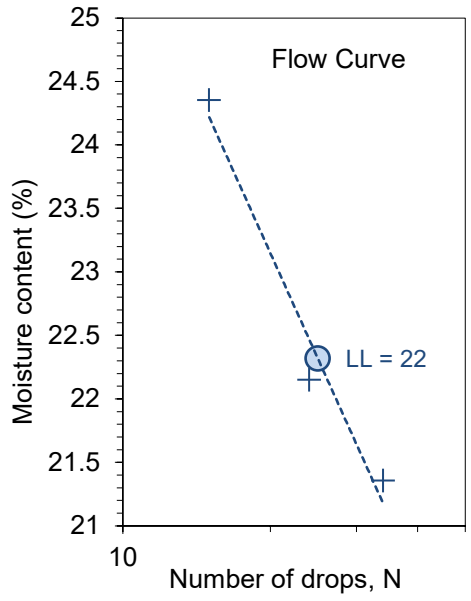
Determination No:	1	2
Wet Soil + Tare (g):	21.19	21.07
Dry Soil + Tare (g):	20.16	20.08
Moisture Loss (g):	1.03	0.99
Tare (g):	13.51	13.52
Dry Soil (g):	6.65	6.56
Moisture Content, w (%):	15.49	15.09

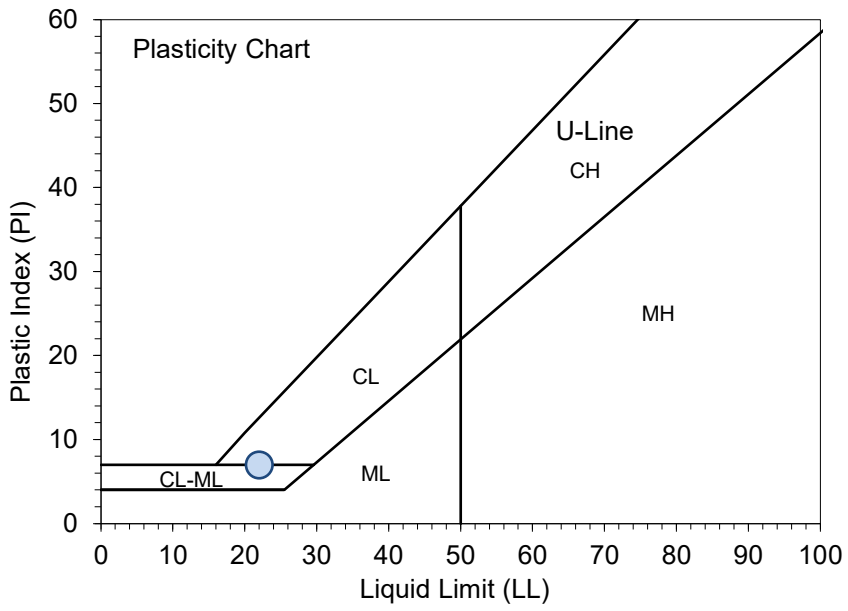
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	34	24	15
Wet Soil + Tare (g):	26.21	23.44	27.01
Dry Soil + Tare (g):	23.95	21.63	24.37
Moisture Loss (g):	2.26	1.81	2.64
Tare (g):	13.37	13.46	13.53
Dry Soil (g):	10.58	8.17	10.84
Moisture Content, w (%):	21.36	22.15	24.35
One-Point LL:		22	

Results

Liquid Limit, LL:	22
Plastic Limit, PL:	15
Plasticity Index, PI:	7





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 5-7 ft

Tested by: AT Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn clay
As-received water content(%):	10.2	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

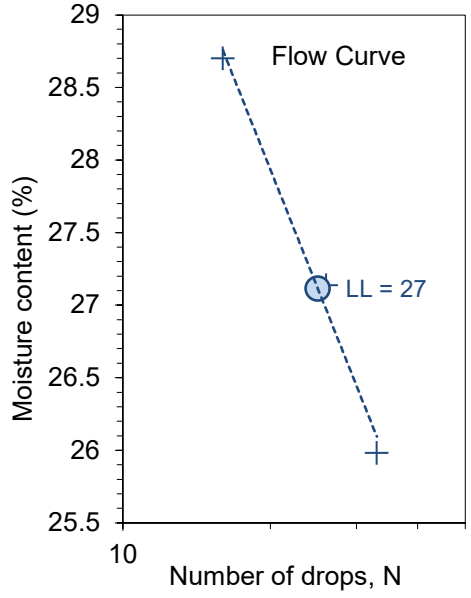
Determination No:	1	2
Wet Soil + Tare (g):	21.43	19.90
Dry Soil + Tare (g):	20.42	18.89
Moisture Loss (g):	1.01	1.01
Tare (g):	13.70	12.28
Dry Soil (g):	6.72	6.61
Moisture Content, w (%):	15.03	15.28

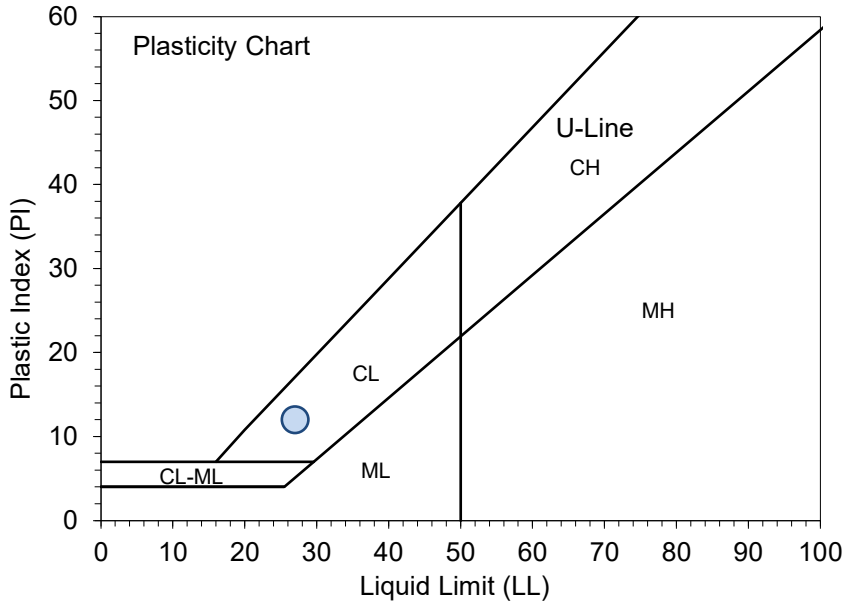
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	33	26	16
Wet Soil + Tare (g):	27.08	27.26	26.22
Dry Soil + Tare (g):	24.24	24.31	23.41
Moisture Loss (g):	2.84	2.95	2.81
Tare (g):	13.31	13.44	13.62
Dry Soil (g):	10.93	10.87	9.79
Moisture Content, w (%):	25.98	27.14	28.70
One-Point LL:		27	

Results

Liquid Limit, LL:	27
Plastic Limit, PL:	15
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 10-12 ft

Tested by: CML Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn silt
As-received water content(%):	12.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

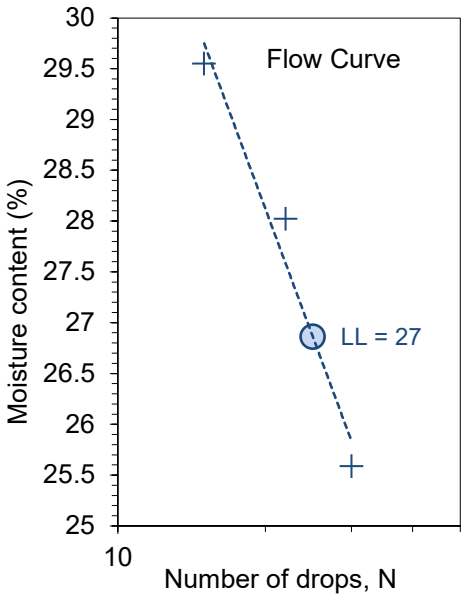
Determination No:	1	2
Wet Soil + Tare (g):	21.25	21.25
Dry Soil + Tare (g):	20.12	20.16
Moisture Loss (g):	1.13	1.09
Tare (g):	13.48	13.69
Dry Soil (g):	6.64	6.47
Moisture Content, w (%):	17.02	16.85

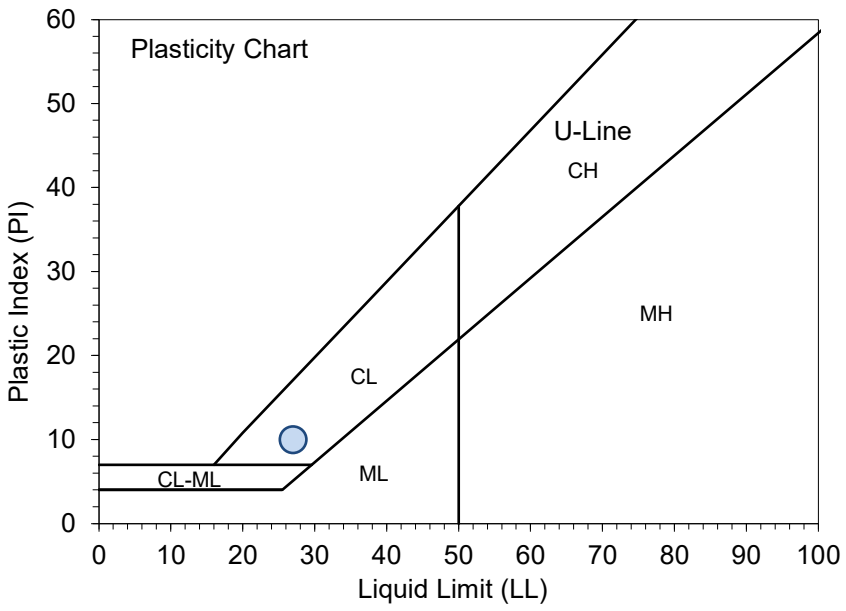
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	22	15
Wet Soil + Tare (g):	26.06	25.37	26.24
Dry Soil + Tare (g):	23.47	22.80	23.27
Moisture Loss (g):	2.59	2.57	2.97
Tare (g):	13.35	13.63	13.22
Dry Soil (g):	10.12	9.17	10.05
Moisture Content, w (%):	25.59	28.03	29.55
One-Point LL:	26	28	

Results

Liquid Limit, LL:	27
Plastic Limit, PL:	17
Plasticity Index, PI:	10





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 20-21 ft

Tested by: PJF Date: 14-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn clay
As-received water content(%):	10.6	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

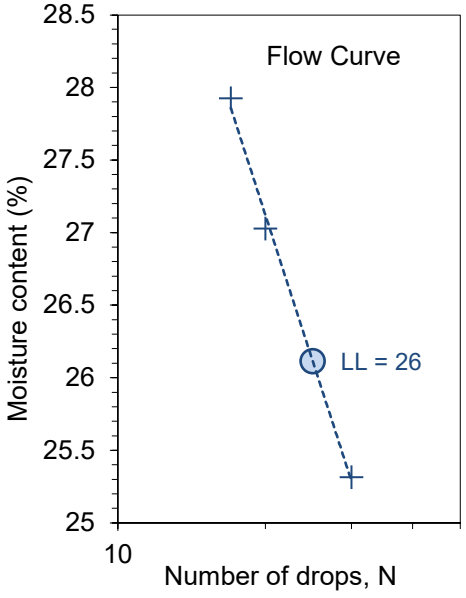
Determination No:	1	2
Wet Soil + Tare (g):	20.36	20.51
Dry Soil + Tare (g):	19.50	19.65
Moisture Loss (g):	0.86	0.86
Tare (g):	13.51	13.56
Dry Soil (g):	5.99	6.09
Moisture Content, w (%):	14.36	14.12

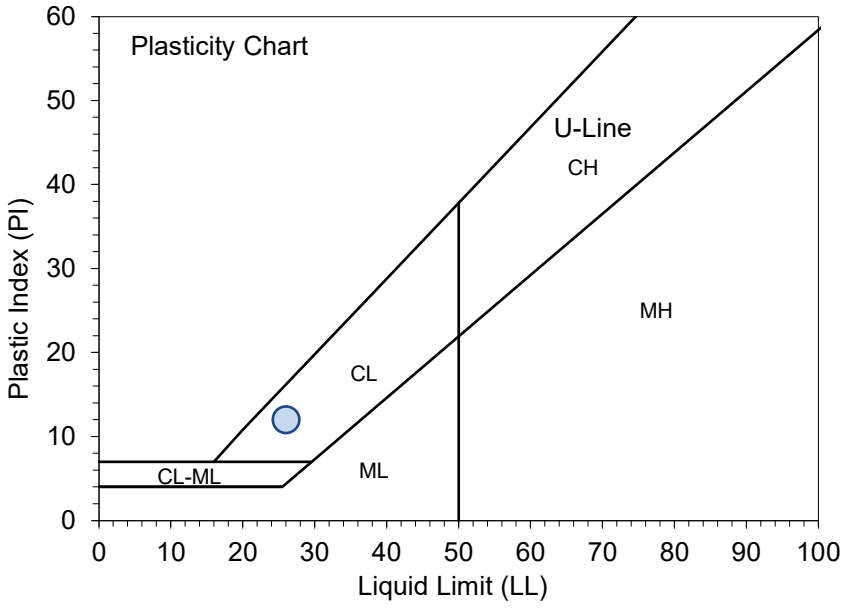
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	20	17
Wet Soil + Tare (g):	27.36	25.95	26.13
Dry Soil + Tare (g):	24.56	23.02	23.34
Moisture Loss (g):	2.80	2.93	2.79
Tare (g):	13.50	12.18	13.35
Dry Soil (g):	11.06	10.84	9.99
Moisture Content, w (%):	25.32	27.03	27.93
One-Point LL:	26	26	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	14
Plasticity Index, PI:	12





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Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 18-19 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: gy - bn clay

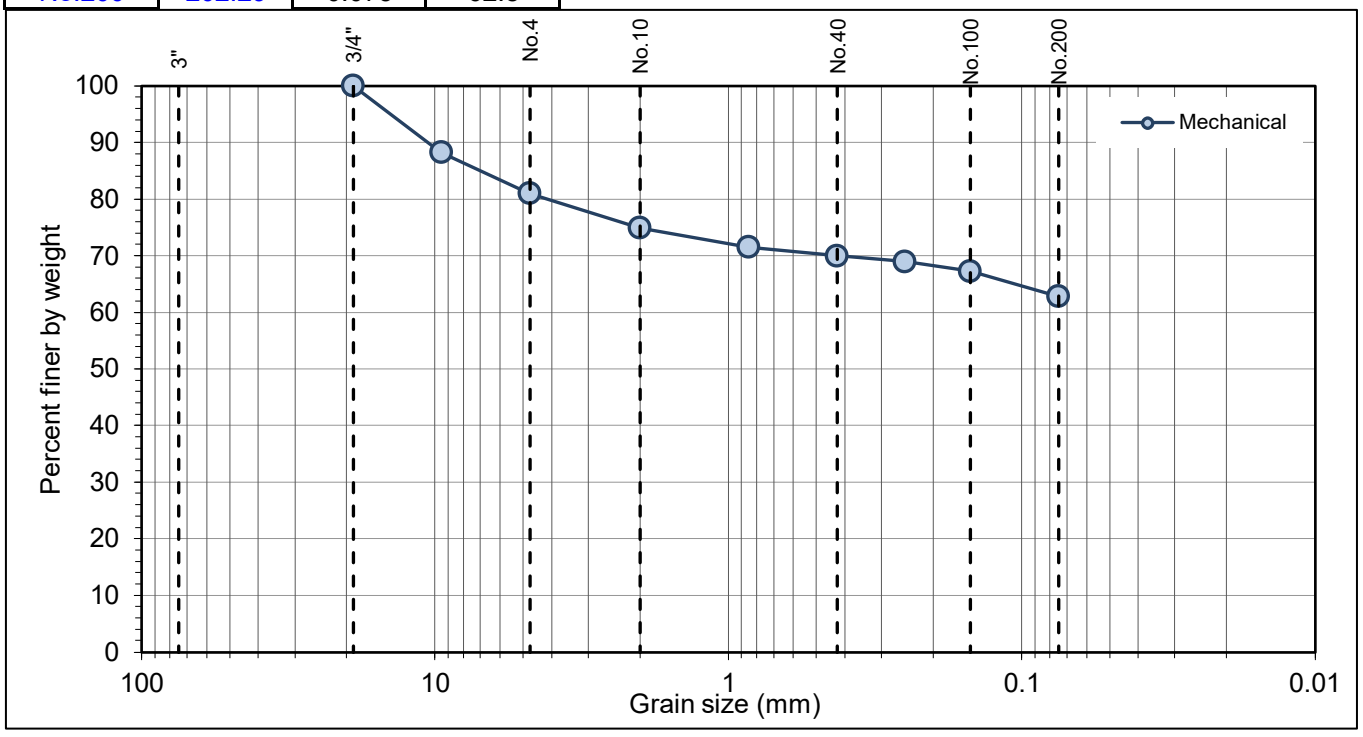
Reduced by: AT Comments: 1.5" rock not included in curve (274.56 g).

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	611.04	543.90
	-	
	611.04	543.90
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	806.82
Dry soil + tare (g):	-	739.68
Tare (g):	-	195.78
Moisture content (%):	0.0	12.3

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	63.83	9.5	88.3
No.4	103.44	4.75	81.0
No.10	136.66	2	74.9
No.20	154.83	0.85	71.5
No.40	163.20	0.425	70.0
No.60	168.87	0.25	69.0
No.100	177.88	0.15	67.3
No.200	202.29	0.075	62.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 27-29 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: bn - gy clay

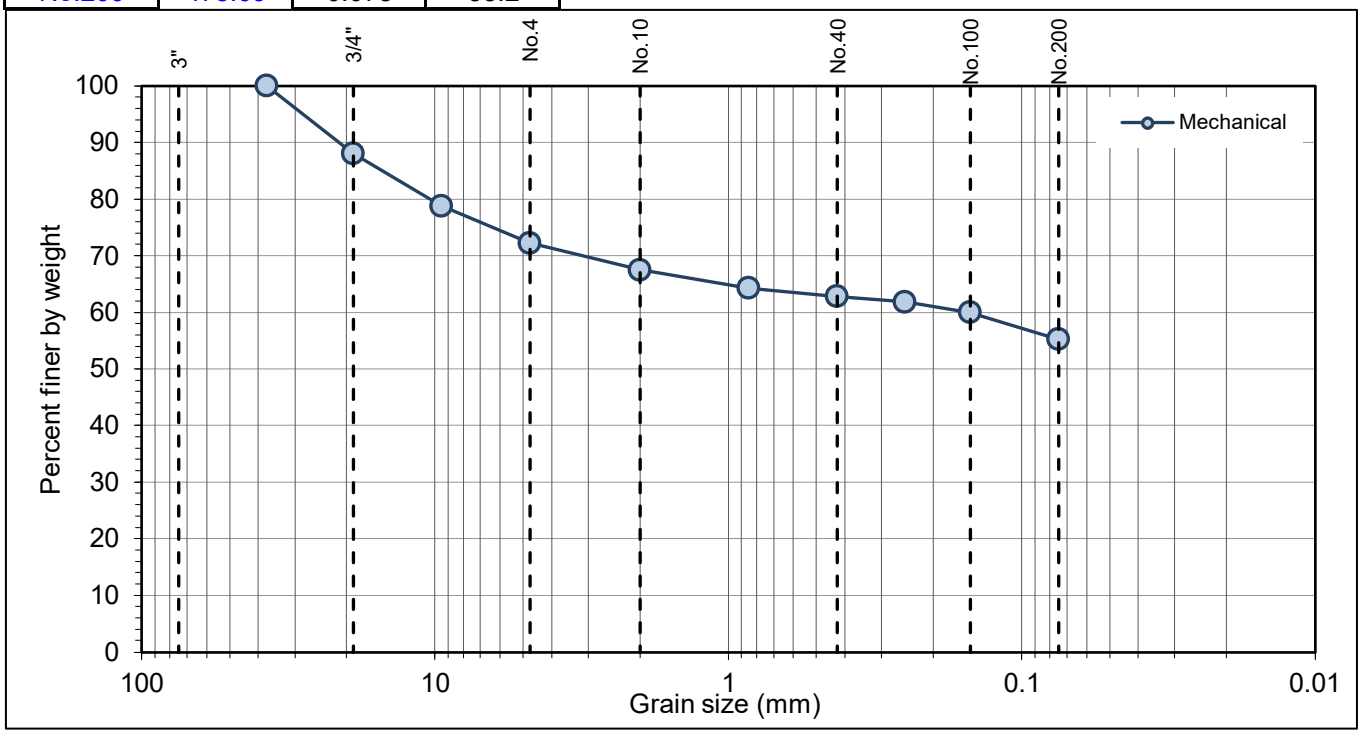
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1176.70	1060.40
	-	
	1176.70	1060.40
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1190.54
Dry soil + tare (g):	-	1074.24
Tare (g):	-	13.84
Moisture content (%):	0.0	11.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	126.52	19	88.1
3/8"	224.74	9.5	78.8
No.4	294.18	4.75	72.3
No.10	344.98	2	67.5
No.20	378.88	0.85	64.3
No.40	394.65	0.425	62.8
No.60	404.46	0.25	61.9
No.100	424.49	0.15	60.0
No.200	475.09	0.075	55.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 54.5-57 ft

Date: 16-Nov-23 Location: -

Tested by: DBW Lab soil description: gy - dk gy clay

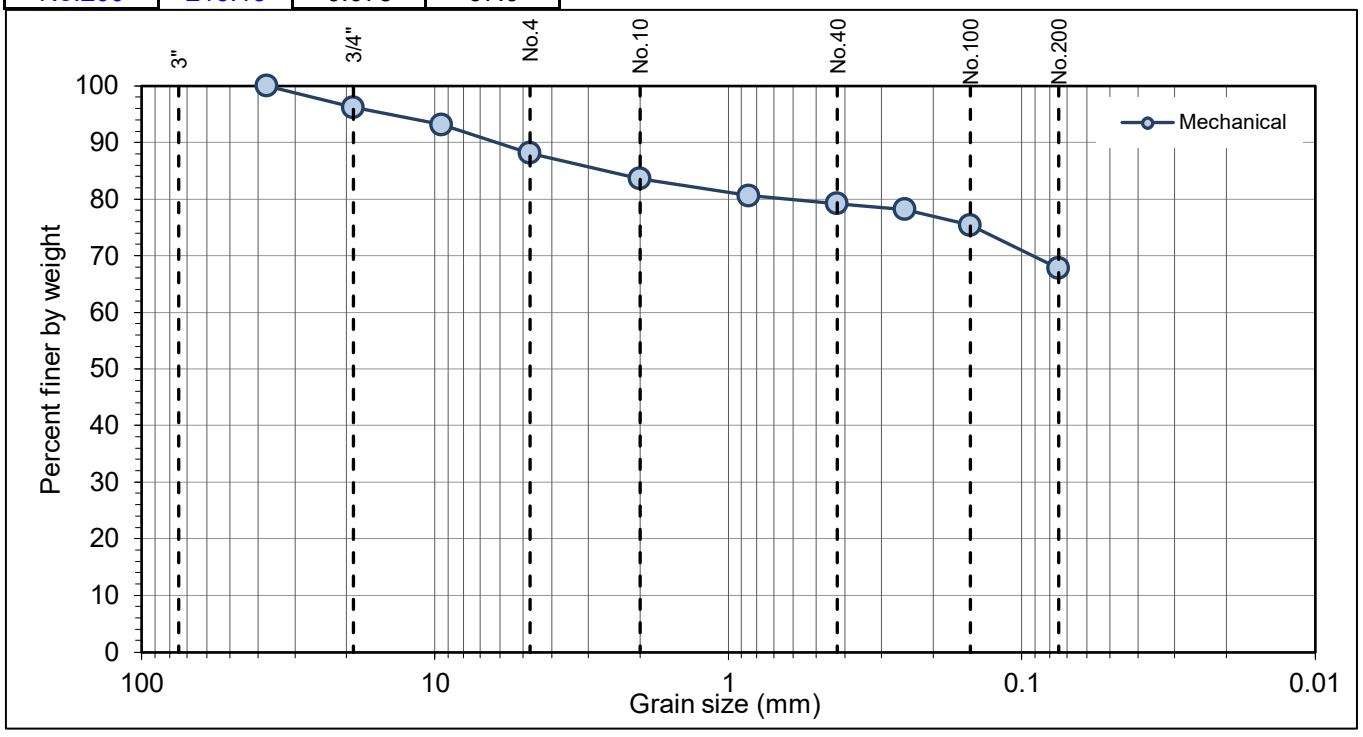
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	756.76	672.36
	-	
	756.76	672.36
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	953.45
Dry soil + tare (g):	-	869.05
Tare (g):	-	196.69
Moisture content (%):	0.0	12.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	25.43	19	96.2
3/8"	45.79	9.5	93.2
No.4	79.85	4.75	88.1
No.10	110.12	2	83.6
No.20	130.27	0.85	80.6
No.40	139.92	0.425	79.2
No.60	146.52	0.25	78.2
No.100	165.51	0.15	75.4
No.200	216.13	0.075	67.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 67-69 ft

Date: 16-Nov-23 Location: -

Tested by: DBW Lab soil description: dk gy - lt bn clay

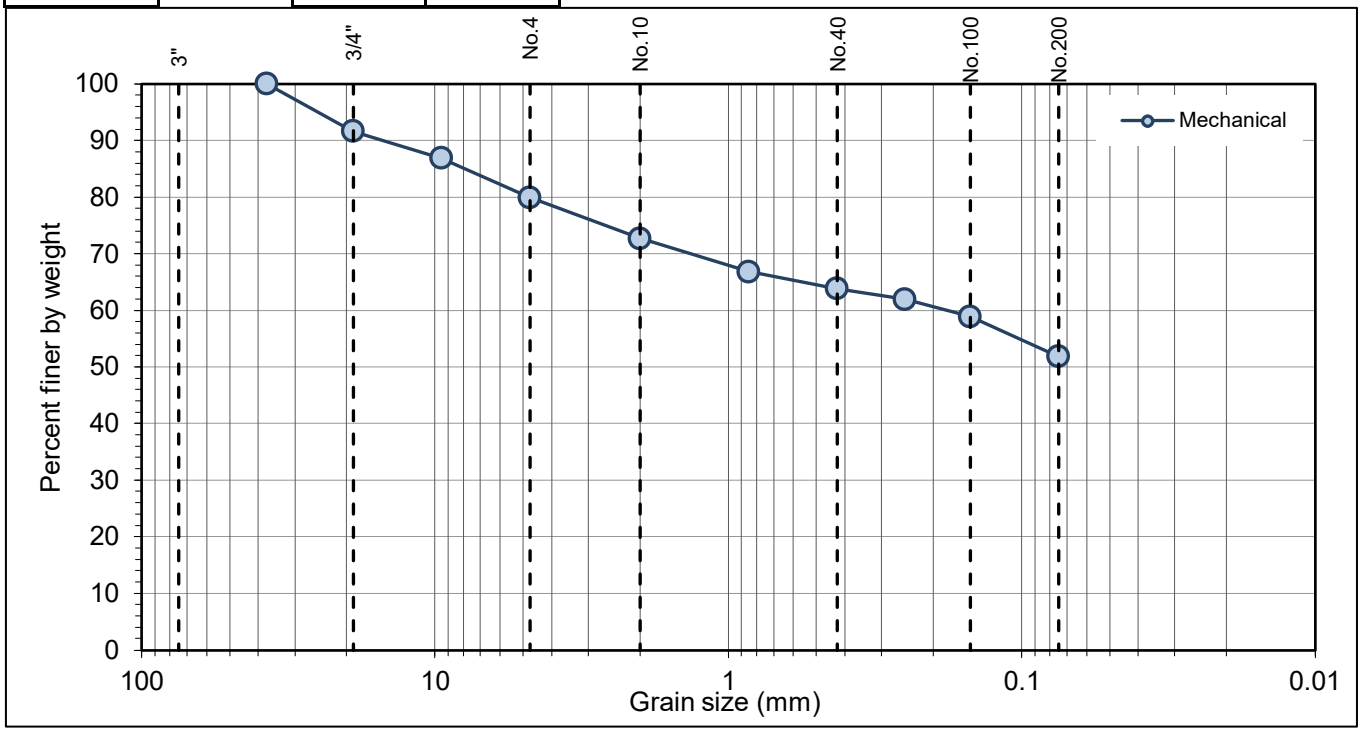
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	651.92	592.70
	-	
	651.92	592.70
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	847.34
Dry soil + tare (g):	-	788.12
Tare (g):	-	195.42
Moisture content (%):	0.0	10.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	49.64	19	91.6
3/8"	77.83	9.5	86.9
No.4	119.04	4.75	79.9
No.10	161.80	2	72.7
No.20	196.75	0.85	66.8
No.40	214.54	0.425	63.8
No.60	225.55	0.25	61.9
No.100	243.72	0.15	58.9
No.200	285.30	0.075	51.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 72.5-75 ft

Date: 16-Nov-23 Location: -

Tested by: DBW Lab soil description: gy - dk gy clay

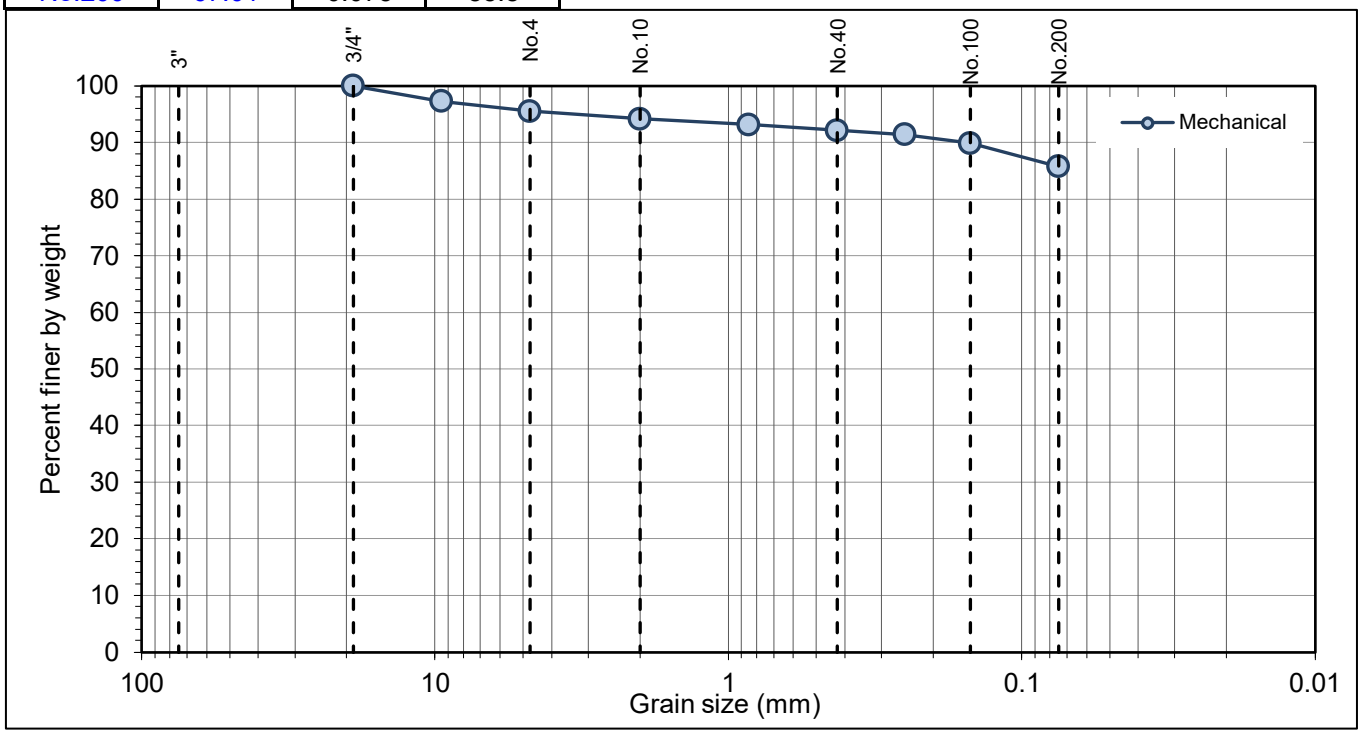
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	570.23	472.61
	-	
	570.23	472.61
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	688.39
Dry soil + tare (g):	-	590.77
Tare (g):	-	118.16
Moisture content (%):	0.0	20.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	12.74	9.5	97.3
No.4	21.18	4.75	95.5
No.10	27.46	2	94.2
No.20	32.38	0.85	93.1
No.40	36.99	0.425	92.2
No.60	40.67	0.25	91.4
No.100	47.81	0.15	89.9
No.200	67.01	0.075	85.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 14.5-16 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: bn - ol bn clay

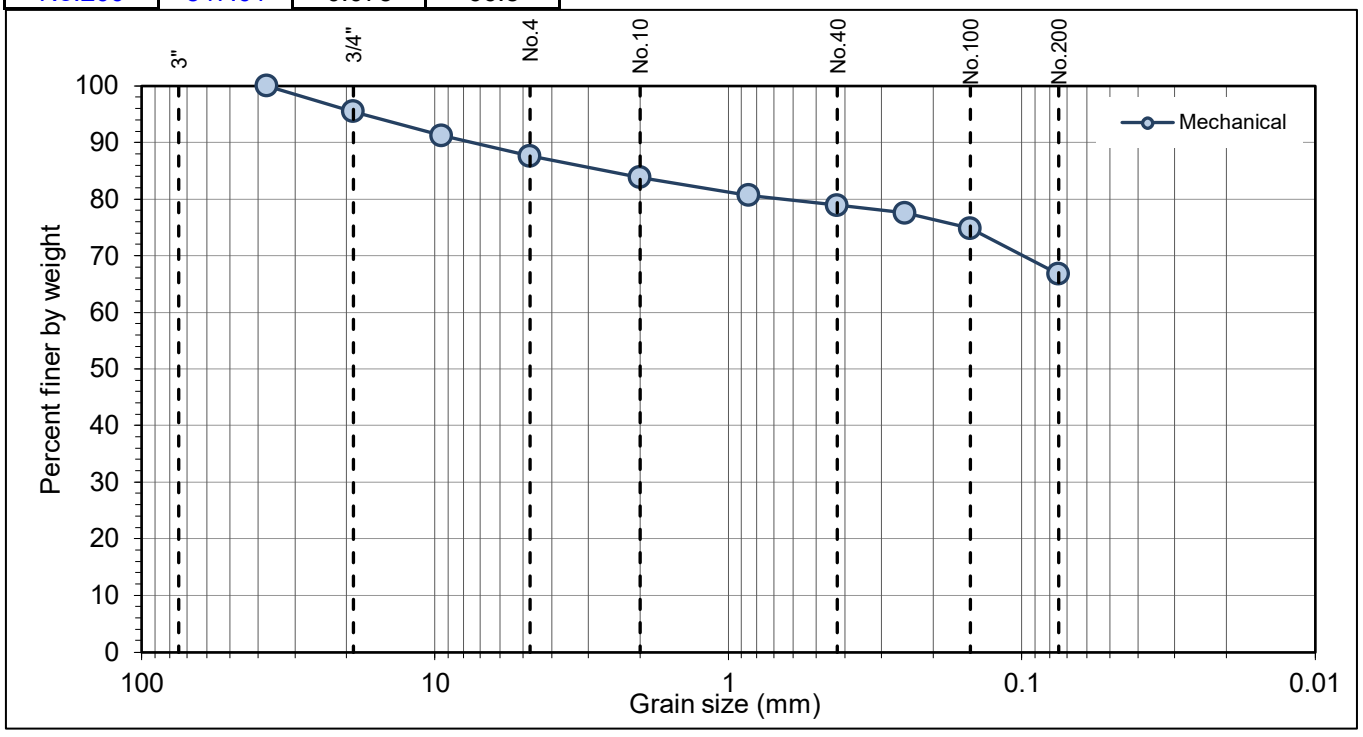
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1841.90	1646.32
	-	
	1841.90	1646.32
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	2264.09
Dry soil + tare (g):	-	2068.51
Tare (g):	-	422.19
Moisture content (%):	0.0	11.9

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	74.19	19	95.5
3/8"	144.60	9.5	91.2
No.4	203.84	4.75	87.6
No.10	266.51	2	83.8
No.20	318.13	0.85	80.7
No.40	347.49	0.425	78.9
No.60	369.50	0.25	77.6
No.100	413.96	0.15	74.9
No.200	547.01	0.075	66.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: bn - ol bn clay

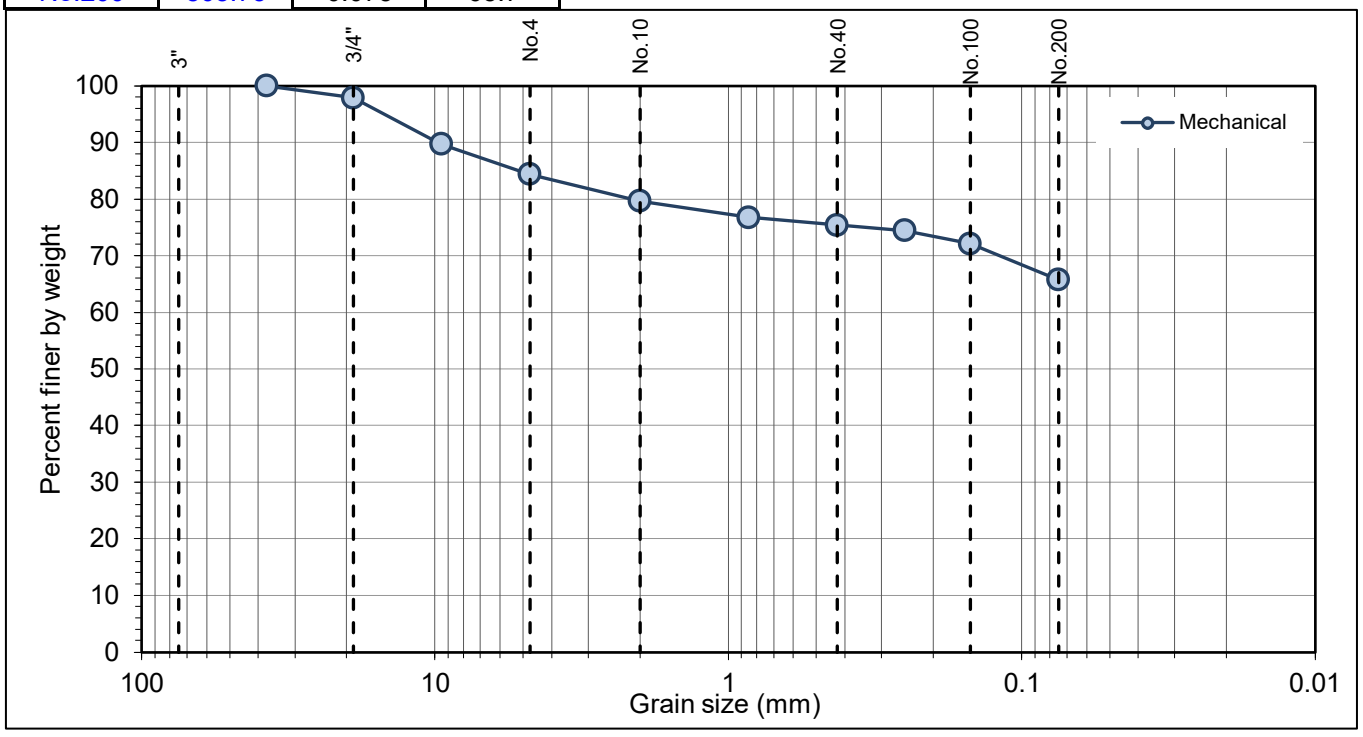
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1666.16	1470.26
	-	
	1666.16	1470.26
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	2104.69
Dry soil + tare (g):	-	1908.79
Tare (g):	-	438.53
Moisture content (%):	0.0	13.3

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	30.28	19	97.9
3/8"	150.96	9.5	89.7
No.4	229.44	4.75	84.4
No.10	298.96	2	79.7
No.20	341.90	0.85	76.7
No.40	361.85	0.425	75.4
No.60	375.86	0.25	74.4
No.100	409.90	0.15	72.1
No.200	503.73	0.075	65.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 32-35 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: bn - dk yl bn clay

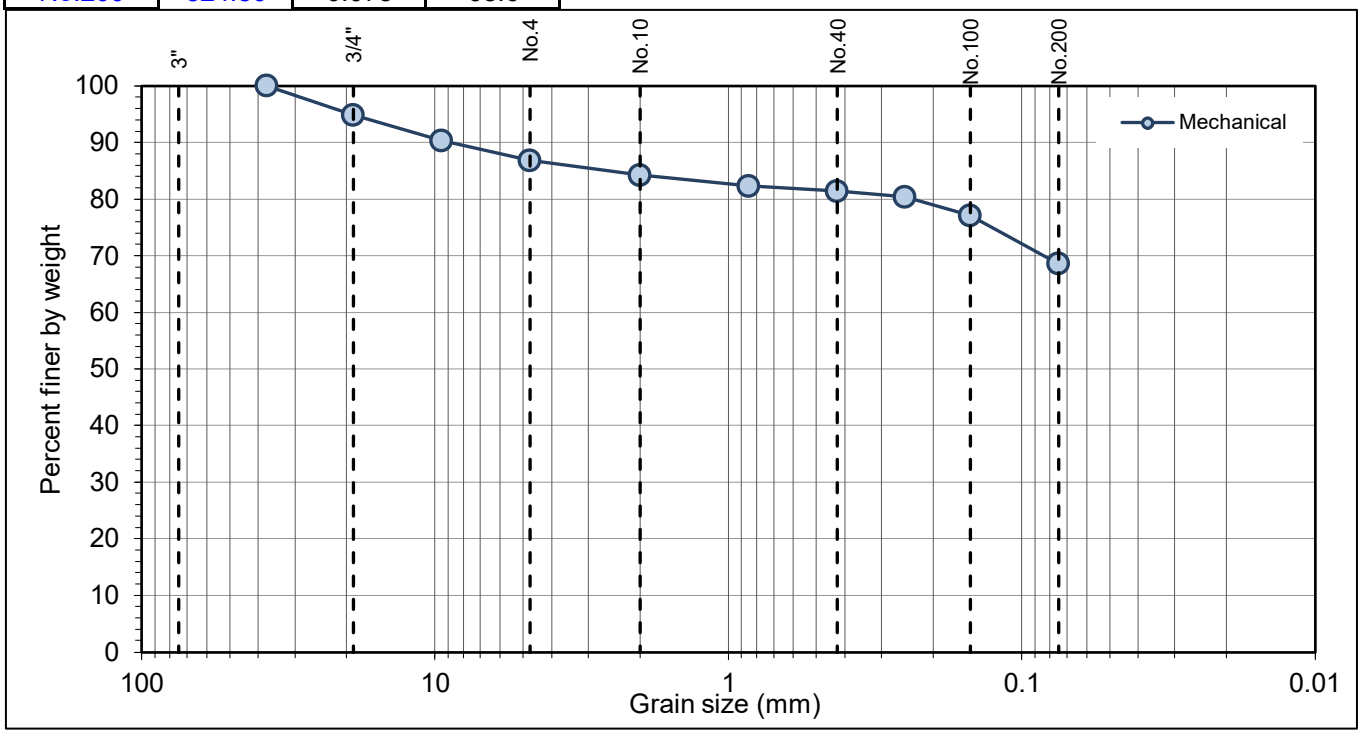
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1913.95	1670.91
	-	
	1913.95	1670.91
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	2453.36
Dry soil + tare (g):	-	2210.32
Tare (g):	-	539.41
Moisture content (%):	0.0	14.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	85.48	19	94.9
3/8"	161.21	9.5	90.4
No.4	219.81	4.75	86.8
No.10	263.64	2	84.2
No.20	295.15	0.85	82.3
No.40	311.17	0.425	81.4
No.60	327.50	0.25	80.4
No.100	382.33	0.15	77.1
No.200	524.86	0.075	68.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 38.5-40 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: lt ol bn - ol bn clay

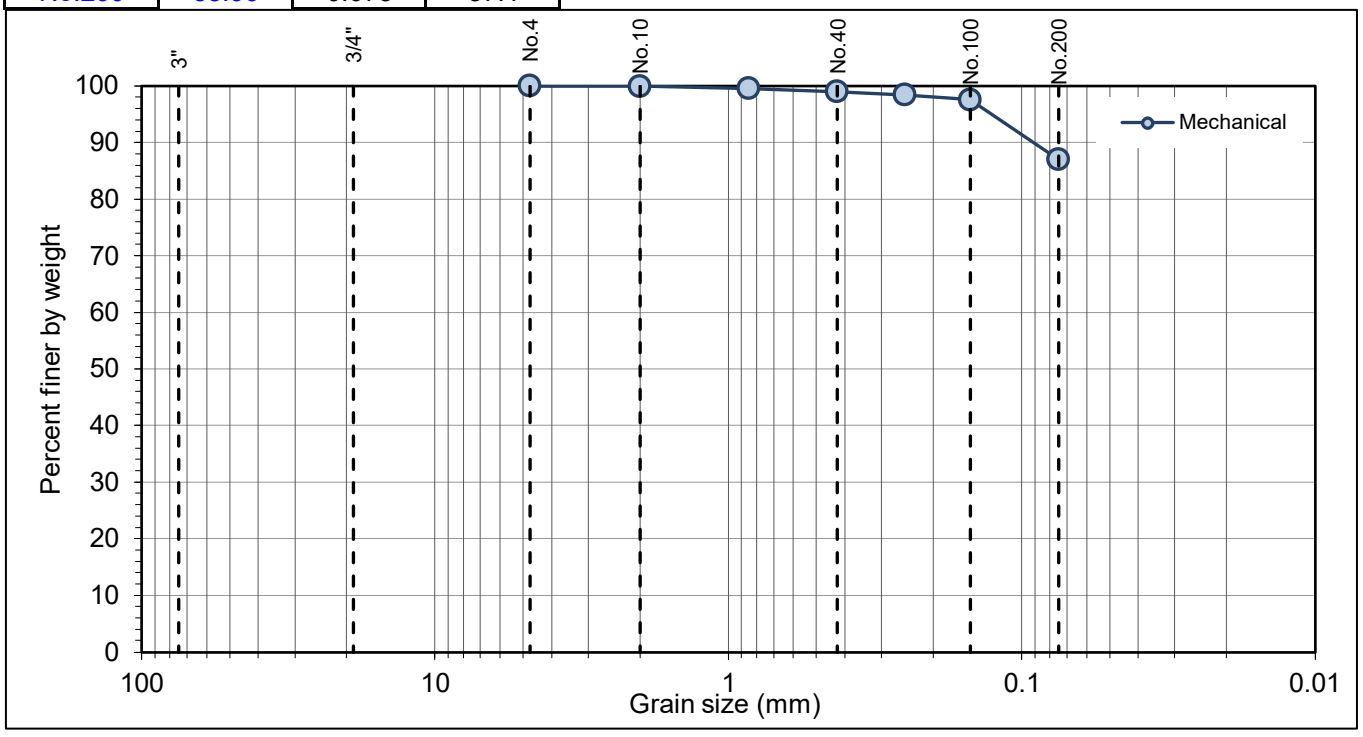
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	321.05	278.08
	-	
	321.05	278.08
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	448.30
Dry soil + tare (g):	-	405.33
Tare (g):	-	127.25
Moisture content (%):	0.0	15.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	-
No.4	-	4.75	100.0
No.10	0.15	2	99.9
No.20	1.17	0.85	99.6
No.40	2.85	0.425	99.0
No.60	4.46	0.25	98.4
No.100	6.75	0.15	97.6
No.200	35.96	0.075	87.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 52-55 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: gy - ol bn clay

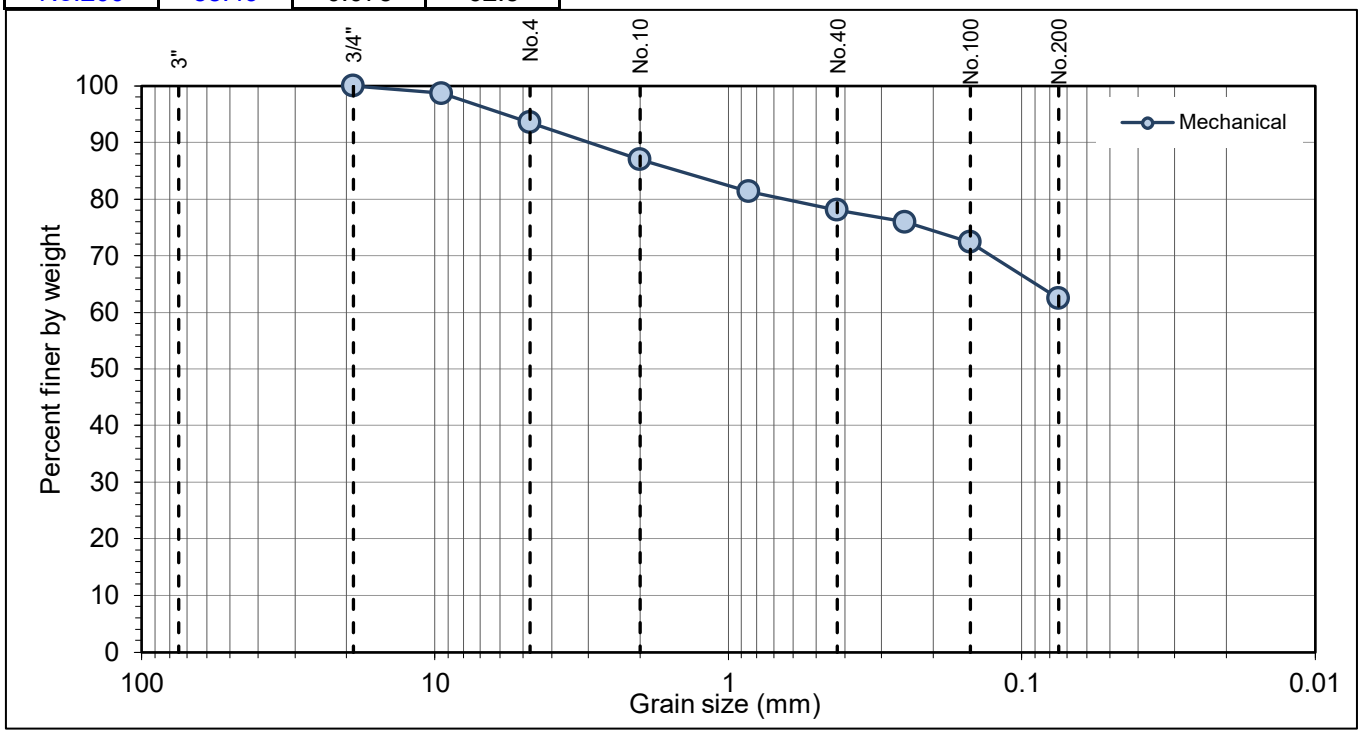
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	262.98	235.69
	-	
	262.98	235.69
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	460.49
Dry soil + tare (g):	-	433.20
Tare (g):	-	197.51
Moisture content (%):	0.0	11.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	3.09	9.5	98.7
No.4	15.18	4.75	93.6
No.10	30.60	2	87.0
No.20	44.01	0.85	81.3
No.40	51.69	0.425	78.1
No.60	56.57	0.25	76.0
No.100	65.04	0.15	72.4
No.200	88.49	0.075	62.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 60-62 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: lt bn - bn clay

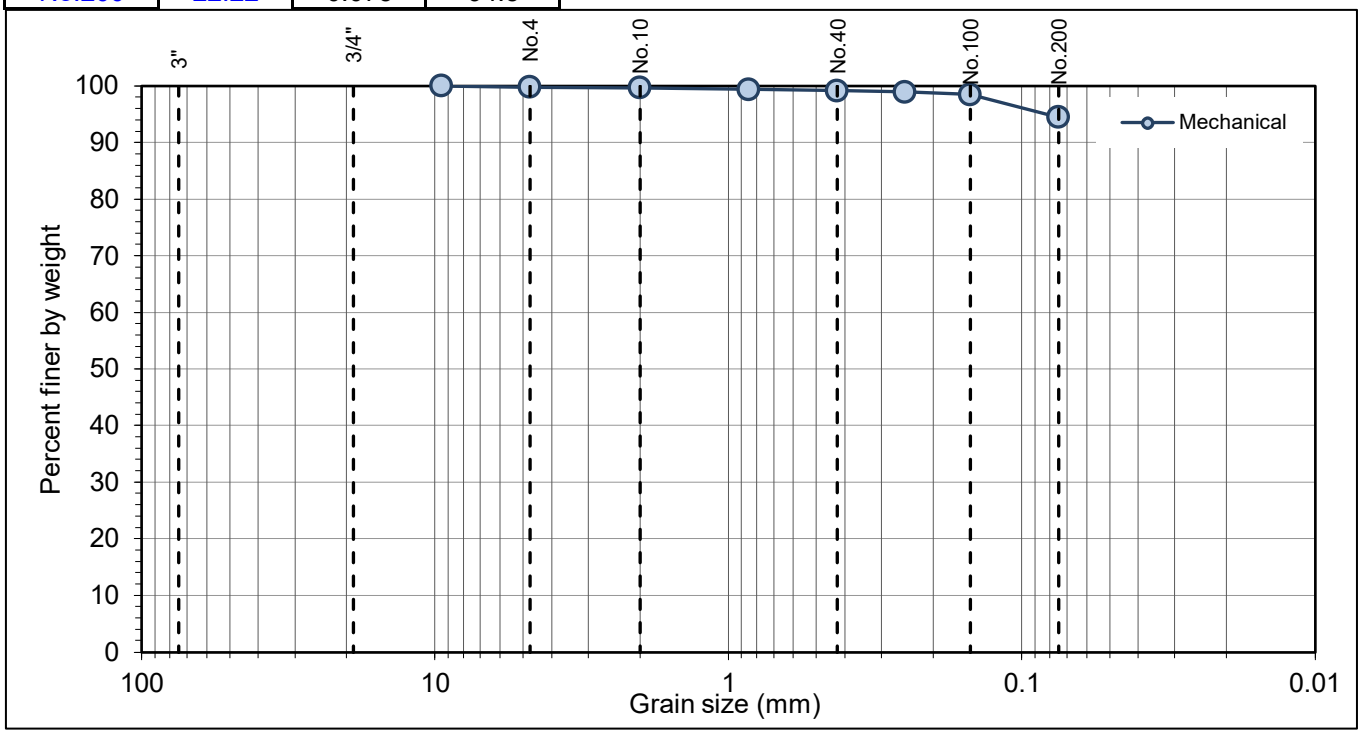
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	460.33	404.88
	-	
	460.33	404.88
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	656.13
Dry soil + tare (g):	-	600.68
Tare (g):	-	195.80
Moisture content (%):	0.0	13.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	100.0
No.4	0.93	4.75	99.8
No.10	1.29	2	99.7
No.20	2.54	0.85	99.4
No.40	3.42	0.425	99.2
No.60	4.29	0.25	98.9
No.100	6.05	0.15	98.5
No.200	22.22	0.075	94.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 64.5-67 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: lt ol bn - ol bn clay

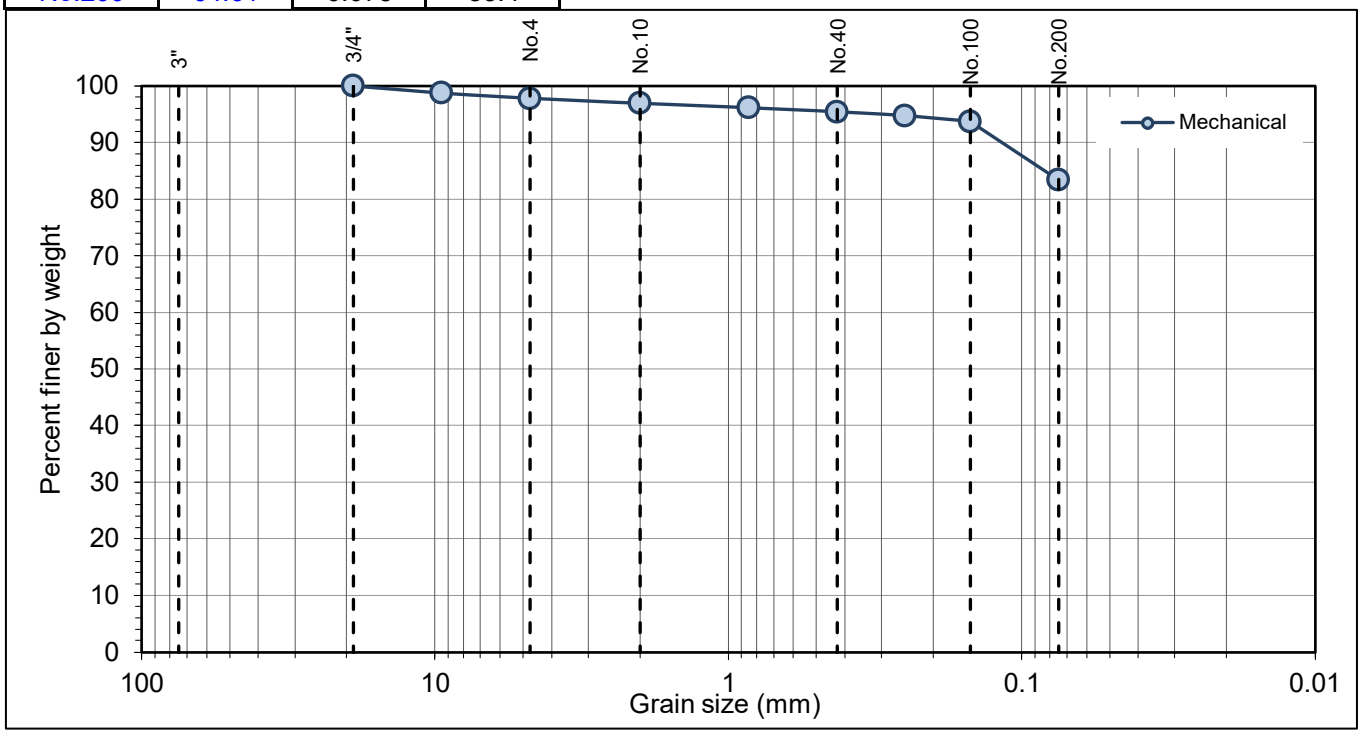
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	439.79	389.75
	-	
	439.79	389.75
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	566.47
Dry soil + tare (g):	-	516.43
Tare (g):	-	126.68
Moisture content (%):	0.0	12.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	4.88	9.5	98.7
No.4	8.54	4.75	97.8
No.10	11.97	2	96.9
No.20	14.92	0.85	96.2
No.40	17.72	0.425	95.5
No.60	20.42	0.25	94.8
No.100	24.38	0.15	93.7
No.200	64.61	0.075	83.4



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 4.5-7 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: lt bn - bn clay

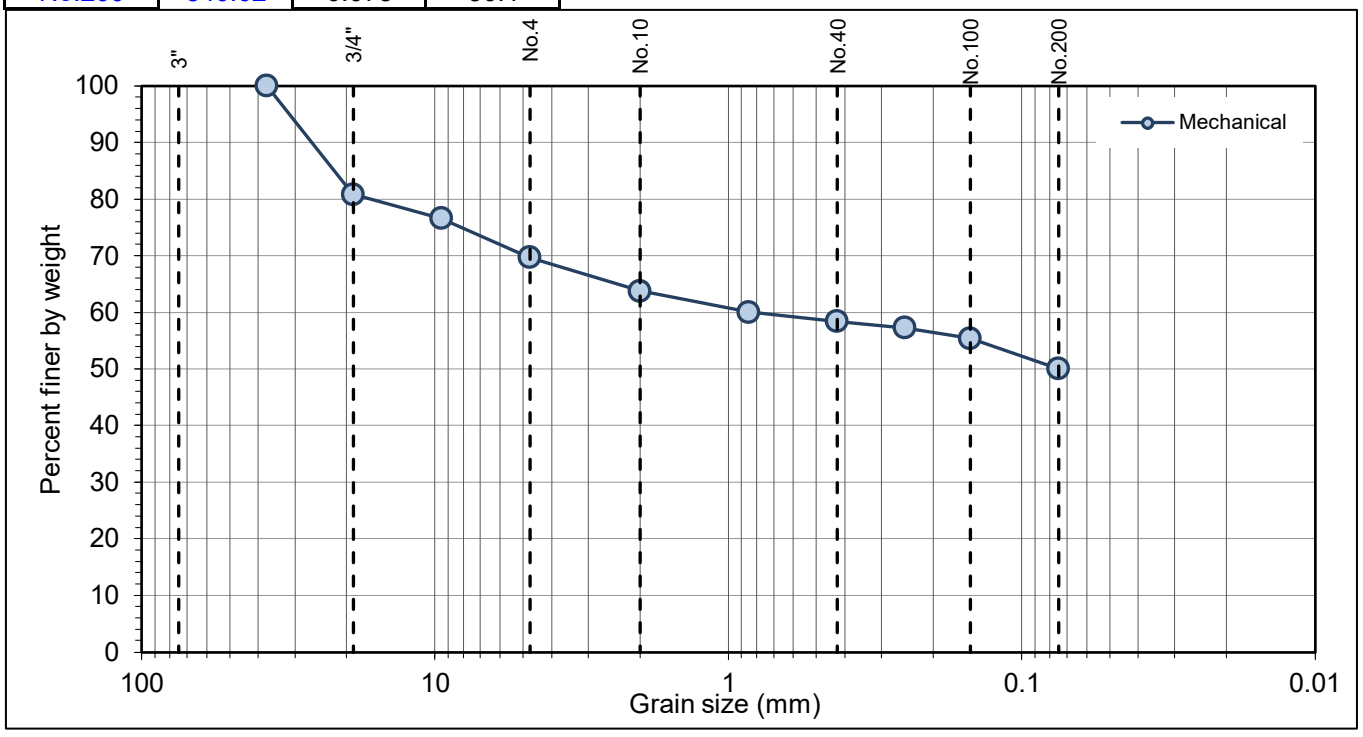
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1190.05	1081.24
	-	
	1190.05	1081.24
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1630.20
Dry soil + tare (g):	-	1521.39
Tare (g):	-	440.15
Moisture content (%):	0.0	10.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	207.44	19	80.8
3/8"	253.12	9.5	76.6
No.4	327.87	4.75	69.7
No.10	391.94	2	63.8
No.20	432.35	0.85	60.0
No.40	450.20	0.425	58.4
No.60	461.91	0.25	57.3
No.100	482.07	0.15	55.4
No.200	540.02	0.075	50.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: pl ol bn - bn clay

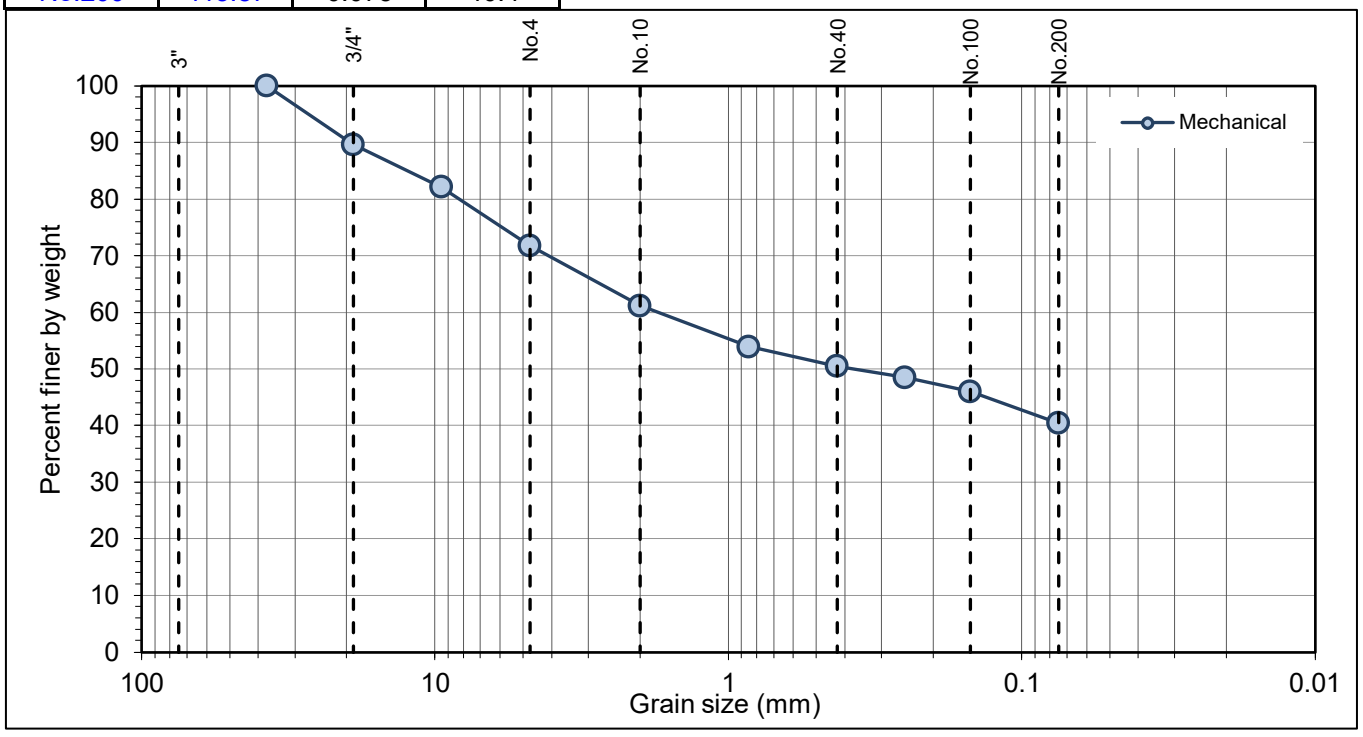
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	753.04	694.60
	-	
	753.04	694.60
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	872.07
Dry soil + tare (g):	-	813.63
Tare (g):	-	119.03
Moisture content (%):	0.0	8.4

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	71.73	19	89.7
3/8"	124.07	9.5	82.1
No.4	195.76	4.75	71.8
No.10	269.78	2	61.2
No.20	320.16	0.85	53.9
No.40	343.81	0.425	50.5
No.60	357.58	0.25	48.5
No.100	374.88	0.15	46.0
No.200	413.87	0.075	40.4



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - bn clay

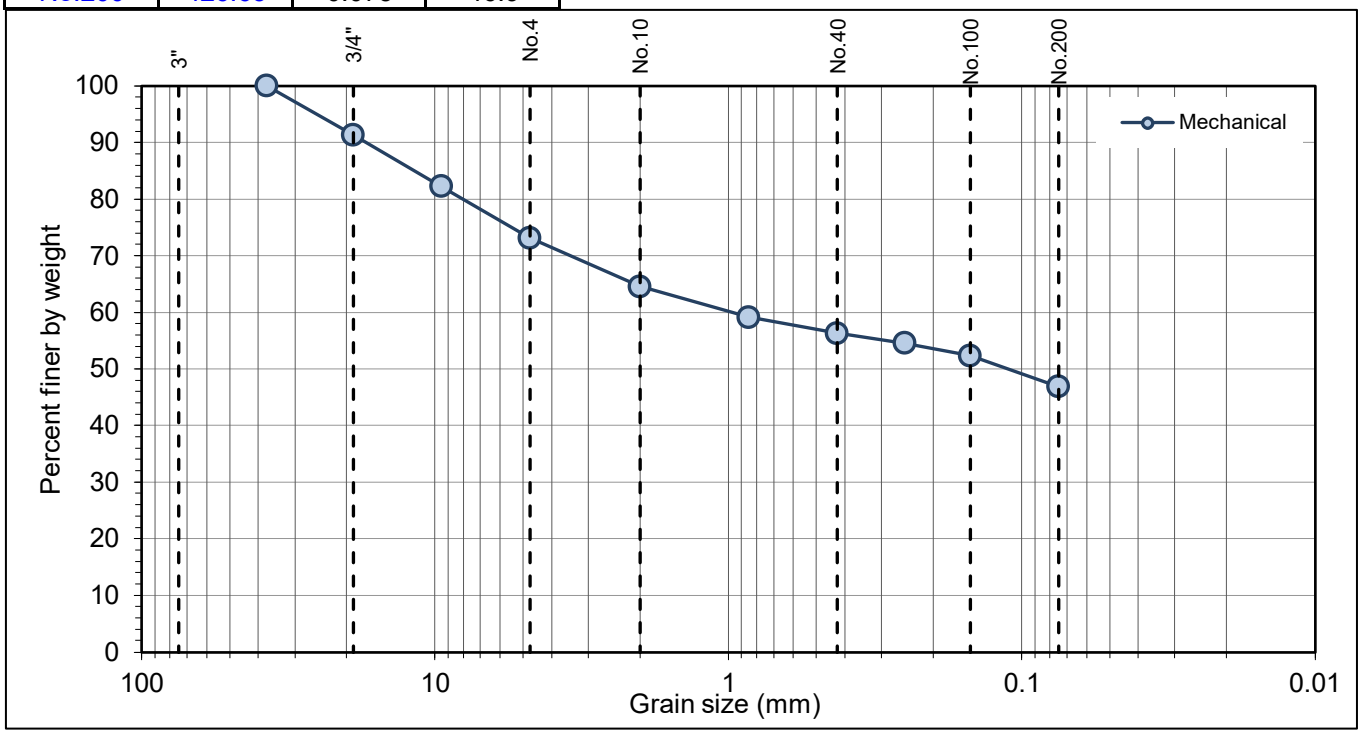
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	902.23	802.85
	-	
	902.23	802.85
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1046.88
Dry soil + tare (g):	-	947.50
Tare (g):	-	144.65
Moisture content (%):	0.0	12.4

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	69.23	19	91.4
3/8"	142.35	9.5	82.3
No.4	215.38	4.75	73.2
No.10	284.76	2	64.5
No.20	328.36	0.85	59.1
No.40	350.76	0.425	56.3
No.60	364.76	0.25	54.6
No.100	382.68	0.15	52.3
No.200	426.63	0.075	46.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 30-33 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: bn - dk bn clay

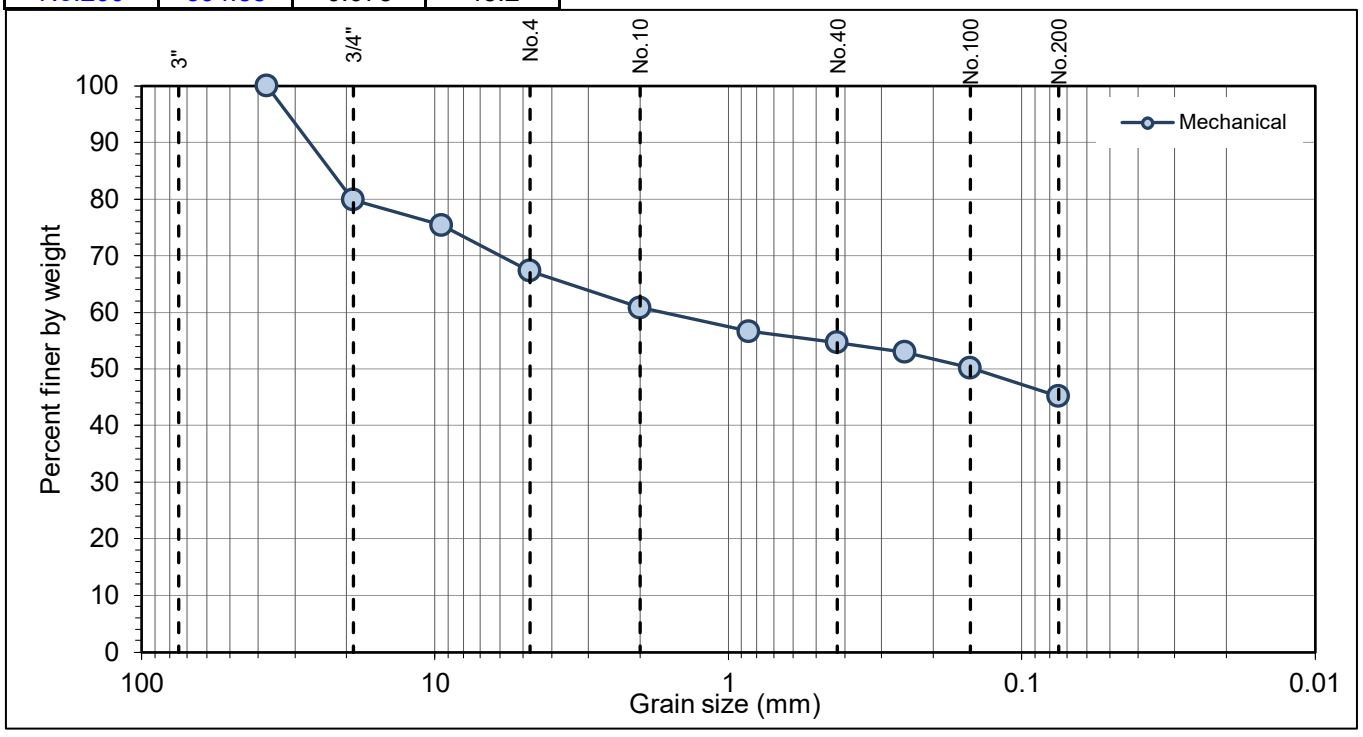
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	798.88	720.83
	-	-
	798.88	720.83
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	943.07
Dry soil + tare (g):	-	865.02
Tare (g):	-	144.19
Moisture content (%):	0.0	10.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	144.91	19	79.9
3/8"	177.22	9.5	75.4
No.4	235.48	4.75	67.3
No.10	282.48	2	60.8
No.20	312.47	0.85	56.7
No.40	326.73	0.425	54.7
No.60	339.06	0.25	53.0
No.100	359.09	0.15	50.2
No.200	394.88	0.075	45.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 7-10 ft

Date: 13-Nov-23 Location: -

Tested by: MGS Lab soil description: lt ol bn - bn clay

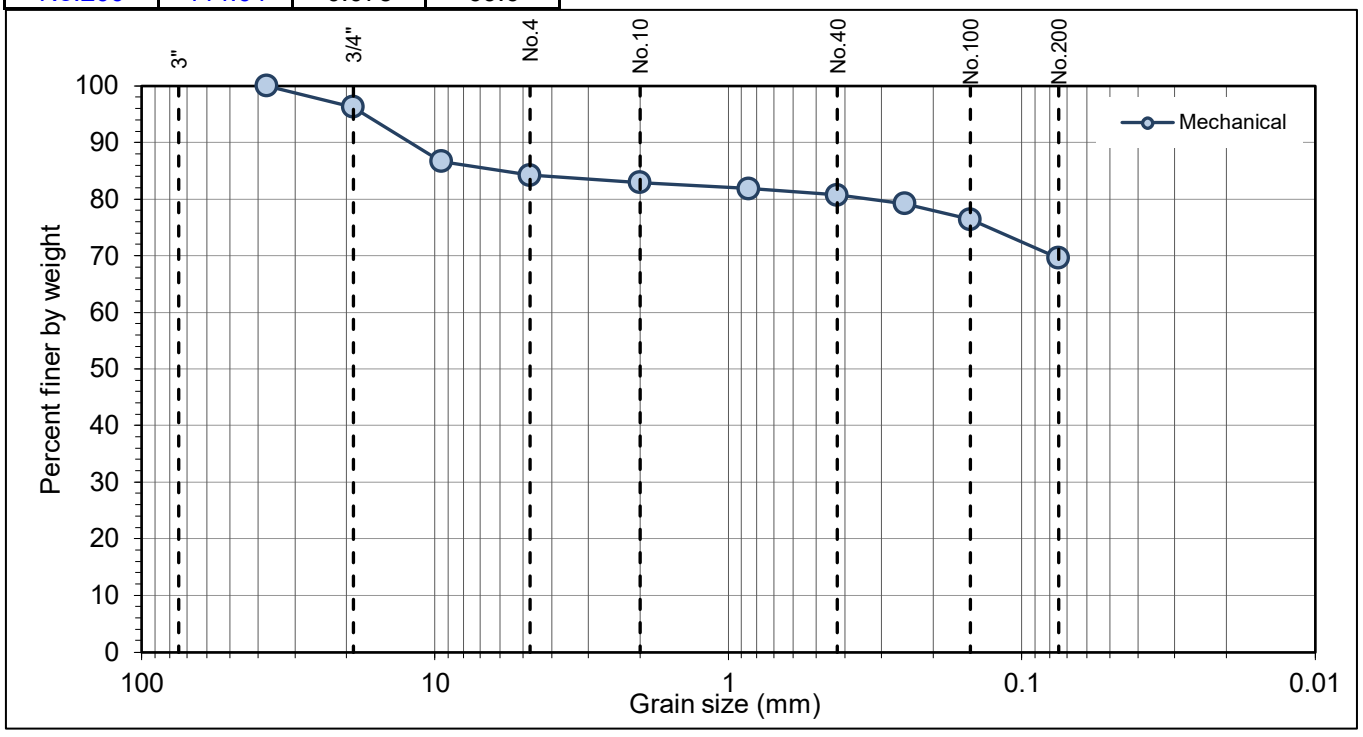
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	457.24	375.28
	-	
	457.24	375.28
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	653.16
Dry soil + tare (g):	-	571.20
Tare (g):	-	195.92
Moisture content (%):	0.0	21.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	13.96	19	96.3
3/8"	50.13	9.5	86.6
No.4	59.19	4.75	84.2
No.10	64.15	2	82.9
No.20	68.10	0.85	81.9
No.40	72.24	0.425	80.8
No.60	78.10	0.25	79.2
No.100	88.55	0.15	76.4
No.200	114.04	0.075	69.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: pl ol bn - lt bn silt

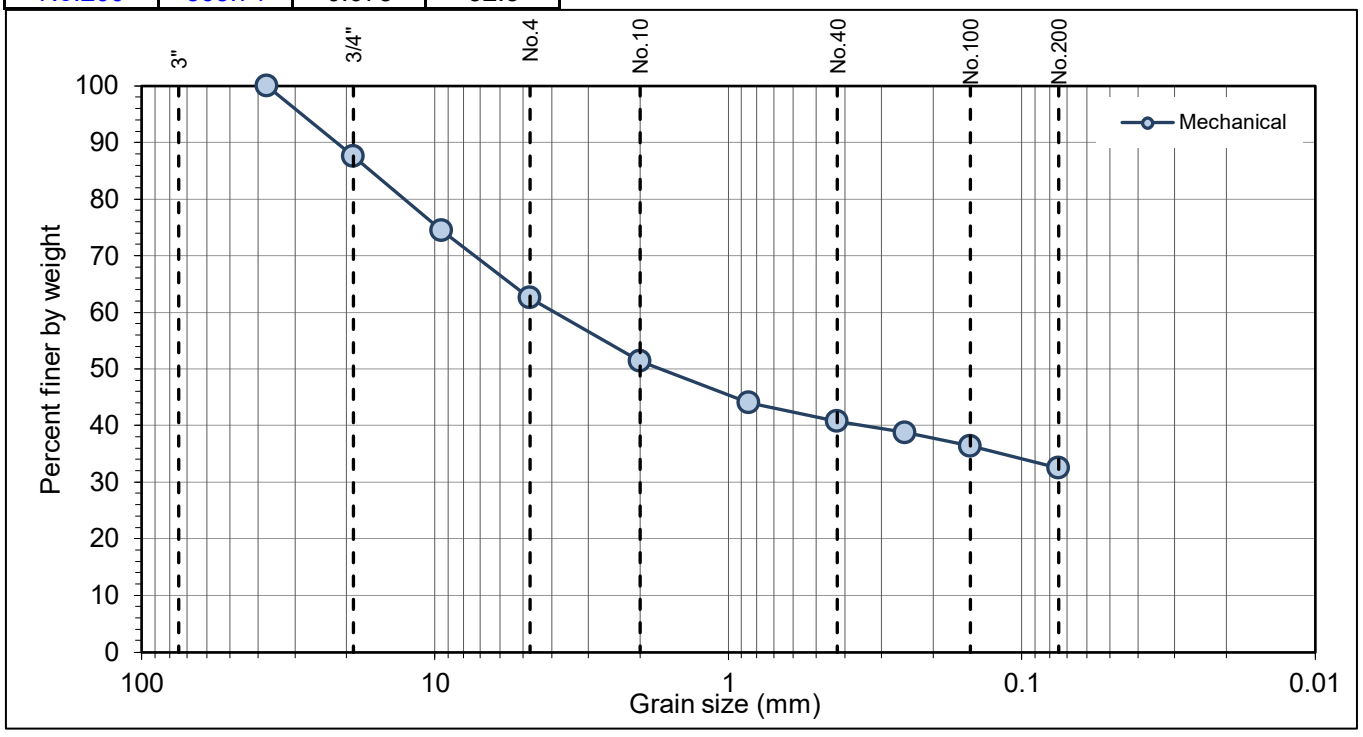
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	483.56	452.93
	-	
	483.56	452.93
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	601.88
Dry soil + tare (g):	-	571.25
Tare (g):	-	118.32
Moisture content (%):	0.0	6.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	56.10	19	87.6
3/8"	115.44	9.5	74.5
No.4	169.54	4.75	62.6
No.10	220.10	2	51.4
No.20	253.53	0.85	44.0
No.40	268.38	0.425	40.7
No.60	277.44	0.25	38.7
No.100	288.21	0.15	36.4
No.200	305.71	0.075	32.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: ol bn - bn silt

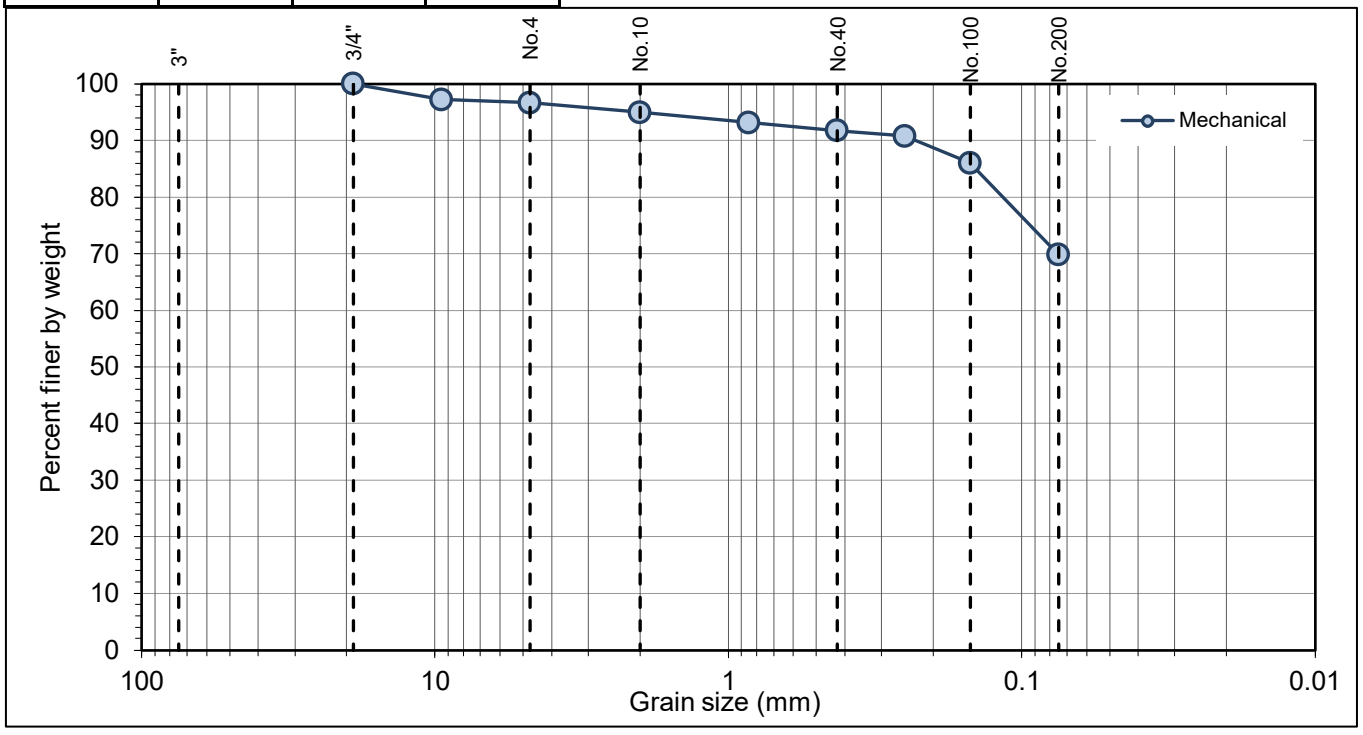
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	434.54	373.10
		-
	434.54	373.10
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	555.20
Dry soil + tare (g):	-	493.76
Tare (g):	-	120.66
Moisture content (%):	0.0	16.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	10.30	9.5	97.2
No.4	12.34	4.75	96.7
No.10	18.72	2	95.0
No.20	25.54	0.85	93.2
No.40	30.76	0.425	91.8
No.60	34.37	0.25	90.8
No.100	52.13	0.15	86.0
No.200	112.39	0.075	69.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 30-33 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: lt bn - bn clay

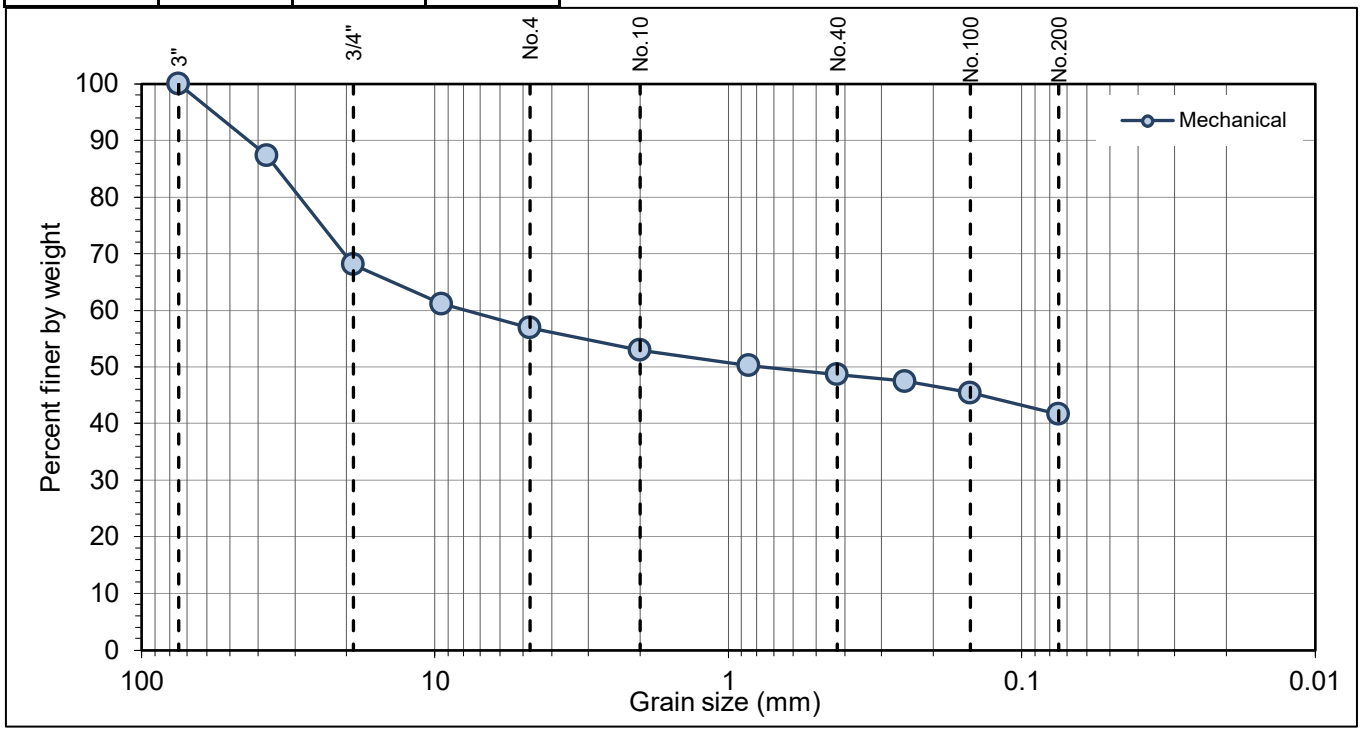
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1120.71	1018.98
	-	
	1120.71	1018.98
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1542.36
Dry soil + tare (g):	-	1440.63
Tare (g):	-	421.65
Moisture content (%):	0.0	10.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	100.0
1.5"	128.32	37.5	87.4
3/4"	325.14	19	68.1
3/8"	396.01	9.5	61.1
No.4	438.75	4.75	56.9
No.10	479.25	2	53.0
No.20	507.10	0.85	50.2
No.40	523.12	0.425	48.7
No.60	535.09	0.25	47.5
No.100	555.98	0.15	45.4
No.200	594.76	0.075	41.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Date: 14-Nov-23 Location: -

Tested by: MGS Lab soil description: ol bn - lt bn clay

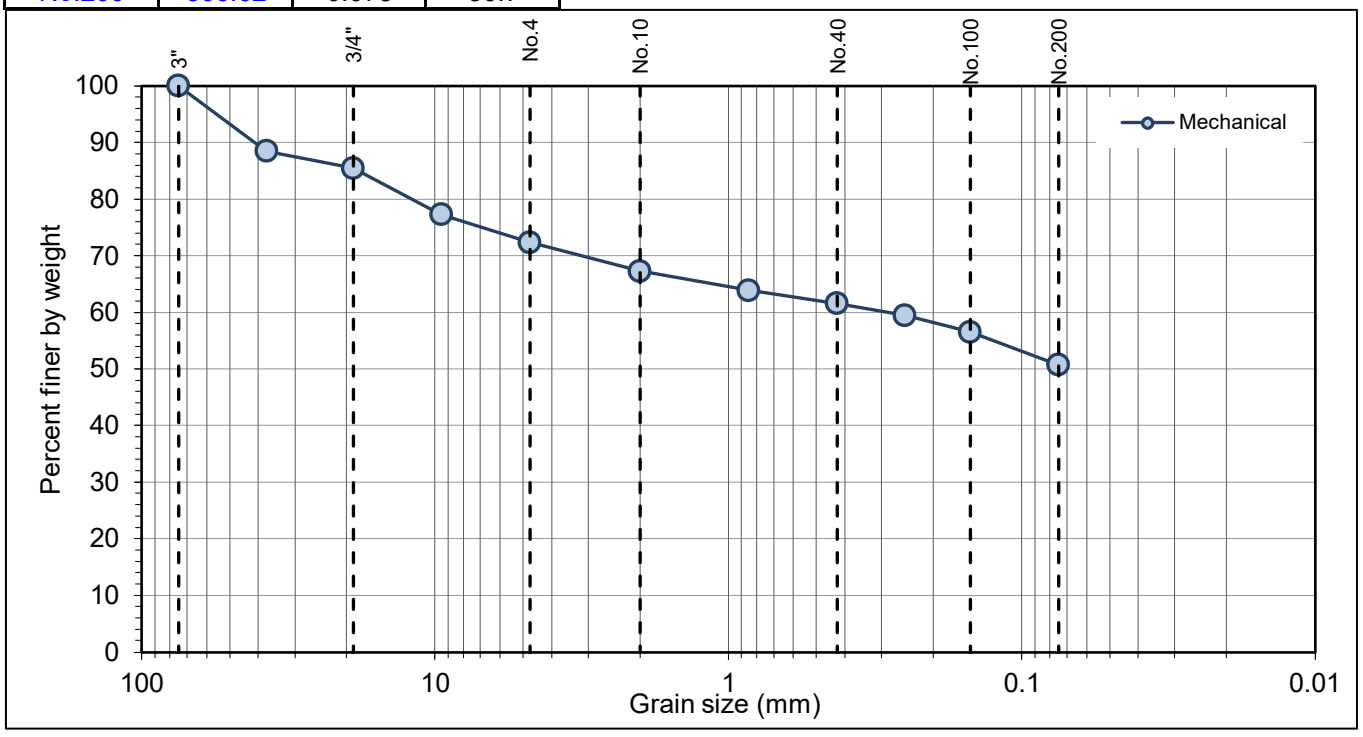
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	707.32	622.21
	-	
	707.32	622.21
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1129.47
Dry soil + tare (g):	-	1044.36
Tare (g):	-	422.15
Moisture content (%):	0.0	13.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	100.0
1.5"	71.56	37.5	88.5
3/4"	90.43	19	85.5
3/8"	141.32	9.5	77.3
No.4	172.00	4.75	72.4
No.10	203.64	2	67.3
No.20	224.65	0.85	63.9
No.40	239.11	0.425	61.6
No.60	252.04	0.25	59.5
No.100	270.48	0.15	56.5
No.200	306.62	0.075	50.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 15-17 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: ol bn - yl bn clay

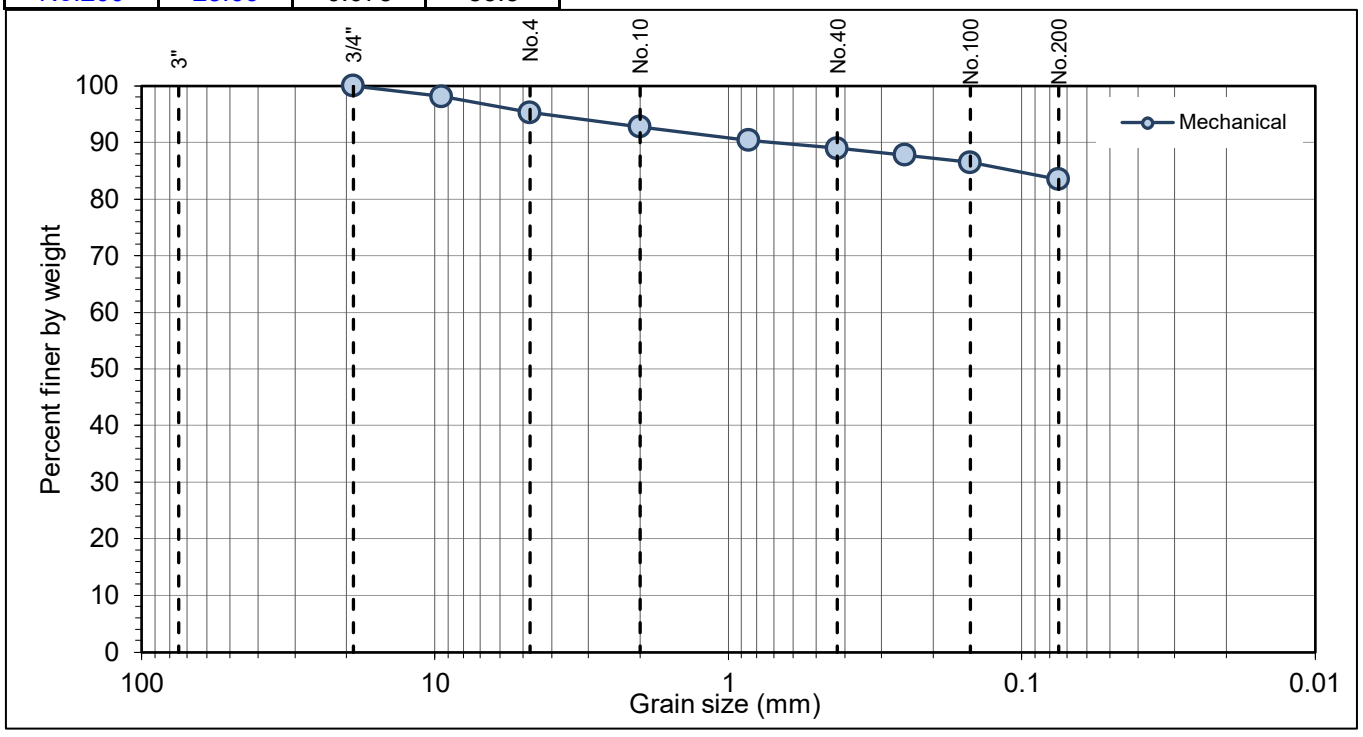
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	180.39	155.31
	-	
	180.39	155.31
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	377.19
Dry soil + tare (g):	-	352.11
Tare (g):	-	196.80
Moisture content (%):	0.0	16.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	2.89	9.5	98.1
No.4	7.30	4.75	95.3
No.10	11.23	2	92.8
No.20	14.96	0.85	90.4
No.40	17.13	0.425	89.0
No.60	18.94	0.25	87.8
No.100	20.99	0.15	86.5
No.200	25.66	0.075	83.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 17.5-19 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: ol bn - lt bn clay

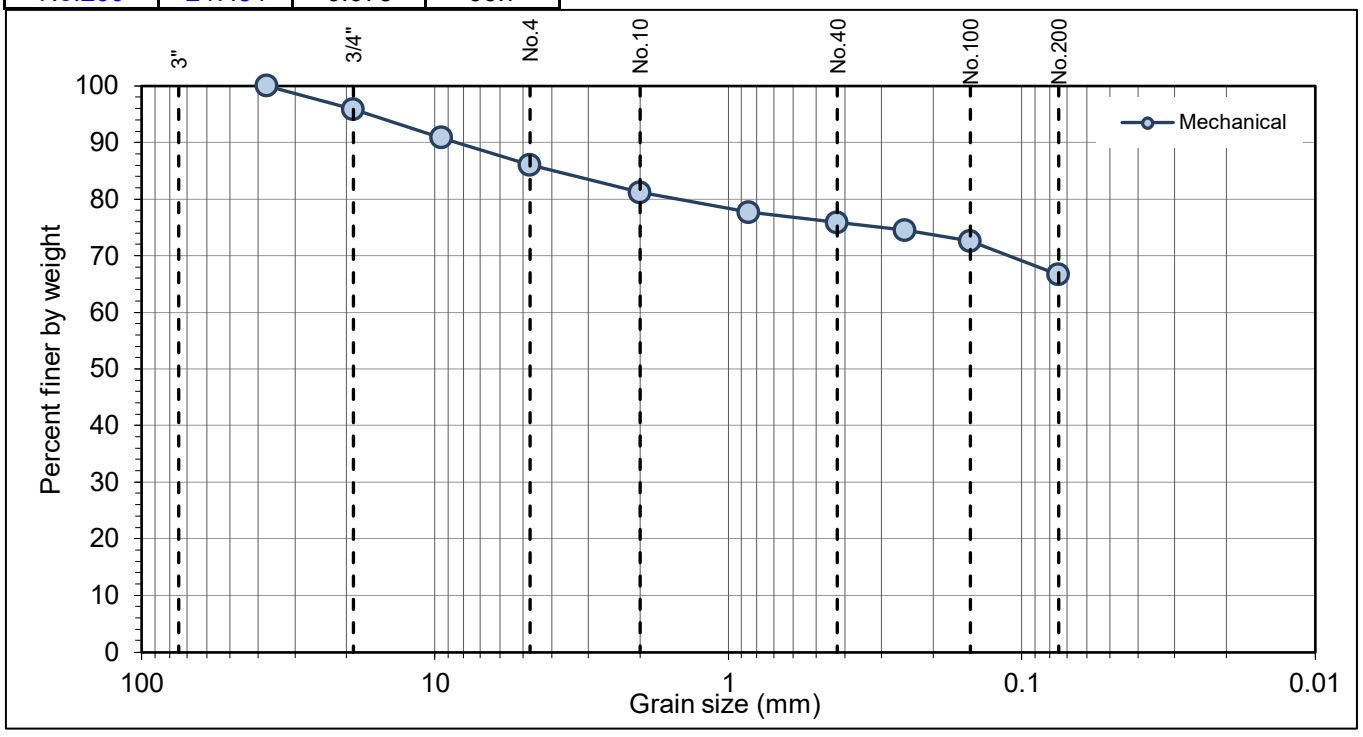
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	847.04	744.57
	-	
	847.04	744.57
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	860.87
Dry soil + tare (g):	-	758.40
Tare (g):	-	13.83
Moisture content (%):	0.0	13.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	30.57	19	95.9
3/8"	68.26	9.5	90.8
No.4	103.76	4.75	86.1
No.10	140.26	2	81.2
No.20	166.43	0.85	77.6
No.40	179.81	0.425	75.9
No.60	189.87	0.25	74.5
No.100	204.29	0.15	72.6
No.200	247.84	0.075	66.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-11

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: bn - dk bn clay

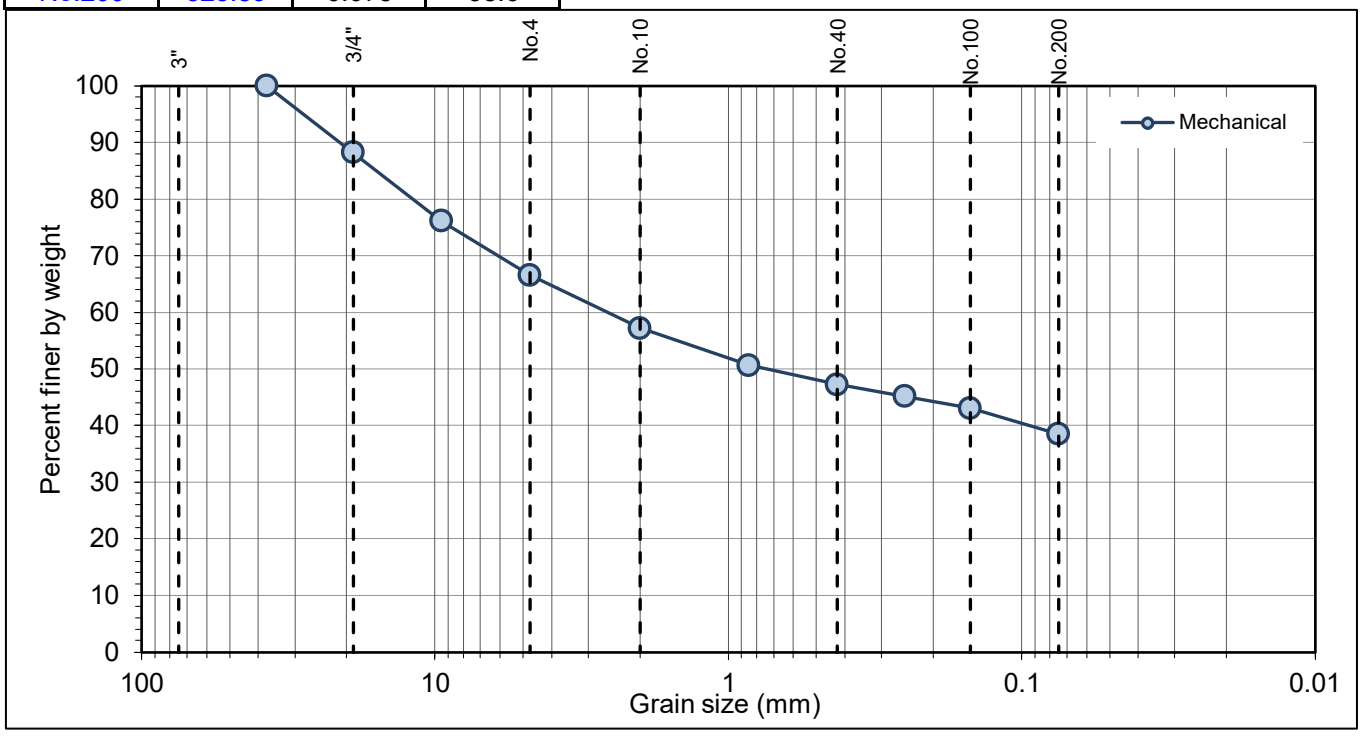
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	563.94	526.72
	-	
	563.94	526.72
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	758.29
Dry soil + tare (g):	-	721.07
Tare (g):	-	194.35
Moisture content (%):	0.0	7.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	61.88	19	88.3
3/8"	125.78	9.5	76.1
No.4	175.93	4.75	66.6
No.10	225.46	2	57.2
No.20	259.93	0.85	50.7
No.40	277.80	0.425	47.3
No.60	288.84	0.25	45.2
No.100	299.98	0.15	43.0
No.200	323.59	0.075	38.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 5-7 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - lt bn clay

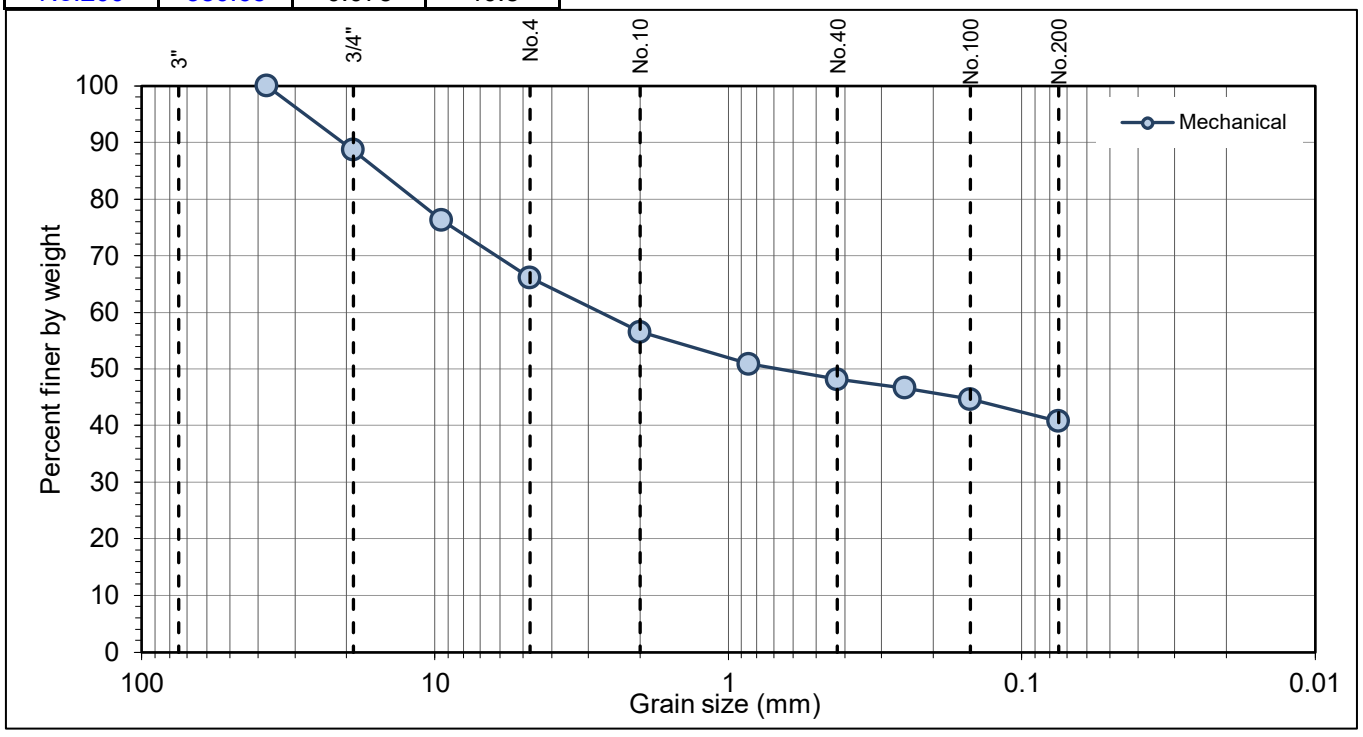
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	708.58	643.08
	-	
	708.58	643.08
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	902.19
Dry soil + tare (g):	-	836.69
Tare (g):	-	193.61
Moisture content (%):	0.0	10.2

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	72.52	19	88.7
3/8"	152.37	9.5	76.3
No.4	217.84	4.75	66.1
No.10	279.58	2	56.5
No.20	316.07	0.85	50.9
No.40	333.42	0.425	48.2
No.60	343.28	0.25	46.6
No.100	355.83	0.15	44.7
No.200	380.65	0.075	40.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 10-12 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - lt bn silt

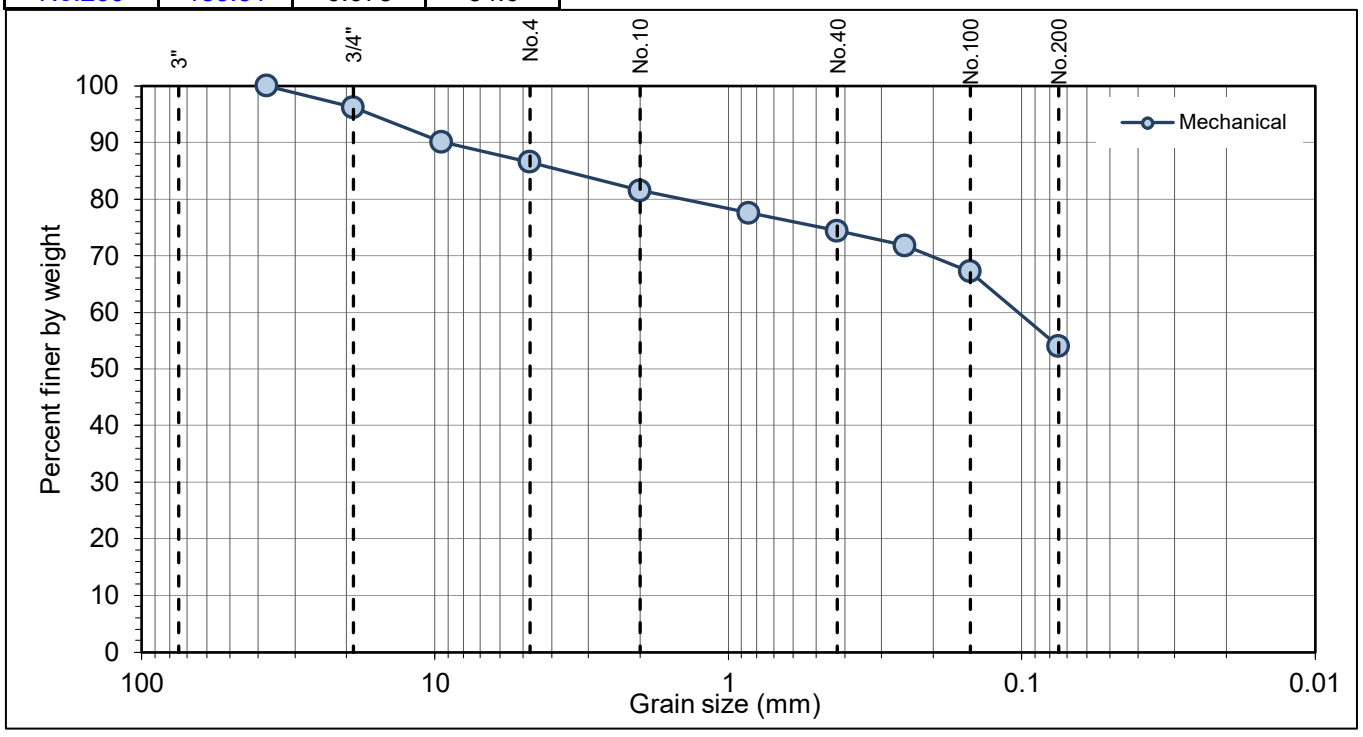
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	450.03	398.84
	-	
	450.03	398.84
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	566.12
Dry soil + tare (g):	-	514.93
Tare (g):	-	116.09
Moisture content (%):	0.0	12.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	15.06	19	96.2
3/8"	39.46	9.5	90.1
No.4	53.76	4.75	86.5
No.10	73.83	2	81.5
No.20	89.44	0.85	77.6
No.40	102.08	0.425	74.4
No.60	112.55	0.25	71.8
No.100	130.86	0.15	67.2
No.200	183.31	0.075	54.0



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 20-21 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - lt bn clay

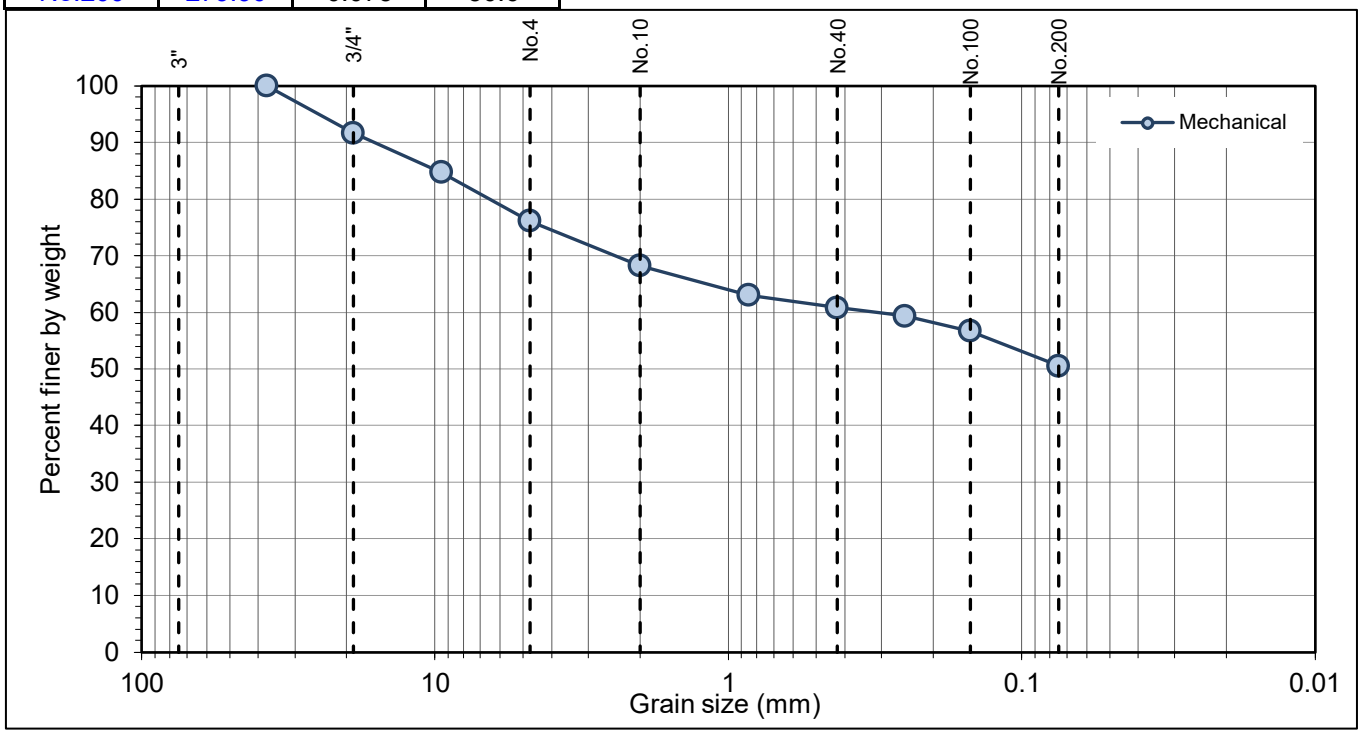
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	625.88	566.11
	-	
	625.88	566.11
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	742.99
Dry soil + tare (g):	-	683.22
Tare (g):	-	117.11
Moisture content (%):	0.0	10.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	47.10	19	91.7
3/8"	86.55	9.5	84.7
No.4	135.05	4.75	76.1
No.10	179.77	2	68.2
No.20	209.38	0.85	63.0
No.40	221.94	0.425	60.8
No.60	230.21	0.25	59.3
No.100	245.14	0.15	56.7
No.200	279.90	0.075	50.6



Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 37-39 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: gy - lt gy gravel

Reduced by: AT Comments:

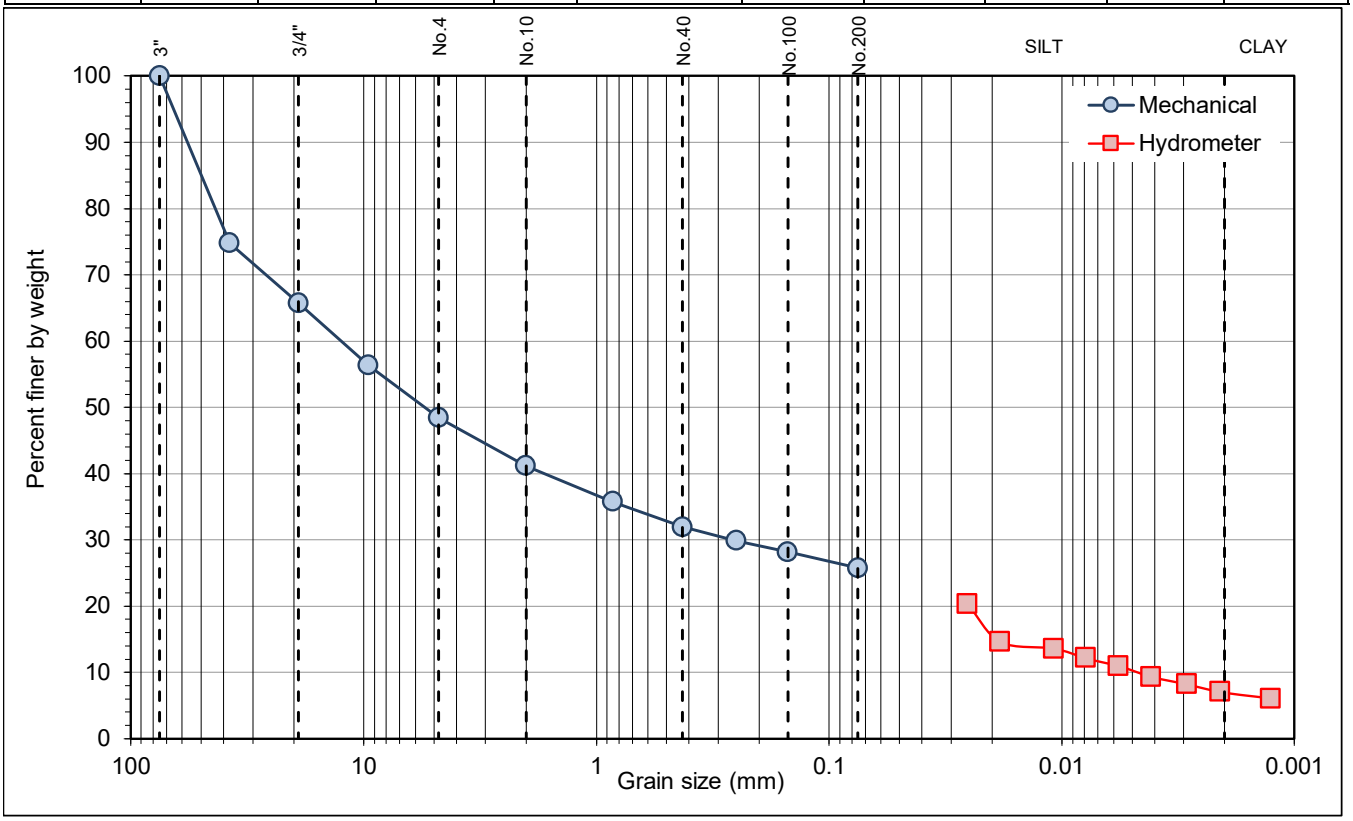
Reviewed by: JC

Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	1237.63	1179.38
+3" Coarse fraction (g):		
-3" Split fraction (g):	1237.63	1179.38
Hydrometer fraction (g):	100.02	99.95
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	1382.61	224.79
Dry soil + tare (g):	-	1324.36	224.77
Tare (g):	-	144.98	196.59
Moisture content (%):	0.00	4.94	0.07

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	41.14
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer		Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
12"	300	-	-		2	21.0	55	5.2	0.02534	20.28
8"	200	-	-		5	21.0	41	5.2	0.01838	14.58
6"	150	-	-		15	21.0	38.5	5.2	0.01084	13.57
4"	100	-	-		30	20.9	35	5.2	0.00789	12.13
3"	75	-	100.0	<=Split	60	21.0	32	5.2	0.00570	10.92
1.5"	37.5	298.03	74.7		120	21.2	28	5.1	0.00414	9.32
3/4"	19	404.72	65.7		250	22.0	25	4.9	0.00290	8.19
3/8"	9.5	515.59	56.3		500	22.5	22	4.7	0.00208	7.02
No.4	4.75	608.62	48.4		1440	20.9	20	5.2	0.00126	6.02
No.10	2	694.22	41.1	<=Split hyd.						
No.20	0.85	13.07	35.8							
No.40	0.425	22.42	31.9							
No.60	0.25	27.41	29.9							
No.100	0.15	31.53	28.2							
No.200	0.075	37.39	25.7							



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Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 44.5-47 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: lt bn - bn gravel

Reduced by: AT Comments:

Reviewed by: JC

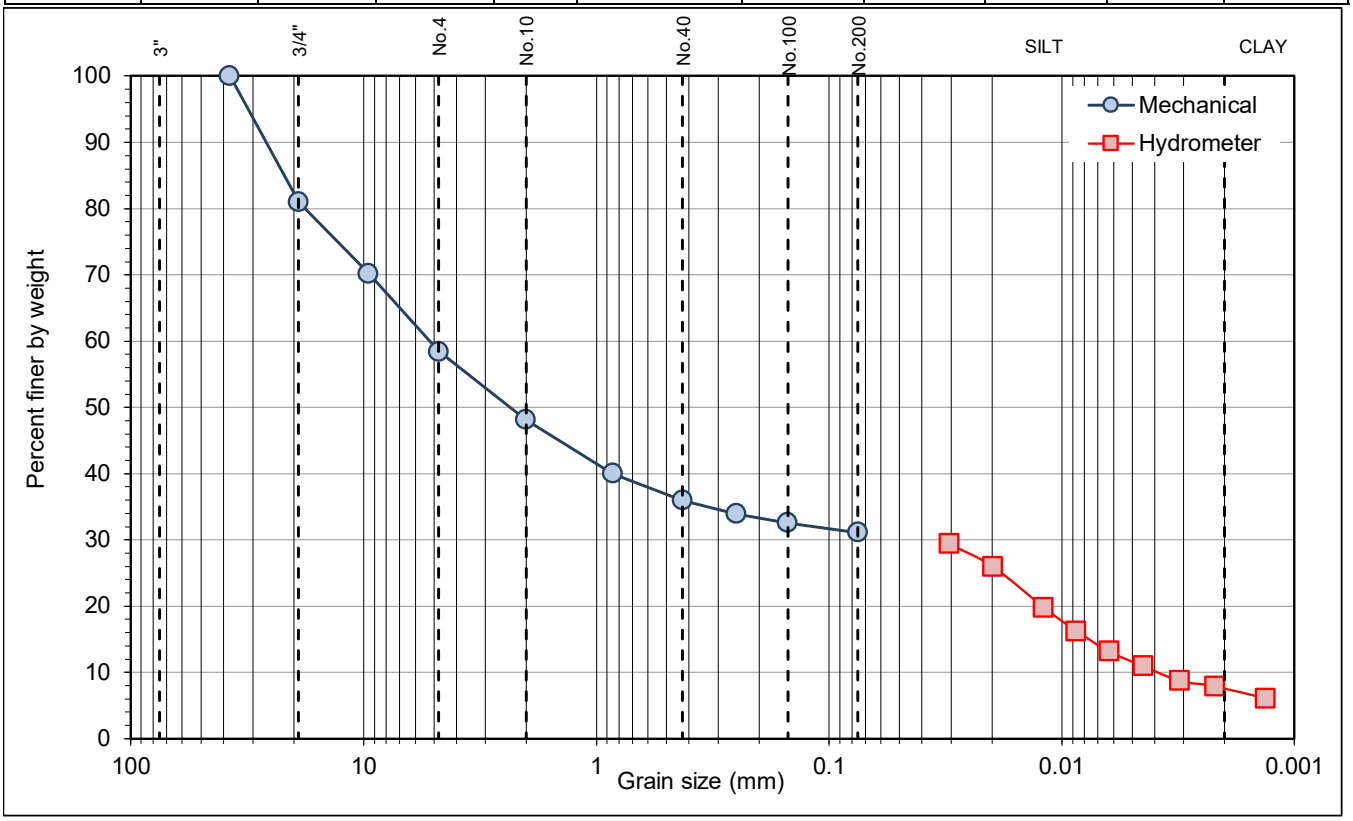
Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	446.03	423.48
+3" Coarse fraction (g):		
-3" Split fraction (g):	446.03	423.48
Hydrometer fraction (g):	50.04	50.01
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	572.96	229.12
Dry soil + tare (g):	-	550.41	229.10
Tare (g):	-	126.93	195.70
Moisture content (%):	0.00	5.32	0.06

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	48.08
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer
12"	300	-	-
8"	200	-	-
6"	150	-	-
4"	100	-	-
3"	75	-	-
1.5"	37.5	-	100.0
3/4"	19	80.60	81.0
3/8"	9.5	126.26	70.2
No.4	4.75	176.21	58.4
No.10	2	219.86	48.1
No.20	0.85	8.39	40.0
No.40	0.425	12.64	35.9
No.60	0.25	14.77	33.9
No.100	0.15	16.16	32.5
No.200	0.075	17.67	31.1

	Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
	2	20.8	36.1	5.2	0.03034	29.35
	5	20.8	32.5	5.2	0.01973	25.93
	15	20.8	26	5.2	0.01193	19.75
	30	20.8	22.25	5.2	0.00865	16.19
<=Split	60	20.9	19	5.2	0.00623	13.12
	120	21.4	16.5	5.1	0.00445	10.88
	250	22.1	14	4.9	0.00310	8.69
	500	22.6	13	4.7	0.00219	7.88
	1448	20.9	11.5	5.2	0.00133	5.99
<=Split hyd.						



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Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 15-17 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: ol bn - yl bn clay

Reduced by: AT Comments:

Reviewed by: JC

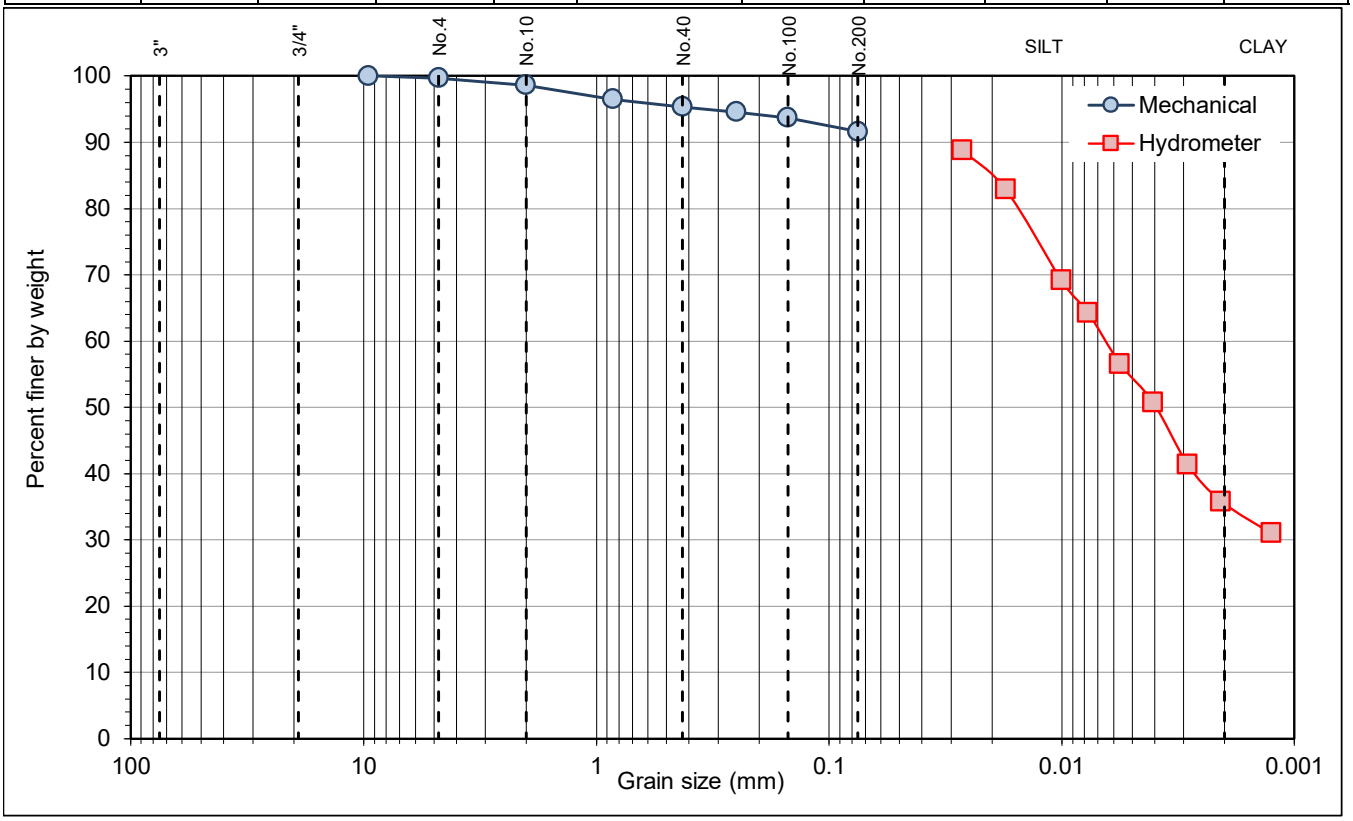
Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	133.83	114.98
+3" Coarse fraction (g):		
-3" Split fraction (g):	133.83	114.98
Hydrometer fraction (g):	50.01	49.74
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	250.79	239.17
Dry soil + tare (g):	-	231.94	238.94
Tare (g):	-	116.96	196.69
Moisture content (%):	0.00	16.39	0.54

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	98.62
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer
12"	300	-	-
8"	200	-	-
6"	150	-	-
4"	100	-	-
3"	75	-	-
1.5"	37.5	-	-
3/4"	19	-	-
3/8"	9.5	-	100.0
No.4	4.75	0.38	99.7
No.10	2	1.59	98.6
No.20	0.85	1.06	96.5
No.40	0.425	1.66	95.3
No.60	0.25	2.04	94.6
No.100	0.15	2.49	93.7
No.200	0.075	3.54	91.6

	Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
	2	20.8	50.5	5.2	0.02667	88.77
	5	20.8	47.5	5.2	0.01737	82.88
	17	20.8	40.5	5.2	0.01004	69.16
	30	20.8	38	5.2	0.00772	64.26
<=Split	60	21.0	34	5.2	0.00562	56.53
	120	21.2	31	5.1	0.00405	50.76
	250	22.0	26	4.9	0.00288	41.40
	500	22.5	23	4.7	0.00206	35.79
	1444	20.9	21	5.2	0.00125	30.98
<=Split hyd.						



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Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-11

No: 23072 (23-1725) **Depth:** 10-12 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: lt ol bn - ol bn clay

Reduced by: AT Comments:

Reviewed by: JC

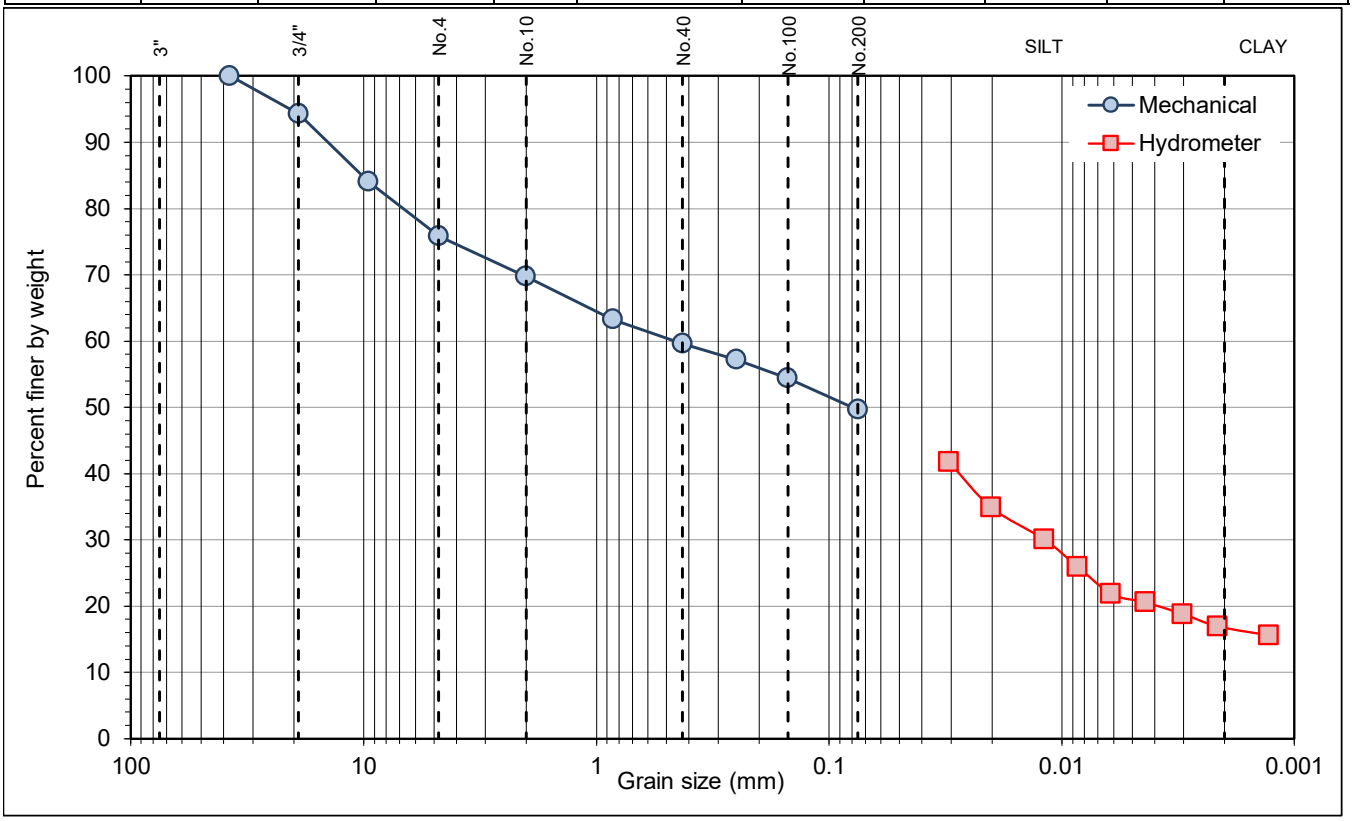
Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	621.27	566.27
+3" Coarse fraction (g):		
-3" Split fraction (g):	621.27	566.27
Hydrometer fraction (g):	50.09	50.00
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	766.77	150.52
Dry soil + tare (g):	-	711.77	150.46
Tare (g):	-	145.50	117.79
Moisture content (%):	0.00	9.71	0.18

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	69.77
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer
12"	300	-	-
8"	200	-	-
6"	150	-	-
4"	100	-	-
3"	75	-	-
1.5"	37.5	-	100.0
3/4"	19	32.39	94.3
3/8"	9.5	90.42	84.0
No.4	4.75	136.85	75.8
No.10	2	171.18	69.8
No.20	0.85	4.67	63.3
No.40	0.425	7.27	59.6
No.60	0.25	9.04	57.2
No.100	0.15	11.05	54.4
No.200	0.075	14.44	49.6

	Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
	2	20.7	35.5	5.3	0.03051	41.74
	5	20.7	30.5	5.3	0.02004	34.84
	15	20.7	27	5.3	0.01186	30.01
	30	20.8	24	5.2	0.00855	25.91
<=Split	60	21.0	21	5.2	0.00615	21.85
	120	21.2	20	5.1	0.00436	20.54
	250	22.0	18.5	4.9	0.00302	18.79
	500	22.6	17	4.7	0.00214	16.95
	1446	20.9	16.5	5.2	0.00129	15.60
<=Split hyd.						



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One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project:	**Bear Development Snow King Lot 53 and 58**	**TH/TP/Sample:**	**JG-10**
No:	**23072 (23-1725)**	**Depth:**	**12.5-14 ft**
Location:	-	Laboratory sample description:	ol bn - lt bn clay
Date:	14-Nov-23	USCS classification:	not requested
Tested by:	AT	Sample type:	Rel. undisturbed, Shelby Tube
Reduced by:	AT	Inundation stress (psf):	100, completion
Checked by:	JC	Swell pressure (psf):	408
Comments:	Gravel up to 1.5" in sample.	Test method:	B
		Preparation procedure:	trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.995	-
	90°	1.002	-
	180°	0.999	-
	270°	1.003	-
Avg Height, Havg (in)		1.000	0.887
Height, H (cm)		2.539	2.253
Dia., D (in)	0°	2.494	-
	90°	2.495	-
Avg Dia., Davg (in)		2.495	2.495
Dia., D (cm)		6.336	6.336
Wt. rings + wet soil (g)		373.54	369.19
Wt. rings (g)		216.21	216.21
Wet soil + tare (g)		1129.47	350.66
Dry soil + tare (g)		1044.36	324.68
Tare (g)		422.15	198.47
Moisture cont., w (%)		13.7	20.6
Gs, assumed		2.70	2.70
Mass total (g)		157.3	153.0
Mass of solids (g)		138.4	138.4
Volume (cm^3)		80.1	71.0
Vol. of water (cm^3)		18.9	14.6
Vol. of solids (cm^3)		51.3	51.3
Vol. of voids (cm^3)		28.8	19.8
Vol. of air (cm^3)		9.9	5.2
Area, A (cm^2)		31.5	31.5
Ht. solids, Hs (cm)		1.626	1.626
Void ratio, e		0.562	0.386
Porosity, n		0.360	0.278
Vol.moisture, T		0.236	0.205
Saturation, S (%)		66	74
Dry density (gm/cm^3)		1.729	1.949
Wet unit wt., gm (pcf)		122.7	146.7
Dry unit wt., gd (pcf)		107.9	121.6

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9998	0.0000	0.5620	0
408	0.0000	0.9997	0.0000	0.5620	120
800	0.0034	0.9964	0.0034	0.5568	131
1,600	0.0108	0.9890	0.0108	0.5452	207
3,200	0.0278	0.9719	0.0278	0.5185	480
6,400	0.0528	0.9470	0.0528	0.4796	369
12,800	0.0843	0.9154	0.0843	0.4303	269
25,600	0.1173	0.8825	0.1173	0.3787	334
51,200	0.1513	0.8484	0.1514	0.3255	480
25,600	0.1474	0.8523	0.1475	0.3316	120
6,400	0.1325	0.8672	0.1326	0.3550	240
1,600	0.1129	0.8869	0.1129	0.3856	343

C'c

(0.1514-0.0528)/[Log(51200)-Log(6400)]

0.0986/(4.71-3.81)

C'c= 0.1096

C'c = Cc/(1+e0)

0.1096 = Cc/(1+0.562)

Cc = 0.171

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

To be determined by the Geotechnical Engineer

Notes:

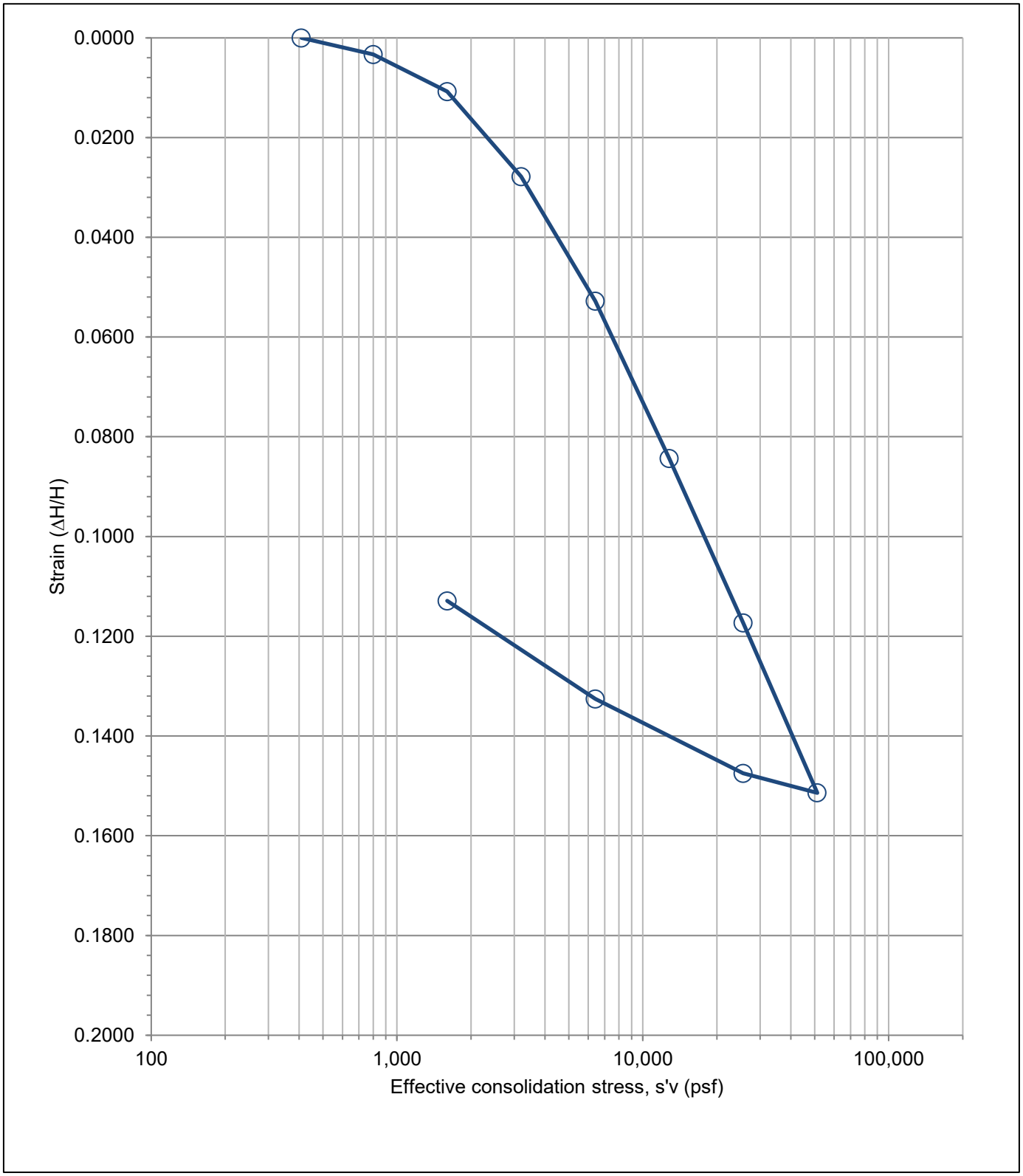
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation

[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10
No: 23072 (23-1725) **Depth:** 12.5-14 ft



One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 | **TH/TP/Sample:** JG-10
No: 23072 (23-1725) | **Depth:** 17.5-19 ft
Location: - | Laboratory sample description: ol bn - lt bn clay
Date: 14-Nov-23 | USCS classification: not requested

Tested by: AT | Sample type: Rel. undisturbed, Shelby Tube
Reduced by: AT | Inundation stress (psf): 100, completion
Checked by: JC | Swell pressure (psf): <100
Comments: | Test method: B
Preparation procedure: trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.985	-
	90°	0.987	-
	180°	0.988	-
	270°	0.989	-
Avg Height, Havg (in)		0.987	0.884
Height, H (cm)		2.508	2.245
Dia., D (in)	0°	2.487	-
	90°	2.496	-
Avg Dia., Davg (in)		2.492	2.492
Dia., D (cm)		6.328	6.328
Wt. rings + wet soil (g)		384.09	380.81
Wt. rings (g)		214.28	214.28
Wet soil + tare (g)		860.87	285.37
Dry soil + tare (g)		758.40	266.49
Tare (g)		13.83	119.06
Moisture cont., w (%)		13.8	12.8
Gs, assumed		2.70	2.70
Mass total (g)		169.8	166.5
Mass of solids (g)		149.3	149.3
Volume (cm^3)		78.9	70.6
Vol. of water (cm^3)		20.5	17.3
Vol. of solids (cm^3)		55.3	55.3
Vol. of voids (cm^3)		23.6	15.3
Vol. of air (cm^3)		3.0	-1.9
Area, A (cm^2)		31.5	31.5
Ht. solids, Hs (cm)		1.758	1.758
Void ratio, e		0.427	0.278
Porosity, n		0.299	0.217
Vol.moisture, T		0.260	0.244
Saturation, S (%)		87	113
Dry density (gm/cm^3)		1.892	2.113
Wet unit wt., gm (pcf)		134.4	148.8
Dry unit wt., gd (pcf)		118.1	131.9

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9873	0.0000	0.4267	0
100	0.0000	0.9872	0.0000	0.4267	108
200	0.0029	0.9844	0.0029	0.4225	123
400	0.0060	0.9813	0.0061	0.4181	210
800	0.0111	0.9761	0.0113	0.4106	96
1,600	0.0185	0.9687	0.0188	0.3999	176
3,200	0.0296	0.9576	0.0300	0.3839	480
6,400	0.0512	0.9360	0.0519	0.3527	89
12,800	0.0722	0.9150	0.0732	0.3223	123
25,600	0.0998	0.8875	0.1010	0.2826	155
51,200	0.1267	0.8605	0.1284	0.2436	315
25,600	0.1236	0.8637	0.1251	0.2482	120
6,400	0.1163	0.8709	0.1178	0.2586	210
1,600	0.1032	0.8840	0.1046	0.2775	980

C'c

(0.1284-0.0732)/[Log(51200)-Log(12800)]

0.0552/(4.71-4.1072)

C'c= 0.091

C'c = Cc/(1+e0)

0.091 = Cc/(1+0.427)

Cc = 0.13

Check:

Cc=(change in void ratio)/(Log change in pressure)

Cc=(0.2436-0.3223)/[Log(51200)-Log(12800)]

Cc=-0.0787/0.6028

Cc=-0.13

~~WHY DOES IT CALCULATE A NEGATIVE VALUE?~~

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

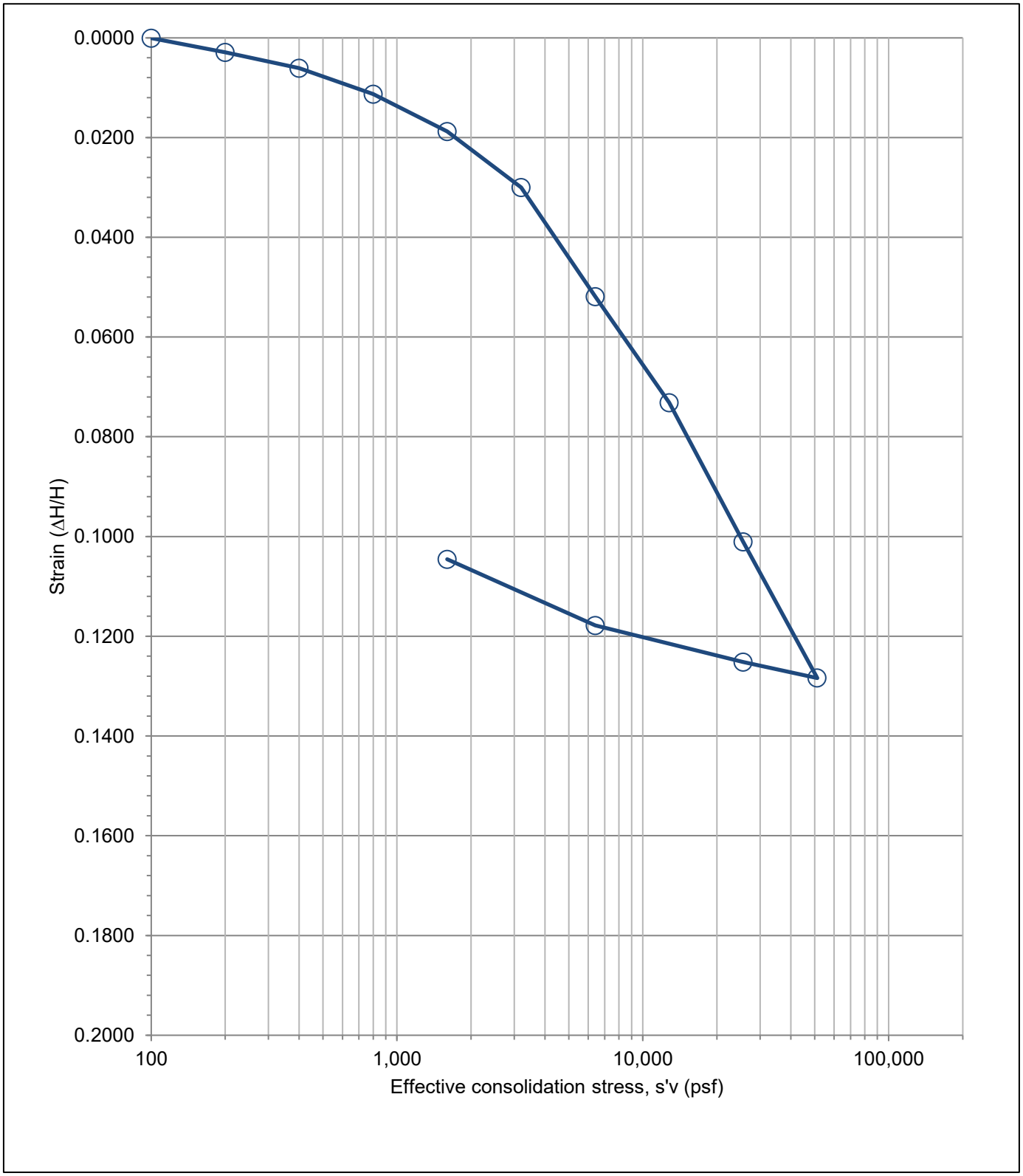
To be determined by the Geotechnical Engineer

Notes:
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation
[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10
No: 23072 (23-1725) **Depth:** 17.5-19 ft



Direct Shear of Soils Under Consolidated Drained Conditions, ASTM D3080

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson # 21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

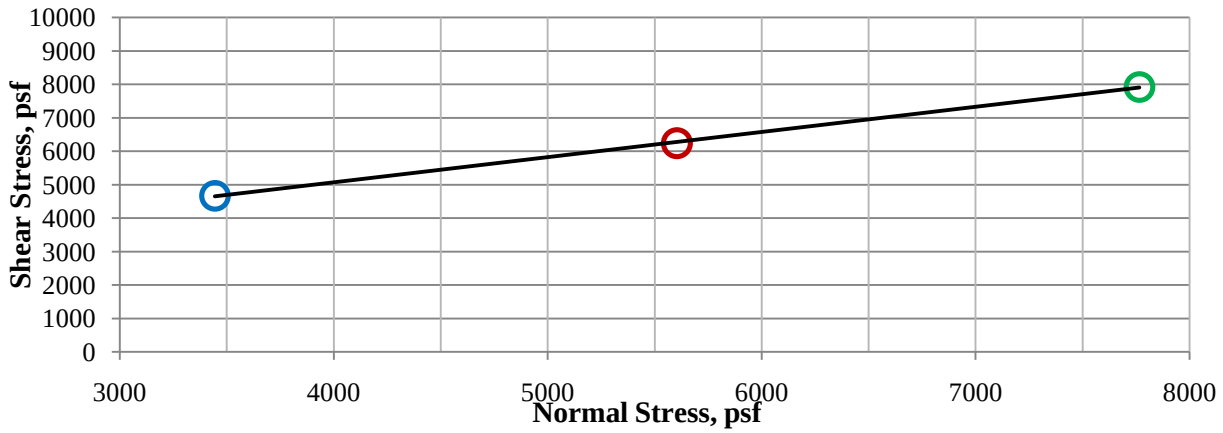
Sample Data:

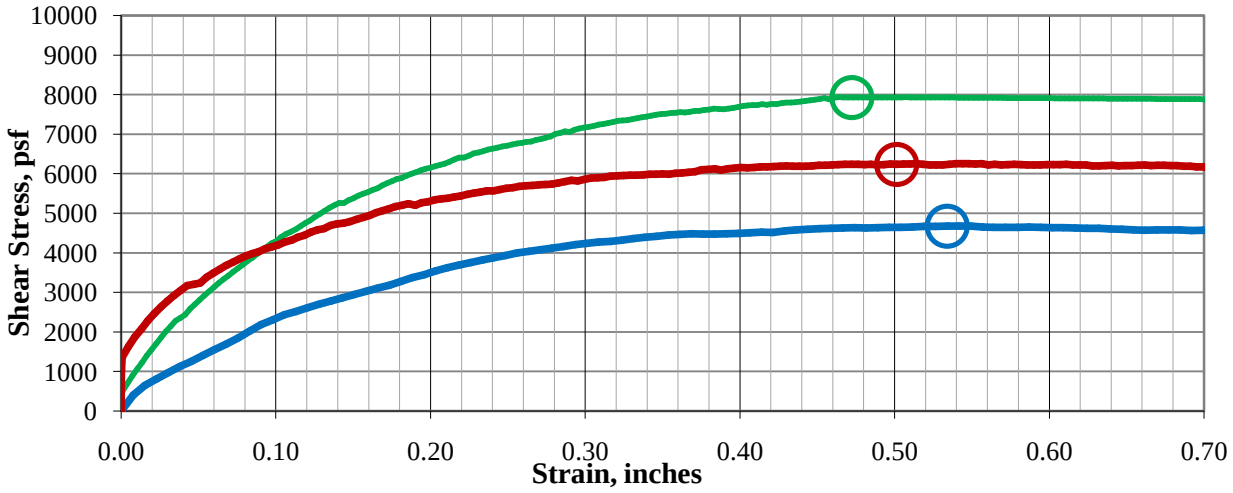
Boring: BH6-11 **Depth:** 52.5'-53' **Density:** 137.7 pcf moist

Description: Sandy Lean Clay, CL

Normal Stress, psf	Initial Moisture,%	Final Moisture,%	Consol + Collapse,%	Final Wet Density, pcf	Final Dry Density, pcf	Max Shear Stress, psf	Failure Strain,%
3444	14.4	16.2	2.2	143.1	123.1	**4673**	**22.1**
5604	14.4	15.6	3.0	143.5	124.1	**6234**	**20.7**
7764	14.4	14.7	3.8	143.6	125.2	**7924**	**19.5**

Peak Angle, ϕ° **37.0** Peak Cohesion, C, psf **2059** Strain rate, %/hour **4.1**





Remarks: Friction angle and cohesion in practice are sensitive to several other material properties, and conditions, in the field and lab. No individual lab property of a material can substitute for overall best practices in geotechnical design, construction, and field testing by qualified professionals.

Direct Shear of Soils Under Consolidated Drained Conditions, ASTM D3080

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson # 21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
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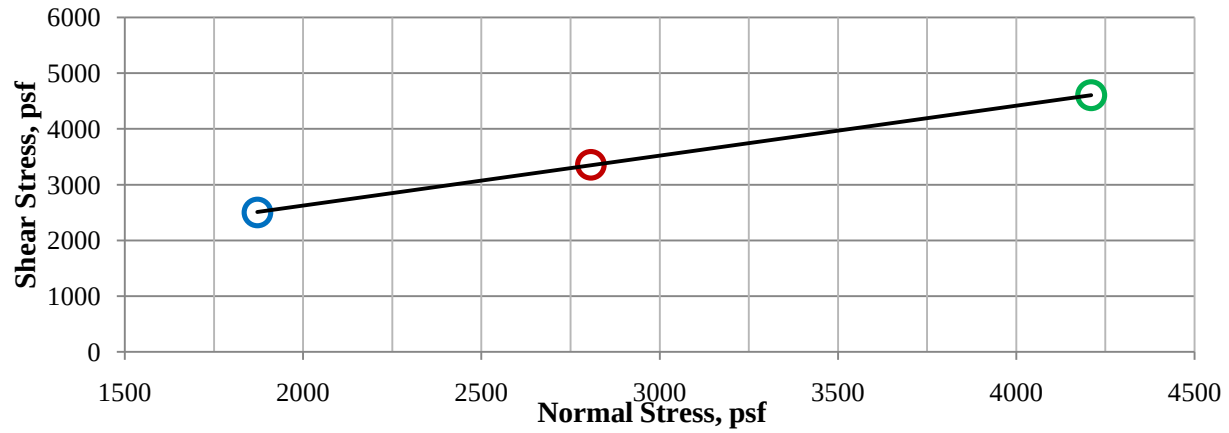
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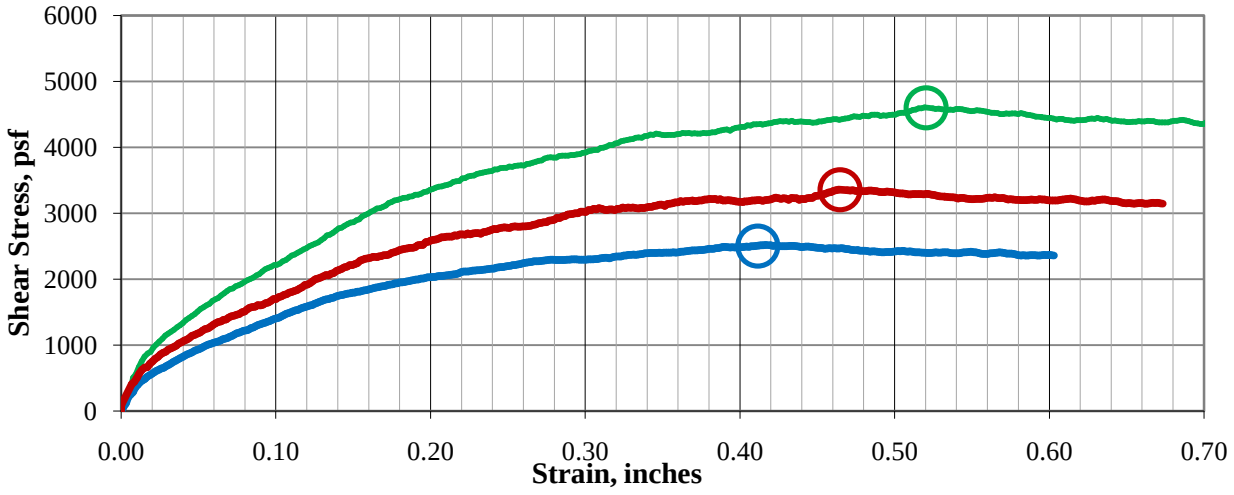
Boring: BH7-4 **Depth:** 19.5'-20' **Density:** 135.1 pcf moist

Description: Sandy Lean Clay, CL

Normal Stress, psf	Initial Moisture,%	Final Moisture,%	Consol + Collapse,%	Final Wet Density, pcf	Final Dry Density, pcf	Max Shear Stress, psf	Failure Strain,%
1871	15.5	19.5	1.5	141.9	118.7	**2505**	**17.0**
2806	15.5	17.6	2.6	141.2	120.1	**3358**	**19.2**
4210	15.5	15.8	3.6	140.5	121.3	**4602**	**21.5**

Peak Angle, ϕ° **41.9** Peak Cohesion, C, psf **835** Strain rate, %/hour **4.1**





Remarks: Friction angle and cohesion in practice are sensitive to several other material properties, and conditions, in the field and lab. No individual lab property of a material can substitute for overall best practices in geotechnical design, construction, and field testing by qualified professionals.

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Billings, Montana 59108-0190
p: 406.652.3930; f: 406.652.3944
www.skgeotechnical.com

Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

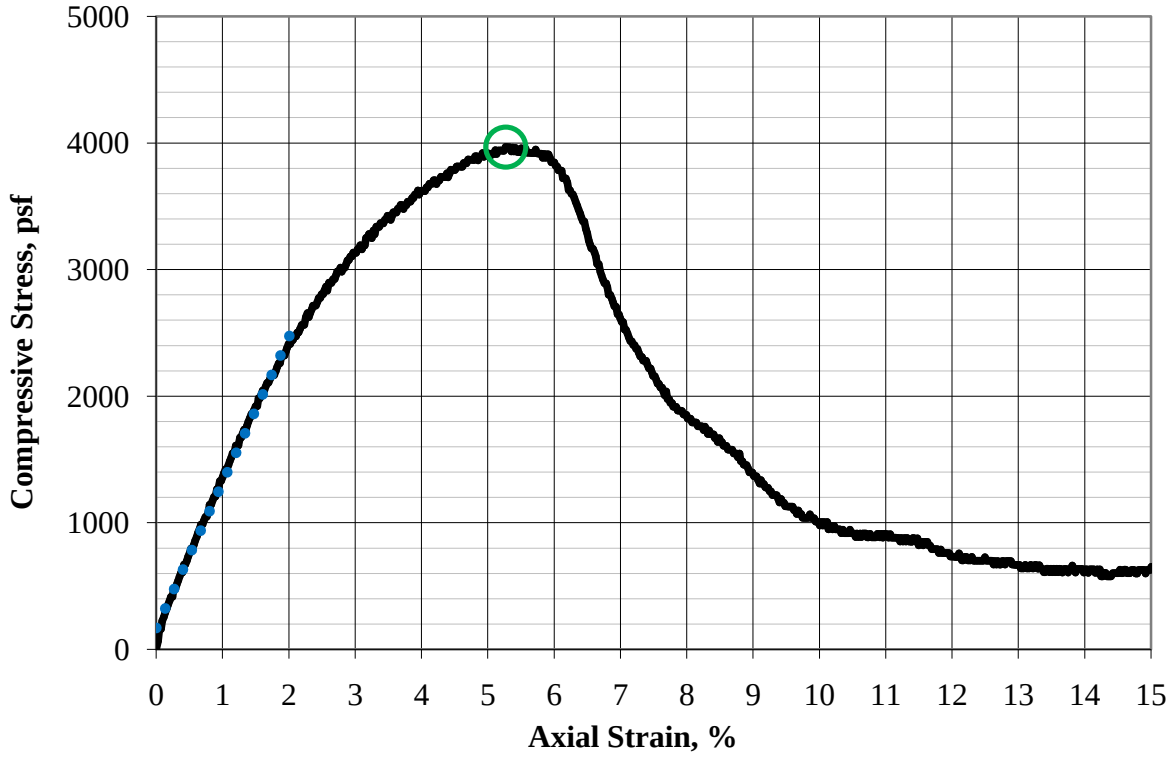
Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

Sample Data:

Boring: BH6-4B
Depth: 22.5' - 23'
Description: Lean Clay, CL

Specimen Properties:	
Average Diameter, in.	2.395
Average Height, in.	5.186
Height/Diameter (L/D)	2.17
Moisture, %	18.6
Wet density, pcf	128.5
Dry density, pcf	108.3

Undrained Unconfined Strength Properties:	
Compressive strength, psf	3968
Shear strength, psf	1984
Axial elastic modulus, psi	798
Failure strain, %	5.3
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
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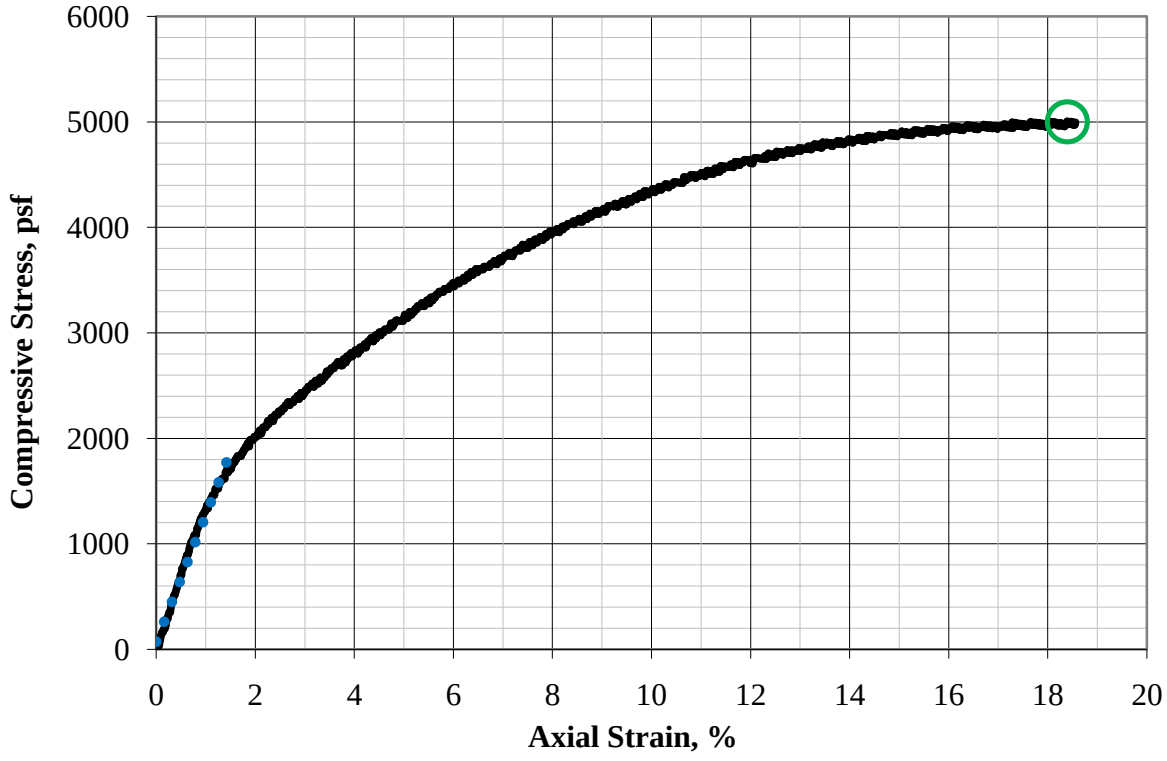
Sample Data:

Boring: BH7-6 Depth: 26' - 26.5'

Description: Lean Clay w/Sand, CL

Specimen Properties:	
Average Diameter, in.	2.389
Average Height, in.	6.044
Height/Diameter (L/D)	2.53
Moisture, %	25.6
Wet density, pcf	126.6
Dry density, pcf	100.8

Undrained Unconfined Strength Properties:	
Compressive strength, psf	5002
Shear strength, psf	2501
Axial elastic modulus, psi	834
Failure strain, %	18.4
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
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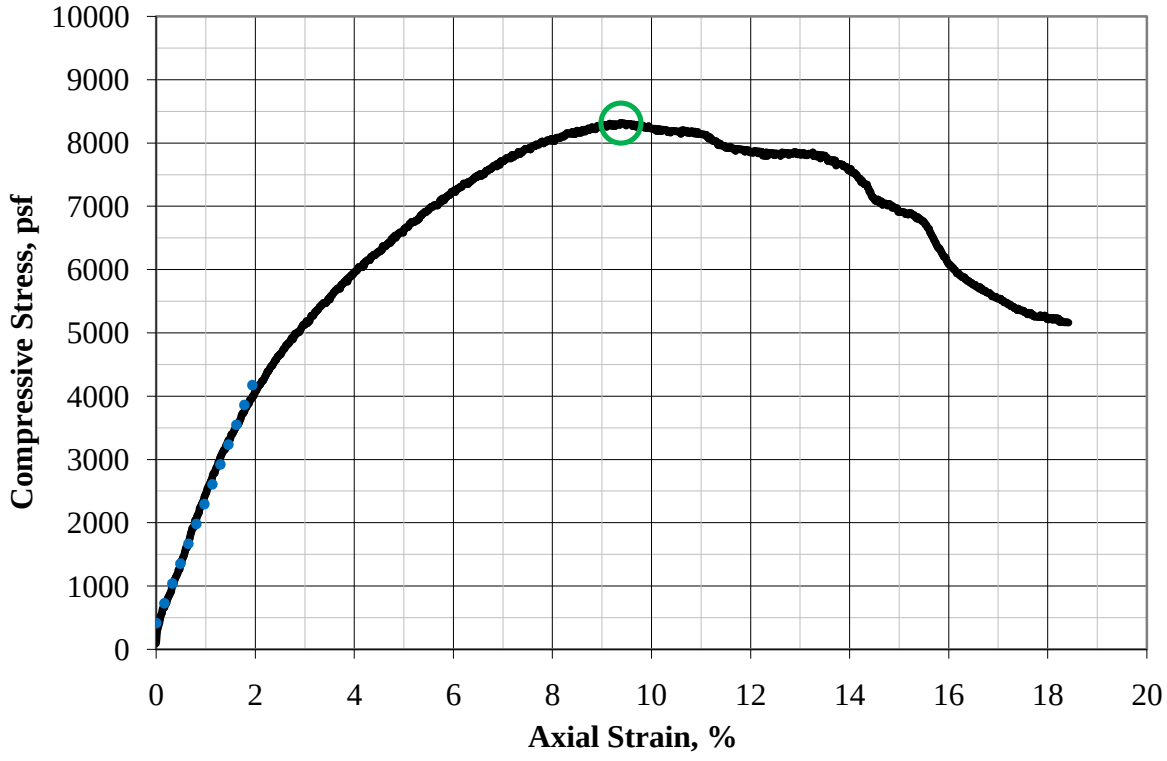
Sample Data:

Boring: BH7-13 Depth: 59.5' - 60'

Description: Sandy Lean Clay, CL

Specimen Properties:	
Average Diameter, in.	2.407
Average Height, in.	5.987
Height/Diameter (L/D)	2.49
Moisture, %	17.1
Wet density, pcf	133.3
Dry density, pcf	113.8

Undrained Unconfined Strength Properties:	
Compressive strength, psf	8315
Shear strength, psf	4158
Axial elastic modulus, psi	1346
Failure strain, %	9.4
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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USCS CLASSIFICATION

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Sample ID: BH1-4 Depth (ft): 29.75'-31.75'

Unified Soils Classification
SC (Clayey Sand with Gravel)

Gravel	22%
Sand	56%
Fines	23%

Liquid Limit:	27
Plastic Limit:	12
Plasticity Index:	15

In-Situ Moisture Content	10.2%

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	115.1	115.1	0.0	0%	100%
1"	25	115.1	115.1	0.0	0%	100%
3/4"	18.75	115.1	143.7	28.6	7%	93%
#4	4.75	115.1	174.2	59.1	22%	78%
#10	2.00	115.1	130.4	15.3	25%	75%
#40	0.425	115.1	131.8	16.7	29%	71%
#200	0.075	115.1	310.1	195.0	77%	23%
Pan	0	115.1	208.2	93.1	100%	0%
		Total Weight of Sample (g)		407.8		

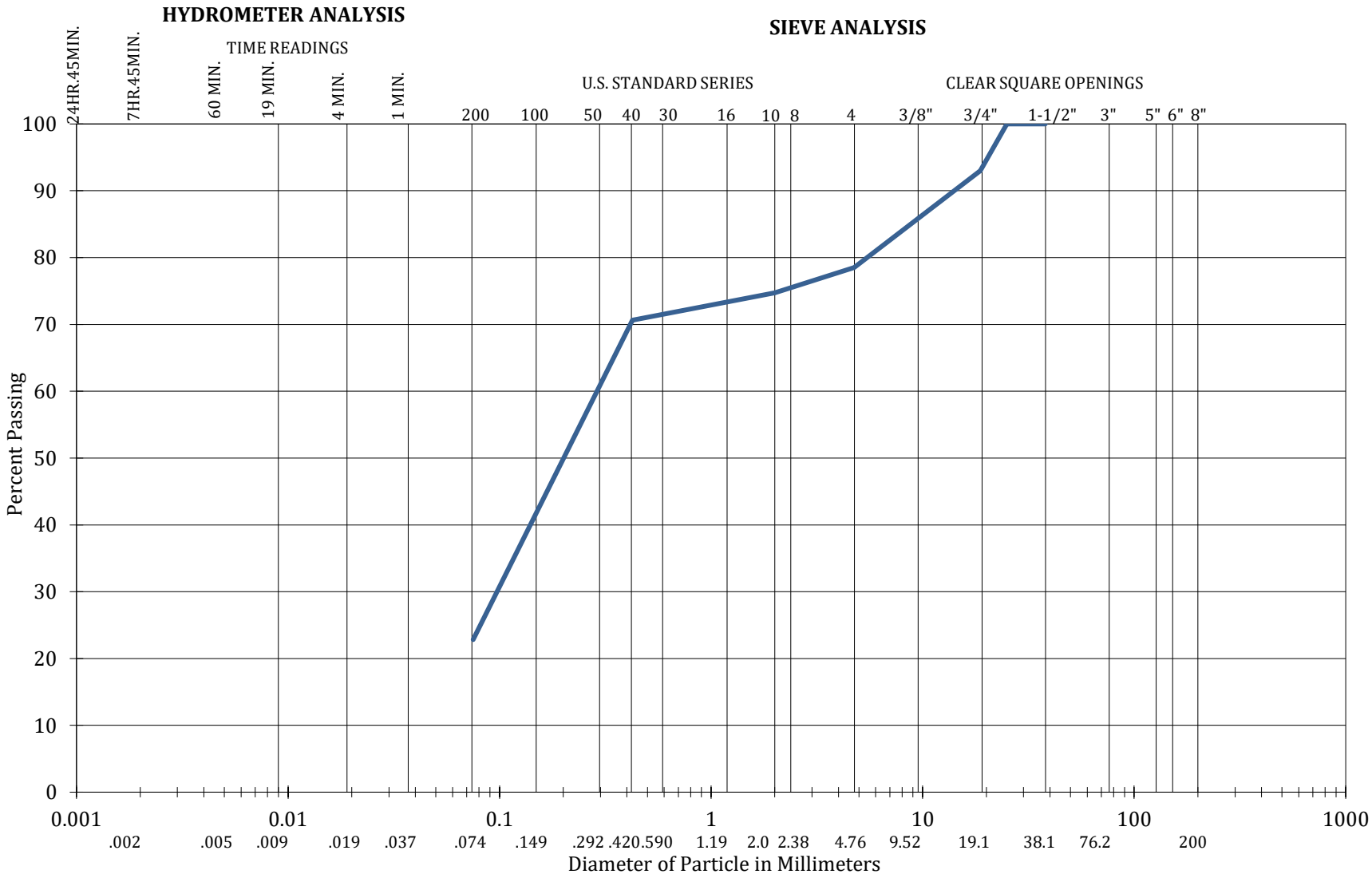
Moisture Content	
Wet Wt + Tare (g)	563.0
Dry Wt. + Tare (g)	521.6
Wt of Water (g)	41.4
Tare Wt. (g)	113.8
Dry Wt. (g)	407.8
Moisture Content	10.2%
Wash	
Wet Wt. + Tare (g)	563.0
Pre Wash Dry (g)	407.8
Post Wash Dry (g)	314.7
Tare Wt. (g)	113.8
Wt.Of Minus #200 =	93.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Brown Clayey Sand w/Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	12/7/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH1-4

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH1-5 Depth (ft): 40'-42'

Unified Soils Classification
SC (Clayey Sand)

Gravel	14%
Sand	57%
Fines	28%

Liquid Limit:	19
Plastic Limit:	4
Plasticity Index:	15

In-Situ Moisture Content	11.6%

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	115.1	115.1	0.0	0%	100%
1"	25	115.1	115.1	0.0	0%	100%
3/4"	18.75	115.1	127.5	12.4	2%	98%
#4	4.75	115.1	186.5	71.4	14%	86%
#10	2.00	115.1	144.7	29.6	19%	81%
#40	0.425	115.1	127.2	12.1	21%	79%
#200	0.075	115.1	411.2	296.1	72%	28%
Pan	0	115.1	282.0	166.9	100%	0%
		Total Weight of Sample (g)		588.5		

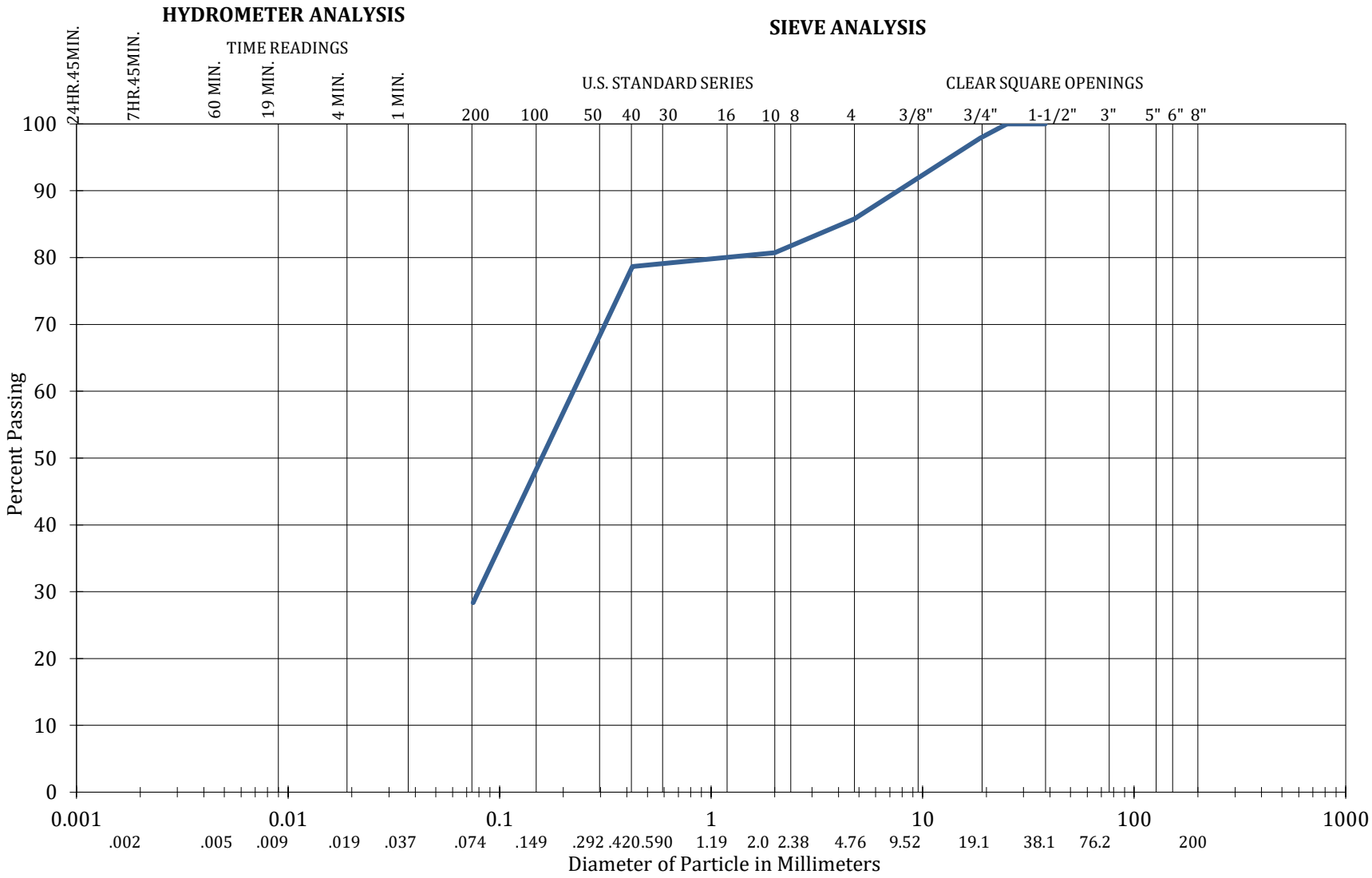
Moisture Content	
Wet Wt + Tare (g)	770.5
Dry Wt. + Tare (g)	702.3
Wt of Water (g)	68.2
Tare Wt. (g)	113.8
Dry Wt. (g)	588.5
Moisture Content	11.6%
Wash	
Wet Wt. + Tare (g)	770.5
Pre Wash Dry (g)	588.5
Post Wash Dry (g)	421.6
Tare Wt. (g)	113.8
Wt.Of Minus #200 =	166.9

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Brown Sandy Clay

Sampled By:	PG
Date:	
Tested By:	AP
Date:	12/7/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH1-5

Lot 58 Grand View Lodges

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Sample ID: BH1-6 Depth (ft): 45'-47'

Unified Soils Classification
SC (Clayey Sand)

Gravel	0%
Sand	66%
Fines	34%

Liquid Limit:	30
Plastic Limit:	6
Plasticity Index:	24

In-Situ Moisture Content	19.3%

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.7	110.7	0.0	0%	100%
1"	25	110.7	110.7	0.0	0%	100%
3/4"	18.75	110.7	110.7	0.0	0%	100%
#4	4.75	110.7	110.7	0.0	0%	100%
#10	2.00	110.7	110.7	0.0	0%	100%
#40	0.425	110.7	129.9	19.2	2%	98%
#200	0.075	110.7	622.1	511.4	66%	34%
Pan	0	110.7	382.8	272.1	100%	0%
		Total Weight of Sample (g)		802.7		

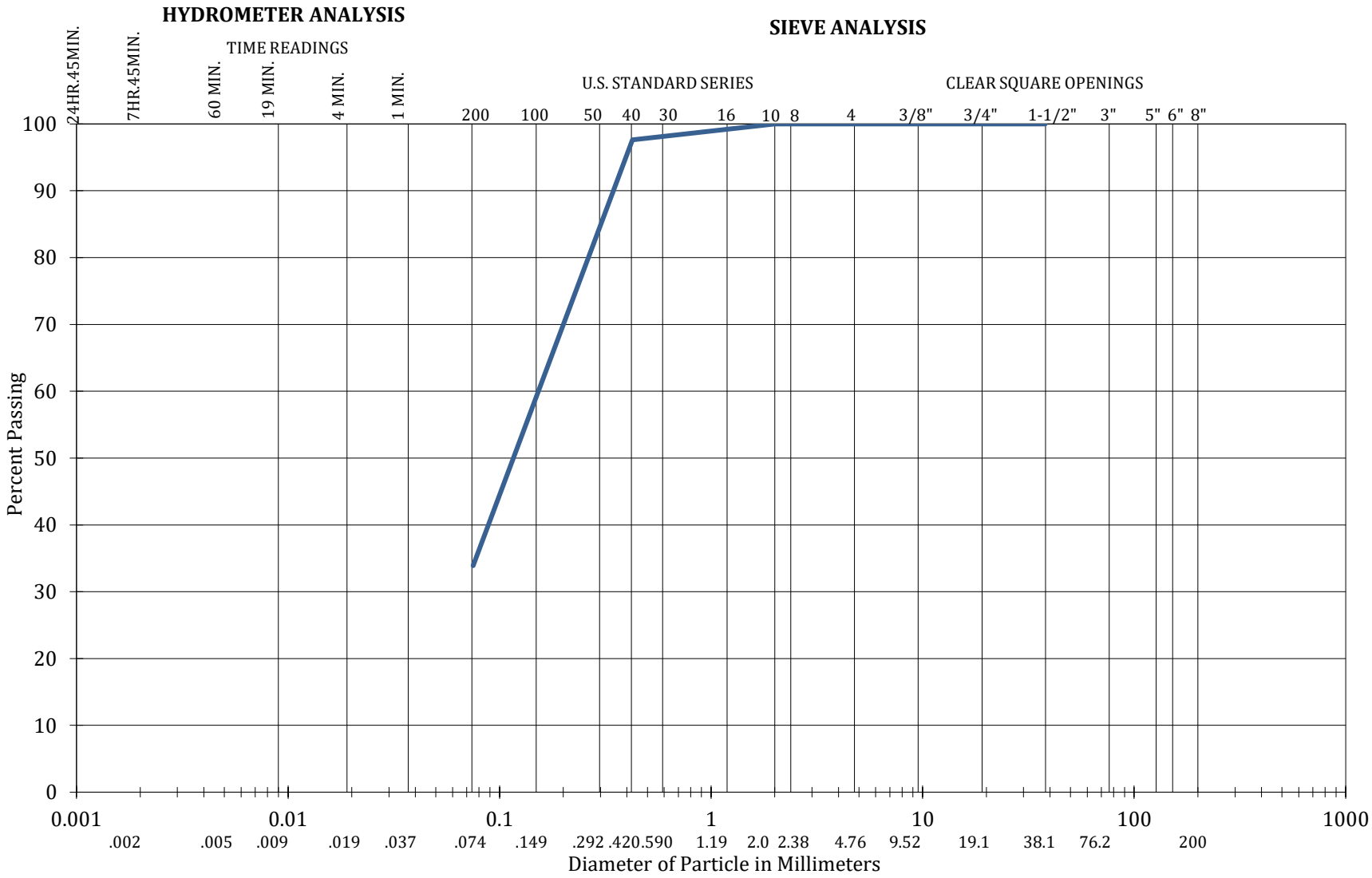
Moisture Content	
Wet Wt + Tare (g)	1067.4
Dry Wt. + Tare (g)	912.6
Wt of Water (g)	154.8
Tare Wt. (g)	109.9
Dry Wt. (g)	802.7
Moisture Content	19.3%
Wash	
Wet Wt. + Tare (g)	1067.4
Pre Wash Dry (g)	802.7
Post Wash Dry (g)	530.6
Tare Wt. (g)	109.9
Wt.Of Minus #200 =	272.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Brown Clayey Sand

Sampled By:	PG
Date:	
Tested By:	AP
Date:	12/7/2005

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH1-6

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH5 @ 23'-28' Depth (ft): 23'-28'

Unified Soils Classification
SC (Clayey Sand)

Gravel	7%
Sand	55%
Fines	38%

Liquid Limit:	29
Plastic Limit:	4
Plasticity Index:	25

In-Situ Moisture Content	N/A

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.1	110.1	0.0	0%	100%
1"	25	110.1	110.1	0.0	0%	100%
3/4"	18.75	110.1	110.1	0.0	0%	100%
#4	4.75	110.1	147.1	37.0	7%	93%
#10	2.00	110.1	134.6	24.5	11%	89%
#40	0.425	110.1	145.4	35.3	18%	82%
#200	0.075	110.1	343.2	233.1	62%	38%
Pan	0	110.1	316.3	206.2	100%	0%
		Total Weight of Sample (g)		536.1		

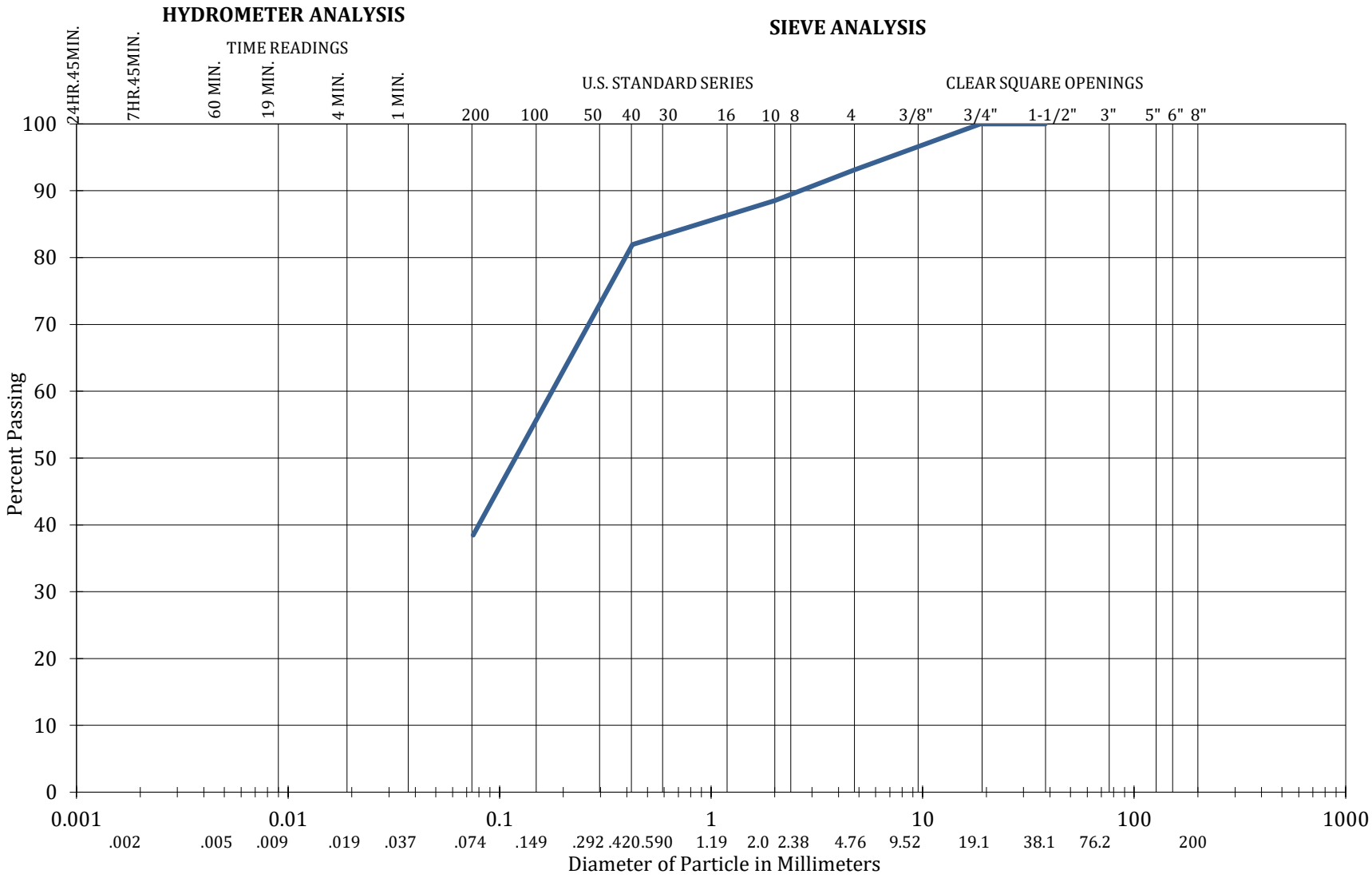
Moisture Content	
Wet Wt + Tare (g)	-
Dry Wt. + Tare (g)	-
Wt of Water (g)	-
Tare Wt. (g)	-
Dry Wt. (g)	-
Moisture Content	-
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	536.1
Post Wash Dry (g)	329.9
Tare Wt. (g)	109.9
Wt.Of Minus #200 =	206.2

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Tan Clayey Sand with Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	1/8/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH5 @ 23'-28'

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH5 @ 37'-41' Depth (ft): 37'-41'

Unified Soils Classification
SC (Clayey Sand)

Gravel	7%
Sand	68%
Fines	25%

Liquid Limit:	28
Plastic Limit:	12
Plasticity Index:	16

In-Situ Moisture Content	N/A

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.1	110.1	0.0	0%	100%
1"	25	110.1	110.1	0.0	0%	100%
3/4"	18.75	110.1	110.1	0.0	0%	100%
#4	4.75	110.1	163.8	53.7	7%	93%
#10	2.00	110.1	139.7	29.6	11%	89%
#40	0.425	110.1	196.8	86.7	23%	77%
#200	0.075	110.1	502.4	392.3	75%	25%
Pan	0	110.1	298.2	188.1	100%	0%
		Total Weight of Sample (g)		750.4		

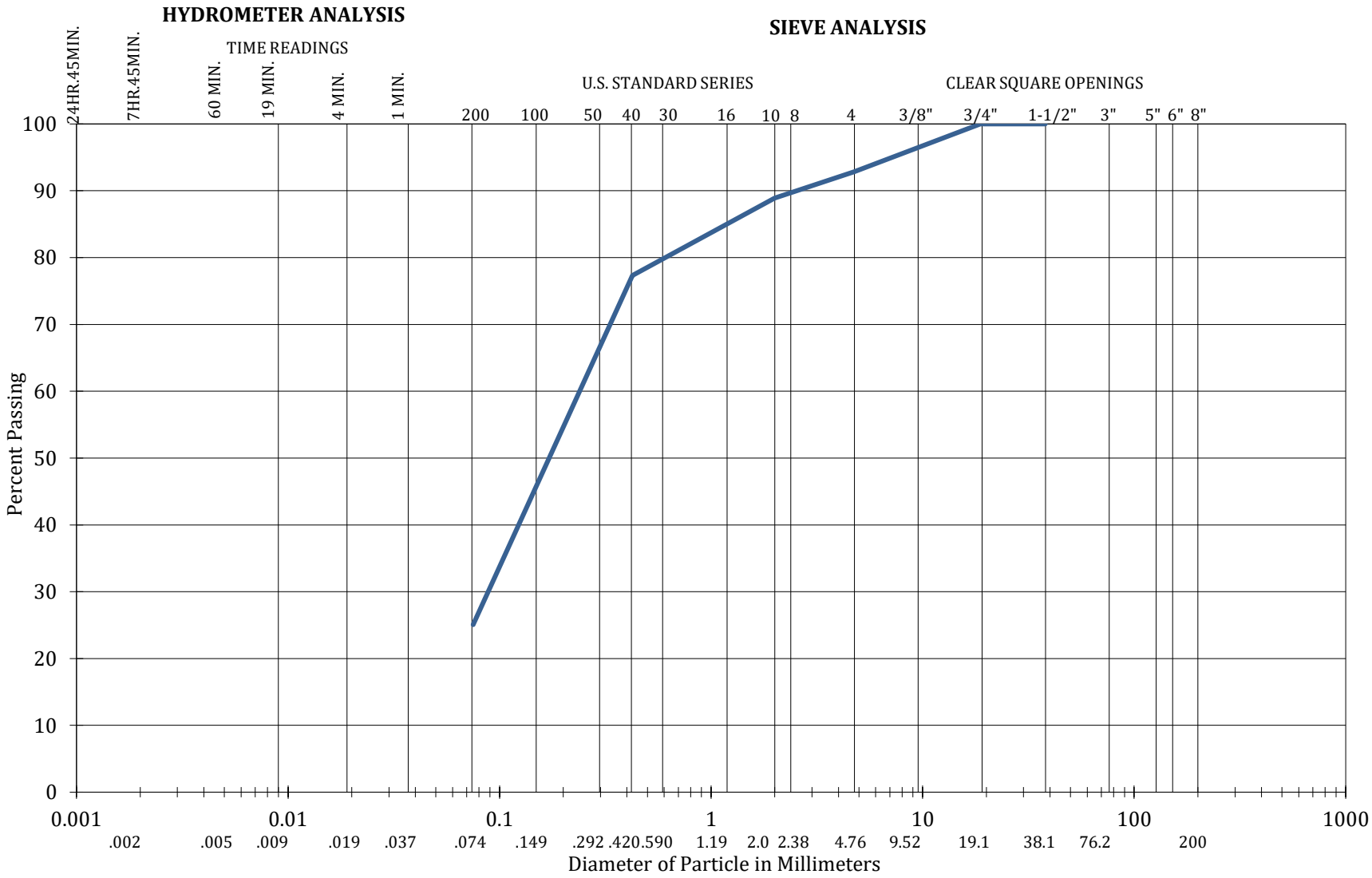
Moisture Content	
Wet Wt + Tare (g)	-
Dry Wt. + Tare (g)	-
Wt of Water (g)	-
Tare Wt. (g)	-
Dry Wt. (g)	-
Moisture Content	-
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	750.4
Post Wash Dry (g)	562.3
Tare Wt. (g)	114.3
Wt.Of Minus #200 =	188.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Gray Clayey Sand with Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	1/8/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH5 @ 37'-41'

Lot 58 Grand View Lodges

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Sample ID: BH6-4B Depth (ft): 22'-23'

Unified Soils Classification
Lean Clay, CL

Gravel	**0%**
Sand	**12%**
Fines	**87%**

Liquid Limit:	**33**
Plastic Limit:	**15**
Plasticity Index:	**18**

In-Situ Moisture Content	**17.5%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.2	292.2	0.0	0%	100%
1"	25	292.2	292.2	0.0	0%	100%
3/4"	18.75	292.2	292.2	0.0	0%	100%
3/8"	9.5	292.2	292.2	0.0	0%	100%
#4	4.75	292.2	293.3	1.0	0%	100%
#10	2.00	292.2	293.3	1.1	1%	99%
#40	0.425	292.2	304.0	11.8	5%	95%
#100	0.15	292.2	301.3	9.1	9%	91%
#200	0.075	292.2	303.4	11.2	13%	87%
Pan	0	292.2	527.4	235.2	100%	0%
		Total Weight of Sample (g)		**269.3**		

Moisture Content	
Wet Wt + Tare (g)	940.7
Dry Wt. + Tare (g)	825.9
Wt of Water (g)	114.8
Tare Wt. (g)	170.9
Dry Wt. (g)	654.9
Moisture Content	17.5%
Wash	
Wet Wt. + Tare (g)	940.7
Pre Wash Dry (g)	269.3
Post Wash Dry (g)	34.2
Tare Wt. (g)	292.2
Wt.Of Minus #200 =	235.2

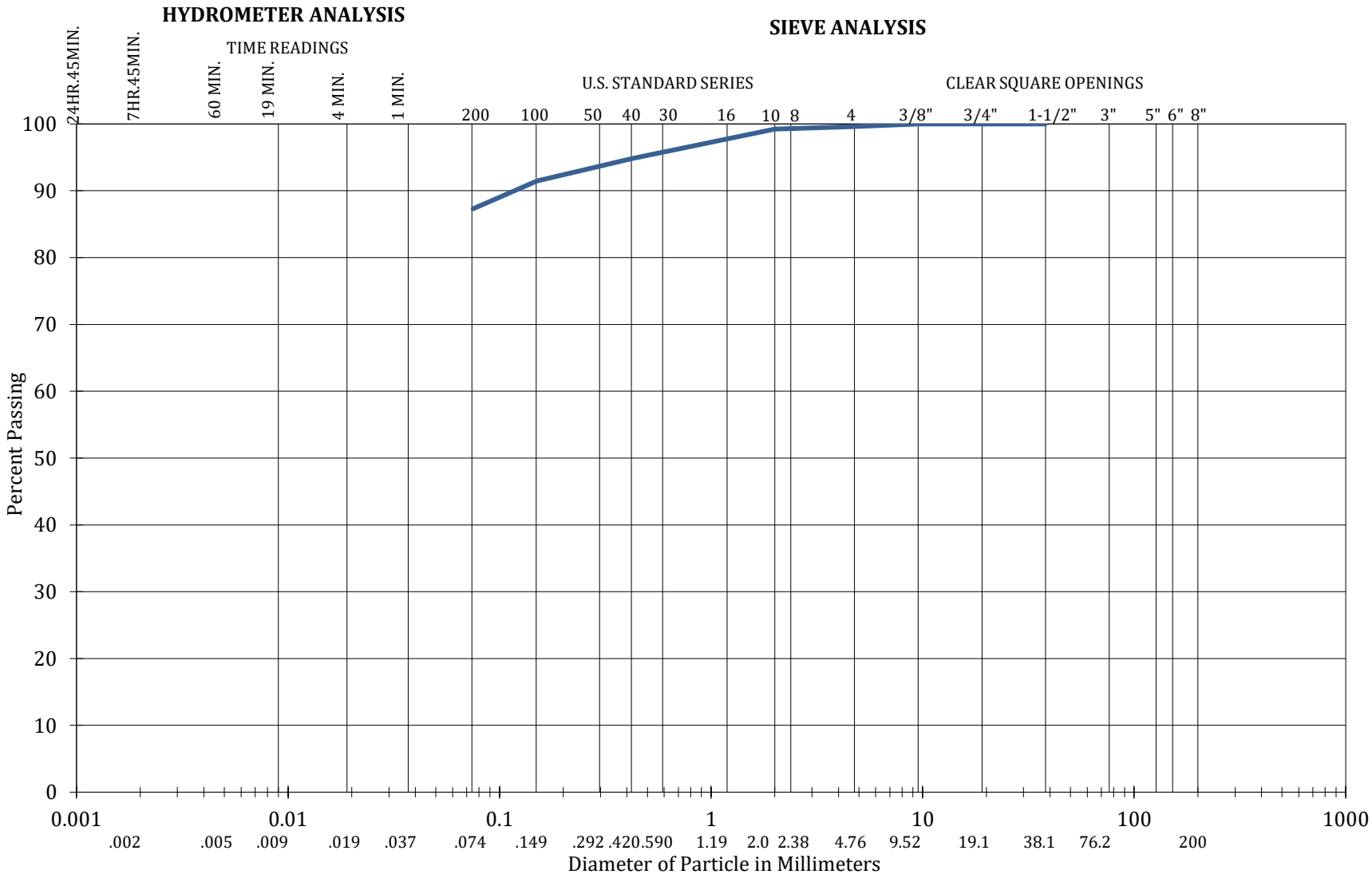
Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Olive Green Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/2/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH6-4B

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH6-11 Depth (ft): 52'-53'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**9%**
Sand	**25%**
Fines	**66%**

Liquid Limit:	**25**
Plastic Limit:	**11**
Plasticity Index:	**14**

In-Situ Moisture Content	**16.5%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	171.0	171.0	0.0	0%	100%
1"	25	171.0	171.0	0.0	0%	100%
3/4"	18.75	171.0	171.0	0.0	0%	100%
3/8"	9.5	171.0	205.5	34.5	5%	95%
#4	4.75	171.0	206.3	35.3	9%	91%
#10	2.00	171.0	231.4	60.4	17%	83%
#40	0.425	171.0	226.7	55.7	25%	75%
#100	0.15	171.0	200.2	29.2	29%	71%
#200	0.075	171.0	213.6	42.7	34%	66%
Pan	0	171.0	661.8	490.9	100%	0%
		Total Weight of Sample (g)		**748.7**		

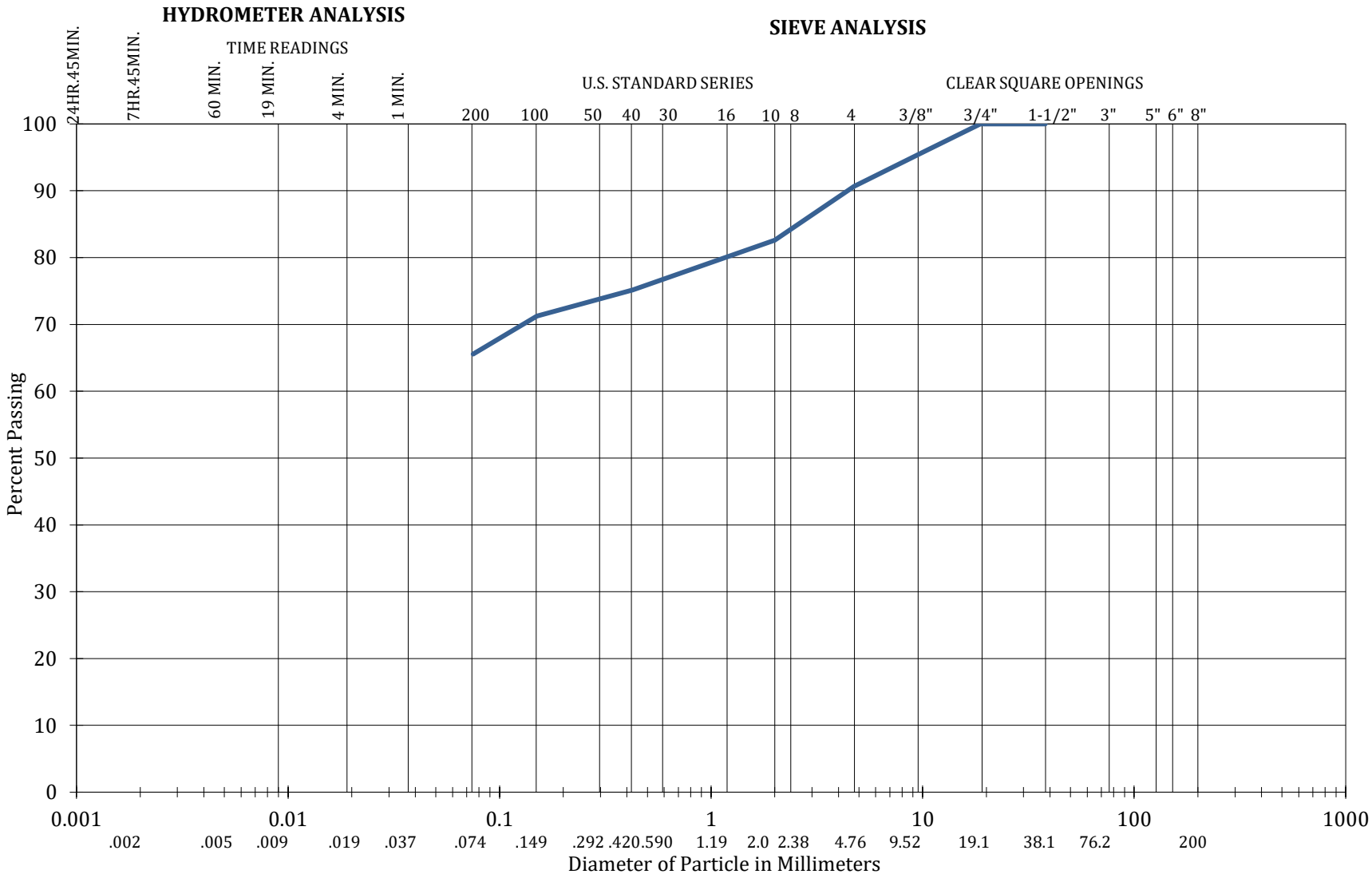
Moisture Content	
Wet Wt + Tare (g)	851.2
Dry Wt. + Tare (g)	754.8
Wt of Water (g)	96.4
Tare Wt. (g)	170.8
Dry Wt. (g)	584.0
Moisture Content	16.5%
Wash	
Wet Wt. + Tare (g)	851.2
Pre Wash Dry (g)	748.7
Post Wash Dry (g)	257.8
Tare Wt. (g)	170.4
Wt.Of Minus #200 =	490.9

Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Sandy Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/7/2021

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH6-11

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH7-4 Depth (ft): 19'-20'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**9%**
Sand	**27%**
Fines	**64%**

Liquid Limit:	**25**
Plastic Limit:	**14**
Plasticity Index:	**11**

In-Situ Moisture Content	**13.2%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.3	292.3	0.0	0%	100%
1"	25	292.3	292.3	0.0	0%	100%
3/4"	18.75	292.3	292.3	0.0	0%	100%
3/8"	9.5	292.3	301.7	9.5	3%	97%
#4	4.75	292.3	307.6	15.4	9%	91%
#10	2.00	292.3	310.8	18.5	16%	84%
#40	0.425	292.3	311.2	18.9	23%	77%
#100	0.15	292.3	306.4	14.1	28%	72%
#200	0.075	292.3	313.4	21.1	36%	64%
Pan	0	292.3	467.0	174.8	100%	0%
		Total Weight of Sample (g)		**272.2**		

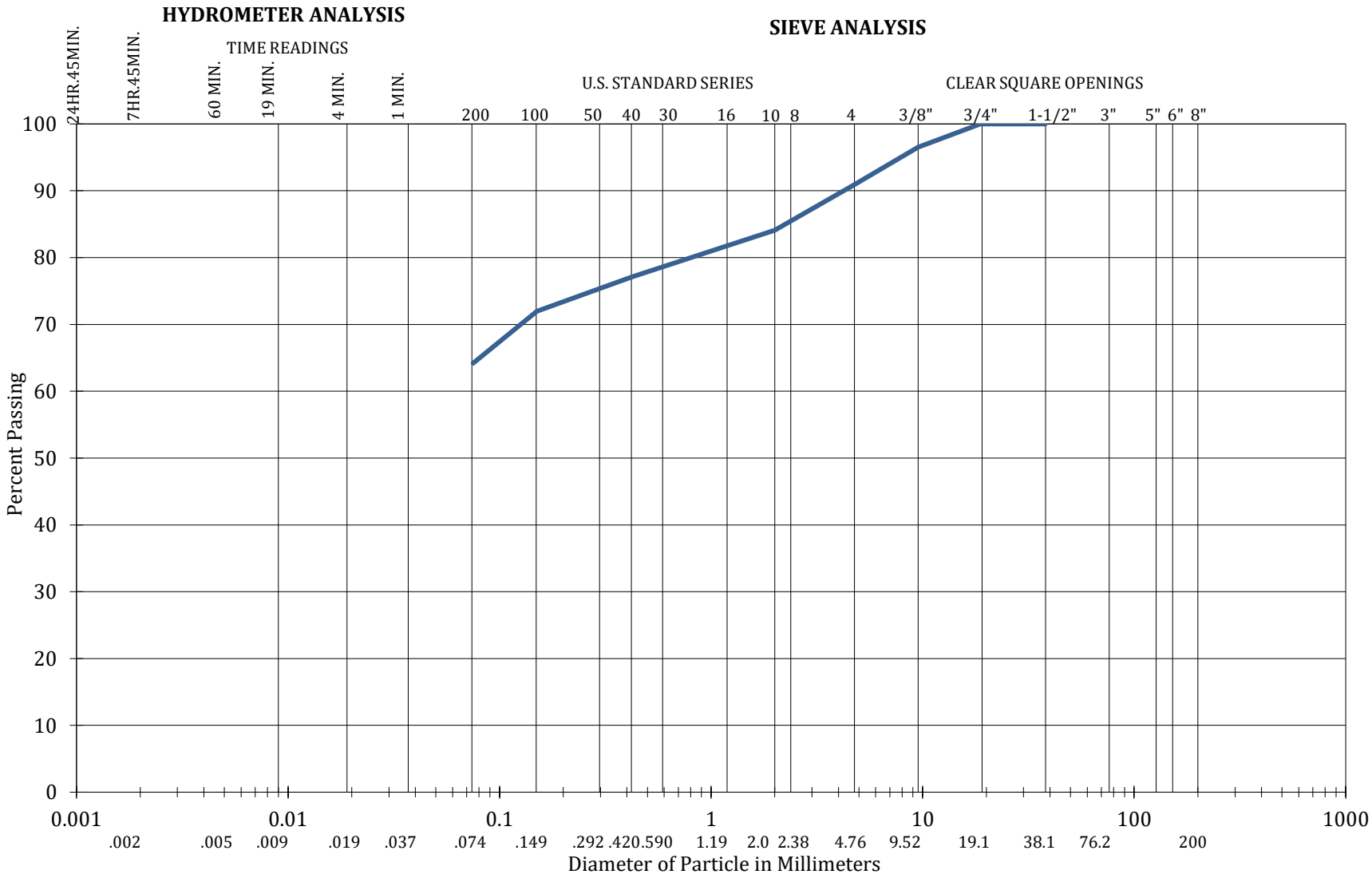
Moisture Content	
Wet Wt + Tare (g)	1193.5
Dry Wt. + Tare (g)	1074.5
Wt of Water (g)	118.9
Tare Wt. (g)	170.9
Dry Wt. (g)	903.7
Moisture Content	13.2%
Wash	
Wet Wt. + Tare (g)	1193.5
Pre Wash Dry (g)	272.2
Post Wash Dry (g)	97.5
Tare Wt. (g)	292.3
Wt.Of Minus #200 =	174.8

Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Sandy Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/2/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH7-4

Lot 58 Grand View Lodges

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Sample ID: BH7-6 Depth (ft): 25.5'-26.5'

Unified Soils Classification

Lean Clay with Sand, CL

Gravel	**4%**
Sand	**15%**
Fines	**81%**

Liquid Limit:	**35**
Plastic Limit:	**17**
Plasticity Index:	**18**

In-Situ Moisture Content	**20.6%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.3	292.3	0.0	0%	100%
1"	25	292.3	292.3	0.0	0%	100%
3/4"	18.75	292.3	292.3	0.0	0%	100%
3/8"	9.5	292.3	298.7	6.4	2%	98%
#4	4.75	292.3	297.1	4.8	4%	96%
#10	2.00	292.3	296.7	4.4	5%	95%
#40	0.425	292.3	300.0	7.7	8%	92%
#100	0.15	292.3	302.7	10.4	12%	88%
#200	0.075	292.3	312.9	20.6	19%	81%
Pan	0	292.3	531.7	239.4	100%	0%
		Total Weight of Sample (g)		**293.8**		

Moisture Content	
Wet Wt + Tare (g)	1304.2
Dry Wt. + Tare (g)	1110.3
Wt of Water (g)	193.9
Tare Wt. (g)	170.6
Dry Wt. (g)	939.7
Moisture Content	20.6%
Wash	
Wet Wt. + Tare (g)	1304.2
Pre Wash Dry (g)	293.8
Post Wash Dry (g)	54.4
Tare Wt. (g)	292.3
Wt.Of Minus #200 =	239.4

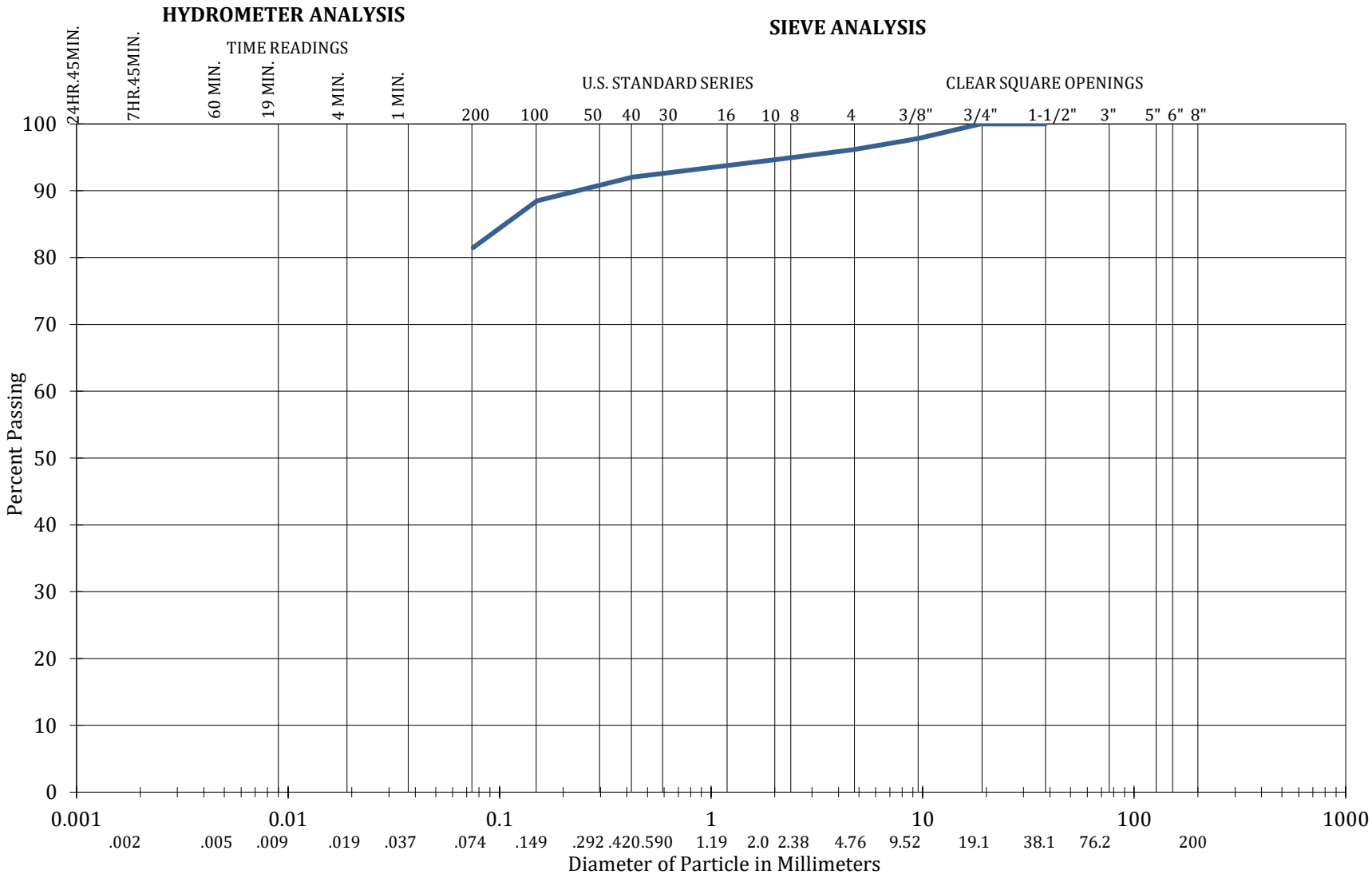
Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/1/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH7-6

Lot 58 Grand View Lodges

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Sample ID: BH7-13 Depth (ft): 59'-60'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**11%**
Sand	**22%**
Fines	**67%**

Liquid Limit:	**29**
Plastic Limit:	**15**
Plasticity Index:	**14**

In-Situ Moisture Content	**17.9%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.2	292.2	0.0	0%	100%
1"	25	292.2	332.0	39.8	6%	94%
3/4"	18.75	292.2	292.2	0.0	6%	94%
3/8"	9.5	292.2	306.5	14.2	8%	92%
#4	4.75	292.2	311.7	19.4	11%	89%
#10	2.00	292.2	325.3	33.1	16%	84%
#40	0.425	292.2	327.0	34.8	21%	79%
#100	0.15	292.2	319.8	27.6	25%	75%
#200	0.075	292.2	344.3	52.0	33%	67%
Pan	0	292.2	748.9	456.6	100%	0%
		Total Weight of Sample (g)		**677.5**		

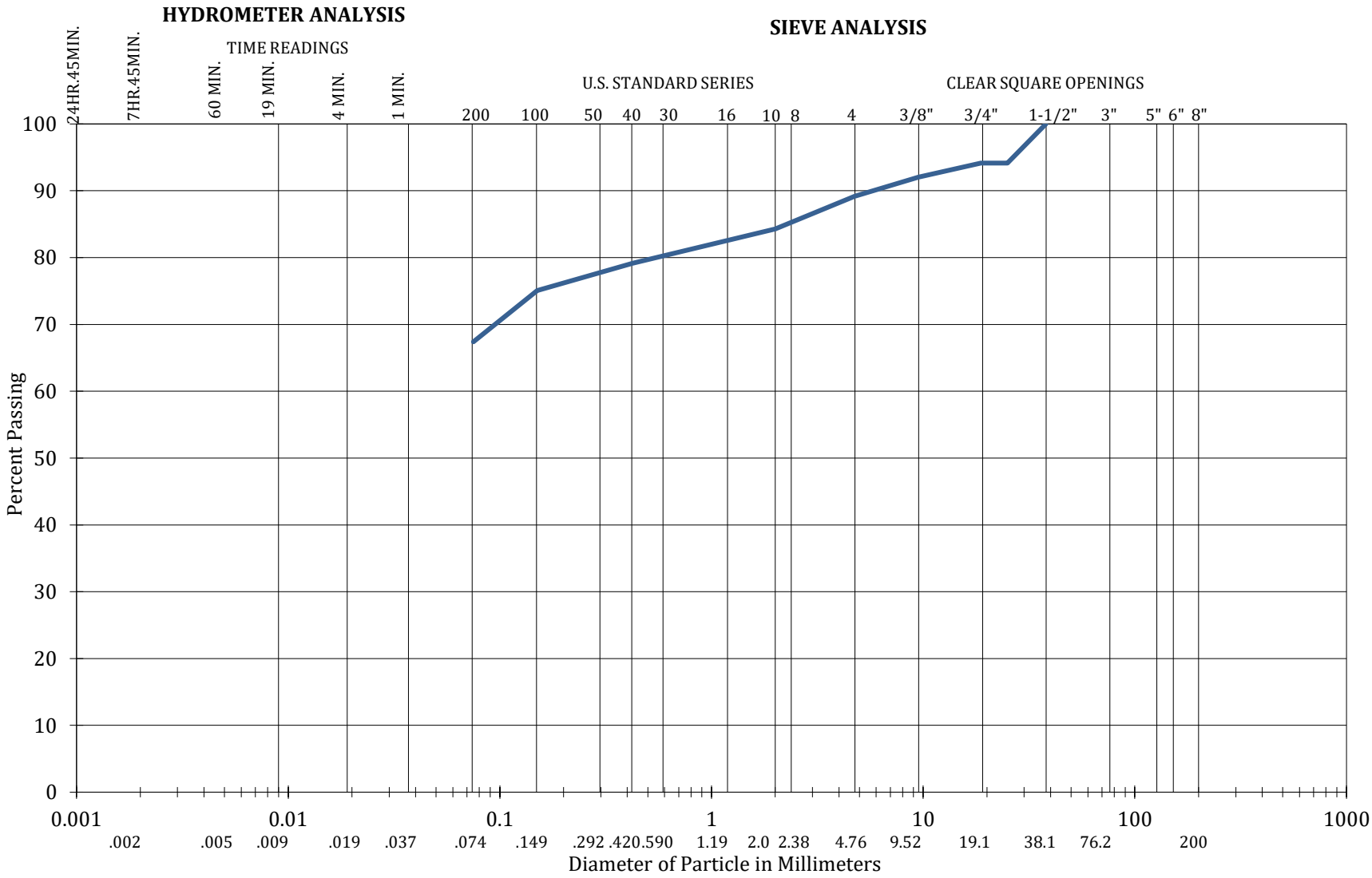
Moisture Content	
Wet Wt + Tare (g)	1000.2
Dry Wt. + Tare (g)	873.8
Wt of Water (g)	126.4
Tare Wt. (g)	169.7
Dry Wt. (g)	704.2
Moisture Content	17.9%
Wash	
Wet Wt. + Tare (g)	1000.2
Pre Wash Dry (g)	677.5
Post Wash Dry (g)	220.9
Tare Wt. (g)	169.7
Wt.Of Minus #200 =	456.6

Project:	Lot 58 Gand View Lodges
Job Number	21-222-02
Visual ID:	Gray Lean Clay with Sand

Sampled By:	AP
Date:	6/25/2021
Tested By:	AE
Date:	7/1/2021

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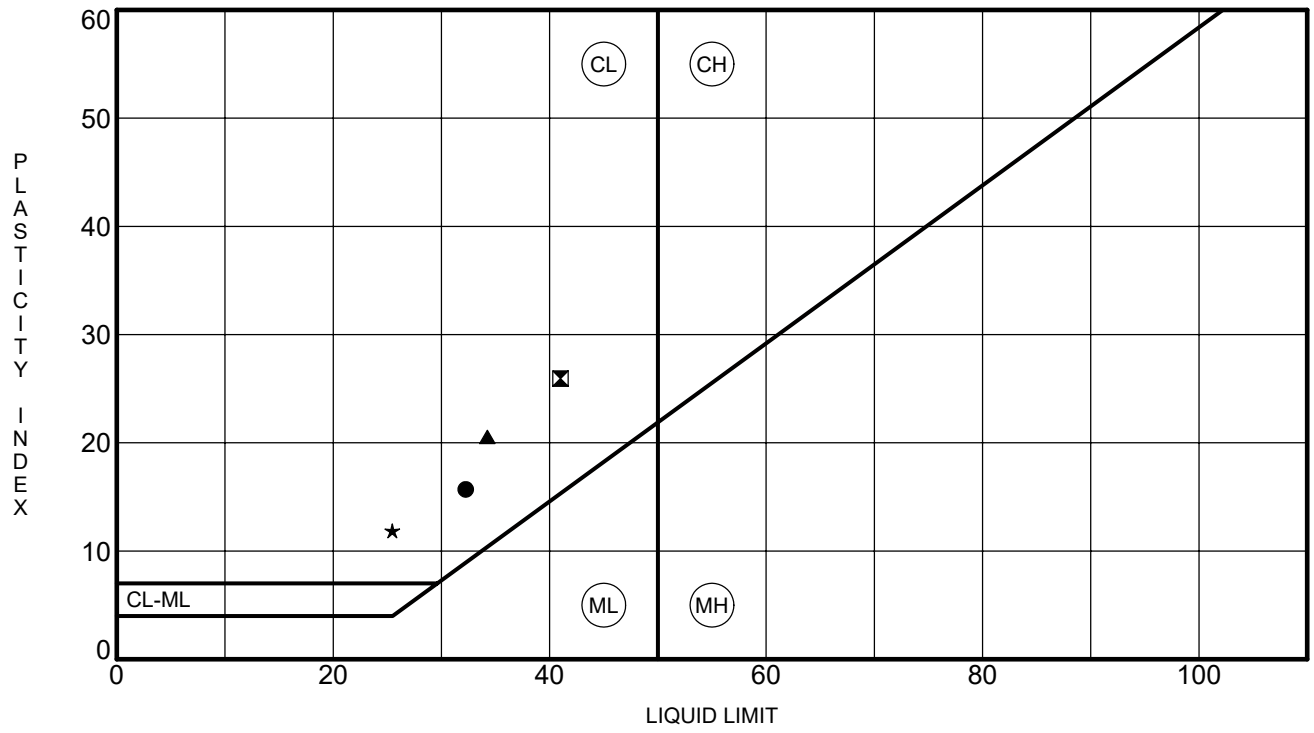
USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH7-13

Lot 58 Grand View Lodges



	Specimen Identification		LL	PL	PI	Fines	Classification
●	**TP-1**	**9.0**	**32**	**17**	**15**		
⊠	**TP-1**	**10.0**	**41**	**15**	**26**		
▲	**TP-1**	**25.0**	**34**	**14**	**20**		
★	**TP-1**	**27.5**	**25**	**14**	**11**		

Womack & Associates, Inc.
P.O. Box 12650
Jackson, WY 83002
Telephone: (307)733-7209
Fax:

ATTERBERG LIMITS' RESULTS

Project: TOJ - Snow King Water Tank

Location: Jackson, Wyoming

Number:

JORGENSEN
GEOTECHNICAL, LLC

PO Box 9550 | 1315 HWY 89 S., Ste. 201
Jackson, WY 83002
PH: 307.733.5150
www.jorgeng.com

APPENDIX D

Soil-Engineering Parameters

Engineering parameters for site soils were evaluated based on a variety of methods, including:

- direct laboratory testing (shear strength and consolidation),
- correlations with index tests,
- empirical relationships between SPT N-values and shear strength, and
- visual classification and empirical estimates.

Due to the chaotic and random nature of the soils (i.e., mixture of fine-grained and coarse-grained soils), collecting relatively undisturbed shelby tube samples of fine-grained soil layers during the drilling effort to perform shear tests and consolidation tests on was difficult. Therefore, very limited soil parameters for soil unit weight, consolidation values, and shear strength values were directly determined from their respective tests. Most of the samples that underwent lab testing were disturbed samples collected during SPT sampling and sonic drilling, of which their results were used to estimate the soil parameters based on correlations. Jorgensen Geotechnical (JG) was able to submit two relatively undisturbed Shelby tube samples to undergo consolidation testing, while the 2021 Nelson Engineering Report presented shear testing results from five relatively undisturbed Shelby tube samples, which were reviewed.

A discussion regarding the selection of soils parameters is found below.

Soil Unit Weight

Two consolidation tests were performed which produced dry unit weights, while five shear test results presented in the Nelson Engineering report produced dry unit weights. These direct unit weight measurements, SPT blow counts, and observations made in the open test pits were used to estimate the in-situ unit weight of the soils. Estimated unit weights are presented below in Table D-1.

Table D-1: Estimated Soil Unit Weight Values

Soil Layer	Unit Weight (Pounds per cubic foot)
CL – Lean Clay	115
SC – Clayey Sand	120
GC – Clayey Gravel	125
SC – Weathered Bedrock	140

Consolidation Parameters

Two consolidation tests were performed on samples collected during the drilling effort performed by JG. No consolidation tests were presented in the Nelson Engineering or Womack and Associates, reports. Coefficients of consolidation, C_c, were calculated based on the direct consolidated test results, as well as methods recommended by Skempton (1944), Nagaraj and Murthy (1985), Wroth and Wood (1978), and Kulhawy and Mayne (1990). These calculation methods use index properties such as the Liquid Limit and the Plasticity Index to estimate the coefficients of consolidation. The results presented below are the average of all C_c, values calculated from the direct results and correlation calculations.

Table D-2: Estimated Coefficients of Consolidation

Soil Layer	Coefficient of Consolidation
CL – Clay	0.20
SC – Clayey Sand	0.18
GC – Clayey Gravel	0.16

Strength Parameters

Internal Friction Angle (phi)

Strength parameters used in the slope stability model were selected by examining direct shear results, calculations based on SPT blow count values, as recommended by Hatanaka and Uchida (1996) and Schmertmann (1975), and calculated based on index properties as recommended by Duncan (1989). Minimum, maximum, and average internal friction angles (phi) are summarized in the table below.

Table D-3: Estimated Internal Friction Values (Degrees)

	Minimum	Maximum	Average	Standard Deviation	Selected phi[1]
CL – Clay	30.0	56.3	37.3	7.2	35
SC – Clayey Sand	27.5	54.2	37.9	9.4	37
GC – Clayey Gravel	29.0	63.3	47.5	9.7	40
SC – Weathered Bedrock	--	--	--	--	60

1. Dashes indicate a refusal condition was met during SPT samples, therefore phi value was estimated

As summarized in the table above, the minimum and maximum calculated internal friction angles for a single soil layer sometimes varied by over 20-degrees. Therefore, internal friction angles were selected by reviewing all calculated values, as well as reviewing suggested values in Chapter 9 of the Pit Slope Manual (1982).

Soils that have undergone movement are assumed to be in a residual strength state; i.e., weaker than the strength of the soils prior to the movement. Though the published geologic maps and our observations in the field classified the origin of the soils as landslide debris, no direct shear zones were observed and no signs of previous shearing (i.e., slickensides) were observed. Additionally, loess, typically formed from windblown glacial silt, was observed overlying the landslide deposit, therefore it is assumed the landslide occurred prior to or during the Pinedale Glaciation approximately 10 to 30 thousand years ago. If the soils observed in the boreholes and test pits were once in a residual state following failure, it is assumed since their mobilization in the failure event, they have been naturally consolidating and therefore regaining strength. Therefore, residual shear strengths were not used for the slope stability model and peak shear strengths were used.

Cohesion

Cohesion was added to the material models in the slope stability model to avoid selecting slip surfaces representing the “infinite slope” solution. Cohesion values used in the slope stability models can be found in Appendix F.

Compression Index (C_c) Calculation Spreadsheet

							Skempton	*Nagaraj*	*Wroth*	*Kulhawy*				
Project	**BH**	**Depth**	**LL**	**PL**	**PI**	**Consol Results**	**Compression Index (Cc)**				**Average**	**Median**	**Std Dev**	**Classification**
Bear Development - Snow King Loop Lots 53 and 58	JG-10	12.5-14.0	39	15	24	0.17	*0.26*	*0.24*	*0.32*	*0.32*	0.29	0.29	0.04	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-10	17.5-19.0	32	14	18	0.13	*0.20*	*0.20*	*0.24*	*0.24*	0.22	0.22	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	18-19	31	16	15		*0.19*	*0.19*	*0.20*	*0.20*	0.20	0.20	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	27-29	28	16	12		*0.16*	*0.18*	*0.16*	*0.16*	0.17	0.16	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	54.5-57	33	15	18		*0.21*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	67-69	26	16	10		*0.14*	*0.16*	*0.14*	*0.14*	0.14	0.14	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	72.5-75	38	17	21		*0.25*	*0.24*	*0.28*	*0.28*	0.26	0.27	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	7-8.5	20	15	5		*0.09*	*0.13*	*0.07*	*0.07*	0.09	0.08	0.03	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-02	14.5-16	31	15	16		*0.19*	*0.19*	*0.22*	*0.22*	0.20	0.21	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	22-25	29	15	14		*0.17*	*0.18*	*0.19*	*0.19*	0.18	0.19	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	32-35	21	16	5		*0.10*	*0.13*	*0.07*	*0.07*	0.09	0.08	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	38.5-40	29	17	12		*0.17*	*0.18*	*0.16*	*0.16*	0.17	0.17	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	52-55	16	4	12		*0.05*	*0.10*	*0.16*	*0.16*	0.12	0.13	0.05	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	60-62	37	23	14		*0.24*	*0.23*	*0.19*	*0.19*	0.21	0.21	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	64.5-67	31	17	14		*0.19*	*0.19*	*0.19*	*0.19*	0.19	0.19	0.00	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	69.5-72	21	16	5		*0.10*	*0.13*	*0.07*	*0.07*	0.09	0.08	0.03	SC
Bear Development - Snow King Loop Lots 53 and 58	JG-03	4.5-7	33	14	19		*0.21*	*0.21*	*0.26*	*0.26*	0.23	0.23	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-03	14.5-17	30	15	15		*0.18*	*0.19*	*0.20*	*0.20*	0.19	0.20	0.01	SC
Bear Development - Snow King Loop Lots 53 and 58	JG-03	22-25	35	15	20		*0.23*	*0.22*	*0.27*	*0.27*	0.25	0.25	0.03	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-03	30-33	29	15	14		*0.17*	*0.18*	*0.19*	*0.19*	0.18	0.19	0.01	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-04	7-8.5	34	16	18		*0.22*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-04	14.5-17	19	14	5		*0.08*	*0.12*	*0.07*	*0.07*	0.08	0.07	0.02	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-04	22-25	31	17	14		*0.19*	*0.19*	*0.19*	*0.19*	0.19	0.19	0.00	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-04	30-33	33	15	18		*0.21*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-10	7.5-9	25	16	9		*0.14*	*0.16*	*0.12*	*0.12*	0.13	0.13	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-10	15-17	38	21	17		*0.25*	*0.24*	*0.23*	*0.23*	0.24	0.23	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-11	7.5-9	22	15	7		*0.11*	*0.14*	*0.09*	*0.09*	0.11	0.10	0.02	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-12	5-6.5	27	15	12		*0.15*	*0.17*	*0.16*	*0.16*	0.16	0.16	0.01	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-12	10-11.5	27	17	10		*0.15*	*0.17*	*0.14*	*0.14*	0.15	0.14	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-12	20-21.5	26	14	12		*0.14*	*0.16*	*0.16*	*0.16*	0.16	0.16	0.01	SC
Nelson 53&58	BH1	29.75	27	12	15		*0.15*	*0.17*	*0.20*	*0.20*	0.18	0.19	0.02	SC
Nelson 53&58	BH1	40	19	4	15		*0.08*	*0.12*	*0.20*	*0.20*	0.15	0.16	0.06	SC
Nelson 53&58	BH1	45	30	6	24		*0.18*	*0.19*	*0.32*	*0.32*	0.25	0.26	0.08	SC
Nelson 53&58	BH5	23	29	4	25		*0.17*	*0.18*	*0.34*	*0.34*	0.26	0.26	0.09	SC
Nelson 53&58	BH5	37	18	2	16		*0.07*	*0.11*	*0.22*	*0.22*	0.15	0.16	0.07	SC
Nelson 53&58	BH6	22	33	15	18		*0.21*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	CL
Nelson 53&58	BH6	52	25	11	14		*0.14*	*0.16*	*0.19*	*0.19*	0.17	0.17	0.03	CL
Nelson 53&58	BH7	19	25	14	11		*0.14*	*0.16*	*0.15*	*0.15*	0.15	0.15	0.01	CL
Nelson 53&58	BH7	25.5	35	17	18		*0.23*	*0.22*	*0.24*	*0.24*	0.23	0.23	0.01	CL
Nelson 53&58	BH7	59	29	15	14		*0.17*	*0.18*	*0.19*	*0.19*	0.18	0.19	0.01	CL
Womack Water Tank	TP-1	9	32	17	15		*0.20*	*0.20*	*0.20*	*0.20*	0.20	0.20	0.00	CL
Womack Water Tank	TP-1	10	41	15	26		*0.28*	*0.26*	*0.35*	*0.35*	0.31	0.32	0.05	CL
Womack Water Tank	TP-1	25	34	14	20		*0.22*	*0.21*	*0.27*	*0.27*	0.24	0.24	0.03	CL
Womack Water Tank	TP-1	27.5	25	14	11		*0.14*	*0.16*	*0.15*	*0.15*	0.15	0.15	0.01	CL

Phi Calculation Spreadsheet

Shear Strength Correlation Summary - Peak Friction Angle

					Hatanaka and Uchida (1996)	*Schmertmann (1975)*							Duncan, 1989							
Project	**BH**	**Sample**	**Depth (ft)**	**(N1)60**	**Peak Phi (N160)**	**Peak Phi (N160)**	**Phi (Direct Shear)**	**LL**	**PI**	**Overburden**	**% Clay**	**Peak Phi**	**Classification**	**Unit Weight (pcf)**	**Cohesion**	**Min**	**Max**	**Average**	**Std Dev**
Bear Dev - 53&58	JG-01	D-8	18	--	--	--		31	15			34	CL	115	0	24.0	26.0	25.0	1.4
Bear Dev - 53&58	JG-01	D-12	27	38	47	53		28	12			35	CL	115	0				
Bear Dev - 53&58	JG-01	D-17	37	94	63	60				4300	7		GC	120	0	31.0	32.0	31.5	0.7
Bear Dev - 53&58	JG-01	D-26	47	84	61	59							GC	120	0				
Bear Dev - 53&58	JG-01	D-27	54.5	--	-	-		33	18			32	CL	115	0				
Bear Dev - 53&58	JG-01	D-31	67	56	53	54							CL	115	0	21.0	27.0	23.7	3.1
Bear Dev - 53&58	JG-01	D-32	67	--	-	-		26	10			36	CL	115	0				
Bear Dev - 53&58	JG-01	D-36	72.5	--	-	-		38	21			31	CL	115	0				
Bear Dev - 53&58	JG-01	D-39	80	35	47	48							GC	120	0				
Bear Dev - 53&58	JG-02	D4	7	-	-	-		20	5			37	GC	120	0	31.0	31.0	31.0	
Bear Dev - 53&58	JG-02	D8	14.5	-	-	-		31	16			32	CL	115	0				
Bear Dev - 53&58	JG-02	D9	17	6	31	31							CL	110	0				
Bear Dev - 53&58	JG-02	D11	22	-	-	-		29	14			30	CL	110	0	23.0	31.0	26.0	3.6
Bear Dev - 53&58	JG-02	D13	27	24	42	47							CL	110	0				
Bear Dev - 53&58	JG-02	D16	32	-	-	-		21	5			37	CL	110	0				
Bear Dev - 53&58	JG-02	D18	37	24	42	46		29	12			35	CL	110	0				
Bear Dev - 53&58	JG-02	D22	44.5	-	-	-				5500	8		GC	125	0	31.0	32.0	31.5	0.7
Bear Dev - 53&58	JG-02	D23	47	45	50	52							GC	125	0				
Bear Dev - 53&58	JG-02	D26	52	-	-	-		16	12			35	CL	110	0				
Bear Dev - 53&58	JG-02	D28	57	45	50	52							CL	125	0				
Bear Dev - 53&58	JG-02	D30	60	-	-	-		37	14			30	CL	125	0	23.0	26.0	24.0	1.7
Bear Dev - 53&58	JG-02	D32	64.5	-	-	-		31	14			30	CL	125	0				
Bear Dev - 53&58	JG-02	D33	67	66	56	56							CL	125	0				
Bear Dev - 53&58	JG-02	D35	69.5	-	-	-		21	5			37	SC	125	0	31.0	31.0	31.0	
Bear Dev - 53&58	JG-02	D40	80	59	54	54							SC	125	0				
Bear Dev - 53&58	JG-03	D3	4.5	-	-	-		33	19				CL	110	0	21.0	21.0	21.0	
Bear Dev - 53&58	JG-03	D4	7	7	31	33							CL	110	0				
Bear Dev - 53&58	JG-03	D8	14.5	-	-	-		30	15			34	SC	120	0	24.0	24.0	24.0	
Bear Dev - 53&58	JG-03	D9	17	33	46	51							SC	120	0				
Bear Dev - 53&58	JG-03	D12	22	-	-	-		35	20			31	GC	120	0				
Bear Dev - 53&58	JG-03	D14	27	22	41	45							GC	120	0	23.0	21.0	22.0	1.4
Bear Dev - 53&58	JG-03	D19	35	17	38	40		29	14			30	GC	120	0				
Bear Dev - 53&58	JG-04	D4	7	8	33	35		34	18			32	CL	110	0	23.0	23.0	23.0	
Bear Dev - 53&58	JG-04	D8	14.5	-	-	-		19	5			37	GC	125	0	31.0	31.0	31.0	
Bear Dev - 53&58	JG-04	D9	17	49	51	55							GC	125	0				
Bear Dev - 53&58	JG-04	D12	2	-	-	-		31	14			30	CL	115	0	23.0	23.0	23.0	
Bear Dev - 53&58	JG-04	D14	27	21	40	44							CL	115	0				
Bear Dev - 53&58	JG-04	D17	30	-	-	-		33	18			32	GC	125	0	23.0	23.0	23.0	
Bear Dev - 53&58	JG-04	D19	35	83	61	59							GC	125	0				
Bear Dev - 53&58	JG-10	D-1	2.5	4	29	28		25	9			36	SC	110	0	26.0	26.0	26.0	
Bear Dev - 53&58	JG-10	D-2	5	11	35	38							CL	110	0				
Bear Dev - 53&58	JG-10	D-3	7.5	9	33	34							CL	110	0				
Bear Dev - 53&58	JG-10	D-4	10	18	39	43							CL	115	0				
Bear Dev - 53&58	JG-10	U1	12.5	-	-	-		39	24			31	CL	110	0	18.0	24.5	21.8	2.4
Bear Dev - 53&58	JG-10	D-5	15	11	35	37		38	17	4200	36	33	CL	110	0				
Bear Dev - 53&58	JG-10	U2	17.5	-	-	-		32	18			32	CL	110	0				
Bear Dev - 53&58	JG-10	D-6	20	14	37	38							CL	110	0				
Bear Dev - 53&58	JG-11	D-1	2.5	16	43	49							GC	115	0				
Bear Dev - 53&58	JG-11	D-2	5	50	52	56							GC	125	0				
Bear Dev - 53&58	JG-11	D-3	7.5	20	40	45		22	7			37	GC	115	0				
Bear Dev - 53&58	JG-11	D-4	10	16	38	41				3600	17		GC	115	0	31.0	27.0	29.7	2.3
Bear Dev - 53&58	JG-11	D-5	12.5	33	46	50							GC	125	0				
Bear Dev - 53&58	JG-11	D-6	15	31	45	49							GC	120	0				
Bear Dev - 53&58	JG-11	D-7	17.5	79	60	59							GC	125	0				
Bear Dev - 53&58	JG-11	D-8	19	77	59	59							GC	125	0				
Bear Dev - 53&58	JG-12	D-1	2.5	5	30	29							GC	110	0				
Bear Dev - 53&58	JG-12	D-2	5	55	53	57		27	12			35	GC	125	0	26.0	26.0	26.0	
Bear Dev - 53&58	JG-12	D-3	7.5	78	59	59							GC	125	0				
Bear Dev - 53&58	JG-12	D-4	10	15	37	40		27	10			36	CL	115	0	27.0	27.0	27.0	
Bear Dev - 53&58	JG-12	D-5	12.5	17	39	42							CL	115	0				
Bear Dev - 53&58	JG-12	D-6	15	41	49	53							GC	120	0	26.0	26.0	26.0	
Bear Dev - 53&58	JG-12	D-7	17.5	45	50	53							GC	120	0				
Bear Dev - 53&58	JG-12	D-8	20	20	40	43		26	12			35	GC	120	0				
Nelson 53&58	BH1	4	29.75	10	32			27	15			34	SC	115					
Nelson 53&58	BH1	5	40	30	38			19	15			34	SC	125					
Nelson 53&58	BH1	6	45	16	33			30	24			31	SC	120		20	32	26.8333	
Nelson 53&58	BH5	-	23	-	-			29	25			30	SC	120					
Nelson 53&58	BH5	-	37	-	-			18	16			32	SC	120		20	32	26.5	
Nelson 53&58	BH6	4	22	15	32			33	18			32	CL	108.3					
Nelson 53&58	BH6	11	52	-	-		37	25	14			30	CL	115		22	30	26.5	
Nelson 53&58	BH7	4	19	-	-		41.9	25	11			36	CL	100					
Nelson 53&58	BH7	6	25.5	21	35			35	18			32	CL	100.8					
Nelson 53&58	BH7	13	59	21	35			29	14			30	CL	113.8		23	31	27.3333	
Womack Water Tank	TP-1		9					32	15			34	CL	110					
Womack Water Tank	TP-1		10					41	26			30	CL	110					
Womack Water Tank	TP-1		25					34	20			31	CL	110					
Womack Water Tank	TP-1		27.5					25	11			36	CL	110		20	30	25.625	

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APPENDIX E

Calculations

Settlement Methodology

The settlement calculations assume the soil layer of concern comprises 100% compressible soil by volume. Though, some soils at the site only partially comprise the fine-grained soils by mass, as described in the borehole logs. Based on lab testing and visual classification, the clayey sand soils contain a maximum of 45% fines by mass. To convert the assumed mass to volume, we have used a scaling factor of 1.25, resulting in an assumed percent fines by volume of 55%.

Because the settlement is anticipated to only occur in the potentially compressible, fine-grained soils, the total settlement calculation was reduced by 55%.

Lateral Pressures Methodology

Seismic coefficients were calculated based on recommendation from NCHRP Report 611 “Seismic Analysis and Desing of Retaining Walls, Buried Structures, Slopes and Embankments” and FHWA NHI Course No 130094 LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations, as described below and illustrated in the equations. For our calculations, we used an average wall height of 30’ to account for the retaining wall at the site, and since the retaining wall is considered a brittle system with negligible allowable displacement, we used an r value of 1 (FHWA, 2011). In summary, the seismic coefficient (ks) is determined by applying a scaling factor (α) to the modified peak ground acceleration (PGAm).

Settlement Calculation Spreadsheet

Project: Bear Development
Project Number: 23072
Engineer: HC
Soil Sample: Average Cc value CL
Scenario: Direclty on poor soil

Settlement analysis of in-situ soil (only analyzing a maximum of 2B worth of soil below footing)

Key:

Manual Input
Calculation

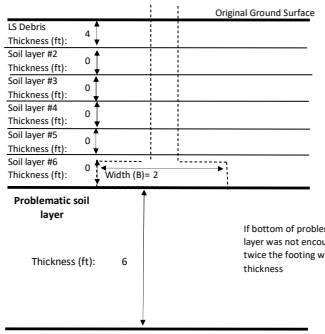
Step 1:

In-Situ Soil Properties of Problematic Soil			
	Soil Description: Lean Clay AF		
	Source of Soil Properties: SK Lab tests		
	Dry unit Weight:	15	pcf
	Moisture Content:	10.0%	
	Moist unit weight:	16.5	pcf
(Avergae 0.4 to 0.7)	Initial Void Ratio (e_0):	0.427	Vv/Vs
(Average 0.2 to 0.5)	Coefficient of Consol. (C_c):	0.2	

Step 2:

Original Overburden Pressure on Soil Element Identified in Step #1			
Soil Layer #1	Unit Weight	135	**PCF**
LS Debris	Thickness	4	**Ft.**
Soil Layer #2	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #3	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #4	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #5	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #6	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Problematic Soil Layer	Unit Weight	125	**PCF**
Below Footing	Thickess (H_0)	6	**Ft.**
Total Original Overburdern Pressure on Soil Element:		915	**PSF**

Pre-construction status. Footing is superimposed.



If bottom of problematic soil layer was not encountered, use twice the footing width for thickness

Step 3:

Foundation Characteristics		
Footing load:	3,000	psf
Estimated Footing Width (B):	2	ft
Footing Depth (D_f):	3	ft
Applied footing load applied to soil element (assuming 2V:1H)	1200	PSF

Step 4:

Backfill Soil Properties		
Dry Unit Weight:	120	pcf
Moisture Content:	12.0%	
Moist Unit Weight:	134.4	pcf
Backfill Depth:	3	ft

Step 5:

Settlement Calculation at Soil Element Identified in Step #2		
Thickness of Problematic Soil Layer (H_0):	6	ft
Depth to soil element below **OG**:	7	ft
Depth to soil element below footing:	3	ft
Original Overburden (σv_0):	915.0	psf
Applied foundation load at soil element :	1200.0	psf
Post Construction pressure at soil element (σv):	1978.2	
Change in presure at soils element:	1063	psf
$(\sigma v_f)/(\sigma v_0)$	2.162	
$Log[(\sigma v_f)/(\sigma v_0)]$	0.335	
$1+e_0$	1.427	
$H_0/(1+e_0)$	4.205	
Inches per foot:	12	
Settlement:	3.38	inches

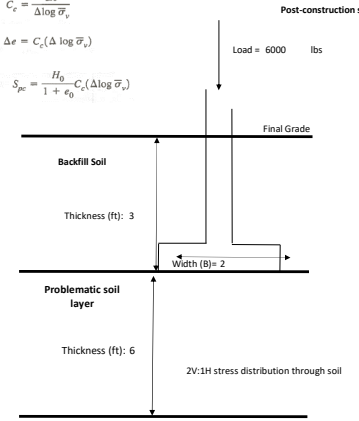
Settlement: $\text{Settlement} = S_{pc} = H_0\left(\frac{\Delta e}{1+e_0}\right)$

Compression Index: $C_c = \frac{\Delta e}{\Delta \log \overline{\sigma}_v}$

Rearranging gives: $\Delta e = C_c(\Delta \log \overline{\sigma}_v)$

Subistituting in gives: $S_{pc} = \frac{H_0}{1+e_0} C_c(\Delta \log \overline{\sigma}_v)$

Post-construction status



This formula is only valid for footings PLACED DIRECTLY ON PROBLEMATIC SOIL LAYER

$$S_{pc} = \frac{H_0}{1+e_0} C_c(\log \overline{\sigma}_{v_f} - \log \overline{\sigma}_{v_o}) = \frac{H_0}{1+e_0}(C_c)\log(\overline{\sigma}_{v_f}/\overline{\sigma}_{v_o})$$

Settlement Calculation Spreadsheet

Project: Bear Development
Project Number: 23072
Engineer: HC
Soil Sample: Average Cc value SC
Scenario: Direclty on poor soil

Settlement analysis of in-situ soil (only analyzing a maximum of 2B worth of soil below footing)

Key:

Manual Input
Calculation

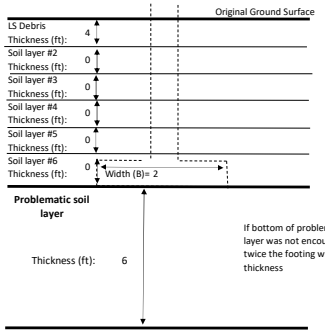
Step 1:

In-Situ Soil Properties of Problematic Soil			
	Soil Description: Lean Clay AF		
	Source of Soil Properties: SK Lab tests		
	Dry unit Weight:	15	pcf
	Moisture Content:	10.0%	
	Moist unit weight:	16.5	pcf
(Avergae 0.4 to 0.7)	Initial Void Ratio (e_0):	0.427	Vv/Vs
(Average 0.2 to 0.5)	Coefficient of Consol. (C_c):	0.18	

Step 2:

Original Overburden Pressure on Soil Element Identified in Step #1			
Soil Layer #1	Unit Weight	135	**PCF**
LS Debris	Thickness	4	**Ft.**
Soil Layer #2	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #3	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #4	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #5	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #6	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Problematic Soil Layer	Unit Weight	125	**PCF**
Below Footing	Thickess (H_0)	6	**Ft.**
Total Original Overburdern Pressure on Soil Element:		915	**PSF**

Pre-construction status. Footing is superimposed.



If bottom of problematic soil layer was not encountered, use twice the footing width for thickness

Step 3:

Foundation Characteristics		
Footing load:	3,000	psf
Estimated Footing Width (B):	2	ft
Footing Depth (D_f):	3	ft
Applied footing load applied to soil element (assuming 2V:1H)	1200	PSF

Step 4:

Backfill Soil Properties		
Dry Unit Weight:	120	pcf
Moisture Content:	12.0%	
Moist Unit Weight:	134.4	pcf
Backfill Depth:	3	ft

Step 5:

Settlement Calculation at Soil Element Identified in Step #2		
Thickness of Problematic Soil Layer (H_0):	6	ft
Depth to soil element below **OG**:	7	ft
Depth to soil element below footing:	3	ft
Original Overburden (σv_0):	915.0	psf
Applied foundation load at soil element :	1200.0	psf
Post Construction pressure at soil element (σv):	1978.2	
Change in presure at soils element:	1063	psf
$(\sigma v_f)/(\sigma v_0)$	2.162	
$Log[(\sigma v_f)/(\sigma v_0)]$	0.335	
$1+e_0$	1.427	
$H_0/(1+e_0)$	4.205	
Inches per foot:	12	
Settlement:	3.04	inches

Note: Maximum % fines by mass 45%. Scaling factor of 1.25 used to assume volume of fines, resulting in 55%.

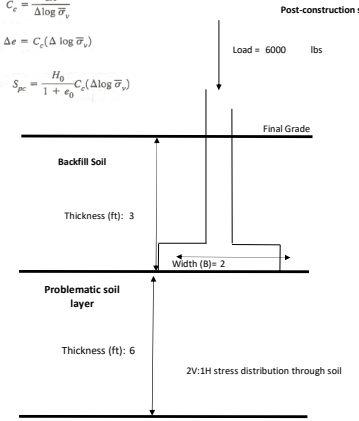
Settlement: $\text{Settlement} = S_{pc} = H_0\left(\frac{\Delta e}{1+e_0}\right)$

Compression Index: $C_c = \frac{\Delta e}{\Delta \log \bar{\sigma}_v}$

Rearranging gives: $\Delta e = C_c(\Delta \log \bar{\sigma}_v)$

Subistituting in gives: $S_{pc} = \frac{H_0}{1+e_0} C_c(\Delta \log \bar{\sigma}_v)$

Post-construction status



This formula is only valid for footings PLACED DIRECTLY ON PROBLEMATIC SOIL LAYER

$$S_{pc} = \frac{H_0}{1+e_0} C_c(\log \bar{\sigma}_{v_f} - \log \bar{\sigma}_{v_o}) = \frac{H_0}{1+e_0}(C_c)\log\left(\bar{\sigma}_{v_f}/\bar{\sigma}_{v_o}\right)$$

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Project Bear Dev | Project No. 23072
Calculated By JBJ | Date 12/20/2023
Sheet 1 of 1

Known:
$F_v = 1.5$
$S_1 = 0.336$
$k_{max} = 0.545$
$H = 30'$
$PGA = 0.454$
$r = 1.0$
$f_a = 1.2$

$\beta = (F_v S_1) / k_{max}$

$\alpha = 1 + 0.01 H [(0.5\beta) - 1]$

$k_s = r PGA \alpha$

$\beta = (1.5)(0.336) / 0.545$

$\boxed{\beta = 0.92}$

$\alpha = 1 + 0.01(30)[(0.5)(0.92) - 1]$

$\boxed{\alpha = 0.838}$

$k_s = (1.0)(0.454)(0.838)$

$k_s = 0.38$

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APPENDIX F

Slope-Stability Analysis

Slope-Stability Analysis

Methodology

1. **Analyses:** Slope stability analyses were performed using the SLOPE/W stability module of GeoStudio 2023.1.2 version 23.1.2.11, produced by Bentley Systems. The Morgenstern-Price limit equilibrium method, which takes into consideration moment and force equilibrium, was used to analyze slope stability.

   Based on the existing and proposed geometry of the project and the mapped geology, we determined the project area may be subject to potential failure. Therefore, we evaluated each cross-section for existing conditions, proposed conditions, and seismic proposed conditions scenarios.

2. **Geometry:** Two cross-sections for the project were analyzed: Cross sections B-B' and C-C' (Figure 4 and Figure 5). Cross section locations are shown in Figure 2. The Cross Section B-B' Proposed Conditions model includes foundation loads for each housing unit because the applied loads from the buildings foundation elements and the change in geometry were identified as potential items that can affect the factor of safety (FS). The Cross Section C-C' Proposed Conditions also includes foundation loads for each housing unit, as well as the existing retaining wall on Lot 53. We based the external existing geometry on topographic data collected by Jorgensen Associates, Inc., proposed finished grade elevations were taken for the preliminary design documents provided by Hoyt Architects, and we based the internal geometry (material boundaries within the slope) on the results of the subsurface exploration (i.e., borehole and test pit logs), statistical correlations based on published literature, geologic conditions, and our experience with similar soils in the area.

   Subsurface conditions at the site were dominated by chaotically deposited landslide debris consisting of fine-grained Lean Clay (CL) and coarse-grained Clayey Gravels (GC) and Clayey Sands (SC). Often, soil layers identified in the SPT samples didn't correspond to similar soil layers at similar depths in the other boreholes indicating the soil layers were not continuous. To create a subsurface soil model with continuous soil layers, the discrete soil samples were interpolated and often combined between boreholes. Where discrete soil samples of different soil types were combined, an average phi value of the combined samples was applied to the entire soil layer.

3. **Materials:** We estimated the shear strength parameters used in the analyses based on correlation to index tests and direct shear testing from the previous Geotechnical Investigation Report from July 2021, provided by Nelson Engineering. See the discussion in Appendix D regarding development of the soil-engineering parameters. Final parameters used in the stability analysis are summarized below in Table F-1.

   Where two separate soil classifications were combined to one layer (i.e., GC/CL), a unit weight and phi angle were selected using a "weighted average" approach; the boreholes shown on figures 4 and 5 were reviewed and depending on the soil shown in each borehole, a weighted average value was selected.

   We used a Mohr-Coulomb strength model to define the soil parameters. Two parameters are used to describe this strength model: cohesion (c) and friction angle (φ). Cohesion is the soil's shear strength at zero overburden stress, and the friction angle expresses the relationship between overburden stress and shear stress. Mathematically, the shear strength is defined by the equation: $\tau = c + \sigma_n \tan(\varphi)$, where τ is the shear strength and σ_n represents the overburden stress. We used effective stress parameters as the soils are anticipated to drain well.

Table F-1: Soil Parameters Used for Slope Stability Analysis B-B'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (CL)	115	100[1]	35
Landslide Debris (GC)	125	50[2]	40
Landslide Debris (GC/CL)	120	100[2]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

Table F-2: Soil Parameters Used for Slope Stability Analysis C-C'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (GC/CL)	120	100[1]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

4. **Phreatic Surface:** Groundwater was encountered during the subsurface exploration in borehole JG-02, JG-03, and JG-04 during the subsurface exploration and are summarized below in Table F-2. Groundwater conditions encountered in the field were used in the slope stability model. It is important to note, the subsurface exploration occurred during a time of year when peak groundwater conditions are assumed to have already occurred, implying potential peak groundwater conditions are *not* shown in the model and are unknown.

Table F-3: Groundwater Conditions

Borehole	Date	Depth BGS (ft)	Approximate Elevation (ft)
JG-02	October 1 and 2, 2023	47	6,393
JG-03	October 2, 2023	27 to 30	6379 to 6376
JG-04	October 2, 2023	30	6374

5. **Seismicity:** Each post-construction scenario was evaluated in a seismic condition. Based on the ReMi and MASW results provided by Atlas Geophysics and direct shear testing data in the previous Nelson Engineering Site Investigation Report, the site is categorized as Site Class C – Very Dense Soil and Soft Rock. Seismicity was incorporated into the model using a pseudo-static limit equilibrium analysis approach where inertial forces from seismic accelerations were applied statically to the model. Seismic loads have been applied to the critical slip surface determined by static analysis for each post construction cross section, as it is assumed to be the most stressed region within the slope (Abramson et al., 2002). A seismic coefficient (k_s) of 0.163 was applied to cross section B-B' and a seismic coefficient of 0.169 was applied to cross section C-C'.

Seismic coefficients were calculated based on recommendation from NCHRP Report 611 "Seismic Analysis and Desing of Retaining Walls, Buried Structures, Slopes and Embankments" and FHWA NHI Course No 130094 LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations, as described below and illustrated in the equations. In summary, the seismic coefficient (k_s) is determined by applying a scaling factor (α) to the modified peak ground acceleration (PGA_m). Additionally, a seismic FS of 1.1 was used because it is assumed the system is ductile and an allowable total permanent seismic deformation of 2.0-inches is acceptable.

$$\beta=F_v \cdot S_1/PGA_m$$

$$\alpha=1+0.01H[(0.5\beta)-1]$$

$$k_s = r^* PGA_m * \alpha$$

Where:

- β = 0.92
- F_v = 1.5
- S_1 = 0.336
- PGA_m = 0.545
- α is equal to 0.595 for the B-B' seismic model, and α is equal to 0.623 for the C-C' seismic model.
- *H* is equal to the height of the critical slip surface; we used conservative values of 75' for the B-B' seismic model, and 70' for the C-C' seismic model
- r = 0.5. A value of 0.5 is used in calculating k_s when dealing with ductile systems (i.e., soils with no rigid structures) with allowable permanent seismic deformation of up to 2-inches.
- PGA is equal to 0.454, taken from ASCE 7-16 seismic design tool.

Our calculations can be found attached to this Appendix.

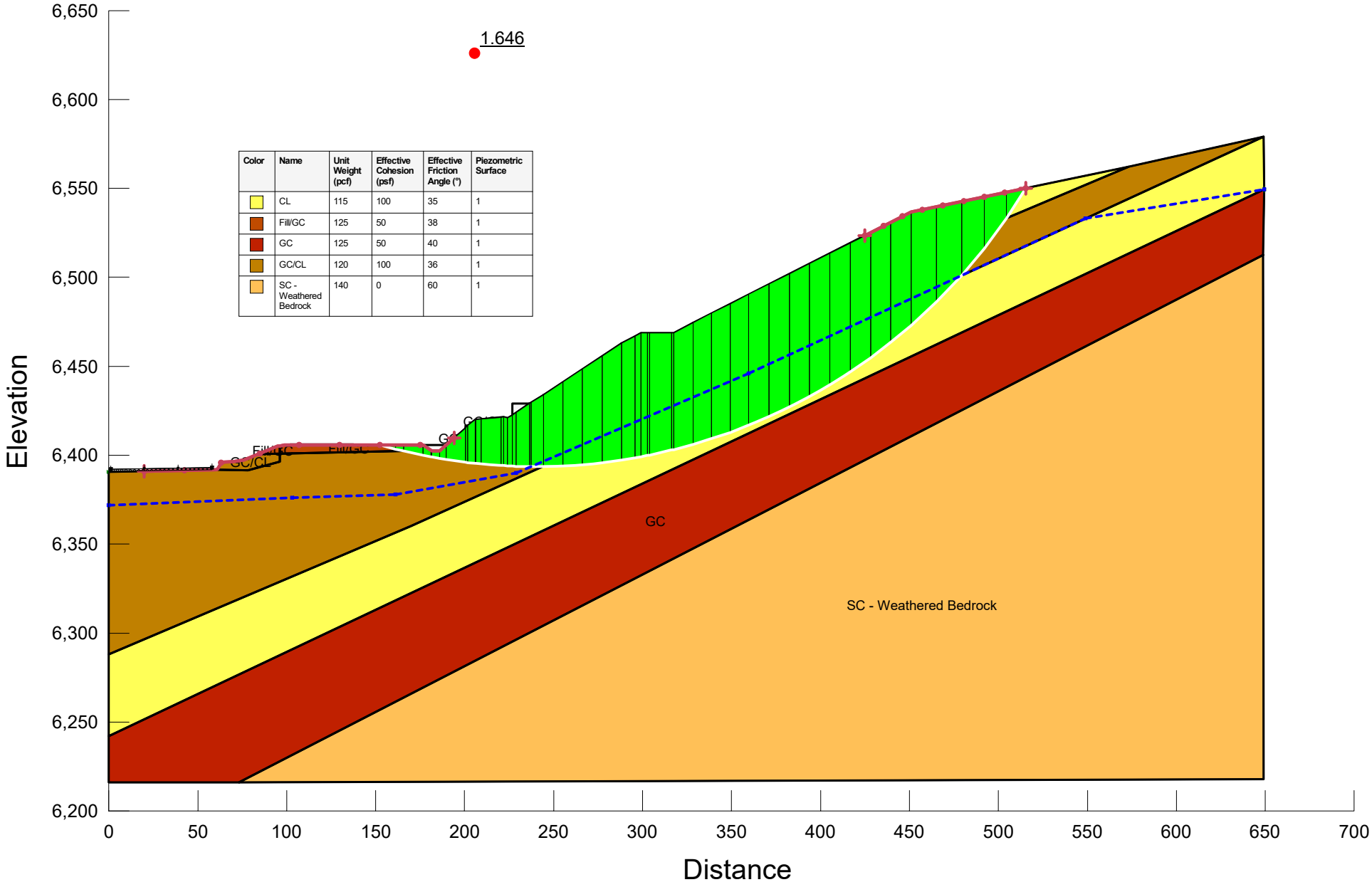
Surcharge Loads and Retaining Wall: Typical foundation loads were incorporated into the model, based on data in Section 1806 of the IBC, 2021. We use a distribution surcharge load of 2000 psf to account for the weight of any structures within the model.

The retaining wall on Lot 53 was also included in the geometry of the models. For the length of the soil nails, spacing and batter we used the Grand View, Building 53 Jackson, Wyoming Permanent Soldier Pile Wall and Temporary Soil Nail Wall Construction Drawings. Although the construction drawings show a slight variation in soil nail lengths, spacing and batter, we used the values applicable to the highest number of soil nails. In our model we used 48' soil nails, vertically spaced 9 feet, and battered -15 degrees.

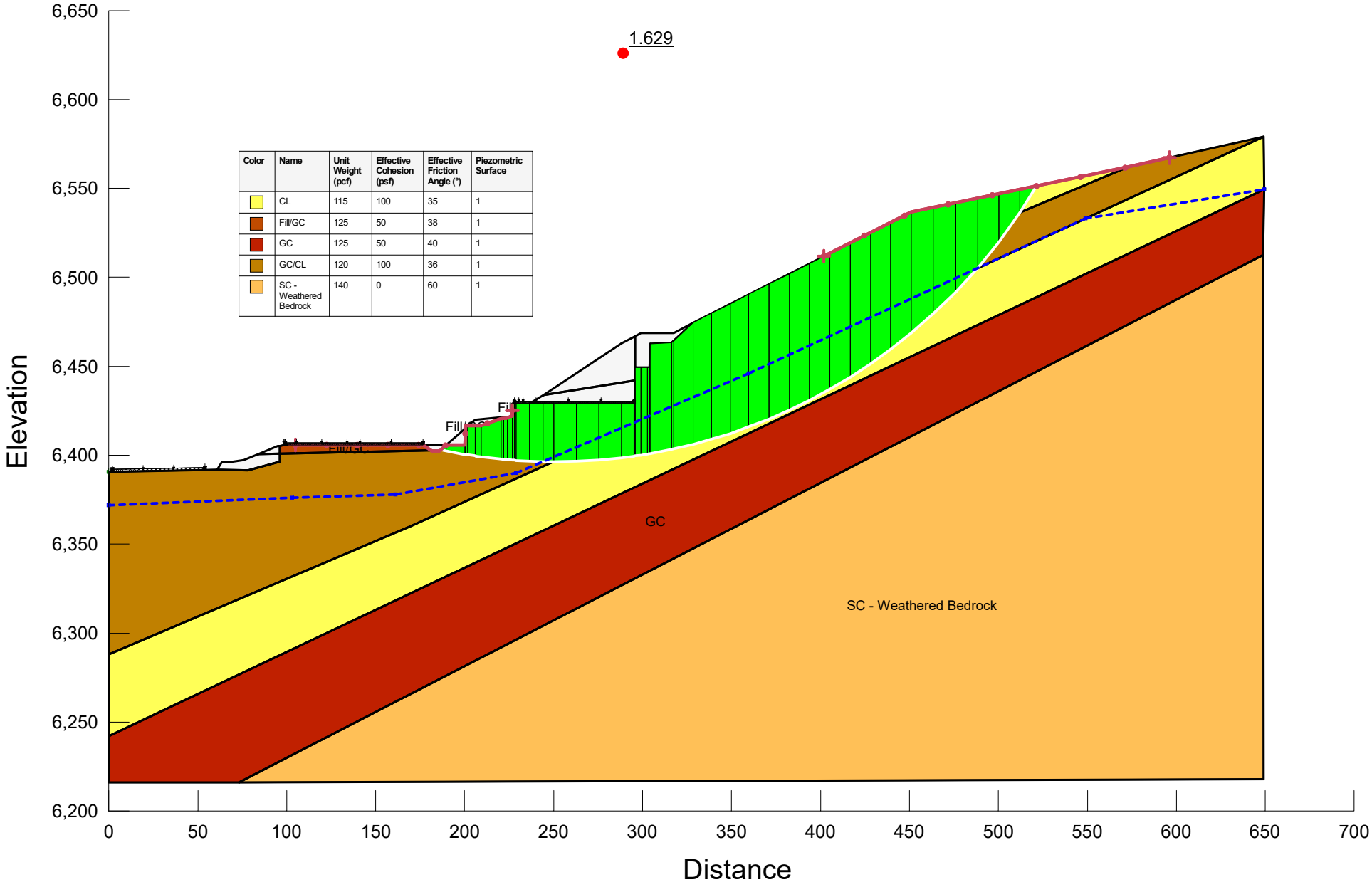
Results

We summarize factor of safety (FS) results for each cross section and analysis in Section 5.1.2 of the Report. The figures that follow are the output from each analysis. The critical slip surface and factor of safety are shown. Output files, reports, convergence data, or other data from Geostudio may be made available upon request.

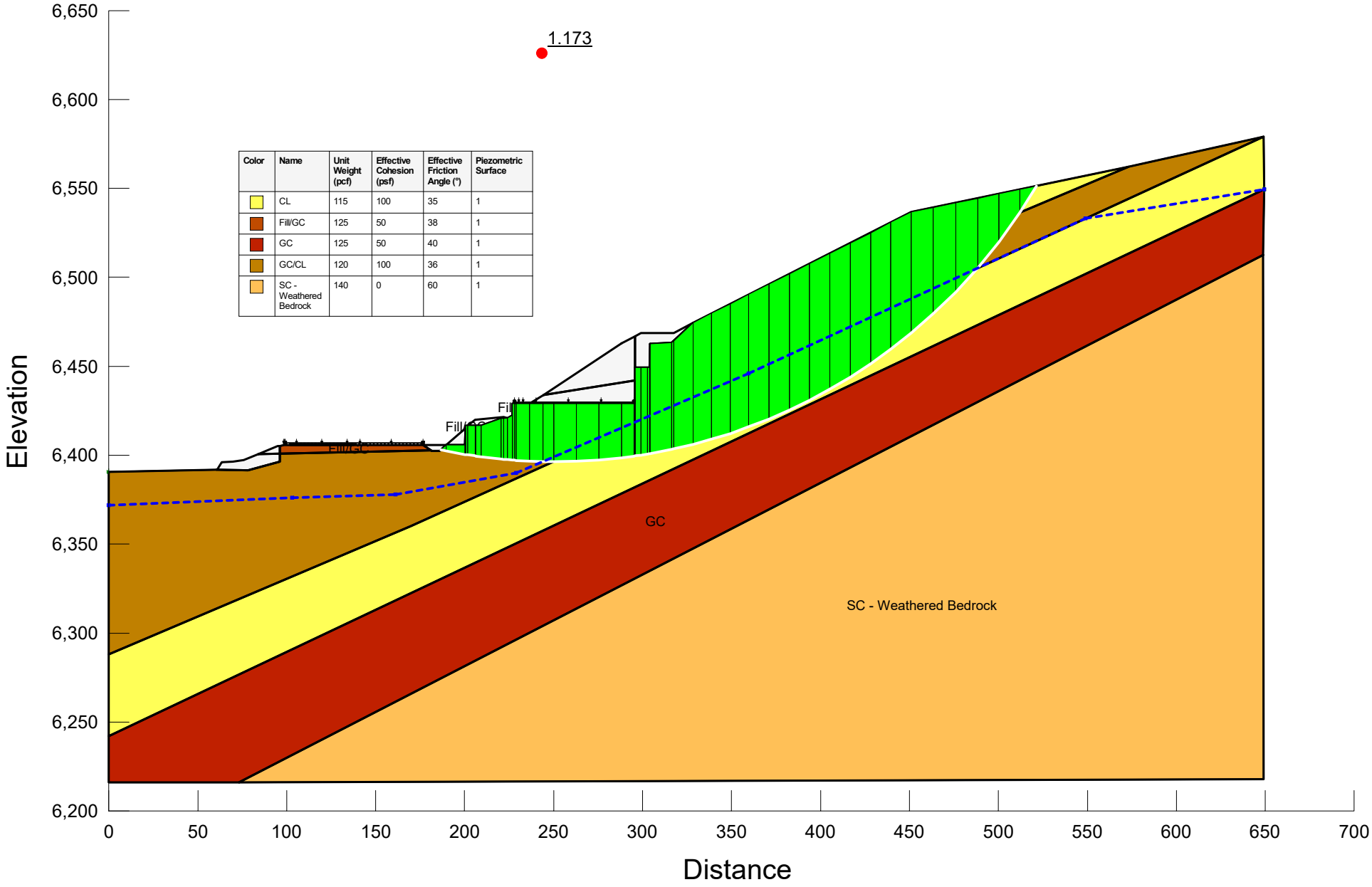
Lot 53 and 58 B-B' Existing Conditions



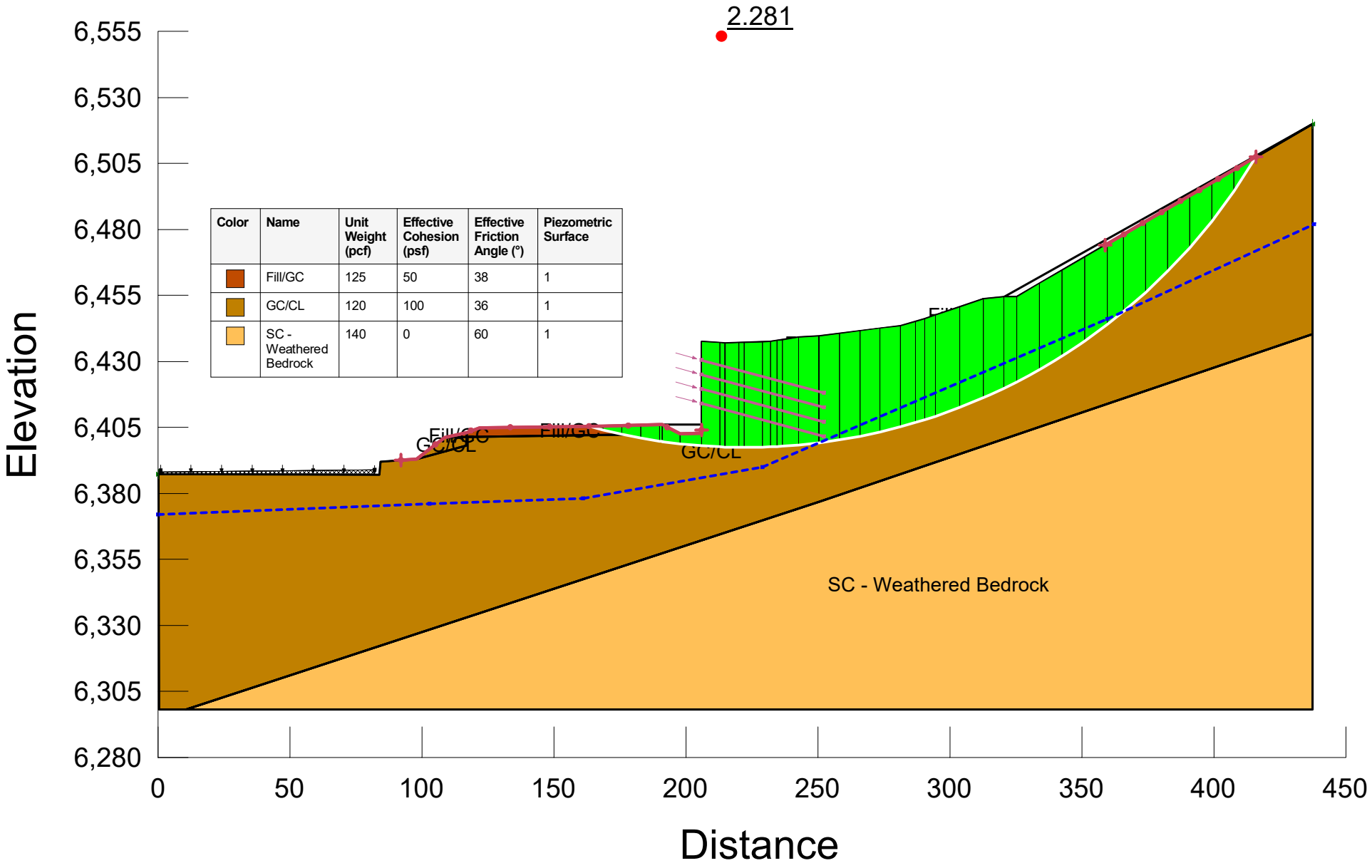
Lot 53 and 58 B-B' Proposed Conditions



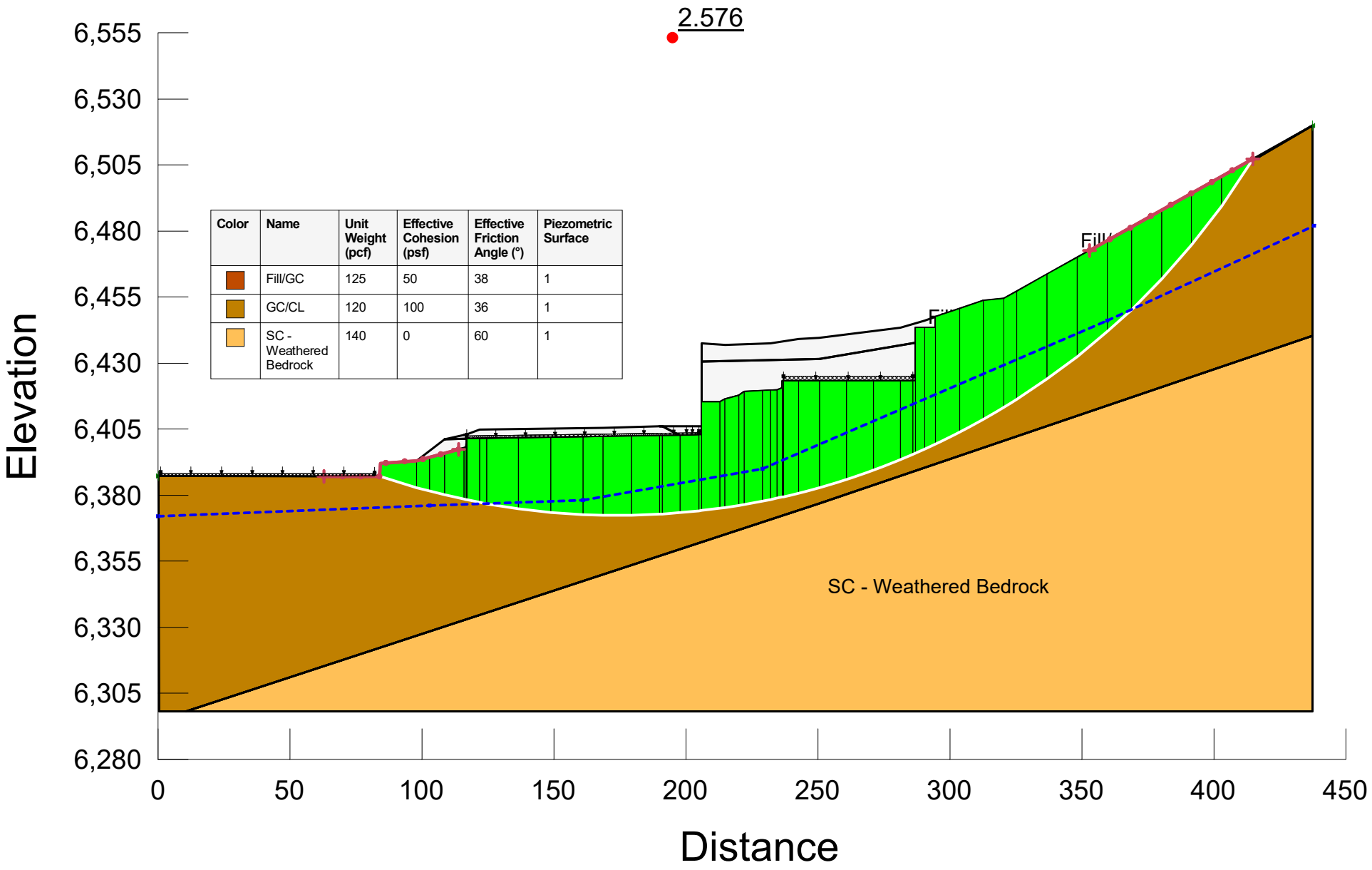
Lot 53 and 58 B-B' Proposed Conditions Siesmic



Lot 53 and 58 C-C' Existing Conditions

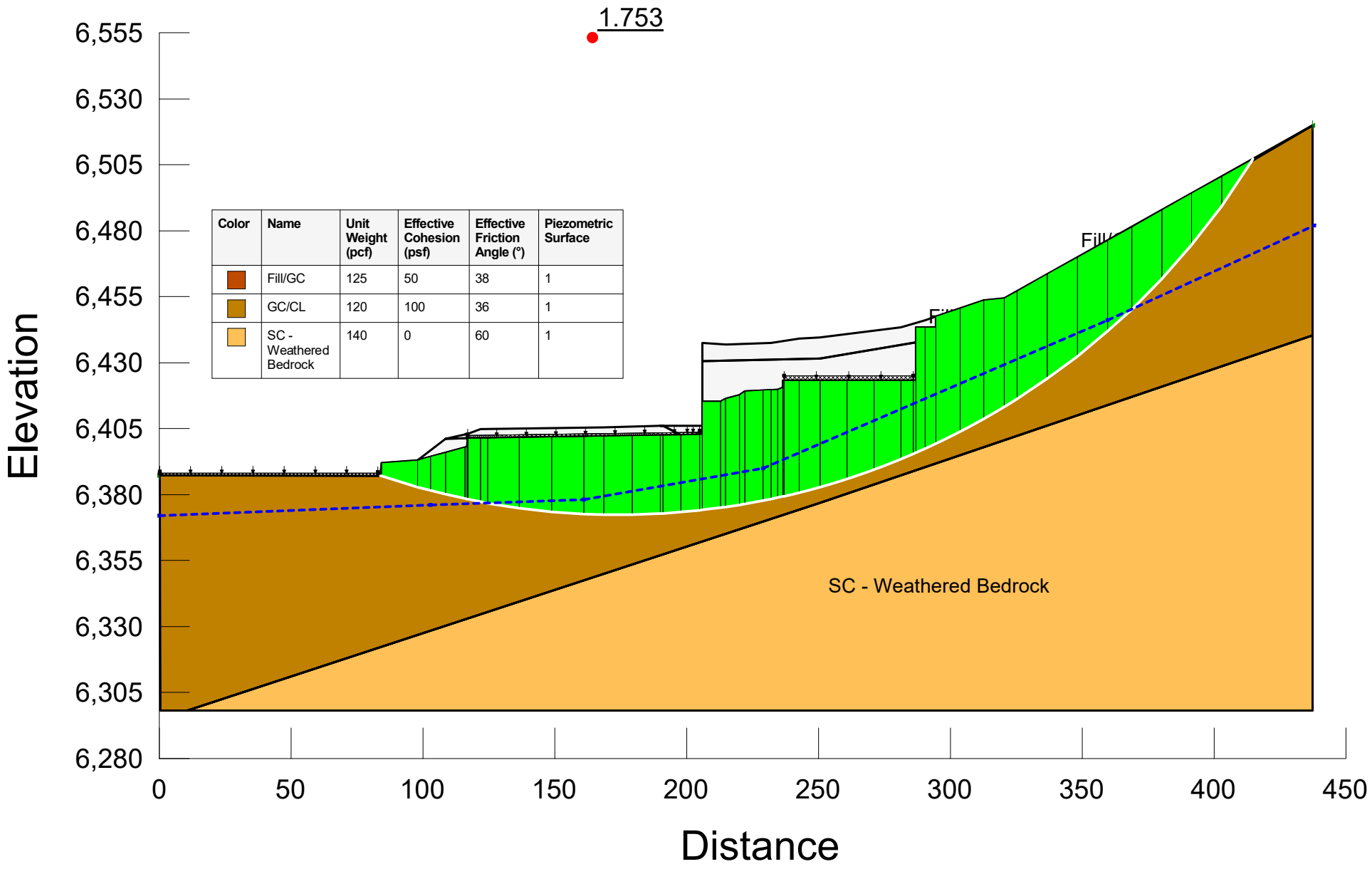


Lot 53 and 58 C-C' Proposed Conditions



Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)	Piezometric Surface
	Fill/GC	125	50	38	1
	GC/CL	120	100	36	1
	SC - Weathered Bedrock	140	0	60	1

Lot 53 and 58 C-C' Proposed Conditions Siesmic

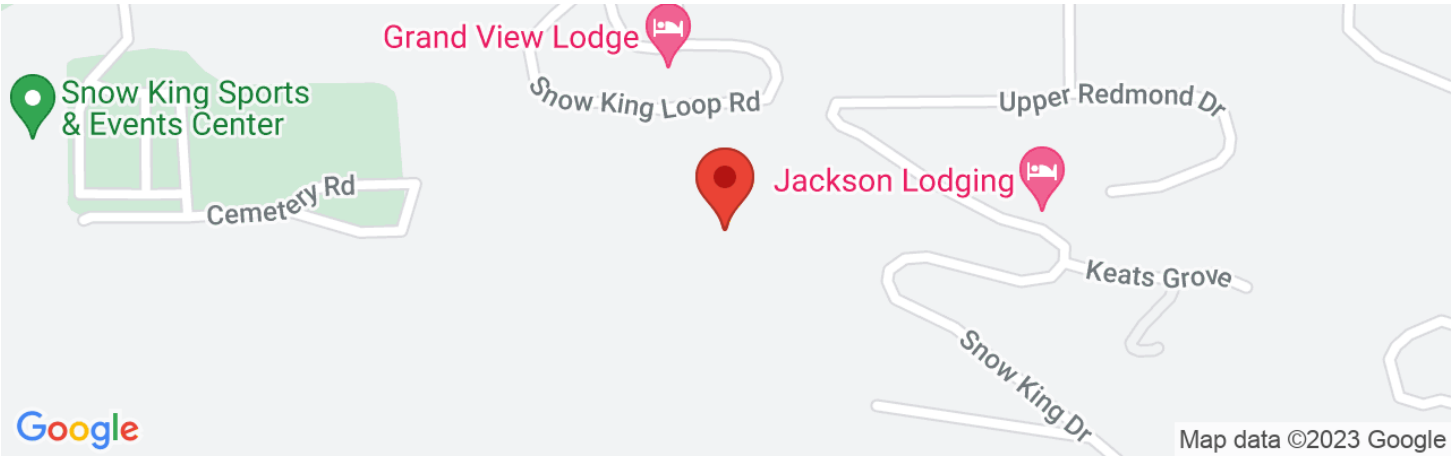


Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)	Piezometric Surface
	Fill/GC	125	50	38	1
	GC/CL	120	100	36	1
	SC - Weathered Bedrock	140	0	60	1

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

OSHPD

Latitude, Longitude: 43.47138391, -110.75322571



Date	20/12/2023, 15:51:56
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	C - Very Dense Soil and Soft Rock

Type	Value	Description
S_S	1.024	MCE_R ground motion. (for 0.2 second period)
S_1	0.336	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.229	Site-modified spectral acceleration value
S_{M1}	0.505	Site-modified spectral acceleration value
S_{DS}	0.819	Numeric seismic design value at 0.2 second SA
S_{D1}	0.336	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.454	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	0.545	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.024	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.145	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.894	Factored deterministic acceleration value. (0.2 second)
S1RT	0.336	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.374	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.721	Factored deterministic acceleration value. (1.0 second)
PGAd	0.66	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.454	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.895	Mapped value of the risk coefficient at short periods

Type	Value	Description
C_{R1}	0.9	Mapped value of the risk coefficient at a period of 1 s
C_V	1.105	Vertical coefficient

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Project BEAR Dev - Lots 53+56 Project No. 23272
Calculated By HC Date 12/20/2023
Sheet 1/2

K_s Determination

U.S. Seismic Design Maps - Structural Engineers Association of California Design Code Reference Document - ASCE 7-16

Risk Category II
Site Class C - Very Dense Soil & Soft Rock

FHWA (2011)

$$K_{MAX} = F_{PGA} \cdot PGA \qquad (6-1)$$

PGA = 0.454
F_{PGA} = 1.20

K_{MAX} or PGA_m = 1.2(0.454) = **0.545**

K_{AV} or MHA (Maximum Average Horizontal Acceleration) = $\alpha \cdot K_{MAX}$ (6-2)

Where $\alpha = 1 + 0.01(H)[(0.5B)-1]$ (6-3)

Where $B = f_v \cdot S_1 / K_{MAX}$ (6-4)

- B Cross Section B-B'

F_v = 1.5
S_1 = 0.336
K_{MAX} = 0.545

$B = 1.5(0.336)/0.545$ (6-4)

B = 0.924

- B Cross Section C-C'

F_v = 1.5
S_1 = 0.336
K_{MAX} = 0.545

$B = 1.5(0.336)/0.545$ (6-4)

B = 0.924

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Project BEAR DEN - LOTS 53+58 Project No. 23072
Calculated By HC Date 12/20/2023
Sheet 2/2

- α Cross Section B-B'

$\beta = 0.924$
$H = 75'$

$\alpha = 1 + 0.01(75)[0.5(0.924) - 1]$ (6-3)

$\alpha = 0.597$

- α Cross Section C-C'

$\beta = 0.924$
$H = 70'$

$\alpha = 1 + 0.01(70)[0.5(0.924) - 1]$ (6-3)

$\alpha = 0.623$

- k_{AV} Cross Section B-B'

$\alpha = 0.597$
$k_{MAX} = 0.545$

$k_{AV} = 0.597\ (0.545)$ (6-2)

$k_{AV} = 0.325$

- k_{AV} Cross Section C-C'

$\alpha = 0.623$
$k_{MAX} = 0.545$

$k_{AV} = 0.623\ (0.545)$ (6-2)

$k_{AV} = 0.339$

- k_S Cross Section B-B'

$k_S = r \cdot k_{AV}$ (6-5)

$r = 0.5$ ASSUMING 2-INCHES OF ALLOWABLE PERMANENT SEISMIC DEFORMATION

$k_S = 0.5\ (0.325)$

$k_S = 0.163$

- k_S Cross Section C-C'

$k_S = r \cdot k_{AV}$ (6-5)

$r = 0.5$ ASSUMING 2-INCHES OF ALLOWABLE PERMANENT SEISMIC DEFORMATION

$k_S = 0.5\ (0.339)$

$k_S = 0.169$

MINIMUM FACTOR OF SAFETY OF 1.1 USING r OF 0.5 AND ASSUMING 2-INCHES OF ALLOWABLE PERMANENT SEISMIC DEFORMATION

JORGENSEN
GEOTECHNICAL, LLC

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December 28, 2023

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosh, WI 53142

RE: GEOTECHNICAL-ENGINEERING REPORT, BEAR DEVELOPMENT – SNOW KING LOOP LOTS 53 AND 58, TETON COUNTY, WYOMING
PROJECT NO: 23072

Dear Nick,

We are pleased to present this Geotechnical-Engineering Report on our geotechnical site exploration for the proposed development at Lots 53 and 58 on Snow King Loop in Teton County, Wyoming. This report describes site conditions observed during the subsurface exploration, presents engineering analyses and recommendations to support the design and construction of foundation elements, and presents pre-construction and post-construction slope stability analyses.

Jorgensen Geotechnical explored subsurface conditions by drilling seven (7) boreholes and excavating four (4) exploratory test pits throughout Lots 53 and 58. A geophysical exploration was also performed comprising MASW and ReMi exploration techniques. In general, the site is underlain primarily by landslide debris, a chaotic mixture lean clay (CL), clayey gravel (GC), and clayey sands (SC). The site sits on a mapped landslide which likely mobilized prior to the Quaternary period. As such, we assume the soil at the site to be well consolidated. We also observed weathered sandstone bedrock during the subsurface exploration. The weathered bedrock was only observed in one borehole, BH-02, at 67.5-ft below ground surface (bgs), and is assumed to be part of the Cretaceous-age Bacon Ridge Formation (Kb).

Building locations and foundation elevations are based on preliminary design data provided by Hoyt Architecture, dated July 19, 2023. As the design progresses, we will be able to make site-specific recommendations.

If you have any questions about this report, or if we may provide other services to you, please contact us. As the project progresses, we will be available to answer questions for you.

Respectfully submitted,
JORGENSEN GEOTECHNICAL







Bruce Jackson G.I.T.
Geotechnical Design Engineer Technician

Harrison Carter, P.E.
Geotechnical Project Manager

Dominique Brough, P.G.
Geotechnical Project Manager

Geotechnical-Engineering Report

Bear Development – Snow King Loop Lots 53 and 58 | Teton County, Wyoming



43.471263°N, -110.753274°W

December 28, 2023

PREPARED FOR

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosh, WI 53142

PREPARED BY

Jorgensen Geotechnical, LLC
PO Box 9550
1315 HIGHWAY 89 S., Ste. 201
Jackson, WY 83002

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1.0 INTRODUCTION

Jorgensen Geotechnical, LLC was commissioned by Bear Development, LLC to perform a subsurface surface exploration and geotechnical engineering and analyses for the proposed development for Lots 53 and 58 accessed by Snow King Loop in Teton County, Wyoming. The purposes of the exploration were to provide information and geotechnical-engineering recommendations pertaining to:

- Subsurface soil conditions
- Site preparation and earthwork
- Geophysical exploration
- Seismic site classification per the International Building Code
- Evaluation of settlement and/or collapse potential
- General foundation design and construction recommendations
- Slabs-on-grade design and construction recommendations
- Lateral earth pressures for retaining structures
- Subgrade preparation
- Slope Stability Analyses
    - Existing Conditions
    - Proposed Conditions
    - Proposed Seismic Conditions

A detailed description of the subsurface exploration and graphical logs are shown in Appendix A, Figures in Appendix B, laboratory testing results are included as Appendix C, determination of soil engineering parameters in Appendix D, Calculations for settlement in Appendix E, and Slope Stability Analyses in Appendix F.

2.0 PROJECT DESCRIPTION

The project site is located in Jackson, Wyoming and is situated at the base of Snow King Resort. Preliminary plans were provided by Hoyt Architecture, dated July 19, 2023. The plans indicate the development for lots 53 and 58 will include two housing units: each with a first-floor parking garage area with three floors of living space above.

It is our understanding the project is in the early stages of the design, and the architectural plans are subject to substantial changes. As the project progresses, Jorgensen Geotechnical is available to consult with team members to increase design and construction efficiency based on our understanding of the subsurface conditions and the proposed design.

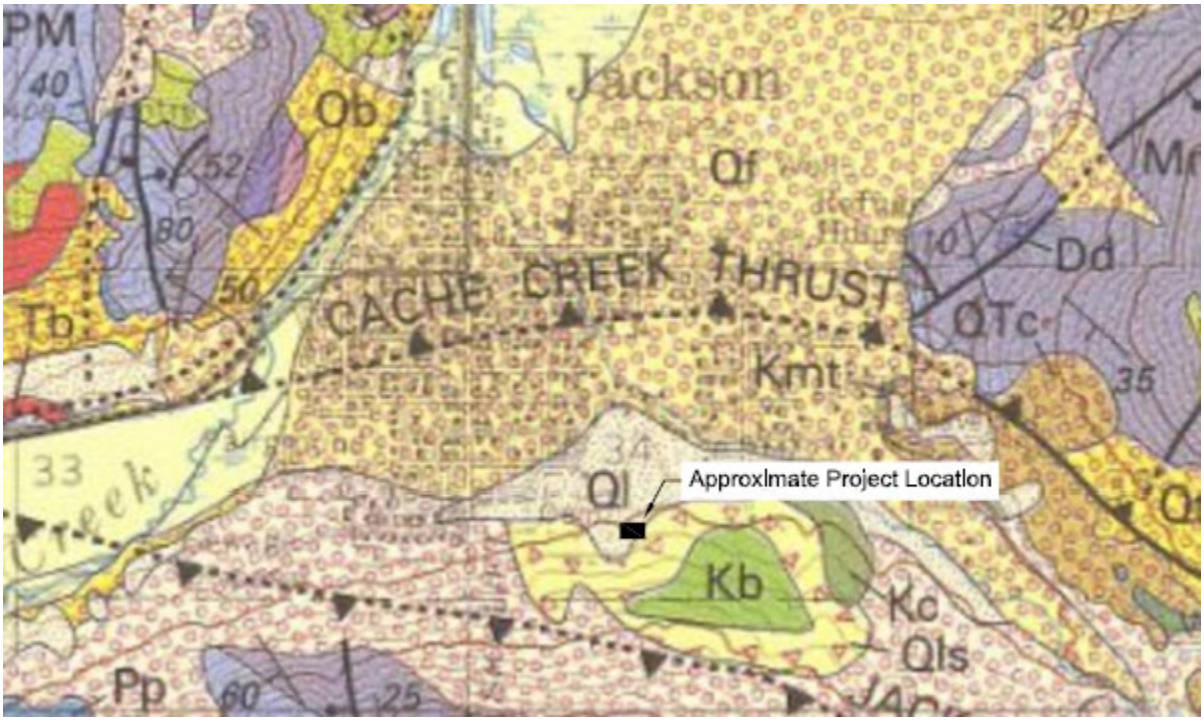


Figure 1: Site Location and Geologic Map

3.0 GEOTECHNICAL EXPLORATION

3.1 Description

JG developed the following description of the site based on field visits, meetings with the project team, our review of available historical aerial imagery, and observations made during the subsurface exploration.

Item	Description
Location and Parcel Information	• Lots 53 and 58 are located at the base of Snow King Resort and are accessed via Snow King Loop. The project area sits at a generalized latitude and longitude of 43.471263°N, -110.753274°W.
Existing Conditions	• The project location slopes from the north upwards to the south and ranges in elevation from approximately 6,400-ft Above Mean Sea Level (AMSL) on the northern boundary of Lot 53, to approximately 6,530-ft AMSL on the southern property boundary of Lot 58. The lots are bisected by a dirt road that provides access for employees at Snow King Resort. • Lot 53 is currently being used for storage by Snow King Resort. • A retaining wall approximately 20-ft tall is present on Lot 53 between the storage area and the access road. This Retaining wall comprises H-piles, lagging, and tie-backs and was built based on construction drawing dated August 13, 2007. • Slopes at the project site range from 10 to 35%.

	• Current utilities at the site include power, gas and water.
Geologic Setting	• The project location is found on the Geologic Map of Grand Teton National Park (Love et. al., 1992), in an area that contains three mapped geologic units including Loess (Ql), a fine-grained, windblown deposit, Landslide Debris (Qls), and the Bacon Ridge Sandstone (Kb). The soils observed from the subsurface exploration seem to be consistent with mapped geology. • The project location sits on a mapped multiple slump/multiple flow landslide, and is understood to be deep seated(WSGS, Wyoming Geologic Hazards Map Tool). A portion of the project site is capped with a wind-blown deposit known as loess which was likely deposited during or after the Pinedale Glaciation Period, or between approximately 30,000 to 10,000 years ago. The mapped loess stratigraphically overlies portions of the mapped landslide unit. • Numerous Quaternary faults (i.e., relatively young and potentially active) are mapped throughout the area. The Teton Fault is mapped approximately 8 miles northwest of the project, at the base of the eastern flank of the Teton Range (Zellman, 2019). Slip rates along the Teton fault is estimated to be between 0.2 and 1.0 mm/year. The Hoback Fault is located approximately 3 miles to the southwest of the project site but is considered old and inactive.

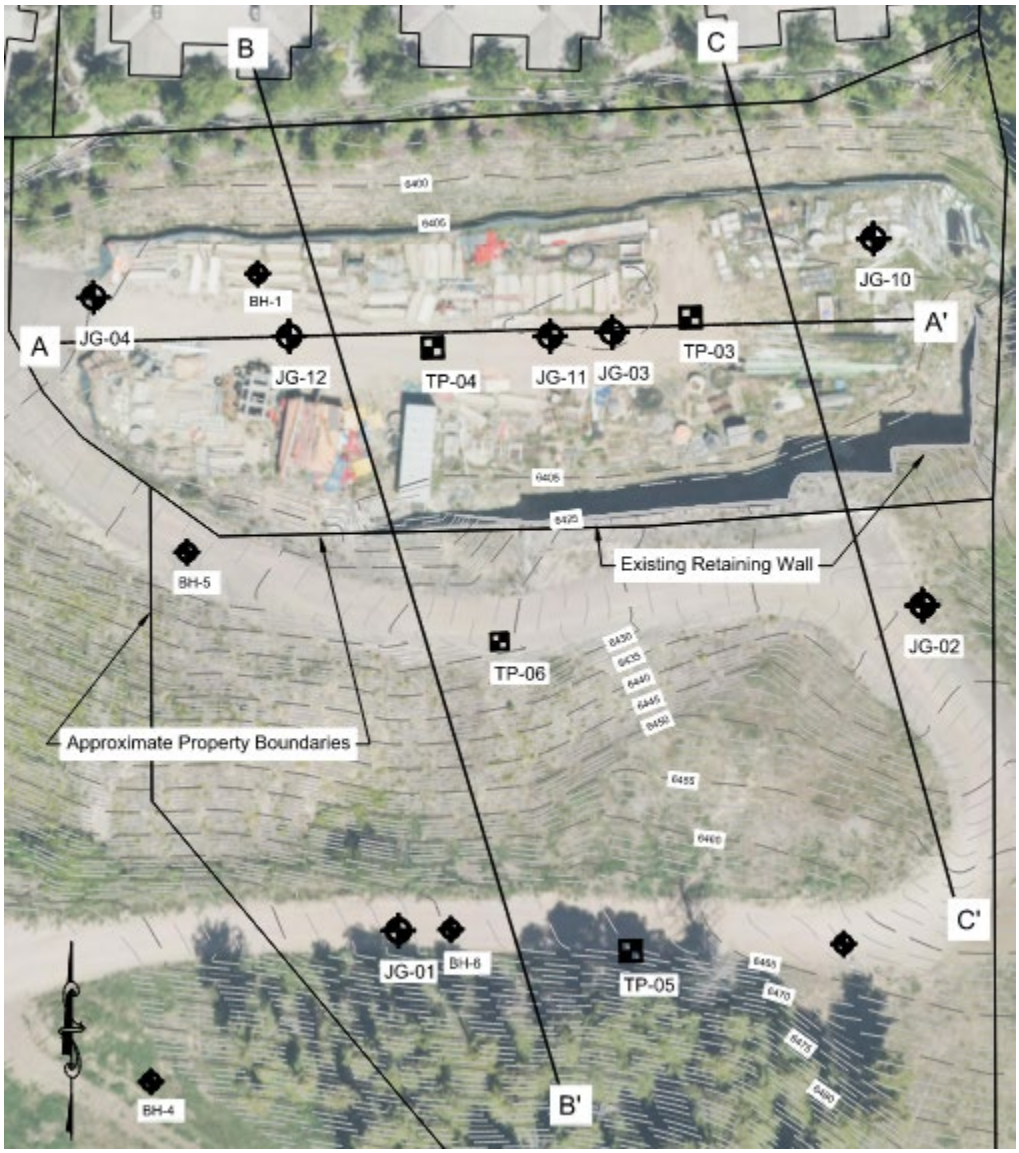


Figure 2: Borehole, Test Pit and Geologic Cross Section Location Map

3.2 Subsurface Soil Conditions

In general, three soil types were encountered during the subsurface exploration:

- **Landslide Debris** – consisting of clayey gravels (GC), lean clays (CL), and clayey sands (SC). The landslide debris soils are assumed to be derived from native colluvium soils prior to mobilization. These landslide debris soils exhibited chaotic deposition, which is also represented in the MASW plots provided by Atlas Geophysics. These results can be found attached to Appendix A.
- **Loess** – consisting of lean clay with sand (CL).
- **Weathered Bedrock** – consisting of soft weathered sandstone of the Bacon Ridge Formation (SC).

Below are three generalized geologic cross-sections spanning both north-south and east-west depicting the subsurface soil conditions and approximate foundation elevations for the buildings on Lots 53 and 58. Cross-section alignments can be found in Figure 2 and complete figures can be found in Appendix B.

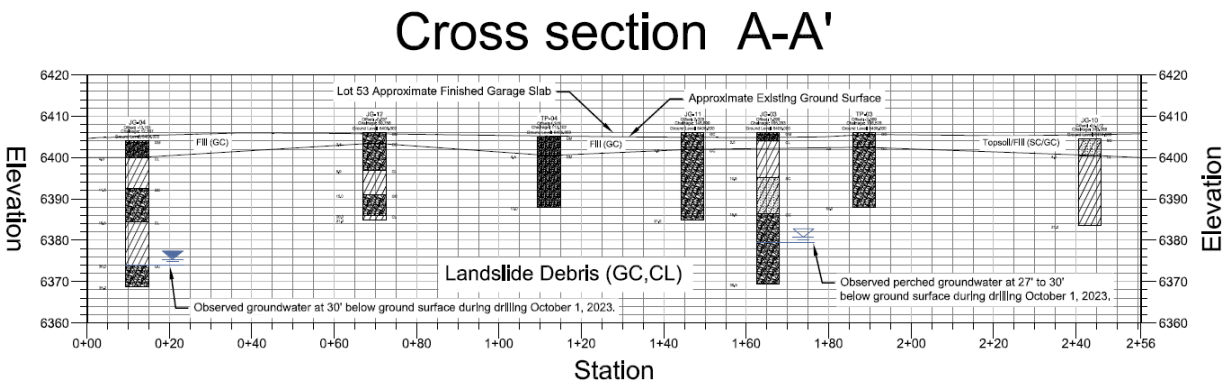


Figure 3: Geologic Cross Section A-A'

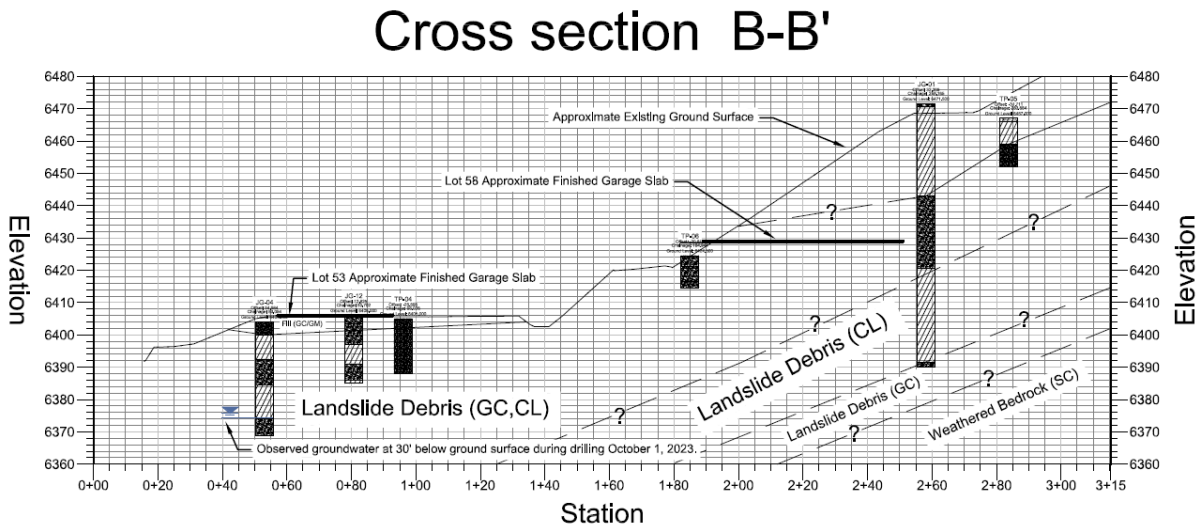


Figure 4: Geologic Cross Section B-B'

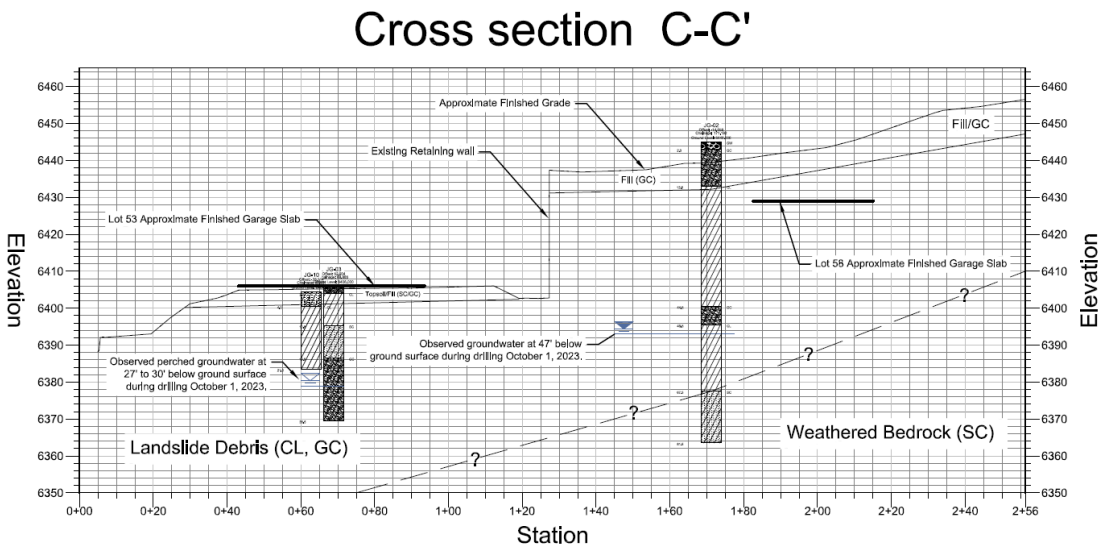


Figure 5: Geologic Cross Section C-C'

The table below describes each soil and rock layer, and detailed borehole logs are represented graphically in Appendix A. **It is important to note that** the borehole exploration techniques used either a 4-inch coring barrel or a 1.5-inch diameter split spoon sampler, limiting the soil that was collected during the drilling effort. It is likely that gravels larger and cobbles 3.0-inches are present but were unable to be logged due to the sampling method. Cobbles and boulders were encountered in the test pits.

Layer	Layer Name	Description	Geotechnical Considerations and Uses
1	**Topsoil/Fill (GC/GM/SC)**	• Observed in all boreholes and test pits • Depths ranging from 1- to 4.5-ft bgs • Classified as a Clayey **Gravel** with Sand, Silty **Gravel** with sand, or a Clayey **Sand** with Gravel. • Both the topsoil and fill are assumed to be derived from native soils • Brown to dark brown • Contains construction debris, including rebar, wood and concrete.	• Undocumented construction fill should be remove from beneath foundations • Non-structural applications
2	**Landslide Debris (GC/CL)**	• Observed in all boreholes and test pits	• Acceptable bearing layer with appropriate subgrade

		• Classified as Clayey **Gravel** with Sand, **Lean Clay**, **Lean Clay** with Sand, Sandy **Lean Clay** with Gravel, • Reddish brown to brownish gray • Coarse-grained soils are loose to very dense • Fine-grained soils are soft to very stiff • **Chaotic deposition, including charcoal fragments** • Observed 15-25% cobbles by volume • 10-55% gravel • 15-30% sand • 25-90% Clay/Silt	improvement methods • Settlement concerns • Structural applications • Non-structural applications
3	**Weathered Bedrock (SC)**	• Observed in BH-02 at 67.5-ft bgs • Classified as Clayey **Sand** • Grayish brown to reddish gray • Very dense • 55% sand • 45% fines	• Unlikely to be reached during construction

3.3 Groundwater

Groundwater was encountered in three boreholes during the subsurface exploration. Groundwater was observed in JG-02 at a depth of 47-ft bgs, JG-04 at a depth of 30-ft bgs, and a region of perched groundwater was encountered in JG-03 ranging from 27- to 30-ft bgs. These groundwater levels were incorporated into our slope stability analysis modeling and are discussed further in Appendix E.

The exploration occurred during a time of year that is considered to take place after peak groundwater levels have occurred, therefore the groundwater levels encountered during the drilling effort are *not* expected to represent peak groundwater levels. Groundwater levels fluctuate in response to seasonal snowmelt, runoff and flow levels in nearby rivers and streams, and is likely most heavily influenced by spring runoff and natural springs uphill. Soil moisture conditions on this site are most likely influenced by surface infiltration due to precipitation, snowmelt, and uphill natural springs. Two groundwater standpipes were installed on Lot 53 as part of the subsurface exploration. These standpipes were installed in JG-10 and JG-12, to total depths of 20 and 21-ft bgs, respectively.

Groundwater data was also presented in the previous Site Investigation Report published by Nelson Engineering, which was dated July, 2021. In this Report, they describe their encounters with perched groundwater to be in relatively thin (<1-ft in thickness) saturated zones. Groundwater measurements taken between 2005 and 2021 typically coincided with these saturated zones. We assume the measured groundwater levels at the site to be heavily influenced by spring runoff and natural springs uphill of the site.

3.4 Earthquakes and Ground Shaking

Jackson, Wyoming is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Montana, and Western Wyoming (Smith and Arabasz, 1991). The Teton fault, located along the eastern margin of the Teton Range, approximately 8-miles northeast of the site, is considered an important structural element of the Intermountain Seismic Belt. Predicted recurrence intervals for maximum credible earthquakes have passed for most of the fault systems capable of generating magnitude 7.5 earthquakes in western Wyoming (Case, 1997), implying the risk of major earthquakes is relatively high. In the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking, liquefaction, or slope movement could potentially cause damage to structures (Smith, et al., 1993).

Shear wave velocity calculated by Atlas Technical Consulting LLC, of Salt Lake City, Utah using ReMi geophysical exploration method for the project site is 1,200 ft/s. The IBC references ASCE 7-16 to determine the ground motion accelerations. Based on subsurface soils, and the results from the geophysical exploration, the site is classified as Site Class C ("Very dense soil and soft rock"). For your convenience, Seismic Design Maps (SEAOC, 2019) values are summarized in Table 3-1: U.S. Seismic Design Maps Summary.

Table 3-1: U.S. Seismic Design Maps Summary

Maximum Considered Earthquake (MCE) Spectral Response Acceleration Parameters			
	Short Period (S_s) =	1.024	
	1-Second Period (S_1) =	0.336	
Site Coefficients and Adjusted MCE Spectral Response Acceleration Parameters			
F_a =	1.2	S_{MS} =	1.229
*F_v =	1.5	*S_{M1} =	0.504
Design Spectral Response Parameters			
	S_{DS} =	0.819	
	*S_{D1} =	0.336	

*Note: Values for F_v, S_{M1}, and S_{D1} were determined in accordance with Section 11.4.4 of ASCE 7-16. Per Section 11.4.8 of ASCE 7-16, if the proposed structure foundation will include seismic isolators or damping systems, a site response analysis shall be performed in accordance with Section 21.1.

The project site is located in an area of moderate seismic activity. The current peak horizontal acceleration (PGA) with a probability of occurrence of 2% in 50 years is approximately 0.454g (USGS, 2014). The site amplification factor at PGA is 1.2, resulting in a site modified peak ground acceleration (PGA_M) of 0.545. This has been applied for the analysis of seismic lateral loading on retaining walls Section 4.3.

The provisions of the IBC are intended to provide uniform levels of performance for structures depending on their intended use and the risk inherent to their failure. The approach adopted in the IBC is intended to provide a uniform margin of safety against collapse at the design motion. The design earthquake ground motion is selected at a ground shaking level that is 2/3 of the maximum considered earthquake (MCE) ground motion, which has a likelihood of exceedance of 2% in 50 years (corresponding to a return period of 2,500 years). The IBC is not intended to prevent damage or loss of

function during a major earthquake; it is intended to reduce the risk of loss of life. Structural design should follow the level of risk tolerable by the Design team.

3.5 Geologic and Geotechnical Hazards

3.5.1 Potential Settlement/Compressible Clays

The primary geotechnical concern at the project site is differential settlement of foundation elements placed on unimproved landslide deposits. Based on the borehole logs, in-situ testing, lab testing, and geophysical exploration, the subgrade soils comprise a range of chaotic mixture of soils, from compressible clays to competent stony soils. The soft clays are expected to experience moderate to severe settlement, while the stony soils are *not* expected to experience substantial settlement. Calculated settlement values are discussed in Section 5.2 and calculation spreadsheets are shown in Appendix E.

3.5.2 Seismic and Fault Related Hazards

The owner should be aware that in the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking could potentially cause damage to structures (Smith et al, 1993). The owners may wish to consider the option of carrying earthquake insurance in addition to homeowner's insurance. Older faults mapped in the immediate vicinity of the property are believed to be old and inactive. Surface rupture due to faulting is very unlikely, and no slope failure is anticipated to occur.

3.5.3 Slope-Related Hazards

In the event of an earthquake or extreme precipitation event, rock fall, debris flows, or avalanches produced from the steep slopes to the south of the development area could potentially cause damage to structures, especially following wildfires. Risk assessment of the slope related hazards was beyond the scope of this Report, but we present slope stability analyses of several slopes captured in the cross section Lot 53 and 58. These are discussed in Section 4.1 and presented in Appendix F.

4.0 GEOTECHNICAL ENGINEERING ANALYSES

4.1 Slope Stability Analyses

The slope stability analyses were performed using SLOPE/W module of Geostudio. We analyzed two sets of geometry for global slope stability, taken from cross sections B-B’ and C-C’. Pre-construction and post-construction external geometry was determined using topographic data provided by Jorgensen Associates, as well as proposed design data provided by Jon Althschuld of Chinook Landscape Architecture, LLC.

Soil-strength parameters were determined using direct testing methods, as well as correlations based on index tests and SPT N-Values. A detailed discussion on soil-strength parameters can be found in Appendix D. The parameters used in the stability analysis are shown in Table 4-2 and Table 4-3. We incorporated a phreatic surface into model based on observed water conditions during the drilling effort. We included surcharge loads to account for future building loads and evaluated seismic conditions using a pseudo-static approach.

Table 4-2: Soil Parameters Used for Slope Stability Analysis B-B'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (CL)	115	100[1]	35
Landslide Debris (GC)	125	50[2]	40
Landslide Debris (GC/CL)	120	100[2]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

Table 4-3: Soil Parameters Used for Slope Stability Analysis C-C'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (GC/CL)	120	100[1]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

4.1.1 Results

Results of the stability analyses are summarized in Table 4-4. Appendix F shows the output of the stability model for Cross-Section B-B' and C-C'.

Table 4-4: Summary of Stability Analyses Results

Cross section	Analysis	FS	Change in FS[1]
B-B'	Pre-construction	1.646	-1.03%
	Post-construction	1.629	
	Post-Construction Seismic	1.173	N/A
C-C'	Pre-construction	2.281	+12.93%
	Post-construction	2.576	
	Post-Construction Seismic	1.753	N/A

1. Negative indicates a reduction in FS from pre-construction to post-construction, while positive indicates an increase in FS from pre-construction to post-construction.

Discussion regarding accepted FS can be found in Appendix F. Changes in Factors of Safety (FS) from pre-construction to post-construction conditions range from -1.03 to 12.93%, though all of the post-construction conditions indicate static FS's above the 1.5 threshold for residential construction ranging from 1.629 to 2.576. Post-construction seismic conditions indicate factors of safety from 1.173 to 1.753, both of which are above the 1.1 FS threshold for maximum allowable permanent seismic deformations of 2 inches (FHWA 2011).

Residual strength results from strain-softening behavior; i.e., soils become weaker with shearing (as in the case of slope movement) decreasing from peak strength to residual strength. Reduced shear strength usually occurs only in soils that have been previously sheared while undisturbed soils typically exist at peak strength. It is possible that sheared soils exist on this site or nearby and exhibit behavior

consistent with residual strength. In this case, seismic slope stability may result in factors of safety less than 1.0. **However, soil shearing was not observed during subsurface exploration at this site. If pockets or layers of soft, weak, or sheared soils are observed during construction, work shall cease, and Jorgensen Geotechnical be notified immediately to evaluate site conditions and review the stability model.**

4.2 Settlement

As described is Section 3.5.1, several different soil types were encountered at the site, all of which represent different levels of settlement potential, increasing the risk of differential settlement which is particularly damaging to structures. Settlement calculations were performed for the compressible clay, and the potentially compressible clayey sands. Because the stony soils contain varying amounts of matrix soils (i.e., clays and sands), estimated settlement is difficult. Though, it is important to note that in general, as the matrix content increases, the risk of settlement increases.

Item	Settlement Analyses – Slopewash	
	Scenario 1	**Scenario 2**
Bearing Layer	**Clay** – Foundation system is placed in direct contact with the clay soils	**Colluvium** - Foundation placed in direct contact with clayey sand soils
Foundation Assumptions	Comprises typical reinforced concrete spread footings	
	Bearing pressure of 3,000 pounds per square foot	
	Buried 3-feet below finished grade	
	Spread footings is 2-feet wide	
Calculated Settlement	3.38-inches	1.67 -inches

The risk of settlement can be reduced by several subgrade improvement methods, of which are discussed below in Section 5.0.

4.3 Lateral Earth Pressures

Lateral pressures were calculated using methods suggested by Bowles (1996) for at-rest, active, and passive conditions and are presented in Table 4-5. These values assume a combination of lean clay and clayey gravel landslide debris will be used as non-structural backfill. We have assumed an estimated internal friction angle of 36° and a unit weight of 130 pcf based on experience working with similar soil deposits and laboratory testing. Calculations assume level backfill against foundation walls or retaining walls.

Table 4-5: Lateral Pressure Parameters for Landslide Debris

Condition	Coefficient of Earth Pressures	γK (equivalent fluid pressure)
Static Conditions Level Backfill	K_o = 0.41 K_a = 0.26 K_p = 3.85	54 pcf 34 pcf 501 pcf
Earthquake Conditions	K_{ae} = 0.38	49 pcf

Level Backfill	K_{pe} = 3.46	449 pcf

Lateral earth pressure design will be estimated based on the concept of equivalent fluid pressures, in which the soil pressure-distribution is triangular against the foundation or retaining wall. The following sections summarize each design situation.

4.3.1 Active Pressures

Application	Retaining walls which are allowed to deflect and develop an active soil wedge
Resultant Force Calculation	½ $\gamma K_a H^2$; pounds per horizontal foot of wall
Resultant Force Location	one-third the wall height (1/3 H) above the base
Seismic Coefficient[1]	K_s = 0.338g (r·α·PGA) per the FHWA (2011)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force	½ (γK_{ae} - γK_a) H^2; pounds per horizontal foot of wall
Seismic Resultant Force Location[2]	Applied at 60% of the wall height above the base

1. Discussion and calculations for the Seismic Coefficient can be found in Appendix F.
2. Research has indicated that lateral pressures due to earthquakes are non-hydrostatic in distribution, and the resultant acts above the lower third-point of the wall (Bakeer, et al, 1990).

4.3.2 At-Rest Pressures

Application[1]	Walls which are restrained and not allowed to deflect
Resultant Force Calculation	½ $\gamma K_0 H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Design control of such walls shall be whichever generates the higher resultant force: at-rest pressures or active seismic pressures.

4.3.3 Passive Pressures

Application[1]	Toe of retaining walls where the wall is allowed to move into soil
Resultant Force Calculation	½ $\gamma K_p H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base
Design Control	k_s = 0.338g (r·α·PGA) per the FHWA (2011)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Passive pressure design should neglect loose fill and soil located within the frost zone.

5.0 GEOTECHNICAL RECOMMENDATIONS

5.1 Recommendations Overview

The fine-grained soils encountered at the site exhibit moderate settlement potential as described above in Section 4.2. Typical spread footings are likely to experience settlement greater than 1-inch if placed above the compressible soils. The risk of settlement can be reduced by **ground improvement techniques** such as geosynthetic reinforced fills, or engineered aggregate piers (EAPs). The risk of settlement can also be reduced by incorporating **deep foundation elements** such as driven piles or micropiles into the foundation design. Subgrade improvement methods to reduce the risk of future differential settlement are discussed in Sections 5.2, 5.3, and 5.4, below.

Due to the need for a construction shoring system, if mass excavation (i.e., over-ex and replace with geosynthetic reinforced fill) is selected, the shoring system will need to be extended at or below the over-excavation limit, increasing the overall height of the shoring system. Deep foundation elements and aggregate piers would negate the need for mass excavation below the shoring system.

It should be noted that different subgrade improvement methods correspond with different levels of risk reduction. Any subgrade improvement method that leaves problematic soil beneath foundation systems has a higher level of risk than those that do not. Similarly, deep foundation elements greatly reduce the risk of settlement by transferring the foundation load past the problematic soils and into the underlying competent soils. Typically, the cost of a foundation system correlates to the risk reduction (i.e., the more expensive foundation system the more risk reduction).

5.2 Reinforced Fills

Reinforced fill comprise imported soil compacted and interbedded with a pre-determined geosynthetic. The reinforced fill will better distribute the foundation load thereby reducing the load applied to the fine-grained, compressible and reducing the amount of future potential settlement. Exact thickness of a reinforced fill is currently unknown due to the limited design data available, though it can be expected to be four to six fee thick with a geosynthetic layer placed at every 1-ft increment.

5.3 Engineered Aggregate Piers

Engineered aggregate piers are a ground improvement technique that utilize compacted aggregate to reinforce potentially problematic soils. The piers are predrilled with an auger to the full design-depth (or to a refusal condition on competent rock/soil), a select aggregate is dumped into the predrilled hole from the surface, and the aggregate is then compacted with a down hole compactor attached to an excavator. The compaction effort not only compacts the imported aggregate, but also densifies the surrounding native soils. The increased density of the select aggregate as well as the surrounding native soils reduces the potential of future foundation settlement. One major benefit of EAPs compared to deep foundation elements, is the EAPs are a ground improvement technique, therefore the foundation footings do not need to be designed as grade beams as it would need to be for deep foundation elements, but typical spread footings.

Aggregate piers are typically designed and installed by a design-build contractor. Such as Keller, Geotech Foundation Company, and Montana Helical Piers. Jorgensen is available to provide design values and recommendations to the selected contractor for final design and price estimates.

5.4 Deep Foundation Elements

Foundations consisting of grade beams supported by deep foundation elements, such as driven piles or micropiles, typically allow very little vertical movement of structural elements. This option represents the lowest risk of future foundation settlement.

Both micropiles and driven piles are typically designed and installed by a design-build contractor. Jorgensen is available to provide design values and recommendations to the selected contractor for final design and price estimates.

5.5 Earthwork

5.5.1 Site Preparation

Prior to the placement of any fill, concrete slabs, or foundation elements, the site should be cleared and stripped of topsoil and all organic debris. No brush, roots, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill. All exposed subgrade surfaces should be free of mounds and depressions which could prevent uniform compaction. If unexpected fills or obstructions are encountered during site clearing or excavation, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

During the excavation, the equipment may disturb and loosen the surface of the subgrade soils. All disturbed areas should be compacted with a smooth-drum vibratory roller, in vibratory mode with a minimum of three passes, prior to the placement of structural fill and footing construction. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed and approved by a representative of this office.

5.5.2 Excavation and Cut Slope Stability

OSHA regulations (29CFR1926) appear to classify the coarse-grained at the site as Type C soil. For planning and design purposes, simple cut slopes should be no steeper than 1.5H:1V. According to OSHA, any cut slope greater than 20 feet in height requires additional analysis. Shallow groundwater conditions at the site may impact shoring requirements. These recommendations are based on observations made at the time of the site exploration. The contractor shall be responsible for adherence to OSHA and other safety regulations by observing soil conditions at the time of construction.

The design of a temporary construction shoring system is beyond the scope of this report. Jorgensen Geotechnical is available to coordinate with shoring contractors to provide design parameters and local expertise to the project and deliver the most efficient shoring option.

5.5.3 Final Backfilling and Grading

Properly compacted backfill and site drainage are very important to protect subgrade soils and prevent water from flowing to undesirable locations (i.e., to the highway). All soils at the site are acceptable for use as backfill and general site grading. Compaction guidelines for both soil types can be found in Section 5.5.4.

5.5.4 Compaction

Based on our borehole logs, compaction of the on-site soils during construction can be measured by performing a Standard Proctor test per ASTM D698 and performing nuclear density gauge testing during the compaction process. Site soils should be moisture-conditioned and placed in lifts and compacted to a predetermined percentage (typically either 92% or 95%) of the maximum dry density as determined by Standard Proctor testing. Soil should be moisture conditioned to between -2% and +2% of the optimum moisture content (OMC). Fine-grained soils require a sheepsfoot or padfoot roller.

It is important to note, the on-site soils contain fine-grained soils which become difficult to compact if moisture contents become too high. Moisture management of the compacted soils will be paramount to reach adequate densities. Additionally, groundwater may impact the ability to compact the soils during construction.

If imported "pit-run" is used as structural fill or if soils at the site contain more oversized clasts (greater than 3-inches) compaction testing with a nuclear density gauge is usually problematic due to the presence of stones. Therefore, we recommend compacting stony soils using a **method specification**, for which Table 5-1 provides initial guidelines.

Table 5-1: Compaction Parameters for Stony Fill

Compactor Type	Lift Thickness	Maximum Particle Size	Minimum Number of Passes[1]
5-ton vibratory	12 inches	9-inch[2]	3
1.5-ton vibratory	9 inches	6-inch	5
Hand-held	4 inches	4-inch	5

1. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
2. Occasional clasts to 12-inch are permitted, if encountered, but should not be nested.

The method specification may be established as follows:

- The contractor will place fill in loose lifts no greater than specified in the above table for whichever class of compactor is used.
- Fill will be compacted with the *minimum* number of passes specified above. The actual number of passes should be determined by observing compaction after each pass to determine if the surface is non-yielding. If the fill surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
- Once the number of passes is determined, this **method** (unique to the material type, compactor, lift thickness, and number of passes) may be continued for the rest of the project as long as fill material properties and subgrade soil conditions remain the same.

It is important to establish a method specification as early in the construction as possible and apply it consistently for the entirety of the project. JG should observe lift thickness, number of passes, and equipment used during compaction. Additional guidance on construction observations may be found in Section 5.5.6.

5.5.5 Compaction Requirements

We recommend the following requirements for engineered fill materials:

Material Type and Location	Minimum Compaction Requirement	Moisture
Stony soils[1]: All Locations (Structural and Non-Structural Applications)	Non-yielding Condition	Usually 6-8%[2]
Non-stony soils	92% or 95% maximum dry density	+2-2% OMC

1. Stony soil may be imported or site-derived
2. Clean, stony soils are typically moisture insensitive and field observations are usually adequate to estimate when soils achieve the proper moisture.

We recommend compaction of fills be observed and tested during construction. If stony fill is not observed to be in a non-yielding condition or non-stony fills do not achieve the recommended compaction requirements, the area represented by the test should be reworked and retested as required to meet the requirements.

5.5.6 Observation during Construction

Recommendations in this report are contingent upon our involvement. If any unexpected soils or conditions are revealed during construction, this office should be notified immediately to survey the conditions and make necessary modifications. All excavations and foundation subgrades should be observed by a representative of JG prior to fill or concrete placement, especially if questionable materials are exposed. Notice shall be provided at a minimum of 24 hours before the requested observation.
We are able to provide the most value observing site conditions at the following times:

1. Upon completion of site preparation to verify all organics and unsuitable material have been removed, and to verify stony alluvial soils have been reached and structural fills have been prepared in accordance with Sections 5.5.1 and 5.5.4.
2. we can observe placement and compaction of fill and aid in the development of a method specification, Section 5.5.4.
3. We can perform density testing by means of proof rolls and with the use of a Nuclear Density Gauge for structural and non-structural soils.

6.0 LIMITATIONS

This report has been prepared based on a limited amount of data. Actual site conditions may vary. These services have been performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty is made or implied.

This report is site-specific and has been prepared in support of the proposed project. The report is for the sole use of the current property owner and their design and construction team and shall be considered non-transferable to future property owners without the written consent of Jorgensen Geotechnical. Under no circumstances are the figures and text to be used separately.

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APPENDIX A

Site Exploration Procedures and Subsurface Exploration Logs

Field Exploration

Borehole Locations and Elevations

Borehole and test pit locations were determined by Jorgensen Geotechnical (JG) staff to bracket the approximate location of the proposed development. Approximate locations of the boreholes and test pits are presented in Figure 2. The approximate location of each borehole and test pit locations were estimated based on relative proximity to landmarks identifiable on aerial photography. Approximate GPS coordinates for each borehole were also collected in the field. Approximate elevations were based on topographic data from Jorgensen Associates.

Subsurface Exploration Procedure

JG conducted a site exploration at the proposed project site utilizing two different subsurface exploration techniques: geotechnical boreholes and open test pits. During the exploration effort, several disturbed samples from SPTs were collected during the drilling effort as well as bulk disturbed grab samples during the test pit excavation. Shelby tubes were used to collect relatively undisturbed samples of soft material for consolidation testing, shear testing, and index testing. The samples were tested at GCI in Salt Lake City, Utah, and the results are presented in Appendix B. Soil-engineering properties were based on visual classification, direct lab testing results, and accepted correlations based on index test results and SPT blow counts and are discussed further in Appendix D. The subsurface exploration techniques are described below.

Sonic Boreholes

On October 1 and 2, 2023, JG directed and oversaw the drilling of four sonic boreholes; two to 80-feet below the ground surface (bgs) and two to 35-feet bgs using a sonic drill rig operated by Cascade Drilling of West Jordan, Utah. Sonic drilling utilizes high frequency vibrations to advance a core barrel or casing into the subsurface soils while collecting one continuous disturbed sample. At predetermined intervals, standard penetration tests (SPT) were performed to generate blow count values and collect additional disturbed samples.

Hollow Stem Auger Boreholes

Three additional boreholes were completed each to 20-feet bgs on October 25, 2023 using a hollow stem auger (HSA) drilling technique with a Diedrich D120 drill rig operated by SK Geotechnical of Billing, Montana. The HSA drilling technique utilized a 4.25-inch inside diameter hollow auger with a solid stem rod in the center that is removed to perform standard penetration tests every 2.5-feet.

Open Test Pits

On October 31, 2023, JG directed and oversaw the excavation of four open test pits. The test pits were excavated using a Hitachi Zaxis 160 steel tracked excavator operated by FCExcvation. The test pits ranged in depth from 10 to 18-feet bgs. Disturbed bulk samples were collected from pertinent soil layers.

Borehole Logs

Field data were collected in the field digitally using the application pLog on a tablet. Draft logs were reviewed in the office, and final versions are presented below. Blow counts for SPT (field N-values) were adjusted to a standard hammer efficiency of 60% and overburden pressure of one atmosphere as suggested by Youd and Idriss (1997) and Fang (1991), to obtain the adjusted (N1)60 values in blows per foot. Soil type, thickness, consistency, and relative moisture content were observed and documented by Jorgensen Geotechnical staff.

Detailed borehole logs are attached. Site conditions may vary and actual soil conditions may differ from those presented in the borehole logs. The final logs represent JG's interpretation of the subsurface soil conditions. Actual soil conditions may differ from those observed in the boreholes.

In addition to borehole and test pit logs produced by Jorgensen Geotechnical, borehole logs presented in a report produced by Nelson Engineering dated July 28, 2021 were also reviewed to determined subsurface soil conditions and are presented below. Approximate borehole locations performed by Nelson Engineering are presented in Figure 2. Test pit logs presented in a report prepared by Womack and Associated dated June 4, 2012 for the water tank due south of the proposed project site were also reviewed.

Geophysical Exploration

Jorgensen Geotechnical contracted with Atlas Technical Consultants LLC of Salt Lake City to perform a geophysical evaluation at the project site. The primary purpose of the geophysical study was to develop subsurface shear-wave velocity profiles using Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Waves (MASW). The geophysical exploration was performed on October 23 and 24th 2024. One ReMi line and one MASW line were performed at the specific project site (Lots 53 and 58), while the other ReMi and MASW lines were performed on Lot 57.

The ReMi study extended to a maximum depth of 100-ft below the ground surface, allowing us to select a Site Class based on the results. Shear wave velocity for the ReMi line RL-2 performed at lots 53 and 58 produced a shear wave velocity of 1,201 ft/s, classifying the site as a Site Class C per ASCE 7-16

The MASW line ML-2 performed at the project site indicates the upper approximately 20-feet are softer (i.e., slower shear wave velocity), and the soils become denser at approximately 30-feet below the ground surface. Though the soils appear to become denser at 30-feet, the upper 20-feet appear to be chaotic and have portions that are dense, and portions that are soft, consistent with the observations made in the boreholes and test pits.

The full Report from Atlas is attached.



Photo 1: Typical sonic drilling setup/JG--01



Photo 2: Typical sonic drilling bulk sample/Landslide Debris (GC/CL)



Photo 3: Typical hollow stem auger drilling setup/JG-12



Photo 4: Typical SPT sample/JG-10 D3



Photo 5: Typical test pit excavation setup/TP-07



Photo 6: Landslide Debris (GC)/TP-03



Photo 7: Chaotic sorting in Landslide Debris (GC)/TP-03



Photo 8: Charcoal present within landslide debris/TP-03



Photo 9: Large angular cobbles ~'1 to 2' diameter/TP-04 spoils pile

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Borehole ID: JG-01

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Diedrich D120
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471263 **Longitude:** -110.753274 **Elevation:** 6471.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
0			D1				Gravel (GW): Slightly moist to moist, brown, medium dense, clast supported, sub-rounded clasts approximately 50% sand and 50% sub-rounded gravel [FILL]					
1												
2			D2				Gravelly LEAN CLAY with Sand (CL): slightly moist, brownish tan, stiff, 25-30% angular gravel, 15-20% sand, 55-65% fines, [LANDSLIDE DEBRIS]					
3												
4												
5			D3									
6												
7			D4									
8			D5									
9												
10												
11												
12												
13												
14			D6									
15												
16												
17			D7									
18			D8					12		31	16	15
19												
			D9									

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
□ Fines Content (%) 20 40 60 80

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Hammer Type: Automatic

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Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) / MC (%) / PL & LL (%) / Fines Content (%)
21							Gravelly LEAN CLAY with Sand (CL): slightly moist, brownish tan, stiff, 25-30% angular gravel, 15-20% sand, 55-65% fines, [LANDSLIDE DEBRIS]						
22			D10										
23													
24													
25			D11										
26													
27													
28			D12	67	11-16-21 38			11		28	16	12	
29							CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, very dense, 50-55% angular gravel, 15-25% sand, 25-30% fines [LANDSLIDE DEBRIS]						
30			D13										
31			D14										
32													
33			D15										
34													
35			D16										
36													
37			D17	56	46-50/5" 94								
38			D18										
39			D19										

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Equipment: Diedrich D120
Hammer Type: Automatic

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41			D20				CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, very dense, 50-55% angular gravel, 15-25% sand, 25-30% fines [LANDSLIDE DEBRIS]						
42			D21										
43			D22										
44			D23										
45			D24										
46			D25										
47		⧗	D26	200	19-50/1" 84								
48													
49													
50													
51							LEAN CLAY, Sandy LEAN CLAY with Gravel, LEAN CLAY with Sand (CL): slightly moist, brownish tan, very stiff, 10-20% gravel, 20-30% sand, 50-90% fines, [LANDSLIDE DEBRIS]						
52													
53													
54													
55													
56			D27					13		33	15	18	●⊢
57													
58													
59			D28										

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Drilling Method: Sonic
Equipment: Diedrich D120
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Project Name: Bear Development - Snow King Loop Lots 53 and 58
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Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
61							LEAN CLAY, Sandy LEAN CLAY with Gravel, LEAN CLAY with Sand (CL): slightly moist, brownish tan, very stiff, 10-20% gravel, 20-30% sand, 50-90% fines, [LANDSLIDE DEBRIS]						
62			D29										
63			D30										
64													
65			D31										
66													
67													
68			D32	115	19-31-50/4" 56			10		26	16	10	● ⊢
69			D33										
70			D34										
71			D35										
72													
73			D36					12		38	17	21	● ⊢
74													
75			D37										
76													
77													
78			D38										
79													

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Equipment: Diedrich D120
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Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
81			D39	100	9-23-35 35		CLAYEY GRAVEL with Sand (GC): slightly moist, brownish gray, dense, angular 55% gravel, 15% sand, 30% fines [LANDSLIDE DEBRIS]						▲
82													
83													
84													
85													
86													
87													
88													
89													
90													
91													
92													
93													
94													
95													
96													
97													
98													
99													

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Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) / MC (%) / PL & LL (%) / Fines Content (%)
1			D1				GRAVEL (GW): slightly moist to moist, brown, medium dense, clast supported, approximately 50% sand and 50% sub-rounded gravel [FILL]						
2													
3			D2				CLAYEY GRAVEL with Sand (GC): slightly moist, medium dense, brownish tan, 55% angular gravel, 15% sand, 30% fines [LANDSLIDE DEBRIS]						
4													
5			D3										
6													
7			D4							20	15	5	H
8													
9			D5										
10			D6										
11													
12			D7				LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel, (CL): Slightly moist, reddish brown, soft to medium stiff, homogeneous, 10-20% sub-angular to angular gravel , 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]						
13													
14													
15			D8					12		31	15	16	●⊣
16													
17													
18			D9	0	4-3-3 6								▲
19													

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Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
21			D10				LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel, (CL): Slightly moist, reddish brown, soft to medium stiff, homogeneous, 10-20% sub-angular to angular gravel , 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]						
22													
23			D11					13		29	15	14	● ⊢
24													
25													
26			D12										
27													
28			D13	100	7-12-13 24	2.50							▲
29			D14										
30													
31			D15										
32													
33			D16					15		21	16	5	●
34													
35													
36			D17										
37													
38			D18	93	16-12-15 24								▲
39			D19					16		29	17	12	● ⊢

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Client: Bear Development, LLC
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Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
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Hammer Type: Automatic
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Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
41			D20				LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel, (CL): Slightly moist, reddish brown, soft to medium stiff, homogeneous, 10-20% sub-angular to angular gravel , 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]					
42												
43			D21									
44												
45			D22				CLAYEY GRAVEL with Sand (GC): moist to wet, reddish brown to grayish tan, dense, homogeneous, 40-50% angular gravel, 20-30% sand, 30-35% fines [LANDSLIDE DEBRIS]					
46												
47							▽					
48			D23	100	14-25-31 45							
49			D24									
50							LEAN CLAY, LEAN CLAY with Sand (CL): wet, tan to reddish tan, stiff to very stiff, homogeneous, 0-10% angular gravel, 5-35% sand, 60-95% fines [LANDSLIDE DEBRIS]					
51			D25									
52												
53			D26					12		26	14	12
54												
55												
56			D27									
57												
58			D28	100	14-26-36 45							
59			D29									

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
☐ Fines Content (%) 20 40 60 80

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Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
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Equipment: Sonic Drill Rig
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Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) 8 16 24 32 / MC (%) / PL & LL (%) 20 40 60 80 / Fines Content (%) 20 40 60 80
61			D30				LEAN CLAY, LEAN CLAY with Sand (CL): wet, tan to reddish tan, stiff to very stiff, homogeneous, 0-10% angular gravel, 5-35% sand, 60-95% fines [LANDSLIDE DEBRIS]	14		37	14	23	
62													
63			D31										
64													
65			D32					13		31	17	14	
66													
67		⧗	D33	400	50/4" 66								
68			D34				CLAYEY SAND (SC): wet, grayish brown to reddish gray, very dense, 55% sand, 45% fines, ironoxide staining, organic odor [WEATHERED ROCK]						
69													
70			D35							21	16	5	
71													
72			D36										
73													
74													
75			D37										
76			D38										
77													
78			D39										
79													

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-02

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 01 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
▽ At time of drilling 47.00 on Oct 01 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 81.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471530 **Longitude:** -110.752693 **Elevation:** 6440.00
Notes: Groundwater encountered at 47' bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
81			D40	0	50/2" 59		CLAYEY SAND (SC): wet, grayish brown to reddish gray, very dense, 55% sand, 45% fines, ironoxide staining, organic odor [WEATHERED ROCK]						
82													
83													
84													
85													
86													
87													
88													
89													
90													
91													
92													
93													
94													
95													
96													
97													
98													
99													

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1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-03

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471750 **Longitude:** -110.753041 **Elevation:** 6406.00
Notes: Perched groundwater encountered between 27 and 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1			D1				SILTY GRAVEL with Sand (GM): slightly moist, dark brown, medium dense, 45% sub-rounded to rounded gravel, 25% sand, 30% fines [FILL]					
2							GRAVELLY LEAN CLAY with Sand (CL): slightly moist, brownish tan, soft, approximately 15-25% angular cobbles by volume, matrix supported, 30-35% angular gravel, 15-20% sand, 50% fines [LANDSLIDE DEBRIS]					
3			D2									
4												
5			D3					10		33	14	19
6												
7			D4	93	4-3-4 7							
8												
9			D5									
10			D6									
11							CLAYEY SAND with Gravel (SC): slightly moist, very light brownish tan, dense, approximately 15-25% angular cobbles by volume, matrix supported, 25-30% angular gravel, 30-35% sand, 40-45% fines [LANDSLIDE DEBRIS]					
12												
13			D7									
14												
15			D8					8		30	15	15
16												
17			D9	100	10-17-20 33							
18							CLAYEY GRAVEL with Sand (GC): moist to wet, reddish brown, medium dense, homogenous, approximately 15-25% angular cobbles by volume, matrix supported, 30-55% angular gravel, 20-30% sand, 30-50% fines [LANDSLIDE DEBRIS]					
19			D10									

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-03

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471750 **Longitude:** -110.753041 **Elevation:** 6406.00
Notes: Perched groundwater encountered between 27 and 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D11				CLAYEY GRAVEL with Sand (GC): moist to wet, reddish brown, medium dense, homogenous, approximately 15-25% angular cobbles by volume, matrix supported, 30-55% angular gravel, 20-30% sand, 30-50% fines [LANDSLIDE DEBRIS]					
22												
23			D12					12		35	15	20
24												
25			D13									
26												
27			D14	87	10-11-14 22							
28												
29			D15									
30			D16									
31			D17					11		29	15	14
32												
33												
34			D18									
35			D19	80	20-25-10 17							
36												
37												
38												
39												

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-04

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
At time of drilling 30.00 on Oct 02 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 35.2 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471774 **Longitude:** -110.753619 **Elevation:** 6404.00
Notes: Groundwater encountered at 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1			D1				SILTY GRAVEL with Sand (GM): slightly moist, dark brown, medium dense, 45% sub-rounded gravel, 25% sand, 30% fines [FILL]					
2												
3			D2									
4							LEAN CLAY with Gravel (CL): slightly moist, brownish tan, soft, approximately 15-25% angular cobbles by volume, matrix supported, 15-20% angular gravel, 15-20% sand, 60-70% fines [LANDSLIDE DEBRIS]					
5			D3									
6												
7			D4	93	2-2-7			12		34	16	18
8			D5		8							
9												
10			D6									
11												
12							CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, dense, approximately 15-25% angular cobbles by volume, matrix supported, 35-55% angular gravel, 15-30% sand, 30-35% fines [LANDSLIDE DEBRIS]					
13			D7									
14												
15			D8					7		19	14	5
16												
17			D9	53	18-27-30							
18					49		LEAN CLAY with Sand (CL): slightly moist, brownish tan, medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-5% angular gravel, 25-30% sand, 65-70% fines [LANDSLIDE DEBRIS]					
19			D10									

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-04

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic
▽ At time of drilling 30.00 on Oct 02 2023

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 35.2 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471774 **Longitude:** -110.753619 **Elevation:** 6404.00
Notes: Groundwater encountered at 30-ft bgs. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D11				LEAN CLAY with Sand (CL): slightly moist, brownish tan, medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-5% angular gravel, 25-30% sand, 65-70% fines [LANDSLIDE DEBRIS]	17				
22												
23			D12							31	17	14
24												
25												
26			D13									
27												
28			D14	87	25-32-12 21							
29			D15									
30			D16									
31			D17				CLAYEY GRAVEL with Sand (GC): wet, grayish brown to reddish gray, very dense, approximately 15-25% angular cobbles by volume, matrix supported, 40-45% angular gravel, 15-20% sand, 40-45% fines [WEATHERED ROCK/LANDSLIDE DEBRIS]	10		33	15	18
32												
33												
34			D18									
35			~~D19~~	400	50/1" 83							
36												
37												
38												
39												

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
□ Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-10

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471827 **Longitude:** -110.752751 **Elevation:** 6404.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-2 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1–4							CLAYEY SAND with Gravel (SC): slightly moist, very loose, brown, 20% angular gravel, 55% sand, 20% fines [TOPSOIL/FILL]					
3			D-1	40	1-1-4 4							
4–5							GRAVELLY LEAN CLAY with Sand. LEAN CLAY with Sand, LEAN CLAY (CL): dry, reddish tan, soft to medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-30% angular gravel, 10-20% sand, 50-90% fines, [LANDSLIDE DEBRIS]					
6			D-2	67	5-8-7 11							
8			D-3	60	5-5-6 9					25	16	9
10–11			D-4	67	9-17-12 18							
13			U-1					14		39	15	24
15–16			D-5	83	4-6-8 11			16		38	21	17
18			U-2					14		32	14	18
19												

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-10

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471827 **Longitude:** -110.752751 **Elevation:** 6404.50
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-2 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / ☐ Fines Content (%) 20 40 60 80
21			D-6	100	5-9-8 14		GRAVELLY LEAN CLAY with Sand. LEAN CLAY with Sand, LEAN CLAY (CL): dry, reddish tan, soft to medium stiff, approximately 15-25% angular cobbles by volume, matrix supported, 0-30% angular gravel, 10-20% sand, 50-90% fines, [LANDSLIDE DEBRIS]						▲
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-11

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471746 **Longitude:** -110.753110 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1–4			D-1	20	11-11-19 26		CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, medium dense, 55% sub-rounded gravel, 25% sand, 20% fines [FILL]					
5–7			D-2	79	5-11-50/5" 50		CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, medium dense to very dense, chaotic sorting, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 30-50% angular gravel, 15-30% sand, 35-40% fines, Charcoal present [LANDSLIDE DEBRIS					
8–9			D-3	90	8-12-14 20			7		22	15	7
10–12			D-4	83	4-9-12 16							
13–15			D-5	100	6-17-23 33							
16–17			D-6	73	10-18-20 31							
18			~~D-7~~	0	50/1" 79							
19			D-8	125	50/5" 77							

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-11

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471746 **Longitude:** -110.753110 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21							CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, medium dense to very dense, chaotic sorting, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 30-50% angular gravel, 15-30% sand, 35-40% fines, Charcoal present [LANDSLIDE DEBRIS					
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
☐ Fines Content (%) 20 40 60 80

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Borehole ID: JG-12

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471744 **Longitude:** -110.753401 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-3 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
0							CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, very loose, 55% rounded gravel, 25% sand, 20% fines [FILL]					
3			D-1	60	4-4-3 5		CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, loose to very dense, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 30-35% angular gravel, 25-30% sand, 40-45% fines [LANDSLIDE DEBRIS]					
5			D-2	93	9-19-50/5" 55			10		27	15	12
7			D-3	75	50/5" 78							
9							LEAN CLAY with Sand (CL): dry, tan, medium stiff, 10% angular gravel, 30-40% sand, 50-60% fines, [LANDSLIDE DEBRIS]					
10			D-4	100	6-6-14 15			13		27	17	10
13			D-5	93	4-6-15 17							
15			D-6	100	6-23-29 41		CLAYEY GRAVEL WITH SAND (GC): dry to slightly moist, brown, dense, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 50% angular gravel, 15% sand, 35% fines [LANDSLIDE DEBRIS]					
18			D-7	73	19-16-42 45							

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-12

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 25 2023 **Completed:** Oct 25 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Total Depth: 21.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471744 **Longitude:** -110.753401 **Elevation:** 6406.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-3 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D-8	100	6-9-15 20		SANDLY LEAN CLAY with Gravel (CL): dry to slightly moist, brown, medium stiff, homogeneous, approximately 15-25% angular cobbles by volume, matrix supported, 20-30% angular gravel, 20-30% sand, 50% fines [LANDSLIDE DEBRIS]	11		26	14	12

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
□ Fines Content (%) 20 40 60 80

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1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Test Pit ID: TP-03

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471762
Longitude: -110.752954
Elevation: 6406.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

Notes:
No groundwater encountered. Stopped at target depth and limits of excavtator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
0						CLAYEY GRAVEL with Sand(GC): dry to slightly moist, blackish brown, homogeneous, 45% sub-angular gravel, 30% sand, 25% fines, [FILL]						
4						CLAYEY GRAVEL with Sand(GC): dry to slightly moist, brown, clast supported, 25% sub-angular to angular cobbles by volume, remaining 50% angular gravel, 15% sand, 35% fines by mass, Large amounts of charcoal. Chaotic sorting. Layer of CL (-0.5") at 6.5' and 8' [LANDSLIDE DEBRIS]						

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Telephone: 307.733.5150

Test Pit ID: TP-04

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471736
Longitude: -110.753241
Elevation: 6405.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160
Notes: No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
1						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, blackish brown, homogeneous, 45% sub-rounded gravel, 30% sand, 25% fines, Chunks of asphalt present, rebar [FILL]						
2												
3												
4												
5						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, clast supported, 15% sub-angular to angular cobbles by volume, remaining 50% angular gravel, 15% sand, 35% fines by mass, Large amounts of charcoal. Chaotic sorting. [LANDSLIDE DEBRIS]						
6												
7												
8												
9												
10												
11												
12			D-1									
13												
14												
15												
16												
17												
18												
19												

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Test Pit ID: TP-05

Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471248
Longitude: -110.753015
Elevation: 6467.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Notes:
Contractor: FCE
Equipment: Hitachi Zaxis 160

No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
1						CLAYEY SAND (SC): dry, brown, loose, 15% gravel, 55% sand, 30% fines, [TOPSOIL]						
2						LEAN CLAY with Sand (CL): dry, light whitish tan, pinholed, 5% angular gravel, 15% sand, 80% fines, medium plasticity, Some gravels and cobbles present. Lime stringers present [LOESS]						
3												
4												
5												
6												
7			D-1									
8						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, clast supported, 35% angular cobbles by volume, remaining 50% angular gravel, 15% sand, 35% fines by mass, charcoal. Chaotic sorting. [LANDSLIDE DEBRIS]						
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

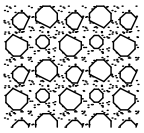
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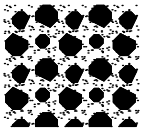
Project Name: Bear Development - Snow King Loop Lots 53 and 58
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471498
Longitude: -110.753164
Elevation: 6424.50
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

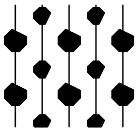
Notes:
No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

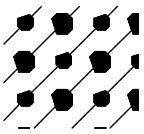
Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
0						CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, 40% angular cobbles by volume, remaining 55% angular gravel, 15% sand, 30% fines by mass, 2-4' cobbles and boulders [LANDSLIDE DEBRIS]						
4						CLAYEY GRAVEL with Sand (GC): slightly moist, dark reddish brown, dense, clast supported, 40% angular cobbles by volume, remaining 55% angular gravel, 15% sand, 30% fines by mass, 2-4' cobbles and boulders. Increased to very dense at bottom of pit. [LANDSLIDE DEBRIS]						
8						CLAYEY GRAVEL with Sand (GC): Dry, reddish brown, very dense, 80% angular cobbles by volume, remaining 55% angular gravel, 20% sand, 25% fines by mass, Appears to be layer of scree/ loose bedrock [LANDSLIDE DEBRIS/WEATHERED BEDROCK]						

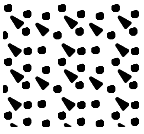
SOIL GRAPHICS

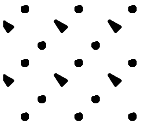
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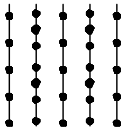
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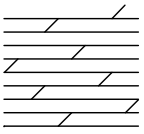
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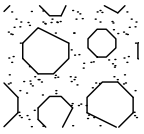
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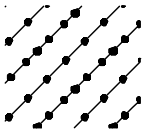
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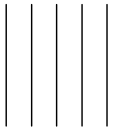
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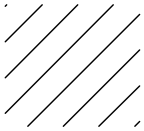
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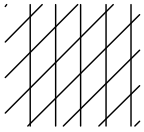
BEDROCK 

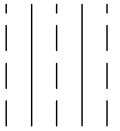
COBBLES/BOULDERS 

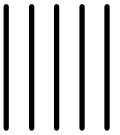
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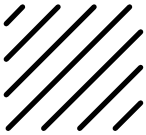
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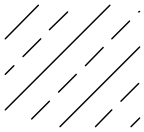
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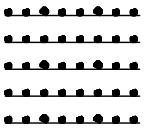
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NOTE: ANGLED DEMARCATIONS ON THE LOGS INDICATE APPROXIMATE OR POORLY DEFINED BOUNDARIES BETWEEN SOIL TYPES.

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PROJECT NAME: **LOT 58 GRAND VIEW LODGES**		**DRILL HOLE No. BH-1**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/11/05 10/12/05**		DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**		DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6408.5**		HOLE DIAMETER: **4"**	
		HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ALUVIAN GRAVEL, COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED ON EXCAVATED CUT SLOPE. SURFICIAL SOILS AT BORING SITE AND IN ADJACENT CUT SLOPES ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER (6' M.D.)*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-5' ARE ROCK CHIPS AND SILTY CLAY FINES*						
		4												
		5						*DRILLING THROUGH ROCK 4.8-6'*						
		6												
		7												
		8												
		9						*CUTTINGS 0-10.1' ARE ROCK CHIPS AND SILTY CLAY FINES*						
		10	X			BH1-1 2" SS	87	*DRY GREY GRAVEL, GP, FILGC, LIMESTONE FRAGMENTS IN MOIST BROWN SILTY SAND MATRIX*			>50			
		11	X											
		12												
		13												*10-20' DR REPORTS INTERVALS OF 1-4" SOFTER MATERIAL. PRIMARILY DRILLING THROUGH ROCK MATERIAL CUTTINGS ARE LIMESTONE FRAGMENTS IN SILTY SAND*
		14												
		15												
		16												
		17												
		18												
		19												
		20	X			BH1-2 2" SS	46	*MOIST BROWN GRAVEL W/ SILT AND SAND, GP-GM, GRAVELS ANGULAR, SILT STIFF. MULTICOLORED GRAVELS HIGHLY WEATHERED*			35			
		21	X											

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CLIENT: **SNOW KING MOUNTAIN RESORT**
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-1* PAGE: *2 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	22												DR MOD. TO EASY DRILLING IN 20–22' INTERVAL 8" ROCK 22.3–23'
		23												
		24												
		25				BH1-3 3"CS	25	MOIST BROWN CLAYEY SAND WITH GRAVEL, SC, PP=2.5 TSF, STIFF TO V. STIFF. FRAG. IN SHOE			8			
		26												DR 1–3" INTERVALS BETWEEN CLASTS
		27												
		28						SOME HIGHER PLASTICITY LEAN CLAYS IN CUTTINGS						
		29												
		30				BH1-4 2.5" SS	21	MOIST BROWN CLAYEY SAND WITH GRAVEL, SC, V. STIFF TO HARD, PP=4.0TSF	27	16	10		10	DR EASIER DRILLING FROM 29.5'± WITH LITTLE HAMMER ACTION
		31												
		32						HOLE CAVED TO 20' AFTER 30' SAMPLE						DR EASIER DRILLING FROM 29.5'± WITH LITTLE HAMMER ACTION FREQ. HAMMER PLUGGING 32–40'
		33												
		34												
		35												
		36												
		37												
		38												
		39												
		40						NO SLUFF IN HOLE @40' DIFFICULTY CLEANING HOLE TO REMOVE ROD INDICATES SOME CAVING IN 30–40' INTERVAL.						
		41				BH1-5 2" SS	70	MOIST BROWN CLAYEY SAND, SC, VERY STIFF TO HARD, FINE ANGULAR GRAVELS IN A SANDY CLAY MATRIX. UPPER 2" HIGHER MOISTURE CONTENT, MAY INDICATE SEEPAGE ZONE 40–41'	19	4	30		12	DR GRAVEL AND COBBLE ZONE 42–43' WATER LEVEL 11/3/05
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-1* PAGE: *3 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44						*CUTTINGS ARE MOIST TO WET OLIVE GREEN CLAYEY SAND*						*DR CONT. HAMMER CLOGGING FROM 42'*
		45	X			*BH1-6 2" SS*	*83*	*MOIST OLIVE GREEN CLAYEY SAND, SC, MED. STIFF TO STIFF, SLIGHTLY SANDY LENS WITHIN. SOME CALCIUM CARBONATE STRINGERS.*	*30*	*6*	*16*		*20*	
		46	X											
		47	X											
		48												
		49												
		50												
		51												
		52	X											*AT 52' DR APPROX. 12' OF WATER IN HOLE OVERNIGHT*
		53	X			*BH1-7 2" SS*	*40*	*AS ABOVE BUT GREY BROWN, SOME COAL/ORGANICS, PP=3.5-4.0 TSF.*			*22*			
		54	X					*BOH =52.0'*						
		55						*SET PIEZO (1"PVC) BOTTOM AT 51.1 SLOTTED BOTTOM 10' FILLED ANNULUS WITH SAND TO 38' 1' STICKUP*						
		56												
		57												
		58												
		59												
		60												
		61												
		62												
		63												
		64												
		65												
		66												

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

S:\PROJECTS\06-12 GRAND VIEW LODGES\DRILLING\BHBORINGLOG.DWG (BH-1 (2)) FEB 13 2006 10:56:01 AM PLOTTED BY: GYR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-2**	PAGE: **1 OF 5**
DATE STARTED / FINISHED: **10/11/05 10/12/05**	DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6550.3**	HOLE DIAMETER: **4"**	
	HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	FREQ. GRAVEL, COBBLE. AND BOULDER SIZE CLASTS	1–6						*BORING LOCATED ON GRASSY AREA. SURFICIAL SOILS IN ADJACENT ROAD CUT ARE GENERALLY STIFF TO HARD GRAVEL AND SILT MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE. SEVERAL LARGE BOULDERS EXCAVATED FROM NEARBY WATER TANK EXCAVATION.*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		3–5						*CUTTINGS 0–5' ARE MOIST LT BROWN GRAVEL WITH WITH SILT, GP–GM*						*DR FREQ. COBBLES. HAMMER ACTION IS NEARLY CONTINUOUS*
		6												*DR NO GRAVEL/COBBLES FROM 6'±*
	WET TO SATURATED SOILS IN INTERVALS FROM 7'–18'	7–9						*DR VERY SOFT DRILLING 7–9.5' CUTTINGS ARE WET CLAY/SANDY CLAY. APPEARS TO BE A SATURATED ZONE*						
		10–11				BH2-1 2.5" CS	75	*FROM 9.5' SAND CONTENT OF CUTTINGS INCREASING MOIST GREY BROWN CLAY, CL, STIFF TO VERY STIFF, NONUNIFORM PLASTICITY IN SAMPLE.*			15			
		12–14												*DR GRAVELLY DRILLING 12'–13'*
		15–16				BH2-2 2" SS	75	*MOIST TO WET GREY CLAYEY SAND W/GRAVEL, SC, GRAVELS FINE TO MED. SANDS FINE. V. STIFF TO HARD, MEDIUM PLASTICITY*			16			
		17												
		18						*HAMMER PLUGGING FREQ. TO 17' CUTTINGS ARE MOIST CLAYS*						
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	19–21						*ROCKY DRILLING FROM 18' FREQ. HAMMER ACTION ON COBBLE AND GRAVELS. CUTTINGS SLIGHTLY MOIST*						

MATERIAL DESCRIPTION

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	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	22												*DR ROCKY DRILLING FROM 20'*
		23						*CUTTINGS TO 25' ARE GRAVEL/COBBLE FRAGMENTS IN SILT/SILTY CLAY WITH SAND MATRIX*						
		24												
		25	X			BH2-3 2.5"	25	*MOIST GREY SANDY SILT/SANDY CLAY, SC, V. STIFF*			18			
		26	X											*DR WET PLASTIC SOILS CONT. PLUG HAMMER. BORING ADVANCED WITH 1.875" ø NQ CORE FROM 30'*
		27	X											
		28												
		29												
		30						*CORING FROM 30' RETURN LOGGED AS IN"/IN"*						
		31		X				*30-30.8' WET SAT GREY CLAY, CL, WET FROM DRILLING FLUID. WITH 2 3" GRAVEL PARTICLES*						
		32		X			33/36	*30.8-33' MOIST GREY GREEN SANDY SILT, ML, V. STIFF TO HARD. GRADES TO SILTY SAND W RED COLORING SOME INTERVALS. TRACE CLAY. THROUGHOUT. 1 2" SEAM OF V.STIFF MED. PLASTICTY CH 31.0'*						
		33		X										
		34												
		35					2/60	*MOIST GREY SAND W/SILT, SP/SM, SANDS FINE, DENSE, WEAKLY CEMENTED*						
		36												
		37												
		38												
		39												
		40					35/60	*MOIST DENSE GRAY GREEN SAND W/SILT, SP-SM, DENSE, CONTAINS 1/4" THICK STRATA OF DK BROWN SILT W/SAND IN LOWER HALF*						
		41												
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-2* PAGE: *3 OF 5*

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		44					43/60	*MOIST DENSE GRAY GREEN SILTY SAND, SM, SANDS FINE, SILT % INCREASING WITH DEPTH, LOWER 1.5' OF SAMPLE MAY BE SANDY SILT. 3–5 DARKER FINE GRAINED STRATA <1" THICKNESS IN INTERVAL*						
		45												
		46												
		47												
		48												
		49												*48–53 DR VARIABLE RATE OF ADVANCE IND. 6"± STRATA*
		50					60/60	*4" INTERVAL 48.2–48.6 SAT V. SOFT SILTY SAND (DRILLING FLUID). MOIST GRAY GREEN SILT, ML, V. STIFF, OCCASIONAL BLACK ANGULAR FINE GRAVELS.*						
		51						*SAND % INCREASING FROM 51' MOIST GREY GREEN SILTY SAND, SM, SANDS FINE, DENSE*						
		52												
		53												
		54					48/48	*MOIST GREY GREEN SILT, SILTY SAND, ML/SM, WEAKLY CEMENTED SILTSTONE UPPER 6"*						
		55												
		56												
		57					12/12	*AS ABOVE*						
		58												
		59												
		60					12/60	*DR COBBLE AND GRAVEL DRILLING AND LOSS OF DRILLING FLUID FROM APPROX. 58'. POOR RETURN, 2" MINUS SANDTONE GRAVELS AND SILTY SAND. APPEARS TO BE COBBLES IN SILTY SAND MATRIX.*						
		61												
		62												
		63												
		64												
		65					12/20	*BLOCKED OF AT 64.7 BY COBBLE. MED. COARSE GRAVEL SIZE FRAGMENTS QUARTZITE NO WATER RETURN 65.5–66'*						
		66												

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S:\STANDARD REFERENCE FILES\LOGGING GRIDDLE.PGU JUN 20 2002 09:35:53 AM PLOTTED BY: GREEN

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-2* PAGE: *4 OF 5*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		67					14/40	*AS ABOVE.* *CONT. LOSS OF FLUID TO FORMATION*						
		68												
		69					18/30	*GRAVEL SIZE LIMEYSANDSTONE FRAGMENTS, SOME SAND ADHEREING TO GRAVEL SURFACES*						
		70						*BLOCKED OFF BY COBBLE @70.5*						
		71					15/30	*DR HARDER COMPETENT ROCK WITH THIN (<2") SOFTER INTERVALS THROUGHOUT. CONT. WATER LOSS.* *MOIST GREEN SILT W/SAND, ML, HARD, TRACE CLAYS.*						
		72												
		73												
		74					54/60	*UPPER 1' IS SILT W SAND, ML, SAT. SOFT (DRILLING FLUID)* *REMAINDER IS MOIST GREEN SANDY SILT, ML, GRADES TO SILTY SAND IN SOME INTERVALS, SANDS FINE. VERY STIFF TO HARD*						
		75												
		76												
		77												
		78												
		79												
		80					44/60	*UPPER 10" MOIST GREEN SAND W/SILT, SP-SM,* *9" INTERVAL MOIST GREEN THEN BLACK CLAY, CH, MED. TO HIGH PLASTICITY, V. STIFF TO HARD* *16" SAND W SILT AS ABOVE* *GRADES TO MOIST GREEN CLAY, CH, HARD, BOTTOM 4"*						*DR REPORTS RED SEDIMENT IN RETURN FLOW 80-81 NO RED MATERIAL IN CORE*
		81												
		82												
		83												
		84					21/51	*14" MOIST GREEN TAN SILTY SAND/SANDY SILT, DENSE/HARD SANDS FINE* *2" MOIST GREEN CLAY, CH/CL, MED. HIGH PLASTICITY , WITH FINE SAND. V. STIFF TO HARD* *5" COBBLES LARGE GRAVELS IN SILT W SAND MATRIX*						*DR REPORTS LITTLE WATER LOSS 83-88*
		85												
		86												*BIT BLOCKED@87.25 NO RETURN FROM 87.5 DR COBBLE DRILLING*
		87												
		88					18/30							
		89												

S:\STANDARD\BORERS\NE_BOREHOLE.DWG (BOREHOLE PLG) JUN 20 2002 09:35:53 AM PLOTTED BY: GREEN

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-2* PAGE: *5 OF 5*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		90						*FRACTURED BLUE GREY LIMESTONE, 1" MD*						*DR COBBLES NO RETURN 89.8–93*
		91					14/38	*FRACTURED LIMESTONE AS ABOVE*						
		92												
		93												
		94												
		95					23/30	*LIMESTONE, 7" CONT. CORE, REMAINDER FRACTURED GRAVEL SIZE*						
		96					20/30	*BLACK TO GREY FRACTURED LIMESTONE, 1.5" M.D. SOME SANDY CALY MATRIX. APPEARS TO HAVE WEATHERED SURFACES*						*BLOCKED@96.5*
		97												
		98												*NO REUTRN 98–103 COBBLES WITH SMOOTH INTERVALS (CORING THROUGH LARGER COBBLE)*
		99												
		100					27/60	*CONT. FRACTURED LIMESTON, WITH SANDY CLAY INTERVALS. FRAGS UP TO 3" CORE LENGTH. WEATHERED SURFACES*						
		101												
		102												
		103												
		104												*NO REUTRN 103–108 CONT. COBBLE DRILLING*
		105					40/60	*AS ABOVE TO BOH*						
		106												
		107												
		108						*SET PIEZOMETER 1" ø PVC.* *BOTTOM AT 107.7* *SLOTTED 97.7–107.7* *NO WATER MEASURED ON 11/3/05*						
		109												
		110												
		111												
		112												

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S:\PROJECTS\2006\126-02 GRAND VIEW GEOTECH\DRAWINGS\LOGS\DWG GBH-2(5).DWG FEB 13 2006 11:06:21 AM PLOTTED BY: GYR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-3** PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/20/05 10/20/05**	DRILLER: **PIEDMONT**
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6445.8**	HOLE DIAMETER: **4"**
	HAMMER TYPE: **140#**

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED UNDISTURBED GROUND. SOILS EXPOSED IN WATERLINE TRENCH TO WEST TO DEPTH OF APPROX. 15' ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE (6' M.D.)*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-10' ARE ROCK CHIPS AND SILTY CLAYEY SAND*						
		4												*10-9.5' DR COBBLES AND GRAVELS WITH MATRIX INTERVALS OF 1" OR LESS THICKNESS*
		5												
		6												
		7												
		8												
		9												
		10	X			BH3-1 2" SS	46	*MOIST LT BROWN SILTY CLAYEY SAND W/GRAVEL, SC-SM, GRAVELS FINE ANGULAR, WITH CALCEROUS STRINGERS. SANDS FINE. GRADES TO SILTY CLAY WITH GRAVEL, STIFF*			34			
		11												
		12												*COBBLES LESS FREQ. FROM 9.5'*
		13												
		14						*DR ROCK, 14.1-16.8'*						
		15												
		16												
		17												
		18												
		19												
		20	X			2" SS	NS				30/0			*DR GRAVEL AND COBBLES FREQ. FROM 20.5'*
		21												

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S:\PROJ\2005\129-12 GRAND VIEW GEOTECH\ENGINEERING\DRIVE (ENGR)\ FEB 13 2006 11:46:48 AM PLOTTED BY: GYR

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-3* PAGE: *2 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22						*CUTTINGS ARE GRAVEL FRAGS AND RED SAND FROM 20'*						
		23												
		24												*WATER LEVEL 11/3/05*
		25												
		26				BH3-2 2"SS	33	*MOIST LT BROWN SILTY CLAY W GRAVEL , CL-ML, FILGC, GRAVELS FINE TO MED. LIMESTONE. STIFF TO VERY STIFF. DRILLING INDICATES HIGHER ROCK % THAN SAMPLE CONTENTS.*			30			*DR FREQ. PLUGGING 25-30' GRAVELLY*
		27												
		28												
		29												
		30												
		31				BH3-3 2.5" SS	100	*MOIST GREY BROWN SILTY SAND W.GRAVEL, SM, SANDS FINE, VERY STIFF*			17			
		32												*DR FREQ. HAMMER PLUGGING 30-35' DUE TO WET SILTY CLAY.*
		33												
		34						*CUTTINGS 35-40' ARE SILTY CLAY, GRAVEL, SILT, AND SAND MIXTURE*						
		35												
		36												
		37												
		38												
		39				BH3-4 2.5" SS	50	*MOIST GREY CLAY, CL HARD. SUSPECT WATER ABOVE IMPERMEABLE CLAY LAYER.*			>50			
		40												
		41				BH3-5 2" SS	58	*MOIST BROWN TO YELLOWBROWN SILTY CLAY W/GRAVEL, CL-ML, SOME COAL, STIFF TO VERY STIFF.*			12			*DR GRAVEL AND COBBLE ZONE 42-43'*
		42				BH3-6 2" SS	100	*MOIST GREY SILT W GRAVEL, ML, FRAGS UP TO 2", V. STIFF TO HARD.*			>50			
		43												
		44												

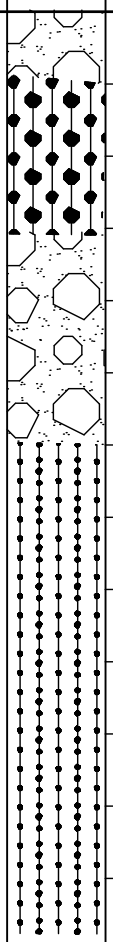
DRILLED BH3A TO 40' WITH DOWNHOLE HAMMER. SET PIEZO BOTTOM AT 33.25 SLOTTED TO 23.25. SAND 33.25-22.0' DRILLED BH3B APPROX. 7' EAST OF BH3A, 3B DRILLED WITH HAMMER TO 42' CASED 3.75"ø TRICONE WITH WATER FROM 42'

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S:\STANDARD\BORINGS\NE_BOREHOLE.PGU JUN 26 2002 09:35:3 AM PLOTTED BY: GREEN

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-3* PAGE: *3 OF 3*



DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
44						This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.						*DR SOFT EASY DRILLING FROM 44–45'*
45												
46												*DR COBBLES 3–6" WITH SOFT INTERVALS 46–49'*
47												
48												
49												*DR SMOOTH DRILLING FROM 49'–BOH*
50												
51	✕			*BH3-7 2" SS*	*100*	*MOIST GREY FINE SILTY SAND, SM, INCLUDES 4" OF CLAY WITH BLACK PEAT/COAL INCLUSIONS, V. STIFF*			*23*			
52	✕											
53												
54												
55												
56	✕			*BH3-8 2" SS*	*100*	*AS ABOVE. V. STIFF, DENSE.*			*20*			
57	✕					*BOH=–55.75'*						
58												
59												
60												
61												
62												
63												
64												
65												
66												

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S:\STANDARDS\BOREHOLE\NE_BOREHOLES.DVG (BOREHOLE.PGL) JUN 28 2002 08:13:53 AM PLOTTED BY: GREEN

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-4**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/22/05 10/23/05**	DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6487.8**	HOLE DIAMETER: **4"**	
	HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED ON UNDISTURBED GROUND. SOILS EXPOSED 50' HIGH CUT SLOPE DOWNSLOPE TO THE NORTH ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE (6' M.D.) SEEPS ARE EVIDENT IN AREA OF CUT FACE DOWNSLOPE OF BORING.*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-6' ARE ROCK CHIPS AND MOIST SILTY CLAYEY SAND*						
		4												*CUTTINGS MOISTURE % INCREASING FROM 6' FEWER ROCKS AND FREQ. BIT PLUGGING.*
		5												
		6												
		7												
		8												
		9	X			BH4-1 2.5" SS	79	*MOIST LT TAN GREEN SILTY SAND, TRACE CLAY, TRACE COAL, HARD.*			35			
		10	X											
		11												
		12												
		13												
		14	X			BH4-2 2" SS	50	*MOIST TO WET RED SILTY CLAYEY GRAVEL W/SAND, MED. PLASTICITY, STIFF TO V. STIFF. MOIST. CHAOTIC, NOT STRATIFIED*			17			*DRILLING WITH 3.75" ø TRICONE AND WATER FROM 15'*
		15	X											
		16												
		17												
		18												
		19												
		20												*DR ROCK 19.5-20.2'*
		21												

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S:\PROJECTS\06-07\TRANSFER STATION GEOTECH\TRANSFER MAIN BUILDING BORING LOGS.DWG GINT-D MAR 14 2005 01:31:31 PM PLOTTED BY:

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-4* PAGE: *2 OF 3*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22												*DR SOFT 20.5–22 DR 50% ROCK WITH 4"–8" INTERVALS OF SOFTER MATERIAL BETWEEN 22–29'*
		23												
		24												
		25												
		26												
		27												
		28												
		29												
▼		30												*WATER LEVEL 11/3/05*
		31												
		32												
		33												
		34						*AT 34' ATTEMPTED SPLIT SPOON, BORING CAVED TO 29' DRILLING WITH CASED 3.75" TRICONE FROM 34' DR SMOOTHER DRILLING AT 35'*						
		35												
		36												
		37												
		38												
		39				BH4-3 2" SS	92	*MOIST TO WET SILT, ML, TAN, MED PLASTICITY. SEAMS .5–1" THICK MAY BE SATURATED. STIFF.*			8			
		40												
		41												*DR COBBLES FROM 39.5 LOSING WATER FROM 40.5*
		42												
		43												
		44												

S:\STANDARD\BORERS\NE_BOREHOLE.DWG (BOREHOLE PLT) JUN 20 2002 09:35:53 AM PLOTTED BY: GREEN

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-4* PAGE: *3 OF 3*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44						*DR CONT FRACTURED ROCKY DRILLING FROM 39' CUTTINGS ARE ANGULAR LIMETONE/SANDSTONE GRAVEL SIZE FRAGMENTS*						
		45												
		46												
		47												
		48												
		49												
		50												
		51												
		52												
		53						*DR CONT FRACTURED ROCKY DRILLING FROM 39' CUTTINGS ARE ANGULAR BLUE BLACK LIMESTONE/SANDSTONE GRAVEL SIZE FRAGMENTS*						
		54						*MAJORITY OF WATER LOST, 39'–BOH*						
		55						*BOH =55.75*						
		56						*SET PIEZO (¾"PVC) BOTTOM AT 36.1' SLOTTED BOTTOM 6' BENTONITE IN HOLE TO 36.1, SAND TO 20' FILLED ANNULUS WITH SAND TO 38'*						
		57												
		58												
		59												
		60												
		61												
		62												
		63												
		64												
		65												
		66												

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S:\PROJ\2002\130-12 GRAND VIEW GEOTECH\BH\BORINGLOGS.DWG (BH-4 (3)) FEB 13 2006 11:07:07 AM PLOTTED BY: GVR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**		**DRILL HOLE No.** BH-5	PAGE: 1 OF 4
DATE STARTED / FINISHED: 10/24/05 10/25/05		DRILLER: PIEDMONT	
LOGGED BY: GYR/ROLFE		DRILL TYPE: TRACK MOUNT B-50	
BOREHOLE LOCATION/ELEVATION: SEE LOCATION MAP/6409.9		HOLE DIAMETER: 4"	
		HAMMER TYPE: 140#	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		1						*BORING LOCATED AT BASE OF 60' PLUS CUT SLOPE*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-10' ARE MOIST TO WET LT BROWN CLAY, SILTY CLAY WITH SOME GRAVEL FRAGMENTS.*						
		4						*DRILLING INDICATES OCCASIONAL COBBLES*						
		5						*MOIST TO WET PLASTIC SOIL CAUSING FREQ. PLUGGING FROM 4'*						
		6												
		7												
		8												
		9												
		10						*DR ROCK 9.5-11'*						
		11						*WET FROM 11' FREQ. HAMMER PLUGGING*						
		12												
		13												*NO WATER IN HOLE @13' AFTER 28 HOURS*
		14												
		15						*NQ CORING FROM 15' RETURN LOGGED AS IN"/IN"*						
		16					10/36	*MOIST LT BROWN CLAYEY SAND W. GRAVEL, COBBLE FRAG. IN SHOE. V. STIFF TO HARD PP> 3.0 TSF*						
		17												
		18												*18-23 LITTLE WATER LOSS SMOOTH DRILLING W/OCCASIONAL COBBLES*
		19					10/60	*AS ABOVE*						
		20												
		21												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *2 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22												*MINIMAL WATER LOSS 23–28'*
		23												
		24												
		25					19/60	*COBBLE IN BIT. MOIST BROWN CLAYEY SAND, SC, SANDS FINE, CLAY FRACTION MED. TO HIGH PLASTICITY, TRACE GRAVELS, HARD*	29	4				
		26												*SOME WATER LOSS @29' REGAINED BY 30'*
		27												
		28												
		29												*DRILLING IND. SAT. SOFT/LOOSE ZONE 30'±1 28–33 SMOOTH DRILLING W/SOME COBBLES LOWER PORTION*
		30					51/60	*AS ABOVE W/COBBLES TO 6", MOIST TAN BROWN SILTY CLAY W/GRAVELS*						
▼		31						*DRILLER REPORTS SAND LENSE "PUSHING IN ON HOLE" AT 30' HOLE CASED TO 33'*						
		32												
		33												
		34												
		35					18/36	*ALL GRAVEL AND COBBLE FRAGMENTS, LITTLE FINE GRAINED MATERIAL*						*MIN. WATER LOSS 33–40'*
		36						*36–38' MOIST TAN BROWN CLAYEY SAND, SC, TRACE GRAVEL, MED. PLASTIC*						
		37					13/24	*ABUNDANT GRAVEL MOIST TAN TO GREY CLAYEY SAND W/GRAVEL, SC, MED. PLASTICITY*						*DRILLING IND. HIGHER GRAVEL FRACTION THAN IN RETURN FROM 33'*
		38												
		39					15/17	*MOIST BROWN CLAYEY SAND, SC, SANDS FINE, FINES MED. PLASTIC, V.STIFF TO HARD, TRACE GRAVEL*	28	12				
		40												
		41					9/43	*MOIST GREY CLAYEY SAND, W/ GRAVEL AND COBBLES, SC, V. STIFF TO HARD*						
		42												
		43												
		44												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *3 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44												
		45					21/60	*MOIST TAN SILTY TO SANDY CLAY W/GRAVEL, CL, MED. PLASTICITY, V. STIFF TO HARD*						*TAN BROWN RETURN*
		46												
		47												
		48												
		49					13/24	*AS ABOVE*						
		50												*GOOD RETURN*
		51												
		52					15/36	*MOIST TAN BROWN SILTY CLAYEY SAND W/GRAVEL, SC-SM COAL IN SHOE @53' V/ STIFF TO HARD*						
		53												
		54					30/30	*MOIST TAN BROWN SILTY CLAY W/GRAVEL, INTERBEDDED COAL STRATA, V. STIFF, SOME MOTTLEING*						
		55												
		56												
		57					27/30	*AS ABOVE*						
		58												
		59												
		60					14/60	*MOIST BROWN SANDY SILTY CLAY W/GRAVEL, CL-ML, VERY STIFF*						
		61												
		62												
		63												
		64						*63-68 SOME KNOCKING, SOME FAST DRILLING*						
		65						*ORGANICS AT 65'*						
		66												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *4 OF 4*

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		67					34/60	*AS ABOVE TO 65' <u>FIBROUS ORGANIC MATERIAL @65±</u> BELOW ORGANICS IS MOIST BLUE GREY SANDY CLAY/CLAYEY SAND, STIFF TO VERY STIFF, WITH GRAVEL. BOTTOM 1' IS MOIST SILTY SAND/SANDY SILT/HARD/V. DENSE*						
		68												
		69												
		70					37/60	*SILTY SAND AS ABOVE SMOOTH DRILLING OCCASION KNOCKING, MOD FAST DRILLING*						
		71												
		72												*GOOD RETURN BLUE/GREY TO WHITE GREY*
		73												
		74						*<u>ORGANIC DEBRIS</u> MOIST BLUE GREY CLAYEY SAND W/ GRAVEL AND OCCASIONAL LARGE FRAGS OF WHITE LIMESTONE, STIFF TO VERY STIFF, CHARCOAL AND ORGANIC DEBRIS*						
		75					44/48							
		76												
		77												
		78					9/12	*MOIST BLUE GREY SANDY SILT, ML, TRACE GRAVEL LOW PLASTICITY STIFF TO VERY STIFF, CHARCOAL*						
		79												
		80					24/33	*AS ABOVE CHARCOAL IN SHOE*						
		81						*BOH AT 80.75 3/4" PIEZO INSTALLED PULLED CASING, CAVED TO 50' WATER IN BORING ABOVE 50' AS SEEN ON CLOTH TAPE. BENTONITE TO 45.5' BOTTOM OF PIEZO AT 45.5' SLOTTED TO 35.5 SAND TO 35.0' CAVED ABOVE*						
		82												
		83												
		84												
		85												
		86												
		87												
		88					18/30							
		89												

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PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-6**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **6/24/2021 6/25/2021**	DRILLER: **IME**	
LOGGED BY: **PRUETT**	DRILL TYPE: **TRUCK-MOUNTED CME85**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6466.0'**	HOLE DIAMETER: **8" OD HOLLOW STEM AUGER (HSA)**	
	HAMMER TYPE: **140# AUTO**	

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DEPTH (FT)	SAMPLES DRIVE	SAMPLES UNDISTURBED	SAMPLES BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
1						*BORING LOCATED ON CENTERLINE OF MOUNTAIN ACCESS ROAD W/GRAVEL SURFACE. UPHILL ROAD CUTS EST. 3-7' HEIGHT. STEEP GRASSY SLOPES UPHILL AND DOWNHILL. SURFICIAL SOILS ON CUT SLOPES DRY SILTY/CLAYEY GRAVEL/GRAVELLY SILT/CLAY WITH COBBLES AND BOULDERS.*						*EASY DRILLING WITH INTERMITTENT BIT GRINDING FROM 1'-10'*
2												*2 MINUTES TO DRILL 0'-5'*
3												
4												
5	5			BH6-1 2" SS	83	*5.0'-6.5' MOIST, BROWN/LT BROWN GRAVELLY SILT/SILTY GRAVEL, HARD, ANGULAR LIMESTONE AND SANDSTONE GRAVELS, FILGC*			34			
6	7											*3 MINUTES TO DRILL 5'-10'*
7	11											*HARD DRILLING IN GRAVELS FROM 7'-8'*
8												
9												
10	6			BH6-2 2" SS	61	*10.0'-11.5' MOIST, LT BROWN/GRAY SILTY GRAVEL WITH SAND, DENSE, ANGULAR LIMESTONE GRAVEL FRAGMENTS, FILGC*			34			*MODERATE DRILLING WITH CONSTANT BIT GRINDING ON GRAVELS AND COBBLES FROM 10'-21'*
11	10											*4 MINUTES TO DRILL 10'-15'*
12	12											
13												
14												
15	12			BH6-3 2" SS	67	*15.0'-16.5' SAME AS ABOVE, TRACE SAND, LIMESTONE GRAVEL LODGED IN TIP OF SS*			47			
16	17											*5 MINUTES TO DRILL 15'-20'*
17	17											
18												
19												
20	17			BH6-4 2" SS	78	*20.0'-21.5' 0"-12" SAME AS ABOVE, DENSE, ANGULAR GRAY LIMESTONE AND MINOR YELLOW SANDSTONE GRAVELS, MEDIUM PLASTICITY SILT*			32			
21	15					*12"-14" MOIST, OLIVE GREEN SILTY CLAYEY GRAVEL WITH MINOR SAND*						
	11											

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DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
22	11											
	6			BH6-4B 3" DM	83	22.0'–23.0' MOIST, OLIVE GREEN LEAN CLAY CHAOTICALLY MIXED WITH MINOR GRAY SILTY CLAY, STIFF TO VERY STIFF, MINOR COAL FRAGMENTS, PP>4.0 TSF, ORANGE OXIDATION STAINING IN TIP OF SS	33	15	15	108	18	MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 21'–25'
23	13	X										
24												4 MINUTES TO DRILL 20'–25'
25	3											
	5			BH6-5 2" SS	83	25.0'–26.5' MOIST, GRAY GRAVELLY SILTY CLAY WITH SAND, STIFF, MEDIUM PLASTICITY SILTY CLAY, PP=1–2 TSF, ANGULAR LIMESTONE AND SANDSTONE CLASTS, SANDSTONE CLAST WITH SHELL FOSSIL, ABUNDANT ORANGE OXIDATION STAINING THROUGHOUT			13			SMOOTH EASY DRILLING FROM 25'–30'
26	6											
27												2 MINUTES TO DRILL 25'–30'
28												BIT GRINDING FROM 28'–29'
29	7			BH6-5B 3" DM	83	28.5'–29.5' MOIST, BROWN SILTY CLAYEY/CLAYEY GRAVEL WITH SAND, MEDIUM DENSE, FINE SAND, ANGULAR LIMESTONE FRAGMENTS, FILGC			16			
	14											
30	14			BH6-6 2" SS	67	30.0'–31.5' MOIST, BROWN SILTY GRAVEL WITH SAND, VERY DENSE, FINE SAND, ANGULAR LIMESTONE FRAGMENTS, FILGC, FROM 4"–8" GRAVEL WITH SILT AND SAND LENS, GRAVEL LODGED IN TIP OF SS			51			MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 30'–35'
31	23											5 MINUTES TO DRILL 30'–35'
	24											
32												
33	7											INCREASED BIT GRINDING FROM 33'–35'
	20	X		BH6-6B 3" DM	100	33.0'–34.0' MOIST, OLIVE GREEN CLAYEY GRAVEL WITH SAND, MEDIUM DENSE, ANGULAR LIMESTONE, DOLOMITE, AND SANDSTONE GRAVELS			19			
34												
35	11											HARD DRILLING WITH CONSTANT BIT GRINDING 35'–45'
	18			BH6-7 2" SS	83	35.0'–36.5' TOP HALF–MOIST, OLIVE GREEN CLAYEY GRAVEL WITH SAND BOTTOM HALF–MOIST BROWN SILTY GRAVEL WITH SAND, DENSE, ANGULAR LIMESTONE FRAGMENTS, FILGC			34			
36	16											GRINDING ON COBBLE/BOULDER FROM 39'–39.5' FOR 15 MIN W/ NO PROGRESS. MOVED BH 6' EAST (BH–6B) DRILLED TO 40.4 WHERE GRINDING ON BOULDER FOR 30 MINS W/ MINOR PROGRESS. MOVED BH 7' WEST (BH–6C/ MW) OF ORIGINAL BH
37												
38						MONITORING WELL DRY ON 6/28/2021						
39												
40	23											
	50			BH6-8C 3" DM	67	39.5'–40.5' 0"–3" PULVERIZED LIMESTONE GRAVEL/COBBLE 3"–8" MOIST, SILTY CLAYEY GRAVEL WITH COBBLES, VERY DENSE, FRACTURED GRAY SANDSTONE GRAVEL AT BOS			>50			
41												
42												
43												HARD DRILLING WITH CONSTANT BIT GRINDING 40'–45'
44												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-6* PAGE: *3 OF 3*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44												
		45	11			BH6-9 2" SS	117	*45.0'–46.5' 0"–4" MOIST, OLIVE GREEN SANDY LEAN CLAY WITH MINOR GRAVEL, PP>4.0 TSF*			34			*EASY TO MODERATE DRILLING WITH OCCASIONAL BIT GRINDING FROM 45'–47.5'*
		46	20					*4"–21" MOIST, BROWN/GRAY/OLIVE GREEN CHAOTICALLY MIXED GRAVELLY LEAN CLAY/SILTY CLAY/SILT WITH SAND, HARD, PP>4.0 TSF, MINOR ORANGE OXIDATION STAINING, VERTICAL CONTACTS IN BOTTOM 6"*						
			17											
		47												*STIFF SMOOTH DRILLING FROM 47.5'–50'*
		48												
		49												*9 MINUTES TO DRILL 45'–50'*
		50	6					*50.0'–51.5' SAME AS ABOVE, TRACE GRAVELS, VERY STIFF, COAL*						
			12			BH6-10 2" SS	122	*FRAGMENTS IN BOTTOM 6"*			26			
		51	18											*EASY TO MODERATE DRILLING WITH INCREASING BIT GRINDING FROM 50'–55'*
		52												
			15					*52.0'–53.0' SAME AS ABOVE WITH GRAVELS, HARD, COAL FRAGMENTS*						
			50	X		BH6-11 3" DM	67	*THROUGHOUT, TOP PORTION OF SAMPLE IS SATURATED DUE TO SURFACE WATER INFILTRATION FOR THUNDERSTORM INTO DRILL STRING*	25	11	>50	121	15	
		53												
		54												
		55												
			9					*55.0'–56.3' SAME AS ABOVE WITH COAL FRAGMENTS*						
			16			BH6-12 2" SS	94				>50			
		56	50/4"											*MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 55'–60'*
		57												
		58												*6 MINUTES TO DRILL 55'–60'*
		59												
		60	10					*60.0'–61.5' MOIST, GRAY SILTY SAND, DENSE, FINE SAND, FINE GRAVEL*						*INITIAL BORING CAVED TO 22' AFTER HSA REMOVAL*
			18			BH6-13 2" SS	89	*INTERVALS, COAL FRAGMENTS THROUGHOUT*			43			
		61	36											
		62												
			21			BH6-14 3" DM	55	*62.0'–62.9' SAME AS ABOVE, VERY DENSE*			>50			
			50/5"											
		63						*BOH = 62.9'*						
								MONITORING WELL CONSTRUCTION						
		64						*PIPE*						
								37.9 FEET OF 2" DIAMETER SCHEDULE 40 PVC CASING FROM 0.3'–18.2', 20–SLOT SCREEN FROM 18.2'–38.2'						
		65						*BACKFILL*						
								BENTONITE– 0.5'–1.5', SPOILS– 1.5'–16.5', BENTONITE– 16.5'–17.5', SILICA SAND– 17.5'–40', BENTONITE– 40'–49', SPOILS– 49'–62.9'						
		66												

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PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-7**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **6/25/2021**	DRILLER: **IME**	
LOGGED BY: **PRUETT**	DRILL TYPE: **TRUCK-MOUNTED CME85**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6459.0'**	HOLE DIAMETER: **8" OD HOLLOW STEM AUGER (HSA)**	
	HAMMER TYPE: **140# AUTO**	

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0						*BORING LOCATED ON UPHILL/SOUTH EDGE OF MOUNTAIN ACCESS ROAD. EXCAVATED CUT SLOPES ABOVE, MINOR FILLS DOWNSLOPE SIDE. GRAVEL WITH SAND ROADWAY G.S. STEEP GRASSY SLOPES BOTH UP AND DOWN SLOPES. EXPOSED SOILS IN CUTS ARE DRY SILTY/CLAYEY GRAVEL/GRAVELLY SILT/CLAY WITH COBBLES AND BOULDERS.*						*MODERATE TO HARD DRILLING WITH CONSTANT BIT GRINDING FROM 1'–9'*
4	6			BH7-1 2" SS	89	*4.0'–5.5' MOIST, BROWN AND DK BROWN CLAYEY GRAVEL WITH TRACE SAND, FRACTURED AND ANGULAR GRAVELS, FILGC, MEDIUM DENSE TO DENSE, 4" FRACTURED LIMESTONE COBBLE AT BOS. WATERLINE FILL OF NATIVE SOILS*			30			
5	5											*GRINDING ON COBBLE/BOULDER FROM 5.5'–6.5'*
	11											
9	4			BH7-2 2" SS	78	*9.0'–10.5' MOIST BROWN SILTY GRAVEL WITH TRACE SAND, FRACTURED AND ANGULAR LIMESTONE AND SANDSTONE GRAVELS, FILGC, MEDIUM DENSE, MINOR ORANGE OXIDATION STAINING THROUGHOUT, PULVERIZED LIMESTONE GRAVEL/COBBLE IN TOP 2"*			29			*15 MINUTES TO DRILL 4'–9'*
10	8											
	11											*EASY DRILLING WITH INTERMITTENT BIT GRINDING FROM 9'–19'*
14	5			BH7-3 2" SS	67	*14.0'–15.5' SAME AS ABOVE*			29			*3 MINUTES TO DRILL 9'–14'*
15	9											
	12											*3 MINUTES TO DRILL 14'–19'*
19	7			BH7-4 3" DM	100	*19.0'–20.5' CHAOTICALLY MIXED BROWN/DK BROWN SANDY LEAN CLAY AND GRAY SILTY CLAY WITH MINOR GRAVEL, VERY STIFF, ORANGE OXIDATION STAINING THROUGHOUT, PP>4.0 TSF*	25	14	18	117	14	
20	14	X										
21												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-7* PAGE: *2 OF 3*

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		22												*MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 19'–23'*
		23												*GRINDING ON COBBLE FROM 22'–23'*
		24	4											
			7			BH7-5 2" SS	117	*24.0'–25.5' MOIST, BROWN/DK BROWN LEAN CLAY WITH SAND, MINOR GRAVELS, VERY STIFF, MINOR WHITE CALCAREOUS STRINGERS THROUGHOUT, PP=2–3 TSF*			19			*10 MINUTES TO DRILL 19'–24'*
		25	9											
			10											*SMOOTH EASY DRILLING FROM 23'–28'*
		26	17	X		BH7-6 3" DM	100	*25.5'–26.5' MOIST BROWN LEAN CLAY WITH SAND, PP=3–4 TSF, COARSE GRAVEL FRAGMENTS COMPLETELY WEATHERED INTO SAND TO FINE GRAVEL SIZED FRAGMENTS*	35	17	21	101	22	
		27												
		28												
		29	19											*EASY TO MODERATE DRILLING WITH CONSTANT BIT GRINDING FROM 28'–44'*
			28			BH7-7 2" SS	67	*29.0'–30.5' MOIST, BROWN SILTY GRAVEL WITH TRACE SAND, ABUNDANT FRACTURED GRAY LIMESTONE AND SANDSTONE GRAVELS, FILGC, VERY DENSE, ORANGE OXIDATION STAINING IN BOTTOM 6", GRAVEL LODGED IN TIP OF SS*			59			
		30	26											*5 MINUTES TO DRILL 29'–34'*
		31												
		32												
		33												
		34	15											
			23			BH7-8 2" SS	89	*34.0'–35.5' SAME AS ABOVE, NO OXIDATION STAINING, GRAY SANDY SILT LENS FROM 5"–7", GRAVEL LODGED IN TIP OF SS*			63			
		35	39											*4 MINUTES TO DRILL 34'–39'*
		36												
		37												
		38												
		39	17											
			50/5"			BH7-9 2" SS	91	*39.0'–39.9' SAME AS ABOVE, GRAY SANDSTONE GRAVEL LODGED IN TIP OF SS*			>50			
		40												*6 MINUTES TO DRILL 39'–44'*
		41												
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-7* PAGE: *3 OF 3*

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		44	16					*44.0'–45.3' SAME AS ABOVE*						
		45	17			BH7-10 2" SS	69				>50			*HARD DRILLING WITH CONSTANT BIT GRINDING FROM 44'–56.5'*
			50/4"											
		46						*GROUNDWATER MEASURED AT 46.35' ON 6/28/2021*						
		47												*GRINDING ON COBBLE/BOULDER FROM 47'–48'*
		48												*20 MINUTES TO DRILL 44'–49'*
		49	17					*49.0'–50.3' SATURATED FROM 0"–4", MOIST FROM 4"–12", BROWN*						
			36			BH7-11 2" SS	75	*CLAYEY GRAVEL, VERY DENSE, PULVERIZED GRAY SANDSTONE COBBLE*			>50			
		50	50/4"					*FROM 5"–11", FILGC*						*GRINDING ON BOULDER FROM 50'–51.5'*
		51												*24 MINTUES TO DRILL 49'–54'*
		52												
		53												
		54	17					*54.0'–55.5' 0"–3" SATURATED SAND AND GRAVEL HEAVE*						
			36			BH7-12 2" SS	78	*3"–14" CHAOTICALLY MIXED MOIST, GRAY AND BROWN SILTY CLAYEY*			61			
		55	39					*GRAVEL, FRACTURED AND ANGULAR GRAVELS, VERY DENSE, FILGC, TIP OF SS IS SATURATED*						
		56												
		57												*MODERATE SMOOTH DRILLING FROM 56.5'–59'*
		58												
		59	11					*59.0'–60.0' SATURATED TO MOIST, GRAY/DK GRAY SANDY LEAN CLAY,*						
			30			BH7-13 3" DM	75	*VERY STIFF, MOIST CLAY PP>4.0 TSF, CHAOTIC BLACK COAL FRAGMENTS IN BOS*	29	15	21	114	18	
		60						*BOH = 60.0'*						
		61						*MONITORING WELL CONSTRUCTION*						
								PIPE						
		62						*59.4 FEET OF 2" DIAMETER SCHEDULE 40 PVC CASING FROM 0.3'–39.5', 20–SLOT SCREEN FROM 39.5'–59.5'*						
								BACKFILL						
		63						*BENTONITE– 0.5'–1.5', SPOILS– 1.5'–34.5', BENTONITE– 34.5'–37', SILICA SAND– 37'–59.5', BENTONITE– 59.5'–60'*						
		64												
		65												
		66												

NELSON ENGINEERING
P.O. BOX 1599, JACKSON WYOMING (307) 733–2087

CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

PROJECT: Town of Jackson, Snow King Water Tank

PIT LOCATION: Southwest of center of tank

TEST PIT: TP- 1

Approximate Pit Dimensions (feet): Length: 40 Width: 15 Depth: 31.5

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6740' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① Clayey GRAVEL and COBBLE: Slightly moist to moist, dark brown, loose to medium dense, ~40% sandy clay is moderately plastic, ~60% angular gravel and cobbles up to 6" diameter, some silt, grades into below over 10" [COLLUVIUM]

② Silty sandy GRAVEL with clay and cobbles: Slightly moist, yellow tan, very slightly plastic, medium dense, few clasts up to 12" diameter, limestone clasts angular to subangular, grades into below [COLLUVIUM]

③ GRAVEL and COBBLE: Dry to slightly moist, reddish gray, fractures/voids lined with calcium carbonate, abundant voids, very loose, limestone, follows topography, consistently overlies olive sandy layer below, calcium carbonate mineralization on clasts, abundant raveling, bottom contact ~35-45 degrees [TALUS]

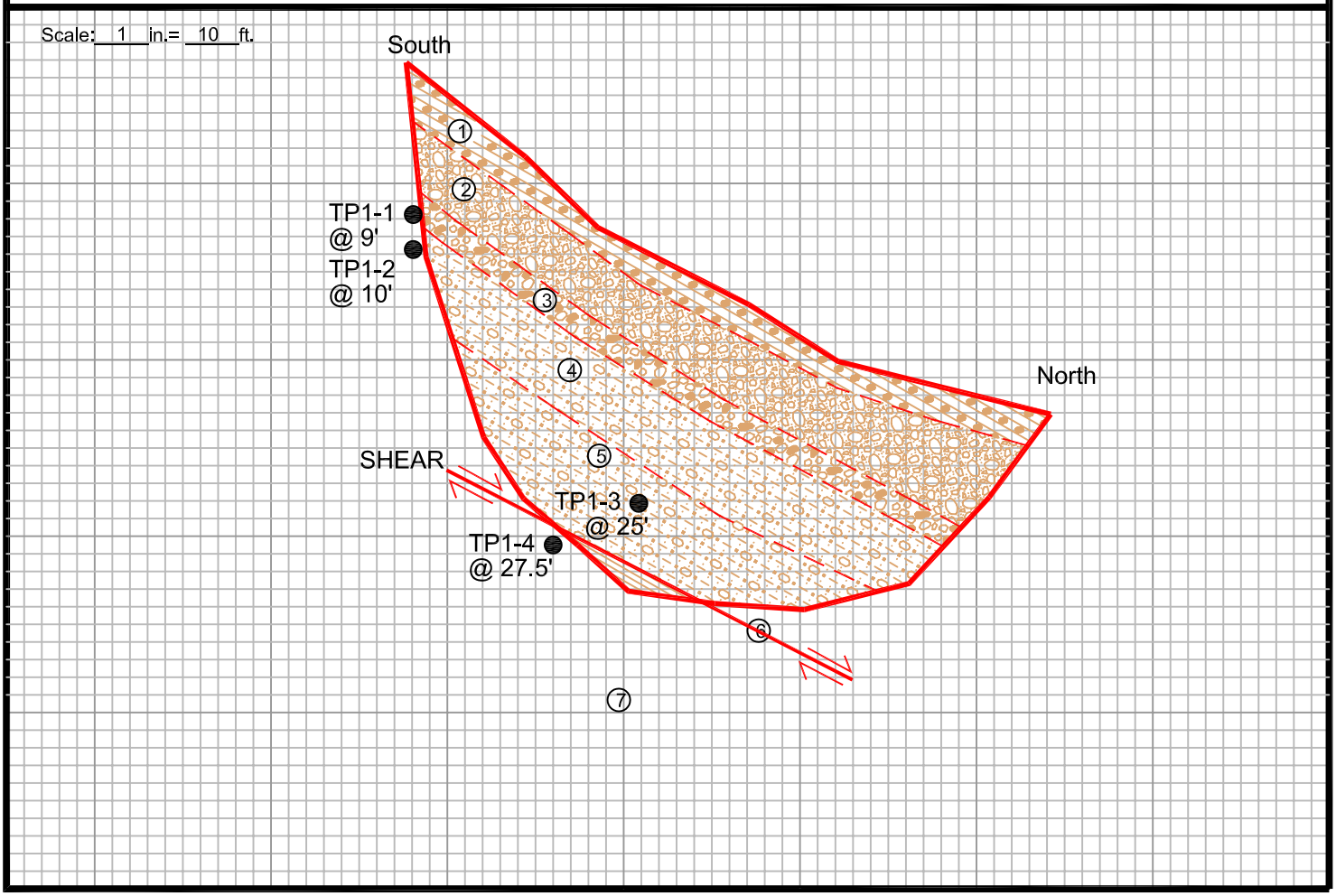
④ Sandy CLAY with gravel and cobble: Slightly moist, olive green, stiff to very stiff, moderately to highly plastic, abundant polished surfaces, irregularly follows silty sandy gravel, cobbles and boulders below contact with material below, varies, ~20% sand, ~15% gravel, ~15% cobble, ~50% sand [LANDSLIDE DEBRIS]

⑤ CLAY and sandy silty GRAVEL and COBBLE: Yellow tan to gray green, intervals of claye and sandy silty gravel and cobbles, few boulders, multiple irregular planar (~bedding) surfaces, angular to subangular boulders up to 2' diameter (mostly limestone), medium dense/very stiff, combination of the olive green sandy clay and the yellow tan silty sandy gravel with clay and cobbles, little consistency with shear orientations, abundant limestone fragments, very irregular contacts [LANDSLIDE DEBRIS]

⑥ CLAY: Pale blue gray, up to 1" thick, soft, moderately plastic, slickensided, dip 30° north [SHEAR ZONE]

⑦ CLAY with sand: Moist, gray, massive, heavily sheared, abundant polished surfaces, highly plastic, darker irregular beds throughout, wavy sheared zone, lots of slickensided surfaces, few coal beds, stiff [LANDSLIDE DEBRIS]

Note: No groundwater observed. Backfilled with spoils. Underlain by stony sandy clay.
Note: Soil Classifications (USCS) based on field descriptions



PROJECT: Town of Jackson, Snow King Water Tank

PIT LOCATION: ~20' northwest of northeast BH-3 (NE 2009)

TEST PIT: TP- 2

Approximate Pit Dimensions (feet): Length: 16 Width: 15 Depth: 12.6

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6711' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① 0.0-1.6ft Clayey sandy GRAVEL and COBBLES: Moist to very moist, medium to dark brown, abundant organics, moderately plastic, angular clasts up to 6" diameter, massive, medium dense [FILL]

② 1.6-2.6ft Sandy CLAY with gravel and cobble: Very moist, dark gray, medium stiff, massive, ~60% clay, ~40% gravel and cobbles up to 6" diameter [TOPSOIL]

③ 2.6-4.8ft Clayey sandy GRAVEL: Very moist, pale brown, medium dense, ~50% fine gravel [COLLUVIUM]

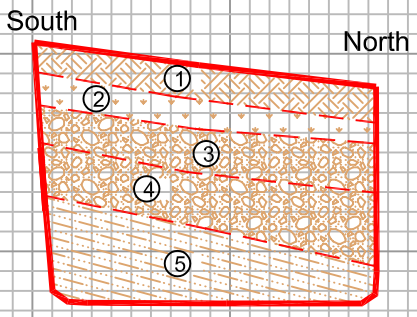
④ 4.8-7.0ft Clayey SAND and GRAVEL: Very moist, pale brown, medium dense, ~50% fine gravel [COLLUVIUM]

⑤ 7.0-12.6ft Sandy CLAY: Moist, green, slightly mottled yellow brown, very stiff, massive, abundant angular to subangular limestone clasts to 1' diameter (most up to 2" diameter) [LANDSLIDE DEBRIS]

Note: No groundwater observed. Backfilled hole with spoils.

Note: Soil Classifications (USCS) based on field descriptions

Scale: 1 in.= 10 ft.



PROJECT: Town of Jackson, Snow King Water Tank

TEST PIT: TP- 3

PIT LOCATION: ~25' east of northeast BH-1 (NE 2009)

Approximate Pit Dimensions (feet): Length: 15 Width: 15 Depth: 11.0

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6762' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
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MATERIAL DESCRIPTIONS

① 0.0-1.2ft Silty CLAY with gravel: Moist to very moist, dark brown to blackish brown, abundant organics, highly plastic, soft [TOPSOIL]

② 1.2-3.5ft Gravelly silty CLAY: Buff yellow tan, stiff, ~25-35% gravel to 3" diameter [COLLUVIUM]

③ 3.5-5.0ft Silty CLAY: Moist, greenish brown with yellow mottling, very stiff [LANDSLIDE DEBRIS]

④ 5.0-6.0ft Gravelly silty CLAY: Moist, yellow tan (buff), stiff to very stiff [LANDSLIDE DEBRIS]

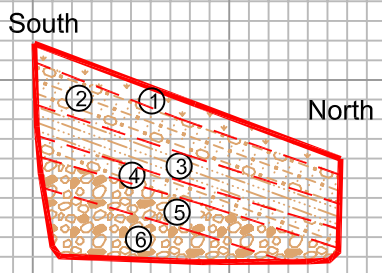
⑤ 6.0-7.5ft Rubble zone: Loose, white precipitates [TALUS]

⑥ 7.5-11.0ft Silty clayey GRAVEL and COBBLE: Yellow brown to red brown, dense, 50-60% clasts up to 8" diameter, oversize [TALUS]

Note: No groundwater observed. Hole standing OK. Backfilled hole with spoils.

Note: Soil Classifications (USCS) based on field descriptions

Scale: 1 in.= 10 ft.





GEOPHYSICAL EVALUATION

SNOW KING

Jackson, Wyoming

PREPARED FOR:

Colter Lane, P.E.
Jorgensen Geotechnical
1315 Highway 89 South, Suite 201
Jackson, Wyoming 83002

PREPARED BY:

Atlas Technical Consultants LLC
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January 2, 2024

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January 2, 2024

Atlas No. 11143

MR. COLTER LANE, P.E.
JORGENSEN GEOTECHNICAL
1315 HIGHWAY 89 SOUTH, SUITE 201
JACKSON, WYOMING 83002

Subject: Geophysical Evaluation
Snow King
Jackson, Wyoming

Dear Mr. Lane:

In accordance with your authorization, Atlas has performed a geophysical evaluation pertaining to a portion of the Snow King project located in Jackson, Wyoming. The primary purpose of our study was to develop subsurface shear-wave velocity profiles and characterize subsurface geologic conditions at select locations of the project site. This was accomplished through the collection of Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Wave (MASW) data. Our services were conducted on October 23rd and 24th, 2023. This report presents our methodology, equipment used, analysis, and findings.

We appreciate the opportunity to be of service on this project. Should you have any questions, please contact the undersigned at (310) 951-1993.

Respectfully submitted,
Atlas Technical Consultants LLC

Stephan A. Callas
Project Geophysicist

Patrick F. Lehrmann, P.G., P.Gp.
Principal Geologist/Geophysicist

SAC:ERC:PFL:ds

Distribution: Mr. Colter Lane at CLane@JorgEng.com

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1. INTRODUCTION

In accordance with your authorization, Atlas has performed a geophysical evaluation pertaining to a portion of the Snow King project located in Jackson, Wyoming (Figure 1). The primary purpose of our study was to develop subsurface shear-wave velocity profiles and characterize subsurface geologic conditions at select locations of the project site. This was accomplished through the collection of Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Wave (MASW) data. Our services were conducted on October 23rd and 24th, 2023. This report presents our methodology, equipment used, analysis, and findings.

2. SCOPE OF SERVICES

Our scope of services included:

- Performance of two one-dimensional (1-D) ReMi profiles (RL-1 & RL-2).
- Performance of two 2-D MASW profiles (ML-1 & ML-2).
- Compilation and geophysical analysis of the collected data.
- Preparation of this illustrated report presenting our methodology and findings.

3. SITE AND PROJECT DESCRIPTION

The project site is generally located just southeast of the Snow King Mountain Resort in Jackson, Wyoming (Figure 1). Specifically, the study area is located on the south side of Snow King Loop Road. The locations of the seismic traverses were generally selected by a representative of your office and adjusted when necessary to account for surface conditions. The study area was composed of two graded lots with an access road separating the two lots. The seismic traverses were performed over relatively flat terrain on the east and west sides of the access road. The surface of the site was generally covered with soil, gravel and seasonal vegetation. Additionally, several surface obstructions including construction materials, a firewood pile, snow grooming equipment, vehicles, and temporary fencing were located within the study area boundaries. Figure 2 depicts the approximate locations of the seismic traverses while Figure 3 depicts the general site conditions.

4. STUDY METHODOLOGY

As previously indicated, our evaluation included the performance of two ReMi and two MASW transects. The following sections detail the methods and instrumentations used.

4.1 ReMi

The ReMi technique uses recorded surface waves (specifically Rayleigh waves) that are contained in background noise to develop a shear-wave velocity profile of the study area down to a depth, in this case, of approximately 100 feet. The depth of exploration is dependent on the length of the line and the frequency content of the background noise. The results of the ReMi

method are displayed as a one-dimensional profile which represents the average condition across the length of the line. The ReMi method does not require an increase of material velocity with depth; therefore, low velocity zones (velocity inversions) are detectable with ReMi.

Our ReMi evaluation included the use of a 24-channel Geometrics Geode seismograph and 24, 4.5-Hz vertical component geophones. Geophones were spaced 10 feet apart for a total line length of 230 feet for each line. A total of 22 records, each 32 seconds in duration, were recorded at each location, while 10 records utilized passive data collection of ambient ground vibration noise and 12 utilized an active source. The active source data gathers included generating a seismic signal at both ends of the seismic spread, approximately 10 or 30 feet off the ends of the geophone array. Six active source files were collected at each end of the line. The recorded data was then downloaded to a field computer for post-processing. The data was later processed using Surface Plus 9.1 - Advanced Surface Wave Processing Software (Geogiga Technology Corp., 2020), which uses the refraction microtremor method (Louie, 2001), and other surface wave analysis methods. The program generates phase-velocity dispersion curves for each record and provides an interactive dispersion modeling tool to determine the best fitting model. The result is a one-dimensional shear-wave velocity model of the site with roughly 85 to 95 percent accuracy (Louie, 2001). For situations in which the shear wave velocity values are close to the limit between site class boundary values, Geotechnical consultants should consider the site's subsurface geologic stratigraphy and structure, soil mechanics, and ReMi evaluation results when assessing seismic site classification. Figures 2 and 3 depict the general site conditions in the study area.

4.2 MASW

Surface waves (specifically Rayleigh waves) were recorded along lines ML-1 and ML-2 in order to provide S-wave velocity information for portions of the site (Figure 2). The surface waves were generated by a hammer and plate (shot) and recorded using a 24-channel Geometrics Geode seismograph and 24, 4.5-Hz vertical component geophones. The geophones were coupled to the ground surface using a Geostuff Landstreamer with geophones stationed 4 feet apart and shots conducted off the end of the lines. Prior to the collection of surface wave data, near and far field effects were evaluated for several shot offset distances. The results indicated that an offset shot of 16 feet off the end of the line was optimal for our evaluation.

Three records, each one second long, were recorded at each shot location. After each shot location, the shot location and geophones were moved an integer multiple of the geophone spacing longitudinally along the profile direction and the line was reshot. The number of shots, spread length, and start and end stations are presented in Table 1.

Table 1: MASW Array Geometry

Line No.	No. of Shots	Total Spread Length (feet)	Profile Length/Start and End Stations (feet)
ML-1	21	252	160/(0-160)
ML-2	25	284	192/(0-192)

The recorded MASW data was processed using SurfSeis® (Kansas Geological Survey, 2019), a MASW software program. One dimensional (1-D) shear-wave (S-wave) velocity (Vs) profiles were generated for each shot location, which correspond to the middle of the geophone array. A two-dimensional color gradient model was then created from the 1-D models using the SurfSeis® interpolation scheme. It should be emphasized that the 2-D profile represents the area between the midpoint of the first shot location and the midpoint of the last shot location. The actual model section length and start and end stations for the sections are also listed in Table 1.

5. RESULTS AND CONCLUSIONS

As previously indicated, our evaluation consisted of performing two 1-D ReMi profiles (RL-1 & RL-2) and two 2-D MASW profiles (ML-1 & ML-2) at the project site. Figures 4a and 4b present the ReMi results for RL-1 and RL-2, respectively. Figures 5a and 5b present the MASW results for ML-1 and ML-2, respectively. The analysis of each is detailed below.

5.1 ReMi

The purpose of our ReMi evaluations were to develop shear-wave velocity profiles to be used for design and construction parameters at the project site. Table 2 and Figures 4a and 4b present the results from our ReMi evaluations. It should be noted that the ReMi results represent the average condition across the length of the line. When the 1-D ReMi surface wave velocity results (analogous to shear wave) show an IBC Vs100 velocity value that is close to the "border line" boundary between IBC Site Classes, the project geotechnical consultant of record should be consulted. The geotechnical consultant of record should also consider other existing available site information and whether obtaining additional new geotechnical evaluation data such as boreholes, surface to downhole seismic (ASTM D7400), crosshole seismic (ASTM D4428), and/or additional 1-D ReMi data collections would be needed concerning the site's subsurface geologic stratigraphy and structure, soil mechanics and soil modulus, along with the initial 1-D ReMi evaluation results when assessing the "borderline" IBC Vs100 Seismic Site Class.

Table 2: ReMi Results

Line No.	Depth (feet)	Shear Wave Velocity (feet/second)	Average Shear Wave Velocity (Vs in feet/second)	Site Class (IBC, 2019)
RL-1 (NW-SE)	0-6	618	Vs100' = 1,320 ft/s	C
	6-14	1170		
	14-25	1494		
	25-35	1435		
	35-69	1152		
	69-100	2010		

Line No.	Depth (feet)	Shear Wave Velocity (feet/second)	Average Shear Wave Velocity (Vs in feet/second)	Site Class (IBC, 2019)
RL-2 (W-E)	0-9	390	Vs100' = 1,201 ft/s	C
	9-14	799		
	14-25	1361		
	25-69	1446		
	69-100	2052		

5.2 MASW

Two MASW traverses were conducted as part of our study. Figures 5a and 5b present the S-wave velocity models generated from our analysis of lines ML-1 and ML-2, respectively. Based on the results, it appears that the project site is generally underlain by low-velocity materials in the near-surface and higher velocity materials at depth. Distinct vertical and lateral velocity variations are evident within the models. Specifically, ML-1 appears to contain pockets of low and high velocity materials in the near surface, possibly related to reported landslide deposits. At depth, ML-1 displays a high velocity contact that spans the length of the profile from northwest to southeast. This high velocity contact is generally contained towards the bottom of the profile; however, protrudes closer to the surface between 90 and 120 feet along the x-axis. This high velocity material may represent bedrock contacts. ML-2 displays slightly more homogenous material in the near surface compared to ML-1. At depth, ML-2 displays a moderately high velocity contact that spans the length of the profile from west to east. This moderately high velocity contact is generally contained within 20 and 50 feet below ground surface and may represent weathered bedrock contacts. It should be noted that there were several underground utilities present in the vicinity of ML-1, and possibly ML-2, which could be affecting the results from our evaluation. As a general rule of thumb, the S-wave velocity of a given material might be between approximately 0.4 to 0.6 of the P-wave velocity, depending on the soil/rock type and condition.

6. LIMITATIONS

The field evaluation and geophysical analyses presented in this report have been conducted in general accordance with current practice and the standard of care exercised by consultants performing similar tasks in the project area. No warranty, express or implied, is made regarding the conclusions and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be present. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Atlas should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document. This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

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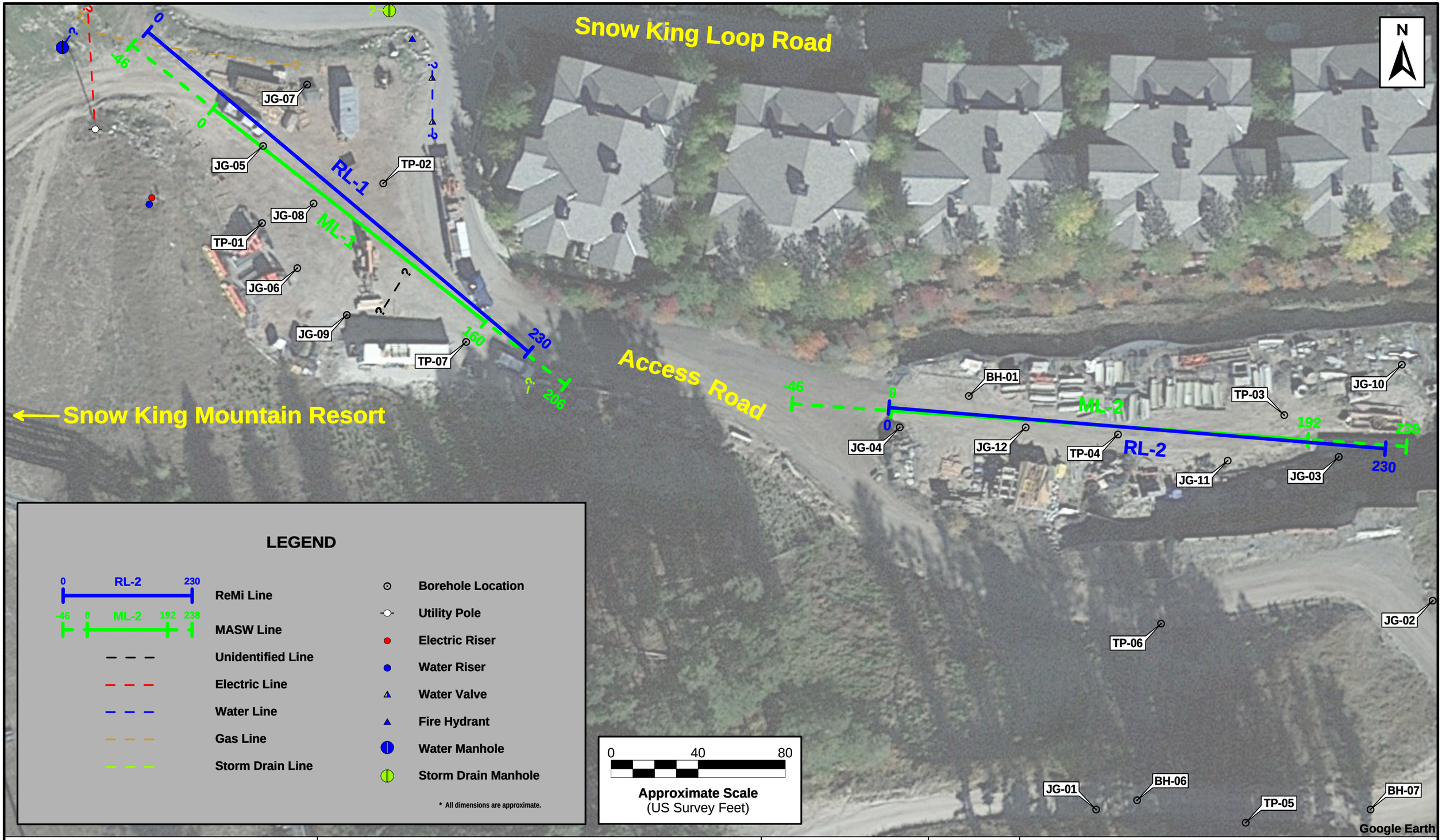
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ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 1	**SITE LOCATION MAP**



LEGEND

- RL-2 (0 – 230): ReMi Line
- ML-2 (-46, 0, 192, 238): MASW Line
- Unidentified Line
- Electric Line
- Water Line
- Gas Line
- Storm Drain Line
- Borehole Location
- Utility Pole
- Electric Riser
- Water Riser
- Water Valve
- Fire Hydrant
- Water Manhole
- Storm Drain Manhole

* All dimensions are approximate.

0 40 80

Approximate Scale
(US Survey Feet)

ATLAS

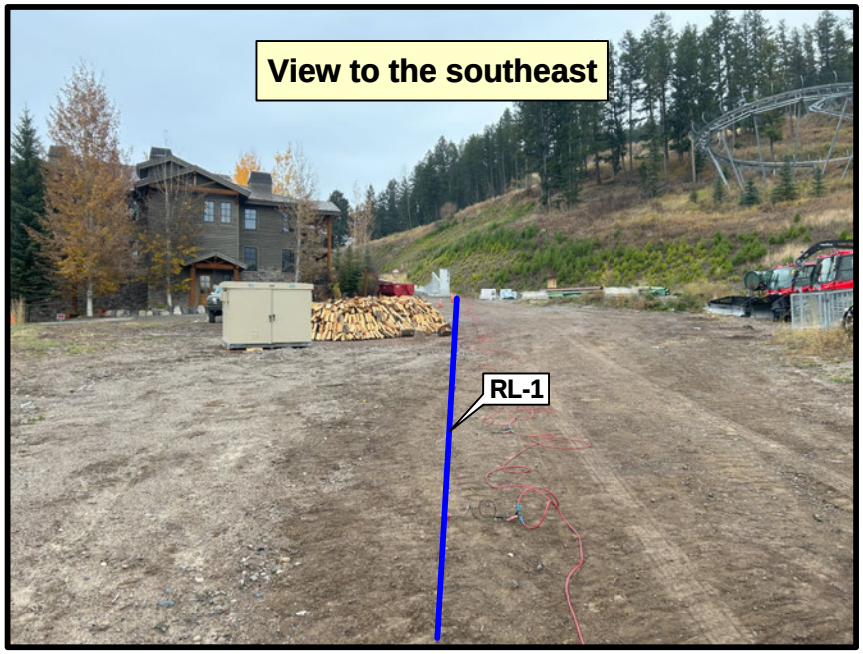
Snow King
Jackson, Wyoming

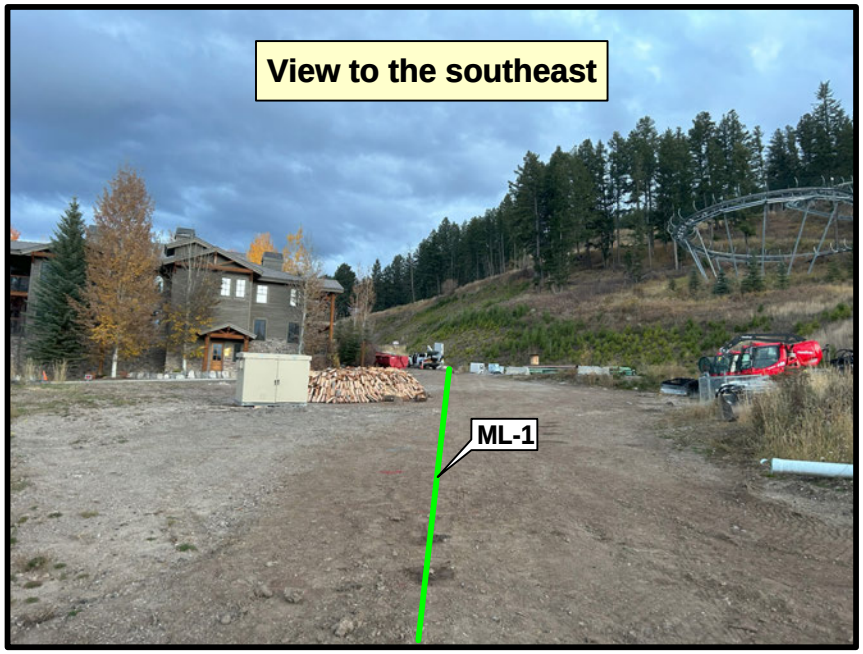
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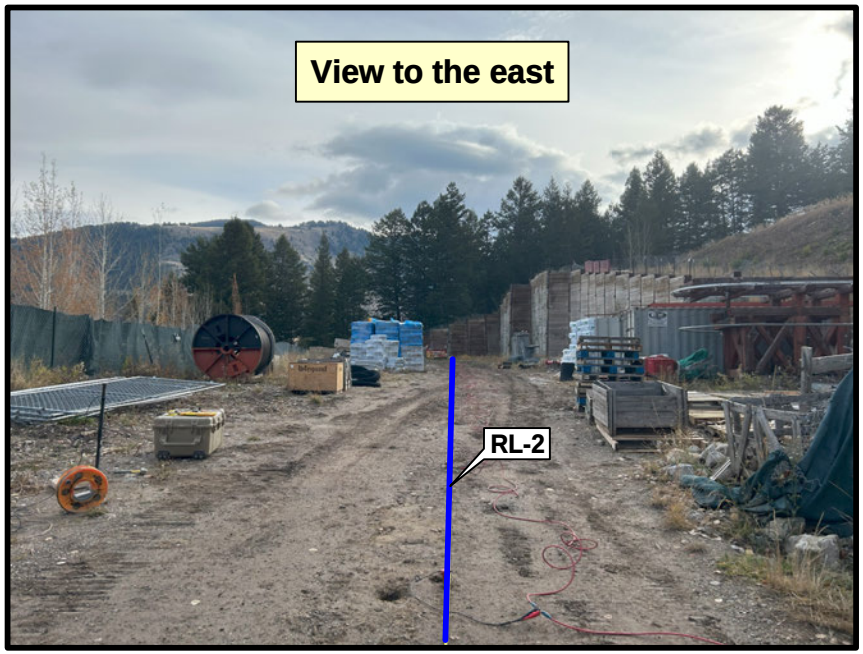
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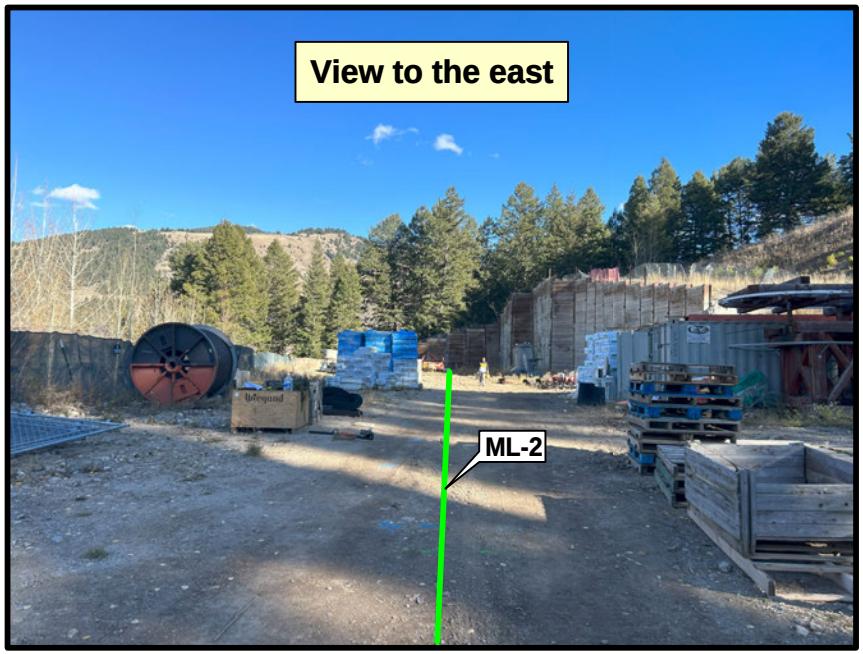
Figure 2

LINE LOCATION MAP



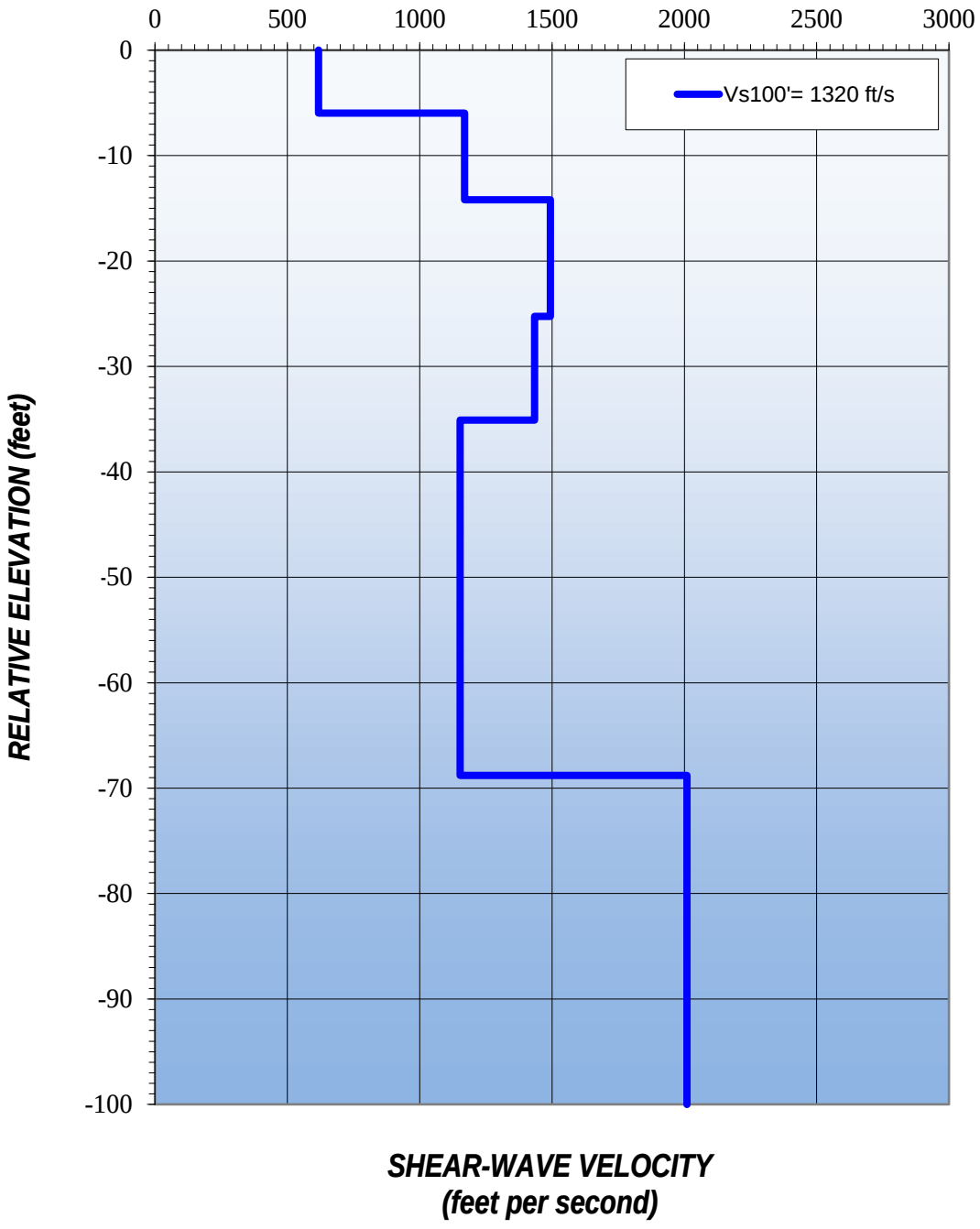




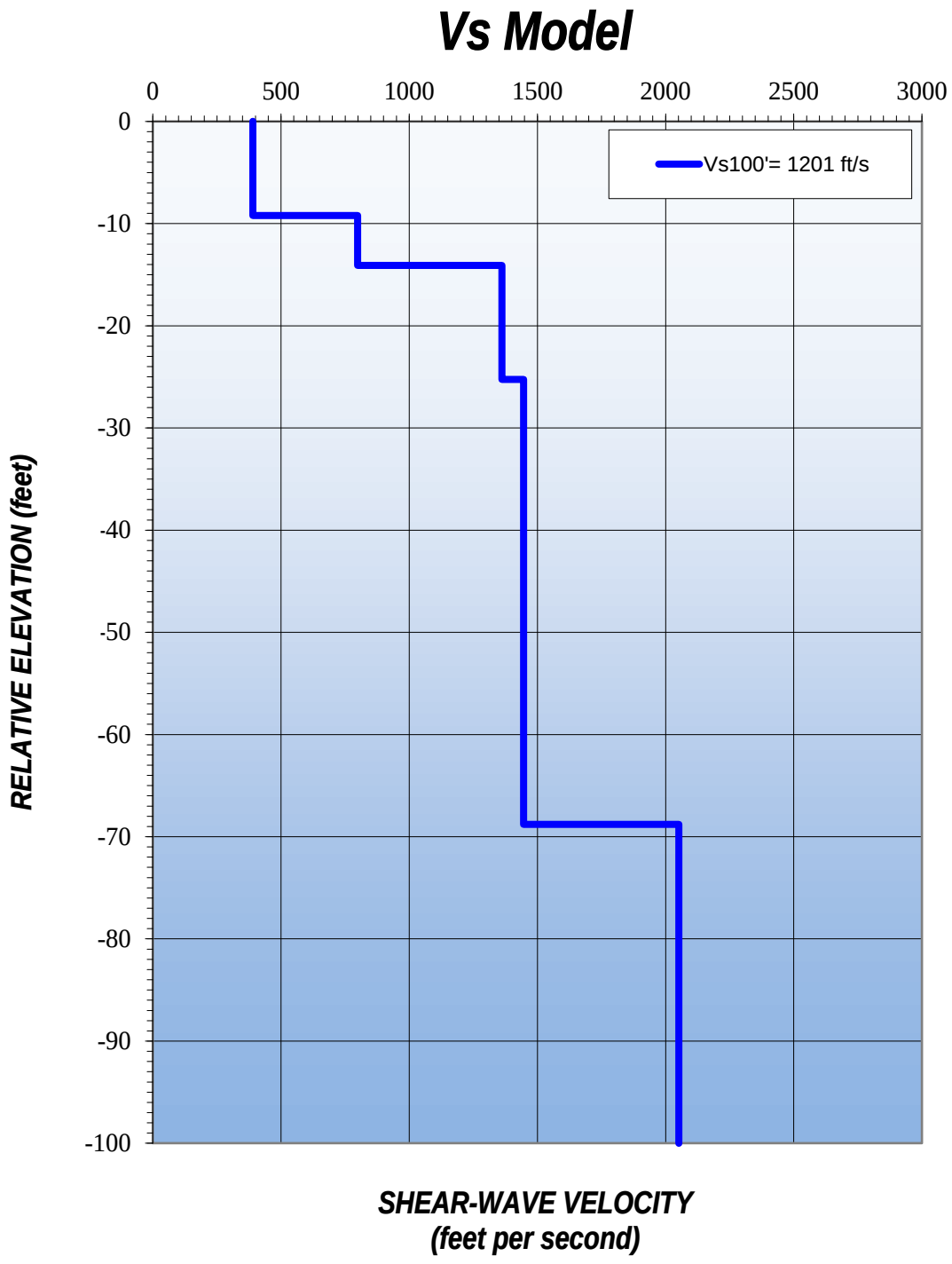


ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 3	**SITE PHOTOGRAPHS**

Vs Model



ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 4a	**ReMi RESULTS** **RL-1**



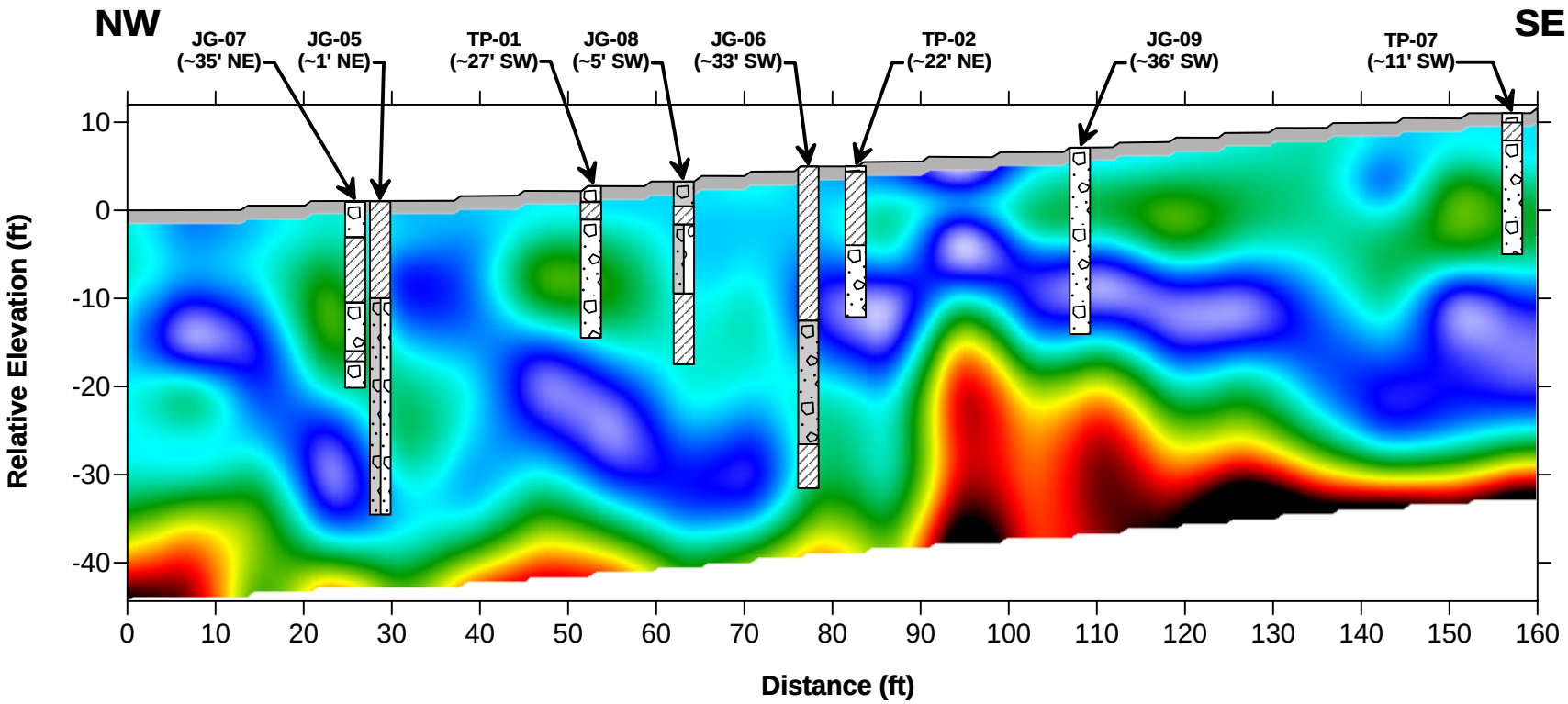
ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 4b	**ReMi RESULTS** **RL-2**

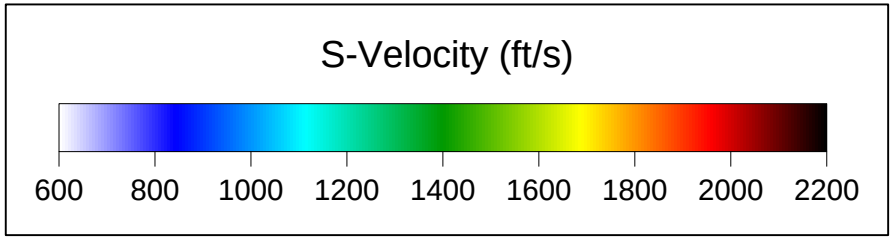
MASW PROFILE
ML-1

LEGEND

CL GM
GP GC

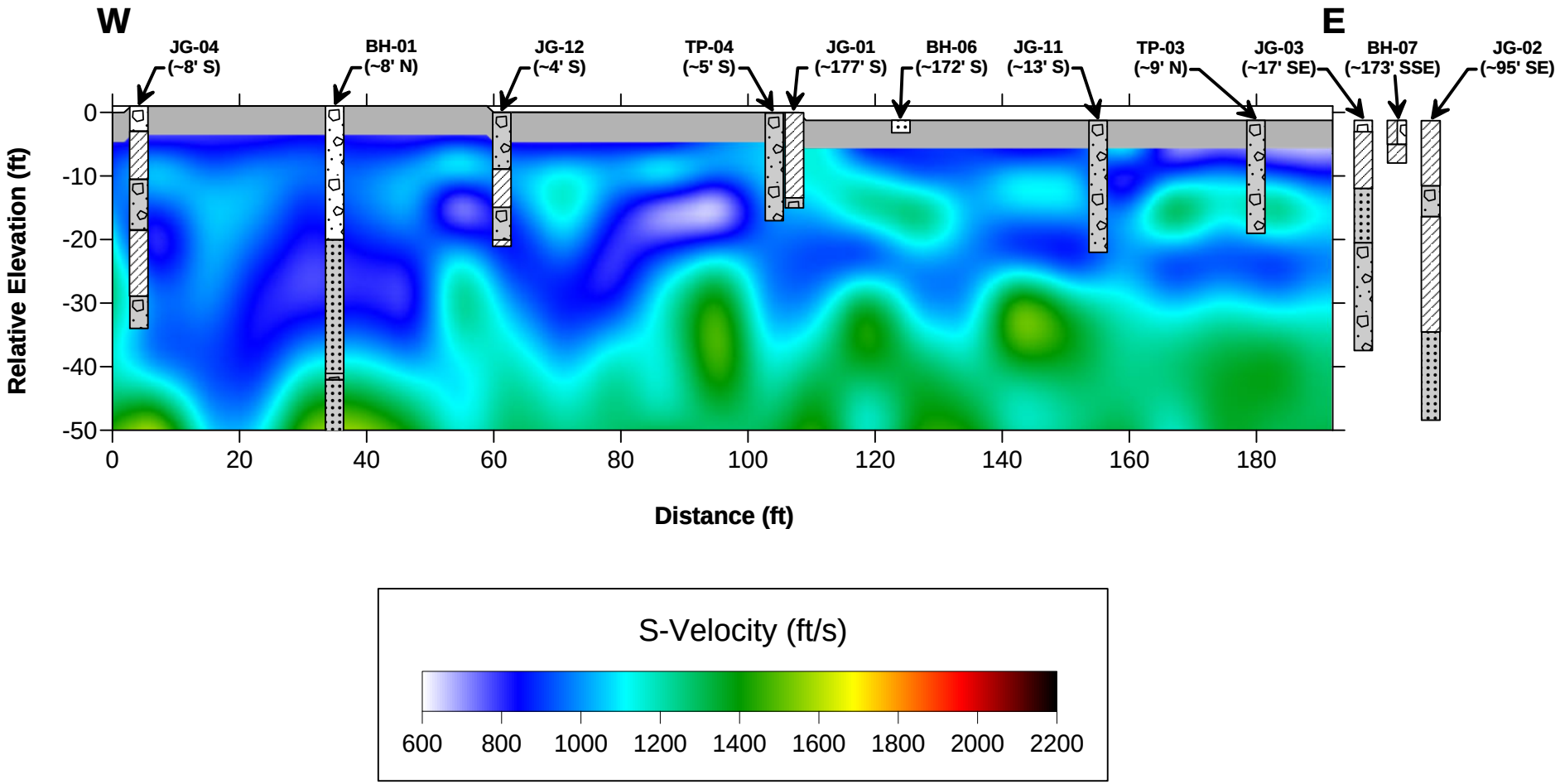
* All dimensions are approximate.
* Borehole data provided by Jorgensen.





ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 5a	**MASW PROFILE ML-1**

MASW PROFILE
ML-2



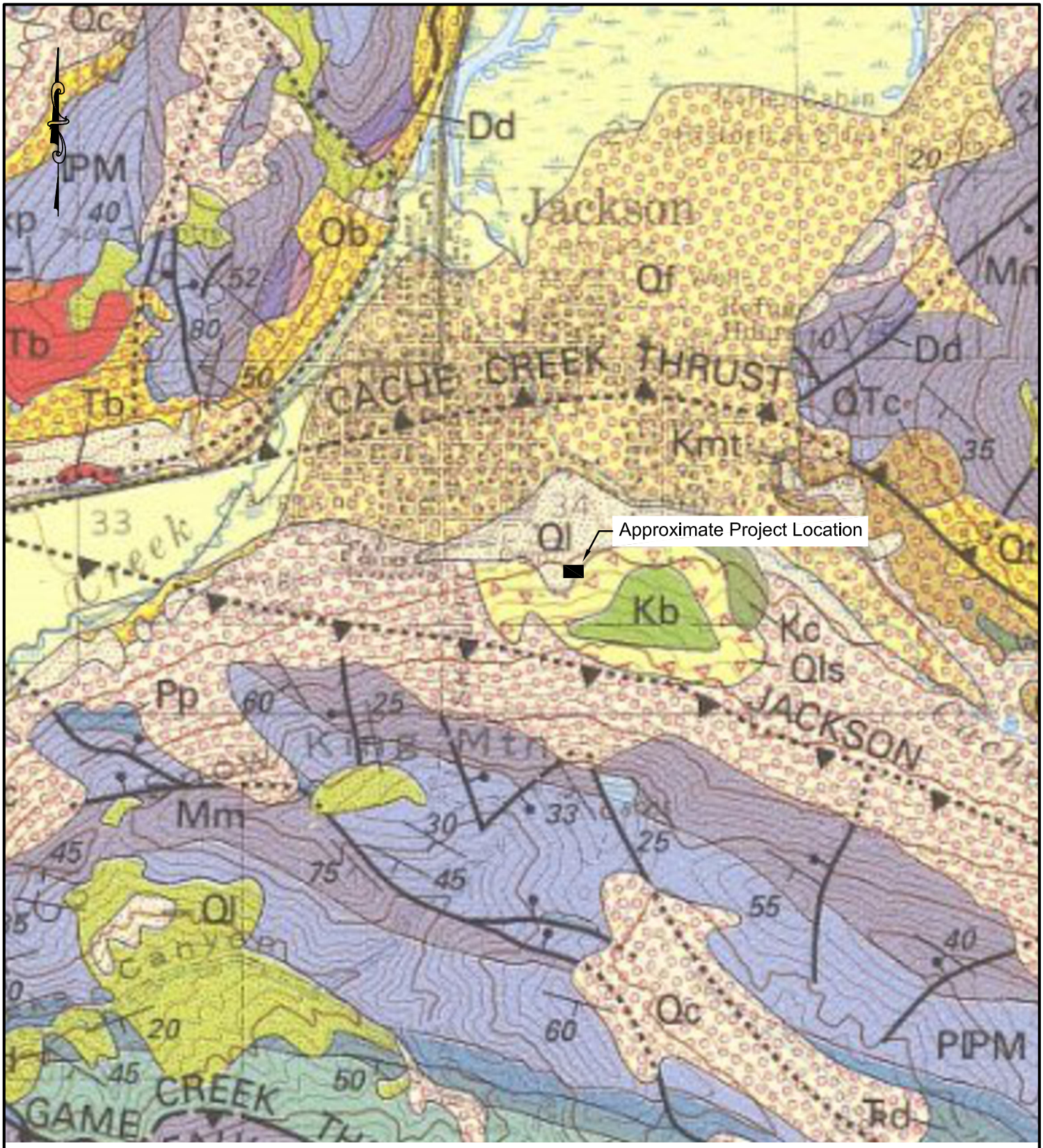
ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 5b	**MASW PROFILE** **ML-2**

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APPENDIX B

Figures



0 2000 4000

SCALE: 1 INCH = 2000 FEET

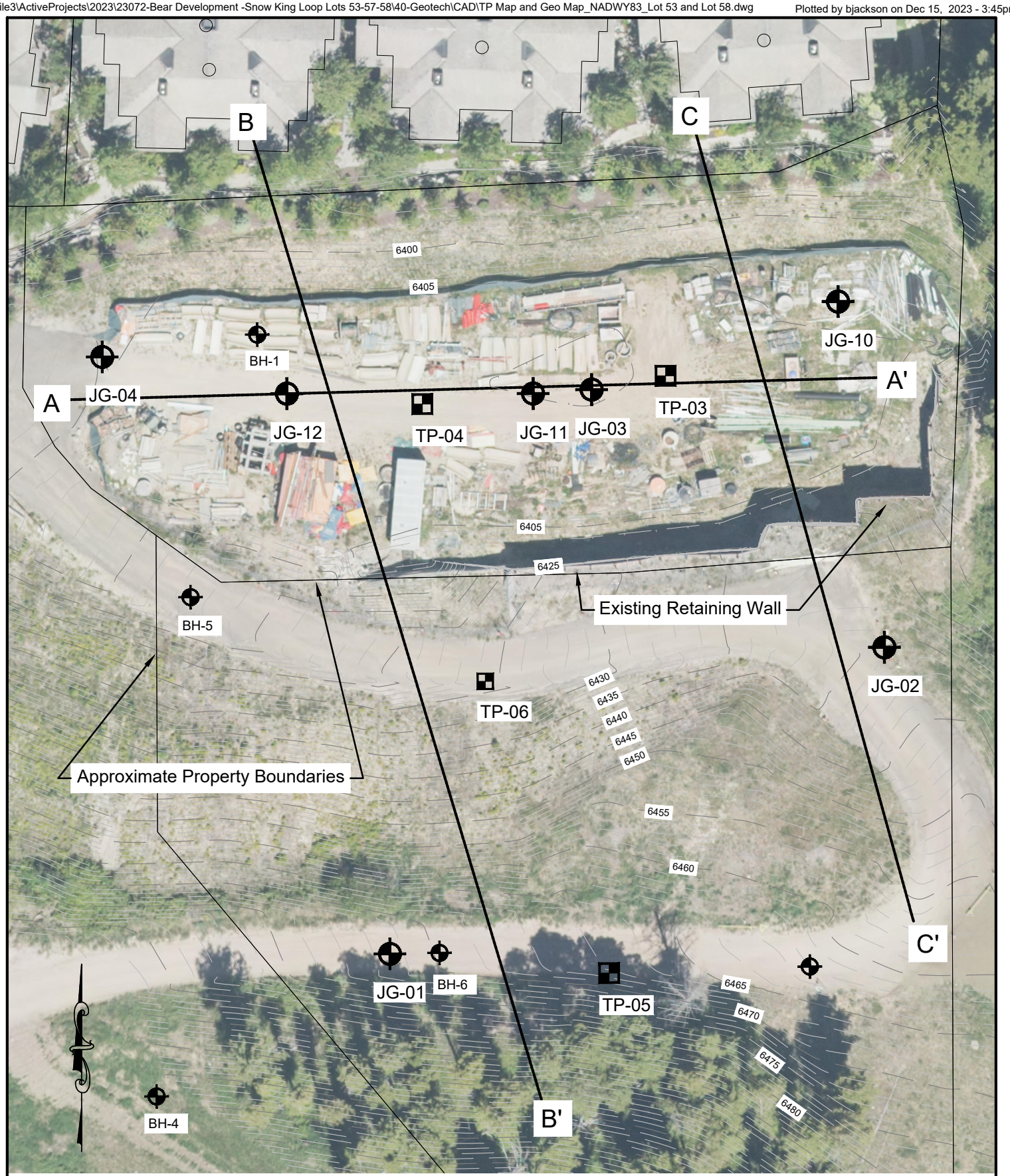
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Map symbols:

Ql - Loess
Qls - Landslide Debris
Kb - Bacon Ridge Sandstone (Upper Cretaceous)

From Love et. al, Geologic Map of Grand Teton National Park, 1992

DRAFTED BY: JBJ REVIEWED BY: HC PROJECT NUMBER 23072	SHEET TITLE: Figure 1 Site Location and Geologic Map	PROJECT TITLE: Geotechincal-Engineering Report Bear Development - Lot 53 and Lot 58 Teton County, Wyoming	JORGENSEN GEOTECHNICAL, LLC PO Box 9550 | 1315 HWY 89 S., Ste. 201 Jackson, WY 83002 PH: 307.733.5150 www.jorgeng.com



0 40 80

SCALE: 1 INCH = 40 FEET
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Borehole (JG-XX), Historic Nelson Engineering Borehole (BH-X), and test pit (TP-XX) locations are approximate and may be surveyed upon request. Existing ground surface topography provided by Jorgensen Associates, taken from topographiuc survey completed November 1, 2023. Aerial imagery provided by Teton County, 2019.

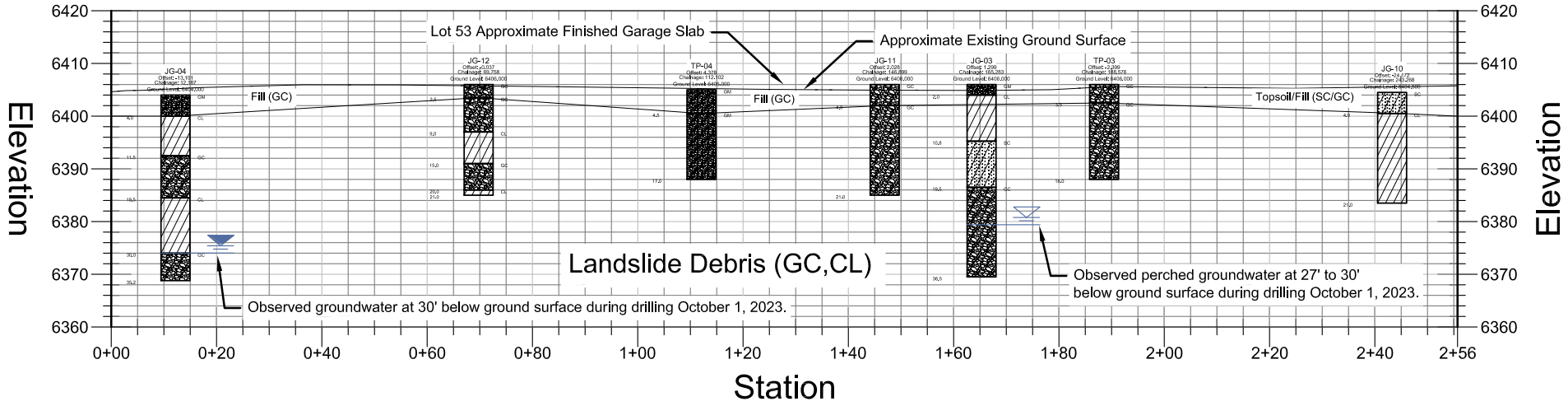
DRAFTED BY:	JBJ
REVIEWED BY:	HC
PROJECT NUMBER	23072

SHEET TITLE:
Figure 2
Borehole, Test Pit and Geologic Cross Section Location Map

PROJECT TITLE:
Geotechnical Engineering Report
Bear Development - Lot 53 and Lot 58
Teton County, Wyoming

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Cross section A-A'

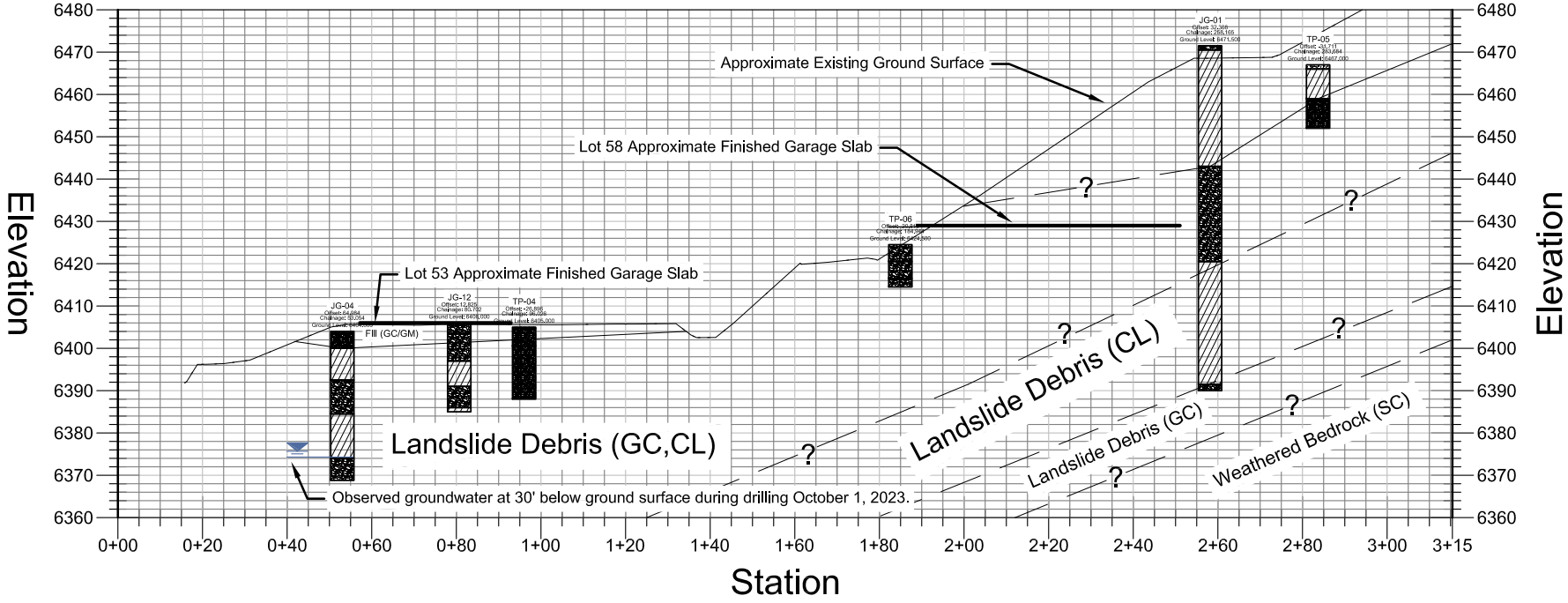


Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

DRAFTED BY: JBJ REVIEWED BY: HC/DB PROJECT NUMBER 23072	SHEET TITLE: Figure 3 Geologic Cross Section A-A'	PROJECT TITLE: Geotechnical-Engineering Report Bear Development - Lot 53 and Lot 58 Teton County, Wyoming	JORGENSEN GEOTECHNICAL, LLC PO Box 9550 | 1315 HWY 89 S., Ste. 201 Jackson, WY 83002 PH: 307.733.5150 www.jorgeng.com

Cross section B-B'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

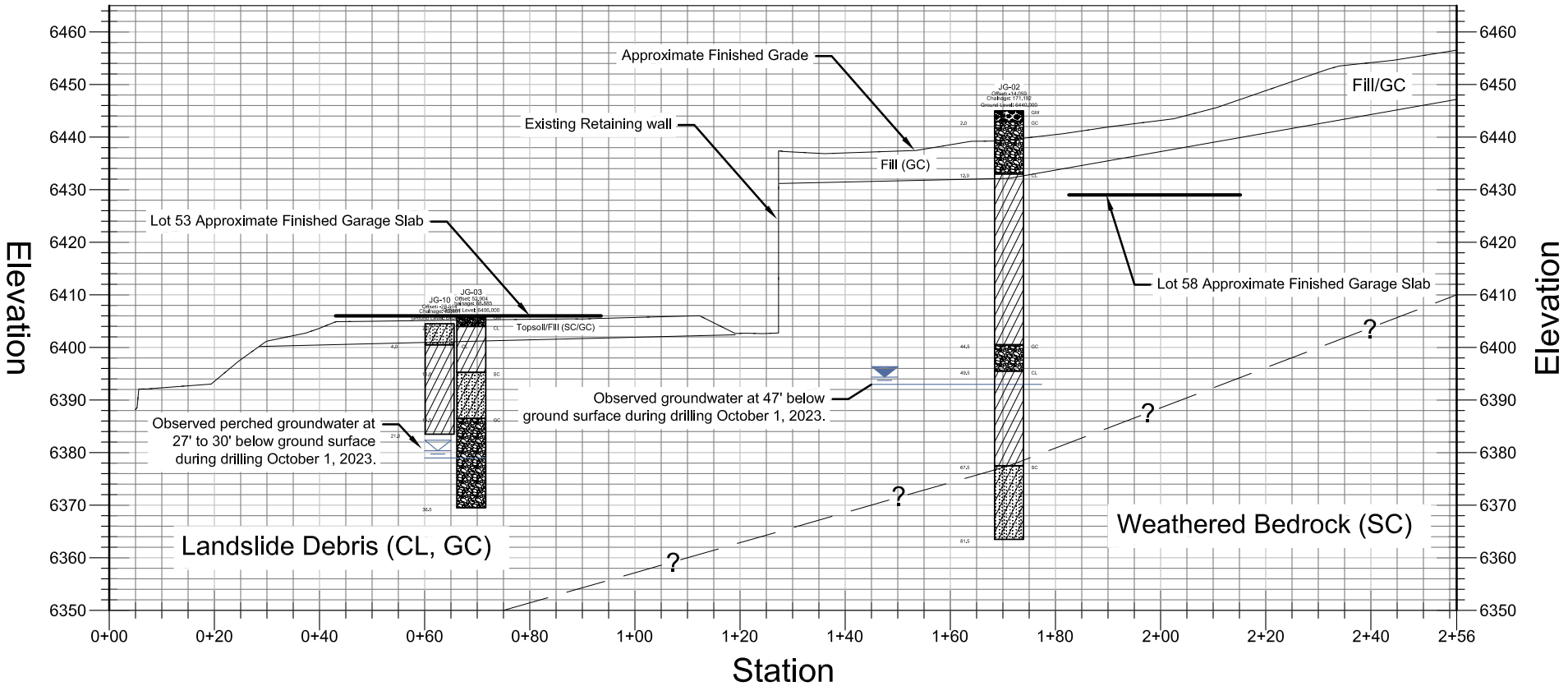
DRAFTED BY:	JBJ
REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 4
Geologic Cross Section B-B'

PROJECT TITLE:
Geotechnical-Engineering Report
Bear Development - Lot 53 and Lot 58
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Cross section C-C'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

DRAFTED BY:	JBJ
REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 5
Geologic Cross Section C-C'

PROJECT TITLE:
Geotechnical-Engineering Report
Bear Development - Lot 53 and Lot 58
Teton County, Wyoming

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APPENDIX C

Soils Laboratory Procedures and Results

Laboratory Testing

Laboratory Testing Procedures

Lab samples were submitted for testing at GCI in Salt Lake City, Utah from boreholes JG-01, JG-02, JG-03, JG-04, JG-10, JG-11, and JG-12.

During the October 2023 site exploration for the Development at Lots 53 and 58, JG collected relatively undisturbed (i.e., thin-walled Shelby tubes) and disturbed samples (i.e., split spoon (SPT) samples and sonic drilling grab samples). Of the samples collected, 31 disturbed samples and two relatively undisturbed samples were selected for lab analysis. Laboratory testing included natural moisture content, unit weight, Atterberg limits, grain-size distribution, hydrometer, and consolidation testing.

The laboratory testing program consisted of:

- Twenty Seven (27) Moisture Contents (ASTM D2937/D2216)
- Thirty (30) Atterberg Limits (ASTM D4318)
- Twenty Seven (27) Grain Size Analysis (ASTM D422)
- Four (4) Hydrometer (ASTM D422a)
- Two (2) One Dimension Consolidation (ASTM D2435)

Results are shown on the following pages.

Laboratory Test Results: Detailed Summary

Laboratory testing included index testing for classification per USCS and indirect correlation with engineering parameters, and direct testing of strength. Classification tests – including Atterberg limits and grain-size analysis – have been summarized in table 4-1, with hydrometer tests and consolidation tests summarized in Tables 4-2 and 4-3, respectively. Full laboratory data sheets are attached.

The data herein are provided for informational purposes. Design-build contractors shall be responsible for providing their own analysis of the test results and for development of appropriate design parameters.

Table 4-1: Classification Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	Gravel (%)	Sand (%)	Fines (%)	Moisture Content (%)	Liquid Limit	Plasticity Index
JG-01	D8	18-19	CL	19.0	18.2	62.8	12.3	31	15
JG-01	D12	27-29	CL	27.7	17.1	55.2	11.0	28	12
JG-01	D17	37-38	GC	51.6	22.7	25.7	--	--	--
JG-01	D27	54.5-57	CL	11.9	20.2	67.9	12.6	33	18
JG-01	D32	67-69	CL	20.1	28.0	51.9	10.0	26	10
JG-01	D36	72.5-75	CL	4.5	10.0	85.5	20.7	38	21
JG-02	D4	7-10	GC	--	--	--	--	20	5
JG-02	D8	14.5-16	CL	12.4	20.8	66.8	11.9	31	16
JG-02	D11	22-25	CL	15.6	18.7	65.7	13.3	29	14
JG-02	D16	32-35	CL	13.2	18.2	68.6	14.5	21	5
JG-02	D18	38.5-40	CL	0.0	12.9	87.1	15.5	29	12
JG-02	D22	44.5-47	GC	41.6	27.3	31.1	--	--	--
JG-02	D26	52-55	CL	6.4	31.1	62.5	11.6	16	12
JG-02	D30	60-62	CL	0.2	5.3	94.5	13.7	37	14
JG-02	D32	64.5-67	CL	2.2	94.4	3.4	12.8	31	14
JG-02	D35	69.5-72	SC	--	--	--	--	21	5
JG-03	D3	4.5-7	CL	30.3	19.6	50.1	10.1	33	19
JG-03	D8	14.5-17	SC	28.2	31.4	40.4	8.4	30	15
JG-03	D12	22-25	GC	26.8	26.3	46.9	12.4	35	20
JG-03	D18	30-33	GC	32.7	22.1	45.2	10.8	29	14
JG-04	D4	7-10	CL	15.8	14.6	69.6	21.8	34	18
JG-04	D8	14.5-17	GC	37.4	30.1	32.5	6.8	19	5
JG-04	D12	22-25	CL	3.3	26.8	69.9	16.5	31	14
JG-04	D17	30-33	GC	43.1	15.3	41.6	10.1	33	18
JG-10	D3	7.5-9	CL	--	--	--	--	25	9
JG-10	U1	12.5-14	CL	27.6	21.7	50.7	13.7	39	24
JG-10	D5	15-17	CL	4.7	11.8	83.5	16.1	38	17
JG-10	U2	17.5-19	CL	13.9	19.4	66.7	13.8	32	18
JG-11	D3	7.5-9	GC	33.4	28.0	38.6	7.1	22	7
JG-12	D2	5-6.5	GC	33.9	25.3	40.8	10.2	27	12
JG-12	D4	10-11.5	CL	13.5	32.5	54.0	12.8	27	10
JG-12	D8	20-21.5	CL	23.9	25.5	50.6	10.6	26	12

Table 4-2: Hydrometer Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	Silt Fraction (%)	Clay Fraction (%)
JG-01	D17	37-38	GC	18	7
JG-02	D22	44.5-47	GC	23	8
JG-10	D5	15-17	CL	55	36
JG-11	D4	10-11.5	GC	33	17

Table 4-3: Consolidation Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	C_C
JG-10	U1	12.5-14	CL	0.171
JG-10	U2	17.5-19	CL	0.130

Supplemental Laboratory Data

Select laboratory results presented in a Site Investigation Report for Lots 53 and 58produced by Nelson Engineering dated July 28, 2021, and results presented in a Geotechnical Investigation Report for a project in close proximity to the site produced by Womack and Associates, Inc., dated June 4, 2010 are presented below.

GERHART COLE

PO Box 880
Midvale, Utah 84047
801.849.0055
gerhartcole.com

To:	Mr. Bruce Jackson Jorgensen Engineering 58 South Tyler, PO Box 1519 Pinedale, Wyoming 82941
Project:	Bear Development Snow King Lots 53 and 58
Gerhart Cole Project Number:	23-1725
Client Project Number	23072
Report Date:	November 30, 2023

Attached are the requested laboratory test results. These laboratory results are for the addressee and must be presented in their entirety without alteration, except with permission.

Gerhart Cole's Laboratory is accredited through the AASHTO Accreditation Program. The results provided were tested in general accordance with the referenced standards. Any test methods reported in this document outside the scope of this accreditation are marked with an asterisk in the header of the individual test report.

Gerhart Cole will dispose of samples two (2) weeks after the date above. Please contact us for storage pricing.

Approved By:_____
Zach Gibbs, PE (UT, MI) Laboratory Director

AASHTO ACCREDITED

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-01**	**JG-01**	**JG-01**	**JG-01**	**JG-01**	**JG-02**
	Depth:	**18-19 ft**	**27-29 ft**	**54.5-57 ft**	**67-69 ft**	**72.5-75 ft**	**14.5-16 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**14-Nov-23**	**14-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**
	Laboratory sample description:	**gy - bn clay**	**bn - gy clay**	**gy - dk gy clay**	**dk by - lt bn clay**	**gy - dk gy clay**	**bn - ol bn clay**
Moisture	Wet soil + tare (g)	806.82	1190.54	953.45	847.34	688.39	2264.09
	Dry soil + tare (g)	739.68	1074.24	869.05	788.12	590.77	2068.51
	Tare (g)	195.78	13.84	196.69	195.42	118.16	422.19
	Moisture content, w (%)	12.3	11.0	12.6	10.0	20.7	11.9
Comments							
QC/QA	Tested By:	AT	AT	CML	CML	CML	CML
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-02**	**JG-02**	**JG-02**	**JG-02**	**JG-02**	**JG-02**
	Depth:	**22-25 ft**	**32-35 ft**	**38.5-40 ft**	**52-55 ft**	**60-62 ft**	**64.5-67 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**
	Laboratory sample description:	**bn - ol bn clay**	**bn - dk yl bn clay**	**lt ol bn - ol bn clay**	**gy - ol bn clay**	**lt bn - bn clay**	**lt ol bn - ol bn clay**
Moisture	Wet soil + tare (g)	2104.69	2453.36	448.30	460.49	656.13	566.47
	Dry soil + tare (g)	1908.65	2210.32	405.33	433.20	600.68	516.43
	Tare (g)	438.53	539.41	127.25	197.51	195.80	126.68
	Moisture content, w (%)	13.3	14.5	15.5	11.6	13.7	12.8
Comments							
QC/QA	Tested By:	CML	CML	CML	CML	CML	CML
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	JG-03	JG-03	JG-03	JG-03	JG-04	JG-04
	Depth:	4.5-7 ft	14.5-17 ft	22-25 ft	30-33 ft	7-10 ft	14.5-17 ft
	Date Sampled:	-	-	-	-	-	-
	Date tested:	13-Nov-23	13-Nov-23	13-Nov-23	13-Nov-23	13-Nov-23	13-Nov-23
	Laboratory sample description:	lt bn - bn clay	pl ol bn - bn clay	lt ol bn - bn clay	bn - dk bn clay	lt ol bn - bn clay	pl ol bn - lt bn silt
Moisture	Wet soil + tare (g)	1630.20	872.07	1046.88	943.07	653.16	601.88
	Dry soil + tare (g)	1521.39	813.63	947.50	865.02	571.20	571.25
	Tare (g)	440.15	119.03	144.65	144.19	195.92	118.32
	Moisture content, w (%)	10.1	8.4	12.4	10.8	21.8	6.8
Comments							
QC/QA	Tested By:	JCC	JCC	JCC	JCC	JCC	JCC
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-04**	**JG-04**	**JG-10**	**JG-10**	**JG-10**	**JG-11**
	Depth:	**22-25 ft**	**30-33 ft**	**12.5-14 ft**	**15-17 ft**	**17.5-19 ft**	**7.5-9 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**	**13-Nov-23**
	Laboratory sample description:	**ol bn - bn silt**	**lt bn - bn clay**	**ol bn - lt bn clay**	**ol bn - y bn clay**	**ol bn - lt bn clay**	**bn - dk bn clay**
Moisture	Wet soil + tare (g)	555.20	1543.36	1129.47	377.19	860.87	758.29
	Dry soil + tare (g)	493.76	1440.63	1044.36	352.11	758.40	721.07
	Tare (g)	120.66	421.65	422.15	196.80	13.83	194.35
	Moisture content, w (%)	16.5	10.1	13.7	16.1	13.8	7.1
Comments							
QC/QA	Tested By:	JCC	JCC	AT	JCC	AT	JCC
	Reduced By:	CML	CML	CML	CML	CML	CML
	Reviewed By:	AT	AT	AT	AT	AT	AT

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 53 and 58**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-12**	**JG-12**	**JG-12**			
	Depth:	**5-7 ft**	**10-12 ft**	**20-21 ft**			
	Date Sampled:	**-**	**-**	**-**			
	Date tested:	**14-Nov-23**	**14-Nov-23**	**14-Nov-23**			
	Laboratory sample description:	**lt ol bn - lt bn clay**	**lt ol bn - lt bn silt**	**lt ol bn - lt bn clay**			
Moisture	Wet soil + tare (g)	902.19	566.12	742.99			
	Dry soil + tare (g)	836.69	514.93	683.22			
	Tare (g)	193.61	116.09	117.11			
	Moisture content, w (%)	10.2	12.8	10.6			
Comments							
QC/QA	Tested By:	AT	AT	AT			
	Reduced By:	CML	CML	CML			
	Reviewed By:	AT	AT	AT			

Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 18-19 ft

Tested by: JC Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - bn clay
As-received water content(%):	12.3	Approximate maximum particle size:	1.5"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

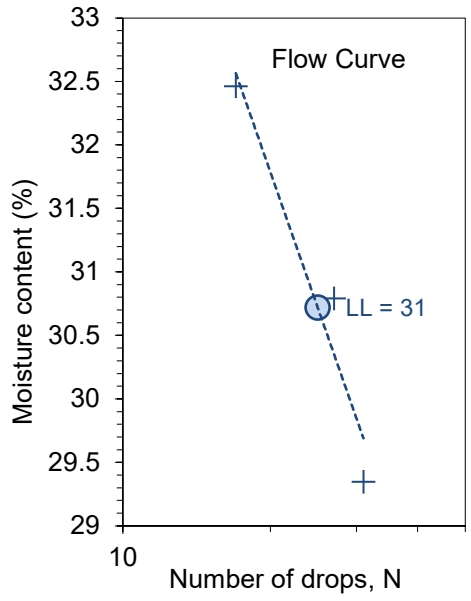
Determination No:	1	2
Wet Soil + Tare (g):	20.94	20.87
Dry Soil + Tare (g):	19.90	19.81
Moisture Loss (g):	1.04	1.06
Tare (g):	13.53	13.42
Dry Soil (g):	6.37	6.39
Moisture Content, w (%):	16.33	16.59

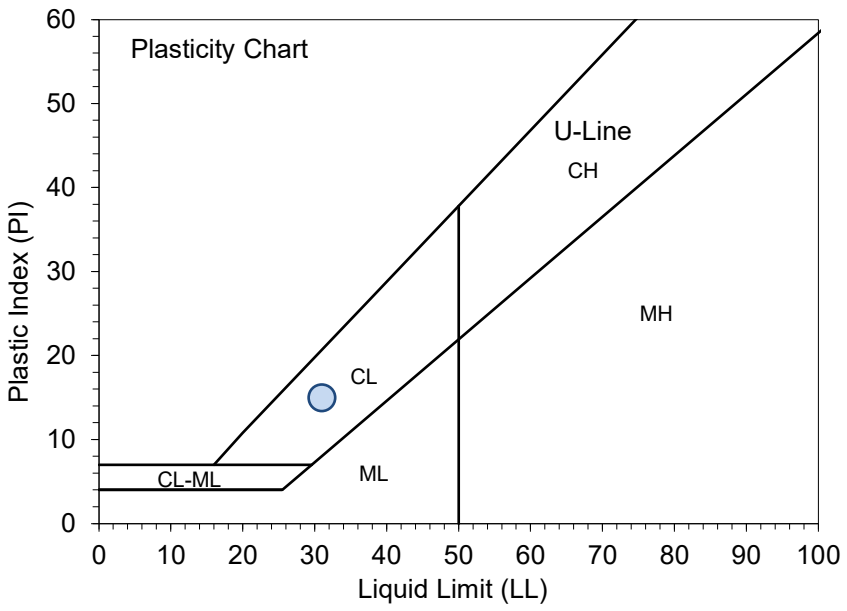
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	27	17
Wet Soil + Tare (g):	23.85	25.34	24.74
Dry Soil + Tare (g):	21.37	22.51	21.75
Moisture Loss (g):	2.48	2.83	2.99
Tare (g):	12.92	13.32	12.54
Dry Soil (g):	8.45	9.19	9.21
Moisture Content, w (%):	29.35	30.79	32.46
One-Point LL:		31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	16
Plasticity Index, PI:	15





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 27-29 ft

Tested by: JC Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - gy clay
As-received water content(%):	11.0	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

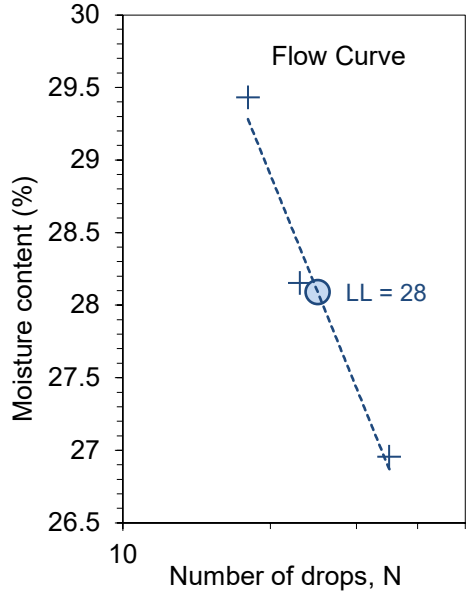
Determination No:	1	2
Wet Soil + Tare (g):	20.76	21.17
Dry Soil + Tare (g):	19.72	20.13
Moisture Loss (g):	1.04	1.04
Tare (g):	13.35	13.69
Dry Soil (g):	6.37	6.44
Moisture Content, w (%):	16.33	16.15

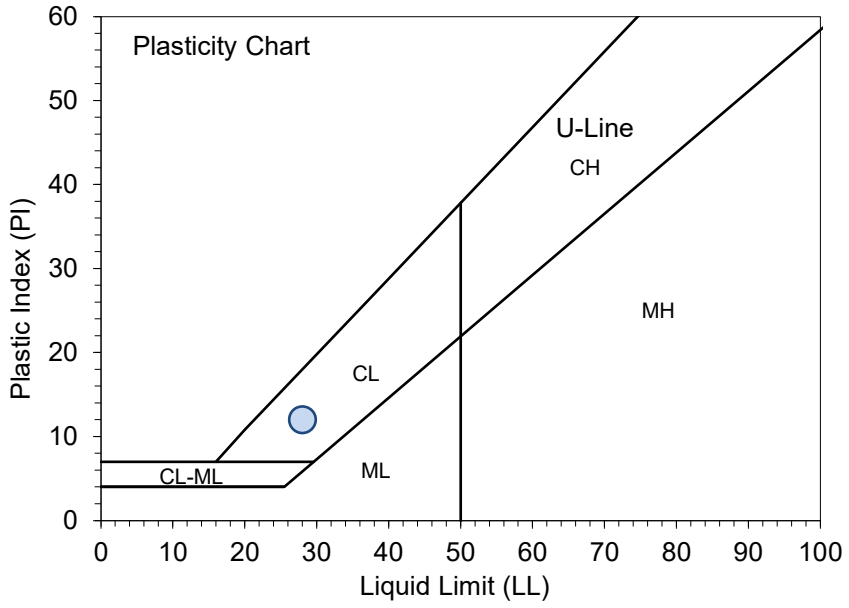
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	23	18
Wet Soil + Tare (g):	25.98	24.87	27.33
Dry Soil + Tare (g):	23.33	22.17	24.16
Moisture Loss (g):	2.65	2.70	3.17
Tare (g):	13.50	12.58	13.39
Dry Soil (g):	9.83	9.59	10.77
Moisture Content, w (%):	26.96	28.15	29.43
One-Point LL:		28	

Results

Liquid Limit, LL:	28
Plastic Limit, PL:	16
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 54.5-57 ft

Tested by: JC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - dk gy clay
As-received water content(%):	12.5	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

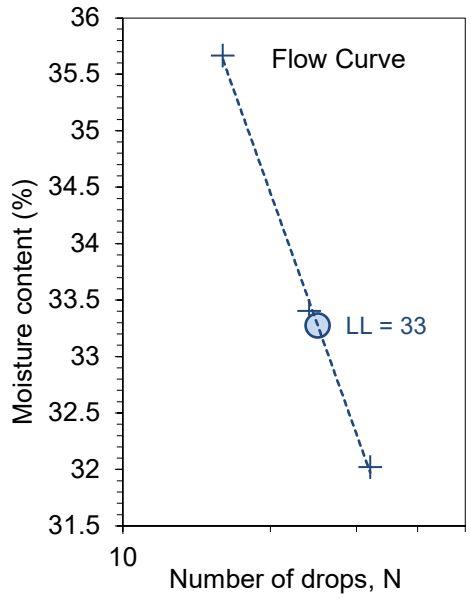
Determination No:	1	2
Wet Soil + Tare (g):	20.65	21.09
Dry Soil + Tare (g):	19.68	20.10
Moisture Loss (g):	0.97	0.99
Tare (g):	13.25	13.55
Dry Soil (g):	6.43	6.55
Moisture Content, w (%):	15.09	15.11

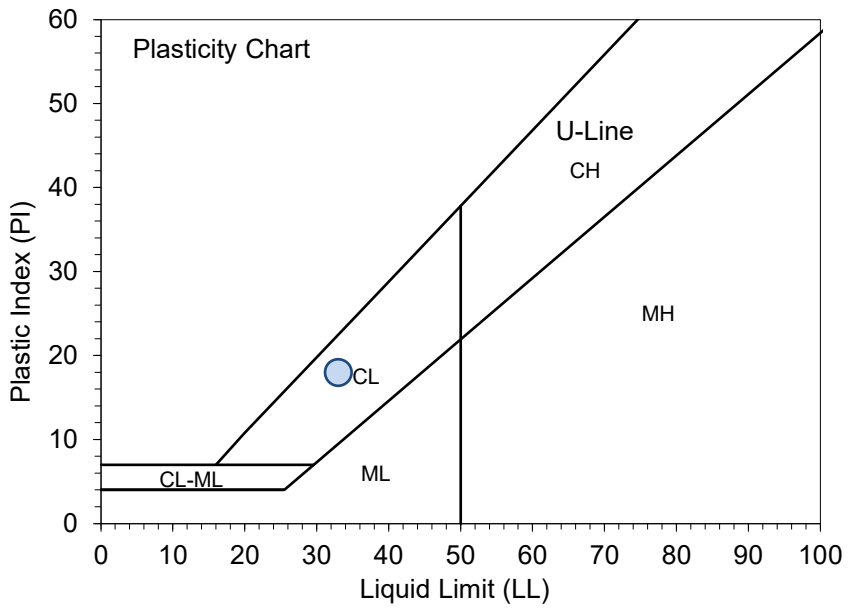
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	32	24	16
Wet Soil + Tare (g):	24.69	24.36	24.92
Dry Soil + Tare (g):	22.00	21.31	21.61
Moisture Loss (g):	2.69	3.05	3.31
Tare (g):	13.60	12.18	12.33
Dry Soil (g):	8.40	9.13	9.28
Moisture Content, w (%):	32.02	33.41	35.67
One-Point LL:		33	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	15
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 67-69 ft

Tested by: JC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	dk gy - lt bn clay
As-received water content(%):	10.0	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

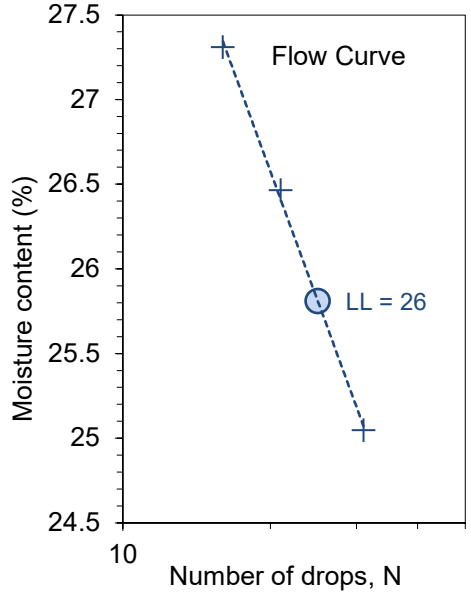
Determination No:	1	2
Wet Soil + Tare (g):	21.01	20.67
Dry Soil + Tare (g):	19.96	19.64
Moisture Loss (g):	1.05	1.03
Tare (g):	13.49	13.07
Dry Soil (g):	6.47	6.57
Moisture Content, w (%):	16.23	15.68

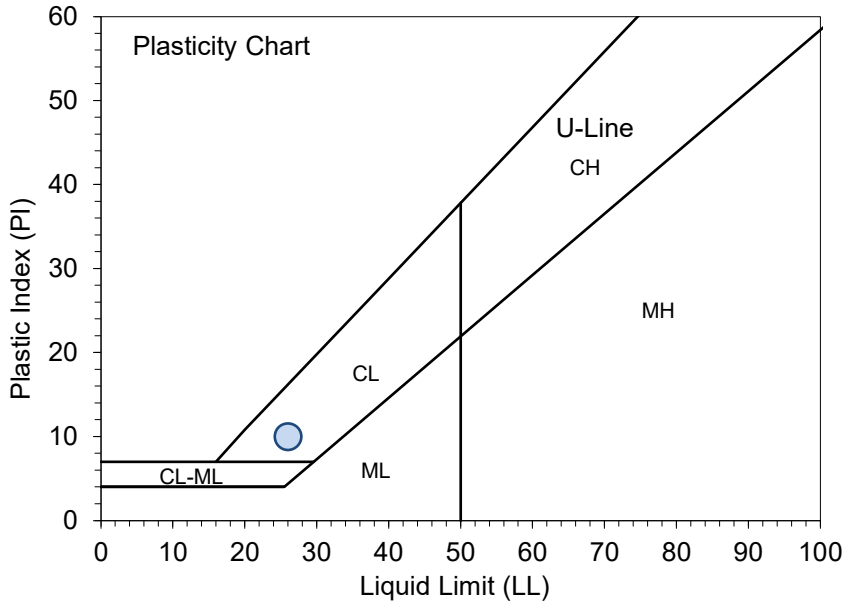
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	21	16
Wet Soil + Tare (g):	26.26	25.37	25.82
Dry Soil + Tare (g):	23.73	22.89	23.22
Moisture Loss (g):	2.53	2.48	2.60
Tare (g):	13.63	13.52	13.70
Dry Soil (g):	10.10	9.37	9.52
Moisture Content, w (%):	25.05	26.47	27.31
One-Point LL:		26	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	16
Plasticity Index, PI:	10





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 72.5-75 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - dk by clay
As-received water content(%):	20.7	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

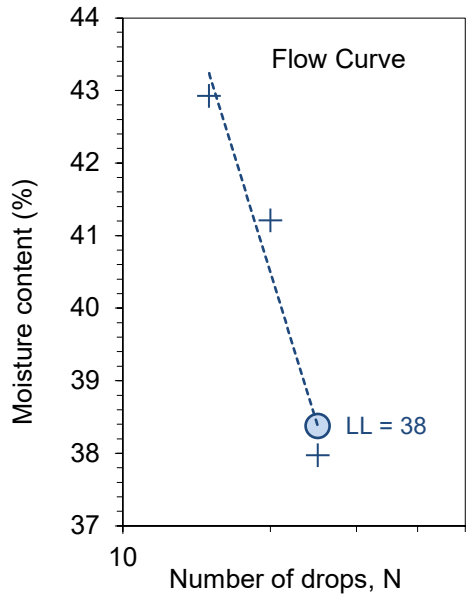
Determination No:	1	2
Wet Soil + Tare (g):	21.19	21.02
Dry Soil + Tare (g):	20.06	19.89
Moisture Loss (g):	1.13	1.13
Tare (g):	13.47	13.48
Dry Soil (g):	6.59	6.41
Moisture Content, w (%):	17.15	17.63

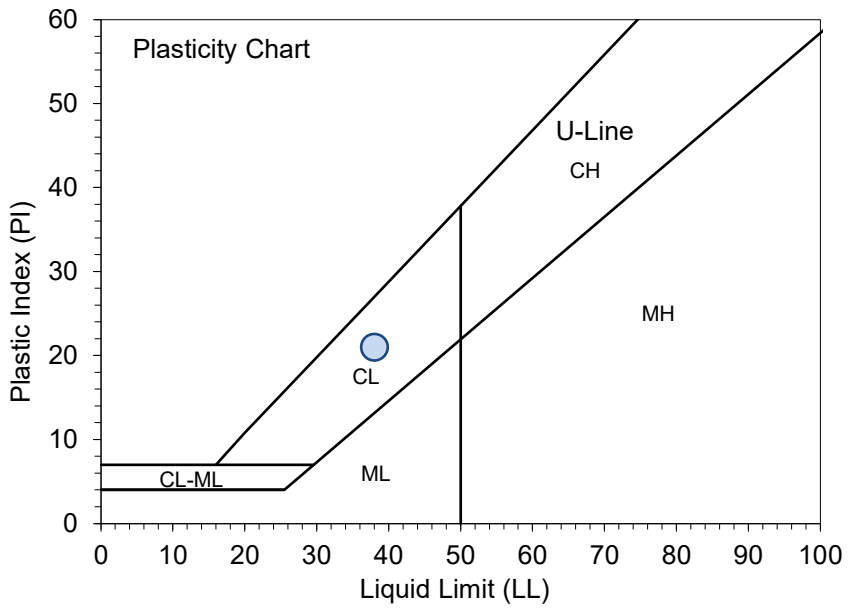
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	25	20	15
Wet Soil + Tare (g):	22.90	24.32	25.41
Dry Soil + Tare (g):	20.31	21.13	21.89
Moisture Loss (g):	2.59	3.19	3.52
Tare (g):	13.49	13.39	13.69
Dry Soil (g):	6.82	7.74	8.20
Moisture Content, w (%):	37.98	41.21	42.93
One-Point LL:	38	40	

Results

Liquid Limit, LL:	38
Plastic Limit, PL:	17
Plasticity Index, PI:	21





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 7-10 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn gravel
As-received water content(%):	Not Requested	Approximate maximum particle size:	1.5"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

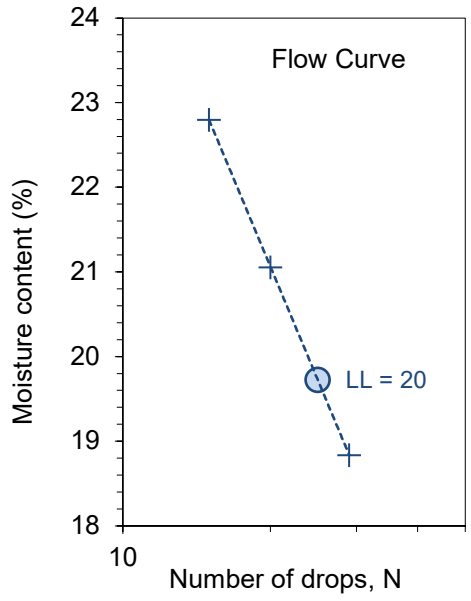
Determination No:	1	2
Wet Soil + Tare (g):	20.22	21.14
Dry Soil + Tare (g):	19.22	20.11
Moisture Loss (g):	1.00	1.03
Tare (g):	12.57	13.32
Dry Soil (g):	6.65	6.79
Moisture Content, w (%):	15.04	15.17

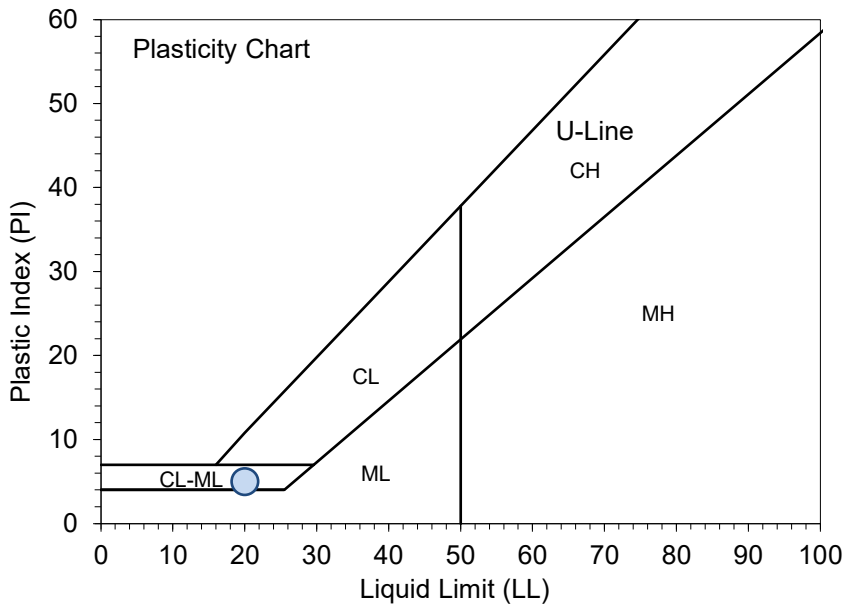
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	20	15
Wet Soil + Tare (g):	26.87	25.20	24.44
Dry Soil + Tare (g):	24.76	23.17	22.29
Moisture Loss (g):	2.11	2.03	2.15
Tare (g):	13.56	13.53	12.86
Dry Soil (g):	11.20	9.64	9.43
Moisture Content, w (%):	18.84	21.06	22.80
One-Point LL:	19	20	

Results

Liquid Limit, LL:	20
Plastic Limit, PL:	15
Plasticity Index, PI:	5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 14.5-16 ft

Tested by: JC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - ol bn clay
As-received water content(%):	11.9	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

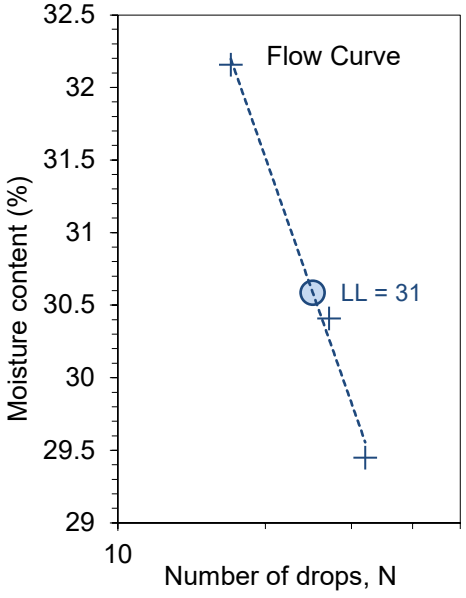
Determination No:	1	2
Wet Soil + Tare (g):	20.91	19.95
Dry Soil + Tare (g):	19.95	19.00
Moisture Loss (g):	0.96	0.95
Tare (g):	13.46	12.46
Dry Soil (g):	6.49	6.54
Moisture Content, w (%):	14.79	14.53

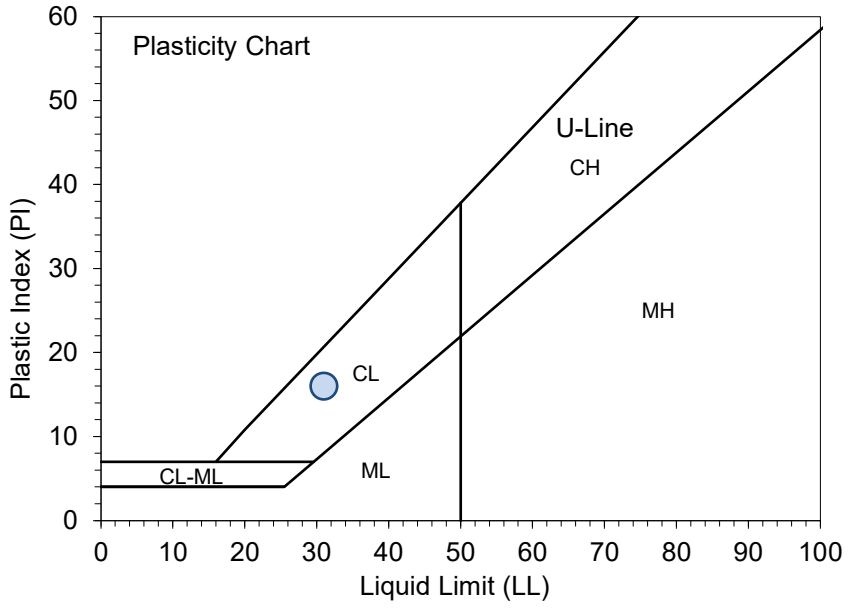
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	32	27	17
Wet Soil + Tare (g):	27.13	25.25	23.71
Dry Soil + Tare (g):	24.02	22.51	20.88
Moisture Loss (g):	3.11	2.74	2.83
Tare (g):	13.46	13.50	12.08
Dry Soil (g):	10.56	9.01	8.80
Moisture Content, w (%):	29.45	30.41	32.16
One-Point LL:		31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	15
Plasticity Index, PI:	16





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - ol bn clay
As-received water content(%):	13.3	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

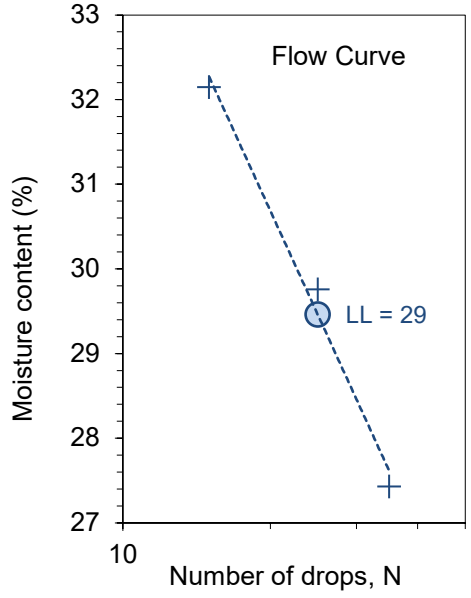
Determination No:	1	2
Wet Soil + Tare (g):	21.43	19.87
Dry Soil + Tare (g):	20.39	18.85
Moisture Loss (g):	1.04	1.02
Tare (g):	13.57	12.08
Dry Soil (g):	6.82	6.77
Moisture Content, w (%):	15.25	15.07

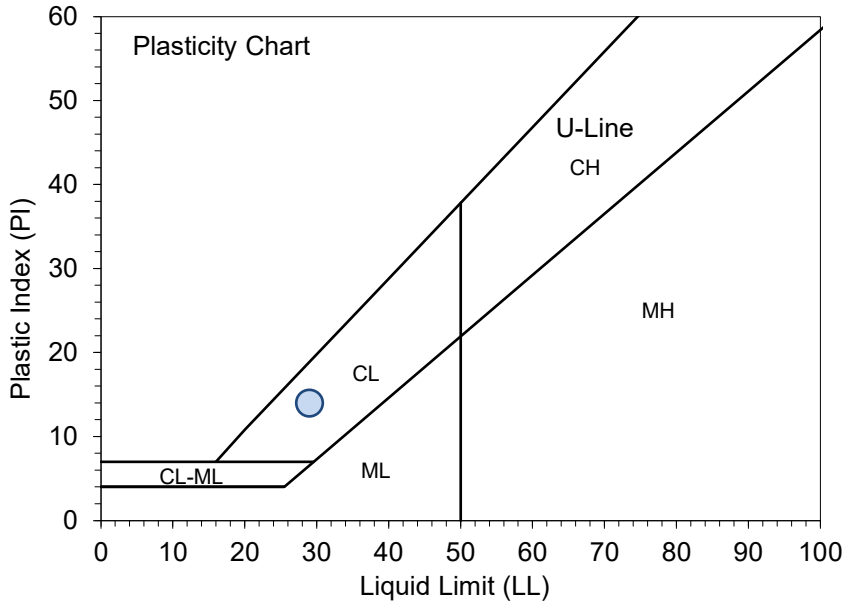
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	25	15
Wet Soil + Tare (g):	22.22	20.57	25.21
Dry Soil + Tare (g):	20.36	18.71	22.22
Moisture Loss (g):	1.86	1.86	2.99
Tare (g):	13.58	12.46	12.92
Dry Soil (g):	6.78	6.25	9.30
Moisture Content, w (%):	27.43	29.76	32.15
One-Point LL:		30	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	15
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 32-35 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk yl bn clay
As-received water content(%):	14.5	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

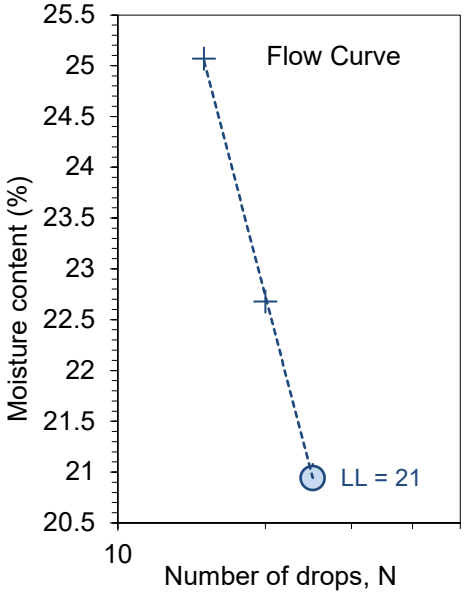
Determination No:	1	2
Wet Soil + Tare (g):	21.05	21.32
Dry Soil + Tare (g):	19.97	20.22
Moisture Loss (g):	1.08	1.10
Tare (g):	13.42	13.54
Dry Soil (g):	6.55	6.68
Moisture Content, w (%):	16.49	16.47

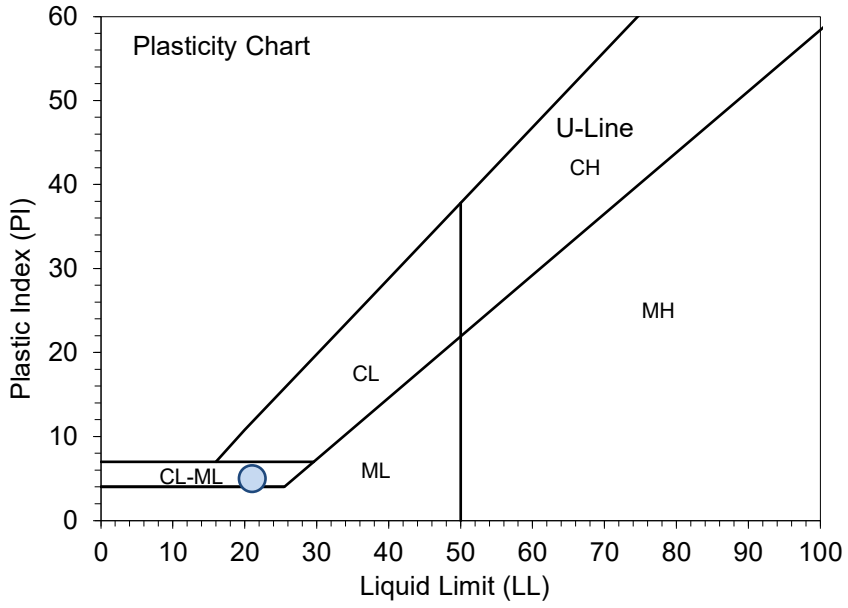
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	25	20	15
Wet Soil + Tare (g):	25.91	24.58	25.44
Dry Soil + Tare (g):	23.76	22.50	22.86
Moisture Loss (g):	2.15	2.08	2.58
Tare (g):	13.51	13.33	12.57
Dry Soil (g):	10.25	9.17	10.29
Moisture Content, w (%):	20.98	22.68	25.07
One-Point LL:	21	22	

Results

Liquid Limit, LL:	21
Plastic Limit, PL:	16
Plasticity Index, PI:	5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 38.5-40 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - ol bn clay
As-received water content(%):	15.5	Approximate maximum particle size:	No. 10
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

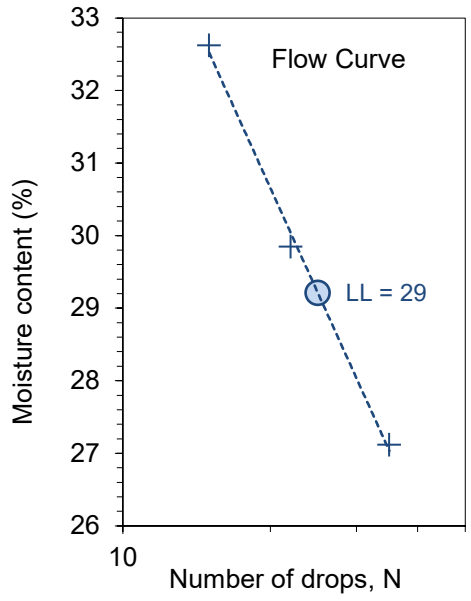
Determination No:	1	2
Wet Soil + Tare (g):	20.84	21.16
Dry Soil + Tare (g):	19.75	20.04
Moisture Loss (g):	1.09	1.12
Tare (g):	13.53	13.60
Dry Soil (g):	6.22	6.44
Moisture Content, w (%):	17.52	17.39

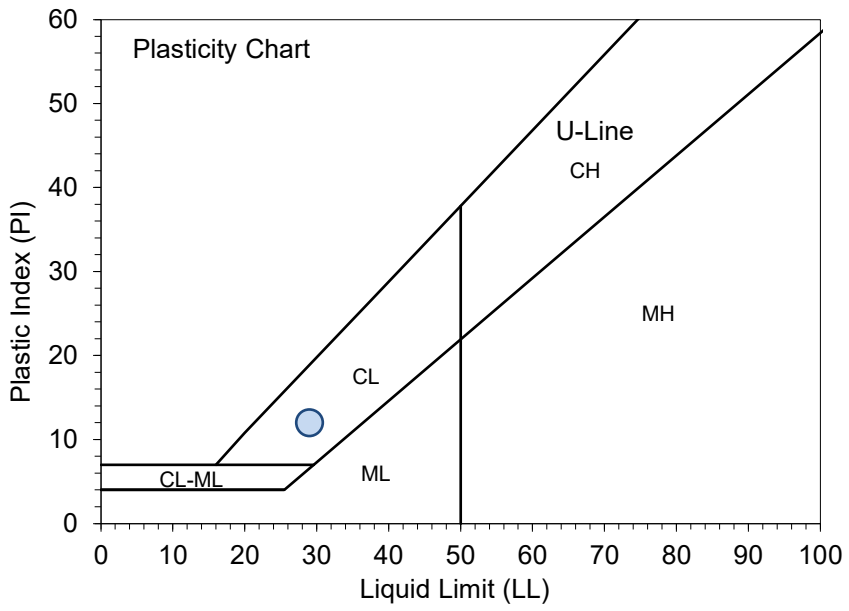
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	22	15
Wet Soil + Tare (g):	24.37	21.89	23.34
Dry Soil + Tare (g):	22.04	19.69	20.88
Moisture Loss (g):	2.33	2.20	2.46
Tare (g):	13.45	12.32	13.34
Dry Soil (g):	8.59	7.37	7.54
Moisture Content, w (%):	27.12	29.85	32.63
One-Point LL:		29	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	17
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 52-55 ft

Tested by: CML Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	gy - ol bn clay
As-received water content(%):	11.6	Approximate maximum particle size:	No. 10
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

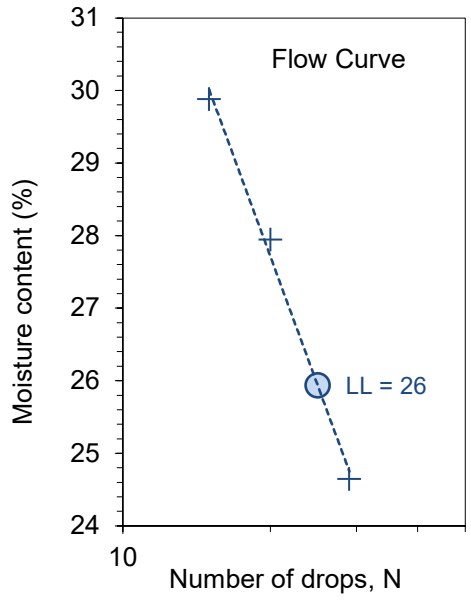
Determination No:	1	2
Wet Soil + Tare (g):	20.78	20.39
Dry Soil + Tare (g):	19.86	19.48
Moisture Loss (g):	0.92	0.91
Tare (g):	13.07	12.86
Dry Soil (g):	6.79	6.62
Moisture Content, w (%):	13.55	13.75

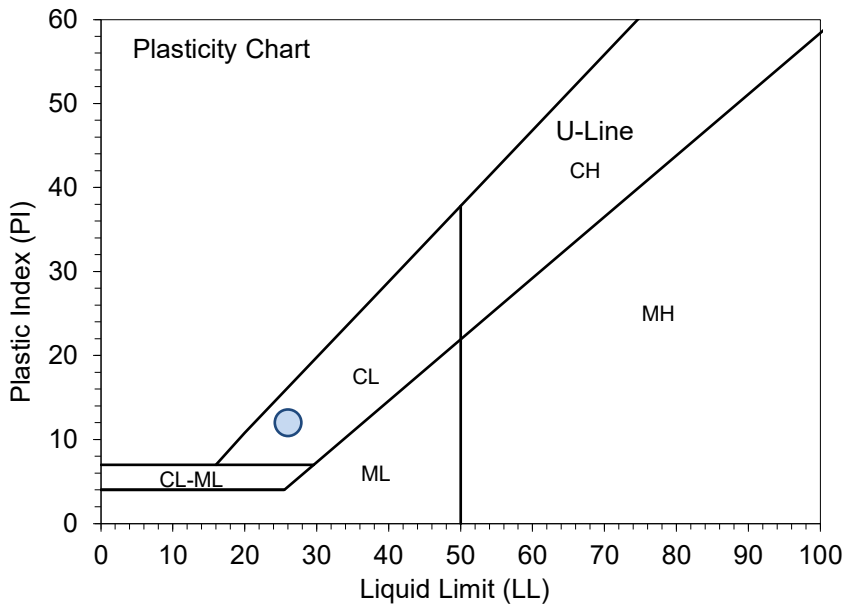
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	20	15
Wet Soil + Tare (g):	26.18	26.47	25.64
Dry Soil + Tare (g):	23.71	23.51	22.84
Moisture Loss (g):	2.47	2.96	2.80
Tare (g):	13.69	12.92	13.47
Dry Soil (g):	10.02	10.59	9.37
Moisture Content, w (%):	24.65	27.95	29.88
One-Point LL:	25	27	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	14
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 60-62 ft

Tested by: PJF Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	13.7	Approximate maximum particle size:	No. 10
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

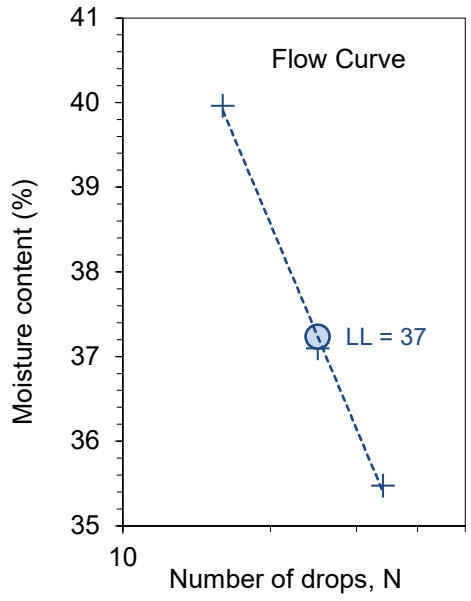
Determination No:	1	2
Wet Soil + Tare (g):	19.85	20.09
Dry Soil + Tare (g):	19.04	19.23
Moisture Loss (g):	0.81	0.86
Tare (g):	13.24	13.20
Dry Soil (g):	5.80	6.03
Moisture Content, w (%):	13.97	14.26

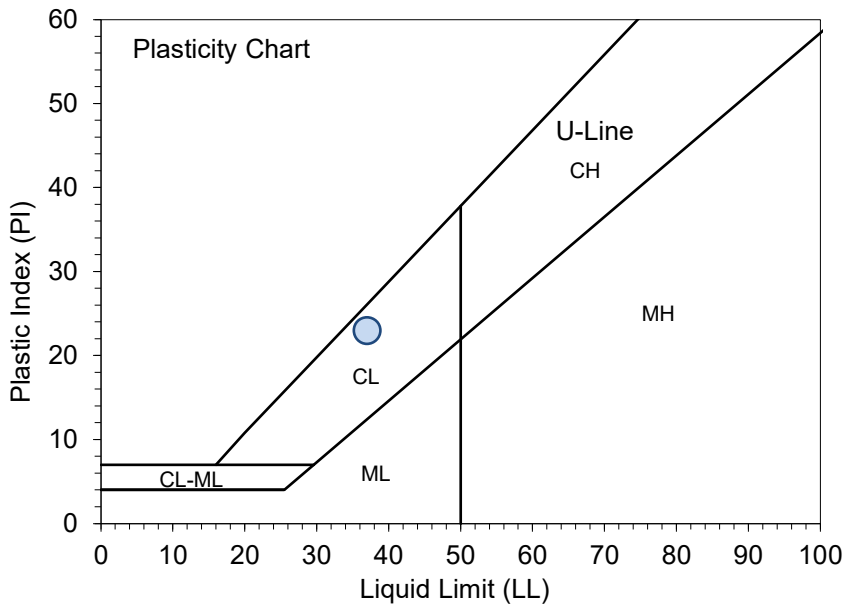
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	34	25	16
Wet Soil + Tare (g):	25.78	25.64	28.95
Dry Soil + Tare (g):	22.31	22.39	24.57
Moisture Loss (g):	3.47	3.25	4.38
Tare (g):	12.53	13.63	13.61
Dry Soil (g):	9.78	8.76	10.96
Moisture Content, w (%):	35.48	37.10	39.96
One-Point LL:		37	

Results

Liquid Limit, LL:	37
Plastic Limit, PL:	14
Plasticity Index, PI:	23





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 64.5-67 ft

Tested by: PJF Date: 16-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - ol bn clay
As-received water content(%):	12.8	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

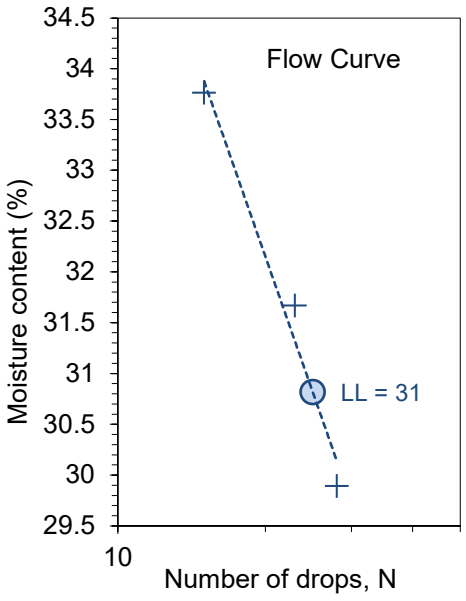
Determination No:	1	2
Wet Soil + Tare (g):	19.92	19.13
Dry Soil + Tare (g):	18.91	18.09
Moisture Loss (g):	1.01	1.04
Tare (g):	12.97	12.20
Dry Soil (g):	5.94	5.89
Moisture Content, w (%):	17.00	17.66

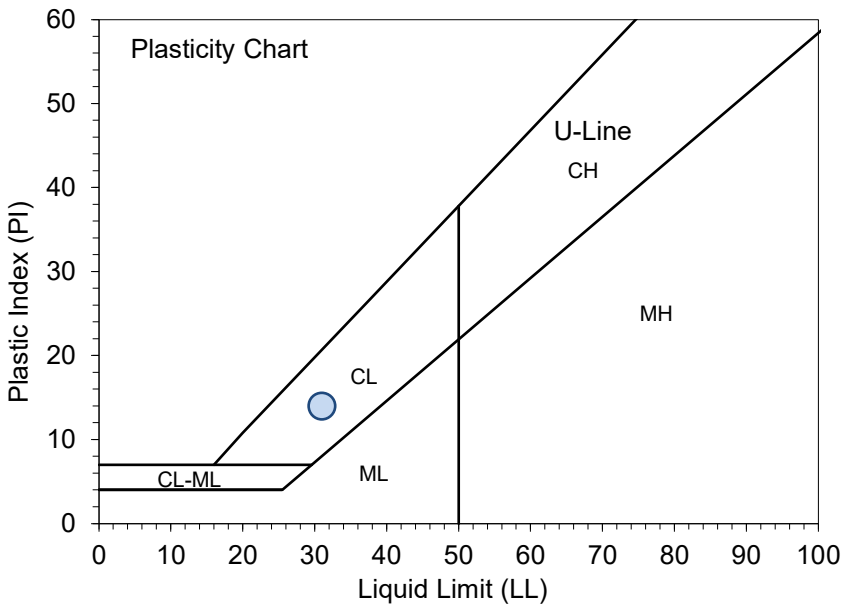
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	28	23	15
Wet Soil + Tare (g):	26.11	26.31	25.75
Dry Soil + Tare (g):	23.21	23.13	22.62
Moisture Loss (g):	2.90	3.18	3.13
Tare (g):	13.51	13.09	13.35
Dry Soil (g):	9.70	10.04	9.27
Moisture Content, w (%):	29.90	31.67	33.76
One-Point LL:	30	31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	17
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 69.5-72 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn gravel
As-received water content(%):	Not Requested	Approximate maximum particle size:	2"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	75
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

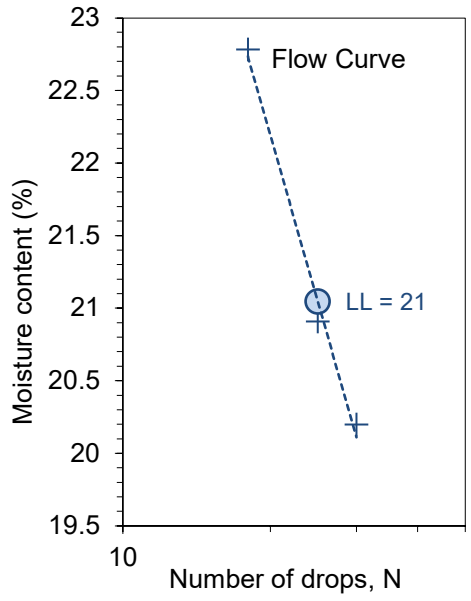
Determination No:	1	2
Wet Soil + Tare (g):	20.46	21.09
Dry Soil + Tare (g):	19.45	20.08
Moisture Loss (g):	1.01	1.01
Tare (g):	12.96	13.57
Dry Soil (g):	6.49	6.51
Moisture Content, w (%):	15.56	15.51

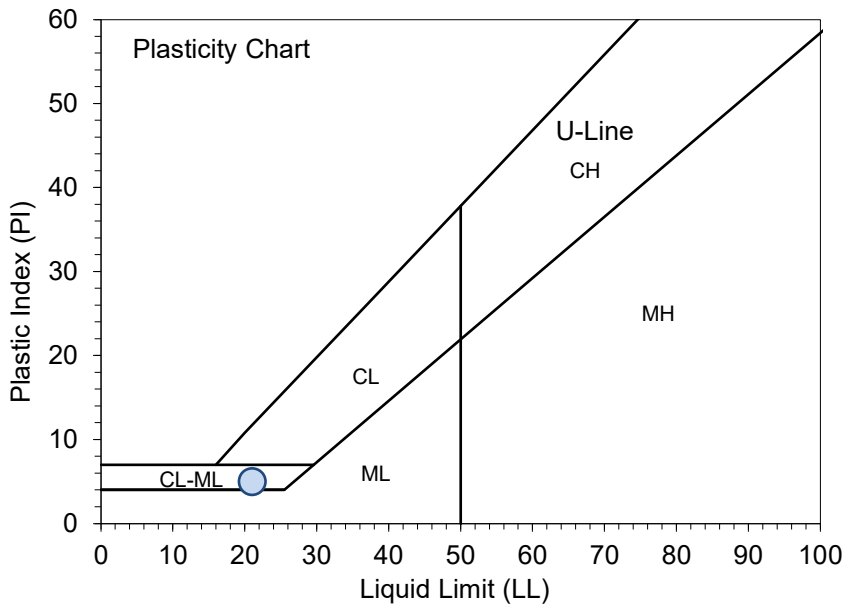
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	25	18
Wet Soil + Tare (g):	24.18	25.29	22.55
Dry Soil + Tare (g):	22.36	23.27	20.75
Moisture Loss (g):	1.82	2.02	1.80
Tare (g):	13.35	13.61	12.85
Dry Soil (g):	9.01	9.66	7.90
Moisture Content, w (%):	20.20	20.91	22.78
One-Point LL:	21	21	

Results

Liquid Limit, LL:	21
Plastic Limit, PL:	16
Plasticity Index, PI:	5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 4.5-7 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	10.1	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

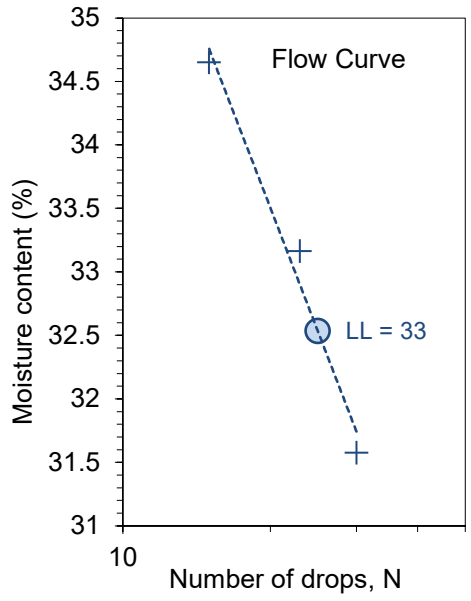
Determination No:	1	2
Wet Soil + Tare (g):	20.63	19.09
Dry Soil + Tare (g):	19.78	18.29
Moisture Loss (g):	0.85	0.80
Tare (g):	13.55	12.54
Dry Soil (g):	6.23	5.75
Moisture Content, w (%):	13.64	13.91

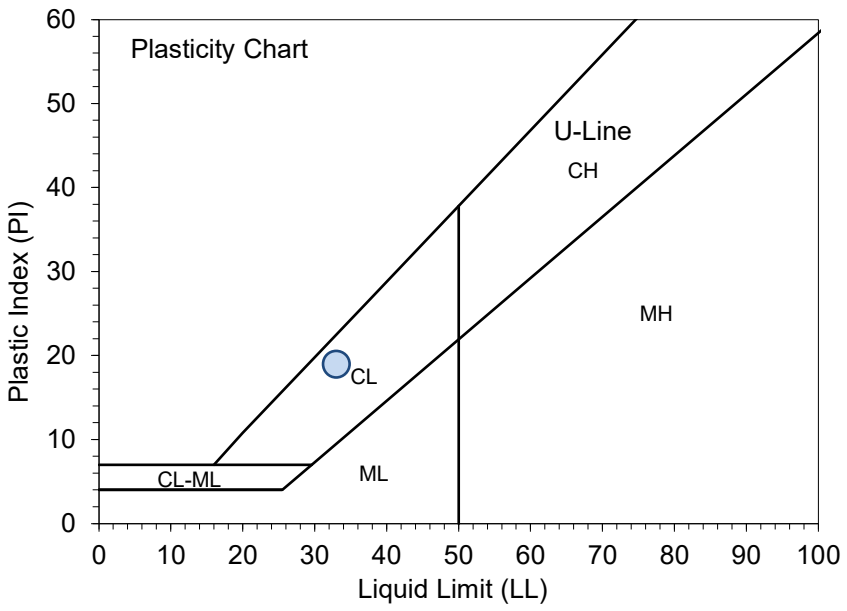
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	23	15
Wet Soil + Tare (g):	27.01	26.81	27.14
Dry Soil + Tare (g):	23.77	23.50	23.64
Moisture Loss (g):	3.24	3.31	3.50
Tare (g):	13.51	13.52	13.54
Dry Soil (g):	10.26	9.98	10.10
Moisture Content, w (%):	31.58	33.17	34.65
One-Point LL:	32	33	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	14
Plasticity Index, PI:	19





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Tested by: MGS Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	pl ol bn - bn clay
As-received water content(%):	8.4	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

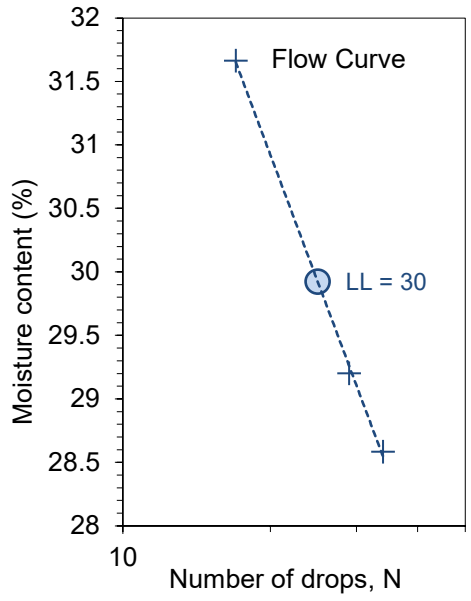
Determination No:	1	2
Wet Soil + Tare (g):	20.68	20.84
Dry Soil + Tare (g):	19.73	19.88
Moisture Loss (g):	0.95	0.96
Tare (g):	13.45	13.56
Dry Soil (g):	6.28	6.32
Moisture Content, w (%):	15.13	15.19

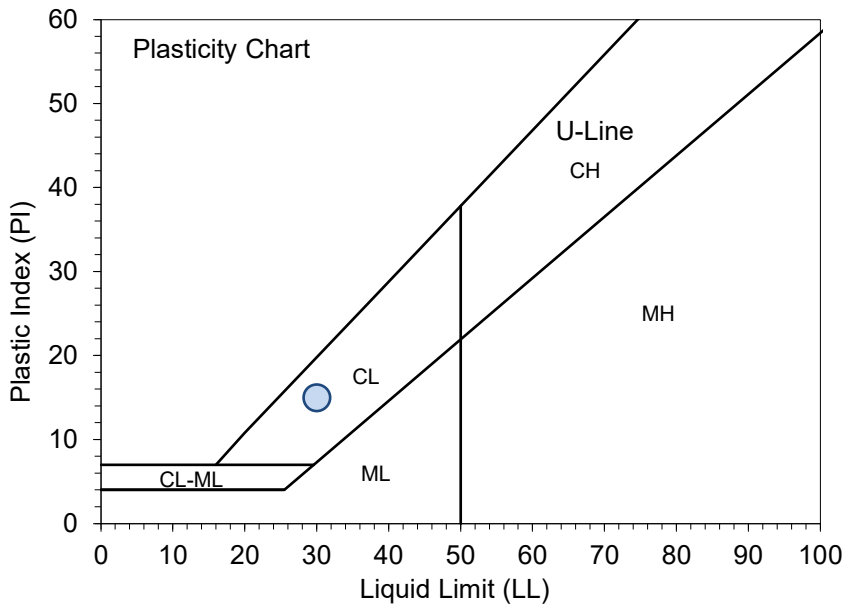
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	34	29	17
Wet Soil + Tare (g):	25.21	28.96	24.78
Dry Soil + Tare (g):	22.32	25.47	22.06
Moisture Loss (g):	2.89	3.49	2.72
Tare (g):	12.21	13.52	13.47
Dry Soil (g):	10.11	11.95	8.59
Moisture Content, w (%):	28.59	29.21	31.66
One-Point LL:		30	

Results

Liquid Limit, LL:	30
Plastic Limit, PL:	15
Plasticity Index, PI:	15





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - bn clay
As-received water content(%):	12.4	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	20
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

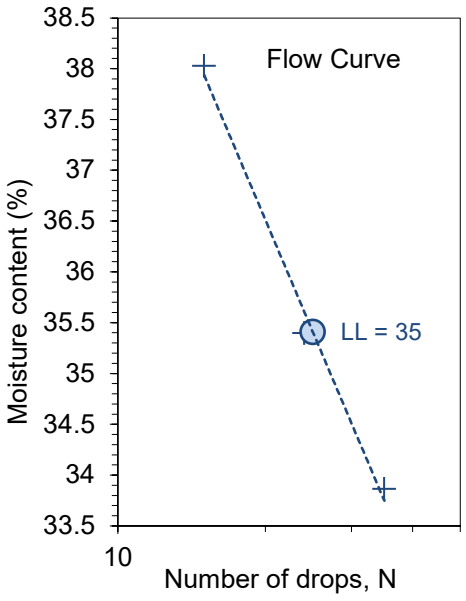
Determination No:	1	2
Wet Soil + Tare (g):	19.21	19.75
Dry Soil + Tare (g):	18.30	18.89
Moisture Loss (g):	0.91	0.86
Tare (g):	12.28	13.22
Dry Soil (g):	6.02	5.67
Moisture Content, w (%):	15.12	15.17

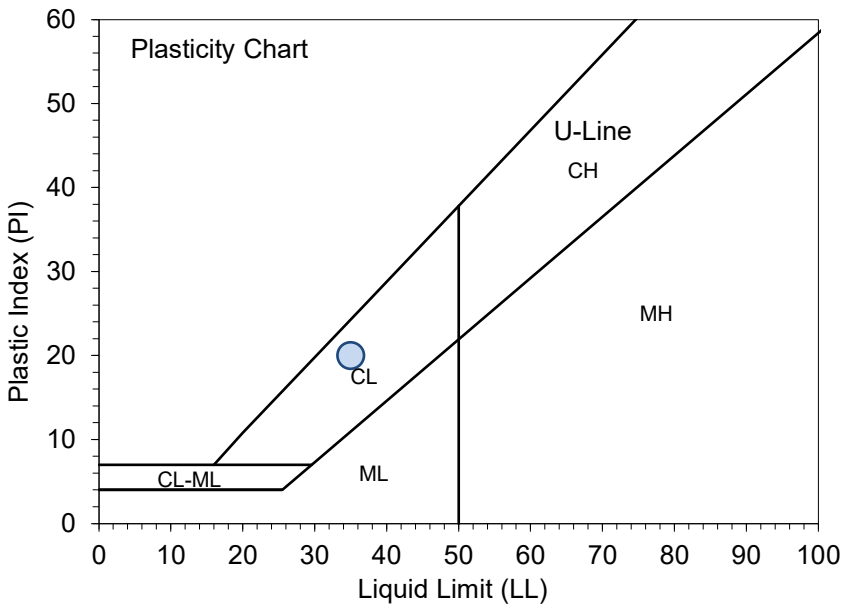
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	24	15
Wet Soil + Tare (g):	26.18	26.09	25.03
Dry Soil + Tare (g):	23.01	22.78	21.90
Moisture Loss (g):	3.17	3.31	3.13
Tare (g):	13.65	13.43	13.67
Dry Soil (g):	9.36	9.35	8.23
Moisture Content, w (%):	33.87	35.40	38.03
One-Point LL:		35	

Results

Liquid Limit, LL:	35
Plastic Limit, PL:	15
Plasticity Index, PI:	20





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 30-33 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn clay
As-received water content(%):	10.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

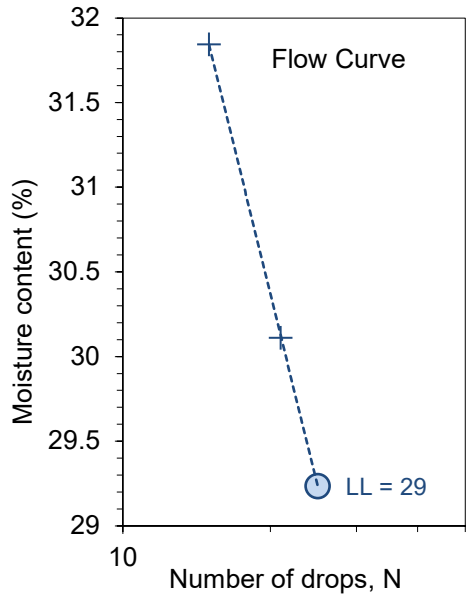
Determination No:	1	2
Wet Soil + Tare (g):	20.40	20.23
Dry Soil + Tare (g):	19.46	19.37
Moisture Loss (g):	0.94	0.86
Tare (g):	13.35	13.51
Dry Soil (g):	6.11	5.86
Moisture Content, w (%):	15.38	14.68

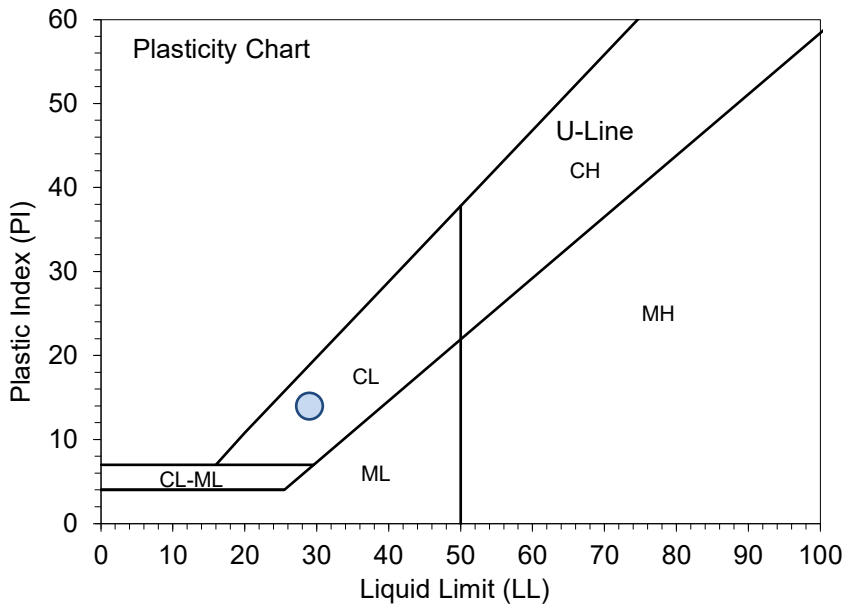
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	25	21	15
Wet Soil + Tare (g):	25.41	25.35	28.60
Dry Soil + Tare (g):	22.55	22.42	24.96
Moisture Loss (g):	2.86	2.93	3.64
Tare (g):	12.77	12.69	13.53
Dry Soil (g):	9.78	9.73	11.43
Moisture Content, w (%):	29.24	30.11	31.85
One-Point LL:	29	29	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	15
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 7-10 ft

Tested by: MGS Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	It ol bn - bn clay
As-received water content(%):	21.8	Approximate maximum particle size:	No. 4
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

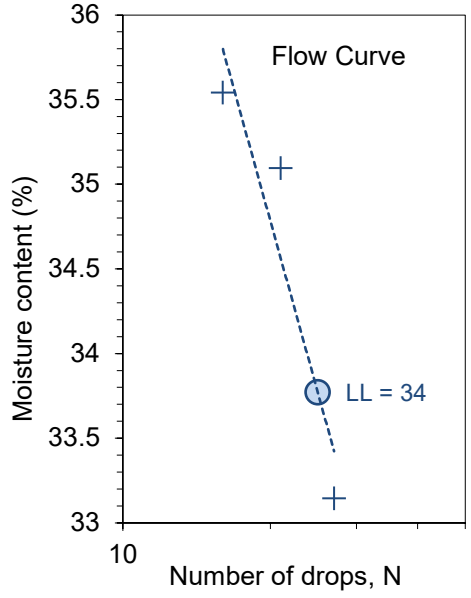
Determination No:	1	2
Wet Soil + Tare (g):	20.44	20.46
Dry Soil + Tare (g):	19.50	19.48
Moisture Loss (g):	0.94	0.98
Tare (g):	13.42	13.24
Dry Soil (g):	6.08	6.24
Moisture Content, w (%):	15.46	15.71

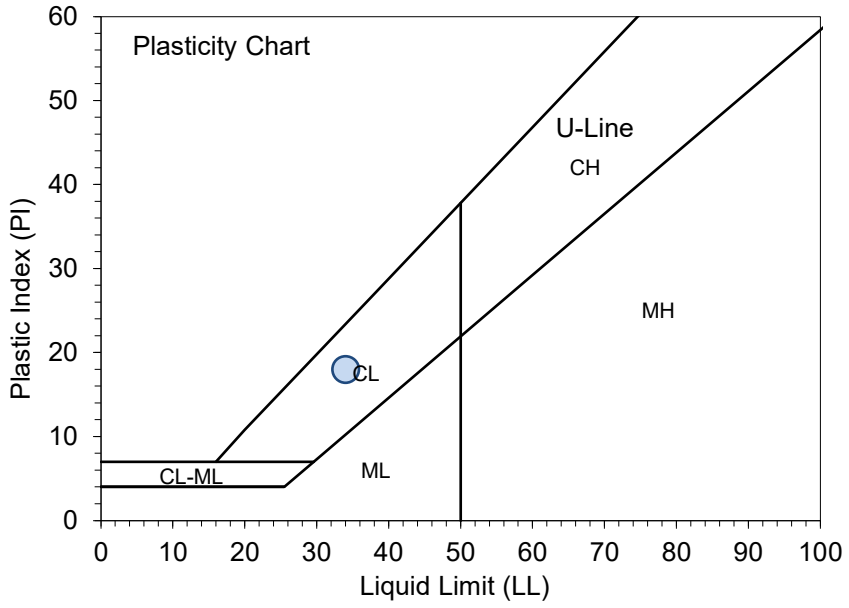
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	27	21	16
Wet Soil + Tare (g):	24.27	26.14	25.99
Dry Soil + Tare (g):	21.30	22.49	22.72
Moisture Loss (g):	2.97	3.65	3.27
Tare (g):	12.34	12.09	13.52
Dry Soil (g):	8.96	10.40	9.20
Moisture Content, w (%):	33.15	35.10	35.54
One-Point LL:	33	34	

Results

Liquid Limit, LL:	34
Plastic Limit, PL:	16
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Tested by: CML Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	pl ol bn - lt bn silt
As-received water content(%):	6.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

Determination No:	1	2
Wet Soil + Tare (g):	21.13	20.64
Dry Soil + Tare (g):	20.21	19.72
Moisture Loss (g):	0.92	0.92
Tare (g):	13.54	12.92
Dry Soil (g):	6.67	6.80
Moisture Content, w (%):	13.79	13.53

Liquid Limit

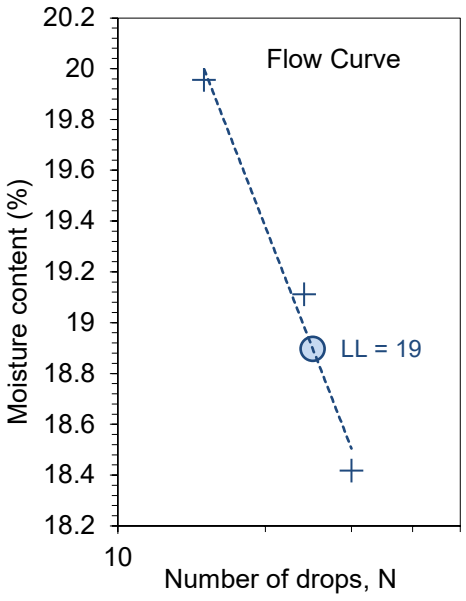
Determination No:	1	2	3
Number of Drops, N:	30	24	15
Wet Soil + Tare (g):	24.37	26.22	24.48
Dry Soil + Tare (g):	22.53	24.15	22.61
Moisture Loss (g):	1.84	2.07	1.87
Tare (g):	12.54	13.32	13.24
Dry Soil (g):	9.99	10.83	9.37
Moisture Content, w (%):	18.42	19.11	19.96
One-Point LL:	19	19	

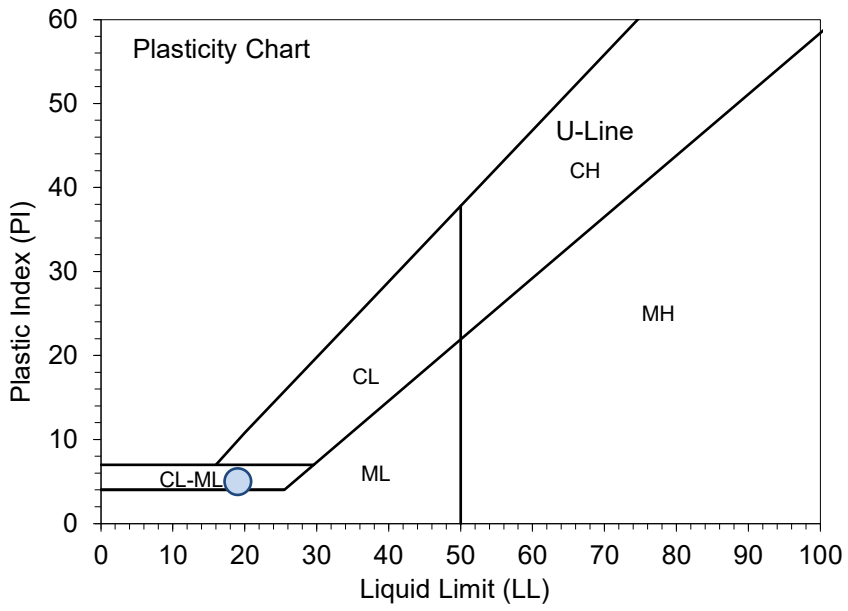
Results

Liquid Limit, LL: 19

Plastic Limit, PL: 14

Plasticity Index, PI: 5





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: PJF Date: 13-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - bn silt
As-received water content(%):	16.5	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

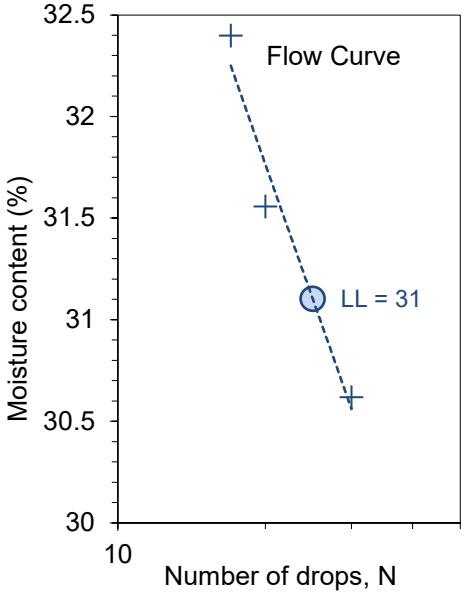
Determination No:	1	2
Wet Soil + Tare (g):	20.25	19.87
Dry Soil + Tare (g):	19.28	18.88
Moisture Loss (g):	0.97	0.99
Tare (g):	13.52	12.94
Dry Soil (g):	5.76	5.94
Moisture Content, w (%):	16.84	16.67

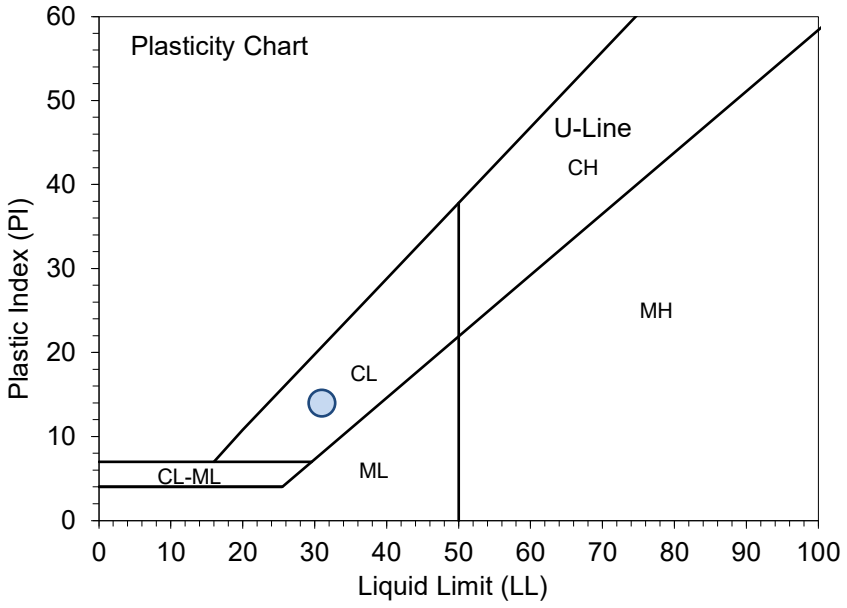
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	20	17
Wet Soil + Tare (g):	26.21	26.45	25.37
Dry Soil + Tare (g):	23.20	23.31	22.48
Moisture Loss (g):	3.01	3.14	2.89
Tare (g):	13.37	13.36	13.56
Dry Soil (g):	9.83	9.95	8.92
Moisture Content, w (%):	30.62	31.56	32.40
One-Point LL:	31	31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	17
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 30-33 ft

Tested by: CML Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	10.1	Approximate maximum particle size:	2"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	25
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

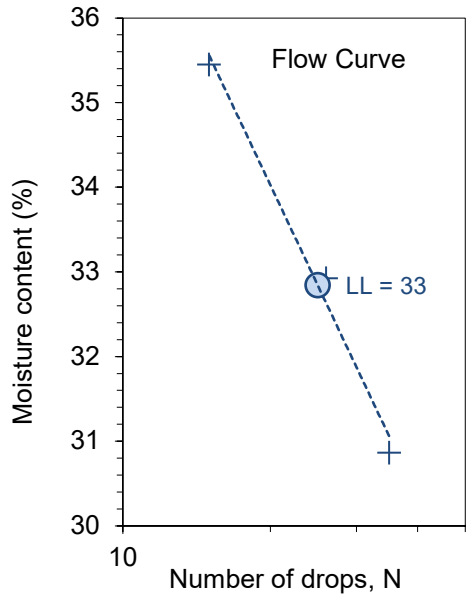
Determination No:	1	2
Wet Soil + Tare (g):	20.99	21.04
Dry Soil + Tare (g):	19.96	20.03
Moisture Loss (g):	1.03	1.01
Tare (g):	13.34	13.41
Dry Soil (g):	6.62	6.62
Moisture Content, w (%):	15.56	15.26

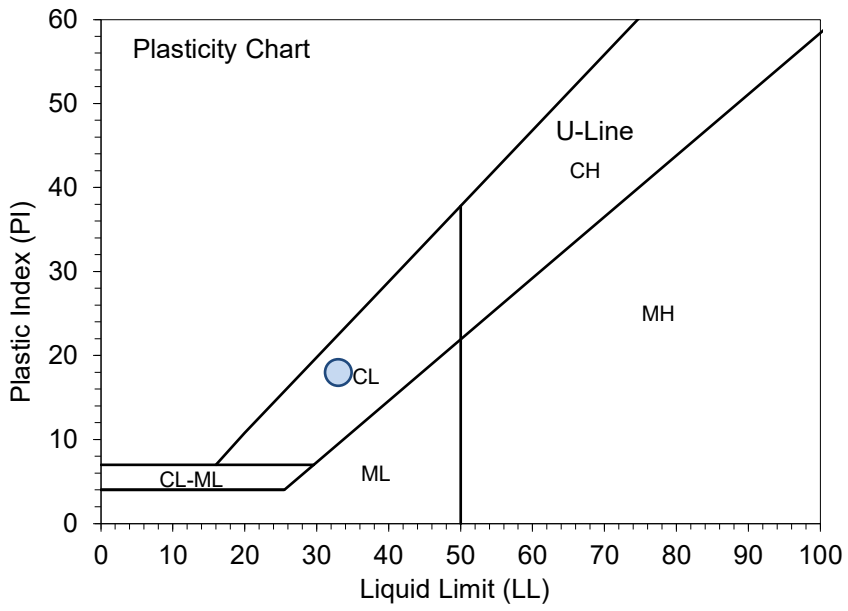
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	26	15
Wet Soil + Tare (g):	25.03	25.76	27.92
Dry Soil + Tare (g):	22.36	22.52	24.13
Moisture Loss (g):	2.67	3.24	3.79
Tare (g):	13.71	12.68	13.44
Dry Soil (g):	8.65	9.84	10.69
Moisture Content, w (%):	30.87	32.93	35.45
One-Point LL:		33	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	15
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn gravel
As-received water content(%):	Not Requested	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	20
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

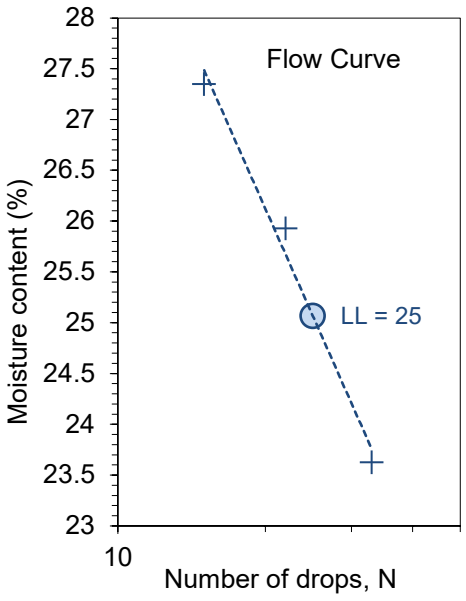
Determination No:	1	2
Wet Soil + Tare (g):	21.15	20.86
Dry Soil + Tare (g):	20.10	19.82
Moisture Loss (g):	1.05	1.04
Tare (g):	13.54	13.35
Dry Soil (g):	6.56	6.47
Moisture Content, w (%):	16.01	16.07

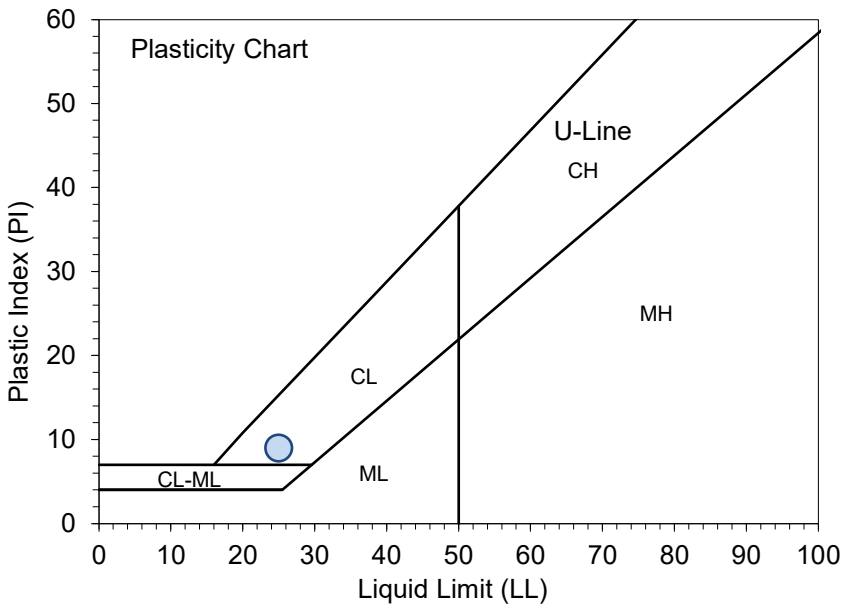
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	33	22	15
Wet Soil + Tare (g):	25.36	27.77	26.44
Dry Soil + Tare (g):	23.03	24.92	23.62
Moisture Loss (g):	2.33	2.85	2.82
Tare (g):	13.17	13.93	13.31
Dry Soil (g):	9.86	10.99	10.31
Moisture Content, w (%):	23.63	25.93	27.35
One-Point LL:		26	

Results

Liquid Limit, LL:	25
Plastic Limit, PL:	16
Plasticity Index, PI:	9





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Tested by: AT Date: 14-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Oven Dry	Laboratory sample description:	ol bn - lt bn clay
As-received water content(%):	13.7	Approximate maximum particle size:	1.5"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

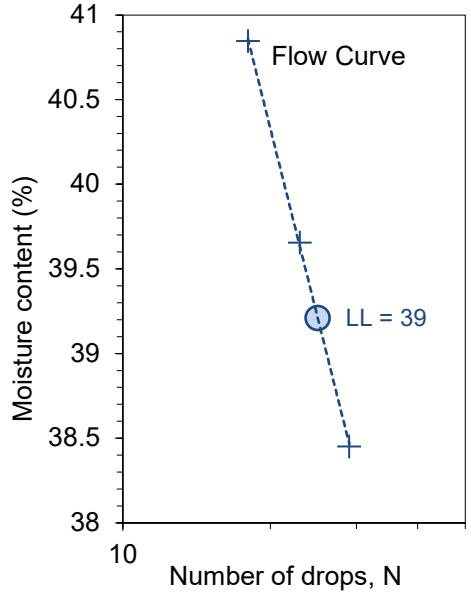
Determination No:	1	2
Wet Soil + Tare (g):	20.12	19.90
Dry Soil + Tare (g):	19.24	19.05
Moisture Loss (g):	0.88	0.85
Tare (g):	13.41	13.55
Dry Soil (g):	5.83	5.50
Moisture Content, w (%):	15.09	15.45

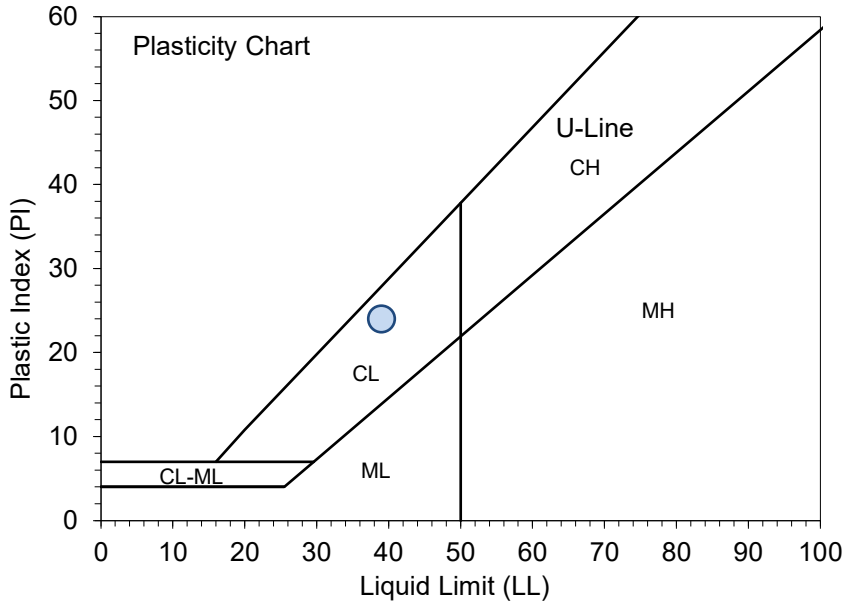
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	23	18
Wet Soil + Tare (g):	25.53	23.25	24.89
Dry Soil + Tare (g):	22.20	20.47	21.61
Moisture Loss (g):	3.33	2.78	3.28
Tare (g):	13.54	13.46	13.58
Dry Soil (g):	8.66	7.01	8.03
Moisture Content, w (%):	38.45	39.66	40.85
One-Point LL:	39	39	

Results

Liquid Limit, LL:	39
Plastic Limit, PL:	15
Plasticity Index, PI:	24





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 15-17 ft

Tested by: AT Date: 13-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - yl bn clay
As-received water content(%):	16.1	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

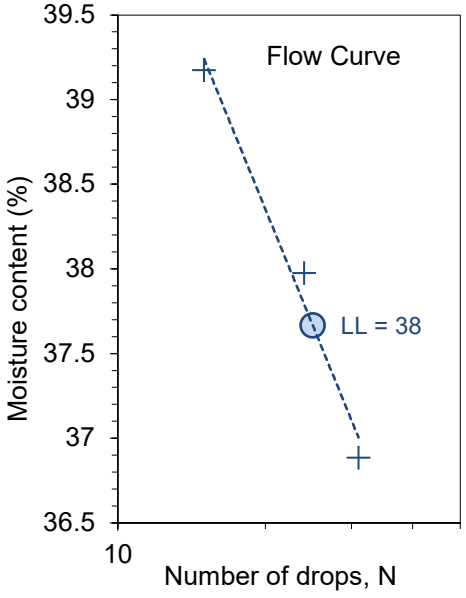
Determination No:	1	2
Wet Soil + Tare (g):	19.43	20.15
Dry Soil + Tare (g):	18.38	18.97
Moisture Loss (g):	1.05	1.18
Tare (g):	13.17	13.33
Dry Soil (g):	5.21	5.64
Moisture Content, w (%):	20.15	20.92

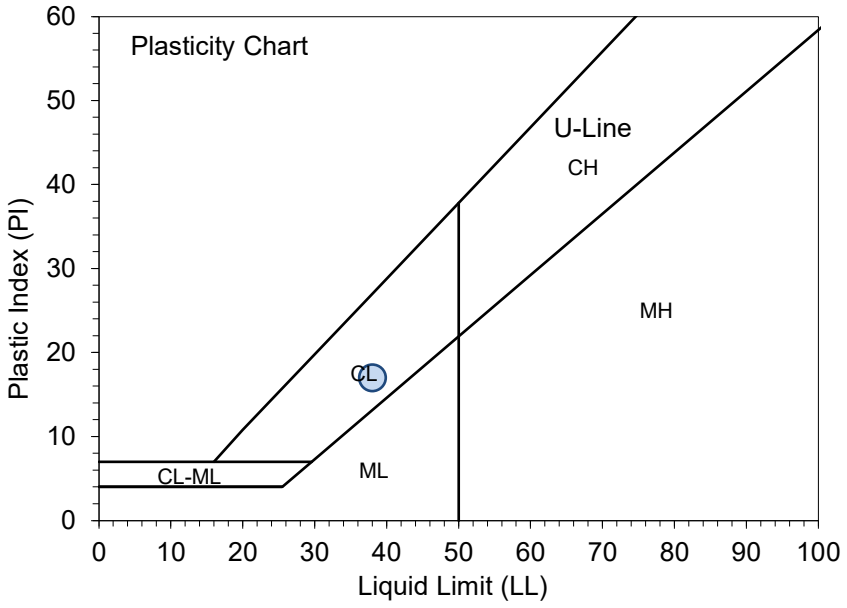
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	24	15
Wet Soil + Tare (g):	24.39	24.09	24.32
Dry Soil + Tare (g):	21.38	21.20	21.28
Moisture Loss (g):	3.01	2.89	3.04
Tare (g):	13.22	13.59	13.52
Dry Soil (g):	8.16	7.61	7.76
Moisture Content, w (%):	36.89	37.98	39.18
One-Point LL:		38	

Results

Liquid Limit, LL:	38
Plastic Limit, PL:	21
Plasticity Index, PI:	17





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 17.5-19 ft

Tested by: AT Date: 14-Nov-23

Reduced by: AT Location: -

Reviewed by: CML

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - lt bn clay
As-received water content(%):	13.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

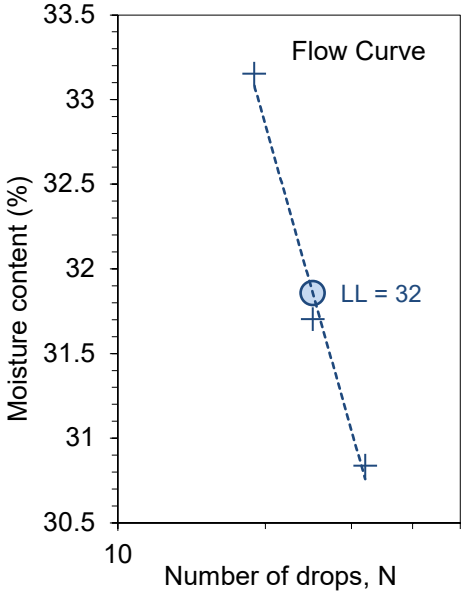
Determination No:	1	2
Wet Soil + Tare (g):	19.95	20.16
Dry Soil + Tare (g):	19.14	19.35
Moisture Loss (g):	0.81	0.81
Tare (g):	13.37	13.72
Dry Soil (g):	5.77	5.63
Moisture Content, w (%):	14.04	14.39

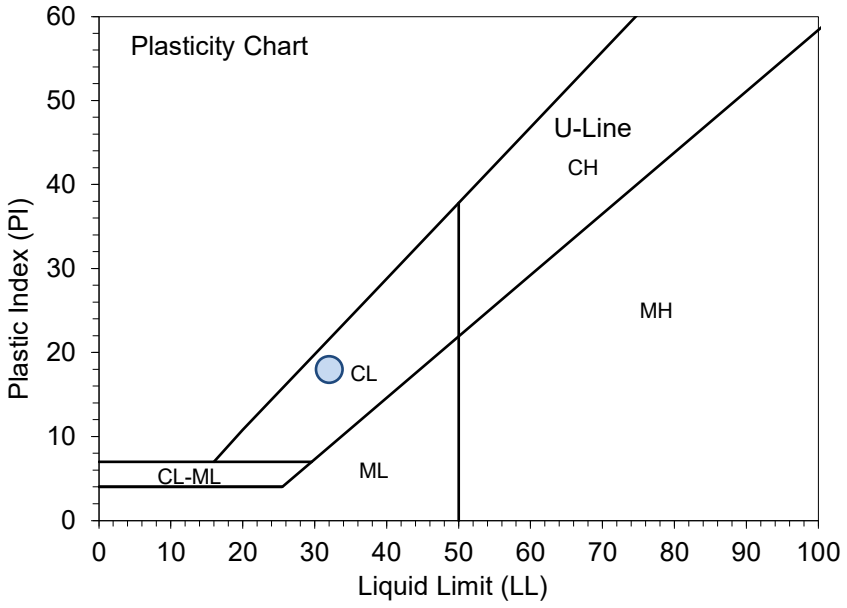
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	32	25	19
Wet Soil + Tare (g):	24.78	24.96	26.04
Dry Soil + Tare (g):	22.10	22.17	22.95
Moisture Loss (g):	2.68	2.79	3.09
Tare (g):	13.41	13.37	13.63
Dry Soil (g):	8.69	8.80	9.32
Moisture Content, w (%):	30.84	31.70	33.15
One-Point LL:		32	

Results

Liquid Limit, LL:	32
Plastic Limit, PL:	14
Plasticity Index, PI:	18





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-11

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Tested by: CML Date: 13-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn clay
As-received water content(%):	7.1	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	30
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

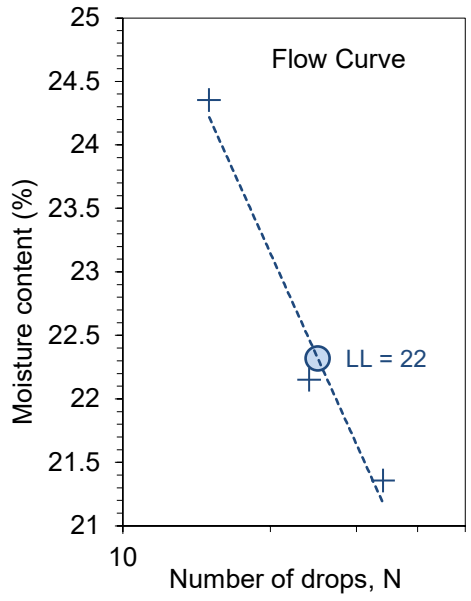
Determination No:	1	2
Wet Soil + Tare (g):	21.19	21.07
Dry Soil + Tare (g):	20.16	20.08
Moisture Loss (g):	1.03	0.99
Tare (g):	13.51	13.52
Dry Soil (g):	6.65	6.56
Moisture Content, w (%):	15.49	15.09

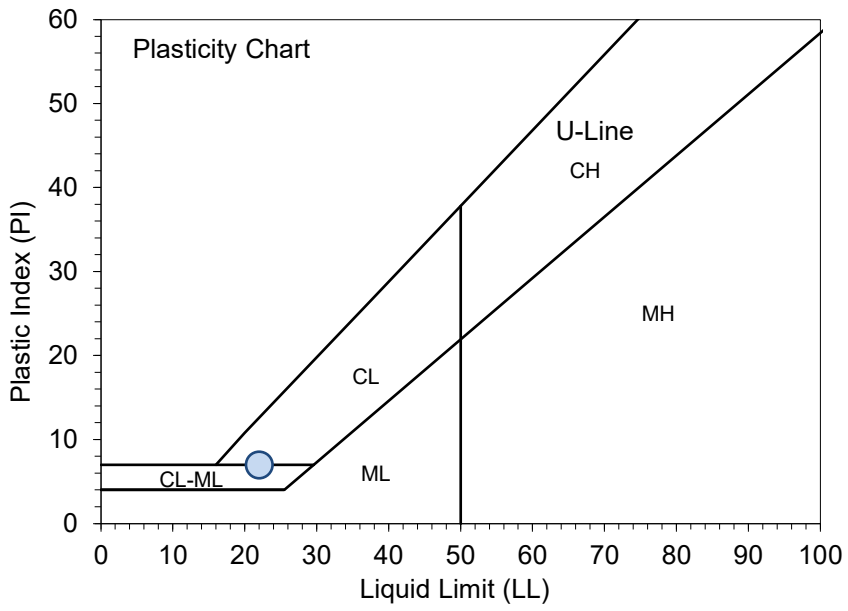
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	34	24	15
Wet Soil + Tare (g):	26.21	23.44	27.01
Dry Soil + Tare (g):	23.95	21.63	24.37
Moisture Loss (g):	2.26	1.81	2.64
Tare (g):	13.37	13.46	13.53
Dry Soil (g):	10.58	8.17	10.84
Moisture Content, w (%):	21.36	22.15	24.35
One-Point LL:		22	

Results

Liquid Limit, LL:	22
Plastic Limit, PL:	15
Plasticity Index, PI:	7





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 5-7 ft

Tested by: AT Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn clay
As-received water content(%):	10.2	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	15
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

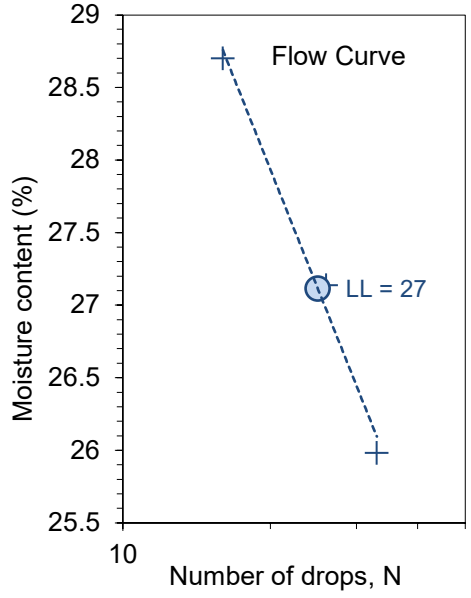
Determination No:	1	2
Wet Soil + Tare (g):	21.43	19.90
Dry Soil + Tare (g):	20.42	18.89
Moisture Loss (g):	1.01	1.01
Tare (g):	13.70	12.28
Dry Soil (g):	6.72	6.61
Moisture Content, w (%):	15.03	15.28

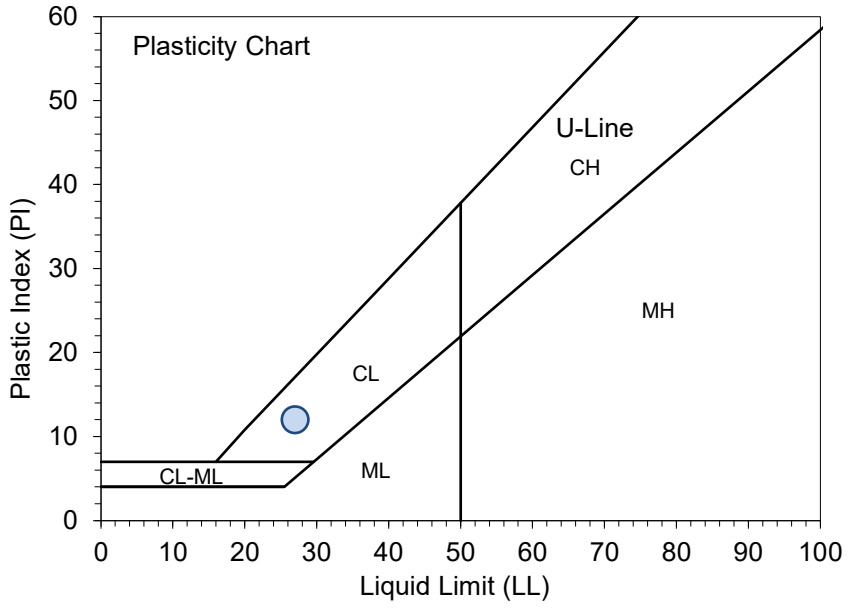
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	33	26	16
Wet Soil + Tare (g):	27.08	27.26	26.22
Dry Soil + Tare (g):	24.24	24.31	23.41
Moisture Loss (g):	2.84	2.95	2.81
Tare (g):	13.31	13.44	13.62
Dry Soil (g):	10.93	10.87	9.79
Moisture Content, w (%):	25.98	27.14	28.70
One-Point LL:		27	

Results

Liquid Limit, LL:	27
Plastic Limit, PL:	15
Plasticity Index, PI:	12





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 10-12 ft

Tested by: CML Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn silt
As-received water content(%):	12.8	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

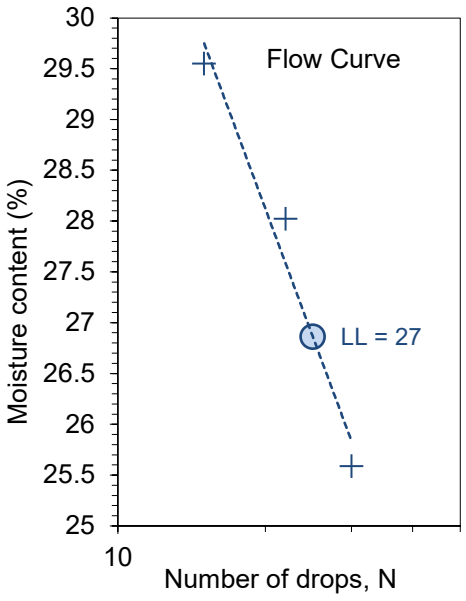
Determination No:	1	2
Wet Soil + Tare (g):	21.25	21.25
Dry Soil + Tare (g):	20.12	20.16
Moisture Loss (g):	1.13	1.09
Tare (g):	13.48	13.69
Dry Soil (g):	6.64	6.47
Moisture Content, w (%):	17.02	16.85

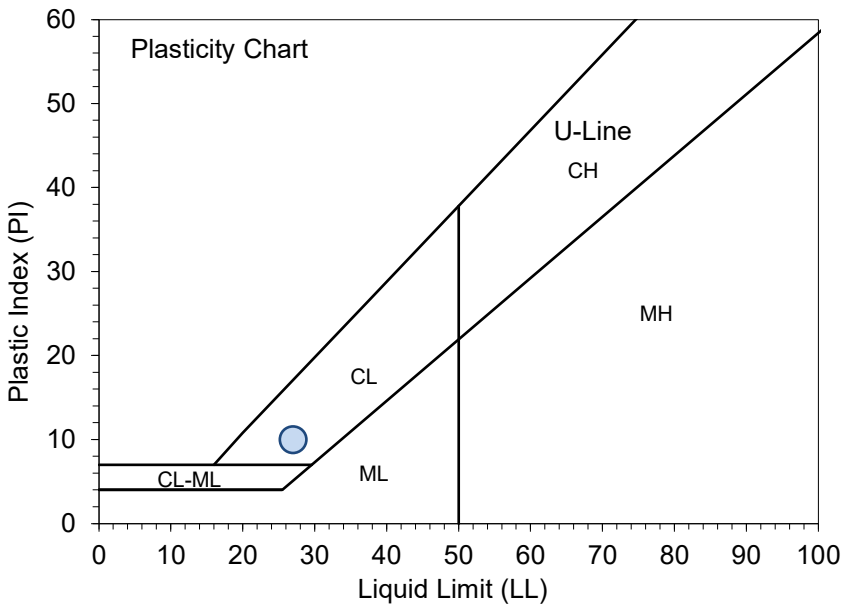
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	22	15
Wet Soil + Tare (g):	26.06	25.37	26.24
Dry Soil + Tare (g):	23.47	22.80	23.27
Moisture Loss (g):	2.59	2.57	2.97
Tare (g):	13.35	13.63	13.22
Dry Soil (g):	10.12	9.17	10.05
Moisture Content, w (%):	25.59	28.03	29.55
One-Point LL:	26	28	

Results

Liquid Limit, LL:	27
Plastic Limit, PL:	17
Plasticity Index, PI:	10





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 20-21 ft

Tested by: PJF Date: 14-Nov-23

Reduced by: DBW Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt ol bn - lt bn clay
As-received water content(%):	10.6	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

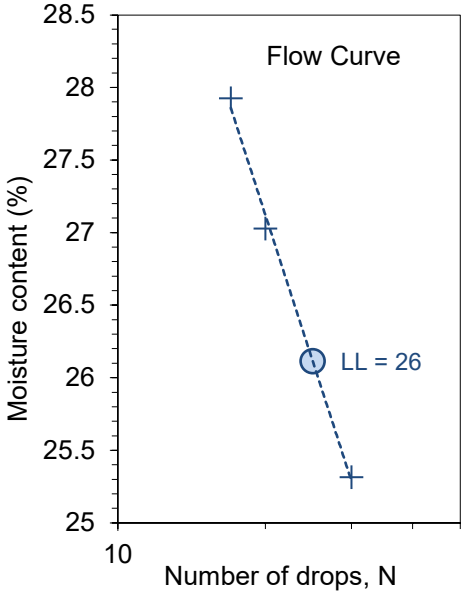
Determination No:	1	2
Wet Soil + Tare (g):	20.36	20.51
Dry Soil + Tare (g):	19.50	19.65
Moisture Loss (g):	0.86	0.86
Tare (g):	13.51	13.56
Dry Soil (g):	5.99	6.09
Moisture Content, w (%):	14.36	14.12

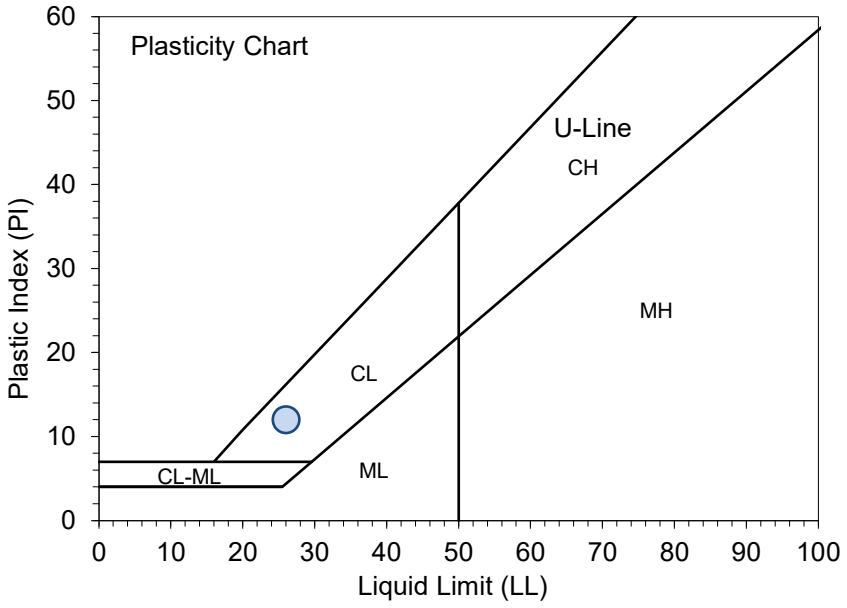
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	30	20	17
Wet Soil + Tare (g):	27.36	25.95	26.13
Dry Soil + Tare (g):	24.56	23.02	23.34
Moisture Loss (g):	2.80	2.93	2.79
Tare (g):	13.50	12.18	13.35
Dry Soil (g):	11.06	10.84	9.99
Moisture Content, w (%):	25.32	27.03	27.93
One-Point LL:	26	26	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	14
Plasticity Index, PI:	12





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Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 18-19 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: gy - bn clay

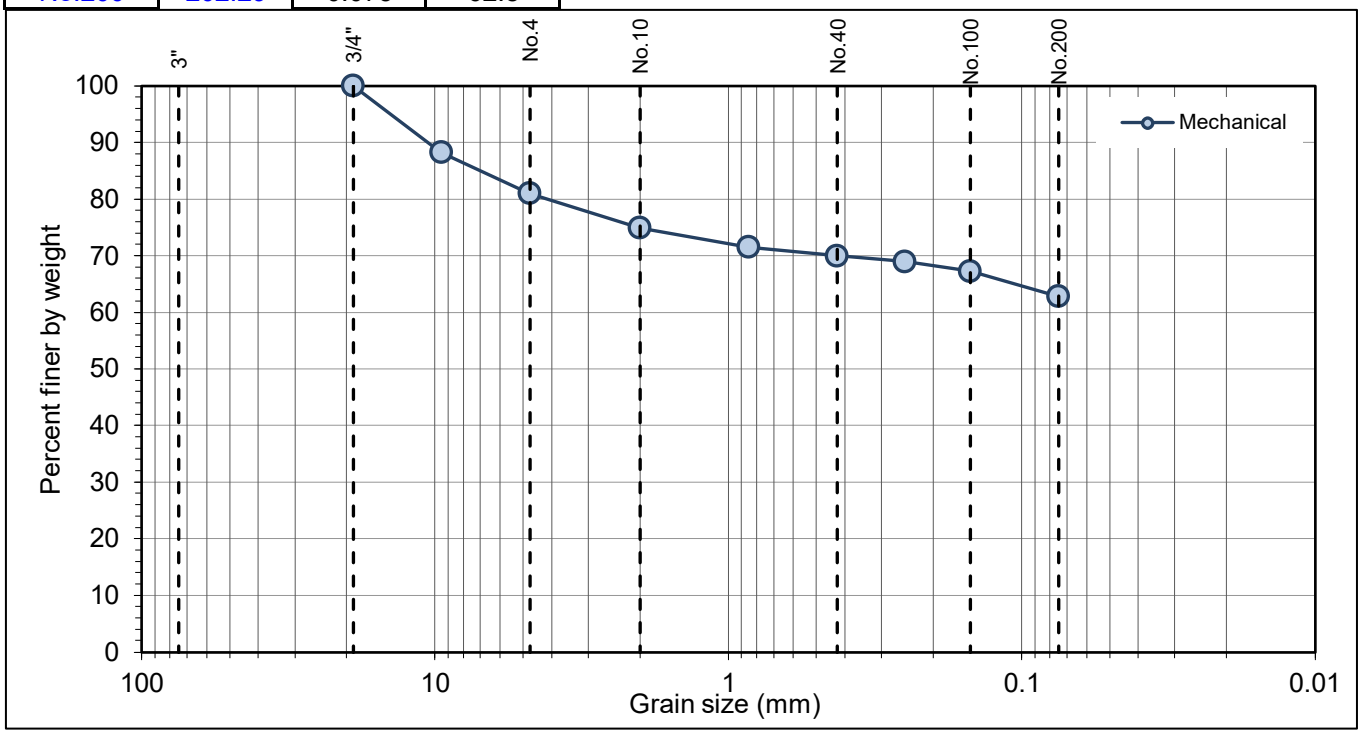
Reduced by: AT Comments: 1.5" rock not included in curve (274.56 g).

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	611.04	543.90
	-	
	611.04	543.90
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	806.82
Dry soil + tare (g):	-	739.68
Tare (g):	-	195.78
Moisture content (%):	0.0	12.3

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	63.83	9.5	88.3
No.4	103.44	4.75	81.0
No.10	136.66	2	74.9
No.20	154.83	0.85	71.5
No.40	163.20	0.425	70.0
No.60	168.87	0.25	69.0
No.100	177.88	0.15	67.3
No.200	202.29	0.075	62.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 27-29 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: bn - gy clay

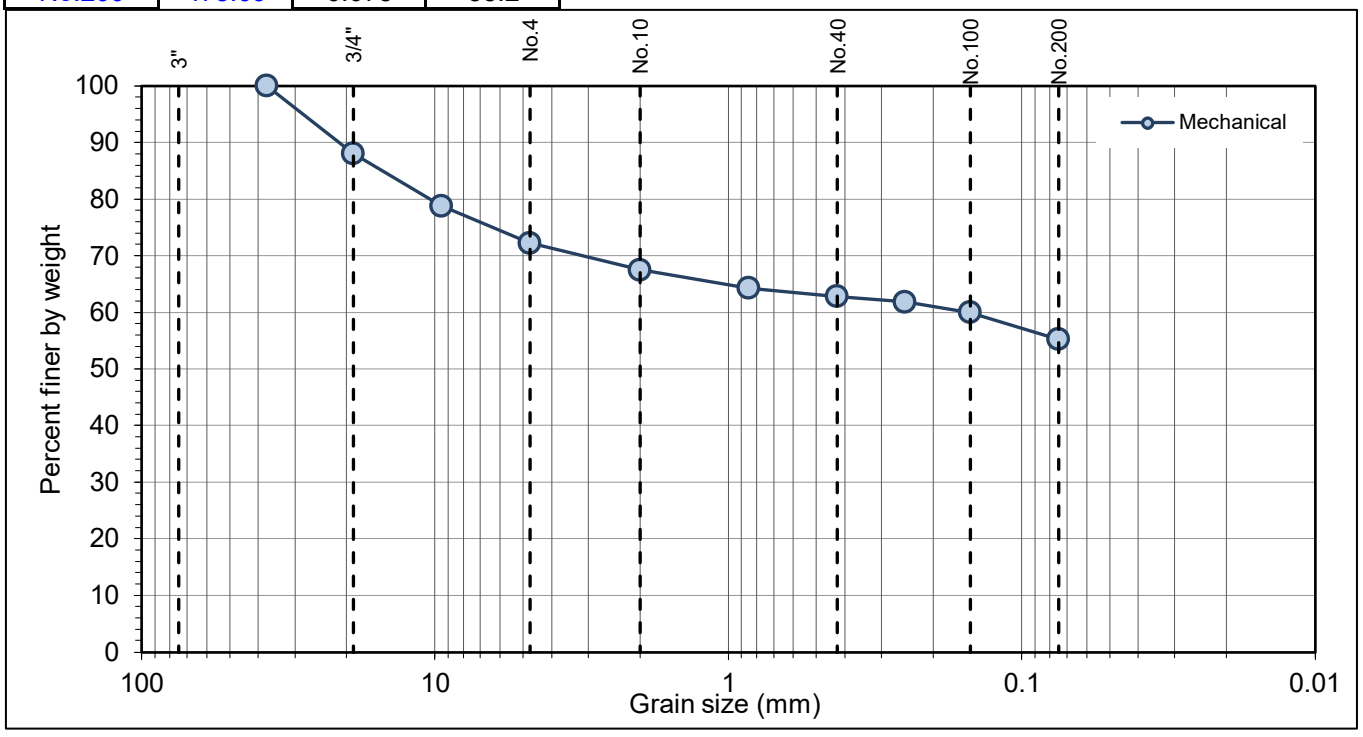
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1176.70	1060.40
	-	
	1176.70	1060.40
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1190.54
Dry soil + tare (g):	-	1074.24
Tare (g):	-	13.84
Moisture content (%):	0.0	11.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	126.52	19	88.1
3/8"	224.74	9.5	78.8
No.4	294.18	4.75	72.3
No.10	344.98	2	67.5
No.20	378.88	0.85	64.3
No.40	394.65	0.425	62.8
No.60	404.46	0.25	61.9
No.100	424.49	0.15	60.0
No.200	475.09	0.075	55.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 54.5-57 ft

Date: 16-Nov-23 Location: -

Tested by: DBW Lab soil description: gy - dk gy clay

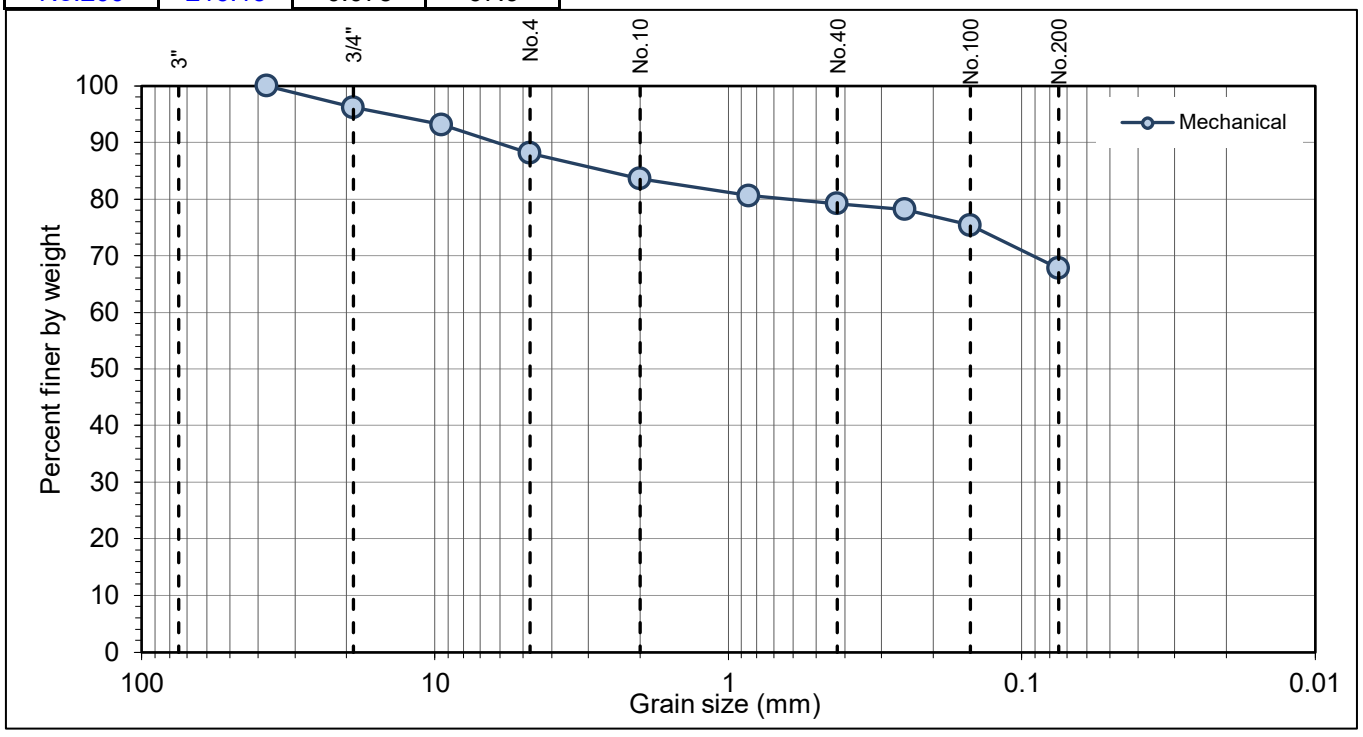
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	756.76	672.36
	-	
	756.76	672.36
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	953.45
Dry soil + tare (g):	-	869.05
Tare (g):	-	196.69
Moisture content (%):	0.0	12.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	25.43	19	96.2
3/8"	45.79	9.5	93.2
No.4	79.85	4.75	88.1
No.10	110.12	2	83.6
No.20	130.27	0.85	80.6
No.40	139.92	0.425	79.2
No.60	146.52	0.25	78.2
No.100	165.51	0.15	75.4
No.200	216.13	0.075	67.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 67-69 ft

Date: 16-Nov-23 Location: -

Tested by: DBW Lab soil description: dk gy - lt bn clay

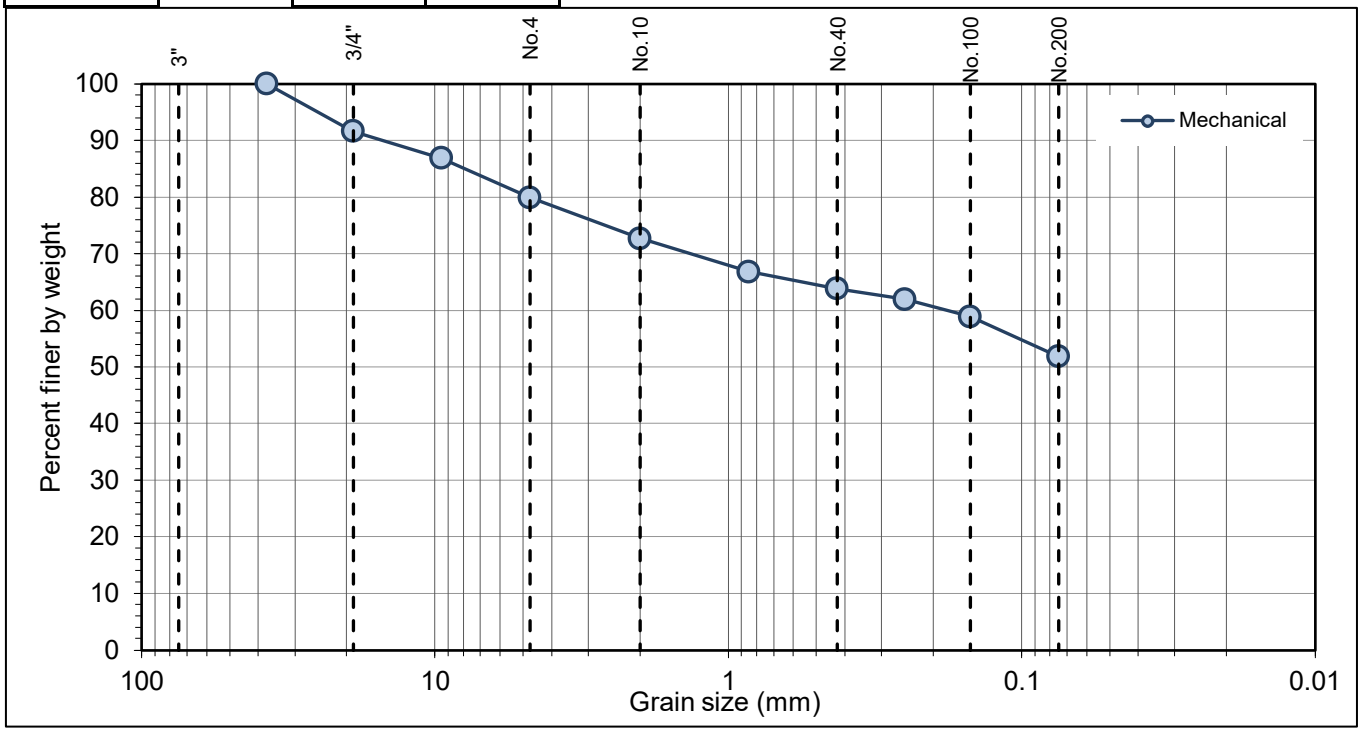
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	651.92	592.70
	-	
	651.92	592.70
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	847.34
Dry soil + tare (g):	-	788.12
Tare (g):	-	195.42
Moisture content (%):	0.0	10.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	49.64	19	91.6
3/8"	77.83	9.5	86.9
No.4	119.04	4.75	79.9
No.10	161.80	2	72.7
No.20	196.75	0.85	66.8
No.40	214.54	0.425	63.8
No.60	225.55	0.25	61.9
No.100	243.72	0.15	58.9
No.200	285.30	0.075	51.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 72.5-75 ft

Date: 16-Nov-23 Location: -

Tested by: DBW Lab soil description: gy - dk gy clay

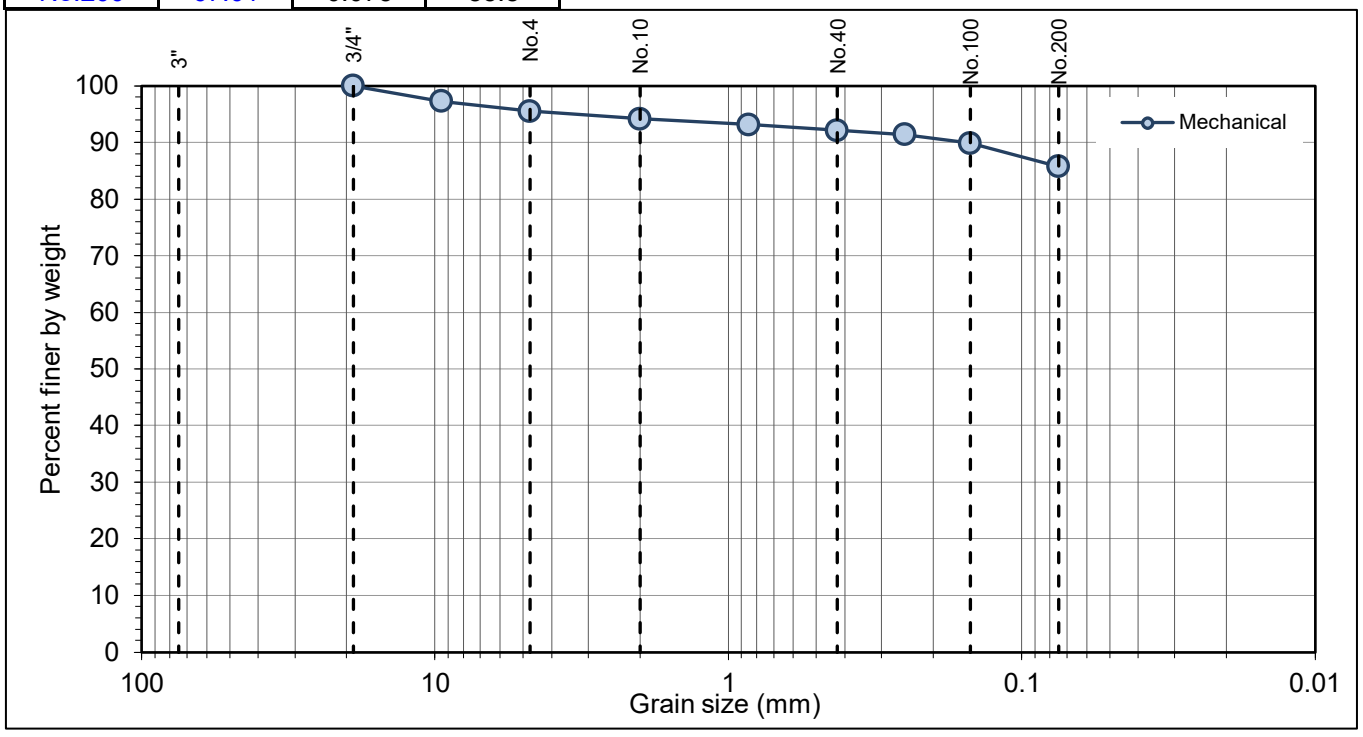
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	570.23	472.61
	-	
	570.23	472.61
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	688.39
Dry soil + tare (g):	-	590.77
Tare (g):	-	118.16
Moisture content (%):	0.0	20.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	12.74	9.5	97.3
No.4	21.18	4.75	95.5
No.10	27.46	2	94.2
No.20	32.38	0.85	93.1
No.40	36.99	0.425	92.2
No.60	40.67	0.25	91.4
No.100	47.81	0.15	89.9
No.200	67.01	0.075	85.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 14.5-16 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: bn - ol bn clay

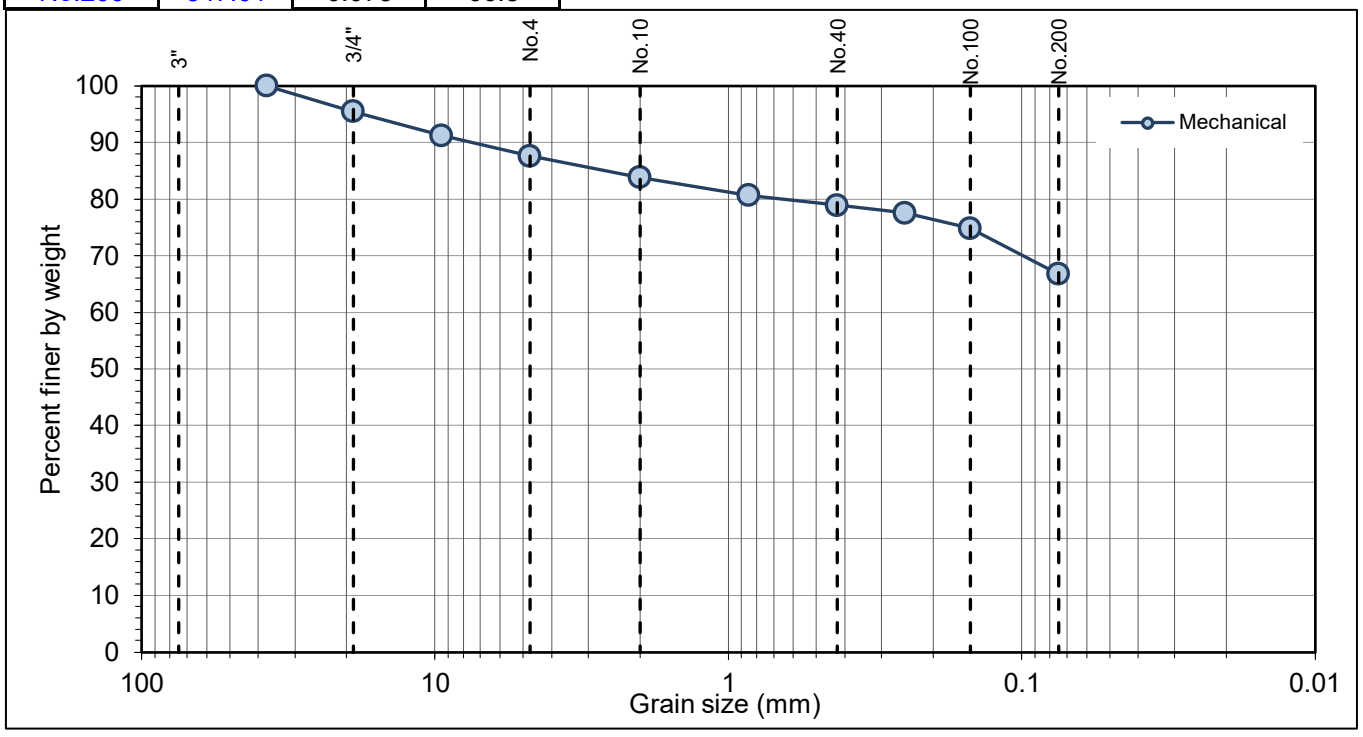
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1841.90	1646.32
	-	
	1841.90	1646.32
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	2264.09
Dry soil + tare (g):	-	2068.51
Tare (g):	-	422.19
Moisture content (%):	0.0	11.9

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	74.19	19	95.5
3/8"	144.60	9.5	91.2
No.4	203.84	4.75	87.6
No.10	266.51	2	83.8
No.20	318.13	0.85	80.7
No.40	347.49	0.425	78.9
No.60	369.50	0.25	77.6
No.100	413.96	0.15	74.9
No.200	547.01	0.075	66.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: bn - ol bn clay

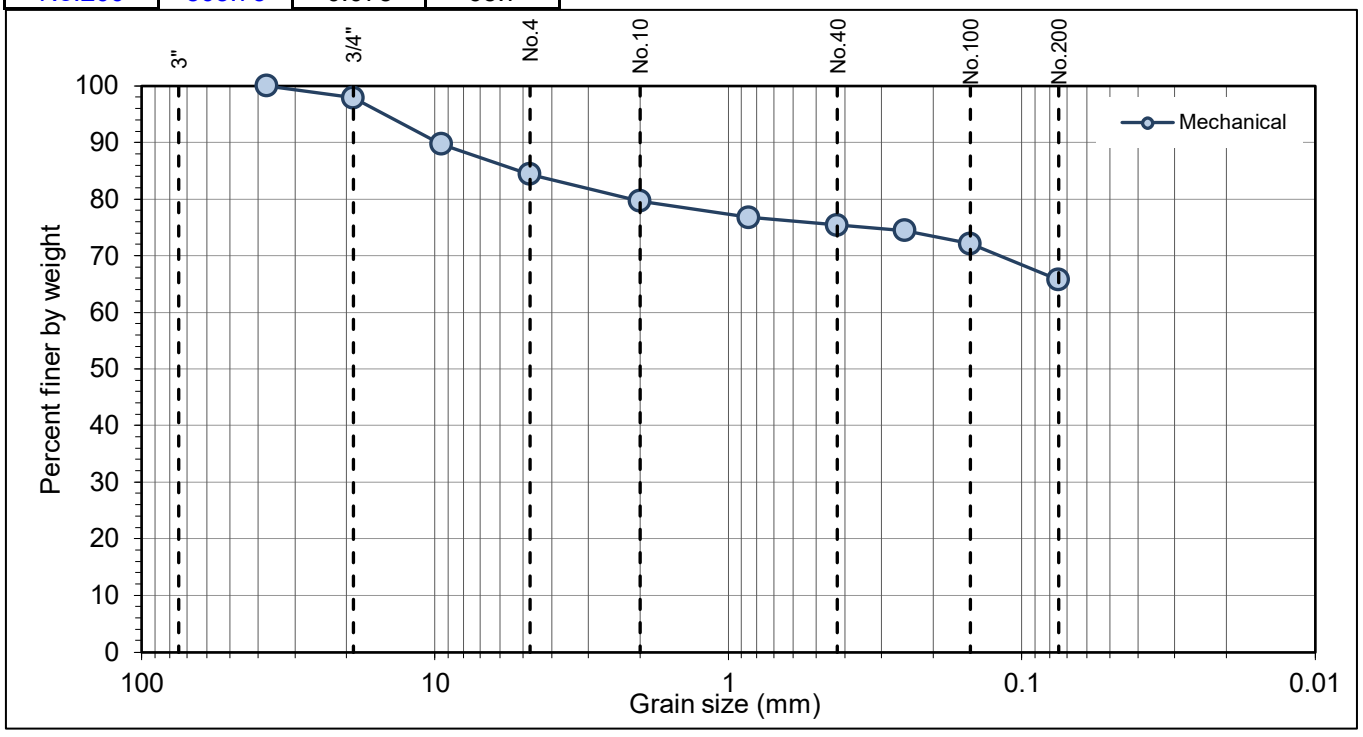
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1666.16	1470.26
	-	
	1666.16	1470.26
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	2104.69
Dry soil + tare (g):	-	1908.79
Tare (g):	-	438.53
Moisture content (%):	0.0	13.3

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	30.28	19	97.9
3/8"	150.96	9.5	89.7
No.4	229.44	4.75	84.4
No.10	298.96	2	79.7
No.20	341.90	0.85	76.7
No.40	361.85	0.425	75.4
No.60	375.86	0.25	74.4
No.100	409.90	0.15	72.1
No.200	503.73	0.075	65.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 32-35 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: bn - dk yl bn clay

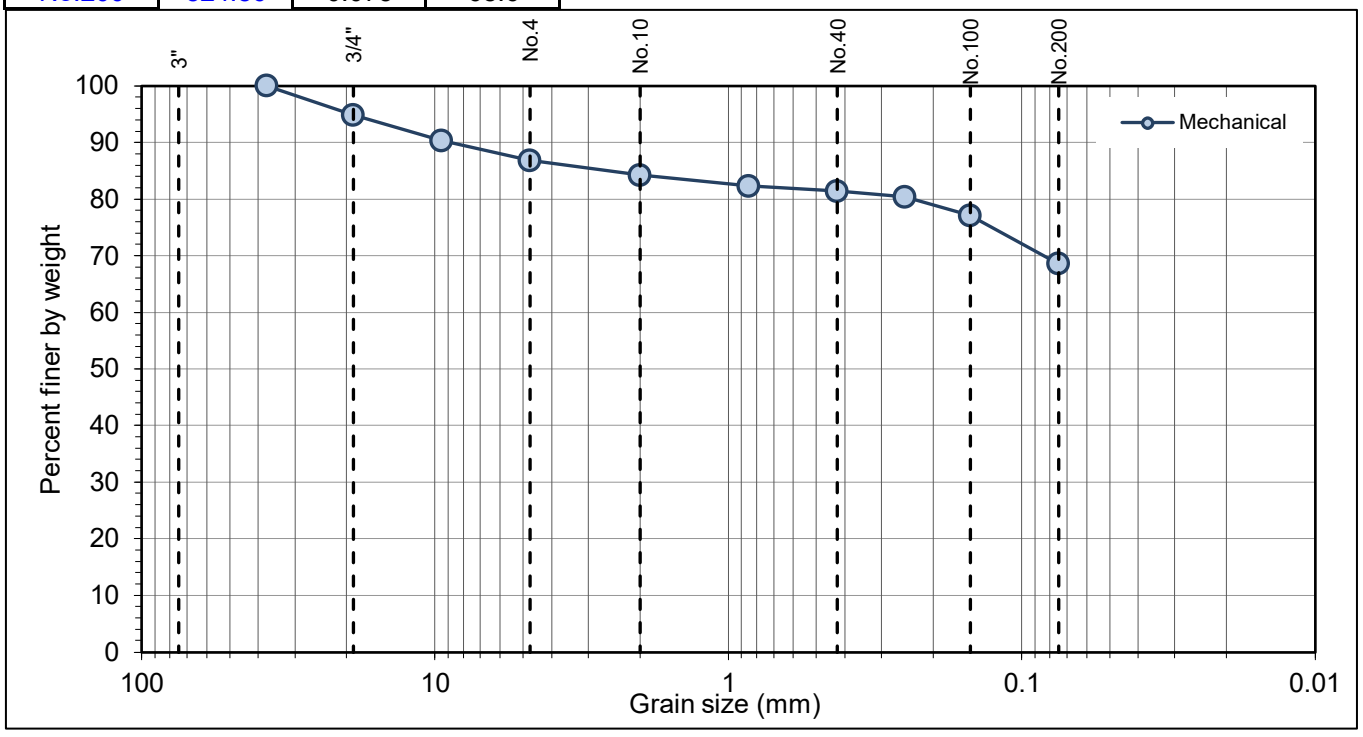
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1913.95	1670.91
	-	
	1913.95	1670.91
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	2453.36
Dry soil + tare (g):	-	2210.32
Tare (g):	-	539.41
Moisture content (%):	0.0	14.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	85.48	19	94.9
3/8"	161.21	9.5	90.4
No.4	219.81	4.75	86.8
No.10	263.64	2	84.2
No.20	295.15	0.85	82.3
No.40	311.17	0.425	81.4
No.60	327.50	0.25	80.4
No.100	382.33	0.15	77.1
No.200	524.86	0.075	68.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 38.5-40 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: lt ol bn - ol bn clay

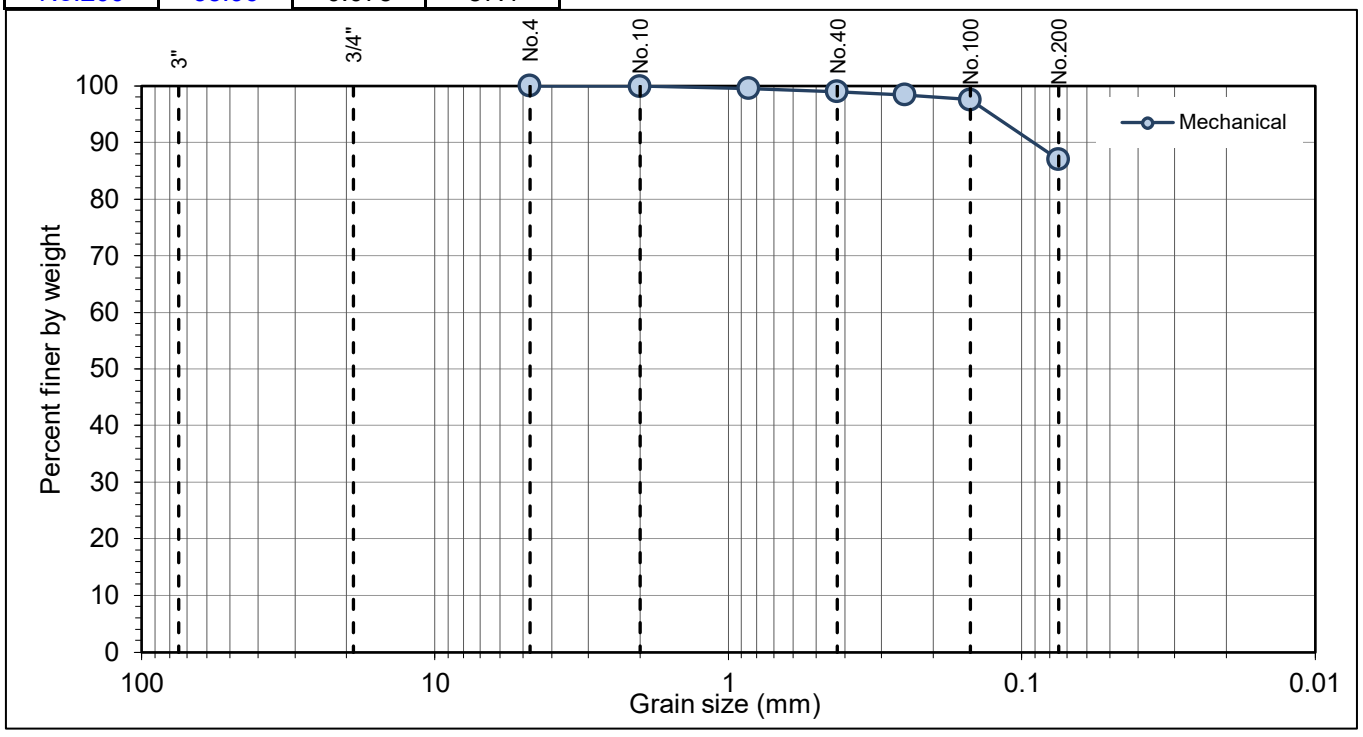
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	321.05	278.08
	-	
	321.05	278.08
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	448.30
Dry soil + tare (g):	-	405.33
Tare (g):	-	127.25
Moisture content (%):	0.0	15.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	-
No.4	-	4.75	100.0
No.10	0.15	2	99.9
No.20	1.17	0.85	99.6
No.40	2.85	0.425	99.0
No.60	4.46	0.25	98.4
No.100	6.75	0.15	97.6
No.200	35.96	0.075	87.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 52-55 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: gy - ol bn clay

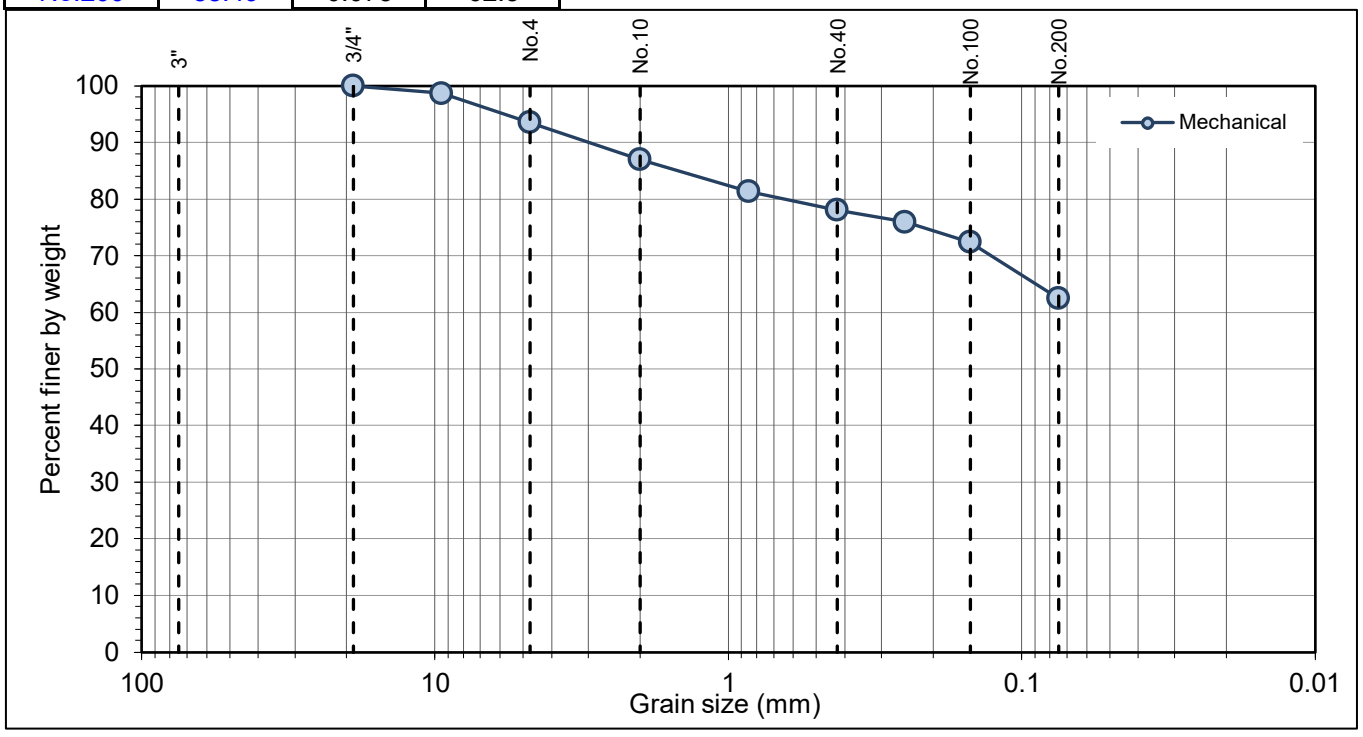
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	262.98	235.69
	-	
	262.98	235.69
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	460.49
Dry soil + tare (g):	-	433.20
Tare (g):	-	197.51
Moisture content (%):	0.0	11.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	3.09	9.5	98.7
No.4	15.18	4.75	93.6
No.10	30.60	2	87.0
No.20	44.01	0.85	81.3
No.40	51.69	0.425	78.1
No.60	56.57	0.25	76.0
No.100	65.04	0.15	72.4
No.200	88.49	0.075	62.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 60-62 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: lt bn - bn clay

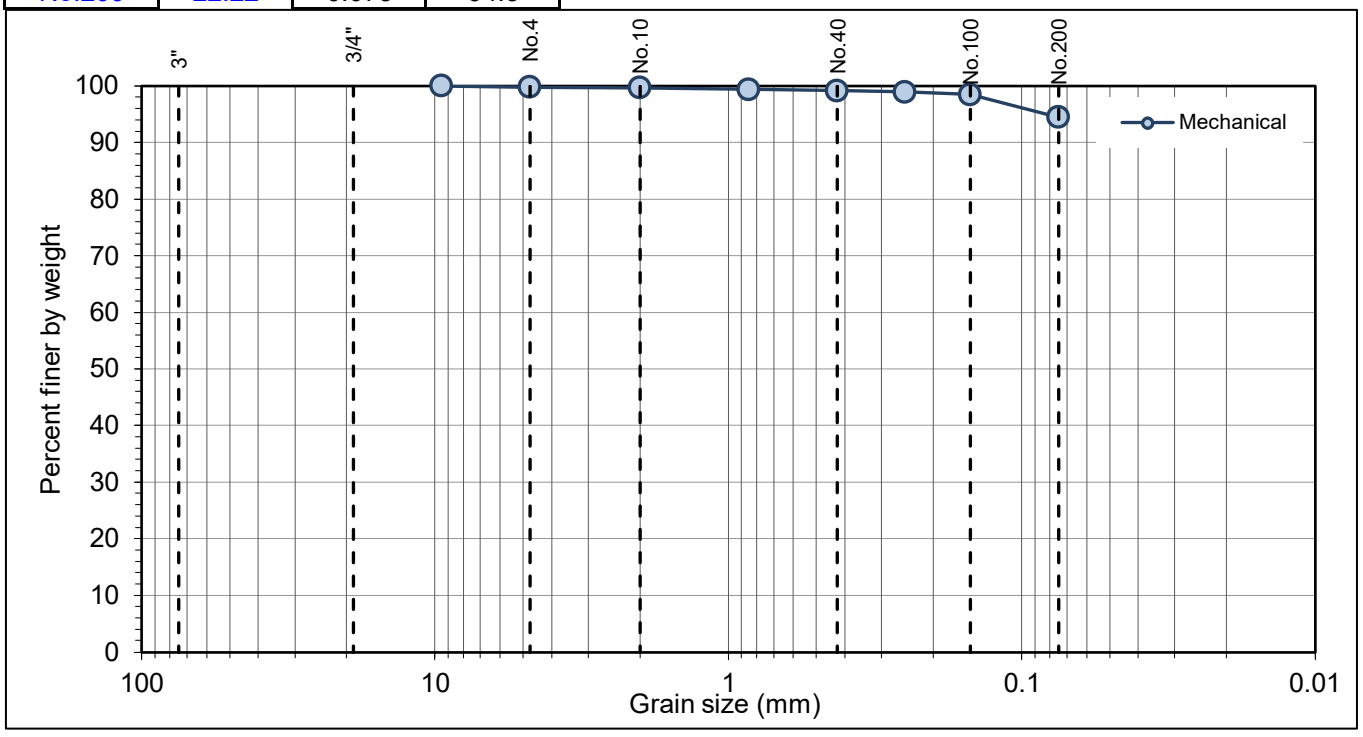
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	460.33	404.88
	-	
	460.33	404.88
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	656.13
Dry soil + tare (g):	-	600.68
Tare (g):	-	195.80
Moisture content (%):	0.0	13.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	100.0
No.4	0.93	4.75	99.8
No.10	1.29	2	99.7
No.20	2.54	0.85	99.4
No.40	3.42	0.425	99.2
No.60	4.29	0.25	98.9
No.100	6.05	0.15	98.5
No.200	22.22	0.075	94.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 64.5-67 ft

Date: 16-Nov-23 Location: -

Tested by: MGS Lab soil description: lt ol bn - ol bn clay

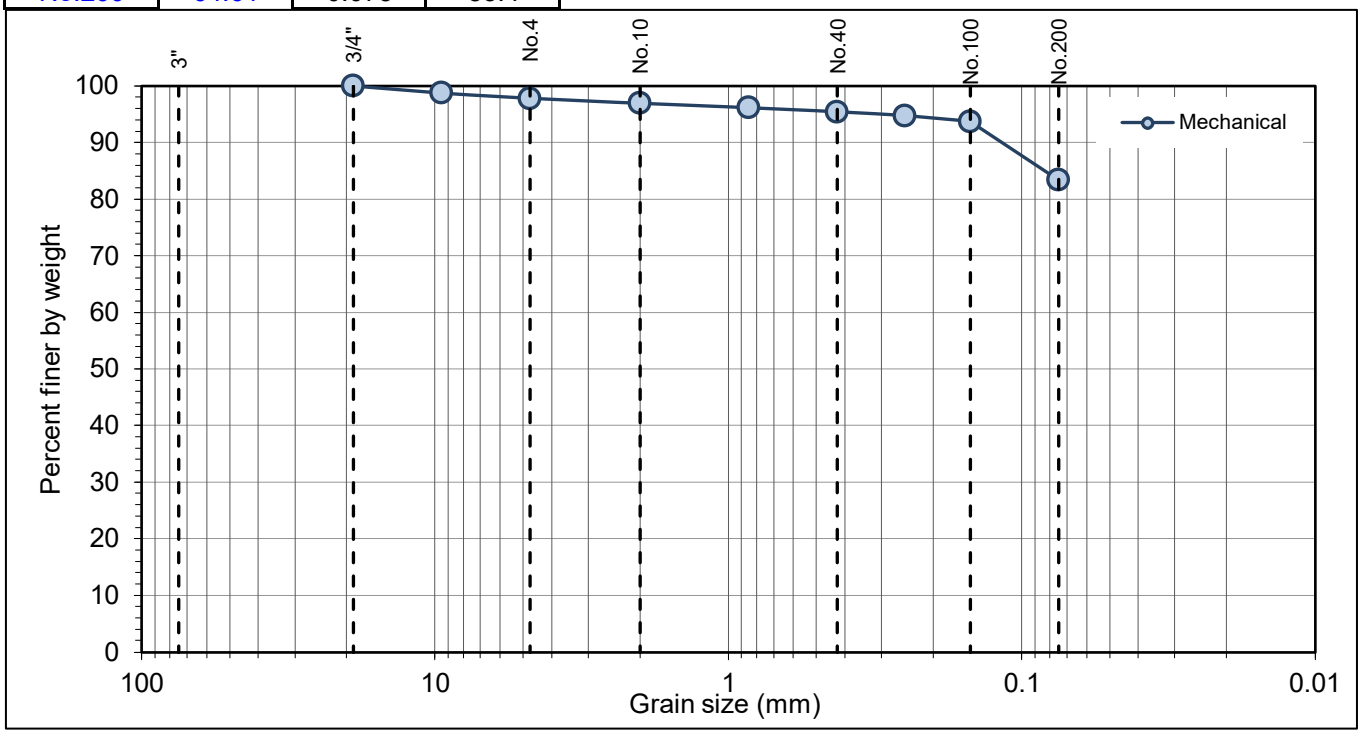
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	439.79	389.75
	-	
	439.79	389.75
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	566.47
Dry soil + tare (g):	-	516.43
Tare (g):	-	126.68
Moisture content (%):	0.0	12.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	4.88	9.5	98.7
No.4	8.54	4.75	97.8
No.10	11.97	2	96.9
No.20	14.92	0.85	96.2
No.40	17.72	0.425	95.5
No.60	20.42	0.25	94.8
No.100	24.38	0.15	93.7
No.200	64.61	0.075	83.4



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 4.5-7 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: lt bn - bn clay

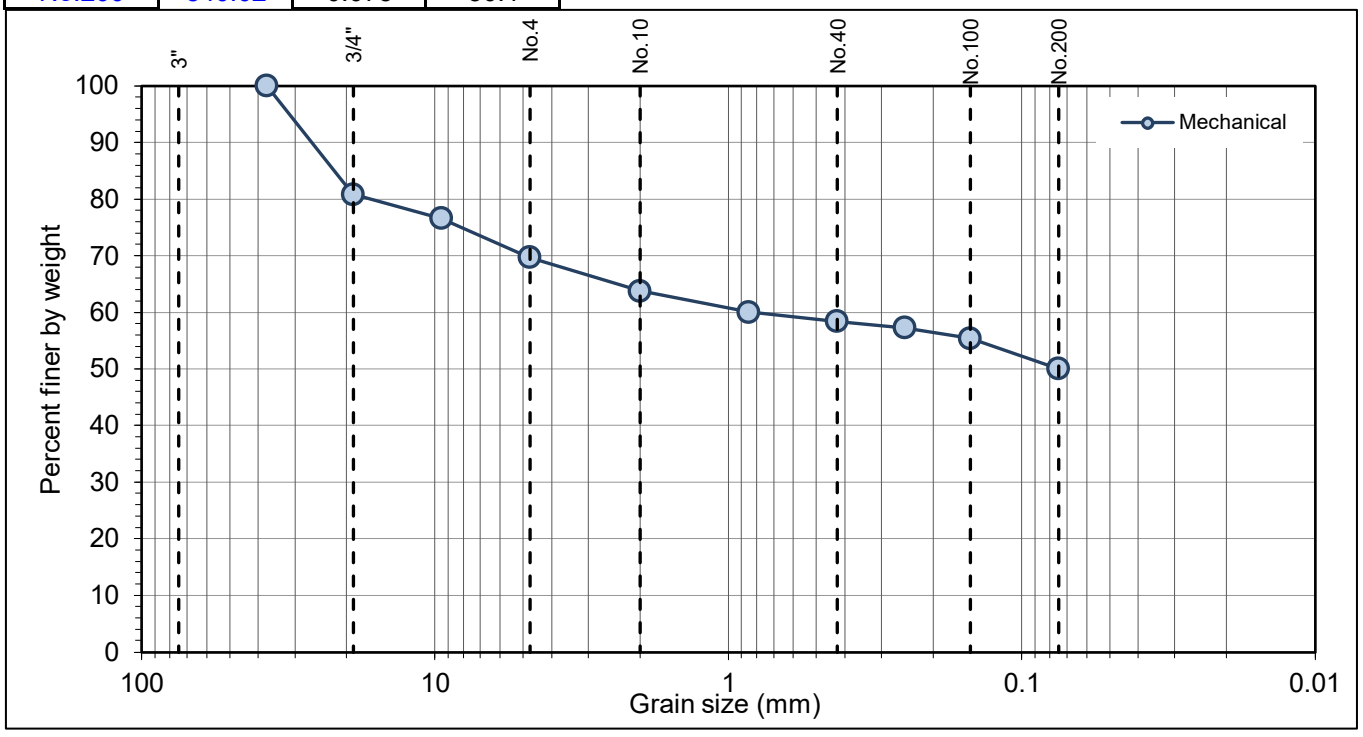
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1190.05	1081.24
	-	
	1190.05	1081.24
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1630.20
Dry soil + tare (g):	-	1521.39
Tare (g):	-	440.15
Moisture content (%):	0.0	10.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	207.44	19	80.8
3/8"	253.12	9.5	76.6
No.4	327.87	4.75	69.7
No.10	391.94	2	63.8
No.20	432.35	0.85	60.0
No.40	450.20	0.425	58.4
No.60	461.91	0.25	57.3
No.100	482.07	0.15	55.4
No.200	540.02	0.075	50.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: pl ol bn - bn clay

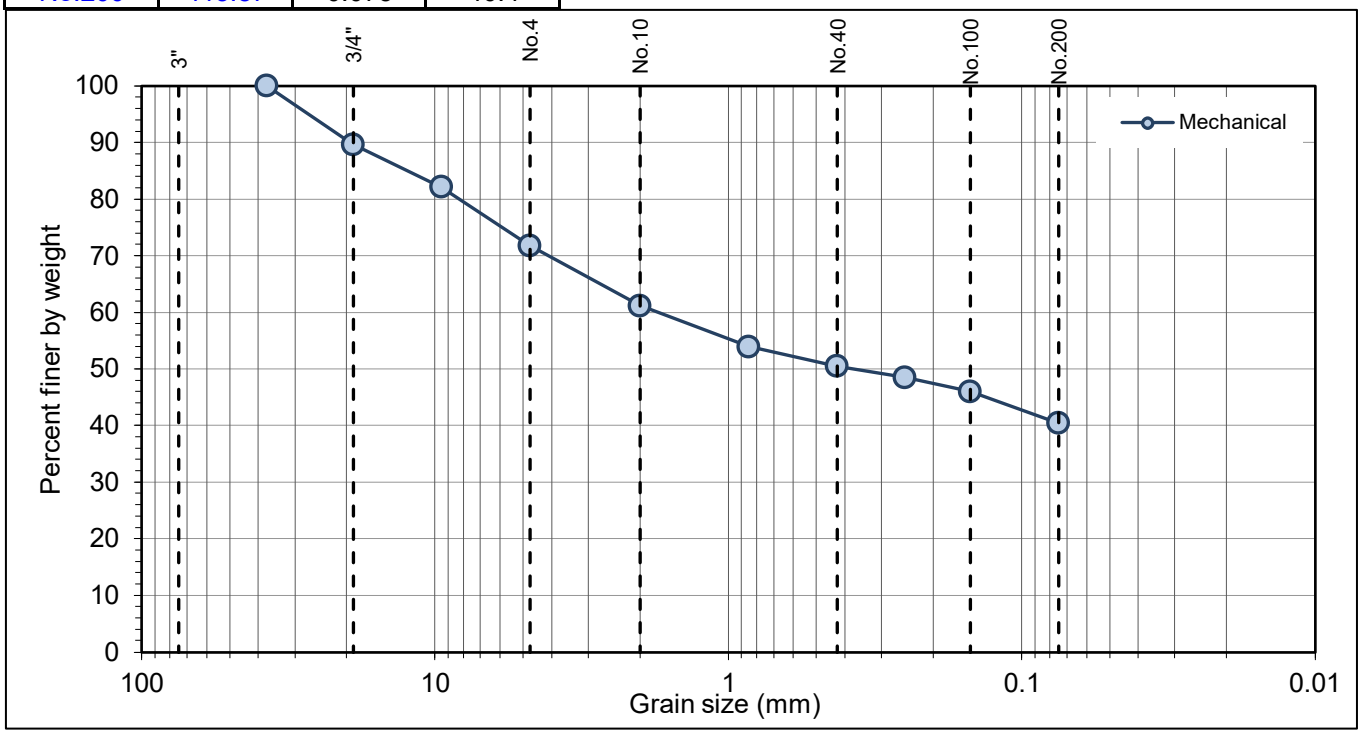
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	753.04	694.60
	-	
	753.04	694.60
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	872.07
Dry soil + tare (g):	-	813.63
Tare (g):	-	119.03
Moisture content (%):	0.0	8.4

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	71.73	19	89.7
3/8"	124.07	9.5	82.1
No.4	195.76	4.75	71.8
No.10	269.78	2	61.2
No.20	320.16	0.85	53.9
No.40	343.81	0.425	50.5
No.60	357.58	0.25	48.5
No.100	374.88	0.15	46.0
No.200	413.87	0.075	40.4



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - bn clay

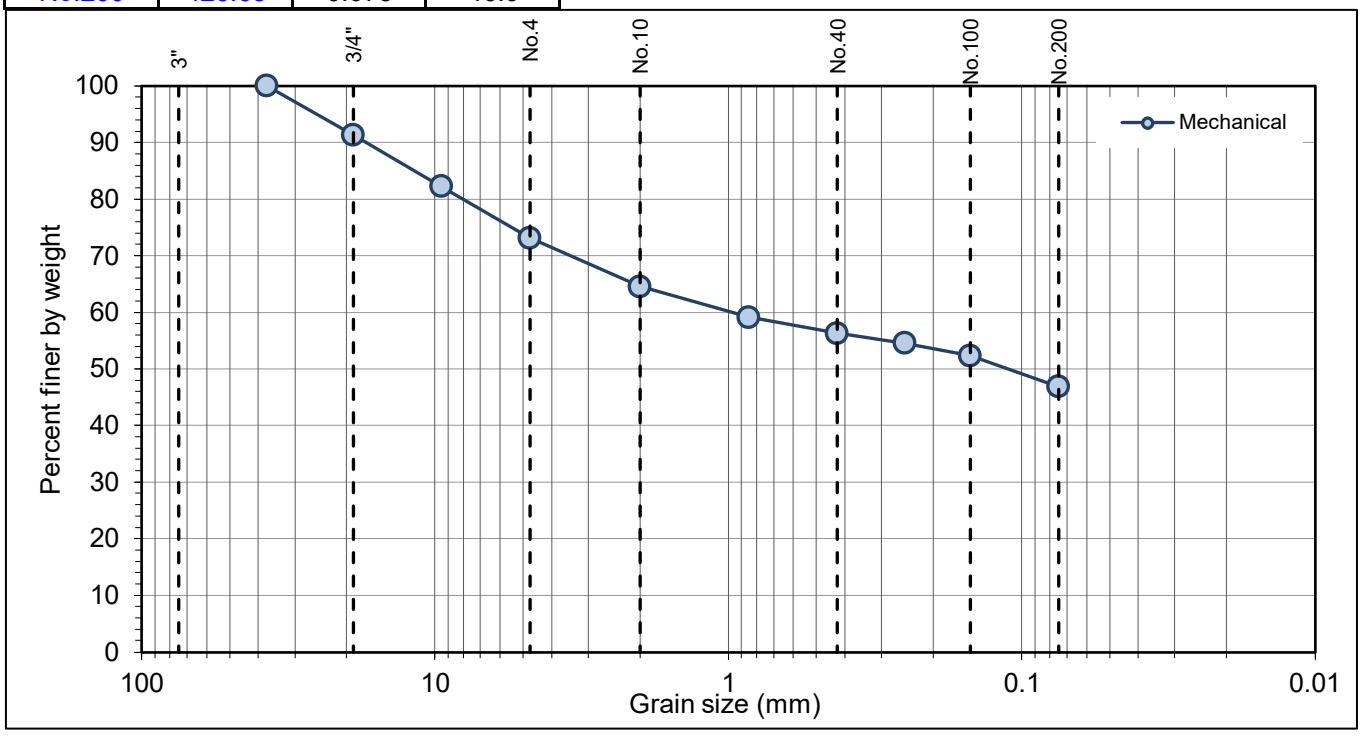
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	902.23	802.85
	-	
	902.23	802.85
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1046.88
Dry soil + tare (g):	-	947.50
Tare (g):	-	144.65
Moisture content (%):	0.0	12.4

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	69.23	19	91.4
3/8"	142.35	9.5	82.3
No.4	215.38	4.75	73.2
No.10	284.76	2	64.5
No.20	328.36	0.85	59.1
No.40	350.76	0.425	56.3
No.60	364.76	0.25	54.6
No.100	382.68	0.15	52.3
No.200	426.63	0.075	46.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-03

No: 23072 (23-1725) **Depth:** 30-33 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: bn - dk bn clay

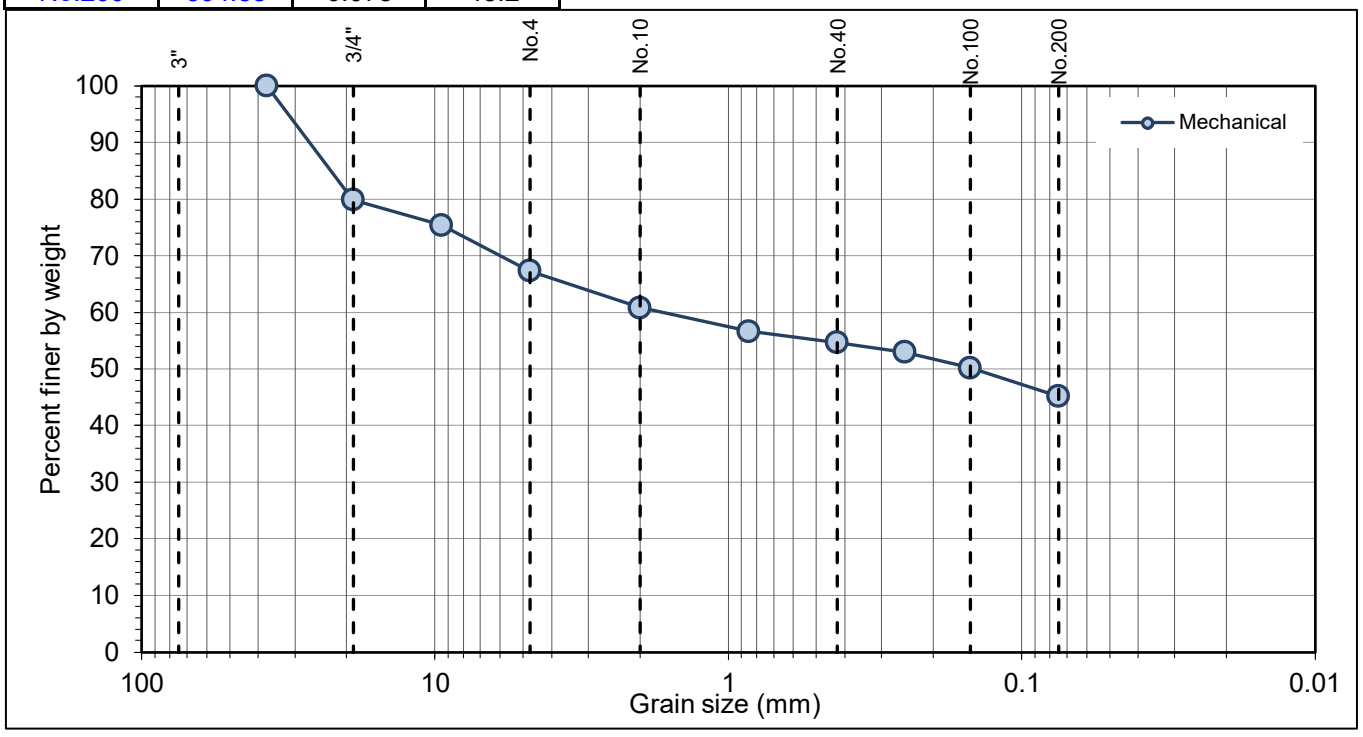
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	798.88	720.83
	-	-
	798.88	720.83
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	943.07
Dry soil + tare (g):	-	865.02
Tare (g):	-	144.19
Moisture content (%):	0.0	10.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	144.91	19	79.9
3/8"	177.22	9.5	75.4
No.4	235.48	4.75	67.3
No.10	282.48	2	60.8
No.20	312.47	0.85	56.7
No.40	326.73	0.425	54.7
No.60	339.06	0.25	53.0
No.100	359.09	0.15	50.2
No.200	394.88	0.075	45.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 7-10 ft

Date: 13-Nov-23 Location: -

Tested by: MGS Lab soil description: lt ol bn - bn clay

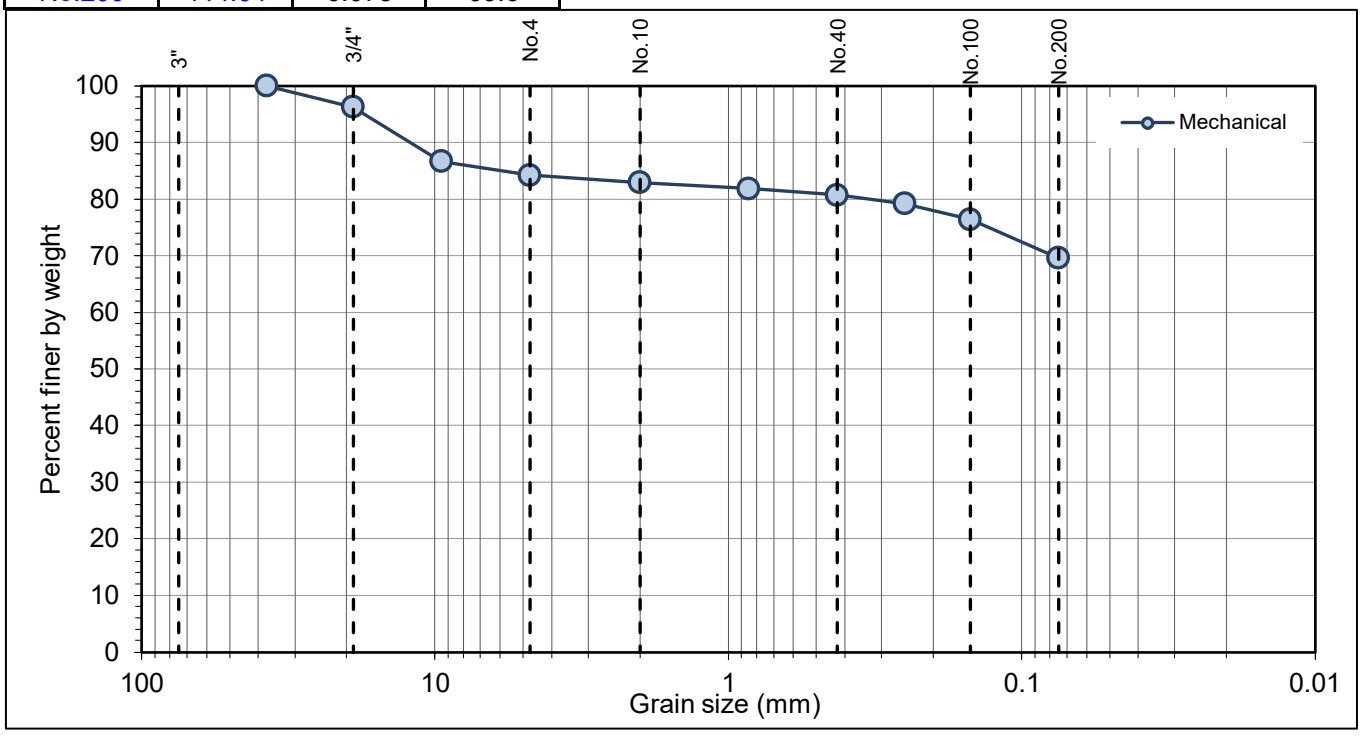
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	457.24	375.28
	-	
	457.24	375.28
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	653.16
Dry soil + tare (g):	-	571.20
Tare (g):	-	195.92
Moisture content (%):	0.0	21.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	13.96	19	96.3
3/8"	50.13	9.5	86.6
No.4	59.19	4.75	84.2
No.10	64.15	2	82.9
No.20	68.10	0.85	81.9
No.40	72.24	0.425	80.8
No.60	78.10	0.25	79.2
No.100	88.55	0.15	76.4
No.200	114.04	0.075	69.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 14.5-17 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: pl ol bn - lt bn silt

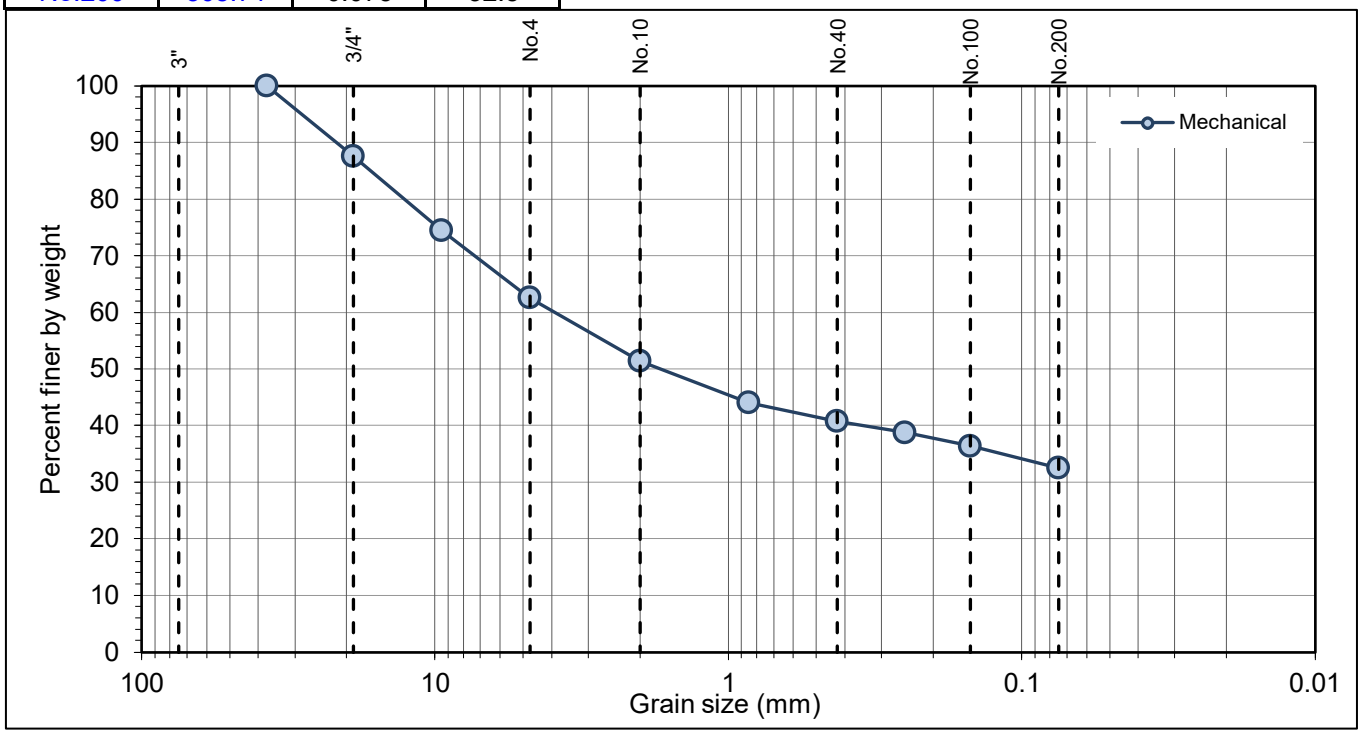
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	483.56	452.93
	-	
	483.56	452.93
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	601.88
Dry soil + tare (g):	-	571.25
Tare (g):	-	118.32
Moisture content (%):	0.0	6.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	56.10	19	87.6
3/8"	115.44	9.5	74.5
No.4	169.54	4.75	62.6
No.10	220.10	2	51.4
No.20	253.53	0.85	44.0
No.40	268.38	0.425	40.7
No.60	277.44	0.25	38.7
No.100	288.21	0.15	36.4
No.200	305.71	0.075	32.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: ol bn - bn silt

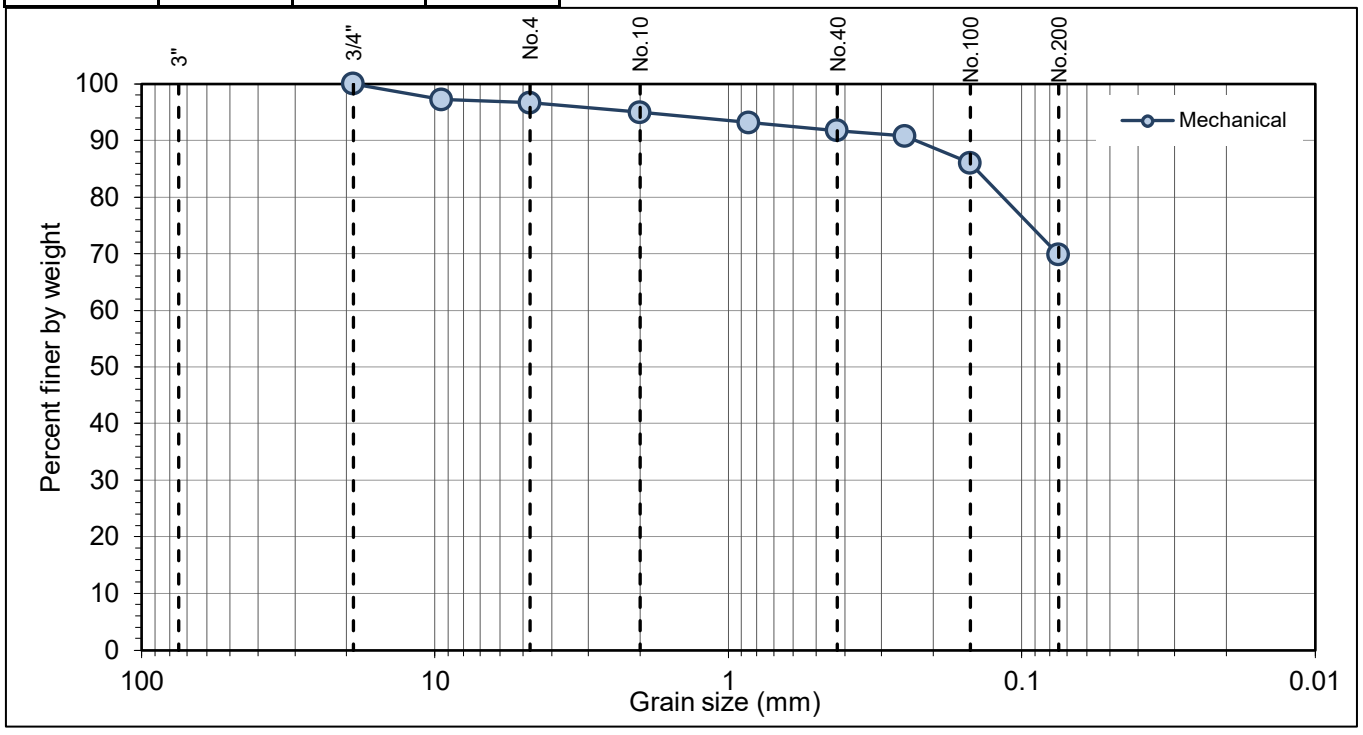
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	434.54	373.10
		-
	434.54	373.10
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	555.20
Dry soil + tare (g):	-	493.76
Tare (g):	-	120.66
Moisture content (%):	0.0	16.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	10.30	9.5	97.2
No.4	12.34	4.75	96.7
No.10	18.72	2	95.0
No.20	25.54	0.85	93.2
No.40	30.76	0.425	91.8
No.60	34.37	0.25	90.8
No.100	52.13	0.15	86.0
No.200	112.39	0.075	69.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-04

No: 23072 (23-1725) **Depth:** 30-33 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: lt bn - bn clay

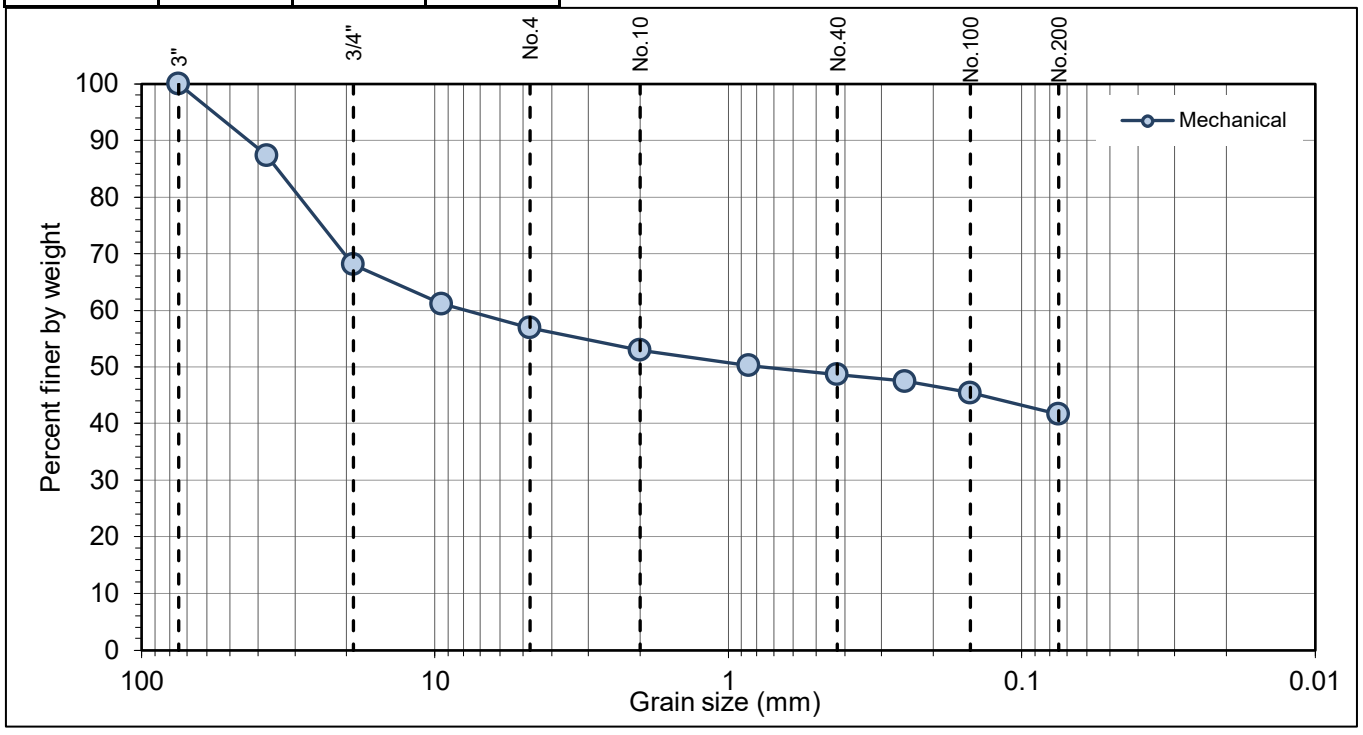
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1120.71	1018.98
	-	
	1120.71	1018.98
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1542.36
Dry soil + tare (g):	-	1440.63
Tare (g):	-	421.65
Moisture content (%):	0.0	10.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	100.0
1.5"	128.32	37.5	87.4
3/4"	325.14	19	68.1
3/8"	396.01	9.5	61.1
No.4	438.75	4.75	56.9
No.10	479.25	2	53.0
No.20	507.10	0.85	50.2
No.40	523.12	0.425	48.7
No.60	535.09	0.25	47.5
No.100	555.98	0.15	45.4
No.200	594.76	0.075	41.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Date: 14-Nov-23 Location: -

Tested by: MGS Lab soil description: ol bn - lt bn clay

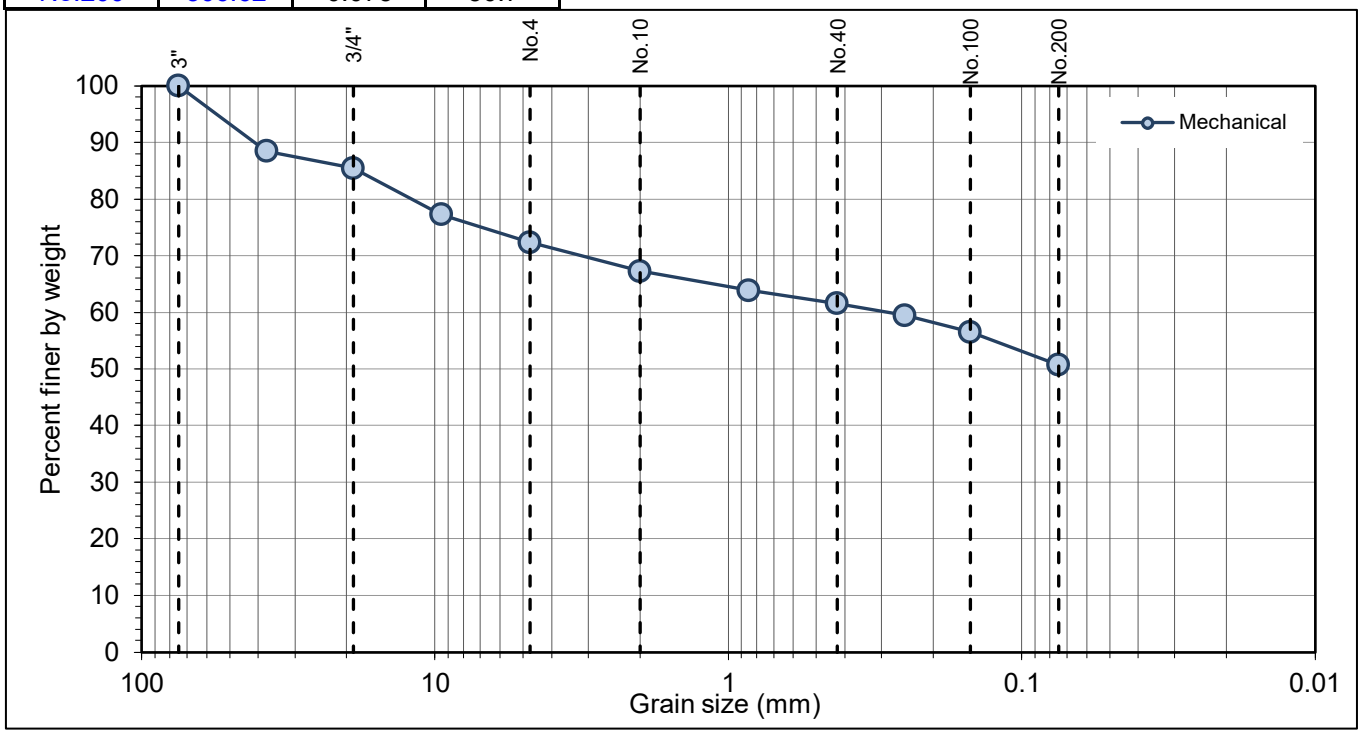
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	707.32	622.21
	-	
	707.32	622.21
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1129.47
Dry soil + tare (g):	-	1044.36
Tare (g):	-	422.15
Moisture content (%):	0.0	13.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	100.0
1.5"	71.56	37.5	88.5
3/4"	90.43	19	85.5
3/8"	141.32	9.5	77.3
No.4	172.00	4.75	72.4
No.10	203.64	2	67.3
No.20	224.65	0.85	63.9
No.40	239.11	0.425	61.6
No.60	252.04	0.25	59.5
No.100	270.48	0.15	56.5
No.200	306.62	0.075	50.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 15-17 ft

Date: 13-Nov-23 Location: -

Tested by: JCC Lab soil description: ol bn - yl bn clay

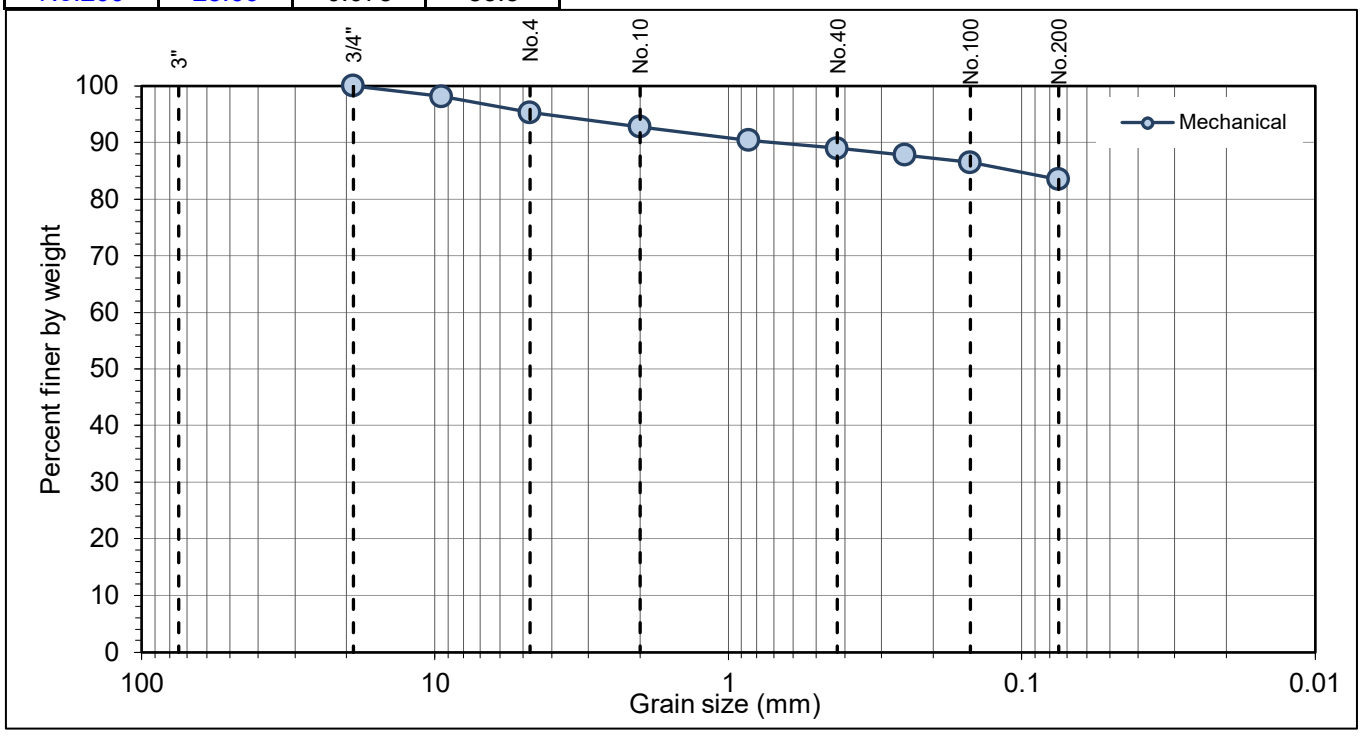
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	180.39	155.31
	-	
	180.39	155.31
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	377.19
Dry soil + tare (g):	-	352.11
Tare (g):	-	196.80
Moisture content (%):	0.0	16.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	2.89	9.5	98.1
No.4	7.30	4.75	95.3
No.10	11.23	2	92.8
No.20	14.96	0.85	90.4
No.40	17.13	0.425	89.0
No.60	18.94	0.25	87.8
No.100	20.99	0.15	86.5
No.200	25.66	0.075	83.5



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 17.5-19 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: ol bn - lt bn clay

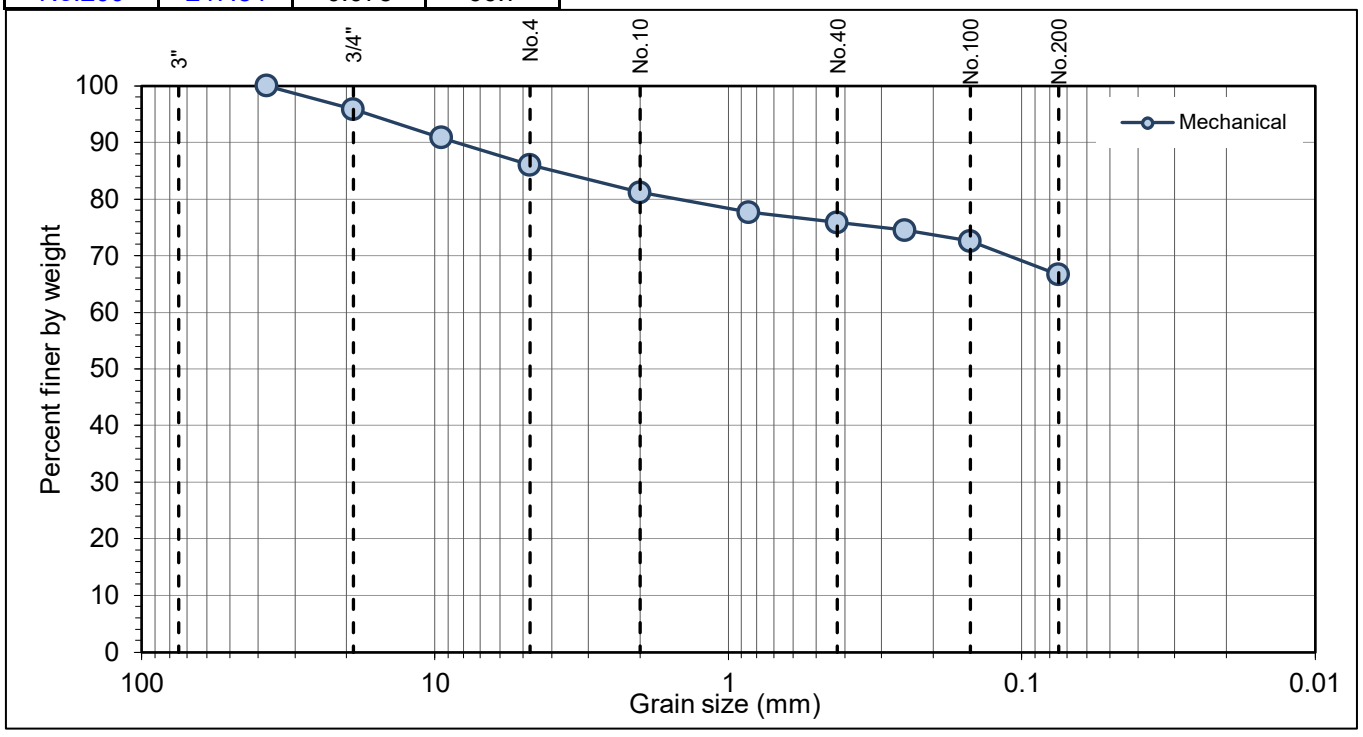
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	847.04	744.57
	-	
	847.04	744.57
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	860.87
Dry soil + tare (g):	-	758.40
Tare (g):	-	13.83
Moisture content (%):	0.0	13.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	30.57	19	95.9
3/8"	68.26	9.5	90.8
No.4	103.76	4.75	86.1
No.10	140.26	2	81.2
No.20	166.43	0.85	77.6
No.40	179.81	0.425	75.9
No.60	189.87	0.25	74.5
No.100	204.29	0.15	72.6
No.200	247.84	0.075	66.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-11

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Date: 13-Nov-23 Location: -

Tested by: DBW Lab soil description: bn - dk bn clay

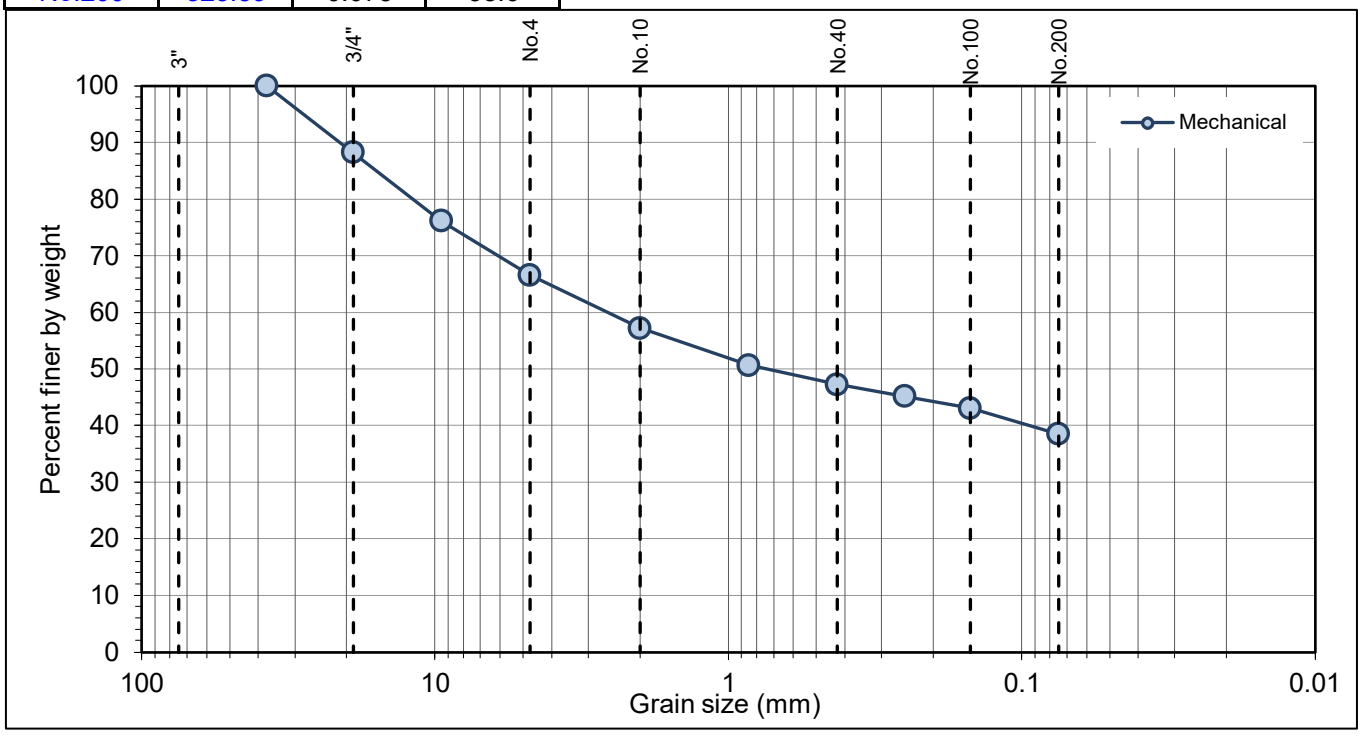
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	563.94	526.72
	-	
	563.94	526.72
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	758.29
Dry soil + tare (g):	-	721.07
Tare (g):	-	194.35
Moisture content (%):	0.0	7.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	61.88	19	88.3
3/8"	125.78	9.5	76.1
No.4	175.93	4.75	66.6
No.10	225.46	2	57.2
No.20	259.93	0.85	50.7
No.40	277.80	0.425	47.3
No.60	288.84	0.25	45.2
No.100	299.98	0.15	43.0
No.200	323.59	0.075	38.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 5-7 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - lt bn clay

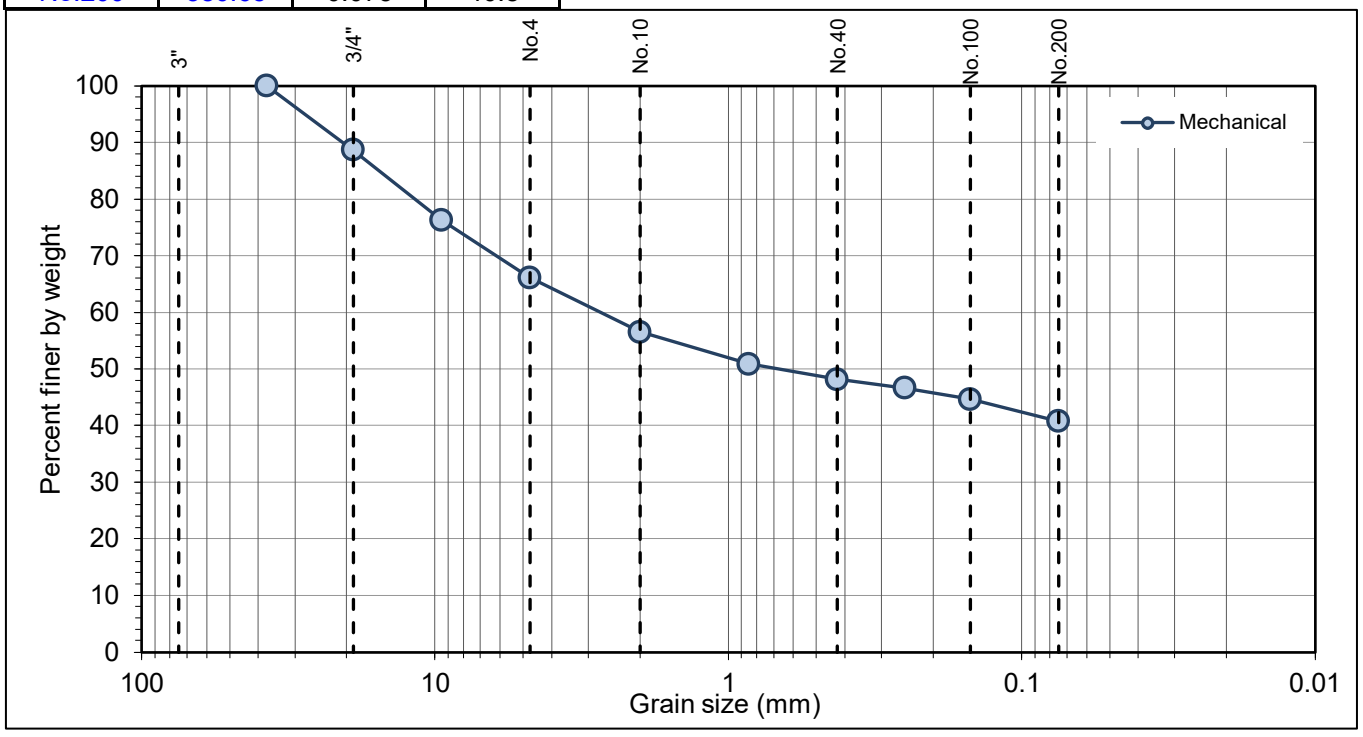
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	708.58	643.08
	-	
	708.58	643.08
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	902.19
Dry soil + tare (g):	-	836.69
Tare (g):	-	193.61
Moisture content (%):	0.0	10.2

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	72.52	19	88.7
3/8"	152.37	9.5	76.3
No.4	217.84	4.75	66.1
No.10	279.58	2	56.5
No.20	316.07	0.85	50.9
No.40	333.42	0.425	48.2
No.60	343.28	0.25	46.6
No.100	355.83	0.15	44.7
No.200	380.65	0.075	40.8



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 10-12 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - lt bn silt

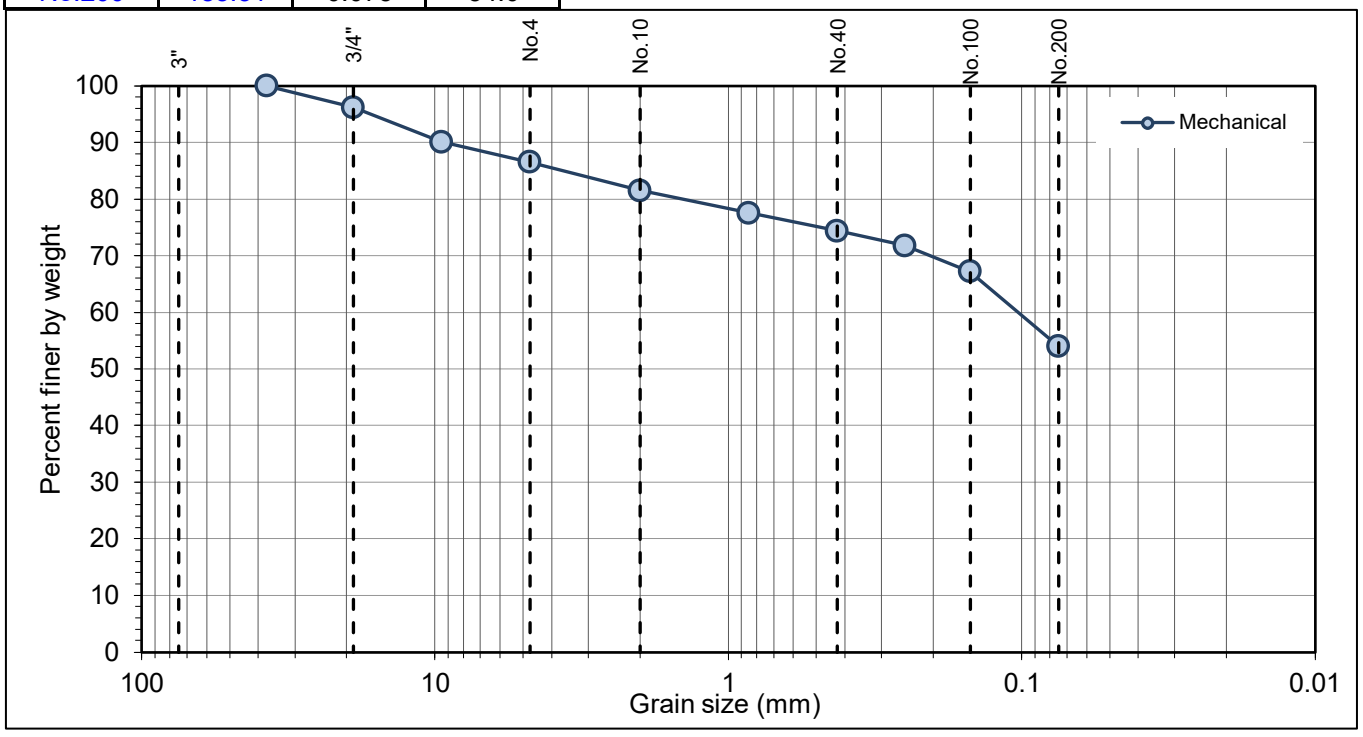
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	450.03	398.84
	-	
	450.03	398.84
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	566.12
Dry soil + tare (g):	-	514.93
Tare (g):	-	116.09
Moisture content (%):	0.0	12.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	15.06	19	96.2
3/8"	39.46	9.5	90.1
No.4	53.76	4.75	86.5
No.10	73.83	2	81.5
No.20	89.44	0.85	77.6
No.40	102.08	0.425	74.4
No.60	112.55	0.25	71.8
No.100	130.86	0.15	67.2
No.200	183.31	0.075	54.0



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-12

No: 23072 (23-1725) **Depth:** 20-21 ft

Date: 14-Nov-23 Location: -

Tested by: DBW Lab soil description: lt ol bn - lt bn clay

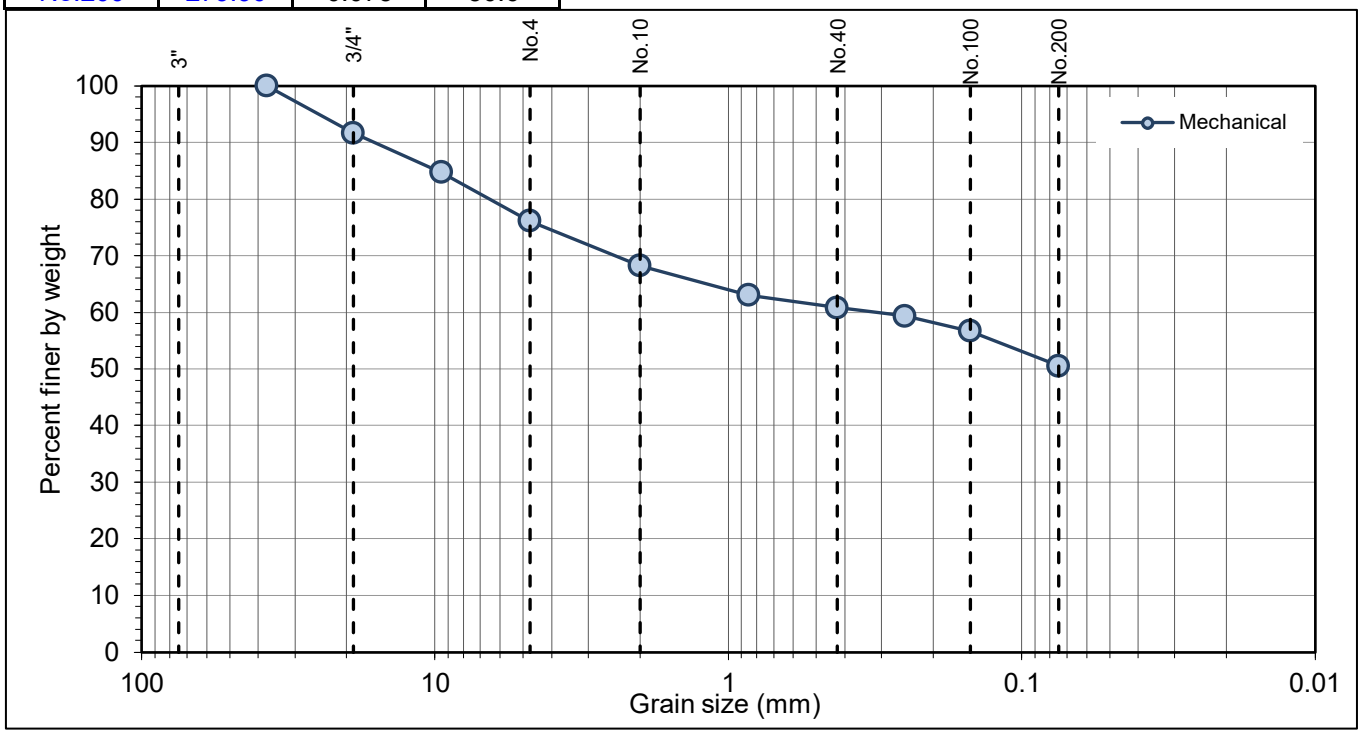
Reduced by: AT Comments:

Reviewed by: CML

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	625.88	566.11
	-	
	625.88	566.11
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	742.99
Dry soil + tare (g):	-	683.22
Tare (g):	-	117.11
Moisture content (%):	0.0	10.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	47.10	19	91.7
3/8"	86.55	9.5	84.7
No.4	135.05	4.75	76.1
No.10	179.77	2	68.2
No.20	209.38	0.85	63.0
No.40	221.94	0.425	60.8
No.60	230.21	0.25	59.3
No.100	245.14	0.15	56.7
No.200	279.90	0.075	50.6



Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-01

No: 23072 (23-1725) **Depth:** 37-39 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: gy - lt gy gravel

Reduced by: AT Comments:

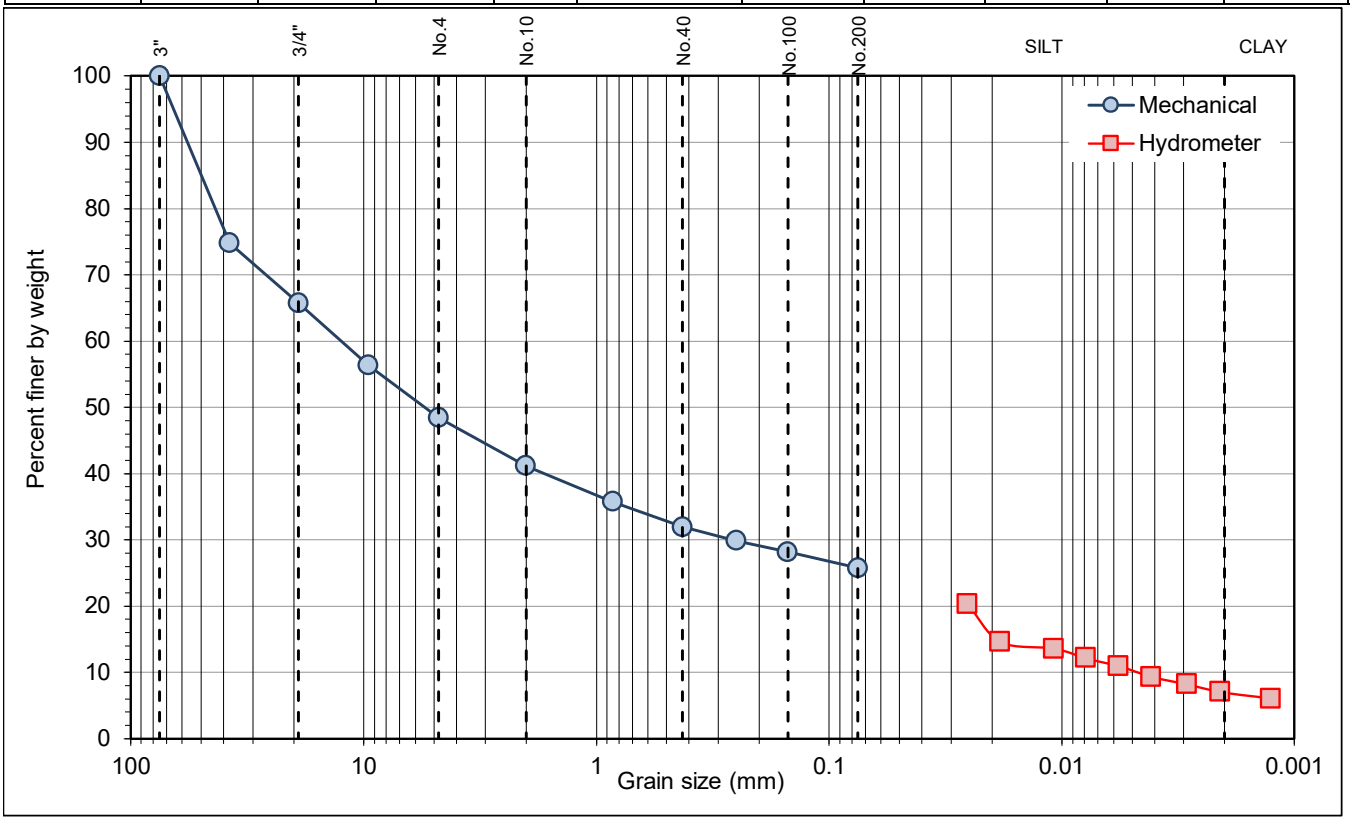
Reviewed by: JC

Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	1237.63	1179.38
+3" Coarse fraction (g):		
-3" Split fraction (g):	1237.63	1179.38
Hydrometer fraction (g):	100.02	99.95
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	1382.61	224.79
Dry soil + tare (g):	-	1324.36	224.77
Tare (g):	-	144.98	196.59
Moisture content (%):	0.00	4.94	0.07

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	41.14
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer		Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
12"	300	-	-		2	21.0	55	5.2	0.02534	20.28
8"	200	-	-		5	21.0	41	5.2	0.01838	14.58
6"	150	-	-		15	21.0	38.5	5.2	0.01084	13.57
4"	100	-	-		30	20.9	35	5.2	0.00789	12.13
3"	75	-	100.0	<=Split	60	21.0	32	5.2	0.00570	10.92
1.5"	37.5	298.03	74.7		120	21.2	28	5.1	0.00414	9.32
3/4"	19	404.72	65.7		250	22.0	25	4.9	0.00290	8.19
3/8"	9.5	515.59	56.3		500	22.5	22	4.7	0.00208	7.02
No.4	4.75	608.62	48.4		1440	20.9	20	5.2	0.00126	6.02
No.10	2	694.22	41.1	<=Split hyd.						
No.20	0.85	13.07	35.8							
No.40	0.425	22.42	31.9							
No.60	0.25	27.41	29.9							
No.100	0.15	31.53	28.2							
No.200	0.075	37.39	25.7							



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Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-02

No: 23072 (23-1725) **Depth:** 44.5-47 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: lt bn - bn gravel

Reduced by: AT Comments:

Reviewed by: JC

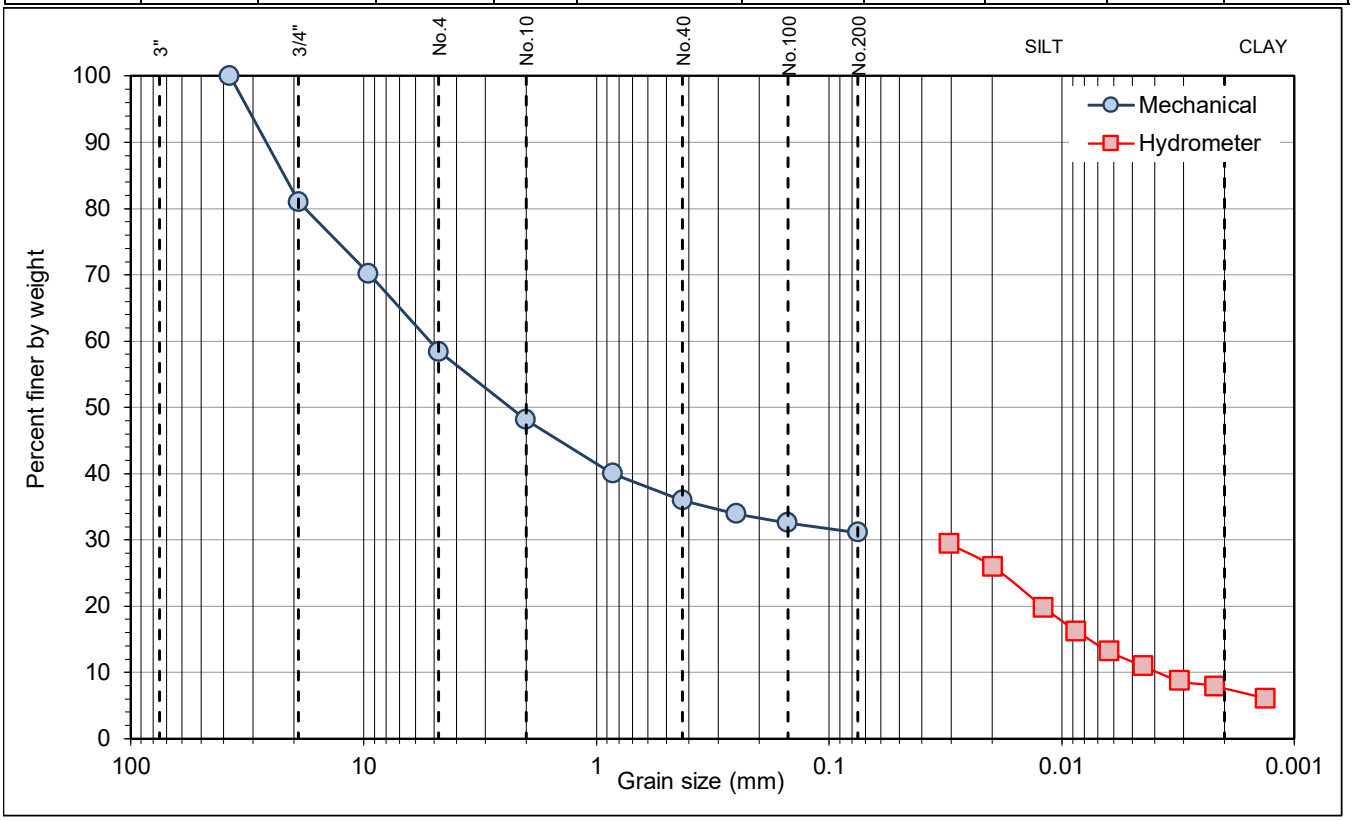
Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	446.03	423.48
+3" Coarse fraction (g):		
-3" Split fraction (g):	446.03	423.48
Hydrometer fraction (g):	50.04	50.01
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	572.96	229.12
Dry soil + tare (g):	-	550.41	229.10
Tare (g):	-	126.93	195.70
Moisture content (%):	0.00	5.32	0.06

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	48.08
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer
12"	300	-	-
8"	200	-	-
6"	150	-	-
4"	100	-	-
3"	75	-	-
1.5"	37.5	-	100.0
3/4"	19	80.60	81.0
3/8"	9.5	126.26	70.2
No.4	4.75	176.21	58.4
No.10	2	219.86	48.1
No.20	0.85	8.39	40.0
No.40	0.425	12.64	35.9
No.60	0.25	14.77	33.9
No.100	0.15	16.16	32.5
No.200	0.075	17.67	31.1

	Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
	2	20.8	36.1	5.2	0.03034	29.35
	5	20.8	32.5	5.2	0.01973	25.93
	15	20.8	26	5.2	0.01193	19.75
	30	20.8	22.25	5.2	0.00865	16.19
<=Split	60	20.9	19	5.2	0.00623	13.12
	120	21.4	16.5	5.1	0.00445	10.88
	250	22.1	14	4.9	0.00310	8.69
	500	22.6	13	4.7	0.00219	7.88
	1448	20.9	11.5	5.2	0.00133	5.99
<=Split hyd.						



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Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10

No: 23072 (23-1725) **Depth:** 15-17 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: ol bn - yl bn clay

Reduced by: AT Comments:

Reviewed by: JC

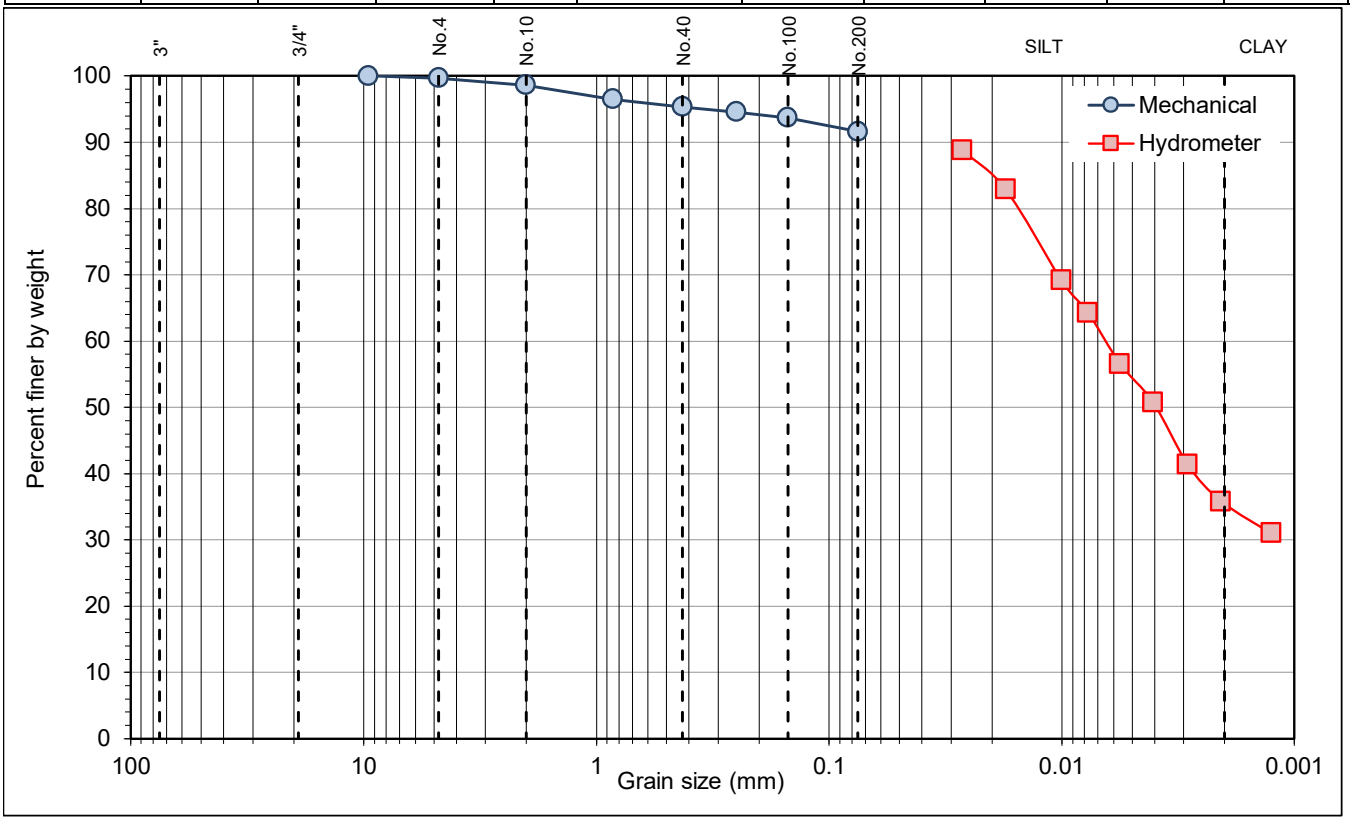
Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	133.83	114.98
+3" Coarse fraction (g):		
-3" Split fraction (g):	133.83	114.98
Hydrometer fraction (g):	50.01	49.74
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	250.79	239.17
Dry soil + tare (g):	-	231.94	238.94
Tare (g):	-	116.96	196.69
Moisture content (%):	0.00	16.39	0.54

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	98.62
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer
12"	300	-	-
8"	200	-	-
6"	150	-	-
4"	100	-	-
3"	75	-	-
1.5"	37.5	-	-
3/4"	19	-	-
3/8"	9.5	-	100.0
No.4	4.75	0.38	99.7
No.10	2	1.59	98.6
No.20	0.85	1.06	96.5
No.40	0.425	1.66	95.3
No.60	0.25	2.04	94.6
No.100	0.15	2.49	93.7
No.200	0.075	3.54	91.6

	Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
	2	20.8	50.5	5.2	0.02667	88.77
	5	20.8	47.5	5.2	0.01737	82.88
	17	20.8	40.5	5.2	0.01004	69.16
	30	20.8	38	5.2	0.00772	64.26
<=Split	60	21.0	34	5.2	0.00562	56.53
	120	21.2	31	5.1	0.00405	50.76
	250	22.0	26	4.9	0.00288	41.40
	500	22.5	23	4.7	0.00206	35.79
	1444	20.9	21	5.2	0.00125	30.98
<=Split hyd.						



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Particle-Size Analysis of Soils with Hydrometer*

(after ASTM D422)

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-11

No: 23072 (23-1725) **Depth:** 10-12 ft

Date: 16-Nov-23 Location: -

Tested by: MGS/DBW Laboratory sample description: lt ol bn - ol bn clay

Reduced by: AT Comments:

Reviewed by: JC

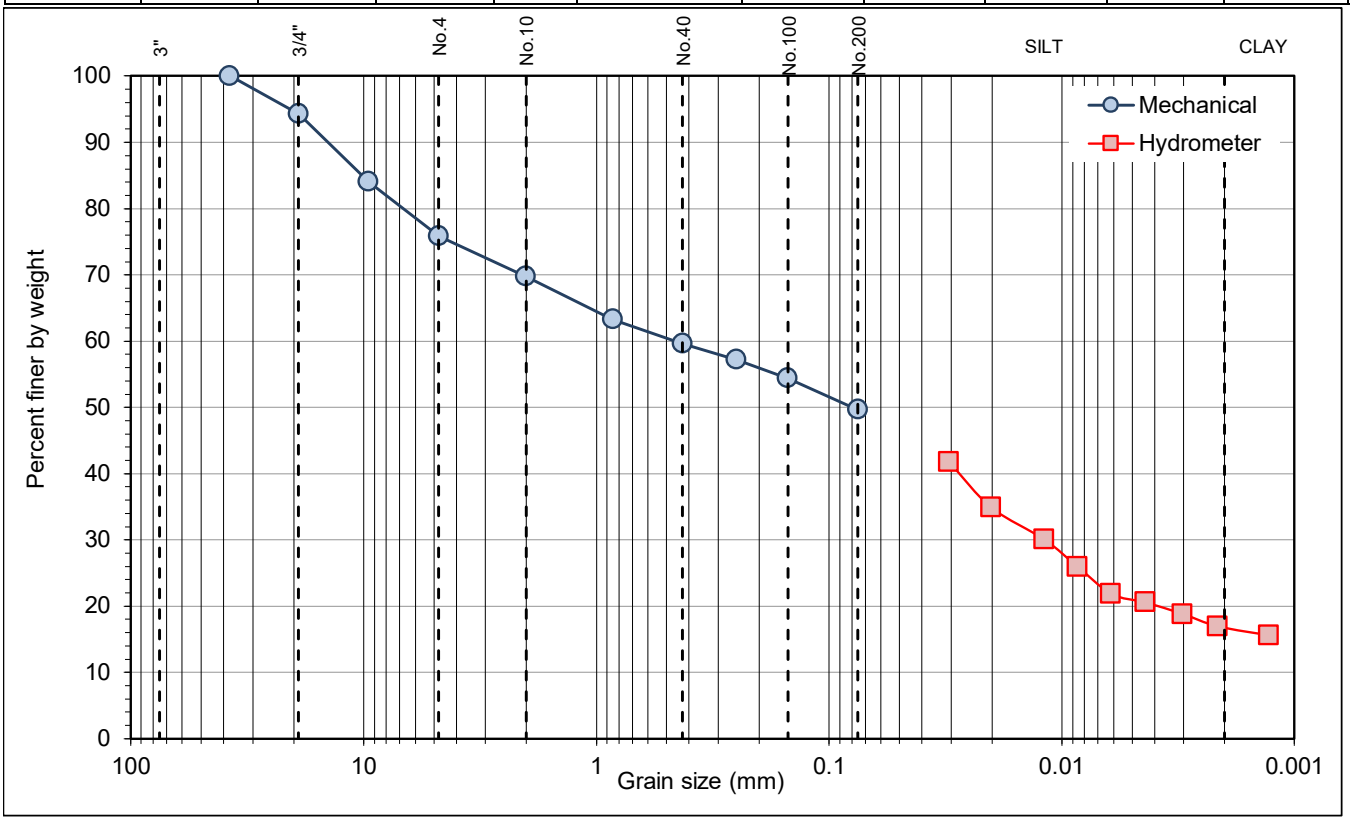
Split sieve:	Yes	
Split sieve:	3"	
	Moist	Dry
Total sample wt. (g):	621.27	566.27
+3" Coarse fraction (g):		
-3" Split fraction (g):	621.27	566.27
Hydrometer fraction (g):	50.09	50.00
Split fraction:	1.000	

Moisture data	C.F.(+3")	S.F.(-3")	Hyd.(-No.10)
Moist soil + tare (g):	-	766.77	150.52
Dry soil + tare (g):	-	711.77	150.46
Tare (g):	-	145.50	117.79
Moisture content (%):	0.00	9.71	0.18

Hydrometer data				
Hyd. split:	No.10		Slope:	-0.164
Gs:	2.7	Assumed	Intercept:	16.3
Hydrometer Seral #:	626325		a:	0.99
Dispersion period (min):	10		Hyd. fraction:	69.77
			Dispersion device:	Air-jet

Sieve	Grain Size (mm)	Accum. Wt. Ret. (g)	Percent Finer
12"	300	-	-
8"	200	-	-
6"	150	-	-
4"	100	-	-
3"	75	-	-
1.5"	37.5	-	100.0
3/4"	19	32.39	94.3
3/8"	9.5	90.42	84.0
No.4	4.75	136.85	75.8
No.10	2	171.18	69.8
No.20	0.85	4.67	63.3
No.40	0.425	7.27	59.6
No.60	0.25	9.04	57.2
No.100	0.15	11.05	54.4
No.200	0.075	14.44	49.6

	Elapsed time (min)	Temp. (°C)	Hydrometer Reading	Composite Correction	Grain Size (mm)	% Soil in Suspension
	2	20.7	35.5	5.3	0.03051	41.74
	5	20.7	30.5	5.3	0.02004	34.84
	15	20.7	27	5.3	0.01186	30.01
	30	20.8	24	5.2	0.00855	25.91
<=Split	60	21.0	21	5.2	0.00615	21.85
	120	21.2	20	5.1	0.00436	20.54
	250	22.0	18.5	4.9	0.00302	18.79
	500	22.6	17	4.7	0.00214	16.95
	1446	20.9	16.5	5.2	0.00129	15.60
<=Split hyd.						



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One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project:	**Bear Development Snow King Lot 53 and 58**	**TH/TP/Sample:**	**JG-10**
No:	**23072 (23-1725)**	**Depth:**	**12.5-14 ft**
Location:	-	Laboratory sample description:	ol bn - lt bn clay
Date:	14-Nov-23	USCS classification:	not requested
Tested by:	AT	Sample type:	Rel. undisturbed, Shelby Tube
Reduced by:	AT	Inundation stress (psf):	100, completion
Checked by:	JC	Swell pressure (psf):	408
Comments:	Gravel up to 1.5" in sample.	Test method:	B
		Preparation procedure:	trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.995	-
	90°	1.002	-
	180°	0.999	-
	270°	1.003	-
Avg Height, Havg (in)		1.000	0.887
Height, H (cm)		2.539	2.253
Dia., D (in)	0°	2.494	-
	90°	2.495	-
Avg Dia., Davg (in)		2.495	2.495
Dia., D (cm)		6.336	6.336
Wt. rings + wet soil (g)		373.54	369.19
Wt. rings (g)		216.21	216.21
Wet soil + tare (g)		1129.47	350.66
Dry soil + tare (g)		1044.36	324.68
Tare (g)		422.15	198.47
Moisture cont., w (%)		13.7	20.6
Gs, assumed		2.70	2.70
Mass total (g)		157.3	153.0
Mass of solids (g)		138.4	138.4
Volume (cm^3)		80.1	71.0
Vol. of water (cm^3)		18.9	14.6
Vol. of solids (cm^3)		51.3	51.3
Vol. of voids (cm^3)		28.8	19.8
Vol. of air (cm^3)		9.9	5.2
Area, A (cm^2)		31.5	31.5
Ht. solids, Hs (cm)		1.626	1.626
Void ratio, e		0.562	0.386
Porosity, n		0.360	0.278
Vol.moisture, T		0.236	0.205
Saturation, S (%)		66	74
Dry density (gm/cm^3)		1.729	1.949
Wet unit wt., gm (pcf)		122.7	146.7
Dry unit wt., gd (pcf)		107.9	121.6

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9998	0.0000	0.5620	0
408	0.0000	0.9997	0.0000	0.5620	120
800	0.0034	0.9964	0.0034	0.5568	131
1,600	0.0108	0.9890	0.0108	0.5452	207
3,200	0.0278	0.9719	0.0278	0.5185	480
6,400	0.0528	0.9470	0.0528	0.4796	369
12,800	0.0843	0.9154	0.0843	0.4303	269
25,600	0.1173	0.8825	0.1173	0.3787	334
51,200	0.1513	0.8484	0.1514	0.3255	480
25,600	0.1474	0.8523	0.1475	0.3316	120
6,400	0.1325	0.8672	0.1326	0.3550	240
1,600	0.1129	0.8869	0.1129	0.3856	343

C'c

(0.1514-0.0528)/[Log(51200)-Log(6400)]

0.0986/(4.71-3.81)

C'c= 0.1096

C'c = Cc/(1+e0)

0.1096 = Cc/(1+0.562)

Cc = 0.171

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

To be determined by the Geotechnical Engineer

Notes:

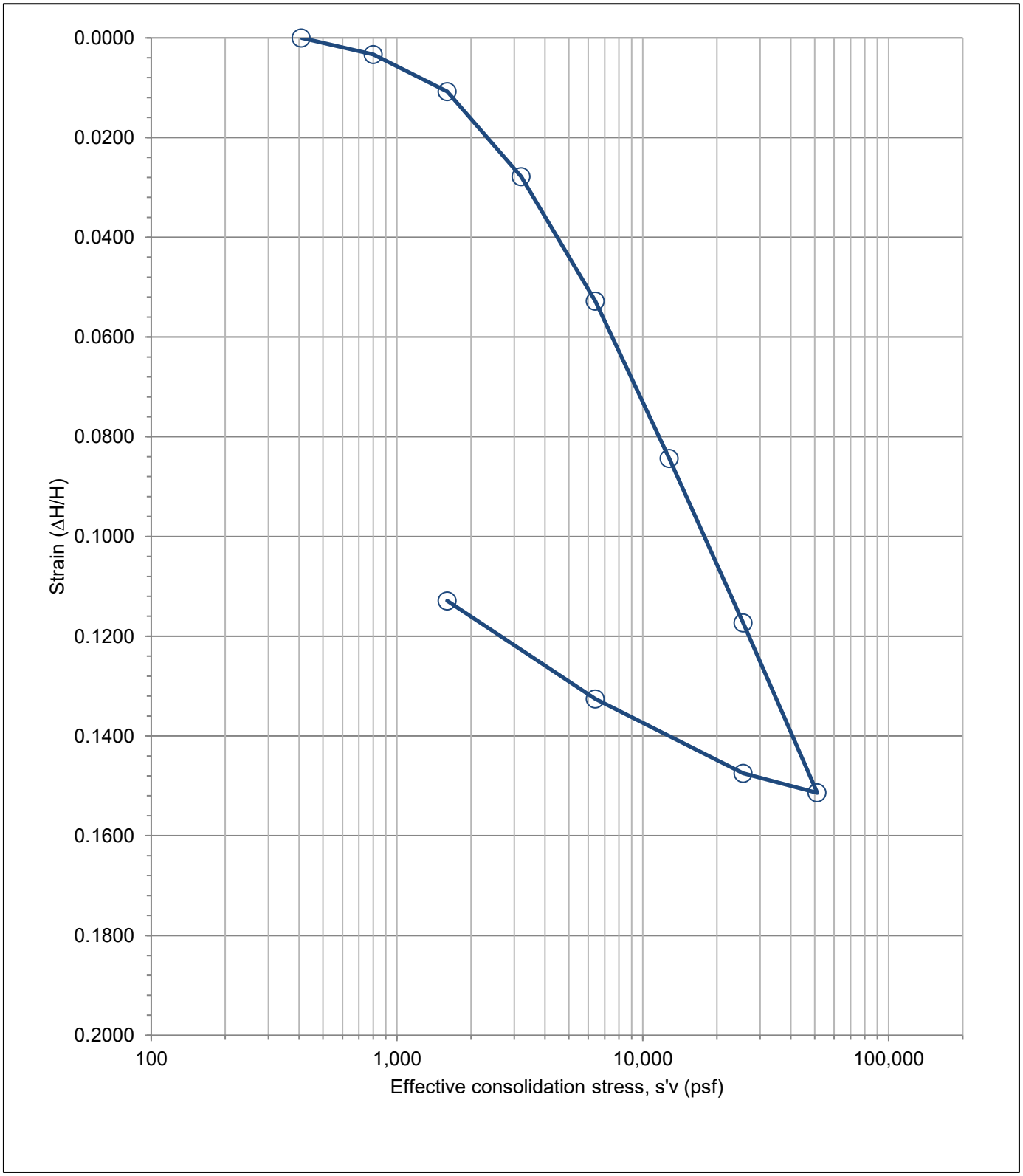
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation

[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10
No: 23072 (23-1725) **Depth:** 12.5-14 ft



One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 | **TH/TP/Sample:** JG-10
No: 23072 (23-1725) | **Depth:** 17.5-19 ft
Location: - | Laboratory sample description: ol bn - lt bn clay
Date: 14-Nov-23 | USCS classification: not requested

Tested by: AT | Sample type: Rel. undisturbed, Shelby Tube
Reduced by: AT | Inundation stress (psf): 100, completion
Checked by: JC | Swell pressure (psf): <100
Comments: | Test method: B
Preparation procedure: trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.985	-
	90°	0.987	-
	180°	0.988	-
	270°	0.989	-
Avg Height, Havg (in)		0.987	0.884
Height, H (cm)		2.508	2.245
Dia., D (in)	0°	2.487	-
	90°	2.496	-
Avg Dia., Davg (in)		2.492	2.492
Dia., D (cm)		6.328	6.328
Wt. rings + wet soil (g)		384.09	380.81
Wt. rings (g)		214.28	214.28
Wet soil + tare (g)		860.87	285.37
Dry soil + tare (g)		758.40	266.49
Tare (g)		13.83	119.06
Moisture cont., w (%)		13.8	12.8
Gs, assumed		2.70	2.70
Mass total (g)		169.8	166.5
Mass of solids (g)		149.3	149.3
Volume (cm^3)		78.9	70.6
Vol. of water (cm^3)		20.5	17.3
Vol. of solids (cm^3)		55.3	55.3
Vol. of voids (cm^3)		23.6	15.3
Vol. of air (cm^3)		3.0	-1.9
Area, A (cm^2)		31.5	31.5
Ht. solids, Hs (cm)		1.758	1.758
Void ratio, e		0.427	0.278
Porosity, n		0.299	0.217
Vol.moisture, T		0.260	0.244
Saturation, S (%)		87	113
Dry density (gm/cm^3)		1.892	2.113
Wet unit wt., gm (pcf)		134.4	148.8
Dry unit wt., gd (pcf)		118.1	131.9

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9873	0.0000	0.4267	0
100	0.0000	0.9872	0.0000	0.4267	108
200	0.0029	0.9844	0.0029	0.4225	123
400	0.0060	0.9813	0.0061	0.4181	210
800	0.0111	0.9761	0.0113	0.4106	96
1,600	0.0185	0.9687	0.0188	0.3999	176
3,200	0.0296	0.9576	0.0300	0.3839	480
6,400	0.0512	0.9360	0.0519	0.3527	89
12,800	0.0722	0.9150	0.0732	0.3223	123
25,600	0.0998	0.8875	0.1010	0.2826	155
51,200	0.1267	0.8605	0.1284	0.2436	315
25,600	0.1236	0.8637	0.1251	0.2482	120
6,400	0.1163	0.8709	0.1178	0.2586	210
1,600	0.1032	0.8840	0.1046	0.2775	980

C'c

(0.1284-0.0732)/[Log(51200)-Log(12800)]

0.0552/(4.71-4.1072)

C'c= 0.091

C'c = Cc/(1+e0)

0.091 = Cc/(1+0.427)

Cc = 0.13

Check:

Cc=(change in void ratio)/(Log change in pressure)

Cc=(0.2436-0.3223)/[Log(51200)-Log(12800)]

Cc=-0.0787/0.6028

Cc=-0.13

~~WHY DOES IT CALCULATE A NEGATIVE VALUE?~~

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

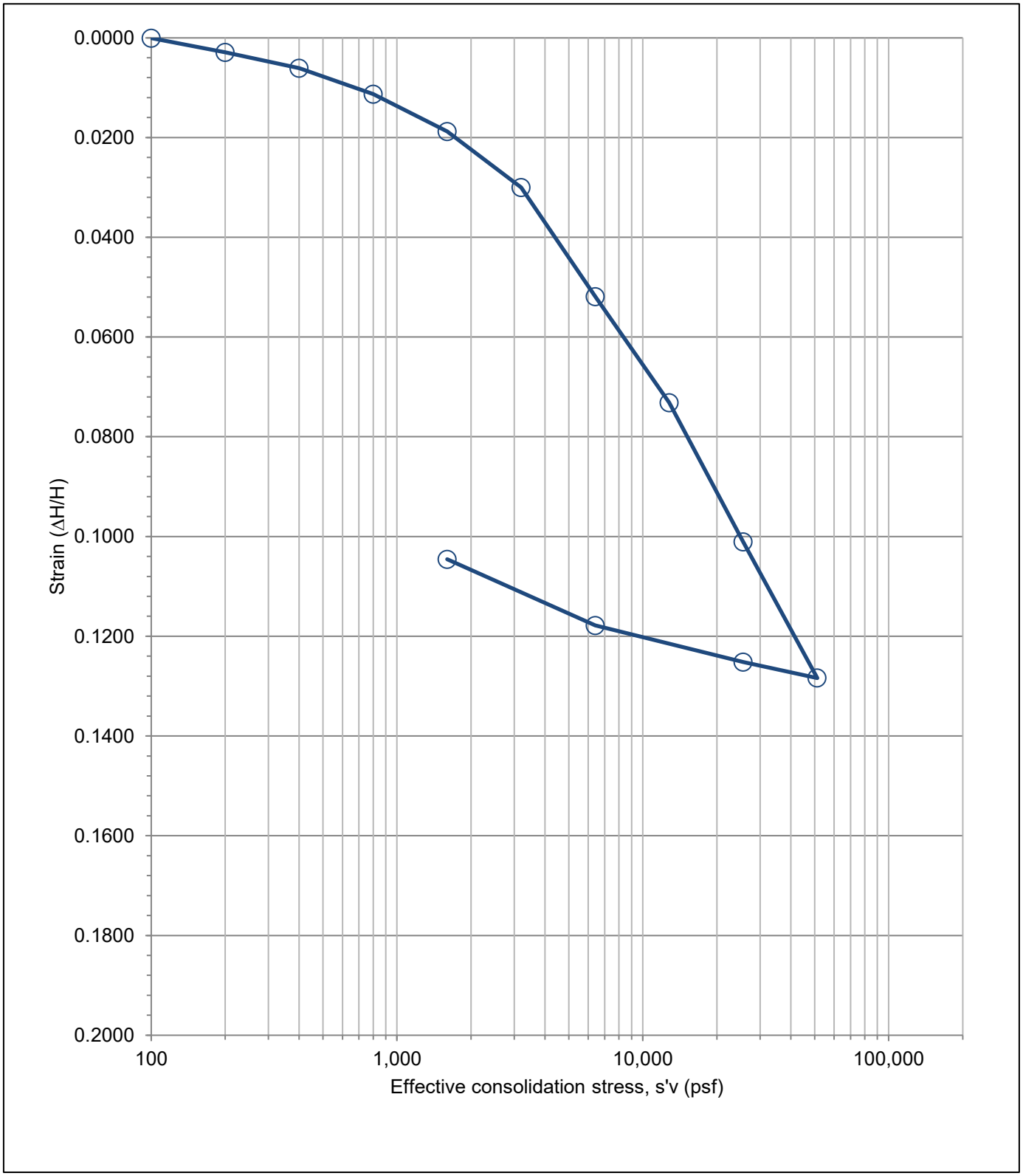
To be determined by the Geotechnical Engineer

Notes:
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation
[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 53 and 58 **TH/TP/Sample:** JG-10
No: 23072 (23-1725) **Depth:** 17.5-19 ft



Direct Shear of Soils Under Consolidated Drained Conditions, ASTM D3080

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson # 21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

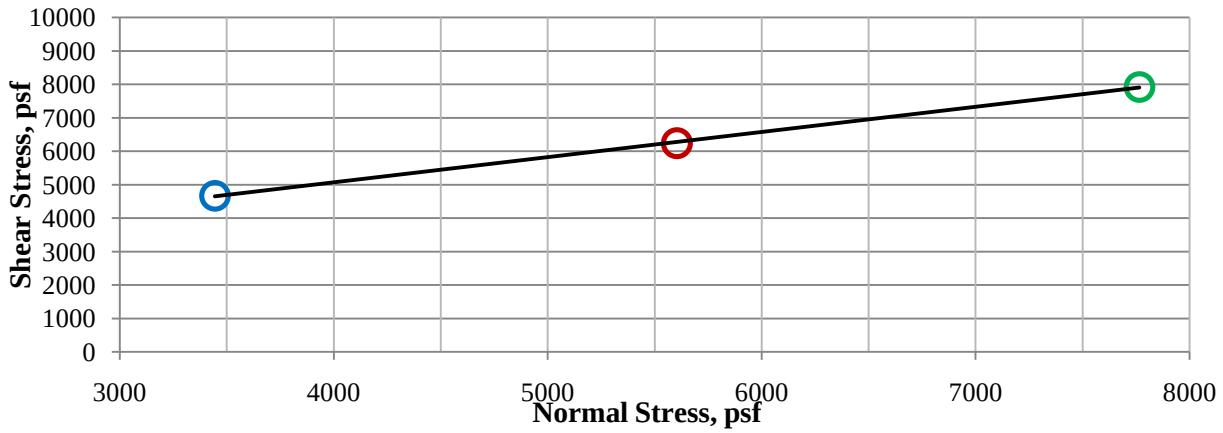
Sample Data:

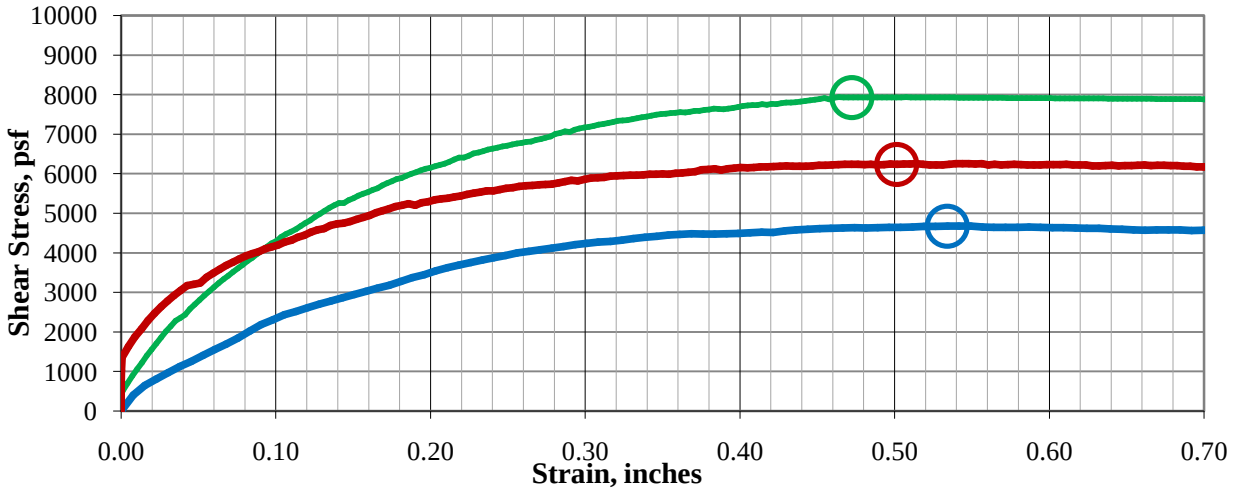
Boring: BH6-11 **Depth:** 52.5'-53' **Density:** 137.7 pcf moist

Description: Sandy Lean Clay, CL

Normal Stress, psf	Initial Moisture,%	Final Moisture,%	Consol + Collapse,%	Final Wet Density, pcf	Final Dry Density, pcf	Max Shear Stress, psf	Failure Strain,%
3444	14.4	16.2	2.2	143.1	123.1	**4673**	**22.1**
5604	14.4	15.6	3.0	143.5	124.1	**6234**	**20.7**
7764	14.4	14.7	3.8	143.6	125.2	**7924**	**19.5**

Peak Angle, ϕ° **37.0** Peak Cohesion, C, psf **2059** Strain rate, %/hour **4.1**





Remarks: Friction angle and cohesion in practice are sensitive to several other material properties, and conditions, in the field and lab. No individual lab property of a material can substitute for overall best practices in geotechnical design, construction, and field testing by qualified professionals.

Direct Shear of Soils Under Consolidated Drained Conditions, ASTM D3080

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson # 21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

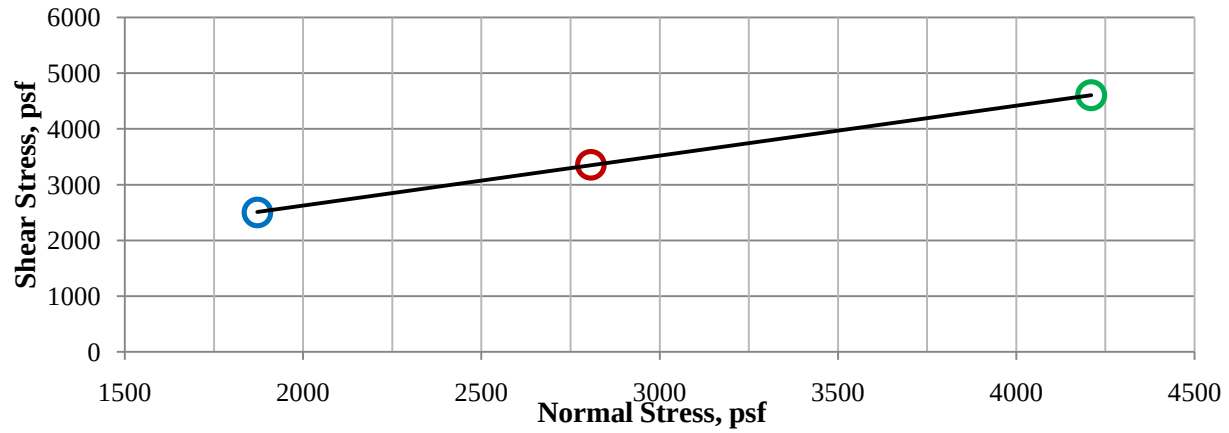
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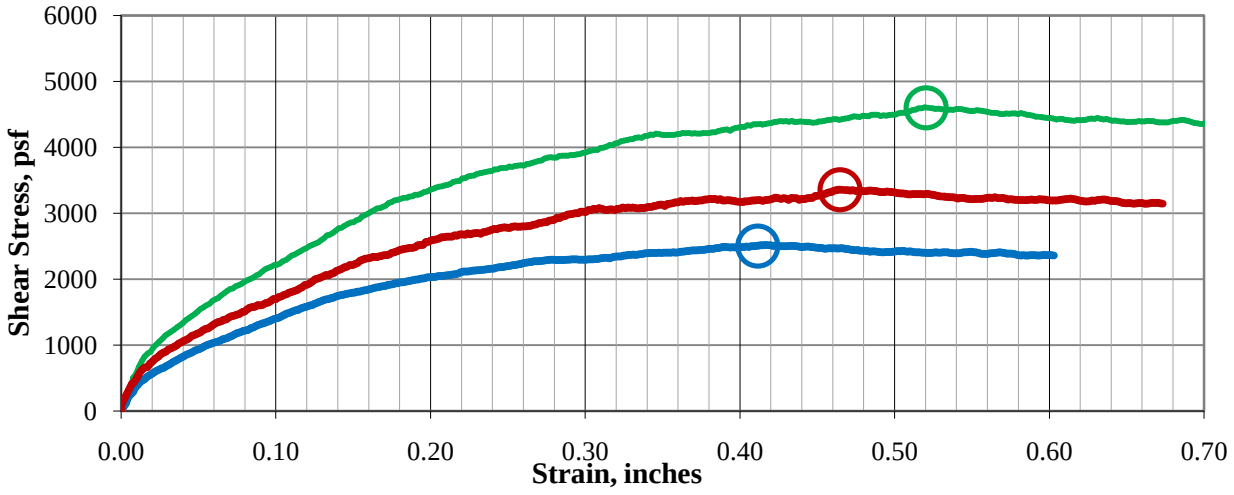
Boring: BH7-4 **Depth:** 19.5'-20' **Density:** 135.1 pcf moist

Description: Sandy Lean Clay, CL

Normal Stress, psf	Initial Moisture,%	Final Moisture,%	Consol + Collapse,%	Final Wet Density, pcf	Final Dry Density, pcf	Max Shear Stress, psf	Failure Strain,%
1871	15.5	19.5	1.5	141.9	118.7	**2505**	**17.0**
2806	15.5	17.6	2.6	141.2	120.1	**3358**	**19.2**
4210	15.5	15.8	3.6	140.5	121.3	**4602**	**21.5**

Peak Angle, ϕ° **41.9** Peak Cohesion, C, psf **835** Strain rate, %/hour **4.1**





Remarks: Friction angle and cohesion in practice are sensitive to several other material properties, and conditions, in the field and lab. No individual lab property of a material can substitute for overall best practices in geotechnical design, construction, and field testing by qualified professionals.

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Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

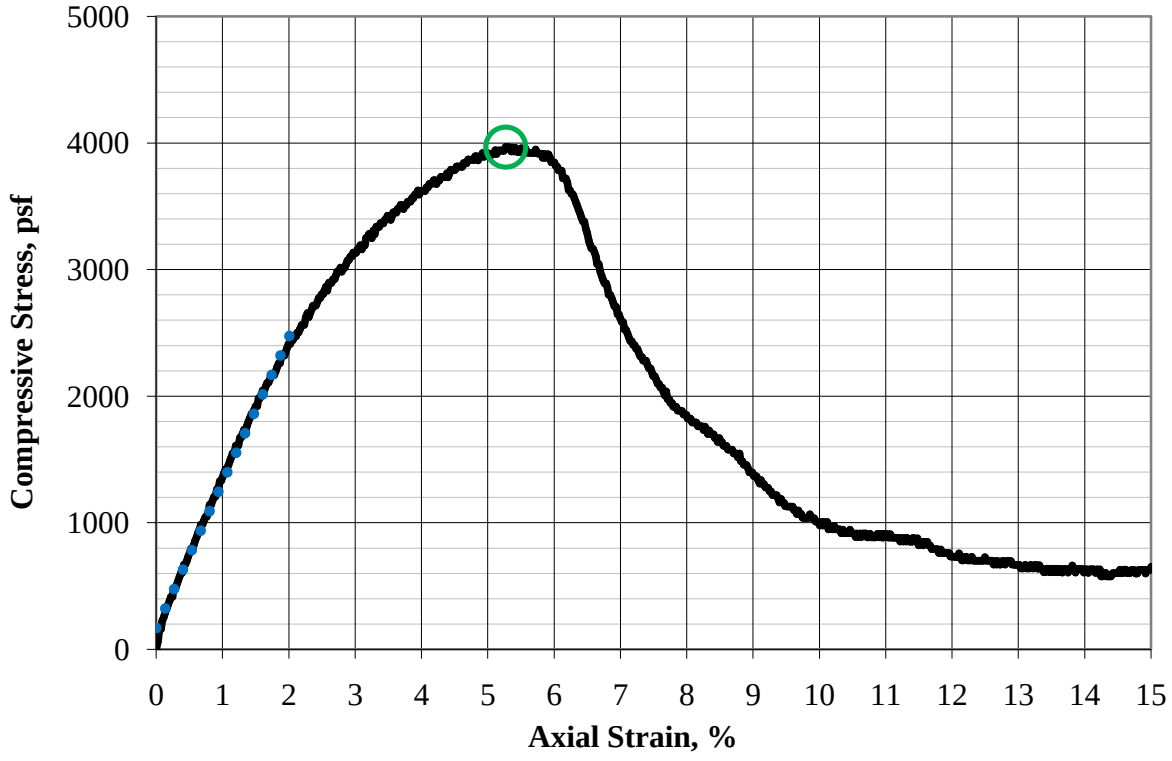
Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

Sample Data:

Boring: BH6-4B
Depth: 22.5' - 23'
Description: Lean Clay, CL

Specimen Properties:	
Average Diameter, in.	2.395
Average Height, in.	5.186
Height/Diameter (L/D)	2.17
Moisture, %	18.6
Wet density, pcf	128.5
Dry density, pcf	108.3

Undrained Unconfined Strength Properties:	
Compressive strength, psf	3968
Shear strength, psf	1984
Axial elastic modulus, psi	798
Failure strain, %	5.3
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
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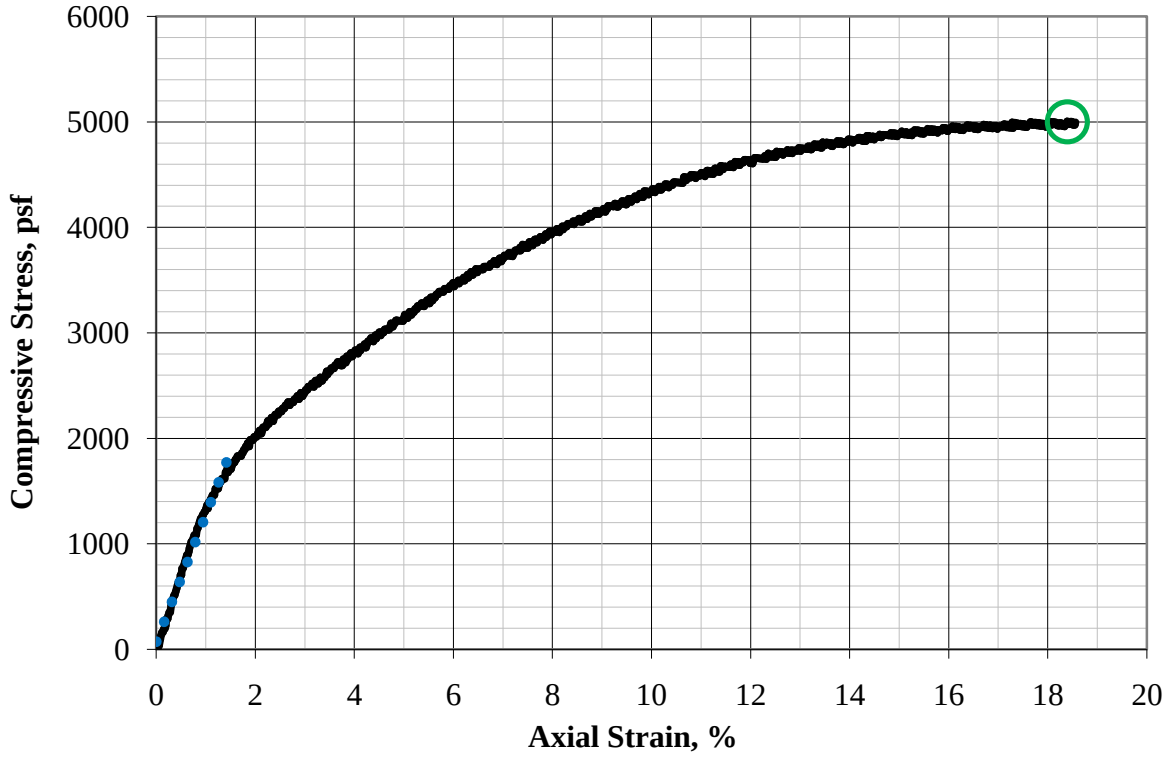
Sample Data:

Boring: BH7-6 Depth: 26' - 26.5'

Description: Lean Clay w/Sand, CL

Specimen Properties:	
Average Diameter, in.	2.389
Average Height, in.	6.044
Height/Diameter (L/D)	2.53
Moisture, %	25.6
Wet density, pcf	126.6
Dry density, pcf	100.8

Undrained Unconfined Strength Properties:	
Compressive strength, psf	5002
Shear strength, psf	2501
Axial elastic modulus, psi	834
Failure strain, %	18.4
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

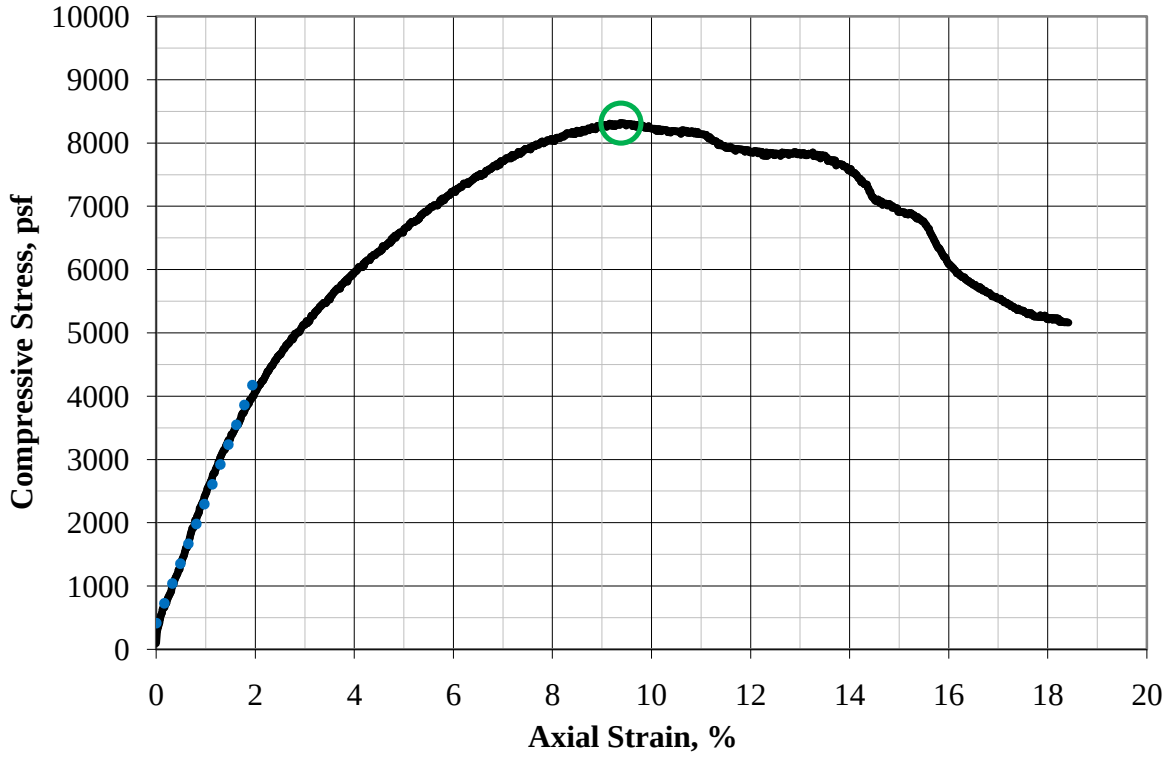
Sample Data:

Boring: BH7-13 Depth: 59.5' - 60'

Description: Sandy Lean Clay, CL

Specimen Properties:	
Average Diameter, in.	2.407
Average Height, in.	5.987
Height/Diameter (L/D)	2.49
Moisture, %	17.1
Wet density, pcf	133.3
Dry density, pcf	113.8

Undrained Unconfined Strength Properties:	
Compressive strength, psf	8315
Shear strength, psf	4158
Axial elastic modulus, psi	1346
Failure strain, %	9.4
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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USCS CLASSIFICATION

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Sample ID: BH1-4 Depth (ft): 29.75'-31.75'

Unified Soils Classification
SC (Clayey Sand with Gravel)

Gravel	22%
Sand	56%
Fines	23%

Liquid Limit:	27
Plastic Limit:	12
Plasticity Index:	15

In-Situ Moisture Content	10.2%

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	115.1	115.1	0.0	0%	100%
1"	25	115.1	115.1	0.0	0%	100%
3/4"	18.75	115.1	143.7	28.6	7%	93%
#4	4.75	115.1	174.2	59.1	22%	78%
#10	2.00	115.1	130.4	15.3	25%	75%
#40	0.425	115.1	131.8	16.7	29%	71%
#200	0.075	115.1	310.1	195.0	77%	23%
Pan	0	115.1	208.2	93.1	100%	0%
		Total Weight of Sample (g)		407.8		

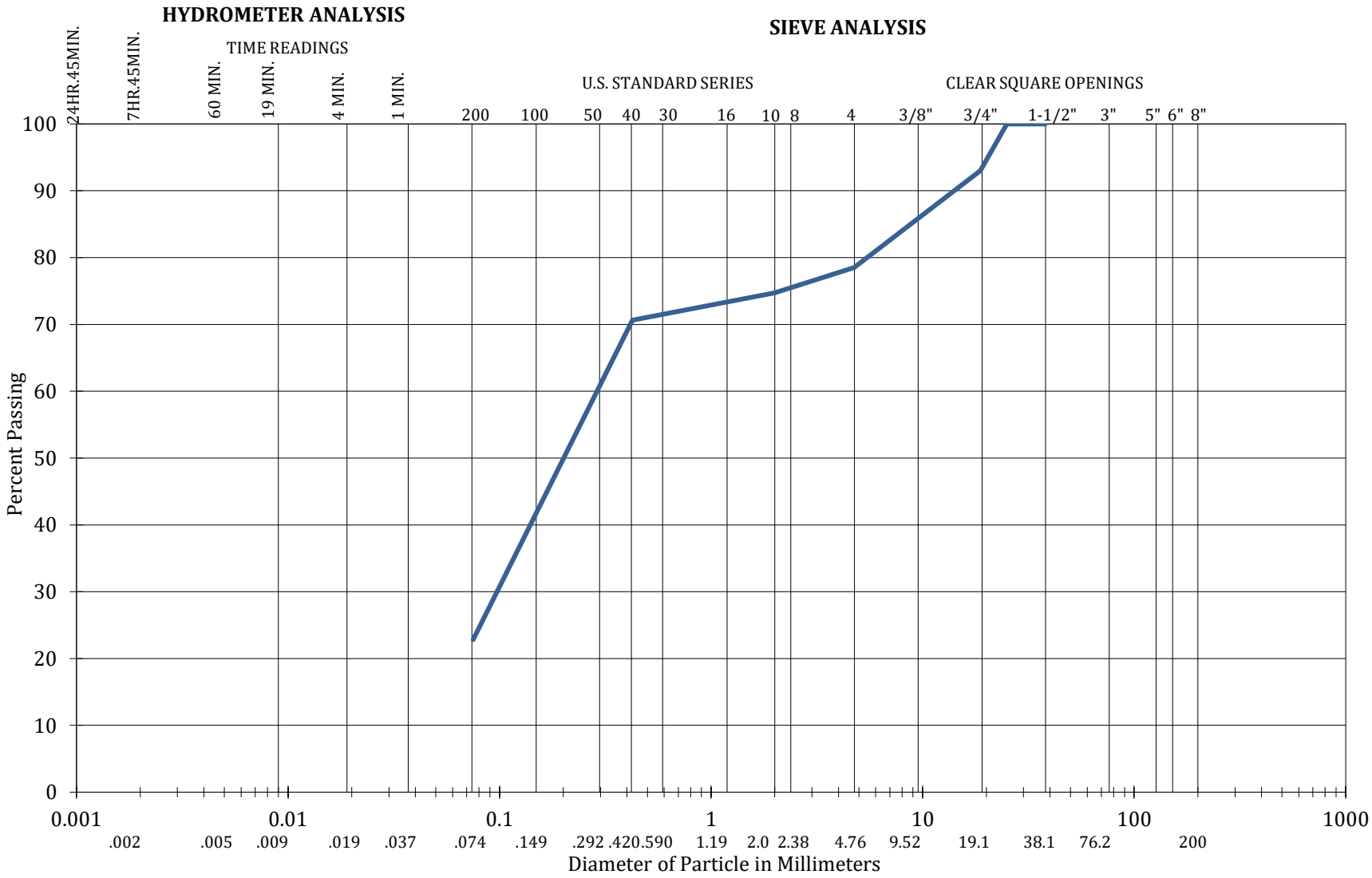
Moisture Content	
Wet Wt + Tare (g)	563.0
Dry Wt. + Tare (g)	521.6
Wt of Water (g)	41.4
Tare Wt. (g)	113.8
Dry Wt. (g)	407.8
Moisture Content	10.2%
Wash	
Wet Wt. + Tare (g)	563.0
Pre Wash Dry (g)	407.8
Post Wash Dry (g)	314.7
Tare Wt. (g)	113.8
Wt.Of Minus #200 =	93.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Brown Clayey Sand w/Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	12/7/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH1-4

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH1-5 Depth (ft): 40'-42'

Unified Soils Classification
SC (Clayey Sand)

Gravel	14%
Sand	57%
Fines	28%

Liquid Limit:	19
Plastic Limit:	4
Plasticity Index:	15

In-Situ Moisture Content	11.6%

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	115.1	115.1	0.0	0%	100%
1"	25	115.1	115.1	0.0	0%	100%
3/4"	18.75	115.1	127.5	12.4	2%	98%
#4	4.75	115.1	186.5	71.4	14%	86%
#10	2.00	115.1	144.7	29.6	19%	81%
#40	0.425	115.1	127.2	12.1	21%	79%
#200	0.075	115.1	411.2	296.1	72%	28%
Pan	0	115.1	282.0	166.9	100%	0%
		Total Weight of Sample (g)		588.5		

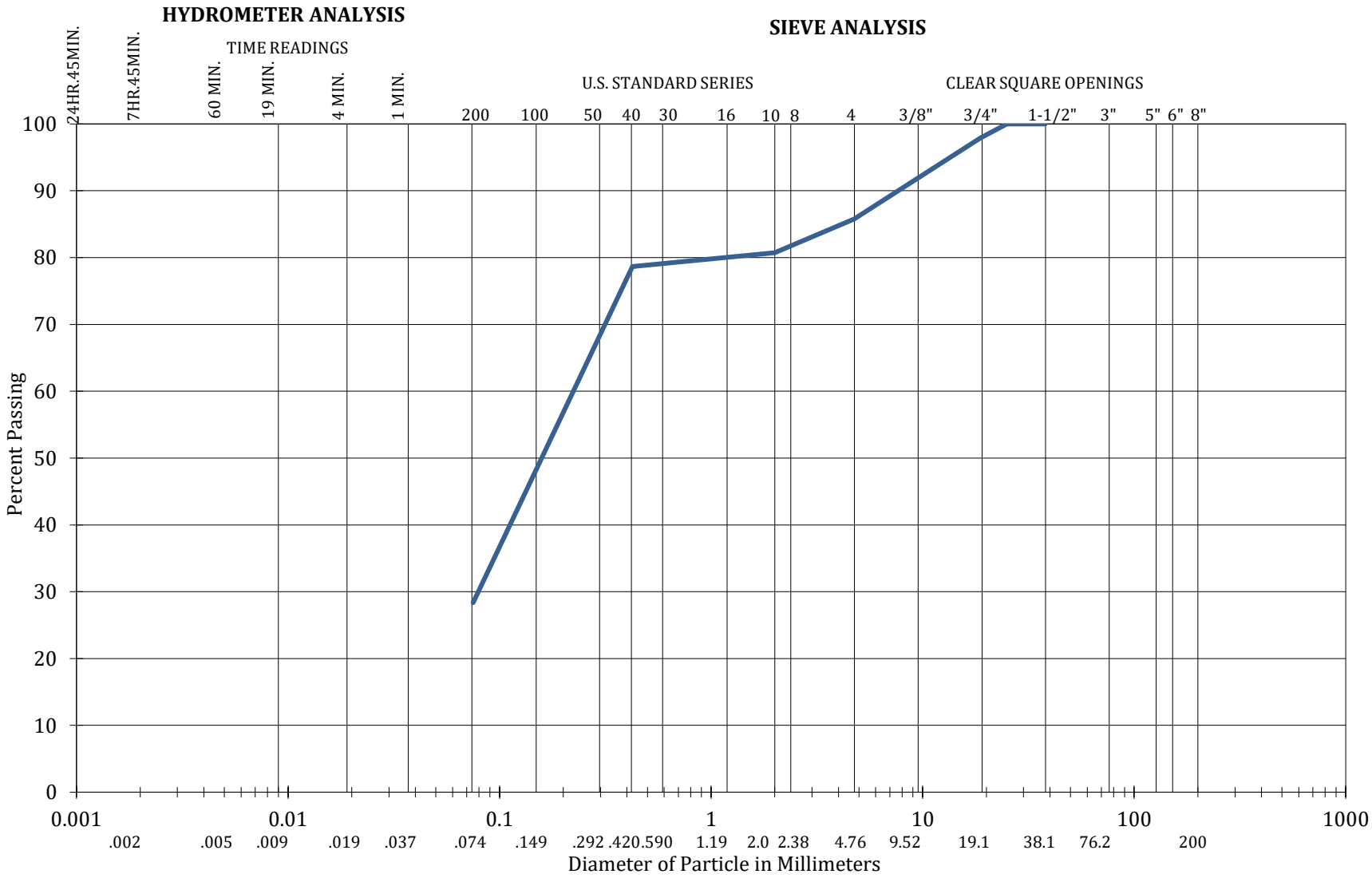
Moisture Content	
Wet Wt + Tare (g)	770.5
Dry Wt. + Tare (g)	702.3
Wt of Water (g)	68.2
Tare Wt. (g)	113.8
Dry Wt. (g)	588.5
Moisture Content	11.6%
Wash	
Wet Wt. + Tare (g)	770.5
Pre Wash Dry (g)	588.5
Post Wash Dry (g)	421.6
Tare Wt. (g)	113.8
Wt.Of Minus #200 =	166.9

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Brown Sandy Clay

Sampled By:	PG
Date:	
Tested By:	AP
Date:	12/7/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH1-5

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH1-6 Depth (ft): 45'-47'

Unified Soils Classification
SC (Clayey Sand)

Gravel	0%
Sand	66%
Fines	34%

Liquid Limit:	30
Plastic Limit:	6
Plasticity Index:	24

In-Situ Moisture Content	19.3%

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.7	110.7	0.0	0%	100%
1"	25	110.7	110.7	0.0	0%	100%
3/4"	18.75	110.7	110.7	0.0	0%	100%
#4	4.75	110.7	110.7	0.0	0%	100%
#10	2.00	110.7	110.7	0.0	0%	100%
#40	0.425	110.7	129.9	19.2	2%	98%
#200	0.075	110.7	622.1	511.4	66%	34%
Pan	0	110.7	382.8	272.1	100%	0%
		Total Weight of Sample (g)		802.7		

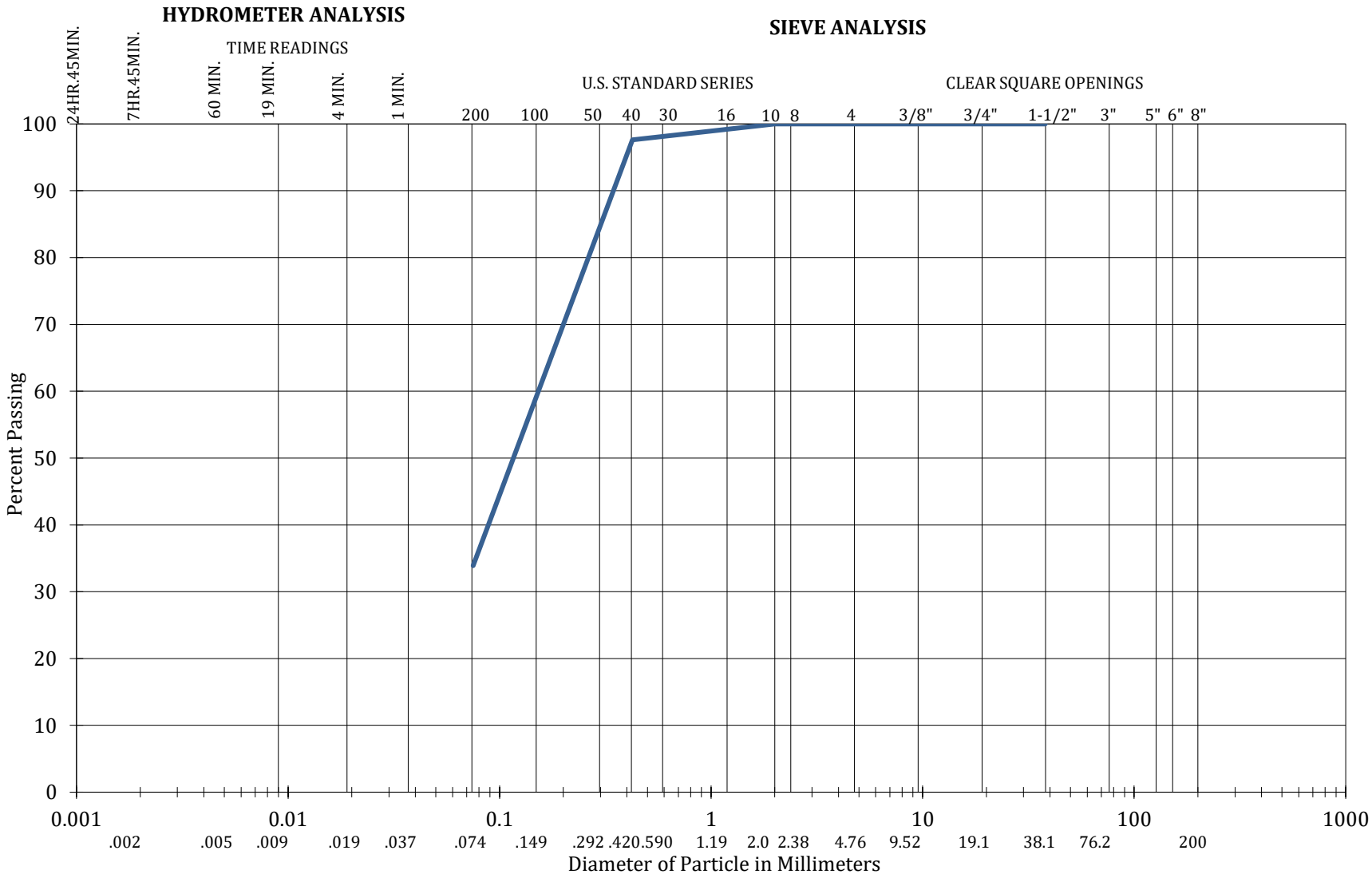
Moisture Content	
Wet Wt + Tare (g)	1067.4
Dry Wt. + Tare (g)	912.6
Wt of Water (g)	154.8
Tare Wt. (g)	109.9
Dry Wt. (g)	802.7
Moisture Content	19.3%
Wash	
Wet Wt. + Tare (g)	1067.4
Pre Wash Dry (g)	802.7
Post Wash Dry (g)	530.6
Tare Wt. (g)	109.9
Wt.Of Minus #200 =	272.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Brown Clayey Sand

Sampled By:	PG
Date:	
Tested By:	AP
Date:	12/7/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH1-6

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH5 @ 23'-28' Depth (ft): 23'-28'

Unified Soils Classification
SC (Clayey Sand)

Gravel	7%
Sand	55%
Fines	38%

Liquid Limit:	29
Plastic Limit:	4
Plasticity Index:	25

In-Situ Moisture Content	N/A

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.1	110.1	0.0	0%	100%
1"	25	110.1	110.1	0.0	0%	100%
3/4"	18.75	110.1	110.1	0.0	0%	100%
#4	4.75	110.1	147.1	37.0	7%	93%
#10	2.00	110.1	134.6	24.5	11%	89%
#40	0.425	110.1	145.4	35.3	18%	82%
#200	0.075	110.1	343.2	233.1	62%	38%
Pan	0	110.1	316.3	206.2	100%	0%
		Total Weight of Sample (g)		536.1		

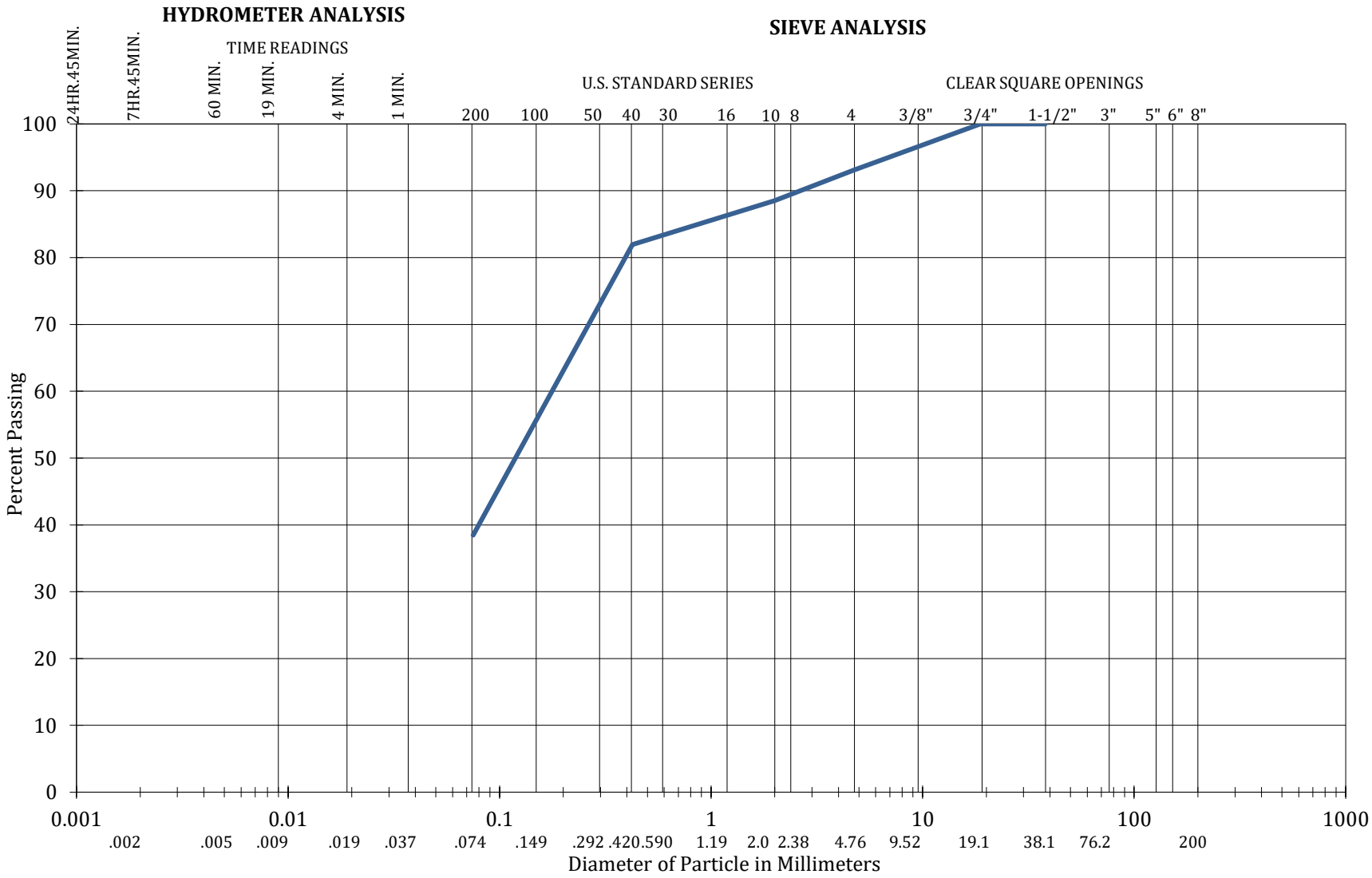
Moisture Content	
Wet Wt + Tare (g)	-
Dry Wt. + Tare (g)	-
Wt of Water (g)	-
Tare Wt. (g)	-
Dry Wt. (g)	-
Moisture Content	-
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	536.1
Post Wash Dry (g)	329.9
Tare Wt. (g)	109.9
Wt.Of Minus #200 =	206.2

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Tan Clayey Sand with Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	1/8/2005

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH5 @ 23'-28'

Lot 58 Grand View Lodges

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Sample ID: BH5 @ 37'-41' Depth (ft): 37'-41'

Unified Soils Classification
SC (Clayey Sand)

Gravel	7%
Sand	68%
Fines	25%

Liquid Limit:	28
Plastic Limit:	12
Plasticity Index:	16

In-Situ Moisture Content	N/A

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.1	110.1	0.0	0%	100%
1"	25	110.1	110.1	0.0	0%	100%
3/4"	18.75	110.1	110.1	0.0	0%	100%
#4	4.75	110.1	163.8	53.7	7%	93%
#10	2.00	110.1	139.7	29.6	11%	89%
#40	0.425	110.1	196.8	86.7	23%	77%
#200	0.075	110.1	502.4	392.3	75%	25%
Pan	0	110.1	298.2	188.1	100%	0%
		Total Weight of Sample (g)		750.4		

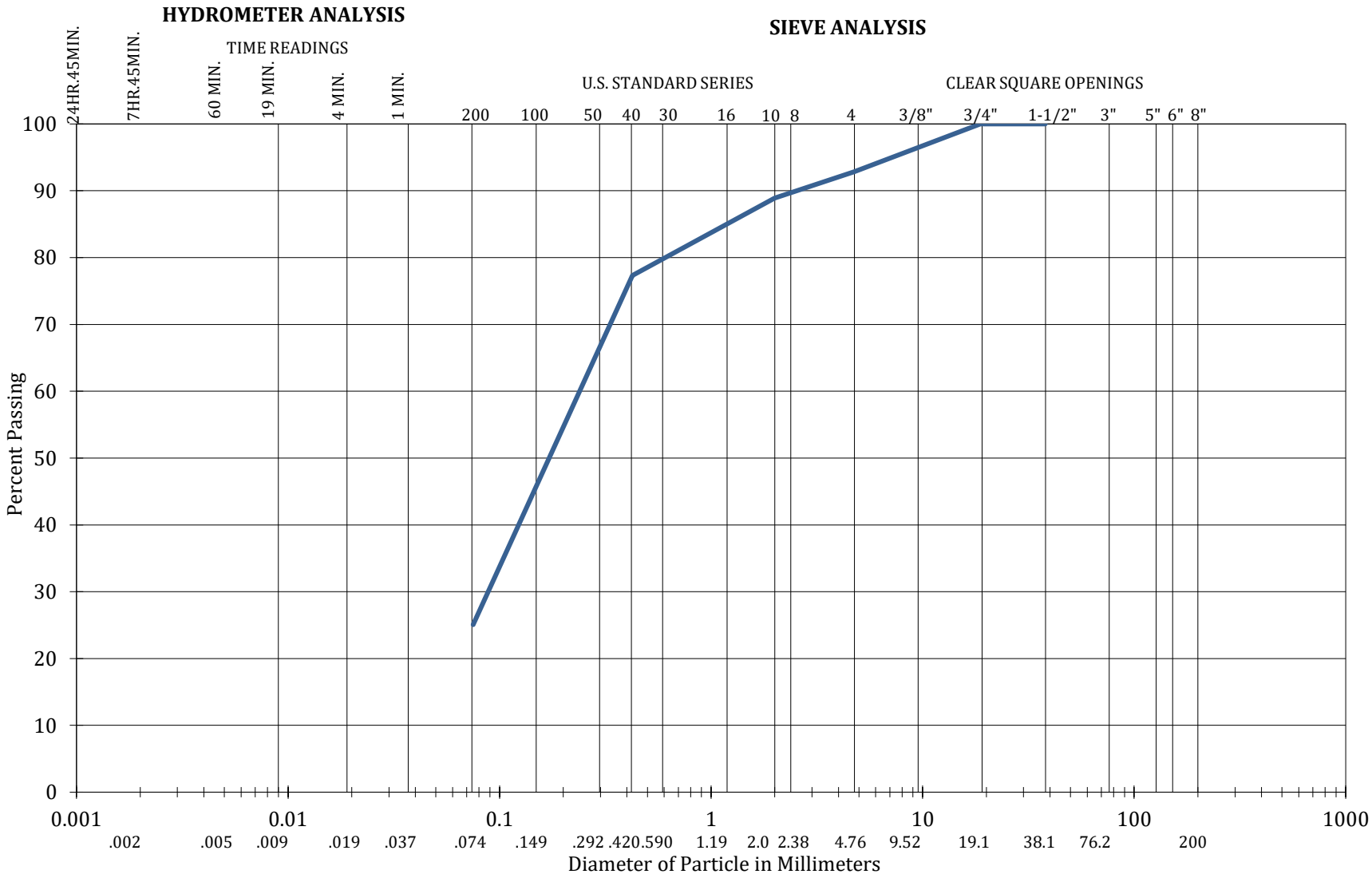
Moisture Content	
Wet Wt + Tare (g)	-
Dry Wt. + Tare (g)	-
Wt of Water (g)	-
Tare Wt. (g)	-
Dry Wt. (g)	-
Moisture Content	-
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	750.4
Post Wash Dry (g)	562.3
Tare Wt. (g)	114.3
Wt.Of Minus #200 =	188.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Gray Clayey Sand with Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	1/8/2005

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH5 @ 37'-41'

Lot 58 Grand View Lodges

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Sample ID: BH6-4B Depth (ft): 22'-23'

Unified Soils Classification
Lean Clay, CL

Gravel	**0%**
Sand	**12%**
Fines	**87%**

Liquid Limit:	**33**
Plastic Limit:	**15**
Plasticity Index:	**18**

In-Situ Moisture Content	**17.5%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.2	292.2	0.0	0%	100%
1"	25	292.2	292.2	0.0	0%	100%
3/4"	18.75	292.2	292.2	0.0	0%	100%
3/8"	9.5	292.2	292.2	0.0	0%	100%
#4	4.75	292.2	293.3	1.0	0%	100%
#10	2.00	292.2	293.3	1.1	1%	99%
#40	0.425	292.2	304.0	11.8	5%	95%
#100	0.15	292.2	301.3	9.1	9%	91%
#200	0.075	292.2	303.4	11.2	13%	87%
Pan	0	292.2	527.4	235.2	100%	0%
		Total Weight of Sample (g)		**269.3**		

Moisture Content	
Wet Wt + Tare (g)	940.7
Dry Wt. + Tare (g)	825.9
Wt of Water (g)	114.8
Tare Wt. (g)	170.9
Dry Wt. (g)	654.9
Moisture Content	17.5%
Wash	
Wet Wt. + Tare (g)	940.7
Pre Wash Dry (g)	269.3
Post Wash Dry (g)	34.2
Tare Wt. (g)	292.2
Wt.Of Minus #200 =	235.2

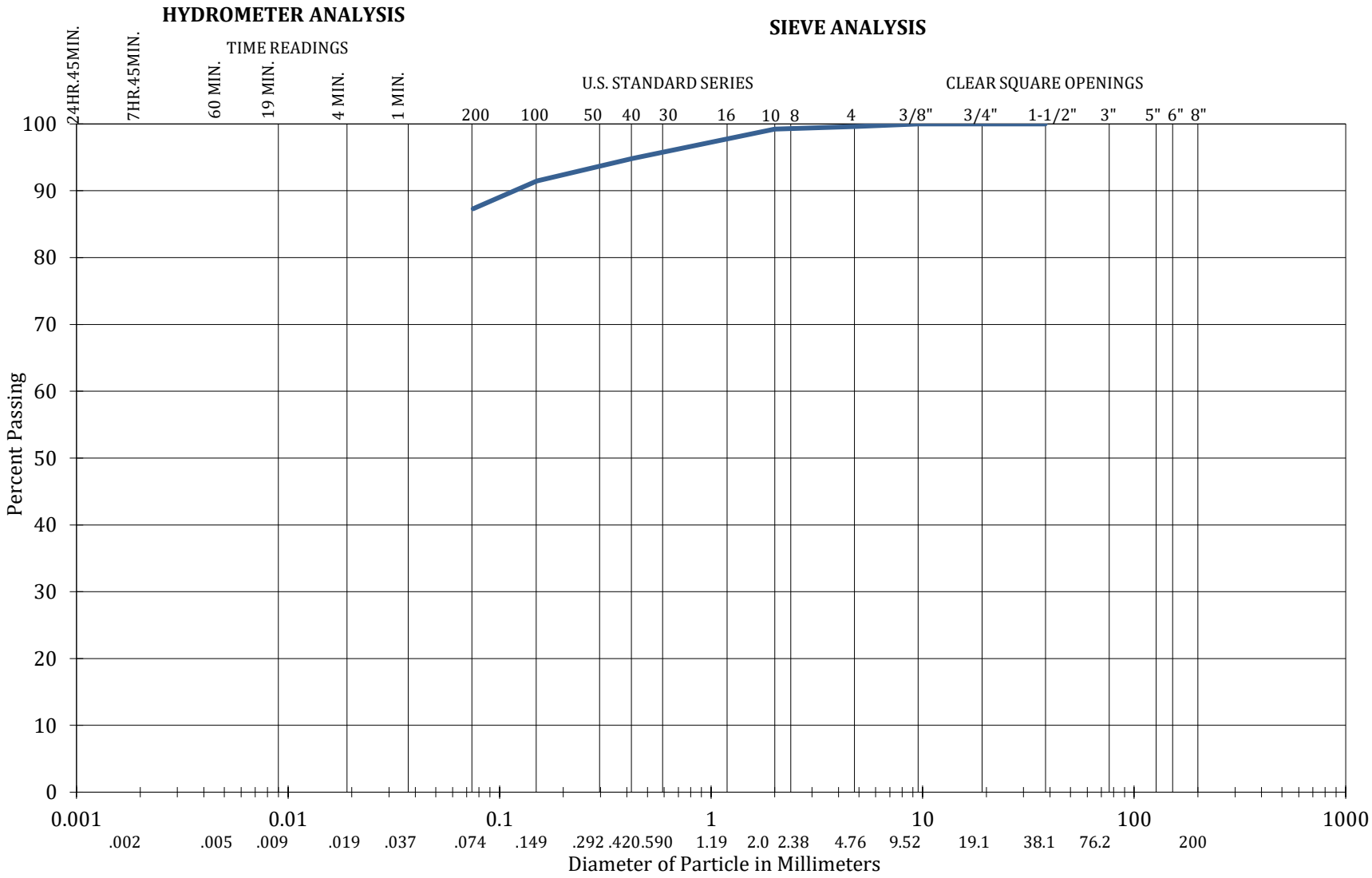
Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Olive Green Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/2/2021

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	FINE	MEDIUM	COARSE	FINE	COARSE	

BH6-4B

Lot 58 Grand View Lodges

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Sample ID: BH6-11 Depth (ft): 52'-53'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**9%**
Sand	**25%**
Fines	**66%**

Liquid Limit:	**25**
Plastic Limit:	**11**
Plasticity Index:	**14**

In-Situ Moisture Content	**16.5%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	171.0	171.0	0.0	0%	100%
1"	25	171.0	171.0	0.0	0%	100%
3/4"	18.75	171.0	171.0	0.0	0%	100%
3/8"	9.5	171.0	205.5	34.5	5%	95%
#4	4.75	171.0	206.3	35.3	9%	91%
#10	2.00	171.0	231.4	60.4	17%	83%
#40	0.425	171.0	226.7	55.7	25%	75%
#100	0.15	171.0	200.2	29.2	29%	71%
#200	0.075	171.0	213.6	42.7	34%	66%
Pan	0	171.0	661.8	490.9	100%	0%
		Total Weight of Sample (g)		**748.7**		

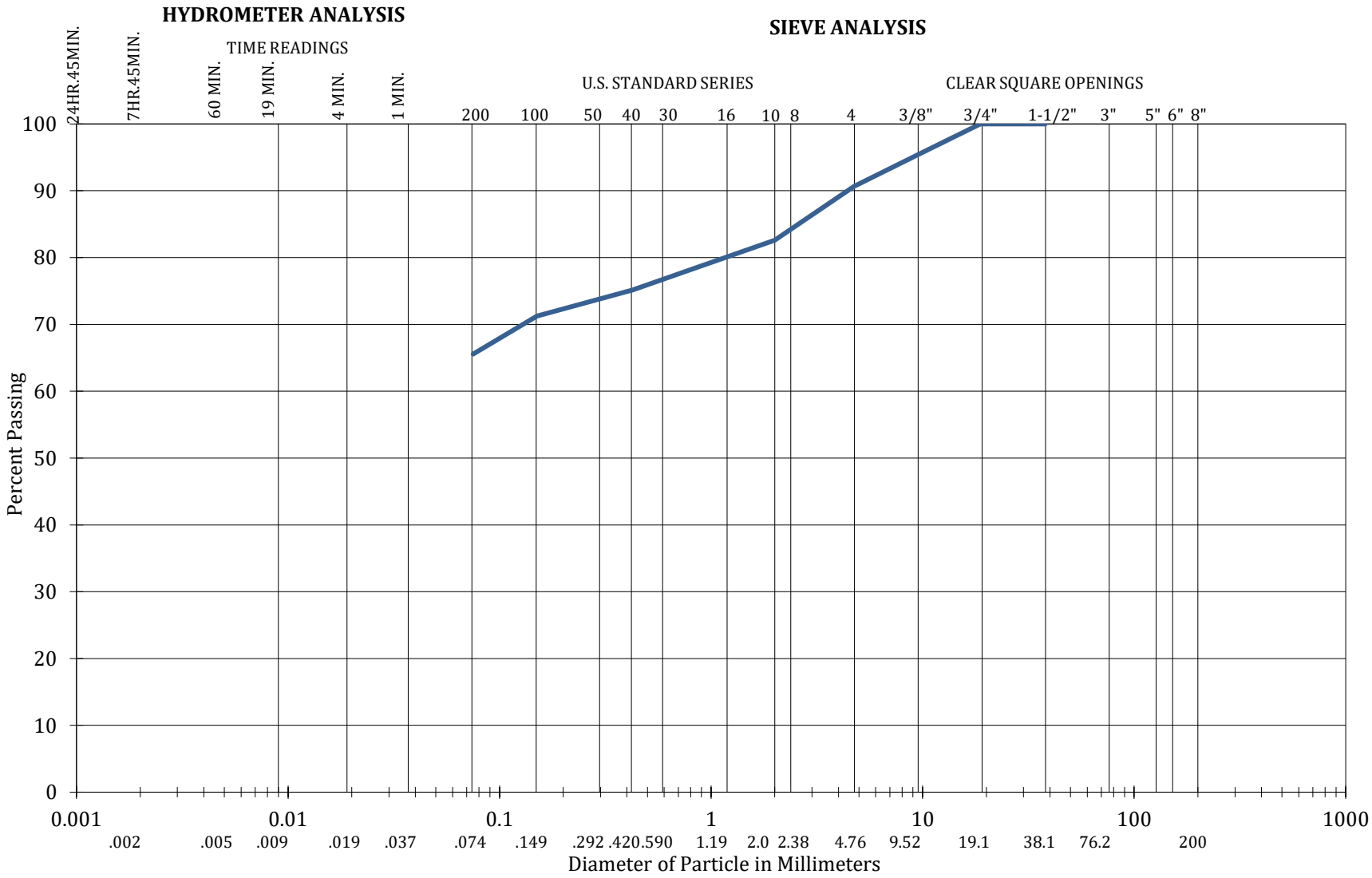
Moisture Content	
Wet Wt + Tare (g)	851.2
Dry Wt. + Tare (g)	754.8
Wt of Water (g)	96.4
Tare Wt. (g)	170.8
Dry Wt. (g)	584.0
Moisture Content	16.5%
Wash	
Wet Wt. + Tare (g)	851.2
Pre Wash Dry (g)	748.7
Post Wash Dry (g)	257.8
Tare Wt. (g)	170.4
Wt.Of Minus #200 =	490.9

Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Sandy Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/7/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH6-11

Lot 58 Grand View Lodges

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Sample ID: BH7-4 Depth (ft): 19'-20'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**9%**
Sand	**27%**
Fines	**64%**

Liquid Limit:	**25**
Plastic Limit:	**14**
Plasticity Index:	**11**

In-Situ Moisture Content	**13.2%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.3	292.3	0.0	0%	100%
1"	25	292.3	292.3	0.0	0%	100%
3/4"	18.75	292.3	292.3	0.0	0%	100%
3/8"	9.5	292.3	301.7	9.5	3%	97%
#4	4.75	292.3	307.6	15.4	9%	91%
#10	2.00	292.3	310.8	18.5	16%	84%
#40	0.425	292.3	311.2	18.9	23%	77%
#100	0.15	292.3	306.4	14.1	28%	72%
#200	0.075	292.3	313.4	21.1	36%	64%
Pan	0	292.3	467.0	174.8	100%	0%
		Total Weight of Sample (g)		**272.2**		

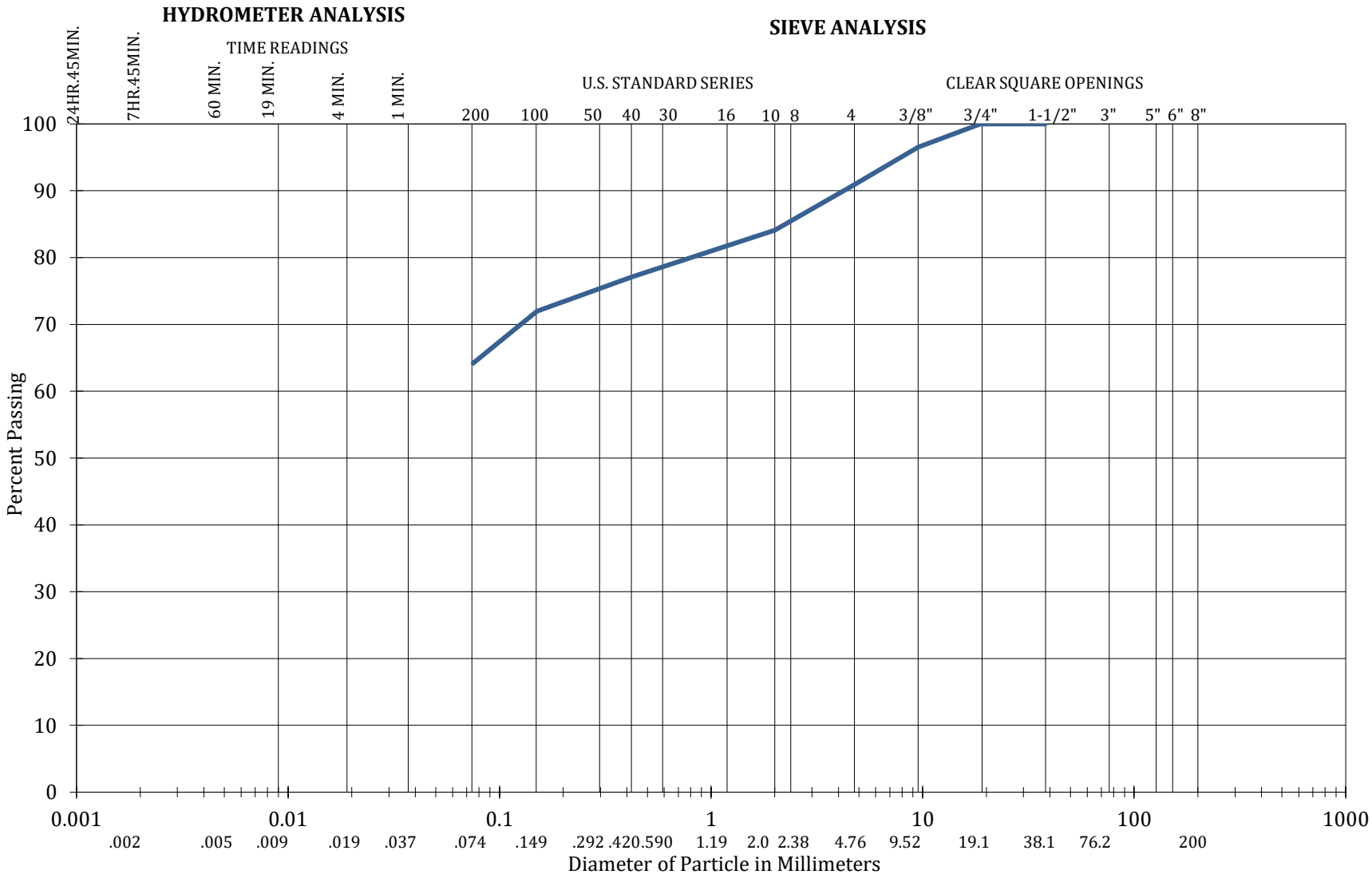
Moisture Content	
Wet Wt + Tare (g)	1193.5
Dry Wt. + Tare (g)	1074.5
Wt of Water (g)	118.9
Tare Wt. (g)	170.9
Dry Wt. (g)	903.7
Moisture Content	13.2%
Wash	
Wet Wt. + Tare (g)	1193.5
Pre Wash Dry (g)	272.2
Post Wash Dry (g)	97.5
Tare Wt. (g)	292.3
Wt.Of Minus #200 =	174.8

Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Sandy Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/2/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH7-4

Lot 58 Grand View Lodges

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Sample ID: BH7-6 Depth (ft): 25.5'-26.5'

Unified Soils Classification

Lean Clay with Sand, CL

Gravel	**4%**
Sand	**15%**
Fines	**81%**

Liquid Limit:	**35**
Plastic Limit:	**17**
Plasticity Index:	**18**

In-Situ Moisture Content	**20.6%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.3	292.3	0.0	0%	100%
1"	25	292.3	292.3	0.0	0%	100%
3/4"	18.75	292.3	292.3	0.0	0%	100%
3/8"	9.5	292.3	298.7	6.4	2%	98%
#4	4.75	292.3	297.1	4.8	4%	96%
#10	2.00	292.3	296.7	4.4	5%	95%
#40	0.425	292.3	300.0	7.7	8%	92%
#100	0.15	292.3	302.7	10.4	12%	88%
#200	0.075	292.3	312.9	20.6	19%	81%
Pan	0	292.3	531.7	239.4	100%	0%
		Total Weight of Sample (g)		**293.8**		

Moisture Content	
Wet Wt + Tare (g)	1304.2
Dry Wt. + Tare (g)	1110.3
Wt of Water (g)	193.9
Tare Wt. (g)	170.6
Dry Wt. (g)	939.7
Moisture Content	20.6%
Wash	
Wet Wt. + Tare (g)	1304.2
Pre Wash Dry (g)	293.8
Post Wash Dry (g)	54.4
Tare Wt. (g)	292.3
Wt.Of Minus #200 =	239.4

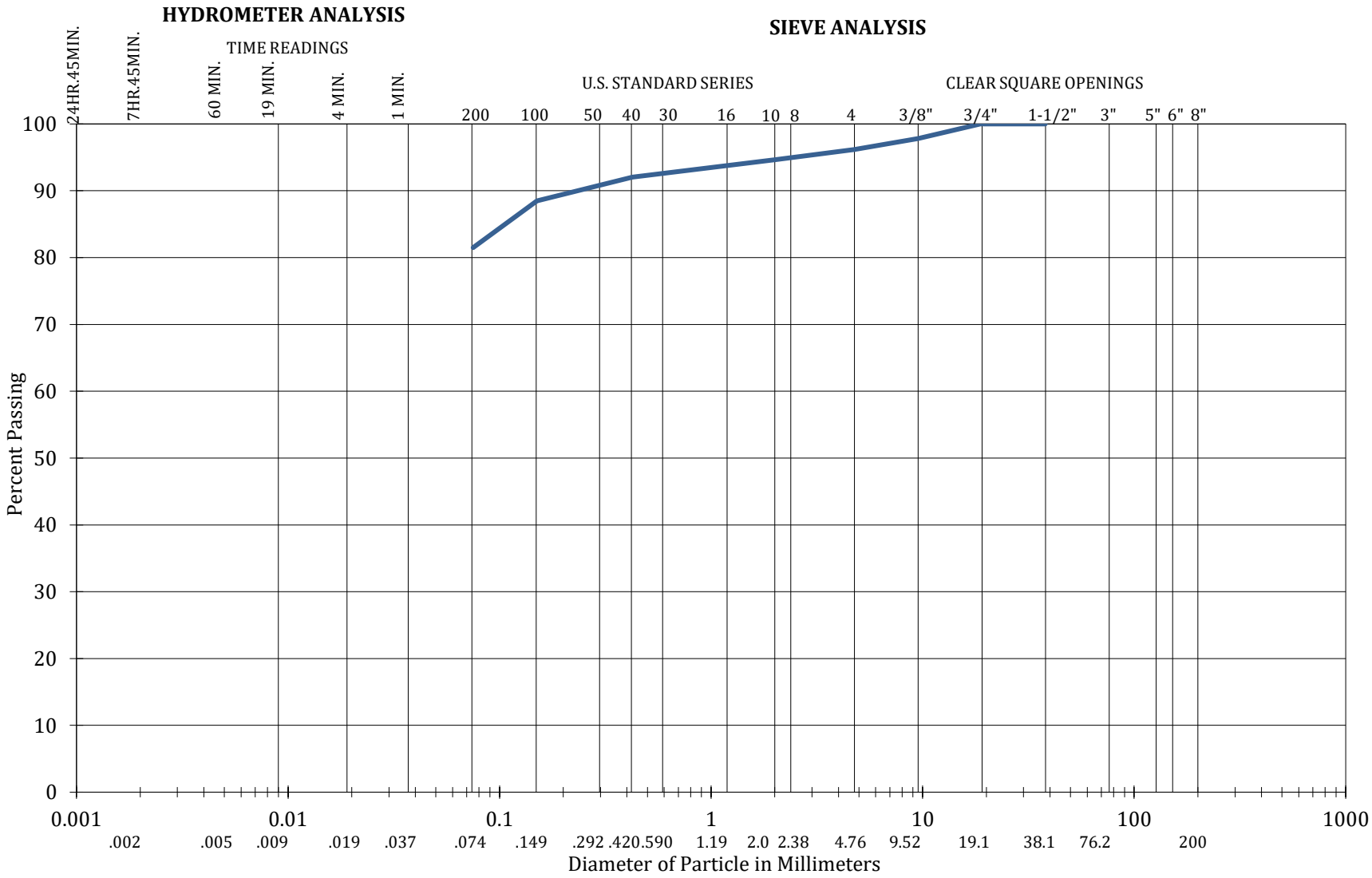
Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/1/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH7-6

Lot 58 Grand View Lodges

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Sample ID: BH7-13 Depth (ft): 59'-60'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**11%**
Sand	**22%**
Fines	**67%**

Liquid Limit:	**29**
Plastic Limit:	**15**
Plasticity Index:	**14**

In-Situ Moisture Content	**17.9%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.2	292.2	0.0	0%	100%
1"	25	292.2	332.0	39.8	6%	94%
3/4"	18.75	292.2	292.2	0.0	6%	94%
3/8"	9.5	292.2	306.5	14.2	8%	92%
#4	4.75	292.2	311.7	19.4	11%	89%
#10	2.00	292.2	325.3	33.1	16%	84%
#40	0.425	292.2	327.0	34.8	21%	79%
#100	0.15	292.2	319.8	27.6	25%	75%
#200	0.075	292.2	344.3	52.0	33%	67%
Pan	0	292.2	748.9	456.6	100%	0%
		Total Weight of Sample (g)		**677.5**		

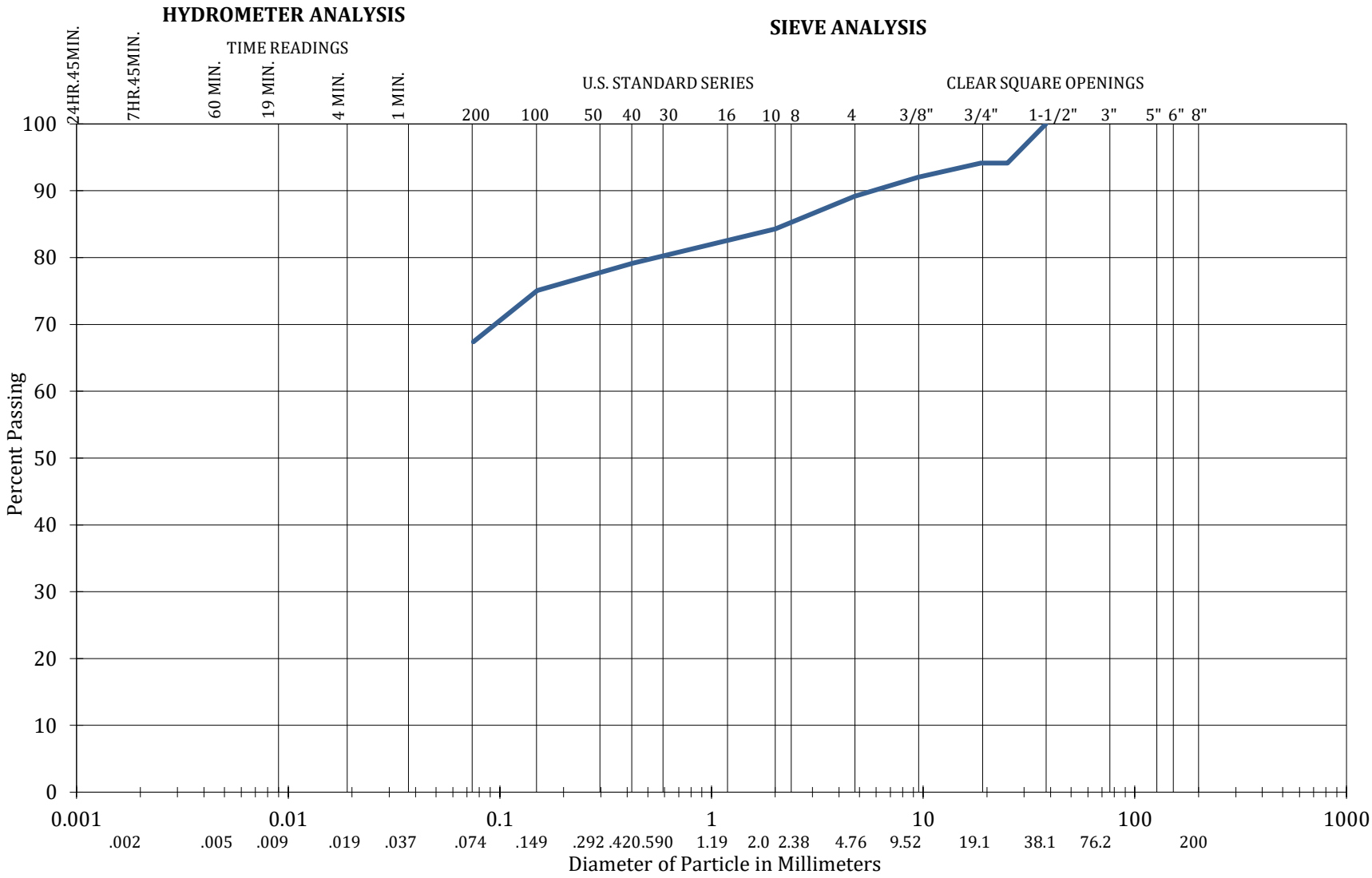
Moisture Content	
Wet Wt + Tare (g)	1000.2
Dry Wt. + Tare (g)	873.8
Wt of Water (g)	126.4
Tare Wt. (g)	169.7
Dry Wt. (g)	704.2
Moisture Content	17.9%
Wash	
Wet Wt. + Tare (g)	1000.2
Pre Wash Dry (g)	677.5
Post Wash Dry (g)	220.9
Tare Wt. (g)	169.7
Wt.Of Minus #200 =	456.6

Project:	Lot 58 Gand View Lodges
Job Number	21-222-02
Visual ID:	Gray Lean Clay with Sand

Sampled By:	AP
Date:	6/25/2021
Tested By:	AE
Date:	7/1/2021

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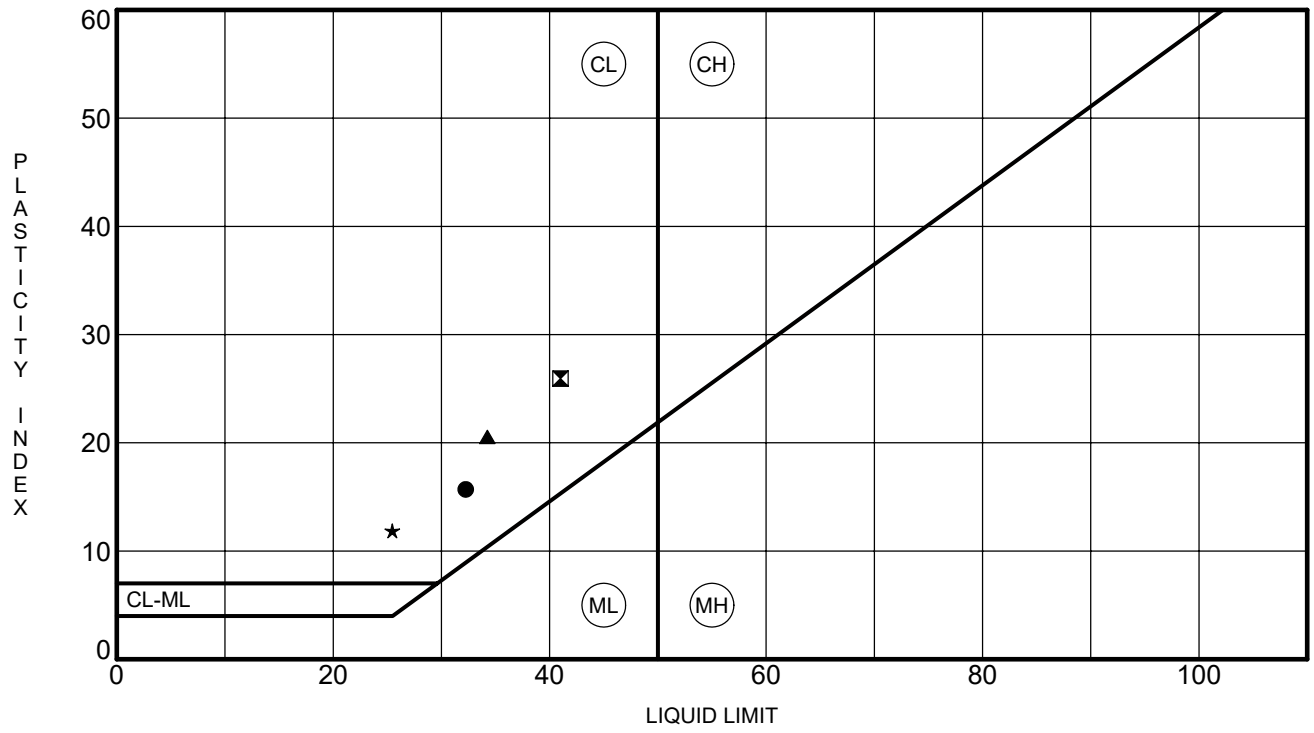
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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH7-13

Lot 58 Grand View Lodges



	Specimen Identification		LL	PL	PI	Fines	Classification
●	**TP-1**	**9.0**	**32**	**17**	**15**		
⊠	**TP-1**	**10.0**	**41**	**15**	**26**		
▲	**TP-1**	**25.0**	**34**	**14**	**20**		
★	**TP-1**	**27.5**	**25**	**14**	**11**		

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Telephone: (307)733-7209
Fax:

ATTERBERG LIMITS' RESULTS

Project: TOJ - Snow King Water Tank

Location: Jackson, Wyoming

Number:

JORGENSEN
GEOTECHNICAL, LLC

PO Box 9550 | 1315 HWY 89 S., Ste. 201
Jackson, WY 83002
PH: 307.733.5150
www.jorgeng.com

APPENDIX D

Soil-Engineering Parameters

Engineering parameters for site soils were evaluated based on a variety of methods, including:

- direct laboratory testing (shear strength and consolidation),
- correlations with index tests,
- empirical relationships between SPT N-values and shear strength, and
- visual classification and empirical estimates.

Due to the chaotic and random nature of the soils (i.e., mixture of fine-grained and coarse-grained soils), collecting relatively undisturbed shelby tube samples of fine-grained soil layers during the drilling effort to perform shear tests and consolidation tests on was difficult. Therefore, very limited soil parameters for soil unit weight, consolidation values, and shear strength values were directly determined from their respective tests. Most of the samples that underwent lab testing were disturbed samples collected during SPT sampling and sonic drilling, of which their results were used to estimate the soil parameters based on correlations. Jorgensen Geotechnical (JG) was able to submit two relatively undisturbed Shelby tube samples to undergo consolidation testing, while the 2021 Nelson Engineering Report presented shear testing results from five relatively undisturbed Shelby tube samples, which were reviewed.

A discussion regarding the selection of soils parameters is found below.

Soil Unit Weight

Two consolidation tests were performed which produced dry unit weights, while five shear test results presented in the Nelson Engineering report produced dry unit weights. These direct unit weight measurements, SPT blow counts, and observations made in the open test pits were used to estimate the in-situ unit weight of the soils. Estimated unit weights are presented below in Table D-1.

Table D-1: Estimated Soil Unit Weight Values

Soil Layer	Unit Weight (Pounds per cubic foot)
CL – Lean Clay	115
SC – Clayey Sand	120
GC – Clayey Gravel	125
SC – Weathered Bedrock	140

Consolidation Parameters

Two consolidation tests were performed on samples collected during the drilling effort performed by JG. No consolidation tests were presented in the Nelson Engineering or Womack and Associates, reports. Coefficients of consolidation, C_c, were calculated based on the direct consolidated test results, as well as methods recommended by Skempton (1944), Nagaraj and Murthy (1985), Wroth and Wood (1978), and Kulhawy and Mayne (1990). These calculation methods use index properties such as the Liquid Limit and the Plasticity Index to estimate the coefficients of consolidation. The results presented below are the average of all C_c, values calculated from the direct results and correlation calculations.

Table D-2: Estimated Coefficients of Consolidation

Soil Layer	Coefficient of Consolidation
CL – Clay	0.20
SC – Clayey Sand	0.18
GC – Clayey Gravel	0.16

Strength Parameters

Internal Friction Angle (phi)

Strength parameters used in the slope stability model were selected by examining direct shear results, calculations based on SPT blow count values, as recommended by Hatanaka and Uchida (1996) and Schmertmann (1975), and calculated based on index properties as recommended by Duncan (1989). Minimum, maximum, and average internal friction angles (phi) are summarized in the table below.

Table D-3: Estimated Internal Friction Values (Degrees)

	Minimum	Maximum	Average	Standard Deviation	Selected phi[1]
CL – Clay	30.0	56.3	37.3	7.2	35
SC – Clayey Sand	27.5	54.2	37.9	9.4	37
GC – Clayey Gravel	29.0	63.3	47.5	9.7	40
SC – Weathered Bedrock	--	--	--	--	60

1. Dashes indicate a refusal condition was met during SPT samples, therefore phi value was estimated

As summarized in the table above, the minimum and maximum calculated internal friction angles for a single soil layer sometimes varied by over 20-degrees. Therefore, internal friction angles were selected by reviewing all calculated values, as well as reviewing suggested values in Chapter 9 of the Pit Slope Manual (1982).

Soils that have undergone movement are assumed to be in a residual strength state; i.e., weaker than the strength of the soils prior to the movement. Though the published geologic maps and our observations in the field classified the origin of the soils as landslide debris, no direct shear zones were observed and no signs of previous shearing (i.e., slickensides) were observed. Additionally, loess, typically formed from windblown glacial silt, was observed overlying the landslide deposit, therefore it is assumed the landslide occurred prior to or during the Pinedale Glaciation approximately 10 to 30 thousand years ago. If the soils observed in the boreholes and test pits were once in a residual state following failure, it is assumed since their mobilization in the failure event, they have been naturally consolidating and therefore regaining strength. Therefore, residual shear strengths were not used for the slope stability model and peak shear strengths were used.

Cohesion

Cohesion was added to the material models in the slope stability model to avoid selecting slip surfaces representing the “infinite slope” solution. Cohesion values used in the slope stability models can be found in Appendix F.

Compression Index (C_c) Calculation Spreadsheet

							Skempton	*Nagaraj*	*Wroth*	*Kulhawy*				
Project	**BH**	**Depth**	**LL**	**PL**	**PI**	**Consol Results**	**Compression Index (Cc)**				**Average**	**Median**	**Std Dev**	**Classification**
Bear Development - Snow King Loop Lots 53 and 58	JG-10	12.5-14.0	39	15	24	0.17	*0.26*	*0.24*	*0.32*	*0.32*	0.29	0.29	0.04	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-10	17.5-19.0	32	14	18	0.13	*0.20*	*0.20*	*0.24*	*0.24*	0.22	0.22	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	18-19	31	16	15		*0.19*	*0.19*	*0.20*	*0.20*	0.20	0.20	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	27-29	28	16	12		*0.16*	*0.18*	*0.16*	*0.16*	0.17	0.16	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	54.5-57	33	15	18		*0.21*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	67-69	26	16	10		*0.14*	*0.16*	*0.14*	*0.14*	0.14	0.14	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	72.5-75	38	17	21		*0.25*	*0.24*	*0.28*	*0.28*	0.26	0.27	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	7-8.5	20	15	5		*0.09*	*0.13*	*0.07*	*0.07*	0.09	0.08	0.03	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-02	14.5-16	31	15	16		*0.19*	*0.19*	*0.22*	*0.22*	0.20	0.21	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	22-25	29	15	14		*0.17*	*0.18*	*0.19*	*0.19*	0.18	0.19	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	32-35	21	16	5		*0.10*	*0.13*	*0.07*	*0.07*	0.09	0.08	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	38.5-40	29	17	12		*0.17*	*0.18*	*0.16*	*0.16*	0.17	0.17	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	52-55	16	4	12		*0.05*	*0.10*	*0.16*	*0.16*	0.12	0.13	0.05	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	60-62	37	23	14		*0.24*	*0.23*	*0.19*	*0.19*	0.21	0.21	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	64.5-67	31	17	14		*0.19*	*0.19*	*0.19*	*0.19*	0.19	0.19	0.00	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-02	69.5-72	21	16	5		*0.10*	*0.13*	*0.07*	*0.07*	0.09	0.08	0.03	SC
Bear Development - Snow King Loop Lots 53 and 58	JG-03	4.5-7	33	14	19		*0.21*	*0.21*	*0.26*	*0.26*	0.23	0.23	0.03	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-03	14.5-17	30	15	15		*0.18*	*0.19*	*0.20*	*0.20*	0.19	0.20	0.01	SC
Bear Development - Snow King Loop Lots 53 and 58	JG-03	22-25	35	15	20		*0.23*	*0.22*	*0.27*	*0.27*	0.25	0.25	0.03	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-03	30-33	29	15	14		*0.17*	*0.18*	*0.19*	*0.19*	0.18	0.19	0.01	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-04	7-8.5	34	16	18		*0.22*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-04	14.5-17	19	14	5		*0.08*	*0.12*	*0.07*	*0.07*	0.08	0.07	0.02	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-04	22-25	31	17	14		*0.19*	*0.19*	*0.19*	*0.19*	0.19	0.19	0.00	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-04	30-33	33	15	18		*0.21*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-10	7.5-9	25	16	9		*0.14*	*0.16*	*0.12*	*0.12*	0.13	0.13	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-10	15-17	38	21	17		*0.25*	*0.24*	*0.23*	*0.23*	0.24	0.23	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-11	7.5-9	22	15	7		*0.11*	*0.14*	*0.09*	*0.09*	0.11	0.10	0.02	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-12	5-6.5	27	15	12		*0.15*	*0.17*	*0.16*	*0.16*	0.16	0.16	0.01	GC
Bear Development - Snow King Loop Lots 53 and 58	JG-12	10-11.5	27	17	10		*0.15*	*0.17*	*0.14*	*0.14*	0.15	0.14	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-12	20-21.5	26	14	12		*0.14*	*0.16*	*0.16*	*0.16*	0.16	0.16	0.01	SC
Nelson 53&58	BH1	29.75	27	12	15		*0.15*	*0.17*	*0.20*	*0.20*	0.18	0.19	0.02	SC
Nelson 53&58	BH1	40	19	4	15		*0.08*	*0.12*	*0.20*	*0.20*	0.15	0.16	0.06	SC
Nelson 53&58	BH1	45	30	6	24		*0.18*	*0.19*	*0.32*	*0.32*	0.25	0.26	0.08	SC
Nelson 53&58	BH5	23	29	4	25		*0.17*	*0.18*	*0.34*	*0.34*	0.26	0.26	0.09	SC
Nelson 53&58	BH5	37	18	2	16		*0.07*	*0.11*	*0.22*	*0.22*	0.15	0.16	0.07	SC
Nelson 53&58	BH6	22	33	15	18		*0.21*	*0.21*	*0.24*	*0.24*	0.23	0.23	0.02	CL
Nelson 53&58	BH6	52	25	11	14		*0.14*	*0.16*	*0.19*	*0.19*	0.17	0.17	0.03	CL
Nelson 53&58	BH7	19	25	14	11		*0.14*	*0.16*	*0.15*	*0.15*	0.15	0.15	0.01	CL
Nelson 53&58	BH7	25.5	35	17	18		*0.23*	*0.22*	*0.24*	*0.24*	0.23	0.23	0.01	CL
Nelson 53&58	BH7	59	29	15	14		*0.17*	*0.18*	*0.19*	*0.19*	0.18	0.19	0.01	CL
Womack Water Tank	TP-1	9	32	17	15		*0.20*	*0.20*	*0.20*	*0.20*	0.20	0.20	0.00	CL
Womack Water Tank	TP-1	10	41	15	26		*0.28*	*0.26*	*0.35*	*0.35*	0.31	0.32	0.05	CL
Womack Water Tank	TP-1	25	34	14	20		*0.22*	*0.21*	*0.27*	*0.27*	0.24	0.24	0.03	CL
Womack Water Tank	TP-1	27.5	25	14	11		*0.14*	*0.16*	*0.15*	*0.15*	0.15	0.15	0.01	CL

Phi Calculation Spreadsheet

Shear Strength Correlation Summary - Peak Friction Angle

					Hatanaka and Uchida (1996)	*Schmertmann (1975)*						Duncan, 1989							
Project	**BH**	**Sample**	**Depth (ft)**	**(N1)60**	**Peak Phi (N160)**	**Peak Phi (N160)**	**Phi (Direct Shear)**	**LL**	**PI**	**Overburden**	**% Clay**	**Peak Phi**	**Classification**	**Unit Weight (pcf)**	**Cohesion**	**Min**	**Max**	**Average**	**Std Dev**
Bear Dev - 53&58	**JG-01**	**D-8**	18	--	--	--		31	15			34	CL	115	0	24.0	26.0	25.0	1.4
Bear Dev - 53&58	**JG-01**	**D-12**	27	38	47	53		28	12			35	CL	115	0				
Bear Dev - 53&58	**JG-01**	**D-17**	37	94	63	60				4300	7		GC	120	0	31.0	32.0	31.5	0.7
Bear Dev - 53&58	**JG-01**	**D-26**	47	84	61	59							GC	120	0				
Bear Dev - 53&58	**JG-01**	**D-27**	54.5	--	-	-		33	18			32	CL	115	0				
Bear Dev - 53&58	**JG-01**	**D-31**	67	56	53	54							CL	115	0	21.0	27.0	23.7	3.1
Bear Dev - 53&58	**JG-01**	**D-32**	67	--	-	-		26	10			36	CL	115	0				
Bear Dev - 53&58	**JG-01**	**D-36**	72.5	--	-	-		38	21			31	CL	115	0				
Bear Dev - 53&58	**JG-01**	**D-39**	80	35	47	48							GC	120	0				
Bear Dev - 53&58	**JG-02**	**D4**	7	-	-	-		20	5			37	GC	120	0	31.0	31.0	31.0	
Bear Dev - 53&58	**JG-02**	**D8**	14.5	-	-	-		31	16			32	CL	115	0				
Bear Dev - 53&58	**JG-02**	**D9**	17	6	31	31							CL	110	0				
Bear Dev - 53&58	**JG-02**	**D11**	22	-	-	-		29	14			30	CL	110	0	23.0	31.0	26.0	3.6
Bear Dev - 53&58	**JG-02**	**D13**	27	24	42	47							CL	110	0				
Bear Dev - 53&58	**JG-02**	**D16**	32	-	-	-		21	5			37	CL	110	0				
Bear Dev - 53&58	**JG-02**	**D18**	37	24	42	46		29	12			35	CL	110	0				
Bear Dev - 53&58	**JG-02**	**D22**	44.5	-	-	-				5500	8		GC	125	0	31.0	32.0	31.5	0.7
Bear Dev - 53&58	**JG-02**	**D23**	47	45	50	52							GC	125	0				
Bear Dev - 53&58	**JG-02**	**D26**	52	-	-	-		16	12			35	CL	110	0				
Bear Dev - 53&58	**JG-02**	**D28**	57	45	50	52							CL	125	0				
Bear Dev - 53&58	**JG-02**	**D30**	60	-	-	-		37	14			30	CL	125	0	23.0	26.0	24.0	1.7
Bear Dev - 53&58	**JG-02**	**D32**	64.5	-	-	-		31	14			30	CL	125	0				
Bear Dev - 53&58	**JG-02**	**D33**	67	66	56	56							CL	125	0				
Bear Dev - 53&58	**JG-02**	**D35**	69.5	-	-	-		21	5			37	SC	125	0	31.0	31.0	31.0	
Bear Dev - 53&58	**JG-02**	**D40**	80	59	54	54							SC	125	0				
Bear Dev - 53&58	**JG-03**	**D3**	4.5	-	-	-		33	19				CL	110	0	21.0	21.0	21.0	
Bear Dev - 53&58	**JG-03**	**D4**	7	7	31	33							CL	110	0				
Bear Dev - 53&58	**JG-03**	**D8**	14.5	-	-	-		30	15			34	SC	120	0	24.0	24.0	24.0	
Bear Dev - 53&58	**JG-03**	**D9**	17	33	46	51							SC	120	0				
Bear Dev - 53&58	**JG-03**	**D12**	22	-	-	-		35	20			31	GC	120	0				
Bear Dev - 53&58	**JG-03**	**D14**	27	22	41	45							GC	120	0	23.0	21.0	22.0	1.4
Bear Dev - 53&58	**JG-03**	**D19**	35	17	38	40		29	14			30	GC	120	0				
Bear Dev - 53&58	**JG-04**	**D4**	7	8	33	35		34	18			32	CL	110	0	23.0	23.0	23.0	
Bear Dev - 53&58	**JG-04**	**D8**	14.5	-	-	-		19	5			37	GC	125	0	31.0	31.0	31.0	
Bear Dev - 53&58	**JG-04**	**D9**	17	49	51	55							GC	125	0				
Bear Dev - 53&58	**JG-04**	**D12**	2	-	-	-		31	14			30	CL	115	0	23.0	23.0	23.0	
Bear Dev - 53&58	**JG-04**	**D14**	27	21	40	44							CL	115	0				
Bear Dev - 53&58	**JG-04**	**D17**	30	-	-	-		33	18			32	GC	125	0	23.0	23.0	23.0	
Bear Dev - 53&58	**JG-04**	**D19**	35	83	61	59							GC	125	0				
Bear Dev - 53&58	**JG-10**	**D-1**	2.5	4	29	28		25	9			36	SC	110	0	26.0	26.0	26.0	
Bear Dev - 53&58	**JG-10**	**D-2**	5	11	35	38							CL	110	0				
Bear Dev - 53&58	**JG-10**	**D-3**	7.5	9	33	34							CL	110	0				
Bear Dev - 53&58	**JG-10**	**D-4**	10	18	39	43							CL	115	0				
Bear Dev - 53&58	**JG-10**	**U1**	12.5	-	-	-		39	24			31	CL	110	0	18.0	24.5	21.8	2.4
Bear Dev - 53&58	**JG-10**	**D-5**	15	11	35	37		38	17	4200	36	33	CL	110	0				
Bear Dev - 53&58	**JG-10**	**U2**	17.5	-	-	-		32	18			32	CL	110	0				
Bear Dev - 53&58	**JG-10**	**D-6**	20	14	37	38							CL	110	0				
Bear Dev - 53&58	**JG-11**	**D-1**	2.5	16	43	49							GC	115	0				
Bear Dev - 53&58	**JG-11**	**D-2**	5	50	52	56							GC	125	0				
Bear Dev - 53&58	**JG-11**	**D-3**	7.5	20	40	45		22	7			37	GC	115	0				
Bear Dev - 53&58	**JG-11**	**D-4**	10	16	38	41				3600	17		GC	115	0	31.0	27.0	29.7	2.3
Bear Dev - 53&58	**JG-11**	**D-5**	12.5	33	46	50							GC	125	0				
Bear Dev - 53&58	**JG-11**	**D-6**	15	31	45	49							GC	120	0				
Bear Dev - 53&58	**JG-11**	**D-7**	17.5	79	60	59							GC	125	0				
Bear Dev - 53&58	**JG-11**	**D-8**	19	77	59	59							GC	125	0				
Bear Dev - 53&58	**JG-12**	**D-1**	2.5	5	30	29							GC	110	0				
Bear Dev - 53&58	**JG-12**	**D-2**	5	55	53	57		27	12			35	GC	125	0	26.0	26.0	26.0	
Bear Dev - 53&58	**JG-12**	**D-3**	7.5	78	59	59							GC	125	0				
Bear Dev - 53&58	**JG-12**	**D-4**	10	15	37	40		27	10			36	CL	115	0	27.0	27.0	27.0	
Bear Dev - 53&58	**JG-12**	**D-5**	12.5	17	39	42							CL	115	0				
Bear Dev - 53&58	**JG-12**	**D-6**	15	41	49	53							GC	120	0				
Bear Dev - 53&58	**JG-12**	**D-7**	17.5	45	50	53							GC	120	0	26.0	26.0	26.0	
Bear Dev - 53&58	**JG-12**	**D-8**	20	20	40	43		26	12			35	GC	120	0				
Nelson 53&58	**BH1**	4	29.75	10	32			27	15			34	SC	115					
Nelson 53&58	**BH1**	5	40	30	38			19	15			34	SC	125					
Nelson 53&58	**BH1**	6	45	16	33			30	24			31	SC	120		20	32	26.8333	
Nelson 53&58	**BH5**	-	23	-	-			29	25			30	SC	120					
Nelson 53&58	**BH5**	-	37	-	-			18	16			32	SC	120		20	32	26.5	
Nelson 53&58	**BH6**	4	22	15	32			33	18			32	CL	108.3					
Nelson 53&58	**BH6**	11	52	-	-		37	25	14			30	CL	115		22	30	26.5	
Nelson 53&58	**BH7**	4	19	-	-		41.9	25	11			36	CL	100					
Nelson 53&58	**BH7**	6	25.5	21	35			35	18			32	CL	100.8					
Nelson 53&58	**BH7**	13	59	21	35			29	14			30	CL	113.8		23	31	27.3333	
Womack Water Tank	**TP-1**		9					32	15			34	CL	110					
Womack Water Tank	**TP-1**		10					41	26			30	CL	110					
Womack Water Tank	**TP-1**		25					34	20			31	CL	110					
Womack Water Tank	**TP-1**		27.5					25	11			36	CL	110		20	30	25.625	

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APPENDIX E

Calculations

Settlement Methodology

The settlement calculations assume the soil layer of concern comprises 100% compressible soil by volume. Though, some soils at the site only partially comprise the fine-grained soils by mass, as described in the borehole logs. Based on lab testing and visual classification, the clayey sand soils contain a maximum of 45% fines by mass. To convert the assumed mass to volume, we have used a scaling factor of 1.25, resulting in an assumed percent fines by volume of 55%.

Because the settlement is anticipated to only occur in the potentially compressible, fine-grained soils, the total settlement calculation was reduced by 55%.

Lateral Pressures Methodology

Seismic coefficients were calculated based on recommendation from NCHRP Report 611 “Seismic Analysis and Desing of Retaining Walls, Buried Structures, Slopes and Embankments” and FHWA NHI Course No 130094 LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations, as described below and illustrated in the equations. For our calculations, we used an average wall height of 30’ to account for the retaining wall at the site, and since the retaining wall is considered a brittle system with negligible allowable displacement, we used an r value of 1 (FHWA, 2011). In summary, the seismic coefficient (ks) is determined by applying a scaling factor (α) to the modified peak ground acceleration (PGAm).

Settlement Calculation Spreadsheet

Project: Bear Development
Project Number: 23072
Engineer: HC
Soil Sample: Average Cc value CL
Scenario: Direclty on poor soil

Settlement analysis of in-situ soil (only analyzing a maximum of 2B worth of soil below footing)

Key:

Manual Input
Calculation

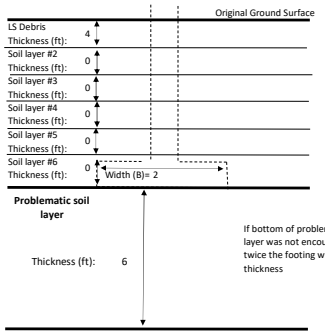
Step 1:

In-Situ Soil Properties of Problematic Soil			
	Soil Description: Lean Clay AF		
	Source of Soil Properties: SK Lab tests		
	Dry unit Weight:	15	pcf
	Moisture Content:	10.0%	
	Moist unit weight:	16.5	pcf
(Avergae 0.4 to 0.7)	Initial Void Ratio (e_0):	0.427	Vv/Vs
(Average 0.2 to 0.5)	Coefficient of Consol. (C_c):	0.2	

Step 2:

Original Overburden Pressure on Soil Element Identified in Step #1			
Soil Layer #1	Unit Weight	135	**PCF**
LS Debris	Thickness	4	**Ft.**
Soil Layer #2	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #3	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #4	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #5	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #6	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Problematic Soil Layer	Unit Weight	125	**PCF**
Below Footing	Thickess (H_0)	6	**Ft.**
Total Original Overburdern Pressure on Soil Element:		915	**PSF**

Pre-construction status. Footing is superimposed.



If bottom of problematic soil layer was not encountered, use twice the footing width for thickness

Step 3:

Foundation Characteristics		
Footing load:	3,000	psf
Estimated Footing Width (B):	2	ft
Footing Depth (D_f):	3	ft
Applied footing load applied to soil element (assuming 2V:1H)	1200	PSF

Step 4:

Backfill Soil Properties		
Dry Unit Weight:	120	pcf
Moisture Content:	12.0%	
Moist Unit Weight:	134.4	pcf
Backfill Depth:	3	ft

Step 5:

Settlement Calculation at Soil Element Identified in Step #2		
Thickness of Problematic Soil Layer (H_0):	6	ft
Depth to soil element below **OG**:	7	ft
Depth to soil element below footing:	3	ft
Original Overburden (σv_0):	915.0	psf
Applied foundation load at soil element :	1200.0	psf
Post Construction pressure at soil element (σv):	1978.2	
Change in presure at soils element:	1063	psf
$(\sigma v_f)/(\sigma v_0)$	2.162	
$Log[(\sigma v_f)/(\sigma v_0)]$	0.335	
$1+e_0$	1.427	
$H_0/(1+e_0)$	4.205	
Inches per foot:	12	
Settlement:	3.38	inches

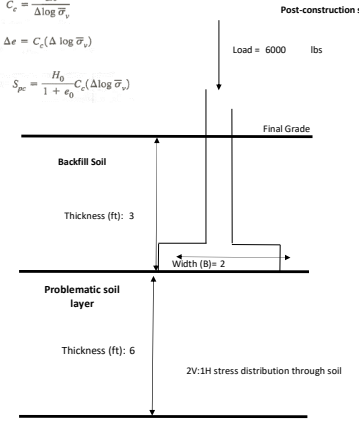
Settlement: $\text{Settlement} = S_{pc} = H_0\left(\frac{\Delta e}{1+e_0}\right)$

Compression Index: $C_c = \frac{\Delta e}{\Delta \log \overline{\sigma}_v}$

Rearranging gives: $\Delta e = C_c(\Delta \log \overline{\sigma}_v)$

Subistituting in gives: $S_{pc} = \frac{H_0}{1+e_0} C_c(\Delta \log \overline{\sigma}_v)$

Post-construction status



This formula is only valid for footings PLACED DIRECTLY ON PROBLEMATIC SOIL LAYER

$$S_{pc} = \frac{H_0}{1+e_0} C_c(\log \overline{\sigma}_{v_f} - \log \overline{\sigma}_{v_o}) = \frac{H_0}{1+e_0}(C_c)\log(\overline{\sigma}_{v_f}/\overline{\sigma}_{v_o})$$

Settlement Calculation Spreadsheet

Project: Bear Development
Project Number: 23072
Engineer: HC
Soil Sample: Average Cc value SC
Scenario: Direclty on poor soil

Settlement analysis of in-situ soil (only analyzing a maximum of 2B worth of soil below footing)

Key:

Manual Input
Calculation

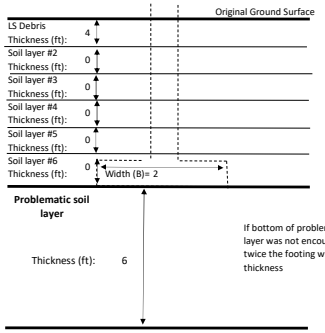
Step 1:

In-Situ Soil Properties of Problematic Soil			
	Soil Description: Lean Clay AF		
	Source of Soil Properties: SK Lab tests		
	Dry unit Weight:	15	pcf
	Moisture Content:	10.0%	
	Moist unit weight:	16.5	pcf
(Avergae 0.4 to 0.7)	Initial Void Ratio (e_0):	0.427	Vv/Vs
(Average 0.2 to 0.5)	Coefficient of Consol. (C_c):	0.18	

Step 2:

Original Overburden Pressure on Soil Element Identified in Step #1			
Soil Layer #1	Unit Weight	135	**PCF**
LS Debris	Thickness	4	**Ft.**
Soil Layer #2	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #3	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #4	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #5	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #6	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Problematic Soil Layer	Unit Weight	125	**PCF**
Below Footing	Thickess (H_0)	6	**Ft.**
Total Original Overburdern Pressure on Soil Element:		915	**PSF**

Pre-construction status. Footing is superimposed.



If bottom of problematic soil layer was not encountered, use twice the footing width for thickness

Step 3:

Foundation Characteristics		
Footing load:	3,000	psf
Estimated Footing Width (B):	2	ft
Footing Depth (D_f):	3	ft
Applied footing load applied to soil element (assuming 2V:1H)	1200	PSF

Step 4:

Backfill Soil Properties		
Dry Unit Weight:	120	pcf
Moisture Content:	12.0%	
Moist Unit Weight:	134.4	pcf
Backfill Depth:	3	ft

Step 5:

Settlement Calculation at Soil Element Identified in Step #2		
Thickness of Problematic Soil Layer (H_0):	6	ft
Depth to soil element below **OG**:	7	ft
Depth to soil element below footing:	3	ft
Original Overburden (σv_0):	915.0	psf
Applied foundation load at soil element :	1200.0	psf
Post Construction pressure at soil element (σv):	1978.2	
Change in presure at soils element:	1063	psf
$(\sigma v_f)/(\sigma v_0)$	2.162	
$Log[(\sigma v_f)/(\sigma v_0)]$	0.335	
$1+e_0$	1.427	
$H_0/(1+e_0)$	4.205	
Inches per foot:	12	
Settlement:	3.04	inches

Note: Maximum % fines by mass 45%. Scaling factor of 1.25 used to assume volume of fines, resulting in 55%.

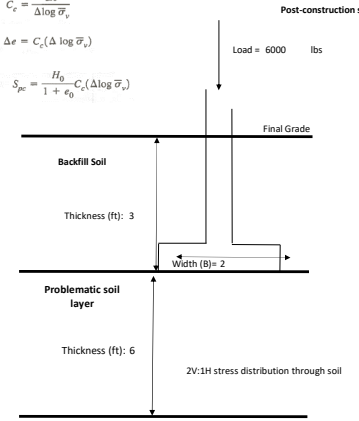
Settlement: $\text{Settlement} = S_{pc} = H_0\left(\frac{\Delta e}{1+e_0}\right)$

Compression Index: $C_c = \frac{\Delta e}{\Delta \log \bar{\sigma}_v}$

Rearranging gives: $\Delta e = C_c(\Delta \log \bar{\sigma}_v)$

Subistituting in gives: $S_{pc} = \frac{H_0}{1+e_0} C_c(\Delta \log \bar{\sigma}_v)$

Post-construction status



This formula is only valid for footings PLACED DIRECTLY ON PROBLEMATIC SOIL LAYER

$$S_{pc} = \frac{H_0}{1+e_0} C_c(\log \bar{\sigma}_{v_f} - \log \bar{\sigma}_{v_o}) = \frac{H_0}{1+e_0}(C_c)\log\left(\bar{\sigma}_{v_f}/\bar{\sigma}_{v_o}\right)$$

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Project Bear Dev | Project No. 23072
Calculated By JBJ | Date 12/20/2023
Sheet 1 of 1

Known:
$F_v = 1.5$
$S_1 = 0.336$
$k_{max} = 0.545$
$H = 30'$
$PGA = 0.454$
$r = 1.0$
$f_a = 1.2$

$\beta = (F_v S_1) / k_{max}$

$\alpha = 1 + 0.01 H [(0.5\beta) - 1]$

$k_s = r PGA \alpha$

$\beta = (1.5)(0.336) / 0.545$

$\boxed{\beta = 0.92}$

$\alpha = 1 + 0.01(30)[(0.5)(0.92) - 1]$

$\boxed{\alpha = 0.838}$

$k_s = (1.0)(0.454)(0.838)$

$k_s = 0.38$

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APPENDIX F

Slope-Stability Analysis

Slope-Stability Analysis

Methodology

1. **Analyses:** Slope stability analyses were performed using the SLOPE/W stability module of GeoStudio 2023.1.2 version 23.1.2.11, produced by Bentley Systems. The Morgenstern-Price limit equilibrium method, which takes into consideration moment and force equilibrium, was used to analyze slope stability.

   Based on the existing and proposed geometry of the project and the mapped geology, we determined the project area may be subject to potential failure. Therefore, we evaluated each cross-section for existing conditions, proposed conditions, and seismic proposed conditions scenarios.

2. **Geometry:** Two cross-sections for the project were analyzed: Cross sections B-B' and C-C' (Figure 4 and Figure 5). Cross section locations are shown in Figure 2. The Cross Section B-B' Proposed Conditions model includes foundation loads for each housing unit because the applied loads from the buildings foundation elements and the change in geometry were identified as potential items that can affect the factor of safety (FS). The Cross Section C-C' Proposed Conditions also includes foundation loads for each housing unit, as well as the existing retaining wall on Lot 53. We based the external existing geometry on topographic data collected by Jorgensen Associates, Inc., proposed finished grade elevations were taken for the preliminary design documents provided by Hoyt Architects, and we based the internal geometry (material boundaries within the slope) on the results of the subsurface exploration (i.e., borehole and test pit logs), statistical correlations based on published literature, geologic conditions, and our experience with similar soils in the area.

   Subsurface conditions at the site were dominated by chaotically deposited landslide debris consisting of fine-grained Lean Clay (CL) and coarse-grained Clayey Gravels (GC) and Clayey Sands (SC). Often, soil layers identified in the SPT samples didn't correspond to similar soil layers at similar depths in the other boreholes indicating the soil layers were not continuous. To create a subsurface soil model with continuous soil layers, the discrete soil samples were interpolated and often combined between boreholes. Where discrete soil samples of different soil types were combined, an average phi value of the combined samples was applied to the entire soil layer.

3. **Materials:** We estimated the shear strength parameters used in the analyses based on correlation to index tests and direct shear testing from the previous Geotechnical Investigation Report from July 2021, provided by Nelson Engineering. See the discussion in Appendix D regarding development of the soil-engineering parameters. Final parameters used in the stability analysis are summarized below in Table F-1.

   Where two separate soil classifications were combined to one layer (i.e., GC/CL), a unit weight and phi angle were selected using a "weighted average" approach; the boreholes shown on figures 4 and 5 were reviewed and depending on the soil shown in each borehole, a weighted average value was selected.

   We used a Mohr-Coulomb strength model to define the soil parameters. Two parameters are used to describe this strength model: cohesion (c) and friction angle (φ). Cohesion is the soil's shear strength at zero overburden stress, and the friction angle expresses the relationship between overburden stress and shear stress. Mathematically, the shear strength is defined by the equation: $\tau = c + \sigma_n \tan(\varphi)$, where τ is the shear strength and σ_n represents the overburden stress. We used effective stress parameters as the soils are anticipated to drain well.

Table F-1: Soil Parameters Used for Slope Stability Analysis B-B'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (CL)	115	100[1]	35
Landslide Debris (GC)	125	50[2]	40
Landslide Debris (GC/CL)	120	100[2]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

Table F-2: Soil Parameters Used for Slope Stability Analysis C-C'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Fill/GC	125	50[1]	38
Landslide Debris (GC/CL)	120	100[1]	36
Weathered Bedrock (SC)	140	0	60

1. Cohesion added where infinite slope stability failures occurred

4. **Phreatic Surface:** Groundwater was encountered during the subsurface exploration in borehole JG-02, JG-03, and JG-04 during the subsurface exploration and are summarized below in Table F-2. Groundwater conditions encountered in the field were used in the slope stability model. It is important to note, the subsurface exploration occurred during a time of year when peak groundwater conditions are assumed to have already occurred, implying potential peak groundwater conditions are *not* shown in the model and are unknown.

Table F-3: Groundwater Conditions

Borehole	Date	Depth BGS (ft)	Approximate Elevation (ft)
JG-02	October 1 and 2, 2023	47	6,393
JG-03	October 2, 2023	27 to 30	6379 to 6376
JG-04	October 2, 2023	30	6374

5. **Seismicity:** Each post-construction scenario was evaluated in a seismic condition. Based on the ReMi and MASW results provided by Atlas Geophysics and direct shear testing data in the previous Nelson Engineering Site Investigation Report, the site is categorized as Site Class C – Very Dense Soil and Soft Rock. Seismicity was incorporated into the model using a pseudo-static limit equilibrium analysis approach where inertial forces from seismic accelerations were applied statically to the model. Seismic loads have been applied to the critical slip surface determined by static analysis for each post construction cross section, as it is assumed to be the most stressed region within the slope (Abramson et al., 2002). A seismic coefficient (k_s) of 0.163 was applied to cross section B-B' and a seismic coefficient of 0.169 was applied to cross section C-C'.

Seismic coefficients were calculated based on recommendation from NCHRP Report 611 "Seismic Analysis and Desing of Retaining Walls, Buried Structures, Slopes and Embankments" and FHWA NHI Course No 130094 LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations, as described below and illustrated in the equations. In summary, the seismic coefficient (k_s) is determined by applying a scaling factor (α) to the modified peak ground acceleration (PGA_m). Additionally, a seismic FS of 1.1 was used because it is assumed the system is ductile and an allowable total permanent seismic deformation of 2.0-inches is acceptable.

$$\beta=F_v \cdot S_1/PGA_m$$

$$\alpha=1+0.01H[(0.5\beta)-1]$$

$$k_s = r^* PGA_m * \alpha$$

Where:

- β = 0.92
- F_v = 1.5
- S_1 = 0.336
- PGA_m = 0.545
- α is equal to 0.595 for the B-B' seismic model, and α is equal to 0.623 for the C-C' seismic model.
- *H* is equal to the height of the critical slip surface; we used conservative values of 75' for the B-B' seismic model, and 70' for the C-C' seismic model
- r = 0.5. A value of 0.5 is used in calculating k_s when dealing with ductile systems (i.e., soils with no rigid structures) with allowable permanent seismic deformation of up to 2-inches.
- PGA is equal to 0.454, taken from ASCE 7-16 seismic design tool.

Our calculations can be found attached to this Appendix.

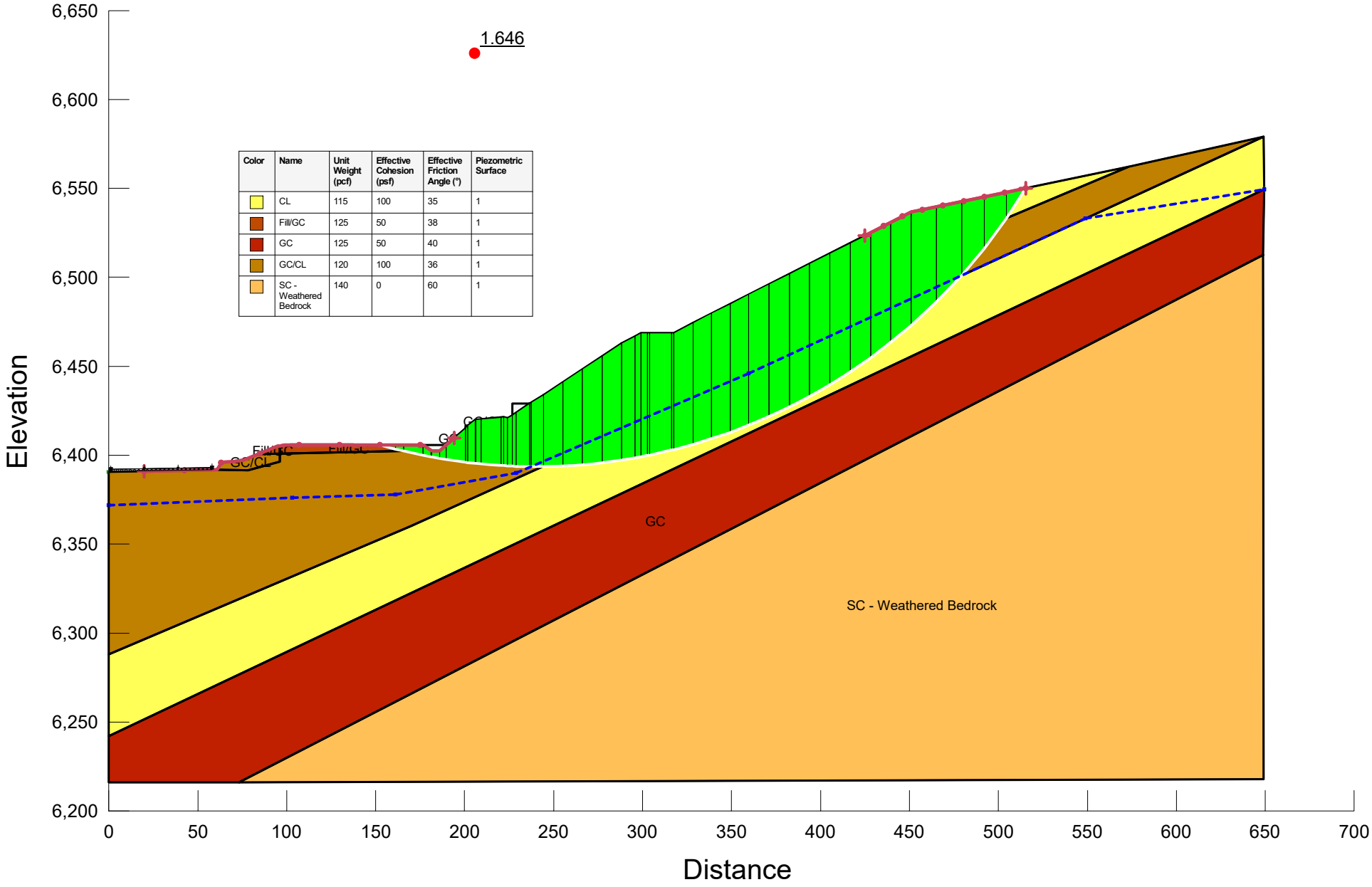
Surcharge Loads and Retaining Wall: Typical foundation loads were incorporated into the model, based on data in Section 1806 of the IBC, 2021. We use a distribution surcharge load of 2000 psf to account for the weight of any structures within the model.

The retaining wall on Lot 53 was also included in the geometry of the models. For the length of the soil nails, spacing and batter we used the Grand View, Building 53 Jackson, Wyoming Permanent Soldier Pile Wall and Temporary Soil Nail Wall Construction Drawings. Although the construction drawings show a slight variation in soil nail lengths, spacing and batter, we used the values applicable to the highest number of soil nails. In our model we used 48' soil nails, vertically spaced 9 feet, and battered -15 degrees.

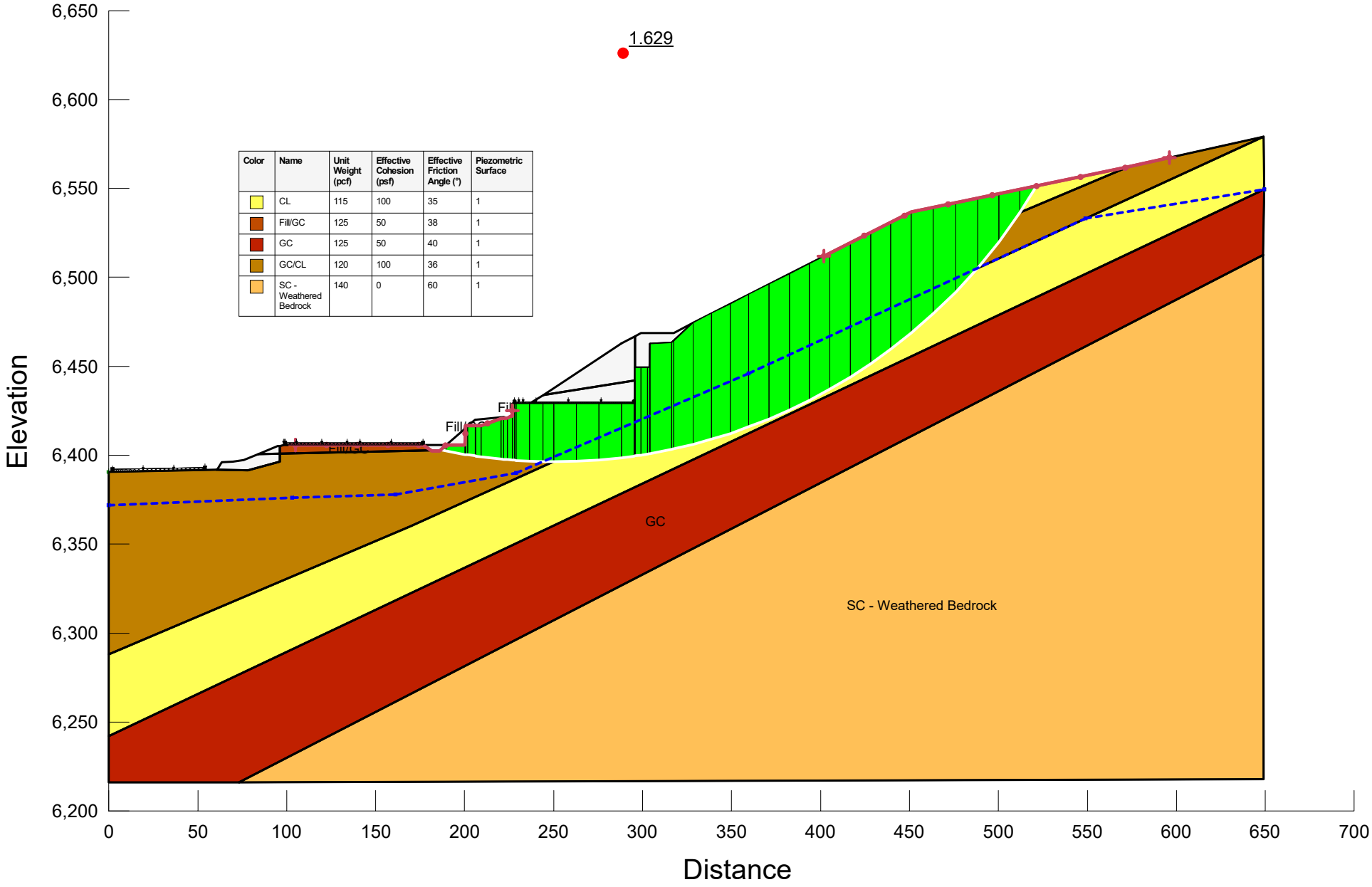
Results

We summarize factor of safety (FS) results for each cross section and analysis in Section 5.1.2 of the Report. The figures that follow are the output from each analysis. The critical slip surface and factor of safety are shown. Output files, reports, convergence data, or other data from Geostudio may be made available upon request.

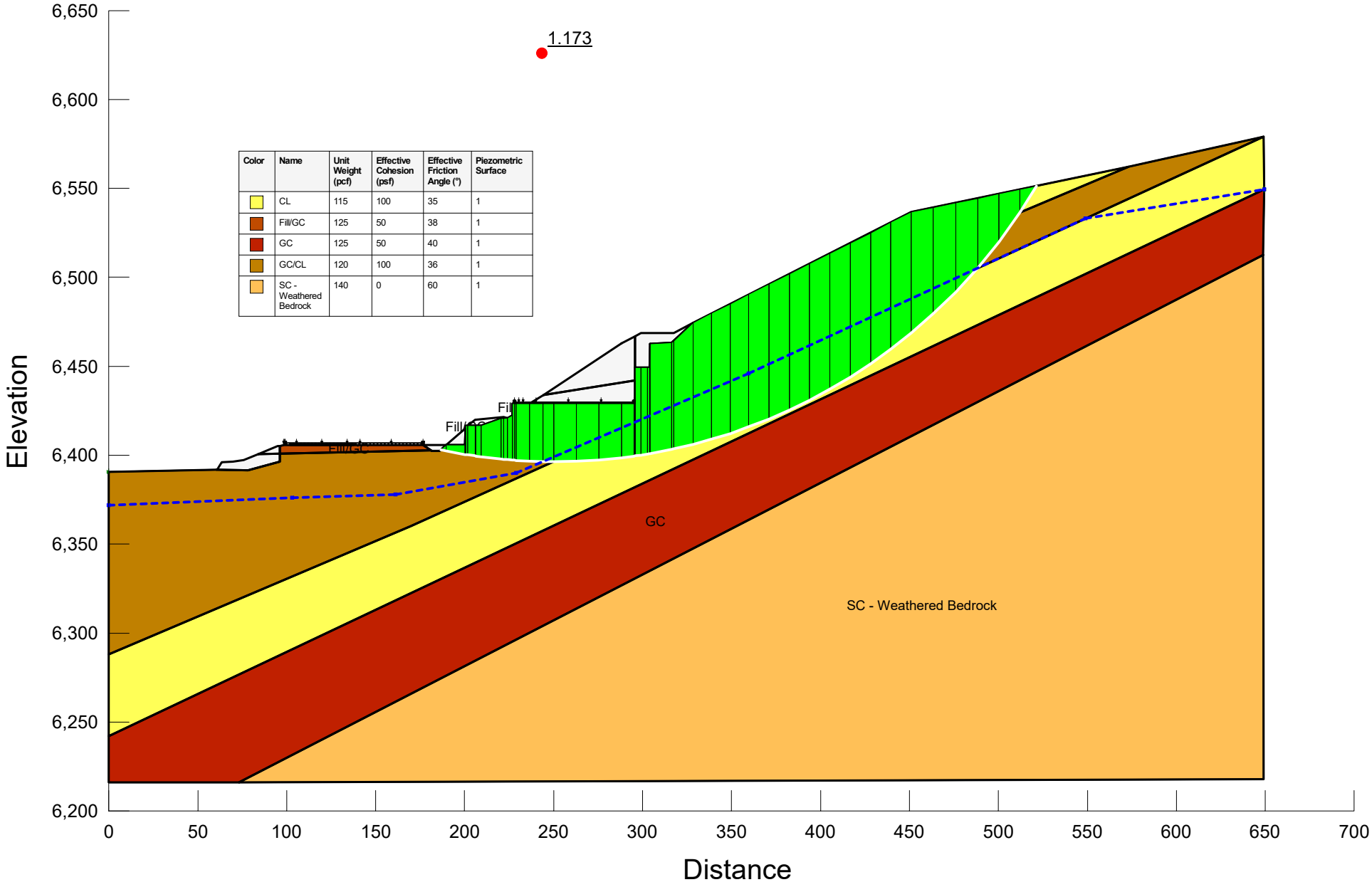
Lot 53 and 58 B-B' Existing Conditions



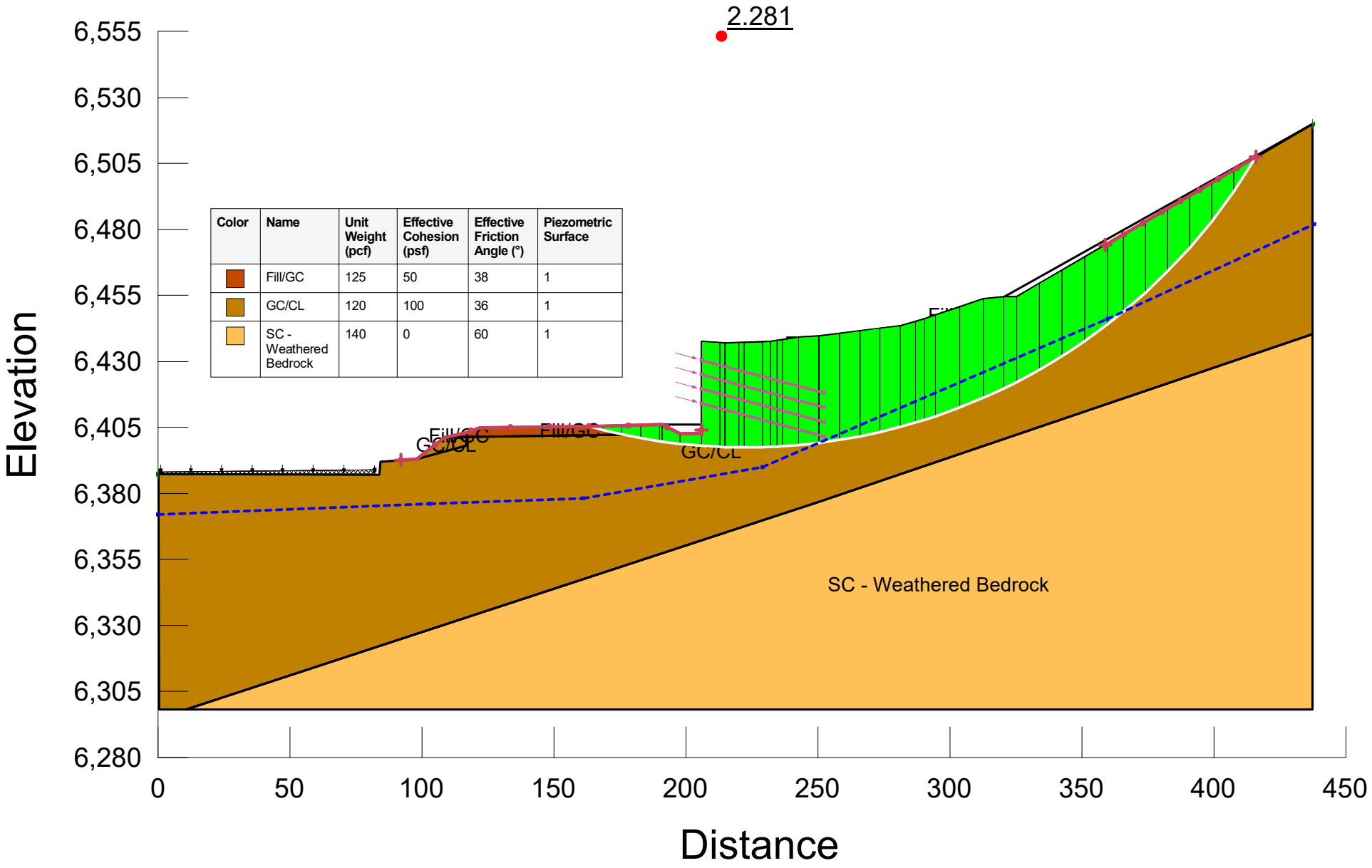
Lot 53 and 58 B-B' Proposed Conditions



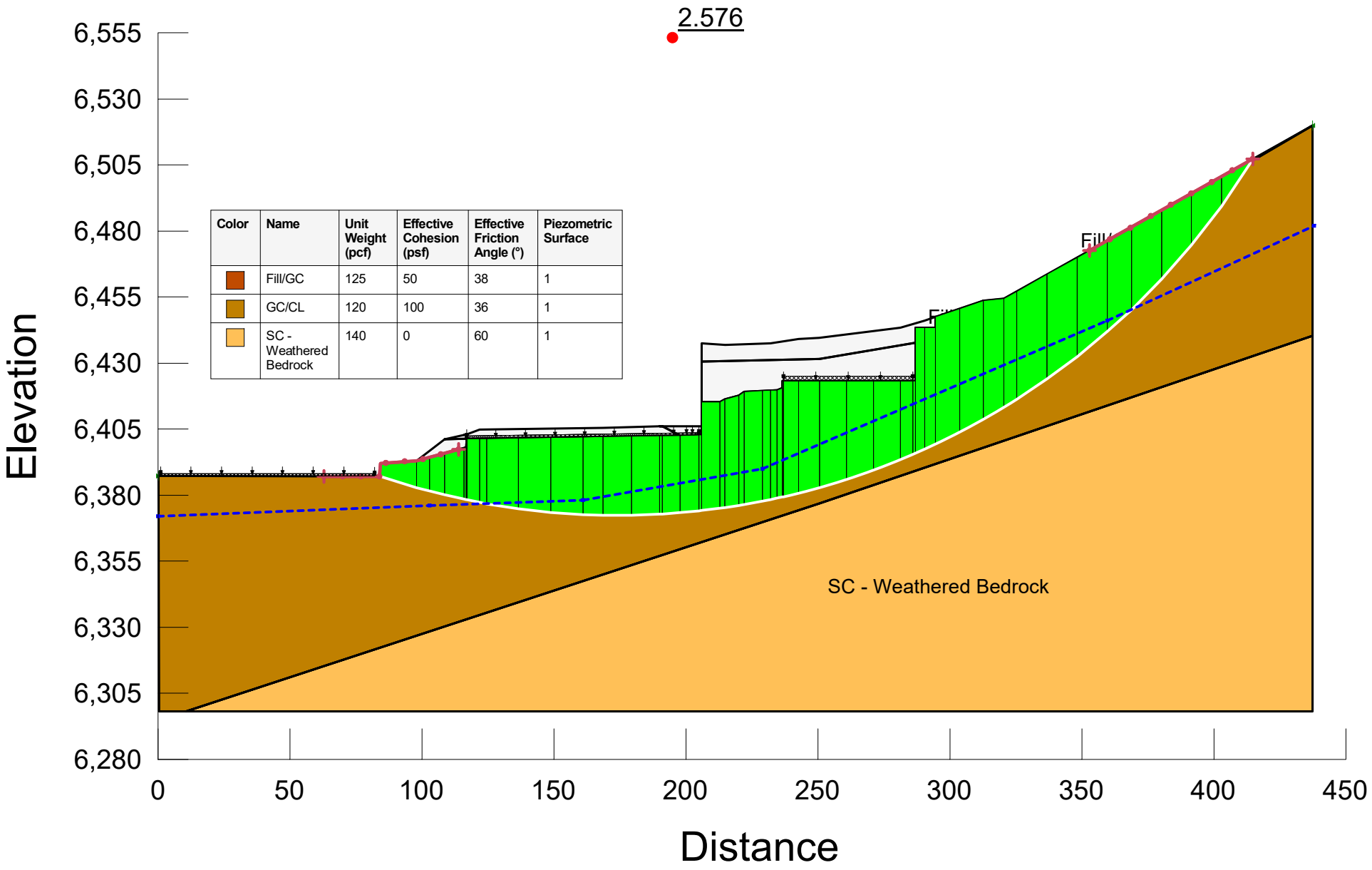
Lot 53 and 58 B-B' Proposed Conditions Siesmic



Lot 53 and 58 C-C' Existing Conditions

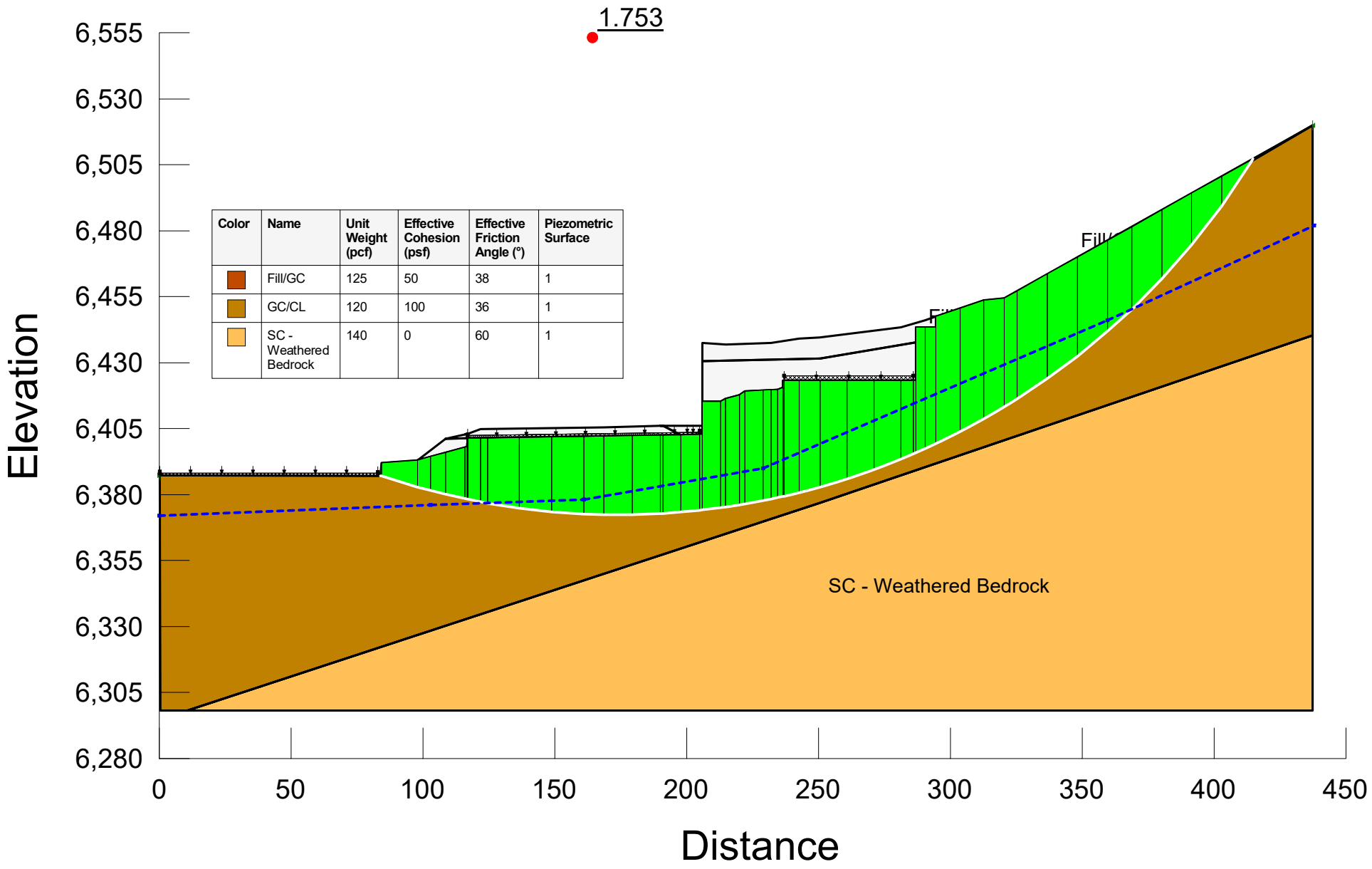


Lot 53 and 58 C-C' Proposed Conditions



Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)	Piezometric Surface
	Fill/GC	125	50	38	1
	GC/CL	120	100	36	1
	SC - Weathered Bedrock	140	0	60	1

Lot 53 and 58 C-C' Proposed Conditions Siesmic

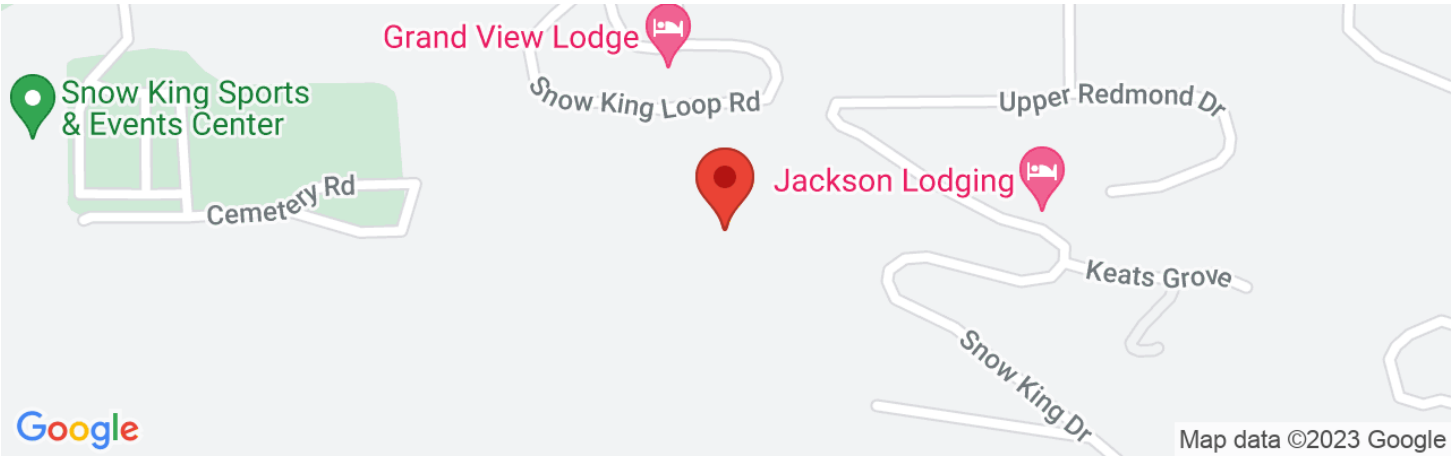


Color	Name	Unit Weight (pcf)	Effective Cohesion (psf)	Effective Friction Angle (°)	Piezometric Surface
	Fill/GC	125	50	38	1
	GC/CL	120	100	36	1
	SC - Weathered Bedrock	140	0	60	1

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

OSHPD

Latitude, Longitude: 43.47138391, -110.75322571



Date	20/12/2023, 15:51:56
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	C - Very Dense Soil and Soft Rock

Type	Value	Description
S_S	1.024	MCE_R ground motion. (for 0.2 second period)
S_1	0.336	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.229	Site-modified spectral acceleration value
S_{M1}	0.505	Site-modified spectral acceleration value
S_{DS}	0.819	Numeric seismic design value at 0.2 second SA
S_{D1}	0.336	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.454	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	0.545	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.024	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.145	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.894	Factored deterministic acceleration value. (0.2 second)
S1RT	0.336	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.374	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.721	Factored deterministic acceleration value. (1.0 second)
PGAd	0.66	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.454	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.895	Mapped value of the risk coefficient at short periods

Type	Value	Description
C_{R1}	0.9	Mapped value of the risk coefficient at a period of 1 s
C_V	1.105	Vertical coefficient

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Project BEAR Dev - Lots 53+56 Project No. 23272
Calculated By HC Date 12/20/2023
Sheet 1/2

K_s Determination

U.S. Seismic Design Maps - Structural Engineers Association of California Design Code Reference Document - ASCE 7-16

Risk Category II
Site Class C - Very Dense Soil & Soft Rock

FHWA (2011)

$$K_{MAX} = F_{PGA} \cdot PGA \qquad (6-1)$$

PGA = 0.454
F_{PGA} = 1.20

K_{MAX} or PGA_m = 1.2(0.454) = **0.545**

K_{AV} or MHA (Maximum Average Horizontal Acceleration) = $\alpha \cdot K_{MAX}$ (6-2)

Where $\alpha = 1 + 0.01(H)[(0.5B)-1]$ (6-3)

Where $B = f_v \cdot S_1 / K_{MAX}$ (6-4)

- B Cross Section B-B'

F_v = 1.5
S_1 = 0.336
K_{MAX} = 0.545

$B = 1.5(0.336)/0.545$ (6-4)

B = 0.924

- B Cross Section C-C'

F_v = 1.5
S_1 = 0.336
K_{MAX} = 0.545

$B = 1.5(0.336)/0.545$ (6-4)

B = 0.924

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Project BEAR DEN - LOTS 53+58 Project No. 23072
Calculated By HC Date 12/20/2023
Sheet 2/2

- α Cross Section B-B'

$\beta = 0.924$
$H = 75'$

$\alpha = 1 + 0.01(75)[0.5(0.924) - 1]$ (6-3)

$\alpha = 0.597$

- α Cross Section C-C'

$\beta = 0.924$
$H = 70'$

$\alpha = 1 + 0.01(70)[0.5(0.924) - 1]$ (6-3)

$\alpha = 0.623$

- k_{AV} Cross Section B-B'

$\alpha = 0.597$
$k_{MAX} = 0.545$

$k_{AV} = 0.597\ (0.545)$ (6-2)

$k_{AV} = 0.325$

- k_{AV} Cross Section C-C'

$\alpha = 0.623$
$k_{MAX} = 0.545$

$k_{AV} = 0.623\ (0.545)$ (6-2)

$k_{AV} = 0.339$

- k_S Cross Section B-B'

$k_S = r \cdot k_{AV}$ (6-5)

$r = 0.5$ ASSUMING 2-INCHES OF ALLOWABLE PERMANENT SEISMIC DEFORMATION

$k_S = 0.5\ (0.325)$

$k_S = 0.163$

- k_S Cross Section C-C'

$k_S = r \cdot k_{AV}$ (6-5)

$r = 0.5$ ASSUMING 2-INCHES OF ALLOWABLE PERMANENT SEISMIC DEFORMATION

$k_S = 0.5\ (0.339)$

$k_S = 0.169$

MINIMUM FACTOR OF SAFETY OF 1.1 USING r OF 0.5 AND ASSUMING 2-INCHES OF ALLOWABLE PERMANENT SEISMIC DEFORMATION

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January 25, 2024

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosh, WI 53142

RE: GEOTECHNICAL-ENGINEERING REPORT, BEAR DEVELOPMENT – SNOW KING LOOP LOT 57, TETON COUNTY, WYOMING
PROJECT NO: 23072

Dear Nick,

We are pleased to present this Geotechnical-Engineering Report on our geotechnical site exploration for the proposed development at Lot 57 on Snow King Loop in Teton County, Wyoming. This report describes site conditions observed during the subsurface exploration, presents engineering analyses and recommendations to support the design and construction of foundation elements, and presents pre-construction and post-construction slope stability analyses.

Jorgensen Geotechnical explored subsurface conditions by drilling five (5) boreholes and excavating three (3) exploratory test pits throughout Lot 57, as well as reviewing other available geotechnical data. A geophysical exploration was also performed comprising MASW and ReMi exploration techniques. In general, the site is primarily underlain by landslide debris, comprising a chaotic mixture of fined grained soils (lean clay and silt),and coarse grained soils (clayey gravels). The site sits on a mapped landslide which was likely mobilized prior to the Quaternary period. As such, we assume the soil at the site to be well consolidated. Loess, a fine-grained windblown deposit was also encountered at the site.

Building locations and foundation elevations are based on preliminary design data provided by Hoyt Architecture, dated July 19, 2023, though it is our understanding that the design is subject to substantial change. As the design progresses, we will be able to make site-specific recommendations and additionalconsulting services.

If you have any questions about this report, or if we may provide other services to you, please contact us. As the project progresses, we will be available to answer questions for you.

Respectfully submitted,
JORGENSEN GEOTECHNICAL

Bruce Jackson G.I.T.
Geotechnical Design Engineer Technician

Harrison Carter, P.E.
Geotechnical Project Manager

Dominique Brough, P.G.
Geotechnical Project Manager

Geotechnical-Engineering Report

Bear Development – Snow King Loop Lot 57 | Teton County, Wyoming



43.472019°N, -110.754636°W

January 25, 2024

PREPARED FOR

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosh, WI 53142

PREPARED BY

Jorgensen Geotechnical, LLC
PO Box 9550
1315 HIGHWAY 89 S., Ste. 201
Jackson, WY 83002

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1.0 INTRODUCTION

Jorgensen Geotechnical, LLC was commissioned by Bear Development, LLC to perform a subsurface surface exploration and geotechnical engineering analyses for the proposed development for Lot 57 accessed by Snow King Loop in Teton County, Wyoming. The purposes of the exploration were to provide information and geotechnical-engineering recommendations pertaining to:

- Subsurface soil conditions
- Site preparation and earthwork
- Geophysical exploration
- Seismic site classification per the International Building Code
- Evaluation of settlement and/or collapse potential
- General foundation design and construction recommendations
- Slabs-on-grade design and construction recommendations
- Lateral earth pressures for retaining structures
- Subgrade preparation
- Slope Stability Analyses
    - Existing Conditions
    - Proposed Conditions
    - Proposed Seismic Conditions

A detailed description of the subsurface exploration and graphical logs are shown in Appendix A, Figures in Appendix B, laboratory testing results are included as Appendix C, determination of soil engineering parameters in Appendix D, Calculations for settlement in Appendix E, and Slope Stability Analyses in Appendix F.

2.0 PROJECT DESCRIPTION

The project site is located in Jackson, Wyoming and is situated near the base of Snow King Resort. Preliminary plans were provided by Hoyt Architecture, dated July 19, 2023. The plans indicate the development for lot 57 will include a new four-story housing unit with a two-floor parking garage with two floors of living space above.

It is our understanding the project is in the early stages of the design, and the architectural plans are subject to substantial changes. As the project progresses, Jorgensen Geotechnical is available to consult with team members to increase design and construction efficiency based on our understanding of the subsurface conditions and the proposed design.

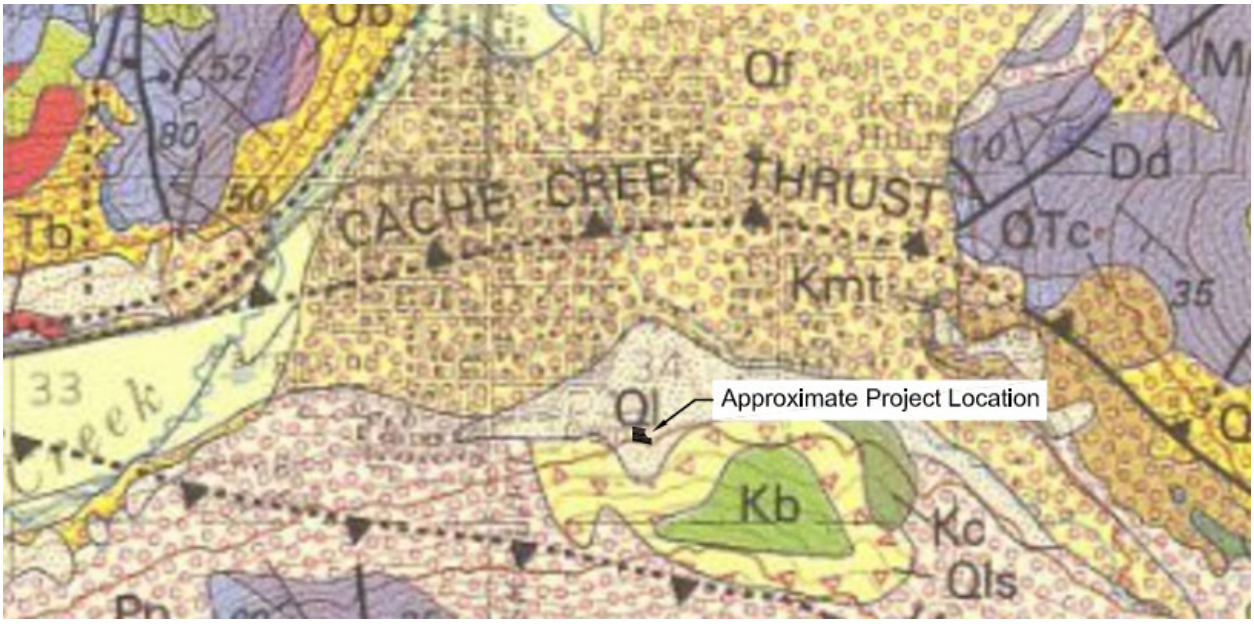


Figure 1: Site Location and Geologic Map

3.0 GEOTECHNICAL EXPLORATION

3.1 Description

JG developed the following description of the site based on field visits, meetings with the project team, our review of available historical aerial imagery, and observations made during the subsurface exploration.

Item	Description
Location and Parcel Information	• Lot 57 is located at the base of Snow King Resort and is accessed via Snow King Loop. The project area sits at a generalized latitude and longitude of 43.471°N, -110.754°W.
Existing Conditions	• The project location gently slopes from the north upwards to the south and ranges in elevation from approximately 6,370-ft Above Mean Sea Level (AMSL) on the northern boundary to approximately 6,390-ft AMSL on the southern property boundary of Lot 57. The lot is bisected by a dirt road that provides access for employees at Snow King Resort. • Lot 57 is currently being used for storage by Snow King Resort. • Current utilities at the site include power, gas, and water.
Geologic Setting	• The project location is found on the Geologic Map of Grand Teton National Park (Love et. al., 1992), in an area that contains three mapped geologic units including Loess (Ql), a fine-grained, windblown deposit, Landslide Debris (Qls), and the Bacon Ridge Sandstone (Kb). The soils observed from the subsurface exploration seem to be consistent with mapped geology.

- The project location sits on a mapped multiple slump/multiple flow landslide, and is understood to be deep seated (WSGS, Wyoming Geologic Hazards Map Tool). A portion of the project site is capped with a wind-blown deposit known as loess which was likely deposited during or after the Pinedale Glaciation Period, or between approximately 30,000 to 10,000 years ago. The mapped loess stratigraphically overlies portions of the mapped landslide unit.
- Numerous Quaternary faults (i.e., relatively young and potentially active) are mapped throughout the area. The Teton Fault is mapped approximately 8 miles northwest of the project, at the base of the eastern flank of the Teton Range (Zellman, 2019). Slip rates along the Teton fault is estimated to be between 0.2 and 1.0 mm/year. The Hoback Fault is located approximately 3 miles to the southwest of the project site but is considered old and inactive.

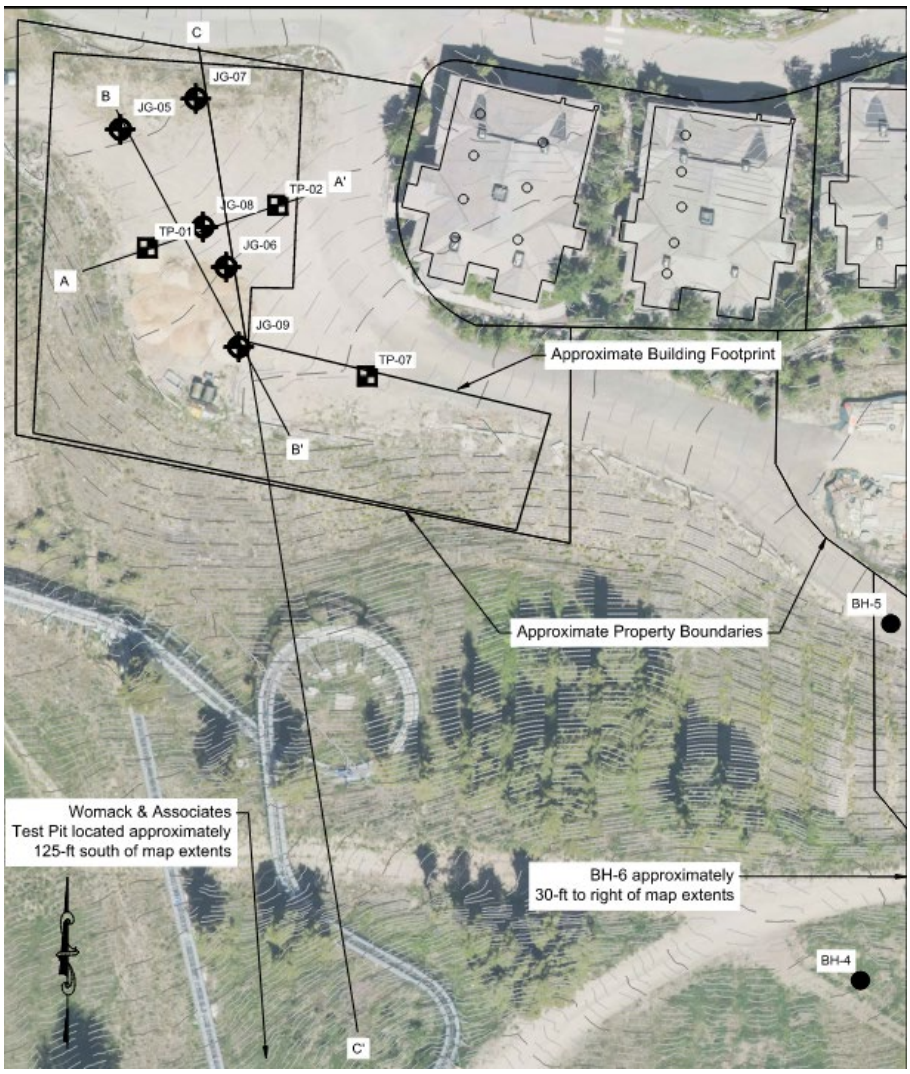


Figure 2: Borehole, Test Pit and Geologic Cross Section Location Map

3.2 Subsurface Soil Conditions

In general, two soil types were encountered during the subsurface exploration:

- **Landslide Debris** – consisting of clayey gravels (GC, GC-GM), and lean clays (CL, ML). The landslide debris soils are assumed to be derived from native colluvium and bedrock soils prior to mobilization of the landslide. These landslide debris soils exhibited chaotic composition, which is also represented in the MASW plots provided by Atlas Geophysics. These results can be found attached to Appendix A.
- **Loess** – consisting of windblown lean clay or silt with sand (CL, ML).

Below are three generalized geologic cross-sections spanning both north-south and east-west depicting the subsurface soil conditions as interpreted by Jorgensen and approximate foundation elevations for the buildings on Lot 57. Cross-section alignment locations can be found in Figure 2 and complete figures can be found in Appendix B.

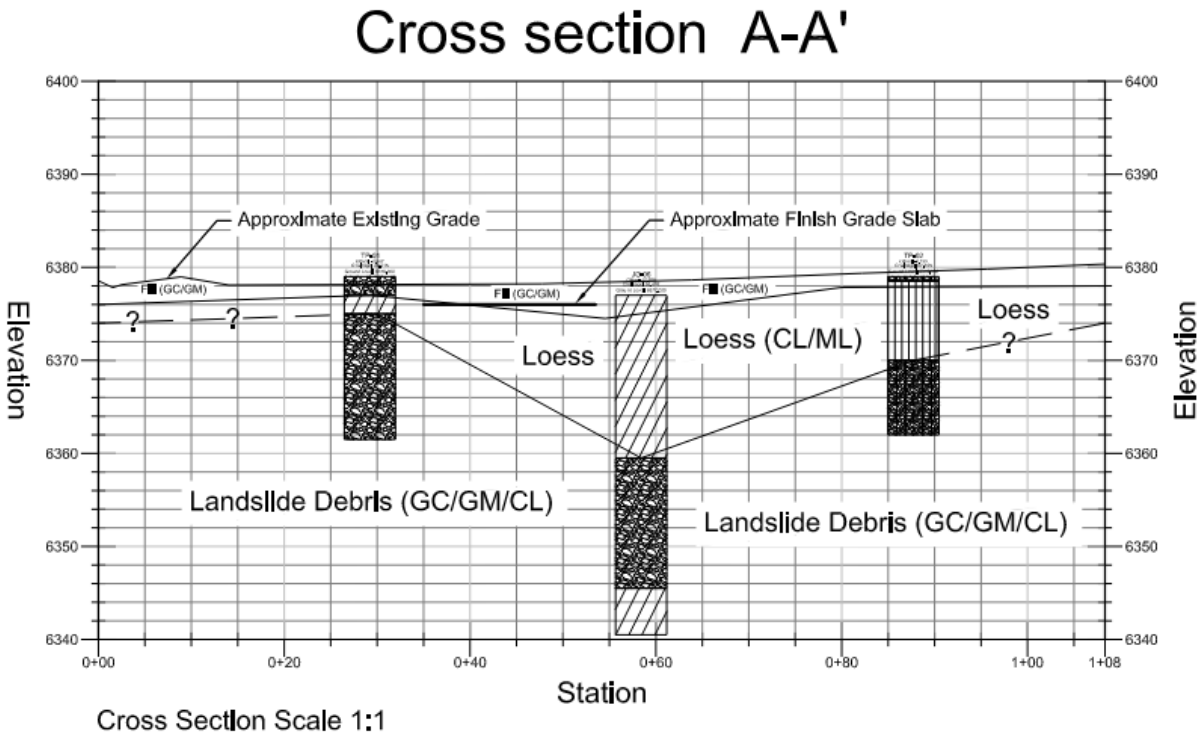


Figure 3: Geologic Cross Section A-A'

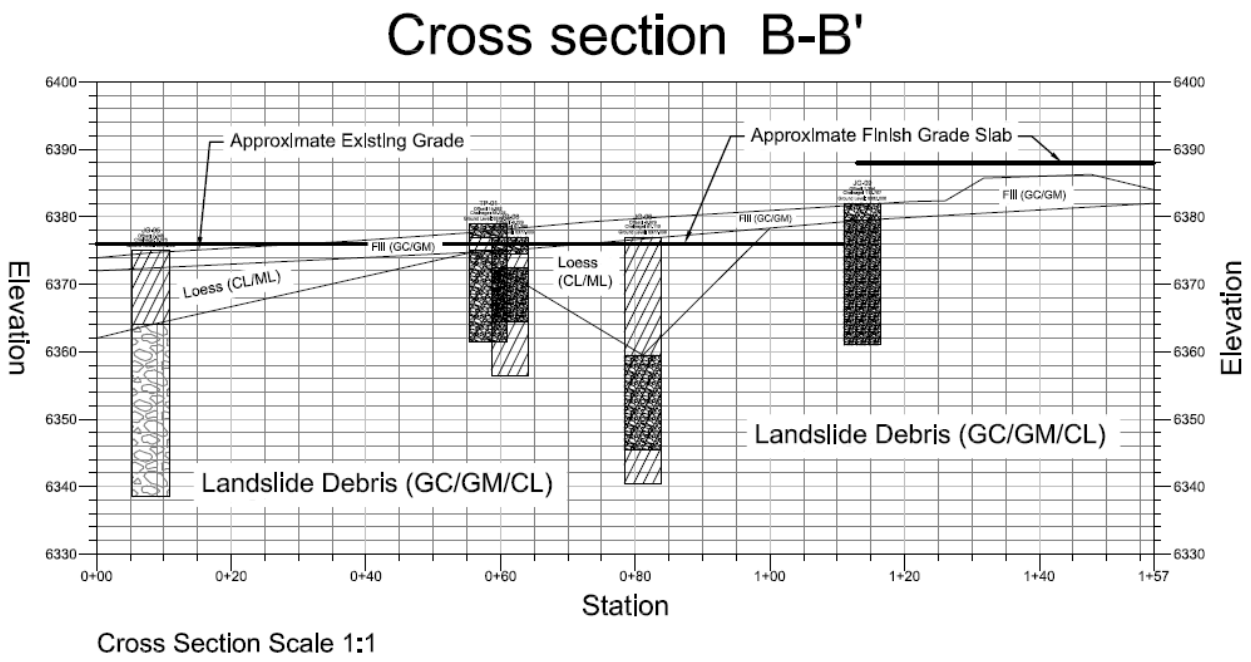


Figure 4: Geologic Cross Section B-B'

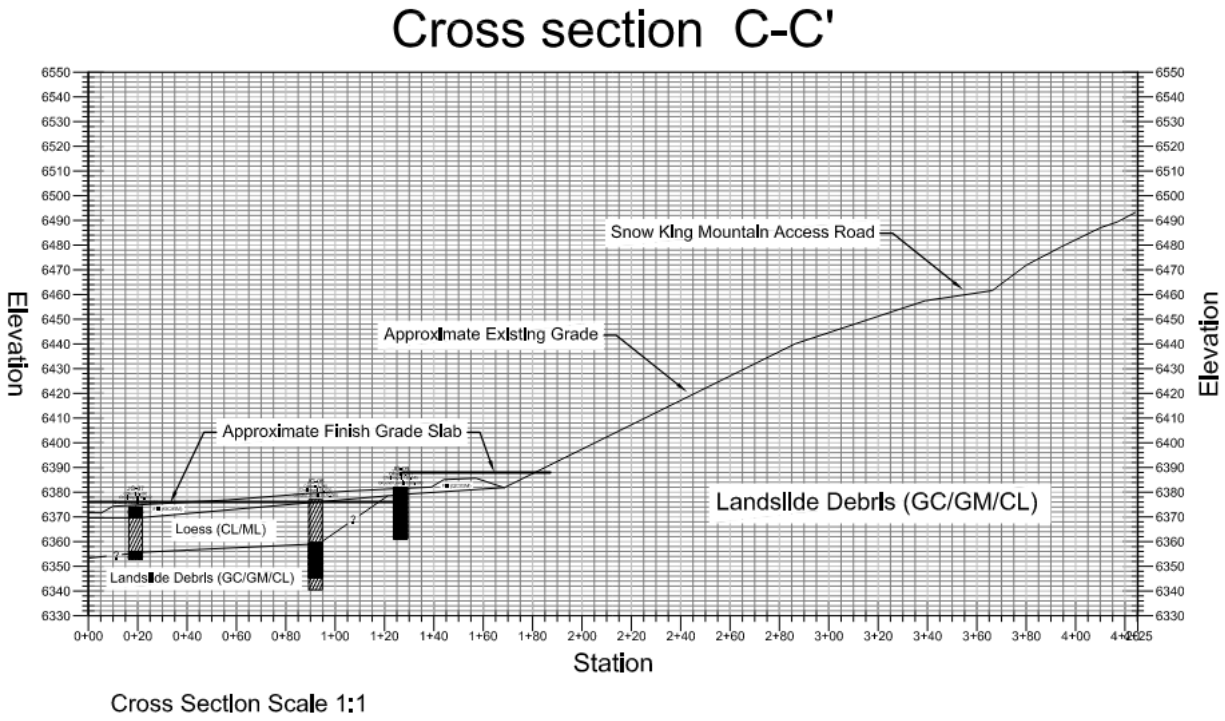


Figure 5: Geologic Cross Section C-C'

The table below describes each soil layer encountered, and detailed borehole logs are represented graphically in Appendix A. **It is important to note that** the borehole exploration techniques used either a 4-inch coring barrel or a 1.5-inch diameter split spoon sampler, limiting the soil that was collected during the drilling effort. It is likely that gravels larger and cobbles larger than 3.0-inches are present but were

unable to be logged due to the sampling method. Cobbles and boulders were encountered in the test pits.

Layer	Layer Name	Description	Geotechnical Considerations and Uses
1	**Fill (GC/GM)**	• Observed in JG-07, JG-08, JG-09, TP-01, TP-02 and TP-07 • Depths ranging from 0.5- to 4-ft bgs • Classified as a Clayey **Gravel** with Sand and silty **Gravel** with sand • The fill at the site could comprise native site soils and crushed road base • Brown to dark brown • Contains up to 15% cobbles by volume • 45-55% gravel • 25-30% sand • 20-25% clay/silt	• Undocumented construction fill should be remove from beneath foundations • Non-structural applications
2	**Loess (CL/ML)**	• Observed in all boreholes and test pits at the site except for JG-09 • Classified as **Lean Clay, Lean Clay** with sand, **Lean Clay** with Gravel, and **Silt** • Tan to light tan • Very soft to stiff • 0-25% gravel • 10-30% sand • 50-95% clay/silt	• Settlement concerns • Non-structural applications
3	**Landslide Debris (GC/GC-GM/CL/SC)**	• Observed in all boreholes and test pits • Classified as Clayey **Gravel** with Sand, **Lean Clay**, **Lean Clay** with Sand, Sandy **Lean Clay** with Gravel, • Reddish brown to brownish gray • Coarse-grained soils are loose to very dense • Fine-grained soils are soft to very stiff	• Acceptable bearing layer with appropriate subgrade improvement methods • Settlement concerns • Structural applications • Non-structural applications

		• **Chaotic deposition, including charcoal fragments** • Observed 15-25% cobbles by volume • 10-55% gravel • 15-30% sand • 25-90% Clay/Silt	

3.3 Groundwater

Groundwater was not encountered in any of the boreholes or test pits during the subsurface exploration. However, we have observed groundwater in areas near the project site and understand the subsurface to include various perched groundwater levels and seeps and springs. Approximate groundwater levels are included in the Slope Stability Analysis models, but are not shown in the cross sections as groundwater was not directly observed at the site in the boreholes.

The exploration occurred during a time of year that is considered to take place after peak groundwater levels have occurred. Groundwater levels fluctuate in response to seasonal snowmelt. Soil moisture conditions on this site are most likely influenced by surface infiltration due to precipitation, snowmelt, and uphill natural springs. One groundwater standpipe was installed in JG-08 to a total depth of 20-ft on Lot 57 as part of the subsurface exploration.

3.4 Earthquakes and Ground Shaking

Jackson, Wyoming is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Montana, and Western Wyoming (Smith and Arabasz, 1991). The Teton fault, located along the eastern margin of the Teton Range, approximately 8-miles northeast of the site, is considered an important structural element of the Intermountain Seismic Belt. Predicted recurrence intervals for maximum credible earthquakes have passed for most of the fault systems capable of generating magnitude 7.5 earthquakes in western Wyoming (Case, 1997), implying the risk of major earthquakes is relatively high. In the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking, or slope movement could potentially cause damage to structures (Smith, et al., 1993).

Shear wave velocity calculated by Atlas Technical Consulting LLC, of Salt Lake City, Utah using ReMi geophysical exploration method for the project site is 1,320 ft/s. The IBC references ASCE 7-16 to determine the ground motion accelerations. Based on subsurface soils, and the results from the geophysical exploration, the site is classified as Site Class C (“Very dense soil and soft rock”). For your convenience, Seismic Design Maps (SEAOC, 2019) values are summarized in Table 3-1: U.S. Seismic Design Maps Summary.

Table 3-1: U.S. Seismic Design Maps Summary

Maximum Considered Earthquake (MCE) Spectral Response Acceleration Parameters			
Short Period (S_s) =	1.025		
1-Second Period (S_1) =	0.337		
Site Coefficients and Adjusted MCE Spectral Response Acceleration Parameters			
F_a =	1.2	S_{MS} =	1.230
*F_v =	1.5	*S_{M1} =	0.506
Design Spectral Response Parameters			
S_{DS} =	0.820		
*S_{D1} =	0.337		

*Note: Values for F_v, S_{M1}, and S_{D1} were determined in accordance with Section 11.4.4 of ASCE 7-16. Per Section 11.4.8 of ASCE 7-16, if the proposed structure foundation will include seismic isolators or damping systems, a site response analysis shall be performed in accordance with Section 21.1.

The project site is located in an area of moderate seismic activity. The current peak horizontal acceleration (PGA) with a probability of occurrence of 2% in 50 years is approximately 0.454g (USGS, 2014). The site amplification factor at PGA is 1.2, resulting in a site modified peak ground acceleration (PGA_M) of 0.545. This has been applied for the analysis of seismic lateral loading on retaining walls Section 4.3.

The provisions of the IBC are intended to provide uniform levels of performance for structures depending on their intended use and the risk inherent to their failure. The approach adopted in the IBC is intended to provide a uniform margin of safety against collapse at the design motion. The design earthquake ground motion is selected at a ground shaking level that is 2/3 of the maximum considered earthquake (MCE) ground motion, which has a likelihood of exceedance of 2% in 50 years (corresponding to a return period of 2,500 years). The IBC is not intended to prevent damage or loss of function during a major earthquake; it is intended to reduce the risk of loss of life. Structural design should follow the level of risk tolerable by the Design team.

3.5 Geologic and Geotechnical Hazards

3.5.1 Potential Settlement/Compressible Clays

The primary geotechnical concern at the project site is differential settlement of foundation elements placed on unimproved landslide and loess deposits. Based on the borehole and test pit logs, in-situ testing, lab testing, and geophysical exploration, the subgrade soils comprise a range of chaotic mixture of soils, from compressible clays to competent stony soils. The soft clays are expected to experience moderate to severe settlement, while the stony soils ware *not* expected to experience substantial settlement. Calculated settlement values are discussed in Section 5.2 and calculation spreadsheets are shown in Appendix E.

3.5.2 Seismic and Fault Related Hazards

The owner should be aware that in the event of a large magnitude earthquake (i.e., approximately 7.5), strong ground shaking could potentially cause damage to structures (Smith et al, 1993). The owners may

wish to consider the option of carrying earthquake insurance in addition to homeowner's insurance. Older faults mapped in the immediate vicinity of the property are believed to be old and inactive. Surface rupture due to faulting is very unlikely, and no slope failure is anticipated to occur.

3.5.3 Slope-Related Hazards

In the event of an earthquake or extreme precipitation event, rock fall, debris flows, or avalanches produced from the steep slopes to the south of the development area could potentially cause damage to structures, especially following wildfires. Risk assessment of the slope related hazards was beyond the scope of this Report, but we present slope stability analyses of several slopes captured in the Geologic Cross Sections B-B' and C-C' for Lot 57. These are discussed in Section 4.1 and presented in Appendix F.

4.0 GEOTECHNICAL ENGINEERING ANALYSES

4.1 Slope Stability Analyses

The slope stability analyses were performed using SLOPE/W module of Geostudio. We analyzed two sets of geometry for global slope stability, taken from cross section C-C'. Pre-construction and post-construction external geometry was determined using topographic data provided by Jorgensen Associates and preliminary architectural plans provided by Hoyt Architects.

Determination of strength values used in the Slope Stability Model can be found in Appendix D.

Results of the stability analyses are summarized in Table 4-1. Appendix F shows the output of the stability model for Cross-Section B-B' and C-C'.

Table 4-1: Summary of Stability Analyses Results

Cross section	Analysis	FS	Change in FS[1]
C-C'	Pre-construction	1.93	0.0%
	Post-construction	1.93	
	Post-Construction Seismic	1.15	N/A

Discussion regarding accepted FS can be found in Appendix F. There does not appear to be a change in FS from existing condition to post-construction conditions based on our understanding of the proposed development. As the design process progresses, we are available to analyze the proposed design approach. Post-construction seismic conditions indicate factor of safety of 1.15, of which is above the 1.1 FS threshold for maximum allowable permanent seismic deformations of 2 inches (FHWA 2011).

Residual strength results from strain-softensing behavior; i.e., soils become weaker with shearing (as in the case of slope movement) decreasing from peak strength to residual strength. Reduced shear strength usually occurs only in soils that have been previously sheared while undisturbed soils typically exist at peak strength. It is possible that sheared soils exist on this site or nearby and exhibit behavior consistent with residual strength. In this case, seismic slope stability may result in factors of safety less than 1.0. **However, soil shearing was not observed during subsurface exploration at this site. If pockets or layers of soft, weak, or sheared soils are observed during construction, work shall cease,**

and Jorgensen Geotechnical be notified immediately to evaluate site conditions and review the stability model.

4.2 Settlement

As described in Section 3.5.1, several different soil types were encountered at the site, all of which represent different levels of settlement potential, increasing the risk of differential settlement which is particularly damaging to structures. Settlement calculations were performed for the compressible clay loess soils and the landslide debris. Because the landslide debris contain varying amounts of matrix soils (i.e., clays and sands), estimated settlement is difficult. Though, it is important to note that in general, as the matrix content increases, the risk of settlement increases.

Item	Settlement Analyses – Loess and Landslide Debris	
	Scenario 1	**Scenario 2**
Bearing Layer	**Loess** – Foundation system is placed in direct contact with the loess soils	Landslide Debris - Foundation placed in direct contact with Landslide Debris
Foundation Assumptions	Comprises typical reinforced concrete spread footings	
	Bearing pressure of 3,000 pounds per square foot	
	Buried 3-feet below finished grade	
	Spread footings is 2-feet wide	
Calculated Settlement	4.75-inches	2.37 -inches

The risk of settlement can be reduced by several subgrade improvement methods, of which are discussed below in Section 5.0.

4.3 Lateral Earth Pressures

Lateral pressures were calculated using methods suggested by Bowles (1996) for at-rest, active, and passive conditions and are presented in Table 4-2. These values assume a combination of lean clay and clayey gravel landslide debris will be used as non-structural backfill. We have assumed an estimated internal friction angle of 36° and a unit weight of 130 pcf based on experience working with similar soil deposits and laboratory testing. Calculations assume level backfill against foundation walls or retaining walls.

Table 4-2: Lateral Pressure Parameters for Landslide Debris

Condition	Coefficient of Earth Pressures	γK (equivalent fluid pressure)
Static Conditions Level Backfill	K_o = 0.41 K_a = 0.26 K_p = 3.85	54 pcf 34 pcf 501 pcf
Earthquake Conditions Level Backfill	K_{ae} = 0.33 K_{pe} = 3.60	43 pcf 468 pcf

Lateral earth pressure design will be estimated based on the concept of equivalent fluid pressures, in which the soil pressure-distribution is triangular against the foundation or retaining wall. The following sections summarize each design situation.

4.3.1 Active Pressures

Application	Retaining walls which are allowed to deflect and develop an active soil wedge
Resultant Force Calculation	½ $\gamma K_a H^2$; pounds per horizontal foot of wall
Resultant Force Location	one-third the wall height (1/3 H) above the base
Seismic Coefficient[1]	K_s = 0.25g (r·α·PGA) per the FHWA (2011)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force	½ (γK_{ae} - γK_a) H^2; pounds per horizontal foot of wall
Seismic Resultant Force Location[2]	Applied at 60% of the wall height above the base

1. Discussion and calculations for the Seismic Coefficient can be found in Appendix F.
2. Research has indicated that lateral pressures due to earthquakes are non-hydrostatic in distribution, and the resultant acts above the lower third-point of the wall (Bakeer, et al, 1990).

4.3.2 At-Rest Pressures

Application[1]	Walls which are restrained and not allowed to deflect
Resultant Force Calculation	½ $\gamma K_0 H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Design control of such walls shall be whichever generates the higher resultant force: at-rest pressures or active seismic pressures.

4.3.3 Passive Pressures

Application[1]	Toe of retaining walls where the wall is allowed to move into soil
Resultant Force Calculation	½ $\gamma K_p H^2$; pounds per horizontal foot of wall
Resultant Force Location	One-third the wall height (1/3 H) above the base
Design Control	k_s = 0.25g (r·α·PGA) per the FHWA (2011)
Seismic Calculation Basis	Mononobe-Okabe equations (Bowles, 1996)
Seismic Resultant Force Location	One-third the wall height (1/3 H) above the base

1. Passive pressure design should neglect loose fill and soil located within the frost zone.

5.0 GEOTECHNICAL RECOMMENDATIONS

5.1 Recommendations Overview

The fine-grained soils encountered at the site exhibit moderate settlement potential as described above in Section 4.2. Typical spread footings are likely to experience settlement greater than 1-inch if placed above the compressible soils. The risk of settlement can be reduced by **ground improvement techniques** such as geosynthetic reinforced fills, or engineered aggregate piers (EAPs). The risk of settlement can also be reduced by incorporating **deep foundation elements** such as driven piles or micropiles into the foundation design. Subgrade improvement methods to reduce the risk of future differential settlement are discussed in Sections 5.2, 5.3, and 5.4, below.

If a construction shoring system is needed,, the shoring system will need to be extended at or below the over-excavation limit, increasing the overall height of the shoring system mass excavation (i.e., over-ex and replace with geosynthetic reinforced fill) is selected. Deep foundation elements and aggregate piers would negate the need for mass excavation below the shoring system.

It should be noted that different subgrade improvement methods correspond with different levels of risk reduction. Any subgrade improvement method that leaves problematic soil beneath foundation systems has a higher level of risk than those that do not. Similarly, deep foundation elements greatly reduce the risk of settlement by transferring the foundation load past the problematic soils and into the underlying competent soils. Typically, the cost of a foundation system correlates to the risk reduction (i.e., the more expensive foundation system the more risk reduction).

5.2 Reinforced Fills

Reinforced fill comprise imported soil compacted and interbedded with a pre-determined geosynthetic. The reinforced fill will better distribute the foundation load thereby reducing the load applied to the fine-grained, compressible and reducing the amount of future potential settlement. Exact thickness of a reinforced fill is currently unknown due to the limited design data available, though it can be expected to be four to six fee thick with a geosynthetic layer placed at every 1-ft increment.

5.3 Engineered Aggregate Piers

Engineered aggregate piers are a ground improvement technique that utilize compacted aggregate to reinforce potentially problematic soils. The piers are predrilled with an auger to the full design-depth (or to a refusal condition on competent rock/soil), a select aggregate is dumped into the predrilled hole from the surface, and the aggregate is then compacted with a down hole compactor attached to an excavator. The compaction effort not only compacts the imported aggregate, but also densifies the surrounding native soils. The increased density of the select aggregate as well as the surrounding native soils reduces the potential of future foundation settlement. One major benefit of EAPs compared to deep foundation elements, is the EAPs are a ground improvement technique, therefore the foundation footings do not need to be designed as grade beams as it would need to be for deep foundation elements, but typical spread footings.

Aggregate piers are typically designed and installed by a design-build contractor. Such as Keller or Geotech Foundation Company West. Jorgensen is available to provide design values and recommendations to the selected contractor for final design and price estimates.

5.4 Deep Foundation Elements

Foundations consisting of grade beams supported by deep foundation elements, such as driven piles or micropiles, typically allow very little vertical movement of structural elements. This option represents the lowest risk of future foundation settlement.

Both micropiles and driven piles are typically designed and installed by a design-build contractor. Jorgensen is available to provide design values and recommendations to the selected contractor for final design and price estimates.

5.5 Earthwork

5.5.1 Site Preparation

Prior to the placement of any fill, concrete slabs, or foundation elements, the site should be cleared and stripped of topsoil and all organic debris. No brush, roots, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill. All exposed subgrade surfaces should be free of mounds and depressions which could prevent uniform compaction. If unexpected fills or obstructions are encountered during site clearing or excavation, such features should be removed, and the excavation thoroughly cleaned prior to backfill placement and/or construction.

During the excavation, the equipment may disturb and loosen the surface of the subgrade soils. All disturbed areas should be compacted with a smooth-drum vibratory roller, in vibratory mode with a minimum of three passes, prior to the placement of structural fill and footing construction. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed and approved by a representative of this office.

5.5.2 Excavation and Cut Slope Stability

OSHA regulations (29CFR1926) appear to classify the coarse-grained at the site as Type C soil. For planning and design purposes, simple cut slopes should be no steeper than 1.5H:1V. According to OSHA, any cut slope greater than 20 feet in height requires additional analysis. Shallow groundwater conditions at the site may impact shoring requirements. These recommendations are based on observations made at the time of the site exploration. The contractor shall be responsible for adherence to OSHA and other safety regulations by observing soil conditions at the time of construction.

The design of a temporary construction shoring system is beyond the scope of this report. Jorgensen Geotechnical is available to coordinate with shoring contractors to provide design parameters and local expertise to the project and deliver the most efficient shoring option.

5.5.3 Final Backfilling and Grading

Properly compacted backfill and site drainage are very important to protect subgrade soils and prevent water from flowing to undesirable locations (i.e., to the highway). All soils at the site are acceptable for use as backfill and general site grading. Compaction guidelines for both soil types can be found in Section 5.5.4.

5.5.4 Compaction

Based on our borehole logs, compaction of the on-site soils during construction can be measured by performing a Standard Proctor test per ASTM D698 and performing nuclear density gauge testing during the compaction process. Site soils should be moisture-conditioned and placed in lifts and compacted to a predetermined percentage (typically either 92% or 95%) of the maximum dry density as determined by Standard Proctor testing. Soil should be moisture conditioned to between -2% and +2% of the optimum moisture content (OMC). Fine-grained soils require a sheepsfoot or padfoot roller.

It is important to note, the on-site soils contain fine-grained soils which become difficult to compact if moisture contents become too high. Moisture management of the compacted soils will be paramount to reach adequate densities. Additionally, groundwater may impact the ability to compact the soils during construction.

If imported "pit-run" is used as structural fill or if soils at the site contain more oversized clasts (greater than 3-inches) compaction testing with a nuclear density gauge is usually problematic due to the presence of stones. Therefore, we recommend compacting stony soils using a **method specification**, for which Table 5-1 provides initial guidelines.

Table 5-1: Compaction Parameters for Stony Fill

Compactor Type	Lift Thickness	Maximum Particle Size	Minimum Number of Passes[1]
5-ton vibratory	12 inches	9-inch[2]	3
1.5-ton vibratory	9 inches	6-inch	5
Hand-held	4 inches	4-inch	5

1. The actual number of passes should be determined by observing whether the surface is yielding after each pass. If the surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
2. Occasional clasts to 12-inch are permitted, if encountered, but should not be nested.

The method specification may be established as follows:

- The contractor will place fill in loose lifts no greater than specified in the above table for whichever class of compactor is used.
- Fill will be compacted with the *minimum* number of passes specified above. The actual number of passes should be determined by observing compaction after each pass to determine if the surface is non-yielding. If the fill surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed.
- Once the number of passes is determined, this **method** (unique to the material type, compactor, lift thickness, and number of passes) may be continued for the rest of the project as long as fill material properties and subgrade soil conditions remain the same.

It is important to establish a method specification as early in the construction as possible and apply it consistently for the entirety of the project. JG should observe lift thickness, number of passes, and equipment used during compaction. Additional guidance on construction observations may be found in Section 5.5.6.

5.5.5 Compaction Requirements

We recommend the following requirements for engineered fill materials:

Material Type and Location	Minimum Compaction Requirement	Moisture
Stony soils[1]: All Locations (Structural and Non-Structural Applications)	Non-yielding Condition	Usually 6-8%[2]
Non-stony soils	92% or 95% maximum dry density	+2-2% OMC

1. Stony soil may be imported or site-derived
2. Clean, stony soils are typically moisture insensitive and field observations are usually adequate to estimate when soils achieve the proper moisture.

We recommend compaction of fills be observed and tested during construction. If stony fill is not observed to be in a non-yielding condition or non-stony fills do not achieve the recommended compaction requirements, the area represented by the test should be reworked and retested as required to meet the requirements.

5.5.6 Observation during Construction

Recommendations in this report are contingent upon our involvement. If any unexpected soils or conditions are revealed during construction, this office should be notified immediately to survey the conditions and make necessary modifications. All excavations and foundation subgrades should be observed by a representative of JG prior to fill or concrete placement, especially if questionable materials are exposed. Notice shall be provided at a minimum of 24 hours before the requested observation.
We are able to provide the most value observing site conditions at the following times:

1. Upon completion of site preparation to verify all organics and unsuitable material have been removed, and to verify stony alluvial soils have been reached and structural fills have been prepared in accordance with Sections 5.5.1 and 5.5.4.
2. we can observe placement and compaction of fill and aid in the development of a method specification, Section 5.5.4.
3. We can perform density testing by means of proof rolls and with the use of a Nuclear Density Gauge for structural and non-structural soils.

6.0 LIMITATIONS

This report has been prepared based on a limited amount of data. Actual site conditions may vary. These services have been performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty is made or implied.

This report is site-specific and has been prepared in support of the proposed project. The report is for the sole use of the current property owner and their design and construction team and shall be considered non-transferable to future property owners without the written consent of Jorgensen Geotechnical. Under no circumstances are the figures and text to be used separately.

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APPENDIX A

Site Exploration Procedures and Subsurface Exploration Logs

Field Exploration

Borehole Locations and Elevations

Borehole and test pit locations were determined by Jorgensen Geotechnical (JG) staff to bracket the approximate location of the proposed development. Approximate locations of the boreholes and test pits are presented in Figure 2. The approximate location of each borehole and test pit were estimated based on relative proximity to landmarks identifiable on aerial photography as well as approximate GPS coordinates which were collected in the field. Approximate elevations were based on topographic data from Jorgensen Associates.

Subsurface Exploration Procedure

JG conducted a site exploration at the proposed project site utilizing two different subsurface exploration techniques: geotechnical boreholes and open test pits. During the exploration effort, several disturbed samples from SPTs and continuous disturbed samples from the sonic drilling were collected. Bulk disturbed grab samples were collected during the test pit excavation. Shelby tubes were used to collect relatively undisturbed samples of soft material for consolidation testing, shear testing, and index testing. The samples were tested at Gerhart Cole, Inc. (GCI) in Salt Lake City, Utah, and the results are presented in Appendix B. Soil-engineering properties were based on visual classification, direct lab testing results, and accepted correlations based on index test results and SPT blow counts and are discussed further in Appendix D. The subsurface exploration techniques are described below.

Sonic Boreholes

On October 2, 2023, JG directed and oversaw the drilling of two boreholes, JG-05 and JG-06, to 35-feet below the ground surface (bgs) using a sonic drill rig operated by Cascade Drilling of West Jordan, Utah. Sonic drilling utilizes high frequency vibrations to advance a core barrel or casing into the subsurface soils while collecting one continuous disturbed sample. At predetermined intervals, standard penetration tests (SPT) were performed to generate blow count values and collect additional disturbed samples.

Hollow Stem Auger Boreholes

Three additional boreholes, JG-07, JG-08 and JG-09, were completed each to approximately 20-feet bgs on October 24, 2023 using a hollow stem auger (HSA) drilling technique with a Diedrich D120 drill rig operated by SK Geotechnical of Billing, Montana. The HSA drilling technique utilized a 4.25-inch inside diameter hollow auger with a solid stem rod in the center that is removed to perform standard penetration tests every 2.5-feet.

Open Test Pits

On October 31, 2023, JG directed and oversaw the excavation of three open test pits, TP-01, TP-07, and TP-08. The test pits were excavated using a Hitachi Zaxis 160 steel tracked excavator operated by FCExcvation and ranged in depth from 16 to 17.5-feet bgs. Disturbed bulk samples were collected from pertinent soil layers.

Borehole and Test Pit Logs

Field data were collected in the field digitally using the application pLog on a tablet for both Boreholes and Test Pits. Draft logs were reviewed in the office, and final versions are presented below. Blow counts for SPT (field N-values) were adjusted to a standard hammer efficiency of 60% and overburden pressure of one atmosphere as suggested by Youd and Idriss (1997) and Fang (1991), to obtain the adjusted (N1)60 values in blows per foot. Soil type, thickness, consistency, and relative moisture content were observed and documented by Jorgensen

Geotechnical staff. The final logs represent JG's interpretation of the subsurface soil conditions. Site soil conditions may differ from those presented in the boreholes.

In addition to borehole and test pit logs produced by Jorgensen Geotechnical, borehole logs presented in a report produced by Nelson Engineering dated July 28, 2021 were also reviewed to aid in determining subsurface soil conditions and are presented below. Approximate borehole locations performed by Nelson Engineering are presented in Figure 2. Test pit logs presented in a report prepared by Womack and Associated dated June 4, 2012 for the water tank due south of the proposed project site were also reviewed, but are not shown in Figure 2 due to their distance from the project site.

Geophysical Exploration

Jorgensen Geotechnical contracted with Atlas Technical Consultants LLC of Salt Lake City to perform a geophysical evaluation at the project site. The primary purpose of the geophysical study was to develop subsurface shear-wave velocity profiles using Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Waves (MASW). The geophysical exploration was performed on October 23 and 24th 2024. One ReMi line (RL-1) and one MASW line (ML-1) were performed at the specific project site (Lot 57), while the other ReMi and MASW lines were performed to the east of the project site on Lots 53 and 58.

The ReMi study extended to a maximum depth of 100-ft below the ground surface, allowing us to select a Site Class based on the results. Shear wave velocity for the ReMi line RL-1 performed at Lot 57 produced a shear wave velocity of 1,320 ft/s, classifying the site as a Site Class C per ASCE 7-16.

The MASW line ML-1 performed at the project site indicates the upper approximately 25-feet are softer (i.e., slower shear wave velocity), and the soils become denser at approximately 30 to 40-feet below the ground surface. Though the soils appear to become denser at 30-feet, the soils at the site appear to chaotic and have portions that are dense, and portions that are soft, consistent with the observations made in the boreholes and test pits.

The full draft version of the Geophysical Evaluation Report – Snow King – Jackson, Wyoming dated January 2, 2024 from Atlas is attached.



Photo 1: Typical Hollow Stem Auger drilling setup/JG--07



Photo 2: Typical sonic drilling bulk sample/Landslide Debris (GC/CL)



Photo 3: Typical SPT sample/JG-05 D4



Photo 4: Typical test pit excavation setup/TP-07



Photo 5: Landslide Debris (GC)/TP-01



Photo 6: Loess (CL/ML)/TP-02

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Borehole ID: JG-05

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.472132 **Longitude:** -110.754770 **Elevation:** 6375.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1			D1				LEAN CLAY, LEAN CLAY with Sand (CL): slightly moist, brownish tan, medium stiff, 0-5% gravel, 10-15% sand, 80-90% fines [LOESS]					
2												
3			D2									
4												
5			D3									
6												
7			D4	73	8-9-15 22							
8												
9			D5									
10			D6					14		39	14	25
11			D7				SILTY CLAYEY GRAVEL, SILTY CLAYEY GRAVEL with Sand (GC-GM): slightly moist, brownish tan, medium dense to very dense, approximately 25% angular cobbles by volume, matrix supported, 40-65% angular gravel, 10-35% sand, 20-25% fines [LANDSLIDE DEBRIS]					
12												
13												
14			D8									
15												
16			D9									
17												
18			D10 a									
19			D10 b									

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Borehole ID: JG-05

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.472132 **Longitude:** -110.754770 **Elevation:** 6375.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	SPT N1(60) / MC (%) / PL & LL (%) / Fines Content (%)
21			D11				SILTY CLAYEY GRAVEL, SILTY CLAYEY GRAVEL with Sand (GC-GM): slightly moist, brownish tan, medium dense to very dense, approximately 25% angular cobbles by volume, matrix supported, 40-65% angular gravel, 10-35% sand, 20-25% fines [LANDSLIDE DEBRIS]						
22													
23			D12					6		26	15	11	● ⊢
24													
25			D13										
26													
27			D15	87	13-40-50								
28			~~D14~~		76								
29			D16										
30													
31			D17										
32													
33			D18										
34													
35			D19	67	28-25-12			2					● ▲
36					19								
37													
38													
39													

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Borehole ID: JG-06

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471972 **Longitude:** -110.754598 **Elevation:** 6377.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
1			D1				LEAN CLAY, LEAN CLAY with Sand, SANDY LEAN CLAY with Gravel (CL): slightly moist, brown, medium stiff to stiff, 0-25% angular gravel, 5-25% sand, 50-95% fines [LOESS]						
2													
3													
4			D2					27		38	19	19	● ⊢
5													
6			D3	87	10-10-25 31								▲
7			D4										
8													
9			D5										
10													
11			D6	60	6-6-9 12								▲
12													
13			D8					10		32	13	19	● ⊢
14			D9										
15													
16			D10	20	10-15-15 26								▲
17													
18			D11				CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, medium dense to dense, approximately 25% angular cobbles by volume, matrix supported, 45-50% angular gravel, 25-30% sand, 20-25% fines [LANDSLIDE DEBRIS]						
19													

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Borehole ID: JG-06

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 02 2023 **Completed:** Oct 02 2023
Drilling Contractor: Cascade Drilling
Drilling Method: Sonic
Equipment: Sonic Drill Rig
Hammer Type: Automatic

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 36.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471972 **Longitude:** -110.754598 **Elevation:** 6377.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21			D12	100	8-12-17 26		CLAYEY GRAVEL with Sand (GC): slightly moist, brownish tan, medium dense to dense, approximately 25% angular cobbles by volume, matrix supported, 45-50% angular gravel, 25-30% sand, 20-25% fines [LANDSLIDE DEBRIS]	5		18	14	4
22			D13									
23			D14									
24												
25			D15	87	20-28-50 66							
26			D16									
27												
28			D17									
29												
30			D18	73	12-30-34 54							
31												
32			D19				LEAN CLAY with Sand (CL): slightly moist, brownish tan, medium stiff, 10% angular gravel, 15-20% sand, 70-75% fines [LANDSLIDE DEBRIS]					
33			D20					15		28	15	13
34												
35			D21	100	12-10-12 18							
36												
37												
38												
39												

Atterberg Limits

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Borehole ID: JG-07

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 24 2023 **Completed:** Oct 24 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 21.0 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.472169 **Longitude:** -110.754649 **Elevation:** 6374.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
1–4			D-1	20	4-3-1 2		CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, very loose, 55% sub-rounded gravel, 25% sand, 20% fines [FILL]					
4–6			U-1 D-2	73	3-2-4 5		LEAN CLAY, Sandy LEAN CLAY (CL): tan, very soft to stiff, 0-10% angular gravel, 10-30% sand, 60-90% fines, medium plasticity, [LOESS]	14		31	20	11
7–9			D-3	73	2-2-2 3							
9–11			U-2 D-4	80	4-16-25 32	2.25		23		33	18	15
12–14			D-5	80	18-23-21 36							
15–16			D-6	87	14-13-14 23							
17–19			D-7	113	50/5" 82		CLAYEY GRAVEL with Sand (GC): dry, whitish tan, dense, approximately 25% angular cobbles by volume, matrix supported, 65% angular gravel, 15% sand, 20% fines [LANDSLIDE DEBRIS]	13		29	15	14

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Borehole ID: JG-07

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 24 2023 **Completed:** Oct 24 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 21.0 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.472169 **Longitude:** -110.754649 **Elevation:** 6374.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
21			D-8	60	10-7-28 31		CLAYEY GRAVEL with Sand (GC): dry, whitish tan, dense, approximately 25% angular cobbles by volume, matrix supported, 65% angular gravel, 15% sand, 20% fines [LANDSLIDE DEBRIS]						▲
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													

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Telephone: 307.733.5150

Borehole ID: JG-08

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 24 2023 **Completed:** Oct 24 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 20.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.472019 **Longitude:** -110.754636 **Elevation:** 6377.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-1 installed to Total depth of 20ft bgs.

Depth	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
0					CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, very loose, 55% sub-angular gravel, 25% sand, 20% fines [FILL]					
3		D-1	67	4-7-10 15	GRAVELLY LEAN CLAY with Sand (CL): slightly moist, tan, medium stiff, 15% angular gravel, 15% sand, 70% fines [LOESS]					
5		D-2	67	8-13-17 25	Poorly Graded GRAVEL with silt and Sand, SILTY CLAYEY GRAVEL with Sand (GP-GM, GC): dry, whitish brown, medium dense to dense, approximately 25% angular cobbles by volume, matrix supported, 65-75% angular gravel, 15-20% sand, 10-20% fines, [LANDSLIDE DEBRIS]					
8		D-3	87	6-13-15 23						
10		D-4	80	13-24-20 31		2				
13		D-5	50	8-9-16 21	Gravelly LEAN CLAY with Sand (CL): dry, reddish tan, medium stiff to very stiff, 20-25% sub-angular to angular gravel, 10-15% sand, 60-65% fines, medium plasticity [LANDSLIDE DEBRIS]	10		32	15	17
15		D-6	60	12-29-14 23						
18		D-7	100	46-14-15 23						
19		D-8	0	50/3" 79						

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-08

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 24 2023 **Completed:** Oct 24 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 20.5 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.472019 **Longitude:** -110.754636 **Elevation:** 6377.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings. MW-1 installed to Total depth of 20ft bgs.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
21							Gravelly LEAN CLAY with Sand (CL): dry, reddish tan, medium stiff to very stiff, 20-25% sub-angular to angular gravel, 10-15% sand, 60-65% fines, high plasticity, [LANDSLIDE DEBRIS]					
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												

▲ SPT N1(60) 8 16 24 32
● MC (%)
⊢ PL & LL (%) 20 40 60 80
☐ Fines Content (%) 20 40 60 80

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Borehole ID: JG-09

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 24 2023 **Completed:** Oct 24 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 21.0 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471879 **Longitude:** -110.754577 **Elevation:** 6382.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index
0							CLAYEY GRAVEL with Sand (GC): slightly moist, reddish brown, very loose, 55% sub-rounded to rounded gravel, 25% sand, 20% fines [FILL]					
3			D-1	50	3-5-6 9		SILTY GRAVEL with Sand (GC): dry to slightly moist, brown, loose to very dense, approximately 25% angular cobbles by volume, matrix supported, 30-45% angular gravel, 20-30% sand, 30-40% silty fines, [LANDSLIDE DEBRIS]					
5			D-2	83	9-11-15 21							
8			D-3	100	8-15-15 24			7		17	16	1
10			D-4	100	12-19-18 28							
13			D-5	100	8-18-19 31							
15			D-6	87	9-18-24 34			6				
18			D-7	111	5-13-50/4" 50							
19			D-8	0	50/2" 78							

SPT N1(60) 8 16 24 32
MC (%)
PL & LL (%) 20 40 60 80
Fines Content (%) 20 40 60 80

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Telephone: 307.733.5150

Borehole ID: JG-09

Client: Bear Development, LLC
Project Number: 23072
Date Started: Oct 24 2023 **Completed:** Oct 24 2023
Drilling Contractor: SK Geotechnical
Drilling Method: 4-1/4" Hollow stem auger
Equipment: Diedrich D120
Hammer Type: Automatic hammer

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Total Depth: 21.0 ft
Logged By: Bruce Jackson **Checked By:** HC
Latitude: 43.471879 **Longitude:** -110.754577 **Elevation:** 6382.00
Notes: No groundwater encountered. Stopped at target depth. Backfilled with cuttings.

Depth	Graphic	Sampler Type	Number	Recovery % RQD	SPT Blow Count (N1)60	Pocket Pen. (tsf)	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	▲ SPT N1(60) 8 16 24 32 / ● MC (%) / ⊢ PL & LL (%) 20 40 60 80 / □ Fines Content (%) 20 40 60 80
21							SILTY GRAVEL with Sand (GC): dry to slightly moist, brown, loose to very dense, homogeneous, approximately 25% angular cobbles by volume, matrix supported, 30-45% angular gravel, 20-30% sand, 30-40% silty fines, [LANDSLIDE DEBRIS]						
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Test Pit ID: TP-01

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471994
Longitude: -110.754725
Elevation: 6379.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

Notes:
No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
1						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, dense, homogeneous, 15% cobbles by volume, remaining 45% gravel, 30% sand, 25% fines by mass [FILL]						
2												
3						LEAN CLAY with Sand (CL): slightly moist, light tan, pinholed, 5% gravel, 15% sand, 80% fines, medium plasticity, Some gravels present [LOESS]						
4												
5						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, clast supported, 15-25% angular cobbles and boulders by volume, 55% angular gravel, 20% sand, 25% fines, [LANDSLIDE DEBRIS]						
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Test Pit ID: TP-02

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.472045
Longitude: -110.754516
Elevation: 6379.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

Notes:
No groundwater encountered. Stopped at target depth and limits of excavator. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
0						(GM): dry to slightly moist, brown, homogeneous, 10% cobbles by volume, remaining 45% gravel, 30% sand, 25% fines by mass, [FILL]						
1						SILT (ML): slightly moist, light tan, pinholed, 6.5% sand, 93.5% fines, Some sand present [LOESS]						
2												
3												
4												
5												
6			U-1				18					
7												
8												
9						SILTY GRAVEL with Sand (GM): dry to slightly moist, brown, clast supported, 25% angular cobbles by volume, remaining 55% angular gravel, 20% sand, 25% fines by mass, More cobbles than TP-1 [LANDSLIDE DEBRIS]						
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

JORGENSEN GEOTECHNICAL, LLC
1315 HWY 89 S., Suite 201 - Jackson, WY 83002
Telephone: 307.733.5150

Test Pit ID: TP-07

Project Name: Bear Development - Snow King Loop Lot 57
Project Location: Jackson, WY
Client: Bear Development, LLC
Logged By: Bruce Jackson
Checked By: HC
Project Number: 23072
Latitude: 43.471846
Longitude: -110.754370
Elevation: 6384.00
Date Started: Oct 31 2023
Completed: Oct 31 2023
Contractor: FCE
Equipment: Hitachi Zaxis 160

Notes:
No groundwater encountered. Stopped due to large boulder. Pit walls remained vertical. Backfilled with spoils.

Depth	Graphic	Sampler Type	Number	Pocket Pen (tsf)	Classification	Material Description	Moisture Content (%)	Dry Unit Wt. (pcf)	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Well
0						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, homogeneous, 15% cobbles by volume, remaining 45% gravel, 30% sand, 25% fines by mass, Frozen [FILL]						
2						LEAN CLAY with Sand (CL): slightly moist, light tan, pinholed, 5% gravel, 15% sand, 80% fines, medium plasticity, Some gravels present [LOESS]						
3						CLAYEY GRAVEL with Sand (GC): dry to slightly moist, brown, clast supported, 25% cobbles by volume, remaining 55% gravel, 20% sand, 25% fines by mass, Increased amount of cobbles with depth. Encountered large Boulder at total depth [LANDSLIDE DEBRIS]						

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-4**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **10/22/05 10/23/05**	DRILLER: **PIEDMONT**	
LOGGED BY: **GYR**	DRILL TYPE: **TRACK MOUNT B-50**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6487.8**	HOLE DIAMETER: **4"**	
	HAMMER TYPE: **140#**	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
	ABUNDANT GRAVEL TO COBBLE AND BOULDER SIZE CLASTS THROUGHOUT	1						*BORING LOCATED ON UNDISTURBED GROUND. SOILS EXPOSED 50' HIGH CUT SLOPE DOWNSLOPE TO THE NORTH ARE GENERALLY STIFF TO HARD/DENSE SILT/FINE SAND/SILTY CLAY, CLAY MIXTURES WITH FREQUENT LIMESTONE CLASTS FROM COBBLE TO BOULDER SIZE (6' M.D.) SEEPS ARE EVIDENT IN AREA OF CUT FACE DOWNSLOPE OF BORING.*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-6' ARE ROCK CHIPS AND MOIST SILTY CLAYEY SAND*						
		4												*CUTTINGS MOISTURE % INCREASING FROM 6' FEWER ROCKS AND FREQ. BIT PLUGGING.*
		5												
		6												
		7												
		8												
		9	X			BH4-1 2.5" SS	79	*MOIST LT TAN GREEN SILTY SAND, TRACE CLAY, TRACE COAL, HARD.*			35			
		10	X											
		11												
		12												
		13												
		14	X			BH4-2 2" SS	50	*MOIST TO WET RED SILTY CLAYEY GRAVEL W/SAND, MED. PLASTICITY, STIFF TO V. STIFF. MOIST. CHAOTIC, NOT STRATIFIED*			17			*DRILLING WITH 3.75" ø TRICONE AND WATER FROM 15'*
		15	X											
		16												
		17												
		18												
		19												
		20												*DR ROCK 19.5-20.2'*
		21												

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S:\PROJECTS\06-07\TRANSFER STATION GEOTECH\TRANSFER MAIN BUILDING BORING LOGS.DWG GINT-D MAR 14 2005 01:31:31 PM PLOTTED BY:

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-4* PAGE: *2 OF 3*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22												*DR SOFT 20.5–22 DR 50% ROCK WITH 4"–8" INTERVALS OF SOFTER MATERIAL BETWEEN 22–29'*
		23												
		24												
		25												
		26												
		27												
		28												
		29												
▼		30												*WATER LEVEL 11/3/05*
		31												
		32												
		33												
		34						*AT 34' ATTEMPTED SPLIT SPOON, BORING CAVED TO 29' DRILLING WITH CASED 3.75" TRICONE FROM 34' DR SMOOTHER DRILLING AT 35'*						
		35												
		36												
		37												
		38												
		39				BH4-3 2" SS	92	*MOIST TO WET SILT, ML, TAN, MED PLASTICITY. SEAMS .5–1" THICK MAY BE SATURATED. STIFF.*			8			
		40												
		41												*DR COBBLES FROM 39.5 LOSING WATER FROM 40.5*
		42												
		43												
		44												

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-4* PAGE: *3 OF 3*

This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44						*DR CONT FRACTURED ROCKY DRILLING FROM 39' CUTTINGS ARE ANGULAR LIMETONE/SANDSTONE GRAVEL SIZE FRAGMENTS*						
		45												
		46												
		47												
		48												
		49												
		50												
		51												
		52												
		53						*DR CONT FRACTURED ROCKY DRILLING FROM 39' CUTTINGS ARE ANGULAR BLUE BLACK LIMESTONE/SANDSTONE GRAVEL SIZE FRAGMENTS*						
		54						*MAJORITY OF WATER LOST, 39'–BOH*						
		55						*BOH =55.75*						
		56						*SET PIEZO (¾"PVC) BOTTOM AT 36.1' SLOTTED BOTTOM 6' BENTONITE IN HOLE TO 36.1, SAND TO 20' FILLED ANNULUS WITH SAND TO 38'*						
		57												
		58												
		59												
		60												
		61												
		62												
		63												
		64												
		65												
		66												

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CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

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PROJECT NAME: **LOT 58 GRAND VIEW LODGES**		**DRILL HOLE No.** BH-5	PAGE: 1 OF 4
DATE STARTED / FINISHED: 10/24/05 10/25/05		DRILLER: PIEDMONT	
LOGGED BY: GYR/ROLFE		DRILL TYPE: TRACK MOUNT B-50	
BOREHOLE LOCATION/ELEVATION: SEE LOCATION MAP/6409.9		HOLE DIAMETER: 4"	
		HAMMER TYPE: 140#	

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		1						*BORING LOCATED AT BASE OF 60' PLUS CUT SLOPE*						*DRILLING W/DOWNHOLE PNEUMATIC HAMMER*
		2												
		3						*CUTTINGS 0-10' ARE MOIST TO WET LT BROWN CLAY, SILTY CLAY WITH SOME GRAVEL FRAGMENTS.*						
		4						*DRILLING INDICATES OCCASIONAL COBBLES*						
		5						*MOIST TO WET PLASTIC SOIL CAUSING FREQ. PLUGGING FROM 4'*						
		6												
		7												
		8												
		9												
		10						*DR ROCK 9.5-11'*						
		11						*WET FROM 11' FREQ. HAMMER PLUGGING*						
		12												
		13												*NO WATER IN HOLE @13' AFTER 28 HOURS*
		14												
		15						*NQ CORING FROM 15' RETURN LOGGED AS IN"/IN"*						
		16					10/36	*MOIST LT BROWN CLAYEY SAND W. GRAVEL, COBBLE FRAG. IN SHOE. V. STIFF TO HARD PP> 3.0 TSF*						
		17												
		18												*18-23 LITTLE WATER LOSS SMOOTH DRILLING W/OCCASIONAL COBBLES*
		19					10/60	*AS ABOVE*						
		20												
		21												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *2 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		22												*MINIMAL WATER LOSS 23–28'*
		23												
		24												
		25					19/60	*COBBLE IN BIT. MOIST BROWN CLAYEY SAND, SC, SANDS FINE, CLAY FRACTION MED. TO HIGH PLASTICITY, TRACE GRAVELS, HARD*	29	4				
		26												*SOME WATER LOSS @29' REGAINED BY 30'*
		27												
		28												
		29												*DRILLING IND. SAT. SOFT/LOOSE ZONE 30'±1 28–33 SMOOTH DRILLING W/SOME COBBLES LOWER PORTION*
		30					51/60	*AS ABOVE W/COBBLES TO 6", MOIST TAN BROWN SILTY CLAY W/GRAVELS*						
▼		31						*DRILLER REPORTS SAND LENSE "PUSHING IN ON HOLE" AT 30' HOLE CASED TO 33'*						
		32												
		33												
		34												
		35					18/36	*ALL GRAVEL AND COBBLE FRAGMENTS, LITTLE FINE GRAINED MATERIAL*						*MIN. WATER LOSS 33–40'*
		36						*36–38' MOIST TAN BROWN CLAYEY SAND, SC, TRACE GRAVEL, MED. PLASTIC*						
		37					13/24	*ABUNDANT GRAVEL MOIST TAN TO GREY CLAYEY SAND W/GRAVEL, SC, MED. PLASTICITY*						*DRILLING IND. HIGHER GRAVEL FRACTION THAN IN RETURN FROM 33'*
		38												
		39					15/17	*MOIST BROWN CLAYEY SAND, SC, SANDS FINE, FINES MED. PLASTIC, V.STIFF TO HARD, TRACE GRAVEL*	28	12				
		40												
		41					9/43	*MOIST GREY CLAYEY SAND, W/ GRAVEL AND COBBLES, SC, V. STIFF TO HARD*						
		42												
		43												
		44												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *3 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		44												
		45					21/60	*MOIST TAN SILTY TO SANDY CLAY W/GRAVEL, CL, MED. PLASTICITY, V. STIFF TO HARD*						*TAN BROWN RETURN*
		46												
		47												
		48												
		49					13/24	*AS ABOVE*						
		50												*GOOD RETURN*
		51												
		52					15/36	*MOIST TAN BROWN SILTY CLAYEY SAND W/GRAVEL, SC-SM COAL IN SHOE @53' V/ STIFF TO HARD*						
		53												
		54					30/30	*MOIST TAN BROWN SILTY CLAY W/GRAVEL, INTERBEDDED COAL STRATA, V. STIFF, SOME MOTTLEING*						
		55												
		56												
		57					27/30	*AS ABOVE*						
		58												
		59												
		60					14/60	*MOIST BROWN SANDY SILTY CLAY W/GRAVEL, CL-ML, VERY STIFF*						
		61												
		62												
		63												
		64						*63-68 SOME KNOCKING, SOME FAST DRILLING*						
		65						*ORGANICS AT 65'*						
		66												

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PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-5* PAGE: *4 OF 4*

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WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES: DRIVE	SAMPLES: UNDISTURBED	SAMPLES: BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
		67					34/60	*AS ABOVE TO 65' <u>FIBROUS ORGANIC MATERIAL @65±</u> BELOW ORGANICS IS MOIST BLUE GREY SANDY CLAY/CLAYEY SAND, STIFF TO VERY STIFF, WITH GRAVEL. BOTTOM 1' IS MOIST SILTY SAND/SANDY SILT/HARD/V. DENSE*						
		68												
		69												
		70					37/60	*SILTY SAND AS ABOVE SMOOTH DRILLING OCCASION KNOCKING, MOD FAST DRILLING*						
		71												
		72												*GOOD RETURN BLUE/GREY TO WHITE GREY*
		73												
		74						*<u>ORGANIC DEBRIS</u> MOIST BLUE GREY CLAYEY SAND W/ GRAVEL AND OCCASIONAL LARGE FRAGS OF WHITE LIMESTONE, STIFF TO VERY STIFF, CHARCOAL AND ORGANIC DEBRIS*						
		75					44/48							
		76												
		77												
		78					9/12	*MOIST BLUE GREY SANDY SILT, ML, TRACE GRAVEL LOW PLASTICITY STIFF TO VERY STIFF, CHARCOAL*						
		79												
		80					24/33	*AS ABOVE CHARCOAL IN SHOE*						
		81						*BOH AT 80.75 3/4" PIEZO INSTALLED PULLED CASING, CAVED TO 50' WATER IN BORING ABOVE 50' AS SEEN ON CLOTH TAPE. BENTONITE TO 45.5' BOTTOM OF PIEZO AT 45.5' SLOTTED TO 35.5 SAND TO 35.0' CAVED ABOVE*						
		82												
		83												
		84												
		85												
		86												
		87												
		88					18/30							
		89												

NELSON ENGINEERING
P.O. BOX 1599, JACKSON WYOMING (307) 733-2087

CLIENT: *SNOW KING MOUNTAIN RESORT JACKSON, WYOMING*

S:\PROJECTS\2005\05-12 GRAND VIEW LODGES\ENGINEERING\DRAWINGS\BORINGLOGS\BH-5(4).DWG FEB 13 2006 10:07:36 AM PLOTTED BY: CYR

PROJECT NAME: **LOT 58 GRAND VIEW LODGES**	**DRILL HOLE No. BH-6**	PAGE: **1 OF 3**
DATE STARTED / FINISHED: **6/24/2021 6/25/2021**	DRILLER: **IME**	
LOGGED BY: **PRUETT**	DRILL TYPE: **TRUCK-MOUNTED CME85**	
BOREHOLE LOCATION/ELEVATION: **SEE LOCATION MAP/6466.0'**	HOLE DIAMETER: **8" OD HOLLOW STEM AUGER (HSA)**	
	HAMMER TYPE: **140# AUTO**	

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DEPTH (FT)	SAMPLES DRIVE	SAMPLES UNDISTURBED	SAMPLES BULK	SAMPLE ID	RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
1						*BORING LOCATED ON CENTERLINE OF MOUNTAIN ACCESS ROAD W/GRAVEL SURFACE. UPHILL ROAD CUTS EST. 3-7' HEIGHT. STEEP GRASSY SLOPES UPHILL AND DOWNHILL. SURFICIAL SOILS ON CUT SLOPES DRY SILTY/CLAYEY GRAVEL/GRAVELLY SILT/CLAY WITH COBBLES AND BOULDERS.*						*EASY DRILLING WITH INTERMITTENT BIT GRINDING FROM 1'-10'*
2												*2 MINUTES TO DRILL 0'-5'*
3												
4												
5	5			BH6-1 2" SS	83	*5.0'-6.5' MOIST, BROWN/LT BROWN GRAVELLY SILT/SILTY GRAVEL, HARD, ANGULAR LIMESTONE AND SANDSTONE GRAVELS, FILGC*			34			
6	7											*3 MINUTES TO DRILL 5'-10'*
7	11											*HARD DRILLING IN GRAVELS FROM 7'-8'*
8												
9												
10	6			BH6-2 2" SS	61	*10.0'-11.5' MOIST, LT BROWN/GRAY SILTY GRAVEL WITH SAND, DENSE, ANGULAR LIMESTONE GRAVEL FRAGMENTS, FILGC*			34			*MODERATE DRILLING WITH CONSTANT BIT GRINDING ON GRAVELS AND COBBLES FROM 10'-21'*
11	10											*4 MINUTES TO DRILL 10'-15'*
12	12											
13												
14												
15	12			BH6-3 2" SS	67	*15.0'-16.5' SAME AS ABOVE, TRACE SAND, LIMESTONE GRAVEL LODGED IN TIP OF SS*			47			
16	17											*5 MINUTES TO DRILL 15'-20'*
17	17											
18												
19												
20	17			BH6-4 2" SS	78	*20.0'-21.5' 0"-12" SAME AS ABOVE, DENSE, ANGULAR GRAY LIMESTONE AND MINOR YELLOW SANDSTONE GRAVELS, MEDIUM PLASTICITY SILT*			32			
21	15					*12"-14" MOIST, OLIVE GREEN SILTY CLAYEY GRAVEL WITH MINOR SAND*						
	11											

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CLIENT: **SNOW KING MOUNTAIN RESORT**
JACKSON, WYOMING

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22	11											
	6			BH6-4B 3" DM	83	22.0'–23.0' MOIST, OLIVE GREEN LEAN CLAY CHAOTICALLY MIXED WITH MINOR GRAY SILTY CLAY, STIFF TO VERY STIFF, MINOR COAL FRAGMENTS, PP>4.0 TSF, ORANGE OXIDATION STAINING IN TIP OF SS	33	15	15	108	18	MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 21'–25'
23	13	X										
24												4 MINUTES TO DRILL 20'–25'
25	3											
	5			BH6-5 2" SS	83	25.0'–26.5' MOIST, GRAY GRAVELLY SILTY CLAY WITH SAND, STIFF, MEDIUM PLASTICITY SILTY CLAY, PP=1–2 TSF, ANGULAR LIMESTONE AND SANDSTONE CLASTS, SANDSTONE CLAST WITH SHELL FOSSIL, ABUNDANT ORANGE OXIDATION STAINING THROUGHOUT			13			SMOOTH EASY DRILLING FROM 25'–30'
26	6											
27												2 MINUTES TO DRILL 25'–30'
28												BIT GRINDING FROM 28'–29'
29	7			BH6-5B 3" DM	83	28.5'–29.5' MOIST, BROWN SILTY CLAYEY/CLAYEY GRAVEL WITH SAND, MEDIUM DENSE, FINE SAND, ANGULAR LIMESTONE FRAGMENTS, FILGC			16			
	14											
30	14			BH6-6 2" SS	67	30.0'–31.5' MOIST, BROWN SILTY GRAVEL WITH SAND, VERY DENSE, FINE SAND, ANGULAR LIMESTONE FRAGMENTS, FILGC, FROM 4"–8" GRAVEL WITH SILT AND SAND LENS, GRAVEL LODGED IN TIP OF SS			51			MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 30'–35'
31	23											5 MINUTES TO DRILL 30'–35'
	24											
32												
33	7											INCREASED BIT GRINDING FROM 33'–35'
	20	X		BH6-6B 3" DM	100	33.0'–34.0' MOIST, OLIVE GREEN CLAYEY GRAVEL WITH SAND, MEDIUM DENSE, ANGULAR LIMESTONE, DOLOMITE, AND SANDSTONE GRAVELS			19			
34												
35	11											HARD DRILLING WITH CONSTANT BIT GRINDING 35'–45'
	18			BH6-7 2" SS	83	35.0'–36.5' TOP HALF–MOIST, OLIVE GREEN CLAYEY GRAVEL WITH SAND BOTTOM HALF–MOIST BROWN SILTY GRAVEL WITH SAND, DENSE, ANGULAR LIMESTONE FRAGMENTS, FILGC			34			
36	16											GRINDING ON COBBLE/BOULDER FROM 39'–39.5' FOR 15 MIN W/ NO PROGRESS. MOVED BH 6' EAST (BH–6B) DRILLED TO 40.4 WHERE GRINDING ON BOULDER FOR 30 MINS W/ MINOR PROGRESS. MOVED BH 7' WEST (BH–6C/ MW) OF ORIGINAL BH
37												
38						MONITORING WELL DRY ON 6/28/2021						
39												
40	23											
	50			BH6-8C 3" DM	67	39.5'–40.5' 0"–3" PULVERIZED LIMESTONE GRAVEL/COBBLE 3"–8" MOIST, SILTY CLAYEY GRAVEL WITH COBBLES, VERY DENSE, FRACTURED GRAY SANDSTONE GRAVEL AT BOS			>50			
41												
42												
43												HARD DRILLING WITH CONSTANT BIT GRINDING 40'–45'
44												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT NAME: *LOT 58 GRAND VIEW LODGES* **DRILL HOLE No.** *BH-6* PAGE: *3 OF 3*

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		44												
		45	11			BH6-9 2" SS	117	*45.0'–46.5' 0"–4" MOIST, OLIVE GREEN SANDY LEAN CLAY WITH MINOR GRAVEL, PP>4.0 TSF*			34			*EASY TO MODERATE DRILLING WITH OCCASIONAL BIT GRINDING FROM 45'–47.5'*
		46	20					*4"–21" MOIST, BROWN/GRAY/OLIVE GREEN CHAOTICALLY MIXED GRAVELLY LEAN CLAY/SILTY CLAY/SILT WITH SAND, HARD, PP>4.0 TSF, MINOR ORANGE OXIDATION STAINING, VERTICAL CONTACTS IN BOTTOM 6"*						
			17											
		47												*STIFF SMOOTH DRILLING FROM 47.5'–50'*
		48												
		49												*9 MINUTES TO DRILL 45'–50'*
		50	6					*50.0'–51.5' SAME AS ABOVE, TRACE GRAVELS, VERY STIFF, COAL*						
			12			BH6-10 2" SS	122	*FRAGMENTS IN BOTTOM 6"*			26			
		51	18											*EASY TO MODERATE DRILLING WITH INCREASING BIT GRINDING FROM 50'–55'*
		52												
			15					*52.0'–53.0' SAME AS ABOVE WITH GRAVELS, HARD, COAL FRAGMENTS*						
			50	X		BH6-11 3" DM	67	*THROUGHOUT, TOP PORTION OF SAMPLE IS SATURATED DUE TO SURFACE WATER INFILTRATION FOR THUNDERSTORM INTO DRILL STRING*	25	11	>50	121	15	
		53												
		54												
		55												
			9					*55.0'–56.3' SAME AS ABOVE WITH COAL FRAGMENTS*						
			16			BH6-12 2" SS	94				>50			
		56	50/4"											*MODERATE DRILLING WITH INTERMITTENT BIT GRINDING FROM 55'–60'*
		57												
		58												*6 MINUTES TO DRILL 55'–60'*
		59												
		60	10					*60.0'–61.5' MOIST, GRAY SILTY SAND, DENSE, FINE SAND, FINE GRAVEL*						*INITIAL BORING CAVED TO 22' AFTER HSA REMOVAL*
			18			BH6-13 2" SS	89	*INTERVALS, COAL FRAGMENTS THROUGHOUT*			43			
		61	36											
		62												
			21			BH6-14 3" DM	55	*62.0'–62.9' SAME AS ABOVE, VERY DENSE*			>50			
			50/5"											
		63						*BOH = 62.9'*						
								MONITORING WELL CONSTRUCTION						
		64						*PIPE*						
								37.9 FEET OF 2" DIAMETER SCHEDULE 40 PVC CASING FROM 0.3'–18.2', 20–SLOT SCREEN FROM 18.2'–38.2'						
		65						*BACKFILL*						
								BENTONITE– 0.5'–1.5', SPOILS– 1.5'–16.5', BENTONITE– 16.5'–17.5', SILICA SAND– 17.5'–40', BENTONITE– 40'–49', SPOILS– 49'–62.9'						
		66												

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CLIENT: *SNOW KING MOUNTAIN RESORT*
JACKSON, WYOMING

PROJECT: Town of Jackson, Snow King Water Tank

PIT LOCATION: Southwest of center of tank

TEST PIT: TP- 1

Approximate Pit Dimensions (feet): Length: 40 Width: 15 Depth: 31.5

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6740' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① Clayey GRAVEL and COBBLE: Slightly moist to moist, dark brown, loose to medium dense, ~40% sandy clay is moderately plastic, ~60% angular gravel and cobbles up to 6" diameter, some silt, grades into below over 10" [COLLUVIUM]

② Silty sandy GRAVEL with clay and cobbles: Slightly moist, yellow tan, very slightly plastic, medium dense, few clasts up to 12" diameter, limestone clasts angular to subangular, grades into below [COLLUVIUM]

③ GRAVEL and COBBLE: Dry to slightly moist, reddish gray, fractures/voids lined with calcium carbonate, abundant voids, very loose, limestone, follows topography, consistently overlies olive sandy layer below, calcium carbonate mineralization on clasts, abundant raveling, bottom contact ~35-45 degrees [TALUS]

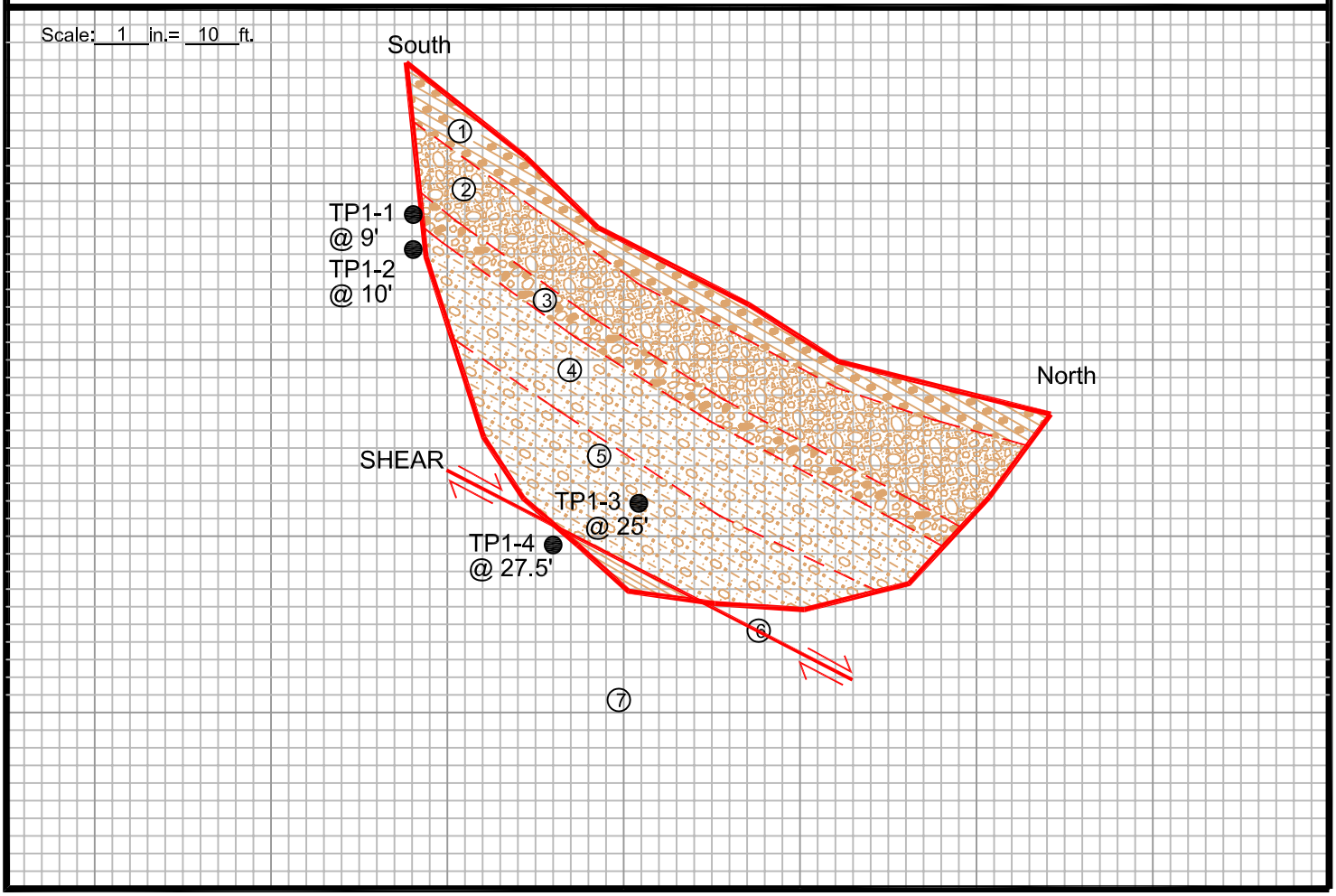
④ Sandy CLAY with gravel and cobble: Slightly moist, olive green, stiff to very stiff, moderately to highly plastic, abundant polished surfaces, irregularly follows silty sandy gravel, cobbles and boulders below contact with material below, varies, ~20% sand, ~15% gravel, ~15% cobble, ~50% sand [LANDSLIDE DEBRIS]

⑤ CLAY and sandy silty GRAVEL and COBBLE: Yellow tan to gray green, intervals of claye and sandy silty gravel and cobbles, few boulders, multiple irregular planar (~bedding) surfaces, angular to subangular boulders up to 2' diameter (mostly limestone), medium dense/very stiff, combination of the olive green sandy clay and the yellow tan silty sandy gravel with clay and cobbles, little consistency with shear orientations, abundant limestone fragments, very irregular contacts [LANDSLIDE DEBRIS]

⑥ CLAY: Pale blue gray, up to 1" thick, soft, moderately plastic, slickensided, dip 30° north [SHEAR ZONE]

⑦ CLAY with sand: Moist, gray, massive, heavily sheared, abundant polished surfaces, highly plastic, darker irregular beds throughout, wavy sheared zone, lots of slickensided surfaces, few coal beds, stiff [LANDSLIDE DEBRIS]

Note: No groundwater observed. Backfilled with spoils. Underlain by stony sandy clay.
Note: Soil Classifications (USCS) based on field descriptions



PROJECT: Town of Jackson, Snow King Water Tank

PIT LOCATION: ~20' northwest of northeast BH-3 (NE 2009)

TEST PIT: TP- 2

Approximate Pit Dimensions (feet): Length: 16 Width: 15 Depth: 12.6

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6711' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

WOMACK AND ASSOCIATES, INC.
• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① 0.0-1.6ft Clayey sandy GRAVEL and COBBLES: Moist to very moist, medium to dark brown, abundant organics, moderately plastic, angular clasts up to 6" diameter, massive, medium dense [FILL]

② 1.6-2.6ft Sandy CLAY with gravel and cobble: Very moist, dark gray, medium stiff, massive, ~60% clay, ~40% gravel and cobbles up to 6" diameter [TOPSOIL]

③ 2.6-4.8ft Clayey sandy GRAVEL: Very moist, pale brown, medium dense, ~50% fine gravel [COLLUVIUM]

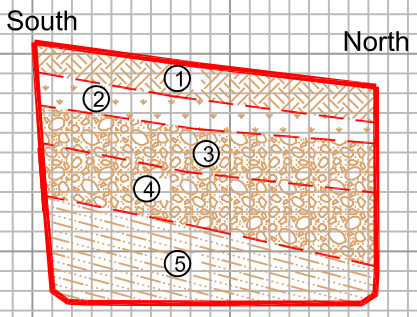
④ 4.8-7.0ft Clayey SAND and GRAVEL: Very moist, pale brown, medium dense, ~50% fine gravel [COLLUVIUM]

⑤ 7.0-12.6ft Sandy CLAY: Moist, green, slightly mottled yellow brown, very stiff, massive, abundant angular to subangular limestone clasts to 1' diameter (most up to 2" diameter) [LANDSLIDE DEBRIS]

Note: No groundwater observed. Backfilled hole with spoils.

Note: Soil Classifications (USCS) based on field descriptions

Scale: 1 in.= 10 ft.



PROJECT: Town of Jackson, Snow King Water Tank

TEST PIT: TP- 3

PIT LOCATION: ~25' east of northeast BH-1 (NE 2009)

Approximate Pit Dimensions (feet): Length: 15 Width: 15 Depth: 11.0

Date: 05-10-10 Logged By: wrw/jr

Approximate Surface Elevation: 6762' Log View Direction: South to North

Excavation Contractor: Schupman Excavation Equipment: JD 240D LC

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• Geotechnical Engineering • Geology
P.O. Box 12650, Jackson, Wyoming 83002
(307) 733-7209 (Fax) 733-8005

MATERIAL DESCRIPTIONS

① 0.0-1.2ft Silty CLAY with gravel: Moist to very moist, dark brown to blackish brown, abundant organics, highly plastic, soft [TOPSOIL]

② 1.2-3.5ft Gravelly silty CLAY: Buff yellow tan, stiff, ~25-35% gravel to 3" diameter [COLLUVIUM]

③ 3.5-5.0ft Silty CLAY: Moist, greenish brown with yellow mottling, very stiff [LANDSLIDE DEBRIS]

④ 5.0-6.0ft Gravelly silty CLAY: Moist, yellow tan (buff), stiff to very stiff [LANDSLIDE DEBRIS]

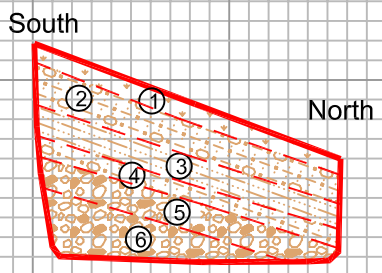
⑤ 6.0-7.5ft Rubble zone: Loose, white precipitates [TALUS]

⑥ 7.5-11.0ft Silty clayey GRAVEL and COBBLE: Yellow brown to red brown, dense, 50-60% clasts up to 8" diameter, oversize [TALUS]

Note: No groundwater observed. Hole standing OK. Backfilled hole with spoils.

Note: Soil Classifications (USCS) based on field descriptions

Scale: 1 in.= 10 ft.





GEOPHYSICAL EVALUATION

SNOW KING

Jackson, Wyoming

PREPARED FOR:

Colter Lane, P.E.
Jorgensen Geotechnical
1315 Highway 89 South, Suite 201
Jackson, Wyoming 83002

PREPARED BY:

Atlas Technical Consultants LLC
358 South 700 East, Suite B518
Salt Lake City, Utah 84102

January 2, 2024

358 South 700 East
Salt Lake City, UT 84102
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January 2, 2024

Atlas No. 11143

MR. COLTER LANE, P.E.
JORGENSEN GEOTECHNICAL
1315 HIGHWAY 89 SOUTH, SUITE 201
JACKSON, WYOMING 83002

Subject: Geophysical Evaluation
Snow King
Jackson, Wyoming

Dear Mr. Lane:

In accordance with your authorization, Atlas has performed a geophysical evaluation pertaining to a portion of the Snow King project located in Jackson, Wyoming. The primary purpose of our study was to develop subsurface shear-wave velocity profiles and characterize subsurface geologic conditions at select locations of the project site. This was accomplished through the collection of Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Wave (MASW) data. Our services were conducted on October 23rd and 24th, 2023. This report presents our methodology, equipment used, analysis, and findings.

We appreciate the opportunity to be of service on this project. Should you have any questions, please contact the undersigned at (310) 951-1993.

Respectfully submitted,
Atlas Technical Consultants LLC

Stephan A. Callas
Project Geophysicist

Patrick F. Lehrmann, P.G., P.Gp.
Principal Geologist/Geophysicist

SAC:ERC:PFL:ds

Distribution: Mr. Colter Lane at CLane@JorgEng.com

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2. SCOPE OF SERVICES 1
3. SITE AND PROJECT DESCRIPTION 1
4. STUDY METHODOLOGY 1
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5. RESULTS AND CONCLUSIONS 3
   - 5.1 ReMi 3
   - 5.2 MASW 4
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FIGURES

Figure 1 Site Location Map
Figure 2 Line Location Map
Figure 3 Site Photographs
Figure 4a ReMi Results (RL-1)
Figure 4b ReMi Results (RL-2)
Figure 5a MASW Profile (ML-1)
Figure 5b MASW Profile (ML-2)

1. INTRODUCTION

In accordance with your authorization, Atlas has performed a geophysical evaluation pertaining to a portion of the Snow King project located in Jackson, Wyoming (Figure 1). The primary purpose of our study was to develop subsurface shear-wave velocity profiles and characterize subsurface geologic conditions at select locations of the project site. This was accomplished through the collection of Refraction Microtremor (ReMi) and Multichannel Analysis of Surface Wave (MASW) data. Our services were conducted on October 23rd and 24th, 2023. This report presents our methodology, equipment used, analysis, and findings.

2. SCOPE OF SERVICES

Our scope of services included:

- Performance of two one-dimensional (1-D) ReMi profiles (RL-1 & RL-2).
- Performance of two 2-D MASW profiles (ML-1 & ML-2).
- Compilation and geophysical analysis of the collected data.
- Preparation of this illustrated report presenting our methodology and findings.

3. SITE AND PROJECT DESCRIPTION

The project site is generally located just southeast of the Snow King Mountain Resort in Jackson, Wyoming (Figure 1). Specifically, the study area is located on the south side of Snow King Loop Road. The locations of the seismic traverses were generally selected by a representative of your office and adjusted when necessary to account for surface conditions. The study area was composed of two graded lots with an access road separating the two lots. The seismic traverses were performed over relatively flat terrain on the east and west sides of the access road. The surface of the site was generally covered with soil, gravel and seasonal vegetation. Additionally, several surface obstructions including construction materials, a firewood pile, snow grooming equipment, vehicles, and temporary fencing were located within the study area boundaries. Figure 2 depicts the approximate locations of the seismic traverses while Figure 3 depicts the general site conditions.

4. STUDY METHODOLOGY

As previously indicated, our evaluation included the performance of two ReMi and two MASW transects. The following sections detail the methods and instrumentations used.

4.1 ReMi

The ReMi technique uses recorded surface waves (specifically Rayleigh waves) that are contained in background noise to develop a shear-wave velocity profile of the study area down to a depth, in this case, of approximately 100 feet. The depth of exploration is dependent on the length of the line and the frequency content of the background noise. The results of the ReMi

method are displayed as a one-dimensional profile which represents the average condition across the length of the line. The ReMi method does not require an increase of material velocity with depth; therefore, low velocity zones (velocity inversions) are detectable with ReMi.

Our ReMi evaluation included the use of a 24-channel Geometrics Geode seismograph and 24, 4.5-Hz vertical component geophones. Geophones were spaced 10 feet apart for a total line length of 230 feet for each line. A total of 22 records, each 32 seconds in duration, were recorded at each location, while 10 records utilized passive data collection of ambient ground vibration noise and 12 utilized an active source. The active source data gathers included generating a seismic signal at both ends of the seismic spread, approximately 10 or 30 feet off the ends of the geophone array. Six active source files were collected at each end of the line. The recorded data was then downloaded to a field computer for post-processing. The data was later processed using Surface Plus 9.1 - Advanced Surface Wave Processing Software (Geogiga Technology Corp., 2020), which uses the refraction microtremor method (Louie, 2001), and other surface wave analysis methods. The program generates phase-velocity dispersion curves for each record and provides an interactive dispersion modeling tool to determine the best fitting model. The result is a one-dimensional shear-wave velocity model of the site with roughly 85 to 95 percent accuracy (Louie, 2001). For situations in which the shear wave velocity values are close to the limit between site class boundary values, Geotechnical consultants should consider the site's subsurface geologic stratigraphy and structure, soil mechanics, and ReMi evaluation results when assessing seismic site classification. Figures 2 and 3 depict the general site conditions in the study area.

4.2 MASW

Surface waves (specifically Rayleigh waves) were recorded along lines ML-1 and ML-2 in order to provide S-wave velocity information for portions of the site (Figure 2). The surface waves were generated by a hammer and plate (shot) and recorded using a 24-channel Geometrics Geode seismograph and 24, 4.5-Hz vertical component geophones. The geophones were coupled to the ground surface using a Geostuff Landstreamer with geophones stationed 4 feet apart and shots conducted off the end of the lines. Prior to the collection of surface wave data, near and far field effects were evaluated for several shot offset distances. The results indicated that an offset shot of 16 feet off the end of the line was optimal for our evaluation.

Three records, each one second long, were recorded at each shot location. After each shot location, the shot location and geophones were moved an integer multiple of the geophone spacing longitudinally along the profile direction and the line was reshot. The number of shots, spread length, and start and end stations are presented in Table 1.

Table 1: MASW Array Geometry

Line No.	No. of Shots	Total Spread Length (feet)	Profile Length/Start and End Stations (feet)
ML-1	21	252	160/(0-160)
ML-2	25	284	192/(0-192)

The recorded MASW data was processed using SurfSeis® (Kansas Geological Survey, 2019), a MASW software program. One dimensional (1-D) shear-wave (S-wave) velocity (Vs) profiles were generated for each shot location, which correspond to the middle of the geophone array. A two-dimensional color gradient model was then created from the 1-D models using the SurfSeis® interpolation scheme. It should be emphasized that the 2-D profile represents the area between the midpoint of the first shot location and the midpoint of the last shot location. The actual model section length and start and end stations for the sections are also listed in Table 1.

5. RESULTS AND CONCLUSIONS

As previously indicated, our evaluation consisted of performing two 1-D ReMi profiles (RL-1 & RL-2) and two 2-D MASW profiles (ML-1 & ML-2) at the project site. Figures 4a and 4b present the ReMi results for RL-1 and RL-2, respectively. Figures 5a and 5b present the MASW results for ML-1 and ML-2, respectively. The analysis of each is detailed below.

5.1 ReMi

The purpose of our ReMi evaluations were to develop shear-wave velocity profiles to be used for design and construction parameters at the project site. Table 2 and Figures 4a and 4b present the results from our ReMi evaluations. It should be noted that the ReMi results represent the average condition across the length of the line. When the 1-D ReMi surface wave velocity results (analogous to shear wave) show an IBC Vs100 velocity value that is close to the "border line" boundary between IBC Site Classes, the project geotechnical consultant of record should be consulted. The geotechnical consultant of record should also consider other existing available site information and whether obtaining additional new geotechnical evaluation data such as boreholes, surface to downhole seismic (ASTM D7400), crosshole seismic (ASTM D4428), and/or additional 1-D ReMi data collections would be needed concerning the site's subsurface geologic stratigraphy and structure, soil mechanics and soil modulus, along with the initial 1-D ReMi evaluation results when assessing the "borderline" IBC Vs100 Seismic Site Class.

Table 2: ReMi Results

Line No.	Depth (feet)	Shear Wave Velocity (feet/second)	Average Shear Wave Velocity (Vs in feet/second)	Site Class (IBC, 2019)
RL-1 (NW-SE)	0-6	618	Vs100' = 1,320 ft/s	C
	6-14	1170		
	14-25	1494		
	25-35	1435		
	35-69	1152		
	69-100	2010		

Line No.	Depth (feet)	Shear Wave Velocity (feet/second)	Average Shear Wave Velocity (Vs in feet/second)	Site Class (IBC, 2019)
RL-2 (W-E)	0-9	390	Vs100' = 1,201 ft/s	C
	9-14	799		
	14-25	1361		
	25-69	1446		
	69-100	2052		

5.2 MASW

Two MASW traverses were conducted as part of our study. Figures 5a and 5b present the S-wave velocity models generated from our analysis of lines ML-1 and ML-2, respectively. Based on the results, it appears that the project site is generally underlain by low-velocity materials in the near-surface and higher velocity materials at depth. Distinct vertical and lateral velocity variations are evident within the models. Specifically, ML-1 appears to contain pockets of low and high velocity materials in the near surface, possibly related to reported landslide deposits. At depth, ML-1 displays a high velocity contact that spans the length of the profile from northwest to southeast. This high velocity contact is generally contained towards the bottom of the profile; however, protrudes closer to the surface between 90 and 120 feet along the x-axis. This high velocity material may represent bedrock contacts. ML-2 displays slightly more homogenous material in the near surface compared to ML-1. At depth, ML-2 displays a moderately high velocity contact that spans the length of the profile from west to east. This moderately high velocity contact is generally contained within 20 and 50 feet below ground surface and may represent weathered bedrock contacts. It should be noted that there were several underground utilities present in the vicinity of ML-1, and possibly ML-2, which could be affecting the results from our evaluation. As a general rule of thumb, the S-wave velocity of a given material might be between approximately 0.4 to 0.6 of the P-wave velocity, depending on the soil/rock type and condition.

6. LIMITATIONS

The field evaluation and geophysical analyses presented in this report have been conducted in general accordance with current practice and the standard of care exercised by consultants performing similar tasks in the project area. No warranty, express or implied, is made regarding the conclusions and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be present. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Atlas should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document. This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk.

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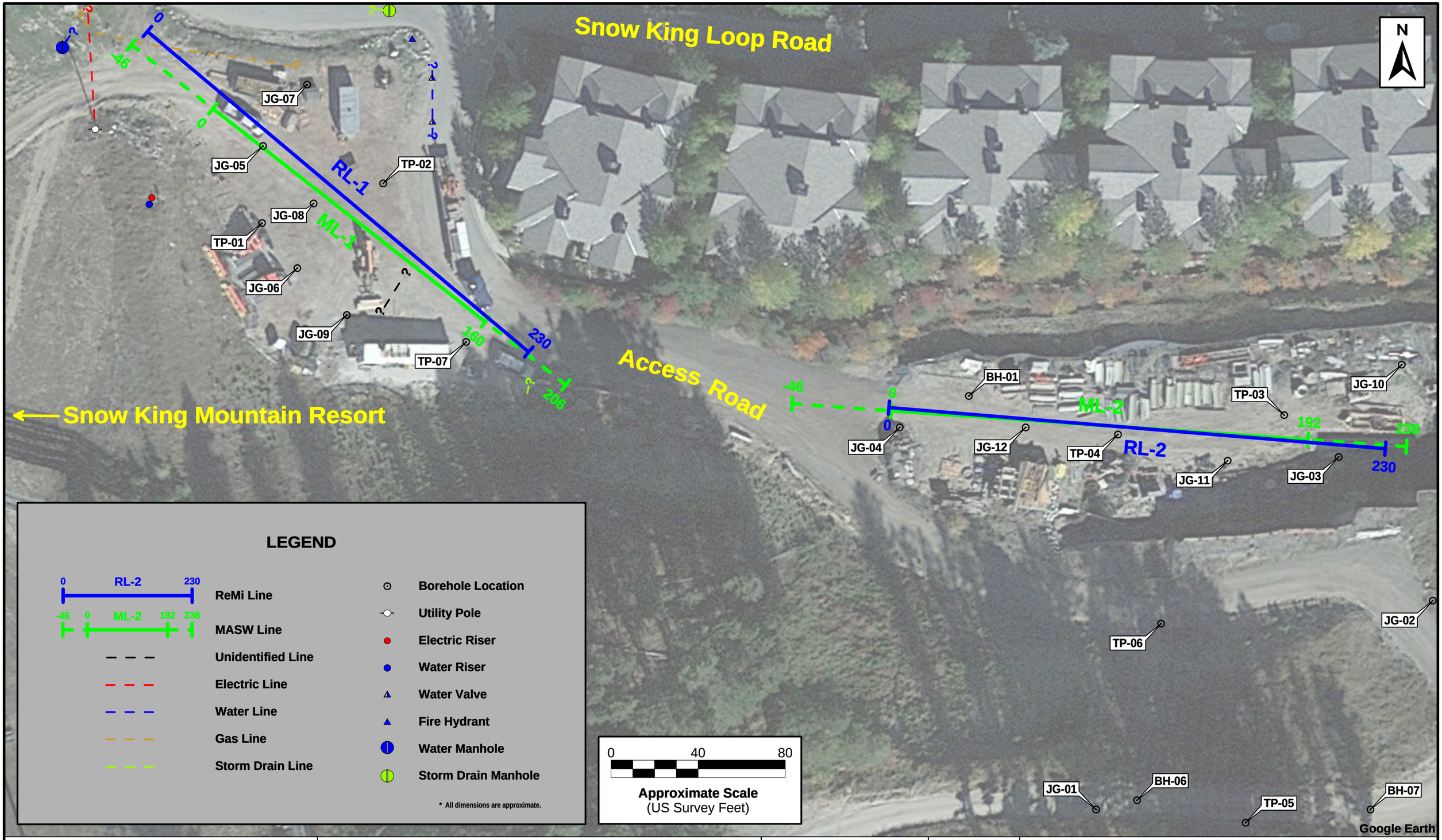
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ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 1	**SITE LOCATION MAP**



LEGEND

- RL-2 (0 – 230): ReMi Line
- ML-2 (-46, 0, 192, 238): MASW Line
- Unidentified Line
- Electric Line
- Water Line
- Gas Line
- Storm Drain Line
- Borehole Location
- Utility Pole
- Electric Riser
- Water Riser
- Water Valve
- Fire Hydrant
- Water Manhole
- Storm Drain Manhole

* All dimensions are approximate.

0 40 80

Approximate Scale
(US Survey Feet)

ATLAS

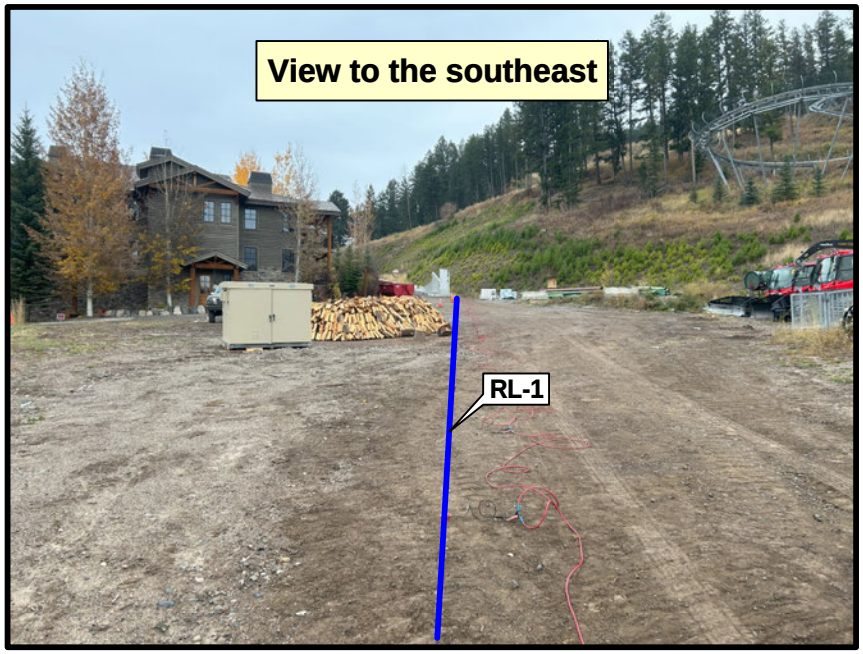
Snow King
Jackson, Wyoming

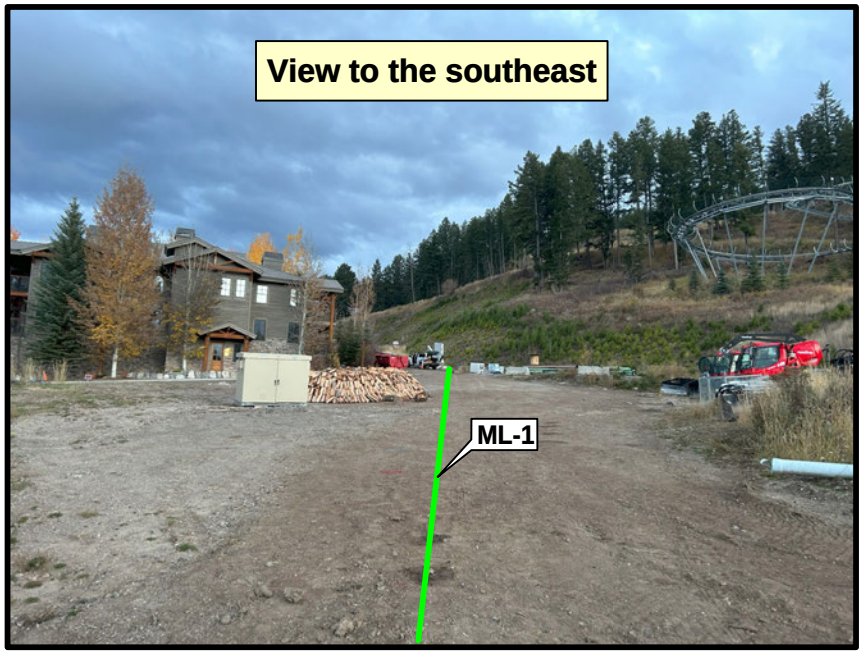
Project No.: 11143

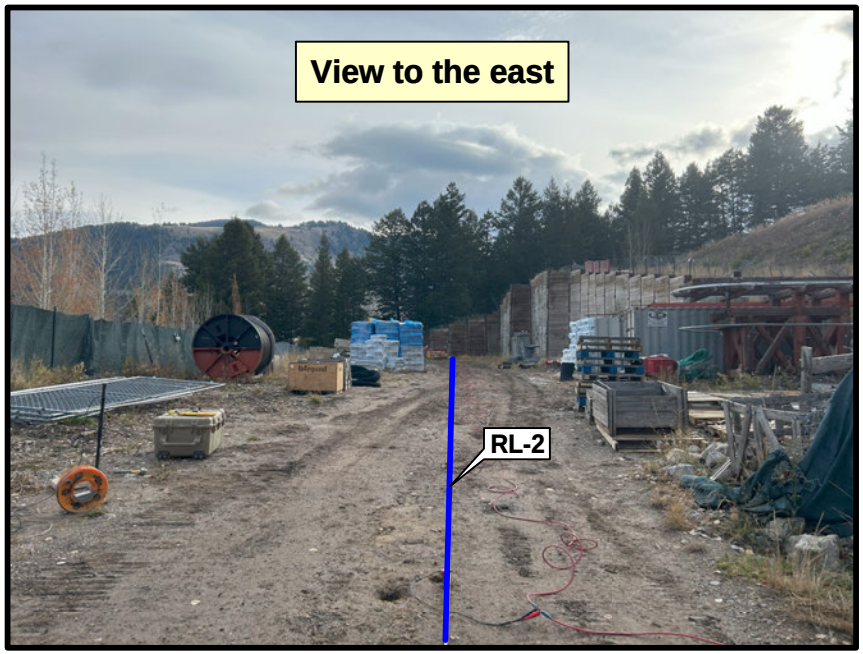
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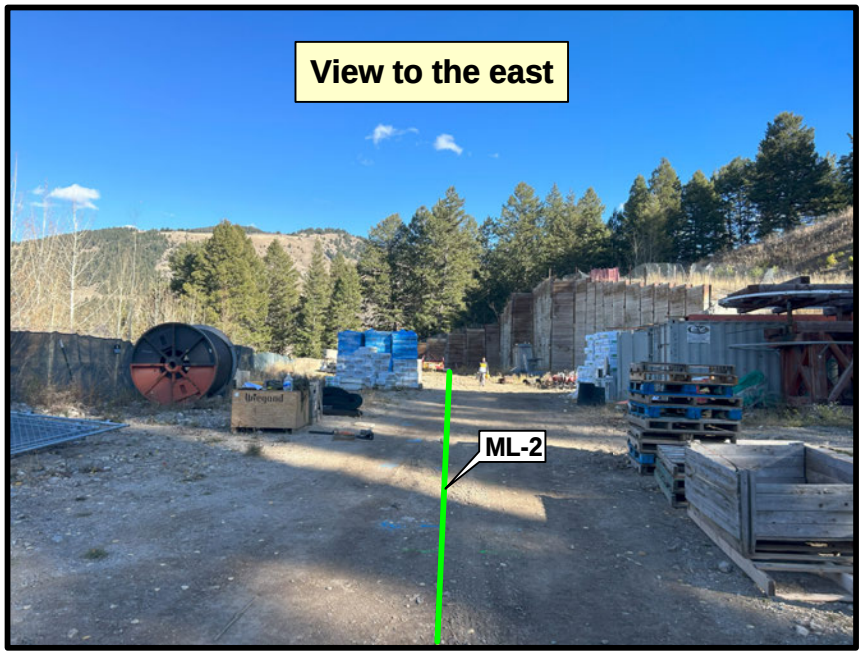
Figure 2

LINE LOCATION MAP



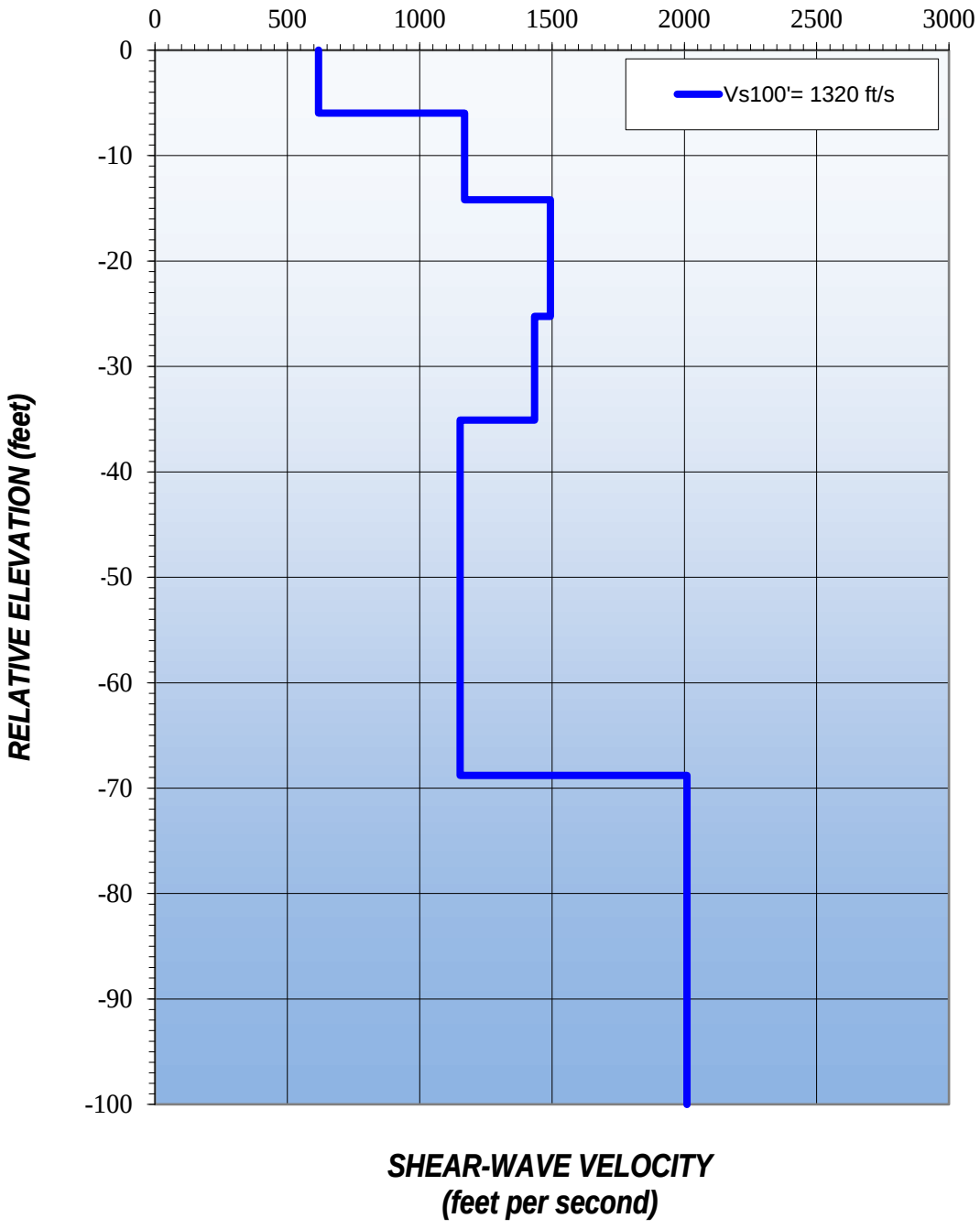




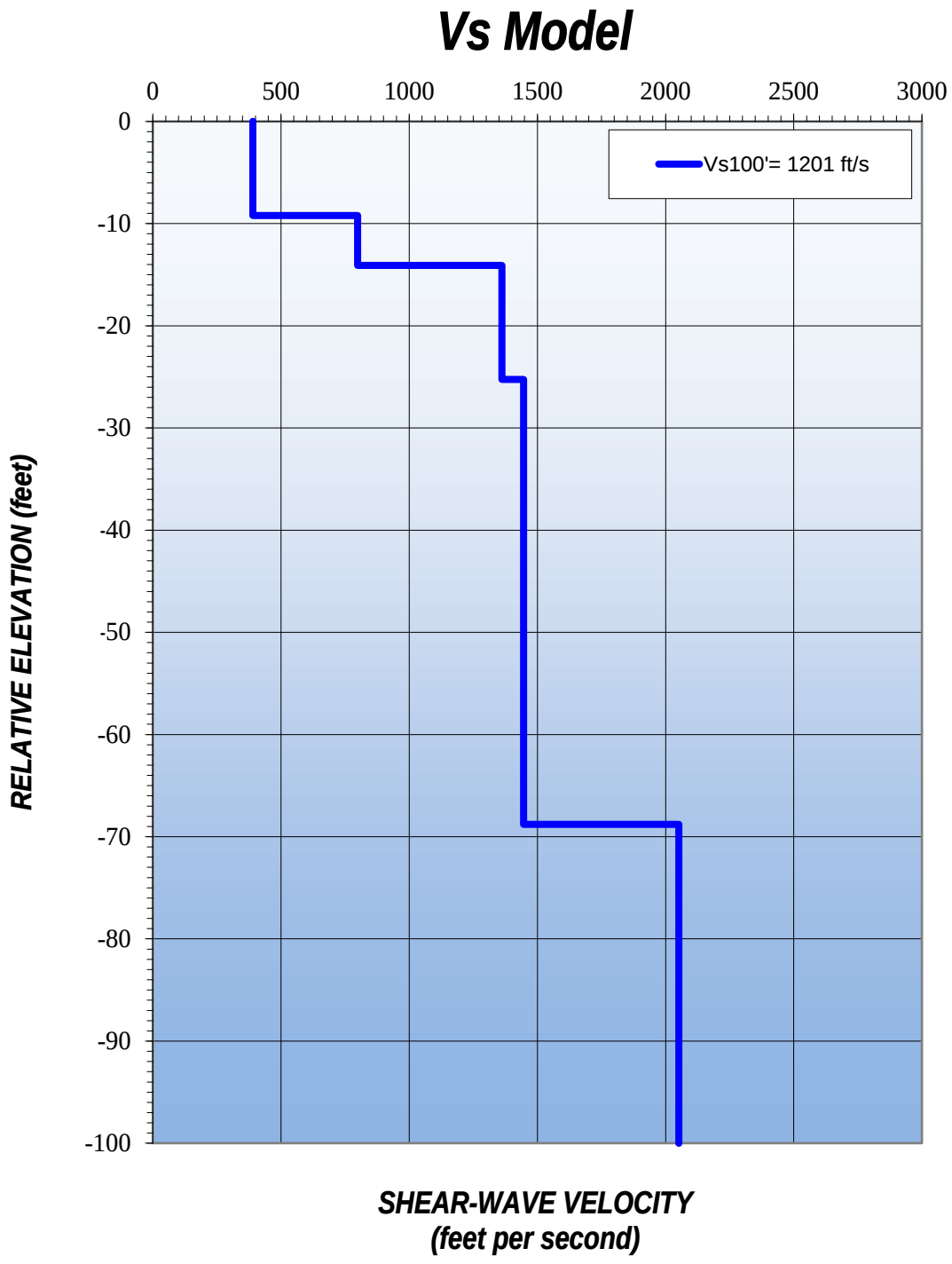


ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 3	**SITE PHOTOGRAPHS**

Vs Model



ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 4a	**ReMi RESULTS** **RL-1**



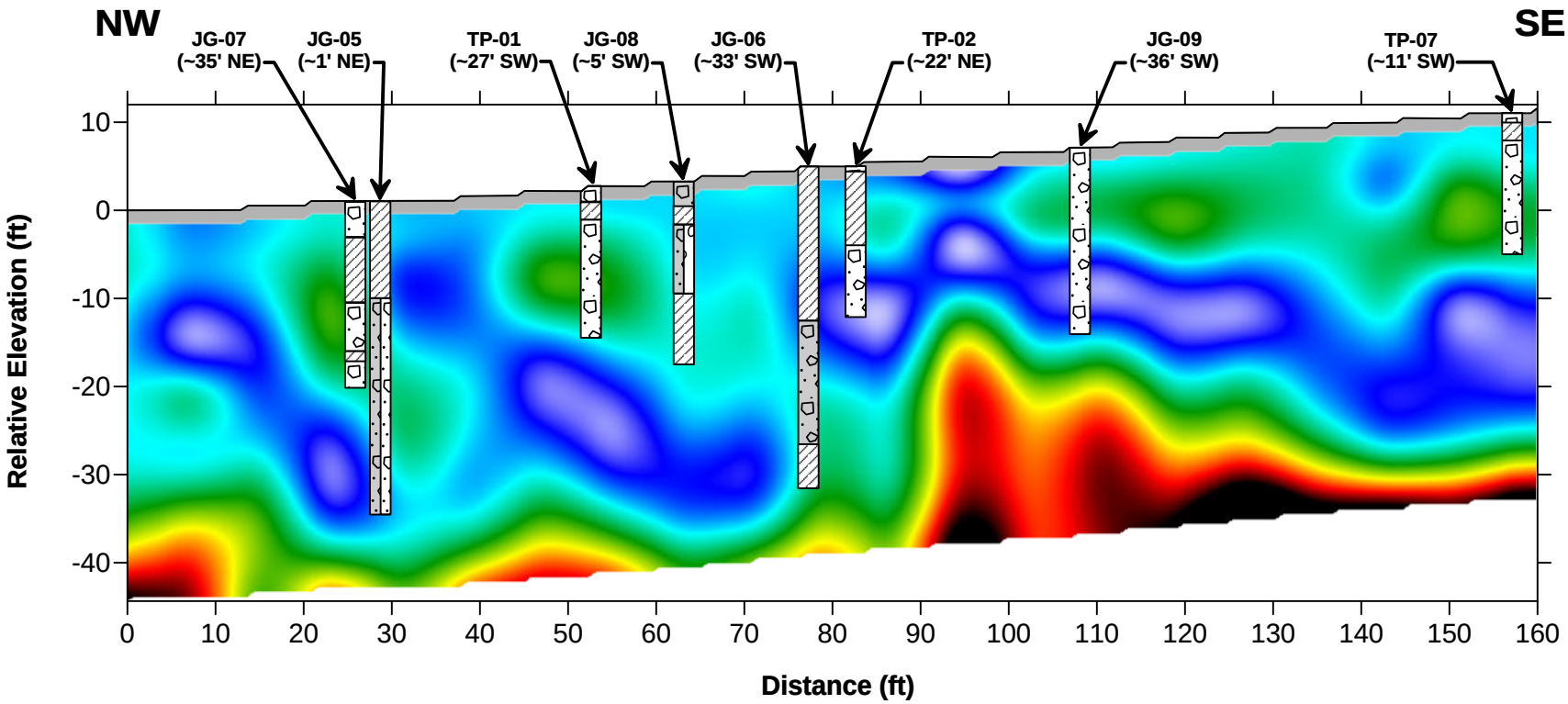
ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 4b	**ReMi RESULTS** **RL-2**

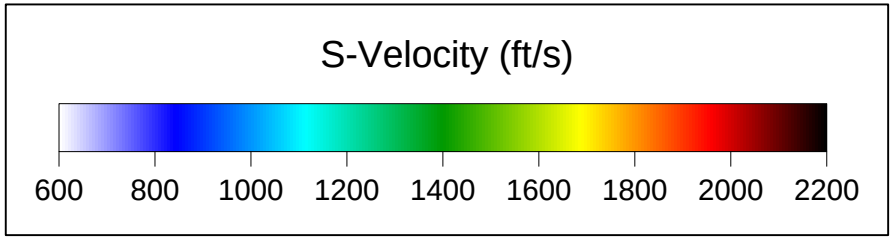
MASW PROFILE
ML-1

LEGEND

CL GM
GP GC

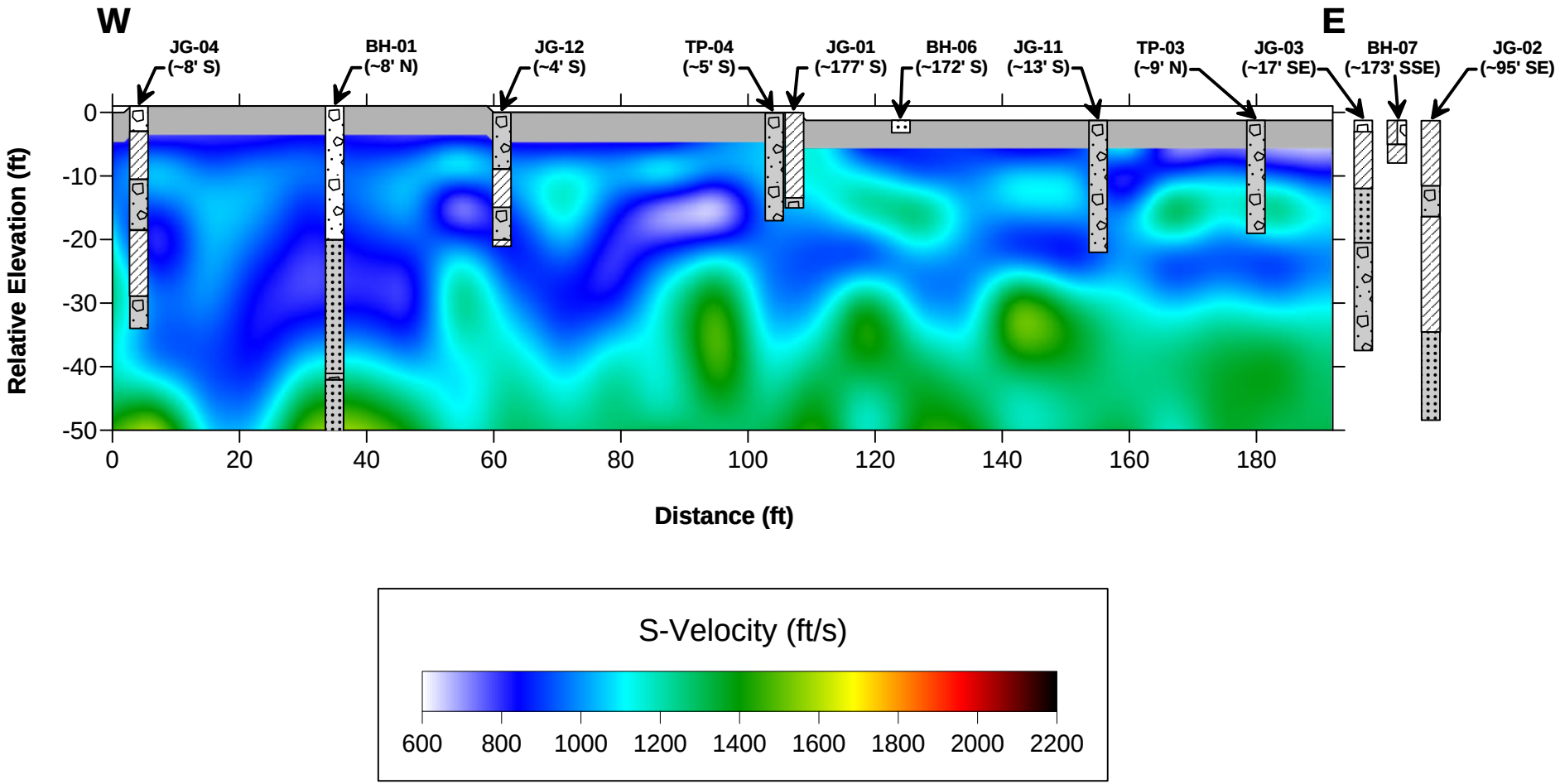
* All dimensions are approximate.
* Borehole data provided by Jorgensen.





ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 5a	**MASW PROFILE ML-1**

MASW PROFILE
ML-2



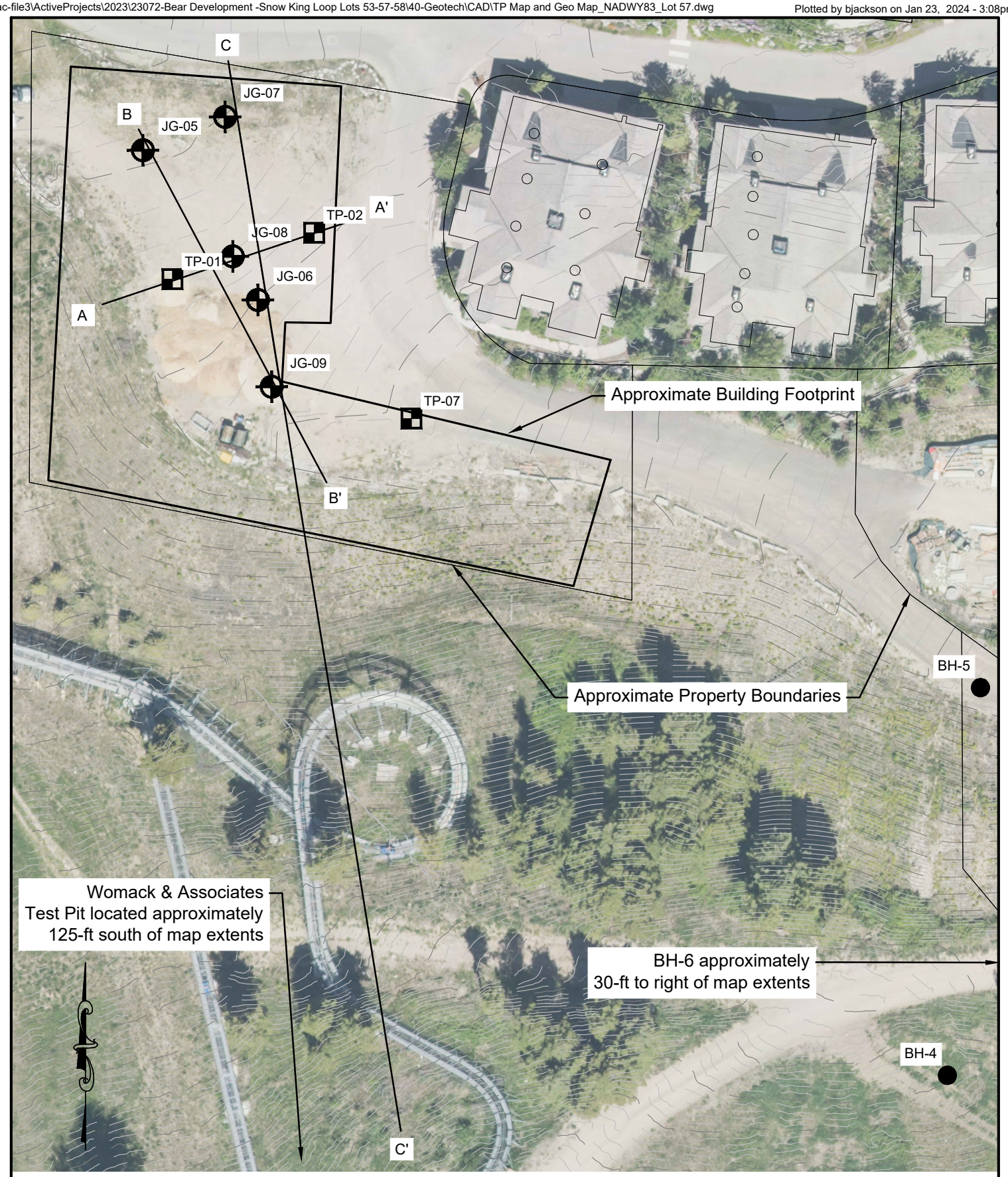
ATLAS	Snow King Jackson, Wyoming	Project No.: 11143 Date: 01/24	Figure 5b	**MASW PROFILE** **ML-2**

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APPENDIX B

Figures



0 50 100

SCALE: 1 INCH = 50 FEET
THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

Borehole (BH-XX), test pit (TP-XX), and Nelson Engineering boreholes (BH-X) locations are approximate and may be surveyed upon request. Existing ground surface topography provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023. Additional topographic data provided by Teton County, 2015. Aerial imagery provided by Teton County, 2019.

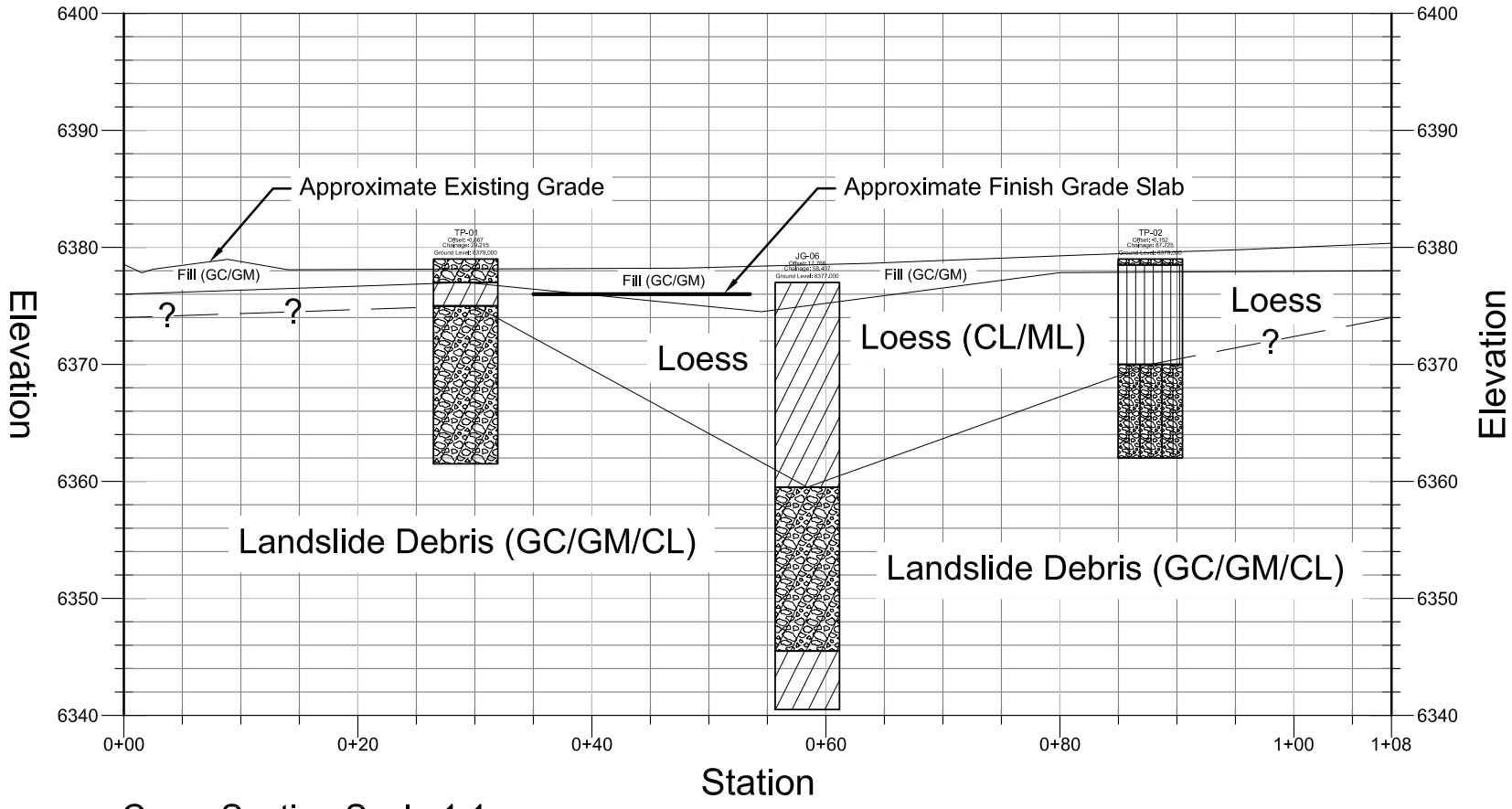
DRAFTED BY:	BJ
REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 2
Borehole, Test Pit and Geologic Cross Section Location Map

PROJECT TITLE:
Geotechnical Engineering Report
Bear Development - Lot 57
Teton County, Wyoming

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Cross section A-A'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

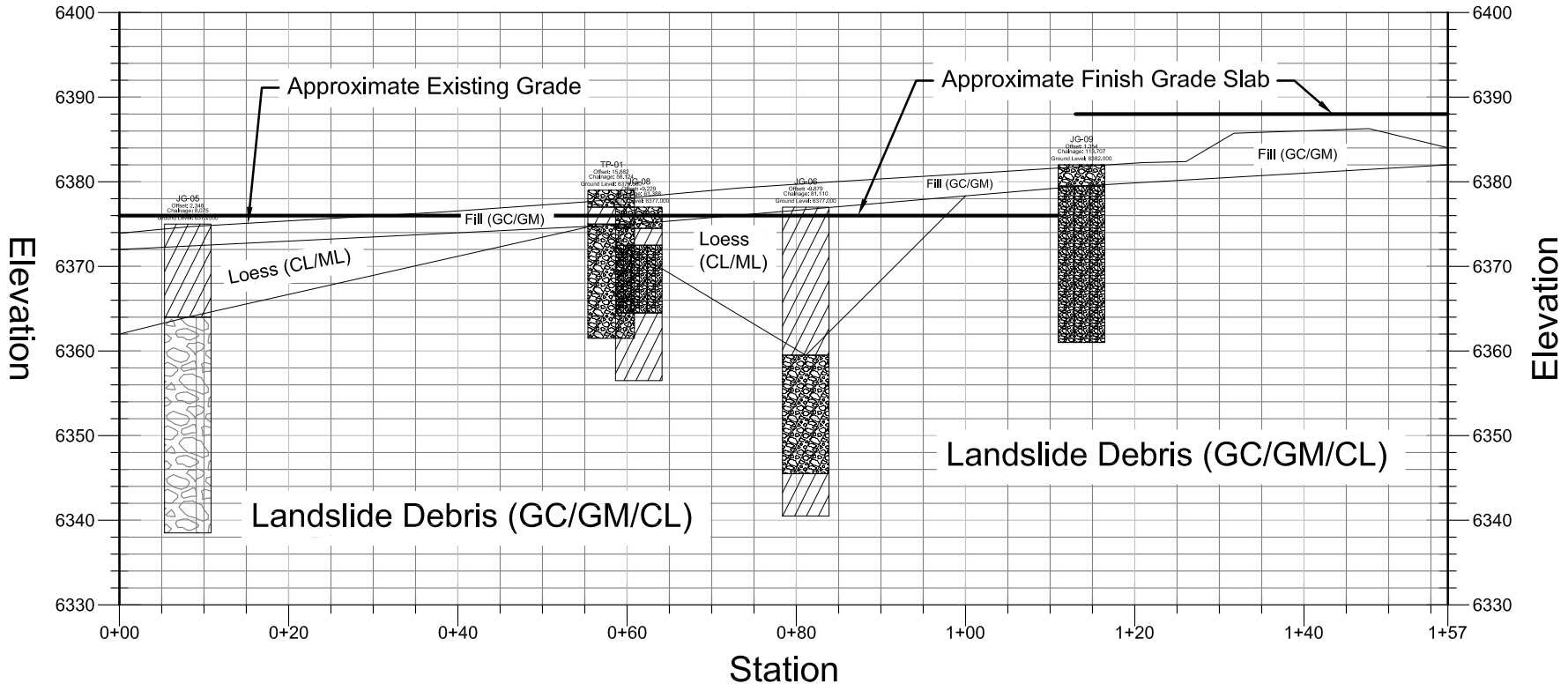
DRAFTED BY:	BJ
REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 3
Geologic Cross Section A-A'

PROJECT TITLE:
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Cross section B-B'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

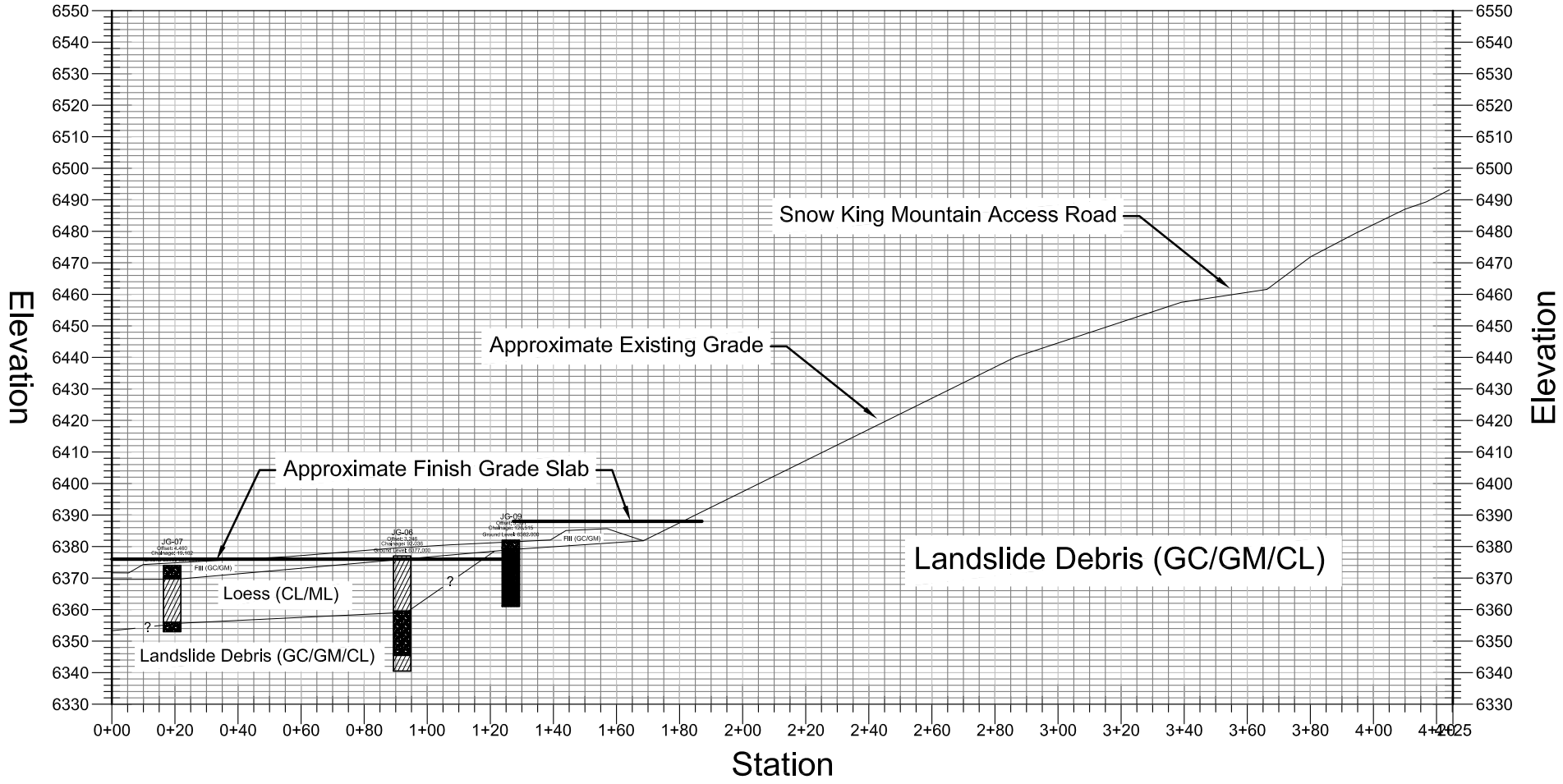
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REVIEWED BY:	HC/DB
PROJECT NUMBER	23072

SHEET TITLE:
Figure 4
Geologic Cross Section B-B'

PROJECT TITLE:
Geotechnical Engineering Report
Bear Development - Lot 57
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Cross section C-C'



Cross Section Scale 1:1

Garage slab elevations provided by Hoyt Architects Preliminary Design dated July 19, 2023. Existing ground surface provided by Jorgensen Associates, taken from topographic survey completed November 1, 2023.

DRAFTED BY: BJ REVIEWED BY: HC/DB PROJECT NUMBER 23072	SHEET TITLE: Figure 5 Geologic Cross Section C-C'	PROJECT TITLE: Geotechnical Engineering Report Bear Development - Lot 57 Teton County, Wyoming	JORGENSEN GEOTECHNICAL, LLC

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APPENDIX C

Soils Laboratory Procedures and Results

Laboratory Testing

Laboratory Testing Procedures

Lab samples were submitted for testing at GCI in Salt Lake City, Utah from boreholes JG-05, JG-06, JG-07, JG-08, JG-09, and TP-02.

During the October 2023 site exploration for the Development at Lot 57, JG collected relatively undisturbed (i.e., thin-walled Shelby tubes) and disturbed samples (i.e., split spoon (SPT) samples, sonic drilling grab samples, and test pit bulk samples). Of the samples collected, 12 disturbed samples and three relatively undisturbed samples were selected for lab analysis. Laboratory testing included natural moisture content, unit weight, Atterberg limits, grain-size distribution, hydrometer, and consolidation testing.

The laboratory testing program consisted of:

- Fifteen (15) Moisture Contents (ASTM D2937/D2216)
- Fifteen (15) Atterberg Limits (ASTM D4318)
- Fifteen (15) Grain Size Analysis (ASTM D422)
- Two (2) Direct Shear Strength (ASTM D3080)
- Three (3) One Dimension Consolidation (ASTM D2435)

We also included applicable laboratory testing data from our site exploration on the nearby Lots 53 And 58, laboratory testing results from Nelson Engineering for Lots 53 and 58, and laboratory testing data for a nearby project provided by Womack & Associates, Inc.

Combined results are shown on the following pages.

Laboratory Test Results: Detailed Summary

Laboratory testing included index testing for classification per USCS, and direct testing of strength, as well as one dimensional consolidation tests. Classification tests – including Atterberg limits and grain-size analysis – have been summarized in table 4-1, with Direct Shear tests and consolidation tests summarized in Tables 4-2 and 4-3, respectively. Full laboratory data sheets are attached.

The data herein are provided for informational purposes. Design-build contractors shall be responsible for providing their own analysis of the test results and for development of appropriate design parameters. Jorgensen is available to assist in the selection of design parameters, if requested.

Table 4-1: Classification Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	Gravel (%)	Sand (%)	Fines (%)	Moisture Content (%)	Liquid Limit	Plasticity Index
JG-05	D6	8.5	CL	1.4	12.4	86.2	13.7	39	25
JG-05	D12	22	GC	66.2	11.6	22.2	5.5	26	11
JG-05	D19	35	GM	48	32.1	19.9	1.8	NP	NP
JG-06	D2a	3.5	CL	0.4	7.3	92.3	26.8	38	19
JG-06	D8	12.5	CL	24.6	21.4	54	9.6	32	19
JG-06	D15	20	GC	48.7	27.3	24	4.7	18	4
JG-06	D20	32.5	CL	11.3	18.6	70.1	14.9	28	13
JG-07	U1	5	CL	12.9	26.9	60.2	14.1	31	11
JG-07	U2	9	CL	1.3	12.5	86.2	22.7	33	15
JG-07	D7	17.5	CL	1.9	15.4	82.7	12.6	29	14
JG-08	D4	10	GM	70.9	18	11.1	2.2	NP[1]	NP
JG-08	D5	12.5	CL	21.2	15.5	63.3	10	32	17
JG-09	D3	7.5	GC	32.3	29.2	38.6	7	17	1
JG-09	D6	15	GM	42.7	22.2	35.1	5.7	NP	NP
TP-02	U1	6	ML	0	6.5	93.5	17.5	NP	NP
BH5[2]	‘-	23	SC	7	55	38	‘-	29	25
BH5[2]	‘-	37	SC	7	98	25	‘-	28	16
BH6[2]	4B	22	CL	0	12	87	17.5	33	18
BH6[2]	‘11	52	CL	9	25	66	16.5	25	14
TP-1[3]	‘-	9	CL	‘-	‘-	‘-	‘-	32	15
TP-1[3]	‘-	10	CL	‘-	‘-	‘-	‘-	41	26
TP-1[3]	‘-	20	CL	‘-	‘-	‘-	‘-	34	20
TP-1[3]	‘-	27.5	CL	‘-	‘-	‘-	‘-	25	11

[1]NP designates non-plastic soils
[2]Designates data from Nelson Engineering
[3]Designates data from Womack & Associates, Inc.

Table 4-2: Direct Shear Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	Cohesion (c)	Peak Friction Angle (f)
JG-07	U1	9-10	CL	379	30
TP-02	U1	6-7	ML	144	34
BH-6[2]	11	52.5	CL	2059	37

[2]Designates data from Nelson Engineering

Table 4-3: Consolidation Testing Summary

Borehole	Sample ID	Depth (ft)	USCS Symbol	C_C
JG-07	U1	5-6	CL	0.17
JG-07	U2	9-10	CL	0.28
TP-02	U1	6-7	ML	0.17

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 57**

No: **23072 (23-1725)**

Location: **-**

X:\PROJECTS\23-1725 Bear Development\Reviewed\[2023-11-10_Lot57_MC.xlsx]1

Sample Info.	Sample:	JG-05	JG-05	JG-05	JG-06	JG-06	JG-06
	Depth:	8.5-11 ft	22-25 ft	35-37 ft	3.5-5 ft	12.5-14 ft	20-22 ft
	Date Sampled:	-	-	-	-	-	-
	Date tested:	16-Nov-23	16-Nov-23	16-Nov-23	16-Nov-23	16-Nov-23	16-Nov-23
	Laboratory sample description:	ol bn - dk ol bn silt	lt bn - bn gravel	tn - bn sandy gravel	bn - ol bn sandy clay	bn - tn clayey gravel	bn - tn sandy gravel
Moisture	Wet soil + tare (g)	706.71	1702.45	480.97	733.41	740.83	549.20
	Dry soil + tare (g)	645.29	1614.91	474.66	619.61	693.33	529.85
	Tare (g)	195.99	13.73	116.46	194.83	197.69	117.39
	Moisture content, w (%)	13.7	5.5	1.8	26.8	9.6	4.7
Comments							
QC/QA	Tested By:	MGS	MGS	MGS	MGS	MGS	MGS
	Reduced By:	AT	AT	AT	AT	AT	AT
	Reviewed By:	MGS	MGS	MGS	MGS	MGS	MGS

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 57**

No: **23072 (23-1725)**

Location: **-**

X:\PROJECTS\23-1725 Bear Development\Reviewed\[2023-11-10_Lot57_MC.xlsx]2

Sample Info.	Sample:	**JG-06**	**JG-07**	**JG-07**	**JG-07**	**JG-08**	**JG-08**
	Depth:	**32.5-35 ft**	**5-6 ft**	**9-10 ft**	**17.5-18 ft**	**10-12 ft**	**12.5-14 ft**
	Date Sampled:	**-**	**-**	**-**	**-**	**-**	**-**
	Date tested:	**16-Nov-23**	**14-Nov-23**	**14-Nov-23**	**16-Nov-23**	**16-Nov-23**	**16-Nov-23**
	Laboratory sample description:	**lt bn - bn clay**	**lt bn - bn gravelly clay**	**lt bn - bn clay**	**lt bn - bn sandy clay**	**tn - bn sandy gravel**	**lt bn - bn sandy clay**
Moisture	Wet soil + tare (g)	764.63	708.54	398.83	282.48	584.18	467.72
	Dry soil + tare (g)	680.77	645.37	361.41	272.74	574.02	443.13
	Tare (g)	117.13	197.20	196.69	195.23	118.03	197.42
	Moisture content, w (%)	14.9	14.1	22.7	12.6	2.2	10.0
Comments							
QC/QA	Tested By:	MGS	MGS	MGS	MGS	MGS	MGS
	Reduced By:	AT	AT	AT	AT	AT	AT
	Reviewed By:	MGS	MGS	MGS	MGS	MGS	MGS

Moisture Content Determination

ASTM D2937 / D2216

Project: **Bear Development Snow King Lot 57**

No: **23072 (23-1725)**

Location: **-**

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Sample Info.	Sample:	**JG-09**	**JG-09**	**TP-02**			
	Depth:	**7.5-9 ft**	**15-17 ft**	**6-7 ft**			
	Date Sampled:	**-**	**-**	**-**			
	Date tested:	**16-Nov-23**	**16-Nov-23**	**15-Nov-23**			
	Laboratory sample description:	**dk yl bn - dk bn sandy gravel**	**dk yl bn - bn sandy gravel**	**lt bn - bn silt**			
Moisture	Wet soil + tare (g)	644.83	632.20	577.49			
	Dry soil + tare (g)	610.41	604.61	508.79			
	Tare (g)	118.01	118.24	116.54			
	Moisture content, w (%)	7.0	5.7	17.5			
Comments							
QC/QA	Tested By:	MGS	MGS	AT			
	Reduced By:	AT	AT	AT			
	Reviewed By:	MGS	MGS	MGS			

Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-05

No: 23072 (23-1725) **Depth:** 8.5-11 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	ol bn - dk ol bn silt
As-received water content(%):	13.7	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

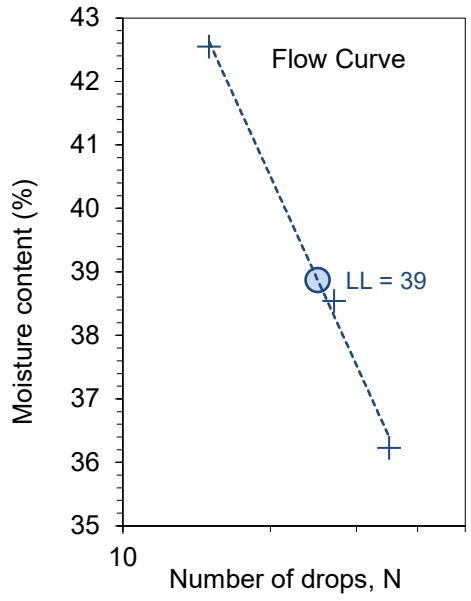
Determination No:	1	2
Wet Soil + Tare (g):	20.43	21.24
Dry Soil + Tare (g):	19.47	20.33
Moisture Loss (g):	0.96	0.91
Tare (g):	12.63	13.55
Dry Soil (g):	6.84	6.78
Moisture Content, w (%):	14.04	13.42

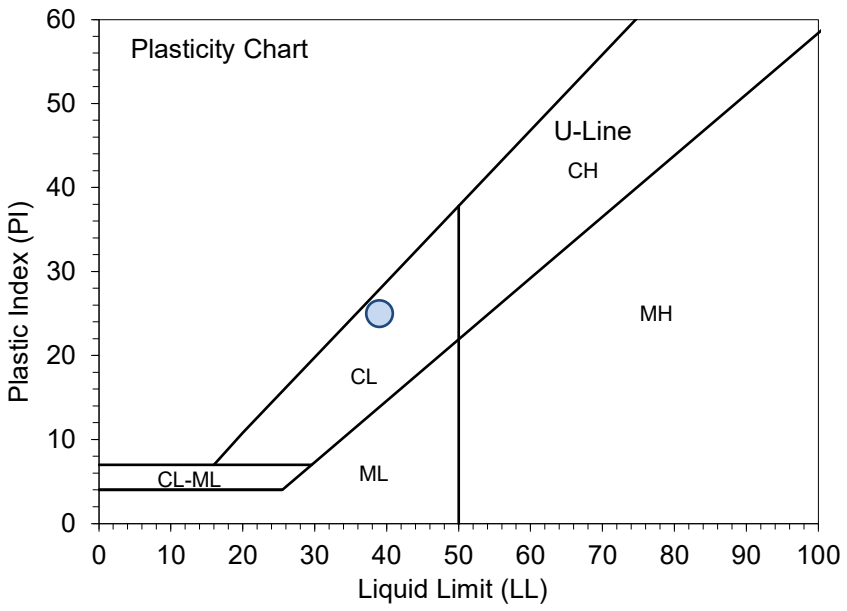
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	27	15
Wet Soil + Tare (g):	23.35	22.53	23.80
Dry Soil + Tare (g):	20.81	20.04	20.63
Moisture Loss (g):	2.54	2.49	3.17
Tare (g):	13.80	13.58	13.18
Dry Soil (g):	7.01	6.46	7.45
Moisture Content, w (%):	36.23	38.54	42.55
One-Point LL:		39	

Results

Liquid Limit, LL:	39
Plastic Limit, PL:	14
Plasticity Index, PI:	25





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-05

No: 23072 (23-1725) **Depth:** 22-25 ft

Tested by: CRC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn gravel
As-received water content(%):	5.5	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

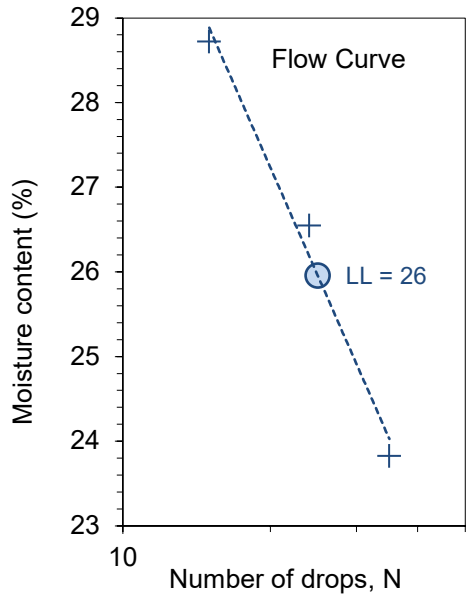
Determination No:	1	2
Wet Soil + Tare (g):	20.29	20.09
Dry Soil + Tare (g):	19.38	19.22
Moisture Loss (g):	0.91	0.87
Tare (g):	13.41	13.37
Dry Soil (g):	5.97	5.85
Moisture Content, w (%):	15.24	14.87

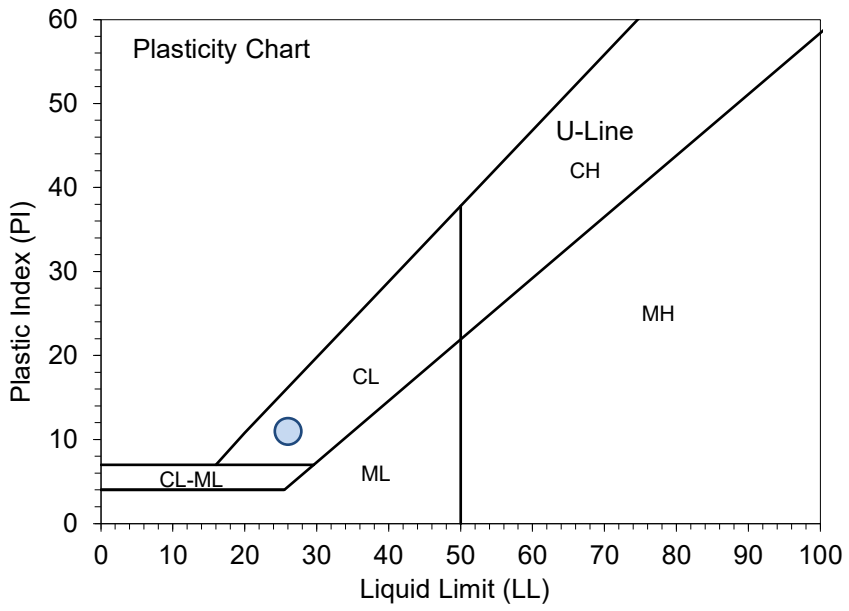
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	24	15
Wet Soil + Tare (g):	20.87	22.12	24.49
Dry Soil + Tare (g):	19.34	20.28	22.08
Moisture Loss (g):	1.53	1.84	2.41
Tare (g):	12.92	13.35	13.69
Dry Soil (g):	6.42	6.93	8.39
Moisture Content, w (%):	23.83	26.55	28.72
One-Point LL:		26	

Results

Liquid Limit, LL:	26
Plastic Limit, PL:	15
Plasticity Index, PI:	11





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 | **TH/TP/Sample:** JG-05

No: 23072 (23-1725) | **Depth:** 35-37 ft

Tested by: CML | Date: 16-Nov-23

Reduced by: CML | Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	tn - bn sandy gravel
As-received water content(%):	1.8	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid Limit:	Could not be determined (N.P.)

Plastic Limit

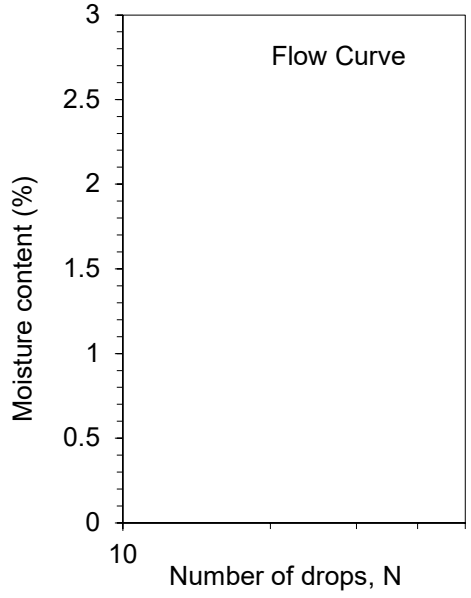
Determination No:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	

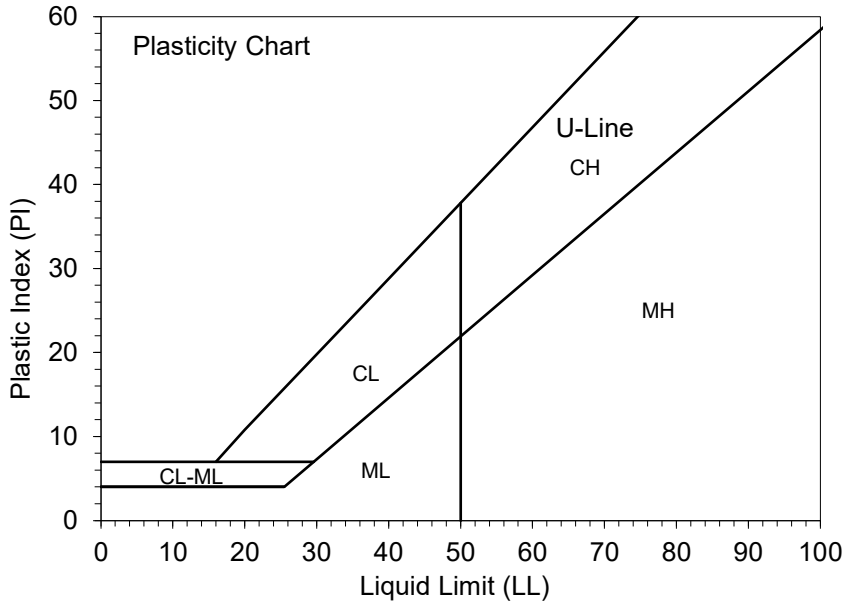
Liquid Limit

Determination No:	
Number of Drops, N:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	
One-Point LL:	

Results

Liquid Limit, LL:	Nonplastic (N.P.)
Plastic Limit, PL:	Nonplastic (N.P.)
Plasticity Index, PI:	Nonplastic (N.P.)





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 3.5-5 ft

Tested by: CRC Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - dk bn sandy clay
As-received water content(%):	26.8	Approximate maximum particle size:	No. 20
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	20
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

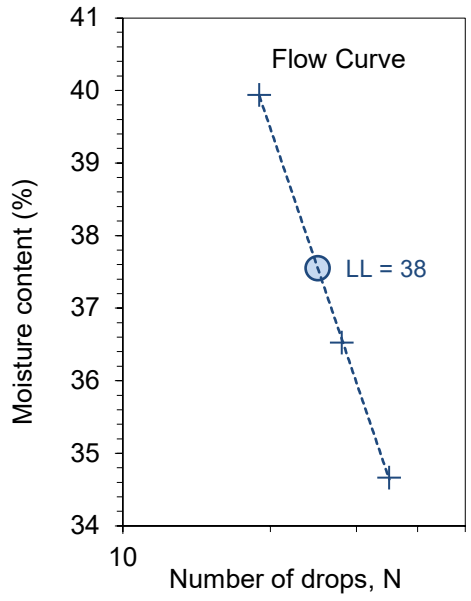
Determination No:	1	2
Wet Soil + Tare (g):	20.24	20.19
Dry Soil + Tare (g):	19.19	19.11
Moisture Loss (g):	1.05	1.08
Tare (g):	13.47	13.35
Dry Soil (g):	5.72	5.76
Moisture Content, w (%):	18.36	18.75

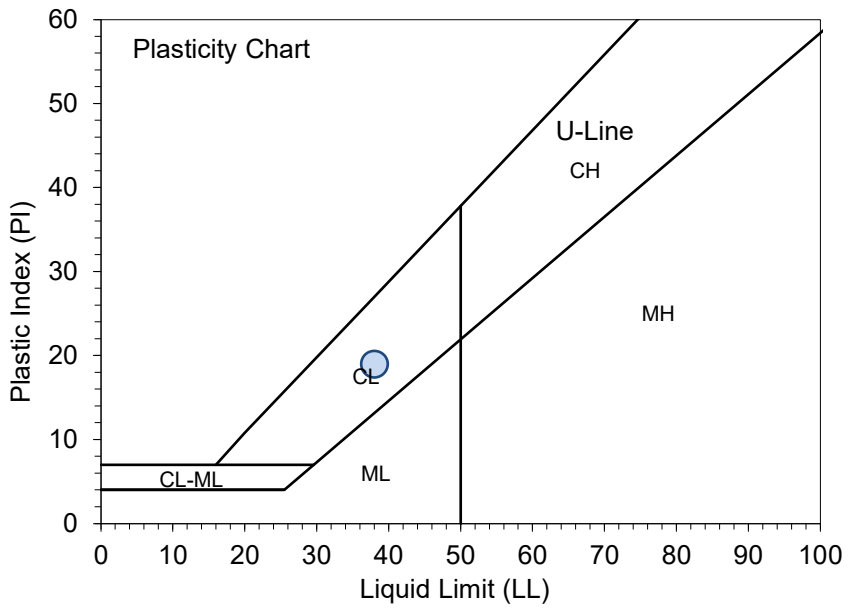
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	28	19
Wet Soil + Tare (g):	23.62	22.15	23.24
Dry Soil + Tare (g):	20.94	19.56	20.48
Moisture Loss (g):	2.68	2.59	2.76
Tare (g):	13.21	12.47	13.57
Dry Soil (g):	7.73	7.09	6.91
Moisture Content, w (%):	34.67	36.53	39.94
One-Point LL:		37	

Results

Liquid Limit, LL:	38
Plastic Limit, PL:	19
Plasticity Index, PI:	19





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - tn clayey gravel
As-received water content(%):	9.6	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

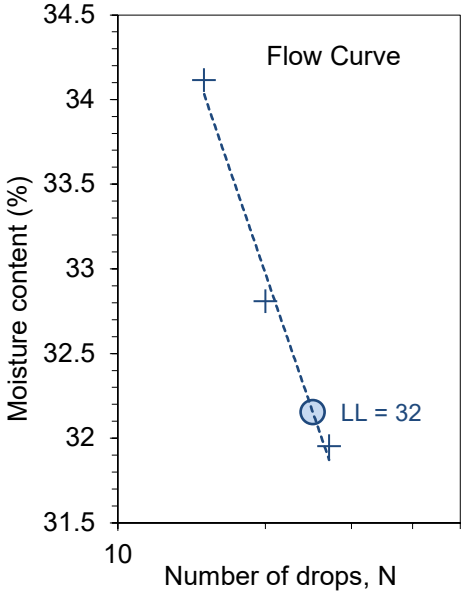
Determination No:	1	2
Wet Soil + Tare (g):	21.39	21.33
Dry Soil + Tare (g):	20.49	20.44
Moisture Loss (g):	0.90	0.89
Tare (g):	13.54	13.63
Dry Soil (g):	6.95	6.81
Moisture Content, w (%):	12.95	13.07

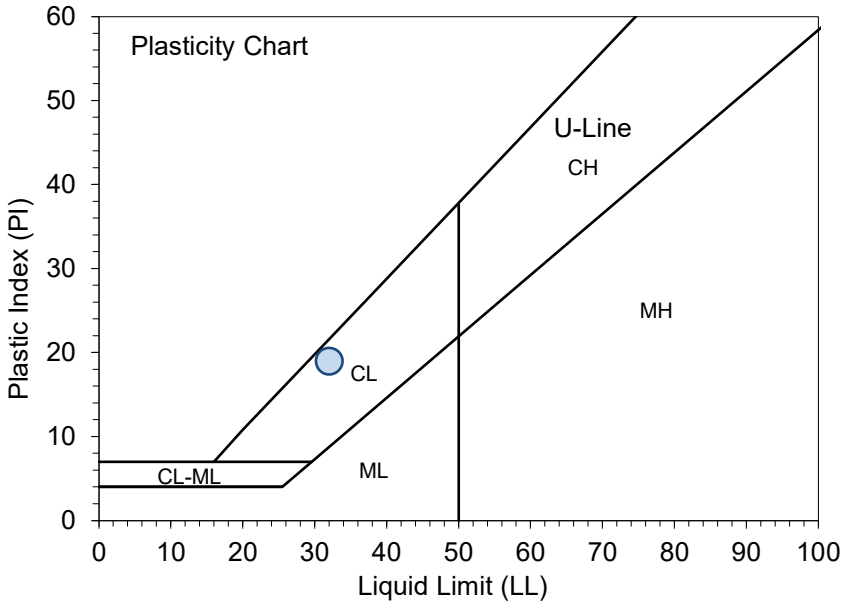
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	27	20	15
Wet Soil + Tare (g):	21.43	22.84	23.23
Dry Soil + Tare (g):	19.19	20.54	20.76
Moisture Loss (g):	2.24	2.30	2.47
Tare (g):	12.18	13.53	13.52
Dry Soil (g):	7.01	7.01	7.24
Moisture Content, w (%):	31.95	32.81	34.12
One-Point LL:	32	32	

Results

Liquid Limit, LL:	32
Plastic Limit, PL:	13
Plasticity Index, PI:	19





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 20-22 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	bn - tn sandy gravel
As-received water content(%):	4.7	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

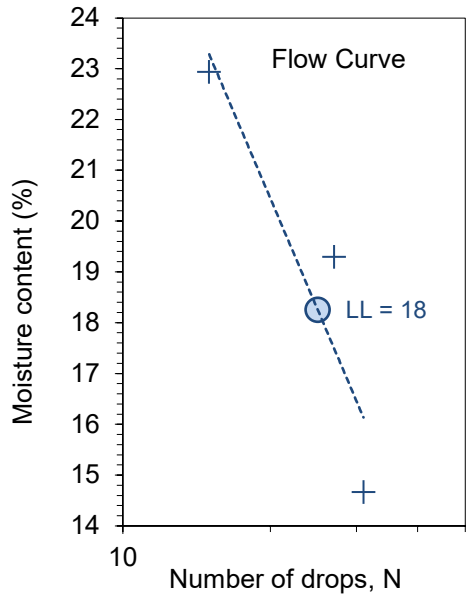
Determination No:	1	2
Wet Soil + Tare (g):	21.25	20.66
Dry Soil + Tare (g):	20.28	19.73
Moisture Loss (g):	0.97	0.93
Tare (g):	13.54	13.07
Dry Soil (g):	6.74	6.66
Moisture Content, w (%):	14.39	13.96

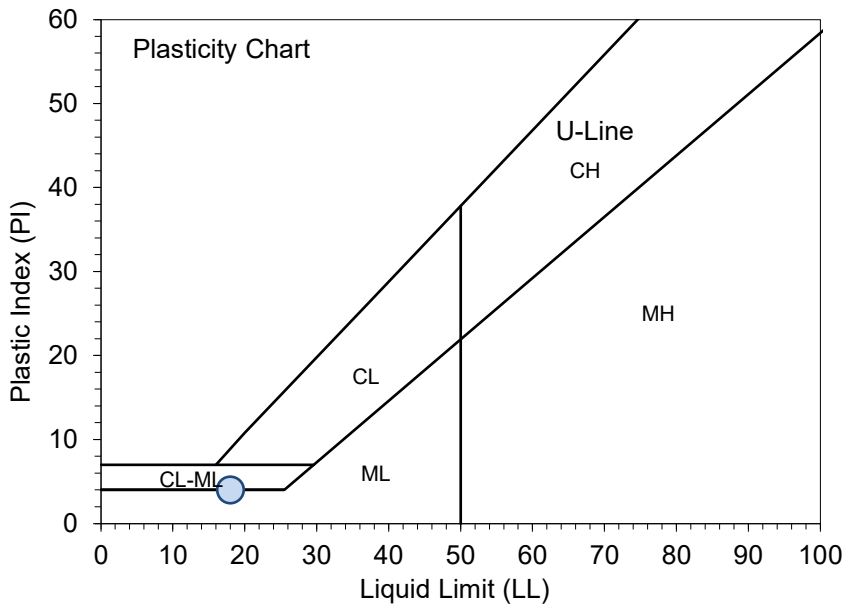
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	31	27	15
Wet Soil + Tare (g):	21.30	25.01	21.22
Dry Soil + Tare (g):	20.27	23.18	19.66
Moisture Loss (g):	1.03	1.83	1.56
Tare (g):	13.25	13.70	12.86
Dry Soil (g):	7.02	9.48	6.80
Moisture Content, w (%):	14.67	19.30	22.94
One-Point LL:		19	

Results

Liquid Limit, LL:	18
Plastic Limit, PL:	14
Plasticity Index, PI:	4





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 32.5-35 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	14.9	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	30
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

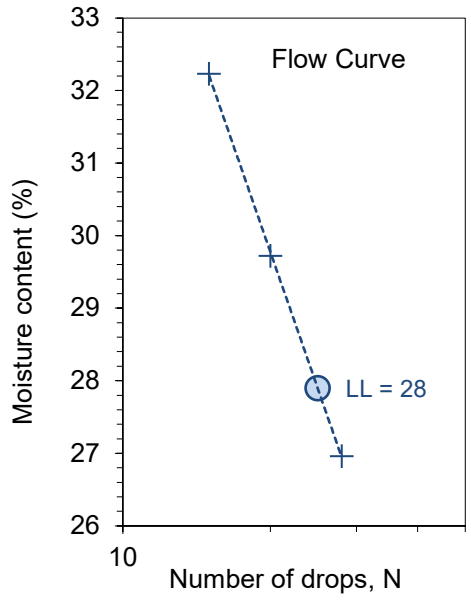
Determination No:	1	2
Wet Soil + Tare (g):	21.35	21.41
Dry Soil + Tare (g):	20.35	20.41
Moisture Loss (g):	1.00	1.00
Tare (g):	13.56	13.61
Dry Soil (g):	6.79	6.80
Moisture Content, w (%):	14.73	14.71

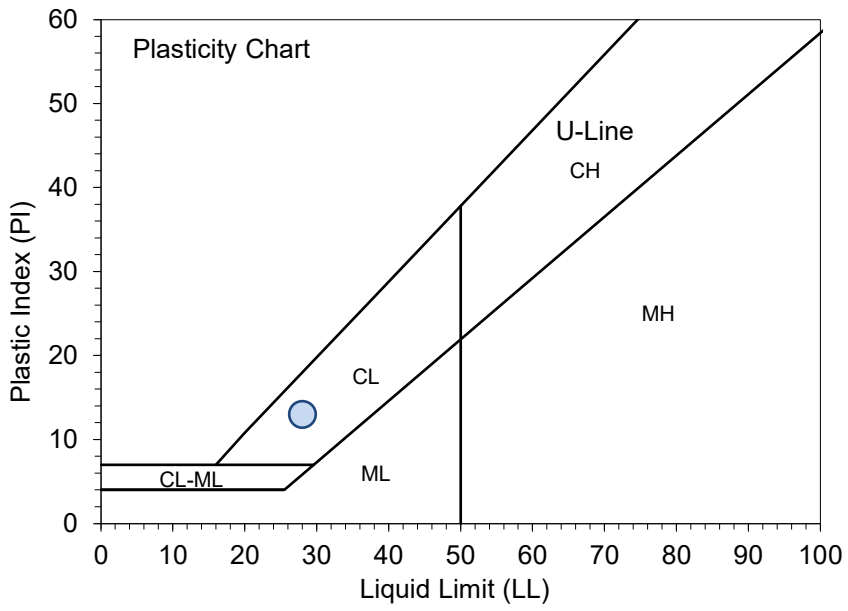
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	28	20	15
Wet Soil + Tare (g):	22.54	23.04	22.69
Dry Soil + Tare (g):	20.62	20.87	20.44
Moisture Loss (g):	1.92	2.17	2.25
Tare (g):	13.50	13.57	13.46
Dry Soil (g):	7.12	7.30	6.98
Moisture Content, w (%):	26.97	29.73	32.23
One-Point LL:	27	29	

Results

Liquid Limit, LL:	28
Plastic Limit, PL:	15
Plasticity Index, PI:	13





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 5-6 ft

Tested by: CRC Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn gravelly clay
As-received water content(%):	14.1	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	10
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

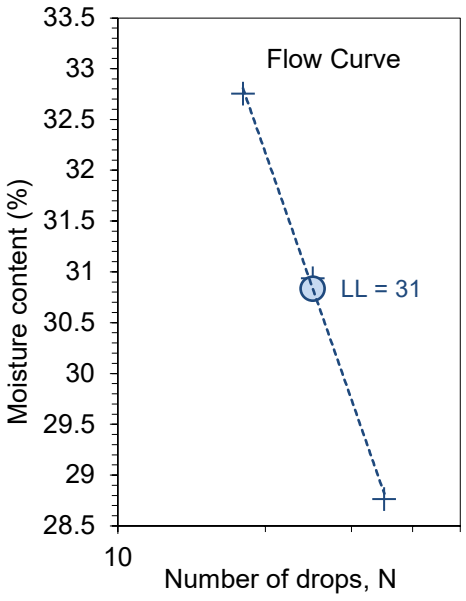
Determination No:	1	2
Wet Soil + Tare (g):	20.40	20.47
Dry Soil + Tare (g):	19.27	19.28
Moisture Loss (g):	1.13	1.19
Tare (g):	13.53	13.34
Dry Soil (g):	5.74	5.94
Moisture Content, w (%):	19.69	20.03

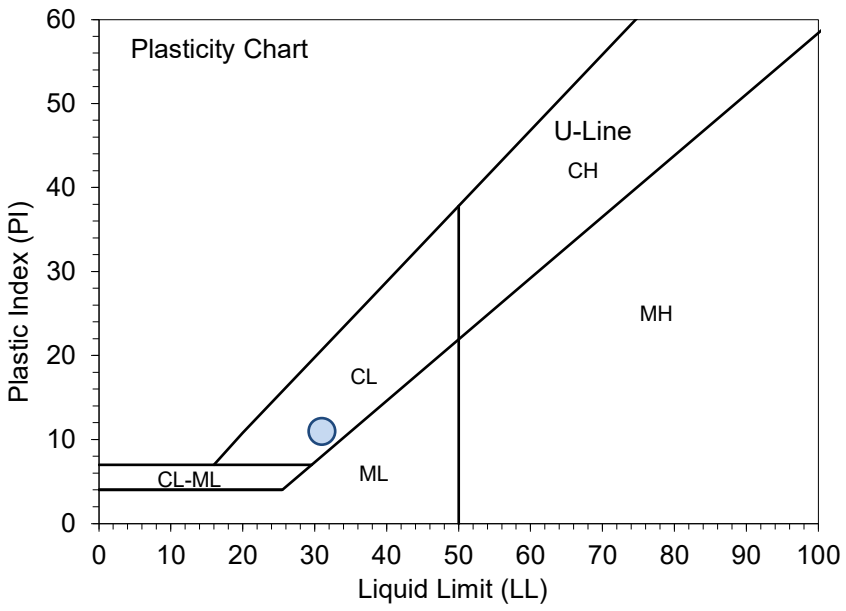
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	25	18
Wet Soil + Tare (g):	25.76	24.30	24.08
Dry Soil + Tare (g):	23.03	21.80	21.24
Moisture Loss (g):	2.73	2.50	2.84
Tare (g):	13.54	13.72	12.57
Dry Soil (g):	9.49	8.08	8.67
Moisture Content, w (%):	28.77	30.94	32.76
One-Point LL:		31	

Results

Liquid Limit, LL:	31
Plastic Limit, PL:	20
Plasticity Index, PI:	11





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 9-10 ft

Tested by: CML Date: 14-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn clay
As-received water content(%):	22.7	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

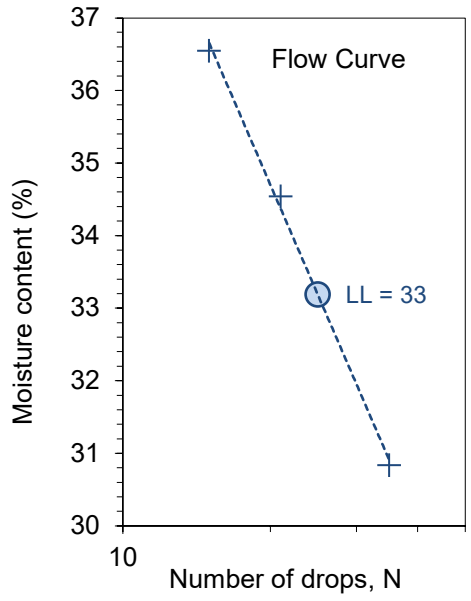
Determination No:	1	2
Wet Soil + Tare (g):	20.85	21.39
Dry Soil + Tare (g):	19.67	20.21
Moisture Loss (g):	1.18	1.18
Tare (g):	13.08	13.63
Dry Soil (g):	6.59	6.58
Moisture Content, w (%):	17.91	17.93

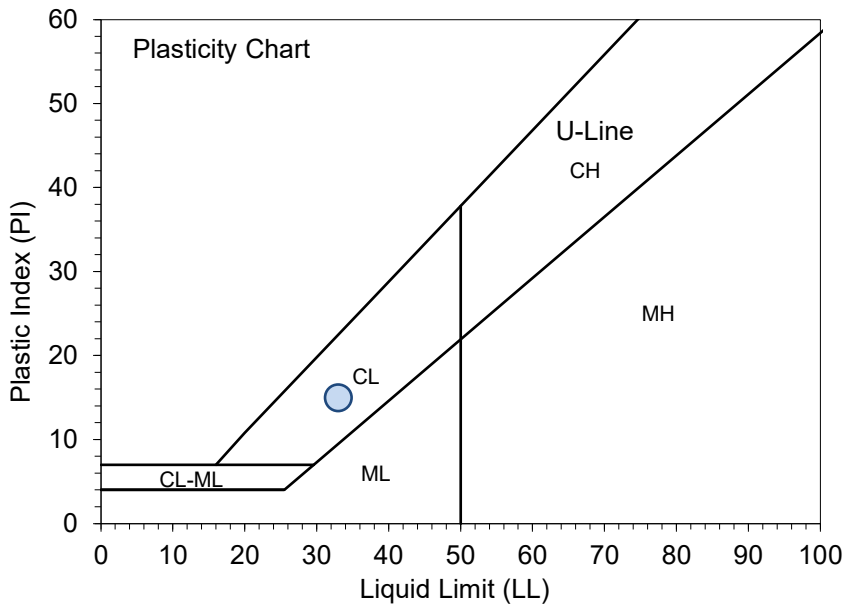
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	21	15
Wet Soil + Tare (g):	20.71	23.47	23.24
Dry Soil + Tare (g):	19.02	20.90	20.59
Moisture Loss (g):	1.69	2.57	2.65
Tare (g):	13.54	13.46	13.34
Dry Soil (g):	5.48	7.44	7.25
Moisture Content, w (%):	30.84	34.54	36.55
One-Point LL:		34	

Results

Liquid Limit, LL:	33
Plastic Limit, PL:	18
Plasticity Index, PI:	15





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 17.5-18 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn sandy clay
As-received water content(%):	12.6	Approximate maximum particle size:	3/8"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	20
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

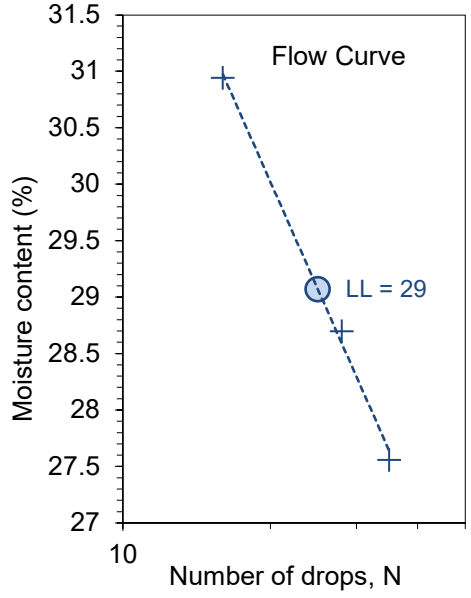
Determination No:	1	2
Wet Soil + Tare (g):	20.56	20.74
Dry Soil + Tare (g):	19.56	19.71
Moisture Loss (g):	1.00	1.03
Tare (g):	12.92	12.99
Dry Soil (g):	6.64	6.72
Moisture Content, w (%):	15.06	15.33

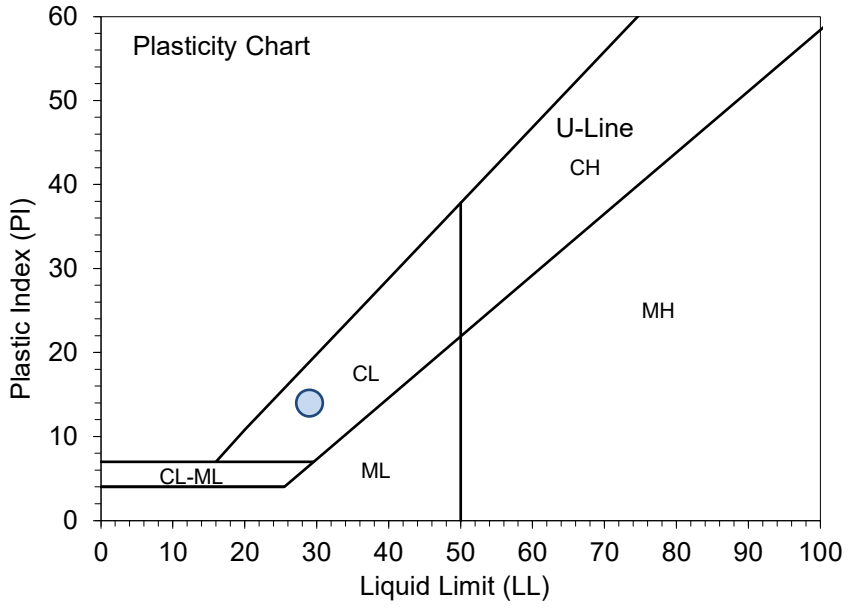
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	35	28	16
Wet Soil + Tare (g):	20.20	19.91	24.55
Dry Soil + Tare (g):	18.72	18.30	21.96
Moisture Loss (g):	1.48	1.61	2.59
Tare (g):	13.35	12.69	13.59
Dry Soil (g):	5.37	5.61	8.37
Moisture Content, w (%):	27.56	28.70	30.94
One-Point LL:		29	

Results

Liquid Limit, LL:	29
Plastic Limit, PL:	15
Plasticity Index, PI:	14





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-08

No: 23072 (23-1725) **Depth:** 10-12 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	tn - bn sandy gravel
As-received water content(%):	2.2	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	40
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid Limit:	Could not be determined (N.P.)

Plastic Limit

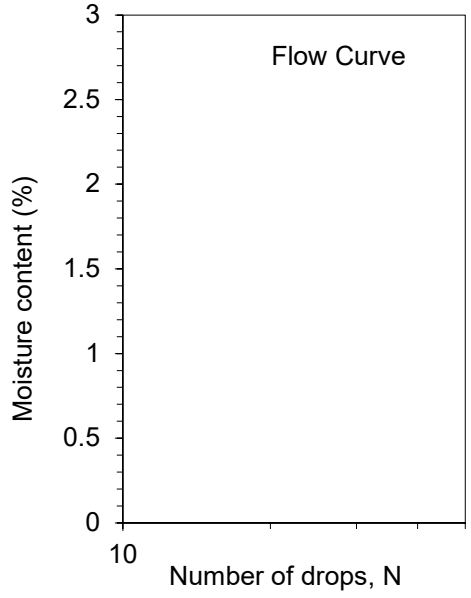
Determination No:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	

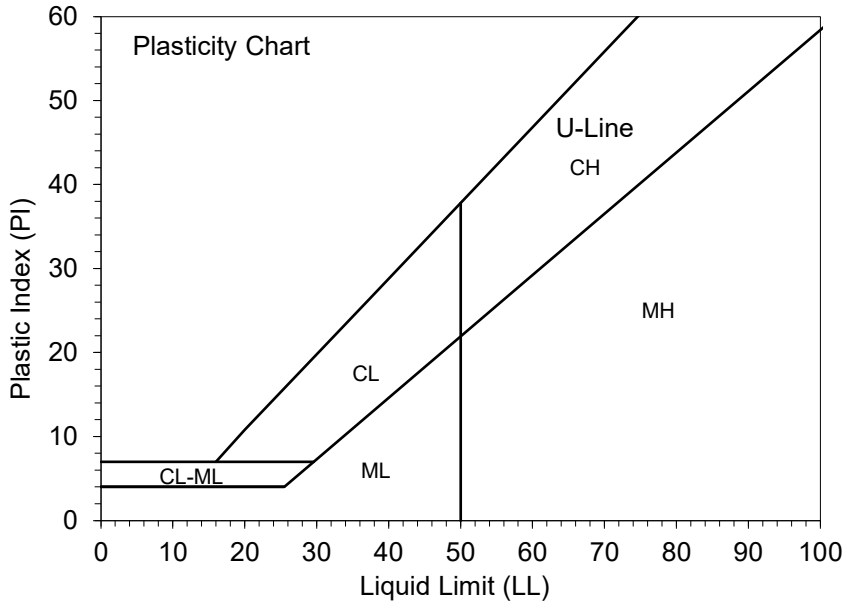
Liquid Limit

Determination No:	
Number of Drops, N:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	
One-Point LL:	

Results

Liquid Limit, LL:	Nonplastic (N.P.)
Plastic Limit, PL:	Nonplastic (N.P.)
Plasticity Index, PI:	Nonplastic (N.P.)





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-08

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	lt bn - bn sandy clay
As-received water content(%):	10.0	Approximate maximum particle size:	3/4"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	30
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

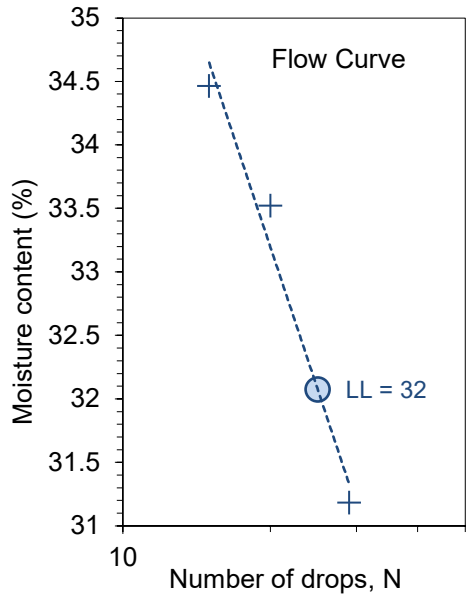
Determination No:	1	2
Wet Soil + Tare (g):	21.19	20.93
Dry Soil + Tare (g):	20.19	19.95
Moisture Loss (g):	1.00	0.98
Tare (g):	13.51	13.39
Dry Soil (g):	6.68	6.56
Moisture Content, w (%):	14.97	14.94

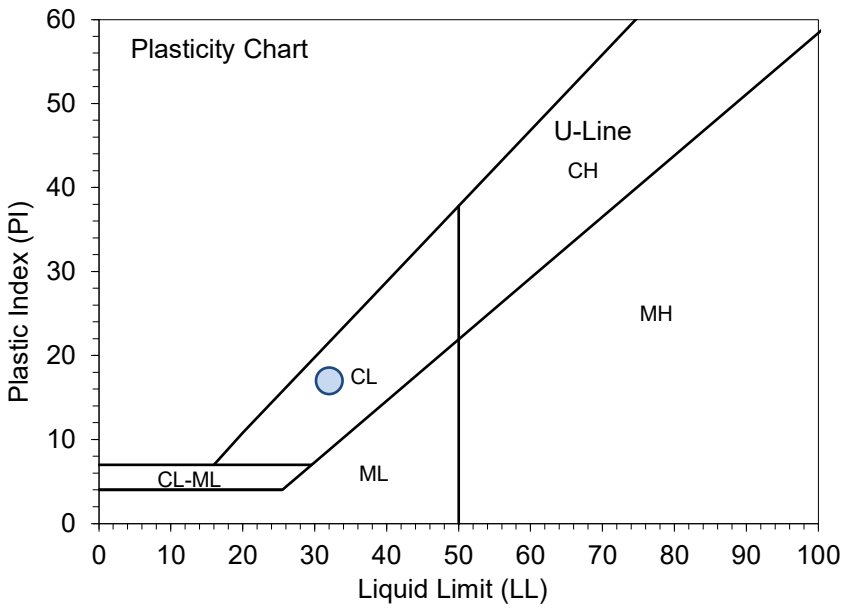
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	29	20	15
Wet Soil + Tare (g):	22.53	22.75	25.44
Dry Soil + Tare (g):	20.40	20.39	22.40
Moisture Loss (g):	2.13	2.36	3.04
Tare (g):	13.57	13.35	13.58
Dry Soil (g):	6.83	7.04	8.82
Moisture Content, w (%):	31.19	33.52	34.47
One-Point LL:	32	33	

Results

Liquid Limit, LL:	32
Plastic Limit, PL:	15
Plasticity Index, PI:	17





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-09

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: JC

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	dk yl bn - bn sandy gravel
As-received water content(%):	7.0	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	30
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid limit test method:	Multipoint

Plastic Limit

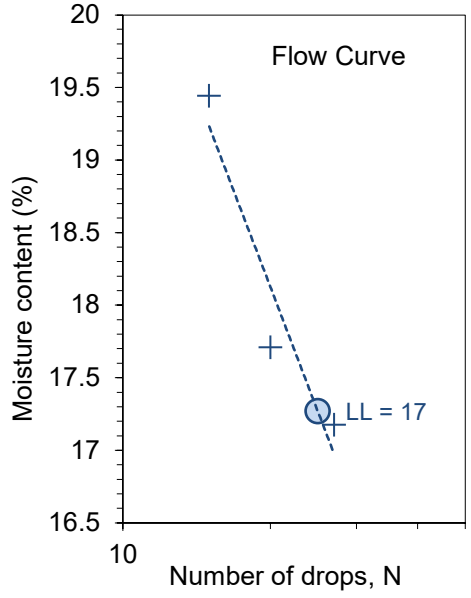
Determination No:	1	2
Wet Soil + Tare (g):	21.04	21.18
Dry Soil + Tare (g):	20.03	20.11
Moisture Loss (g):	1.01	1.07
Tare (g):	13.42	13.46
Dry Soil (g):	6.61	6.65
Moisture Content, w (%):	15.28	16.09

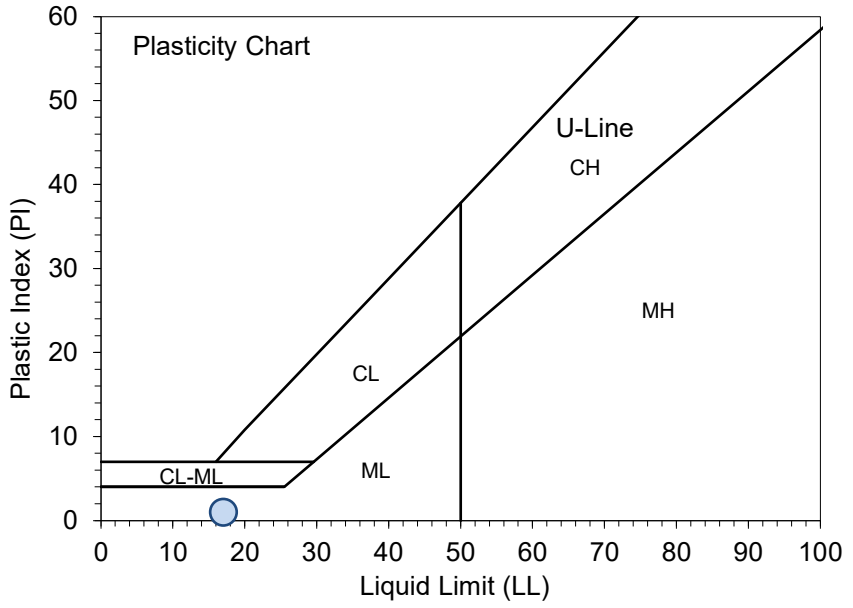
Liquid Limit

Determination No:	1	2	3
Number of Drops, N:	27	20	15
Wet Soil + Tare (g):	25.12	24.21	25.51
Dry Soil + Tare (g):	23.33	22.46	23.55
Moisture Loss (g):	1.79	1.75	1.96
Tare (g):	12.91	12.58	13.47
Dry Soil (g):	10.42	9.88	10.08
Moisture Content, w (%):	17.18	17.71	19.44
One-Point LL:	17	17	

Results

Liquid Limit, LL:	17
Plastic Limit, PL:	16
Plasticity Index, PI:	1





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-09

No: 23072 (23-1725) **Depth:** 15-17 ft

Tested by: CML Date: 16-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	dk yl bn - bn sandy gravel
As-received water content(%):	5.7	Approximate maximum particle size:	1"
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	30
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid Limit:	Could not be determined (N.P.)

Plastic Limit

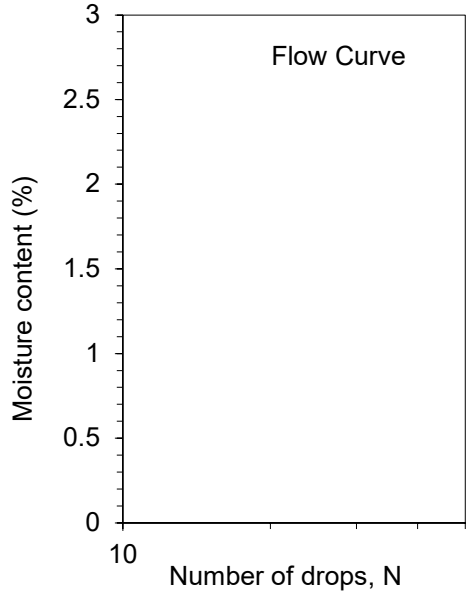
Determination No:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	

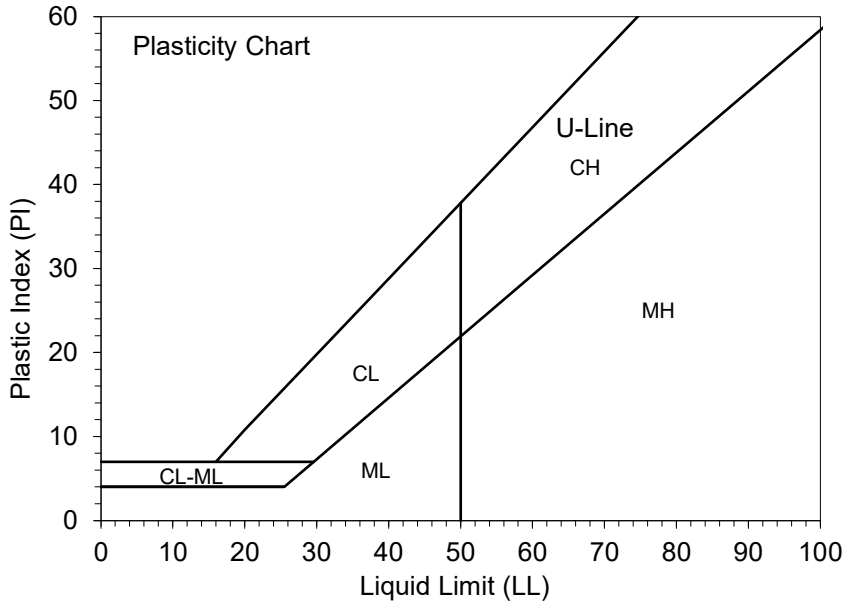
Liquid Limit

Determination No:	
Number of Drops, N:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	
One-Point LL:	

Results

Liquid Limit, LL:	Nonplastic (N.P.)
Plastic Limit, PL:	Nonplastic (N.P.)
Plasticity Index, PI:	Nonplastic (N.P.)





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Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(After ASTM D4318 and AASHTO T89/T90)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** TP-02

No: 23072 (23-1725) **Depth:** 6-7 ft

Tested by: CML Date: 15-Nov-23

Reduced by: CML Location: -

Reviewed by: AT

Sample Preparation

Preparation method:	Air Dry	Laboratory sample description:	It bn - bn silt
As-received water content(%):	17.5	Approximate maximum particle size:	No. 20
Liquid Limit device:	Mechanical	Estimate of % retained on No.40 sieve (%):	<5
Grooving tool:	Plastic	Method of removing > No. 40 sieve:	Hand Sieved
Testing method:	Hand rolled	Liquid Limit:	Could not be determined (N.P.)

Plastic Limit

Determination No:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	

Liquid Limit

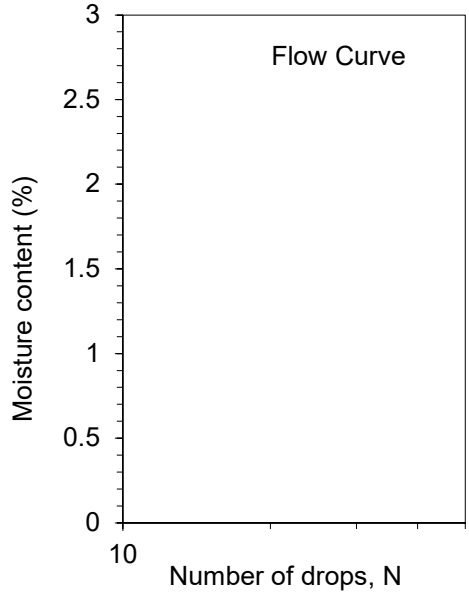
Determination No:	
Number of Drops, N:	
Wet Soil + Tare (g):	
Dry Soil + Tare (g):	
Moisture Loss (g):	
Tare (g):	
Dry Soil (g):	
Moisture Content, w (%):	
One-Point LL:	

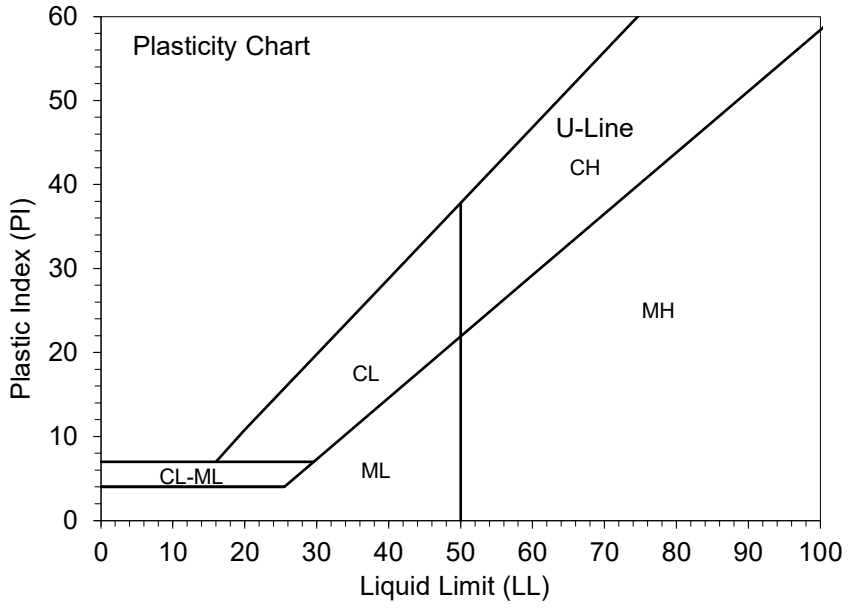
Results

Liquid Limit, LL: Nonplastic (N.P.)

Plastic Limit, PL: Nonplastic (N.P.)

Plasticity Index, PI: Nonplastic (N.P.)





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Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-05

No: 23072 (23-1725) **Depth:** 8.5-11 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: ol bn - dk ol bn silt

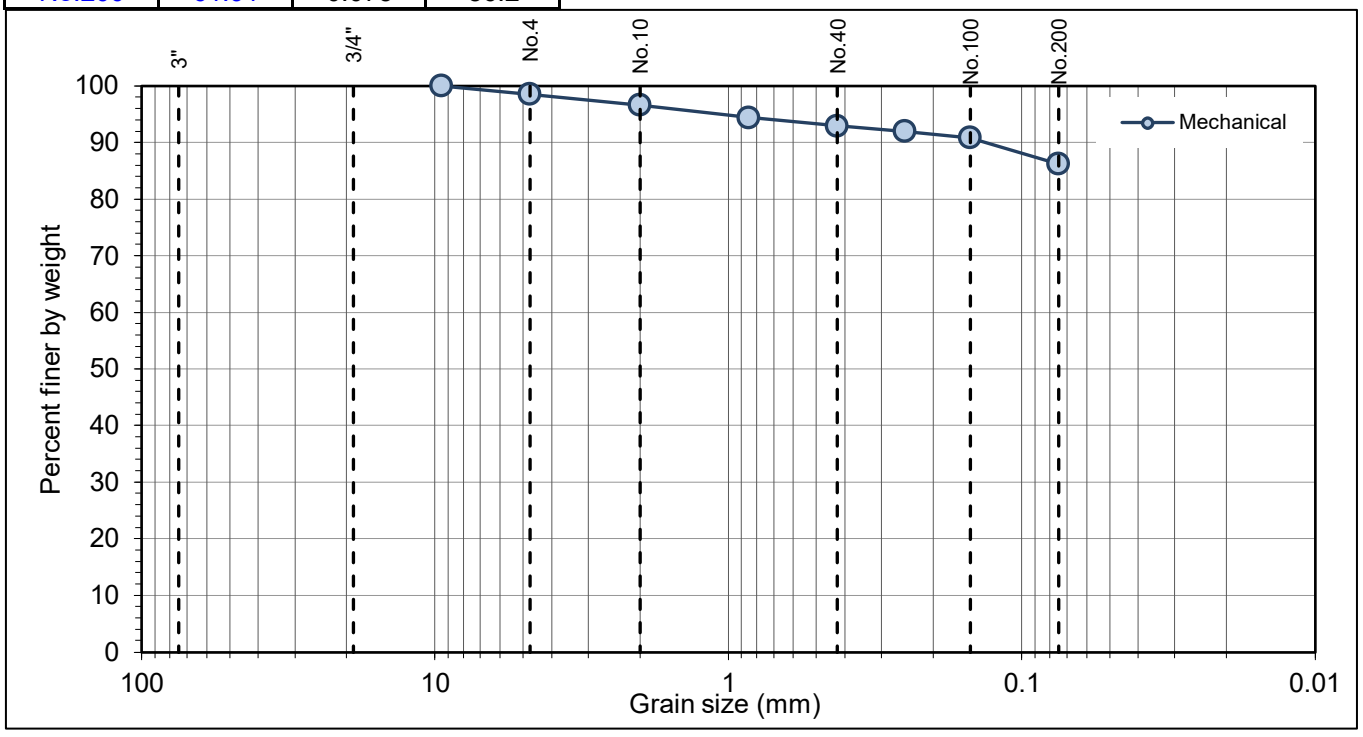
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	510.72	449.30
	-	
	510.72	449.30
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	706.71
Dry soil + tare (g):	-	645.29
Tare (g):	-	195.99
Moisture content (%):	0.0	13.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	100.0
No.4	6.47	4.75	98.6
No.10	15.15	2	96.6
No.20	25.05	0.85	94.4
No.40	31.63	0.425	93.0
No.60	36.08	0.25	92.0
No.100	41.22	0.15	90.8
No.200	61.91	0.075	86.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-05

No: 23072 (23-1725) **Depth:** 22-25 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: lt bn - bn gravel

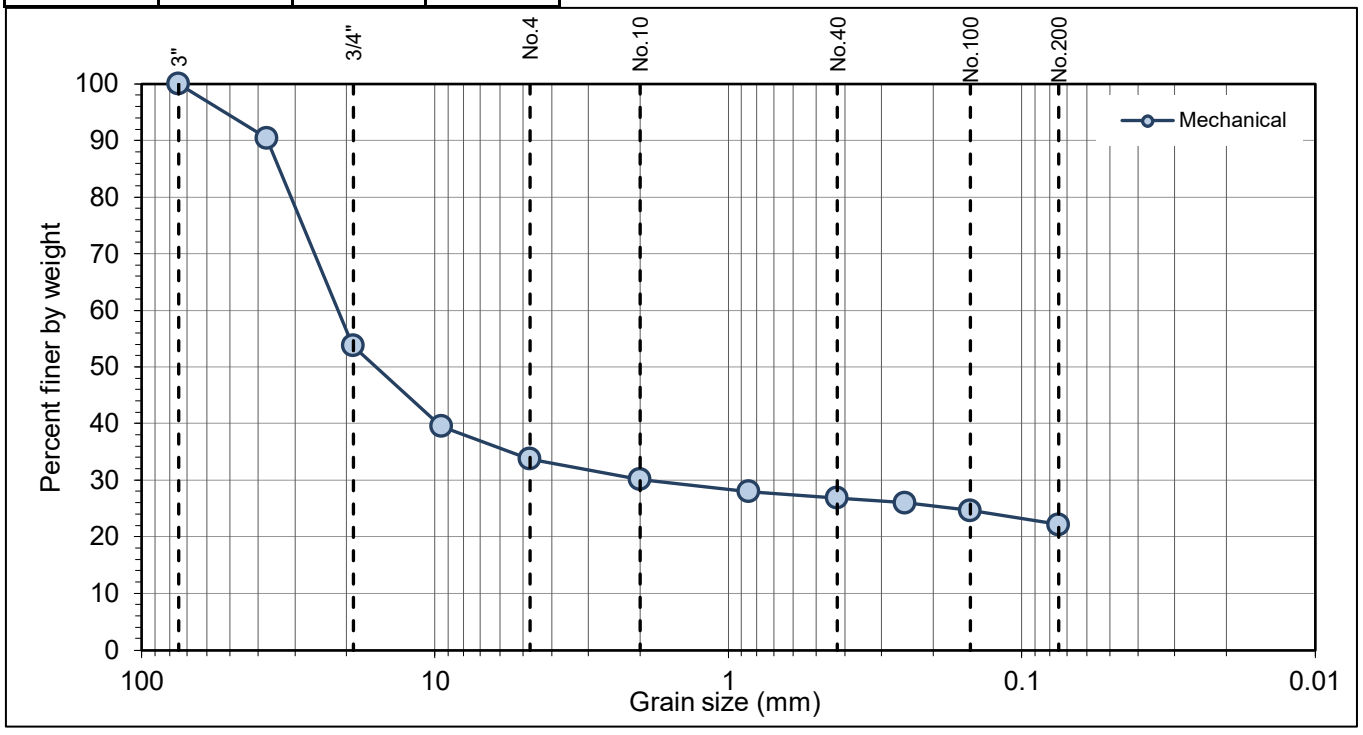
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	1688.72	1601.18
	-	
	1688.72	1601.18
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	1702.45
Dry soil + tare (g):	-	1614.91
Tare (g):	-	13.73
Moisture content (%):	0.0	5.5

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	100.0
1.5"	153.23	37.5	90.4
3/4"	740.77	19	53.7
3/8"	969.00	9.5	39.5
No.4	1060.67	4.75	33.8
No.10	1119.28	2	30.1
No.20	1153.68	0.85	27.9
No.40	1171.53	0.425	26.8
No.60	1184.79	0.25	26.0
No.100	1206.93	0.15	24.6
No.200	1246.16	0.075	22.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-05

No: 23072 (23-1725) **Depth:** 35-37 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: tn - bn sandy gravel

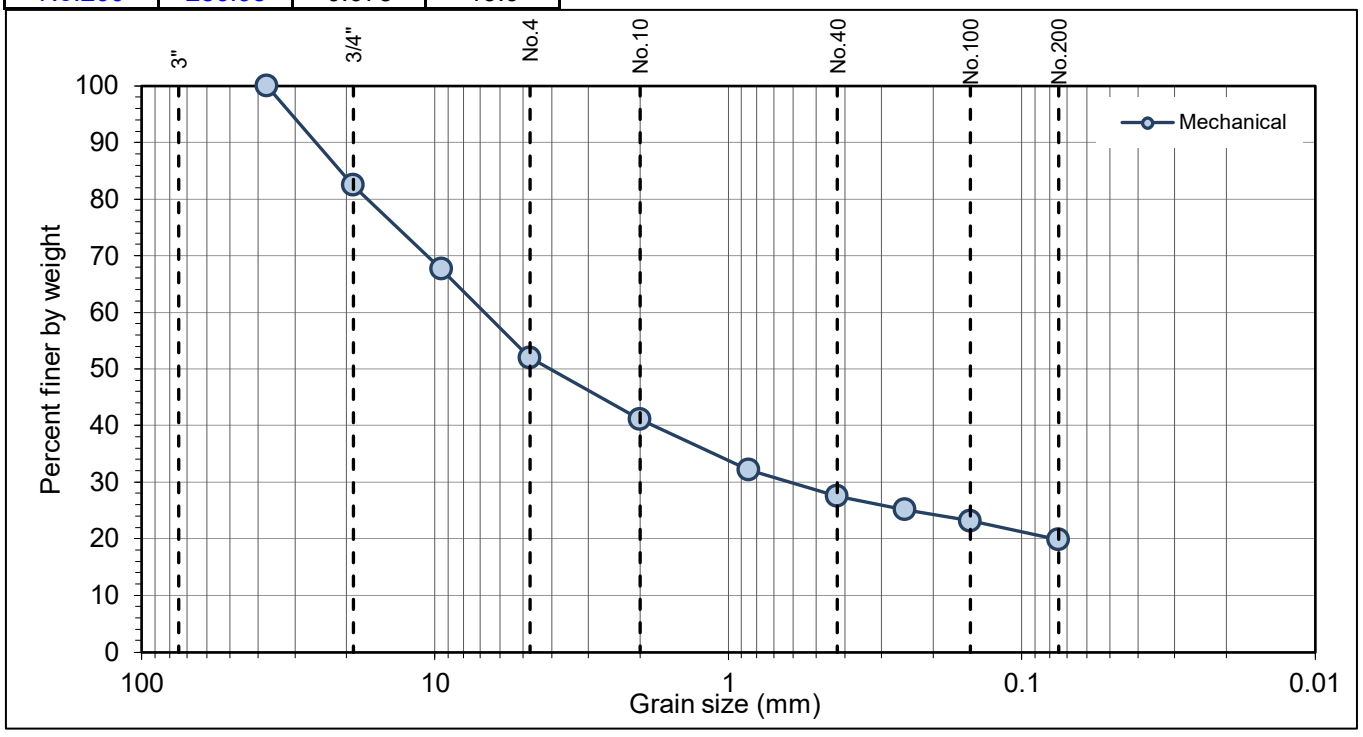
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	364.51	358.20
	-	-
	364.51	358.20
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	480.97
Dry soil + tare (g):	-	474.66
Tare (g):	-	116.46
Moisture content (%):	0.0	1.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	62.67	19	82.5
3/8"	115.82	9.5	67.7
No.4	171.91	4.75	52.0
No.10	211.10	2	41.1
No.20	243.11	0.85	32.1
No.40	259.58	0.425	27.5
No.60	268.13	0.25	25.1
No.100	275.21	0.15	23.2
No.200	286.95	0.075	19.9



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 3.5-5 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: bn - dk bn sandy clay

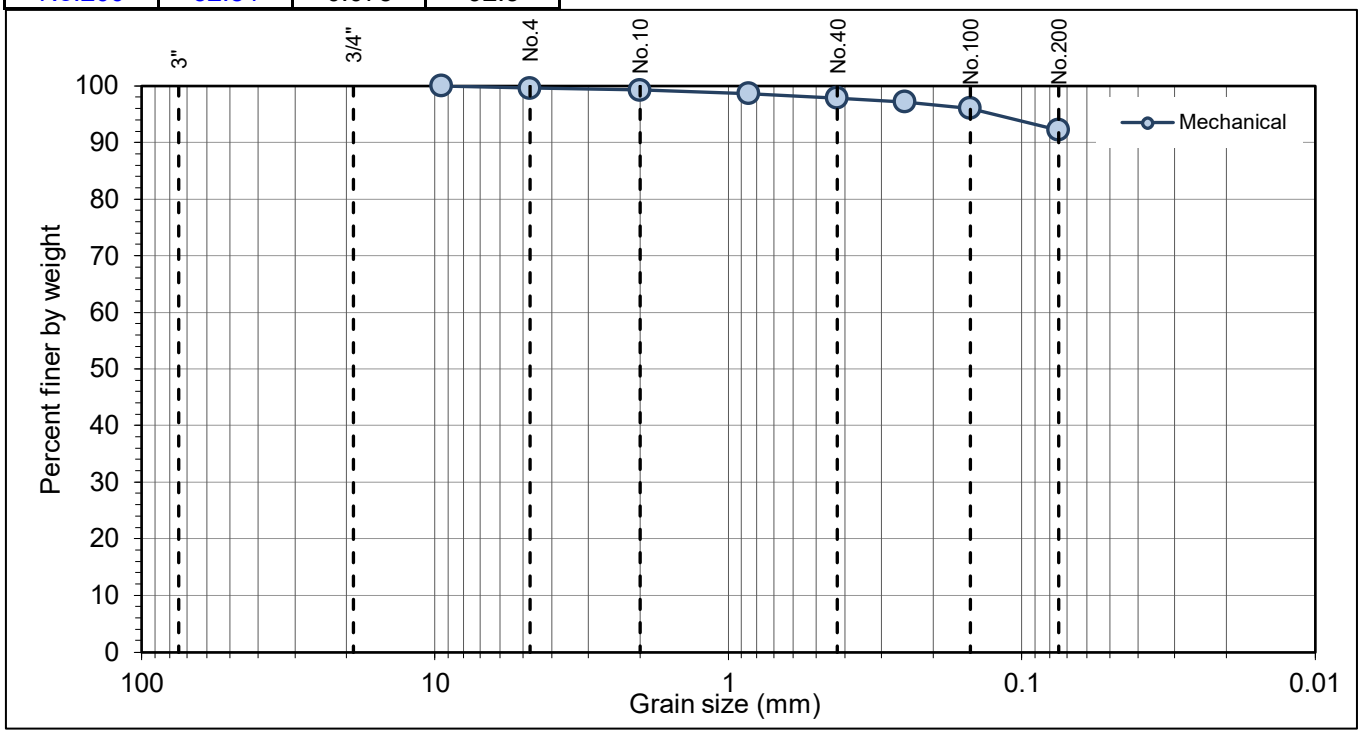
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	538.58	424.78
	-	
	538.58	424.78
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	733.41
Dry soil + tare (g):	-	619.61
Tare (g):	-	194.83
Moisture content (%):	0.0	26.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	100.0
No.4	1.68	4.75	99.6
No.10	3.01	2	99.3
No.20	5.85	0.85	98.6
No.40	9.10	0.425	97.9
No.60	11.87	0.25	97.2
No.100	16.77	0.15	96.1
No.200	32.84	0.075	92.3



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: bn - tn clayey gravel

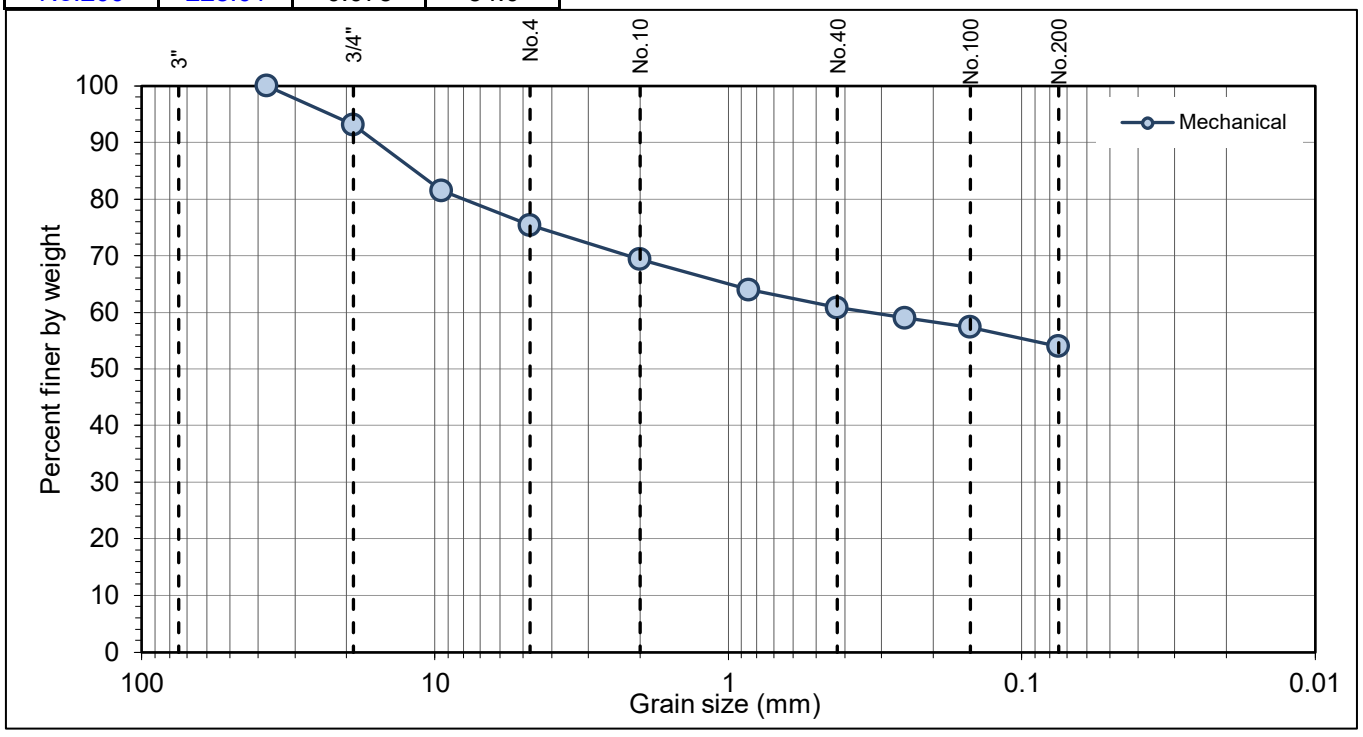
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	543.14	495.64
	-	
	543.14	495.64
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	740.83
Dry soil + tare (g):	-	693.33
Tare (g):	-	197.69
Moisture content (%):	0.0	9.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	33.86	19	93.2
3/8"	91.52	9.5	81.5
No.4	121.77	4.75	75.4
No.10	151.95	2	69.3
No.20	178.46	0.85	64.0
No.40	194.30	0.425	60.8
No.60	203.22	0.25	59.0
No.100	211.25	0.15	57.4
No.200	228.01	0.075	54.0



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 20-22 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: bn - tn sandy gravel

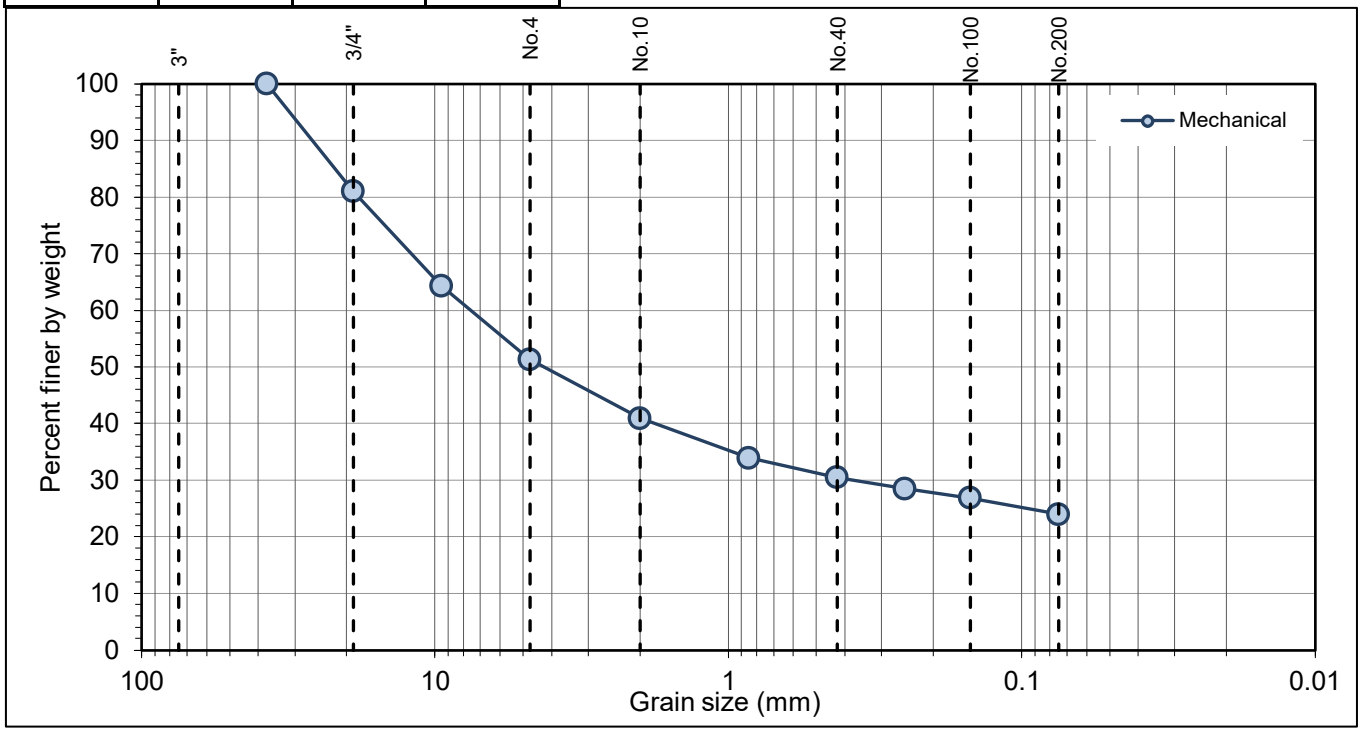
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	431.81	412.46
	-	
	431.81	412.46
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	549.20
Dry soil + tare (g):	-	529.85
Tare (g):	-	117.39
Moisture content (%):	0.0	4.7

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	78.09	19	81.1
3/8"	147.07	9.5	64.3
No.4	200.86	4.75	51.3
No.10	243.73	2	40.9
No.20	272.66	0.85	33.9
No.40	286.85	0.425	30.5
No.60	295.11	0.25	28.5
No.100	301.79	0.15	26.8
No.200	313.55	0.075	24.0



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-06

No: 23072 (23-1725) **Depth:** 32.5-35 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: lt bn - bn clay

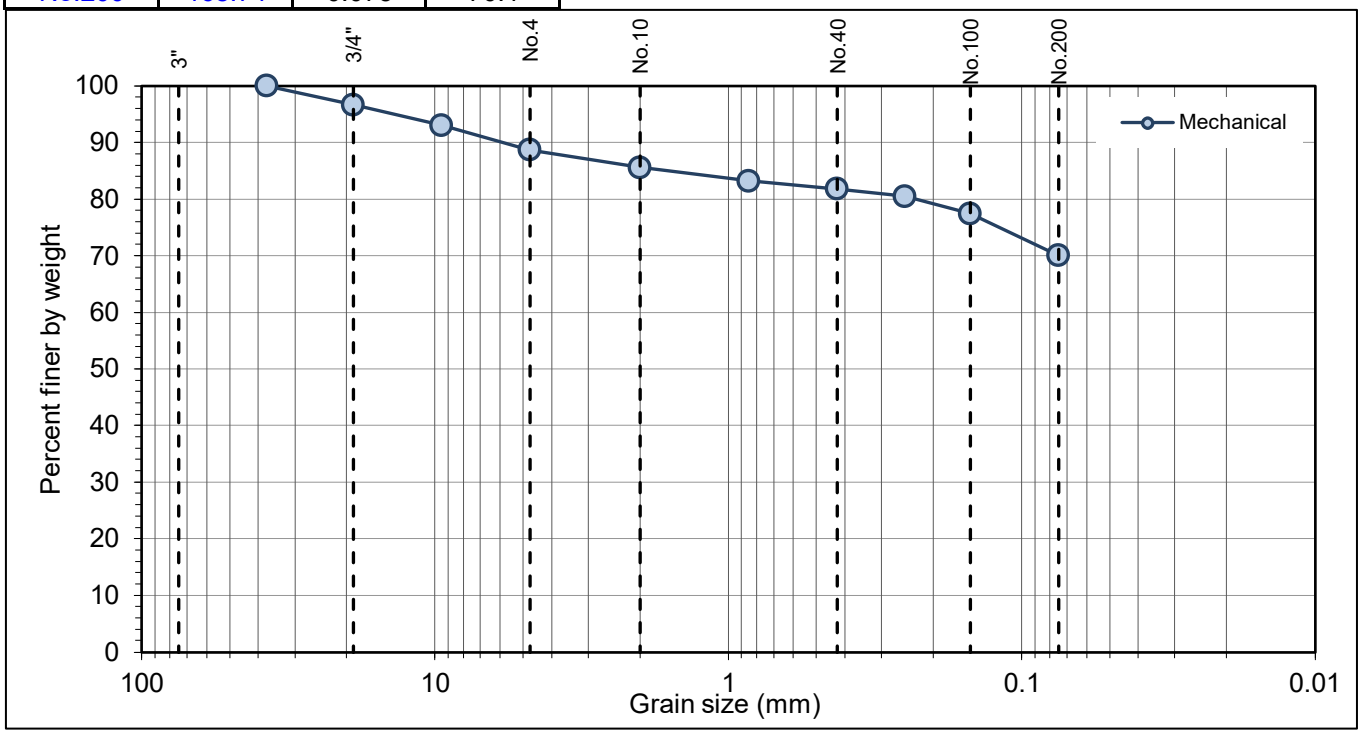
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	647.50	563.64
	-	-
	647.50	563.64
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	764.63
Dry soil + tare (g):	-	680.77
Tare (g):	-	117.13
Moisture content (%):	0.0	14.9

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	18.66	19	96.7
3/8"	39.17	9.5	93.1
No.4	63.61	4.75	88.7
No.10	81.28	2	85.6
No.20	94.55	0.85	83.2
No.40	102.61	0.425	81.8
No.60	109.80	0.25	80.5
No.100	126.97	0.15	77.5
No.200	168.74	0.075	70.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 5-6 ft

Date: 14-Nov-23 Location: -

Tested by: DW Lab soil description: lt bn - bn gravelly clay

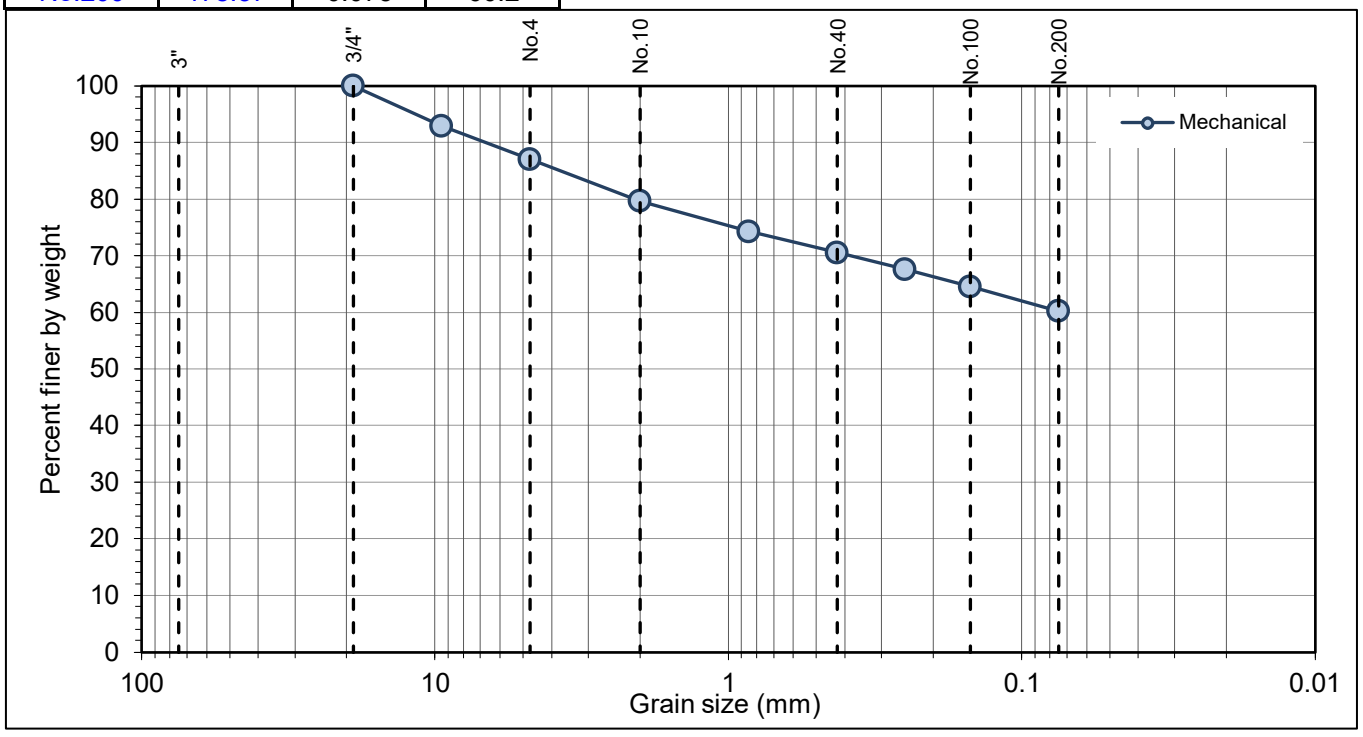
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	511.34	448.17
	-	
	511.34	448.17
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	708.54
Dry soil + tare (g):	-	645.37
Tare (g):	-	197.20
Moisture content (%):	0.0	14.1

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	100.0
3/8"	31.59	9.5	93.0
No.4	57.98	4.75	87.1
No.10	91.18	2	79.7
No.20	115.33	0.85	74.3
No.40	131.89	0.425	70.6
No.60	145.17	0.25	67.6
No.100	158.80	0.15	64.6
No.200	178.37	0.075	60.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 9-10 ft

Date: 10-Nov-23 Location: -

Tested by: JCC Lab soil description: lt bn - bn silt

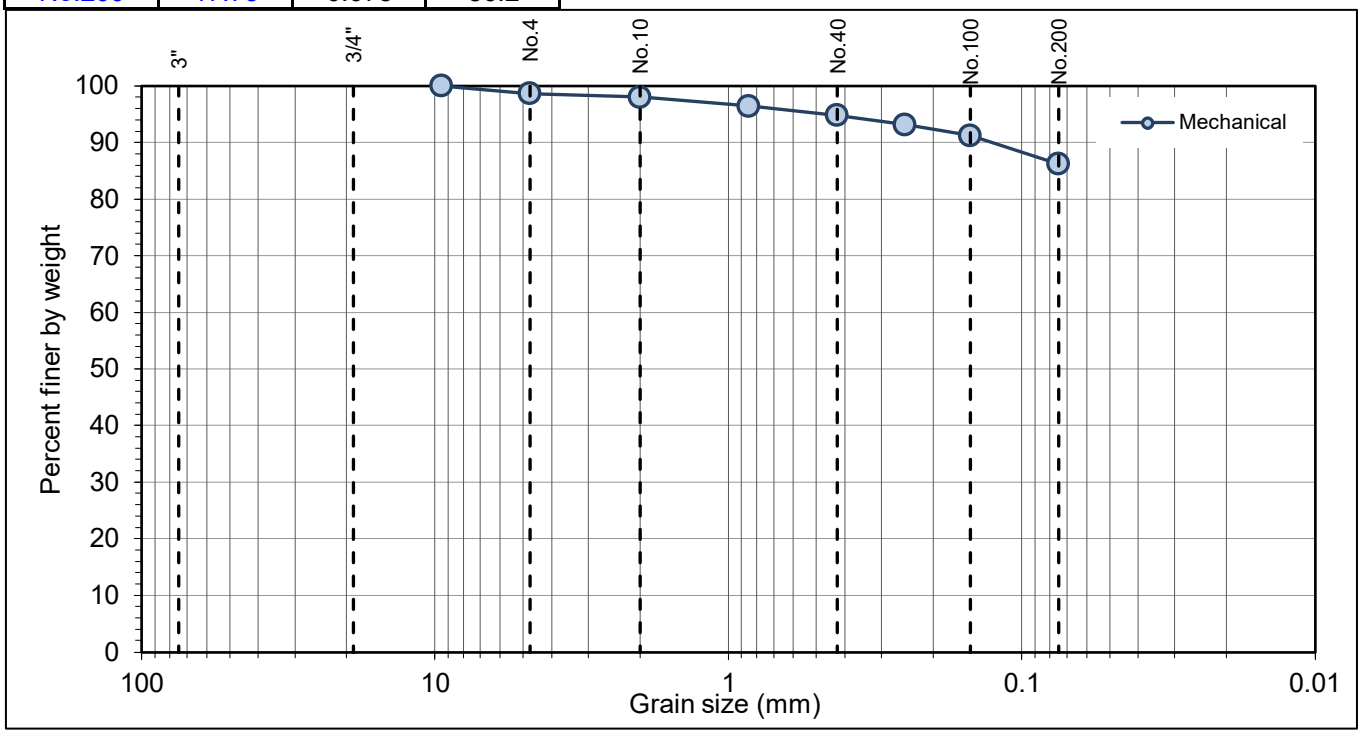
Reduced by: AT Comments:

Reviewed by: JC

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	160.04	128.80
	-	
	160.04	128.80
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	355.80
Dry soil + tare (g):	-	324.56
Tare (g):	-	195.76
Moisture content (%):	0.0	24.3

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	100.0
No.4	1.73	4.75	98.7
No.10	2.57	2	98.0
No.20	4.60	0.85	96.4
No.40	6.72	0.425	94.8
No.60	8.78	0.25	93.2
No.100	11.27	0.15	91.3
No.200	17.73	0.075	86.2



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 17.5-18 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: lt bn - bn sandy clay

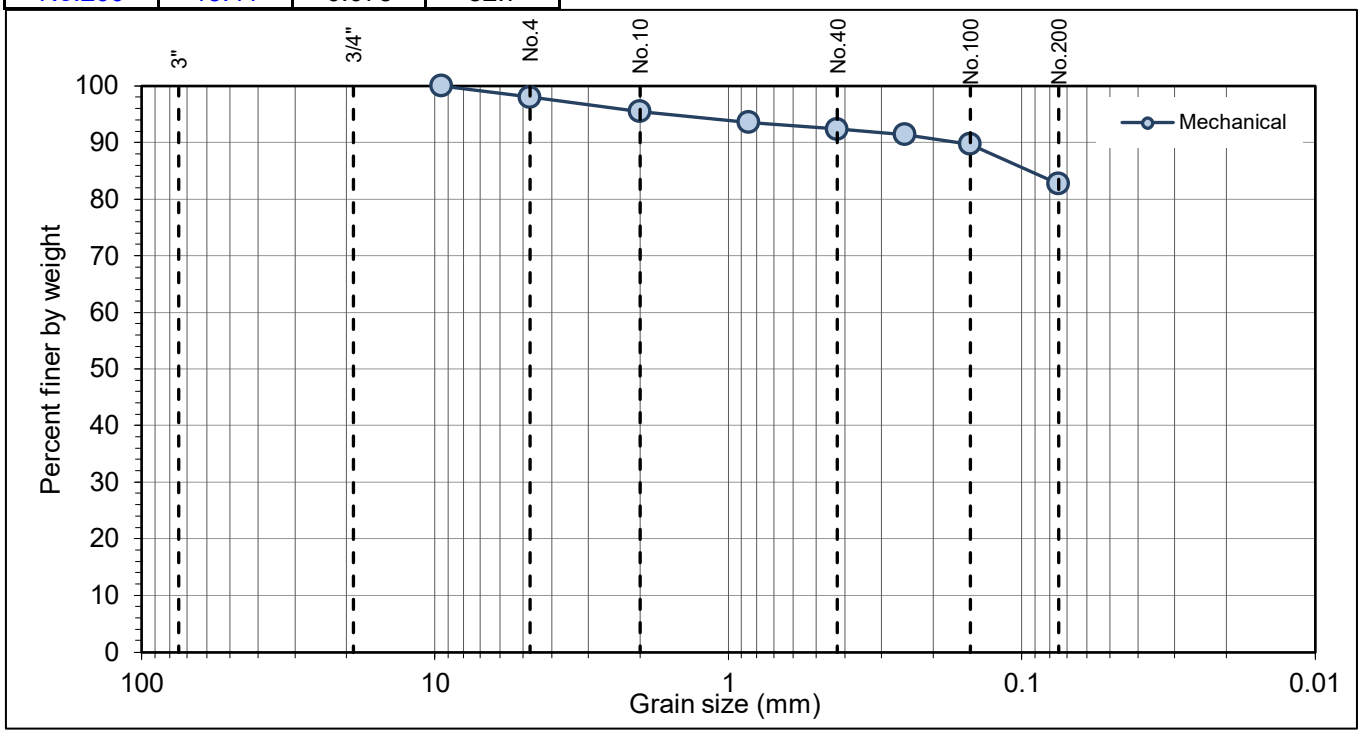
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	87.25	77.51
		-
	87.25	77.51
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	282.48
Dry soil + tare (g):	-	272.74
Tare (g):	-	195.23
Moisture content (%):	0.0	12.6

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	100.0
No.4	1.51	4.75	98.1
No.10	3.48	2	95.5
No.20	5.00	0.85	93.5
No.40	5.93	0.425	92.3
No.60	6.64	0.25	91.4
No.100	7.95	0.15	89.7
No.200	13.41	0.075	82.7



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-08

No: 23072 (23-1725) **Depth:** 10-12 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: tn - bn sandy gravel

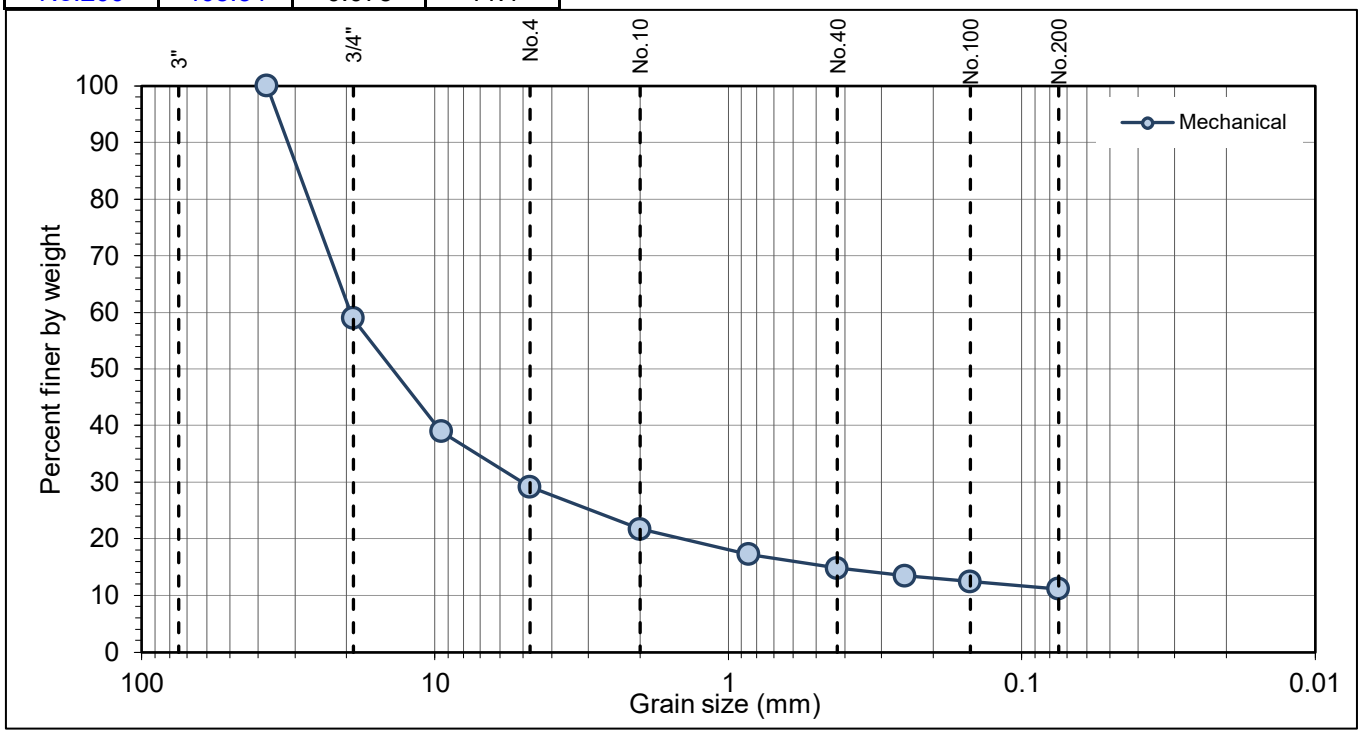
Reduced by: JC Comments:

Reviewed by: AT

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	466.15	455.99
	-	
	466.15	455.99
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	584.18
Dry soil + tare (g):	-	574.02
Tare (g):	-	118.03
Moisture content (%):	0.0	2.2

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	187.26	19	58.9
3/8"	278.45	9.5	38.9
No.4	323.16	4.75	29.1
No.10	357.01	2	21.7
No.20	377.36	0.85	17.2
No.40	388.54	0.425	14.8
No.60	394.67	0.25	13.4
No.100	399.46	0.15	12.4
No.200	405.34	0.075	11.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-08

No: 23072 (23-1725) **Depth:** 12.5-14 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: lt bn - bn sandy clay

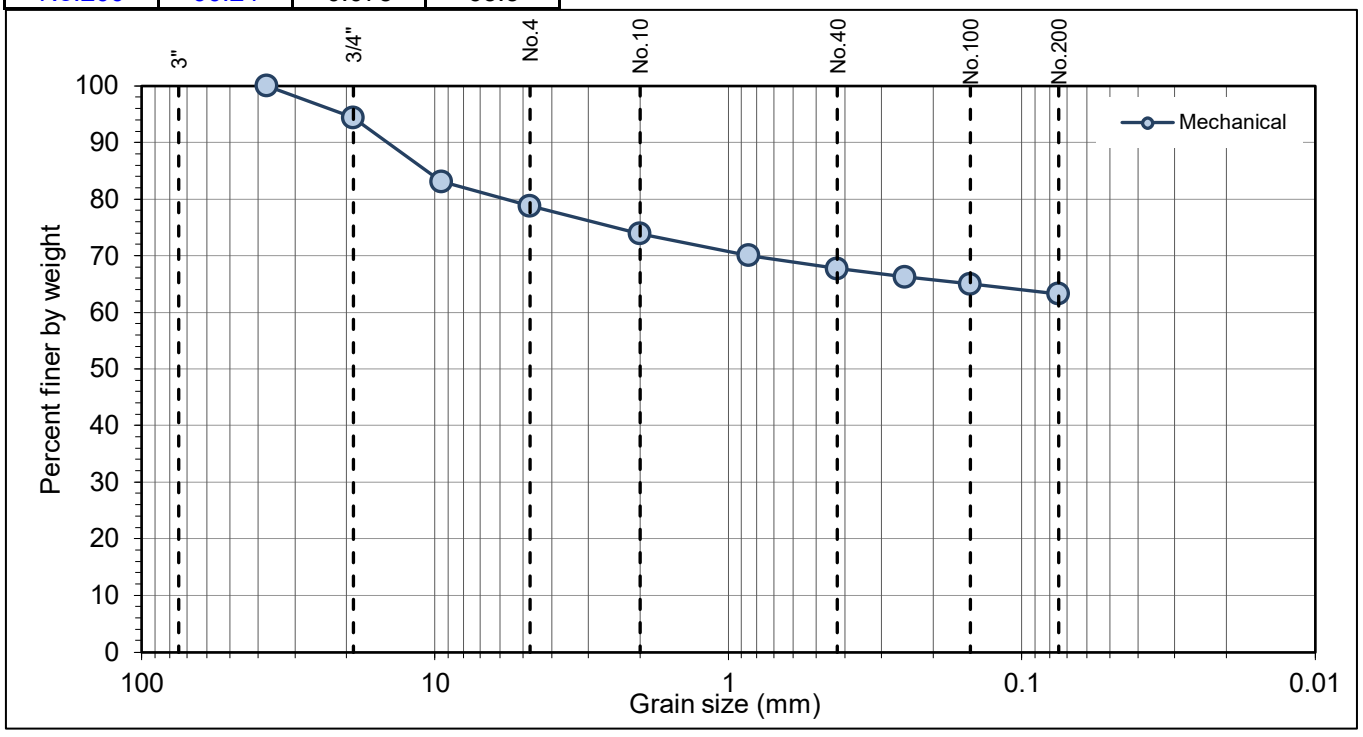
Reduced by: AT Comments:

Reviewed by: WMC

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	270.30	245.71
	-	
	270.30	245.71
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	467.72
Dry soil + tare (g):	-	443.13
Tare (g):	-	197.42
Moisture content (%):	0.0	10.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	13.71	19	94.4
3/8"	41.47	9.5	83.1
No.4	52.05	4.75	78.8
No.10	64.21	2	73.9
No.20	73.62	0.85	70.0
No.40	79.28	0.425	67.7
No.60	82.99	0.25	66.2
No.100	85.98	0.15	65.0
No.200	90.24	0.075	63.3



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-09

No: 23072 (23-1725) **Depth:** 7.5-9 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: dk yl bn - dk bn sandy gravel

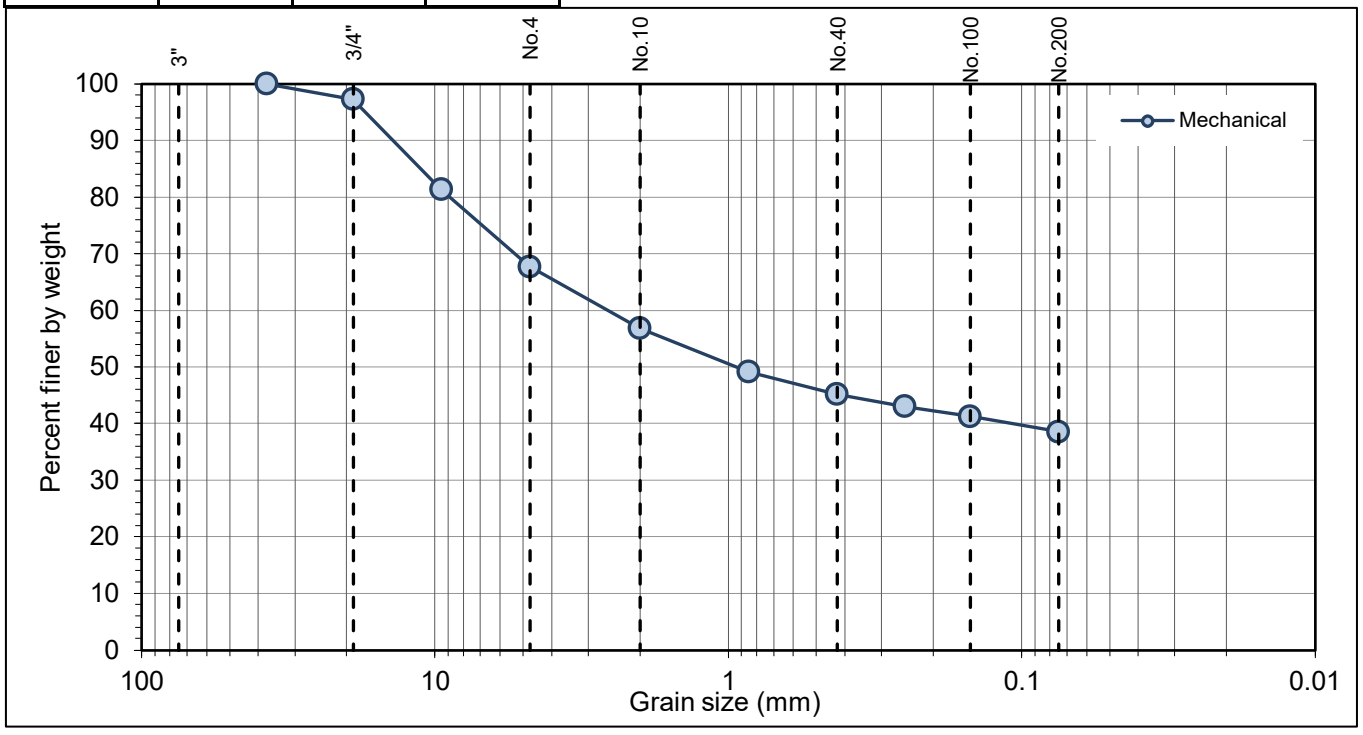
Reduced by: AT Comments:

Reviewed by: WMC

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	526.82	492.40
	-	
	526.82	492.40
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	644.83
Dry soil + tare (g):	-	610.41
Tare (g):	-	118.01
Moisture content (%):	0.0	7.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	13.31	19	97.3
3/8"	91.93	9.5	81.3
No.4	158.81	4.75	67.7
No.10	212.76	2	56.8
No.20	250.58	0.85	49.1
No.40	269.94	0.425	45.2
No.60	280.51	0.25	43.0
No.100	289.27	0.15	41.3
No.200	302.48	0.075	38.6



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-09

No: 23072 (23-1725) **Depth:** 15-17 ft

Date: 16-Nov-23 Location: -

Tested by: DW Lab soil description: dk yl bn - bn sandy gravel

Reduced by: AT Comments:

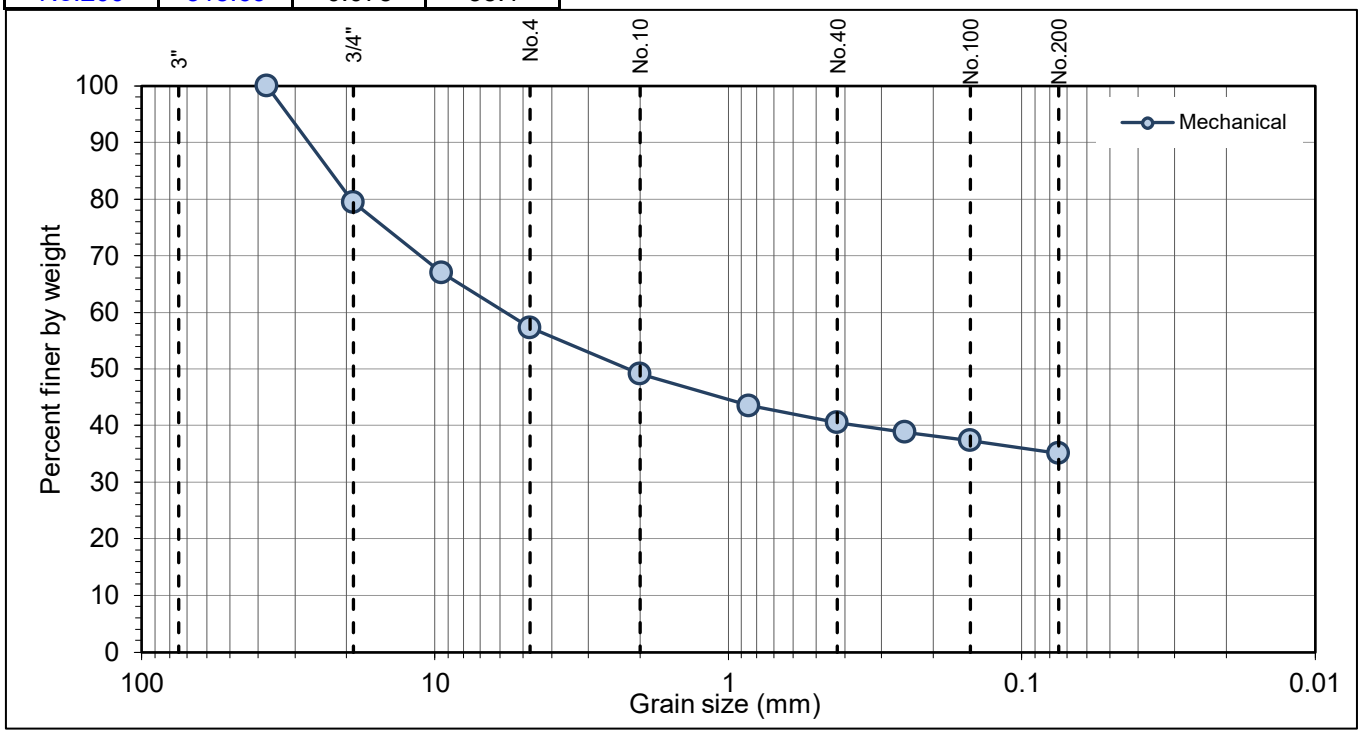
Reviewed by: WMC

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	514.46	486.37
	-	
	514.46	486.37
Split fraction:	1.000	

Moisture data

Moist soil + tare (g):	-	632.70
Dry soil + tare (g):	-	604.61
Tare (g):	-	118.24
Moisture content (%):	0.0	5.8

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	100.0
3/4"	99.92	19	79.5
3/8"	160.29	9.5	67.0
No.4	207.63	4.75	57.3
No.10	247.50	2	49.1
No.20	274.59	0.85	43.5
No.40	289.20	0.425	40.5
No.60	297.50	0.25	38.8
No.100	304.57	0.15	37.4
No.200	315.69	0.075	35.1



Particle-Size Analysis of Soils*

(after ASTM D422 and AASHTO T88)

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** TP-02

No: 23072 (23-1725) **Depth:** 6-7 ft

Date: 10-Nov-23 Location: -

Tested by: JCC Lab soil description: lt bn - bn silt

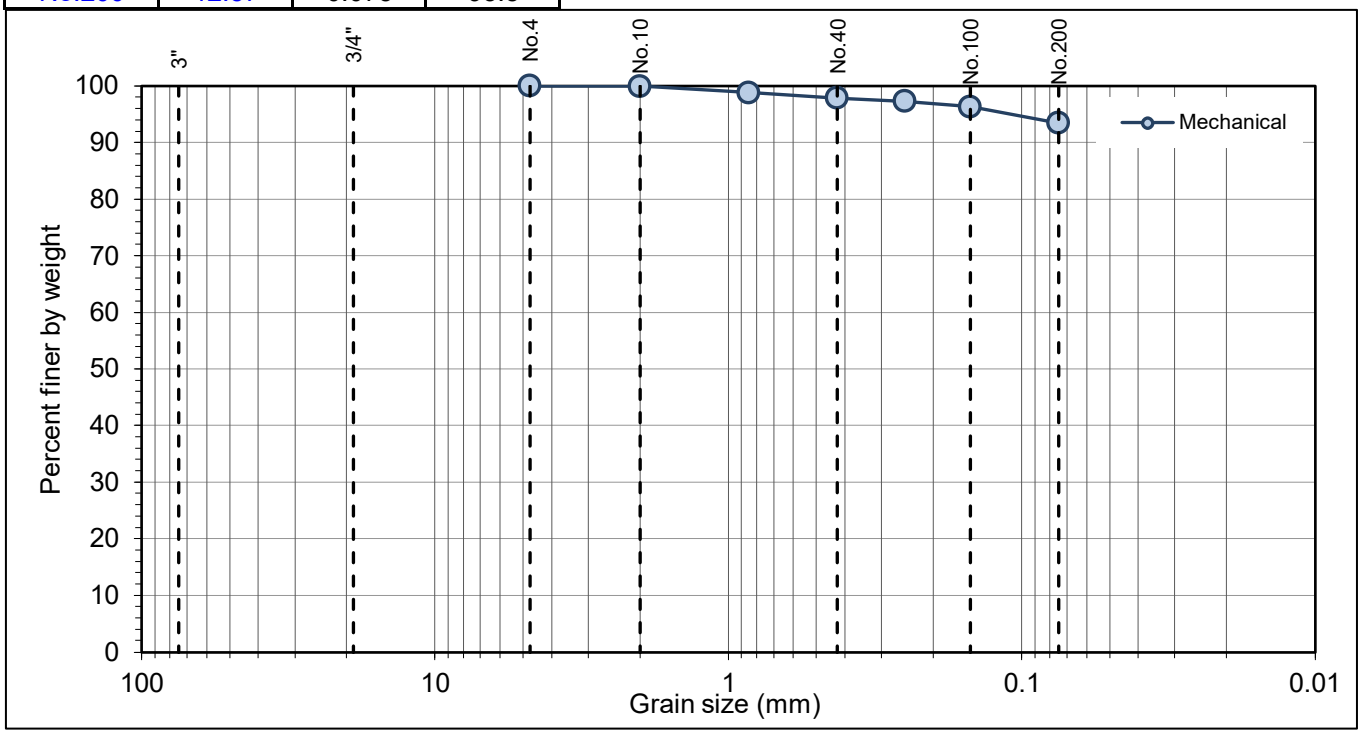
Reduced by: AT Comments:

Reviewed by: JC

Split:	No	
	-	
	Moist	Dry
Total sample wt. (g):	228.50	193.74
	-	
	228.50	193.74
Split fraction:	1.000	

Moisture data		
Moist soil + tare (g):	-	374.48
Dry soil + tare (g):	-	339.72
Tare (g):	-	145.98
Moisture content (%):	0.0	17.9

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer
12"	-	300	-
8"	-	200	-
6"	-	150	-
4"	-	100	-
3"	-	75	-
1.5"	-	37.5	-
3/4"	-	19	-
3/8"	-	9.5	-
No.4	-	4.75	100.0
No.10	0.06	2	100.0
No.20	2.24	0.85	98.8
No.40	4.19	0.425	97.8
No.60	5.26	0.25	97.3
No.100	7.14	0.15	96.3
No.200	12.57	0.075	93.5



One-Dimensional Consolidation Properties of Soils

After ASTM D2435 and USBR 5700

GERHART COLE

Project:	**Bear Development Snow King Lot 57**	**TH/TP/Sample:**	**JG-07**
No:	**23072 (23-1725)**	**Depth:**	**5-6 ft**
Location:	-	Laboratory sample description:	lt bn - bn gravelly clay
Date:	14-Nov-23	USCS classification:	not requested
Tested by:	AT	Sample type:	Rel. undisturbed, Shelby Tube
Reduced by:	AT	Inundation stress (psf):	100, beginning
Checked by:	MGS	Swell pressure (psf):	179
Comments:	Gravel up to 3/8" in sample.	Test method:	B
		Preparation procedure:	trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.996	-
	90°	0.992	-
	180°	0.997	-
	270°	0.995	-
Avg Height, Havg (in)		0.995	0.876
Height, H (cm)		2.527	2.225
Dia., D (in)	0°	2.493	-
	90°	2.495	-
Avg Dia., Davg (in)		2.494	2.494
Dia., D (cm)		6.335	6.335
Wt. rings + wet soil (g)		373.57	372.12
Wt. rings (g)		216.72	216.72
Wet soil + tare (g)		708.54	351.80
Dry soil + tare (g)		645.37	331.42
Tare (g)		197.20	196.58
Moisture cont., w (%)		14.1	15.1
Gs, assumed		2.70	2.70
Mass total (g)		156.9	155.4
Mass of solids (g)		137.5	137.5
Volume (cm^3)		79.7	70.1
Vol. of water (cm^3)		19.4	17.9
Vol. of solids (cm^3)		50.9	50.9
Vol. of voids (cm^3)		28.7	19.2
Vol. of air (cm^3)		9.4	1.3
Area, A (cm^2)		31.5	31.5
Ht. solids, Hs (cm)		1.615	1.615
Void ratio, e		0.564	0.378
Porosity, n		0.361	0.274
Vol.moisture, T		0.243	0.256
Saturation, S (%)		67	93
Dry density (gm/cm^3)		1.726	1.960
Wet unit wt., gm (pcf)		122.9	140.9
Dry unit wt., gd (pcf)		107.7	122.4

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9950	0.0000	0.5644	0
179	0.0001	0.9949	0.0001	0.5642	120
400	0.0028	0.9922	0.0028	0.5601	156
800	0.0083	0.9867	0.0083	0.5514	240
1,600	0.0169	0.9781	0.0170	0.5379	233
3,200	0.0296	0.9654	0.0298	0.5179	109
6,400	0.0537	0.9413	0.0539	0.4801	144
12,800	0.0805	0.9145	0.0809	0.4378	89
25,600	0.1080	0.8870	0.1085	0.3947	85
51,200	0.1365	0.8585	0.1372	0.3498	106
25,600	0.1339	0.8611	0.1346	0.3539	54
6,400	0.1276	0.8674	0.1283	0.3637	240
1,600	0.1188	0.8762	0.1194	0.3776	631

C'c	Cc
(0.1374-0.0809)/[Log(51200)-Log(12800)]	(0.3498-0.4378)/[Log(51200)-Log(12800)]
0.0565/(4.71-4.1072)	-0.088/(4.71-4.1072)
C'c= 0.098	C'c= -0.108
C'c = Cc/(1+e0)	C'c = Cc/(1+e0)
0.098 = Cc/(1+0.564)	0.108 = Cc/(1+0.564)
Cc = 0.17	Cc = -0.17

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

To be determined by the Geotechnical Engineer

Notes:

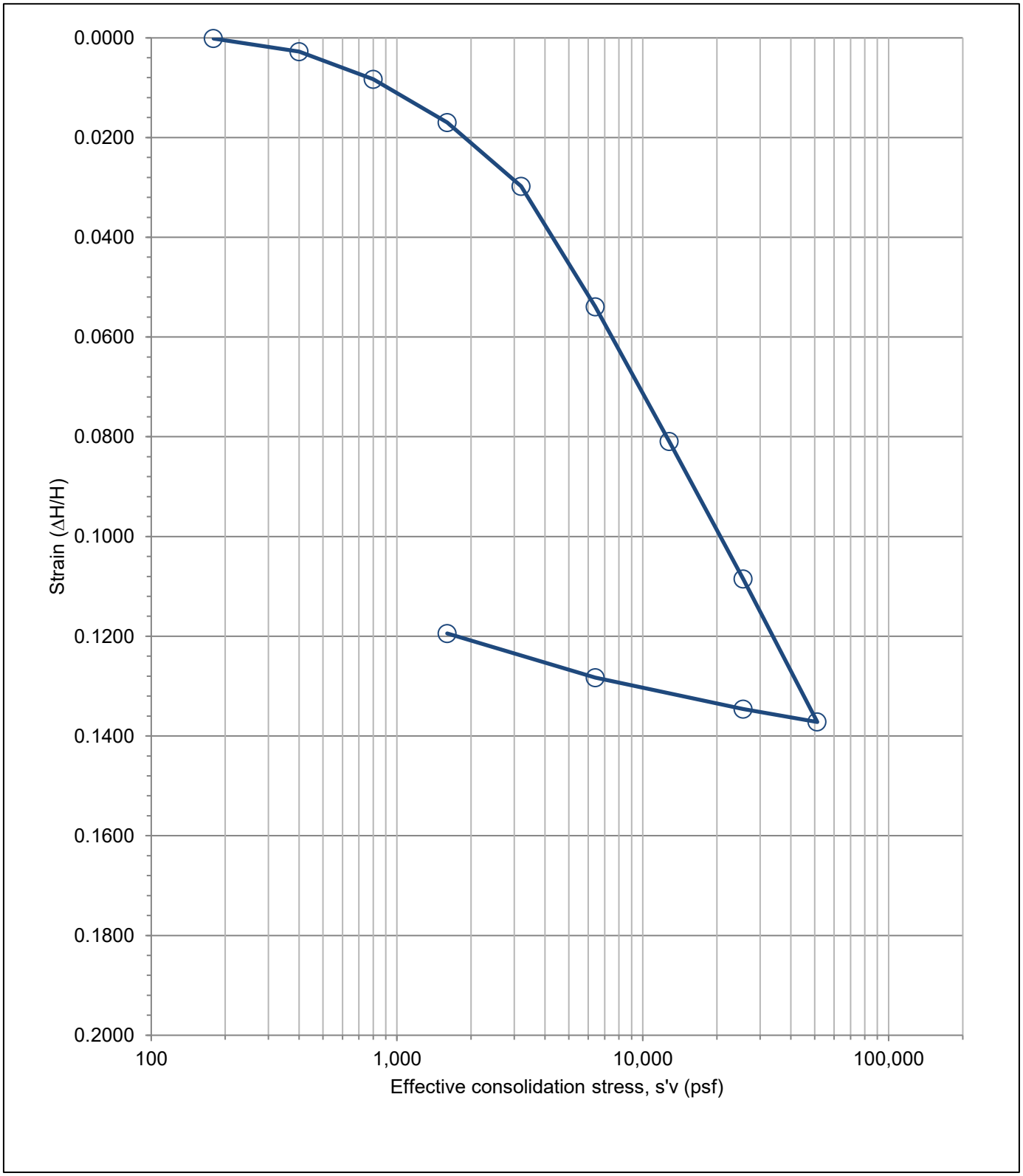
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation

[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07
No: 23072 (23-1725) **Depth:** 5-6 ft



One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 57 | **TH/TP/Sample:** JG-07
No: 23072 (23-1725) | **Depth:** 9-10 ft
Location: - | Laboratory sample description: lt bn - bn silt
Date: 13-Nov-23 | USCS classification: not requested

Tested by: AT | Sample type: Rel. undisturbed, Shelby Tube
Reduced by: AT | Inundation stress (psf): 100, completion
Checked by: MGS | Swell pressure (psf): 138
Comments: | Test method: B
Preparation procedure: trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.997	-
	90°	0.996	-
	180°	0.998	-
	270°	0.998	-
Avg Height, Havg (in)		0.997	0.806
Height, H (cm)		2.533	2.048
Dia., D (in)	0°	2.494	-
	90°	2.483	-
Avg Dia., Davg (in)		2.489	2.489
Dia., D (cm)		6.321	6.321
Wt. rings + wet soil (g)		354.85	351.75
Wt. rings (g)		216.58	216.58
Wet soil + tare (g)		355.80	330.74
Dry soil + tare (g)		324.56	305.91
Tare (g)		195.76	195.93
Moisture cont., w (%)		24.3	22.6
Gs, assumed		2.70	2.70
Mass total (g)		138.3	135.2
Mass of solids (g)		111.3	111.3
Volume (cm^3)		79.5	64.3
Vol. of water (cm^3)		27.0	23.9
Vol. of solids (cm^3)		41.2	41.2
Vol. of voids (cm^3)		38.3	23.0
Vol. of air (cm^3)		11.3	-0.8
Area, A (cm^2)		31.4	31.4
Ht. solids, Hs (cm)		1.313	1.313
Void ratio, e		0.928	0.559
Porosity, n		0.481	0.359
Vol.moisture, T		0.340	0.372
Saturation, S (%)		71	104
Dry density (gm/cm^3)		1.400	1.732
Wet unit wt., gm (pcf)		108.6	132.5
Dry unit wt., gd (pcf)		87.4	108.1

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9973	0.0000	0.9285	0
138	0.0001	0.9971	0.0001	0.9283	83
400	0.0043	0.9930	0.0043	0.9202	41
800	0.0113	0.9859	0.0113	0.9066	117
1,600	0.0213	0.9759	0.0214	0.8873	172
3,200	0.0369	0.9603	0.0370	0.8571	450
6,400	0.0615	0.9358	0.0617	0.8096	217
12,800	0.1006	0.8967	0.1008	0.7340	82
25,600	0.1550	0.8422	0.1555	0.6287	111
51,200	0.2096	0.7876	0.2102	0.5231	110
25,600	0.2070	0.7902	0.2076	0.5281	39
6,400	0.2002	0.7971	0.2008	0.5414	58
1,600	0.1910	0.8062	0.1915	0.5591	79

C'c

(0.2102-0.1008)/[Log(51200)-Log(12800)]

0.1094/(4.71-4.1072)

C'c= 0.18

C'c = Cc/(1+e0)

0.18 = Cc/(1+0.564)

Cc = 0.28

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

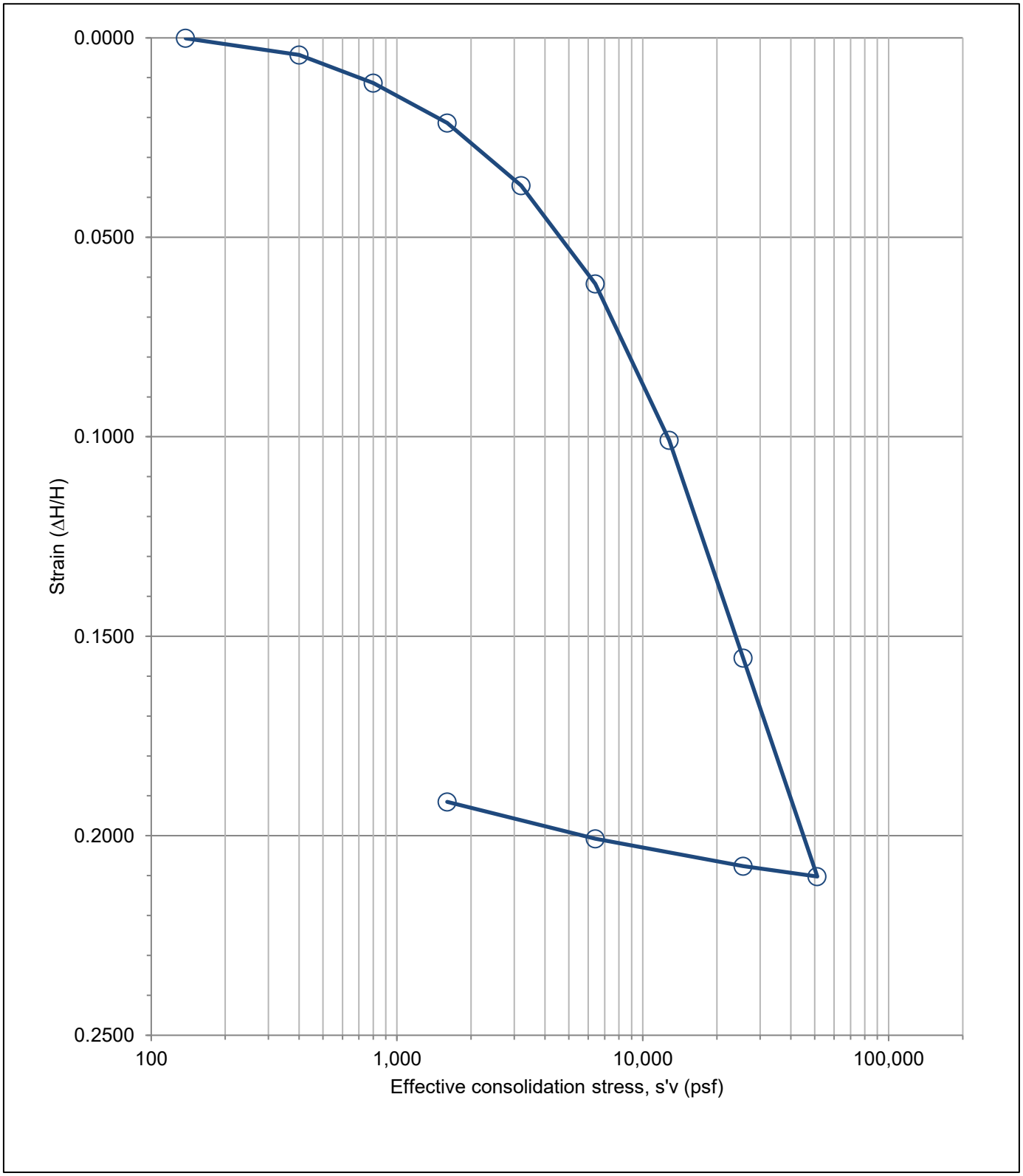
To be determined by the Geotechnical Engineer

Notes:
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation
[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** JG-07
No: 23072 (23-1725) **Depth:** 9-10 ft



One-Dimensional Consolidation Properties of Soils

After ASTM D2435 and USBR 5700

GERHART COLE

Project:	**Bear Development Snow King Lot 57**	**TH/TP/Sample:**	**TP-02**
No:	**23072 (23-1725)**	**Depth:**	**6-7 ft**
Location:	-	Laboratory sample description:	lt bn - bn silt
Date:	13-Nov-23	USCS classification:	not requested
Tested by:	AT	Sample type:	Rel. undisturbed, Shelby Tube
Reduced by:	AT	Inundation stress (psf):	100, completion
Checked by:	MGS	Swell pressure (psf):	121
Comments:	Observed fines squeezed out of ring during testing.	Test method:	B
		Preparation procedure:	trimmed

Phase Relationships

		Initial	Final
Height, H (in)	0°	0.991	-
	90°	0.989	-
	180°	0.990	-
	270°	0.990	-
Avg Height, Havg (in)		0.990	0.869
Height, H (cm)		2.515	2.208
Dia., D (in)	0°	2.494	-
	90°	2.930	-
Avg Dia., Davg (in)		2.712	2.712
Dia., D (cm)		6.888	6.888
Wt. rings + wet soil (g)		354.82	358.76
Wt. rings (g)		214.62	214.62
Wet soil + tare (g)		374.48	271.10
Dry soil + tare (g)		339.72	244.48
Tare (g)		145.98	127.16
Moisture cont., w (%)		17.9	22.7
Gs, assumed		2.70	2.70
Mass total (g)		140.2	144.1
Mass of solids (g)		118.9	118.9
Volume (cm^3)		93.7	82.3
Vol. of water (cm^3)		21.3	25.3
Vol. of solids (cm^3)		44.0	44.0
Vol. of voids (cm^3)		49.7	38.3
Vol. of air (cm^3)		28.4	13.0
Area, A (cm^2)		37.3	37.3
Ht. solids, Hs (cm)		1.181	1.181
Void ratio, e		1.129	0.869
Porosity, n		0.530	0.465
Vol.moisture, T		0.228	0.307
Saturation, S (%)		43	66
Dry density (gm/cm^3)		1.268	1.445
Wet unit wt., gm (pcf)		93.4	110.6
Dry unit wt., gd (pcf)		79.2	90.2

Vertical Stress - Deformation Results

Vert. stress (psf)	Corr. Dial, dfc [a] (in)	Hc [b] (in)	Vert. strain, ev	Void ratio, e	Load duration (min)
Seating	0.0000	0.9900	0.0000	1.1286	0
121	0.0003	0.9897	0.0003	1.1279	53
200	0.0018	0.9882	0.0018	1.1247	76
400	0.0063	0.9837	0.0064	1.1150	76
800	0.0123	0.9777	0.0124	1.1022	87
1,600	0.0203	0.9697	0.0205	1.0849	171
3,200	0.0322	0.9578	0.0325	1.0594	450
6,400	0.0484	0.9416	0.0489	1.0245	120
12,800	0.0711	0.9189	0.0719	0.9756	98
25,600	0.1006	0.8894	0.1016	0.9123	79
51,200	0.1356	0.8544	0.1370	0.8370	114
25,600	0.1340	0.8560	0.1354	0.8404	27
6,400	0.1284	0.8616	0.1297	0.8525	24
1,600	0.1207	0.8693	0.1219	0.8691	50

C'c

(0.1370-0.0719)/[Log(51200)-Log(12800)]

0.0651/(4.71-4.1072)

C'c= 0.108

C'c = Cc/(1+e0)

0.108 = Cc/(1+0.564)

Cc = 0.17

Cc

(0.8370-0.9756)/[Log(51200)-Log(12800)]

-0.14/(4.71-4.1072)

C'c= -0.108

C'c = Cc/(1+e0)

0.108 = Cc/(1+0.564)

Cc = -0.17

Data Interpretation Summary

Preconsolidation stress, s'p (psf)	---
Compression ratio, CR	---
Recompression ratio, RR	---

To be determined by the Geotechnical Engineer

Notes:

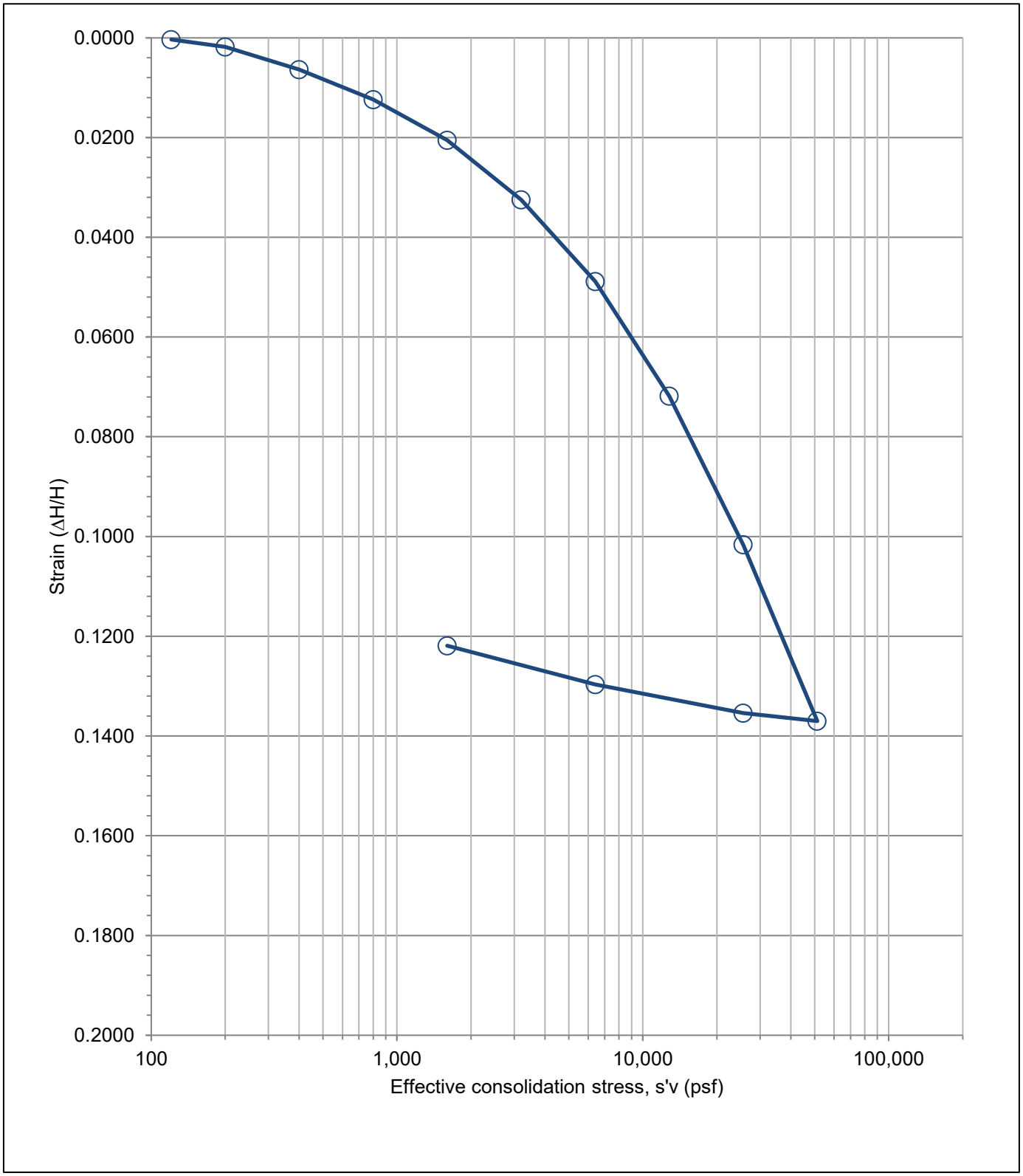
[a] Dfc = end of increment deformation corrected for machine, porous stone, and filter paper deformation

[b] Hc = height at end of consolidation of each vert. stress

One-Dimensional Consolidation Properties of Soils
After ASTM D2435 and USBR 5700

GERHART COLE

Project: Bear Development Snow King Lot 57 **TH/TP/Sample:** TP-02
No: 23072 (23-1725) **Depth:** 6-7 ft



Direct Shear Test for Soils Under Drained Conditions*

After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 9-10 ft

Location: -

Date: 14-Nov-23

Tested by: AT

Reduced by: AT

Checked by: MGS

Laboratory sample description: lt bn - bn clay

USCS classification: not requested

Comments: Gravel up to 3/8" in samples.

X:\PROJECTS\23-1725 Bear Development\Reviewed\[2023-11-10_Lot57_JG-07_DS.xlsm]Sum

Sample type: Undisturbed-trimmed from shelby tul

Testing device: GeoJac-DS

Gravel (%) 1.3

Sand (%) 12.4

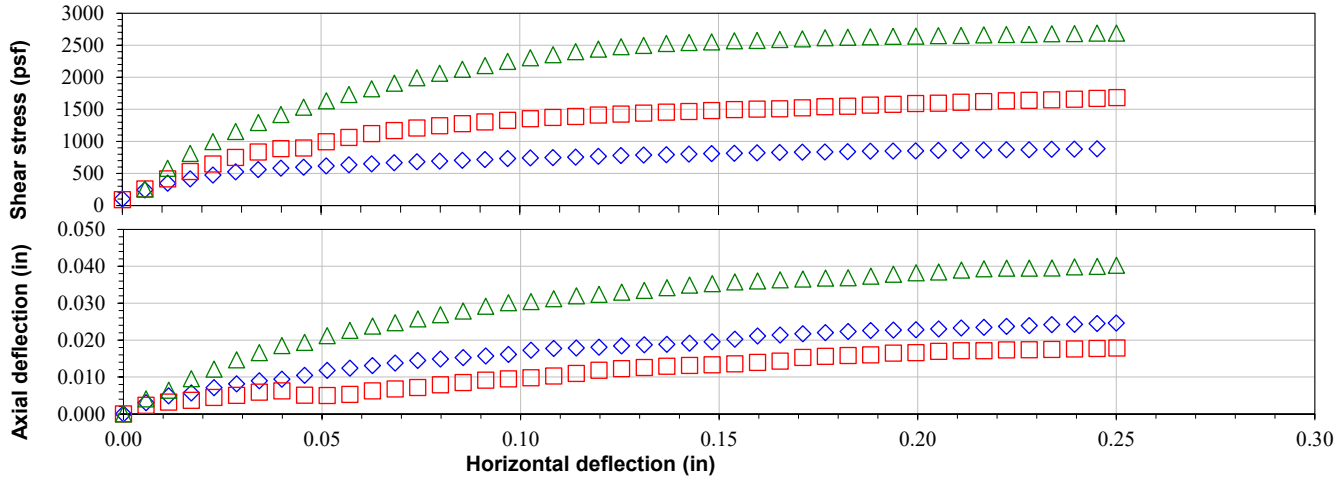
Fines (%) 86.2

LL (%): 33

PL (%): 18

Note: NP = Non-Plastic

	Test Number	Sample 1		Sample 2		Sample 3	
		Initial	Final	Initial	Final	Initial	Final
Unit weight data	Height, H (in)	1.000	0.977	1.014	0.990	1.203	1.131
	Height, H (cm)	2.540	2.482	2.576	2.515	3.056	2.872
	Dia., D (in)	2.500	2.500	2.488	2.488	2.485	2.485
	Dia., D (cm)	6.350	6.350	6.320	6.320	6.312	6.312
	Wt. rings + wet soil (g)	2064.95	2072.64	2058.40	2079.05	2106.13	2107.55
	Wt. rings (g)	1909.89	1909.89	1899.13	1899.13	1920.29	1920.29
Moisture	Wet soil + tare (g)	333.67	353.12	333.67	277.63	398.87	380.83
	Dry soil + tare (g)	311.91	322.93	311.91	248.26	361.41	345.58
	Tare (g)	194.64	197.91	194.64	117.28	196.69	197.10
	Moisture cont., w (%)	18.6	24.1	18.6	22.4	22.7	23.7
Phase Relationships	Gs, assumed	2.65	2.65	2.65	2.65	2.65	2.65
	Mass total (g)	155.1	162.8	159.3	179.9	185.8	187.3
	Mass of solids (g)	130.8	130.8	134.3	134.3	151.4	151.4
	Volume (cm^3)	80.4	78.6	80.8	78.9	95.6	89.9
	Vol. of water (cm^3)	24.3	32.0	24.9	45.6	34.4	35.9
	Vol. of solids (cm^3)	49.4	49.4	50.7	50.7	57.1	57.1
	Vol. of voids (cm^3)	31.1	29.3	30.1	28.2	38.5	32.7
	Vol. of air (cm^3)	6.8	-2.7	5.2	-17.4	4.0	-3.1
	Area, A (cm^2)	31.7	31.7	31.4	31.4	31.3	31.3
	Ht. solids, Hs (cm)	1.558	1.558	1.616	1.616	1.826	1.826
	Void ratio, e	0.630	0.593	0.594	0.556	0.673	0.573
	Porosity, n	0.386	0.372	0.372	0.357	0.402	0.364
	Vol.moisture, T	0.302	0.407	0.309	0.578	0.360	0.399
	Saturation, S (%)	78	109	83	162	89	110
	Dry density (gm/cm^3)	1.626	1.664	1.663	1.703	1.584	1.685
	Wet unit wt., gm (pcf)	120.3	128.9	123.1	130.2	121.3	130.2
	Dry unit wt., gd (pcf)	101.5	103.9	103.8	106.3	98.9	105.2
	Normal stress,Sn (psf)	1000		2000		4000	
	Peak shear stress,Tp (psf)	884		1680		2690	
	Deflection at Peak Stress (in)	0.245		0.250		0.245	
	Shear rate (in./min)	0.001		0.001		0.001	
	Consolidation time (min)	16.0		16.0		480.2	



Direct Shear Test for Soils Under Drained Conditions*

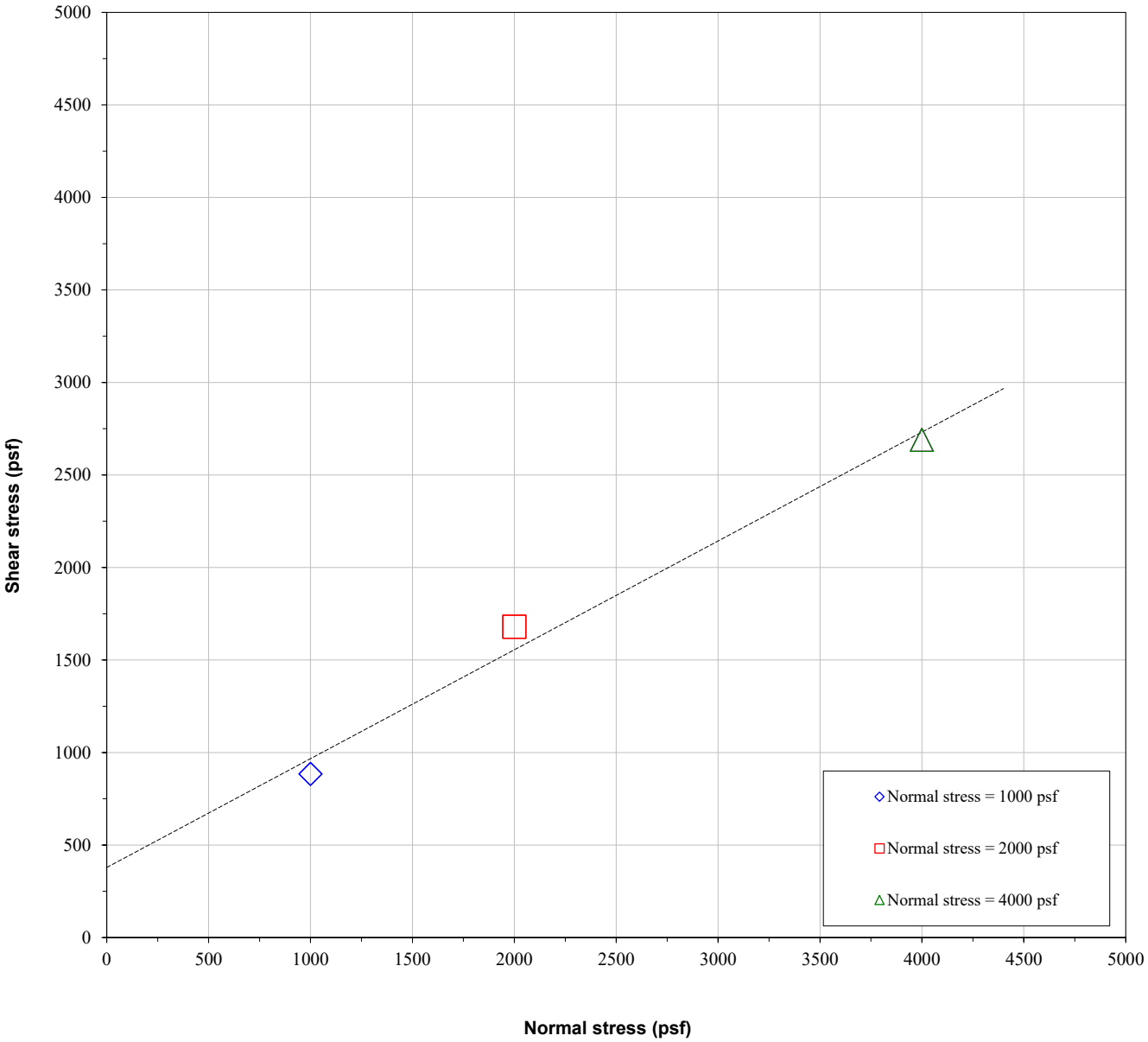
After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 9-10 ft

f (deg)	30
c (psf)	379



Direct Shear Test for Soils Under Drained Conditions*

After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 9-10 ft

Normal stress = 1000 psf			Normal stress = 2000 psf			Normal stress = 4000 psf		
Lateral Deflection (in)	Shear Stress (psf)	Axial Deflection (in)	Lateral Deflection (in)	Shear Stress (psf)	Axial Deflection (in)	Lateral Deflection (in)	Shear Stress (psf)	Axial Deflection (in)
0.000	104	0.000	0.000	92	0.000	0.000	0	0.000
0.006	243	0.003	0.006	258	0.002	0.006	259	0.004
0.011	347	0.005	0.011	415	0.003	0.011	579	0.006
0.017	415	0.006	0.017	530	0.004	0.017	813	0.010
0.023	476	0.007	0.023	648	0.004	0.023	996	0.012
0.028	524	0.008	0.028	750	0.005	0.028	1154	0.015
0.034	560	0.009	0.034	834	0.006	0.034	1294	0.017
0.040	582	0.009	0.040	887	0.006	0.040	1418	0.019
0.046	599	0.010	0.046	897	0.005	0.046	1533	0.019
0.051	618	0.012	0.051	995	0.005	0.051	1632	0.021
0.057	634	0.012	0.057	1062	0.005	0.057	1731	0.023
0.063	649	0.013	0.063	1121	0.006	0.063	1821	0.024
0.068	668	0.014	0.068	1168	0.007	0.068	1907	0.025
0.074	682	0.015	0.074	1208	0.007	0.074	1991	0.026
0.080	693	0.015	0.080	1244	0.008	0.080	2062	0.027
0.086	706	0.015	0.086	1276	0.008	0.086	2124	0.028
0.091	718	0.016	0.091	1303	0.009	0.091	2181	0.029
0.097	732	0.016	0.097	1329	0.009	0.097	2247	0.030
0.103	741	0.017	0.103	1354	0.010	0.103	2304	0.030
0.108	748	0.018	0.108	1373	0.010	0.108	2351	0.031
0.114	756	0.018	0.114	1389	0.011	0.114	2400	0.032
0.120	766	0.018	0.120	1412	0.012	0.120	2440	0.032
0.125	779	0.018	0.125	1426	0.012	0.125	2478	0.033
0.131	787	0.019	0.131	1442	0.013	0.131	2497	0.033
0.137	793	0.019	0.137	1455	0.013	0.137	2527	0.034
0.143	803	0.019	0.143	1465	0.013	0.143	2541	0.035
0.148	810	0.020	0.148	1480	0.013	0.148	2552	0.035
0.154	815	0.020	0.154	1496	0.014	0.154	2568	0.036
0.160	821	0.021	0.160	1503	0.014	0.160	2575	0.036
0.165	828	0.021	0.165	1509	0.014	0.165	2588	0.036
0.171	832	0.022	0.171	1523	0.015	0.171	2598	0.037
0.177	836	0.022	0.177	1540	0.016	0.177	2616	0.037
0.182	841	0.022	0.182	1548	0.016	0.182	2624	0.037
0.188	847	0.023	0.188	1565	0.016	0.188	2631	0.037
0.194	850	0.023	0.194	1579	0.016	0.194	2639	0.038
0.200	853	0.023	0.200	1592	0.017	0.200	2642	0.038
0.205	858	0.023	0.205	1596	0.017	0.205	2649	0.038
0.211	860	0.023	0.211	1611	0.017	0.211	2652	0.039
0.217	866	0.023	0.217	1621	0.017	0.217	2662	0.039
0.222	870	0.024	0.222	1632	0.017	0.222	2667	0.039
0.228	870	0.024	0.228	1640	0.017	0.228	2668	0.039
0.234	877	0.024	0.234	1647	0.017	0.234	2678	0.040
0.239	880	0.024	0.239	1658	0.018	0.240	2682	0.040
0.245	884	0.024	0.245	1670	0.018	0.245	2689	0.040
0.250	883	0.025	0.250	1683	0.018	0.250	2688	0.040

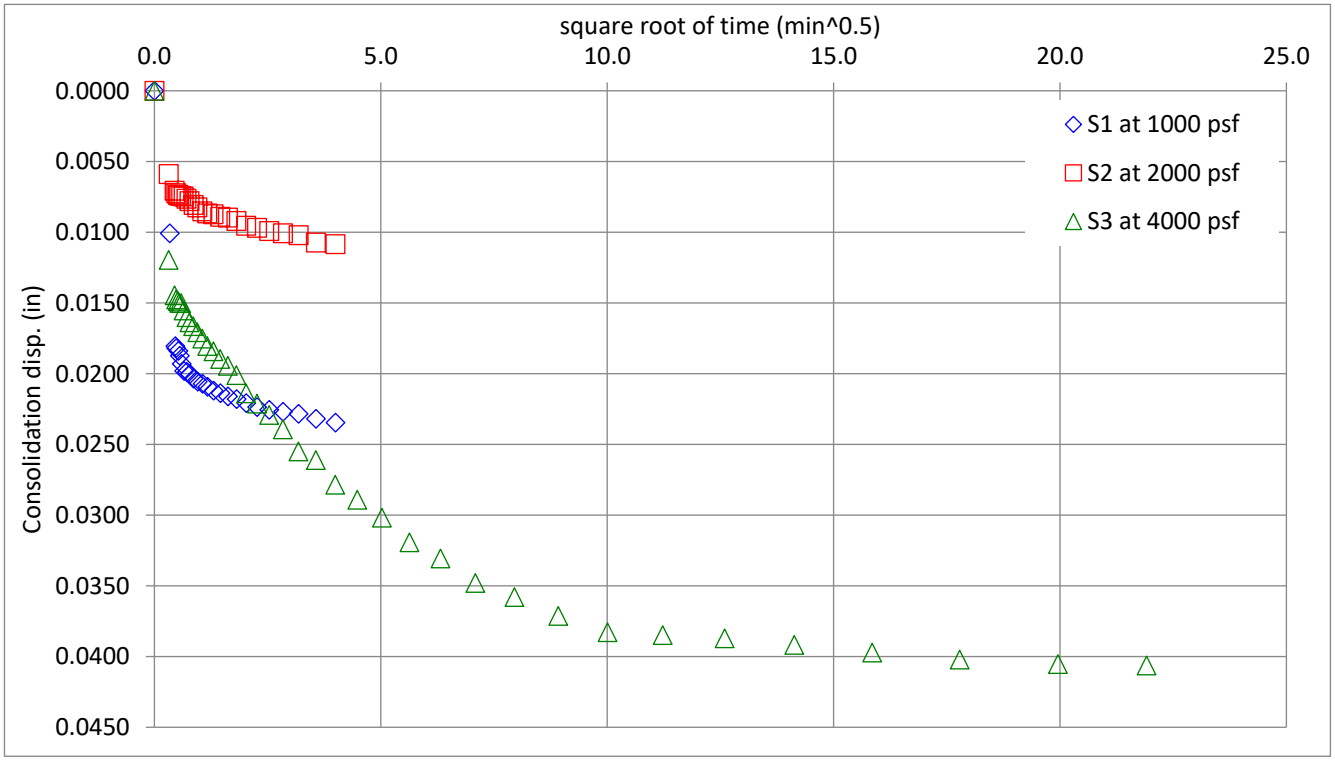
Direct Shear Test for Soils Under Drained Conditions*

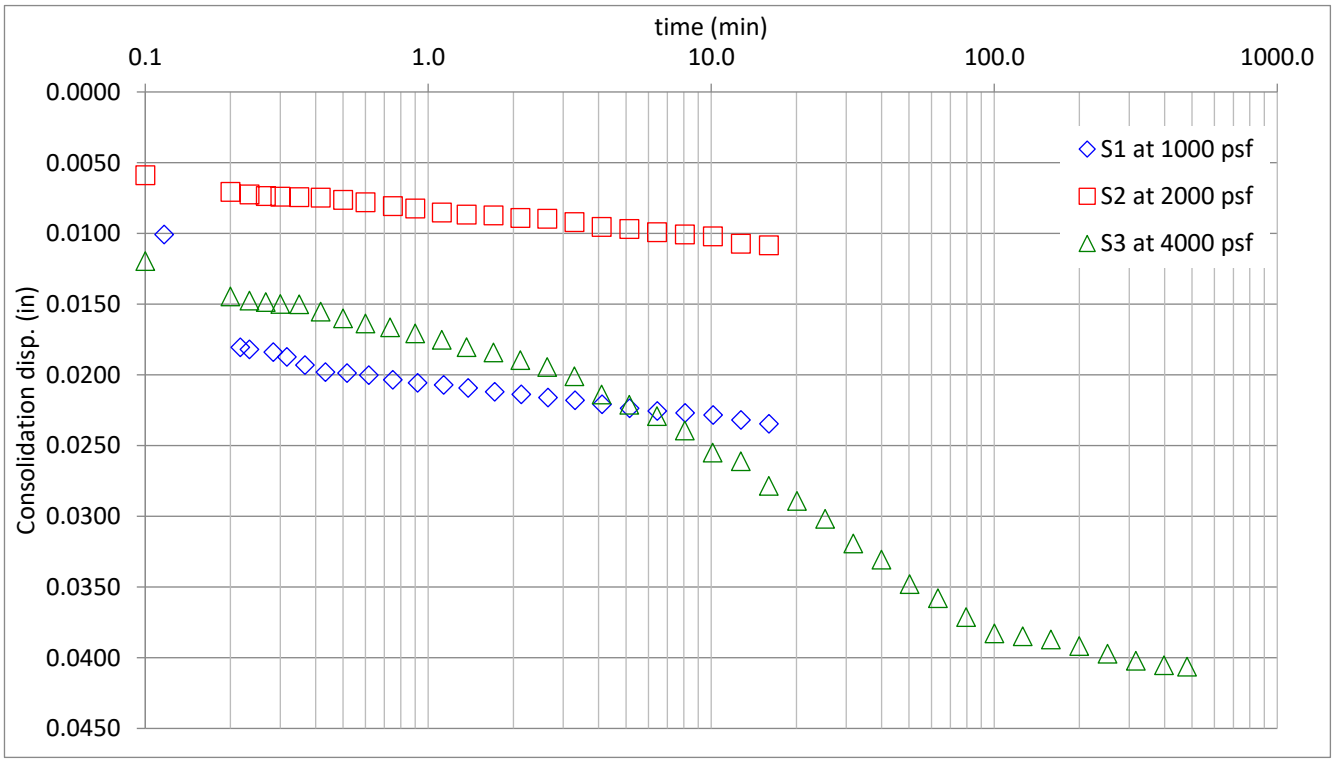
After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** JG-07

No: 23072 (23-1725) **Depth:** 9-10 ft





Direct Shear Test for Soils Under Drained Conditions*

After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** TP-02

No: 23072 (23-1725) **Depth:** 6-7 ft

Location: - Laboratory sample description: lt bn - bn silt

Date: 15-Nov-23 USCS classification: not requested

Tested by: AT Comments:

Reduced by: AT

Checked by: MGS X:\PROJECTS\23-1725 Bear Development\Reviewed\[2023-11-10_Lot57_TP-02_DS.xlsm]Sum

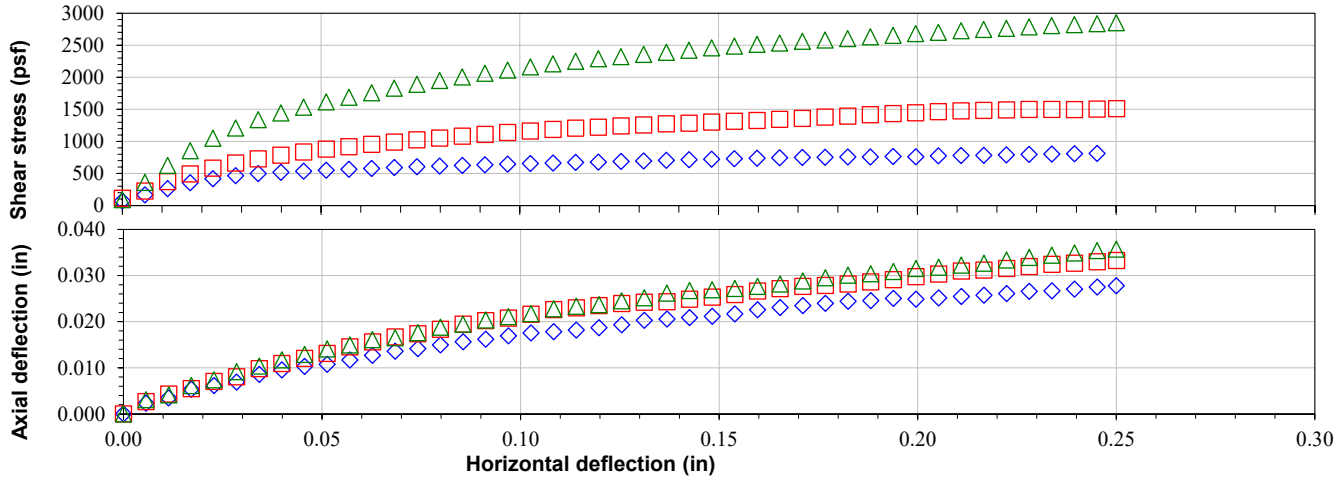
Sample type: Undisturbed-trimmed from shelby tul Gravel (%) 0.0 LL (%): NP

Testing device: GeoJac-DS Sand (%) 6.5 PL (%): NP

Fines (%) 93.5 Note: NP = Non-Plastic

	Test Number	Sample 1		Sample 2		Sample 3	
		Initial	Final	Initial	Final	Initial	Final
Unit weight data	Height, H (in)	1.000	0.975	1.000	0.965	1.000	0.954
	Height, H (cm)	2.540	2.477	2.540	2.452	2.540	2.422
	Dia., D (in)	2.500	2.500	2.500	2.500	2.500	2.500
	Dia., D (cm)	6.350	6.350	6.350	6.350	6.350	6.350
	Wt. rings + wet soil (g)	2052.51	2072.93	2040.55	2068.15	2066.16	2077.33
	Wt. rings (g)	1914.98	1914.98	1897.83	1897.83	1918.67	1918.67
Moisture	Wet soil + tare (g)	577.49	273.08	577.49	338.97	577.49	346.43
	Dry soil + tare (g)	508.79	240.64	508.79	308.78	508.79	316.58
	Tare (g)	116.54	126.81	116.54	193.75	116.54	195.96
	Moisture cont., w (%)	17.5	28.5	17.5	26.2	17.5	24.7
Phase Relationships	Gs, assumed	2.65	2.65	2.65	2.65	2.65	2.65
	Mass total (g)	137.5	158.0	142.7	170.3	147.5	158.7
	Mass of solids (g)	117.0	117.0	121.4	121.4	125.5	125.5
	Volume (cm^3)	80.4	78.4	80.4	77.7	80.4	76.7
	Vol. of water (cm^3)	20.5	40.9	21.3	48.9	22.0	33.2
	Vol. of solids (cm^3)	44.2	44.2	45.8	45.8	47.4	47.4
	Vol. of voids (cm^3)	36.3	34.3	34.6	31.8	33.1	29.3
	Vol. of air (cm^3)	15.8	-6.6	13.3	-17.0	11.1	-3.8
	Area, A (cm^2)	31.7	31.7	31.7	31.7	31.7	31.7
	Ht. solids, Hs (cm)	1.395	1.395	1.447	1.447	1.496	1.496
	Void ratio, e	0.821	0.776	0.755	0.694	0.698	0.620
	Porosity, n	0.451	0.437	0.430	0.410	0.411	0.383
	Vol.moisture, T	0.255	0.522	0.264	0.629	0.273	0.432
	Saturation, S (%)	57	119	61	154	66	113
	Dry density (gm/cm^3)	1.455	1.492	1.510	1.564	1.560	1.636
	Wet unit wt., gm (pcf)	106.7	119.7	110.8	123.3	114.5	127.4
	Dry unit wt., gd (pcf)	90.8	93.1	94.3	97.6	97.4	102.1

Normal stress,Sn (psf)	1000	2000	4000
Peak shear stress,Tp (psf)	814	1510	2850
Deflection at Peak Stress (in)	0.250	0.250	0.250
Shear rate (in./min)	0.001	0.001	0.001
Consolidation time (min)	25.3	20.1	10.1



Direct Shear Test for Soils Under Drained Conditions*

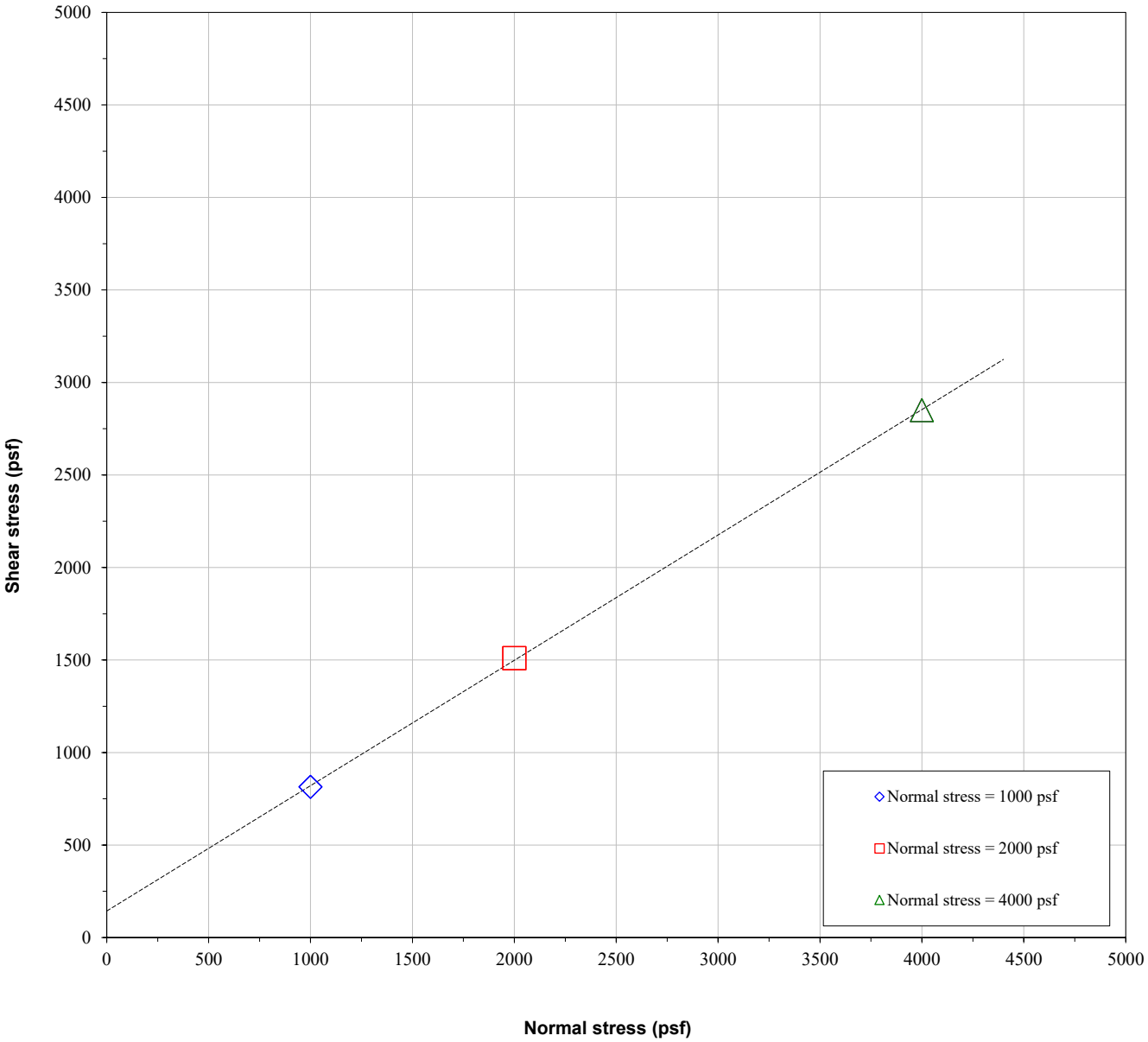
After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** TP-02

No: 23072 (23-1725) **Depth:** 6-7 ft

f (deg)	34
c (psf)	144



Direct Shear Test for Soils Under Drained Conditions*

After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** TP-02

No: 23072 (23-1725) **Depth:** 6-7 ft

Normal stress = 1000 psf			Normal stress = 2000 psf			Normal stress = 4000 psf		
Lateral Deflection (in)	Shear Stress (psf)	Axial Deflection (in)	Lateral Deflection (in)	Shear Stress (psf)	Axial Deflection (in)	Lateral Deflection (in)	Shear Stress (psf)	Axial Deflection (in)
0.000	71	0.000	0.000	114	0.000	0.000	91	0.000
0.006	166	0.002	0.006	226	0.003	0.006	361	0.003
0.011	263	0.003	0.011	373	0.004	0.011	625	0.004
0.017	354	0.005	0.017	494	0.005	0.017	855	0.006
0.023	418	0.006	0.023	583	0.007	0.023	1049	0.007
0.028	465	0.007	0.028	663	0.008	0.028	1209	0.009
0.034	497	0.009	0.034	727	0.010	0.034	1340	0.010
0.040	518	0.010	0.040	786	0.011	0.040	1445	0.012
0.046	536	0.010	0.046	835	0.012	0.046	1533	0.013
0.051	551	0.011	0.051	879	0.013	0.051	1617	0.014
0.057	564	0.012	0.057	918	0.015	0.057	1687	0.015
0.063	578	0.013	0.063	954	0.016	0.063	1757	0.016
0.068	592	0.014	0.068	990	0.017	0.068	1829	0.017
0.074	605	0.014	0.074	1023	0.017	0.074	1890	0.018
0.080	615	0.015	0.080	1052	0.018	0.080	1950	0.019
0.086	626	0.016	0.086	1083	0.019	0.086	2006	0.019
0.091	636	0.016	0.091	1110	0.020	0.091	2063	0.020
0.097	646	0.017	0.097	1138	0.021	0.097	2113	0.021
0.103	656	0.018	0.103	1162	0.022	0.103	2162	0.022
0.108	664	0.018	0.108	1188	0.023	0.108	2210	0.023
0.114	673	0.018	0.114	1206	0.023	0.114	2251	0.023
0.120	679	0.019	0.120	1222	0.023	0.120	2291	0.024
0.125	686	0.019	0.125	1242	0.024	0.125	2323	0.025
0.131	696	0.020	0.131	1258	0.024	0.131	2358	0.025
0.137	705	0.021	0.137	1274	0.024	0.137	2389	0.026
0.143	714	0.021	0.143	1284	0.025	0.143	2422	0.027
0.148	722	0.021	0.148	1301	0.025	0.148	2458	0.027
0.154	729	0.022	0.154	1314	0.026	0.154	2486	0.027
0.160	736	0.023	0.160	1326	0.027	0.160	2514	0.028
0.165	744	0.023	0.165	1343	0.027	0.165	2535	0.028
0.171	750	0.023	0.171	1359	0.028	0.171	2561	0.029
0.177	751	0.024	0.177	1378	0.028	0.177	2581	0.030
0.182	757	0.024	0.182	1394	0.028	0.182	2605	0.030
0.188	758	0.025	0.188	1415	0.029	0.188	2630	0.030
0.194	766	0.025	0.194	1432	0.029	0.194	2653	0.031
0.200	760	0.025	0.200	1447	0.030	0.200	2681	0.032
0.205	774	0.025	0.205	1463	0.030	0.205	2700	0.032
0.211	781	0.025	0.211	1476	0.031	0.211	2727	0.032
0.217	783	0.026	0.217	1484	0.031	0.217	2746	0.033
0.222	790	0.026	0.222	1492	0.032	0.222	2763	0.033
0.228	797	0.027	0.228	1498	0.032	0.228	2786	0.034
0.234	802	0.027	0.234	1499	0.032	0.234	2805	0.034
0.240	807	0.027	0.240	1495	0.033	0.239	2820	0.035
0.245	813	0.027	0.245	1504	0.033	0.245	2836	0.035
0.250	814	0.028	0.250	1512	0.033	0.250	2851	0.036

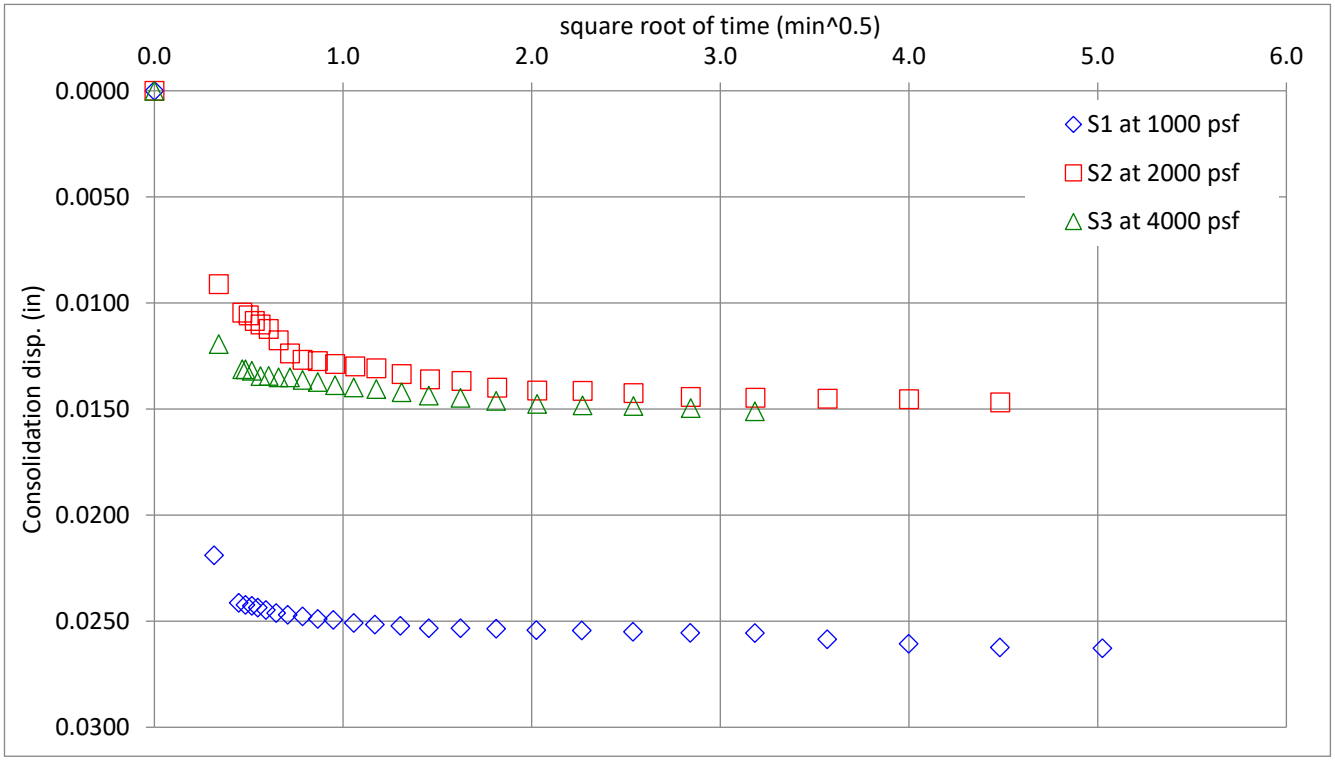
Direct Shear Test for Soils Under Drained Conditions*

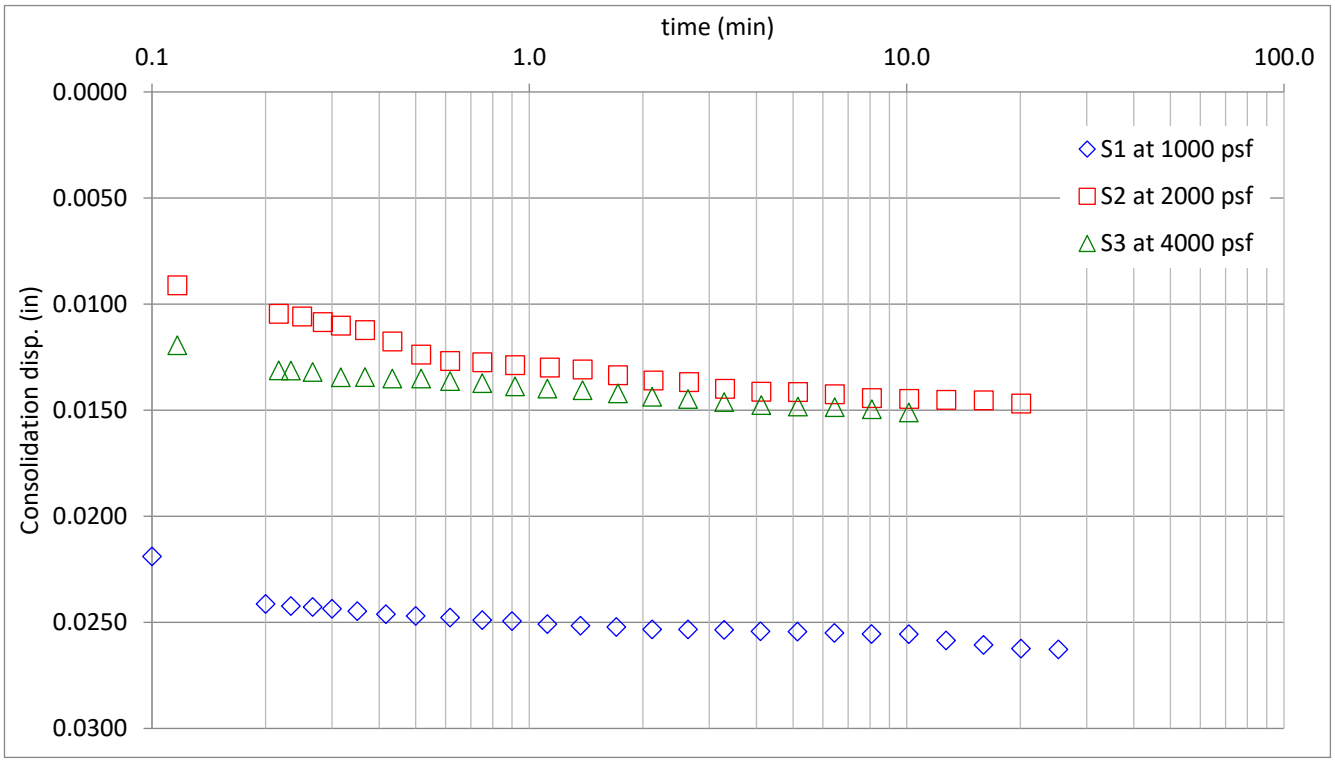
After ASTM D3080

GERHART COLE

Project: Bear Development Snow King **TH/TP/Sample:** TP-02

No: 23072 (23-1725) **Depth:** 6-7 ft





Direct Shear of Soils Under Consolidated Drained Conditions, ASTM D3080

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson # 21-222-02
Jackson, Wyoming

Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

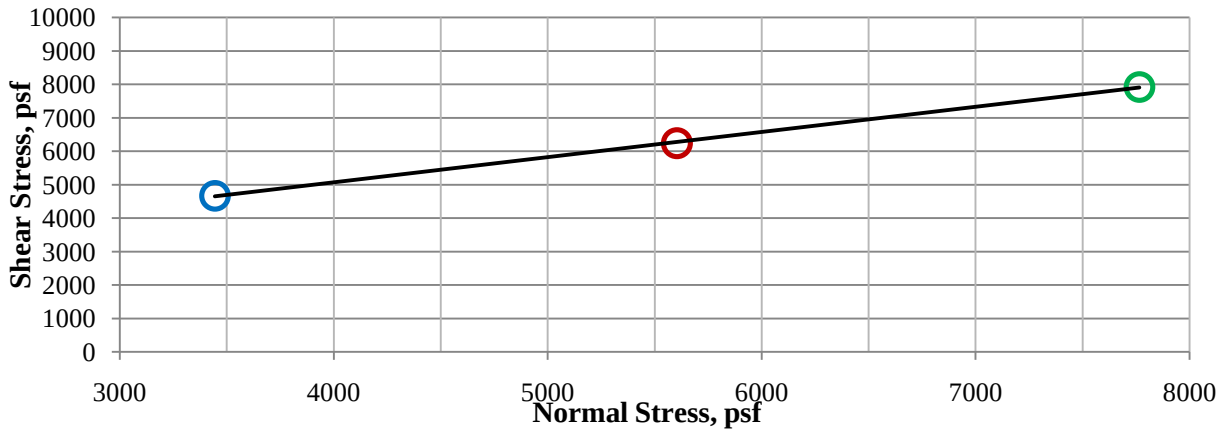
Sample Data:

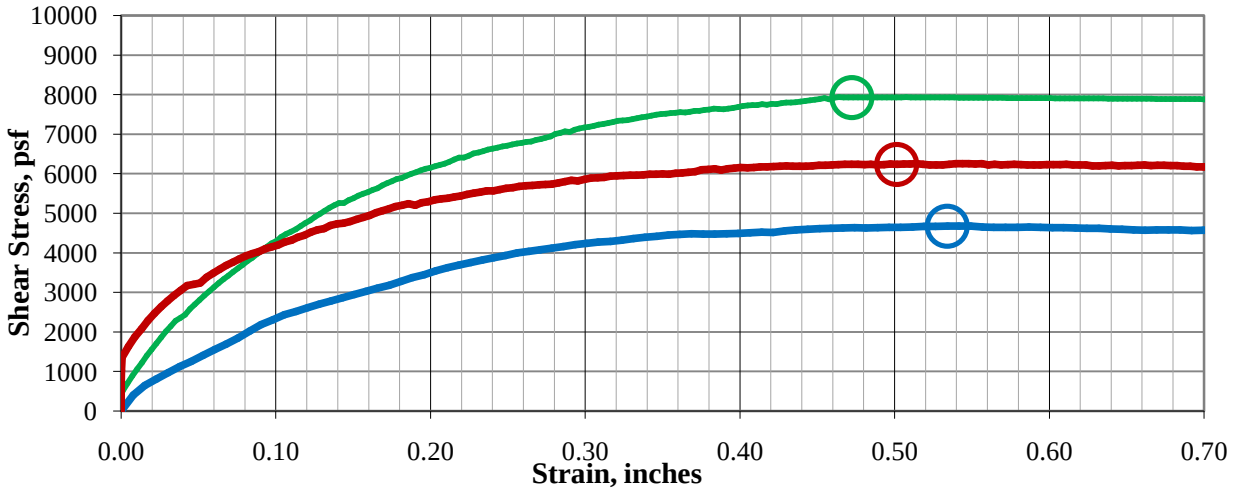
Boring: BH6-11 **Depth:** 52.5'-53' **Density:** 137.7 pcf moist

Description: Sandy Lean Clay, CL

Normal Stress, psf	Initial Moisture,%	Final Moisture,%	Consol + Collapse,%	Final Wet Density, pcf	Final Dry Density, pcf	Max Shear Stress, psf	Failure Strain,%
3444	14.4	16.2	2.2	143.1	123.1	**4673**	**22.1**
5604	14.4	15.6	3.0	143.5	124.1	**6234**	**20.7**
7764	14.4	14.7	3.8	143.6	125.2	**7924**	**19.5**

Peak Angle, ϕ° **37.0** Peak Cohesion, C, psf **2059** Strain rate, %/hour **4.1**





Remarks: Friction angle and cohesion in practice are sensitive to several other material properties, and conditions, in the field and lab. No individual lab property of a material can substitute for overall best practices in geotechnical design, construction, and field testing by qualified professionals.

2511 Holman Avenue
P. O. Box 80190
Billings, Montana 59108-0190
p: 406.652.3930; f: 406.652.3944
www.skgeotechnical.com

Unconfined Compressive Strength of Cohesive Soil

ASTM D 2166

Date: July 26, 2021

Project: **08-2506L Laboratory Testing**
Lot 58 Grand View Lodges
Nelson #21-222-02
Jackson, Wyoming

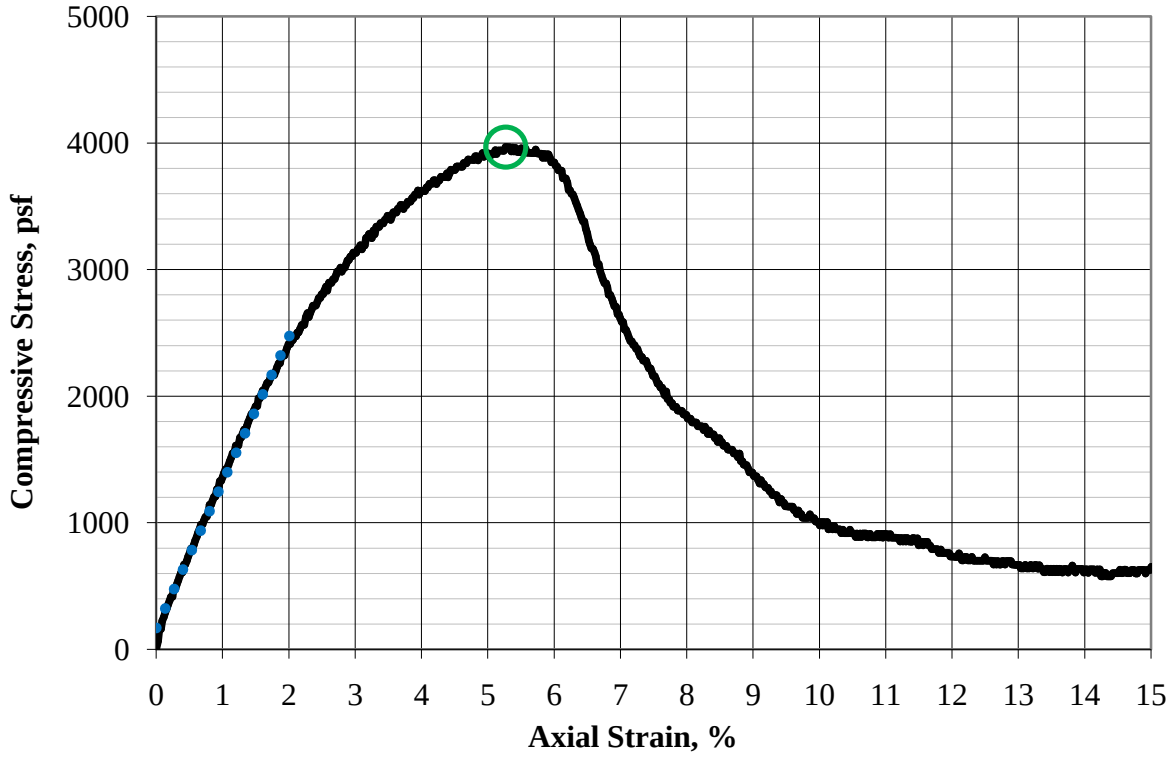
Client: Mr. Phil Gyr, PE
Nelson Engineering
pgyr@nelsonengineering.net

Sample Data:

Boring: BH6-4B
Depth: 22.5' - 23'
Description: Lean Clay, CL

Specimen Properties:	
Average Diameter, in.	2.395
Average Height, in.	5.186
Height/Diameter (L/D)	2.17
Moisture, %	18.6
Wet density, pcf	128.5
Dry density, pcf	108.3

Undrained Unconfined Strength Properties:	
Compressive strength, psf	3968
Shear strength, psf	1984
Axial elastic modulus, psi	798
Failure strain, %	5.3
Strain rate, 0.5 - 2% per minute	1.2
Temperature, °F	72.0



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USCS CLASSIFICATION

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Sample ID: BH5 @ 23'-28' Depth (ft): 23'-28'

Unified Soils Classification
SC (Clayey Sand)

Gravel	7%
Sand	55%
Fines	38%

Liquid Limit:	29
Plastic Limit:	4
Plasticity Index:	25

In-Situ Moisture Content	N/A

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.1	110.1	0.0	0%	100%
1"	25	110.1	110.1	0.0	0%	100%
3/4"	18.75	110.1	110.1	0.0	0%	100%
#4	4.75	110.1	147.1	37.0	7%	93%
#10	2.00	110.1	134.6	24.5	11%	89%
#40	0.425	110.1	145.4	35.3	18%	82%
#200	0.075	110.1	343.2	233.1	62%	38%
Pan	0	110.1	316.3	206.2	100%	0%
		Total Weight of Sample (g)		536.1		

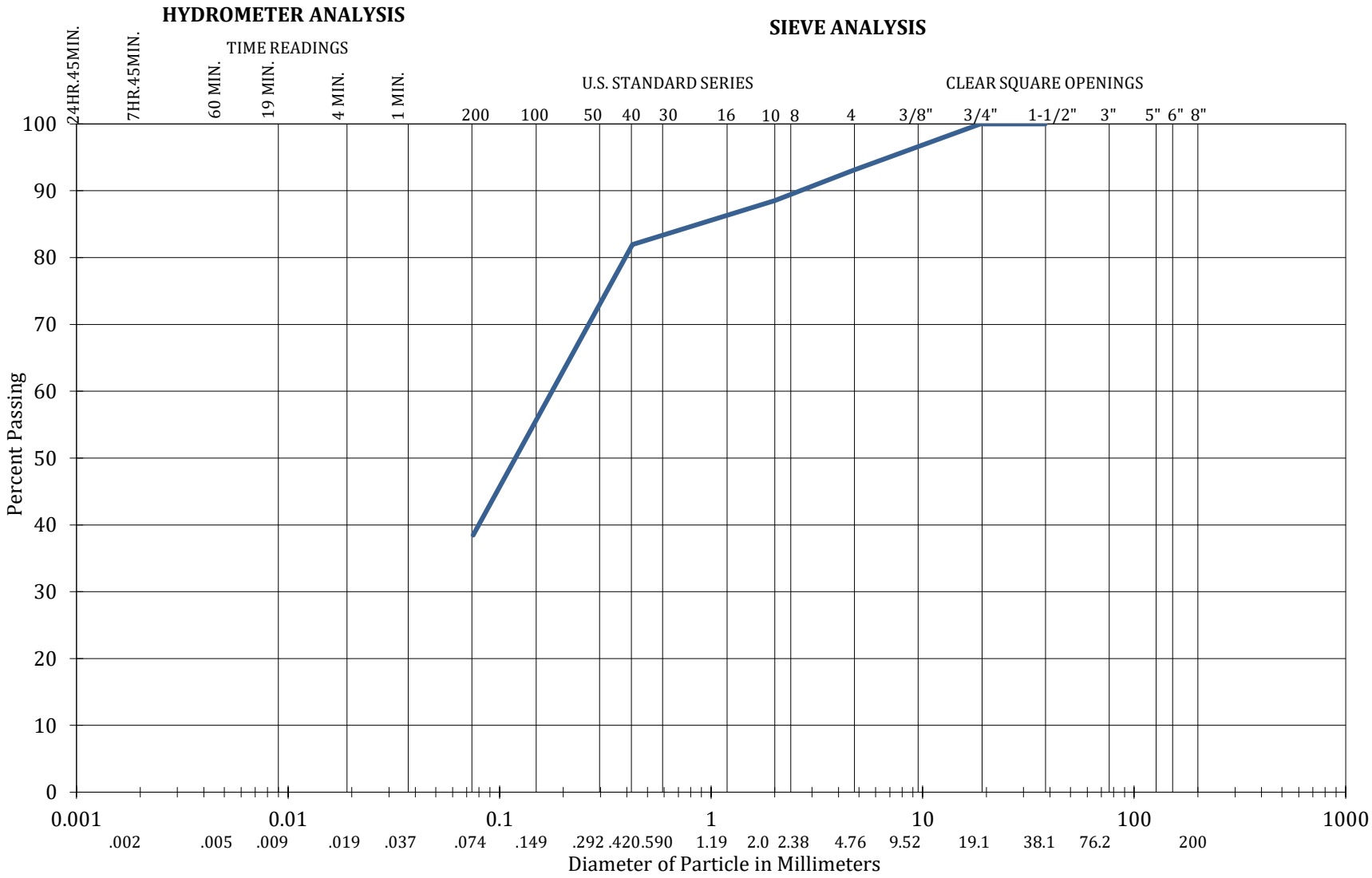
Moisture Content	
Wet Wt + Tare (g)	-
Dry Wt. + Tare (g)	-
Wt of Water (g)	-
Tare Wt. (g)	-
Dry Wt. (g)	-
Moisture Content	-
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	536.1
Post Wash Dry (g)	329.9
Tare Wt. (g)	109.9
Wt.Of Minus #200 =	206.2

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Tan Clayey Sand with Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	1/8/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH5 @ 23'-28'

Lot 58 Grand View Lodges

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USCS CLASSIFICATION

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Sample ID: BH5 @ 37'-41' Depth (ft): 37'-41'

Unified Soils Classification
SC (Clayey Sand)

Gravel	7%
Sand	68%
Fines	25%

Liquid Limit:	28
Plastic Limit:	12
Plasticity Index:	16

In-Situ Moisture Content	N/A

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	110.1	110.1	0.0	0%	100%
1"	25	110.1	110.1	0.0	0%	100%
3/4"	18.75	110.1	110.1	0.0	0%	100%
#4	4.75	110.1	163.8	53.7	7%	93%
#10	2.00	110.1	139.7	29.6	11%	89%
#40	0.425	110.1	196.8	86.7	23%	77%
#200	0.075	110.1	502.4	392.3	75%	25%
Pan	0	110.1	298.2	188.1	100%	0%
		Total Weight of Sample (g)		750.4		

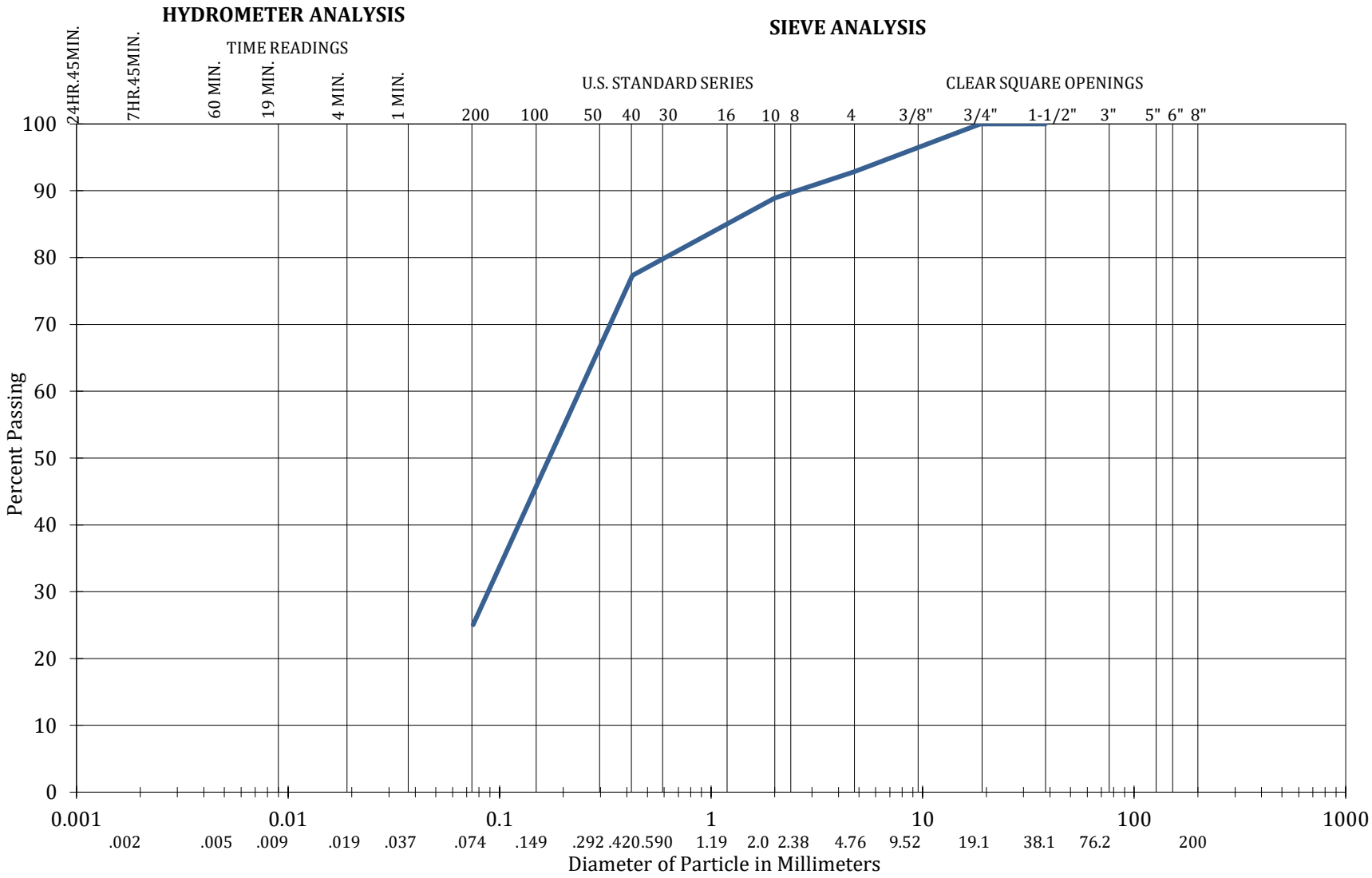
Moisture Content	
Wet Wt + Tare (g)	-
Dry Wt. + Tare (g)	-
Wt of Water (g)	-
Tare Wt. (g)	-
Dry Wt. (g)	-
Moisture Content	-
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	750.4
Post Wash Dry (g)	562.3
Tare Wt. (g)	114.3
Wt.Of Minus #200 =	188.1

Project:	Lot 58 Grand View Lodges
Job Number	02-130-12
Visual ID:	Gray Clayey Sand with Gravel

Sampled By:	PG
Date:	
Tested By:	AP
Date:	1/8/2005

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USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH5 @ 37'-41'

Lot 58 Grand View Lodges

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Sample ID: BH6-4B Depth (ft): 22'-23'

Unified Soils Classification
Lean Clay, CL

Gravel	**0%**
Sand	**12%**
Fines	**87%**

Liquid Limit:	**33**
Plastic Limit:	**15**
Plasticity Index:	**18**

In-Situ Moisture Content	**17.5%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	292.2	292.2	0.0	0%	100%
1"	25	292.2	292.2	0.0	0%	100%
3/4"	18.75	292.2	292.2	0.0	0%	100%
3/8"	9.5	292.2	292.2	0.0	0%	100%
#4	4.75	292.2	293.3	1.0	0%	100%
#10	2.00	292.2	293.3	1.1	1%	99%
#40	0.425	292.2	304.0	11.8	5%	95%
#100	0.15	292.2	301.3	9.1	9%	91%
#200	0.075	292.2	303.4	11.2	13%	87%
Pan	0	292.2	527.4	235.2	100%	0%
		Total Weight of Sample (g)		**269.3**		

Moisture Content	
Wet Wt + Tare (g)	940.7
Dry Wt. + Tare (g)	825.9
Wt of Water (g)	114.8
Tare Wt. (g)	170.9
Dry Wt. (g)	654.9
Moisture Content	17.5%
Wash	
Wet Wt. + Tare (g)	940.7
Pre Wash Dry (g)	269.3
Post Wash Dry (g)	34.2
Tare Wt. (g)	292.2
Wt.Of Minus #200 =	235.2

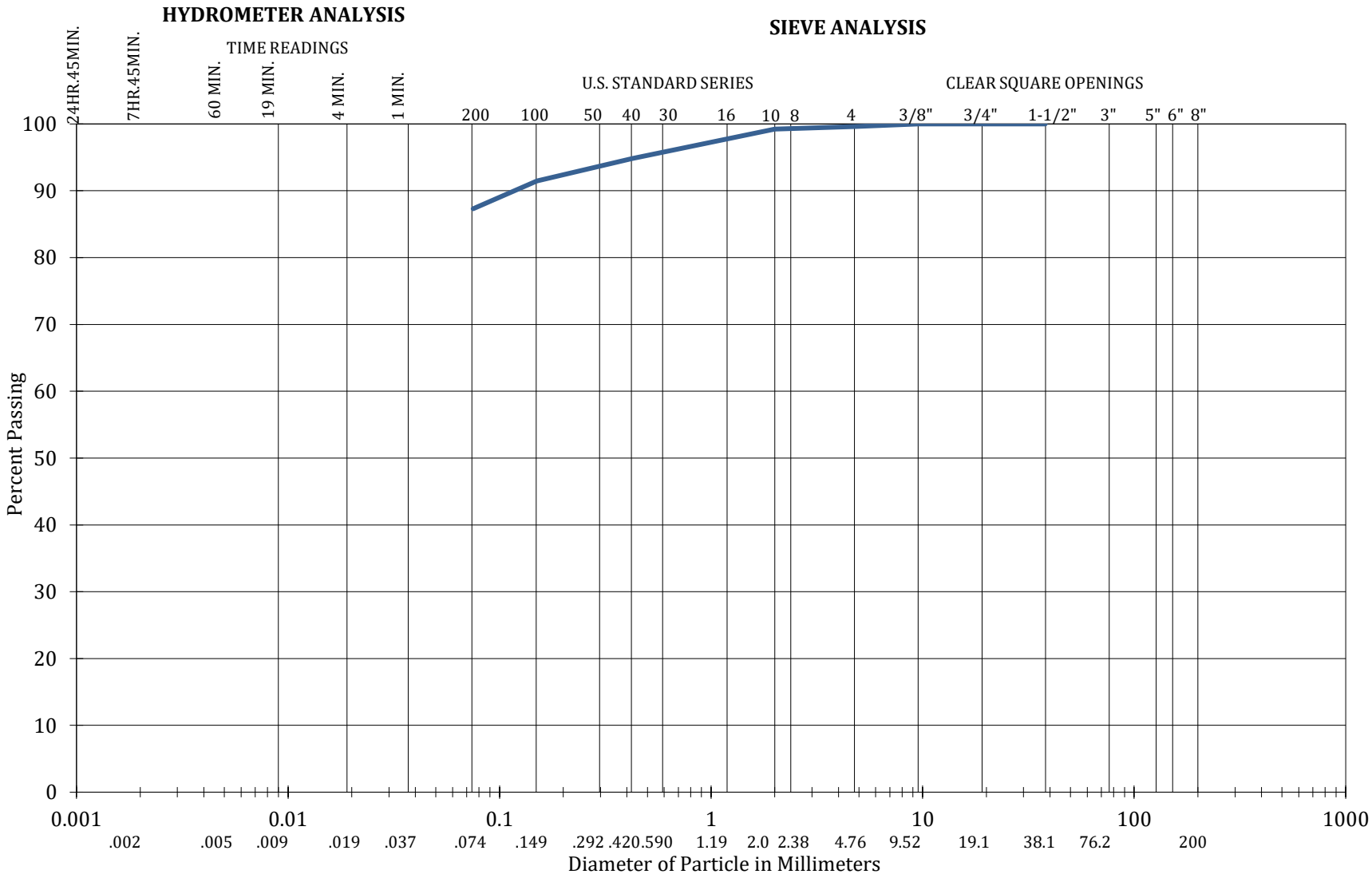
Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Olive Green Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/2/2021

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CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH6-4B

Lot 58 Grand View Lodges

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Sample ID: BH6-11 Depth (ft): 52'-53'

Unified Soils Classification
Sandy Lean Clay, CL

Gravel	**9%**
Sand	**25%**
Fines	**66%**

Liquid Limit:	**25**
Plastic Limit:	**11**
Plasticity Index:	**14**

In-Situ Moisture Content	**16.5%**

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1.5"	38	171.0	171.0	0.0	0%	100%
1"	25	171.0	171.0	0.0	0%	100%
3/4"	18.75	171.0	171.0	0.0	0%	100%
3/8"	9.5	171.0	205.5	34.5	5%	95%
#4	4.75	171.0	206.3	35.3	9%	91%
#10	2.00	171.0	231.4	60.4	17%	83%
#40	0.425	171.0	226.7	55.7	25%	75%
#100	0.15	171.0	200.2	29.2	29%	71%
#200	0.075	171.0	213.6	42.7	34%	66%
Pan	0	171.0	661.8	490.9	100%	0%
		Total Weight of Sample (g)		**748.7**		

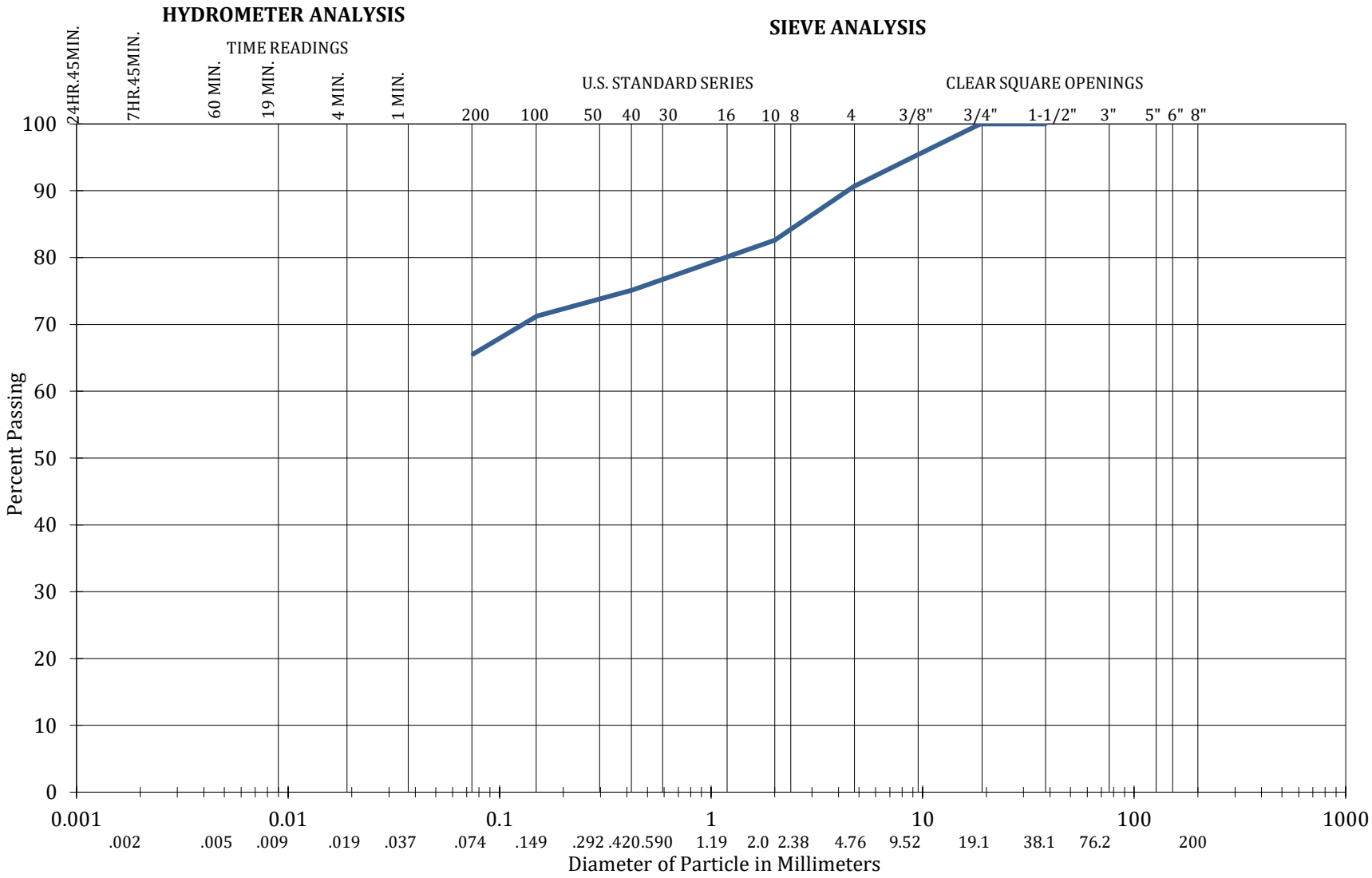
Moisture Content	
Wet Wt + Tare (g)	851.2
Dry Wt. + Tare (g)	754.8
Wt of Water (g)	96.4
Tare Wt. (g)	170.8
Dry Wt. (g)	584.0
Moisture Content	16.5%
Wash	
Wet Wt. + Tare (g)	851.2
Pre Wash Dry (g)	748.7
Post Wash Dry (g)	257.8
Tare Wt. (g)	170.4
Wt.Of Minus #200 =	490.9

Project:	Lot 58 Grand View Lodges
Job Number	21-222-02
Visual ID:	Brown Sandy Lean Clay

Sampled By:	AP
Date:	6/24/2021
Tested By:	AE
Date:	7/7/2021

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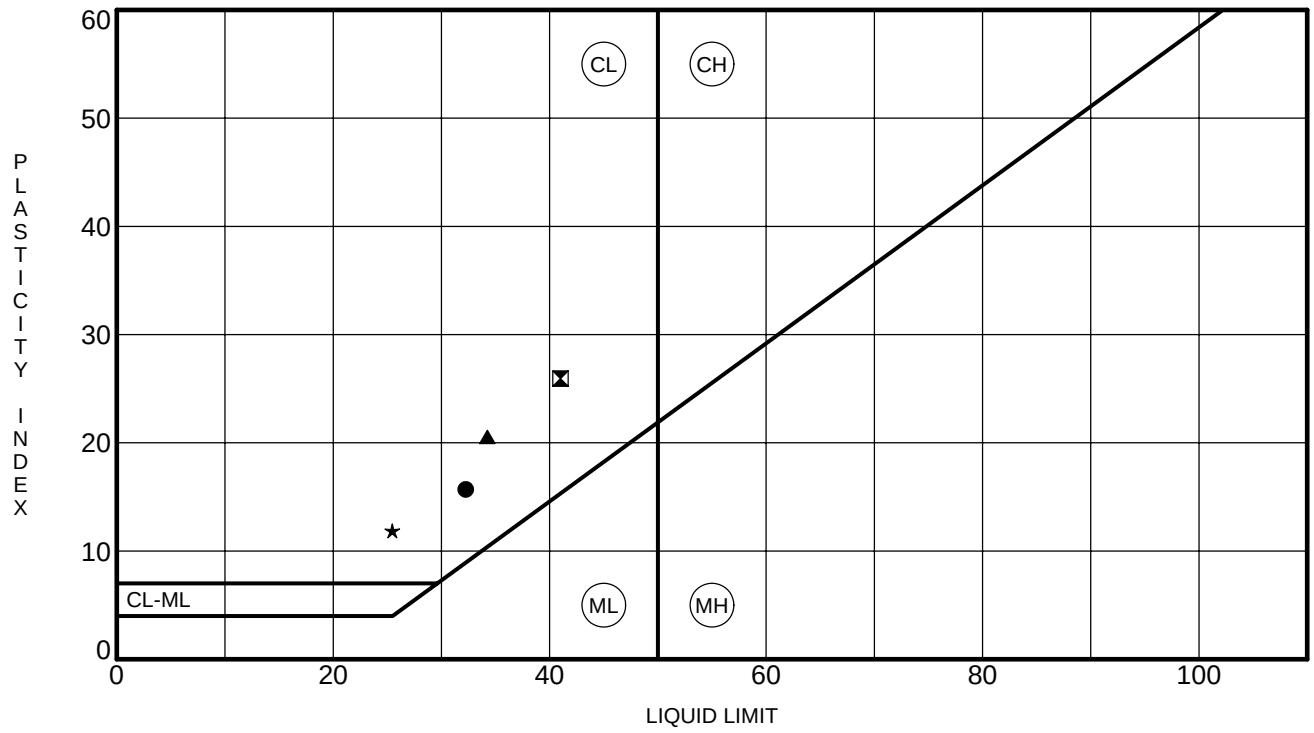
USCS CLASSIFICATION SIEVE CHART



CLAY (plastic) TO SILT (non-plastic)	SAND			GRAVEL		COBBLES
	FINE	MEDIUM	COARSE	FINE	COARSE	

BH6-11

Lot 58 Grand View Lodges



	Specimen Identification		LL	PL	PI	Fines	Classification
●	**TP-1**	**9.0**	**32**	**17**	**15**		
⊠	**TP-1**	**10.0**	**41**	**15**	**26**		
▲	**TP-1**	**25.0**	**34**	**14**	**20**		
★	**TP-1**	**27.5**	**25**	**14**	**11**		

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ATTERBERG LIMITS' RESULTS

Project: TOJ - Snow King Water Tank

Location: Jackson, Wyoming

Number:

JORGENSEN
GEOTECHNICAL, LLC

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APPENDIX D

Soil-Engineering Parameters

Engineering parameters for site soils were evaluated based on a variety of methods, including:

- direct laboratory testing (shear strength and consolidation),
- correlations with index tests,
- empirical relationships between SPT N-values and shear strength, and
- visual classification and empirical estimates.

Due to the chaotic and random nature of the soils (i.e., mixture of fine-grained and coarse-grained soils), collecting relatively undisturbed Shelby tube samples of the landslide debris during the drilling effort to perform shear tests and consolidation tests on was difficult. Therefore, very limited soil parameters for soil unit weight, consolidation values, and shear strength values were directly determined from their respective tests. Most of the samples that underwent lab testing were disturbed samples collected during SPT sampling, sonic drilling and test pit excavation, of which their results were used to estimate the soil parameters based on correlations. We submitted three relatively undisturbed Shelby tube samples to undergo consolidation and shear strength testing for the loess encountered at the site.

Since the landslide deposits are understood to cover a greater area than just Lot 57, we also included applicable soil parameters from our site exploration on the nearby Lots 53 And 58, soil parameters from Nelson Engineering for Lots 53 and 58, and soil parameters for a nearby project provided by Womack & Associates, Inc.

A discussion regarding the selection of soils parameters is found below.

Soil Unit Weight

Three consolidation tests were performed which produced dry unit weights, while two shear tests were performed which produced dry unit weights. These direct unit weight measurements, SPT blow counts, and observations made in the open test pits were used to estimate the in-situ unit weight of the soils. Estimated unit weights are presented below in Table D-1.

Table D-1: Estimated Soil Unit Weight Values

Soil Layer	Average Unit Weight (Pounds per cubic foot)
CL and ML – Lean Clay (Loess)	115
GC-GM,GC and SC– Clayey Gravel, Silty Clayey Gravel, Clayey Sand (Landslide Debris)	125

Consolidation Parameters

Coefficients of consolidation, C_c, were calculated based on the direct consolidated test results, as well as correlation methods recommended by Skempton (1944), Nagaraj and Murthy (1985), Wroth and Wood (1978), and Kulhawy and Mayne (1990). These calculation methods use index properties such as the Liquid Limit and the Plasticity Index to estimate the coefficients of consolidation. The results presented below are the average of all C_c, values calculated from the direct results and correlation calculations.

Table D-2: Estimated Coefficients of Consolidation

Soil Layer	Coefficient of Consolidation
CL - Loess	0.22
ML-Loess	0.17
GC – Landslide Debris	0.13
GM – Landslide Debris	-
SC – Landslide Debris	0.22

Strength Parameters

Internal Friction Angle (phi)

Strength parameters used in the slope stability model were selected by examining direct shear results, calculations based on SPT blow count values, as recommended by Hatanaka and Uchida (1996) and Schmertmann (1975), and calculated based on index properties as recommended by Duncan (1989). Minimum, maximum, and average internal friction angles (phi) are summarized in the table below.

Table D-3: Estimated Internal Friction Values (Degrees)

	Minimum	Maximum	Average	Standard Deviation	Selected phi
CL – Loess	19	59.8	40.4	9.6	35
ML – Loess	34	34	34	0	35
GC – Landslide Debris	20.9	60.4	47.9	6.3	40
GC-GM – Landslide Debris	26	59	44.3	9.4	40
SC – Landslide Debris	16	35	27.2	6.4	25

As summarized in the table above, the minimum and maximum calculated internal friction angles for a single soil layer sometimes varied by over 20-degrees. Therefore, internal friction angles were selected by reviewing all calculated values, as well as reviewing suggested values in Chapter 9 of the Pit Slope Manual (1982).

Soils that have undergone movement are assumed to be in a residual strength state; i.e., weaker than the strength of the soils prior to the movement. Though the published geologic maps and our observations in the field classified the origin of the soils as landslide debris, no direct shear zones were observed and no signs of previous shearing (i.e., slickensides) were observed. Additionally, loess, typically formed from windblown glacial silt, was observed overlying the landslide deposit, therefore it is assumed the landslide occurred prior to or during the Pinedale Glaciation approximately 10 to 30 thousand years ago. If the soils observed in the boreholes and test pits were once in a residual state following failure, it is assumed since their mobilization in the failure event, they have been naturally consolidating and therefore regaining strength. Therefore, residual shear strengths were not used for the slope stability model and peak shear strengths were used.

Cohesion

Cohesion was added to the material models in the slope stability model to avoid selecting slip surfaces representing the “infinite slope” solution. Cohesion values used in the slope stability models can be found in Appendix F.

Compression Index (C_c) Calculation Spreadsheet

Project	BH	Depth	LL	PL	PI	Consol Results	Compression Index (Cc)				Average	Median	Std Dev	Classification
Bear Development - Snow King Loop Lot 57	JG-05	8.5'-11'	39	14	25		0.26	0.24	0.34	0.34	0.30	0.30	0.05	CL
Bear Development - Snow King Loop Lot 57	JG-05	22'-25'	26	15	11		0.14	0.16	0.15	0.15	0.15	0.15	0.01	GC
Bear Development - Snow King Loop Lot 57	JG-05	35'-37'	NP	NP	NP		-	-	-	-	-	-	-	GM
Bear Development - Snow King Loop Lot 57	JG-06	3.5'-5'	38	19	19		0.25	0.24	0.26	0.26	0.25	0.25	0.01	CL
Bear Development - Snow King Loop Lot 57	JG-06	12.5'-14'	32	13	19		0.20	0.20	0.26	0.26	0.23	0.23	0.03	CL
Bear Development - Snow King Loop Lot 57	JG-06	20'-22'	18	14	4		0.07	0.11	0.05	0.05	0.07	0.06	0.03	GC
Bear Development - Snow King Loop Lot 57	JG-06	32.5'-35'	28	15	13		0.16	0.18	0.18	0.18	0.17	0.18	0.01	CL
Bear Development - Snow King Loop Lot 57	JG-07	5'-6'	31	20	11	0.17	0.19	0.19	0.15	0.15	0.17	0.17	0.03	CL
Bear Development - Snow King Loop Lot 57	JG-07	9'-10'	33	18	15	0.28	0.21	0.21	0.20	0.20	0.20	0.20	0.00	CL
Bear Development - Snow King Loop Lot 57	JG-07	17.5'-18'	29	15	14		0.17	0.18	0.19	0.19	0.18	0.19	0.01	CL
Bear Development - Snow King Loop Lot 57	JG-08	10'-12'	NP	NP	NP		-	-	-	-	-	-	-	GM
Bear Development - Snow King Loop Lot 57	JG-08	12.5'-14'	32	15	17		0.20	0.20	0.23	0.23	0.21	0.22	0.02	CL
Bear Development - Snow King Loop Lot 57	JG-09	7.5'-9'	17	16	1		0.06	0.11	0.01	0.01	0.05	0.04	0.04	GC
Bear Development - Snow King Loop Lot 57	JG-09	15'-17'	NP	NP	NP		-	-	-	-	-	-	-	GM
Bear Development - Snow King Loop Lot 57	TP-02	6'-7'	NP	NP	NP	0.17	-	-	-	-	-	-	-	ML
Bear Development - Snow King Loop Lots 53 and 58	JG-01	18-19	31	16	15		0.19	0.19	0.20	0.20	0.20	0.20	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	27-29	28	16	12		0.16	0.18	0.16	0.16	0.17	0.16	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	54.5-57	33	15	18		0.21	0.21	0.24	0.24	0.23	0.23	0.02	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	67-69	26	16	10		0.14	0.16	0.14	0.14	0.14	0.14	0.01	CL
Bear Development - Snow King Loop Lots 53 and 58	JG-01	72.5-75	38	17	21		0.25	0.24	0.28	0.28	0.26	0.27	0.02	CL
Nelson 53&58	BH5	23'-28'	29	4	25		0.17	0.18	0.34	0.34	0.26	0.26	0.09	SC
Nelson 53&58	BH5	37'-41'	28	12	16		0.16	0.18	0.22	0.22	0.19	0.20	0.03	SC
Nelson 53&58	BH6	22'-23'	33	15	18		0.21	0.21	0.24	0.24	0.23	0.23	0.02	CL
Nelson 53&58	BH6	52'-53'	25	11	14		0.14	0.16	0.19	0.19	0.17	0.17	0.03	CL
Womack Water Tank	TP-1	9	32	17	15		0.20	0.20	0.20	0.20	0.20	0.20	0.00	CL
Womack Water Tank	TP-1	10	41	15	26		0.28	0.26	0.35	0.35	0.31	0.32	0.05	CL
Womack Water Tank	TP-1	25	34	14	20		0.22	0.21	0.27	0.27	0.24	0.24	0.03	CL
Womack Water Tank	TP-1	27.5	25	14	11		0.14	0.16	0.15	0.15	0.15	0.15	0.01	CL

Phi Calculation Spreadsheet

Shear Strength Correlation Summary - Peak Friction Angle

					Hatanaka and Uchida (1996)	Schmertmann (1975)					Duncan, 1989			
Project	BH	Sample	Depth (ft)	(N1)60	Peak Phi (N160)	Peak Phi (N160)	Phi (Direct Shear)	LL	PI	Overburden	Peak Phi	lassificatio	Unit Weight (pcf)	Cohesion
Bear Dev - 57	JG-05	D4	8.5	22	41	47		39	25	2371	19	CL	120	0
Bear Dev - 57	JG-05	D12	22	-	-	-		26	11	-	26	GC-GM		0
Bear Dev - 57	JG-05	D14	28.5	76	59	58		-	-	4871		GC-GM	125	0
Bear Dev - 57	JG-05	D19	36.5	19	40	42		-	-	5871		GC-GM	125	0
Bear Dev - 57	JG-06	D2	3.5	-				38	19	-	22	CL		0
Bear Dev - 57	JG-06	D3	6.5	31	45	52		-	-	2421		CL	115	0
Bear Dev - 57	JG-06	D6	11.5	12	36	39		-	-	2996		CL	115	0
Bear Dev - 57	JG-06	D8	12.5	-				32	19	-	22	CL		0
Bear Dev - 57	JG-06	D9	16.5	26	43	48		-	-	3571		CL	115	0
Bear Dev - 57	JG-06	D12	20	-				18	4	-	31	GC		0
Bear Dev - 57	JG-06	D13	21.5	26	43	47		-	-	4171		GC	120	0
Bear Dev - 57	JG-06	D15	26.5	66	56	57		-	-	4796		GC	125	0
Bear Dev - 57	JG-06	D18	31.5	54	53	55		-	-	5421		GC	125	0
Bear Dev - 57	JG-06	D19	32.5	-				28	13	-	24			0
Bear Dev - 57	JG-06	D21	36.5	18	39	41		-	-	6021		CL	120	0
Bear Dev - 57	JG-07	D-1	2.5	2	26	21		-	-	2446		GC	110	0
Bear Dev - 57	JG-07	D-2	5	5	30	30		31	11	2721	26	CL	110	0
Bear Dev - 57	JG-07	D-3	7.5	3	28	25		-	-	2996		CL	110	0
Bear Dev - 57	JG-07	D-4	10	32	45	51	30	33	15	3296	23	CL	120	379
Bear Dev - 57	JG-07	D-5	12.5	36	47	52		-	-	3596		CL	120	0
Bear Dev - 57	JG-07	D-6	15	23	41	46		-	-	3896		CL	120	0
Bear Dev - 57	JG-07	D-7	17.5	82	60	59		29	14	4140	23	GC	125	0
Bear Dev - 57	JG-07	D-8	19.5	31	45	49		-	-	4459		GC	125	0
Bear Dev - 57	JG-08	D-1	2.5	15	37	42		-	-	2589		CL	110	0
Bear Dev - 57	JG-08	D-2	5	25	42	48		-	-	2876		GC-GM	115	0
Bear Dev - 57	JG-08	D-3	7.5	23	41	46		-	-	3164		GC-GM	115	0
Bear Dev - 57	JG-08	D-4	10	31	45	50		-	-	3451		GC-GM	115	0
Bear Dev - 57	JG-08	D-5	12.5	21	41	45		32	17	3739	22	CL	115	0
Bear Dev - 57	JG-08	D-6	15	23	42	46		-	-	4026		CL	115	0
Bear Dev - 57	JG-08	D-7	17.5	23	42	46		-	-	4314		CL	115	0
Bear Dev - 57	JG-08	D-8	19	79	60	59		-	-	4423		CL	125	0
Bear Dev - 57	JG-09	D-1	2.5	9	34	36		-	-	2677		GC	110	0
Bear Dev - 57	JG-09	D-2	5	21	41	46		-	-	2964		GC	115	0
Bear Dev - 57	JG-09	D-3	7.5	24	42	47		17	1	3252	35	GC	115	0
Bear Dev - 57	JG-09	D-4	10	28	44	49		-	-	3539		GC	115	0
Bear Dev - 57	JG-09	D-5	12.5	31	45	50		-	-	3827		GC	115	0
Bear Dev - 57	JG-09	D-6	15	34	46	51		-	-	4139		GC	125	0
Bear Dev - 57	JG-09	D-7	17.5	50	52	55		-	-	4443		GC	125	0
Bear Dev - 57	JG-09	D-8	19	78	60	59		-	-	4558		GC	125	0
Bear Dev - 57	TP-02			-	-	-	34	-	-	-		ML	115	144
Bear Dev - 538.58	JG-01	D-8	18	--	--	--		31	15		34	CL	115	0
Bear Dev - 538.58	JG-01	D-12	27	38	47	53		28	12		35	CL	115	0
Bear Dev - 538.58	JG-01	D-17	37	94	63	60				4300		GC	120	0
Bear Dev - 538.58	JG-01	D-26	47	84	61	59						GC	120	0
Bear Dev - 538.58	JG-01	D-27	54.5	--	-	-		33	18		32	CL	115	0
Bear Dev - 538.58	JG-01	D-31	67	56	53	54						CL	115	0
Bear Dev - 538.58	JG-01	D-32	67	--	-	-		26	10		36	CL	115	0
Bear Dev - 538.58	JG-01	D-36	72.5	--	-	-		38	21		31	CL	115	0
Bear Dev - 538.58	JG-01	D-39	80	35	47	48						GC	120	0
Nelson 538.58	BH5	-	23	-	-	-		29	25		35	SC	115	0
Nelson 538.58	BH5	-	37	-	-	-		28	16		30	SC	115	0
Nelson 538.58	BH6	4	22	15	32	-		33	18		32	CL	108.3	0
Nelson 538.58	BH6	11	52	-	-	-	37	25	14		30	CL	115	0
Nelson 538.58	BH4	1	9	79	60	-						GC	120	0
Nelson 538.58	BH4	2	14	50	52	-						GC	125	0
Nelson 538.58	BH4	3	38	92	62	-						ML	110	0
Womack Water Tank	TP-1	-	9		-	-		32	15		34	CL	110	0
Womack Water Tank	TP-1	-	10		-	-		41	26		30	CL	110	0
Womack Water Tank	TP-1	-	25		-	-		34	20		31	CL	110	0
Womack Water Tank	TP-1	-	27.5		-	-		25	11		36	CL	110	0

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APPENDIX E

Calculations

Settlement Methodology

The settlement calculations assume the soil layer of concern comprises 100% compressible soil by volume. Though, some soils at the site only partially comprise the fine-grained soils by mass, as described in the borehole logs. Based on lab testing and visual classification, the clayey gravels and silty gravels contain a maximum of 40% fines by mass. To convert the assumed mass to volume, we have used a scaling factor of 1.25, resulting in an assumed percent fines by volume of 50%.

Because the settlement is anticipated to only occur in the potentially compressible, fine-grained soils, the total settlement calculation was reduced by 50%.

Lateral Pressures Methodology

Seismic coefficients were calculated based on recommendation from NCHRP Report 611 "Seismic Analysis and Desing of Retaining Walls, Buried Structures, Slopes and Embankments" and FHWA NHI Course No 130094 LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations, as described below and illustrated in the equations. For our calculation of the seismic coefficient (k_s), we used an average wall height of 15' to account for the estimated foundation wall height of the building, and since the foundation wall is considered a ductile system with negligible allowable displacement, we used a ductility factor (r) value of 0.5 (FHWA, 2011). In summary, the seismic coefficient (k_s) is determined by applying a scaling factor (α) to the modified peak ground acceleration (PGAm) and a selected ductility factor based on the project requirements.

As the design progresses, close coordination with the structural engineer is recommended to ensure the assumptions above correspond with the design of the structure. If assumption above do not match the design requirements, additional analyses will be required.

Project: Bear Development
Project Number: 23072
Engineer: HC
Soil Sample: Average Cc value CL
Scenario: Direclty on poor soil

Settlement analysis of in-situ soil (only analyzing a maximum of 2B worth of soil below footing)

Key:

Manual Input
Calculation

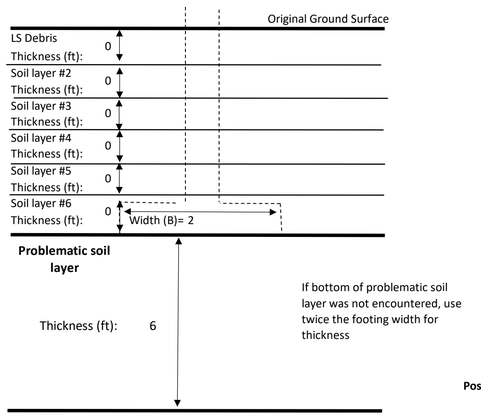
Step 1:

In-Situ Soil Properties of Problematic Soil			
	Soil Description: Lean Clay Loess		
	Source of Soil Properties: GCI Lab Data		
	Dry unit Weight:	79.4	pcf
	Moisture Content:	17.9%	
	Moist unit weight:	93.6	pcf
(Avergae 0.4 to 0.7)	Initial Void Ratio (e_0):	1.129	Vv/Vs
(Average 0.2 to 0.5)	Coefficient of Consol. (C_c):	0.17	

Step 2:

Original Overburden Pressure on Soil Element Identified in Step #1			
Soil Layer #1	Unit Weight		**PCF**
LS Debris	Thickness		**Ft.**
Soil Layer #2	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #3	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #4	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #5	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #6	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Problematic Soil Layer	Unit Weight	93.6	**PCF**
Below Footing	Thickess (H_0)	6	**Ft.**
Total Original Overburdern Pressure on Soil Element:		281	**PSF**

Pre-construction status. Footing is superimposed.



If bottom of problematic soil layer was not encountered, use twice the footing width for thickness

Step 3:

Foundation Characteristics		
Footing load:	3,000	psf
Estimated Footing Width (B):	2	ft
Footing Depth (D_f):	3	ft
Applied footing load applied to soil element (assuming 2V:1H)	1200	PSF

Step 4:

Backfill Soil Properties		
Dry Unit Weight:	120	pcf
Moisture Content:	12.0%	
Moist Unit Weight:	134.4	pcf
Backfill Depth:	3	ft

Step 5:

Settlement Calculation at Soil Element Identified in Step #2		
Thickness of Problematic Soil Layer (H_0):	6	ft
Depth to soil element below **OG**:	3	ft
Depth to soil element below footing:	3	ft
Original Overburden (σv_0):	280.8	psf
Applied foundation load at soil element :	1200.0	psf
Post Construction pressure at soil element (σv_f):	1884.0	
Change in presure at soils element:	1603	psf
$(\sigma v_f)/(\sigma v_0)$	6.709	
$Log[(\sigma v_f)/(\sigma v_0)]$	0.827	
$1+e_0$	2.129	
$H_0/(1+e_0)$	2.818	
Inches per foot:	12	
Settlement:	4.75	inches

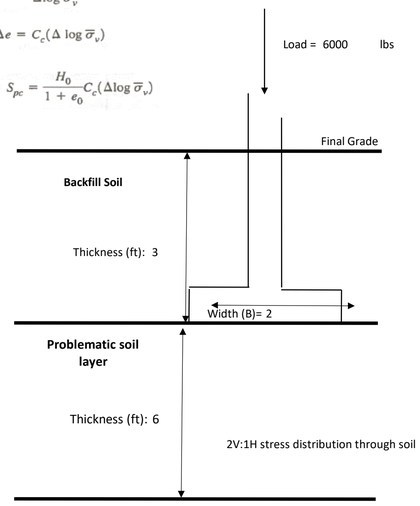
Settlement: $\text{Settlement} = S_{pc} = H_0\left(\frac{\Delta e}{1 + e_0}\right)$

Compression Index: $C_c = \frac{\Delta e}{\Delta \log \overline{\sigma}_v}$

Rearranging gives: $\Delta e = C_c(\Delta \log \overline{\sigma}_v)$

Subistituting in gives: $S_{pc} = \frac{H_0}{1 + e_0} C_c(\Delta \log \overline{\sigma}_v)$

Post-construction status



This formula is only valid for footings PLACED DIRECTLY ON PROBLEMATIC SOIL LAYER

$$S_{pc} = \frac{H_0}{1 + e_0} C_c(\log \overline{\sigma}_{v_f} - \log \overline{\sigma}_{v_e}) = \frac{H_0}{1 + e_0}(C_c)\log\left(\overline{\sigma}_{v_f}/\overline{\sigma}_{v_0}\right)$$

Project: Bear Development
Project Number: 23072
Engineer: HC
Soil Sample: Average Cc value for GC
Scenario: Directly on poor soil

Settlement analysis of in-situ soil (only analyzing a maximum of 2B worth of soil below footing)

Key:

Manual Input
Calculation

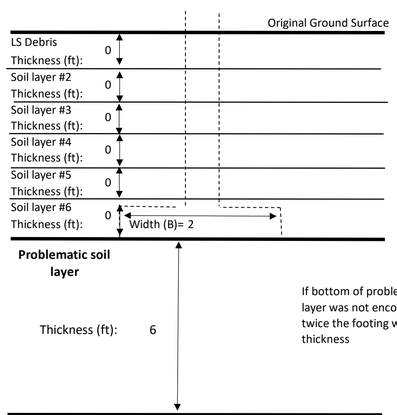
Step 1:

In-Situ Soil Properties of Problematic Soil			
	Soil Description: Clayey Silty Gravel		
	Source of Soil Properties: GCI Lab data		
	Dry unit Weight:	125	pcf
	Moisture Content:	7.0%	
	Moist unit weight:	133.8	pcf
(Avergae 0.4 to 0.7)	Initial Void Ratio (e_0):	0.427	Vv/Vs
(Average 0.2 to 0.5)	Coefficient of Consol. (C_c):	0.13	

Step 2:

Original Overburden Pressure on Soil Element Identified in Step #1			
Soil Layer #1	Unit Weight		**PCF**
LS Debris	Thickness		**Ft.**
Soil Layer #2	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #3	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #4	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #5	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Soil Layer #6	Unit Weight		**PCF**
(Descriptor)	Thickness		**Ft.**
Problematic Soil Layer	Unit Weight	125	**PCF**
Below Footing	Thickess (H_0)	6	**Ft.**
Total Original Overburdern Pressure on Soil Element:		375	**PSF**

Pre-construction status. Footing is superimposed.



If bottom of problematic soil layer was not encountered, use twice the footing width for thickness

Step 3:

Foundation Characteristics		
Footing load:	3,000	psf
Estimated Footing Width (B):	2	ft
Footing Depth (D_f):	3	ft
Applied footing load applied to soil element (assuming 2V:1H)	1200	PSF

Step 4:

Backfill Soil Properties		
Dry Unit Weight:	120	pcf
Moisture Content:	12.0%	
Moist Unit Weight:	134.4	pcf
Backfill Depth:	3	ft

Step 5:

Settlement Calculation at Soil Element Identified in Step #2		
Thickness of Problematic Soil Layer (H_0):	6	ft
Depth to soil element below **OG**:	3	ft
Depth to soil element below footing:	3	ft
Original Overburden (σv_0):	375.0	psf
Applied foundation load at soil element :	1200.0	psf
Post Construction pressure at soil element (σv_f):	1978.2	
Change in presure at soils element:	1603	psf
$(\sigma v_f)/(\sigma v_0)$	5.275	
$Log[(\sigma v_f)/(\sigma v_0)]$	0.722	
$1+e_0$	1.427	
$H_0/(1+e_0)$	4.205	
Inches per foot:	12	
Settlement:	4.74	inches

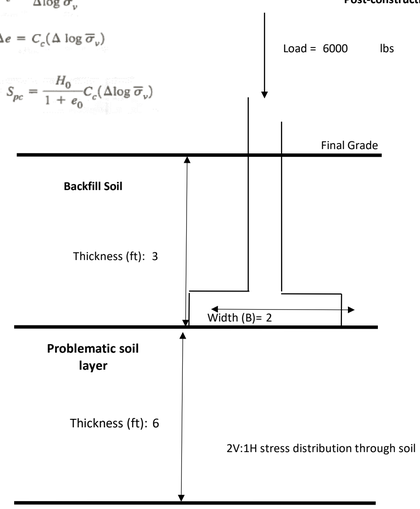
Settlement: $\text{Settlement} = S_{pc} = H_0\left(\frac{\Delta e}{1+e_0}\right)$

Compression Index: $C_c = \frac{\Delta e}{\Delta \log \overline{\sigma}_v}$

Rearranging gives: $\Delta e = C_c(\Delta \log \overline{\sigma}_v)$

Subistituting in gives: $S_{pc} = \frac{H_0}{1+e_0} C_c(\Delta \log \overline{\sigma}_v)$

Post-construction status



This formula is only valid for footings PLACED DIRECTLY ON PROBLEMATIC SOIL LAYER

$$S_{pc} = \frac{H_0}{1+e_0} C_c(\log \overline{\sigma}_{v_f} - \log \overline{\sigma}_{v_o}) = \frac{H_0}{1+e_0}(C_c)\log(\overline{\sigma}_{v_f}/\overline{\sigma}_{v_o})$$

Note: Maximum % fines by mass 40%. Scaling factor of 1.25 used to assume volume of fines, resulting in 50%.

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Project Bear Dev. Project No. 23072

Calculated By _____ Date _____

Sheet K_S Determination for Lateral Pressures

Known:

$F_v = 1.5$

$S_1 = 0.336$

$K_{max} = 0.545$

$H = 15'$ Basement Walls

$PGA = 0.454$

$F_a = 1.2$

- $\beta = F_v S_1 / K_{max}$

$\beta = 1.5(0.336) / 0.545$

$\boxed{\beta = 0.92}$

- $\alpha = 1 + 0.01(H)[(0.5\beta) - 1]$

$\alpha = 1 + 0.01(15)[(0.5)(0.92) - 1]$

$\boxed{\alpha = 0.919}$

- $K_{AV} = \alpha K_{max}$

$K_{AV} = 0.919(0.545)$

$\boxed{K_{AV} = 0.501}$

$K_S = r K_{AV}$

Assumed $r = 0.5$ for Ductile System with Negligible Allowable Displacements

$K_S = 0.5(0.501)$

$\boxed{K_S = 0.25}$

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APPENDIX F

Slope-Stability Analysis

Slope-Stability Analysis

Methodology

1. **Analyses:** Slope stability analyses were performed using the SLOPE/W stability module of GeoStudio 2023.1.2 version 23.1.2.11, produced by Bentley Systems. The Morgenstern-Price limit equilibrium method, which takes into consideration moment and force equilibrium, was used to analyze slope stability.

   Based on the existing and proposed geometry of the project and the mapped geology, we determined the project area may be subject to potential failure. Therefore, we evaluated the cross-section for existing conditions, proposed conditions, and seismic proposed conditions scenarios.

2. **Geometry:** One cross section for the project was analyzed: Cross section C-C' (Figure 5). Cross section location is shown in Figure 2. Based on Cross section C-C', we included geometry for the existing conditions at the site, proposed conditions, and proposed conditions including seismic forces. The proposed conditions models also include estimated foundation loads for each housing unit based on preliminary plans provided to Jorgensen. We based the external existing geometry on topographic data collected by Jorgensen Associates, Inc. and supplemental topographic data provided by Teton County, 2015, proposed finished grade elevations were taken for the preliminary design documents provided by Hoyt Architects, and we based the internal geometry (material boundaries within the slope) on the results of the subsurface exploration (i.e., borehole and test pit logs), statistical correlations based on published literature, geologic conditions, and our experience with similar soils in the area.

   Subsurface conditions at the site were dominated by chaotically deposited landslide debris consisting of fine-grained Lean Clay (CL) and coarse-grained Clayey and Silty Gravels and (GC-GM) and Clayey Sands (SC). Often, soil layers identified in the SPT samples didn't correspond to similar soil layers at similar depths in the other boreholes indicating the soil layers were not continuous. To create a subsurface soil model with continuous soil layers, the discrete soil samples were interpolated and often combined between boreholes. Where discrete soil samples of different soil types were combined, an average phi value and unit weight of the combined samples was applied to the entire soil layer.

3. **Materials:** We estimated the shear strength parameters used in the analyses based on correlation to index tests and direct shear testing, as well as direct shear testing from the previous Geotechnical Investigation Report from July 2021, provided by Nelson Engineering. See the discussion in Appendix D regarding development of the soil-engineering parameters applied to the soil layers. Final parameters used in the stability analysis are summarized below in Table F-1.

   Where two separate soil classifications were combined to one layer (i.e., GC and CL), a unit weight and phi angle were selected using a "weighted average" approach; the boreholes shown on figure 5 were reviewed and depending on the soil shown in each borehole, a weighted average value was estimated.

   We used a Mohr-Coulomb strength model to define the soil parameters. Two parameters are used to describe this strength model: cohesion (c) and friction angle (φ). Cohesion is the soil's shear strength at zero overburden stress, and the friction angle expresses the relationship between overburden stress and shear stress. Mathematically, the shear strength is defined by the equation: $\tau = c + \sigma_n \tan(\varphi)$, where τ is the shear strength and σ_n represents the overburden stress. We used effective stress parameters as the overall soils are anticipated to drain well.

Table F-1: Soil Parameters Used for Slope Stability Analysis C-C'

Layer Name	Unit Weight (pcf)	Cohesion (c',psf)	Friction Angle (φ', degrees)
Construction Fill	125	50[1]	38
Landslide Debris GC/GM/SC	120	50	40
Loess – CL/ML	113	50[1]	36

1. Cohesion added where infinite slope stability failures occurred

4. **Phreatic Surface:** Groundwater was not encountered during the subsurface exploration for Lot 57. Groundwater conditions depicted in the models are based on groundwater observations at the nearby Lots 53 and 58 at an approximate depth of 30-feet below the ground surface. It is important to note, the subsurface exploration occurred during a time of year when peak groundwater conditions are assumed to have already occurred, implying potential peak groundwater conditions are *not* shown in the model and are unknown.

5. **Seismicity:** The post-construction scenario was evaluated in a seismic condition. Based on the ReMi and MASW results provided by Atlas Geophysics and direct shear testing data in the previous Nelson Engineering Site Investigation Report, the site is categorized as Site Class C – Very Dense Soil and Soft Rock. Seismicity was incorporated into the model using a pseudo-static limit equilibrium analysis approach where inertial forces from seismic accelerations were applied statically to the model. Seismic loads have been applied to the critical slip surface determined by static analysis for the post construction scenario, as it is assumed to be the most stressed region within the slope (Abramson et al., 2002). A seismic coefficient (k_s) of 0.25 was applied to Cross section C-C'.

Seismic coefficients were calculated based on recommendation from NCHRP Report 611 "Seismic Analysis and Desing of Retaining Walls, Buried Structures, Slopes and Embankments" and FHWA NHI Course No 130094 LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations, as described below and illustrated in the equations. In summary, the seismic coefficient (k_s) is determined by applying a scaling factor (α) to the modified peak ground acceleration (PGAm) and a selected ductility factor based on the project requirements. Additionally, a seismic FS of 1.1 was used because it is assumed the system's allowable total permanent seismic deformation is negligible.

$$\beta = F_v \cdot S_1 / PGA_m$$

$$\alpha = 1 + 0.01H[(0.5\beta) - 1]$$

$$k_s = r^* \, PGA_m * \alpha$$

Where:

- $\beta = 0.92$
- $F_v = 1.5$
- $S_1 = 0.336$
- PGA_m (k_{max}) = 0.545
- α is equal to 0.838 for the C-C' seismic model.
- *H* is equal to the height of the critical slip surface; we used a conservative value of 15' for the C-C' seismic model

- r = 0.5. A value of 0.5 is used in calculating k_s when dealing with ductile systems (i.e., soils with no rigid structures) with allowable permanent seismic deformation of up to 2-inches (i.e. negligible displacement).
- Corresponding minimum factor of safety is 1.1

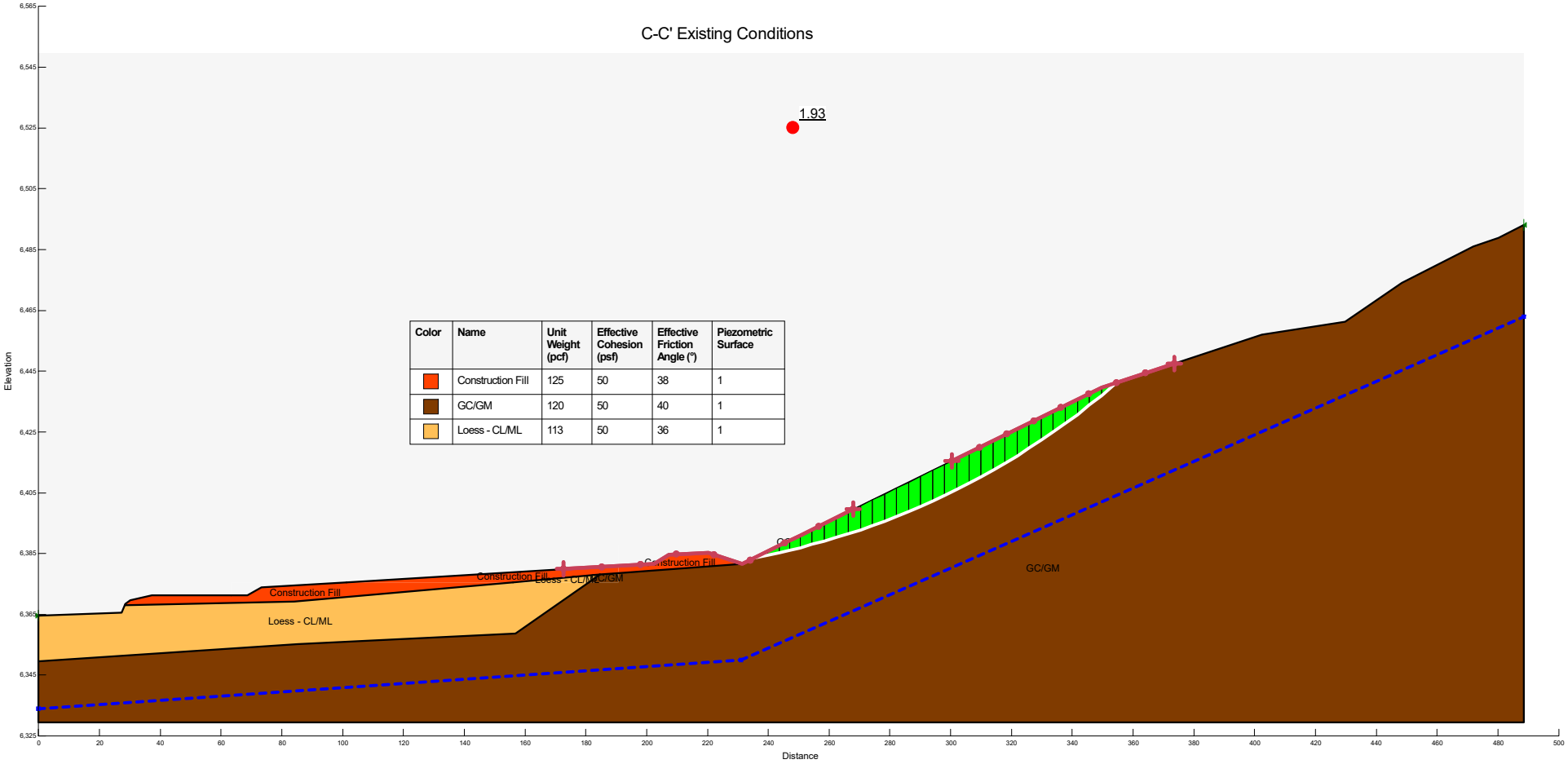
We calculated a ks value of 0.25, which we applied to our C-C' seismic model.

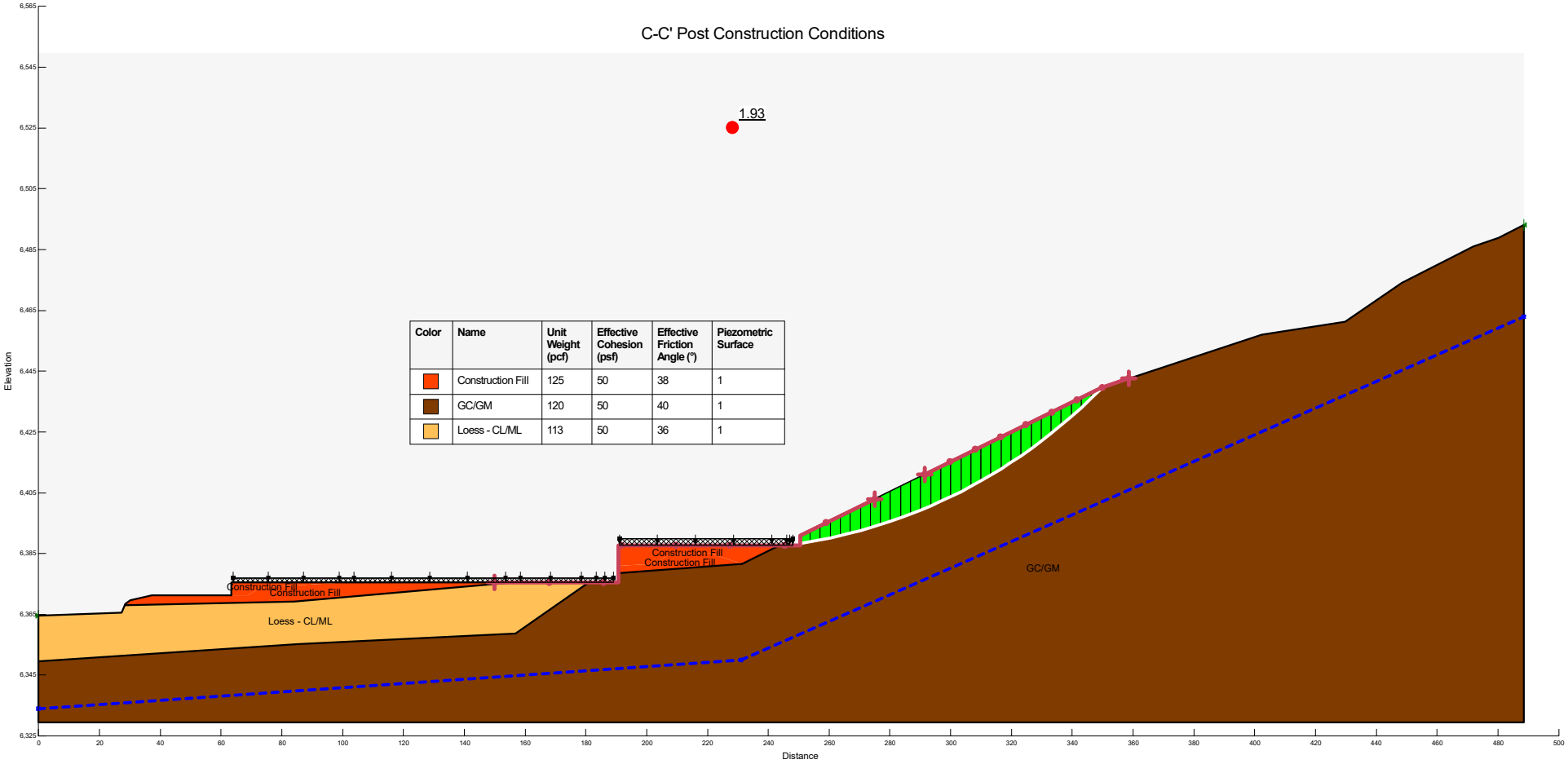
As the design progresses, close coordination with the structural engineer is recommended to ensure the assumptions above correspond with the design of the structure. If assumption above do not match the design requirements, additional analyses will be required.

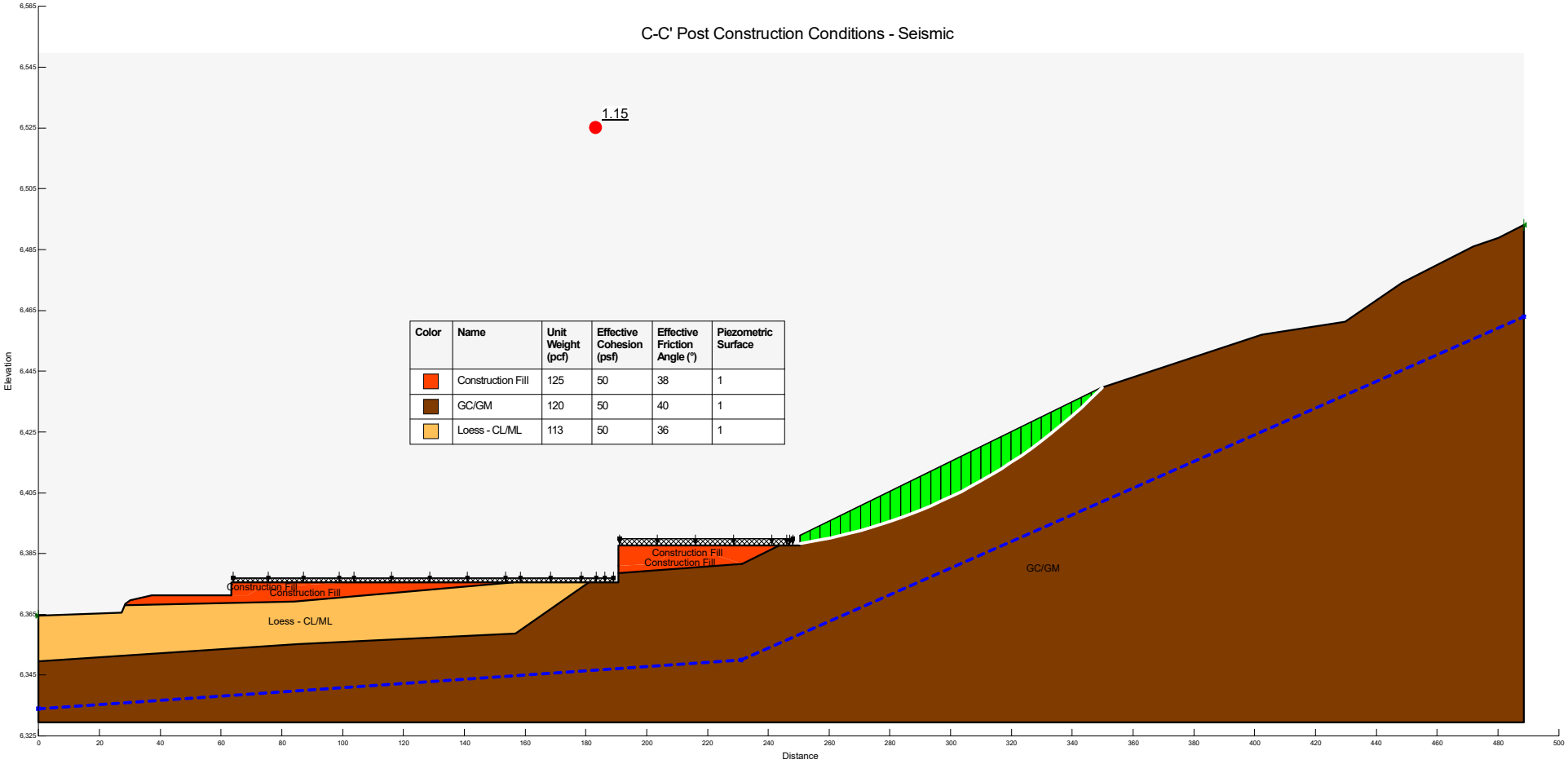
Surcharge Loads: Typical foundation loads were incorporated into the model, based on data in Section 1806 of the IBC, 2021. We use a distribution surcharge load of 2,000 psf to account for the weight of any structures within the model.

Results

We summarize factor of safety (FS) results for each cross section and analysis in Section 4.1 of the Report. The figures that follow are the output from each analysis. The critical slip surface and factor of safety are shown. Output files, reports, convergence data, or other data from Geostudio may be made available upon request.


C-C' Existing Conditions
1.93
Color
Name
Unit Weight (pcf)
Effective Cohesion (psf)
Effective Friction Angle (°)
Piezometric Surface
Construction Fill
125
50
38
1
GC/GM
120
50
40
1
Loess - CL/ML
113
50
36
1
Construction Fill
Loess - CL/ML
GC/GM
Elevation
Distance

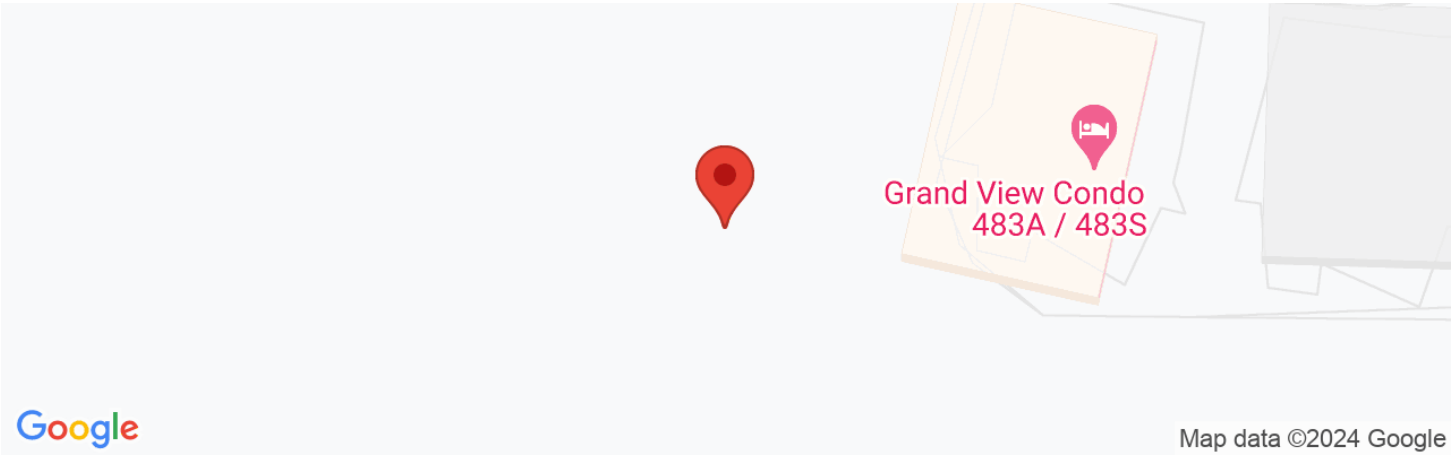

C-C' Post Construction Conditions
1.93
Color
Name
Unit Weight (pcf)
Effective Cohesion (psf)
Effective Friction Angle (°)
Piezometric Surface
Construction Fill
125
50
38
1
GC/GM
120
50
40
1
Loess - CL/ML
113
50
36
1
Construction Fill
Construction Fill
Construction Fill
Construction Fill
Loess - CL/ML
GC/GM
Elevation
Distance
6,565
6,545
6,525
6,505
6,485
6,465
6,445
6,425
6,405
6,385
6,365
6,345
6,325
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500


C-C' Post Construction Conditions - Seismic
1.15
Color
Name
Unit Weight (pcf)
Effective Cohesion (psf)
Effective Friction Angle (°)
Piezometric Surface
Construction Fill
125
50
38
1
GC/GM
120
50
40
1
Loess - CL/ML
113
50
36
1
Construction Fill
Construction Fill
Construction Fill
Construction Fill
Loess - CL/ML
GC/GM
Elevation
Distance
6,565
6,545
6,525
6,505
6,485
6,465
6,445
6,425
6,405
6,385
6,365
6,345
6,325
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500

USGS web services were down for some period of time and as a result this tool wasn't operational, resulting in *timeout* error.
USGS web services are now operational so this tool should work as expected.

OSHPD

Latitude, Longitude: 43.47198215, -110.75457259



Date	05/01/2024, 14:07:21
Design Code Reference Document	ASCE7-16
Risk Category	II
Site Class	C - Very Dense Soil and Soft Rock

Type	Value	Description
S_S	1.025	MCE_R ground motion. (for 0.2 second period)
S_1	0.337	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.23	Site-modified spectral acceleration value
S_{M1}	0.506	Site-modified spectral acceleration value
S_{DS}	0.82	Numeric seismic design value at 0.2 second SA
S_{D1}	0.337	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1.2	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.454	MCE_G peak ground acceleration
F_{PGA}	1.2	Site amplification factor at PGA
PGA_M	0.545	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.025	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.146	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.901	Factored deterministic acceleration value. (0.2 second)
S1RT	0.337	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.375	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.725	Factored deterministic acceleration value. (1.0 second)
PGAd	0.662	Factored deterministic acceleration value. (Peak Ground Acceleration)
PGA_{UH}	0.454	Uniform-hazard (2% probability of exceedance in 50 years) Peak Ground Acceleration
C_{RS}	0.895	Mapped value of the risk coefficient at short periods

Type	Value	Description
C_{R1}	0.9	Mapped value of the risk coefficient at a period of 1 s
C_V	1.105	Vertical coefficient

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Project Bear Dev. - Lot 57 Project No. 23072
Calculated By JBJ Date 1/23/2024
Sheet 1/2

k_s Determination

U.S. Seismic Design maps - Structural Engineers Association of California Design Code Reference Document - ASCE 7-16

Risk Category II
Site class C - Very Dense Soil + Soft Rock

FHWA (2011)

$$k_{max} = f_{pga} \cdot PGA \quad (6\text{-}1)$$

$PGA = 0.454$
$F_{PGA} = 1.2$

$$k_{max} \text{ or } PGA_m = 1.2(0.454) = \underline{0.545}$$

$$k_{av} \text{ or MHA (maximum Average Horizontal Acceleration)} = \alpha \cdot k_{max} \quad (6\text{-}2)$$

where: $\alpha = 1 + 0.01(H)[(0.5\beta)-1]$ (6-3)

where: $\beta = f_v \cdot S_1 / k_{max}$ (6-4)

where: $f_v = 1.5$
$S_1 = 0.336$
$k_{max} = 0.545$

$\beta = (1.5)(0.336) / 0.545$

$\boxed{\beta = 0.92}$

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Project Bear Dev. Lot 57 Project No. 23072
Calculated By JBJ Date 1/23/2024
Sheet 2/2

α Determination:

$\beta = 0.92$
$H = 15'$

$\alpha = 1 + 0.01(15)[0.5(0.92) - 1]$ (6-3)

$\boxed{\alpha = 0.919}$

k_{av} Determination:

$\alpha = 0.919$
$k_{max} = 0.545$

$k_{av} = 0.919(0.545)$

$\boxed{k_{av} = 0.501}$

k_s Determination:

$k_{av} = 0.501$ (6-5)

$r = 0.5$ (assuming allowable permanent Seismic Deformation is negligible).

$k_s = 0.5(0.501)$

$\boxed{k_s = 0.25}$

Minimum factor of Safety of 1.1 using r of 0.5 assuming negligible allowable permanent Seismic Deformation

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July 24, 2024

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosha, WI 53142

RE: GEOTECHNICAL-ENGINEERING REPORT: ADDENDUM No. 1 ADDITIONAL SLOPE STABILITY ANALYSIS, SNOW KING LOOP LOT 57, TETON COUNTY, WYOMING
PROJECT NUMBER: 23072

Dear Mr. Orthmann

We are pleased to present this addendum to the Geotechnical-Engineering Report (Report) for the proposed development at Lot 57 on Snow King Loop in Teton County, Wyoming. The original Report for Lot 57 was prepared and issued by this office on January 25, 2024. Per Section 2.0 of the Report, the project was in the early stages of design with our understanding that architectural plans could be subject to change, and additional slope stability analysis would be performed as the design progressed.

The purpose of this addendum is to provide additional slope stability analyses based on updated finished floor elevations for the proposed structures based on plan provided by Northworks dated May 23, 2024. The original Geotechnical-Engineering Report and this addendum should not be treated as stand-alone documents but rather be saved and transmitted to all members of the project team together. The additional slope stability analysis presented in this Addendum supersedes the original slope stability analyses presented in the original Report.

Project Background
At your request, Jorgensen Geotechnical (JG) drilled five (5) boreholes and excavated three (3) exploratory test pits for Lot 57 as part of the original geotechnical subsurface exploration. The purpose of the exploration was to bracket the proposed building locations. We identified two primary soil types at the proposed building locations: landslide debris and loess. The landslide deposits we encountered consist clayey gravels, lean clays, sandy gravels and exhibited chaotic deposition. Borehole data from Nelson engineering and MASW plots from Atlas Geophysics were incorporated into our subsurface characterization.

The original Report for Lot 57 recommended engineered aggregate piers (EAPs) or reinforced fills as soil improvement methods to reduce the risk of future potential settlement. It is our understanding that the design team elected to use EAPs for the proposed structures.

Slope Stability Analysis
The slope stability analyses were performed using SLOPE/W module of Geostudio. We analyzed one set of geometry for global slope stability taken from cross sections C-C'. All soil parameters used in this updated slope stability analyses remained consistent with the original Report; the only alteration to this updated slope stability model is the new finished floor elevations (i.e., external geometry). Refer to Appendix F of the original Geotechnical Engineering Report for general methodology of the slope

stability analyses including internal and external geometry, materials, phreatic surfaces, seismicity, and surcharges of each model. Table 1 presents the updated finish floor elevation for each structure based on the Northworks plans.

Table 1: Adjusted Finish Floor Elevations

Location	Finish Floor Elevation, ft
Lot 57 (South)	6402
Lot 57 (North)	6371

Results of the updated stability analyses are summarized in Table 2. The attached models show the output of the stability model for Cross-Section C-C'. Preconstruction slope stability results are not presented, as those are unchanged from the original Geotechnical Engineering Report.

Table 2: Lot 57 Slope Stability Analysis Results

Cross section	Analysis	FS
C-C'	Post-construction	1.96
	Post-Construction Seismic	1.16

Results

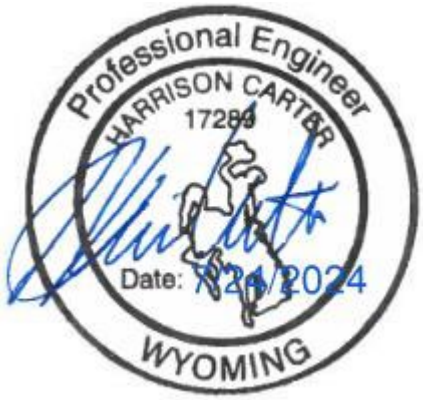
Factors of Safety (FS) with the updated finish floor elevations were 1.96 in static conditions, above the 1.5 threshold for residential construction. Post-construction seismic conditions indicate factors of safety of 1.16, above the 1.1 FS threshold for maximum allowable permanent seismic deformations of 2 inches (FHWA 2011).

Limitations
This report has been prepared based on a limited amount of data. Actual site conditions may vary. These services have been performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in this area under similar conditions. No other warranty is made or implied.

If you have any questions about this letter, or if we may provide other services to you, please contact us.

Respectfully submitted,

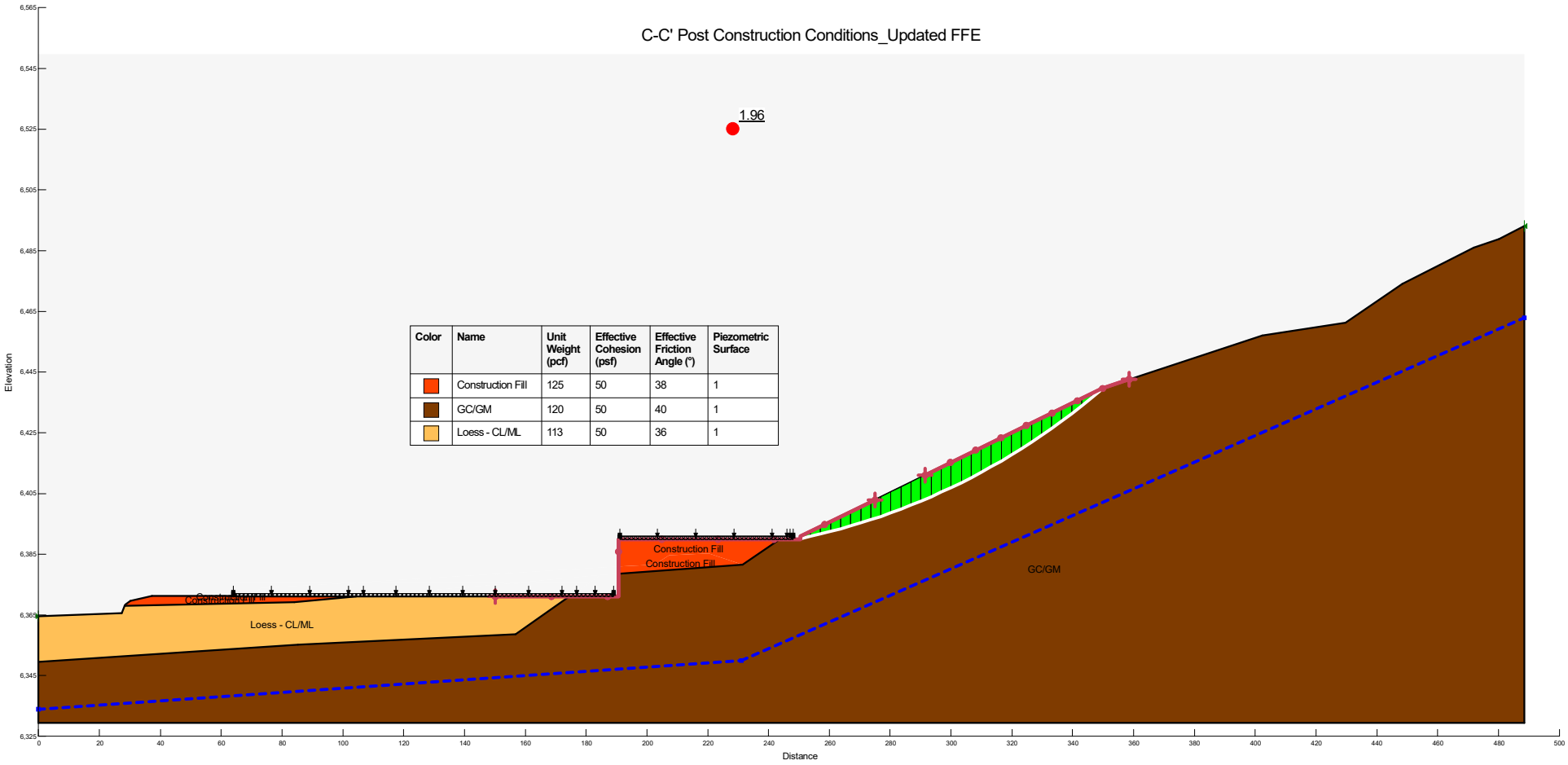
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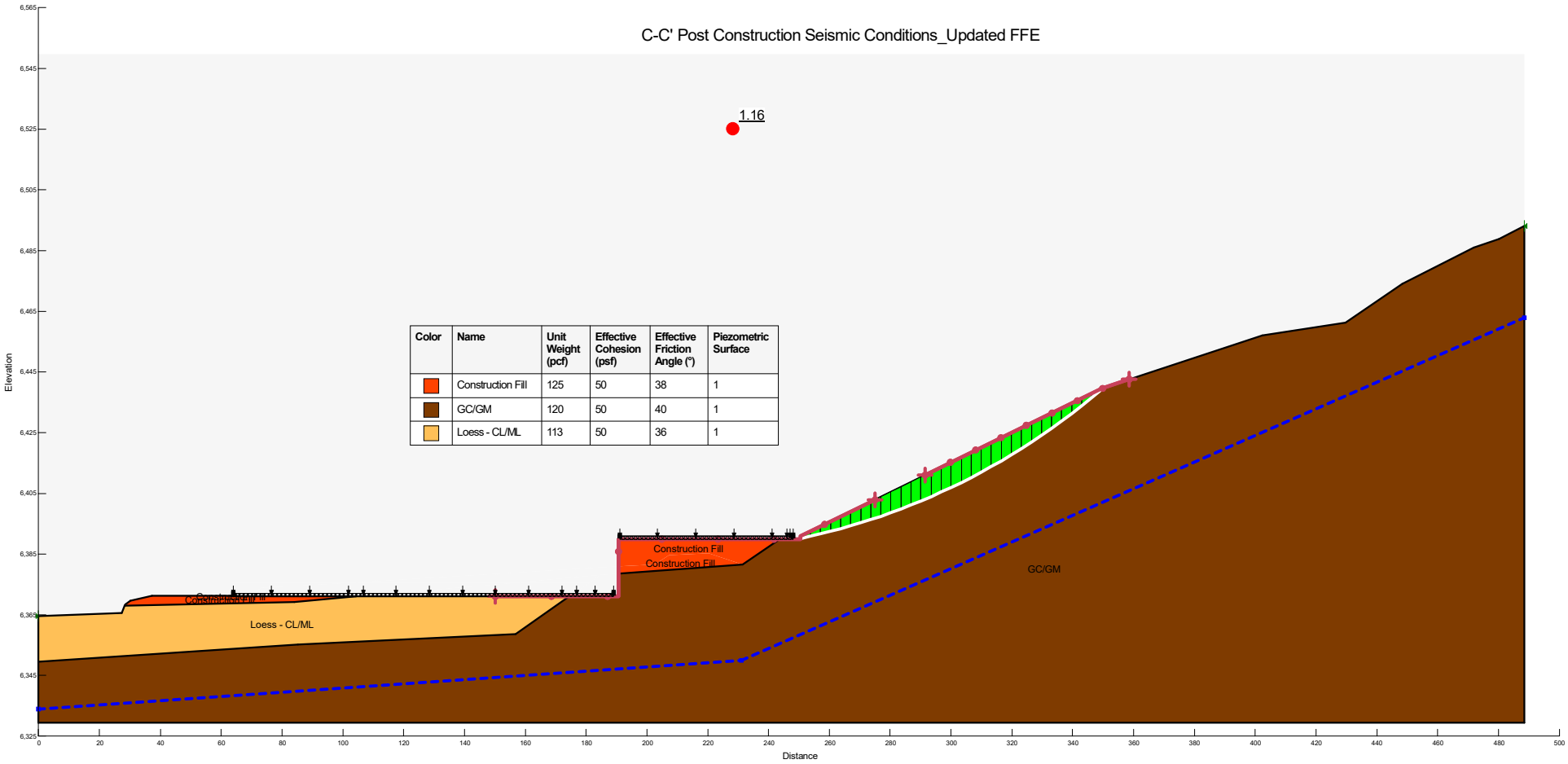


Nick Annala, E.I.
Geotechnical Design Engineer Technician

Harrison Carter, P.E.
Geotechnical Engineering Manager

Attached:
Slope Stability Models


C-C' Post Construction Conditions_Updated FFE
1.96
Color
Name
Unit Weight (pcf)
Effective Cohesion (psf)
Effective Friction Angle (°)
Piezometric Surface
Construction Fill
125
50
38
1
GC/GM
120
50
40
1
Loess - CL/ML
113
50
36
1
Construction Fill
Construction Fill
GC/GM
Loess - CL/ML
Elevation
Distance
6,565
6,545
6,525
6,505
6,485
6,465
6,445
6,425
6,405
6,385
6,365
6,345
6,325
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500


C-C' Post Construction Seismic Conditions_Updated FFE
1.16
Color
Name
Unit Weight (pcf)
Effective Cohesion (psf)
Effective Friction Angle (°)
Piezometric Surface
Construction Fill
125
50
38
1
GC/GM
120
50
40
1
Loess - CL/ML
113
50
36
1
Construction Fill
Construction Fill
Loess - CL/ML
GC/GM
Elevation
Distance
6,565
6,545
6,525
6,505
6,485
6,465
6,445
6,425
6,405
6,385
6,365
6,345
6,325
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500

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July 24, 2024

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosha, WI 53142

RE: GEOTECHNICAL-ENGINEERING REPORT: ADDENDUM No. 1 ADDITIONAL SLOPE STABILITY ANALYSIS, SNOW KING LOOP LOTS 53, AND 58, TETON COUNTY, WYOMING
PROJECT NUMBER: 23072

Dear Mr. Orthmann

We are pleased to present this addendum to the Geotechnical-Engineering Report (Report) for the proposed development at Lots 53 and 58 on Snow King Loop in Teton County, Wyoming. The original Report for Lots 53 and 58 was prepared and issued by this office on December 28, 2023. Per Section 2.0 of the Report, the project was in the early stages of design with our understanding that architectural plans could be subject to change, and additional slope stability analysis would be performed as the design progressed.

The purpose of this addendum is to provide additional slope stability analyses based on updated finished floor elevations for the proposed structures based on plans provided by Northworks with the issue date of May 23, 2024. The original Geotechnical-Engineering Report and this addendum should not be treated as stand-alone documents but rather be saved and transmitted to all members of the project team together. The additional slope stability analysis presented in this Addendum supersedes the original slope stability analyses presented in the original Report.

Project Background
At your request, Jorgensen Geotechnical (JG) drilled seven (7) boreholes and excavated four (4) exploratory test pits for Lots 53 and 58 as part of the original geotechnical subsurface exploration. The purpose of the exploration was to bracket the proposed building locations. We identified three primary soil types at the proposed building locations: landslide debris, loess, and weathered bedrock. The landslide deposits we encountered consist of clayey gravels, lean clays, sandy gravels and exhibited chaotic deposition. Borehole data from Nelson engineering and MASW plots from Atlas Geophysics were incorporated into our subsurface characterization.

The original Report for Lots 53 and 58 recommended engineered aggregate piers (EAPs) or reinforced fills as soil improvement methods to reduce the risk of future potential settlement. It is our understanding that the design team elected to use EAPs for the proposed structures.

Slope Stability Analysis
The slope stability analyses were performed using SLOPE/W module of Geostudio. We analyzed two sets of geometry for global slope stability taken from cross sections B-B' and C-C'. All soil parameters used in this update slope stability analyses remained consistent with the original report; the only alteration to this updated slope stability model is the new finished floor elevations (i.e., external geometry). Refer to

Appendix F of the original Geotechnical Engineering Report for general methodology of the slope stability analyses including internal and external geometry, materials, phreatic surfaces, seismicity, and surcharges of each model. Table 1 presents the updated finish floor elevation for each structure based on the Northworks plans.

Table 1: Adjusted Finish Floor Elevations

Location	Finish Floor Elevation, ft
Lot 58	6419
Lot 53	6402

Results of the stability analyses are summarized in Table 2. The attached models show the output of the stability model for Cross-Section B-B' and C-C'. Preconstruction slope stability results are not presented, as those are unchanged from the original Geotechnical Engineering Report.

Table 2: Lot 53 and 58 Slope Stability Analysis Results

Cross section	Analysis	FS
B-B'	Post-construction	1.55
	Post-Construction Seismic	1.12
C-C'	Post-construction	2.66
	Post-Construction Seismic	1.80

Results

Factors of Safety (FS) with the updated finish floor elevations range from 1.55 to 2.66 in static conditions indicating FS's above the 1.5 threshold for residential construction. Post-construction seismic conditions indicate factors of safety from 1.12 to 1.80, all of which are above the 1.1 FS threshold for maximum allowable permanent seismic deformations of 2 inches (FHWA 2011).

Limitations

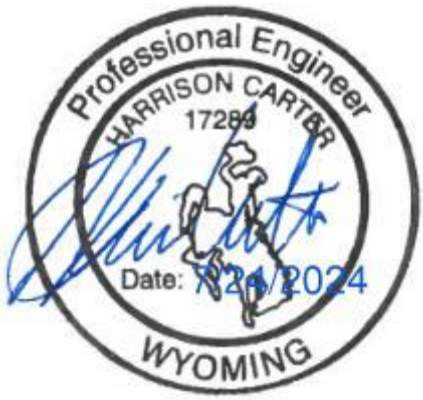
This report has been prepared based on a limited amount of data. Actual site conditions may vary. These services have been performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in this area under similar conditions. No other warranty is made or implied.

If you have any questions about this letter, or if we may provide other services to you, please contact us.

Respectfully submitted,

JORGENSEN GEOTECHNICAL



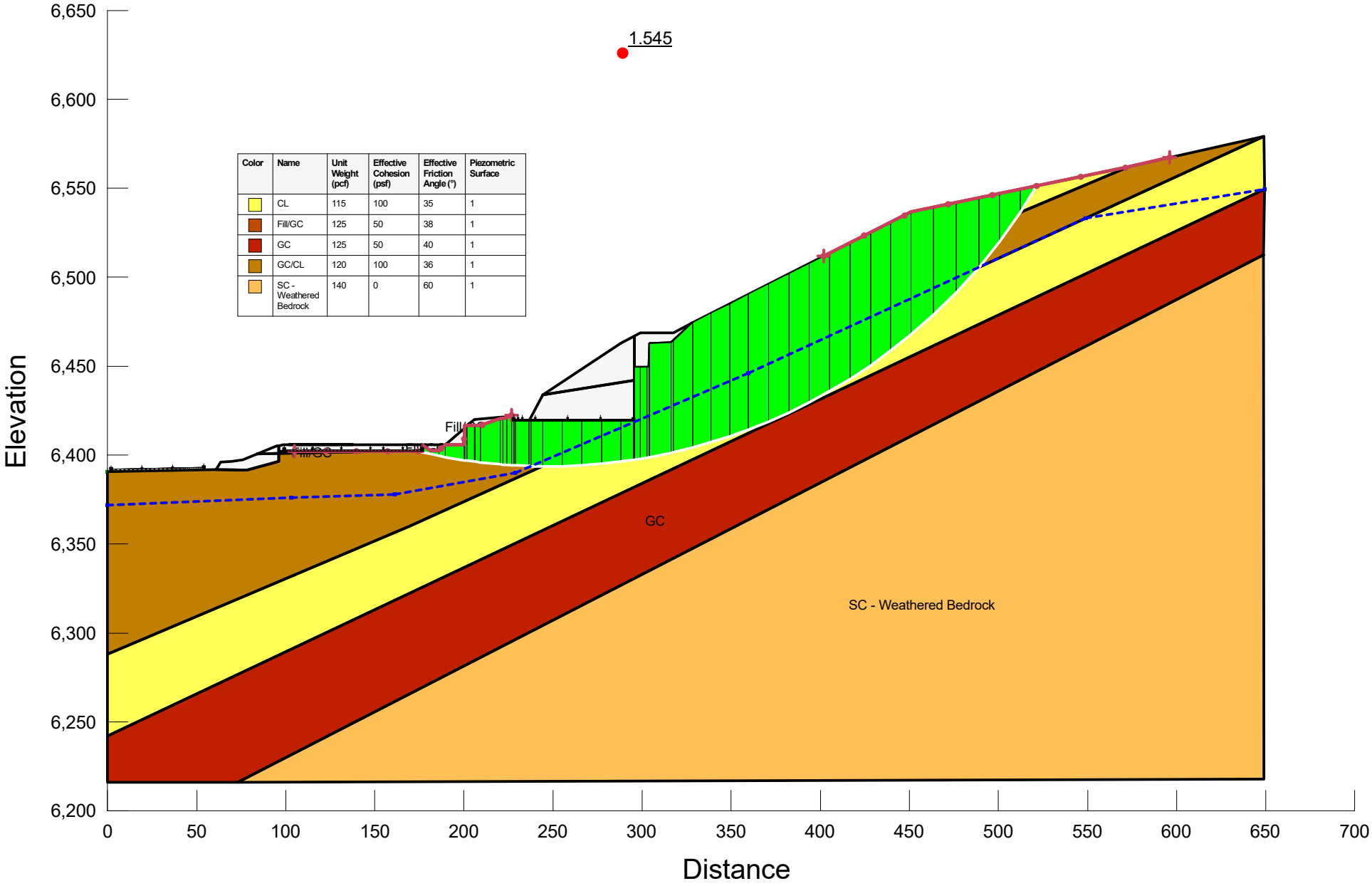


Nick Annala, E.I.
Geotechnical Design Engineer Technician

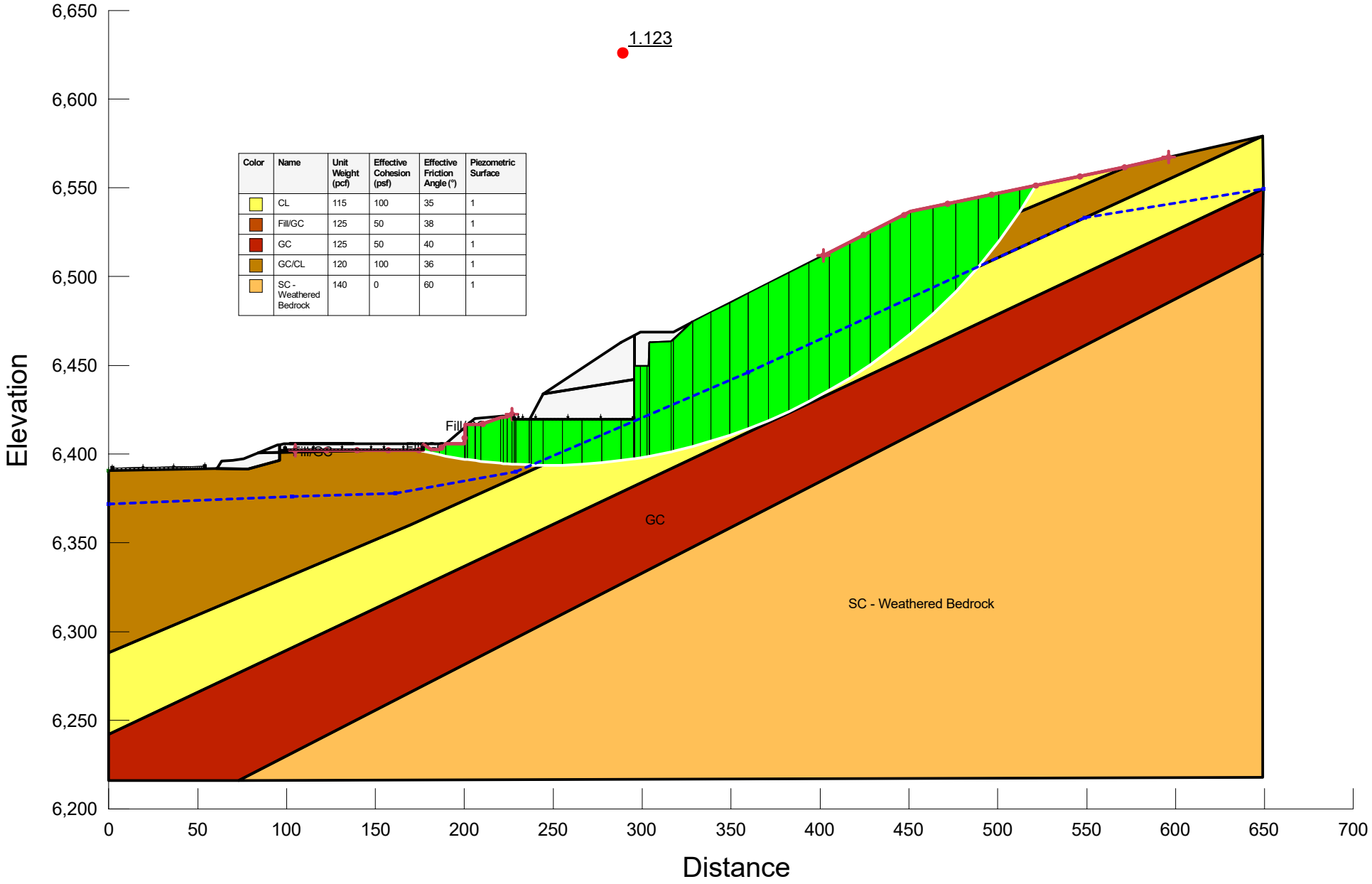
Harrison Carter, P.E.
Geotechnical Engineering Manager

Attached:
Updated Slope Stability Models

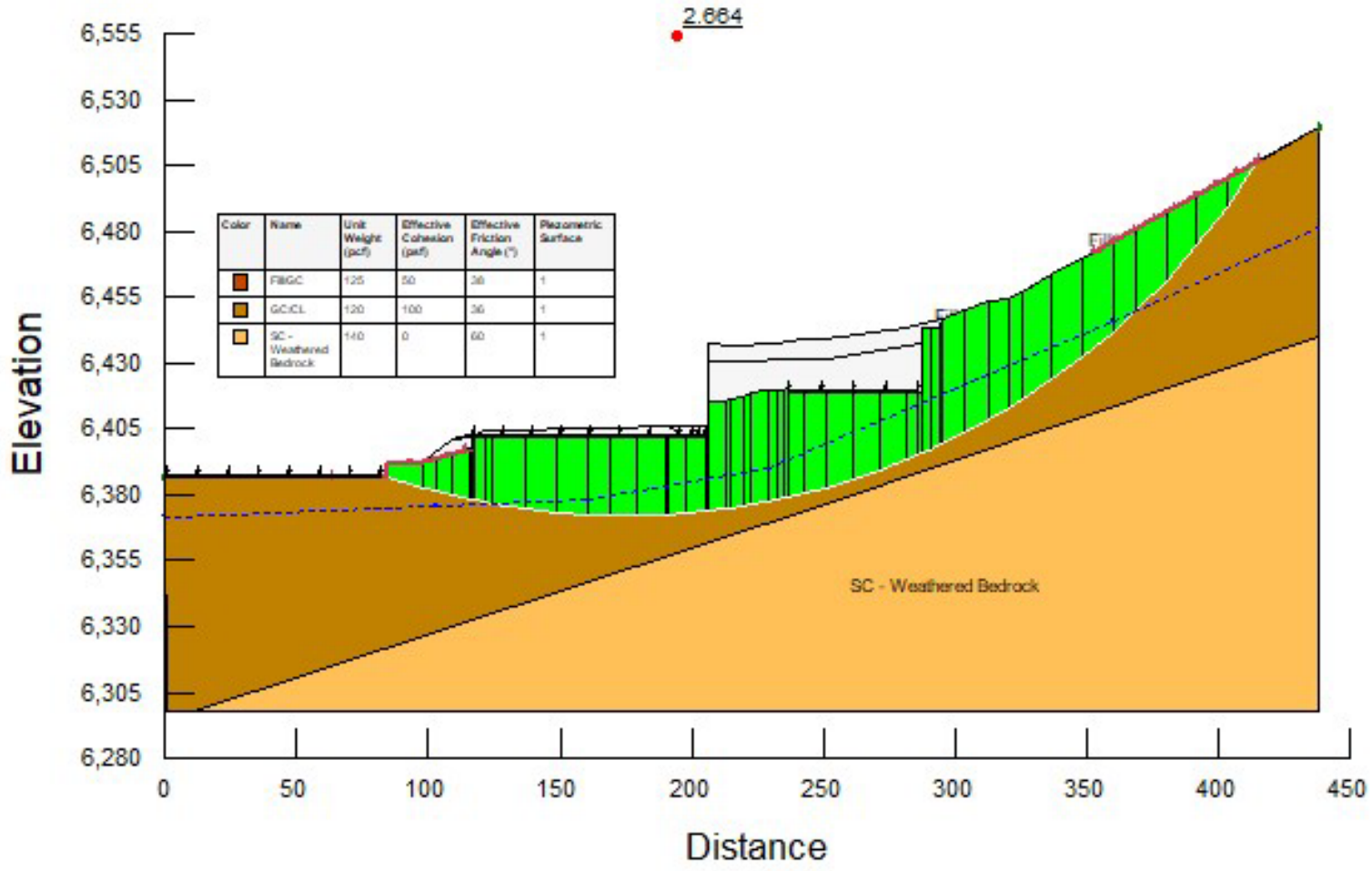
Lot 53 and 58 B-B' Proposed Conditions_Updated FFE



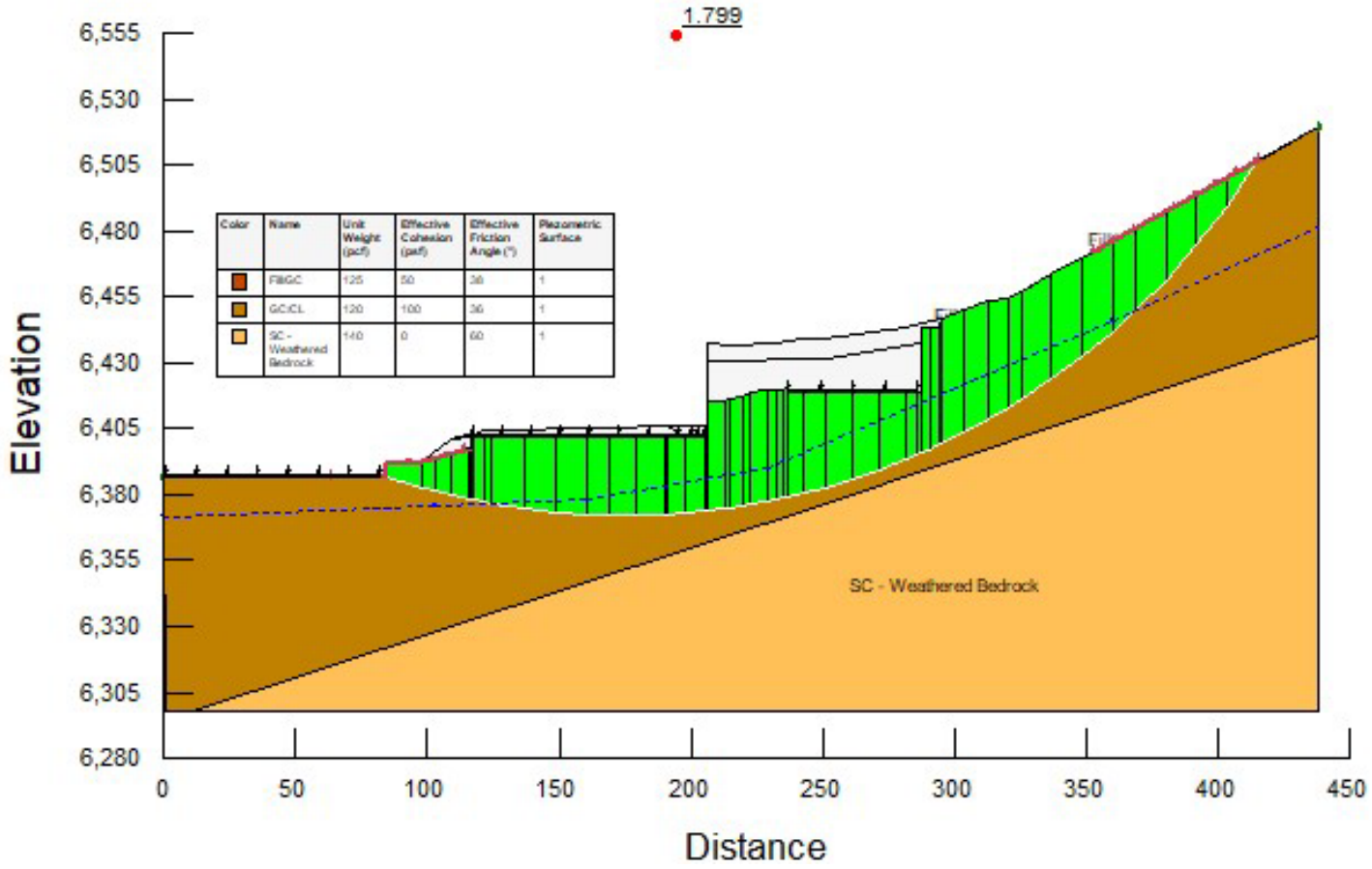
Lot 53 and 58 B-B' Proposed Seismic Conditions_Updated FFE



Lot 53 and 58 C-C' Proposed Conditions_Updated FFE



Lot 53 and 58 C-C' Proposed Seismic Conditions_Updated FFE



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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 2 YEAR

Design Storm Frequency = 2 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	18,937	0.43	0.2	1	0.2	0.2	0.09
Gravel Road	633	0.01	0.85	1	0.85	0.85	0.01
Asphalt and Concrete	495	0.01	0.95	1	0.95	0.95	0.01
Lawn, Heavy, Steep, 7%+	14,347	0.33	0.3	1	0.3	0.3	0.10
		0.00	0	1	0	0	0.00
Totals	**34412.4**	**0.79**					**0.21**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.26$

$C_{wd} \times C_f = 0.26$

$C_{wd} \times C_f \times \Sigma A_j = 0.21$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	1.07	67.62	0.22
10	0.89	112.49	0.19
15	0.73	138.39	0.15
20	0.64	161.78	0.13
30	0.5	189.58	0.10
40	0.4	202.22	0.08
50	0.34	214.86	0.07
60	0.3	227.50	0.06
70	0.29	256.57	0.06
80	0.26	262.89	0.05
90	0.24	273.00	0.05
100	0.23	290.69	0.05

Peak Flow Rate = 0.22 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 2 YEAR

Design Storm Frequency = 2 years

Discharge Rate, d = 0.22 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	0	0.00	0.08	1	0.08	0.08	0.00
Roofs	28,452	0.65	0.95	1	0.95	0.95	0.62
Asphalt and Concrete	4,308	0.10	0.95	1	0.95	0.95	0.09
Lawn, Heavy, Steep, 7%+	1,652	0.04	0.3	1	0.3	0.3	0.01
		0.00	0	1	0	0	0.00
Totals	**34412**	**0.79**					**0.73**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.92$

$C_{wd} \times C_f = 0.92$

$C_{wd} \times C_f \times \Sigma A_j = 0.73$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	1.07	234.94	67.06	167.88	0.78
10	0.89	390.83	134.12	256.71	0.65
15	0.73	480.85	201.18	279.68	0.53
20	0.64	562.09	268.23	293.86	0.46
30	0.5	658.70	402.35	256.35	0.36
40	0.4	702.62	536.47	166.15	0.29
50	0.34	746.53	670.59	75.94	0.25
60	0.3	790.44	804.70	-14.26	0.22
70	0.29	891.44	938.82	-47.38	0.21
80	0.26	913.40	1,072.94	-159.54	0.19
90	0.24	948.53	1,207.06	-258.52	0.17
100	0.23	1,010.01	1,341.17	-331.16	0.17

Water Quantity Storage Required = 294 ft^3

= 2,198 gallons

Peak Flow Rate = 0.78 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 10 YEAR

Design Storm Frequency = 10 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	18,937	0.43	0.2	1	0.2	0.2	0.09
Gravel Road	633	0.01	0.85	1	0.85	0.85	0.01
Asphalt and Concrete	495	0.01	0.95	1	0.95	0.95	0.01
Lawn, Heavy, Steep, 7%+	14,347	0.33	0.3	1	0.3	0.3	0.10
		0.00	0	1	0	0	0.00
Totals	**34412.4**	**0.79**					**0.21**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.26$

$C_{wd} \times C_f = 0.26$

$C_{wd} \times C_f \times \Sigma A_j = 0.21$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	1.8	113.75	0.38
10	1.42	179.47	0.30
15	1.19	225.60	0.25
20	1.05	265.41	0.22
30	0.83	314.71	0.17
40	0.68	343.77	0.14
50	0.57	360.21	0.12
60	0.51	386.75	0.11
70	0.47	415.82	0.10
80	0.44	444.88	0.09
90	0.4	455.00	0.08
100	0.37	467.63	0.08

Peak Flow Rate = 0.38 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 10 YEAR

Design Storm Frequency = 10 years

Discharge Rate, d = 0.38 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	0	0.00	0.08	1	0.08	0.08	0.00
Roofs	28,452	0.65	0.95	1	0.95	0.95	0.62
Gravel Road	4,308	0.10	0.85	1	0.85	0.85	0.08
Lawn, Heavy, Steep, 7%+	1,652	0.04	0.3	1	0.3	0.3	0.01
		0.00	0	1	0	0	0.00
Totals	**34412.4**	**0.79**					**0.72**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.91$

$C_{wd} \times C_f = 0.91$

$C_{wd} \times C_f \times \Sigma A_j = 0.72$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	1.8	389.84	112.81	277.03	1.29
10	1.42	615.08	225.62	389.46	1.02
15	1.19	773.18	338.43	434.75	0.85
20	1.05	909.62	451.24	458.38	0.75
30	0.83	1,078.55	676.85	401.69	0.59
40	0.68	1,178.17	902.47	275.70	0.49
50	0.57	1,234.48	1,128.09	106.39	0.41
60	0.51	1,325.44	1,353.71	-28.26	0.37
70	0.47	1,425.07	1,579.32	-154.26	0.34
80	0.44	1,524.69	1,804.94	-280.25	0.32
90	0.4	1,559.35	2,030.56	-471.21	0.29
100	0.37	1,602.66	2,256.18	-653.52	0.26

Water Quantity Storage Required = 458 ft^3

= 3,429 gallons

Peak Flow Rate = 1.29 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 100 YEAR

Design Storm Frequency = 100 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	18,937	0.43	0.2	1.25	0.25	0.25	0.11
Gravel Road	633	0.01	0.85	1.25	1.0625	1	0.01
Asphalt and Concrete	495	0.01	0.95	1.25	1.1875	1	0.01
Lawn, Heavy, Steep, 7%+	14,347	0.33	0.3	1.25	0.375	0.375	0.12
		0.00	0	1.25	0	0	0.00
Totals	**34412.4**	**0.79**					**0.26**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.26$

$C_{wd} \times C_f = 0.33$

$C_{wd} \times C_f \times \Sigma A_j = 0.26$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	3	236.98	0.78
10	2.33	368.10	0.61
15	1.9	450.26	0.50
20	1.65	521.35	0.43
30	1.3	616.14	0.34
40	1.08	682.49	0.28
50	0.95	750.43	0.25
60	0.82	777.28	0.21
70	0.74	818.36	0.19
80	0.65	821.52	0.17
90	0.61	867.34	0.16
100	0.56	884.71	0.15

Peak Flow Rate = 0.78 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 100 YEAR

Design Storm Frequency = 100 years

Discharge Rate, d = 0.78 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	0	0.00	0.08	1.25	0.1	0.1	0.00
Roofs	28,452	0.65	0.95	1.25	1.1875	1	0.65
Asphalt and Concrete	4,308	0.10	0.95	1.25	1.1875	1	0.10
Lawn, Heavy, Steep, 7%+	1,652	0.04	0.3	1.25	0.375	0.375	0.01
		0.00	0	1.25	0	0	0.00
Totals	**34412.4**	**0.79**					**0.79**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.92$

$C_{wd} \times C_f = 1.00$

$C_{wd} \times C_f \times \Sigma A_j = 0.79$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	3	716.93	235.02	481.91	2.37
10	2.33	1,113.62	470.04	643.59	1.84
15	1.9	1,362.16	705.06	657.10	1.50
20	1.65	1,577.24	940.07	637.16	1.30
30	1.3	1,864.01	1,410.11	453.89	1.03
40	1.08	2,064.74	1,880.15	184.60	0.85
50	0.95	2,270.26	2,350.19	-79.92	0.75
60	0.82	2,351.51	2,820.22	-468.71	0.65
70	0.74	2,475.78	3,290.26	-814.48	0.58
80	0.65	2,485.34	3,760.30	-1,274.96	0.51
90	0.61	2,623.95	4,230.33	-1,606.39	0.48
100	0.56	2,676.52	4,700.37	-2,023.85	0.44

Water Quantity Storage Required = 657 ft^3
= 4,915 gallons

Peak Flow Rate = 2.37 cfs

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SNOW KING - LOT 57

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 2 YEAR

Design Storm Frequency = 2 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	19,003	0.44	0.2	1	0.2	0.2	0.09
Gravel Road	1,561	0.04	0.85	1	0.85	0.85	0.03
Asphalt and Concrete	2,461	0.06	0.95	1	0.95	0.95	0.05
Lawn, Heavy, Steep, 7%+	13,130	0.30	0.3	1	0.3	0.3	0.09
		0.00	0	1	0	0	0.00
Totals	**36154.8**	**0.83**					**0.26**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.32$

$C_{wd} \times C_f = 0.32$

$C_{wd} \times C_f \times \Sigma A_j = 0.26$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	1.07	84.74	0.28
10	0.89	140.97	0.23
15	0.73	173.44	0.19
20	0.64	202.74	0.17
30	0.5	237.59	0.13
40	0.4	253.43	0.10
50	0.34	269.27	0.09
60	0.3	285.11	0.08
70	0.29	321.54	0.08
80	0.26	329.46	0.07
90	0.24	342.13	0.06
100	0.23	364.31	0.06

Peak Flow Rate = 0.28 cfs

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SNOW KING - LOT 57

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 2 YEAR

Design Storm Frequency = 2 years

Discharge Rate, d = 0.28 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	1,011	0.02	0.08	1	0.08	0.08	0.00
Roofs	19,594	0.45	0.95	1	0.95	0.95	0.43
Asphalt and Concrete	11,235	0.26	0.95	1	0.95	0.95	0.25
Lawn, Heavy, Steep, 7%+	4,315	0.10	0.3	1	0.3	0.3	0.03
		0.00	0	1	0	0	0.00
Totals	**36155**	**0.83**					**0.70**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.85$

$C_{wd} \times C_f = 0.85$

$C_{wd} \times C_f \times \Sigma A_j = 0.70$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	1.07	227.84	84.04	143.80	0.75
10	0.89	379.03	168.08	210.94	0.63
15	0.73	466.33	252.12	214.21	0.51
20	0.64	545.12	336.16	208.95	0.45
30	0.5	638.81	504.24	134.56	0.35
40	0.4	681.39	672.32	9.07	0.28
50	0.34	723.98	840.40	-116.42	0.24
60	0.3	766.57	1,008.48	-241.92	0.21
70	0.29	864.52	1,176.57	-312.05	0.20
80	0.26	885.81	1,344.65	-458.83	0.18
90	0.24	919.88	1,512.73	-592.84	0.17
100	0.23	979.50	1,680.81	-701.30	0.16

Water Quantity Storage Required = 214 ft^3

= 1,602 gallons

Peak Flow Rate = 0.75 cfs

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SNOW KING - LOT 57

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 10 YEAR

Design Storm Frequency = 10 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	19,003	0.44	0.2	1	0.2	0.2	0.09
Gravel Road	1,561	0.04	0.85	1	0.85	0.85	0.03
Asphalt and Concrete	2,461	0.06	0.95	1	0.95	0.95	0.05
Lawn, Heavy, Steep, 7%+	13,130	0.30	0.3	1	0.3	0.3	0.09
		0.00	0	1	0	0	0.00
Totals	**36154.8**	**0.83**					**0.26**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.32$

$C_{wd} \times C_f = 0.32$

$C_{wd} \times C_f \times \Sigma A_j = 0.26$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	1.8	142.55	0.47
10	1.42	224.92	0.37
15	1.19	282.73	0.31
20	1.05	332.63	0.27
30	0.83	394.40	0.22
40	0.68	430.83	0.18
50	0.57	451.42	0.15
60	0.51	484.69	0.13
70	0.47	521.12	0.12
80	0.44	557.55	0.12
90	0.4	570.22	0.10
100	0.37	586.06	0.10

Peak Flow Rate = 0.47 cfs

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SNOW KING - LOT 57

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 10 YEAR

Design Storm Frequency = 10 years

Discharge Rate, d = 0.47 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	1,011	0.02	0.08	1	0.08	0.08	0.00
Roofs	19,594	0.45	0.95	1	0.95	0.95	0.43
Gravel Road	11,235	0.26	0.85	1	0.85	0.85	0.22
Lawn, Heavy, Steep, 7%+	4,315	0.10	0.3	1	0.3	0.3	0.03
		0.00	0	1	0	0	0.00
Totals	**36154.8**	**0.83**					**0.68**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.82$

$C_{wd} \times C_f = 0.82$

$C_{wd} \times C_f \times \Sigma A_j = 0.68$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	1.8	369.24	141.38	227.86	1.22
10	1.42	582.58	282.75	299.83	0.96
15	1.19	732.33	424.13	308.20	0.81
20	1.05	861.56	565.51	296.06	0.71
30	0.83	1,021.57	848.26	173.31	0.56
40	0.68	1,115.93	1,131.01	-15.08	0.46
50	0.57	1,169.26	1,413.76	-244.50	0.39
60	0.51	1,255.42	1,696.52	-441.10	0.35
70	0.47	1,349.78	1,979.27	-629.49	0.32
80	0.44	1,444.14	2,262.02	-817.88	0.30
90	0.4	1,476.96	2,544.77	-1,067.81	0.27
100	0.37	1,517.99	2,827.53	-1,309.54	0.25

Water Quantity Storage Required = 308 ft^3
= 2,305 gallons

Peak Flow Rate = 1.22 cfs

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SNOW KING - LOT 57

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 100 YEAR

Design Storm Frequency = 100 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	19,003	0.44	0.2	1.25	0.25	0.25	0.11
Gravel Road	1,561	0.04	0.85	1.25	1.0625	1	0.04
Asphalt and Concrete	2,461	0.06	0.95	1.25	1.1875	1	0.06
Lawn, Heavy, Steep, 7%+	13,130	0.30	0.3	1.25	0.375	0.375	0.11
		0.00	0	1.25	0	0	0.00
Totals	**36154.8**	**0.83**					**0.33**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.32$

C_{wd} x C_f = 0.39

C_{wd} x C_f x ΣA_j = 0.33

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	3	296.99	0.98
10	2.33	461.32	0.76
15	1.9	564.28	0.62
20	1.65	653.37	0.54
30	1.3	772.17	0.43
40	1.08	855.33	0.35
50	0.95	940.46	0.31
60	0.82	974.12	0.27
70	0.74	1025.60	0.24
80	0.65	1029.56	0.21
90	0.61	1086.98	0.20
100	0.56	1108.76	0.18

Peak Flow Rate = 0.98 cfs

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SNOW KING - LOT 57

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 100 YEAR

Design Storm Frequency = 100 years

Discharge Rate, d = 0.98 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	1,011	0.02	0.08	1.25	0.1	0.1	0.00
Roofs	19,594	0.45	0.95	1.25	1.1875	1	0.45
Asphalt and Concrete	11,235	0.26	0.95	1.25	1.1875	1	0.26
Lawn, Heavy, Steep, 7%+	4,315	0.10	0.3	1.25	0.375	0.375	0.04
		0.00	0	1.25	0	0	0.00
Totals	**36154.8**	**0.83**					**0.83**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.85$

$C_{wd} \times C_f = 1.00$

$C_{wd} \times C_f \times \Sigma A_j = 0.83$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	3	753.23	294.53	458.69	2.49
10	2.33	1,170.01	589.07	580.94	1.93
15	1.9	1,431.13	883.60	547.53	1.58
20	1.65	1,657.10	1,178.14	478.96	1.37
30	1.3	1,958.39	1,767.20	191.18	1.08
40	1.08	2,169.29	2,356.27	-186.98	0.90
50	0.95	2,385.21	2,945.34	-560.13	0.79
60	0.82	2,470.58	3,534.41	-1,063.83	0.68
70	0.74	2,601.14	4,123.48	-1,522.34	0.61
80	0.65	2,611.18	4,712.55	-2,101.37	0.54
90	0.61	2,756.80	5,301.61	-2,544.81	0.51
100	0.56	2,812.04	5,890.68	-3,078.64	0.46

Water Quantity Storage Required = 581 ft^3

= 4,345 gallons

Peak Flow Rate = 2.49 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 2 YEAR

Design Storm Frequency = 2 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	0	0.00	0.2	1	0.2	0.2	0.00
Gravel Road	7,280	0.17	0.85	1	0.85	0.85	0.14
Asphalt and Concrete	0	0.00	0.95	1	0.95	0.95	0.00
Lawn, Heavy, Steep, 7%+	40,636	0.93	0.3	1	0.3	0.3	0.28
		0.00	0	1	0	0	0.00
Totals	**47916**	**1.10**					**0.42**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.38$

$C_{wd} \times C_f = 0.38$

$C_{wd} \times C_f \times \Sigma A_j = 0.42$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	1.07	136.56	0.45
10	0.89	227.18	0.38
15	0.73	279.51	0.31
20	0.64	326.73	0.27
30	0.5	382.89	0.21
40	0.4	408.42	0.17
50	0.34	433.94	0.14
60	0.3	459.47	0.13
70	0.29	518.18	0.12
80	0.26	530.94	0.11
90	0.24	551.36	0.10
100	0.23	587.10	0.10

Peak Flow Rate = 0.45 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 2 YEAR

Design Storm Frequency = 2 years

Discharge Rate, d = 0.45 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	0	0.00	0.08	1	0.08	0.08	0.00
Roofs	9,344	0.21	0.95	1	0.95	0.95	0.20
Asphalt and Concrete	12,857	0.30	0.95	1	0.95	0.95	0.28
Lawn, Heavy, Steep, 7%+	25,715	0.59	0.3	1	0.3	0.3	0.18
		0.00	0	1	0	0	0.00
Totals	**47916**	**1.10**					**0.66**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.60$

$C_{wd} \times C_f = 0.60$

$C_{wd} \times C_f \times \Sigma A_j = 0.66$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	1.07	214.04	135.44	78.60	0.71
10	0.89	356.07	270.87	85.20	0.59
15	0.73	438.08	406.31	31.77	0.48
20	0.64	512.10	541.74	-29.65	0.42
30	0.5	600.11	812.62	-212.50	0.33
40	0.4	640.12	1,083.49	-443.37	0.26
50	0.34	680.13	1,354.36	-674.23	0.22
60	0.3	720.14	1,625.23	-905.10	0.20
70	0.29	812.15	1,896.10	-1,083.95	0.19
80	0.26	832.16	2,166.98	-1,334.82	0.17
90	0.24	864.16	2,437.85	-1,573.69	0.16
100	0.23	920.17	2,708.72	-1,788.55	0.15

Water Quantity Storage Required = 85 ft^3

= 637 gallons

Peak Flow Rate = 0.71 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 10 YEAR

Design Storm Frequency = 10 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	0	0.00	0.2	1	0.2	0.2	0.00
Gravel Road	7,280	0.17	0.85	1	0.85	0.85	0.14
Asphalt and Concrete	0	0.00	0.95	1	0.95	0.95	0.00
Lawn, Heavy, Steep, 7%+	40,636	0.93	0.3	1	0.3	0.3	0.28
		0.00	0	1	0	0	0.00
Totals	**47916**	**1.10**					**0.42**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.38$

$C_{wd} \times C_f = 0.38$

$C_{wd} \times C_f \times \Sigma A_j = 0.42$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	1.8	229.74	0.76
10	1.42	362.47	0.60
15	1.19	455.64	0.50
20	1.05	536.05	0.44
30	0.83	635.60	0.35
40	0.68	694.31	0.29
50	0.57	727.49	0.24
60	0.51	781.10	0.22
70	0.47	839.81	0.20
80	0.44	898.52	0.19
90	0.4	918.94	0.17
100	0.37	944.47	0.16

Peak Flow Rate = 0.76 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 10 YEAR

Design Storm Frequency = 10 years

Discharge Rate, d = 0.76 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	0	0.00	0.08	1	0.08	0.08	0.00
Roofs	9,344	0.21	0.95	1	0.95	0.95	0.20
Gravel Road	12,857	0.30	0.85	1	0.85	0.85	0.25
Lawn, Heavy, Steep, 7%+	25,715	0.59	0.3	1	0.3	0.3	0.18
		0.00	0	1	0	0	0.00
Totals	**47916**	**1.10**					**0.63**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.57$

$C_{wd} \times C_f = 0.57$

$C_{wd} \times C_f \times \Sigma A_j = 0.63$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	1.8	344.00	227.84	116.16	1.14
10	1.42	542.75	455.67	87.08	0.90
15	1.19	682.26	683.51	-1.25	0.75
20	1.05	802.66	911.35	-108.69	0.66
30	0.83	951.72	1,367.02	-415.29	0.52
40	0.68	1,039.64	1,822.69	-783.06	0.43
50	0.57	1,089.32	2,278.36	-1,189.04	0.36
60	0.51	1,169.59	2,734.04	-1,564.45	0.32
70	0.47	1,257.50	3,189.71	-1,932.21	0.30
80	0.44	1,345.41	3,645.38	-2,299.97	0.28
90	0.4	1,375.99	4,101.05	-2,725.07	0.25
100	0.37	1,414.21	4,556.73	-3,142.52	0.23

Water Quantity Storage Required = 116 ft^3

= 869 gallons

Peak Flow Rate = 1.14 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
PRE-DEVELOPMENT - 100 YEAR

Design Storm Frequency = 100 years

Discharge Rate, d = 0.00 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Unimproved	0	0.00	0.2	1.25	0.25	0.25	0.00
Gravel Road	7,280	0.17	0.85	1.25	1.0625	1	0.17
Asphalt and Concrete	0	0.00	0.95	1.25	1.1875	1	0.00
Lawn, Heavy, Steep, 7%+	40,636	0.93	0.3	1.25	0.375	0.375	0.35
		0.00	0	1.25	0	0	0.00
Totals	**47916**	**1.10**					**0.53**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.38$

$C_{wd} \times C_f = 0.48$

$C_{wd} \times C_f \times \Sigma A_j = 0.53$

Time of Concentration = 5 minutes

	Water Quantity Calculations		
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Peak Flow (ft^3/sec)
5	3	478.61	1.58
10	2.33	743.45	1.23
15	1.9	909.37	1.00
20	1.65	1052.95	0.87
30	1.3	1244.40	0.69
40	1.08	1378.41	0.57
50	0.95	1515.61	0.50
60	0.82	1569.86	0.43
70	0.74	1652.82	0.39
80	0.65	1659.20	0.34
90	0.61	1751.73	0.32
100	0.56	1786.83	0.30

Peak Flow Rate = 1.58 cfs

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SNOW KING - LOT 53

STORMWATER MANAGEMENT PLAN
RATIONAL METHOD RUNOFF CALCULATIONS
POST-DEVELOPMENT - 100 YEAR

Design Storm Frequency = 100 years

Discharge Rate, d = 1.58 cfs

Surface Type	Area A (ft^2)	Area (acres)	Runoff Coefficient C	Frequency Factor C_f	C x C_f	Calculation Value C'	C' x A (acres)
Lawn, Sandy, Flat, 2%	0	0.00	0.08	1.25	0.1	0.1	0.00
Roofs	9,344	0.21	0.95	1.25	1.1875	1	0.21
Asphalt and Concrete	12,857	0.30	0.95	1.25	1.1875	1	0.30
Lawn, Heavy, Steep, 7%+	25,715	0.59	0.3	1.25	0.375	0.375	0.22
		0.00	0	1.25	0	0	0.00
Totals	**47916**	**1.10**					**0.83**

Weighted Runoff Coefficient, $C_{wd} = \frac{\Sigma C_i A_j}{\Sigma A_j} = 0.60$

$C_{wd} \times C_f = 0.75$

$C_{wd} \times C_f \times \Sigma A_j = 0.83$

Time of Concentration = 5 minutes

	Water Quantity Calculations				
Rainfall Duration, t (min)	Rainfall Intensity, i (in/hr)	Runoff Volume (ft^3)	Discharge Volume (ft^3)	Site Detention (ft^3)	Peak Flow (ft^3/sec)
5	3	750.14	474.66	275.48	2.48
10	2.33	1,165.22	949.32	215.90	1.93
15	1.9	1,425.27	1,423.98	1.29	1.57
20	1.65	1,650.31	1,898.64	-248.32	1.36
30	1.3	1,950.37	2,847.95	-897.59	1.07
40	1.08	2,160.41	3,797.27	-1,636.86	0.89
50	0.95	2,375.45	4,746.59	-2,371.14	0.79
60	0.82	2,460.47	5,695.91	-3,235.44	0.68
70	0.74	2,590.49	6,645.23	-4,054.74	0.61
80	0.65	2,600.49	7,594.55	-4,994.05	0.54
90	0.61	2,745.52	8,543.86	-5,798.34	0.50
100	0.56	2,800.53	9,493.18	-6,692.65	0.46

Water Quantity Storage Required = 275 ft^3

= 2,061 gallons

Peak Flow Rate = 2.48 cfs

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

BY: SS & JL
Date: 2025-03-24

Average Day Occupancy Rate [1]	50%
Max Day Factor [1], MDF	2.72
Peak Hour Factor [2], PHF	4

WATER DEMAND							
a				b	c=a*b	d=MDF*c	e=d/1440 * PHF
Unit Type			No. of Units	Average gpd/unit	Average TOTAL, gpd	Maximum TOTAL, gpd	PEAK HOUR, gpm
Lot 53							
Condo	1	Bedroom	1	125	125	340	0.9
Affordable	1	Bedroom	3	125	375	1020	2.8
Condo	2	Bedroom	18	125	4500	12240	34.0
Affordable	2	Bedroom	3	125	750	2040	5.7
Condo	3	Bedroom	7	125	2625	7140	19.8
Affordable	3	Bedroom	1	125	375	1020	2.8
Condo	4	Bedroom	0	125	0	0	0.0
Subtotal Domestic Water Demand					8750	23800	66.1
Lot 58							
Condo	1	Bedroom	0	125	0	0	0.0
Condo	2	Bedroom	7	125	1750	4760	13.2
Condo	3	Bedroom	5	125	1875	5100	14.2
Condo	4	Bedroom	0	125	0	0	0.0
Subtotal Domestic Water Demand					3625	9860	27.4
Lot 57 North							
Condo	1	Bedroom	0	125	0	0	0.0
Affordable	1	Bedroom	2	125	250	680	1.9
Condo	2	Bedroom	10	125	2500	6800	18.9
Affordable	2	Bedroom	1	125	250	680	1.9
Condo	3	Bedroom	0	125	0	0	0.0
Affordable	3	Bedroom	1	125	375	1020	2.8
Condo	4	Bedroom	0	125	0	0	0.0
Subtotal Domestic Water Demand					3375	9180	25.5
Lot 57 South							
Condo	1	Bedroom	0	125	0	0	0.0
Affordable	1	Bedroom	0	125	0	0	0.0
Condo	2	Bedroom	4	125	1000	2720	7.6
Affordable	2	Bedroom	1	125	250	680	1.9
Condo	3	Bedroom	6	125	2250	6120	17.0
Affordable	3	Bedroom	0	125	0	0	0.0
Condo	4	Bedroom	2	125	1000	2720	7.6
Subtotal Domestic Water Demand					4500	12240	34.0
Total Domestic Water Demand					20,250	55,080	153.0

JORGENSEN ASSOCIATES, PC
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FIRE SUPPRESSION						
Total Building Size	Building Type	Required Pressure [4]	Required Duration [4]	Total Fire Flow [4]	Sprinkler Reduction [5]	Adjusted Fire Flow [5]
(SF)	(IBC)	(psi)	(hours)	(gpm)	(%)	(gpm)
Lot 53						
73,743	IIB	20	4	6000	75%	1500
Lot 58						
34,849	IIB	20	4	4000	75%	1000
Lot 57 North						
32,455	IIB	20	3	3750	75%	1000
Lot 57 South						
38,378	IIB	20	4	4000	75%	1000

Note:

[1] Based on daily rates from the WYDEQ CH 12, Section 8

[2] Peak Hour Factor based on busiest hour occuring during the busiest quarter of the day.

[3] IFC - Appendix B, Table B105.1, Type II-B

[4] IFC - Appendix B, Section B105.2, 75% reduction for automatic sprinkler systems, minimum 1500 gpm

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BY: SS & JL
Date: 2025-03-24

WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**
Lot 53					
Condo 1 Bedroom	1	Lavatory Sink	1	1.5	2
		Shower	1	2.5	3
		Bath Tub	1	8	8
		Toilet	1	6	6
		Kitchen Sink	1	1.8	2
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	3
		Utility Sink	0	4	0
Affordable 1 Bedroom	3	Lavatory Sink	1	1.5	5
		Shower	1	2.5	8
		Bath Tub	1	8	24
		Toilet	1	6	18
		Kitchen Sink	1	1.8	5
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	9
		Utility Sink	0	4	0
Condo 2 Bedroom	18	Lavatory Sink	3	1.5	81
		Shower	1	2.5	45
		Bath Tub	1	8	144
		Toilet	2	6	216
		Kitchen Sink	1	1.8	32
		Dishwasher	1	1.3	23
		Laundry (washer)	1	3	54
		Utility Sink	0	4	0
Additional Sinks		Lavatory Sink	12	1.5	18
Additional Toilets		Toilet	5	6	30
Affordable 2 Bedroom	3	Lavatory Sink	2	1.5	9
		Shower	1	2.5	8
		Bath Tub	1	8	24
		Toilet	2	6	36
		Kitchen Sink	1	1.8	5
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	9
		Utility Sink	0	4	0
Condo 3 Bedroom	7	Lavatory Sink	5	1.5	53
		Shower	3	2.5	53
		Bath Tub	1	8	56

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WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**
		Toilet	3	6	126
		Kitchen Sink	1	1.8	13
		Dishwasher	1	1.3	9
		Laundry (washer)	1	3	21
		Utility Sink	0	4	0
Affordable 3 Bedroom	1	Lavatory Sink	1	1.5	2
		Bath Tub	1	8	8
		Shower	1	2.5	3
		Toilet	1	6	6
		Kitchen Sink	1	1.8	2
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	3
		Utility Sink	0	4	0
Lot 58					
Condo 2 Bedroom	7	Lavatory Sink	3	1.5	32
		Shower	1	2.5	18
		Bath Tub	1	8	56
		Toilet	2	6	84
		Kitchen Sink	1	1.8	13
		Dishwasher	1	1.3	9
		Laundry (washer)	1	3	21
		Utility Sink	0	4	0
Condo 3 Bedroom	5	Lavatory Sink	5	1.5	38
		Shower	3	2.5	38
		Bath Tub	1	8	40
		Toilet	3	6	90
		Kitchen Sink	1	1.8	9
		Dishwasher	1	1.3	7
		Laundry (washer)	1	3	15
		Utility Sink	0	4	0
Lot 57					
Affordable 1 Bedroom	2	Lavatory Sink	1	1.5	3
		Shower	1	2.5	5
		Bath Tub	1	8	16
		Toilet	1	6	12
		Kitchen Sink	1	1.8	4
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	6
		Utility Sink	0	4	0
Condo 2 Bedroom	14	Lavatory Sink	3	1.5	63
		Shower	1	2.5	35

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WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**
		Bath Tub	1	8	112
		Toilet	2	6	168
		Kitchen Sink	1	1.8	25
		Dishwasher	1	1.3	18
		Laundry (washer)	1	3	42
		Utility Sink	0	4	0
Additional Sinks		Lavatory Sink	3	1.5	5
Affordable 2 Bedroom	2	Lavatory Sink	2	1.5	6
		Shower	1	2.5	5
		Bath Tub	1	8	16
		Toilet	2	6	24
		Kitchen Sink	1	1.8	4
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	6
		Utility Sink	0	4	0
Affordable 3 Bedroom	1	Lavatory Sink	2	1.5	3
		Shower	2	2.5	5
		Bath Tub	1	8	8
		Toilet	2	6	12
		Kitchen Sink	1	1.8	2
		Dishwasher	0	1.3	0
		Laundry (washer)	1	3	3
		Utility Sink	0	4	0
Condo 3 Bedroom	6	Lavatory Sink	3	1.5	27
		Shower	2	2.5	30
		Bath Tub	1	8	48
		Toilet	2	6	72
		Kitchen Sink	1	1.8	11
		Dishwasher	1	1.3	8
		Laundry (washer)	1	3	18
		Utility Sink	0	4	0
Condo 4 Bedroom	2	Lavatory Sink	6	1.5	18
		Shower	3	2.5	15
		Bath Tub	1	8	16
		Toilet	3	6	36
		Kitchen Sink	1	1.8	4
		Dishwasher	1	1.3	3
		Laundry (washer)	1	3	6
		Utility Sink	0	4	0

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WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**

TOTAL FIXTURE VALUE	2,541
Probable Water Flow Demand (AWWA M22 - Figure 4-3)	75
Design Pressure Adjustment Factor (AWWA M22 - 60 psi)	1.00
Adjusted Probable Demand (gpm)[3]	**75**

Note:

[1] Fixture Value based on AWWA M22

[2] Fixture count based 2024.07.02 program

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WATER DEMAND - M22 FIXTURE CALCULATION					
Unit Type	**No. of Units**	**Fixture**	**Fixtures per Unit[2]**	**Fixture Value[1]**	**Fixture Value**

[3] *Domestic use only, no irrigation*

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Attachment D: Water System Evaluation

The existing Snow King Resort Public Water System consists of a duplex booster pump located in the garage of Love Ridge Condominium Building 48, at 6,372 feet, a 1,160LF long, 8" diameter water supply line running uphill to a 110,000 gallon storage tank south/above at roughly 6,600 feet.

System Configuration

The following information was drawn from the Grand View Lodges – Phase B Wyoming DEQ Permit to Construct.

Static Headloss:

Water surface elevation in tank, full:

Tank Floor Elevation:	6583.0'
Depth to shutoff:	+ 13.0'
	6596.0'

	6596.0'
Booster Station Elevation:	- 6,372.0'
	224.0'

Friction Loss:

Fittings	Number of Fittings
8" Diameter Gate Valve	3
8" Diameter Tee; flow through	5
8" Diameter Tee; branch flow	1
8" Diameter 90° Bend	2
8" Diameter 45° Bend	6
8" Diameter 22.5° Bend	2
8" Diameter 11.25° Bend	2

Minor Head Loss; calculated for various flow scenarios

$$H_m = \frac{K*V^2}{2*g}$$

Flowrate	136 gpm	272 gpm	1,000 gpm	1,190.6 gpm
Minor Losses	0.05 ft-H_2O	0.19 ft-H_2O	2.59 ft-H_2O	3.67 ft-H_2O

Pipe

1,160 LF of 8" Diameter CL-350 Ductile Iron Pipe, Cement Lined

C coefficient	140.0
Inside Diameter	8.43"

Major Head Loss; calculated for various flow scenarios using Flowmaster

Flowrate	136 gpm	272 gpm	1,000 gpm	1,190.6 gpm
Major Losses	0.36' ft-H_2O	1.28 ft-H_2O	14.32 ft-H_2O	19.78 ft-H_2O

System Total Head Loss

Flowrate	136 gpm	272 gpm	1,000 gpm	1,190.6 gpm
Head	224.41' ft-H_2O	225.47 ft-H_2O	240.91 ft-H_2O	247.45 ft-H_2O

Water Available

Storage Tank

The tank provides 110,000 gallons of water storage

Pumped

Using 272 gpm flow scenario, for both pumps operating simultaneously

System Total Head: 45psi = 225.47 ft-H_2O

Pump Intake Head: - 103.83 ft-H_2O

121.64 ft-H_2O → 60.82 ft-H_2O per stage

National Pump M6HC Pump Curve used, 2-stage, 4.400 impeller configuration

Pump flowrate, Q = 155 gpm

System Demands

Existing Demands

Existing Love Ridge Condominiums Water Demand				
	Units No. of Units	Average TOTAL, gpd	Maximum TOTAL, gpd	Peak Hour gpm
Condos	20	10,944	27,072	37.6

Proposed Demands

Domestic Water Demand				
Lot	Units No. of Units	Average TOTAL, gpd	Maximum TOTAL, gpd	Peak Hour gpm
Lot 53	34	9,250	25,160	69.9
Lot 58	12	3,625	9,860	27.4
Lot 57	26	7,375	20,060	55.7
Total	**72**	**20,250**	**55,080**	**153.0**

Fire Flow

Combined fire sprinkler and hydrant flow: 1,000 gpm for 2 hours

System Capacity Analysis

Fire Flow Event: 2-hour duration

Water Supply

Storage Tank; at pump on level, assuming 5,000-gallon operating range between pump on and pump off level

105,000 gallons

Pumped; both booster pumps operating

Pump 1, starts at beginning of fire flow event

$$155\ gpm * 120\ minutes = 18{,}600\ gallons$$

Pump 2, starts when lag pump on level is reached in the tank. Assuming 5,000 gallons to lag pump on, this takes 4 minutes at fire flows

$$155\ gpm * 116\ minutes = 17{,}980\ gallons$$

Total volume of water available: $105{,}000 + 18{,}600 + 17{,}980 = \mathbf{141{,}580\ gallons}$

Water Demands

Existing Domestic Demands

Peak Hour: $37.6\ gpm * 60\ minutes = 2{,}256\ gallons$

Typical hour of maximum day: $27{,}072\ gpd \Big/ 24\ \frac{hours}{day} = 1{,}128\ gallons$

$$2{,}256 + 1{,}128 = 3{,}384\ gallons$$

Proposed Domestic Demands

Peak Hour: $153.0\ gpm * 60\ minutes = 9{,}198\ gallons$

Typical hour of maximum day: $55{,}080\ gpd \Big/ 24\ \frac{hours}{day} = 2{,}295\ gallons$

$$9{,}198 + 2{,}295 = 11{,}493\ gallons$$

Fire Flow, sprinklers and hydrants: $1{,}000\ gpm * 120\ minutes = 120{,}000\ gallons$

Total volume of water demanded: $3{,}384 + 11{,}493 + 120{,}000 = \mathbf{134{,}877\ gallons}$

Total volume of water available exceeds total volume of water demanded

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BY: SS & JL
Date: 2025-03-24

Average Daily Flow	60%
Peak Hour Factor	4

SANITARY SEWER DEMAND						
Unit Type			No. of Units[2]	Max Flow per Bedroom, gpd[1]	Average TOTAL, gpd	Maximum TOTAL, gpd	PEAK HOUR, gpm
Lot 53							
Condo	1	Bedroom	1	150	90	150	0.4
Affordable	1	Bedroom	3	150	270	450	1.3
Condo	2	Bedroom	18	150	3240	5400	15.0
Affordable	2	Bedroom	3	150	540	900	2.5
Condo	3	Bedroom	7	150	1890	3150	8.8
Affordable	3	Bedroom	1	150	270	450	1.3
Condo	4	Bedroom	0	150	0	0	0.0
SUBTOTAL SANITARY SEWER DEMAND					6300	10500	29.2
Lot 58							
Condo	1	Bedroom	0	150	0	0	0.0
Condo	2	Bedroom	7	150	1260	2100	5.8
Condo	3	Bedroom	5	150	1350	2250	6.3
Condo	4	Bedroom	0	150	0	0	0.0
SUBTOTAL SANITARY SEWER DEMAND					2610	4350	12.1
Lot 57 North							
Condo	1	Bedroom	0	150	0	0	0.0
Affordable	1	Bedroom	2	150	180	300	0.8
Condo	2	Bedroom	10	150	1800	3000	8.3
Affordable	2	Bedroom	1	150	180	300	0.8
Condo	3	Bedroom	0	150	0	0	0.0
Affordable	3	Bedroom	1	150	270	450	1.3
Condo	4	Bedroom	0	150	0	0	0.0
SUBTOTAL SANITARY SEWER DEMAND					2430	4050	11.3
Lot 57 South							
Condo	1	Bedroom	0	150	0	0	0.0
Affordable	1	Bedroom	0	150	0	0	0.0
Condo	2	Bedroom	4	150	720	1200	3.3
Affordable	2	Bedroom	1	150	180	300	0.8
Condo	3	Bedroom	6	150	1620	2700	7.5
Affordable	3	Bedroom	0	150	0	0	0.0
Condo	4	Bedroom	2	150	720	1200	3.3
SUBTOTAL SANITARY SEWER DEMAND					3240	5400	15.0
TOTAL SANITARY SEWER DEMAND					14,580	24,300	67.5

Notes:

[1] *Based on daily flow rates from the WYDEQ CH 11, Part B, Table 1*

[2] *Bedroom count shown based on Development Plan Review, 10.25.2019*

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Attachment F: Snow King Resort Master Plan Water, Sewer, Traffic Analysis Assumptions

The Snow King Resort Master Plan evaluated impacts of development of the Master Plan area on the Town of Jackson infrastructure. Assumptions about the nature of future development were made to do these impact studies. For this Development Plan, we have broken out the assumed impacts that apply to Sub-area 3 based on the Example Development Table with the goal of ensuring the total impact of development in the sub-area is less than or equal to what was analyzed and approved in the Master Plan approval process.

The following assumed land uses for Sub-area 3, from the Example Development Table were used:
Condominium Units: 150
Hotel Rooms: 50

Traffic Impact

The traffic impacts allocated to Sub-area 3 in the Master Plan analysis are found by using the projected trip generation rates given in Table C-5 of the Master Plan.
Condo Units: 10.2 trips/unit/day
Hotel Rooms: 8.0 trips/room/day

This yields a traffic generation allocation, for sub-area 3 of:

Condominiums: $150\ units * 8.0\ \frac{trips/_{unit}}{day} = 1{,}200\ \frac{trips}{day}$

Hotel Rooms: $50\ rooms * 10.2\ \frac{trips/_{unit}}{day} = 510\ \frac{trips}{day}$

Total: $\mathbf{1710\ \frac{trips}{day}}$

Sanitary Sewer Generation

The sanitary sewer generation allocated to Sub-area 3 in the Master Plan analysis are found by using the projected maximum day sanitary sewer generation rates given in Section IX.C.4 of the Master Plan. The *Proposed Master Plan Flow Potential-2000* are:
Condominiums: 450 gpd/condominium
Hotel Units: 225 gpd/room

This yields a wastewater generation allocation, for sub-area 3 of:

Condominiums: $150\ units * 450\ \frac{gpd}{condominum} = 67{,}500\ gpd$

Hotel Units: $50\ rooms * 225\ \frac{gpd}{room} = 11{,}250\ gpd$

Total: $\boldsymbol{Maximum\ Day: 78{,}750\ gpd}$

$$\boldsymbol{Average\ Day = \frac{Maximum\ Day}{2} = 39{,}375\ gpd}$$

Water Demand

The water demand allocated to Sub-area 3 in the Master Plan analysis are found by using the projected domestic demand given in Section IX.B of the Master Plan. The Master Plan assumed that peak demand for domestic flow was double the maximum day wastewater generation rate. This yields:

Condominiums: 700 gpd/condominium
Hotel Units: 450 gpd/room

This yields a wastewater generation allocation, for sub-area 3 of:

Condominiums: $150\ units * 700 \frac{gpd}{condominum} = 105{,}000\ gpd$

Hotel Units: $50\ rooms * 450 \frac{gpd}{room} = 22{,}500\ gpd$

Total: $\boldsymbol{Maximum\ Day: 127{,}500\ gpd}$

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Regular Meeting
Submitting Department:	Administration & Finance	**Presenter:**	Kelly Thompson & Tyler Sinclair
Agenda Item:	Fiscal Year 2025 Budget - Amendment #4	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Town Council to consider approval of a resolution adopting amendments to the Town of Jackson's fiscal year 2025 budget.

Requested Action.
Staff requests that the Mayor & Council approve the attached resolution.

Recommendations.
Staff recommends that the Mayor & Council approve the attached resolution.

Background.
The annual adoption of the fiscal year budget, and subsequent amendments, are critical to the Town's ability to accomplish its purpose and mission. The budget is a vehicle for the Council to address strategic priorities and give staff resources to provide core services.

Analysis & Key Policy Questions.
The attached resolution proposes modifications to the Town's current FY2025 budget. The resolution represents the 2025 amended budget divided into budget divisions. There are increased expenditures of $5,749,578, of this $651,575 are items not previously presented to Council shown in blue below. There are increased revenues of $2,803,056 assigned to specific funds. Detailed budget amendments include:

- $140,000 for License Plate Reader contract approved at the Regular Town Council Meeting - June 5, 2023.
  - This will be funded with IT Services fund balance.
- $70,000 increase to IT services for various small tools, internet and communication items.
  - This will be funded with IT Services fund balance.
- $60,078 for Council chambers AV contract approved at the Special Town Council Meeting - June 9, 2025.
  - This will be funded with IT Services fund balance.
- $4,438,136 for Gregory Lane Complete Street project approved at the Regular Town Council Meeting - March 9, 2025.
  - This will be funded with:
    - $2,411,798 from the Capital Project Fund balance
    - $987,556 from the Water Utility Fund reserve
    - $1,028,782 from the Sewer Utility Fund reserve
    - $2,130,588 from the 2022 Specific Purpose Excise Tax – Transportation Alternatives and Safe Routes to School
    - $281,210 from a 319 federal grant
- $382,175 for total compensation increase. This is due to total compensation adjustments for new staff hires, current staff adjustments, and salary savings estimates. The FY25 budget includes a $700,000 reduction in total compensation to account for salary savings. This was based on historical trends in an effort to make the budget more accurate. The departments below ended up having lower vacancy rates, therefore the budget needs an increase to account for this. Departments impacted:
  - $45,407 for the Animal Shelter department, this will be funded with Animal Care Fund balance.
  - $300,190 for the Police – Patrol department, this will be funded with the General Fund discretionary fund

    - $36,578 for the Police - Community Service Officers department, his will be funded with the General Fund discretionary fund,
- $162,000 for upgrades to the IT server room and replacement of the UPS server.
    - This will be funded with reductions in other capital projects and operating accounts.
- $100,083 for BUILD grant administration increase due to updated figures from County and consultant.
    - This will be funded by the BUILD grant or 2022 SPET.
- $13,000 for prisoner expense due to a mid-year rate increase by the jail.
    - This will be funded with General Fund Discretionary fund balance.
- $10,900 for Council increases to supplies, printing, publication and professional service accounts.
    - This will be funded with General Fund Discretionary fund balance.
- $6,000 for utility electronic payment processing.
    - This is covered in utility rates and customer fees.
- $4,500 for electrical work at the Parking Access Revenue Control System (PARCS) at Millward/Simpson parking garage that was not covered by the contract.
    - This will be funded with Parking Exaction funds and parking management fees.
- Capital Project Budget Rollover: These capital projects were in progress at the end of FY2024. Remaining funds from FY2024 need to be carried into the FY2025 budget to complete these projects:
    - $196,904 to close out the Town's share of the Recreation Center remodel.
    - $165,000 for Patrol Vehicles

See attached the complete Budget Resolution divided by Division and Fund for further detail.

Question #1: Does Council have any edits to the staff recommended budget amendments?

Possible Alternatives.
Council may amend as deemed necessary.

Comprehensive Plan & Priority Alignment.
Common Value #3 - Quality of Life, Section 8. Quality Community Service Provision

- *Principle 8.1*- Maintain current, coordinated service delivery
    - Policy 8.1.e: Budget for service delivery
- *Principle 8.2* - Coordinate the provision of infrastructure and facilities needed for service delivery
    - Policy 8.1.S.1: Use budgeting to affirm desired service levels from government service providers that address all policies of Principle 8.1.

Fiscal Impact.
The proposed budget adjustments in the attached resolution include only the updates where current division estimates vary significantly from the FY25 budget. The proposed budget adjustments do not address small and relatively immaterial variances between expectations and budget.

Staff Impact.
Town Manager and Directors spend about 20 hours a month reviewing the budget.

Attachments or Links.
Resolution 25-12 adopting amendments to the Fiscal Year 2025 Budget.

Suggested Motion.

I move to approve Resolution 25-12 adopting amendments to the fiscal year 2025 budget as presented.

RESOLUTION 25-12

A RESOLUTION ADOPTING AMENDMENTS TO THE FISCAL YEAR 2025 BUDGET OF THE TOWN OF JACKSON.

WHEREAS, pursuant to Wyoming Statutes, the governing body of the Town of Jackson is empowered to control the finances of the Town including adopting and amending the annual budget; and

WHEREAS, the specific statutory requirements for budgeting procedures are stipulated in the Uniform Municipal Fiscal Procedures Act (W.S. 16-4-101 through 16-4-124); and

NOW THEREFORE BE IT RESOLVED by the Town Council of the Town of Jackson that the fiscal year 2025 budget is hereby amended as follows:

EXPENDITURES AND OTHER USES	Approved Budget	Increase (Decrease)	Amended Budget
Mayor & Town Council	447,028	10,850	457,878
Town Attorney	829,144	-	829,144
Municipal Judge	330,695	-	330,695
Administration	1,262,615	-	1,262,615
Internal Services	1,064,003	-	1,064,003
Finance	854,310	-	854,310
Communications and Strategic Initiatives	677,038	-	677,038
Information Technology	1,190,632	-	1,190,632
Planning	992,714	-	992,714
Town-Wide Services	382,497	-	382,497
Town Facilities	917,638	(112,900)	804,738
Police - Administration	1,045,147	13,000	1,058,147
Police - Investigations	1,017,900	-	1,017,900
Police - Patrol	4,012,025	300,190	4,312,215
Police - Community Service	751,972	36,578	788,550
Police - Special Operations	26,450	-	26,450
Victim Services	447,616	-	447,616
Animal Shelter/Control	457,986	45,407	503,393
Building Inspections	578,852	-	578,852
Public Works Administration	659,943	-	659,943
Streets	2,304,337	-	2,304,337
Engineering	845,204	-	845,204
Yard Operations	52,242	(4,500)	47,742
Cemetery	80,459	-	80,459
Social Services	1,567,651	-	1,567,651
Community Initiatives	720,975	-	720,975
County-Budgeted Joint Programs	7,383,129	-	7,383,129
Transfers Out	7,472,119	117,400	7,589,519
Total General Fund	38,372,321	406,025	38,778,346
Affordable Housing	1,671,211	-	1,671,211
Total Affordable Housing Fund	1,671,211	-	1,671,211
Parking Exactions Fund	184,500	4,500	189,000
Total Parking Exactions Fund	184,500	4,500	189,000
Parks Exactions	550,000	-	550,000
Total Park Exactions	550,000	-	550,000
Employee Housing Fund	1,049,312	-	914,625
Transfers out	134,687	-	134,687
Total Employee Housing Fund	1,183,999	-	1,183,999
Animal Care Fund	25,000	-	25,000
Transfers Out	121,142	45,407	166,549
Total Animal Care Fund	146,142	45,407	191,549
Lodging Tax Fund	-	-	-
Transfers Out	1,430,434	-	1,430,434
Total Lodging Tax Fund	1,430,434	-	1,430,434
START Administration	2,151,637	-	2,151,637
START Operations	8,460,825	-	8,460,825
START Capital	7,460,779	-	7,460,779
START Transfers	164,987	-	164,987
Total START Fund Expenditures	18,238,228	-	18,238,228
Capital Outlay	9,659,152	2,886,230	12,545,382
Transfers Out	195,000	-	195,000
Total Capital Projects Fund	9,854,152	2,886,230	12,740,382

EXPENDITURES AND OTHER USES	Approved Budget	Increase (Decrease)	Amended Budget
Capital Outlay	17,800	-	17,800
Total 2006 SPET	17,800	-	17,800
Capital Outlay	125,000	-	125,000
Total 2010 SPET	125,000	-	125,000
Capital Outlay	1,556,497		1,556,497
Total 2014 SPET	1,556,497	-	1,556,497
Capital Outlay	20,000	-	20,000
Total 2016 SPET	20,000	-	20,000
Capital Outlay	8,337,000	-	8,337,000
Total 2019 SPET	8,337,000	-	8,337,000
Water Maintenance & Operation	1,417,716	-	1,417,716
Water Wells	404,241	-	404,241
Water Billing & Accounting	337,684	-	337,684
Water Capital Outlay	7,469,666	987,556	8,457,222
Water Debt Service	66,970	-	66,970
Water Transfers Out	912,315	-	912,315
Sewage Plant Operations	894,230	-	894,230
Sewage Maint. & Operations	928,634	-	928,634
Sewage Billing & Accounting	213,247	6,000	219,247
Sewage Capital Outlay	4,601,413	1,028,782	5,630,195
Sewage Transfers Out	912,315	-	912,315
Total Enterprise Funds	18,158,431	2,022,338	20,180,769
Employee Insurance	3,621,603	-	3,621,603
Total Insurance Fund	3,621,603	-	3,621,603
Fleet Expenditures	2,690,954	-	2,690,954
Total Fleet Management Fund	2,690,954	-	2,690,954
Central Equipment Expenses	1,697,665	190,000	1,887,665
Total Central Equipment Fund	1,697,665	190,000	1,887,665
IT Services	1,604,255	135,000	1,739,255
Transfers Out	150,000	60,078	210,078
Total IT Service Fund	1,754,255	195,078	1,949,333

REVENUES AND OTHER SOURCES	Approved Budget	Increase (Decrease)	Amended Budget
Taxes	12,836,160	-	12,836,160
Licenses & Permits	1,534,843	-	1,534,843
Intergovernmental Revenue	16,192,034	-	16,192,034
Charges for Services	868,558	-	868,558
Fines & Forfeitures	310,000	-	310,000
Miscellaneous Revenue	1,229,764	-	1,229,764
Transfers In	2,363,991	45,407	2,409,398
Total General Fund	35,335,350	45,407	35,380,757
Licenses & Permits	450,000	-	450,000
Miscellaneous Revenue	96,100	-	96,100
Transfers In	1,638,898	-	1,638,898
Total Affordable Housing Fund	2,184,998	-	2,184,998
Licenses & Permits	17,000	-	17,000
Charges for Services	-	4,500	4,500
Miscellaneous Revenue	74,300	-	74,300
Total Parking Exactions	91,300	4,500	95,800
Licenses & Permits	50,000	-	50,000
Charges for Services	4,500	(4,500)	-
Miscellaneous Revenue	26,200	-	26,200
Total Park Exactions	80,700	(4,500)	76,200
Miscellaneous Revenue	903,415	-	903,415
Transfers In	-	-	-
Total Employee Housing Fund	903,415	-	903,415

REVENUES AND OTHER SOURCES	Approved Budget	Increase (Decrease)	Amended Budget
Miscellaneous Revenue	124,920	-	124,920
Total Animal Care Fund	124,920	-	124,920
Taxes	1,420,834	-	1,420,834
Intergovernmental Revenue	-	-	-
Miscellaneous Revenue	9,600	-	9,600
Total Lodging Tax Fund	1,430,434	-	1,430,434
Intergovernmental Revenue	12,984,514	-	12,984,514
Charges for Services	2,087,060	-	2,087,060
Miscellaneous Revenue	254,140	-	254,140
Transfers In	1,525,772	-	1,525,772
Total START Fund Revenues	16,851,486	-	16,851,486
Intergovernmental	591,154	2,580,171	3,171,325
Licenses & Permits	325,000	-	325,000
Miscellaneous Revenue	588,500	-	588,500
Transfers In	5,747,883	177,478	5,925,361
Total Capital Projects Fund	7,252,537	2,757,649	10,010,186
Miscellaneous Revenue	5,500	-	5,500
Total 2010 SPET	5,500		5,500
Miscellaneous	85,100	-	85,100
Total 2014 SPET	85,100		85,100
Miscellaneous	13,500	-	13,500
Total 2016 SPET	13,500	-	13,500
Miscellaneous	225,000	-	225,000
Total 2019 SPET	225,000	-	225,000
Taxes	500,000	-	500,000
Miscellaneous	11,300	-	11,300
Total 2022 SPET	511,300	-	511,300
Water Intergovernmental	1,573,458	-	1,573,458
Water Charges for Services	3,112,715	-	3,112,715
Water Miscellaneous	262,700	-	262,700
Water Transfers In	65,000	-	65,000
Sewage Charges for Services	3,507,500	-	3,507,500
Sewage Miscellaneous	205,280	-	205,280
Sewage Transfers In	65,000	-	65,000
Total Enterprise Funds	8,791,653	-	8,791,653
Charges for Services	2,950,988	-	2,950,988
Miscellaneous Revenue	75,100	-	75,100
Total Employee Insurance Fund	3,026,088	-	3,026,088
Charges for Services	2,757,716	-	2,757,716
Miscellaneous Revenue	(3,500)	-	(3,500)
Transfers In	140,000	-	140,000
Total Fleet Management Fund	2,894,216	-	2,894,216
Charges for Services	803,500	-	803,500
Miscellaneous Revenue	31,800	-	31,800
Transfers In	65,000	-	65,000
Total Central Equipment Fund	900,300	-	900,300
Charges for Services	1,498,171	-	1,498,171
Miscellaneous Revenue	1,400	-	1,400
Transfers In	-	-	-
Total IT Service Fund	1,499,571	-	1,499,571

CHANGE OF FUND BALANCE	Approved Budget	Increase (Decrease)	Amended Budget
General Fund	(3,036,971)	(360,618)	(3,397,589)
Affordable Housing	513,787	-	513,787
Parking Exactions Fund	(93,200)	-	(93,200)
Park Exactions Fund	(469,300)	(4,500)	(473,800)
Employee Housing Fund	(280,584)	-	(280,584)
Animal Care Fund	(21,222)	(45,407)	(66,629)
Lodging Tax Fund	-	-	-
Start Fund	(1,386,742)	-	(1,386,742)
Capital Projects	(2,601,615)	(128,581)	(2,730,196)
2006 SPET	(17,800)	-	(17,800)
2010 SPET	(119,500)	-	(119,500)
2014 SPET	(1,471,397)	-	(1,471,397)
2016 SPET	(6,500)	-	(6,500)
2019 SPET	(8,112,000)	-	(8,112,000)
2022 SPET	511,300	-	511,300
Enterprise Funds	(9,366,778)	(2,022,338)	(11,389,116)
Employee Insurance Fund	(595,515)	-	(595,515)
Fleet Management Fund	203,262	-	203,262
Central Equipment Fund	(797,365)	(190,000)	(987,365)
IT Services Fund	(254,684)	(195,078)	(449,762)

PASSED, APPROVED, & ADOPTED this 16th day of June , 2025

Town of Jackson

By: _____
Arne O. Jorgenson
Mayor

ATTEST:

By: _____
Riley Taylor
Town Clerk

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular Meeting
Submitting Department:	Administration	**Presenter:**	Tyler Sinclair
Agenda Item:	Fiscal Year 2026 Budget Resolution	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Town Council to consider approval of a Resolution adopting the Town of Jackson's Fiscal Year 2026 budget.

Requested Action.
Staff requests that the Mayor & Council approve the attached Resolution.

Recommendations.
Staff recommend that the Mayor & Council approve the attached Resolution.

Background.
The Mayor and Council are required by State Statute 16-4-109 and sound fiscal management practice to formally adopt an annual budget. A budget hearing must be held not later than the third Tuesday in June. After holding a public hearing, Council must adopt a budget. The budget then becomes the fiscal road map for management through which policies are implemented for the fiscal year beginning on July 1. By formally adopting the budget, the Mayor and Council are provided with a tool for measuring management's financial stewardship.

Analysis.
Town staff continues to work to balance current needs while preparing for a positive future, recognizing our responsibility to future generations. Fiscal transparency is a key priority, and this budget was prepared in accordance with applicable Wyoming Statutes and Town Ordinances. The proposed FY26 budget strives to:

- Investment in the Town's incredible staff to retain and recruit employees who provide quality services on which our community can rely.
- Resources to maintain and protect critical infrastructure including water and sewer.
- Clean drinking water, community safety, and consistent snow plowing.
- Improvements and new infrastructure added to Gregory Lane above and below ground.
- Allocations to support health and human service providers to deliver critical programs.
- A prudent reserve account providing a cushion for unforeseen challenges.

This budget includes a 0.5 Property Tax mill assessment with estimated revenues totaling $436,194. With adoption of the budget, staff will follow the procedure and request the County Assessor assess 0.5 property tax mills within the Town of Jackson.

Below staff has provided a summary of the proposed Fiscal Year 2026 Budget including all changes directed by Council to date.

TOWN OF JACKSON, WYOMING
ADOPTED BUDGET FOR FISCAL YEAR 2026
ALL FUNDS - FINANCIAL SOURCES AND USES

DESCRIPTION	GENERAL FUND	SPECIAL REVENUE	CAPITAL PROJECTS	ENTERPRISE FUNDS	INTERNAL SERVICE	TOTAL FUNDS
Beginning Fund Balance	**$17,050,961**	**$14,775,076**	**$21,620,901**	**$12,879,831**	**$ 2,242,009**	**$ 68,568,778**
Revenues:						
Taxes	12,572,826	-	1,450,000	-	-	14,022,826
Licenses & Permits	1,710,578	142,000	250,000	-	-	2,102,578
Intergovernmental	16,829,671	14,045,917	5,816,695	883,458	-	37,575,741
Charges for Services	953,780	2,233,700	-	7,050,101	8,449,183	18,686,764
Fines & Forfeitures	380,000	-	-	-	-	380,000
Miscellaneous Revenue	1,209,214	1,590,371	661,050	461,760	95,000	4,017,395
Total Revenues	**33,656,069**	**18,011,988**	**8,177,745**	**8,395,319**	**8,544,183**	**76,785,304**
Transfers In	2,637,474	1,763,753	6,209,500	660,000	127,302	11,398,029
Total Sources	**36,293,543**	**19,775,741**	**14,387,245**	**9,055,319**	**8,671,485**	**88,183,333**
Expenditures:						
General Government	9,296,372	709,669	6,364,368	-	6,359,016	22,729,425
Public Safety	13,827,603	20,000	1,449,240	-	281,349	15,578,192
Public Works	4,124,091	-	11,471,451	13,760,429	2,933,622	32,289,593
Community Health & Human Services	1,548,632	-	-	-	-	1,548,632
Community Initiatives	597,200	654,745	-	-	-	1,251,945
Transit	-	17,295,490	78,754	-	-	17,374,244
Culture & Recreation	2,669,010	600,000	694,184	-	-	3,963,194
Debt Service	-	-	-	66,970	-	66,970
Total Expenditures	**32,062,908**	**19,279,904**	**20,057,997**	**13,827,399**	**9,573,987**	**94,802,195**
Transfers Out	6,946,787	1,835,284	695,000	1,920,958	-	11,398,029
Total Uses	**39,009,695**	**21,115,188**	**20,752,997**	**15,748,357**	**9,573,987**	**106,200,224**
Ending Fund Balance	**$ 14,334,809**	**$ 13,435,629**	**$ 15,255,149**	**$ 6,186,793**	**$ 1,339,507**	**$ 50,551,886**
Change in Fund Balance	***(2,716,152)***	***(1,339,447)***	***(6,365,752)***	***(6,693,038)***	***(902,502)***	***(18,016,891)***

Possible Alternatives.

None.

Comprehensive Plan & Priority Alignment.
To successfully implement the Comprehensive Plan, Council must set priorities, be strategic, and be disciplined. A critical component is prioritizing and identifying the necessary level of funding to address desired goals, policies, and strategies, which is all critical to the successful implementation of Town Priorities and the Comprehensive Plan. In addition, many of the programs and strategies called for in the Comprehensive Plan come at an additional cost to the community that current funding levels cannot accommodate. Chapter 8 - Quality Community Service Provision calls for *"Timely, efficient and safe delivery of quality services and facilities in a fiscally responsible and coordinated manner."*

Fiscal Impact.
The adopted budget serves as guide for expenditures in the following fiscal year. The fiscal impact is summarized in the resolution accompanying this staff report.

Staff Impact.
The staff impact of preparing this information is estimated at over 350 hours for all department members participating in preparing budget requests and internal staff meetings.

Attachments or Links.
Resolution 25-13 adopting the Fiscal Year 2026 Budget
Property Tax Mill Levy Letter to County

Suggested Motion.
I move to approve Resolution 25-13 adopting the Town of Jackson's fiscal year 2026 budget as presented and further direct staff to request the County Assessor assess 0.5 property mills within the Town of Jackson.

RESOLUTION 25-13

A RESOLUTION ADOPTING THE FISCAL YEAR 2026 BUDGET FOR THE TOWN OF JACKSON, WYOMING.

WHEREAS, the Town of Jackson is subject to the provisions of the Uniform Municipal Fiscal Procedures Act as specified by Wyoming Statutes (W.S. 16-4-101 through 16-4-124); and

WHEREAS, pursuant to the Uniform Municipal Fiscal Procedures Act, the governing body for the Town of Jackson is required, by resolution or ordinance, to make the necessary appropriations and adopt a budget, subject to future amendment, for fiscal year 2026.

NOW, THEREFORE, BE IT RESOLVED, by the Town Council of the Town of Jackson, Wyoming, in regular session duly assembled, that the budget for fiscal year ending June 30, 2026 shall be as follows:

TOWN OF JACKSON, WYOMING
ADOPTED BUDGET FOR FISCAL YEAR 2026
ALL FUNDS - FINANCIAL SOURCES AND USES

DESCRIPTION	GENERAL FUND	SPECIAL REVENUE	CAPITAL PROJECTS	ENTERPRISE FUNDS	INTERNAL SERVICE	TOTAL FUNDS
Beginning Fund Balance	**$17,050,961**	**$14,775,076**	**$21,620,901**	**$12,879,831**	**$ 2,242,009**	**$ 68,568,778**
Revenues:						
Taxes	12,572,826	-	1,450,000	-	-	14,022,826
Licenses & Permits	1,710,578	142,000	250,000	-	-	2,102,578
Intergovernmental	16,829,671	14,045,917	5,816,695	883,458	-	37,575,741
Charges for Services	953,780	2,233,700	-	7,050,101	8,449,183	18,686,764
Fines & Forfeitures	380,000	-	-	-	-	380,000
Miscellaneous Revenue	1,209,214	1,590,371	661,050	461,760	95,000	4,017,395
Total Revenues	**33,656,069**	**18,011,988**	**8,177,745**	**8,395,319**	**8,544,183**	**76,785,304**
Transfers In	2,637,474	1,763,753	6,209,500	660,000	127,302	11,398,029
Total Sources	**36,293,543**	**19,775,741**	**14,387,245**	**9,055,319**	**8,671,485**	**88,183,333**
Expenditures:						
General Government	9,296,372	709,669	6,364,368	-	6,359,016	22,729,425
Public Safety	13,827,603	20,000	1,449,240	-	281,349	15,578,192
Public Works	4,124,091	-	11,471,451	13,760,429	2,933,622	32,289,593
Community Health & Human Services	1,548,632	-	-	-	-	1,548,632
Community Initiatives	597,200	654,745	-	-	-	1,251,945
Transit	-	17,295,490	78,754	-	-	17,374,244
Culture & Recreation	2,669,010	600,000	694,184	-	-	3,963,194
Debt Service	-	-	-	66,970	-	66,970
Total Expenditures	**32,062,908**	**19,279,904**	**20,057,997**	**13,827,399**	**9,573,987**	**94,802,195**
Transfers Out	6,946,787	1,835,284	695,000	1,920,958	-	11,398,029
Total Uses	**39,009,695**	**21,115,188**	**20,752,997**	**15,748,357**	**9,573,987**	**106,200,224**
Ending Fund Balance	**$ 14,334,809**	**$ 13,435,629**	**$ 15,255,149**	**$ 6,186,793**	**$ 1,339,507**	**$ 50,551,886**
Change in Fund Balance	***(2,716,152)***	***(1,339,447)***	***(6,365,752)***	***(6,693,038)***	***(902,502)***	***(18,016,891)***

NOW, THEREFORE, BE IT FURTHER RESOLVED, by the Town Council of the Town of Jackson, the preceding results in the following budgeted appropriations by fund and division for the fiscal year ending June 30, 2026:

General Fund	
General Government	
Mayor & Town Council	$ 559,647
Town Attorney	859,447
Municipal Judge	334,154
Administration	1,297,633
Internal Services	1,366,203
Finance	1,019,239
Communications & Strategic Initiatives	670,124
Information Technology	1,017,088
Planning	1,119,042
Town Facilities	1,053,795
Public Safety	
Police	8,007,791
Fire/EMS (County)	3,146,023
Emergency Management (County)	99,451
Communications Center (County)	970,596
Victim Services	476,201
Animal Shelter/Control	513,058
Building Inspections	614,483
Public Works	
Publice Works Administration	583,233
Streets	2,588,659
Town Engineer	893,596
Yard Operations	58,603
Community Health & Human Services	
Community Health & Human Services	1,548,632
Community Initiatives	
Community Initiatives	597,200
Culture and Recreation	
Parks & Recreation (County)	2,466,545
Pathways	122,584
Memorial Park (Cemetery)	79,881
Transfers Out	6,946,787
Total	$ 39,009,695

Special Revenue Funds	
Affordable Housing	
Community Development	$ 644,985
Parking Exactions	
Community Development	9,760
Park Exactions	
Culture & Recreation	600,000
Employee Housing	
General Government	709,669
Transfers Out	150,038
Animal Care	
Public Safety	20,000
Transfers Out	100,000
Lodging Tax	
Transfers Out	1,118,768
START Bus System	
Administration	1,797,571
Operations	8,107,919
Capital Outlay	7,390,000
Transfers Out	466,478
Total	$ 21,115,188

Capital Projects Funds	
Capital Projects (5th cent)	
Public Works	
Annual Street Maintenance	$ 1,530,000
Annual R&M - Boardwalks	112,200
Annual R&M-Paint Projects	94,554
Vine St 770 LF	544,000
Broadway Inlets At Jean, Gros Ventre	150,000
Broadway ADA	1,150,000
Tree Removal Existing Area	85,000
Placeholder Tbd By Tc Long Term Plannng Direction	50,000
General ROW Improvements	51,000
Seal PD Bay roof leaks	50,000
Public Safety	
Police Department Tasers	24,000
Meridian Barriers	77,000
Dispatch (County)	556,115
Fire/EMS (County)	644,205
Emergency Management	147,920
Culture and Recreation	
Parks & Recreation (County)	237,184
Pathways	
TOJ Bicycle Network Improvements	100,000
E-Bike Safety Improvements	300,000
Bike Racks	7,000
USFWS Connector & North Cache	20,000
Scott Lane-Maple Way Bike/Ped	30,000
Transit	
Build- Jorgenson 1 & 2	78,754
General Government	
UPS Server IT Server Room	25,000
Climate Action Projects	16,500
Council Chambers AV Upgrade	308,000
Bunkhouse Sprinkler System	25,000
EV charging stations - Subaward	4,918,368
EV charging stations - Town	661,500
New Town Hall Generator	350,000
Facilities - commercial/residential exteriors	40,000
GLS Basement Building	20,000
Transfers Out	695,000
2014 SPET	
North Cache Pedestrian Streetscape Improvements ($1,000,000) (Complete	3,000
Gregory Lane Complete St/Drainage	801,697
2019 SPET	
Gregory Lane Complete Street	6,800,000
2022 SPET	
County - Water Quality	50,000
Total	$ 20,752,997
Utility Funds	
Water Utility	
Public Works	
Maintenance and operations	$ 1,700,718
Water wells	364,442
Billing, accounting, & insurance	265,899
Capital outlay	5,209,054
Debt service	66,970
Transfers Out	960,479
Sewage Utility	
Public Works	
Sewage plant operations	914,714
Maintenance and operations	965,133
Billing, accounting, & insurance	258,856
Capital outlay	4,081,613
Transfers Out	960,479
Total	$ 15,748,357

Internal Service Funds	
Employee Insurance	$ 4,164,260
Fleet Management	2,763,622
Central Equipment	485,349
IT Services	2,160,756
Total	$ 9,573,987

PASSED, APPROVED, & ADOPTED this 16th **day of** June **, 2025**
Town of Jackson

By: _____
Arne O. Jorgenson
Mayor

ATTEST:

By: _____
Riley Taylor
Town Clerk

ADMINISTRATION DEPARTMENT

Teton County Assessor
Melissa Shinkle
200 S. Willow Street
P.O. Box 583
Jackson, WY 83001

Teton County Treasurer
Katie Smitts
200 S. Willow Street
P.O. Box 585
Jackson, WY 83001

Teton County Board of County Commissioners
Mark Newcomb, Chair
200 S. Willow Street
P.O. Box 3594
Jackson, WY 83001

June 17, 2025

To Whom It May Concern,

Please accept this letter as formal notice that the Town of Jackson requests that a .5 property tax mill be applied within the Town of Jackson. The Jackson Town Council formally voted to apply such a tax on June 16, 2025 with the adoption of the FY26 budget.

Please reach out with any questions you may have.

Sincerely,

Tyler Sinclair
Town Manager

cc: Roxanne Robinson, Director of Internal Services
Kelly Thompson, Finance Director

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Regular Town Council Meeting
Submitting Department:	Administration	**Presenter:**	Kelly Thompson
Agenda Item:	Resolution 25-14 - Fee Schedule	**Public Comment:**	Yes

Purpose & Policy Considerations.
The Town Council sets fees for the organization through resolutions.

Requested Action.
Staff requests that Council adopt the proposed amended fee schedule.

Recommendations.
Staff recommends the Town Council consider and discuss the proposed fees, make any changes, and adopt the fee schedule.

Background.
Per Municipal Code 1.01.120 - Fee schedules are allowed to be changed by resolution subject to public hearing as follows:

> *"Wherever in this Code it is provided that fees, rates, or charges are in an amount established by resolution or are as established by resolution, any resolution setting or updating the fees, rates, or charges shall be subject to a public hearing at a regular or special meeting of the Town Council ."*

Town Council approved last year's annual fee schedule as part of the budget process on June 17, 2024, and subsequently amended it for corrections and edits on August 8, 2024, September 10, 2024, and December 16, 2024.

Analysis & Key Questions.
Council and Staff discussed fee schedule adjustments at the May 6, May 14 and May 27, 2025, budget workshops. Council directed staff to include for final Council consideration an increase to all fees by 2.34%, the 12-month Consumer Price Index change as of January 2025. In addition, staff presented, and Council discussed new fees for final consideration by Council as follows:

- Bar and Grill Renewal - $10,500, the max allowed by statute
  - On May 27, Council directed staff to adjust this to a 20% increase over the FY25 fee.
- Limited Retail (Club) - $1,500, the max allowed by statute
  - On May 27, Council directed staff to adjust this to 2.34% CPI increase over FY25 fee.
- Fire Hydrant Flow Testing - $1,000

In addition, Council considered a Special Malt Beverage Permit at the Regular Town Council Meetings on May 19, 2025 and June 2, 2025. This sets the fee for a new permit at $1,000. Special Malt Beverage Permits are permits, not annual licenses, and therefore there will not be a renewal fee. The ordinance approving this permit is scheduled for third reading on July 7, 2025. Staff would like to add this to the fee schedule. Should the ordinance fail, staff can edit the fee schedule at a later date.

If approved, the resolution and new fees will be effective on July 1, 2025.

Alternatives.
- Council could defer the effective date beyond July 1, 2025.

- Direct staff to add additional new fees or amend the proposed annual schedule resolution for consideration at the June 16, 2025 Town Council meeting.
- Other

Comprehensive Plan & Priority Alignment.
Section 8. Quality Community Service Provision: Timely, efficiently and safely deliver quality services and facilities in a fiscally responsible and coordinated manner. In order to continue to provide and maintain quality community services, fee schedules need attention on an annual basis in order to offset the cost of providing some of those services.

Fiscal Impact.
The fiscal impact of adjusting current fees by 2.34% CPI is approximately $50,000 - $100,000. The variance is due to the unknown volume and dollar value of permits, licenses, etc. that are issued on an annual basis.

Staff Impact.
The staff impact of updated fees is approximately 5 hours to update all related applications, documents, websites, etc. that are tied to the fee schedule. It also includes the time necessary to print, obtain signatures, post online, and record the resolution in the permanent record books for the Town of Jackson.

Attachments or Links.
Fee Schedule Resolution 25-14
Appendix A: Fee Schedule

Suggested Motion.
I move to approve Resolution 25-14, rescinding all previous fee schedules and adopting the Town of Jackson Fee Schedule.

RESOLUTION 25-14

A RESOLUTION SETTING FEES, COSTS, AND CHARGES (A FEE SCHEDULE)

EFFECTIVE JULY 1, 2025

WHEREAS, the Town Council acknowledges there are fees and costs identified in the Town of Jackson Municipal Code; and

WHEREAS, the Town Council acknowledges that in order to continue to maintain quality community services, fee amounts need to be reviewed on an ongoing basis and adjusted from time to time to offset the cost of providing those services; and

WHEREAS, the Town Council plans to expand community engagement during the annual budget process to include fee updates; and

WHEREAS, on March 15, 2021, the Town Council approved Ordinance 1280 which amended and reenacted sections of the Jackson Municipal Code allowing fees that may be set by resolution, to be set by resolution, and removes those fees from the Jackson Municipal Code; and

WHEREAS, The Town Council, by adoption of this resolution adopts the Town of Jackson Fee Schedule, attached hereto as Appendix A, and rescinds all previous fee schedules; and

WHEREAS, this Fee Schedule is not applicable to governmental entities doing business with the Town of Jackson, nor is it applicable for interdepartmental transactions; and

NOW THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING, having duly met on June 16, 2025, at a Regular Town Council Meeting, which was properly noticed and open to the public, and having fully considered the matter at hand, that the fee schedule is hereby amended as follows:

The Jackson Town Council adopts this Resolution 25-14, replacing the previous Town of Jackson Fee Schedule, with the updated Fee Schedule attached hereto as Appendix A.

PASSED, APPROVED, AND ADOPTED this 16th day of June 2025.

TOWN OF JACKSON

_____

Arne O. Jorgensen, Mayor

ATTEST: _____

Riley Hovorka, Town Clerk

RESOLUTION 25-14, APPENDIX A
FEE SCHEDULE, EFFECTIVE JULY 1, 2025

This Schedule excludes Water, Sewer, and Capacity Fees found in Title 13

Business License		**$ Current Fee**
5.16.010	**Sales Tax Collecting**	
	less than 10 employees	133.00
	11-49 employees	267.00
	50-99 employees	400.00
	100 employees, or more	667.00
5.16.020	**Non-Sales Tax Collecting**	
	less than 10 employees	174.00
	11-49 employees	387.00
	50-99 employees	521.00
	100 employees, or more	868.00
5.16.025	**Independent Contractors and Agents**	133.00
5.16.027	**Commercial Rentals**	135.00
5.16.027	**Residential Rentals**	135.00
5.06.130	**Solicitation - Commercial**	135.00
5.06.150	**Solicitation - Highway or Street**	135.00
5.20.010	**Installation Permit**	34.00
5.32.040	**Pawnbroker**	35.00
5.20.020	**Exposition Licenses**	
	5 or fewer vendors; for-profit expositions	139.00
	more than 5 vendors; for-profit expositions	278.00
	5 or fewer vendors; non-profit expositions	70.00
	more than 5 vendors; non-profit expositions	139.00
5.12.080 A	**Application Fee, Non-Refundable Portion**	
	processing fee for denied license	50.00
5.04.026 B	**Renewal Late Fee**	
	$33 per month on January 31st	34.00
5.12.130	**Change of Location Fee**	
	notice given on new application	50.00

Ground Transportation		**$ Current Fee**
5.50.040 B	**Transportation License**	
	< 10 employees	133.00
	> 10 employee	267.00
5.50.050 B	**Vehicle License Permit**	
	>30 mpg	51.00
	< 30 mpg	77.00
5.50.060 B	**Operator License Permit**	
	new	127.00
	renewal	64.00
5.50.085	**Taxi Fares**	
	see Resolution #21-10 "A RESOLUTION ESTABLISHING A GROUND TRANSPORTATION FARE MAP"	
	https://www.jacksonwy.gov/575/Taxi-Fee-Information	

Miscellaneous	**$ Current Fee**

Public Records		
	Copy	
	electronic document, *per document*	15.00
	black and white paper	0.29/page
	color paper	0.56/page
	Plotted Map	
	size 11x17, each	Actual Cost
	size 24x36, each	Actual Cost
	size 36x54, each	Actual Cost
	Photograph	17.00
	Police Report	17.00
	LDRs and Comprehensive Plan	65.00
	Research / Compilation Services	18.00
	External electronic media (disk, usb drive, etc.)	17.00
	Postage / shipping	Actual Cost
	Other special circumstances	Actual Cost
Vehicle Inspection		10.00
Application Submittal Fee		$5/Application
Credit Card Transaction Fee		2.55%/Transaction
Public Intoxication Administrative Fee (Set by Ordinance)		25.00
DUI Administrative Fee (Set by Ordinance)		
	Convicted	800.00
	Deferred	750.00
Boot list Administrative Fee (Set by Ordinance)		50.00
Municipal Court Record Search		10.00

Jackson Hole Airport		**$ Current Fee**
2.36.120	**Passenger Boarding Fee**	
	Per passenger enplaning commercial aircraft, not to exceed	6.00

Liquor License		**$ Current Fee**
6.20.006 C	**Annual Liquor License**	
	Bar and Grill: renewal	3,726.00
	Bar and Grill: new application	10,500.00
	Limited Retail (Club)	529.00
	Microbrewery	500.00
	Resort	3,000.00
	Restaurant	3,000.00
	Retail	1,500.00
	Satellite Manufacturer	100.00
	Satellite Winery	100.00
	Winery	500.00
6.20.006 D	**Temporary, 24-Hour Permits**	
	Catering	50.00
	Malt Beverage	50.00
	Manufacturer's Off-Premises	50.00

Animal Shelter Impounding, Board, Adoption		$ Proposed Fee
7.02.040 B	**Capture of Animals, Impoundment**	
	First	35.00
	Same animal, second within one year	49.00
	Same animal, third within one year	69.00
	Same animal fourth and more within one year	138.00
	Impoundment, Boarding	
	First 24-hours included in impoundment fee	-
	per animal for each 24-hours	21.00
7.02.050	**Adoption**	
Res 09-04	Dog, impounded for 7+ days	124.00
Res 09-04	Cat, impounded for 7+ days	107.00

Animal Control and Dog License		$ Current Fee
7.12.025	**Owner Surrender**	39.00
	Rabies voucher	29.00
	Dog License	
	Altered	12.00
	Unaltered	29.00

Health and Safety, Alarms		$ Current Fee
8.32.090	**Police response to a false alarm**	219.00

Waste Reduction Fee (Plastic Bag)		$ Current Fee
8.36.020 J	**Consumer Waste Reduction Fee, paper or plastic bag**	0.20
8.36.050 A	Store retains	0.10
8.36.050 B	Remit to Town of Jackson	0.10
8.36.070 D	Late remittance to Town of Jackson	10.00
8.36.070	**Audit and Violations**	
8.36.070 C	First conviction	58.00
8.36.070 C	Second conviction	117.00
8.36.070 C	Third Conviction goes to Municipal Court	-

Engineering Fees		$ Current Fee
	Sewer and Water County Connection Request (Application) Fee	
	Non-Refundable Application Fee	52.00
	Single Lot	102.00
	Central System	1,023.00
	Staff Review	$155/hour
	Fees are for each utility connected	
	Sewer and Water Connection and Use Agreement Fee	
	Non-Refundable Application Fee	52.00
	Single Lot	102.00
	Central System	1,023.00
	Staff Review	$155/hour
	Fees are for each utility connected	
	Sewer and Water Connection Permit (SWP) for County Connections	
	Non-Refundable Application Fee	52.00
	Permit Fee - Each Utility: Individual Residential (Primary + 1 accessory):	465.00
	Permit Fee - Each Utility: Multi-Unit Residential (3+ Units)	900.00
	Permit Fee - Each Utility: Multi-Lot Residential/Subdivision	465.00/Lot
	Permit Fee - Each Utility: Non-Residential Development	1,680.00
	Inspections	$155/hour

Encroachment Permit		$ Current Fee
12.08.030	**Encroachment Agreements**	
	Non-Refundable Application Fee	53.00
	Request for Encroachment	637.00
	Encroachment Agreement	637.00
	Crane in PROW (set in crane agreements, per license)	880.00
	Crane Swing in PROW (set in crane agreements, per license)	622.00
	Crane Agreement Annual Renewal	500.00
	Amendments to Agreements: Half the cost of the Agreement Fee	500.00
	Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work)	
12.08.060	**Encroachment Activity:**	
	Minimum Fee: Non-Refundable, applied to full Permit Fee	53.00
	Amendment to Permit: Non-refundable	27.00
	Utility Excavation in public paved surface- per utility	529.00
	Utility Excavation in public gravel surface - per utility	317.00
	Utility Excavation in public unimproved/landscaped - per utility	317.00
	Driveway cuts/curb cuts installation/replacement - each	190.00
	Curb and gutter installation - Linear Feet of Curb, 50 feet Minimum	190.00
	Sidewalk installation - Square Feet of Sidewalk, 50 feet Minimum	190.00
	Construction-related, occupy street travel lane - Linear Feet of Curb, 50 feet Minimum	100.00
	Construction-related, occupy bike travel lane/pathway/cycle track –Linear Feet of Curb, 50 feet Minimum	22.00
	Construction-related, occupying sidewalk and buffer area –Linear Feet of Curb, 50 feet Minimum	17.00
	Construction-related, occupy public alley - per day	190.00
	Construction-related, occupy time-restricted parking space - per space/day	94.00
	Construction-related, occupy non-time restricted parking space - per space/day	53.00
	House moving, per mile/day in town	1,351.00
	Other, as deemed appropriate by Public Works Director	
	Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work)	
	Excavation, Construction, and Occupancy fees are cumulative	
	Fees are per the table unless otherwise noted, conditioned, or regulated (e.g. restrictions for winter snow removal ordinance). Minimum permit fees may apply. Minimum pay quantity is as shown.	
	Fees, other than the Deposit on Permit, are non-refundable unless staff determines that it was notified prior to the permitted dates that the permit activity would not occur.	
	Full lane closure is inclusive of adjacent parking, does not include sidewalk and buffer area fee.	
	Fee Waivers are in accordance with the Planning Permit Fee Waiver policy or other established agreements.	

Parklet Permit		$ Current Fee
12.10.050 A	Annual Parklet fee	3,500.00

Special Event Permit		$ Current Fee
12.28.050 F	**Applicants:**	
	Non-Profit	31.00
	For-Profit, including commercial film/photo	1,059.00
	Expressive Activity	-

Planning Permit	$ Current Fee
Fee Waiver	
The Town Council may reduce, defer, or waive application fees upon request if the proposed project advances significant community goals, which include but are not limited to, the following:	
1. A project that is sponsored by a governmental entity, or a project that received public funding.	
2. A project that provides extraordinary charitable, civic, educational, or similar benefits to the community.	
Such requests shall be submitted, for action by the Town Council, to the Planning Director within 30 days of receipt and prior to the submittal of an application. All requests shall be made prior to initiating a project as set forth in LDR Division 5100.	
Fees are non-refundable once processing has commenced unless staff has determined that the permit is unnecessary.	
General Pre-Application Conference (per Pre-App meeting)	
Sketch Plan, Special Use, Planned Unit Development	813.00
Conditional Use, Development Plan, Map Amendment	406.00
Development Option Plan	406.00
Grading & Erosion Control	204.00
Optional/Elective Conference with:	
Staff	204.00
Planning Commission or Town Council	Original Fee
Design Review Committee	270.00
Physical Development	
Sketch Plan, Development Plan	3,387.00
Sign Permit	
Per Sign	101.00
Master Signage Plan	406.00
Basic Use Permit	678.00
Basic Use Permit - Short-Term Rental	
Initial Application Fee - per bedroom	529.00
Annual Renewal Fee	529.00
Conditional Use Permit	
Use Permit only	3,387.00
Concurrent with application requiring public hearing	678.00
Special Use Permit	3,387.00
Development Option or Subdivision	
Development Option Plan	678.00
Subdivision Plat, *plus technical review fee*	1,355.00
Exempt Land Division	No Charge
Boundary Adjustment	
Plat Required, *plus technical review fee*	1,355.00
Without Plat, *plus technical review fee*	610.00
Interpretations	
Formal Interpretation	678.00
Zoning Compliance Verification	678.00
Amendments	
LDR Text	2,033.00
Zoning Map	2,033.00
Planned Unit Development	2,033.00
Relief	
Administrative Adjustment	678.00
Variance	678.00

	Appeal of Administrative Decision	678.00
	Beneficial Use Determination	1,355.00
	Enforcement	
	After-the-Fact Permit	Initial Fee X 2
	Amendments of Permits or Approvals	
	Re-Submittal while in review process	Half Initial Fee
	To approved plans and permits, *fee for permit review required by net change in density/inte*	Calculation
	To condition requiring Council approval	678.00
	Miscellaneous	
	Administrative decision elevated to public hearing	678.00
	Planner of Day, miscellaneous services, research, per hour	105.00
	Third party or consultant fees	Actual Cost

Building Permit (IBC)		**$ Current Fee**
15.04.020 7	**Deposit on Building Permit**	
	Non-refundable, applied to full BP fee	564.00
15.04.090	**New Buildings and Additions**	
	Single Family Residence	1.70/sf
	Commercial, Office, Multi-family and similar	1.13/sf
	Warehouse, storage and similar	1.70/sf
15.04.090	**Remodels and Alterations**	
Total Valuation	*Fee Calculation*	
$1 to 17,000		288.00
$17,001 to 40,000	$288 for the first $17,000 plus $12 for each additional $1000 or fraction thereof, to and including $40,000	
$40,001 to 100,000	$549 for the first $40,000 plus $10 for each additional $1,000 or fraction thereof, to and including $100,000	
$100,001 to 500,000	$1,157 for the first $100,000 plus $8 for each additional $1,000 or fraction thereof, to and including $500,000	
$500,001 to $1,000,000	$4,313 for the first $500,000 plus $6 for each additional $1,000 or fraction thereof, to and including $1,000,000	
$1,000,001 to $5,000,000	$7,130 for the first $1,000,000 plus $4 for each additional $1,000 or fraction thereof, to and including $5,000,000	
$5,000,000 and up	$20,654 for the first $5,000,000 plus $2 for each additional $1,000 or fraction thereof	
	Plan Review Fee	
	Plan review fee assessed @ 65% of building permit fee (cost per/sf + cost per total valuation as provided above)	
15.04.090	**Other Inspections**	
	Outside normal business hours	113.00/hr
	Re-inspection under Section 305(g)	85.00/hr
	No fee specifically indicated	85.00/hr
	Review of revisions made to Approved Plan	113.00/hr

Fire Permits (IFC and IWUIC)		**$ Current Fee**
15.08.010	All construction plan reviews; 2 hour minimum charge	154.00/hr
	All construction plan resubmittal reviews, 1/2 hour minimum charge	102.00/hr
	Annual existing building inspection	102.00
	Use of outside consultants	Actual Costs
	Re-inspection of new construction	102.00/hr
	New business registration for existing buildings	102.00
	Re-inspection after more than 2 failed inspections of existing buildings	256.00
	Operational permits	102.00

	Fire Protection Construction Permit Valuation	
Total Valuation	*Fee Calculation*	
$1.00 to $500		41.00
$501 to 2,000	$41.00 for the first $500 plus $2.30 for each additional $100.00 or fraction thereof, to and including $2,000	
$2,001 to 25,000	$75.48 for the first $2,000 plus $15.10 each additional $1,000 or fraction thereof, to and including $25,000	
$25,001 to 50,000	$422.67 for the first $25,000.00 plus $11.00 for each additional $1,000 or fraction thereof, to and including $50,000	
$50,001 to 100,000	$697.72 for the first $50,000 plus $7.68 for each additional $1,000 or fraction thereof, to and including $100,000	
$100,001 to 500,000	$1,081.50 for the first $100,000 plus $6.14 for each additional $1,000 or fraction thereof, to and including $500,000	
$500,001 to 1,000,000	$3,537.72 for the first $500,000 plus $5.12 for each additional $1,000 or fraction thereof, to and including $1,000,000	
$1,000,001 and up	$6,096.26 for the first $1,000,000 plus $4.09 for each additional $1,000 or fraction thereof	

Mechanical Permit (IMC)		**$ Current Fee**
15.12.030	**Mechanical / Fuel Gas Permit**	
	For the issuance of each permit	56.00
	For issuing each supplemental permit	23.00
	Install or relocate gravity/forced air furnace to 100,000 btu/h	29.00
	Install or relocate gravity/forced air furnace over 100,000 btu/h	34.00
	Install or relocate each floor furnace, including vent	25.00
	Install or relocate suspended, recessed or floor mounted heater	25.00
	Install, relocate or replace appliance vent	18.00
	Repair or alter any heating, cooling, absorption or evaporative system	23.00
	Install or relocate boiler or compressor to 3 hp	25.00
	Install or relocate absorption system to 100,000 btu/h	25.00
	Install or relocate boiler or compressor 3-15 hp	45.00
	Install or relocate absorption system 100,000-500,000 btu/h	45.00
	Install or relocate boiler or compressor 15-30 hp	62.00
	Install or relocate absorption system 500,000-1,000,000 btu/h	62.00
	Install or relocate boiler or compressor 30-50 hp	95.00
	Install or relocate absorption system 1,000,000-1,750,000 btu/h	95.00
	Install or relocate boiler or compressor over 50 hp	170.00
	Install or relocate absorption system over 1,750,000 btu/h	170.00
	Each air-handling unit up to 10,000 cfm and attached ducts	23.00
	Each air-handling unit over 10,000 cfm	34.00
	Each evaporative cooler other than portable type	23.00
	Each ventilation fan attached to a single duct	18.00
	Each ventilation system not part of heating or air conditioning system	23.00
	Installation of hood system serving any mechanical exhaust, including ducts	23.00
	Install or relocate domestic type incinerator	34.00
	Install or relocate commercial or industrial incinerator	129.00
	Install, relocate or alter any unclassified equipment	23.00
	Install Hydronic Heating- up to 1000 sq. ft	25.00
	Install Hydronic Heating- 1001 sq. ft. - 2500 sq. ft	39.00
	Install Hydronic Heating- 2501 sq. ft. - 5000 sq. ft	56.00
	Install Hydronic Heating- 5001 sq. ft. and over	85.00
	Gas-piping Systems to 5 outlets	18.00
	For each additional Gas-piping System outlet, per outlet	6.00

15.12.030	**Inspections**	
	Inspections outside normal business hours	113.00/hr
	Re-inspection fee	85.00/hr
	For which no fee is specifically indicated	85.00/hr
	Additional plan review required by changes, additions, or revisions to approved plans (minimum charge 1 hour)	113.00/hr

Electrical Code		**$ Current Fee**
15.20.010 3	**Valuation of Electrical Work**	
	1.00 to 500	37.00
	500.01 to 600	42.00
	600.01 to 700	47.00
	700.01 to 800	51.00
	800.01 to 900	56.00
	900.01 to 1,000	61.00
	1,000.01 to 1,100	65.00
	1,100.01 to 1,200	71.00
	1,200.01 to 1,300	76.00
	1,300.01 to 1,400	81.00
	1,400.01 to 1,500	85.00
	1,500.01 to 1,600	90.00
	1,600.01 to 1,700	95.00
	1,700.01 to 1,800	99.00
	1,800.01 to 1,900	104.00
	1,900.01 to 2,000	110.00
	2,000.01 to 3,000	124.00
	3,000.01 to 4,000	143.00
	4,000.01 to 5,000	162.00
	5,000.01 to 6,000	181.00
	6,000.01 to 7,000	201.00
	7,000.01 to 8,000	220.00
	8,000.01 to 9,000	239.00
	9,000.01 to 10,000	259.00
	10,000.01 to 11,000	277.00
	11,000.01 to 12,000	297.00
	12,000.01 to 13,000	316.00
	13,000.01 to 14,000	336.00
	14,000.00 to 15,000	355.00
	15,000.01 to 16,000	375.00
	16,000.01 to 17,000	412.00
	17,000.01 to 18,000	432.00
	18,000.01 to 19,000	451.00
	19,000.01 to 20,000	471.00
	20,000.01 to 21,000	490.00
	21,000.01 to 22,000	509.00
	22,000.01 to 23,000	528.00
	23,000.01 to 24,000	548.00
	24,000.01 to 25,000	568.00
	25,000.01 to 50,000 = $568 for the first $25,000.00, plus $11 for each additional $1,000.00 or fraction thereof, to and including $50,000.00	
	50,000.01 to 100,000 = $1,023 for the first $50,000.00, plus $8 for each additional $1,000.00 or fraction thereof, to and including $100,000.00	
	100,000.01 and Up = $1,554 for the $100,000.00 plus $6 for each additional $1,000.00 or fraction thereof	

	Connect all temporary services	36.00
	Work started before the permit was issued	2X times the permit fee
	Re-inspection Fees	102.00/hr*
	Inspections for Which No Fee is Indicated; minimum 1/2 hour charge	102.00/hr*
	Additional Plan Review, minimum ½ hour charge; for review required by changes, additions or revisions to plans.	102.00/hr*
	Use of Outside Consultants	Actual Costs**
	Electrical Plan reviews	65% of Permit Fee
	Failed Final Inspection Fee	102.00
	* Or the total hourly cost to the jurisdiction, whichever is greatest. The cost shall include supervision, overhead, equipment, hourly wages and fringe benefits for the employees involved. Minimum charge is one hour.	
	** Actual costs include administrative and overhead costs.	

Plumbing Permits		**$ Current Fee**
15.24.030	**Plumbing and Fuel Gas Permits**	
	For issuing each permit	56.00
	For each plumbing fixture on one trap or set of fixtures on one trap (including water, drainage piping and backflow protection)	18.00
	For each building sewer and trailer park sewer	29.00
	Rainwater systems – per drain (inside building)	18.00
	For each water heater and/or vent	18.00
	For each gas-piping system of one to five outlets	18.00
	For each additional gas-piping system outlet, per outlet	6.00
	For each industrial waste pretreatment interceptor including its trap and vent, excepting kitchen type grease interceptors functioning as fixture traps	18.00
	For each installation, alteration or repair of water piping and/or water treating equipment, each fixture	18.00
	For each repair or alteration of drainage or vent piping, each fixture	18.00
	For each lawn sprinkler system on any one meter including backflow protection devices	18.00
	For atmospheric-type vacuum breakers not included in Item #10:	1.00
	1 to 5 each	18.00
	over 5 each	6.00
	For each backflow protective device, other than atmospheric-type vacuum breakers:	
	2 inch diameter and smaller	18.00
	over 2 inches in diameter	29.00
	Install Hydronic Heating- up to 1000 sq. ft	25.00
	Install Hydronic Heating- 1001 sq. ft. - 2500 sq. ft	39.00
	Install Hydronic Heating- 2501 sq. ft. - 5000 sq. ft	56.00
	Install Hydronic Heating- 5001 sq. ft. and over	85.00
	For each Fire Sprinkler System	18.00
	Inspections	
	Inspections outside normal business hours	113.00/hr
	Re-inspection fee	85.00/hr
	Inspections for which no fee is specifically indicated	85.00/hr
	Additional plan review required by changes, additions, or revisions to approved plans (minimum charge 1 hour)	113.00/hr

Flood Damage Prevention		**$ Current Fee**
15.30.110	**Floodplain Development Permit**	
	Non-refundable Application Fee	53.00
	Scale of project is determined by the Floodplain Administrator and examples of projects are included in the application:	1.00

	Small Scale	317.00
	Large Scale	794.00
	Floodplain Map Revision (CLOMR and LOMR) Application	1,271.00
	Permit Revisions: half the cost of the original permit	
	Variance Application	794.00
	No Fee Specifically Indicated	159.00/hr
	Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work - not including Emergency Waiver)	
	Third Party Technical Review	Actual Cost

Contractor Licensing		**$ Current Fee**
15.36.034	**Classification:**	
	General Contractor (Class A)	451.00
	Building Contractor (Class B)	451.00
	Building Contractor Restricted (Class Br)	451.00
	Residential Contractor (Class C)	451.00
	Electrical Contractor	451.00
	Low Voltage Electrical Contractor	451.00
	Plumbing Contractor	451.00
	HVAC Contractor	451.00
	Woodstove/Gas Stove Installer	451.00
	Gas Service Contractor	451.00
	Proprietary Homeowner Contractor	451.00
	Specialty Solar Panel Installer	451.00
	Specialty Licenses	451.00
15.36.038	**Renewal Late Fee:**	
	General Contractor (Class A)	35.00
	Building Contractor (Class B)	35.00
	Building Contractor Restricted (Class Br)	35.00
	Residential Contractor (Class C)	35.00
	Plumbing Contractor	35.00
	HVAC Contractor	35.00
	Gas Service Contractor	35.00
	Proprietary Homeowner Contractor	35.00
	Specialty Solar Panel Installer	35.00
	Specialty Licenses	35.00
15.36.050 G	**Certificates of Qualification**	
	Initial Certificate	170.00
	Renewal of Certificate	85.00
15.36.038	Renewal Late Fee	35.00

Demolition Standards		**$ Current Fee**
15.38.010	**Demolition Permit**	
	Non-refundable Application Fee	53.00
	Demolition Permit	265.00
	Permit Revisions: half the cost of the original permit	
	No Fee Specifically Indicated	159.00/hr
	Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work - not including Emergency Waiver)	
	Third Party Technical Review	Actual Cost

Grading, Erosion Control, and StormwaterManagement		**$ Current Fee**
LDR: 5.7	**Grading Permit**	
	Deposit on Grading Permit: Non-Refundable, applied to full Grading Permit Fee	53.00

Individual Residential (Primary + 1 accessory):	
Statement	212.00
Plan Level	636.00
Multi-Unit Residential (3+ Units)	
Statement	212.00/unit
Plan Level	370.00/unit
Multi-Lot Residential/Subdivision: Plan Level Only	370.00/lot
Commercial Development: $0.10/square foot of total development area; minimum fee $200	
Permit Revisions: One Hour Minimum	155.00/hr
Fee Not Specifically Indicated	155.00/hr
Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work - not including Emergency Waiver)	
Third Party Technical Review	Actual Cost

Cemetery		**$ Current Fee**
Res 05-28	**Fees:**	
	Internment - Open/Close Full	522.00
	Internment - Open/Close Cremation	74.00
	Weekend / Holiday Charge	148.00
	Deed Filing Fee	30.00
	Winter Charge (Dec 1 - April 30)	148.00
	Plot Purchase - Full	447.00
	Plot Purchase - Cremation/Infant	148.00
	Disinterment - Open/Close Full	671.00
	Disinterment - Open/Close Cremation	148.00

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Regular Town Council Meeting
Submitting Department:	Internal Services	**Presenter:**	Riley Hovorka & Lea Colasuonno
Agenda Item:	Resolution 25-15: FAA Grant for the Construct Deicing Pad and Containment Facility (Phase2) at the Jackson Hole Airport.	**Public Comment:**	Yes

Purpose & Policy Considerations.
Federal Aviation Administration (FAA) has offered the Jackson Hole Airport Board a Grant Agreement in the amount of $3,311,889 for the "Construct Deicing Pad and Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings)" project. The Resolution presented for the Town Council approval authorizes the Jackson Hole Airport Board to accept a grant in an amount of $3,311,889.

Requested Action.
Staff requests that Council consider adopting Resolution 25-15, a resolution accepting the FAA Grant Agreement for the Construct Deicing Pad and Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings) project at the Jackson Hole Airport.

Recommendations.
Staff recommends that Council adopt Resolution 25-15, a resolution accepting the FAA Grant Agreement for the Construct Deicing Pad and Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings) project at the Jackson Hole Airport with the FAA obligation under the grant being $3,311,889.

Background.
This is an Airport Infrastructure Grant from the Federal Aviation Administration under the Infrastructure Investment and Jobs Act.

The maximum federal share for this project is 93.75%.

The grant funds will be applied towards a portion of Phase 2 of the deice pad project, which includes the expansion of the deice pad from three spots to five spots and procurement and installation of dispensing and collection systems. This project is currently underway.

The specific work to be funded with this grant includes the following: (1) installation of approximately 1,500 feet of sewer line and utility corridor (communication and power); (2) installation of approximately 1,700 feet of duct bank (fiber optic cable); and (3) procurement of two 40,000 gallon deice pad runoff collection tanks and one prefabricated concrete shelter (to house electrical and control equipment).

This grant includes the traditional terms, conditions and assurances contained in prior grants. As a reminder, Grant Condition 25 provides, "The Co-Sponsors understand and agree that they jointly and severally adopt and ratify the representations and assurances contained therein and that the word "Sponsor" as used in the application and other assurances is deemed to include all Co-Sponsors."

This grant includes additional general and special conditions and assurances, including new grant assurances required by the FAA Reauthorization Act of 2024 and new conditions and assurances to reflect new Executive Orders, Executive Actions and priorities of the current Administration. The more noteworthy changes include the following:

- Condition 2(c) (Close Out and Termination) now lists five specific circumstances under which FAA may terminate the grant.
- Condition 30(b) states that the Sponsor "certifies that it does not operate any programs promoting diversity, equity, and inclusion (DEI) initiatives that violate any applicable Federal anti-discrimination laws."
- Condition 31 states, "the Sponsor will cooperate with Federal officials in the enforcement of Federal law, including cooperating with and not impeding U.S. Immigration and Customs Enforcement (ICE) and other Federal offices and components of the Department of Homeland Security in and the enforcement of Federal immigration law."
- Assurance C(1) requires the Sponsor to comply with "all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this grant" and lists multiple Executive Orders issued by the current Administration, including EO 14149 (Restoring Freedom of Speech and Ending Federal Censorship), EO 14151 (Ending Radical and Wasteful Government DEI Programs and Preferencing), EO 14154 (Unleashing American Energy), EO 14168 (Defending Women from Gender Ideology Extremism and Restoring Biological Truth to the Federal Government), and EO 14173 (Ending Illegal Discrimination and Restoring Merit-Based Opportunity).
- New Assurance 40 prohibits the Sponsor from restricting or prohibiting the sale of 100-octane low lead aviation gasoline, in accordance with the FAA Reauthorization Act of 2024.

Analysis & Key Policy Questions.
Pursuant to the Joint Power Agreement, the Jackson Hole Airport Board is required to submit its annual budget, and any subsequent amendments, to the Town Council and County Commission for approval.

Possible Alternatives.
1) Adopt Resolution 25-15
2) Not adopt Resolution 25-15, denying approval of the FAA Grant Agreement
3) Request revisions to the FAA Grant Agreement

Comprehensive Plan & Priority Alignment.
Airport operations and upgrades to airport facilities are in direct alignment with Common Value 3, Quality of Life and more specifically, Principle 8.2 coordinating the provision of infrastructure and facilities needed for service delivery. The airport also has a direct correlation to a diverse and balanced economy as noted in Section 6 of Common Value 3.

Fiscal Impact.
There will be no fiscal impact to the Town of Jackson. Jackson Hole Airport Board will have to fund the difference between the overall project cost and the FAA AIP grant.

Staff Impact.
The Town Clerk spent approximately 1 hour preparing meeting materials and the Town Attorney spent approximately 20 hours providing legal analysis.

Attachments or Links.
Resolution 25-15
FAA Grant for the Construct Deicing Pad and Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings)

Suggested Motion.
I move to adopt Resolution 25-15, a resolution approving the FAA Grant Agreement for the Construct Deicing Pad and

Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings) project at the Jackson Hole Airport with the FAA obligation under the grant being $3,311,889.

TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING
RESOLUTION 25-15

A RESOLUTION PROVIDING APPROVAL FOR A GRANT TO
CONSTRUCT DEICING PAD AND CONTAINMENT FACILITY
(PHASE 2 – INSTALL UTILITIES AND PROCURE UNDERGROUND
STORAGE TANKS AND PREFABRICATED CONTROL BUILDINGS)
GRANT NO. 3-56-0014-084-2025

WHEREAS, the Jackson Hole Airport Board (the "Board") was organized as an airport board on January 17, 1968, pursuant to Wyoming Statute § 10-5-202; is deemed a joint power board pursuant to Wyoming Statute § 16-1-105; and is the owner and operator of a public use airport known as the Jackson Hole Airport ("Airport"); and

WHEREAS, the Board is authorized to receive grants from the Federal Aviation Administration ("FAA") for planning and/or improvements to the Airport; and

WHEREAS, the Board has received a grant offer from FAA authorized under the Infrastructure Investment and Jobs Act for the Construct Deicing Pad and Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings) project in the not-to-exceed amount of THREE MILLION THREE HUNDRED ELEVEN THOUSAND EIGHT HUNDRED AND EIGHTY-NINE DOLLARS ($3,311,889), and the Board desires to accept such grant; and

WHEREAS, the FAA requires a resolution of approval from the Town of Jackson, as co-sponsor, in order for the Board to receive such a grant.

NOW, THEREFORE, be it resolved by the Town Council of the Town of Jackson, Wyoming that it hereby provides approval for the Board to accept FAA Grant Number 3-56-0014-084-2025 in the amount of THREE MILLION THREE HUNDRED ELEVEN THOUSAND EIGHT HUNDRED AND EIGHTY-NINE DOLLARS ($3,311,889), for the Construct Deicing Pad and Containment Facility (Phase 2 – Install Utilities and Procure Underground Storage Tanks and Prefabricated Control Buildings) project as more fully described in the Project Application.

This Resolution shall become effective upon adoption.

PASSED, APPROVED, AND ADOPTED this 16th day of June 2025.

TOWN OF JACKSON, WYOMING

By: _____
Arne O. Jorgensen, Mayor

ATTEST

_____
Riley Hovorka, Town Clerk

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Meeting
Submitting Department:	External Affairs	**Presenter:**	Susan Scarlata
Agenda Item	Repeal of Resolution 24-03	**Public Comment:**	Yes

Purpose & Policy Considerations.
At its meeting on May 19, 2025, Town Council directed staff to present a resolution to dissolve the Equity Task Force (ETF) due to a bill that passed in the most recent Legislative session, which specifies that no governmental entity shall engage in diversity, equity, or inclusion program.

Requested Action.
Staff requests that Council approve Resolution 24-16 to repeal Resolution 24-03 that continued the Equity Task Force after its first two years.

Recommendations.
Staff recommends that Council approve Resolution 24-16, which repeals Resolution 24-03.

Background.
Town Council moved to establish an Equity Task Force in August of 2021. The initial Task Force was appointed through April of 2024. Early in 2024, staff presented ideas to refine the resolution that established the Equity Task Force and related processes and systems. Council approved these suggestions and appointed nine members for the second iteration of this Task Force. This second group has been meeting since September of 2024 and taking part in different assignments to build knowledge and engagement in and around local government issues.

Analysis.
During the 68th General Legislative Session in 2025, Representative Rachel Rodriguez-Williams sponsored House Bill 147 'Prohibition of Institutional Discrimination.' This bill specifies that no governmental entity shall engage in any diversity, equity or inclusion program, activity or policy; Engage in institutional discrimination; Require instruction promoting institutional discrimination; Require any student, employee or contractor to attend or participate in any diversity, equity or inclusion program or training or any institutional discrimination program or training. At its May 19, 2025, meeting, Town Council directed staff to present a resolution to dissolve the Equity Task Force (ETF) due to Bill 147, which goes into effect July 1, 2025.

Possible Alternatives.
Council alternatives include the following:

- Council has the option not to proceed in adopting the resolution to dissolve the Equity Task Force.
- Council could move to amend the current Equity Task Force Resolution
- Other

Comprehensive Plan & Priority Alignment.
The Comp Plan's third Common Value is 'Quality of Life,' which highlights that our community takes pride in our local identity and community character. The Comp Plan states, "Residents and visitors have become accustomed to high-quality life safety, transportation, educational, social, cultural, and recreational services." Considering whether this is true for all residents, the Equity Task Force recommended an update to the Comp Plan with a more direct focus on equity.

Fiscal Impact.
Council authorized Equity Task Force members to be paid $450 monthly totaling $48,600 annually for the 9-member Task Force. Dissolving this task force will save some of these costs.

Staff Impact.
The External Affairs Department uses staff capacity to steward the Equity Task Force. In a calendar year, the lead staff member facilitating this initiative spent about 120 hours to organize and steward this Task Force.

Attachments or Links.
Resolution 25-16.

Suggested Motions.

I move to approve Resolution 25-16, a Resolution Repealing Resolution 24-03.

RESOLUTION 25 - 16

A RESOLUTION REPEALING RESOLUTION NO. 24-03

WHEREAS, in 2022 the Town of Jackson Town Council established the Equity Task Force with a two-year term to provide recommendations to the Town Council regarding how to increase equity in the community, which was continued in 2024 via Resolution 24-03; and

WHEREAS, during the 68th General Legislative Session in the winter of 2025, Representative Rodriguez-Williams sponsored House Bill 147, which specifies that no governmental entity shall engage in any diversity, equity, or inclusion program;

WHEREAS, the Town of Jackson Town Council, therefore, is repealing Resolution No. 24-03, thereby dissolving the Equity Task Force.

NOW THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING, having duly met on 16, 2025, at a Town Council Meeting, which was properly noticed and open to the public, and having fully considered the matter at hand, that:

Resolution No. 24-03 is hereby repealed.

DATED THIS 16th DAY OF JUNE 2025.

TOWN OF JACKSON

_____

Arne O. Jorgensen, Mayor
ATTEST:

_____
Riley Hovorka, Town Clerk

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular Meeting
Submitting Department:	Internal Services	**Presenter:**	Lynsey Lenamond
Agenda Item:	Special Malt Beverage Permit Ordinance Second Reading	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for the Town Council to consider an ordinance establishing a Special Malt Beverage Permit.

Requested Action.
Staff requests that the Town Council consider an ordinance establishing a Special Malt Beverage Permit.

Recommendations.
Staff recommends the Town Council approve the ordinance establishing a Special Malt Beverage Permit for public auditoriums, civic centers, or event centers.

Background.
On May 19, 2025 staff discussed with Council why a Special Malt Beverage permit should be established, recommendations for the duration of the permit, the fee for the permit, and which current applicants/events this license type would immediately affect. At that meeting, Council directed staff to present the draft ordinance at the next available Town Council meeting.

Analysis & Key Policy Questions.
During the May 19th presentation, staff presented Council with key policy questions related to the establishment of the permit, as well as the fee and duration of the permit. Council did not request any changes to staff recommendations at that time.

Possible Alternatives.
Council could choose to add additional rules for eligibility for a Special Malt Beverage Permit, set a different fee for the permit, and/or set a different duration for the permit.

Comprehensive Plan & Priority Alignment.
Facilitating ways for organizations to more effectively utilize the alcohol permits available to them at event centers and supporting a variety of events in the Town offering entertainment, comradery, and community gatherings support Section 4 – the Town as the Heart of the Region, regarding enhanced civic spaces and social functions.

Fiscal Impact.
If Council approves staff's recommendations and the fee set forth in the upcoming fee schedule, the fee for a new permit will be $1,000. Special Malt Beverage Permits are permits, not annual licenses under the statutes, and therefore there will not be a renewal fee. There would be an additional fiscal impact of approximately $300 - $400 related to advertising of an adopted ordinance. The two entities currently utilizing catering permits or individual malt beverage permits will see a slight reduction in costs and a slight revenue decrease to the Town of approximately $800-$900 annually.

Staff Impact.
The staff impact of research and preparation of this staff report has been approximately 2 hours. The staff impact leading up to this staff report, researching this item, and presenting it for Council action was approximately X hours. Town staff will gain some efficiency in processing one permit vs. Processing a set of catering permits or individual malt beverage permits.

Attachments or Links.
Ordinance W.

Suggested Motion. *Council always has the option to adopt, approve with conditions, continue, or deny items*.

I move to approve Ordinance W on second reading.

STAFF REPORT

Meeting Date:	June 2, 2025	**Meeting Title:**	Town Council Regular Meeting
Submitting Department:	Internal Services	**Presenter:**	Lynsey Lenamond
Agenda Item:	Special Malt Beverage Permit Ordinance	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for the Town Council to consider an ordinance establishing a Special Malt Beverage Permit.

Requested Action.
Staff requests that the Town Council consider an ordinance establishing a Special Malt Beverage Permit.

Recommendations.
Staff recommends the Town Council approve the ordinance establishing a Special Malt Beverage Permit for public auditoriums, civic centers, or event centers.

Background.
On May 19, 2025 staff discussed with Council why a Special Malt Beverage permit should be established, recommendations for the duration of the permit, the fee of the permit and which current applicants/events this license type would immediately affect. At that meeting, Council directed staff to present the draft ordinance at the next available Town Council meeting.

Analysis & Key Policy Questions.
During the May 19th presentation, staff presented Council with key policy questions related to the establishment of the permit, as well as the fee and duration of the permit. Council did not request any changes to staff recommendations at that time.

Possible Alternatives.
Council could choose to add additional rules for eligibility for a Special Malt Beverage Permit, set a different fee for the permit, and/or set a different duration for the permit.

Comprehensive Plan & Priority Alignment.
Facilitating ways for organizations to more effectively utilize the alcohol permits available to them at event centers and supporting a variety of events in the Town offering entertainment, comradery, and community gatherings support Section 4 – the Town as the Heart of the Region, regarding enhanced civic spaces and social functions.

Fiscal Impact.
If Council approves staff's recommendations and the fee set forth in the upcoming fee schedule, the fee for a new permit will be $1,000. Special Malt Beverage Permits are permits, not annual licenses under the statutes, and therefore there will not be a renewal fee. There would be an additional fiscal impact of approximately $300 - $400 related to advertising of an adopted ordinance. The two entities currently utilizing catering permits or individual malt beverage permits will see a slight reduction in costs and a slight revenue decrease to the Town of approximately $800-$900 annually.

Staff Impact.
The staff impact of research and preparation of this staff report has been approximately 2 hours. The staff impact leading up to this staff report, researching this item, and presenting it for Council action was approximately 25 hours. Town staff will gain some efficiency in processing one permit vs. processing a set of catering permits or individual malt beverage permits.

Attachments or Links.
Ordinance W.

Suggested Motion. *Council always has the option to adopt, approve with conditions, continue, or deny items*.

I move to approve Ordinance W on first reading.

ORDINANCE W

AN ORDINANCE AMENDING CHAPTER 6.20, APPLICATION FOR LICENSES AND PERMITS, AND CHAPTER 6.50, SPECIAL 24-HOUR PERMITS, OF TITLE 6, LIQUOR LICENSES AND PERMITS, OF THE MUNICIPAL CODE OF THE TOWN OF JACKSON, WYOMING.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING:

SECTION I.

Section 6.20.006of the Jackson Municipal Code of the Town of Jackson Municipal Code is hereby amended as follows:

6.20.006 - Application form and fees.

A. A person desiring any liquor license or permit under this title shall apply to the Town Clerk on forms prepared by the Attorney General of the State of Wyoming, as and in accordance with the statute of the State of Wyoming.

B. The Town, upon application, state certification, and public hearing, may issue a liquor license or permit pursuant to this title and Title 12 of the Wyoming State Statutes.

C. The fee paid annually for each license and permit shall be in an amount established by resolution; however, in no case shall the sum be greater than the amount authorized by applicable Wyoming Statutes. No application will be processed, nor any licenses or permits issued, until payment in full has been made.

D. The fee to be paid for each license and permit shall be in an amount established by resolution, which fees may be amended from time to time by the Town Council; however, in no case shall the sum be greater than the amounts authorized by applicable Wyoming Statutes.

(Ord. _____§ 1, 2025; Ord. 1280 § 4, 2021; Ord. 1245 § 1, 2020; Ord. 1185 § 1, 2017; Ord. 969 § 1, 2010; Ord. 853 § 4, 2007).

SECTION II.

Sections 6.50.010 and 6.50.020 of the Jackson Municipal Code of the Town of Jackson Municipal Code are hereby amended as follows:

Chapter 6.50 – SPECIAL PERMITS

6.50.010 – 24-Hour Catering permits.

It is the duty and obligation of the resort or retail liquor licensee under which the catering permittee is acting to ensure compliance with all State and Town alcohol laws and regulations. Any violations thereof shall be attributed to the resort or retail liquor licensee.

(Ord. _____§ 1, 2025; Ord. 1245 § 1, 2020; Ord. 1185 § 1, 2017; Ord. 853 § 7, 2007; Ord. 823 § 1, 2006; Ord. 714 § 1, 2002).

6.50.020 –24-Hour Malt beverage permits.

Applicants for malt beverage permits must have successfully completed an alcohol server education course approved by the Wyoming Liquor Division or the Jackson Police Department prior to permit application. Proof of current alcohol server training certification will be required as part of the malt beverage permit application.

(Ord. ____§ 1, 2025; Ord. 1245 § 1, 2020; Ord. 1185 § 1, 2017; Ord. 969 § 2, 2010; Ord. 853 § 7, 2007; Ord. 697 § 1, 2002; Ord. 90 § 4, 1965).

SECTION III.

Section 6.50.030 of the Jackson Municipal Code of the Town of Jackson Municipal Code is hereby amended as follows:

6.50.030 – Special malt beverage permits for public auditoriums, civic centers or events centers.

A. Applicants for special malt beverage permits must have successfully completed an alcohol server education course approved by the Wyoming Liquor Division or the Jackson Police Department prior

to application. Proof of current alcohol server training certification will be required as part of the special malt beverage permit application.

B. Special malt beverage permits may be issued in accordance to 6.20.006 of this Title, without a public hearing or Council approval.

C. An application for a permit under this section 6.50.030 shall include a description of the type of event.

D. Special malt beverage permits are valid for 180 days' from, and including, the date of issuance.

E. Under a special malt beverage permit, malt beverages may only be sold and consumed i) inside the building for which the permit is issued or inside the property boundaries of a defined outdoor space set in the permit, ii) only during events that are open to the public and, iii) that are related to rodeos, non-youth spectator sporting events, performances, conferences, ceremonies, or similar types of events where tickets are sold or provided.

(Ord. _____§ 1, 2025).

SECTION VI.

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION III.

If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of the ordinance.

SECTION V.

This Ordinance shall become effective July 1, 2025 after its passage, approval, and publication.

PASSED 1ST READING THE _____DAY OF _____2025.
PASSED 2ND READING THE _____DAY OF _____2025.
PASSED AND APPROVED THE _____DAY OF _____2025.

TOWN OF JACKSON

BY: _____
Arne Jorgensen, Mayor

ATTEST:

BY: _____
Riley Hovorka, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING)
) ss.
COUNTY OF TETON)

I hereby certify that the foregoing Ordinance No. XXX was duly published in the Jackson Hole News and Guide, a newspaper of general circulation published in the Town of Jackson, Wyoming, on the _____day of _____, 2025.

I further certify that the foregoing Ordinance was duly recorded on page _____of Book _____of Ordinances of the Town of Jackson, Wyoming.

_____
Riley Hovorka, Town Clerk

ORDINANCE XXX

AN ORDINANCE AMENDING CHAPTER 6.20, APPLICATION FOR LICENSES AND PERMITS, AND CHAPTER 6.50, SPECIAL 24-HOUR PERMITS, OF TITLE 6, LIQUOR LICENSES AND PERMITS, OF THE MUNICIPAL CODE OF THE TOWN OF JACKSON, WYOMING.

~~AN ORDINANCE AMENDING AND REENACTING SECTIONS 6.20.006.D., CHAPTER 6.50, SECTION 6.50.010 AND 6.50.020 AND ESTABLISHING SECTION 6.50.030 REGARDING SPECIAL MALT BEVERAGE PERMITS FOR PUBLIC AUDITORIUMS, CIVIC CENTERS OF THE CODE OF THE TOWN OF JACKSON, WYOMING.~~

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING:

SECTION I.

Section 6.20.006~~.D., Chapter 6.50, Section 6.50.010 and 6.50.020~~ of the Jackson Municipal Code of the Town of Jackson Municipal Code ~~are~~ is hereby amended ~~and reenacted to read~~ as follows:

6.20.006 - Application form and fees.

A. A person desiring any liquor license or permit under this title shall apply to the Town Clerk on forms prepared by the Attorney General of the State of Wyoming, as and in accordance with the statute of the State of Wyoming.

B. The Town, upon application, state certification, and public hearing, may issue a liquor license or permit pursuant to this title and Title 12 of the Wyoming State Statutes~~Wyo. Stat. Ann. tit. 12~~.

C. The fee paid annually for each license and permit shall be in an amount established by resolution; however, in no case shall the sum be greater than the amount authorized by applicable Wyoming Statutes. No application will be processed, nor any licenses or permits issued, until payment in full has been made.

D. The fee to be paid for each ~~24-hour special~~license and permit shall be in an amount established by resolution, which fees may be amended ~~by ordinance~~from time to time ~~of~~ by the Town Council; however, in no case shall the sum be greater than the amounts authorized by applicable Wyoming Statutes. ~~No permit will be issued until payment in full has been made.~~

(Ord. ~~XXX~~ § 1, 2025; Ord. 1280 § 4, 2021; Ord. 1245 § 1, 2020; Ord. 1185 § 1, 2017; Ord. 969 § 1, 2010; Ord. 853 § 4, 2007).

SECTION II.

Sections 6.50.010 and 6.50.020 of the Jackson Municipal Code of the Town of Jackson Municipal Code are hereby amended as follows:

Chapter 6.50 – SPECIAL ~~24 HOUR~~ PERMITS

6.50.010 – 24-Hour Catering permits.

It is the duty and obligation of the resort or retail liquor licensee under which the catering permittee is acting to ensure compliance with all State and Town alcohol laws and regulations. Any violations thereof shall be attributed to the resort or retail liquor licensee.

(Ord. ~~XXX~~ § 1, 2025; Ord. 1245 § 1, 2020; Ord. 1185 § 1, 2017; Ord. 853 § 7, 2007; Ord. 823 § 1, 2006; Ord. 714 § 1, 2002).

6.50.020 –24-Hour Malt beverage permits.

Applicants for malt beverage permits ~~will~~ must have successfully completed an alcohol server education course approved by the Wyoming Liquor Division or the Jackson Police Department prior to permit application. Proof of current alcohol server training certification will be required as part of the malt beverage permit application.

(Ord. ~~XXX~~ § 1, 2025; Ord. 1245 § 1, 2020; Ord. 1185 § 1, 2017; Ord. 969 § 2, 2010; Ord. 853 § 7, 2007; Ord. 697 § 1, 2002; Ord. 90 § 4, 1965).

SECTION III.

Section 6.50.030 of the Jackson Municipal Code of the Town of Jackson Municipal Code is hereby amended as follows:

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6.50.030 – Special malt beverage permits for public auditoriums, civic centers or events centers.

A. Applicants for special malt beverage permits ~~will~~must have successfully completed an alcohol server education course approved by the Wyoming Liquor Division or the Jackson Police Department prior to application. Proof of current alcohol server training certification will be required as part of the special malt beverage permit application.

B. Special malt beverage permits ~~shall~~ may be issued ~~–~~in accordance to 6.20.006 of this Title~~upon application to and review by the Town Clerk, on forms prepared by the Town Clerk~~, without a public hearing or Council approval.

C. An application for a permit under this section 6.50.030 shall be accompanied by a designation of the event for which the application is sought, specifying the type of event.

D. ~~The duration of the s~~Special malt beverage permits are valid for ~~shall be for a~~ 180 days' from, and including, the date of issuance~~6 month period~~.

E. Under a special malt beverage permit, malt beverages may only be sold or consumed i) inside the building for which the permit is issued, ii) only during events that are open to the public and, iii) that are related to non-youth spectator sporting events, performances, conferences, ceremonies, or similar types of events where tickets are sold or provided.

(Ord. ~~XXX~~ § 1, 2025)

SECTION ~~I~~VI.

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION III.

If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of the ordinance.

SECTION ~~I~~V.

This Ordinance shall become effective July 1, 2025 after its passage, approval, and publication.

PASSED 1ST READING THE _____DAY OF _____ 2025.
PASSED 2ND READING THE _____ DAY OF _____2025.
PASSED AND APPROVED THE _____ DAY OF _____ 2025.

TOWN OF JACKSON

BY: _____
Arne Jorgensen, Mayor

ATTEST:

BY: _____
Riley Hovorka, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING)
) ss.
COUNTY OF TETON)

I hereby certify that the foregoing Ordinance No. XXX was duly published in the Jackson Hole News and Guide, a newspaper of general circulation published in the Town of Jackson, Wyoming, on the _____day of _____, 2025.

I further certify that the foregoing Ordinance was duly recorded on page _____ of Book _____ of Ordinances of the Town of Jackson, Wyoming.

_____
Riley Hovorka, Town Clerk

STAFF REPORT

Meeting Date:	16 June 2025	**Meeting Title:**	Town Council Regular – Ordinance
Submitting Department:	Joint Transportation Division	**Presenter:**	Charlotte Frei
Agenda Item:	Parking Garage Ordinance X– Second Reading	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Council to review ordinances related to payment at the parking garage and violations of new rules at the garage.

Requested Action.
Staff requests that Council review and consider Ordinance X to amend Municipal Code § 10.04.225 to match the policy for operating/managing the public parking structure located at West Simpson Avenue and South Milward Street.

Recommendations.
Staff recommends approval of Ordinance X as presented in the attachment to this staff report.

Background.
Several changes are proposed to ensure the Municipal Code section addressing the public parking structure is consistent with the new management of the parking structure, including:

1. Removal of the 48-hour time limit for parking in the structure
2. Adding language requirement the payment of the parking fee as posted at the structure
3. Prohibiting parking for more than 30 consecutive days
4. Requiring compliance with posted rules and regulations (rules will be posted on new signs at the garage).
5. Adding a prohibition on tampering, damaging, breaking into the payment equipment
6. Added ordinance requiring payment of fees.

Analysis & Key Policy Questions.
Several policy questions have been discussed in March 2024 and December 2024 (Staff Report: https://jacksonwy.portal.civicclerk.com/event/2214/files/attachment/6170). The ordinance reflects discussions and direction from Council received on February 18, 2025, when Council approved the contract with SKIDATA: https://jacksonwy.portal.civicclerk.com/event/2234/files/attachment/6360.

Concurrent with the first reading of this ordinance (June 2, 2025), the contract for the payment processor was being presented and approved.

Possible Alternatives.

- Council could direct staff to provide other or additional regulatory options.

Comprehensive Plan & Priority Alignment.
The guiding vision and chapter goal for Multimodal Transportation (Chapter 7) of the Comprehensive Plan is:

Travel by walk, bike, carpool, or transit will be more convenient than travel by single-occupancy vehicle.

Several strategies support improving enforcement at the garage; specifically, managing levels of service by evaluating parking occupancy and coordinating service levels across Town and County departments are identified by the plan in two strategies:

"Strategy 7.2.S.4: Reevaluate parking standards and other regulations that currently promote travel by single-occupancy motor vehicles." Introducing technology to support enforcement will also provide data on turnover and occupancy that staff can use to re-evaluate existing standards and regulations.

"Strategy 8.1.S.1: Define desired service levels from government service providers that address all policies of Principle 8.1 [Maintain Current, Coordinated Service Delivery]." The parking access technology is anticipated to reduce the burden on staff in Town Facilities and Jackson Police Department, allowing staff to redirect their time to higher and better uses that technology cannot perform.

Staff Impact.
The Regional Transportation Planning Administrator and staff from Town Police, Public Works, and Planning Departments have contributed approximately **80** hours in total to this project since Council's direction to pursue procurement of the Parking Access Revenue Control System (PARCS). The staff resources needed to operate and maintain the system (after installation) include:

- Town Public Works, Facilities and Street Divisions – 50 hours per year to repair or troubleshoot maintenance issues and to ensure entrance and parking information signs and pavement markings are maintained. Currently Town Public Works staff spends 100-150 hours per year for cleaning after routine incidents.
- Town Police Department – 325 hours per year to address violations, issue refunds, and check the garage for stays over 30 days. Currently CSOs spend approximately 600 hours per year in the garage (this does not include patrol officers' time in the garage).
- Town Hall and Dispatch – 30 hours per year to help customers experiencing issues; customers can press a button for support; this number will call Town Hall during business hours and dispatch after hours. Clear instructions at entry and exit can reduce the customer calls.
- Transportation Planning Functions – 40 hours per year to review reports, evaluate data and make recommendations for parking management.
- Director of External Affairs – 12 hours to develop communications around the program change initially, and regular communications about parking locations in future years. Seeing the armbar may deter people from parking, so staff anticipates the need to pre-emptively educate the public that the garage is still free from 4 am – 10 pm but paid overnight.

Additionally, the equipment is expected to reduce staff time monitoring, enforcing, and cleaning the garage. The ability to pay on exit is expected to reduce the number of tickets in municipal court and thus reduce the workload among PD and legal staff related to violations. The time CSOs previously spent monitoring and enforcing the 48-hour limit in the garage can be spent on other activities.

Fiscal Impact.
N/A for the municipal code. Fiscal impact associated with the payment processor is $55 per month (see related staff report from June 2, 2025 for payment processor). The cost of the SKIDATA contract (approved February 18, 2024) is $179,000 for year one, $9,760 in year two, and $20,873 for year 3 and subsequent years. Years 3 and beyond have a higher annual fee due to the warranty for equipment and services; the warranty includes quarterly inspections by SKIDATA technicians.

Attachments or Links.
Ordinance X

Suggested Motion.
I move to approve Ordinance X on second reading.

ORDINANCE X

AN ORDINANCE AMENDING TITLE 10, VEHICLES AND TRAFFIC, CHAPTER 10.04, TRAFFIC REGULATIONS—ADOPTION OF UNIFORM ACT, OF THE MUNICIPAL CODE OF THE TOWN OF JACKSON,

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING:

SECTION I.

Chapter 10.04, Traffic Regulations—Adoption Of Uniform Act, of the Municipal Code of the Town of Jackson is hereby amended as follows:

10.04.225- Public parking structure at West Simpson Avenue and South Milward Street.

A. *Fees.* Vehicles entering or using the public parking structure shall pay fees in accordance with the posted rates displayed at the entrance to the parking structure.

B. *Prohibitions*. It is unlawful for any person to do any of the following in the public parking structure:
   1. Fail to obey the posted rules and regulations of the public parking structure.
   2. Sleep or camp or car camp within or about any vehicle within the public parking structure.
   3. Deface, destroy, tamper with, open or willfully break, or impair the usefulness of the parking payment equipment, including the boom gate.
   4. Intentionally evade the required payment.
   5. Park a vehicle in the public parking structure for more than 30 consecutive days.

C. *Commercial Vehicles*. No commercial vehicle, freight carrying vehicle, or trailer shall be parked in the public parking structure. For the purposes of this chapter, a "commercial vehicle" means any self-propelled or towed vehicle capable of carrying ten or more persons exclusive of the driver, whether a van, truck, bus, or otherwise; or any self-propelled or towed vehicle used to transport persons and property in the furtherance of any commercial or business purposes; or any self-propelled or towed vehicle used in commerce to transport passengers or cargo.

(Ord. § 1, 2025; Ord. 1311 § 1, 2022; Ord. 1114 § 1, 2016; Ord. 1079 § 1, 2015; Ord. 1052 § 1, 2014).

SECTION II.

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION III.

If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate,

distinct and independent provision and such holding shall not affect the validity of the remaining portions of the ordinance.

SECTION IV.

This Ordinance shall become effective after its passage, approval, and publication.

PASSED 1ST READING THE 2 DAY OF June , 2025.

PASSED 2ND READING THE _____DAY OF _____ , 2025.

PASSED AND APPROVED THE _____DAY OF _____, 2025.

TOWN OF JACKSON

BY: _____
Arne O. Jorgensen, Mayor

ATTEST:

_____
Riley Hovorka, Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING)
) ss
COUNTY OF TETON)

I hereby certify that the foregoing Ordinance No. was duly published in the Jackson Hole News and Guide, a newspaper of general circulation published in the Town of Jackson, Wyoming, on the _____day of _____, 2025.

I further certify that the foregoing Ordinance was duly recorded on page _____ of Book of Ordinances of the Town of Jackson, Wyoming.

_____

Riley Hovorka, Town Clerk

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular
Submitting Department:	Legal	**Presenter:**	Lea Colasuonno
Agenda Item:	Renewal CenturyLink Franchise Agreement	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for Council to review and consider entering a new franchise agreement between the Town and Qwest Corporation (d/b/a CenturyLink, and CenturyLink hereafter).

Requested Action.
Staff request the Council review and consider the ordinance for a new franchise agreement between the Town and CenturyLink for a five-year term attached to this staff report.

Recommendations.
Staff recommend the Council approve the ordinance.

Background.
The Town and CenturyLink last entered into a franchise, pursuant to which CenturyLink provides telecommunications services to residents and businesses within the Town, in 2019. The term of the franchise was four years, or until December 31, 2023, after which time the franchise became a "holdover" franchise on a month-to-month basis through June 30, 2024.

In accordance with the provisions of the existing franchise, the Town Attorney contacted CenturyLink in May of 2023 to enter "good faith negotiations regarding renewal of the franchise." The negotiations have been challenging; they just resolved and resulted in the attached ordinance.

CenturyLink provides both residential and commercial internet services in the Town of Jackson.

Analysis & Key Policy Question.
Is Council willing to enter a new franchise with CenturyLink?

- **Policy Considerations**.
  - Telecommunications services are a critical service to residents and businesses within the Town of Jackson, fostering economic activity, providing expected services to residents and tourists alike, ensuring remote connectivity for educational, social, and healthcare needs.
  - CenturyLink does pay a fee to access the Town's rights-of-way (ROW), which is 5% of gross revenues (as that term is defined in the franchise).
- **Highlights of the Franchise.**
  - Grant. The Town is granting CenturyLink a nonexclusive authorization to construct, maintain, and operate a wireline communications system in, on, under, etc. the Town's ROW. What is explicitly not granted are cable, Multichannel Video Program Distributor, nor wireless systems – all of which would require separate franchises (under different legal rules).
  - Term. The term is 5 years, with two additional 5-year periods that automatically begin as long as i) CenturyLink is not in violation of the franchise and ii) neither party provides notice of termination.
  - Rules of ROW Occupancy. CenturyLink shall operate so as to:
    - ✓ Minimize disturbance / interference with the ROW and adjacent property owners.
    - ✓ Protect surrounding property from harm and, upon notice of undue vibration, heat, noise or interference, remedy it within 48 hours (emergencies and the like excepted).
    - ✓ Keep and maintain their facilities free of graffiti

- ✓ Reasonably compensate the Town for any tree trimming necessitated by its facilities
- ✓ Own or control all components of its system placed in the Town's ROW
- ✓ Cooperate with others to minimize adverse impacts on the Town's ROW through joint trenching and other arrangements
- ✓ Replace / restore the ROW if it damages it, as necessary and at its expense, to a condition equal to or better than that condition immediately prior to the disturbance.

- System Relocation. CenturyLink may be required to relocate its system (or portions of it) in two circumstances: i) structures – whether above or underground – to which CenturyLink's system is attached to or located within are removed, ordered to be removed, or relocated; and ii) CenturyLink's system interferes with the use of the ROW by the Town or the public, or it presents a risk to public health or safety.
- Fee. CenturyLink pays a fee equal to the greater of 5% of gross revenues generated by the System or $25,000 per annum. This minimum annual fee increases on an annual basis by 3%.
- Audit. The Town has the right to undertake an audit of CenturyLink on an annual basis upon 30 days prior written notice. The Town also has a general right to inspect books and records kept in the normal course of business.
- Assignment/Transfer. CenturyLink may only assign/transfer to a parent, subsidiary, or affiliated corporation or as part of corporate financing, reorganization, or refinancing. Other than that, the Town's prior written consent is required.
- Bonding. CenturyLink must have a valid $50,000 surety bond in place.
- Insurance. CenturyLink must have the following (minimum) insurance in place with a current A.M. Best's rating of not less than A-:
  - ✓ General Liability: $1,500,000 per occurrence
  - ✓ Automobile Liability: $1,500,000 per occurrence
  - ✓ Workers' Compensation: Statutory Limits
  - ✓ Employer's Liability: $750,000/$750,000/$750,000
- Indemnity: Except to the extent caused by the gross negligence or willful misconduct of the Town, CenturyLink), indemnifies the Town from anything arising out of or related in any manner to their operations within the corporate limits of the Town.

Possible Alternatives.
Council may elect to terminate the franchise and direct the Town Attorney to provide options for next steps with respect to CenturyLink.

Comprehensive Plan & Priority Alignment.
This item aligns with Section 8, quality service delivery to the public, as reliable and quality communications infrastructure is critical to, not only economic health, but general health, safety, and welfare of residents and visitors alike.

Fiscal Impact.
The fiscal impact of entering a new franchise is revenue positive from he previous version. The existing franchise requires a flat payment of $25,000 whereas the new agreement sets that amount as the minimum, and includes a 3% escalator annually.

Staff Impact.
The staff impact of this item has been in the Legal Department, estimated at 85 hours, and Public Works and Administration, estimated at a combined 12 hours.

Attachments or Links.
Ordinance Y.

Suggested Motion.
I move to approve Ordinance Y, an ordinance granting a franchise to Qwest Corporation *dba CenturyLink QC* on first reading.

ORDINANCE Y

AN ORDINANCE GRANTING A FRANCHISE TO QWEST CORPORATION D/B/A CENTURYLINK QC ON BEHALF OF ITSELF TO OPERATE AND MAINTAIN A TELECOMMUNICATIONS SYSTEM FOR THE PURPOSE OF SUPPLYING SERVICE TO THE TOWN OF JACKSON AND PROVIDING AN EFFECTIVE DATE.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING, IN REGULAR SESSION DULY ASSEMBLED, THAT:

SECTION I.

WHEREAS, the Town Council, having determined that Qwest Corporation dba CenturyLink QCs ("Grantee") is willing to provide the services, facilities, and equipment necessary to meet the needs and interests of the Town of Jackson, Wyoming ("Franchising Authority"), and is willing to be bound by conditions of Applicable Law, and by binding agreement to serve the public interest, does hereby ordain as follows:

FINDINGS

In the review of the request for renewal by Grantee and negotiations related thereto, and as a result of a public hearing, the Town makes the following findings:

1. Grantee's technical ability, financial condition, legal qualifications, and character were considered and approved in a full public proceeding after due notice and a reasonable opportunity to be heard;
2. Grantee's plans for operating the System were considered and found adequate and feasible in a full public proceeding after due notice and a reasonable opportunity to be heard;
3. The Franchise granted to Grantee by the Town complies with the existing applicable State statutes, federal laws and regulations;
4. Grantee has substantially complied with the material terms of the current Franchise under Applicable Law; and
5. The Franchise granted to Grantee is nonexclusive.

SECTION 1
Definition of Terms

1.0 Definitions. For the purpose of this Franchise, the following terms, phrases, words, and abbreviations shall have the meanings ascribed to them below. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number:

A. "Applicable Law" means all federal, state, and local laws, statutes, codes, ordinances, resolutions, orders, rules, and regulations including, but not limited to, FCC resolutions, orders, rules, regulations, the Communications Act, and all administrative and judicial decisions interpreting the same.

B. "Communications Act" or "Act" collectively means the Federal Communications Act of 1934, as amended.

C. "Communications" or "Communications Services" means Telecommunications Services, as defined in Wyo. Stat 37-15-101 and the Communications Act and 47 U.S.C. § 153(53). Neither "Communications" nor Communications Services" shall include Cable Services or Multichannel Video Programming ("MVPD) Services as both are defined in 47 U.S.C. § 522. In order to provide Cable Services or MVPD services, Grantee must obtain a Cable or MVPD franchise.

D. "Emergency" means an unforeseen combination of circumstances or the resulting state of such circumstances that require immediate action to avoid imminent danger to health, safety, or property.

E. "FCC" means Federal Communications Commission or successor governmental entity thereto.

F. "Franchise" shall mean the initial authorization, or renewal thereof, issued by the Franchising Authority, whether such authorization is designated as a franchise, permit, license, resolution, contract, certificate, or otherwise, which authorizes construction and operation of the System.

G. "Franchising Authority" means the Town of Jackson, Wyoming, or the lawful successor, transferee, or assignee thereof.

H. "Grantee" means Century Link, or the lawful successor, transferee, or assignee thereof.

I. "Gross Revenues" means any revenue received by the Grantee from the operation of the System in the Service Area as specified in Appendix A, from the sale of Communication Services within the Town limits. Gross Revenues shall not include: (1) any fees or taxes which are imposed directly or indirectly on any Subscriber thereof by any governmental unit or agency, and which are collected by the Grantee on behalf of such governmental unit or agency; and, (2) uncollectible revenues from customers within the Town limits, subject to inclusion when collected.

J. "Person" means an individual, partnership, association, joint stock Grantee, trust, corporation, or governmental entity.

K. "Public Ways" shall mean the surface of, and the space below and above, any existing or hereafter established public street, highway, freeway, bridge, land path, alley, court, boulevard, sidewalk, parkway, way, lane, public way, drive, circle, or other Public Way, dedicated primarily to public travel or utility use, including, but not limited to, utility strips expressly dedicated to the Franchising Authority, which, by virtue of the terms of dedication, the Franchising Authority may permit Grantee to use and occupy for purposes of installing the System to provide Telecommunications Communications Services.

L. "Service Area" means the present municipal boundaries of the Franchising Authority, and shall include any additions thereto by annexation or other legal means.

M. "Subscriber" or "Customer" means a Person or user of the System who lawfully receives Communications Services or other services provided by Grantee with the Grantee's express permission.

N. "System" shall have the meaning and refer to, unless otherwise specified, the Grantee's infrastructure constructed and operated in the Public Ways of the Town under this Agreement.

SECTION 2
Grant of Franchise

2.0 Grant. Subject to the ongoing supervision of the Franchising Authority, and subject to the exercise of the Franchising Authority's police powers, the Franchising Authority hereby grants to the Grantee a nonexclusive Franchise which authorizes the Grantee to construct, maintain and operate a wireline Communications Services System in, on, along, among, across, or under Public Ways within the Service Area.

A. The grant does not encompass the right to provide, or authorize others to use the facilities to provide Cable Services or MVPD Services. The Grant does not authorize Grantee to install, or permit others to install, wireless facilities. A separate franchise is required for such uses. In the event Grantee intends to commence providing services or to conduct any other activity not authorized by this Agreement, it must first request and obtain a separate franchise, license or other right of way use agreement from the Franchising Authority. This Agreement does not authorize the installation of any facilities other than the Grantee's Communications System.

B. At any time that Grantee ceases to operate as a provider of Communications Services, the Franchising Authority shall have the option, at its sole discretion and upon six (6) months' written notice to Grantee, to terminate this Agreement and request the removal of Grantee's facilities from the Public Ways, including the cost of any site remediation arising out of Grantee's use, at no cost to the Franchising Authority, without any liability to the Franchising Authority related directly or indirectly to such termination.

2.1 Purpose.

A. To the extent permitted by state and federal law, the Franchising Authority reserves the right to require and regulate the provision of services and facilities by Grantee. The central purpose of this Franchise is to define the general terms and conditions under which Grantee may occupy and use Public Ways to provide Communications Services. In consideration of and as part of the compensation for the Franchise, right, privilege and authority granted herein, the Grantee, its successors, and assigns, agree to furnish Communications Services to residents, persons and business of the Service Area.

B. The Franchise is not in lieu of: permits or approvals, or associated fees therefore, that may be required in connection with particular activities in the Public Ways, including, but not limited to occupancy permits, construction permits, building permits; traffic plans and authorizations that may be required under the land use codes of the Franchising Authority for particular placements or placements at particular locations, including, but not limited to design review requirements in historic districts; or licenses, leases or agreements that may be required for use of Franchising Authority property other than the Public Ways. Permits and authorizations must be applied for in a timely manner, and work may not commence before required permits or authorizations issue.

C. All work required of Grantee hereunder shall be performed at no cost to the Franchising Authority or to any governmental authority, except as specifically provided herein, or where required by Wyoming law.

2.2 Term. The initial term of this Franchise shall be five (5) years, commencing on the ___ day of _____, 2025, through and including the ___ day of _____, 2030, unless sooner terminated as provided herein.

Provided that Grantee is not in default in the performance of its obligations hereunder, this Franchise shall automatically renew for two (2) additional five (5) year terms, and year-to-year thereafter until either party gives notice of its intent to terminate the Franchise or unless otherwise terminated as provided herein. All the terms and conditions during the renewal period(s) shall be the same as during the initial term, unless modified by the parties in writing as provided herein. Renewal shall be deemed automatic without additional notice unless either party notifies the other in writing of non-renewal on or before six (6) months prior to the expiration of the current term.

SECTION 3
Minimum Conditions of Street Occupancy

3.0 Conditions of Street Occupancy. In occupying, entering into, and conducting work in the Public Ways, Grantee will comply with all applicable federal, state, and local laws and regulations, and in addition, comply with the following minimum conditions:

A. All transmission and distribution structures, other lines, and equipment installed by the Grantee pursuant to the terms hereof shall be located so as to not unreasonably interfere with the use of Public Ways for travel. Whenever it shall be necessary to install facilities, to bore, horizontally drill, dig or in any manner to disturb or interfere with any Public Ways, Grantee shall cause a minimum of interference with the proper use of Public Ways and with the rights and reasonable convenience of property owners who own property that adjoins any of such Public Ways, and shall not at any time encumber more of the streets than shall be reasonably necessary to enable the Grantee to fulfill the intent and purpose of this Franchise. The Grantee shall be required to obtain any necessary permit from the Franchising Authority prior to entering any Public Way. Applications must be submitted with ample time for review and approval to adhere to the timeframes indicated by Town policy/ordinance/code. The requested improvements and traffic control plan must be provided and approved by the Town Public Works Department prior to the start of any work.

B. All construction, modification, repair, and operation shall be performed in a manner that protects surrounding property from harm, and free of debris and anything of a dangerous, noxious, or offensive nature or which would create a hazard or undue vibration, heat, noise or interference. If the Franchising Authority gives Grantee written notice of a failure by Grantee to comply with this subsection B, Grantee shall use its best efforts to remedy such failure within forty-eight (48) hours after receipt of such written notice. If Grantee defaults in its obligations hereunder, the Franchising Authority may upon prior written notice perform the necessary work and charge the reasonable cost thereof to and collect the same from the Grantee. Notwithstanding the foregoing, in the event of an Emergency, or where the System creates or is contributing to an imminent danger to health, safety, or property, the Franchising Authority may remove, relay, relocate, or otherwise perform work necessary to address the dangerous condition without prior notice to Grantee. The

Franchising Authority shall make reasonable efforts to contact Grantee prior to performing such work, or immediately thereafter if prior notice is not practical.

C. Grantee shall at all times keep and maintain the System's facilities free of all graffiti located thereon. If Franchising Authority notifies Grantee that graffiti is located on the System facilities, Grantee shall remove the graffiti within ten (10) business days of the written notice. If Grantee defaults in its obligations hereunder the Franchising Authority may perform the necessary work and charge the reasonable cost thereof to and collect the same from the Grantee.

D. Whenever and wherever Grantee shall rebuild, relocate or construct new cables or lines within the Public Ways of the Town, such cables or lines shall be located in the alleys or utility easements of the Town, however, if such location is not feasible, then a different location within the Public Ways shall be selected, subject to approval of the Town Public Works Department. All transmission and distribution structures, other lines, and equipment shall be maintained in good condition, with neat and orderly appearance, and placed so as to minimize visual intrusions in the area in which they are placed.

E. The Grantee may trim trees or other natural growth overhanging any of its System in the Service Area to prevent branches from coming in contact with the Grantee's wires, cables or other equipment. The Grantee shall reasonably compensate the Franchising Authority for any damages caused to the Franchising Authority's property in the course of trimming, or shall, in Grantee's sole discretion perform the necessary work itself to redress the damage caused. Work must be performed in a manner satisfactory to the Franchising Authority (including, for example, with respect to the timing of tree replacement, and the type of tree to be planted).

F. Grantee must own or control all components of System placed in the Public Ways, other than a support structure owned by a governmental entity or an entity which itself holds a franchise and which has been authorized to place the support structure within the Public Way. Excluding the support structure owned by such other entity, the System must be under the sole control and management of Grantee; and Grantee shall be liable for all acts or omissions, and all harms associated with that System, or its use of any support structure.

G. Franchising Authority may require Grantee to reasonably cooperate with others to minimize adverse impacts on the Public Ways through joint trenching and other arrangements.

3.1 Restoration of Property. If during the course of the Grantee's construction, operation, or maintenance of the System there occurs a disturbance of any Public Way or other property by the Grantee, it shall, at its expense, replace and restore such Public Way or property to a condition equal to or better than that condition of the Public Way or property existing immediately prior to such disturbance; or, if different, to such condition as may be required by applicable codes and regulation governing the Public Way or property.

3.2 Relocation of System.

A. Grantee may be required to remove and relocate the System, both underground and aerially deployed, subject to such notice as may ordinarily be provided to users of similar structures, if: (a) the structures to which they are attached or located within are removed, ordered to be removed or relocated or (b) to ensure that the structures to which they are attached or located within do

not interfere with the use of the Public Way by the Franchising Authority or the public, or present a risk to public health or safety. Grantee shall bear the costs and expenses for any relocation required to achieve a public purpose, including, but not limited to the exercise of the Franchising Authority's police powers to maintain the public health, safety, and general welfare.

B. To the extent that Grantee is requested to remove or relocate its System to share the use of the Public Way by a third party, nothing herein prevents Grantee from seeking compensation from that third party; or from raising a claim that the obligation to share is being applied in a manner inconsistent with Applicable Law.

C. The rights and privileges granted hereby shall not be in preference or hindrance to the right of the Franchising Authority, or any other governmental agency, improvement district or other authority having jurisdiction, to perform or carry on any public works, public improvements, or public projects. In the event that the System interferes in any way with the construction, maintenance, or repair of such public works, public improvements, or public projects, the Grantee shall (a) immediately commence work to remove or relocate the object of such interference if Emergency circumstances exist or (b) otherwise, within sixty (60) days of notice of such interference (or such longer period as may be reasonably agreed upon by the Franchising Authority), protect or relocate the System, as may be directed by the Franchising Authority or other governmental authority.

D. In any case where the underground portion of the System must be relocated, Grantee may, as an alternative to removing its System, abandon the System in place. If funds are available to users of the Public Way for relocation, nothing herein prevents Grantee from seeking funding for relocation.

3.3 Closing of Public Way. Nothing in this Agreement shall be construed as a waiver or release of the rights of the Franchising Authority in and to Public Way. In the event that all or part of the Public Way within the Service Area is, pursuant to statutory procedures, (1) closed to pedestrian and/or vehicular traffic and/or utilities; or (2) vacated or abandoned, or if ownership of the land in, under or over the affected Public Way is otherwise transferred to another Person, all rights and privileges granted pursuant to this Agreement with respect to such Public Way, or any part of such Public Way so abandoned, vacated, or transferred, shall cease upon the effective date of such closing, vacation, or transfer, and Grantee shall remove the System facilities from such Public Way, except as may be reserved as part of the vacation or abandonment of the Public Way. Nothing herein is meant to preclude Grantee from pursuing any rights it may have under state law against a private Person if the Public Way is vacated for the benefit of that Person. The Franchising Authority shall provide reasonable prior written notice to Grantee of any such closing, vacation, or transfer to allow Grantee to remove and relocate its facilities where the right to continue to occupy and use such Public Way is not reserved for Grantee, and shall work with Grantee to identify alternative routes if facilities must be relocated.

3.4 Undergrounding.

A. For all new installations, extensions, upgrades, and major maintenance of the System, the Franchising Authority may require the Grantee to underground the System as required by Applicable Law, provided such undergrounding is required of all telecommunications system franchisees or other franchisees operating in the Public Ways. As such, Grantee shall construct, operate, and maintain its lines underground, but may place other equipment in vaults or on pedestals above ground where permitted in accordance with the Franchising Authority's normal practices for the affected area.

B. No new aboveground facilities may be placed in a local improvement district where utilities are to be undergrounded, except as otherwise provided in connection with the establishment of that local improvement district. Nothing in this Franchise prevents the Franchising Authority or residents of the Town from requiring Grantee to participate in a plan for a local improvement district, and to relocate, underground or otherwise move or modify its facilities in accordance with the requirements for the local improvement district subject to Applicable Law at the expense of the Franchising Authority or residents of the Town.

3.5 Failure to Perform. If Grantee defaults in its obligations to perform any work hereunder, (including, but not limited to relocation of its System), the Franchising Authority may perform the work, or cause the work to be performed, and charge the actual and reasonable cost thereof to and collect the same from the Grantee. Franchising Authority may not perform the work unless it provides thirty (30) days prior written notice to the Grantee of such default, and Grantee fails to cure such default within the thirty (30) day period, or such other extended period of time, to the extent that a cure is capable of being completed within a reasonable period of time thereafter, and Grantee has commenced a cure of such default within the thirty (30) day period. Notice to Grantee required hereunder, except in the case of emergencies, where there is an imminent threat to Persons or property.

3.6 All Work Performed Safely. All work performed in connection with the System shall be performed in a safe, thorough, workmanlike and reliable manner using materials of good and commercially reasonable quality. The Grantee shall employ ordinary care at all times and employ commonly accepted methods and devices for the prevention of failures and accidents that are likely to cause damage, injury, or nuisance to the public. In addition, the Grantee shall, at its sole cost and expense, undertake all necessary and appropriate efforts to prevent accidents at its work sites, and to comply with all legal and regulatory safety requirements of all permits, licenses, and other forms of approval or authorization. Grantee will comply with Franchising Authority requirements for identification of the System facilities and for identification of employees, subcontractors, vehicles and equipment when performing work within the Public Way. Grantee is responsible for ensuring that all contractors and subcontractors comply with the requirements of this Franchise and Applicable Law when performing work on behalf of Grantee, and is jointly and severally responsible for their acts and omissions.

3.7 Emergency Notification. Grantee shall provide Franchising Authority with a twenty-four (24) hour emergency telephone number at which a representative of Grantee, not voice mail or a recording, can be contacted in the event of an Emergency. Grantee shall respond immediately to address a reported Emergency. Grantee shall be required at all times to have available maintenance crews with a response time of no more than twelve (12) hours.

3.8 Required Reports.

A. Upon request, the Grantee shall provide Franchising Authority, at no cost to the Franchising Authority, a map as previously prepared, used, and relied upon by Grantee in its normal course of business, clearly indicating the approximate location of all components of the System in the Public Ways. This shall be provided to the Franchising Authority in a format that is GIS compatible or an alternative as agreed to by both the Franchising Authority and the Grantee. Maps of Grantee's System shall be held as proprietary and confidential by the Franchising Authority, and are not intended to be released to any other person or entity unless required by law, and only then, in accordance with Wyo. Stat. § 16-4-203(d)(v).

B. Upon request, Grantee shall provide Franchising Authority, at no cost to the Franchising Authority, documentation of the location of any portion of its System as built in the Public Ways and physically demarcate the location of relevant portions of its System on the ground. The former shall be provided to the Franchising Authority in a format that is GIS compatible or an alternative as agreed to by both the Franchising Authority and the Grantee.

C. Upon request, and to the extent not expressly required under a permit, Grantee will keep the Town Engineer apprised of the status of any work in the Public Ways.

D. Upon request, Grantee shall provide any required certificate of public convenience and necessity, and shall provide other proofs that it has authority to construct, modify, repair, or operate the System.

E. All requests to Grantee pursuant to this section 3.8 may be directed to NetworkOperationsCenter@lumen.com, 1-888-678-7070.

3.9 Temporary Changes for Other Permittees. At the request of any Person holding a valid permit upon reasonable advance notice, Grantee shall temporarily raise, lower, or remove its System facilities, property, or equipment as necessary to allow the moving of a building, vehicle, equipment, or other item. The expense of such temporary changes must be paid by the permit holder, and Grantee may require payment of the estimated cost in advance.

SECTION 4
Franchise Fee, Transfer, and Certain Franchising Authority Rights

4.0 Franchise Fee.

A. As of the Effective Date of this Agreement, and in return for the rights granted hereunder, Grantee shall pay Franchising Authority a franchise fee equal to the greater of five percent (5%) of Gross Revenues generated by the System or $25,000 per annum ("Minimum Fee"), to be paid in quarterly installments, with each installment due 45 days after the end of the calendar quarter. The Minimum Fee per annum shall increase on an annual basis by three percent (3%). At the request of the Franchising Authority, payments will be made electronically if technically feasible and at no cost to the Grantee. The Franchising Authority may require the Grantee to submit a statement, certified as true by an authorized representative of the Grantee, setting forth its gross revenues. The request shall be made by the Franchising Authority no later than thirty (30) days after the given annual use payment is received, and the Grantee shall have ninety (90) days to respond.

B. The fee may be modified if a court or agency of competent jurisdiction determines that the fee is not in compliance with Applicable Law, competitively neutral or unlawfully discriminates in favor of Grantee, and Grantee may be required to pay a higher, non-discriminatory, and competitively neutral fee. Grantee reserves the right to challenge the franchise fee to the extent it is inconsistent with Applicable Laws.

C. Acceptance of Payment and Recomputation, No acceptance of any payment shall be construed as an accord by the Franchising Authority that the amount paid is, in fact, the correct amount, nor

shall any acceptance of payments be construed as a release of any claim the Franchising Authority may have for further or additional sums payable or for the performance of any other obligation of Grantee. Any transactions which have the effect of circumventing payment of the franchise fee, including evasion of payment of the franchise fee by non-reporting of gross revenues, bartering, or any other means which evade the actual collection of revenues for business pursued by the Grantee, are prohibited.

D. Audits. On an annual basis, upon thirty (30) days prior written notice, the Franchising Authority, including the Franchising Authority's auditor or his/her authorized representative, shall have the right to conduct an independent audit of the Grantee's records directly related to determination of the franchise fee owed. Should the Grantee's business records be located in another city or state, the Grantee shall, upon the request of the Franchising Authority, make such records or information available to the Franchising Authority at a convenient location in the Franchising Authority within a time agreed to by the Franchising Authority. Each Party shall pay its own costs and expenses incurred in connection with any such audit, except in the event there is a final and non-appealable determination of an underpayment of five percent (5%) or more of the amount that was due and payable to the Franchising Authority, in which case, in addition to making full payment of the relevant obligation, the Grantee will promptly pay to the Franchising Authority the actual costs and expenses incurred by the Franchising Authority associated with the audit, including attorneys' fees and the professional services of the auditor to perform the audit; provided, however, the Grantee's obligations to pay such costs and expenses shall be capped at $15,000.00 for any one audit. The Franchising Authority may not retain any person or entity to perform the audit whose compensation for performing the audit is dependent in any manner upon the outcome of any such audit, including the audit findings, the recovery of fees, or the recovery of any other payments. Any additional amount due to the Franchising Authority as a result of the audit, including any applicable interest, shall be paid by the Grantee within thirty (30) days after the Grantee receives a written notice from the Franchising Authority accompanied by a copy of the audit report and any other supporting document necessary to determine the alleged amount due is correct.

E. Late Payments. In the event any payment is not received on the date due, Grantee shall pay interest on the amount due, at the prime rate charged by the bank the Franchising Authority uses as its main depository, on the date the payment was due plus three percent (3%), calculated from the date the payment was originally due until the date the Franchising Authority receives the payment. If Grantee fails to pay any sums herein specified within fifteen (15) days following Grantee's receipt of written notice that such sums are due, such failure to pay following such written notice shall be treated as a default subject to the provisions of Section 7 below. Notwithstanding the foregoing, in the event the Grantee terminates the operation of its System within the Franchising Authority, it shall make a final payment of any amounts past due to the Franchising Authority within ninety (90) calendar days thereof, and shall provide a report for the calendar year through the date of termination of the operations, which report shall contain the information and certification required hereinabove.

F. Tax Liability. The franchise fees shall be in addition to any and all taxes or other levies or assessments which are now or will be required to be paid by businesses by any law of the Town, the State of Wyoming, or the United States including, without limitation, sales, use or other taxes, business license fees or other payments. Payment of the franchise fees under this Franchise will not exempt the Grantee from the payment of any other license fee, permit fee, tax, or charge on

the business, occupation, property, or income of the Grantee that may be lawfully imposed by the Franchising Authority.

4.1 Rates to Comply with Applicable Law. The rates to be charged by Grantee for Communications Services shall comply with any enforceable local, state, or federal regulatory authority having jurisdiction. If no governmental official or body has rate setting jurisdiction, Grantee may set rates to be charged at its sole discretion. To the extent the Franchising Authority may in the future become entitled to set fees and charges for the services provided pursuant to this Agreement, the Franchising Authority reserves the right to regulate the rates, fees, charges, deposits, and associated terms and conditions for any service provided pursuant to this Agreement to the fullest extent permitted by Applicable Law with appropriate procedural due process.

4.2 Transfer of Franchise.

A. The Franchise or System, or control of the Franchise or of the System may not be assigned or transferred directly or indirectly by any means (all collectively referred to herein as "Transfers") other than to a parent, subsidiary, or affiliated corporation or as part of any corporate financing, reorganization, or refinancing without the prior written consent of Franchising Authority, which consent shall not be unreasonably withheld, conditioned or delayed, provided: (1) Grantee is in compliance with this Franchise in all respects; and (2) that the Transfer does not create any additional burden upon the Public Ways or adversely affect the Franchising Authority's interests under this Franchise.

B. Grantee may mortgage, pledge, or hypothecate its interest in the System without prior written consent provided that any such arrangement is subordinate to the terms of this Franchise, and will not permit any Person to succeed to the rights of Grantee under the Franchise without the Franchising Authority's prior written consent, and will not result in any lien extending to municipal property or the Franchise itself

C. In all cases, an assignee or transferee must accept all obligations of the Grantee, and responsibility for all acts and omissions of Grantee, known and unknown, unless the Franchising Authority expressly agrees otherwise.

D. Except as otherwise provided herein, the Franchise is not divisible by sublease, license or otherwise. Notwithstanding the foregoing, nothing contained herein shall prohibit Grantee from providing Services to its customers.

4.3 Non-exclusive Franchise. The right to use and occupy said streets, alleys, Public Ways and places for the purposes herein set forth shall not be exclusive and the Franchising Authority reserves the right to grant a similar use of said streets, alleys, Public Ways and places to any Person at any period of this Franchise.

4.4 Franchising Authority Rights in Franchise.

A. The right is hereby reserved to the Franchising Authority to adopt, in addition to the provisions herein and existing applicable ordinances, such additional regulations, relative to this Franchise as it shall find necessary in the exercise of its general police powers.

B. The Franchising Authority shall have the right, during the life of this Franchise, at fair market price and negotiated terms and conditions for services, and in accordance with a negotiated service order, to request that the Grantee provide services provided by the Grantee to Franchising Authority offices, core facilities, and/or utilities, including but not limited to Town Hall, Public Works, Police Stations(s), and Fire/EMS stations(s) that are passed by its System within the Town.

C. The Franchising Authority shall have the rights, subject to the provisions of this Franchise to make such inspections of all construction and installation activities undertaken by the Grantee within the Public Ways of the Town as may be necessary to ensure compliance with this Franchise and all applicable Town ordinances.

SECTION 5
Compliance

5.0 Books and Records/Reports

A. In addition to the audit rights provided for in Section 4.0(D) above, the Grantee agrees that the Franchising Authority upon reasonable advance written notice to the Grantee may review such books and records directly related to the Franchising Authority and this Agreement which are kept in the normal course of business at the Grantee's business office, during normal business hours and on a non-disruptive basis, as is reasonably necessary to ensure compliance with the terms hereof.

B. Notwithstanding anything to the contrary set forth herein, subject to Applicable Law, neither the Franchise Authority or Grantee shall be required to publicly disclose information which is proprietary or confidential in nature, absent an appropriate order of a court or agency of competent jurisdiction. The Franchising Authority agrees to treat any information disclosed by the Grantee as confidential pending a contrary determination, and only to disclose it to employees, representatives, agents or consultants that have a need to know and that have agreed to maintain the confidentiality of the materials in accordance with law. The Grantee shall not be required to provide personally identifiable Subscriber information, or other information which Grantee is prohibited by law from disclosing to the Franchising Authority. Nothing herein shall be interpreted to require the Franchising Authority to violate the Wyoming Public Records Act or Sunshine Laws, or to defend against a claim that documents produced must be disclosed. Franchising Authority shall notify Grantee in writing if Franchising Authority receives a request to disclose confidential information, so that Grantee may take appropriate steps to protect its interest.

SECTION 6
Insurance and Indemnification

6.0 Surety Bonds.

A. Grantee shall, as a material condition of this Franchise, and prior to the commencement of any work in the Public Way, deliver to the Franchising Authority a bond in the amount of fifty thousand dollars ($50,000), payable to the Franchising Authority to ensure the appropriate and timely performance of work in the Public Way and compliance with the obligations of its Franchise. The required bond must be with good and sufficient sureties, issued by a surety company authorized to transact business in the State of Wyoming, and satisfactory to the Town Solicitor in form and substance, and must be maintained until all obligations to Franchising Authority under this

Franchise (including obligations to remove) are satisfied. The Grantee shall maintain such bond at all times throughout the term of the Agreement and for a period of one (1) year following the expiration or termination of the Agreement.

B. If a higher bond amount would be required by Applicable Law in connection with permits for work in Public Ways, Grantee shall provide an additional bond so that the total bonded amount equals the higher bond requirement.

C. If Grantee fails to timely pay any sum required to be paid pursuant to this Agreement, or fails to perform any obligation or cure an act or omission which the Franchising Authority believes can be remedied in whole or in part through the expenditure of funds, the Franchising Authority may draw upon the bond thirty (30) days after providing Grantee written notice of its intent to do so, unless within that period, Grantee pays the amount owed or performs or cures to the satisfaction of the Franchising Authority. The written notice must state the sum the Franchising Authority believes is owed or performance or cure that Franchising Authority believes may be remedied in part by drawing on the bond. The Franchising Authority may not seek to recover from the bond while any action, appeal or other process has been instituted by Grantee to challenge the amount owed.

D. The total amount of the bond required by this Agreement shall be forfeited in favor of the Franchising Authority if, the Grantee abandons its System in violation of this Franchise at any time during the Franchise Term or any extension thereto.

E. Grantee shall not permit the bond to expire or approach less than thirty (30) days prior to expiration without securing and delivering to the Franchising Authority substitute, renewal or replacement bond in conformance with the provisions of this Agreement.

F. If Franchising Authority notifies Grantee of any amounts due to Franchising Authority or pursuant to this Franchise or Applicable Law, and the Grantee does not make such payment within thirty (30) days, the Franchising Authority may withdraw the amount in question, with any applicable interest and penalties, from the bond by notice to the Grantee and the issuer specifying the amount and purpose of such withdrawal. However, if within this thirty (30) day time frame, Grantee gives written notice it disputes entitlement to payments from Grantee, the Parties shall promptly meet to attempt to resolve the dispute in good faith amongst themselves.

G. If at the time of a withdrawal from the bond by the Franchising Authority, the amount available with the issuer is insufficient to provide the total payment of the claim asserted in the Franchising Authority's notice of withdrawal, the balance of such claim shall not be discharged or waived, but the Franchising Authority may continue to assert the same as an obligation of the Grantee to the Franchising Authority.

6.1 Insurance Requirements.

A. Grantee shall procure and maintain insurance for the duration of this Franchise against any and all claims for injuries to Persons or damages to property which may in any way arise from, or in connection with any work performed in connection with the System or pursuant to this Franchise by Grantee, its agents, representatives, or employees ("Work"). Such insurance shall be in the following minimum amounts, which assume that no hazardous materials will be associated with any part of the System and that the System will be of a kind and type regularly installed in the Public

Way. The Franchising Authority may require additional insurance if, in the Franchising Authority's reasonable view, the System presents additional risks to it, the public or property.

B. Minimum Coverages and Limits:
   (1) General Liability: $1,500,000 per occurrence
   (2) Automobile Liability: $1,500,000 per occurrence
   (3) Workers' Compensation: Statutory Limits
   (4) Employer's Liability: $750,000/$750,000/$750,000

C. Evidence showing proof of such insurance shall be submitted to Franchising Authority prior to commencement of any work in the Town, which shall also be made available at www.lumen.com/moi. Further, it shall be an affirmative obligation upon Grantee to maintain the insurance policies in full force and effect during the term of the Franchise. Each policy shall require that notice be provided to Franchising Authority thirty (30) days prior to cancellation of the policy. A substitute certification must be provided to the Franchising Authority prior to the date any insurance lapses or otherwise is terminated. Failure to comply with the insurance requirements shall be considered a material breach of this Franchise.

D. The General Liability policy is to contain or be endorsed to name Franchising Authority, its officers, officials, agents, and employees as additional insureds as it relates to the liability arising out of the Work. Such coverage shall be primary and shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

E. Workers' Compensation. Grantee shall maintain Workers' Compensation Insurance for all of Grantee's employees who are in any way connected with the Work. Such insurance shall comply with all applicable state laws and provide a waiver of subrogation against the Franchising Authority, its officers, officials, agents, and employees. Grantee and/or its insurers are responsible for payment of any liability arising out of Workers' Compensation, unemployment, or employee benefits offered to its employees

F. Insurance is to be placed with insurers with a current A.M. Best's rating of not less than A-:VII and licensed to do business in the State of Wyoming, unless otherwise approved by Franchising Authority, and Grantee shall not self-insure in satisfaction of any of the insurance requirements set out herein without the express written consent of Franchising Authority.

6.2 Indemnification. Except to the extent caused by the gross negligence or willful misconduct of Franchising Authority or its employees, Grantee agrees to indemnify, save, and hold harmless, and defend the Franchising Authority, its elected officials, employees, contractors, boards, commissions and agents, from and against any liability for damages and from any liability or claims (including judgments, decrees, court costs, and defense costs), arising out of or related in any manner to Grantee's operations within the corporate limits of the Town, the exercise of the privileges granted herein by Franchising Authority, or the acts or omissions of the Grantee, its officers, employees, contractors, or agents, related in any way to the construction, modification, repair, or operation of the System. Provided, the Franchising Authority shall give the Grantee written notice of its obligation to indemnify the Franchising Authority within fifteen (15) days of service of a claim or action subject to this Section. If Grantee assumes the defense in a timely manner, and the Franchising Authority determines that it is necessary for it to employ separate counsel, the costs for such separate counsel shall be the responsibility of the Franchising Authority.

6.3 Grantee to Have No Recourse. Except to the extent provided for herein, Grantee specifically agrees it will not seek monetary damages from Franchising Authority for any loss, cost, expense, or damage arising out of any provision or requirement of this Franchise, or enforcement or this Franchise, nor from the Franchising Authority's exercise of its authority to grant additional Franchises, but shall only be entitled to seek declaratory or injunctive relief. The Franchising Authority shall not be liable, unless directly and proximately caused by the negligence or willful, intentional or malicious acts of the Franchising Authority, for any damage to or loss of any part of its System within the Public Way as a result of or in connection with any public works, public improvements, construction, excavation, grading, filling, or work of any kind in the Public Way by or on behalf of the Franchising Authority.

SECTION 7
Enforcement and Termination of Franchise

7.0 Notice of Violation. In the event that the Franchising Authority believes that the Grantee has not complied with the terms of the Franchise, it shall notify the Grantee in writing of the exact nature of the alleged noncompliance.

7.1 Grantee's Right to Cure or Respond. The Grantee shall have thirty (30) days from receipt of the notice described in Section 7.0: (a) to respond to the Franchising Authority, contesting the assertion of noncompliance, or (b) to cure such default, or (c) in the event that, by the nature of default, such default cannot be cured within the 30-day period, Grantee shows within that 30-day period that it has initiated reasonable steps to remedy such default as promptly as is possible, and by a date certain. If Grantee fails to promptly complete the cure to the satisfaction of the Franchising Authority, the Franchise may be terminated after public hearing without further notice or opportunity to cure.

7.2 Public Hearing. In the event that the Grantee fails to respond to the notice described in Section 7.0 pursuant to the procedures set forth in Section 7.1, or in the event that the alleged default is not remedied to the satisfaction of the Franchising Authority within thirty (30) days, the Franchising Authority shall schedule a public hearing to consider any objections Grantee has raised with respect to the claimed default, and investigate the default to consider whether to terminate the Franchise. The Franchising Authority shall notify the Grantee in writing of the time and place of such public hearing and provide the Grantee with an opportunity to be heard.

7.3 Enforcement. Subject to applicable federal and state law, in the event the Franchising Authority, after such meeting, determines that the Grantee is in default of any provision of the Franchise, the Franchising Authority may:

A. Commence an action in court seeking any relief which may be available; and

B. In the case of a default of a material provision of the Franchise, declare the Franchise to be revoked.

If the Franchise is revoked, nothing herein prevents Grantee from contesting the validity of the revocation in a court of competent jurisdiction. Except where continued operation would present a risk to the safety of Persons or property, Franchising Authority shall permit Grantee to continue to operate its System during the pendency of the dispute subject to the terms and conditions of this Franchise.

7.4 Impossibility of Performance. If either Franchising Authority or Grantee is prevented or delayed from fulfilling any term or provision of this Franchise by reason of fire, flood, earthquake, or like acts of

nature, wars, revolution, civil commotion, explosion, acts of terrorism, embargo, an action of government acting in its sovereign capacity that prevents performance hereunder, or similar events then performance shall be excused for the period it is prevented or delayed, and the affected party shall endeavor to remove or overcome such inability as soon as reasonably possible. Provided that, this provision does not excuse a failure to perform under Sections 3.0.A, 3.1-3.3 or 3.7, or prevent Franchising Authority from exercising its rights under those sections or Section 3.5.

7.5 Franchising Authority Termination Right. Franchising Authority shall have the right to terminate this Franchise (i) if the Franchising Authority is mandated by law, a court order or decision, or the federal or state government to take certain actions that will cause or require the removal of the System from the Public Ways; or (ii) if Grantee's licenses to operate the System and/or provide Communications Service are terminated, revoked, expired, or otherwise abandoned; or (iii) any material term is declared unenforceable; or (iv) there is a default by Grantee that is not cured within the time limits set forth within this Franchise.

7.6 Removal due to Termination or Abandonment. Following the termination of the Franchise for any reason, or in the event Grantee ceases to operate and abandons the System, Grantee shall, within one hundred twenty (120) days or such other reason able time period as the parties may otherwise agree, remove the System from the Public Ways and restore the Public Ways to specifications reasonably prescribed by Franchising Authority. If Grantee defaults in its obligations hereunder, the Franchising Authority may perform the necessary work and charge the reasonable cost thereof to and collect the same from Grantee. Provided that, removal is not required as to any part of the System which Grantee has separate authority from the State or from the Franchising Authority to remain in place. Provided further, Grantee may request the right to abandon its System in place, and Franchising Authority may permit that abandonment where it determines abandonment is in the public interest, and will not unduly burden the Public Way. Abandonment may be conditioned on providing all right and title to the portion abandoned to the System, free and clear of any encumbrances, so that the Franchising Authority may use, remove or otherwise dispose of the same as it determines appropriate.

SECTION 8
Miscellaneous Provisions

8.0 Actions of Parties. In any action by the Franchising Authority or the Grantee that is mandated or permitted under the terms hereof, such party shall act in a reasonable, expeditious, and timely manner. Furthermore, in any instance where approval or consent is required under the terms hereof, such approval or consent shall not be unreasonably withheld.

8.1 Compliance with Applicable Law. In addition to the requirements of this Agreement, the Grantee shall adhere to all Applicable Laws including obtaining and remaining in compliance with all permits, licenses, certifications, grants, registration, or any other authorization required by any appropriate governmental entity, including the Franchising Authority, the Federal Communications Commission, or the Wyoming Public Service Commission.

8.2 Change of Law Consultation. The Parties agree to consult in the event that any court, agency, commission, legislative body, or other authority of competent jurisdiction issues a finding or takes an action that limits the validity or enforceability of this Agreement, in whole or in part. Should the finding be final, non-appealable, and binding upon either the Franchising Authority or the Grantee, this Agreement shall be deemed modified or limited to the extent necessary to address the subject of the finding unless either

Party, within thirty (30) days of receipt of the ruling, provides written notice to the other Party of election to terminate, in which case this Agreement shall terminate within six (6) months of such notice or such earlier period as the Parties mutually may agree. Where the effect of a finding is a modification of this Agreement, the Parties shall enter into good faith negotiations to modify this Agreement in the manner which best effectuates its overall purposes and the intentions of the Parties. Failure to reach a mutually satisfactory modification within one hundred eighty (180) days of the commencement of such efforts shall entitle either Party to terminate this Agreement on the provision of thirty (30) days' written notice.

8.3 Theft of Service. In addition to those criminal and civil remedies provided by state and federal law, it shall be a misdemeanor for any Person to create or make use of any unauthorized connection, whether physically, electrically, acoustically, inductively, or otherwise, with any part of the System without the express consent of the Grantee. Further, without the express consent of the Grantee, it shall be a misdemeanor for any Person to tamper with, remove, or injure any property, equipment, or part of the System or any means of receiving services provided thereto. Subject to applicable federal and state law, the Franchising Authority shall incorporate into its criminal code, if not presently a part thereof, criminal misdemeanor law which will enforce the intent of this Section.

8.4 Notice. Unless expressly otherwise agreed between the parties, every notice or response required by this Franchise to be served upon the Franchising Authority or the Grantee shall be in writing, and shall be deemed to have been duly given to the required party upon actual receipt when hand delivered, when sent by nationally recognized overnight courier, or sent by certified or registered mail, postage prepaid, return receipt requested.

The notices or responses to the Franchising Authority shall be addressed as follows:

Town of Jackson
Town Administrator
P.O. Box 1689
150 E. Pearl Avenue
Jackson, WY 83001

The notices or responses to the Grantee shall be addressed as follows:

Qwest Corporation d/b/a CenturyLink
Network Infrastructure Support
931 14th Street
Denver, CO 80202
Attn: Network ROW
With a copy to:

Qwest Corporation d/b/a CenturyLink
Assistant General Counsel, Right of Way
931 14th Street, 9th Floor
Denver, CO 80202

The Franchising Authority and the Grantee may designate such other address or addresses from time to time by giving written notice to the other. *Notwithstanding any other provision hereof*, in the event of an

Emergency or in a case where there is an imminent hazard to persons or properties, notice may be provided by telephone to the emergency contact required by this Agreement.

8.5 Descriptive Headings. The captions to Sections contained herein are intended solely to facilitate the reading thereof. Such captions shall not affect the meaning or interpretation of the text herein.

8.6 Severability. If any Section, sentence, paragraph: term, or provision hereof is determined to be illegal, invalid, or unconstitutional, by any court of competent jurisdiction or by any state or federal regulatory authority having jurisdiction thereof, such determination shall have no effect on the validity of any other Section, sentence, paragraph, term or provision hereof, all of which will remain in full force and effect for the term of the Franchise, or any renewal or renewals thereof.

8.7 Effective Date. The effective date of this Franchise is upon the effective date as adopted by the Jackson Town Council pursuant to the provisions of Applicable Law.

8.8 Controlling law. This Franchise is to be governed by the law of the State of Wyoming, its conflict of laws provisions excepted.

8.9 Venue. In the event that suit shall be brought by either party, the parties agree that venue shall be exclusively vested in the state courts of the County of Teton, or, where otherwise appropriate, exclusively in the United States District Court for Wyoming.

8.10 Sovereign Immunity. The Franchising Authority does not waive its sovereign immunity by entering into this Franchise Agreement, and fully retains all immunities and defenses provided by law with respect to any action based on or arising out of this Franchise.

8.11 No Advertisement. Grantee shall not place any advertisement or other notice on or about the System which identifies the Grantee in any way (except for emergency notification postings, or postings required by law).

8.12 Non-Waiver. Failure of Franchising Authority or Grantee to insist on strict performance of any of the conditions, covenants, terms or provisions of this Franchise or to exercise any of its rights hereunder shall not waive such rights, but either party shall have the rights to enforce such rights at any time and take such action as might be lawful or authorized hereunder, either in law or equity. The receipt of any sum paid by Grantee to Franchising Authority after a breach of this Agreement shall not be deemed a waiver of such breach unless expressly set forth in writing.

8.13 Merger. This document contains the entire agreements of the parties hereto with respect to the Franchise. No provision of this Franchise may be amended or added to except by an agreement in writing signed by the parties hereto or respective successors in interest.

IN WITNESS WHEREOF, the parties hereto have entered into this Franchise Agreement on _____, 2025

Town of Jackson, WY

By:_____
Arne O. Jorgensen, Mayor

ATTEST:_____
Riley Hovorka, Town Clerk

Qwest Corporation, d/b/a CenturyLink QC, Grantee

By: _____

Title:_____

SECTION II.
All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION III.
If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate distinct and independent provision, and such holding shall not affect the validity of the remaining portions of the ordinance.

SECTION IV.
This ordinance shall become effective after its passage, approval, and publication.

PASSED 1ST READING THE ____ DAY OF _____ 2025.
PASSED 2ND READING THE ____ DAY OF _____ 2025.
PASSED AND APPROVED THE ____ DAY OF _____ 2025.

TOWN OF JACKSON

BY:_____
Arne O. Jorgensen, Mayor

ATTEST:

BY: _____
Riley Hovorka, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING)
) ss.
COUNTY OF TETON)

I hereby certify that the foregoing Ordinance No. _____ was duly published in the Jackson Hole News and Guide, a newspaper of general circulation published in the Town of Jackson, Wyoming, on the _____ day of _____, 2025.

I further certify that the foregoing Ordinance was duly recorded on page _____ in Book ___ of Ordinances of the Town of Jackson, Wyoming.

_____
Riley Hovorka, Town Clerk

APPENDIX A

LISTING OF SERVICE CATEGORIES INCLUDED IN "GROSS REVENUE" FOR CALCULATION OF FRANCHISE FEES

INTRASTATE TELECOM SERVICES

For purposes of this Agreement, the Parties agree that the categories to be included in Gross Revenue shall be the same funding categories used to determine Grantee's payment obligations to the Wyoming Universal Service Fund for services rendered within the jurisdictional boundary of the Franchising Authority. These categories include:

1) Local Exchange Service

2) Local Private Line

4) Intrastate Switched Toll (Long Distance)

5) Alternate Access and Directory

6) Intrastate VOIP Services

7) Other Intrastate Retail Revenue (Paging, Pay Telephone, etc)

8 Other Services and Charges (Service Line Charges, etc)

THE FOLLOWING IS A NON-EXCLUSIVE LISTING OF CATEGORIES OF REVENUE NOT REPRESENTING THE RETAIL SALE OF LOCAL ACCESS SERVICES AND THEREFORE EXCLUDED FROM THE DEFINITION OF "GROSS REVENUES" AND, THEREFORE, ARE NOT INCLUDED IN THE CALCULATION OF ANY FEE DUE TO THE CITY:

1) Proceeds from the sale of bonds, mortgages, or other evidences of indebtedness, securities or stocks

2) Bad debt write-offs

3) Revenue from directory advertising

4) Any amounts collected from customers that are to be remitted to a federal or state agency as part of a Universal Service Fund or other government program, including but not limited to support for the hearing impaired

5) Any amounts collected for taxes, fees, or surcharges and paid to the federal, state or local governments

6) Revenues from internet access

7) Revenues from digital or other electronic content, such as computer software, music and video downloads

8) Revenues from equipment sales, rentals, installation and maintenance

9) Revenues from any carrier purchased for resale, provided that such carrier pays fees to the Town for use of the public rights of way.

STAFF REPORT

Meeting Date:	June 16, 2025	**Meeting Title:**	Town Council Regular
Submitting Department:	Internal Services	**Presenter:**	Lynsey Lenamond
Agenda Item:	Board of Examiners (BOE) Appointment	**Public Comment:**	Yes

Purpose & Policy Considerations.
The purpose of this item is for the Mayor and Council to consider an appointment to the Board of Examiners.

Requested Action.
Staff requests that Council consider appointing a new board member to the Board of Examiners.

Recommendations.
Staff recommends the appointment of one member to the BOE.

Background.
The BOE is made up of 5-9 members, with each term lasting two years. We currently have 4 vacant seats on the BOE.

Jackson Municipal Code 15.36.010 - Board of examiners created; duties of same states:
A. Town of Jackson Board of Examiners shall be created, consisting of five to nine members, including a chairperson, to be appointed by the Town Council. The Board shall serve at the pleasure of the Town Council and members shall be volunteer, nonpaid positions. Upon the affirmative vote of a majority of the Town Council, members may be removed from the Board. Members of the Board of Examiners shall consist of professionals in the construction industry, including by way of example and not exclusion, tradespeople, architects, and engineers.
B. Initial appointments to the Board of Examiners shall be two appointments for one year and three appointments for two years, and thereafter appointments shall be for a term of two years at the expiration of the term of each member.
C. The Board of Examiners shall establish rules, regulations, and procedures for conducting business, which rules, regulations, and procedures shall be approved by the Town Council prior to being effective.

After more than a year of advertising, staff received a letter of interest and resume from Ben Aufderheide.

With this appointment, staff will continue to advertise for additional vacancies on the BOE with the hopes of filling all possible seats.

Other current members on the BOE are as follows:

Member		Term Expiring
Jade Beus		7/31/2025
Mike Mielke		7/31/2025
Kasey Mateosky		7/31/2026
Katie Wilson		7/31/2026
Tyson Slater		7/31/2026

Analysis & Key Policy Questions.

Key Policy Question: Is the Town Council comfortable with a new appointed member to the BOE?

Possible Alternatives.

1. Not appoint the applicant
2. Make appointments at a later date.

Comprehensive Plan & Priority Alignment.
Having a Board of Examiners is in alignment with Principle 8.1, *Strategies to maintain current, coordinated service delivery*.

Fiscal Impact.
Advertising for vacant seats on the BOE has cost approximately $2,500 in the past year.

Staff Impact.
Staff spent approximately 2 hours working with the Building Inspector and the applicant and preparing this staff report.

Attachments or Links.
None.

Suggested Motion.
I move to appoint Ben Aufderheide to the Board of Examiners for a two-year term, which shall expire July 31, 2027.

MEMORANDUM

TO: Mayor and Town Council

FR: Tyler Sinclair, Town Manager

DT: June 9, 2025

RE: Town Manager's Report

Temporary Sign Permits

The Temporary Sign Permits for Council consideration at this meeting are:

- ✓ Becoming Jackson Hole requests to hang two temporary banners, one at 105 Buffalo Way (Albertson's) and one at 255 W Deloney (Miler Park) from August 1-8, 2025 to advertise their TRYathalon (P25-101).

- ✓ The Art Association of Jackson Hole requests to hang two temporary banners, one at 105 Buffalo Way (Albertson's) from June 16 – June 21 & one at Center for the Arts from June 19 – June 21, 2025 to advertise the Teton Mudpots Summer Sale (P25-096).

- ✓ Teton Cotillion requests to hang one temporary banner at 105 Buffalo Way (Albertson's) from August 31-September 13, 2025 to advertise their Fall Classes (P25-104).

Staff recommends approval of these requests and with the approval of the Town Manager's report, staff will issue the Temporary Sign Permits as requested.