

AGENDA

Planning and Zoning Commission

June 19, 2019 – REGULAR MEETING

5:30 PM

The New Business items have been placed on the agenda in the order they were received. Please note that at 9:00 p.m., the Commission will evaluate the remainder of the agenda to determine if time constraints will permit the full agenda to be heard at this meeting. All items not heard at this meeting will be postponed to the next regularly scheduled PC/BOA meeting of July 3, 2019 or to a special meeting scheduled by the Commission.

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

1. CALL TO ORDER
2. ROLL CALL
3. MATTERS FROM THE PUBLIC
4. APPROVAL OF MINUTES
 - I. June 5, 2019
5. OLD BUSINESS
6. NEW BUSINESS
7. BOARD OF ADJUSTMENT
8. PLANNING COMMISSION
 - I. **Item P19-105:** REQUEST FOR APPROVAL TO AMEND THE OFFICIAL ZONING MAP FROM URBAN COMMERCIAL (UC) TO DOWNTOWN CORE (DC) FOR A PORTION OF TWO PROPERTIES LOCATED AT 135 & 175 EAST BROADWAY AVENUE.
 - II. **ITEM P19-114:** REQUEST FOR APPROVAL TO AMEND THE OFFICIAL ZONING MAP FROM URBAN COMMERCIAL (UC) TO DOWNTOWN CORE (DC) FOR THE PROPERTY LOCATED AT 105 EAST BROADWAY AVENUE.
 - III. **Item P19-097 & 098:** SKETCH PLAN AND ADMINISTRATIVE ADJUSTMENT TO DEVELOP 29-UNIT CONDOMINIUM BUILDING AT 165 AND 185 NORTH GLENWOOD STREET.
9. MATTERS FROM THE COMMISSION
10. AGENDA FOLLOWUP
11. MATTERS FROM STAFF
12. ADJOURNMENT

**MINUTES
PLANNING AND ZONING COMMISSION
TOWN OF JACKSON, WYOMING
JUNE 5, 2019**

The meeting of the Planning and Zoning Commission was called to order at 5:30 p.m. on 6/5/19, in the Town Hall Council Chambers.

ROLL CALL:

☒ Anne Schuler, ☒ David Vandenberg, ☒ Katie Wilson, ☒ Abby Petri, ☒ Chris Beaulieu,
☒ William Gale, ☒ Thomas Smits

STAFF: Paul Anthony & Tyler Valentine

MATTERS FROM THE PUBLIC: None

APPROVAL OF MINUTES:

May 15, 2019 Joint Meeting

A motion was made by: Anne seconded by: Chris
Motion approved by a 6 to 0 vote

**Thomas showed up after the minutes were already approved which is why the minutes approval vote only shows 6 votes.*

NEW BUSINESS:

BOARD OF ADJUSTMENT

1. **ITEM P19-085:** REQUEST FOR A VARIANCE FROM THE CURB CUT STANDARD IN THE NEIGHBORHOOD LOW DENSITY-5 (NL-5) ZONING DISTRICT FOR THE PROPERTY LOCATED AT 610 HALL AVENUE.

STAFF PRESENTATION: Tyler Valentine

APPLICANT PRESENTATION: Dave Simpson & Kristen Corbett

PUBLIC COMMENT: None

PC DISCUSSION: Discussion took place around how close driveways should be to the western property line as it may cause traffic concerns for vehicles backing out onto Hall Avenue. Ultimately the Board of Adjustment was comfortable with the Engineer's comments which state that the driveway must be at least 10 feet away from the surveyed western property line. In addition, discussion took place over the distance between future curb cuts as it relates to preserving as much on-street parking as possible. Ultimately a condition of approval was added to this effect.

MOTION:

Based upon the findings for a Variance as presented in the staff report related to 1) Special conditions and circumstances exists; 2) Not result of applicant; 3) Strict application deprives reasonable use; 4) Minimum Variance; 5) Not injurious to neighborhood; and 6) Harmony with LDRs as presented by the applicant and staff for Item P19-085, I move to **approve** a Variance to the 20-foot maximum curb cut standard in the NL-5 zone to allow 40-feet of curb cut in two 20'-wide curb cuts for the property addressed at 610 Hall Avenue, subject to the departmental reviews attached hereto and one condition of approval:

1. The variance shall expire in two years.
2. The applicant shall consider preserving on-street parking with regards to driveway separation distance.

A motion was made by: Anne seconded by: Will
Motion approved by a _7_ to _0_ vote

OLD BUSINESS: None

MATTERS FROM COMMISSION: None

AGENDA FOLLOWUP: None

MATTERS FROM STAFF: Staff updated the Planning Commission on upcoming public engagement for Historic Preservation District 1 (Town Square) set for Monday June 10th at Snow King. Updates on the Parking Study also were discussed. Staff would also follow up next meeting and provide information on future conferences and some members may be interested in attending. Finally, staff updated the Commission on the two RFPs: 440 West Kelly and 105 Mercill.

ADJOURN:

A motion was made by: Anne seconded by: Chris
Motion approved by a _7_ to _0_ vote



TOWN OF JACKSON PLANNING COMMISSION AGENDA DOCUMENTATION

PREPARATION DATE: JUNE 10, 2019
MEETING DATE: JUNE 19, 2019

SUBMITTING DEPARTMENT: PLANNING
DEPARTMENT DIRECTOR: TYLER SINCLAIR
PRESENTER: PAUL ANTHONY

SUBJECT: **ITEM P19-105:** REQUEST FOR APPROVAL TO AMEND THE OFFICIAL ZONING MAP FROM URBAN COMMERCIAL (UC) TO DOWNTOWN CORE (DC) FOR A PORTION OF TWO PROPERTIES LOCATED AT 135 & 175 EAST BROADWAY AVENUE.

OWNER: DELONEY STREET LLC & BWD ST LLC

APPLICANT: CAFÉ G LLC

REQUESTED ACTION

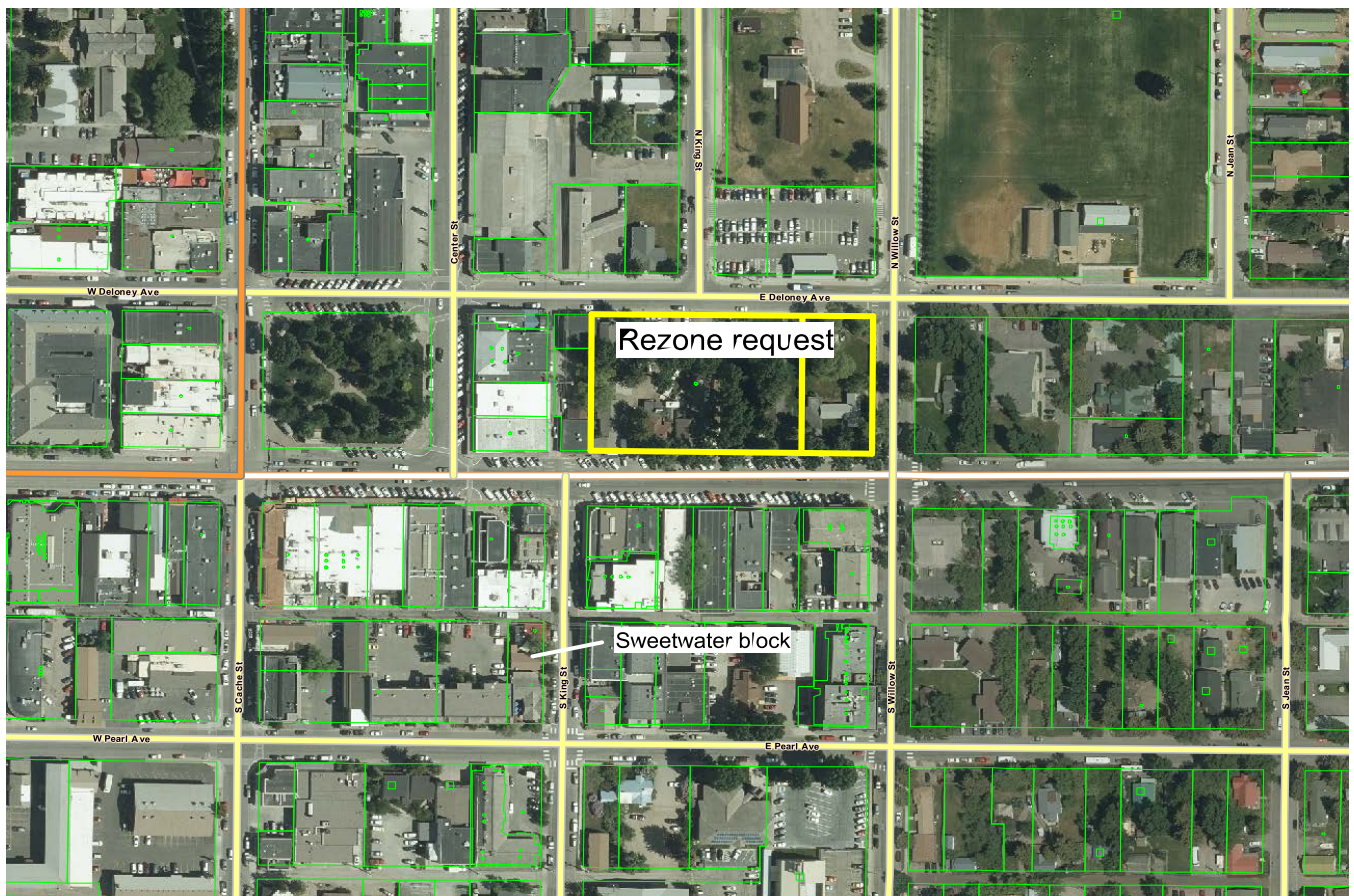
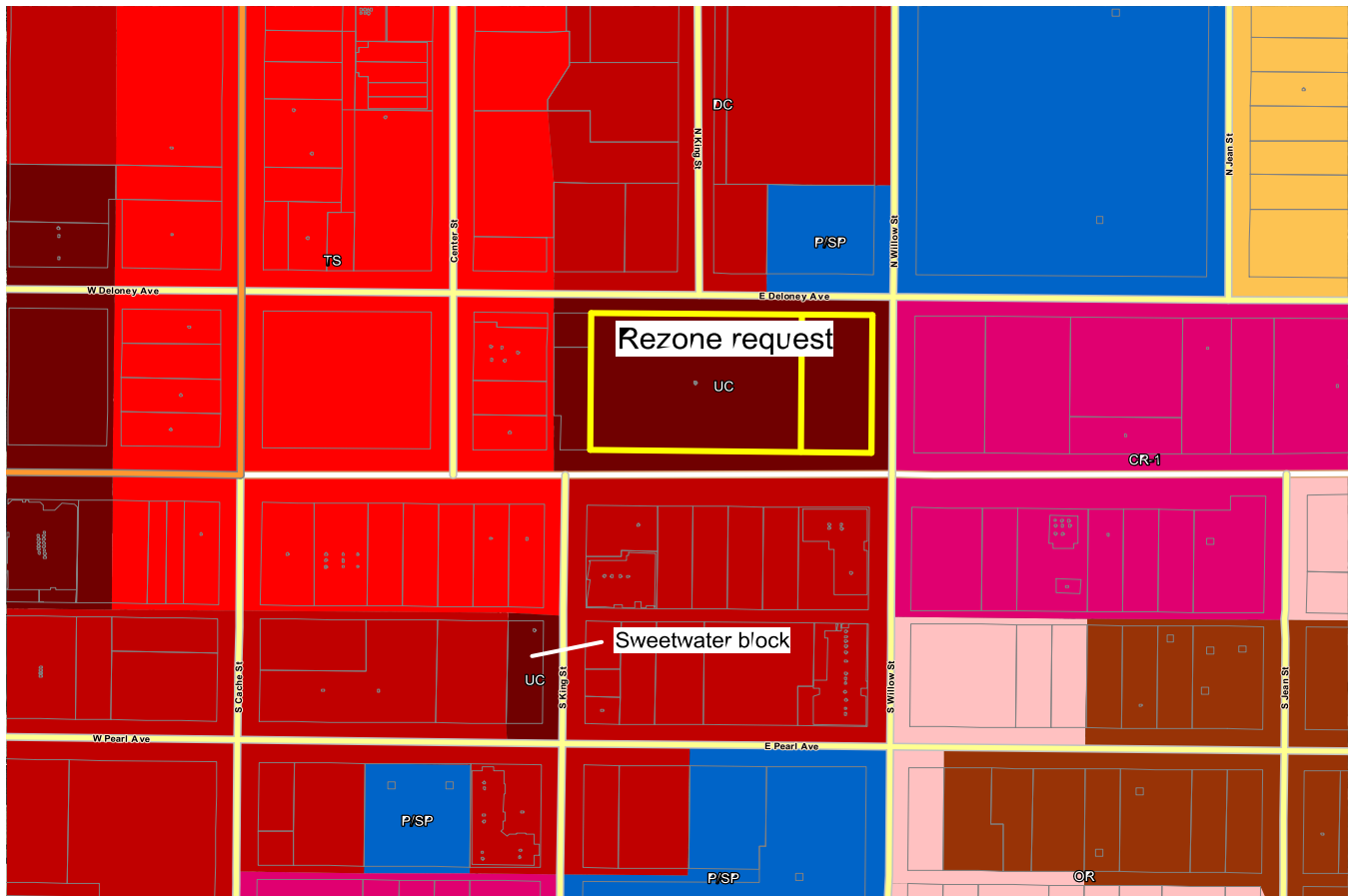
The applicant is requesting approval to amend the Official Zoning Map to rezone a portion of two properties located at 135 & 175 East Broadway Avenue from Urban Commercial (UC) to Downtown Core (DC).

APPLICABLE REGULATIONS

Section 8.7.2 Zoning Map Amendment

LOCATION

The properties are located at 135 & 175 East Broadway Avenue, legally described as parcels PT SW1/4SW1/4, SEC. 27, TWP. 41, RNG. 116 and PT SW1/4SW1/4, SEC. 27, TWP. 41, RNG. 116. An aerial photo and zoning map are shown below:





BACKGROUND

Existing Site Characteristics:

The two subject parcels have been zoned UC since 1994. The portion of the larger property at 135 E. Broadway subject to this request has three existing structures on it including Belle Cose (facing Broadway) and the Home Design and the Workshop buildings facing Deloney. The remainder of the parcel not included in this request contains three buildings of historical significance Café Genevieve, Persephone Bakery, and the Healthy Being Juicery. These buildings and property would remain in the UC zoning district.

The second smaller property at 175 E. Broadway has one primary structure that serves as a residential unit on the southern portion of the site which will remain in the UC zoning district. The northern portion of the parcel which is part of this application contains Cache Creek and no structures at this time.

The overall site also contains considerable green open space and large cottonwood trees that add considerably to the character of the site. The proposed parcels are ‘triple frontage’ properties meaning that they are bounded by three street frontages – Broadway on the south, Deloney on the north and Willow on the east. There is currently no alley serving the site or other interior access largely as a result of the parcels never being subdivided. The properties to the west are zoned Urban Commercial (UC) and Town Square (TS), to the north Downtown Core (DC) and Public Semi/Public (P/SP) and south Downtown Core (DC), and to the east Commercial Residential - 1 (CR-1).

District 2 Rezoning Update

During the rezoning process for Comprehensive Plan District 2: Town Commercial Core adopted in 2016, the two properties were proposed for Downtown Core (DC) zoning by staff to be consistent with the properties across the street on Broadway and the general Comprehensive Plan vision for the area. During this process, the Council decided to postpone the rezoning of these properties due to concerns about the lack of zoning tools to protect the site’s historic structures. The Council had the same concern about the historic structures

on the “Sweetwater” property at 85 S. King Street. More specifically, the Council did not believe that the primary current tool for protecting historic structures – i.e., the ability of the Historic Preservation Board to request a 90-day stay from the Council on a demolition permit for a historic structure – was enough. Council found that, pursuant to the terms of the 90-day stay tool, if no preservation buyer or alternative site for a historic structure could be found within the 90-day grace period, the landowner could demolish the historic structure without further process. Due to this context, the Council decided to keep the existing UC zoning for both the East Broadway and King Street blocks with the understanding that Town staff would look into possible new historic preservation LDR tools for consideration by Council in the future. The assumption was that these two UC areas would be reconsidered for rezoning once new historic preservation LDR tools and new Town Square zoning were decided upon. Since that time, Town in partnership with the Teton County Historic Preservation Board (TCHPB) have begun work on this project with the first public workshop on June 10 and scheduled completion of the project in the spring 2020.

Previous Request:

In 2018 the owner not the current applicant requested to change the zoning of both parcels from UC to DC. They stated that this change would be consistent with the direction the Town was going before the Council removed these properties from the District 2 update to address historic preservation options and Town Square zoning. In recognition of the Council’s concerns over the historic structures on the site, and in response to comments from the TCHPB, the applicant offered a voluntary deed restriction that would permanently preserve the Café Genevieve cabin on the site with the condition that the cabin could be moved to another location on the 135/175 East Broadway properties provided that it still fronted East Broadway. Furthermore, it stated that should the properties be redeveloped, that the Café Genevieve cabin will be “maintained or relocated to be visually prominent” and will not be attached to any other structures. Regarding the two structures that house Persephone Bakery and The Juicery, the deed- restriction stated that these structures “may be maintained anywhere on the property or relocated to another meaningful [off-site] location.” The deed restriction then provided a definition of “meaningful location” and the conditions for maintaining structures at these defined locations. The deed restriction, however, did not guarantee that the two structures will be preserved in the short-term or long-term.

The Planning Commission heard the item on December 5, 2018 and then continued it to December 19, 2018 where they voted 5-2 to deny the requested rezone. Significant time was spent trying to understand the legal issues raised by the proposed deed restriction from the applicant. For example, many of the Commissioners were not sure whether it was proper for them to base their rezoning recommendation on the “bargained for” promises contained in the proposed deed restriction. The Town Attorney attended both Commission meetings and provided detailed input on the differences between contract zoning (most likely not legal) and conditional zoning (most likely legal) in Wyoming. The Town Attorney concluded that the current deed restriction proposal likely constitutes legal conditional zoning and so the Commissioners were free to consider this option for approval at their discretion.

On other topics, most Commission members found that the Council’s decision in 2016 to postpone rezoning the applicant’s properties was reasonable based on the unique historic resources on the site. While some members were concerned about the property rights of the applicant being in “limbo,” the Commission noted that the applicant was still free to develop the property under current zoning (which has similar development potential to the proposed DC zoning), and so there was not a significant adverse impact on property rights from delaying the rezone of the properties. The Commission also acknowledged that delaying the zoning in no way “preserves” the historic structures because nothing prevents the applicant from applying for a demolition permit tomorrow to remove some or all of the structures on the site. This was a risk the Commission was willing to take. In the end, the Commission agreed that rezoning for the applicant’s properties should be done concurrent with the District 1 and historic preservation LDR update that will hopefully be completed in Spring, 2020.

The previous application was scheduled to be heard by the Town Council but after multiple continuances was ultimately withdrawn by the owner, making way for this new application by a new applicant.

Applicant's Request:

This new application is different than the previous application in that the new applicant is only proposing to rezone a portion of the two properties from UC to DC. The portion of the properties containing the three most historically significant structures would remain UC with the balance of the property being rezoned to DC.

STAFF ANALYSIS

The applicant's request is limited to amending the Official Zoning Map to change a portion of the two subject properties from UC to DC zoning. It does not include any proposed physical development or uses for the site. Thus, the Town's review is limited only to making the required finding for a map amendment in Section 8.7.2 (see below).

As described under the required findings (below) for a Zoning Map Amendment, staff finds that the proposed DC zone is appropriate for a portion of the properties based upon the Comprehensive Plan's vision for the area and because no significant historically significant structures have been identified by the Historic Preservation Board. The DC zone is also consistent with the DC zone directly across the street on Broadway Avenue and will allow physical development and use that is consistent with the desired character for this area. Some changes to allowed physical development regulations will occur if rezoned to DC which are highlighted in the table below. The notable changes include increased building height, access to the Workforce Housing Floor Area Bonus (2:1 tool) and new pedestrian frontage standards. Beyond the noted changes, the property will remain in the Lodging Overlay and allow nearly all the same uses as UC.

Staff acknowledges that in the previous similar rezone application staff found that the Town should complete the District 1: Town Square (TS) rezoning and Historic Preservation LDRs and program prior to considering a rezone application for the entire property. However, in evaluating this new application to rezone only a portion of the property not containing the three most significant historical structures, staff finds that the three primary reasons for the recommendation for denial of the previous application have been addressed.

- First, the new application addresses the primary concern of Town Council back in 2016, by removing the portion of the property with the three most significant historical structures from the rezone request and leaving them in the legacy UC zoning district. This allows the District 1: Town Square rezoning and Historic Preservation LDRs to be completed prior to considering the appropriate Character zone (new TS zone, DC Zone, other) that should be placed on the retained historical portion of these properties moving forward. Ultimately it is staff's goal to replace Legacy Zones, such as UC, with Character Zones, such as DC to ensure implementation of the Comprehensive Plan. In addition, staff notes that a rezone to DC at this time would not preclude another rezone to a more appropriate zone in the future should one be developed.
- Second, the new application removes the proposal for a deed restriction to ensure the future of the three most historical structures associated with a rezone to DC zoning. Both staff and the Commission had concerns with how the deed restriction would work to protect the structures, how it would affect the property going forward, and whether the restriction was contract zoning (most likely not legal in Wyoming) or conditional zoning (most likely legal in Wyoming).
- Third, this applicant fits the description of a conservation buyer, having spent much time and consideration on how best to rezone and design the property to ensure the community character elements of the site are maintained. Staff acknowledges that the future use of the property is only subject to the zoning standards in place at the time of development but acknowledges the conservation buyer aspect of this application as it was discussed in previous applications as a consideration.

Although not typical, staff finds that rezoning a property into two (2) different zoning districts is allowed by the Land Development Regulations and is appropriate in this situation. Specifically, Section 1.7.5 Sites in Multiple Zones, defines how such properties are to be dealt with regarding minimum site area, maximum density/intensity and the location of development. Specifically, in this application staff finds that split/dual zoning these properties is appropriate due to the size of the properties (close to one entire city block). Staff finds that by utilizing this approach in this instance two Comprehensive Plan objectives can be achieved. The first is to preserve the historic structures on the site by maintaining the UC zoning on a portion of the site until a time when an appropriate character zone can be identified. The second is to implement the desired future character for District 2: Downtown Commercial through rezoning a portion of the property to the DC zone at this time.

As noted above this application is for rezoning only with no associated physical development or use permits. Due to the size of the parcel it is anticipated that a Sketch Plan to review lot configuration followed by a subdivision plat or a sketch plan for future development as one and/or two parcels would be the likely next steps for future development of the property.

In reviewing this request staff has provided the below table to illustrate how the UC and DC zones compare in terms of basic development standards:

Comparison of UC and DC Zones		
Standard	UC	DC
FAR	1.3	1.3
Height	35'	42' – 46'
Stories	3 (Lodging Overlay)	3
3rd-story setback	None	10' with 60% encroachment
LSR	10%	0%
Setbacks (Front/side/rear)	0'/0'/0'	0'-5'/0' or 5'/0' or 5'
Maximum building size	35,000 sf with CUP	None
Uses	Generally the same. Still allows a detached single-family home. Minor differences with accessory uses.	Generally the same. Does not allow detached single-family home. Minor differences with accessory uses.
Workforce Housing FAR Bonus (2:1 tool)	Not allowed. Instead, 25% FAR bonus for workforce housing	Allowed

PUBLIC COMMENT

The Town has received no public comment on this item at the time of writing this report.

STAFF FINDINGS

Pursuant to Section 8.7.2.D the advisability of amending the Official Zoning Map is a matter committed to the legislative discretion of the Town Council and is not controlled by any one factor. In deciding to adopt or deny a proposed zoning map amendment the Commission shall consider factors including, but not limited to, the extent to which the proposed amendment:

1. *Is consistent with the purposes and organization of the LDRs.*

Complies. Staff finds the proposed request to be consistent with the purpose and intent of the LDRs, specifically the DC zoning district. Staff finds that by rezoning a portion of the property to DC, the applicant will have the opportunity to develop the property utilizing a revised Character Zone consistent with the Comprehensive Plan vision for the area. In addition, staff finds that the purpose of the DC zone (*LDR Section 2.2.10*) to provide for a vibrant mixed-use area with a variety of uses and amenities is appropriate for this site, specifically regarding building and parking location, and allowed land uses. Furthermore, the DC zone pedestrian frontage of 13.5 feet will provide more amenity space for pedestrians compared to the UC zone which only requires 10 feet of pedestrian frontage. Additionally, the DC zoning will require that a portion of the third floor be stepped back to break up building mass whereas the UC zone has no third story step-back requirement. Overall, the DC zone would provide more flexibility to the property owner while ensuring that future development best compliments and supports the Comprehensive Plan vision for Sub-area 2.3.

2. *Improves implementation of the desired future character defined in the Illustration of Our Vision chapter of the Comprehensive Plan.*

The proposed application is located in Character District #2 Town Commercial Core, specifically Sub-area 2.3 Downtown Commercial Core of the 2012 Comprehensive Plan. In order to review the application for conformance with the Comprehensive Plan, staff has reviewed the Policy Objectives for District 2 as follows:

Common Value 1: Ecosystem Stewardship

The Comprehensive Plan does not list any applicable policy objectives for this Common Value in District 2.

Not Applicable.

Common Value 2: Growth Management

4.1.b: Emphasize a variety of housing types, including deed-restricted housing

Complies. The DC zone allows use of the Workforce Floor Area Bonus (2:1 tool) to encourage development of housing for the local workforce.

4.1.d: Maintain Jackson as the economic center of the region

Complies. Although no development is proposed, the DC zone is intended to support mixed-use development which includes commercial spaces that serve local businesses, residents and visitors.

4.2.c: Create vibrant walkable mixed use subareas

Complies. The required pedestrian frontage standards of the DC zone will better achieve this policy than the current UC zone.

4.2.d: Create a Downtown Retail Shopping District

Complies. Although no development is proposed, the DC zone is intended to support mixed-use development which includes commercial spaces such as retail that serve local businesses, residents and visitors.

4.2.f: Maintain lodging as a key component in the downtown

Not Applicable. There is no physical development proposed, however the property will remain in the Lodging Overlay.

4.4.b: Enhance Jackson gateways

Not applicable.

Policy 4.4.d: Enhance natural features in the built environment

Not applicable. There will be no change to the regulations affecting natural features on the site as a result of the proposed zone change.

Common Value 3: Quality of Life

Policy 5.2.d: Encourage deed-restricted rental units

Complies. The DC zone will allow for the use of the Workforce Housing FAR Bonus not allowed in the UC zone.

6.2.b: Support businesses located in the community because of our lifestyle

Not applicable. There is no physical development proposed, however the DC zone will allow the same commercial uses as the UC zone which can support local businesses.

6.2.c: Encourage local entrepreneurial opportunities

Not applicable. There is no physical development proposed.

6.3.a: Ensure year-round economic viability

Not applicable. There is no physical development proposed.

7.1.c: Increase the capacity for use of alternative transportation modes

Not applicable. There is no physical development proposed.

In addition, staff finds that the application should be reviewed for consistency specifically with subarea 2.3 Downtown Commercial Core which states as follows as the desired vision for the subarea:

Sub-area 2.3 Downtown Commercial Core: this large, mixed use, TRANSITIONAL Subarea currently consists of a variety of retail, restaurant, office and other commercial activities, along with long-term residences and lodging in a variety of building sizes and forms. Downtown is the center of civic, cultural, economic, and social activity in the community as well as the center of the visitor experience, as a significant amount of lodging is located here. The existing character and built form is varied and inconsistent. The goal of this subarea is to create a vibrant mixed use area by accommodating a variety of uses and amenities. The subarea will be the starting point for the development of a refined Lodging Overlay boundary and future discussion of the type and size of lodging desired. A key challenge will be to provide a balance between lodging and long-term residential housing. Future structures will be predominantly mixed use, while multifamily structures will be allowed if it properly addresses the street. Commercial uses that create an active and engaging pedestrian experience will be predominantly located on the first and second floors of buildings. Examples of these uses include restaurants, bars, a variety of retail shops and commercial amusement. Furthermore, as portions of the subarea will be located within a future Downtown Retail Shopping District, uses such as office, residential and lodging will be predominantly located on upper floors. A goal of this subarea will be to create a consistent building size and form. In the future, a variety of two to three story buildings are desired. Buildings should be located to create an attractive street wall and take advantage of good urban design principles including massing, articulation and the provision of public space. The pedestrian realm will be of great importance in this mixed use subarea, and emphasis should be placed on adding improvements focusing on the pedestrian experience. Parking should continue to be provided predominately in public lots and on street to create a vibrant, walkable area that is oriented to the pedestrian. On-site parking should be predominantly underground or screened from view. Future redevelopment should enhance the Flat Creek corridor for recreational and ecological purposes. Buildings should front onto the creek to provide opportunities for interaction and enjoyment of this community resource.

Complies. The proposed rezone for a portion of the subject parcels is consistent with the above vision for Subarea 2.3 as it will encourage development that supports a strong retail and visitor experience in the downtown. The request will allow for the development of mixed-use buildings of three stories with descriptive architectural requirements consistent with the surrounding properties already zoned DC. In addition, the DC zone will allow a greater opportunity to provide deed restricted workforce housing through the Workforce Housing Floor Area Bonus (2:1 tool) found in the DC zone. The request will also better address pedestrian frontages and the location of parking better than the current UC zone consistent with the above described vision. Overall, staff finds that DC zone requested for a portion will be successful meeting the desired future character of the area while addressing the existing conditions on the site not part of this request.

3. *Is necessary to address changing conditions or a public necessity.*

Complies. Staff finds that the rezone to DC from UC will address the desired future vision for Comprehensive Plan, Character District 2.

4. *Is consistent with other adopted Town Ordinances.*

Complies. Staff finds that the proposed request is consistent with all other Town Ordinances.

[ATTACHMENTS](#)

Applicant Submittal
Department Reviews

RECOMMENDATION

The Planning Director recommends **approval** of the request (P19-105) to amend the Official Zoning Map to rezone a portion of two properties located at 135 & 175 East Broadway Avenue from Urban Commercial (UC) to Downtown Core (DC) subject to the staff analysis and findings in this staff report and department reviews attached hereto.

SUGGESTED MOTION

Based upon the findings for an amendment to the Official Zoning Map as presented by staff, and the applicant for Item P19-105 related to 1) Consistency with the purposes and organization of the LDRs; 2) Improved implementation of the desired future character in the Comprehensive Plan; 3) Need to address changing conditions or a public necessity; and 4) Consistency with other adopted Town Ordinances, I move to recommend **approval** to the Town Council to change the zoning from Urban Commercial (UC) to Downtown Core (DC) for a portion of the properties located at 135 & 175 East Broadway Avenue subject to this staff report and the departmental reviews attached hereto.

CIRQUE CONSULTING, LLC
P.O. Box 7775
Jackson, WY 83002

May 1, 2019

Tyler Sinclair, Planning Director
Town of Jackson Planning and Building
PO Box 1687
Jackson, WY 83001

**RE: East Broadway Zoning Map Amendment – 135 & 175 E. Broadway –
Pre-App P18-194**

Dear Tyler,

On behalf of the applicant, Café G, LLC, please accept this letter and the accompanying materials as a formal request for Zoning Map Amendment within the Town of Jackson for property located within portions of lands located at 135 and 175 E. Broadway currently owned by Deloney Street, LLC and BWD Street, LLC.

The applicant seeks to rezone the subject property from Urban Commercial (UC) to Downtown Core (DC). The lodging overlay currently in place would remain unchanged.

Included for your review are the following:

- Check for \$1,500
- Planning Application
- Letters of Authorization
- Project Narrative & Findings
- Legal Description
- Neighborhood Meeting documents
- Zone Map Amendment Map

As we have discussed, the applicant is very eager to have the rezone application move forward as expeditiously as possible. Any effort you can provide to keep this on track would be greatly appreciated.

Please do not hesitate to contact me at (307) 413-5424 should you have any questions with this submittal. We look forward to hearing from you upon your sufficiency determination.

Sincerely,



George Putnam
Cirque Consulting, LLC



PLANNING PERMIT APPLICATION
Planning & Building Department
Planning Division

150 E Pearl Ave. | ph: (307) 733-0440
P.O. Box 1687 | fax: (307) 734-3563
Jackson, WY 83001 | www.townofjackson.com

For Office Use Only

Fees Paid _____
Check # _____ Credit Card _____ Cash _____
Application #s _____

PROJECT.

Name/Description: E. Broadway Rezoning
Physical Address: Pts of 135, 175 East Broadway Ave. Jackson, 83001
Lot, Subdivision: n/a PIDN: 22-41-16-27-3-00-010; 22-41-16-27-3-00-009

OWNER.

Name: Deloney Street, LLC; BWD Street, LLC Phone: 690-1304
Mailing Address: POB 10309, Jackson, WY ZIP: 83002
E-mail: jeff@gardnercmc.com

APPLICANT/AGENT.

Name: Café G, LLC Phone: 307-413-5424
Mailing Address: PO Box 7372 Jackson, WY 83002 ZIP: 83002
E-mail: gputnam@cirqueconsulting.com

DESIGNATED PRIMARY CONTACT.

____ Owner ☒ Applicant/Agent

TYPE OF APPLICATION. Please check all that apply; see Fee Schedule for applicable fees.

Use Permit	Physical Development	Interpretations
____ Basic Use	____ Sketch Plan	____ Formal Interpretation
____ Conditional Use	____ Development Plan	____ Zoning Compliance Verification
____ Special Use		

Relief from the LDRs	Development Option/Subdivision	Amendments to the LDRs
____ Administrative Adjustment	____ Development Option Plan	____ LDR Text Amendment
____ Variance	____ Subdivision Plat	☒ Zoning Map Amendment
____ Beneficial Use Determination	____ Boundary Adjustment (replat)	____ Planned Unit Development
____ Appeal of an Admin. Decision	____ Boundary Adjustment (no plat)	____ Other: _____

PRE-SUBMITTAL STEPS. Pre-submittal steps, such as a pre-application conference, environmental analysis, or neighborhood meeting, are required before application submittal for some application types. See Section 8.1.5, Summary of Procedures, for requirements applicable to your application package. If a pre-submittal step is required, please provide the information below. If you need assistance locating the project number or other information related to a pre-submittal step, contact the Planning Department. **If this application is amending a previous approval, indicate the original permit number.**

Pre-application Conference #:	P18-194	Environmental Analysis #:	n/a
Original Permit #:	n/a	Date of Neighborhood Meeting:	04/26/2019

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. Provide **one electronic copy** (via email or thumb drive), and **two hard copies** of the submittal packet.

Have you attached the following?

- ☒ **Application Fee.** Fees are cumulative. Applications for multiple types of permits, or for multiple permits of the same type, require multiple fees. See the currently adopted Fee Schedule in the Administrative Manual for more information.
- ☒ **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. If the owner is a partnership or corporation, proof that the owner can sign on behalf of the partnership or corporation is also required. Please see the Letter of Authorization template in the Administrative Manual for a sample.
- ☒ **Response to Submittal Requirements.** The submittal requirements can be found on the TOJ website for the specific application. If a pre-application conference is held, the submittal requirements will be reviewed at the conference followed by a written summary. The submittal requirements on the TOJ website are intended as a reference to assist you in submitting a sufficient application.

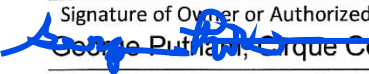
FORMAT.

The main component of any application is demonstration of compliance with all applicable Land Development Regulations (LDRs) and Resolutions. The submittal checklists are intended to identify applicable LDR standards and to outline the information that must be submitted to sufficiently address compliance with those standards.

For some submittal components, minimum standards and formatting requirements have been established. Those are referenced on the checklists where applicable. For all other submittal components, the applicant may choose to make use of narrative statements, maps, drawings, plans and specifications, tables and/or calculations to best demonstrate compliance with a particular standard.

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.

Signature of Owner or Authorized Applicant/Agent

Name Printed

George Putnam, Cirque Consulting, LLC

05/01/2019

Date
Agent
Title

LETTER OF AUTHORIZATION

BWD Street LLC

, "Owner" whose address is: PO Box 10309

Jackson, WY 83002

(NAME OF ALL INDIVIDUALS OR ENTITY OWNING THE PROPERTY)

, as the owner of property

more specifically legally described as: 175 E. Broadway - PT SW1/4SW1/4, Sec. 27, TWP. 41
Rng. 116

(If too lengthy, attach description)

HEREBY AUTHORIZES George Putnam, Cirque Consulting, LLC

as

agent to represent and act for Owner in making application for and receiving and accepting on Owners behalf, any permits or other action by the Town of Jackson, or the Town of Jackson Planning, Building, Engineering and/or Environmental Health Departments relating to the modification, development, planning or replatting, improvement, use or occupancy of land in the Town of Jackson. Owner agrees that Owner is or shall be deemed conclusively to be fully aware of and to have authorized and/or made any and all representations or promises contained in said application or any Owner information in support thereof, and shall be deemed to be aware of and to have authorized any subsequent revisions, corrections or modifications to such materials. Owner acknowledges and agrees that Owner shall be bound and shall abide by the written terms or conditions of issuance of any such named representative, whether actually delivered to Owner or not. Owner agrees that no modification, development, platting or replatting, improvement, occupancy or use of any structure or land involved in the application shall take place until approved by the appropriate official of the Town of Jackson, in accordance with applicable codes and regulations. Owner agrees to pay any fines and be liable for any other penalties arising out of the failure to comply with the terms of any permit or arising out of any violation of the applicable laws, codes or regulations applicable to the action sought to be permitted by the application authorized herein.

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.

OWNER:

Max C. Chapman
(SIGNATURE) (SIGNATURE OF CO-OWNER)

Title: Managing Member

(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)

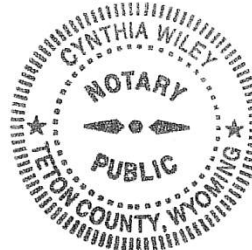
The foregoing instrument was acknowledged before me by Max C. Chapman this 26 day of April, 2019.

WITNESS my hand and official seal.

Cynthia Wiley
(Notary Public)

My commission expires: 6-18-21

(Seal)



LETTER OF AUTHORIZATION

BWD Street LLC

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Jackson, WY 83002

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more specifically legally described as: 175 E. Broadway - PT SW1/4SW1/4, Sec. 27, TWP. 41
Rng. 116

(If too lengthy, attach description)

HEREBY AUTHORIZES Robbin Levy Mommsen, Café G, LLC

as

agent to represent and act for Owner in making application for and receiving and accepting on Owners behalf, any permits or other action by the Town of Jackson, or the Town of Jackson Planning, Building, Engineering and/or Environmental Health Departments relating to the modification, development, planning or replatting, improvement, use or occupancy of land in the Town of Jackson. Owner agrees that Owner is or shall be deemed conclusively to be fully aware of and to have authorized and/or made any and all representations or promises contained in said application or any Owner information in support thereof, and shall be deemed to be aware of and to have authorized any subsequent revisions, corrections or modifications to such materials. Owner acknowledges and agrees that Owner shall be bound and shall abide by the written terms or conditions of issuance of any such named representative, whether actually delivered to Owner or not. Owner agrees that no modification, development, platting or replatting, improvement, occupancy or use of any structure or land involved in the application shall take place until approved by the appropriate official of the Town of Jackson, in accordance with applicable codes and regulations. Owner agrees to pay any fines and be liable for any other penalties arising out of the failure to comply with the terms of any permit or arising out of any violation of the applicable laws, codes or regulations applicable to the action sought to be permitted by the application authorized herein.

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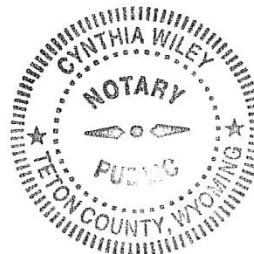
STATE OF Wyoming)
)SS.
COUNTY OF Teton)

The foregoing instrument was acknowledged before me by Max Chapman, Jr. this 24 day of APRIL, 2019.

WITNESS my hand and official seal.

Cynthia Wiley
(Notary Public)
My commission expires: 6/18/21

(Seal)



LETTER OF AUTHORIZATION

Deloney Street LLC

, "Owner" whose address is: PO Box 10309

Jackson, WY 83002

(NAME OF ALL INDIVIDUALS OR ENTITY OWNING THE PROPERTY)

, as the owner of property
more specifically legally described as: 135 E. Broadway - PT SW1/4SW1/4, Sec. 27, TWP. 41
Rng. 116

(If too lengthy, attach description)

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as

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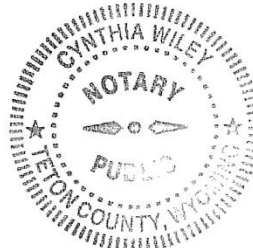
STATE OF Wyoming)
)SS.
COUNTY OF Teton)

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WITNESS my hand and official seal.

(Seal)

(Notary Public)

My commission expires: 6-18-21



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Deloney Street LLC

Jackson, WY 83002

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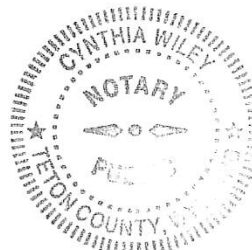
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Project Narrative:

The property known as the Genevieve Block is an important part of our town's history and story. In September 2018, an application was submitted to the town of Jackson by the current owner of 135 and 175 E. Broadway, that would have rezoned those properties, in their entirety, from Urban Commercial Lodging Overlay (UC/LO) to Downtown Core Lodging Overlay (DC/LO). While special restrictions were proposed at the time to recognize the existing historically significant structures, there were fears that a rezone would mean potential relocation or permanent destruction of historic buildings, green space and large trees, and the loss of community character that the block brings to downtown Jackson. That rezone application was ultimately not supported by the Town of Jackson Planning Commission and was withdrawn prior to a hearing at the Town Council.

The block is now under contract by Café G, LLC, an entity formed as the vehicle for a community effort to purchase the properties and preserve their unique character by specifically recognizing and protecting the historic buildings and green space through the use of land conservation and historic preservation tools. The partial rezone from UC to DC zoning that is contemplated by this new application will make it possible to condense the potential development footprint to the smallest space possible in the area of the property on land rezoned to DC along the northern half of the properties that will have the least impact on the historic buildings, community green space and character of the block while leaving the historically significant buildings in the UC zone.

This application is for a rezone of a portion of 135 and 175 East Broadway to Downtown Core/Lodging Overlay (DC/LO) zoning. A map depicting the proposed area to be rezoned to DC is attached with this application. The property is currently zoned Urban Commercial/Lodging Overlay (UC/LO) and is approximately 1.8 acres in size. A review of the Comprehensive Plan Zone District map shows the property within District 2: Downtown Sub Area 2.3 and adjacent to the District 1: Inner Square Sub Area 1.1 on the west and the District 2: Mixed Use Office and Residential Sub Area 2.6 on the east. The property presently contains commercial development consisting of locally owned businesses and single family residential which is currently rented. The proposed project would allow for mixed-use commercial and residential development under the standards established by the Downtown Core (DC) zone district. The lodging overlay remains unchanged by this rezone request.

Findings for Approval – Zoning Map Amendment

1. Is consistent with the purposes and organization of the LDRs

The proposed zoning map amendment is consistent with the purposes and organization of the Land Development Regulations (LDRs) as they stand as the implementation, in regulatory form, of the stated vision and desires of the Jackson/Teton County Comprehensive Plan adopted May 2012.

The proposed rezone of the subject property from Urban Commercial/ Lodging Overlay (UC/LO) to Downtown Core / Lodging Overlay (DC/LO) implements the community vision as it will “serve to preserve and protect the area’s ecosystem in order to ensure a healthy environment, community, and economy for current and future generations.” The rezone of the proposed property to DC/LO will allow for development to follow the form of DC zoning which provides greater flexibility with building design and use of the third story which allows for a more compact development footprint and greater ability to pursue greenspace and historic structure preservation. Preserving the historical and cultural landscape of Jackson for future generations is a stated goal of the Comprehensive Plan (Jackson/Teton County Comprehensive Plan 2012 - Policy 4.5.a).

The physical location of the proposed lands to be rezoned follows the stated desire of the LDRs to implement the common values of community character given that the DC zone specifically allows ecosystem stewardship by focusing development within the Town of Jackson and directs future managed growth to an identified character district within the Town of Jackson where economic vitality, housing and cultural activities are stated defining features.

Quality of life priorities are recognized as foundations of the purposes of the LDRs and are supported by the proposed rezone to DC/LO. A sustainable, vibrant, stable and diversified community can be realized where potential residents and business owners are able to live and conduct business in a manner that supports alternative modes of transportation by its adjacent proximity to the Deloney Ave. START transit center. The DC zone allowances for residential use of the third story, and workforce housing incentives for floor area further compliment the proposed action’s consistency with the LDRs.

The proposed rezone allows the implementation of the illustration of the vision for each complete neighborhood character zone. The DC zone as defined in Section 2.2.10 of the LDRs is a recognized complete neighborhood character zone which dictates several desired form standards including streets, pedestrian frontages, building frontages and parking for the downtown core area of Jackson. Additional physical development and use standards are clearly defined for DC zoning. The land proposed for rezoning is suitable for inclusion in the DC zone as its location and character provide opportunity to preserve the cultural landscape and historic buildings of the Van Vleck family along Broadway Ave. while allowing future development of the subject lands within the desired form and character of DC zoning which is the predominant and appropriate character district found on adjacent lands in close proximity to the town square. DC zoning further provides predictable regulations, incentives and allowances for development that the subject property can utilize to benefit the community. DC Zoning of this property follows the desired coordination between Town and County efforts to implement the shared community vision of “Town as Heart”.

Given the subject land's location within the downtown core area of Jackson and desired effect of the DC character district to the form, density, and use of DC lands, the proposed rezone follows the organization of the LDRs which outline the standards of the community's character-based approach to land planning. Further, the LDRs outline physical development standards, allowed uses and land division parameters under which the subject property may be developed and the lands inclusion in DC zoning is an appropriate change to allow the community to fulfill its stated mission and goals.

2. Improves implementation of the desired future character defined in the Illustration of Our Vision chapter of the Comprehensive Plan

The proposed rezone of currently UC zoned lands to DC improves implementation of the desired future character defined for District 2: Town Commercial Core, in the Illustration of Our Vision chapter of the Comprehensive Plan in several significant ways.

Current UC zoning lacks specificity to many of the desired character defining elements outlined for District 2 and Subarea 2.3 – Downtown, such as streetscapes, pedestrian frontages, building frontages and parking. Rezoning to DC provides for the stated implementation of these character defining elements which will guide development to support a vibrant mixed-use pedestrian friendly environment. By clearly defining building bulk and scale and architectural form, pedestrian sidewalk and greenspace characteristics, DC zoning will provide predictability and intention to future development to compliment the surrounding neighborhood and location context within the downtown area.

A stated goal of the Downtown subarea is to “create a consistent building size and form.” Under current UC zoning, there are no requirements for development to ensure this stated building consistency is achieved or good urban design principles are followed. Rezoning to DC will provide clear guidance to achieve the stated goal by following requirements for building frontages outlined in LDR Section 2.2.1.d, Rules Applicable to All Complete Neighborhood Character Zones. Establishing this type of building size and form consistency along east Deloney Ave. extending from the town square is appropriate and logical as a transitional area from the commercial core of Jackson.

Lodging is recognized as a key use within in the Downtown sub-area, and striking a balance between commercial space, lodging and long-term residential housing is often challenged by market conditions. Rezoning the subject property to Downtown Core will provide the guidance, tools and incentives lacking under current UC zoning to realize the community vision of a desired variety of mixed uses that support year-round community-based business and local entrepreneurial energy.

3. Is necessary to address changing conditions or public necessity

The lands subject to the rezone are currently under contract for sale. The proposed rezone to Downtown Core is necessary to provide guidance to the applicant and current owner that will allow desired predictability and flexibility for the future development and conservation of the subject property.

4. Is consistent with other adopted Town Ordinances

The proposed rezone to Downtown Core is consistent with other adopted Town Ordinances as included in The Municipal Code adopted by the Town Council through and including Ordinance No. 1227, dated April 2019.

Legal description of land to be included in Zoning Map amendment:

That part of the SW1/4SW1/4, Section 27, Township 41N, Range 116 W, 6th P.M., Teton County Wyoming. Being more particularly described as follows:

The north half and the west 50 feet of the south half of that land owned by Deloney Street, LLC described in that Deed recorded in Document # 0729086 Book 698, pages 824-825 in the Office of the Clerk of Teton County. PIDN: 22-41-16-27-03-00-010

AND

The north half of that land owned by BWD Street LLC described in that Deed recorded in Document # 0841627 Book 850, pages 29-31 in the Office of the Clerk of Teton County. PIDN: 22-41-16-27-03-00-009

Neighborhood Meeting Summary
4/26/2019

A neighborhood meeting was held on the property on April 26, 2019 from 4-7pm. Neighbors and members of the public were invited to visit the historic structures and greenspace on the property. At 4:30pm a presentation was made by the applicants and agent to the gathered group of approximately 75+ people of the current plan to purchase the property and preserve the historic structures along Broadway and greenspace areas. The proposed rezone was introduced and described per the attached proposed zone change map.

Neighbors was then invited to come talk to project representatives in two breakout locations led by project members George Putnam, Cirque Consulting and Adam Janak, Northworks Architects. Technical questions and comments were discussed and recorded at these breakout locations. Additional comments were compiled from conversations held by the project team with neighbors and the public who came to the open house receptions held at three participating businesses. A compilation of comments is included.

Two neighborhood meeting notice boards was posted at the site on April 16, 2019 – ten days prior to the public meeting. Content of the public notice is attached.

Notice was mailed to neighbors on April 16, 2019. A copy of this notice and the names and addresses of recipients is included.

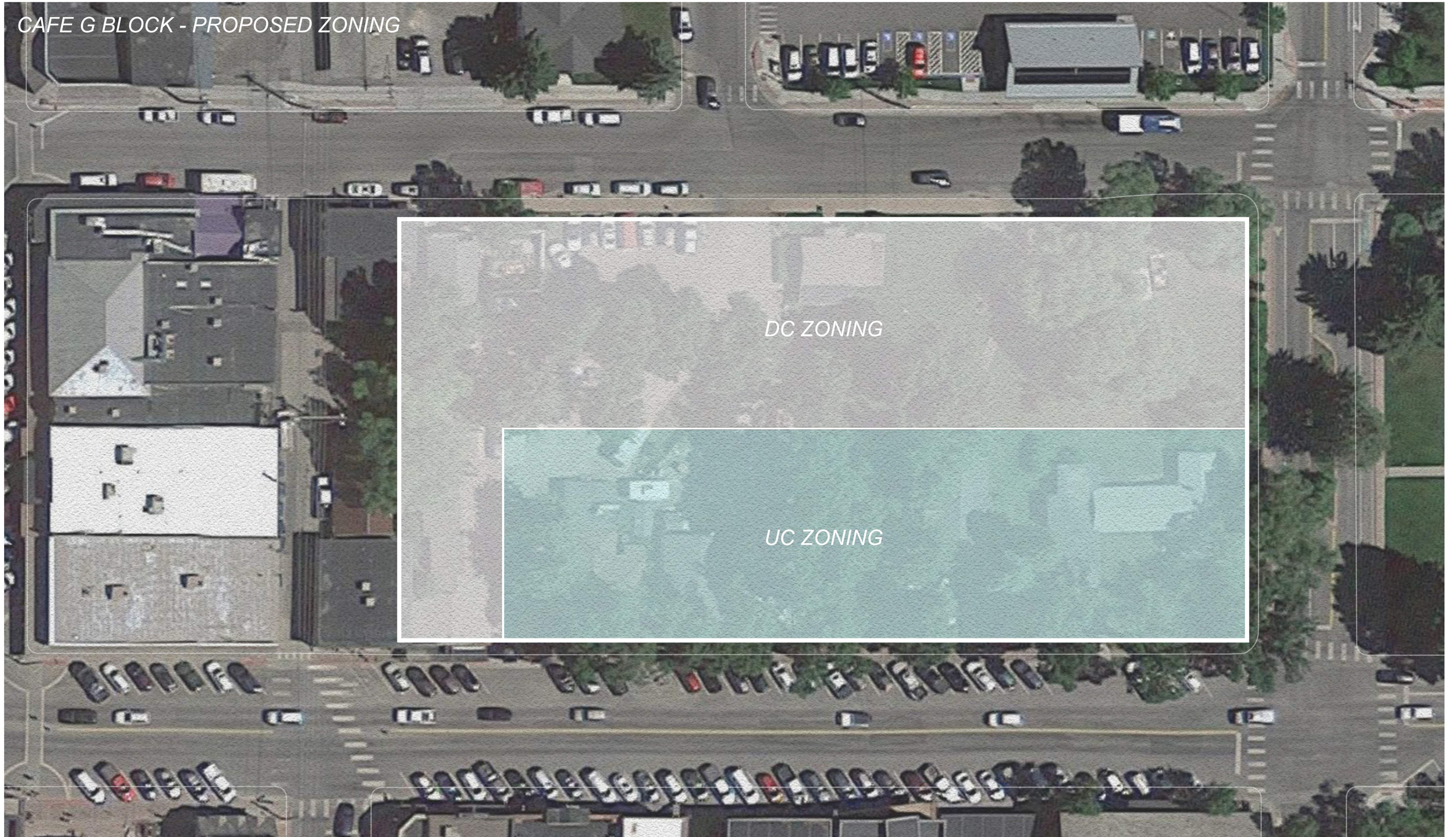
Name	Mailing Address	City, State	StAddr
98 CENTER STREET, LLC	217 WEST 22ND STREET	NEW YORK, NY 10011	98 CENTER STREET
ANIMAL ADOPTION CENTER, INC.	PO BOX 8532	JACKSON, WY 83002	270 E BROADWAY AVENUE
ARDT, LLC	P.O. BOX 9605	JACKSON, WY 83002	250 E BROADWAY AVENUE
BALD EAGLE, LLC	P.O. BOX 6368	JACKSON, WY 83002	150 E BROADWAY AVENUE
BROADWAY & WILLOW LLC	P.O. BOX 4719	JACKSON, WY 83001	200 E BROADWAY AVENUE
BROADWAY CENTRE LLC	PO BOX 489	JACKSON, WY 83001	235 E BROADWAY AVENUE
BROADWAY MILLENNIUM LLC C/O GRAND TETON PROPERTY MANAGEMENT	P.O. BOX 2282	JACKSON, WY 83001	
BWD STREET, LLC	PO BOX 10309	JACKSON, WY 83002	175 E BROADWAY AVENUE
CACHE CREEK, LLC	P.O. BOX 2924	JACKSON, WY 83001	230 E BROADWAY AVENUE #1-8
CADENHEAD, SAMANTHA 2004 IRREVOCABLE TRUST	PO BOX 4257	JACKSON, WY 83001-4257	36 E BROADWAY AVENUE #9-3
CENTER STREET, LLC	P.O. BOX 10309	JACKSON, WY 83002	155 CENTER STREET
CHABAD LUBAVITCH OF WYOMING, INC.	PO BOX 9818	JACKSON, WY 83001	265 E BROADWAY AVENUE
CHET'S WAY, LLC	P.O. BOX 694	JACKSON, WY 83001	60 E BROADWAY AVENUE
COLTER BAY RESORTS, LLC	6067 NORTH SEQUOIA DRIVE	FRESNO, CA 93711-1256	25 S WILLOW STREET #3
CRABTREE CORNER, LLC	PO BOX 3767	JACKSON, WY 83001	84 E BROADWAY AVENUE
DELONEY STREET, LLC	P.O. BOX 10309	JACKSON, WY 83002	135 E BROADWAY AVENUE
DOWNTOWN HOLDINGS, LLC	P.O. BOX 126	JACKSON, WY 83001	140 E BROADWAY AVENUE
ETOILE HOLDINGS, LLC	PO BOX 37	PENNS PARK, PA 18940	36 E BROADWAY AVENUE #5-2
FOAM CAPITAL, LLC	PO BOX 1045	JACKSON, WY 83001	105 E BROADWAY AVENUE
GILL FAMILY, LLC	2505 SHOOTIN' IRON RANCH ROAD	JACKSON, WY 83001	40 CENTER STREET
GILL, RALPH LLC, THE	PO BOX 128	JACKSON, WY 83001	130 N CACHE STREET
HARGER, DONALD K. ET UX	P.O. BOX 2826	JACKSON, WY 83001	36 E BROADWAY AVENUE #3-1
HUFF HOUSE, L.C.	P.O. BOX 4902	JACKSON, WY 83001	245 E BROADWAY AVENUE
HUTCHINGS, MELVIN D. ET UX	1892 COUNTY ROAD 125	THAYNE, WY 83127	30 CENTER STREET
I.O.O.F. #8	P.O. BOX 586	JACKSON, WY 83001	45 E DELONEY AVENUE
JACKSON HOLE DEVELOPMENT CO. C/O MATHIEU, JAMES	PO BOX 1659	JACKSON, WY 83001	12 E CENTER STREET
JACKSON STATE BANK & TRUST, THE	P. O. BOX 2609	CARLSBAD, CA 92009	165 E DELONEY AVENUE
JIM BOB ENTERPRISES, LLC	P.O. BOX 1845	JACKSON, WY 83001	290 E BROADWAY AVENUE
JOURDAN FAMILY LIMITED PART.	P.O. BOX 3159	JACKSON, WY 83001	110 E BROADWAY AVENUE #101
KOMINSKY, RAYMOND J. & SHARLEEN KAY	PO BOX 1318	JACKSON, WY 83001	175 E DELONEY AVENUE
MILLER HOUSE, LLC	P.O. BOX 4902	JACKSON, WY 83001	211 E BROADWAY AVENUE
MTSBC, LLC	PO BOX 6372	JACKSON, WY 83002	274 E BROADWAY AVENUE
REDEEMER LUTHERAN CHURCH OF JACKSON, WY	PO BOX 1016	JACKSON, WY 83001	275 N WILLOW STREET
SOLEIL HOLDING COMPANY, LLC	P.O. BOX 4316	JACKSON, WY 83001	164 E DELONEY AVENUE
TETON ACADIA GROUP, LLC C/O JDHCO	PO BOX 3369	JACKSON, WY 83001	50 E BROADWAY AVENUE
TETON COUNTY SCHOOL DISTRICT #1	P.O. BOX 568	JACKSON, WY 83001	255 N JEAN STREET
TOWN OF JACKSON	P.O. BOX 1687	JACKSON, WY 83001	
VANDEWATER ENTERPRISES LP	1815 POPLAR	BUHL, ID 83316	48 E BROADWAY AVENUE
W/S HOLDING #1, LLC	P.O. BOX 2335	CASPER, WY 82602	36 E BROADWAY AVENUE #2-1
YAMINI LLC	PO BOX 9696	JACKSON, WY 83002	220 E BROADWAY AVENUE
ZIONS FIRST NATIONAL BANK	1 SOUTH MAIN STREET	SALT LAKE CITY, UT 84133-1109	25 S WILLOW STREET #2

Genevieve Historic Block Questions from Public at Neighborhood Meeting 4/26/19

- The JHNG's discussion of the zoning change confused me
- The current greenspace is fantastic, would love to see it stick around
- What happens if you raise more than \$7M
- Can you have the zoning proposed maps available online somewhere?
- What will happen to the creek? Any improvements/changes?
- What is the difference between DC and UC?
- What will be the Town's role in the property once it is protected?
- Does "perpetuity" still apply?
- Who are our donations going to exactly, and what does that money ultimately go towards?
- Would this space be a town park? What will happen to the fences? Any programming you can tell us about?
- Who owns the block now?
- Would transportation's plan change? What about parking across the street? Any additional space or updates?
- What can people do to help other than donate? Can we write letters to Council or sign something?
- What will happen to the red house? All of these buildings once belonged to Van Vlecks and they're all apart of down history.
- How will the land be handled beneath the historic structures?
- What does the current Historic Easement do to maintain the structures? What do you mean the NHRP doesn't help to protect them?
- Who will own the land and who will the businesses rent from?
- Can you help me understand the complexities of the rezone?
- \$7 M doesn't include the buildings? Do they need investors?
- Why is there no protection under the NHRP? How can it only be a designation/recognition?
- I would love to support this project – have you tested the rezone with the Town Council? What do they feel about the zoning change?
- Is DC gray zoning allowed to be 35 feet?
- Will housing be available in either scenario, or in DC? How much space and for how many total people?
- My name is Jim Monroe and I am very excited about this project and would be very happy to help
- Have you thought about having a Farmers Market booth with an informational table?
- Can you clarify whether this plan would help keep historic buildings exactly as they are now?
- I'm confused about how much greenspace there will be and how the development could potentially be.
- What does the NHRP actually do if it doesn't protect anything(from being torn down)?
- What can we do here this summer to promote the space positively?
- Who would take the lead on preservation easement purposes?
- How does the division of lots happen successfully?
- What happens when we raise more than \$7M?

- Could we buy the properties in gray / are they for sale?
- Greenspace and old growth are super important – how can we do more?
- I support the need for greenspace in urban centers, but also understand the need for responsible development. Have you considered economic losses?
- J Schechter – have a weekly thermometer of progress in funding to stay relevant and put a number on the other parcels so protection feels attainable
- Can you help me understand the difference between DC and UC
- How can we get more involved? (Shelly Holland, Sweetwater)
- This project is an “ambitious” undertaking
- What happens if your plan fails?
- Was the 90k sq ft hotel a ploy?
- Is the “anonymous buyer” a strawman for the hotel?
- Workshop helps break up the view and is beneficial for helping block the view of the parking lot
- Can we get a copy of the easements and map of the area? Is it available online?
- What does the \$7M actually do? I still feel like this unclear/is being kept from me
- How do the resale components add up?
- Does anyone even care about the green space?
- Are we trying to save \$16 juices?
- We/They should be reaching out to national customer base (in re: to businesses)
- Balance Salon & Spa Employee: Unique and historic, love the space.
- JoAnn Hoff, 140 Aspen Drive: Please save workshop building. This could potentially be additional income property. Love the plan!
- Love the idea of added greenspace to north
- Support less hotel development and more historic preservation
- Support of extension of greenspace
- I would love to see as many trees saved as possible

CAFE G BLOCK - PROPOSED ZONING



SAVE GENEVIEVE
HISTORIC COMMUNITY GREENSPACE

Town of Jackson
Project Plan Review History
PLANNING

Project Number P19-105 **Applied** 5/2/2019 **STOL**
Project Name Zoning Map Amend - Cafe G block **Approved**
Type ZONING MAP AMENDMENT **Closed**
Subtype **Expired**
Status STAFF REVIEW **Status**

Applicant Cafe G LLC **Owner** BWD STREET, LLC

Site Address 175 E BROADWAY AVENUE **City** JACKSON **State** WY **Zip** 83001

Subdivision **Parcel No** 22411627300009 **General Plan**

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					
Building	APPROVED W/COND	5/3/2019	5/23/2019	5/6/2019	
Kelly Sluder					
(5/6/2019 8:14 AM KS)					
New property lines cannot create an existing structure to become out of code compliance for location, opening and rated walls.					
Fire		5/3/2019	5/23/2019		
Kathy Clay					
Joint Housing Dept		5/3/2019	5/23/2019		
Stacy Stoker					
Legal	APPROVED W/COND	5/3/2019	5/23/2019	6/13/2019	
Lea Colasuonno					
(6/13/2019 10:59 AM LC)					
LDR 8.7.2.C, Findings for Approval for a Zoning Map Amendment states that:					
"The advisability of amending the Official Zoning Map is a matter committed to the legislative discretion of the Town Council and is no controlled by any one factor. In deciding to adopt or deny a proposed zoning map amendment the Town Council shall consider factors, including, but not limited to, the extent to which the proposed amendment: 1. Is consistent with the purposes and organization of the LDRs; 2. Improves implementation of the desired future character defined in the illustration of Our Vision chapter of the Comprehensive Plan; 3. Is necessary to address changing conditions or a public necessity; 4. Is consistent with other adopted Town Ordinances.					
Parks and Rec	NO COMMENT	5/3/2019	5/23/2019	5/15/2019	
Steve Ashworth					
(5/15/2019 3:28 PM STOL)					
Tiffany,					
No comment from P&R on P19-105, 107. Thanks.					
Andy Erskine, CPSI					

Type of Review Contact Notes	Status	Dates			Remarks
		Sent	Due	Received	
Pathways Brian Schilling (5/15/2019 4:17 PM STOL) No comments from Pathways.	NO COMMENT	5/3/2019	5/23/2019	5/15/2019	
Planning Paul Anthony		5/3/2019	5/23/2019		
Police Todd Smith	NO COMMENT	5/3/2019	5/23/2019	5/6/2019	
Public Works Brian Lenz		5/3/2019	5/23/2019		
START Darren Brugmann		5/3/2019	5/23/2019		



TOWN OF JACKSON PLANNING COMMISSION AGENDA DOCUMENTATION

PREPARATION DATE: JUNE 14, 2019
MEETING DATE: JUNE 19, 2019

SUBMITTING DEPARTMENT: PLANNING
DEPARTMENT DIRECTOR: TYLER SINCLAIR
PRESENTER: TYLER VALENTINE

SUBJECT: **ITEM P19-114:** REQUEST FOR APPROVAL TO AMEND THE OFFICIAL ZONING MAP FROM URBAN COMMERCIAL TO DOWNTOWN CORE FOR THE PROPERTY LOCATED AT 105 EAST BROADWAY AVENUE.

OWNER: FOAM CAPITAL LLC

APPLICANT: JOHN STENNIS

REQUESTED ACTION

The applicant is requesting approval to amend the Official Zoning Map to rezone the property located at 105 East Broadway Avenue from Urban Commercial (UC) to Downtown Core (DC).

APPLICABLE REGULATIONS

Section 8.7.2 Zoning Map Amendment

LOCATION

The property is located at 105 East Broadway Avenue, legally described as parcel PT. SW1/4SW1/4, SEC. 27, TWP. 41, RNG. 116. An aerial photo and zoning map are shown below:



BACKGROUND

Existing Site Characteristics:

The subject parcel is approximately 7,300 sf in size. The parcel is 150 feet deep with varying widths starting at 42 feet wide in the southern third of the parcel and increasing to 52 feet wide in the northern two-thirds of the parcel. The parcel has been zoned UC since 1994 and is located within the Lodging Overlay (LO). There are two existing structures on the property: a 3,800 sf split level retail building built in 1974 which fronts Broadway Avenue, and a 1,152 sf single-story storage garage built in 1930 to the rear. Zoning to the east and north is UC, zoning to the south is DC and zoning to the west is Town Square (TS). Also to the west is a Town alley that connects Broadway Avenue to Deloney Avenue. Oddly, the first southern 50 feet of the alley starting from Broadway Avenue is 20 feet wide, then the remaining northern 100 feet of alley narrows to 10 feet wide until it intersects Deloney Avenue. In addition, the lot slopes from north to south resulting in a 3-foot elevation change.

District 2 Rezoning Update

During the rezoning effort for District 2 (Commercial Core) that was adopted in 2016, the applicant's property along with the remaining properties to the east up to Willow Street, were proposed for DC zoning by staff to be consistent with the properties across the street on Broadway and the general vision for the area. The Council decided to postpone rezoning the properties to DC due to concerns that this area of properties was different from other District 2 properties because of the historic structures (Café Genevieve (Van Vleck House), Persephone & Whole Bean Juicery, etc.)), and that the Town's existing LDRs lack zoning tools to protect historic structures. More specifically, the Council did not believe that the primary current tool for protecting historic structures – i.e., the ability of the Historic Preservation Board to request a 90-day stay from the Council on a demolition permit for a historic structure – was enough. Although the Historic Preservation Board has not identified any historically significant structures on the subject property, 105 E. Broadway was inevitably included with the properties to the east and put on hold for a rezone based on its location as a contiguous parcel.

Applicant's Request:

The applicant is proposing to change the zoning of the subject parcel from UC to DC. They state that this change would be consistent with the direction the Town was going before the Council removed this property from the District 2 update to address historic preservation options, especially considering that the Historic Preservation Board has not identified any historically significant structures on their property. The applicant also provided several physical development comparisons between the UC and DC zoning which highlight the main differences between the two zones, namely height, setbacks and the Workforce Housing Floor Area Bonus (2:1 tool). The applicant has stated that regardless of the outcome of this rezone request, they intend on developing the property with a mix-use use building.

STAFF ANALYSIS

The applicant's request is limited to amending the Official Zoning Map to change the subject property from UC to DC zoning. It does not include any proposed physical development or uses. Thus, the Town's review is limited only to making the required findings for a map amendment in Section 8.7.2 (see below).

As described under the required findings (below) for a map amendment, staff finds that the proposed DC zone is appropriate for the site based upon the Comprehensive Plan's vision for the area and because no historically significant structures have been identified by the Historic Preservation Board. The DC zoning is also consistent with the DC zoning directly across the street on Broadway Avenue and will allow physical development and use that is consistent with the desired character for this area. Some changes to allowed physical development regulations will occur if rezoned to DC which are highlighted in the table below. The notable changes include increased building height, access to the Workforce Housing Floor Area Bonus (2:1

tool) and new pedestrian frontage standards. Beyond the noted changes, the property will remain in the Lodging Overlay and allow nearly all of the same uses as UC.

Staff would like to make note that the Town has begun the District #1 - Town Square (TS) rezoning process which likely will include the subject lot in the overall rezone discussion. Completion of the TS rezone process will be in approximately 9-12 months. One outcome could result in the subject lot being rezoned to DC, then later rezoned again to a new Town Square zone. Ultimately the goal is to replace Legacy Zones, such as UC, with Character Zones, such as DC and Staff is able to make the findings to support this rezone request at this time.

Although a separate application (P19-105 & 107), the contiguous parcels to the east (135 & 175 E. Broadway) are also being considered for a similar rezone request to rezone the majority of those parcels to DC while maintaining some UC zoning to protect the existing historic structures. Because that application includes protections for the portions of the block that host historically significant structures, Staff is also recommending approval to Town Council for that request as it alleviates the primary original concern regarding preservation of historic structures on those properties. That application does not affect the findings and basis for Staff's support of this request, however both requests are part of the larger discussion resulting in some overlapping discussion as to the vision for this important block.

To help understand how the UC and DC zones compare in terms of basic development standards, please see the below table:

Comparison of UC and DC Zones		
Standard	UC	DC
FAR	1.3	1.3
Height	35'	42' – 46'
Stories	3 (Lodging Overlay)	3
3rd-story setback	None	10' with 60% encroachment
LSR	10%	0%
Setbacks (Front/side/rear)	0'/0'/0'	0'-5'/0' or 5'/0' or 5'
Maximum building size	35,000 sf with CUP	None
Uses	Generally the same. Still allows a detached single-family home. Minor differences with accessory uses.	Generally the same. Does not allow detached single-family home. Minor differences with accessory uses.
Workforce Housing Bonus (2:1 tool)	Not allowed. Instead, 25% FAR bonus for workforce housing	Allowed

In summary, while the allowed floor area of both the UC and DC is the same, the main difference is that the DC zone's additional height allows greater flexibility in design and the DC zone provides the Workforce Housing Floor Area Bonus (2:1 tool) which can result in more development than UC zoning if used.

Staff would like to note that although the applicant has provided build-out scenarios for both zones, the Council should not consider these in their decision to rezone the property.

PUBLIC COMMENT

The Town has received no public comment on this item at the time of writing this report.

STAFF FINDINGS

Item A: Pursuant to Section 8.7.2.D the advisability of amending the Official Zoning Map is a matter committed to the legislative discretion of the Town Council and is not controlled by any one factor. In deciding to adopt or deny a proposed zoning map amendment the Town Council shall consider factors including, but not limited to, the extent to which the proposed amendment:

1. *Is consistent with the purposes and organization of the LDRs.*

Complies. Staff finds the proposed request to be consistent with the purpose and intent of the LDRs, specifically the DC zoning district. The purpose of the DC zone (*LDR Section 2.2.10*) is to provide for a vibrant mixed-use area with a variety of uses and amenities. If the property is rezoned to DC, the applicant will have the opportunity to develop the lot in a way that aligns with the intent and desired land use layout for the DC zone. In addition, the DC zone pedestrian frontage of 13.5 feet will provide more amenity space for pedestrians compared to the UC zone which only requires 10 feet of pedestrian frontage. Furthermore, the DC zoning will require that a portion of the third floor be stepped back to break up building mass whereas the UC zone has no third story step-back requirement. Overall, the DC zone would provide more flexibility to the property owner while ensuring that the building best complements and supports pedestrian movement.

2. *Improves implementation of the desired future character defined in the Illustration of Our Vision chapter of the Comprehensive Plan.*

The proposed application is located in Character District #2 Town Commercial Core, specifically Sub-area 2.3 Downtown Commercial Core of the 2012 Comprehensive Plan. In order to review the application for conformance with the Comprehensive Plan, staff has reviewed the Policy Objectives for District 2 as follows:

Common Value 1: Ecosystem Stewardship

Not Applicable.

Common Value 2: Growth Management

4.1.d: Maintain Jackson as the economic center of the region

Complies. Although no development is proposed, the DC zoning is intended to support mixed-use development which includes commercial spaces that serve local businesses, residents and visitors.

4.2.c: Create vibrant walkable mixed use subareas

Not Applicable. There is no physical development proposed.

4.2.d: Create a Downtown Retail Shopping District

Complies. Although no development is proposed, the DC zoning is intended to support mixed-use development which includes commercial spaces such as retail that serve local businesses, residents and visitors.

4.2.f: Maintain lodging as a key component in the downtown

Not Applicable. There is no physical development proposed, however the property will remain in the Lodging Overlay.

4.4.b: Enhance Jackson gateways

Not applicable.

Policy 4.4.d: Enhance natural features in the built environment

Not applicable.

Common Value 3: Quality of Life

Policy 5.2.d: Encourage deed-restricted rental units

Not Applicable. The DC zone will allow for the use of the Workforce Housing FAR Bonus not allowed in the UC zone.

6.2.b: Support businesses located in the community because of our lifestyle

Not applicable. There is no physical development proposed, however the DC zoning will allow the same commercial uses as the UC zoning which can support local businesses.

6.2.c: Encourage local entrepreneurial opportunities

Not applicable. There is no physical development proposed.

6.3.a: Ensure year-round economic viability

Not applicable. There is no physical development proposed.

7.1.c: Increase the capacity for use of alternative transportation modes

Not applicable. There is no physical development proposed.

In addition, staff finds that the application should be reviewed for consistency specifically with subarea 2.3 Downtown Commercial Core which states as follows as the desired vision for the subarea:

Sub-area 2.3 Downtown Commercial Core: his large, mixed use, TRANSITIONAL Subarea currently consists of a variety of retail, restaurant, office and other commercial activities, along with long-term residences and lodging in a variety of building sizes and forms. Downtown is the center of civic, cultural, economic, and social activity in the community as well as the center of the visitor experience, as a significant amount of lodging is located here. The existing character and built form is varied and inconsistent. The goal of this subarea is to create a vibrant mixed use area by accommodating a

variety of uses and amenities. The subarea will be the starting point for the development of a refined Lodging Overlay boundary and future discussion of the type and size of lodging desired. A key challenge will be to provide a balance between lodging and long-term residential housing. Future structures will be predominantly mixed use, while multifamily structures will be allowed if it properly addresses the street. Commercial uses that create an active and engaging pedestrian experience will be predominantly located on the first and second floors of buildings. Examples of these uses include restaurants, bars, a variety of retail shops and commercial amusement. Furthermore, as portions of the subarea will be located within a future Downtown Retail Shopping District, uses such as office, residential and lodging will be predominantly located on upper floors. A goal of this subarea will be to create a consistent building size and form. In the future, a variety of two to three story buildings are desired. Buildings should be located to create an attractive street wall and take advantage of good urban design principles including massing, articulation and the provision of public space. The pedestrian realm will be of great importance in this mixed use subarea, and emphasis should be placed on adding improvements focusing on the pedestrian experience. Parking should continue to be provided predominately in public lots and on street to create a vibrant, walkable area that is oriented to the pedestrian. On-site parking should be predominantly underground or screened from view. Future redevelopment should enhance the Flat Creek corridor for recreational and ecological purposes. Buildings should front onto the creek to provide opportunities for interaction and enjoyment of this community resource.

Complies. The proposed rezone is consistent with the above vision for Subarea 2.3 as it will encourage development that supports a strong retail and visitor experience in the downtown. The request will still allow for mixed-use buildings of three stories and allow more opportunity to provide deed restricted workforce housing through the Workforce Housing Floor Area Bonus (2:1 tool). The request will also address pedestrian frontages and location for parking better than the current UC zoning which is consistent with the above future vision. Overall, Staff finds that DC zoning is best suited for this area and with the DC zoning directly across the street on Broadway.

3. *Is necessary to address changing conditions or a public necessity.*

Not applicable. There is no physical development proposed.

4. *Is consistent with other adopted Town Ordinances.*

Complies. Staff finds that the proposed request is consistent with all other Town Ordinances.

ATTACHMENTS

Applicant Submittal
Department Reviews

RECOMMENDATION

The Planning Director recommends **approval** of the request (P19-114) to amend the Official Zoning Map to rezone the property located at 105 East Broadway Avenue from Urban Commercial (UC) to Downtown Core (DC) subject to the staff analysis and findings in this staff report and department reviews attached hereto.

SUGGESTED MOTION

Based upon the findings for an amendment to the Official Zoning Map as presented by Staff and the applicant for Item P19-114 related to 1) consistency with the purposes and organization of the LDRs; 2) improved

implementation of the desired future character in the Comprehensive Plan; 3) need to address changing conditions or a public necessity; and 4) consistency with other adopted Town Ordinances, I move to recommend **approval** to the Town Council to change the zoning from Urban Commercial (UC) to Downtown Core (DC) for the property located at 105 East Broadway Avenue, subject to this staff report and the departmental reviews attached hereto.

Town of Jackson
Project Plan Review History
PLANNING

Project Number P19-114 **Applied** 5/9/2019 **STOL**
Project Name Zoning Map Amend - 105 E. Broadway **Approved**
Type ZONING MAP AMENDMENT **Closed**
Subtype **Expired**
Status STAFF REVIEW **Status**

Applicant GYDE Architects **Owner** FOAM CAPITAL, LLC

Site Address **City** **State** **Zip**
105 E BROADWAY AVENUE JACKSON WY 83001

Subdivision **Parcel No** **General Plan**
22411627300012

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					

Building Kelly Sluder	NO COMMENT	5/9/2019	5/30/2019	5/13/2019	
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Fire Kathy Clay	NO COMMENT	5/9/2019	5/30/2019	5/14/2019	
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Joint Housing Dept Stacy Stoker		5/9/2019	5/30/2019		
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Legal Lea Colasuonno (6/13/2019 11:02 AM LC)	APPROVED W/COND	5/9/2019	5/30/2019	6/13/2019	
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LDR 8.7.2.C, Findings for Approval for a Zoning Map Amendment states that:

"The advisability of amending the Official Zoning Map is a matter committed to the legislative discretion of the Town Council and is not controlled by any one factor. In deciding to adopt or deny a proposed zoning map amendment the Town Council shall consider factors, including, but not limited to, the extent to which the proposed amendment:

1. Is consistent with the purposes and organization of the LDRs;
2. Improves implementation of the desired future character defined in the illustration of Our Vision chapter of the Comprehensive Plan;
3. Is necessary to address changing conditions or a public necessity;
4. Is consistent with other adopted Town Ordinances.

Parks and Rec Steve Ashworth (5/15/2019 3:27 PM STOL)	NO COMMENT	5/9/2019	5/30/2019	5/15/2019	
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Tiffany,
P&R has no comment on Zoning request for P19-114. Thanks.

Andy Erskine, CPSI

Type of Review Contact Notes	Status	Dates			Remarks
		Sent	Due	Received	
Pathways Brian Schilling (5/16/2019 8:39 AM STOL) No comments from Pathways. Brian	NO COMMENT	5/9/2019	5/30/2019	5/15/2019	
Planning Lea Colasuonno		5/9/2019	5/30/2019		
Planning Tyler Valentine (6/14/2019 12:22 PM STOL) Please see staff report	APPROVED	5/9/2019	5/30/2019	6/14/2019	
Police Todd Smith (5/10/2019 1:14 PM STOL) No concerns at this time.	NO COMMENT	5/9/2019	5/30/2019	5/9/2019	
Thanks, Todd Smith					
Public Works Brian Lenz		5/9/2019	5/30/2019		
START Darren Brugmann		5/9/2019	5/30/2019		



PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave. | ph: (307) 733-0440
P.O. Box 1687 | www.townofjackson.com
Jackson, WY 83001

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: 105 East Broadway Zoning Map Amendment
Physical Address: 105 East Broadway Avenue
Lot, Subdivision: PT. SW1/4SW1/4, SEC. 27, TWP. 41, RNG. 116 PIDN: 22-41-16-27-3-00-012

PROPERTY OWNER.

Name: FOAM Capital, LLC Phone: _____
Mailing Address: PO Box 1045 ZIP: 83001
E-mail: _____

APPLICANT/AGENT.

Name: John Stennis, GYDE Architects Phone: 307-733-7303
Mailing Address: PO Box 4735, 80 West Broadway, Jackson, WY ZIP: 83001
E-mail: js@gydearchitects.com

DESIGNATED PRIMARY CONTACT.

____ Property Owner ☒ Applicant/Agent

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

Use Permit	Physical Development	Interpretations
____ Basic Use	____ Sketch Plan	____ Formal Interpretation
____ Conditional Use	____ Development Plan	____ Zoning Compliance Verification
____ Special Use	____ Design Review	Amendments to the LDRs
Relief from the LDRs	Subdivision/Development Option	____ LDR Text Amendment
____ Administrative Adjustment	____ Subdivision Plat	☒ Map Amendment
____ Variance	____ Boundary Adjustment (replat)	Miscellaneous
____ Beneficial Use Determination	____ Boundary Adjustment (no plat)	____ Other: _____
____ Appeal of an Admin. Decision	____ Development Option Plan	____ 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 #: P19-037 Environmental Analysis #: n/a
Original Permit #: n/a Date of Neighborhood Meeting: 4/11/2019

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?

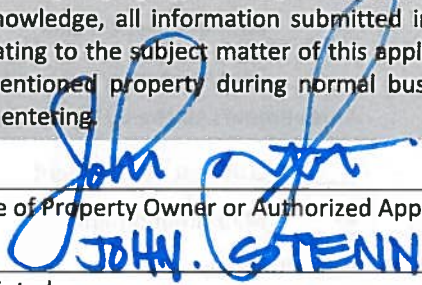
- ☒ **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.
- ☒ **Notarized Letter of Authorization.** A notarized letter of consent from the landowner is required if the applicant is not the owner, or if an agent is applying on behalf of the landowner. Please see the Letter of Authorization template at www.townofjackson.com/DocumentCenter/View/102/Town-Fee-Schedule-PDF.
- ☒ **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.

Signature of Property Owner or Authorized Applicant/Agent

Name Printed


JOHN STENNIS

07 May 2019

Date

Associate

Title

LETTER OF AUTHORIZATION

Foam Capital, LLC, "Owner" whose address is: _____

PO Box 1045, Jackson WY 83001

(NAME OF ALL INDIVIDUALS OR ENTITY OWNING THE PROPERTY)

_____, as the owner of property
more specifically legally described as: 105 E Broadway, Jackson WY 83001

(If too lengthy, attach description)

HEREBY AUTHORIZES GYDE Gilday Yehia Architects as
agent to represent and act for Owner in making application for and receiving and accepting
on Owners behalf, any permits or other action by the Town of Jackson, or the Town of
Jackson Planning, Building, Engineering and/or Environmental Health Departments
relating to the modification, development, planning or replatting, improvement, use or
occupancy of land in the Town of Jackson. Owner agrees that Owner is or shall be deemed
conclusively to be fully aware of and to have authorized and/or made any and all
representations or promises contained in said application or any Owner information in
support thereof, and shall be deemed to be aware of and to have authorized any subsequent
revisions, corrections or modifications to such materials. Owner acknowledges and agrees
that Owner shall be bound and shall abide by the written terms or conditions of issuance of
any such named representative, whether actually delivered to Owner or not. Owner agrees
that no modification, development, platting or replatting, improvement, occupancy or use of
any structure or land involved in the application shall take place until approved by the
appropriate official of the Town of Jackson, in accordance with applicable codes and
regulations. Owner agrees to pay any fines and be liable for any other penalties arising out
of the failure to comply with the terms of any permit or arising out of any violation of the
applicable laws, codes or regulations applicable to the action sought to be permitted by the
application authorized herein.

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.

OWNER:

M. Jason Majors
(SIGNATURE) (SIGNATURE OF CO-OWNER)

Title: M. Jason Majors, Attorney and Authorized Agent
(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 M. Jason Majors this 12th day of
February, 2019.

WITNESS my hand and official seal.

Gloria J. Geffre
(Notary Public)

My commission expires:

01/24/2023

(Seal)





GRANTOR: HOKE & CO LLC
GRANTEE: FOAM CAPITAL LLC
Doc 0947803 Filed At 14:50 ON 04/30/18
Sherry L. Daigle Teton County Clerk fees: 18.00
By Mary Smith Deputy Clerk

Space Above This Line for Recorder's Use Only

WARRANTY DEED

File No.: **663379JAC (mgm)**

Hoke & Co., LLC, a Wyoming limited liability company, GRANTOR(S), for Ten Dollars (\$10.00) and other good and valuable consideration in hand paid, receipt of which is hereby acknowledged, CONVEY(S) AND WARRANT(S) to

Foam Capital, LLC, a Wyoming limited liability company, GRANTEE(S),

whose mailing address is PO Box 1045, Jackson, WY 83001, the following described real estate, situated in the County of **Teton**, State of **Wyoming**, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Wyoming, to-wit: **Legal Description attached hereto as Exhibit A and by this reference incorporated herein.**

State Identification Number 22-41-16-27-3-00-012

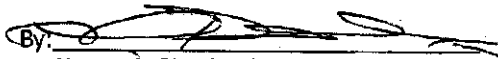
Including and together with all and singular the tenements, hereditaments, appurtenances and improvements thereon or thereunto belonging, but subject to taxes, reservations, covenants, encroachments, conditions, restrictions, rights-of-way and easements of record.

WITNESS the due execution and delivery of this Warranty Deed

this 24 day of April, 2018.

Hoke & Co., LLC, a Wyoming limited liability company

By: The G. Bland & Elizabeth S. Hoke Family Trust
(Schedules A & B), Managers

By: 
Name: G. Bland Hoke, Jr.
Title: Trustee
By: 
Name: Elizabeth S. Hoke
Title: Trustee

State of _____)
County of _____) ss.

The foregoing instrument was acknowledged before me by G. Bland Hoke, Jr. and Elizabeth S. Hoke, as Trustees of The G. Blank & Elizabeth S. Hoke Family Trust (Schedule A & B) as Managers of the Hoke & Co., LLC, a Wyoming limited liability company, this _____ day of April, 2018.

Witness my hand and official seal.

See attached notarial certificate.

Notary Public
My Commission expires:

EXHIBIT A

Legal Description
Hoke & Co., LLC
22-41-16-27-3-00-012

A parcel of land being a portion of the SW1/4SW1/4 of Section 27, T. 41 N., R. 116 W., 6th P.M., Teton County, Wyoming, being more particularly described as follows:

COMMENCING at the southwest section corner of said Section 27 as marked by a brass cap inscribed "RLS 164";

THENCE S 89°32'41" E, 451.26 feet along the south line of said Section 27 to a point marked by a 5/8-inch diameter steel reinforcing bar with an aluminum cap inscribed "PLS 16012" set this survey, said point being **THE POINT OF BEGINNING**;

THENCE N 00°31'53" E, 50.00 feet, departing said section line and continuing along the east line of that parcel described in Book of Deeds 14, Page 276 and Book of Photos 25, Page 233 as recorded in the Office of the Clerk of Teton County, Wyoming, to a point marked by a 5/8-inch diameter steel reinforcing bar with an aluminum cap inscribed "PLS 16012" set this survey;

THENCE N 89°32'41" W, 10.00 feet, along the north line of said parcel, to a point of intersection with the east line of a 10-foot-wide strip of land dedicated to the public as shown on Plat 105 as recorded in said Clerk's office and marked by a 5/8-inch diameter steel reinforcing bar with an aluminum cap inscribed "PLS 16012" set this survey;

THENCE N 00°31'53" E, 100.00 feet, along said east line, to a point coincident with the southwest corner of that parcel described that Warranty Deed recorded in Book of Photos 633, Page 1068 and marked by a 5/8-inch diameter steel reinforcing bar with an aluminum cap inscribed "PLS 16012" set this survey;

THENCE N 89°51'38" E, 52.01 feet, along the south line of said parcel to a point of intersection with the west line of that parcel described in described that Warranty Deed recorded in Book of Photos 698, Page 824-825 and marked by a 5/8-inch diameter steel reinforcing bar with an aluminum cap inscribed "PLS 16012" set this survey;

THENCE S 00°34'03" W, 100.00 feet, along said west line, to a point marked by a brass cap inscribed "RLS 164" found this survey;

THENCE S 00°34'03" W, 50.54 feet, continuing along said west line, to a point marked by a 5/8-inch diameter steel reinforcing bar with an aluminum cap inscribed "PLS 16012" set this survey;

THENCE N 89°32'41" W, 41.91 feet to **THE POINT OF BEGINNING**.

The basis of bearings is S 89°32'41" E along the south line of Section 27, T. 41 N., R. 116 W., 6th P.M., Teton County, Wyoming.

All in accordance with the map entitled "Hoke & Co., LLC-Map of Survey" as recorded in the Office of the Clerk of Teton County, Wyoming as T-20J.

Y2 Consultants, LLC
25 April 2018
PLW Project #17451 Prepared by AWWF

1 | Page

EXHIBIT _____

17451-180425-LEGAL.doc

CALIFORNIA ALL-PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of SAN DIEGO }

On 4/24/2018 before me, Del Lau, Notary Public
(Here insert name and title of the officer)

personally appeared G. BLAND HOKKE JA & ELIZABETH S. HOKKE
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

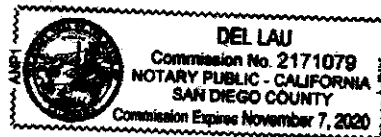
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Notary Public Signature

(Notary Public Seal)



ADDITIONAL OPTIONAL INFORMATION

DESCRIPTION OF THE ATTACHED DOCUMENT

(Title or description of attached document)

(Title or description of attached document continued)

Number of Pages Document Date

CAPACITY CLAIMED BY THE SIGNER

- ☐ Individual (s)
☐ Corporate Officer

(Title)

- ☐ Partner(s)
☐ Attorney-in-Fact
☐ Trustee(s)
☐ Other

INSTRUCTIONS FOR COMPLETING THIS FORM

This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he/she/they~~, is /are) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
 - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
 - ❖ Indicate title or type of attached document, number of pages and date.
 - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

07 May 2019

Tyler Sinclair, Planning Director
Town of Jackson Planning and Building Department
150 E Pearl Avenue
Jackson, WY 83001

- Hand Delivered -

Dear Mr. Sinclair,

GYDE Architects, an association with Hal Hutchinson of HH Land Strategies are pleased to submit the enclosed Zoning Map Amendment application for the property located at 105 East Broadway, Town of Jackson, Wyoming.

The purpose of the Zoning Map Amendment application is to secure approval of an amendment to the official Zone District Map for the subject property from Urban Commercial (UC) to Downtown Commercial (DC).

On April 11, 2019, the applicant held a Neighborhood Meeting, which was properly noticed in accordance with LDR requirements. Presenting at the Neighborhood Meeting were myself, John Stennis, from GYDE Architects and Hal Hutchinson, from HH Land Strategies. Together we presented the proposal to change zoning for the subject property and answered questions from the public in attendance. One result of this Neighborhood meeting was that a member of the Teton County Historic Preservation Board encouraged us to present the proposal to the Historic Preservation Board. This was done on April 16, 2019.

Enclosed please find the following application materials:

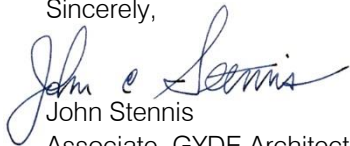
- Planning Permit Application Form;
- Signed and notarized Letter of Authorization from the owner;
- Application fee in the amount of \$1,500;
- Warranty Deed conveying the property to FOAM Capital, LLC;
- T-Map T-20J showing the property as surveyed and recorded;
- Narrative description of the proposed application;
- Zoning Map Amendment - DC Zoning Exhibits; and
- Zoning Map Amendment - UC Zoning Exhibits



It is our understanding, based on discussions with the Jackson Hole Land Trust team, that the adjacent 135 E. Broadway parcel is submitting a concurrent Zoning Map Amendment application for the same UC to DC zoning. We also understand that the Town has offered to expedite the process for this project. As we are seeking the same zoning change and are adjacent properties, we would like for our application to be reviewed concurrently with the 135 E. Broadway submission.

Please contact me with any questions or concerns.

Sincerely,



John Stennis

Associate, GYDE Architects PC

105 East Broadway, Town of Jackson, Wyoming

Application for: Zoning Map Amendment

Submitted: May 7, 2019

Owner:

Foam Capital, LLC
PO Box 1045
Jackson, WY 83001

Applicant

GYDE Architects
80 W Broadway, Suite 200
PO Box 4735
Jackson, WY 83001
307-733-7303

With

HH Land Strategies LLC
PO Box 1902
Wilson, WY 8301
307-699-0265

Description of Project Goals and Applications

Project Goals:

FOAM Capital, LLC, the owner of 105 East Broadway seeks approval of a Zoning Map Amendment application that would allow a change of zoning from Urban Commercial (UC) to Downtown Commercial (DC). The property is within the lodging overlay. No change to this overlay designation is currently being sought by this application. The purpose of the application is to allow greater flexibility to develop the subject property including utilizing incentives not currently available under current UC zoning for providing additional, voluntary, workforce housing on the property.

Property description

105 East Broadway Avenue is currently zoned UC and is within the Lodging Overlay. Properties to the North and South of the subject property are zoned DC. Properties to the West are zoned Town Square (TS) and properties on the same block to the East are zoned UC, although there is currently an application to rezone portions of these properties from UC to DC. The Town Lodging Overlay is located North, East and South of the subject property. Located on the North side of East Broadway, 105 East Broadway is bordered on the West by an alley.

The property is an irregular shaped lot, measuring approximately 42 feet along the South boundary fronting East Broadway. The total length of the lot is 150 feet. At a distance of approximately 50 feet from the South boundary, the lot projects West approximately 10 feet resulting in an increased width of approximately 52 feet along the Northern 100 feet of the lot. This increased width of 10 feet projects into the alley bordering the West side of the lot. See attached map (T-20J) The applicant is not aware of any easements or other public use rights that exist to provide for the use of this portion of the private land by the public.

In addition, a sewer line exists in the projection portion of the lot in a line approximately coincident with the west boundary of the 42-foot-wide portion of the lot. Similarly, the applicant is not aware of any easements permitting this public utility to be located within the lot. Overhead powerlines extend across the property in a North-South direction.

Unlike many other surrounding properties, the subject lot is not flat. The property slopes significantly from North to South, resulting in a difference in elevation from the Northwest corner of the property to the Southwest corner of the property of approximately 3 feet. 105 East Broadway is also lower in elevation than the properties West of the alley, which also front Town Square and are zoned Town Square.

Structures currently located on the property include a commercial building fronting Broadway. According to aerial photography found on the Teton County GIS, this commercial building was constructed sometime between 1967 and 1977. There also exists on the property a building located behind (North) of the commercial, storefront building. This utility (shed) building may

have been present prior to 1967, although this is unclear from the aerial photography. After posting of the neighborhood meeting, the applicant sent an e-mail to the Historic Preservation Board on April 1, 2019 soliciting any comments or concerns they had about the shed. At that time, it was shared that the shed is in poor condition and would not be saved as part of a future project. The board did not return any communication to the applicant. The applicant appeared before the Teton County/Town of Jackson Historic Preservation board on April 16, 2019. The applicant discussed the utility (shed) building with the board, who found that while the building may be historic, there is little significance to the building as it is mainly obstructed from public view and has little historic integrity. The Board did state, however, they would likely require a delay should demolition permit for this building be submitted to the Town of Jackson for consideration. The above statements strictly reflect the impression of the applicant based on their attendance at the meeting and does not reflect any documented discussion or meeting minutes of the Historic Preservation Board. Nevertheless, there currently exists no regulatory requirement within the Town of Jackson to preserve or otherwise retain historic structures.

Currently, the 105 East Broadway commercial retail space contains approximately 3,800 s.f. in a split-level configuration fronting East Broadway. The utility building (shed) is approximately 400 s.f.

Zoning Map Amendment Purpose:

Under the current UC zoning and with the property being within the Lodging Overlay, the property is permitted three stories within a 35' height limit. Based on discussions with Town planning staff, due to the sloped nature of the site, development on 105 East Broadway would be eligible for the allowance for "Overall Height of a Stepped Structure" which increases the height limitation by 110%, resulting in an overall height for development on the site of 38.5'. It is also permitted a FAR of 1.3. In addition, a "bonus" increase of 25% FAR is permitted for floor area that is devoted to on-site permanently affordable housing and/or employee housing. Under this zoning, the physical development for the property would include a three-story structure with a basement. This approach would utilize all of the 1.3 FAR permitted and employ the 25% bonus for deed restricted housing. This would be included within the allowable 38.5' height. It would also include a building that is setback 10' from the Broadway curb, as permitted by the UC zone district.

Under the proposed DC zoning, and the allowances within the Lodging Overlay, the physical development proposed for the property will include a three-story structure with a basement. This approach would utilize all of the 1.3 FAR permitted and employ the 50% bonus for deed restricted housing. This would be included within the allowable 42' height. It would also include a building that is setback 13' from the Broadway curb in accordance with DC zoning, as opposed to the 10' permitted under UC zoning. The third story is contemplated to be set back from Broadway in a manner that minimizes its visibility from the South.

Based on the above, the difference between the two physical development approaches under the current and proposed zoning is limited to an increase in height from 38.5' to 42', an in

increase in floor area dedicated only deed restricted housing, and an increase in the distance the building will be set back from the curb under the proposed zoning.

Considering the properties north and south of the subject property are zoned DC and permitted a 42' height, and considering the sloped condition of the site, this would result in a building that is entirely consistent with the context of the built environment in which it is located.

Under both approaches, parking would be located on the ground level along approximately 2/3rds of the Northern portion of the property and would be covered by the second level above. Based on a letter on file at the Planning Department dated 8/15/05 there are 16 parking credits allocated to the property. This is based on the overall square footage and use of the property in 1988. A change in zoning would have no effect on parking credits.

The proposed use of the property will include a mixture of retail space located on the ground level and residential and/or short-term rental space located on the second and third levels. There is a desire on the part of the owner to include a significant amount of workforce housing in the project. Therefore, we are considering employing the 25% floor area bonus for permanently deed restricted affordable or employee housing permitted by the Town LDRs.

During the rezoning effort for District 2: Commercial Core that was adopted in 2016, the subject property was proposed for Downtown Core (DC) zoning by staff. The intent was to be consistent with the Comprehensive Plan's general vision for the area and with certain nearby commercial properties, such as those across the street on Broadway. The Council decided to postpone new zoning, however, due to concerns that the two properties East of the subject property seemed different from other District 2 properties because of the historic structures, and that the Town's existing LDRs lack zoning tools to protect historic structures. The Council had similar concerns about the historic structures on the "Sweetwater" property at 85 South King Street, which are also in District 2.

More specifically, the Council did not believe that the primary current tool for protecting historic structures – i.e., the ability of the Historic Preservation Board to request from the Council a 90-day stay for a demolition permit on a historic structure – was enough to adequately protect our limited historic structures. Due to this context, the Council decided to keep the existing UC zoning for the East Broadway and King Street properties with the understanding that Town staff would look into possible new historic preservation LDR tools for consideration by the Council in the future. The apparent intent was that the Council wanted to have the benefit of knowing what, if any, historic preservation tools might be adopted before they gave final rezoning consideration to these two sites.

Considering that the purpose of delaying the adoption of new, DC zoning for the subject property was to consider the merits of protecting historic structures, and that the subject property does not contain historic structures that rise to the significance of those found on the properties to the East, the application to change the zoning for the subject property from UC to DC is consistent with the Comprehensive Plan, and Town Council's intent to allow the increased flexibility and availability of incentives that DC zoning permits.

Findings for Approval:

3. Zoning Map Amendment Findings for Approval

LDR Section 8.7.2.C. Zoning Map Amendment Findings for Approval

The advisability of amending the Official Zoning Map is a matter committed to the legislative discretion of the Board of County Commissioners and is not controlled by any one factor. In deciding to adopt or deny a proposed zoning map amendment the Board of County Commissioners shall consider factors including, but not limited to, the extent to which the proposed amendment:

1. Is consistent with the purposes and organization of the LDRs;

The purpose of the LDRs is to implement the Jackson/Teton County Comprehensive Plan and promote the health, safety and general welfare of the present and future inhabitants of the community. The subject property is located in Comprehensive Plan Subarea 2.3 – Town Commercial Core, which forms the basis of the DC zone district and was used to establish DC zoning for properties North and South of the subject property. The block in which the subject property is located contained historic structures, and hence were treated under special circumstances and not included in the zoning revisions for surrounding properties. Based on the circumstances associated with the subject property stated herein, a Zoning Map Amendment 105 East Broadway is consistent with the purposes and organization of the LDRs.

2. Improves implementation of the desired future character defined in the Illustration of Our Vision chapter of the Comprehensive Plan;

The Vision of the Town Commercial Core is to provide for 2-3 story buildings that create a vibrant, pedestrian oriented mixed-use district with a variety of non-residential and residential uses. The vision emphasizes providing a variety of housing types, including encouraging deed-restricted rental units. Rezoning 105 East Broadway from UC to DC will allow for increased floor area dedicated exclusively to deed-restricted rental units, thereby improving the implementation of the desired future character for the area. The location of 105 East Broadway, adjacent to an alley buffering development from properties zoned Town Square, as well as the change in elevation from these properties to the subject property will minimize the impact that the additional height permitted in the DC zone district represents and will improve the vision for the district where “new buildings should be pulled to the street, creating an attractive street wall with parking located predominately underground or out of sight.”

3. Is necessary to address changing conditions or a public necessity; and

Changing conditions are represented by the Comprehensive Plan and the vision for the community that it represents. It is necessary to amend the zoning map to change zoning of the property from UC to DC to ensure the vision, as state elsewhere herein is achieved.

4. Is consistent with the other adopted County Resolutions.

The applicant is not aware of any adopted County resolutions that would be inconsistent with the application to amend the zoning map from UC to DC for the subject property. In addition, by virtue of the property being located within District 2 of the Comprehensive Plan, and District 2 being the basis for establishing DC zoning, the Town has found that this zone district on this property is consistent with other adopted County Resolutions.

LEGEND

- Indicates a Brass Cap inscribed "RLS 164" found this survey
- Indicates a 2" diameter iron pipe found this survey
- Indicates a Witness Corner PK nail with shiner inscribed "PLS 6193" found this survey
- Indicates an aluminum cap inscribed "PLS 4270" found this survey
- Indicates an aluminum cap inscribed "PLS 6447" found this survey
- Indicates a MAG nail set this survey for orientation and mapping purposes.
- Indicates a 5/8" diameter rebar with aluminum cap inscribed "PLS 16012" set this survey
- Indicates a calculated point; nothing found or set this survey
- Sewer Manhole

- Property Boundary Line
- Adjacent Boundary Line
- Existing Building
- Approximate Sewer Line

NOTES:

No underground utilities or subsurface improvements were mapped as part of this survey except where specifically indicated.

No Wetland Mapping was done as part of this survey.

Current Zoning = TOJ-UC (Town of Jackson-Urban Commerical)Residential.
For applicable setback and height regulations established by Town of Jackson Ordinance 1159 as passed on January 4, 2017 see Town of Jacks Land Development Regulations Section 2.3.2

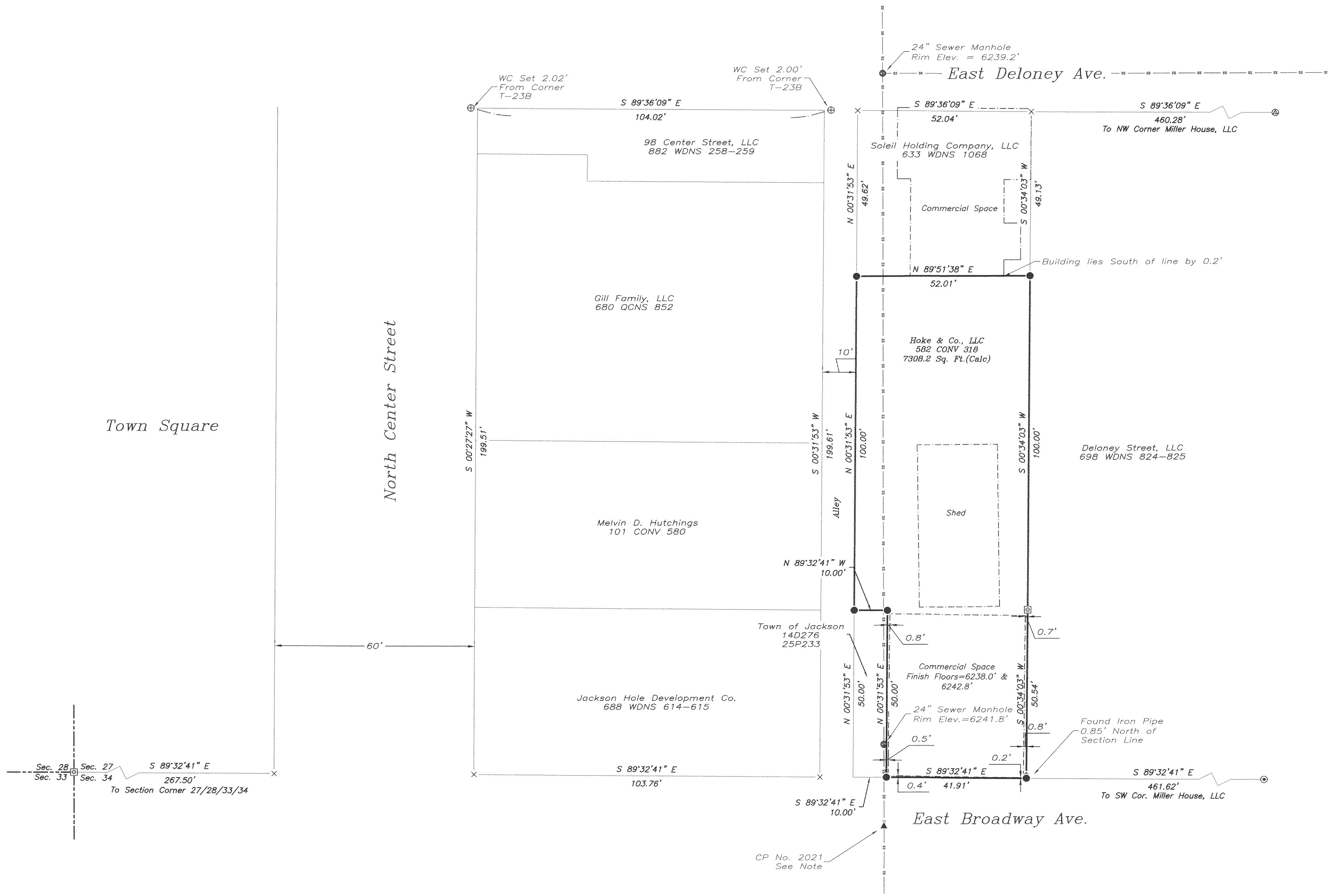
Elevations as shown hereon have been measured using US Survey Feet and are based on a RTK GPS measurement to a MAG nail as shown hereon (GPS Derived, NAVD88, Geiod 12B) (Base Elevation = 6240.7' at Y2 CP No. 2021).

The Basis of Bearings for this survey is referenced to a direct GPS measurement and is considered Geodetic (geodetic north using WGS 84, Nad83,CORS96,EPOCH2002.0000).

All horizontal measurements are in units of US Survey Feet, and are GPS derived ground measurements based on the Wyoming West (zone 4904) State Plane Coordinate System, (NAD 1983 (2012), EPOCH2010.0000) and a project scale factor of 1.0003217226.

Topographic features represented on this map show conditions determined by a field survey made in January of 2018 and may not reflect changes made subsequent to that date.

Easements of sight and record not shown hereon may exist.



CERTIFICATE OF SURVEYOR

State of Wyoming) ss
County of Teton)

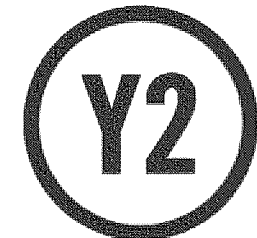
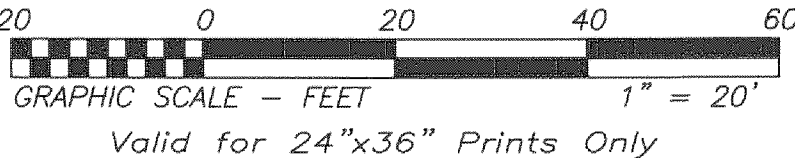
I, Mark W. Fellermann, of Jackson, Wyoming, hereby certify that this map was made from notes taken during an actual survey made under my direction in January and February 2018, and from records on file with the Office of the Clerk of Teton County, and that it correctly represents the points and corners as set or found at the time of said survey.

Mark W. Fellermann
Wyo PLS 16012



F-20J

GRANTOR: FELLERMANN, MARK W.SURVEYOR
GRANTEE: THE PUBLIC T-20J
Doc 0943404 Filed At 15:09 ON 02/05/18
Sherry L. Daigle Teton County Clerk fees: 50.00
By Mary Smith Deputy



Y2 Consultants
215 East Simpson
P.O. Box 2674
Jackson, WY 83001
Ph: 307-733-2999

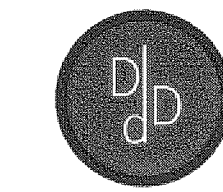
Map of Survey

Project Number - 17461
Project Path - F:\2017\17461_Hoke\Survey\ACAD\17461_180110_BASE.dwg
Drawn By - MMF
Reviewed By - SRP/PWG
Drawing Date - January 23, 2018
Revision Date -

Client Name
Bland Hoke

Project Address
105 East Broadway
Avenue
Jackson, WY

Hoke & Co., LLC
Being a portion of
SW1/4SW1/4 Section 27
T. 41 N., R. 116 W., 6th P.M.
Teton County, Wyoming



Sheet 1 of 1



01 EXHIBITS

- 2 Vicinity and Zoning Map
- 3 Plat Map
- 4 Massing Study
- 5 Site Photos

CURRENT AND FUTURE ZONING

In 2012 Teton County and the Town of Jackson adopted a joint Comprehensive Plan. This Plan outlined new planning objectives for the community and over the past two years, the Town of Jackson has been working on a zone by zone basis to update the existing Land Development Regulations to better reflect the goals of the Comprehensive Plan. Although this was the goal; the interpretation of the Comprehensive Plan goals has led to changes in the LDR’s that are not necessarily envisioned in the plan. The property is currently in the **Urban Commercial (UC)** zone. The UC is a legacy zone meaning that it has not been updated and remains, as it was before the Comprehensive Plan was adopted. The property also falls under the lodging overlay which allows for the development of a third floor in the UC zone.

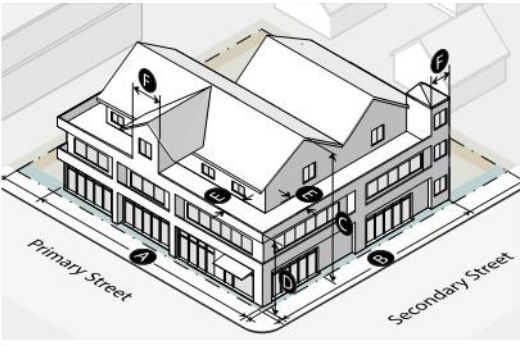
PARKING CREDITS

A memo to file from Liza Hoke dated 8/15/05 based on conversation with Anna Unger, intern for the Town planning and building department calculated grandfathered parking credits as follows:

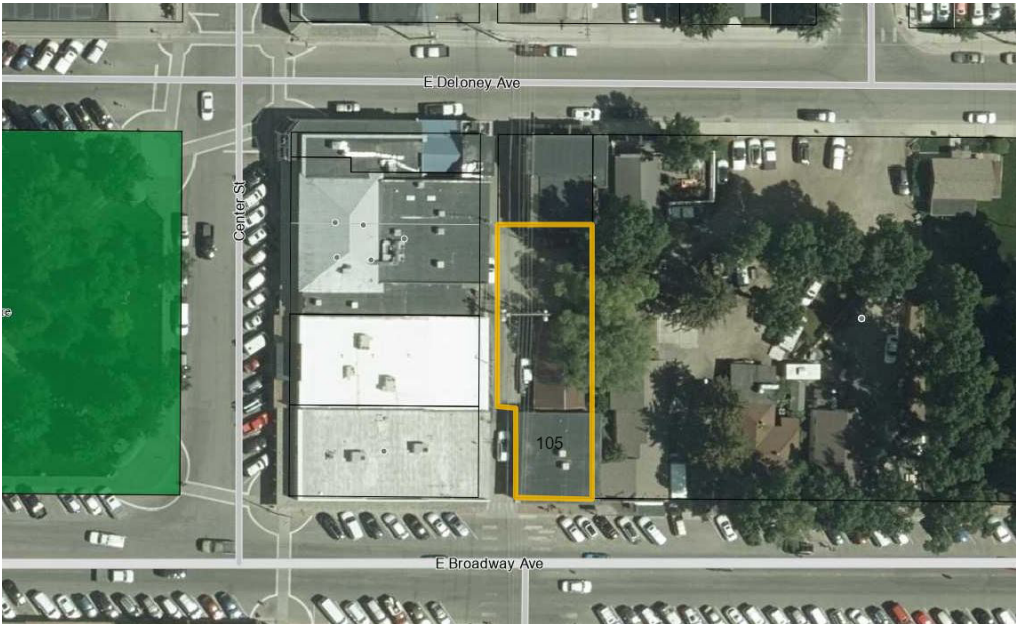
Based on the use and square footage of this property as of October 1988:

- Retail lower floor 1,824 SF
- Retail upper floor 1,920 SF
- 3,744 SF / 1 parking space per 250 SF = 15 parking credits
- Garage/shop space 400 SF = 1 parking credit

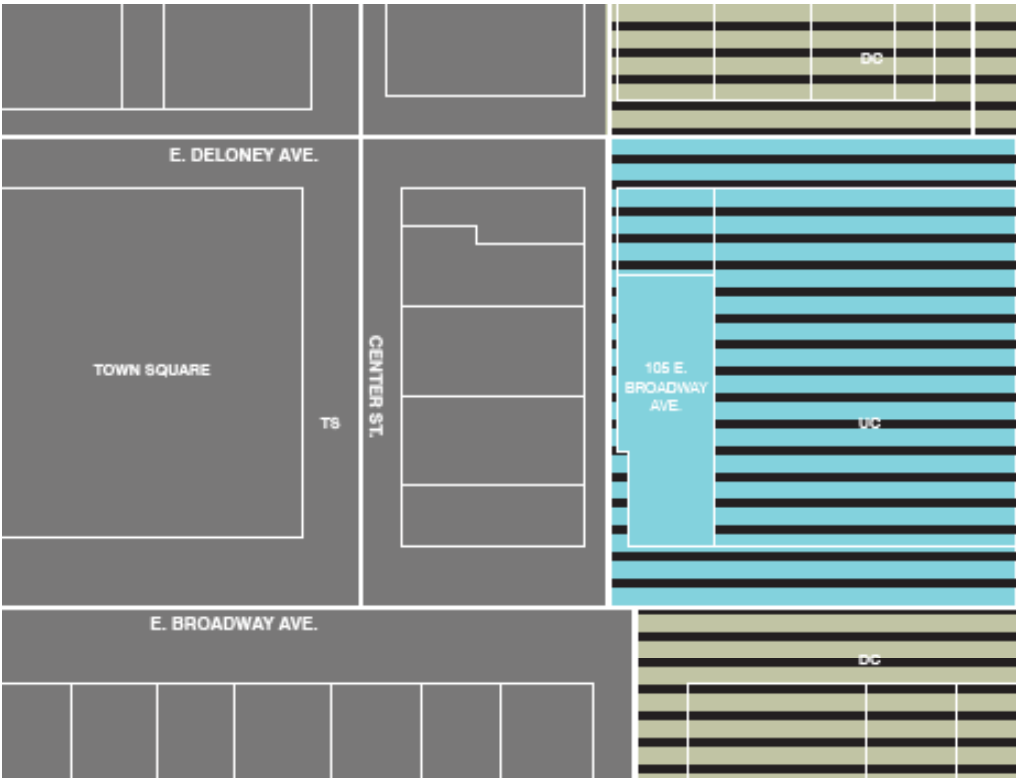
TOTAL = 16 parking credits.

	
Street Facade (Sec. 9.4.11.)	
Width of ground and 2nd story in primary street setback range	A
% of lot width (min)	80%
Length from street corner (min)	30'
Width of ground and 2nd story in secondary street setback range	B
% of lot width (min)	80%
Length from street corner (min)	30'
Building Height (Sec. 9.4.9.)	
Height (max) if roof pitch ≥ 5/12	46' C
Height (max) if roof pitch < 5/12	42' C
Stories (max)	3 C
Stories or Height (min) in any street setback range	2 or 24' D
Building Stepback (Sec. 9.4.12.)	
Stepback for any 3rd story street facade or street facade over 30' (min)	10' E
Encroachment in stepback (max % of overall facade width)	60% F
A building with only residential use that has at least 4 units is exempt from the stepback requirement	
Scale of Development	
Floor area ratio (FAR) (max) (E.3.)	1.3
Deed restricted housing exemption	(Sec. 7.8.3.)
Workforce housing floor area bonus	(Sec. 7.8.4.)

DC Zoning Requirements

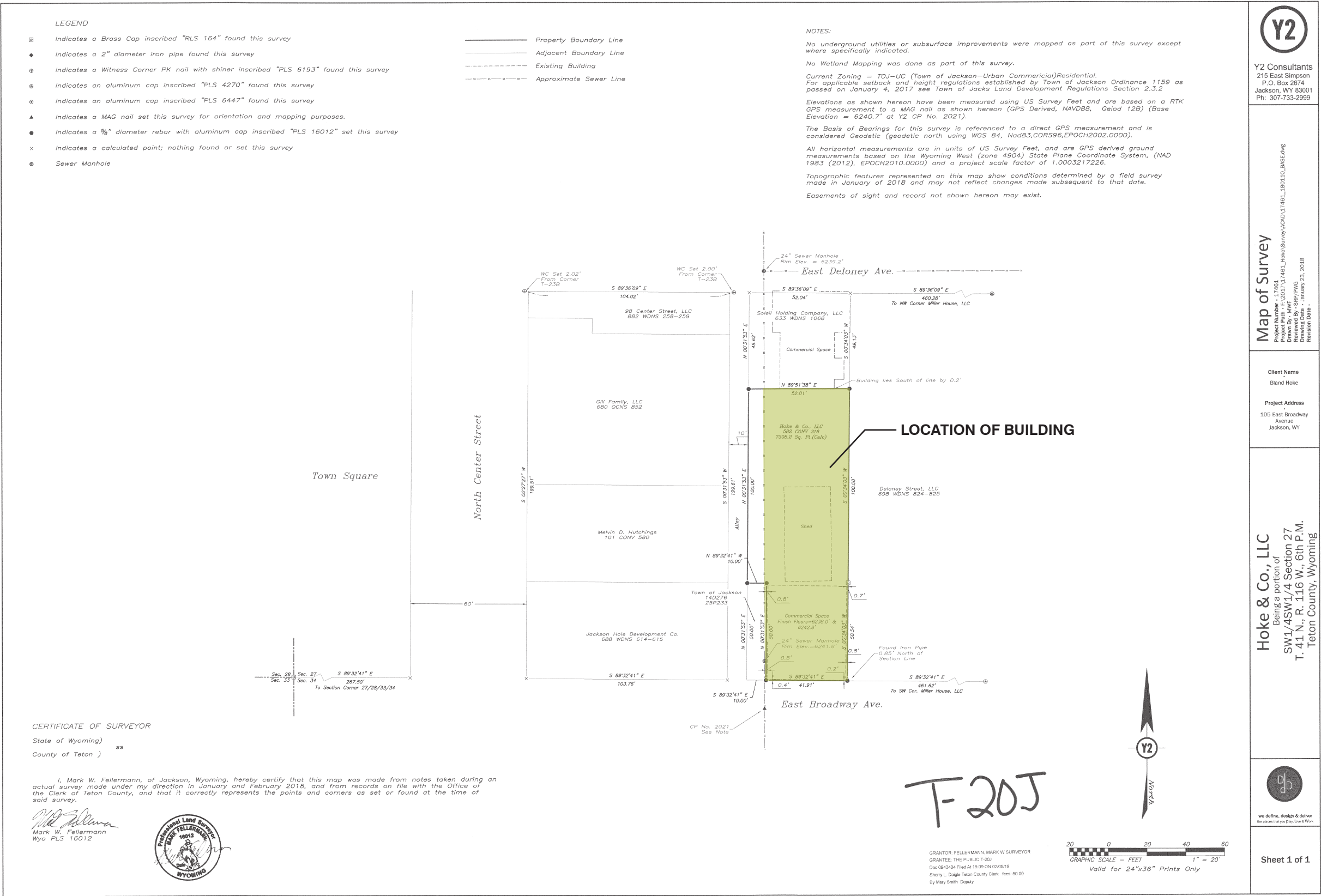


VICINITY MAP / 2017 AERIAL PHOTOGRAPHY



TOWN OF JACKSON ZONING

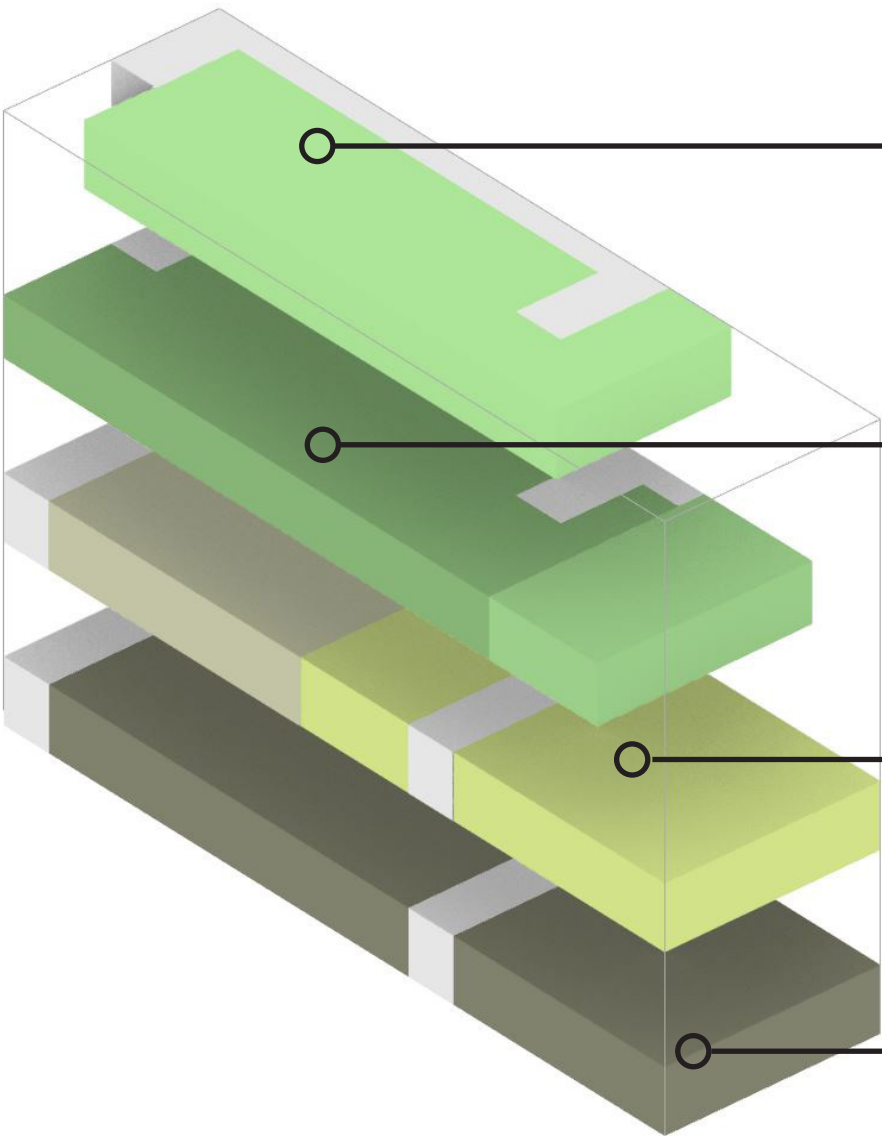
- TS - Town Square
- DC - Downtown Commercial
- UC - Urban Commercial
- LDG - Lodging Overlay



T20J PLAT MAP
n.t.s.

DEVELOPMENT SCENARIO

Utilizing the 50% housing bonus available in DC and backing out circulation for the housing component



LEVEL 3		
4,180 sf	residential	
720 sf	circulation	
1,400sf	exterior patio (not counted toward FAR)	

LEVEL 2		
1,000sf	residential	
4,030sf	deed restricted housing	
720 sf	circulation	
550 sf	exterior patios (not counted toward FAR)	

STREET LEVEL		
3,000 sf	retail	
600 sf	circulation	
200 sf	utility (not counted toward FAR)	
2,500 sf	parking (10-12 spaces, not counted toward FAR)	

BASEMENT		
5,400 sf	basement (storage and mechanical)	
600 sf	circulation	

TOTAL: 14,250 sf DEVELOPMENT POTENTIAL WITH DEED RESTRICTED HOUSING

Affordable Housing Requirement

This scheme proposes a building based on base development potential in the DC Zone with the use of the 50% affordable housing bonus for deed restricted housing which can be either affordable or employment based and a 3,000sf retail component. The following assumes that short term rentals would not be proposed which would be a larger housing requirement.

Affordable Housing Units Required		
Retail (3000 s.f.)		= 1.294 affordable housing units
Unrestricted Single-Family Housing Units (5,180 s.f.)		= 0.642 affordable housing units
TOTAL:		1.642 Affordable housing units
Breakdown of Required Affordability and Size		
Rental Units for 50% Median Income		0.642 units
This unit can be a minimum of a 1 Bed/Studio Apartment		
Since this is a partial requirement a fee-in-lieu can be paid which would be approximately \$201,888.		
Rental/Ownership Units for 120% Median Income		1.0 units
This unit must be a min. 2 Bedroom unit		

Parking Requirement:

Housing: 9,210 sf x 1.5 parking spaces per 1,000 sf = 13.8 = 14 spaces req'd
Commercial: 3,000 sf x 2.25 parking spaces per 1,000 sf = 6.75 = 7 spaces req'd

21 spaces would be required and about 10-12 could be achieved on site with ground level parking with a standard 9'x18' size. 16 parking credits exist so the remainder could most likely be applied to fulfill the parking requirement.



VIEW LOOKING NORTHEAST



BROADWAY STREET ELEVATION



ADJACENT ALLEYWAY



BACK OF BUILDING



SIDEWALK LOOKING EAST



01 EXHIBITS

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- 3 Plat Map
- 4 Massing Study
- 6 Site Photos

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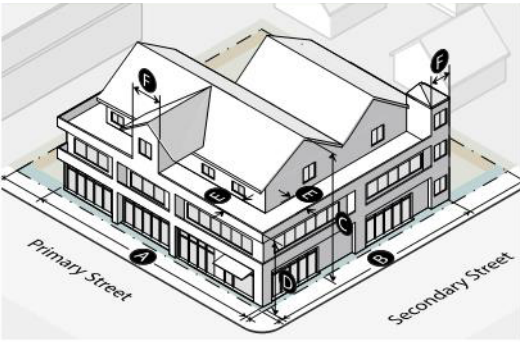
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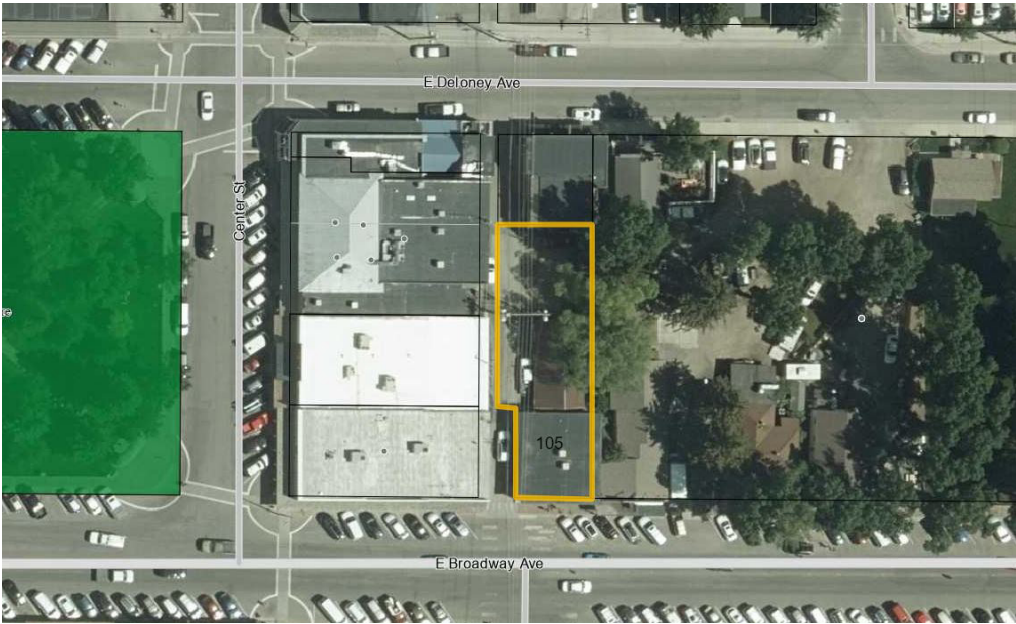
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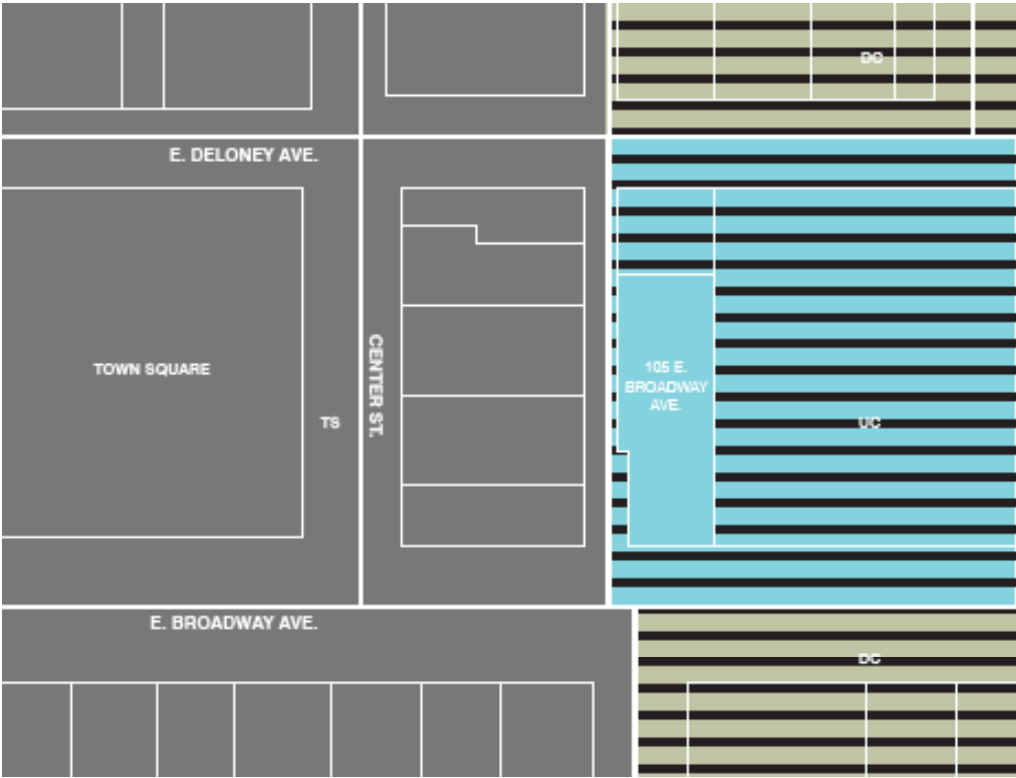
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Scale of Development	
Floor area ratio (FAR) (max) (E.3.)	1.3
Deed restricted housing exemption	(Sec. 7.8.3.)
Workforce housing floor area bonus	(Sec. 7.8.4.)

DC Zoning Requirements

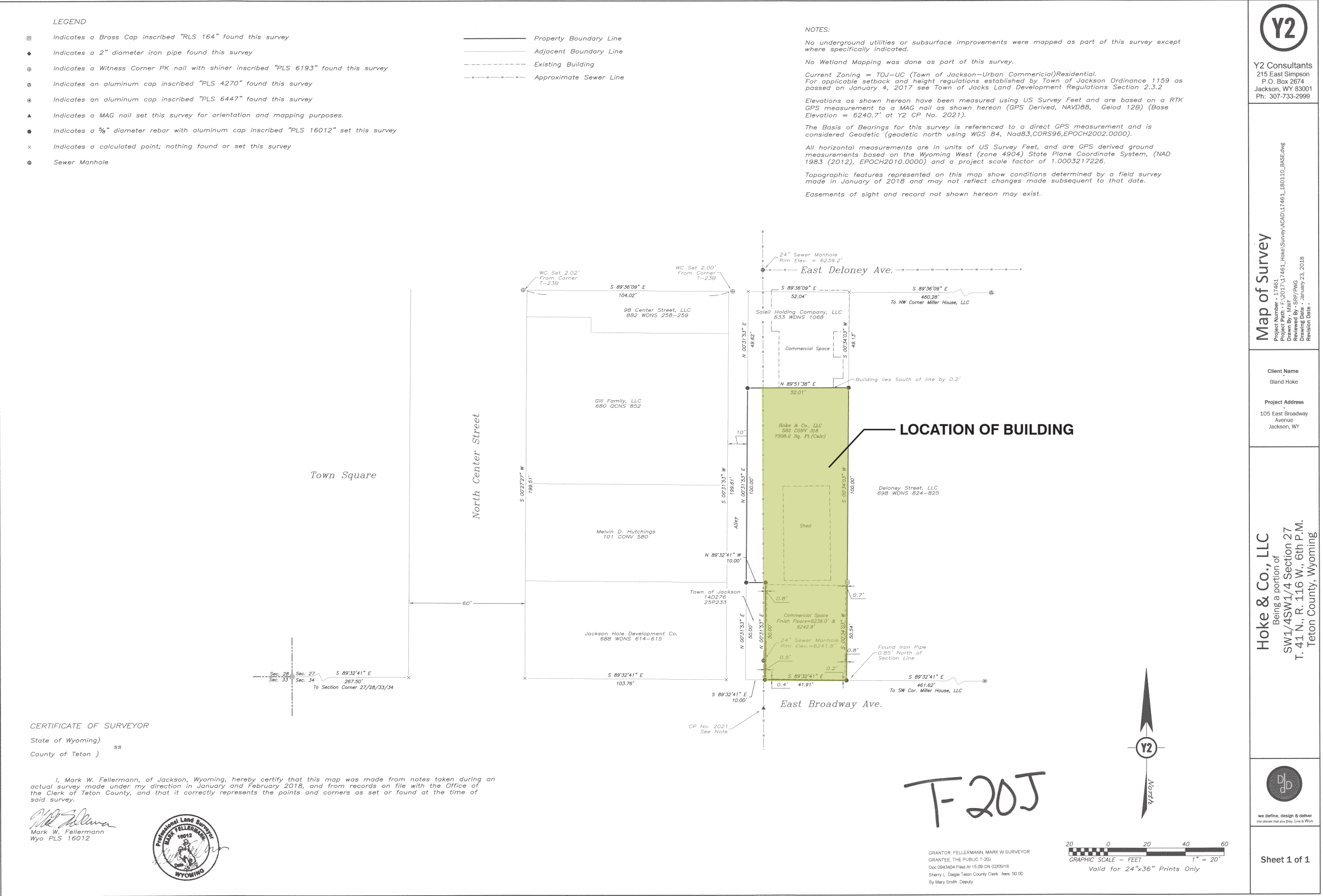


VICINITY MAP / 2017 AERIAL PHOTOGRAPHY



TOWN OF JACKSON ZONING

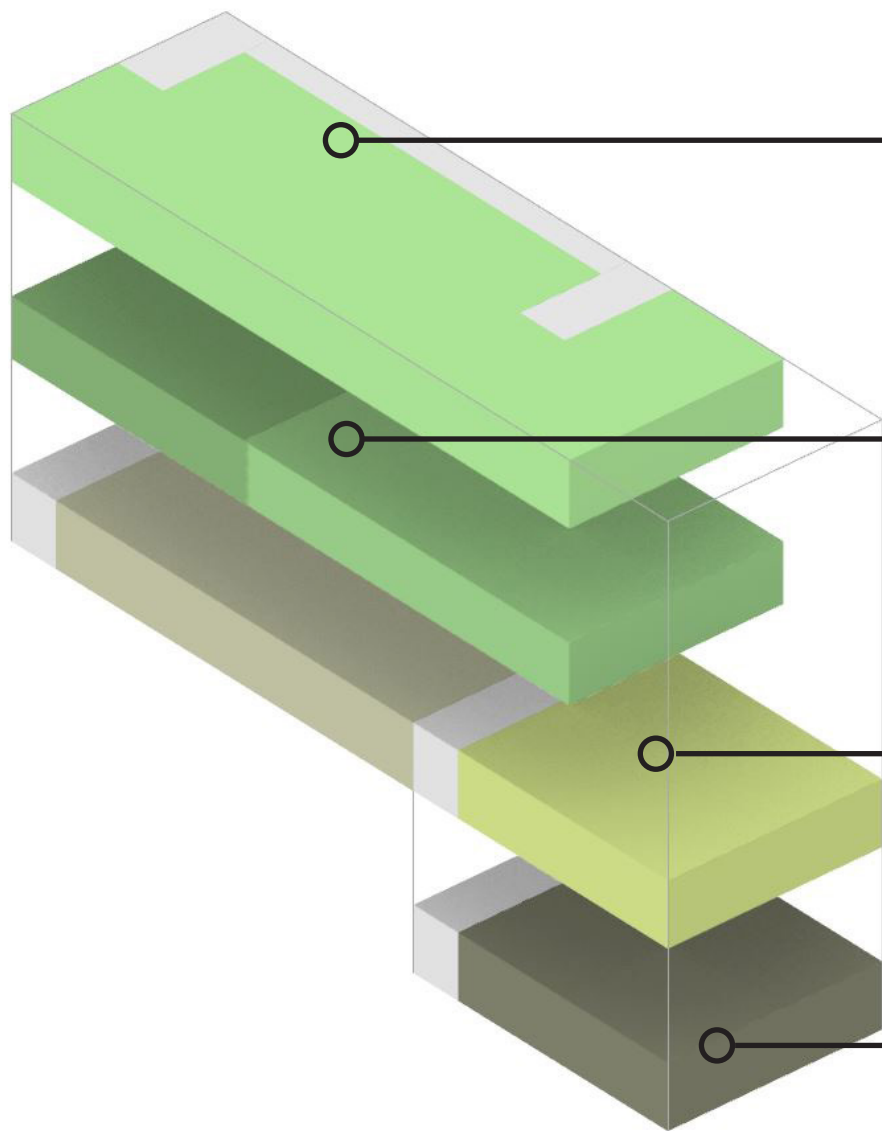
- TS - Town Square
- DC - Downtown Commercial
- UC - Urban Commercial
- LDG - Lodging Overlay



T-20J PLAT MAP
n.t.s.

DEVELOPMENT SCENARIO 1 - DEVELOPMENT POTENTIAL WITH DEED RESTRICTED HOUSING

2,375 sf of employee or affordable housing added to the project.



LEVEL 3

3,980 sf	residential
720 sf	circulation
1,600 sf	exterior patio / pool (not counted toward FAR)

LEVEL 2

2,146 sf	residential
1,735 sf	deed restricted housing
720 sf	circulation
1,699 sf	exterior patios (not counted toward FAR)

STREET LEVEL

1,974 sf	retail
600 sf	circulation
200 sf	utility (not counted toward FAR)
3,400 sf	parking (16 spaces, not counted toward FAR)

BASEMENT

1,974 sf	basement
600 sf	circulation

TOTAL: 11,875 sf DEVELOPMENT POTENTIAL WITH DEED RESTRICTED HOUSING

Affordable Housing Requirement

In this scheme the Affordable Housing requirements are the same. The bonus housing is already affordable so it does not require any additional mitigation.

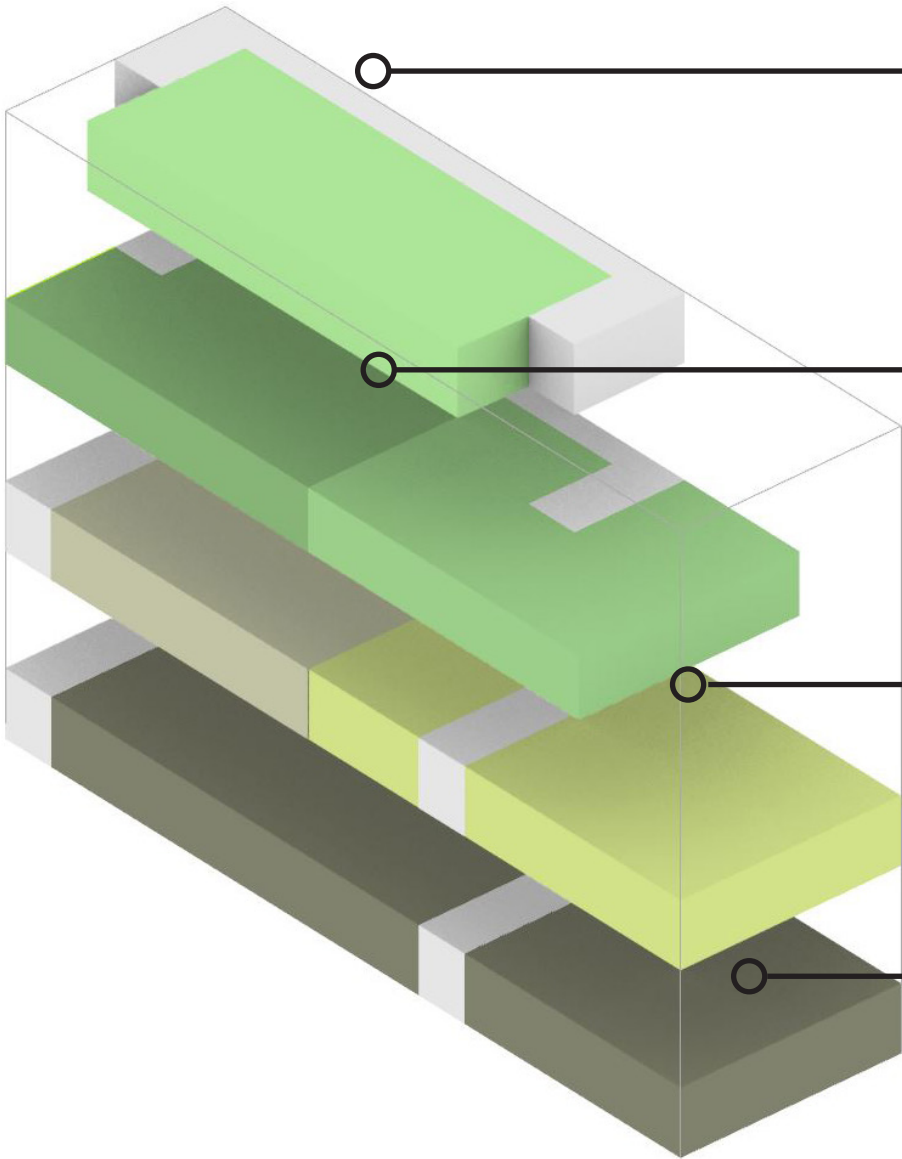
Parking Requirement:

Housing: 7,861 sf x 1.5 parking spaces per 1,000 sf = 11.78 = 12 spaces req'd
Commercial: 1,974 sf x 2.25 parking spaces per 1,000 sf = 4.5 = 5 spaces req'd

17 parking spaces are required. 16 ground level parking spaces can be achieved at a standard 9'x18' size on site leaving 1 parking space. One of the 16 parking credits that exist could be applied.

DEVELOPMENT SCENARIO 2 - LARGER RETAIL & FULL BASEMENT

2,375 sf of employee or affordable housing added to the project.



LEVEL 3

2,255 sf	residential
720 sf	circulation
4,700sf	exterior patio (not counted toward FAR)

LEVEL 2

2,205sf	residential
2,375 sf	deed restricted housing
720 sf	circulation
1,000sf	exterior patios (not counted toward FAR)

STREET LEVEL

3,000 sf	retail
600 sf	circulation
200 sf	utility (not counted toward FAR)
2,500 sf	parking (16 spaces, not counted toward FAR)

BASEMENT

5,400 sf	basement (storage and mechanical)
600 sf	circulation

TOTAL: 11,875 sf DEVELOPMENT POTENTIAL WITH DEED RESTRICTED HOUSING

Affordable Housing Requirement

This scheme proposes a building based on base development potential with the use of the affordable housing bonus for deed restricted housing which can be either affordable or employment based and a 3,000sf retail component. The following assumes that short term rentals would not be proposed which would be a larger housing requirement.

Affordable Housing Units Required		
Retail (3000 s.f.)	=	1.294 affordable housing units
Unrestricted Single-Family Housing Units (4,460 s.f.)	=	0.281 affordable housing units
TOTAL:		1.281 Affordable housing units
Breakdown of Required Affordability and Size		
Rental Units for 50% Median Income		0.575 units
This unit can be a minimum of a 1 Bed/Studio Apartment		
Since this is a partial requirement a fee-in-lieu can be paid which would be approximately \$80,747.		
Rental/Ownership Units for 120% Median Income		1.0 units
This unit must be a min. 2 Bedroom unit		

Parking Requirement:

Housing: 4,460 sf x 1.5 parking spaces per 1,000 sf = 6.7 = 7 spaces req'd
Commercial: 3,000 sf x 2.25 parking spaces per 1,000 sf = 6.75 = 7 spaces req'd

14 spaces would be required and about 10-12 could be achieved on site with ground level parking with a standard 9'x18' size. 16 parking credits exist. so 2-4 could be used to fulfill part of the parking requirement.



VIEW LOOKING NORTHEAST



BROADWAY STREET ELEVATION



ADJACENT ALLEYWAY



BACK OF BUILDING



SIDEWALK LOOKING EAST



TOWN OF JACKSON PLANNING COMMISSION AGENDA DOCUMENTATION

PREPARATION DATE: JUNE 14, 2019
MEETING DATE: JUNE 19, 2019

SUBMITTING DEPARTMENT: PLANNING
DEPARTMENT DIRECTOR: TYLER SINCLAIR
PRESENTER: PAUL ANTHONY

SUBJECT: **ITEM P19-097 & P19-098:** SKETCH PLAN AND ADMINISTRATIVE ADJUSTMENT TO DEVELOP 29-UNIT CONDOMINIUM BUILDING AT 165 AND 185 NORTH GLENWOOD STREET

APPLICANT: ROSEVILLE VENTURES II, LLC

REQUESTED ACTION

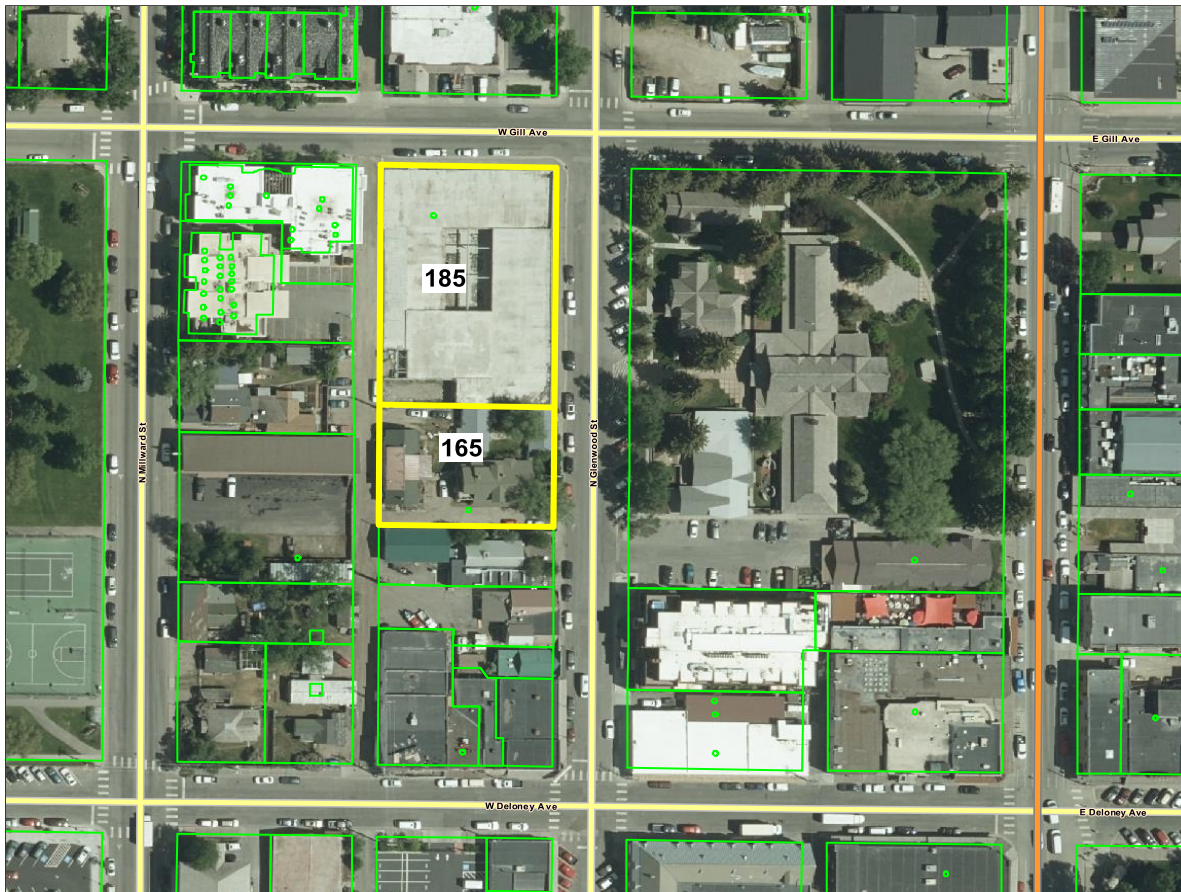
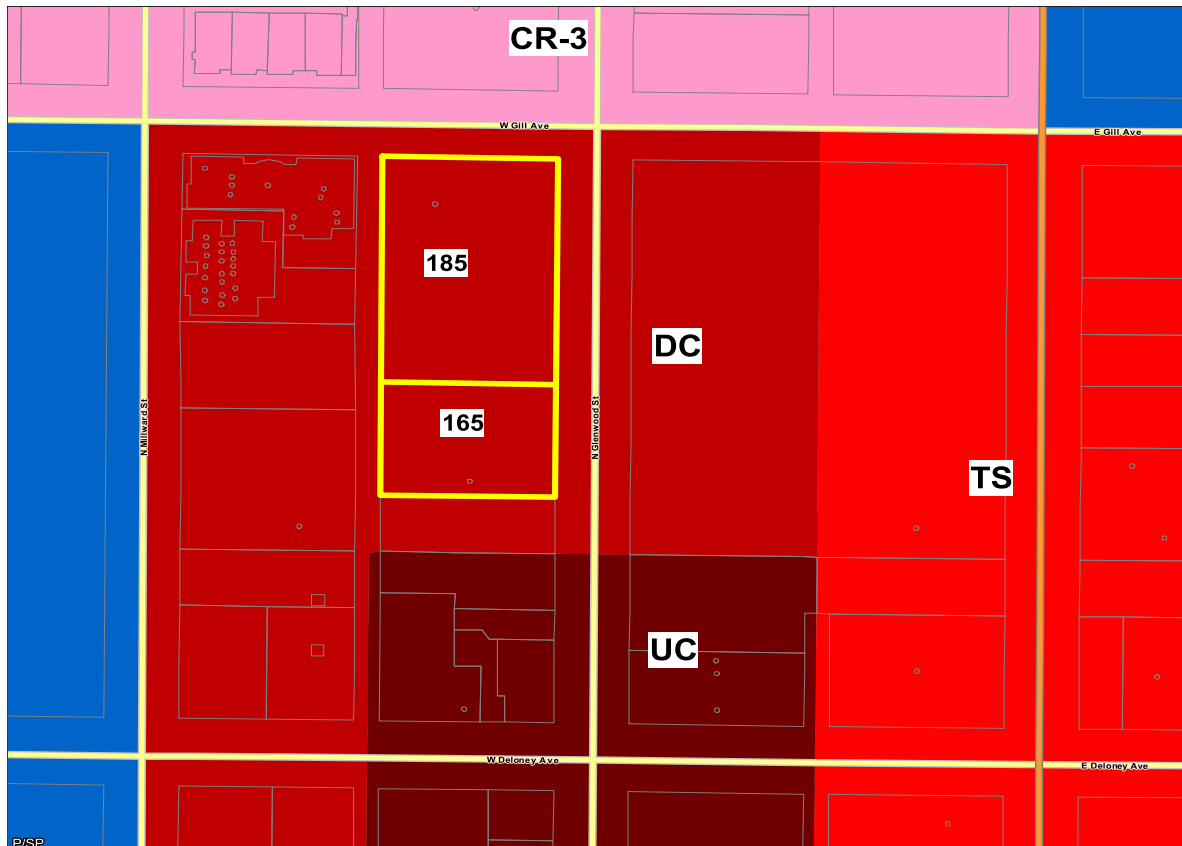
The applicant is requesting approval of a Sketch Plan and Administrative Adjustment for a 29-unit condominium building of residential and short-term rental units for the properties located at 165 and 185 North Glenwood Street.

APPLICABLE REGULATIONS

Section 8.3.1 Sketch Plan
Section 8.8.1 Administrative Adjustment

LOCATION

The property is located at 165 and 185 North Glenwood Street, legally known as Lots 1 – 6, BLK. 6, JACKSON. An aerial photo and zoning map are shown below:



BACKGROUND

The applicant's .96-acre property extends more than half a block and includes 185 North Glenwood (4 lots) and 165 North Glenwood (2 lots). It includes the corner with West Gill Avenue and is adjacent to the alley extending from W. Gill Avenue. It is zoned Downtown Commercial (DC) and located in the Lodging Overlay (LO). The St. Johns Church property is located across the street to the east.

The larger 185 N. Glenwood site currently contains a covered underground parking garage. This structure is the only development on the site and is a remnant from the previous McCabe Corner housing project that was approved in 2007 but never completed. The applicant bought the property in 2012 and soon thereafter covered the then partially complete underground parking garage that was known as the "hole in the ground." The existing garage footprint is located approximately 10' from the curbs on N. Glenwood and W. Gill. The two lots on the 165 N. Glenwood site were acquired by the applicant in 2016 and currently contain a mix of residential and commercial uses in four older structures. The applicant has applied for a demolition permit for all four structures.

PROJECT DESCRIPTION

General Overview

Request #1: Sketch Plan for 29-unit condominiums: The applicant is requesting approval of a Sketch Plan for a 29-unit condominium project in two buildings that will be connected with underground parking (48 spaces, or 62 spaces including tandem spaces). The project will include 15 short-term rental units (which also are allowed long-term residential use), 9 market residential units, and 5 deed-restricted workforce housing units in a total of approximately 89,000 sf of habitable floor area (with about 79,000 sf of that being above ground). The applicant has provided a diagram showing the location and number of each type of unit within the development. The project includes a central courtyard that is accessed from both Glenwood Street and Gill Avenue and provides private open space. All vehicular access and parking will be from the alley that is proposed to be paved by the applicant from the parking entrance north to the intersection with Gill Avenue. Each unit is designed as a 3-story, townhouse that will have a private entrance (no common hallways) from both the underground parking structure and the adjacent street or courtyard.

Request #2: Administrative Adjustment to reduce the Pedestrian Frontage: The applicant is also requesting approval of an Administrative Adjustment to reduce the required Pedestrian frontage from 13'6" to 13'1" on the Glenwood Frontage and to 10'1" on the Gill frontage. The stated justification for the request stems from the fact that the existing garage/building foundation on 185 N. Glenwood is only 10' from the curb and that moving the entire structure back even a few feet to meet the full 13'6' pedestrian width would be unreasonably difficult and expensive. Instead, the applicant is proposing to move the curb 2'8" – 3' to the east (i.e., into the street) on the N. Glenwood frontage. The same Administrative Adjustment is requested for the new building on 165 N. Glenwood because the applicant wants to keep both buildings located in the same plane, rather than setting the 165 N. Glenwood building approximately 5" behind the 185 N. Glenwood building.

Phasing: The applicant's intent is to build the project in two phases. The first phase would start soon after approval, and the second phase would likely commence before Phase 1 was complete but final timing has not been determined. The two phases are summarized below:

Phase 1 (185 Glenwood):

- 20 Units

Above Grade

- 9 Short-term Rental units (base FAR) (25,547 sf)
- 4 free market residential units (base FAR) (9,953 sf)
- 4 free-market residential units (2:1 Bonus) (11,641 sf)
- 3 Workforce Ownership units (2:1 Bonus) (6,451 sf)

Phase 2 (165 Glenwood)

- 9 Units
 - 6 Short-term Rental units (base FAR) (18,035 sf)
 - 0 free market residential units (base FAR) (0.0 sf)
 - 1 free-market residential unit (2:1 Bonus) (3,061 sf)
 - 2 Workforce ownership units (2:1 Bonus) (4,227 sf)

TOTAL:

- Above Grade: 78,915 sf
- All Habitable (includes basements): 89,049 sf

Affordable Housing Credit and Requirement: The applicant calculates that the two properties have a combined housing credit under Sec. 6.3.2.A.1 in the LDRs of 11.62 units. This is based on the historical uses (since December 18, 1995) of Office and Light Industrial uses (former Jackson Hole News and Guide on 185 N. Glenwood), and Retail and Outfitter/Tour Operator uses on 165 N. Glenwood (various retail stores and JH Mountain Guides). The applicant has provided an independent calculation, as required by the LDRs, to determine the housing mitigation credit for the previous Outfitter/Tour Operator use. In summary, the only proposed development that requires housing mitigation are the 15 Short-Term Rentals (which are mitigated at the higher Short-term Rental rate rather than the lower long-term residential rate) and 4 market long-term residential condominiums because the remainder of the units are exempt from mitigation under the Workforce Housing Bonus FAR in Sec. 7.8.4 (see next paragraph). According to the applicant, the non-exempt units generate an affordable housing mitigation requirement of 10.221 units. Thus, their credit of 11.611 units would exceed their affordable housing requirement and so no affordable housing mitigation is proposed for the project.

Workforce Housing Floor Area Bonus: The project is also using the Workforce Housing Floor Area Bonus in Sec. 7.8.4 to allow additional floor area for market and deed-restricted housing (please see the Staff Analysis section for explanation of how the “2:1” FAR bonus works). Using the 2:1 FAR bonus, the applicant is proposing 5 market bonus units (16,608 sf) and 5 Workforce deed-restricted units (11,714 sf), including basements.

STAFF ANALYSIS

Sketch Plan Review

The Sketch Plan is a written and graphic representation of a development concept. The purpose of the Sketch Plan is to represent a proposed development at a preliminary, conceptual level of detail in order to determine general compliance with the Jackson-Teton County Comprehensive Plan and these LDRs. It is through the Sketch Plan process that the Town has the opportunity to identify development-related issues that must be addressed in greater detail during the final Development Plan process. This project requires Sketch Plan because the project’s 53,535 sf of qualifying floor area exceeds the 19,500 sf threshold for a Sketch Plan in the DC Zone. Staff finds that the Sketch Plan is the appropriate process for reviewing the proposed development.

Conformance with the Comprehensive Plan

This site is located Character District 2: Town Commercial Core and Subarea 2.3: Downtown. This is a *Transitional* area intended for redevelopment with a mixture of 2 to 3-story commercial and residential buildings, a high level of pedestrian and transit connection, high-quality public spaces, and a high concentration of tourist-related accommodations and services. Parking should be hidden or underground and buildings should create an attractive street wall to encourage pedestrian activity. Other than street trees, landscaping and green areas are minimal and largely provided on a voluntary basis. Staff finds that the project is consistent with these goals but please see the section on Findings for Sketch Plans for staff's more detailed analysis on the project's conformance with the Comprehensive Plan.

Conformance with Other Applicable Regulations

Staff finds that the applicant complies with the dimensional standards in the DC zone as shown in the table below and discussed further in this section.

	DC	Proposed	Complies?
FAR	1.3 base max (54,363 sf) + 2:1 Workforce Bonus: Determined by proposal	1.29 base (53,535) + 2:1 Workforce Bonus: (28,322 sf (including basements)	Yes
LSR	n/a	n/a	Yes
Plant Units	n/a	n/a (10 street trees provided)	Yes
Minimum Lot Size	n/a for condo/townhome	n/a for condo/townhome	Yes
Height	42' (< 5:12 roof pitch) 46' (≥ 5:12 roof pitch)	38' – 42' (< 5:12 roof pitch)	Yes
Density	n/a	30 units per acre	Yes
Parking	1.5 space per unit = 43.5	48 spaces (62 including tandem)	Yes
Primary Street Setback	0' – 5'	3'	Yes
Secondary Street Setback	0' – 5'	3'	Yes
Side Interior Setback	0' or 5'	5'	Yes
Rear Setback	0' or 5'	5'	Yes
Street Façade Width	80% of primary and secondary street	94% for primary and 87% for secondary	Yes
3rd Story Stepback	10' with 60% encroachment allowed	10' and 59% encroachment	Yes
Pedestrian Frontage	13'6" with Trees in Grate	13'1" (Glenwood) and 10'1" (Gill) both Trees in Grate	Yes (if Admin. Adjust. Approved)

Landscaping

There is no landscaping requirement for this project because the DC zone has no LSR requirement. However, the applicant has provided a preliminary landscaping plan that shows a variety of planter boxes along the front facades and at the entrance of each unit. These plantings not only help to break up the mass of the buildings but they add greenery to the public view while helping to define the public and private realms along the sidewalk. Additional planters are proposed within the private courtyard, and while these planters will not impact the public view, they will create a more inviting semi-private area where residents of the project can enjoy the outside and visit with each other. The project also proposes 9 new street trees (Ash and American Elm) as part of their “Trees in Grate” pedestrian frontage requirement. These trees will provide shade and screening of the project and help to create an attractive sidewalk experience for all users.

Historical and Cultural Resources

There are no existing historical structures or resources on the 185 N. Glenwood site. At this time, the site is entirely developed with an underground parking structure.

The 165 N. Glenwood site currently has four structures. None of these structures are listed on the National register of Historic Places or are designated as a local historic resource (i.e., has a local plaque) by the Teton County Historic Preservation Board’s (TCHPB). It should be noted, however, that all four structures are more than 50 years old and so could be eligible for local designation if the TCHPB finds that one or more of the structures has historical significance.

As stated previously, the applicant has submitted a demolition permit for all four structures on 165 N. Glenwood. As with all demolition permits, the TCHPB has an initial 21-day permit review period in which it has the authority to a request from the Council a 90-day stay from demolition on any structure that is over 50 years old or that it deems to have historical or architectural significance. In this case, the TCHPB found that the two larger structures on the site, called Nurses Quarters A and Nurses Quarters B, have historical significance as part of the history St. John’s Hospital and Church and asked the Council for a 90-day stay. On June 3, 2019, the Council approved a 90-day stay from demolition of both structures.

Site Design

The proposed site plan is consistent with the goals of the DC zone by creating a strong street wall, providing multiple unit entrances, an ample and landscaped sidewalk, an internal pedestrian courtyard that provides private open space, and an underground parking lot that hides all parking from public view. Breaking up the project into two condominium buildings helps to break up the mass of the project. New sidewalks will be installed on both Glenwood Street and Gill Avenue that will significantly improve pedestrian safety and function along the frontage of this project. Street trees and planter boxes will further improve the street experience for residents and visitors alike.

The applicant proposes to pave the alley from Gill Avenue to the parking garage entrance. Paving alleys to accommodate large, new developments that will significantly increase traffic on alleys has become common in recent years. Consistent with this practice, staff has added a condition of approval that the entire alley bordering the project be paved, not just the portion proposed by the applicant. This condition will require an additional 100’ of paved alley.

Building Design

Both buildings are 3-stories with a flat roof design and are a maximum of 42' in height, including the handrails for the rooftop decks. Each unit has a private entrance from either the street or the courtyard and range in size from 1,932 sf to 4,154 sf in mostly 3-br units but with a few 2-br and 4-br units as well. The design uses a 3rd-story stepback and other additive and subtractive elements to vary the façade and roof lines to create interest and shadow lines. The exterior materials are primarily weathered steel, concrete, charred wood, and wood and steel accents.

The rooftop decks will be accessed by a stair tower that will project approximately 10' above the rooftops. According to Section 9.4.9.C.1, structures used exclusively for elevator or stairway access to a roof may exceed the maximum height by up to 10' if the stair tower is not visible from a contiguous street and does not occupy more than 20% of the roof area. The applicant has provided a "sky plane" analysis that demonstrates that the stair towers would not be visible to a 6'-tall person walking on the sidewalk across the streets on Glenwood or Gill. The one exception to this would be that some of the stair towers would be visible when viewed directly from the alley entrance along Gill Avenue, but this does not violate the requirements of the LDRs.

Design Review Committee (DRC) Review

The applicant's Sketch Plan design was approved by the Design Review Committee (DRC) on May 8, 2019 without any conditions of approval. The DRC also reviewed the project on two previous occasions (Nov. 2018, and Feb 2019) as part of a voluntary review process requested by the applicant. Final DRC review of the project will be provided as part of the Development Plan process.

In the course of its review, the DRC became increasingly supportive of the project's site and building design. The primary comments raised by the DRC and addressed satisfactorily up to this point by the applicant include the following:

- **Massing:** There were initial concerns that the Glenwood frontage was very large and the massing needed to be broken up more. There was support also to consider some material modifications and perhaps put less emphasis on verticality with more emphasis on some of the horizontal elements. There also might be opportunities to emphasize the entrances more (e.g., stairs, recessed doors, etc.) to make the building rhythm more interesting. The applicant responded by significantly recessing the front entrance doors and adding stairs, locating planters in front of the 1st-story windows, and increasing the amount of articulation in the front façade.
- **Courtyard:** The internal courtyard is an opportunity to create an interesting mix of shared private space but how to arrange/divide this space is a difficult question. There was some concern that the approx. 30' width between the tall buildings on both sides could feel cavernous and dark. Elevation changes, using stairs or terraces, could help break up and organize the space. Also, because the courtyard will serve as the front entrance for many of the units, this area needs to be well developed and welcoming. Green space may be hard to fit other than in raised planter beds. Most felt that the area should not be restricted with entrance gates but that it would feel private naturally because most members of public will not mistake this area for a public area.
- **Materials:** Cheaper metal panels should be avoided (keep Core 10), especially for the first level close to the public. There was some concern that the charred wood might not weather well over time. But replacing the wood with another metal product was not supported because it would result in potentially too much metal.
- **Windows on 1st Floor:** There was concern that the large windows on the first floor might be excessive and would reduce the privacy of the residents and lead them to block or shade windows all the time. Smaller windows that were raised above the ground level could help to create a more

residential look and function. Perhaps planters or some other interest could be added to provide privacy. While the 1st story windows stayed largely the same size, the applicant added raised planters to partially block views into the units that will increase privacy.

The DRC acknowledged that this project is only at Sketch Plan and so not fully designed. Nevertheless, they were complementary of the evolution of the project and the applicant's willingness to make changes to address the concerns of the DRC.

Vehicular Access/ Circulation/Traffic

Vehicular access to the project will be provided by the existing north-south alley on the west side of the site that leads to the underground parking garage that serves the entire project. Additional overflow or guest parking will be provided by on-street parking as is typical in the downtown area.

While the LDRs do not require a traffic impact analysis for this project (or any project unless it is associated with a Conditional Use or is located on a State Highway), the applicant has provided a traffic analysis submitted previously for the Club Lespri (White Buffalo Club site) and McCabe Corner mixed-use developments located on Gill Avenue between Glenwood and Millward Streets. The McCabe Corner development consisted of 33 condominiums (70% short-term rental / 30% long term residential) and was proposed on the same four lots as Phase 1 of the applicant's project. The background traffic counts for this analysis were conducted mostly in 2002. The study estimated that the McCabe Corner project would produce 153 Average Daily Trips (ADT) but then reduced this number to 122 ADT based on the downtown location of the development that would allow residents to walk, bike, or take transit to many of the jobs, entertainment, and services close to the development. The analysis concluded that this level of ADT (including an additional 267 ADT from the Club Lespri development) would add minor additional delays to the Gill intersection but that these delays "should not significantly reduce levels of service and therefore should not warrant any traffic mediation efforts."

Due to the fact that the McCabe Corner and proposed projects are not identical, that the background traffic volumes have changed, and that recent development in the surrounding neighborhood has significantly changed, staff is not comfortable using the analysis to make any hard conclusions or recommendations. Even so, it should be noted that the proposed 29 units (15 short-term rental and 14 long-term residential) would generate far fewer ADT than the combined projects analyzed in the submitted traffic analysis, so significant impacts are not likely or expected. And, again, given that no traffic analysis is required or was requested by Planning staff, staff does not believe that an updated traffic impact is necessary in the first place. The general rule is that by-right development located within downtown's street grid can be accommodated by the existing street network.

Affordable/Employee/Workforce Housing

Sec. 6.3.2.A.1 in the LDRs allows properties to get an affordable housing "credit" for any uses on the site established from December 19, 1995 to the present. Essentially, whichever uses generate the highest mitigation requirement during this period create a credit of equal value that can be used to offset the housing requirement of new development or redevelopment on the same site.

The below table provides a summary of the affordable housing mitigation plan. Additional detail is provided after the table.

Affordable Housing Mitigation Summary

Mitigation Requirement (Base 1.3 FAR)	Mitigation Requirement (2:1 Workforce FAR Bonus)
<i>Proposed: 53,535 sf</i> Requirement: 10.22 deed-restricted units Credit for existing/historical uses: - Office (JH News and Guide office) = 3.91 units - Light Industry (JH News and Guide press) = 1.51 units - Retail (various businesses) = 0.627 units - Outfitter/Tour Operator (JH Mountain Guides) = 5.56 units (see independent calculation) Total Credits = 11.61 units (see below for explanation) Complies: 1.39 units of credit remaining	<i>Proposed: 28,322 sf (not including basements)</i> 14,702 sf of market housing (5 units) 10,678 sf of Workforce housing (5 units) Requirement @ 2:1 = 18,881 sf (market) : 9,441 sf (Workforce) Complies: Applicant proposes 1,237 sf of Workforce housing in excess of requirement

Affordable Housing Requirement (Base 1.3 FAR)

The applicant has provided a housing calculation worksheet that shows a housing credit of 11.611 units. This credit is derived from four previous uses on both properties: 1) Office (JH News and Guide office); 2) Light Industry (JH News and Guide press); 3) Retail (various businesses); and 4) Outfitter/Tour Operator (JH Mountain Guides). The proposed project, which includes 15 Short-Term Rentals and 4 market long-term residential condominiums built using the 1.3 base FAR, generates an affordable housing mitigation requirement of 10.221 units. Thus, their credit of 11.611 units is more than enough to meet their affordable housing requirement and so no affordable housing mitigation is required for the project.

Workforce Housing FAR Bonus (2:1 Bonus)

In addition to the base FAR, applicants in the DC zone have the option to increase residential development potential by using the Workforce Housing FAR Bonus in Section 7.8.4. In summary, this bonus allows developers to add 2 sf of market residential floor area to a project for every 1 sf of deed-restricted workforce housing they provide. The deed-restriction required for this option is a Workforce ownership or rental restriction that has no income limits or initial sales price caps (see below summary for major terms of this deed restriction). Sometimes called the “fill the box” or “2:1” option, this tool typically applies after the base floor area (FAR) has been used up, including any required mitigated housing. Any bonus floor area allowed by the bonus tool must comply with all regular zoning requirements for setbacks, height, parking, etc. — i.e., all bonus floor area must fit in the “box” defined by the zone’s dimensional standards without the need for variances or administrative adjustments. Bonus market floor area can be used only for residential units (i.e., no commercial uses, such as short-term rentals, are allowed). The purpose of the 2:1 tool is to encourage the market to build deed-restricted workforce housing in desired locations without any taxpayer subsidy.

Using the Workforce bonus, the project proposes a total of 5 market residential units (14,702 sf) and 5 deed restricted units (10,678) – not including basements. This ratio of 14,702:10,678 exceeds the required 2:1

bonus requirement so staff finds that the projects meets the Workforce Housing Bonus ratio requirements. All workforce units will be required to meet the Housing Department's livability standards (e.g., storage, outdoor space, etc.). Considering the proposed workforce units are quite large (1,932 sf - 2,943 sf), staff anticipates few issues meeting the livability standards.

The applicant will be required to record a Workforce Ownership deed restriction prior to Certificate of Occupancy for the units. Below is a summary of the primary terms of the Workforce Ownership deed restriction:

- *Initial sales price:* Set by owner with no restrictions
- *Subsequent sales price:* Limited to 2.5% annual appreciation
- *Income restriction:* None
- *Ownership of real estate:* Not within 150 miles of Teton County
- *Employment:* Average of 30 hrs/wk and 75% of income from local business
- *Occupancy requirement:* 10 month / year minimum

Development Exactions

The proposed project includes 29 condominium units. Each unit, therefore, will generate demand for schools and parks that must be mitigated according to Division 7.5: Development Exactions Standards. The applicant has provided initial exaction requirements of \$78,300 for parks and \$43,500 for schools. The final school and park exactions will be calculated as part of the Development Plan approval and will be due at the time of subdivision plat approval.

Administrative Adjustment for Pedestrian Frontage

Section 2.2.1.C (final paragraph) in the LDRs allows the Planning Director to establish a lesser pedestrian frontage pursuant to the Administrative Adjustment procedure in Section 8.8.1. Rather than setting an objective standard to limit the extent of the modification, such as the 20% applied to many of the standards subject to Administrative Adjustments, the LDRs state the pedestrian frontage can be modified to be more consistent with the existing sidewalk and the desired pedestrian frontages in the Community Streets Plan.

Again, the applicant's request is to reduce the required "Trees in Grate" pedestrian frontage from 13'6" to 13'1" on the Glenwood frontage and to 10'1" on the Gill frontage. This request includes the request to move the existing west curb on N. Glenwood 2'8" – 3' to the east (i.e., narrow the road) to create additional room for the sidewalk. The immediate reason for request is that the existing foundation of the parking garage on 185 N. Glenwood is located approximately 10' from the existing curbs on Glenwood and Gill. To be clear, the applicant is seeking the same Administrative Adjustment for the proposed new building on 165 N. Glenwood because they would like both buildings to be lined up in the same location/plane. Staff agrees with the applicant's basic contention that it would be impractical and unreasonably expensive to require the applicant to move the existing foundation back 3' to meet the pedestrian frontage. We also agree that moving the curb is a good idea to create a larger sidewalk (see next paragraph for more on this issue) and to reduce the extent of the Administrative Adjustment. While it could be argued that the new structure on 165 N. Glenwood should not be given the same flexibility because it has no existing parking structure, the applicant's desire to evenly line up both building facades is reasonable and aesthetically beneficial. Plus, since the Administrative Adjustment is only 5" (assuming the curb is relocated), requiring a 5" off-set would not be noticeable or serve any other public interest.

The applicant has had preliminary discussions with the Town Engineer about this change and has received conceptual support. While moving the curb would narrow Glenwood Street by up to 3 feet, there would still

remain enough space curb-to-curb to safely accommodate parallel parking (west side), two 11'-wide drive lanes, and the existing angled parking on the east side. Planning staff finds that the benefits of moving the curb (e.g., increasing pedestrian safety and improving the streetscape with street trees) outweigh any potential side effects of narrowing the street. If the curb relocation is approved, then the applicant is asking for only a 5" Administrative Adjustment from the 13'6" requirement on the Glenwood frontage. Planning staff finds this to be a reasonable request and intended to better fit into the existing (and future) sidewalk context on Glenwood Street. While final plans for the curb relocation still need to be made, staff is comfortable with approving the requested Administrative Adjustment with the condition that final design approval be obtained from the Town Engineer and Planning Director prior to approval of the Building Permit. And if the Council does not support moving the curb, then the request would be for a 3'6" Administrative Adjustment to allow a 10' pedestrian frontage where 13'6" is required. Staff would support this request as well because the existing building located is not the applicant's fault and some accommodation is necessary.

On the Gill Avenue side, there is no request to relocate the curb so the extent of the Administrative Adjustment is greater at approximately 3'5". If approved, this would leave a 6'-wide clear pedestrian walkway (as required), a 4' landscape/street tree zone where 5' is otherwise required, and no 2.5 "building transition area," which is where additional space is provided to allow for swinging doors, planters, etc. However, based on the proposed design of the Gill frontage (which includes recessed front door that will not encroach into the sidewalk and planters integrated into the building design), and given the existing location of the building foundation, staff finds that a 10'1" sidewalk will provide adequate pedestrian movement, especially with the paver design that extends the usable area for walking to 10' between trees. In addition, this sidewalk width would essentially match the existing sidewalk on Gill in front of the White Buffalo to the West. Again, staff recommends approval of the Administrative Adjustment with the condition of approval that final design approval be obtained from the Town Engineer and Planning Director prior to approval of the Building Permit.

Consistent with staff's previous approach, even though the Planning Director is typically the final decision-maker on Administrative Adjustments, whenever a request for an Administrative Adjustment is contained within a larger application that requires Council approval, the Planning Director elevates approval to the Council for the final decision. Please see below the findings for an Administrative Adjustment as drafted by staff.

PUBLIC COMMENT

The Planning Department has received one public comment from Reverend Jimmy Bartz, rector of St. John's Episcopal Church, who expressed concern that narrowing Glenwood Street by up to 3 feet for the Administrative Adjustment would compromise traffic movement on Glenwood and reduce snow storage.

STAFF FINDINGS

Item A: Sketch Plan. All Sketch 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.*

This site is located Character District 2: Town Commercial Core and Subarea 2.3: Downtown of the 2012 Comprehensive Plan. The following is the vision for Subarea 2.3:

Sub-area 2.3 Downtown Commercial Core: This large, mixed use, TRANSITIONAL Subarea currently consists of a variety of retail, restaurant, office and other commercial activities, along with long-term residences and lodging in a variety of building sizes and forms. Downtown is the center of civic, cultural, economic, and social activity in the community as well as the center of the visitor experience, as a significant amount of lodging is located here. The existing character and built form is varied and inconsistent.

The goal of this subarea is to create a vibrant mixed use area by accommodating a variety of uses and amenities. The subarea will be the starting point for the development of a refined Lodging Overlay boundary and future discussion of the type and size of lodging desired. A key challenge will be to provide a balance between lodging and long-term residential housing. Future structures will be predominantly mixed use, while multifamily structures will be allowed if it properly addresses the street. Commercial uses that create an active and engaging pedestrian experience will be predominantly located on the first and second floors of buildings. Examples of these uses include restaurants, bars, a variety of retail shops and commercial amusement. Furthermore, as portions of the subarea will be located within a future Downtown Retail Shopping District, uses such as office, residential and lodging will be predominantly located on upper floors.

A goal of this subarea will be to create a consistent building size and form. In the future, a variety of two to three story buildings are desired. Buildings should be located to create an attractive street wall and take advantage of good urban design principles including massing, articulation and the provision of public space. The pedestrian realm will be of great importance in this mixed use subarea, and emphasis should be placed on adding improvements focusing on the pedestrian experience. Parking should continue to be provided predominately in public lots and on street to create a vibrant, walkable area that is oriented to the pedestrian. On-site parking should be predominantly underground or screened from view. Future redevelopment should enhance the Flat Creek corridor for recreational and ecological purposes. Buildings should front onto the creek to provide opportunities for interaction and enjoyment of this community resource.

Complies. The proposed project meets the general purpose and goals of Subarea 2.3. In particular, by providing underground parking, an attractive street wall, a mix of visitor and residential uses, and urban-type landscaping (e.g., planter boxes), the project has addressed many of the desired characteristics for this part of Town. In addition, the DRC has reviewed this project and approved it for Sketch Plan with positive comments regarding the site design, interior courtyard, architectural style, and streetscape. Finally, the applicant's use of the 2:1 Workforce Bonus meets the Comprehensive Plan's goals of creating deed-restricted workforce housing in locations close to jobs, services, and transit.

Common Value 1: Ecosystem Stewardship

Not Applicable.

Common Value 2: Growth Management

Policy 4.1.b: Emphasize a variety of housing types, including deed-restricted housing

Complies. Staff finds that by providing five voluntary Workforce deed-restricted units (10,678 sf total), the proposed development meets this policy goal.

4.1.d: Maintain Jackson as the economic center of the region

Complies. The proposed redevelopment will redevelop a site that has been called “The Hole in the Ground” for over ten years. Replacing this eyesore with a new short-term rental ownership units and other residential housing will help support the “lights on” goals for downtown by adding visitors and new residents within easy walking distance to all the shops, amenities, and transportation options of downtown Jackson.

4.2.c: Create vibrant walkable mixed use subareas

Complies. The proposed mixed-use redevelopment will improve the sidewalks on Glenwood Street and Gill Avenue with a wider, safer, and more functional sidewalk. In addition, the proposed development will add tourist-oriented services within the pedestrian heart of downtown.

4.2.d: Create a Downtown Retail Shopping District

Complies: While no retail is proposed with this project, the addition of visitor lodging facilities and more long-term residents within easy walking distance of the stores and restaurants of downtown will help support a vibrant, year-round retail district in the downtown.

4.2.f: Maintain lodging as a key component in the downtown

Complies. The proposed project will add 15 short-term rental ownership unit very close to the Town Square Area.

4.4.b: Enhance Jackson gateways

Not applicable.

Policy 4.4.d: Enhance natural features in the built environment

Not applicable.

Common Value 3: Quality of Life

Policy 5.2.d: Encourage deed-restricted rental units

Complies. Staff finds that by providing five voluntary Workforce deed-restricted units (10,678 sf total), the proposed development meets this policy goal.

6.2.b: Support businesses located in the community because of our lifestyle

Not applicable.

6.2.c: Encourage local entrepreneurial opportunities

Not applicable.

6.3.a: Ensure year-round economic viability

Complies. While no retail is proposed with this project, the addition of visitor lodging facilities and more long-term residents within easy walking distance of the stores and restaurants of downtown will help support a vibrant, year-round retail district in the downtown.

7.1.c: Increase the capacity for use of alternative transportation modes

Complies. The proposed redevelopment will provide visitor accommodations and housing in the heart of downtown Jackson where all of the alternative modes of travel – walking, biking, and transit – are convenient and readily available.

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 proposed project will not have significant impacts on public facilities and infrastructure.

4. *The proposed project complies with all relevant standards of these LDRs and other Town Ordinances as can be determined by the level of detail of a sketch plan.*

Complies. Staff finds that the application meets the base and bonus standards of the LDRs.

5. *The proposed project is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.*

Not applicable.

Item B: Pursuant to Section 8.8.1 Administrative Adjustment of the Land Development Regulations, the findings for an Administrative Adjustment Section 8.8.1.C must be made:

A. Purpose

The purpose of an administrative adjustment is to allow minor adjustments to certain requirements and numerical standards in these LDRs based on specific review standards. The intent is to provide relief when application of a standard creates practical difficulties in advancement of Comprehensive Plan goals or zoning district purposes.

B. Applicability

An application may be made for administrative adjustment of the following standards of the LDRs per Subsection B. Applicability

1. *Landscape Surface Ratio may be adjusted up to 20%.*
2. *Structure setbacks, not including setbacks from natural resources, may be adjusted up to 20%.*
3. *Site development setbacks, not including setbacks from natural resources, may be adjusted up to 20%.*

4. *Fencing height and setbacks may be adjusted up to 20%.*
5. *Grade of developable slopes may be adjusted up to 20%.*
6. *Any dimensional standard of a building frontage may be adjusted up to 20%*
7. *Building façade width may be adjusted up to 20%*
8. *Wildlife friendly fencing may be adjusted as allowed by 5.1.2.E.*
9. *Standard plant units may be adjusted as allowed by 5.5.3.F.3.*
10. *Sign standards may be adjusted as allowed by 5.6.1.B.2*
11. *Parking requirement may be adjusted as allowed by 6.2.2.A.1.*
12. *Pedestrian frontage standards may be adjusted as allowed by 2.2.1.C*

Staff finds that the request for approval of a minor adjustment to the “Trees in Grate” pedestrian frontage meets the applicability of allowance #12 above.

C. Findings

An administrative adjustment shall be approved upon finding the application:

1. *Complies with the applicability standards of this Section;*

Complies. As stated above, the application is in compliance with allowance #12 of the applicability requirements.

2. *Either:*

- a. Compensates for some unusual constraint of the site or proposal that is not shared by landowners generally, or*
- b. Better protects natural and scenic resources, or*
- c. Better supports the purpose of the zone;*

Complies. Based upon Finding 2.a, staff finds that because the site is already developed with a foundation and underground parking structure that cannot be removed or relocated without great effort or expense, that the requested adjustment helps to compensate for this existing condition.

3. *Is consistent with the purpose of the zone and the desired future character for the area described in the Comprehensive Plan;*

District 2: Town Commercial Core

Subarea 2.3: Downtown

Classification: Transitional

Neighborhood Form: Town

Complies. Please see the Comprehensive Plan findings above in Finding #1 for Item A (Sketch Plan). The approval of the pedestrian frontage request would help to create a wider, safer, and more attractive sidewalk for visitors and residents of the project as well as for all pedestrians walking along the site. Promoting walking and creating inviting and functional streetscapes are central goals of the DC zone.

In addition, staff finds that the application should be reviewed for consistency specifically with subarea 2.3 Downtown, which states as follows as the desired vision for the subarea:

This large, mixed use, TRANSITIONAL Subarea currently consists of a variety of retail, restaurant, office and other commercial activities, along with long-term residences and lodging in a variety of building sizes and forms. Downtown is the center of civic, cultural, economic, and social activity in

the community as well as the center of the visitor experience, as a significant amount of lodging is located here. The existing character and built form is varied and inconsistent.

The goal of this subarea is to create a vibrant mixed use area by accommodating a variety of uses and amenities. The subarea will be the starting point for the development of a refined Lodging Overlay boundary and future discussion of the type and size of lodging desired. A key challenge will be to provide a balance between lodging and long-term residential housing. Future structures will be predominantly mixed use, while multifamily structures will be allowed if it properly addresses the street. Commercial uses that create an active and engaging pedestrian experience will be predominantly located on the first and second floors of buildings. Examples of these uses include restaurants, bars, a variety of retail shops and commercial amusement. Furthermore, as portions of the subarea will be located within a future Downtown Retail Shopping District, uses such as office, residential and lodging will be predominantly located on upper floors.

A goal of this subarea will be to create a consistent building size and form. In the future, a variety of two to three story buildings are desired. Buildings should be located to create an attractive street wall and take advantage of good urban design principles including massing, articulation and the provision of public space. The pedestrian realm will be of great importance in this mixed use subarea, and emphasis should be placed on adding improvements focusing on the pedestrian experience. Parking should continue to be provided predominately in public lots and on street to create a vibrant, walkable area that is oriented to the pedestrian. On-site parking should be predominantly underground or screened from view. Future redevelopment should enhance the Flat Creek corridor for recreational and ecological purposes. Buildings should front onto the creek to provide opportunities for interaction and enjoyment of this community resource.

Complies. Staff finds that the project will create a more vibrant pedestrian realm that will help to support the character goals in the above-described vision for Subarea 2.3. Furthermore, by supporting the proposed project, which includes both visitor accommodations and long-term residential housing, the administrative adjustment will have the larger benefit of supporting the vitality of the Town Square area.

4. *Will not pose a danger to the public health or safety; and*

Complies. While approval of the request would result in Glenwood Street being reduced in width by up to 3 feet, the preliminary direction from the Town Engineer is that the street will remain wide enough to safely accommodate the Town's desired cross section of one lane of parallel parking, two travel lanes, and angled parking. In addition, the request would improve pedestrian safety if approved, so staff finds that the modest request should not pose a danger to the public health or safety.

5. *The site is not subject to a series of incremental administrative adjustments that circumvent the purpose of this Section.*

Complies. This property has not been the subject of previous administrative adjustments and there is no apparent indication that future administrative adjustments are planned or necessary.

ATTACHMENTS

Department Reviews
Applicant Submittal
Public comment

RECOMMENDATIONS/ CONDITIONS OF APPROVAL

Item A: The Planning Director recommends **approval** of the Administrative Adjustment P19-098 to reduce the pedestrian frontage “Trees in Grate” pedestrian frontage from 13’6” to 13’1” on the Glenwood frontage and to 10’1” on the Gill frontage for the property located at 185 North Glenwood Street, subject to one condition of approval.

1. Final design approval of the curb and Glenwood Street cross section shall be obtained from the Town Engineer and Planning Director prior to approval of the Building Permit.

Item B: The Planning Director recommends **approval** of a Sketch Plan P19-097 for a 29-unit condominium building for the property located at 165 and 185 North Glenwood Street, subject to the department reviews and the following conditions.

- 1) The applicant shall pave the alley adjacent to the property for the full length of the 300’-wide project site.
- 2) As part of the Development Plan submittal, the applicant shall clarify how they plan to ensure that long-term residential units are not used for short-term rental use.

SUGGESTED MOTIONS

Item A: Based on the findings as presented in the staff report and made by the applicant for an **Administrative Adjustment** (Item P19-098), I move to make findings 1-5 in Section 8.8.1.C of the Land Development Regulations relating to 1) applicability; 2) unusual constraint, better protects natural or visual resources, or better supports purpose of zone; 3) consistency with zone or Comprehensive Plan; 4) danger to public safety; and 5) incremental administrative adjustments, and to **recommend approval** to the Town Council of an Administrative Adjustment to reduce to reduce the pedestrian frontage “Trees in Grate” pedestrian frontage from 13’6” to 13’1” on the Glenwood frontage and to 10’1” on the Gill frontage for the property located at 185 North Glenwood Street, legally known as Lots 1 – 4, BLK. 6, JACKSON, subject to the departmental reviews and one condition of approval.

1. Final design approval of the curb and Glenwood Street cross section shall be obtained from the Town Engineer and Planning Director prior to approval of the Building Permit.

Item B: Based upon the findings as presented in the staff report and made by the applicant for a **Sketch Plan** (Item P19-097), I move to make findings 1-5 in Section 8.3.13.C of the Land Development Regulations related to 1) Consistency with the Comprehensive Plan; 2) Achieves purpose of NRO & SRO overlays; 3) Impact of public facilities & services; 4) Compliance with relevant LDRs & Town Ordinances; 5) Conformance with past permits & approvals, and to **recommend approval** to the Town Council of a Sketch Plan for a 29-unit condominium building for the property located at 165 and 185 North Glenwood Street, legally known as Lots 1 – 6, BLK. 6, JACKSON, subject to the departmental reviews and the following conditions.

1. The applicant shall pave the alley adjacent to the property for the full length of the 300’-wide project site.
2. As part of the Development Plan submittal, the applicant shall clarify how they plan to ensure that long-term residential units are not used for short-term rental use.

PLANNING

Project Number	P19-097	Applied	5/1/2019	STOL
Project Name	Sketch Plan - Glenwood Gill Condos	Approved		
Type	SKETCH PLAN	Closed		
Subtype		Expired		
Status	STAFF REVIEW	Status		
Applicant	Nick Orthmann	Owner	ROSEVILLE VENTURES II, LLC	
Site Address		City	State	Zip
185 N GLENWOOD STREET	JACKSON	WY	83001	
Subdivision	Parcel No	General Plan		
JACKSON ORIGINAL-TOWNSITE	22411628410001			

Type of Review	Status	Dates			Remarks
Contact		Sent	Due	Received	
Notes					
Building Kelly Sluder (5/2/2019 10:07 AM KS) Construction drawings must meet the current adopted version of the IBC and local amendments.	APPROVED W/CONDITI	5/1/2019	5/22/2019	5/2/2019	
Fire Kathy Clay	APPROVED W/CONDITI	5/1/2019	5/22/2019	5/3/2019	See Notes

Type of Review	Status	Dates			
		Sent	Due	Received	Remarks
Contact					
Notes					
TO:	Paul Anthony, Principal Planner				
FROM:	Kathy Clay, Fire Marshal				
DATE:	May 3, 2019				
SUBJECT:	165, 185 N. Glenwood Street Glenwood/Gill Condominiums P19-097				

This office has received the request for a sketch plan and administrative adjustment review at the above location. The most current edition of the International Fire Code (IFC) and the 2017 edition of the National Electric Code (NEC) shall be used for building design.

Comments include, but are not limited to:

General Requirements

1. Fire apparatus access shall be provided. (2015 IFC 503.1.1)
2. Visible address numbers, a minimum of 4 inches in height and 0.5-inch stroke width, shall be installed on all structures. (IFC 505.1)
3. Portable fire extinguishers shall be placed in accordance with code requirements. (IFC 906).
4. Interior finishes shall meet fire code requirements. (IFC Chapter 8)
Finishes including walls, ceilings, interior trim, furniture, furnishing, window treatments, decorative materials and decorative vegetation in building shall meet the allowed flame spread and smoke development indexes. Information to be provided on the finish schedule includes application location, model number/name, color, attachment system, manufacturer contact information, the flame spread class and smoke development rating of the product and allowed finish as outlined in table 803.3. Vendor data submittal information needs to be provided for each interior finish showing flame spread and smoke development certifications.
5. Means of egress shall meet fire code requirements. (IFC Chapter 10)
6. The means of egress, including exit discharge, shall be illuminated at all times building space served by means of egress is occupied. (IFC 1008.1)
7. Illumination shall be provided in the means of egress in accordance with (1008.2). Under emergency power, means of egress illumination shall comply with (1008.3).
8. Any hazardous material storage shall meet fire code requirement.(IFC Chapter 27)
9. Should any fuel-fired appliances be installed, requirements for carbon monoxide detection shall be followed. (IFC 915)
10. Final fire inspection shall be required before certificate of occupancy is released.
11. The construction documents shall be prepared by a registered design professional. Architectural stamp needs to be shown on the plans. Stamp and resubmit the construction plans. (IFC 105.4)
12. Fire protection systems plans submitted to Fire Department for review shall consist of one set of paper plans and one set of electronic plans (CD, thumb drive, or PDF format).

Sprinklers

1. Jackson Hole Fire/EMS does NOT review hydraulic calculations. Hydraulic calculations are the sole responsibility of the certified sprinkler designer.
2. As determined by the Building Official and the International Building Code, the structure will have an automatic fire sprinkler system in accordance with appropriate NFPA standard for the occupancy type, at this time, NFPA 13R appears appropriate. (IFC 903.2.7)
3. Fire Department Connection (FDC) location shall be determined by the AHJ and noted in the fire sprinkler plan review.
4. Knox Box shall be installed in an approved location at each structure having a fire sprinkler system. (IFC 506.1)
5. Water main shall be installed in accordance to NFPA 13 and NFPA 24 to provide for proper clearances, seismic requirements, flushing and hydro testing. (IFC 901.4.1)
6. Fire flow requirements shall meet Appendix B of the International Fire Code.
7. Pitot water flow test is required on all new fire sprinkler installations for NFPA 13R and NFPA 13 systems. Plans will not be approved without certified test. (NFPA 291)
8. Horn/strobe shall be installed above the fire department connection. (IFC 912.2.2.1)

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					
9. ***Room which houses fire sprinkler riser shall be no less than 5' x 7' in dimension and shall be accessible from outside grade. (IFC 903.2.11.1.1)					
Alarms					
10. Building shall have a complete alarm system per NFPA 72. A full set of fire alarm plans from a fire alarm contractor shall be submitted with all calculations and cut sheets of all equipment. (IFC Chapter 9)					
11. Tactile appliances shall be installed where needed to notify occupants unable to see or hear emergency alarms, per most current edition of NFPA 72.					
12. Audible appliances provided for the sleeping areas to awaken occupants shall produce a low frequency alarm signal per most current edition of NFPA 72.					
13. Any structure with Group R occupancy shall have required carbon monoxide detection as required. (IFC 915.1)					

Please feel free to contact me if you have any further questions at 307-733-4732.

Joint Housing Dept APPROVED W/CONDITI 5/1/2019 5/22/2019 5/21/2019 See Notes
 Stacy Stoker
 (5/21/2019 2:48 PM SAS)

The applicant is proposing 5 Workforce housing units. These units must be in compliance with the Livability Standards in the Housing Rules and Regulations. The Livability Standards Questionnaire shall be completed by the applicant and submitted to the Housing Department. The questionnaire can be obtained from the Housing Department. The Housing Department will review to ensure the units comply. A copy of the Livability Standards are available from the Housing Department and can be found on the Housing Department website.

Prior to Certificate of Occupancy, the Housing Department shall inspect the units, and a Workforce Housing Special Restriction shall be recorded on each of the Workforce units.

Legal APPROVED W/CONDITI 5/1/2019 5/22/2019 5/14/2019
 Lea Colasuonno
 (5/14/2019 5:44 PM LC)

Legal has no comment at this time though may as the project moves through the Planning process. It is noteworthy that the traffic study is from 2007 and has not been updated at this time.

Parks and Rec APPROVED W/CONDITI 5/1/2019 5/22/2019 5/15/2019
 Steve Ashworth
 (5/15/2019 3:30 PM STOL)

Tiffany,
 Landscape plan and tree proposals look good. Plans reference 'pavers with trees in grates (per TOJ standards)'. Would request that the tree boxes and grates are consistent with the ones on North Cache St. We need to establish consistent design and implementation of boxes and grates throughout the town. The design of these boxes hold up better in the winter and require less long term maintenance. I have not seen specifications on these boxes from the Town but in discussions with Public Works and Staff the ones on North Cache streetscape are the preferred design.

Andy Erskine, CPSI

Pathways APPROVED W/CONDITI 5/1/2019 5/22/2019 5/15/2019
 Brian Schilling

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					
(5/15/2019 4:19 PM STOL)					
P19-097, 098, 099 - 165 and 185 N Glenwood Sketch Plan and Admin Adjustment					
Comments from Teton County/TOJ Pathways Department					
Status: approved w/conditions					
• Sidewalks/Street Frontage - o Staff concurs with the proposed adjustments to the streetscapes on Glenwood and Gill. - o Staff appreciates the options provided for intersection treatments. • Continuous sidewalk - o Sidewalks shall be continuous when crossing access driveways and alleys. - o The concrete sidewalk surface and texture shall continue uninterrupted across the entire access driveway. The sidewalk shall be constructed so that it remains at a consistent vertical alignment with the sidewalk legs on either side of the driveway. I.e., the sidewalk shall not ramp down when crossing the driveway access, rather the driveway should rise to the level of the sidewalk. Any vertical change from the street elevation to the sidewalk elevation should be restricted to the driveway apron in the buffer space between the sidewalk and street. • Bike Parking - o The amount of short term bike parking noted on the plans seems inadequate. Given the location of the development in the heart of downtown, staff expects there to be a significant demand for short-term bike parking (i.e. quick access bike parking that doesn't require residents to bring bikes inside the building or individual units). - o Short-term parking (for visitors or guests parking for a few hours or less): the recommended style for short-term bike parking is the "single inverted-U" rack. "Wave," "ribbon," and "toaster" style racks shall not be used. The best location for a rack area is immediately adjacent to the entrance it serves. Bike parking should be hardscaped and should not obstruct pedestrian flow. - o Rack type and storage locations should be shown on site plans. - o Staff supports including the bike parking towards the landscape surfacing requirement so that bike parking does not negatively impact the applicant's landscape requirements. Conversion of a car parking spot to bike parking would also be supported. - o Jackson Hole Community Pathways will be happy to provide additional background information and guidance on site selection, layout, rack selection, and rack installation.					
Planning	APPROVED W/CONDITI	5/1/2019	5/22/2019	6/3/2019	
Paul Anthony					
See staff report for Planning Department comments.					
Police	APPROVED W/CONDITI	5/1/2019	5/22/2019	5/6/2019	very old traffic study 13 yrs
Todd Smith					
Public Works		5/1/2019	5/22/2019		
Jeff Silliman					
START		5/1/2019	5/22/2019		
Darren Brugmann					

Sketch Plan Application For Glenwood and Gill Condominiums

Applicant:



Prepared by:



Jorgensen Associates, P.C.
Engineers, Land Surveyors, & Planners
1315 Highway 89 South, Suites 201 & 203 83001
P.O. Box 9550
Jackson, WY 83002
307.733.5150

Town of Jackson

Submittal Date: April 29, 2019
Jorgensen Associates, P.C.
Project No. 18105
TOJ #P18-083

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SECTION 1 - PROJECT BACKGROUND, OVERVIEW, FINDINGS AND RESPONSE TO SUBMITTAL CHECKLIST

A. PROJECT BACKGROUND & HISTORY

The Glenwood Gill Condominium project located at 165-185 N. Glenwood Street consists of 29 fee simple condominium units. The site is currently owned by Roseville Ventures II, LLC an affiliate of Bear Development, LLC (Bear), the applicant. Bear has successfully completed several residential and commercial development projects across the United States. An affiliate of Bear was the former owner of the Painted Buffalo Inn from 2007 to 2017. S.R. Mills is a Principal in Bear and will be overseeing this project. The 185 site was acquired by Bear in 2012 and was colloquially known as the “hole-in-the-ground” before Bear completed the construction of an underground parking structure in 2014. The 165 site was acquired by Bear in 2016 and is currently occupied by a mix of residential and commercial uses. A demolition permit for all structures on site is being submitted to the Town concurrently with the Sketch Plan. Over the past 12-months, Bear has completed initial feasibility studies, assembled the project team, and begun conversations with community stakeholders. The Sketch Plan application will outline the proposed development is designed to answer as many questions as possible about the project. Bear and the project team look forward to working with the Town to make this project a success.

B. OWNER & PROJECT TEAM INFORMATION

PROPERTY OWNERS & APPLICANTS:

Roseville Ventures II, LLC
C/O Bear Development, LLC
4011 80th Street
Kenosha, WI 53142
262-308-2656
Contact: Nick Orthmann
northmann@beardevelopment.com

ARCHITECT

Kahler Slater Architects
648 N Plankinton Avenue
Milwaukee, WI 53203
414-290-3748
Contact: Tom Miller
tmiller@kahlerslater.com

ARCHITECTURAL CONSULTANT

Hawtin Jorgensen Architects
265 E Kelly Avenue
Jackson, Wyoming 83001
307-733-4364
Contact: Arne Jorgensen
ajorgensen@hawtinjorgensen.com

LAND PLANNING, SURVEYING & ENGINEERING

Jorgensen Associates, P.C.
P.O. Box 9550
Jackson, Wyoming 83002
307-733-5150
Contact: Brendan Schulte
bschulte@jorgensenassociates.com

LAND PLANNING & LANDSCAPE ARCHITECTURE

Hershberger Design
560 S Glenwood Street
Jackson, Wyoming 83001
307-739-1001
Contact: Bonny Hershberger
bonny@hershbergerdesign.com

C. DEVELOPMENT PROPOSAL

The applicant proposes to build 29-fee simple condominium units on the 0.96 acre site located on the southwest corner of Glenwood Street and Gill Avenue. The site is zoned DC: Downtown Core. The project will include 15-units with short-term rental ability, 9-free market units and 5-workforce housing units provided through the Workforce Ownership program. The project will utilize the Workforce Housing Floor Area Bonus (LDR Div. 7.8) program as detailed in the project program and the housing mitigation calculations included with this submittal in **Section 5**. All units are townhome style with individual entrances and no common hallways. The individual entrances are located along Glenwood Street, Gill Street and the central courtyard. The majority of the units will have a private entrance in the below grade parking structure as well.

The applicant will allow for some flexibility in the final floor plan for each purchaser, however the unit demising walls, footprint and overall square footages will not change. By example, a purchaser of a unit may choose to reduce the bedroom count from 3 bedrooms to 2 bedrooms. As such, the bedroom counts included in this submittal for purposes of housing mitigation calculations and exactions are assumed to be greatest possible number to ensure that all requirements are ultimately met or exceeded depending on final buildout of each unit. There will

be 48 parking stalls in the below grade parking structure providing parking at a ratio of 1.66 stalls per unit. Nineteen of the 48 stalls are tandem stalls that allow space for more than one vehicle.

Access to the site is via N Glenwood Street, W Gill Street and the alleyway that spans from W Gill Street to W Deloney Avenue. The parking garage is accessed via the alleyway. The proposal includes paving the portion of the alleyway that borders the project site as well as a widening of the streetscape along Glenwood Street by approximately 2 feet 8 inches to 3 feet.

The Town of Jackson Land Development Regulations (LDRs) require 13 foot 6 inches (13'6") from back of curb to building façade for a trees in grates pedestrian frontage, however due to the existing foundation, an Administrative Adjustment per LDR Section 8.8.1 is being requested to allow for a 13 foot 1 inch (13'1") measurement of the pedestrian streetscape on the west side of North Glenwood Street. This is achieved by relocating the existing curb line along Glenwood Street by approximately 2 feet 8 inches to 3 feet. The building on the 165 Glenwood portion of the site is aligned with the 185 Glenwood portion to maintain the 13' 1" streetscape throughout the project. Along W Gill Avenue, similar existing conditions result in a streetscape of 10' 1" due to the existing foundation, and an Administrative Adjustment is also being requested on this frontage.

D. FINDINGS FOR APPROVAL

I. 8.3.1.C. Sketch Plan - Findings for Approval

1. *Is consistent with the desired future character described for the site in the Jackson/Teton County Comprehensive Plan.*

Complies. The project falls within the Comprehensive Plan District 2: Town Commercial Core – 2.3 Downtown which is a transitional subarea and currently consists of a variety of retail, restaurant, office and other commercial activities, along with long-term residences and lodging in a variety of sizes and forms.

The goal of this subarea is intended to create ***“a vibrant mixed-use area by accommodating a variety of uses and amenities. The sub area will be the starting point for the development of a refined Lodging Overlay and a future discussion of the type and size of lodging desired. A key challenge will be to provide a balance between lodging and long-term residential housing.... Multifamily structures will be allowed if it properly addresses the street.”***

The Glenwood Gill Condominium project complies with direction provided by the comprehensive plan in this subarea because it provides that delicate balance between the commercial short-term rental use allowed within the Lodging Overlay and the long-term residential component desired as a mix of uses within this subarea.

The design of the building addresses the street as required by the DC Zone and the comprehensive plan for allowing multi-family structures. The building mass and scale will be uniform and consistent with nearby buildings such as the White Buffalo Club, Hotel Jackson, and the Timbers Residence Club. At three stories the project meets variety of two- and three-story variety in mixing with its two-story neighbor to the east (St. John Campus).

The project creates the attractive street wall desired by the subarea and with each unit being accessed from street, creates a vibrant and active pedestrian experience. Articulation and circulation into the courtyard and around the condominiums connects the site comprehensively to both Glenwood and Gill. Street trees, on street parking and pedestrian curb cut/ramps further enhance the pedestrian experience by providing an adequate buffer from traffic thus giving pedestrians a pleasant and safe walking environment. Furthermore, while on-street parking is available, on-site parking is predominantly provided underground in a parking garage and screened from view as desired by the subarea

The project is perfectly situated on the east edge of the Lodging Overlay near Miller Park and Flat Creek. While this project does not front Flat creek per se, it does provide connection to those fringe areas further west on Gill Avenue. It also provides the opportunity to be connected to the design and the desired pedestrian focus which makes it a perfect fit into the desired characteristics for Comprehensive Plan District 2: Town Commercial Core – 2.3

2. *Achieves the standards and objective of the Natural Resource Overlay (NRO) and Scenic Resources Overlay (SRO), if applicable.*

Not Applicable. The project is not located within the Natural Resource Overlay (NRO) or the Scenic Resource Overlay (SRO), and this finding is therefore not applicable.

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 project will provide the required school and park exactions that are designed to ensure development offsets to the impact it has on these services. Public utilities and project utility connections will be designed to ensure that the project does not overburden TOJ utilities. Conceptual flow calculations are provided herein in **Section 4.** The project is within the town limits and is currently served by police, fire and EMT services. The development will not result in increased impacts on availability of these services. A traffic study is included with this submittal as well and significant impact is not projected.

4. ***Complies with all relevant standards of these LDRs and other County Ordinances as can be determined by the level of detail of a sketch plan.***

Complies. The project complies with all applicable Land Development Regulations. Specifically, the project complies with all dimensional limitations in the DC Zone as shown in the development program. One caveat is the dimension between the back of curb and the façade that comprises the pedestrian streetscape on the north side of the development along West Gill Avenue and again on the east side of the development on North Glenwood Street. Because the garage was built prior to the current regulations and does not make sense to demolish what is already there, the applicant will file an Administrative Adjustment to comply with the LDRs in this portion of the project.

5. ***Is in substantial conformance with all standards or conditions of any prior applicable permits or approvals.***

Complies. The project is in substantial conformance with all standards and prior permits.

II. 8.8.1.C. Administrative Adjustment - Findings for Approval

1. ***Complies with the applicability standards of this Section;***

Complies. The purpose of this Administrative Adjustment is to allow for a minor adjustment to the requirements and numerical standards of pedestrian frontage as allowed by Section 2.2.1.C. of the LDRs. Due to the existing foundation, it is not possible to achieve the desired pedestrian frontage of 13' 6" as set forth by Section 2.2.1.C.2. of the LDRs for trees in grates. While a major design component of this development is focused on the pedestrian experience, these requirements and numerical standards make it difficult to comply with the standards of the DC Zone and desired intent of the Comp Plan. Compliance would mean destroying the foundation that was built prior to the new LDRS were approved. The minor adjustment would allow for 10' 1" pedestrian frontage along West Gill Avenue and 13' 1" pedestrian frontage along North Glenwood Street.

2. ***Compensates for some unusual constraint of the site or proposal that is not shared by landowners generally;***

Complies. The approval of this Administrative Adjustment would compensate for the unusual constraint of the site caused by existing conditions which includes an existing foundation that was constructed prior to the current dimensional limitations set forth

in the DC Zone in the current LDRs. These existing conditions are unusual and typically not shared by other land owners proposing development in the DC Zone of the Town of Jackson.

3. *Is consistent with the purpose of the zone and the desired future character for the area described in the Comprehensive Plan;*

Complies. Approval of this Administrative Adjustment complies with the intent of the DC Zone and future desired characteristics of the Downtown District. It proposes a balance between long-term residential housing and short-term lodging within the Downtown Core and provides an active and engaging pedestrian experience while providing connectivity from the Downtown Core to adjacent restaurants and the public open space and amenities at Miller Park.

4. *Will not pose a danger to the public health or safety; and the site is not subject to a series of incremental administrative adjustments that circumvent the purpose of this Section.*

Complies. The approval of this Administrative Adjustment does not pose a danger to the public health or safety because the proposed pedestrian travel way is 10' 1" along West Gill Avenue and 13' 1" pedestrian frontage along North Glenwood Street, thus maintaining a safe width for ADA standards and a high-quality walking environment.

E. PROPOSED DEVELOPMENT PROGRAM

I. Development Summary/Dimensional Limitations

Glenwood Gill Condominiums - Dimensional Limitations			
Zoning: Downtown Core (DC) 2.2.10			Updated: 04.25.2019
Requirements	Required	Proposed	Comply/Not Comply
Building Setbacks (Sec. 9.4.8)			
Street	0' - 5'	3'	Complies
Side	0' - 5'	3'	Complies
Rear	0' or 5'	5'	Complies
3rd Floor	0' or 5'	3'	Complies
Landscaping (Sec 5.5.)			
Landscape Surface Ratio	n/a	at BP	will comply
Plant Units	n/a	at BP	will comply
Street Facade (Sec. 9.4.11)			
% of Lot width Primary Street	80% (min)	94%	Complies
% of Lot width Secondary Street	80% (min)	87%	Complies
Building Height (Sec. 9.4.9)			

Sketch Plan Application
Glenwood Gill Condominiums

Height (max) if roof pitch < 5/12	42'	Varies 38.5' - 41'	Complies
Stories (max)	3	3	Complies
Building Stepback (Sec. 9.4.12)			
Stepback for any 3rd story street facade or street façade over 30' (min)	10'	10'	Complies
Encroachment in stepback (max % of overall façade width)	60%	59%	Complies
Scale of Development - FAR (max)			
	1.3	1.29	Complies
Pedestrian Frontage¹			
	flexible	trees in grates	Complies
Parking Type²			
	flexible	underground	Complies
Exterior Lighting (Sec. 5.3.1)			
Lumens per site (max)	3	at BP	Will Comply
All Fixtures	100,000	at BP	Will Comply
Unshielded Fixtures	5,500	at BP	Will Comply
Light Color	≤3000 Kelvin	at BP	Will Comply
Scenic Resource Overlay (SRO) (Sec. 5.3.2)	n/a	n/a	n/a
Allowed Uses			
Residential Use: Attached Single Family Unit (6.1.4.B)			
Permit	B	B	Complies
Individual Unit Max	8,000	4,200	Complies
Parking (min)	1.5/DU	13.5	Complies
Lodging: Short-term Rental Unit (6.1.5.C)			
Permit	B (LO)	B (LO)	Complies
Individual Unit Max	n/a	n/a	Complies
Parking (min)	1.5/DU	30	Complies
Total Parking	43.5	48 + on-street parking	Complies
1. Existing conditions preclude development from achieving the desired pedestrian frontage of the DC Zone; an Administrative Adjustment will accompany this application.			
2. On street parking is also available.			

II. Structure Location and Mass

1. Structure location can be found on the Proposed Site Plan (C2.0) found in **Section 3**.
2. Structure scale is shown in the schematic floor plans and elevations found in **Section 3**.

III. Building Design - Schematic designs with floor plans and elevations can be found in Section 3.

IV. Other Information - A Neighborhood Meeting was conducted at Hansen Hall (170 North

Glenwood Street) on April 11, 2019. An overview was compiled and can be found in Section 5.

- V. Site Development/ Lot Coverage** - Structure location can be found on the Proposed Site Plan (C2.0) found in Section 3.

F. PHASING PLAN

Each phase is detailed below and will be divided by the two sites at 165 & 185 Glenwood. Please note that the project complies with the LDRs as a whole and each phase complies with the LDRs when calculated individually.

- I. Phase 1 - 185 Glenwood** - Construction of Phase 1 is projected to start shortly after Development Plan approval by the Town. Construction will utilize the existing parking deck so earthwork should be minimal. A demolition permit will be submitted to the town for the structures currently located on 165 Glenwood. While there is potential for overlap in timing between the construction on the 185 site and demolition on the 165 site, each process is being looked at individually and the final timing of each will be determined upon final Town approvals of their appropriate permits. Phase 1 will include:

- 9-units with short term rental ability
- 8-free market units
- 3-Workforce Ownership units

- II. Phase 2 - 165 Glenwood-** Phase 2 of the project will include the expansion of the underground parking deck and construction of an additional 9-townhomes. Phase 2 will include:

- 6-units with short term rental ability
- 1-free market unit
- 2-Workforce Ownership units
-

G. OPERATIONAL STANDARDS

Outside Storage	No outside storage is proposed
Refuse and Recycling	See site plan for refuse container location
Noise	Use will comply with regulations
Vibration	Use will comply with regulations
Electrical Disturbances	Use will comply with regulations
Fire and Explosive Hazards	Use will comply with regulations

Sketch Plan Application
Glenwood Gill Condominiums

- H. OTHER** – A neighborhood meeting was held on April 11, 2019 at Hanson Hall (170 N Glenwood Street). Nineteen attendees signed in and participated in the discussion regarding the project. Attendees shared comments and asked questions regarding the proposal. Items related to the design, parking, access and construction were discussed. Overall the meeting was positive and collaborative and the development team has taken into account the ideas that were mentioned. A tabulation of the attendees was compiled and is attached here in **Section 3**.

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SECTION 2 – ENGINEER’S REPORT

A. INTRODUCTION

This Engineer’s Report is intended to provide the engineering basis for design and to discuss engineering related issues for the development of Lots 1-6, Block 6, Original Town Site, Jackson, Wyoming, currently known as 165 and 185 Glenwood Street. The proposed development includes 29 residential units which will include a number of deed restricted housing units, units that will support short terms rentals and non-short-term market units. Existing Town of Jackson road, water, sanitary sewer and storm sewer infrastructure will be used to service the development and electrical, gas and communication utilities are in place at or near the proposed development. The basic layout site plan attached in **Section 3** and the general engineering items are discussed here.

B. SETTING

The site located in the north part of the Town of Jackson and has seen various uses since before 1945. The northern portion of the lot, 185 Glenwood, was most recently slated for the development of a 33-unit condominium project in 2006 which lead to the excavation of a deep hole meant for underground parking and foundations. The project was halted due to economic conditions, leaving the hole open and incomplete. In 2012 Bear Development purchased the property and subsequently completed the concrete parking structure in 2014 as a means to stabilize the excavation and prepare the lot of unspecified future development. The southern portion of the site, 165 Glenwood currently has a mix of commercial and residential uses.

C. GRADING, EROSION CONTROL, DRAINAGE, & STORMWATER

Proposed conditions on site include underground parking beneath the whole site with street level conditions consisting of three building segments separated by a courtyard. Some of the condominium units will be accessed from the Glenwood or Gill Street frontage while others are accessed from the central courtyard. The courtyard will be accessed from the north end by several steps and an ADA compliant sidewalk from the east. Since the site is completely utilized by the structure and site improvements, storm water will be collected into a central system, treated as appropriate and routed using a controlled release system to the city storm water system at the storm water manhole located in Glenwood Street, just south of the Glenwood/Gill intersection. Storm Water release rate will be determined using pre-development conditions as specified in the most current version of the Town of Jackson Land Development Regulations. Due spatial constraints, the difficulty of mechanical snow removal, and the probability of ice and snow buildup in the sheltered courtyard, the courtyard and rooftop decks will have snow melt systems that will drain to the storm water system. A curb inlet may be added to in the new section of curb to capture storm water running down the gutter from the north and would be connected to the Town of Jackson Storm Sewer running along Glenwood.

D. SOILS AND SITE CONDITIONS

An original Geotechnical Investigation Report was produced by Womack and Associates (WAI) in the Fall of 2006 for 185 North Glenwood is attached herein in **Section 4**. Jorgensen Geotechnical conducted additional field work on 165 North Glenwood and produced a report than encompasses 165 North Glenwood and updated the previous WAI report for 185 North Glenwood in the winter of 2018. The reports identified the underlying as sandy and clayey gravels of the Cache Creek Alluvial Fan which are were deemed suitable for construction. Several young and potentially active faults have been mapped near the project site, most notably the East Gros Ventre Fault, faults on the east and west sides of the West Gros Ventre Butte, and the Teton Fault system along the base (east) of the Teton Range. Appropriate seismic coefficients should be used in the design of structures.

E. ROADS AND ACCESS

Access to the site is currently from Glenwood Street, Gill Avenue and the north-south alley west of the project site. Parallel parking will continue to exist on both Glenwood and Gill in front of the project and main site access will be through the underground parking accessed through the alley. The curb line along Glenwood Street will be moved 2 to 3 feet east to provide space for a buffer area with trees and a sidewalk while continuing to meet the Town of Jackson street width minimums for the angled parking on the east side of the street, both lanes and parallel parking on the west side of the street. The addition of a curb extension to the south-west corner of the Glenwood/Gill intersection is being proposed but this improvement is dependent on the Town making similar improvements to the rest of the intersection to achieve the benefits of shorter pedestrian crossing distances and improving intersection safety.

F. TRAFFIC

A Traffic Impact Study (TIS) was completed in 2006 by Jorgensen Associates for two developments that were being proposed at the time at Lots 1 through 4 and Lots 18 through 20, Block 6, Original Town Site, Jackson, Wyoming. The two developments were Club Lespri proposed by White Buffalo Development LLC located on the southeast corner of Gill Avenue and Milward Street (lots 18 through 20) and McCabe Corner proposed by The Eden Group located at 185 North Glenwood (lots 1 through 4). Club Lespri (aka White Buffalo) development consisted of a mixed-use private club with a dining room, lounge, wellness center, condominiums, and employee housing. The McCabe Corner development was proposed to consist of 33 condominiums. The Club Lespri was completed, but the McCabe corner development was never completed. The proposed BEAR development consists of 29 condominium units, four less than those proposed for the McCabe Corner development. For this reason, the original TIS remains valid.

The TIS indicated the two developments may add some delay to the Gill Avenue intersection with Glenwood and Millward Streets, however, the minor, additional delays should not significantly reduce the levels of service and therefore should not warrant any traffic mediation efforts. The completed Traffic Impact Study for this project is presented in a separate document titled "Traffic Impact Study for Club Lespri and McCabe Corner" and attached herein in **Section 4**.

G. PARKING

The development proposes the construction of 29 condominium units consisting of a mix of two- and three-bedroom units, with some available for short term rental. Both residential apartments and short-term rentals greater than 2 bedrooms require 1.5 parking spaces per units indicating 44 total required parking spots. The underground parking structure will provide 48 spots, exceeding the required parking.

H. PATHWAYS

According to the 2015 Community Streets plan, both Glenwood and Gill are designated as shared streets with no bicycle designation. The nearest, designated bike routes are Millward Street (1 block west of the project) and Mercill Avenue (1 block north of the project). Low speeds and traffic volume on the connecting streets provide safe access to both. Pedestrian improvements are proposed as part of this project to both street frontages and provide the maximum space available based on the existing structure. Glenwood Street will have a 5' buffer area and a variable (6' minimum) sidewalk. Gill Avenue will have a 4' buffer area and variable (6' minimum sidewalk).

I. WATER

Water will be supplied by the Town of Jackson through their distribution system located within Glenwood Street. Ties to the TOJ system will require an encroachment permit and a coordinated effort with the TOJ Public Works Department to identify the appropriate water service tap location. Once the system is on the project property it will be owned and operated by the development and all maintenance will be the responsibility of the development. The project team will coordinate with the TOJ Engineering and Public Works Department for capacity fees, backflow protection, water meter size, domestic, irrigation, and fire suppression installation arrangements. Based on preliminary demand calculations and anticipated service size, a Permit to Construct from the Wyoming DEQ will likely be required. Based on research conducted in conjunction with the previous, 2006 development, it is expected that adequate capacity is available from the Glenwood Street water main. Coordination with the Town Engineer will be essential as water demand values are refined and the site infrastructure design advances. The project team will also coordinate with the Fire Department to ensure adequate fire protection measures are in place.

An estimated water demand analysis is included in **Section 4**. A more detailed infrastructure layout will be included with the Development Plan Submittal.

J. WASTEWATER

Sanitary sewer will be connected to the existing Town of Jackson sewage collection lines within the alley west of the site and eventually be treated at the TOJ Wastewater Treatment Plant in South Park. The sewage collection lines internal to the project will be the responsibility of the development for operation and maintenance. Coordination between the building mechanical design and the TOJ Public Works Department will identify the appropriate service tap location.

Preliminary expected wastewater flows and research conducted in conjunction with the previous, 2006 development, indicate that there is adequate capacity from the sewer line located in the alley. Continued coordination with the Town Engineer will be essential as wastewater flows are refined and the site infrastructure design advances.

An estimated waste water demand analysis is included in **Section 4**. A more detailed infrastructure layout will be included with the Development Plan Submittal.

K. CABLE UTILITIES AND GAS

Power and communication lines will enter the project via the alley boarding the site the west. Lower Valley Energy and Century Link lines arrive at the site via overhead utility lines at the lot corner between 165 and 185 North Glenwood in the western alley and are then directed underground to nearby vaults and pedestals. A single 2-inch gas main is located within the western alley with a service line running east-west beneath the southern portion of 165 N. Glenwood. Further details and specific location of these connections to the project will be developed during the development plan submittal.

L. SNOW STORAGE

No snow storage is anticipated to be provided since all surfaces that will require snow removal in the development will have snow melt systems provided. Melt water will be routed to the storm water collection system. Any unforeseen snow removal will require trucking offsite.

M. GROUNDWATER, STREAMS, & RIVERS

There are no permanent streams or rivers on this parcel, with the nearest water feature being Flat Creek located approximately 700-ft northwest of the project site. Groundwater was encountered during the 2006 WAI investigation at an approximate depth of 25-ft below the ground surface (bgs). Groundwater monitoring was conducted by WAI in the spring of 2007, which showed groundwater levels remained fairly consistent at 25-ft bgs through the spring runoff. No groundwater was encountered during the Jorgensen Geotechnical fieldwork conducted in November of 2018. One groundwater monitoring well was installed to 30-ft bgs in one of the 2018 boreholes to facilitate groundwater monitoring during the 2019 spring runoff season.

SECTION 3 – SKETCH PLAN DRAWINGS

- **ARCHITECTURAL PLANS**
 - **CIVIL SITE PLANS**
 - **LANDSCAPE PLANS**

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SKETCH PLAN

GLENWOOD GILL CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

04/26/19



Kahler Slater

NOT FOR
CONSTRUCTION

CIVIL SHEET INDEX	
Sheet Number	Sheet Name
C1.0	EXISTING CONDITIONS
C2.0	PROPOSED CONDITIONS
C2.1	STREET IMPROVEMENTS

LANDSCAPE SHEET INDEX	
Sheet Number	Sheet Name
L0.1	SITE RENDERING
L0.2	LANDSCAPE PLAN

ARCHITECTURAL SHEET INDEX	
Sheet Number	Sheet Name
A110	BASEMENT PLAN
A111	FIRST FLOOR PLAN
A112	SECOND FLOOR PLAN
A113	THIRD FLOOR PLAN
A114	ROOF PLAN
A121	ENLARGED PLAN - UNIT C
A122	ENLARGED PLAN - UNIT E
A201	EXTERIOR ELEVATIONS
A202	EXTERIOR ELEVATIONS
A203	EXTERIOR ELEVATIONS
A301	PERSPECTIVES
A302	PERSPECTIVES
A303	PERSPECTIVES
A304	PERSPECTIVES
A401	CONTEXT IMAGES

Revisions	Date
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SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

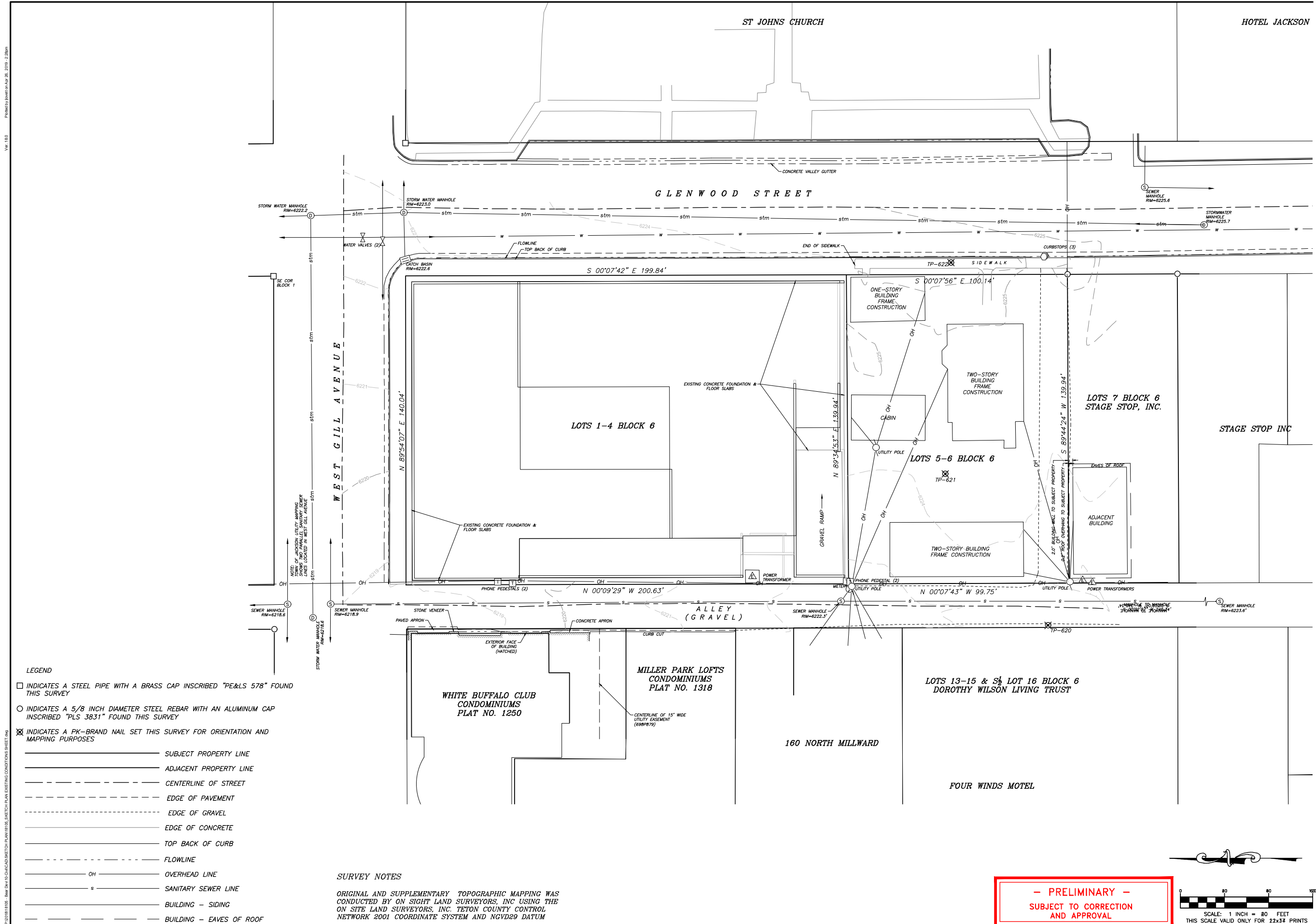
165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR DEVELOPMENT

Sheet Title
COVER SHEET

Sheet No.
G000

NOT FOR
CONSTRUCTION



Revisions Date

SCOPE DOCUMENTS

Drawing Date

GLENWOOD GILL
CONDOMINIUMS

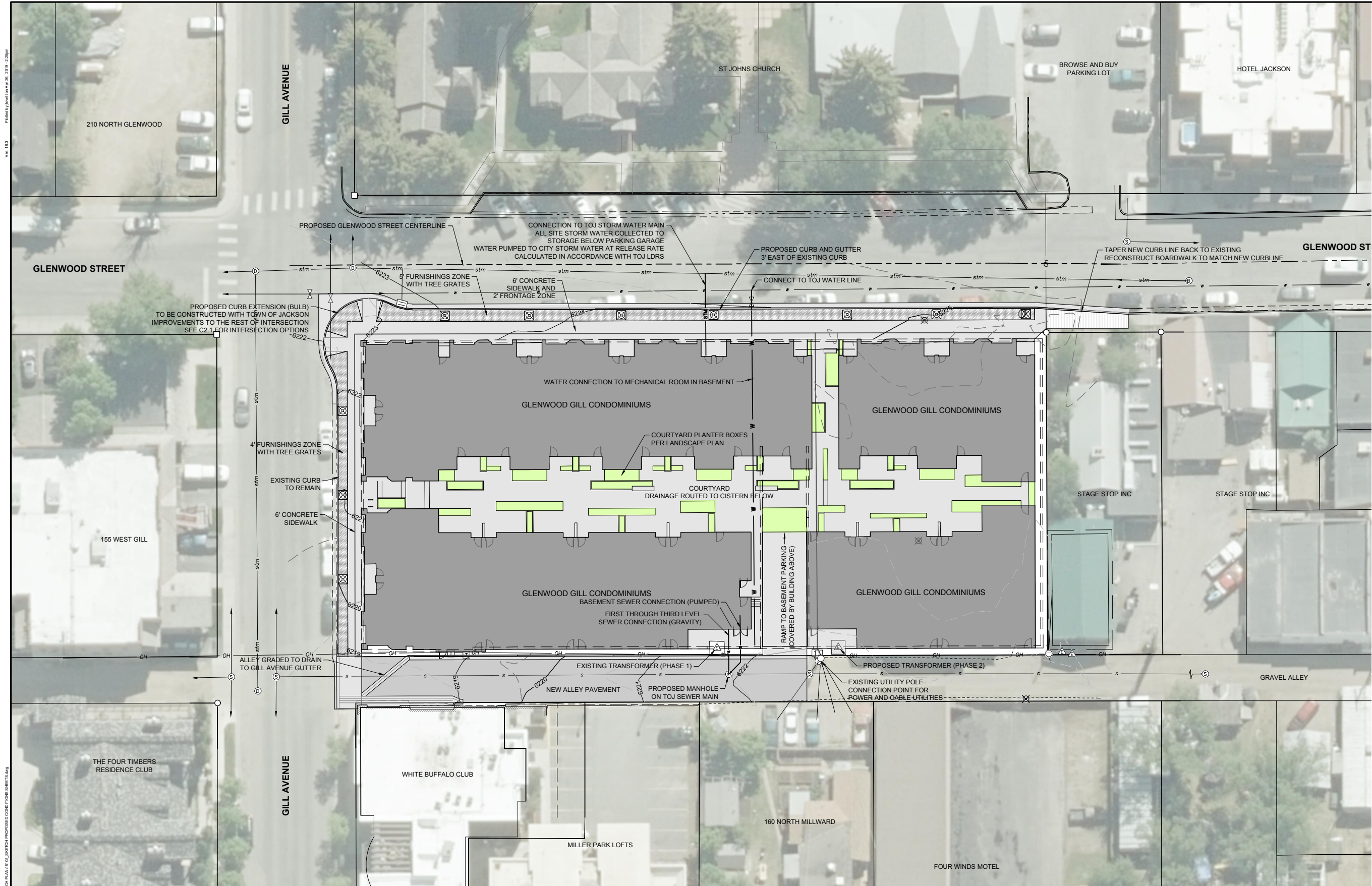
165 and 185 GLENWOOD ST.

Project No. 18105 BEAR DEVELOPMENT

Sheet Title

EXISTING
CONDITIONS

Sheet No.
C1.0



NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
4.26.2019

GLENWOOD GILL
CONDOMINIUMS

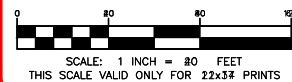
165 and 185 GLENWOOD ST.

Project No. BEAR
18105 DEVELOPMENT

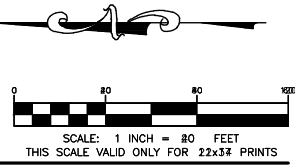
Sheet Title
SITE PLAN

Sheet No.
C2.0

- PRELIMINARY -
SUBJECT TO CORRECTION
AND APPROVAL



Ver. 18.0
Plotted by Jovett on Apr 26, 2019 - 2:28pm



Revisions	Date
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SCOPE DOCUMENTS

Drawing Date

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.

Project No.	BEAR
18105	DEVELOPMENT

Sheet Title
**STREET
IMPROVEMENTS**

Sheet No.
C2.1



- LEGEND
- (A) Parallel Parking
 - (B) Pavers with Trees in Grates (Per TOJ Std.)
 - (C) Pedestrian Sidewalk
 - (D) Bike Racks
 - (E) Courtyard Circulation
 - (F) Private Courtyard
 - (G) Raised Planter w/ Trees
 - (H) Raised Planters w/ Ornamental Grasses/ Perennials
 - (I) Trash
 - (J) Entrance to Units from Gill and Glenwood
 - (K) Access to Underground Parking Garage
 - (L) Proposed Curb Bulb Out
 - (M) Existing Diagonal Parking
 - (N) Benches



HERSHBERGER DESIGN
Landscape Architecture Environmental Planning Urban Design
300 S. Main St. Suite 100 Jackson, Wyoming 83001 307.739.1001 307.739.0022

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CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
4.26.2019

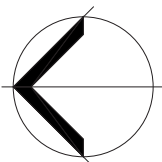
GLENWOOD GILL
CONDOMINIUMS

165 and 185 Glenwood ST.
Jackson, WY 83001

Project No. BEAR
18105 DEVELOPMENT

Sheet Title
SITE RENDERING

Sheet No.
L0.1



NOT FOR
CONSTRUCTION

LEGEND

	PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	ROAD CENTERLINE
	PROPOSED CURB
	CONCRETE SIDEWALK
	COURTYARD PAVEMENT
	PAVERS
	RAISED PLANTER (METAL OR CONCRETE)
	TREE GRATE (PER TOJ STANDARD)
	BIKE RACK (INVERTED 'U' STYLE)

PLANT SCHEDULE

TREES	BOTANICAL NAME / COMMON NAME	CONT	SIZE	QTY
	Fraxinus pennsylvanica 'Patmore' 'Patmore' Ash	3" Cal.	B&B	4
	Populus tremuloides Quaking Aspen	3" Cal.	B&B	2
	Ulmus americana 'New Horizon' New Horizon American Elm	3" Cal.	B&B	6
SHRUBS	BOTANICAL NAME / COMMON NAME	CONT	SIZE	QTY
	Spiraea betulifolia 'Tor Gold' / Glow Girl Birchleaf Spirea	5 Gal.		22
GROUND COVERS	BOTANICAL NAME / COMMON NAME	CONT	SPACING	QTY
	Ornamental Grasses - Species TBD	1 Gal.	24" O.C.	400

LANDSCAPE PLANT COST ESTIMATE

All landscaping will comply with Div. 5.5 of Town of Jackson LDR's. The landscape bond amount is based off of the following cost estimate:

PLANTS	SIZE	UNIT COST	QTY	TOTAL
Patmore Ash	3" Cal	\$400	4	\$1,600.00
Quaking Aspen	3" Cal	\$400	2	\$800.00
New Horizon Elm	3" Cal	\$400	6	\$2,400.00
Glow Girl Birchleaf Spirea	5 Gal	\$55	22	\$1,210.00
Ornamental Grasses	1 Gal	\$12	400	\$4,800.00
TOTAL LANDSCAPE COST ESTIMATE				\$10,810

IRRIGATION	
Estimated Cost to Irrigate	\$5,000
TOTAL COST OF PLANTS + IRRIGATION	\$15,810
TOTAL COST x 125% FOR BOND AMOUNT	\$19,762.50

NOTES

ZONING DISTRICT	DC: Downtown Core
Plant Unit Requirement	N/A per 2.2 (& 2.2.2)
Landscape Surface Requirement	N/A
Pedestrian Frontage Proposed	Trees in Grates
BICYCLE PARKING PROPOSED	4
VEHICLE PARKING PROPOSED - SEE CIVIL/ARCH	
TRASH - SEE ARCH.	

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
4.26.2019

GLENWOOD GILL CONDOMINIUMS

165 and 185 Glenwood ST.
Jackson, WY 83001

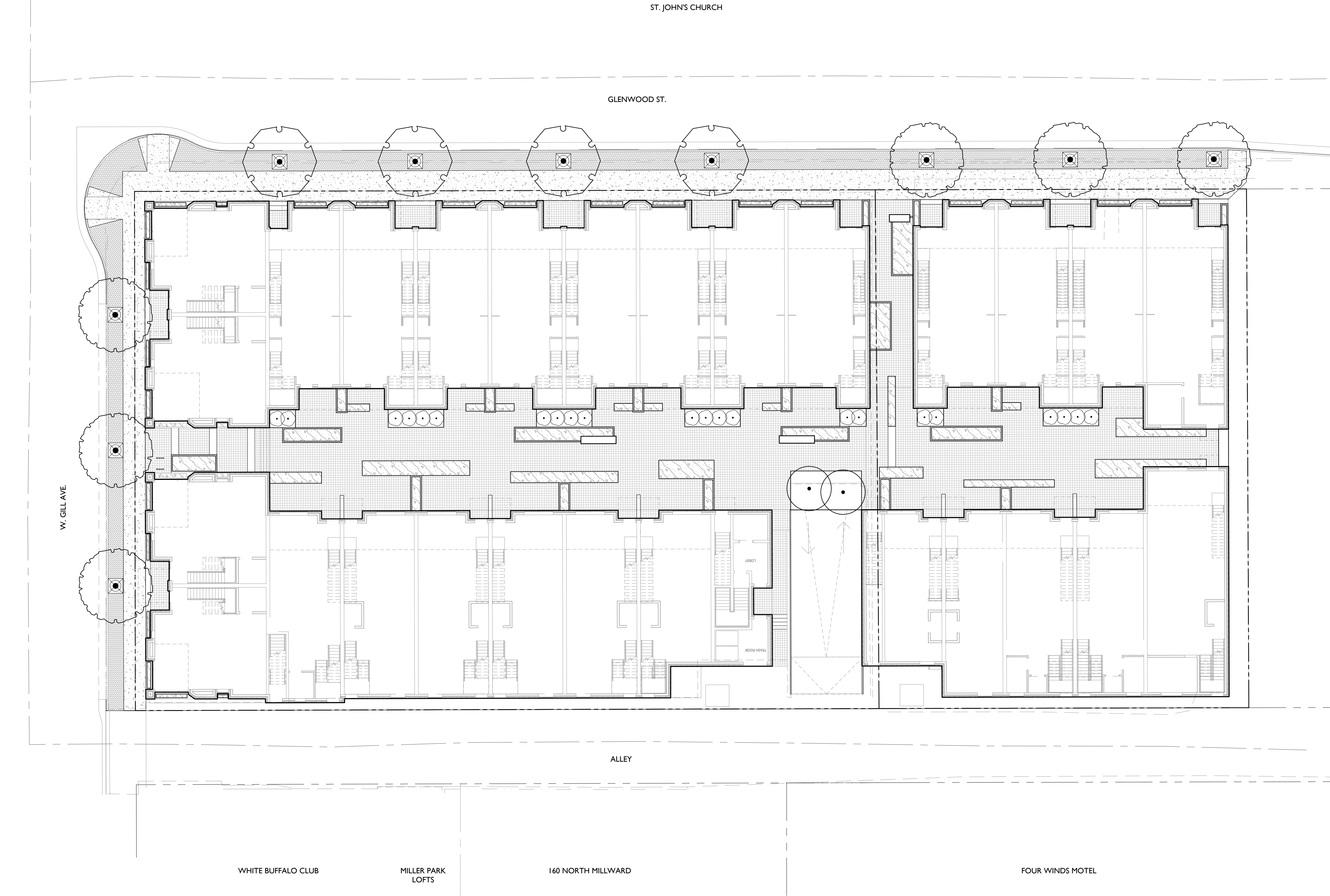
Project No. BEAR
18105 DEVELOPMENT

Sheet Title

LANDSCAPE PLAN

Sheet No.

L0.2



PLANTING & IRRIGATION NOTES

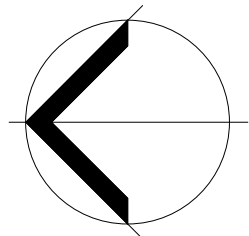
- Refer to Civil Engineer's utility and grading plans. If site conditions vary from what is shown, contact the Landscape Architect and Civil Engineer for direction before proceeding.
- Verify locations and timing of site improvements installed under other sections. If any part of the work cannot be completed due to site conditions, contact the Landscape Architect for direction before proceeding.
- 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.
- Obtain approval of finish grading from Landscape Architect prior to installing any plant material. The finish grades of planting areas and lawns shall be 1/2" below adjacent edging or paving. Confirm mulch depth and whether lawns are to be seed or sod.
- 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.
- Contractor to verify suitability of native or imported topsoil. Suitable topsoil shall be free of roots, plants, sod, stones greater than 4" in any dimension, clay lumps, and other extraneous materials detrimental to plant growth.
- 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.
- 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.
- 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.
- 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.
- 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.

- 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.
- All plants shall be planted at the same level with relation to finish grade as they were grown in the field or nursery.
- 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.
- 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.

- All irrigation within Right of Way to be installed per Teton County/Jackson Parks & Recreation specifications.
- No pruning of existing or newly planted trees or shrubs shall be allowed without the direction and approval of the Landscape Architect.
- For ball & burlap trees, remove burlap from top 1/3 of rootball and entire wire basket as tree pits are backfilled.
- 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.
- 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.



NOT FOR
CONSTRUCTION

Revisions	Date
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SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date

04/26/2015

GLENWOOD GILL CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No.	BEAR
218062.00	DEVELOPMENT

Sheet Title
BASEMENT PLAN

Sheet No.

A110

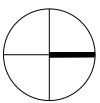


1 00-BASEMENT FLOOR
3/32" = 1'-0"

NOT FOR
CONSTRUCTION



1 01-1ST FLOOR
3/32" = 1'-0"



Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

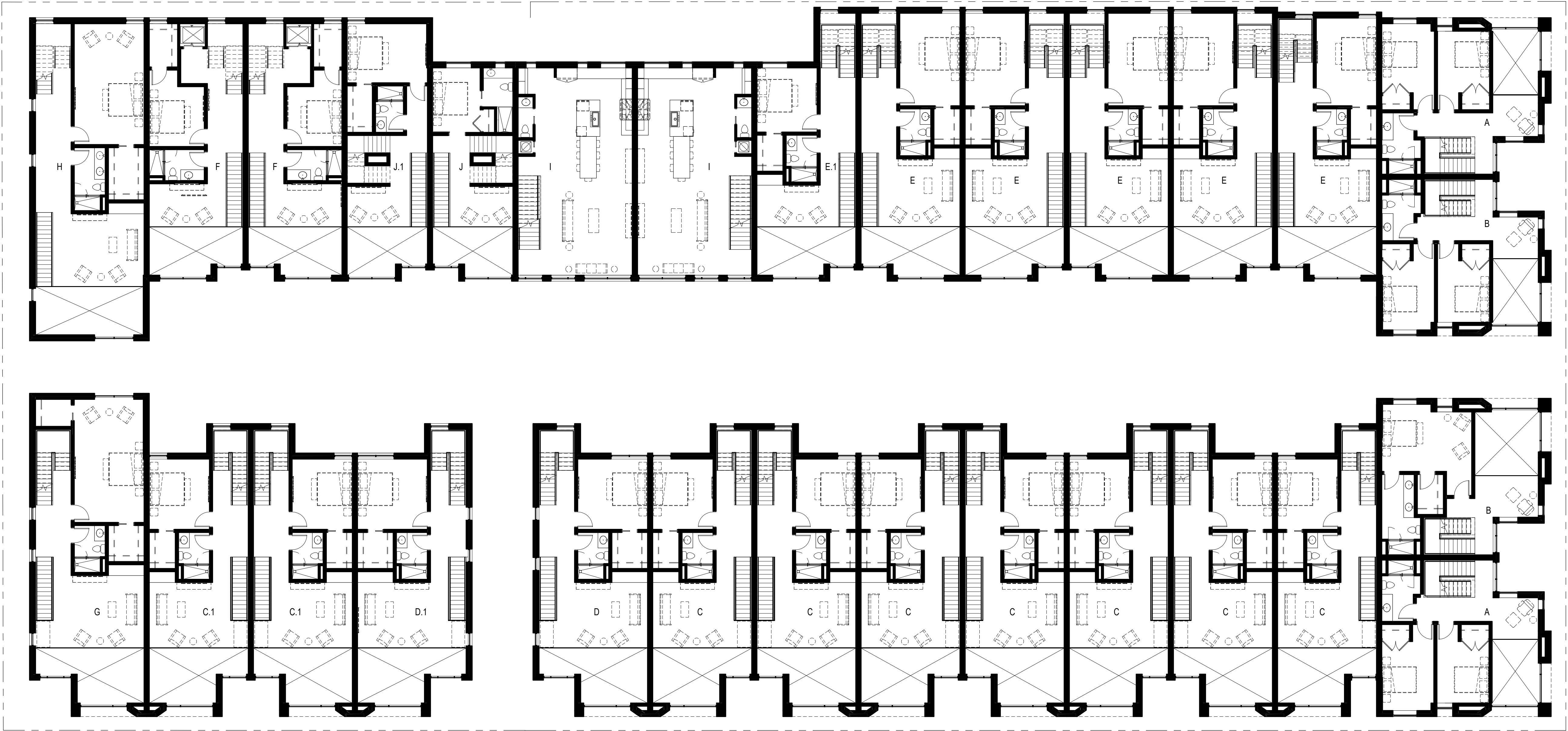
165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title
FIRST FLOOR PLAN

Sheet No.
A111

NOT FOR
CONSTRUCTION



1 02-2ND FLOOR
3/32" = 1'-0"

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title
SECOND FLOOR PLAN

Sheet No.

A112

NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

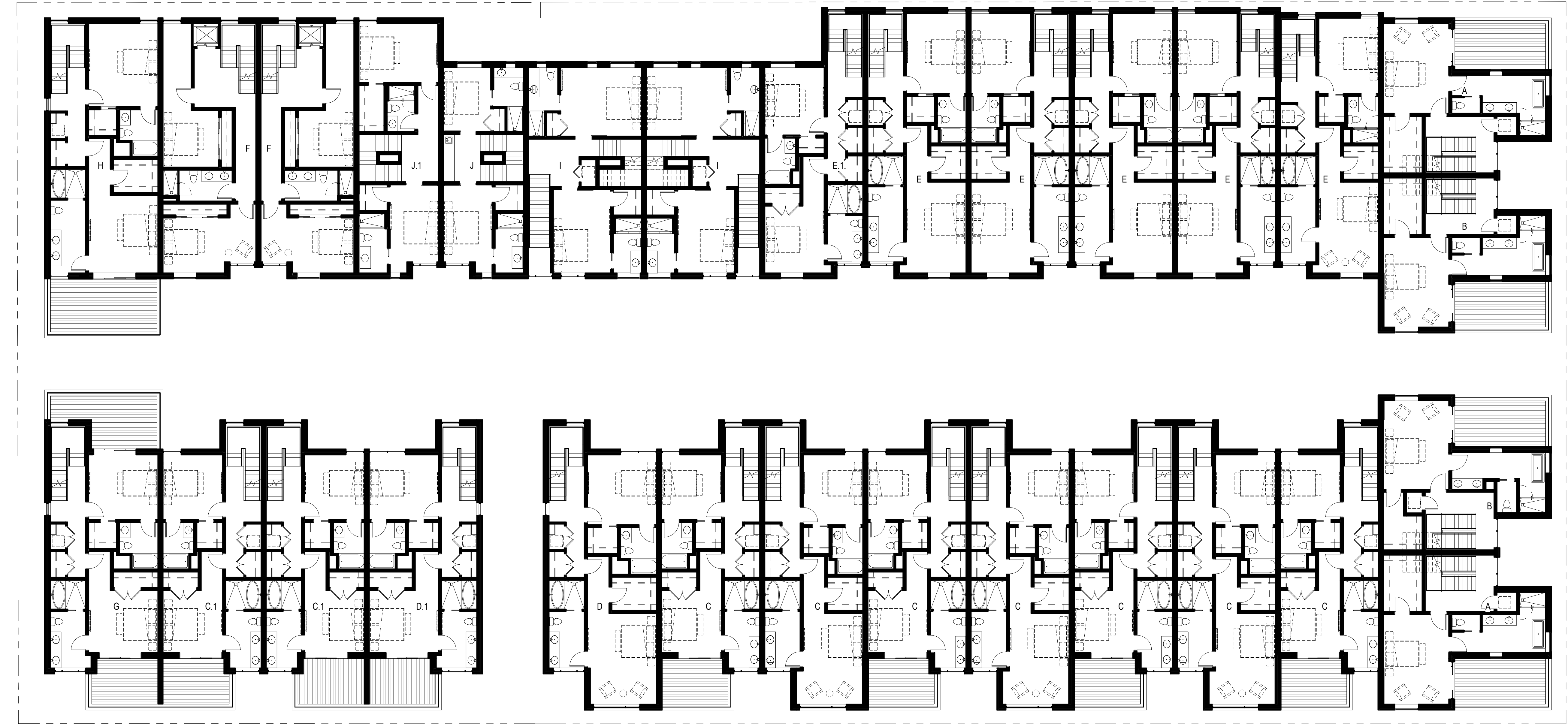
GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

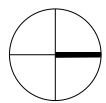
Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title
THIRD FLOOR PLAN

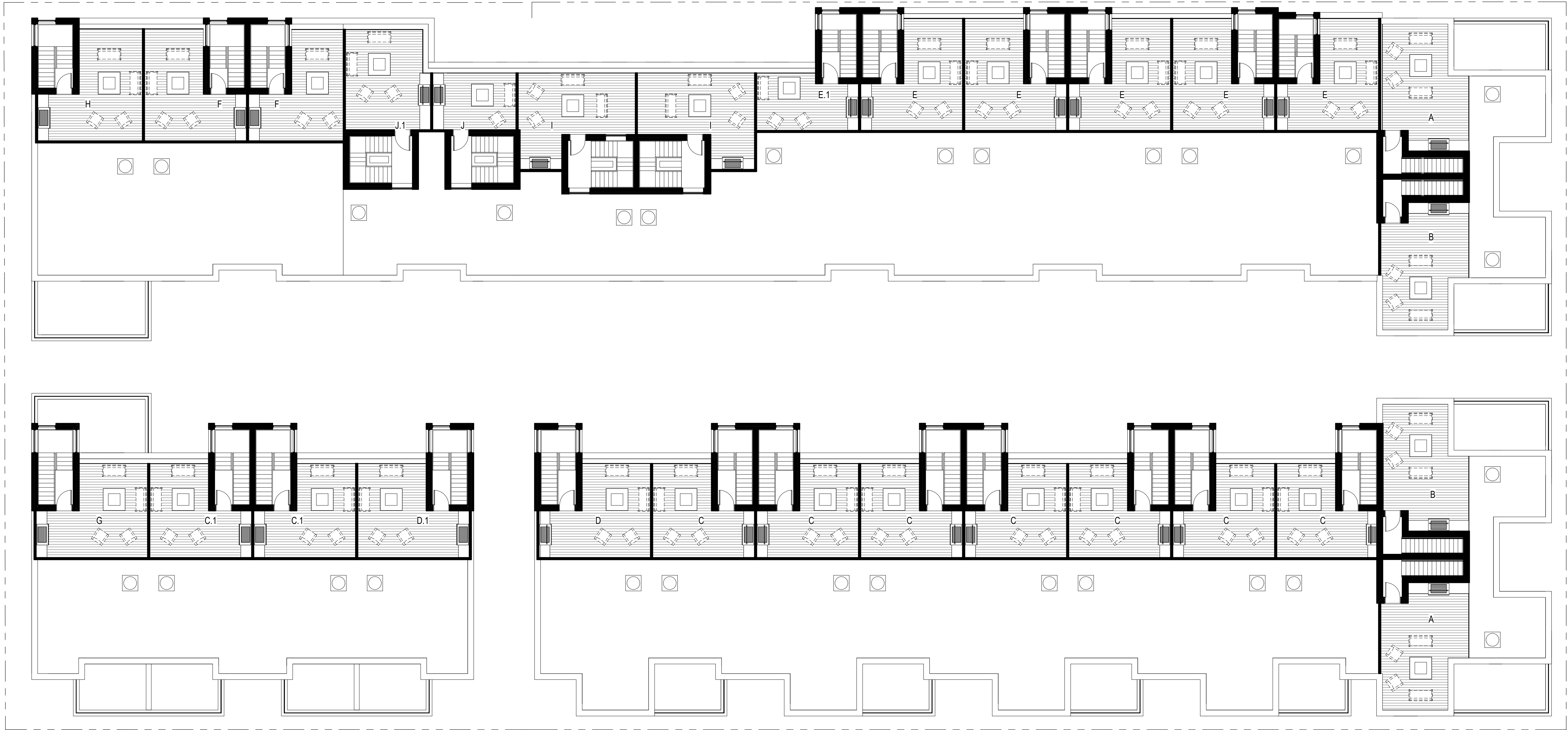
Sheet No.
A113



1 03-3RD FLOOR
3/32" = 1'-0"



NOT FOR
CONSTRUCTION



1 04-ROOF
3/32" = 1'-0"

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

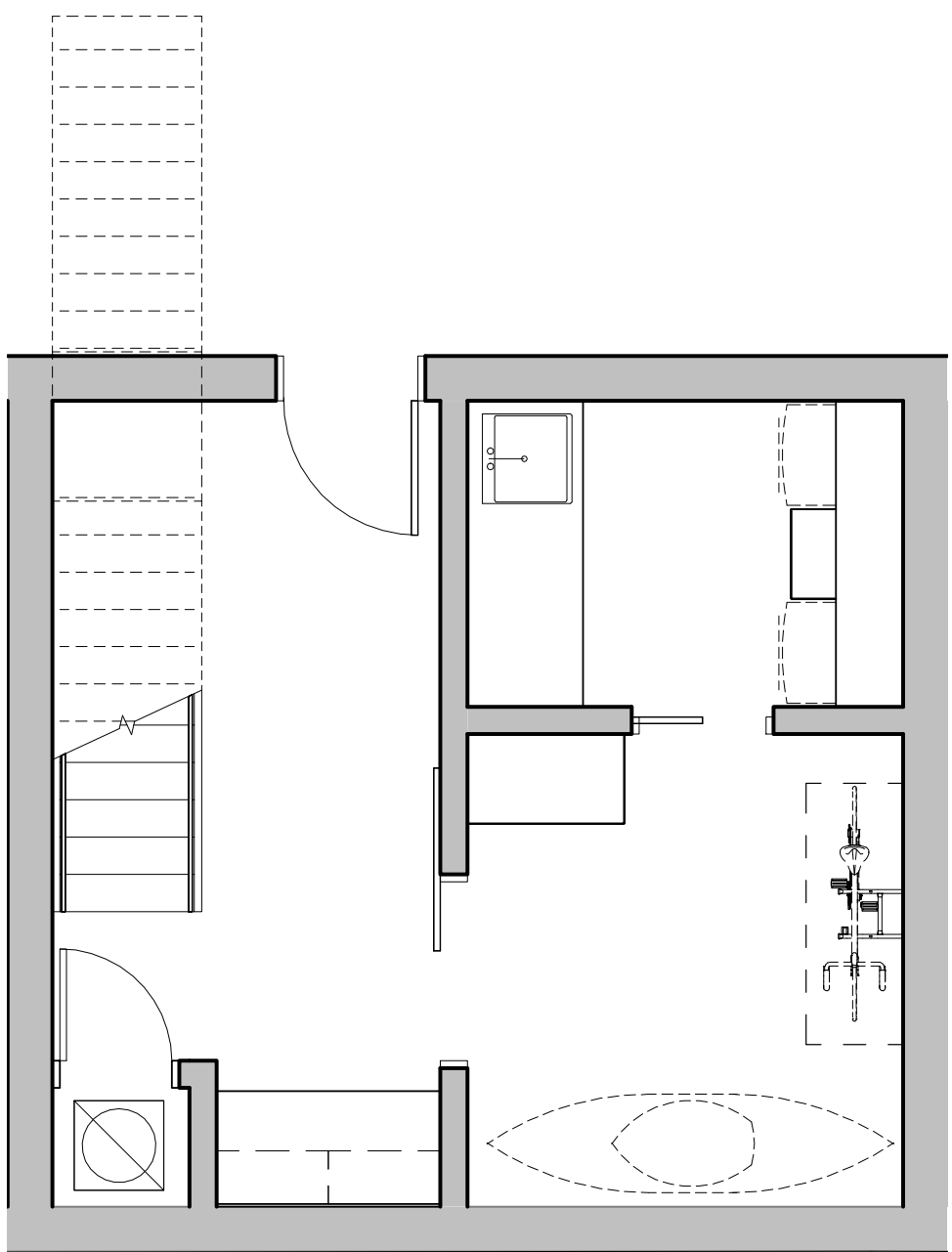
Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title
ROOF PLAN

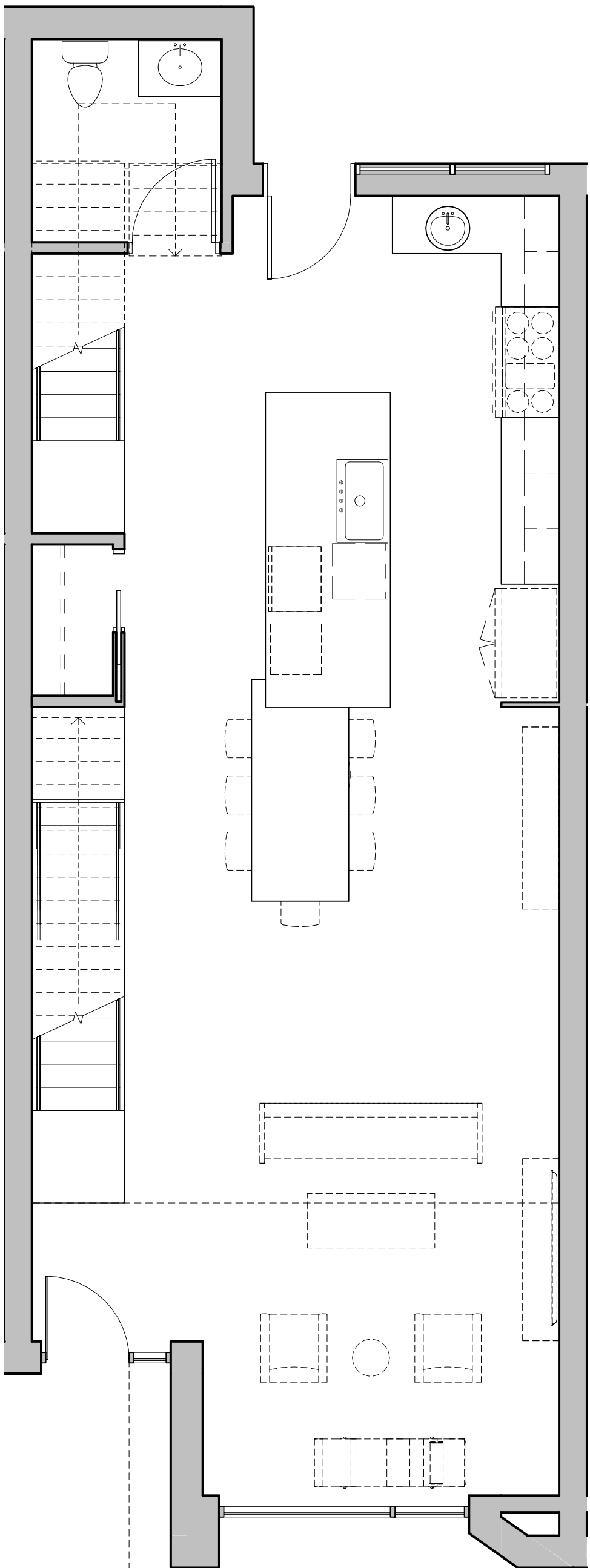
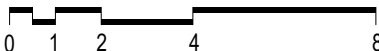
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A114

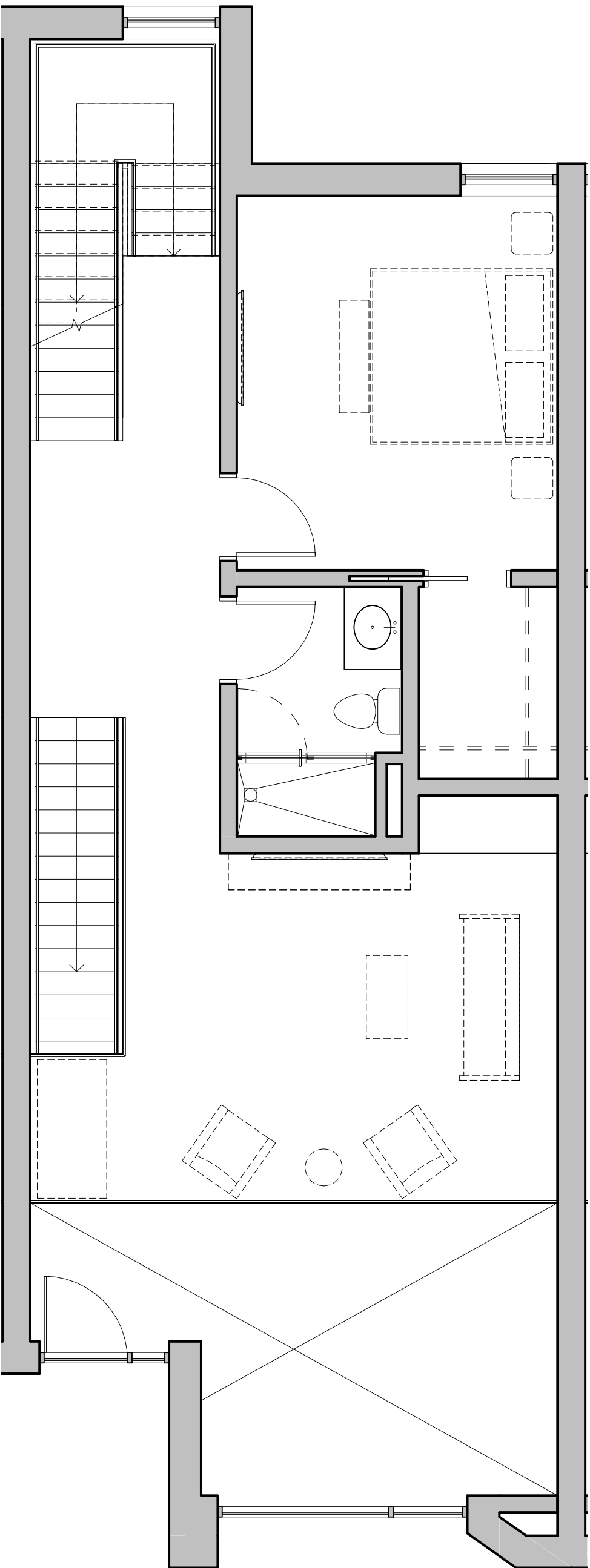
NOT FOR
CONSTRUCTION



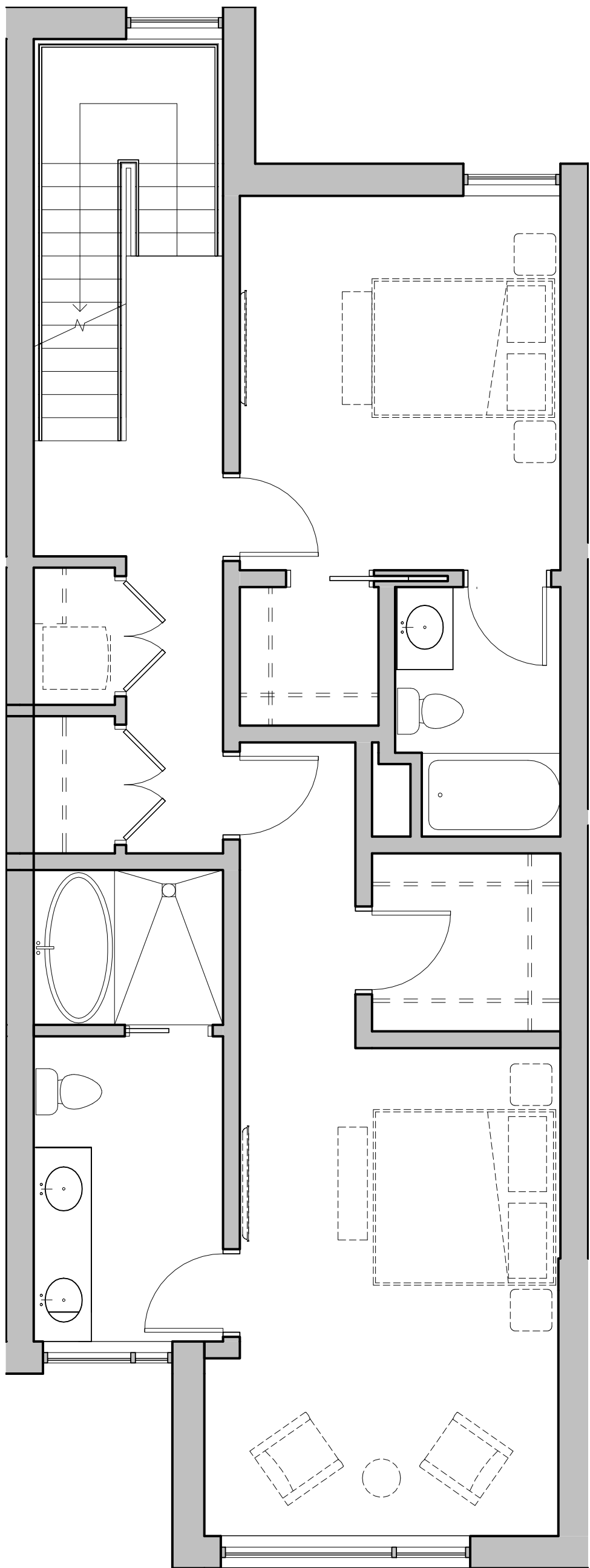
BASEMENT



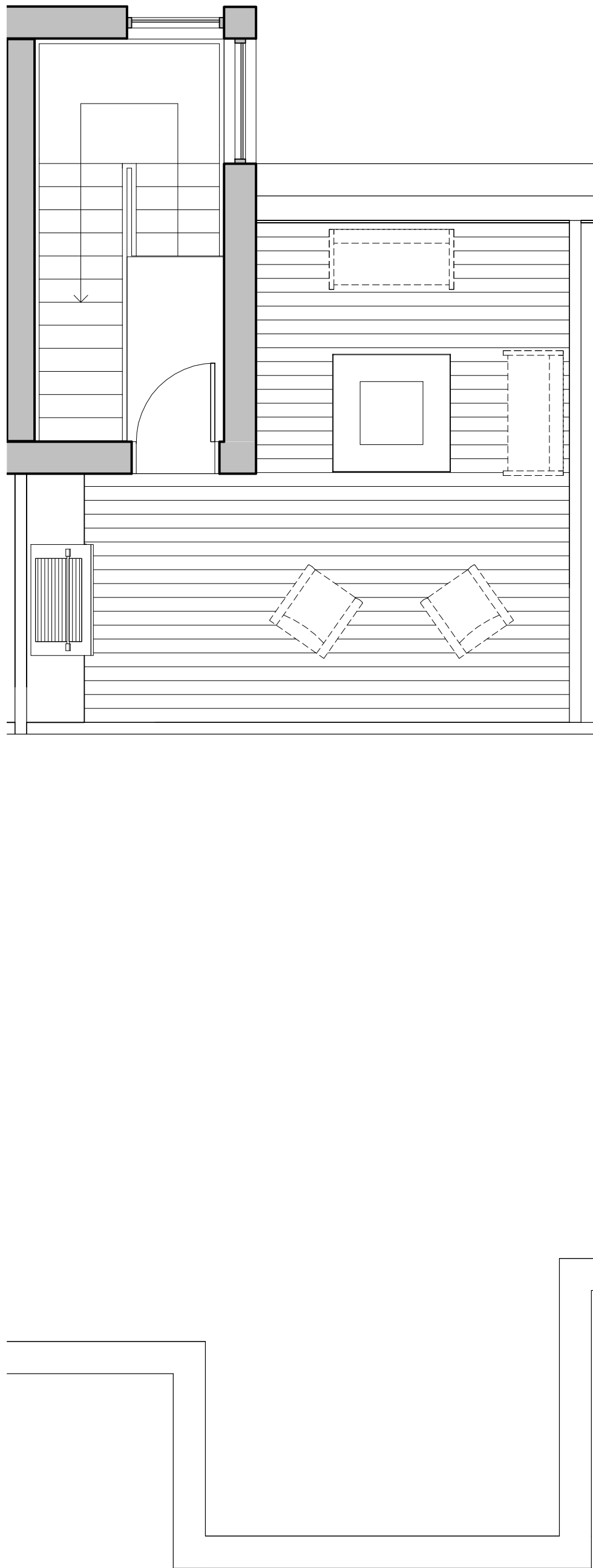
1ST FLOOR



2ND FLOOR



3RD FLOOR



ROOFTOP

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

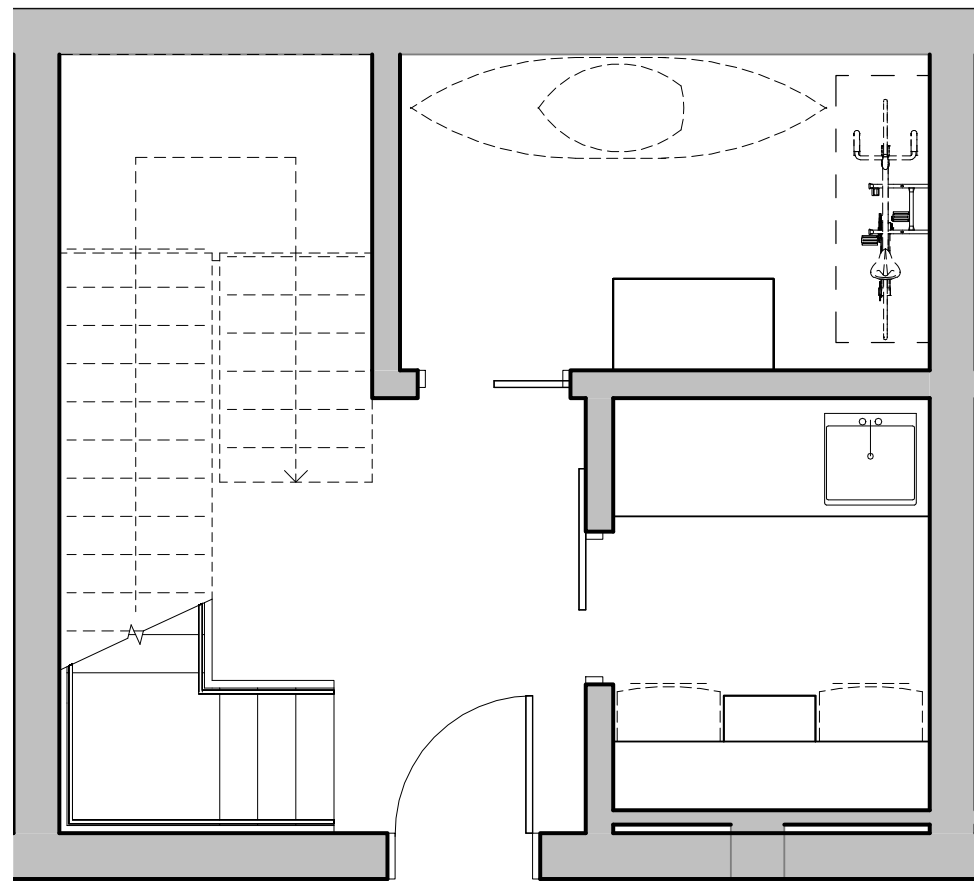
Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title

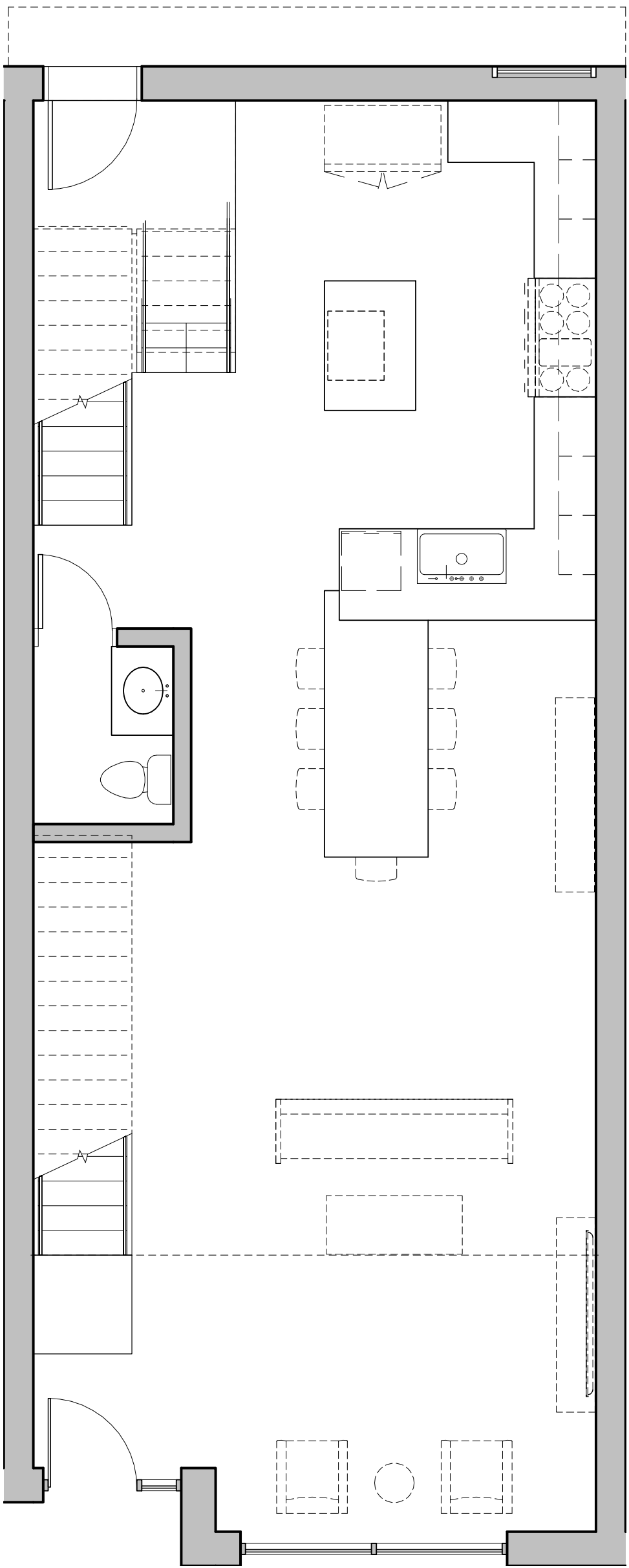
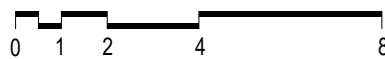
ENLARGED PLAN - UNIT C

Sheet No.

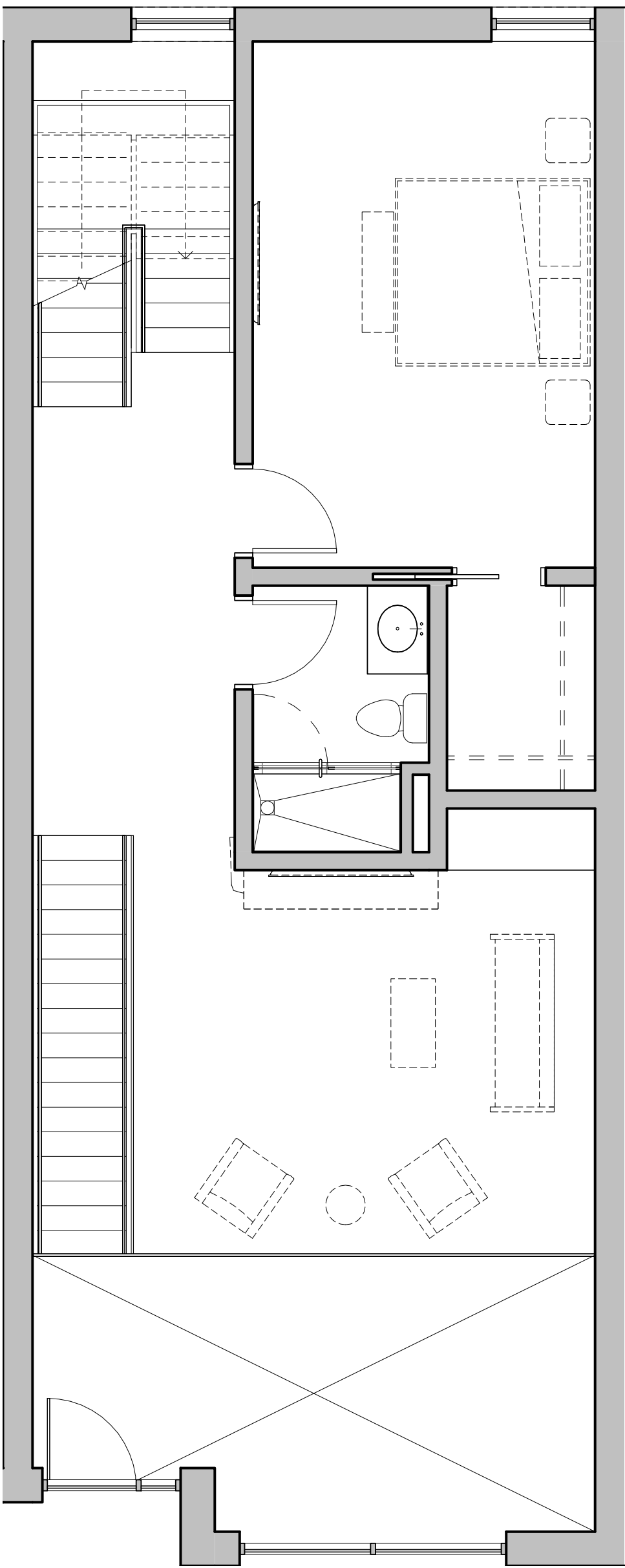
A121



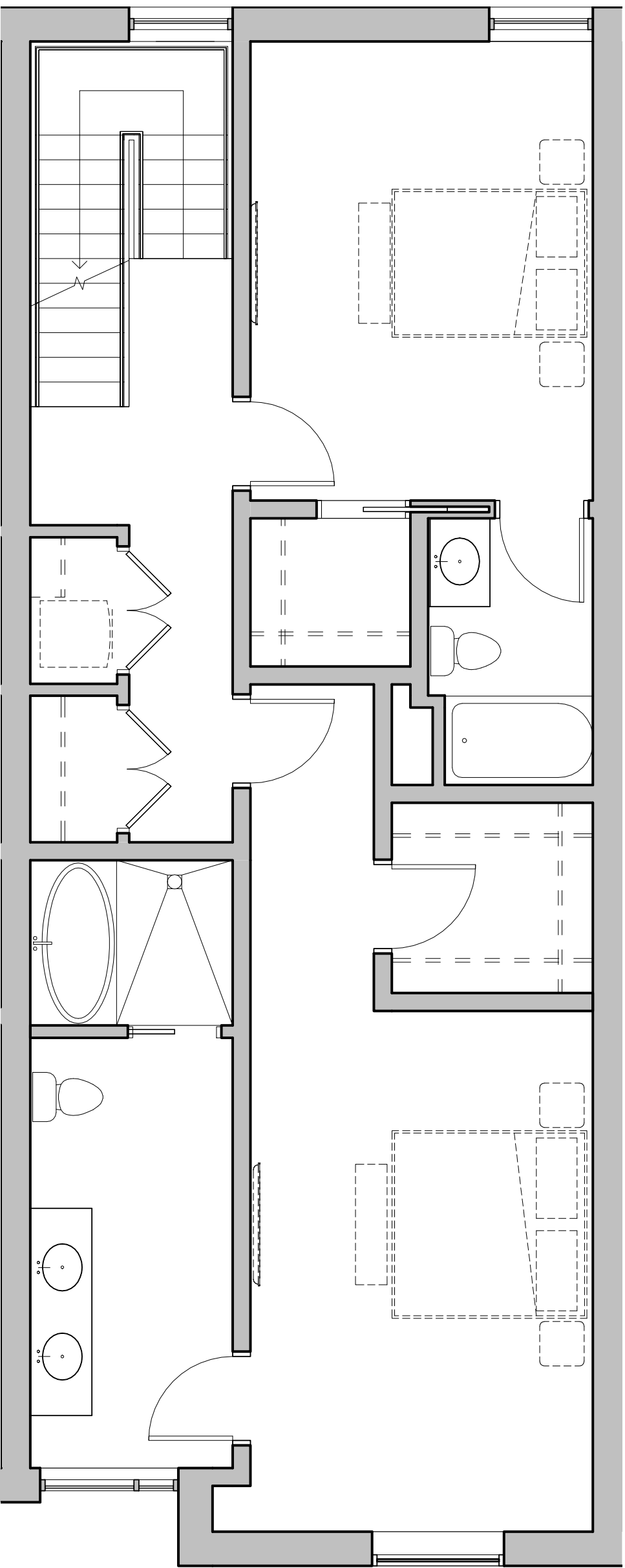
BASEMENT



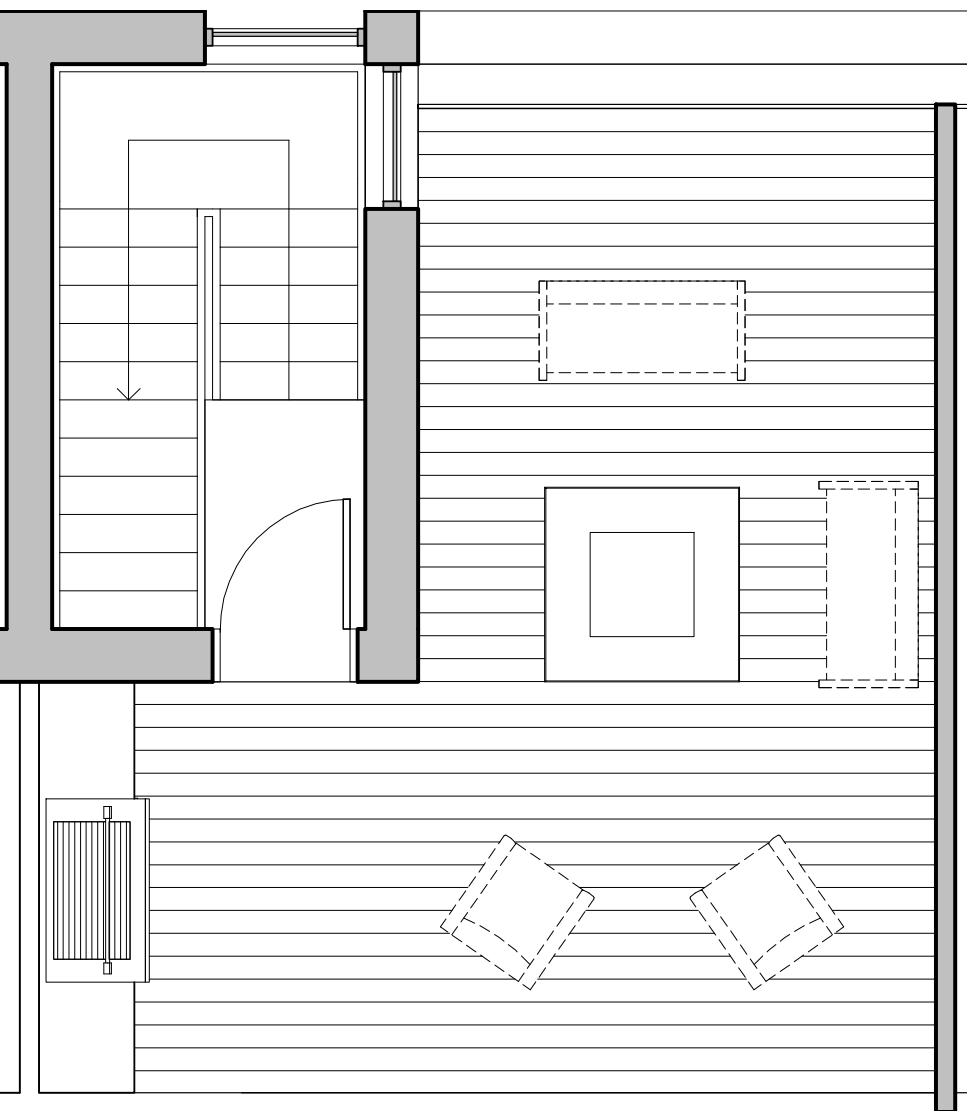
1ST FLOOR



2ND FLOOR



3RD FLOOR



ROOFTOP

NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

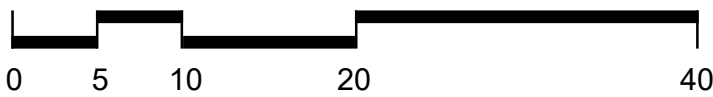
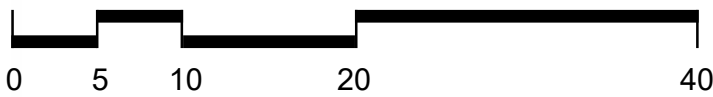
Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title

ENLARGED PLAN - UNIT E

Sheet No.

A122



NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR
DEVELOPMENT

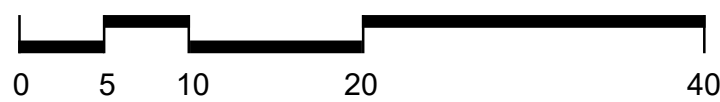
Sheet Title
EXTERIOR ELEVATIONS

Sheet No.
A201

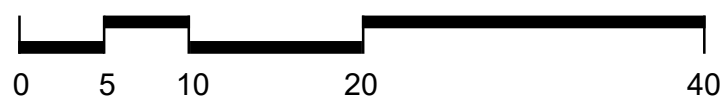
NOT FOR
CONSTRUCTION



EAST ELEVATION - COURTYARD



WEST ELEVATION - COURTYARD



Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR
DEVELOPMENT

Sheet Title
EXTERIOR ELEVATIONS

Sheet No.

A202



0 5 10 20 40



0 5 10 20 40



WEATHERING STEEL



CHARRED WOOD



WOOD ACCENTS



CONCRETE
FACADE MATERIALS

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR DEVELOPMENT

Sheet Title
EXTERIOR ELEVATIONS

Sheet No.

A203



NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS
Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. BEAR
218062.00 DEVELOPMENT

Sheet Title
PERSPECTIVES

Sheet No.
A301

NOT FOR
CONSTRUCTION

Revisions	Date
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SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No.	BEAR
218062.00	DEVELOPMENT

Sheet Title

PERSPECTIVES

Sheet No.
A302

NOT FOR
CONSTRUCTION

Revisions	Date
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SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No.	BEAR
218062.00	DEVELOPMENT

Sheet Title

PERSPECTIVES

Sheet No.
A303



NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS
Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. BEAR
218062.00 DEVELOPMENT

Sheet Title
PERSPECTIVES

Sheet No.
A304

NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No.
218062.00 BEAR
DEVELOPMENT

Sheet Title
CONTEXT IMAGES



SECTION 4 – ENGINEERING DOCUMENTS

- **WATER AND SEWER DEMAND CALCULATIONS**
 - **GEOTECH REPORT**
 - **TRAFFIC STUDY**

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Glenwood Gill Condominiums
165 and 185 Glenwood Street
JA Project No. 18105

Utility Study
WATER SYSTEM

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

BY: JL

Date: 4.24.2019

Average Day Demand¹

125 gpd

Maximum Day Demand¹

340 gpd

Peak Hour Factor²

4 PHF

WATER DEMAND						
	Occupancy Per Unit	Number of Units	Total Occupancy	Average TOTAL, gpd	Maximum TOTAL, gpd	PEAK HOUR, gpm
Unit, 2 Bedroom	3	3	9	1125	3060	8.5
Unit, 3 Bedroom	4	26	104	13000	35360	98.2
Subtotal Housing				14,125	38,420	106.7
	Quantity	Unit	Average inch/day	Average TOTAL, gpd	Maximum TOTAL, gpd	PEAK HOUR, gpm
Irrigation System	2,000	SF	0.25	312	623	1.7
Subtotal Irrigation				312	623	1.7
TOTAL WATER DEMAND				14,437	39,043	108

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)
120,000	IV	20	4	6250	75%	1563

Note:

¹ Based on daily rates from the WYDEQ CH 11, Section 34

² Peak Hour Factor based on busiest hour occurring during the busiest quarter of the day.

³ IFC - Appendix B, Table B105.1, Type V-B

⁴ IFC - Appendix B, Section B105.2, 75% reduction for automatic sprinkler systems, minimum 1500 gpm

BY: JK

Date: 04.24.2019

Bear Development					
WATER DEMAND - M22 FIXTURE CALCULATION					
	Fixture	No. Units	Fixtures per Unit ²	Fixture Value ¹	Fixture Value
H	Lavatory Sink	1	6	1.5	9
	Shower	1	5	2.5	13
	Toilet	1	5	6	30
	Kitchen Sink	1	2	1.8	4
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	1	3	3
	Utility Sink	1	0	4	0
F	Lavatory Sink	2	4	1.5	12
	Shower	2	3	2.5	15
	Toilet	2	3	6	36
	Kitchen Sink	2	1	1.8	4
	Dishwasher	2	1	1.3	3
	Laundry (washer)	2	1	3	6
	Utility Sink	2	1	4	8
E1	Lavatory Sink	1	5	1.5	8
	Shower	1	4	2.5	10
	Toilet	1	4	6	24
	Kitchen Sink	1	1	1.8	2
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	1	3	3
	Utility Sink	1	1	4	4
E	Lavatory Sink	4	5	1.5	30
	Shower	4	4	2.5	40
	Toilet	4	4	6	96
	Kitchen Sink	4	1	1.8	7
	Dishwasher	4	1	1.3	5
	Laundry (washer)	4	1	3	12
	Utility Sink	4	1	4	16
E2	Lavatory Sink	1	5	1.5	8
	Shower	1	3	2.5	8
	Toilet	1	2	6	12
	Kitchen Sink	1	1	1.8	2
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	1	3	3
	Utility Sink	1	0	4	0

A	Lavatory Sink	2	4	1.5	12
	Shower	2	3	2.5	15
	Toilet	2	1	6	12
	Kitchen Sink	2	1	1.8	4
	Dishwasher	2	1	1.3	3
	Laundry (washer)	2	1	3	6
	Utility Sink	2	1	4	8
B	Lavatory Sink	2	4	1.5	12
	Shower	2	3	2.5	15
	Toilet	2	3	6	36
	Kitchen Sink	2	1	1.8	4
	Dishwasher	2	1	1.3	3
	Laundry (washer)	2	1	3	6
	Utility Sink	2	1	4	8
C	Lavatory Sink	7	5	1.5	53
	Shower	7	4	2.5	70
	Toilet	7	4	6	168
	Kitchen Sink	7	2	1.8	25
	Dishwasher	7	1	1.3	9
	Laundry (washer)	7	1	3	21
	Utility Sink	7	1	4	28
D	Lavatory Sink	1	5	1.5	8
	Shower	1	4	2.5	10
	Toilet	1	4	6	24
	Kitchen Sink	1	2	1.8	4
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	1	3	3
	Utility Sink	1	1	4	4
D1	Lavatory Sink	1	5	1.5	8
	Shower	1	4	2.5	10
	Toilet	1	4	6	24
	Kitchen Sink	1	2	1.8	4
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	1	3	3
	Utility Sink	1	1	4	4
C1	Lavatory Sink	2	5	1.5	15
	Shower	2	4	2.5	20
	Toilet	2	4	6	48
	Kitchen Sink	2	2	1.8	7
	Dishwasher	2	1	1.3	3
	Laundry (washer)	2	1	3	6
	Utility Sink	2	1	4	8

G	Lavatory Sink	1	6	1.5	9
	Shower	1	5	2.5	13
	Toilet	1	5	6	30
	Kitchen Sink	1	2	1.8	4
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	1	3	3
	Utility Sink	1	1	4	4
J1	Lavatory Sink	1	4	1.5	6
	Shower	1	3	2.5	8
	Toilet	1	4	6	24
	Kitchen Sink	1	1	1.8	2
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	0	3	0
	Utility Sink	1	0	4	0
J	Lavatory Sink	1	4	1.5	6
	Shower	1	3	2.5	8
	Toilet	1	4	6	24
	Kitchen Sink	1	1	1.8	2
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	0	3	0
	Utility Sink	1	0	4	0
I	Lavatory Sink	1	3	1.5	5
	Shower	1	2	2.5	5
	Toilet	1	3	6	18
	Kitchen Sink	1	1	1.8	2
	Dishwasher	1	1	1.3	1
	Laundry (washer)	1	0	3	0
	Utility Sink	1	0	4	0

TOTAL FIXTURE VALUE	1,339
----------------------------	--------------

Probable Water Flow Demand (AWWA M22 - Figure 4-2)	68
Design Pressure Adjustment Factor (AWWA M22 - 80 psi)	1.17
Adjusted Probable Demand (gpm) ³	79.56

Note:

¹ Fixture Value based on AWWA M22

² Fixture count based 4.2019 program

³ Domestic use only, no irrigation

Glenwood Gill Condominiums
165 and 185 Glenwood Street
JA Project No. 18105

Utility Study
SANITARY SEWER DEMAND

JORGENSEN ASSOCIATES, PC
PO Box 9550
Jackson, WY 83002
307.733.5150

BY: JK

Date: 4.24.2019

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
H	3	Bedroom	1	150	270	450	1.3
F	3	Bedroom	2	150	540	900	2.5
E1	3	Bedroom	1	150	270	450	1.3
E	3	Bedroom	5	150	1350	2250	6.3
A	3	Bedroom	2	150	540	900	2.5
B	3	Bedroom	2	150	540	900	2.5
C	3	Bedroom	7	150	1890	3150	8.8
D	3	Bedroom	1	150	270	450	1.3
D1	3	Bedroom	1	150	270	450	1.3
C1	3	Bedroom	2	150	540	900	2.5
G	3	Bedroom	1	150	270	450	1.3
J1	3	Bedroom	1	150	270	450	1.3
J	2	Bedroom	1	150	180	300	0.8
I	2	Bedroom	2	150	360	600	1.7
TOTAL SANITARY SEWER DEMAND					7,560	12,600	35

Notes:

¹ Based on daily flow rates from the WYDEQ CH 11, Part B, Table 1

² Bedroom count shown based on Mormon Row Cabins Schematic, 4.12.2019



JORGENSEN

GEOTECHNICAL, LLC

PO Box 9550 · 1315 HWY 89 S., Suite 201
Jackson, WY 83002
PH: 307.733.5150
www.jorgeng.com

November 30, 2018

Nick Orthmann
Bear Development, LLC
4011 80th Street
Kenosha, WI 53142

RE: GEOTECHNICAL INVESTIGATION REPORT, 165 AND 185 NORTH GLENWOOD STREET, JACKSON, WYOMING (PROJECT NO: 18105)

Dear Mr. Orthmann,

We are pleased to present this report of our geotechnical investigation for the proposed development at 165 and 185 N. Glenwood St. in Jackson, Wyoming. This report encompasses 165 N. Glenwood and updates the previous report for 185 N. Glenwood which was prepared by Womack & Associates (WAI) and issued to the Eden Group in November of 2006. The report describes site conditions observed during the investigations and presents engineering analyses and recommendations for the proposed new structure.

In summary, the recent subsurface exploration encountered essentially the same material as was observed in 2006 and engineering recommendations generally remain the same. Engineering analyses depending upon seismic parameters, which have changed since 2006, have been updated in this report, as well as references to the current version of the building code (IBC, 2015; ASCE 7-10).

Groundwater monitoring is strongly recommended during the spring run-off season of 2019 to verify site groundwater levels will not impact the proposed construction.

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

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Cc: Arne Jorgensen, Hawtin-Jorgensen

**Geotechnical Investigation Report
165 and 185 North Glenwood Street
Jackson, Wyoming**

Prepared for:

**Nick Orthmann
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Prepared by:



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Appendix B:	2018 Borehole Logs
Appendix C:	USGS Seismic Design Maps Summary and Detailed Reports

1.0 INTRODUCTION

As authorized by Mr. Nick Orthmann of Bear Development, LLC, Jorgensen Geotechnical conducted a geotechnical investigation for the proposed development at 165 and 185 N. Glenwood Street in Jackson, Wyoming (Figure 1). The site is located in the Town of Jackson on the corner of North Glenwood Street and Gill St., about 750-ft east of the toe of East Gros Ventre Butte. Womack & Associates (WAI) previously conducted a geotechnical site investigation and prepared a geotechnical report for 185 N. Glenwood Street in October of 2006. The 2006 WAI report can be found in Appendix A of this report. The purposes of the additional field work conducted in November of 2018 were to verify soil and groundwater conditions at 165 N. Glenwood street are similar to those discovered at 185 N. Glenwood street in September of 2006, evaluate soil-engineering properties, and to provide recommendations for foundation construction.

2.0 PROPOSED CONSTRUCTION

It is our understanding the proposed structure will consist of an underground parking garage beneath a multi-story structure spanning both 165 and 185 N. Glenwood Street. Development of 185 N. Glenwood Street began between 2007 and 2009, but was never completed. Existing facilities include an underground parking garage and ramp at 185 N. Glenwood capped with a concrete slab. It is our understanding the walls of the parking structure were supported using soil nails, several of which extend into 165 N. Glenwood.

The southern portion of the project site located at 165 N. Glenwood Street is currently occupied by four separate structures, all of which will be demolished prior to construction of the proposed structure. Mr. Arne Jorgensen with Hawtin-Jorgensen Architects indicated the proposed building will be an extension of the existing structure at 185 N. Glenwood Street consisting of an underground parking garage with footings placed approximately 12 feet below the existing ground surface.

3.0 INVESTIGATION PROCEDURES

3.1 Environmental Assessment

A Phase I environmental assessment was completed by on September 6, 2006, for 185 N. Glenwood St. and consisted of a review of records provided by the Town of Jackson, Wyoming, Department of Environmental Quality (WDEQ), and the Environmental Protection Agency (EPA). The result of this assessment indicated that, while several surrounding areas are locally contaminated with hydrocarbons, the property was not associated with any current or historic environmental hazards.

3.2 Subsurface Investigation

The original field investigation conducted on September 14th and 15th, 2006, consisted of a preliminary site reconnaissance and a drilling and sampling program of three exploratory boreholes at 185 N. Glenwood, shown as BH-1 through BH-3 in Figure 2. The 2018 update

included two boreholes at 165 N. Glenwood, shown as JG-18-1 and JG-18-2 as shown in Figure 2. All five of the boreholes were drilled to depths ranging from 27 to 33 feet below the ground surface (bgs) in order to observe subgrade soil and groundwater conditions. One standpipe piezometer consisting of a two-inch, 20-slot PVC pipe completed with an eight-inch flush-mount surface vault was installed to 30-feet bgs in JG-18-1 during the November, 2018 site investigation. Descriptive logs of the boreholes can be found in Appendix B.

ProSonic Drilling provided contract drilling services for the 2006 investigation. The sonic drill rig had an interior diameter of 4" and returned continuous samples throughout the entire borehole depth during drilling. For Standard Penetration Tests (SPT), the sonic rig was equipped with a 140 lb. chain-drive hammer with a reported efficiency of 60%.

The 2018 drilling program was performed using a hollow-stem auger mounted on a Simco 2800HS drill rig. SPTs were performed at 2.5-ft intervals and samples were collected using a split spoon sampler driven by a rope and cathead pulley system dropping a 140-lb hammer 30-inches per blow. Blow counts (i.e., the number of blows to advance the sampler 6-inches) were recorded during each test, and adjusted to a hammer efficiency of 60% and overburden pressure of one atmosphere, as suggested by Youd and Idriss (1997) and Fang (1991), to obtain standard adjusted $(N_1)_{60}$ values in blows per foot (bpf).

The $(N_1)_{60}$ corrections account for differences in sampler size and configuration, hammer efficiency, overburden pressure, and other variables. It is very important to use the $(N_1)_{60}$ values for consideration of rock and soil strength rather than the field N-values. There is often significant variability between the two sets of blow counts.

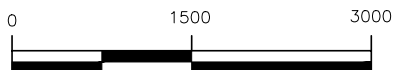
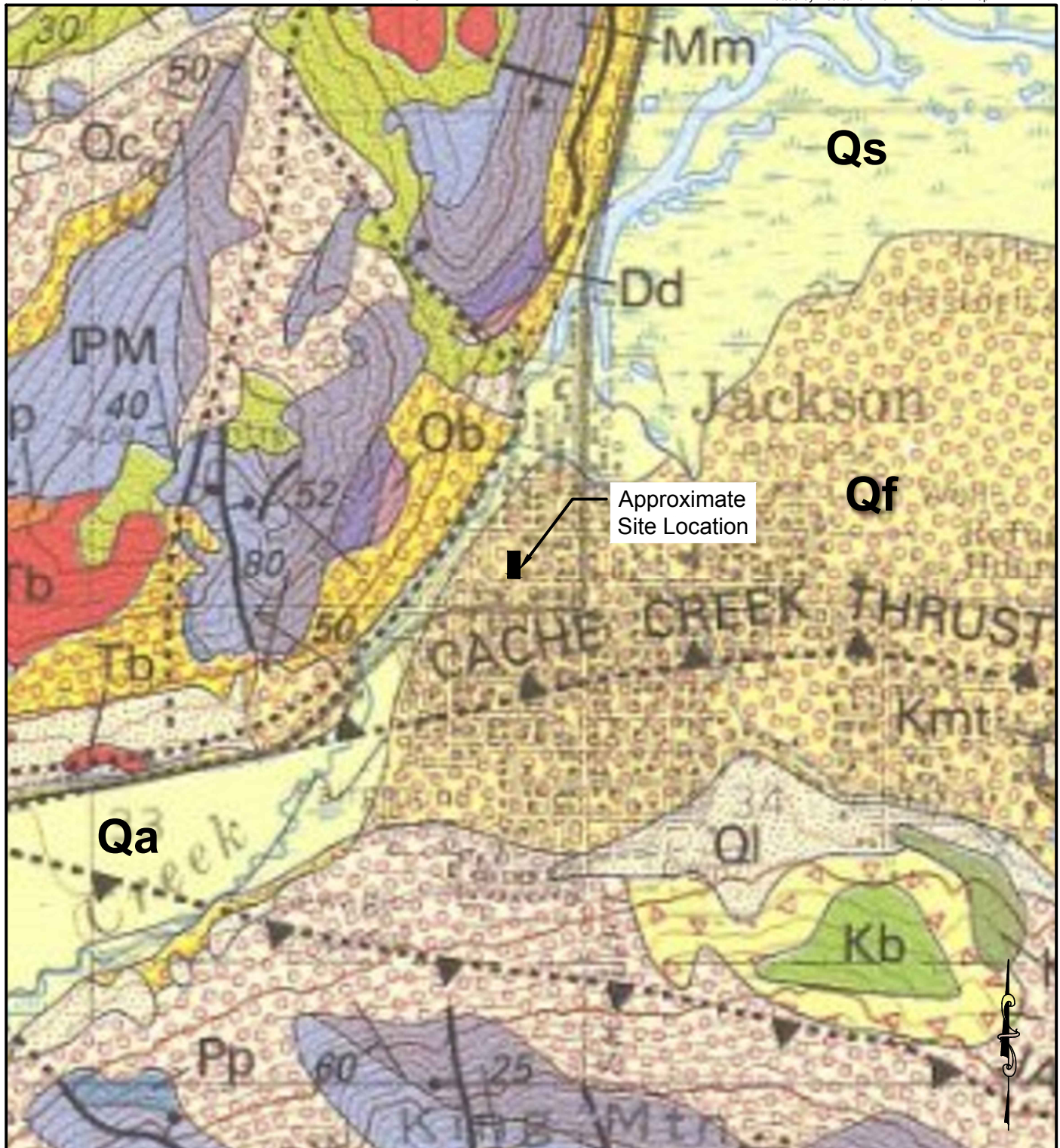
Soil types, consistencies, and relative moisture contents were observed and documented by a Jorgensen Geotechnical engineer during the 2018 investigation and a WAI engineer during the 2006 investigation. Site conditions and actual soil conditions may differ from those presented in the borehole logs. The approximate borehole locations are shown in Figure 2 and detailed borehole logs are presented graphically in Appendix B.

3.3 Laboratory Analysis

Given the stony character of soils encountered at the site, no laboratory testing was performed.

3.4 Report Preparation

This report describes the observed geologic and geotechnical site conditions and includes a site location and geologic map. Boreholes are presented graphically in Appendix B. This report provides engineering analysis and recommendations for the construction of foundation elements, drainage, and shoring elements.



SCALE: 1 INCH = 1500 FEET

THIS SCALE VALID ONLY FOR 8.5x11 PRINTS

From Love et al., 1992, Geologic map of Grand Teton National Park, Teton County, Wyoming

Map Symbols: Qf - Alluvial Fan Qs - Swamp Deposits
Qa - Alluvium - Gravel, Sand, and Flood-Plain Deposits

DRAFTED BY:	HC	SHEET TITLE:	PROJECT TITLE:	 JORGENSEN Geotechnical, LLC 307-733-5150 www.jorgeng.com
REVIEWED BY:	CHL	Figure 1	Geotechnical Site Investigation	
PROJECT NUMBER	18105	Site Location and Geologic Map	165 N. Glenwood - Bear Dev. Jackson, Wyoming	



DRAFTED BY:	HC	SHEET TITLE:	PROJECT TITLE:	 JORGENSEN Geotechnical, LLC 307-733-5150 www.jorgeng.com
REVIEWED BY:	CHL	Figure 2	Geotechnical Site Investigation	
PROJECT NUMBER		Borehole Location Map	165 N. Glenwood - Bear Dev. Jackson, Wyoming	
18105				

4.0 SITE CONDITIONS

4.1 Description

The project site is in the north part of the Town of Jackson, on the southwest corner of the intersection between North Glenwood Street and West Gill Avenue. The site is about one block east of Flat Creek and one block south and west of Cache Creek. The site is currently occupied by several structures. The northern portion of the site on 185 N. Glenwood Street is occupied by a partially completed underground parking garage, while the southern portion of the site on 165 N. Glenwood is currently occupied by four separate structures. The site is relatively level to very gently sloping to the northwest toward Flat Creek. Elevation at the site is about 6,210 feet above sea level.

4.2 Geology

A geologic map of the Grand Teton National Park (Figure 1), which encompasses the town of Jackson and the project site, was published by Love, et al, in 1992. The map shows the location of surficial deposits, bedrock units, and geologic structures (i.e., faults and folds). As depicted on the map, the project site is within the Cache Creek alluvial fan deposits (Qf) consisting of water-laid gravel, sand, silt, and clay with the finer grained deposits becoming more abundant at the distal ends of the fans (i.e., far from the mouth of the canyon), and stonier deposits at the proximal (i.e., near the mouth of the canyon) end of the fans. Soils encountered in the boreholes are consistent with the mapped geology and generally consist of sandy and clayey gravels. The alluvial fan is presumably underlain at depth by Tertiary and Paleozoic aged bedrock. Bedrock was not encountered in the boreholes and is expected to be very deep.

Numerous Quaternary aged (relatively young and potentially active) faults have been mapped in the Jackson area (Love et al, 1992; USGS, 2006), notably the East Gros Ventre fault, faults on the east and west side of West Gros Ventre Butte, and the Teton fault system along the east side (base) of the Teton Range. The surface trace of the Teton fault is located approximately 6 miles west of the project site. The mapped trace of the East Gros Ventre fault lies along the eastern base of East Gros Ventre Butte (Figure 1). This feature is mainly concealed beneath late Pleistocene to Holocene alluvium (Machette et al, 2001).

Two east-west trending buried fault segments, the Cache Creek thrust fault and the Jackson thrust fault, are mapped south of the project site (dotted lines with black triangles on Figure 1). The fault segments appear to be truncated by the north-south trending Teton fault system, and offset only the older geologic units (i.e., the Paleozoic and Tertiary aged rocks). These fault traces do not appear to offset the younger geologic units and therefore are inferred to be relatively old and inactive structures.

4.3 Soils

Similar soil conditions were encountered in all of the boreholes drilled for this investigation. Borehole BH-1 (2006) was drilled to a depth of 27 feet near the northeast corner of 185 N. Glenwood. Boreholes BH-2 and -3 at 185 N. Glenwood were drilled to depths of 27 and 28 feet in the northwest corner and southeastern corner of the lot, respectively. Borehole JG-18-1

(2018) was drilled to a depth of 31.5-ft near the northwest corner of 165 N. Glenwood, and JG-2 was drilled to a depth of 33-ft near the southwest corner. All borehole locations are shown on Figure 2.

The site is underlain by stratified alluvial fan deposits consisting primarily of medium dense to very dense sandy and clayey gravel/cobble. About 4-ft of very loose sandy silt fill was encountered at the ground surface in borehole JG-18-1 and JG-18-2. As indicated by the 2006 report (Appendix A) and borehole logs in Appendix B, most of the site is underlain by sandy gravel and cobble alluvial fan deposits. Based on field estimates, the stony alluvial fan soils consist of about 20-30% sand and 70-80% 5-inch minus subrounded gravel and cobbles. Adjusted blow count (N_1)₆₀ values in the stony alluvial fan are typically in the range of 20 to more than 50 bpf.

Thin beds of gravelly clay were encountered below about 25-ft in some borings. These thin, lenticular beds of clayey gravels are unlikely to affect foundation performance. Boring JG-18-2 encountered medium stiff massive clay from 29-ft bgs down to total depth of the boring at 33-ft. The adjusted blow count in this clay was 8 bpf, which indicates a soft to medium stiff consistency. However, assuming the foundations for the proposed structure are placed at approximately 12-ft bgs, the clay is too deep to affect foundation design. This clay may represent a remnant of the glacial lake beds that formerly occupied the valley or a fine-grained deposit near the distal (downstream) end of the alluvial fan.

4.4 Groundwater

Groundwater was encountered in boreholes BH-1 and BH-2 (WAI, 2006) in September of 2006 at approximately 25-ft below the ground surface. Groundwater monitoring at borehole BH-2 was conducted through the spring 2007, which indicated groundwater levels remain at approximately 25-ft bgs for a large portion of the year. Measured groundwater levels at the site did not appear to respond to flow levels in Flat and Cache Creeks. Groundwater was not encountered down to 33-ft bgs at 165 N. Glenwood at the time of drilling in October 2018, though the investigation occurred during what is typically considered a dry time of year. We strongly recommend groundwater monitoring in MW-1 (JG-18-1) during the spring of 2019. Construction methods used for parking areas below grade will be informed by groundwater monitoring data from MW-1 and BH-2. Recommendations for construction in areas of high groundwater are presented in Section 6.1.

4.5 Earthquakes and Ground Shaking

Jackson Hole is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Wyoming, and western Montana (Smith and Arabasz, 1991). The Teton fault along the eastern margin of the Teton Range about 6 miles northwest of the project 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 events in western Wyoming (Case, 1997), implying that the risk of major earthquakes may be high.

Ground motion accelerations should be derived for the project site in accordance with the general procedure defined in the International Building Code (IBC). The IBC references ASCE 7-10 to determine the ground motion accelerations. Based on subsurface soils and geologic maps, the site is classified as a Site Class D ("Stiff Soils"). For your convenience, USGS Seismic Design Maps Summary and Detailed Reports were produced assuming a risk category of I/II/III and are attached in Appendix C. These reports present design ground motion for structural design. The site's seismic hazard results in a Seismic Design Category D.

The site is in an area of moderate seismic activity. The current peak horizontal acceleration (PGA) with 10% probability of exceedance in 50-years is approximately 0.20g, according to the USGS National Seismic Hazard Maps (2014). This has been applied in this report for analysis of seismic lateral loading on retaining walls; see Section 5.3.

The provisions of the IBC are intended to provide uniform levels of performance for structures, depending on their occupancy and 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* ground 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 percent in 50 years (a return period of about 2,500 years). The owner should be aware that 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 to the owner.

4.6 Geological and Geotechnical Hazards

4.6.1 Liquefaction Potential

Loose, saturated sands and silty sands, and in some cases silts and gravels, may liquefy when exposed to seismic shaking. Liquefaction has been most prevalent in areas where loose saturated sands occur within about 30 feet or less of the ground surface, but in some instances, liquefaction has been reported in saturated deposits up to 60 feet deep (EERI, 1994).

The boreholes drilled to a depth of about 33 feet encountered sandy gravel and cobbles under the site that appear to be too stony and dense to liquefy in a seismic event. It is possible that liquefiable materials occur at greater depths. At this flat-lying location, liquefaction could potentially cause minor differential settlement. However, there appears to be little risk of "lateral spreading", which is a major slope movement that is a common source of catastrophic failure during earthquakes.

4.6.2 Geological Hazards

The owner should be aware that in the event of a large magnitude earthquake, there are several geologic hazards that could potentially cause damage to structures (Smith et al, 1993). Potential hazards at this site might include strong ground shaking and ground cracking. Although the risk of surface rupture along an un-mapped fault trace exists, the risk is very small.

5.0 ENGINEERING ANALYSIS

5.1 Settlement

Foundation footings shall be placed on stony Cache Creek alluvial fan material. Significant consolidation (e.g., total settlement of 1-inch and differential settlement of 0.5-inches) of the dense to very dense, sandy and clayey gravels and cobbles observed in the boreholes is not anticipated. Removal of loose topsoil and fill material from the upper 2-4 feet is necessary, but is expected for the basement excavation. Removal of the loose fill shall extend to exterior footings including those for awnings, porches, and hardscapes.

5.2 Bearing Capacity

Bearing capacity of soil refers to its ability to resist shear failure under load. The bearing capacity of the stony alluvial fan deposits was estimated using Meyerhof's bearing capacity equation for strip footings (Bowles, 1996). Soil properties were estimated based on visual soil classification. The average unit weight of the soil is estimated to be about 125 pcf, and the friction angle is estimated to be about 36 degrees (Pit Slope Manual, 1982; Huang, 1983). The foundation footings are assumed to be 16 inches wide, placed on the sandy gravel and cobble alluvial fan. Assuming continuous 16-inch strip footings, an allowable bearing capacity for the stony alluvial material is estimated to be about 5,000 psf.

These values assume footings will be placed directly on the stony alluvial fan or approved engineered fill. Jorgensen should be contacted prior to the placement of structural fill or foundation elements to observe whether or not the excavation has reached competent stony alluvial fan or approved stony fill.

5.3 Lateral Pressures

Lateral pressures were calculated using methods suggested by Bowles (1996). Lateral pressures were calculated for at-rest, active, and passive conditions assuming level backfill, and are presented in Table 5-1. These values assume stony site material will be used as exterior backfill. We have assumed an estimated internal friction angle of 36° and a unit weight of 125 pounds per cubic foot (pcf) based on visual classification of the soils.

Table 5-1: Lateral Pressure Parameters for Native Stony Alluvial Fan Soils

Condition	Coefficient of Earth Pressure	γK (equivalent fluid pressure)
Static Conditions Level Backfill	$K_o = 0.41$ $K_a = 0.26$ $K_p = 3.85$	52 pcf 32 pcf 481 pcf
Earthquake Conditions Level Backfill	$K_{ae} = 0.32$ $K_{pe} = 3.65$	39 pcf 456 pcf

5.3.1 Active Pressures

For lateral pressure design of retaining walls, which are allowed to deflect and develop an active soil wedge, the calculated equivalent fluid pressure (γK_a) is about 32 pcf assuming a horizontal ground surface behind the retaining wall. This pressure distribution would be equivalent to a force of approximately $16H^2$ pounds per horizontal foot of wall acting at one-third the wall height (H) above the base.

Lateral pressures on retaining walls from earthquakes were estimated using the Mononobe-Okabe equations (Bowles, 1996; Duncan et al, 1990). Because the maximum acceleration occurs only briefly during an earthquake, it is common practice when designing dams and other earth structures to reduce the design acceleration to $\frac{1}{2}$ of the maximum design acceleration (Hynes-Griffin and Franklin, 1984). Thus, we have calculated seismic lateral pressures using a horizontal acceleration k_h of .10g ($\frac{1}{2}$ of k_h max) per the USGS (2014).

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). Accordingly, active soil pressures have been divided into two components that act at different wall heights. The static force acts at the lower third-point, as discussed above. The resultant force from seismic lateral pressures is applied at 60% of the wall height above the base with a magnitude equal to the difference between the seismic and static active pressures; i.e., $\frac{1}{2}(\gamma k_{ae} - \gamma k_a)H^2$ or $3.5H^2$.

5.3.2 Passive Pressures

For passive pressures, an equivalent fluid pressure (γK_p) of about 481 pcf was estimated for static conditions and 456 pcf for seismic conditions. Passive pressure design should neglect the loose fill and soil located within the frost zone.

5.3.3 At-Rest Pressures

For lateral pressure design of foundation walls, which are restrained and not allowed to deflect, the calculated at rest earth pressure (γK_o) is about 52 pcf, assuming a horizontal ground surface behind the foundation wall. Use the at-rest pressure or the active pressure under seismic conditions for foundation wall design, whichever is greater.

5.4 Soil Friction

Terzaghi, et al (1996) suggests the use of the internal strength of the soil for the friction angle along a concrete base in granular soils, with a maximum value of 30° . Accordingly, a friction value of 0.58, which is the tangent of 30° , is suggested if foundation elements are founded on the native stony alluvial fan or an approved structural fill. The friction value may be combined with the passive pressure to resist horizontal loads.

5.5 Shoring

It is our understanding the proposed basement footings may be more than 10 feet below ground surface. Shoring will likely be required around the perimeter of the new building.

Recommended shoring alternatives include H-pile walls and soil nails. When a building design has been selected, this office should be involved in selection of shoring techniques. It is our understanding the foundation walls for 185 N. Glenwood Street are supported by tie-backs or soil nails. It is assumed the soil nails were designed and installed using the soil nail parameters presented in Section 5.5.2 of the 2006 WAI report (Appendix A). Based on conversations with the Architect, it is our understanding the existing underground parking garage will be extended to the south onto 165 N. Glenwood Street using the same design and construction techniques. Therefore, selection and design of the shoring system for 165 N. Glenwood Street should mimic the performance of the original shoring system. Test data from the original construction is expected to represent the most accurate information for anchor or nail performance.

In light of the existing shoring system, the southern wall of the partially completed underground parking garage on 185 North Glenwood street contains several soil nails extending to the south onto 165 N. Glenwood street. Construction of the proposed construction must take into consideration the effect of removing these anchors and ensure the proposed excavation will not damage the existing structure.

6.0 RECOMMENDATIONS

6.1 Foundations

In our opinion, the sandy gravel and cobble alluvial fan soils below a depth of about 2 to 3 feet will provide adequate support for anticipated foundation loads of the proposed structure. Excavation for the foundation footings should remove the upper 2 to 3 feet of finer-grained soil and fill, exposing the top of the underlying gravel and cobbles. Foundation footings may be placed directly on the stony alluvial fan. Given the depth and stiff character of the two clay layers encountered we believe that over-excavation will not be necessary.

All footings should be placed below the frost line, including exterior footings for awnings and porches. The building code for Teton County requires that footings be placed at a minimum depth of 34 inches below finished grade, with a minimum foundation exposure of 6 inches above finished grade.

To further reduce the risk from potential settlement, any material loosened during the excavation process shall be compacted to a non-yielding state prior to placement of the concrete footings. A vibrating, smooth-drum roller compactor or "whacker" may be used to densify the coarse-grained soils. If the groundwater level is above the bottom of the footing excavation, compaction may not be feasible.

Because of the possibility of relatively shallow groundwater conditions at the site, a full-basement or below grade parking structure may be vulnerable to seepage. If the owner and architect plan to construct the building with a full-basement or underground parking, we strongly recommend a foundation system that is fully waterproofed unless groundwater monitoring in spring 2019 indicates otherwise. The foundation footings, stem walls, and floor slab should be constructed as a monolithic unit to eliminate joints and completely wrapped

with a waterproof membrane system. If necessary, adequate foundation reinforcement should be used to counteract buoyant forces that may be exerted on the floor slab.

Relying on a dewatering system to mitigate seepage into the lower levels of the building is not recommended. Mechanical means of dewatering may be problematical because of the high permeability of the stony soils and the anticipated large quantities of water that would need to be displaced. In addition, dewatering systems typically have high installation costs, long-term operation and maintenance expenses, and reliability and water discharge issues.

During foundation construction, shallow groundwater may be encountered. Dewatering to reduce water levels may be required during foundation construction. At this point we do not consider it necessary to specify dewatering procedures during construction. Pumping may be required and discharge of water may be problematical at this site. Adequate planning is important to address proper discharge of the water. These issues will not be of concern if groundwater does not rise significantly from its current level.

A Structural engineer should review the plans to check that adequate support is provided to the foundation systems. Minor settlement of footings, foundation walls, and floor slabs may result in small fractures in the concrete walls, concrete floor slabs, and sheetrock. These occurrences are normal and should not be a cause for concern.

6.2 Site Preparation

At the start of construction, the site should be cleared and stripped of topsoil, fine grained soils, and organic debris. No brush, roots, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or site-derived engineered 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.

If fine-grained soils are observed at foundation depth, they should be removed and replaced with an approved engineered fill, such as pit-run or select site soils. During excavation for the foundation system, removal of large cobbles and boulders may disturb and loosen the surrounding material. All disturbed areas should be compacted with a smooth-drum vibratory roller, in vibratory mode with a minimum of three passes, prior to placement of structural fill and/or 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 Jorgensen.

All excavations and foundation subgrades should be observed by a representative of Jorgensen 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.

6.3 Foundation Drains

Foundation drains were recommended in Section 6.4 of the 2006 WAI Report, though it is unknown if foundation drains were installed during the construction of the existing underground parking garage. Foundation drains for the proposed addition to the existing underground parking garage should mimic the existing foundation drain in order to obtain a single, harmonious system. This issue may be revisited following groundwater monitoring and final design.

6.4 Excavation and Cut Slope Stability

OSHA regulations (29CFR1926) appear to classify site soils as Type C. For planning and design purposes, simple cut slopes should be no steeper than 1.5H:1V in the stony alluvial fan. These are recommendations based on observations made at the time of the investigation. The contractor shall be responsible for adherence to OSHA and other safety regulations by observing soil and groundwater conditions at the time of construction.

Simple cut slopes may not be possible in all or most of the site. Site constraints such as adjacent buildings, utilities, and roads are likely to require shoring to support excavation for basement foundations. Selection and design of an appropriate shoring system is beyond the scope of this report, but may be provided upon request.

6.5 Final Backfilling and Grading

Properly compacted backfill will reduce settlement of the soil against foundation walls and beneath exterior concrete slabs. Exterior backfill around the building should consist of site materials placed in lifts no greater than 9 inches loose thickness and compacted. Existing site material may be used for exterior and utility trench backfill.

Structural fill should be used beneath exterior slabs-on-grade. Utility trenches should also be backfilled in lifts and compacted. Final grading should provide protection from frost. Do not over compact exterior backfills against “green” foundation walls.

Prior to placement of structural fill for the foundation subgrade or exterior slabs-on-grade, the site should be cleared and grubbed. No brush, roots, sod, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill.

6.6 Compaction of Engineered fill

If engineered fill is used to achieve final grades below footings, the fill may consist of select stony site material or imported pit-run fill placed in horizontal lifts no greater than 12 inches loose thickness, as indicated by Table 6-1. Larger cobbles (> 4” diameter) should not be used as structural backfill, except as specified in Table 6-1.

Table 6-1: Compaction Parameters for Stony Fill

Compactor Type	Lift Thickness	Maximum Particle Size	Minimum Number of Passes
5-ton vibratory	12 inches	9-inch*	3
1.5-ton vibratory	9 inches	6-inch	5
Hand-held	4 inches	4-inch	5

* Occasional clasts to 12-inch are permitted, if encountered, but should not be nested (placed against one another).

Stony fill will compact into a dense, strong, well-draining structural fill, and strict moisture control is usually not required. Compaction testing with a nuclear density gauge is usually problematic due to the presence of large stones. Therefore, we recommend compacting stony fills using a method specification, which may be established as follows:

- The contractor will place fill in loose lifts no greater than specified in Table 6-1 for whichever class of compactor is used.
- Fill will be compacted with the *minimum* number of passes specified in Table 6-1. 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 building pad construction. JG should observe lift thickness, number of passes, and equipment used during compaction. Additional guidance on construction observations may be found in Section 6.12.

Exterior backfills should be placed as early as possible. However, do not over-compact exterior backfills against “green” foundation walls. Utility trenches should also be backfilled in lifts and compacted. Stony soils will require a vibrating smooth-drum roller or vibratory plate (i.e., hoe-pack or “jumping jack”) for compaction.

6.7 Final Grading

Properly compacted backfill and site drainage are important for protecting basements and foundation elements from water infiltration. Final grading should provide positive drainage of at least 0.5 foot in the first 10 feet (5%) away from the structure. Adequate gutters are strongly recommended. Roof runoff should be discharged at least 3 feet away from the building or exterior slabs. Swales or other moisture collection points should be avoided if possible within 10 feet of the foundation or retaining walls. Drainage swales should slope a minimum of 2%.

6.8 Interior Slabs-on-Grade

The recommendations in this section apply only if the basement has not been fully waterproofed and is within 5 feet of the seasonal water table. The interior floor slab should be at least 4 inches thick, and any slabs bearing vehicles should be at least 6 inches thick. Minor floor cracking of slab-on-grade construction is difficult if not impossible to prevent. Such cracking is normal and should be expected to occur with time. Buildings are almost never free of cracks, and cracking is caused by many factors other than soil movement, such as concrete shrinkage, normal activities, and daily and seasonal variability in temperature and humidity.

The following suggestions are recommended for standard slab-on-grade construction. An impermeable layer (usually plastic) is suggested beneath the slab, underlain by 4 inches of clean drain gravel that will act as a capillary break to reduce dampness. Two options are available to reduce the tendency for the concrete to crack as it dries. Three articles from the American Concrete Institute (ACI) that discuss these options are located in Appendix C of the 2006 WAI Report.

1. A blotter layer may be placed under the slab. In the past, loose sand has been used for this purpose, but is no longer recommended. A cover of 4 inches of trimmable, compactible, granular material may be placed over the sheeting to receive the concrete slab. This material usually consists of “crusher run material”, which varies in size from about 1.5-inch down to rock dust. Alternatively, 3 inches of fine graded material such as crusher fines or manufactured sand may be used.
2. The blotter layer may be eliminated if the concrete is reinforced properly. The article entitled “Controlling Curling and Cracking in Floors to Receive Coverings” provides a discussion of proper floor slab reinforcement. If the contractor needs additional guidance on reinforcement, a structural engineer should provide it.

The Teton County Building Department also requires a ventilation system for slab-on-grade construction in inhabited buildings. A ventilation system is not required for a deep basement or parking garage below the groundwater level.

6.9 Exterior Slabs-on-Grade

Exterior slabs (sidewalks, patios, driveways, etc.) typically sustain the greatest damage. Cracking is almost impossible to avoid, and freeze-thaw adds to the difficulty caused by soil consolidation. The fine-grained topsoil, silt, and clay fill material near existing ground surface could potentially cause severe frost or settlement damage. The following suggestions may reduce differential movement of exterior slabs.

Exterior concrete slabs should be at least 4 inches thick, 6 inches if supporting vehicles. Exterior slabs should not be tied to foundation walls. Any movement of exterior slabs may be transmitted to the foundation walls, resulting in damage. Posts for patios or other exterior columns should not bear on exterior slabs. If the slabs settle or rise, the movement can be

transmitted to the post, resulting in damage to the structure.

Exterior slabs placed on fine-grained soils may be very susceptible to frost heave, and any exterior flat work placed on these soils may perform poorly. Performance of the slabs may be improved by placement of at least 6 inches, preferably 12 inches, of gravel beneath the slab. Expansion joints are recommended in all concrete flatwork.

6.10 Ventilation and Radon

Evaluation of radon was beyond the scope of work; local codes should be followed and specialty contractors employed, if necessary. A capillary break layer (Section 6.8) may be necessary to accommodate a radon vent pipe. Teton County Building Code requires that slabs below living spaces be ventilated and sealed. Ventilation should also be provided for areas under crawl spaces. The building contractor is ultimately responsible for following local building codes.

6.11 Reinforcing, Utilities Testing, and Concrete Considerations

Footings, slabs, and foundation walls should be reinforced to resist differential movement. We strongly recommend consultation with a structural engineer to specify adequate reinforcement. Exterior concrete should contain 5% to 7% entrained air. We recommend pressure testing of water and sewer lines before backfilling.

6.12 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 observe the conditions and make any 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 stony alluvial fan soils or stony fill have been reached and prepared in accordance with Section 6.2.
2. During the placement of the beginning lifts of engineered fill, if required, to observe compaction (i.e., develop a method specification, see Section 6.6: and
3. Once the site has been prepared to the bottom of footing elevation to witness a proof roll with the compactor.

7.0 LIMITATIONS

This report has been prepared based on a limited amount of data. Actual site conditions may vary. This report, including engineering analysis, recommendations, figures, and design details are exclusive to the referenced site. Under no circumstances shall the figures be separated from the text and used independently. This report is not a stand-alone document and shall always be accompanied by the original 2006 WAI report found in appendix A of this report. Recommendations in this report are not applicable to other construction sites. 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.

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APPENDIX A

185 N. Glenwood Geotechnical Report (WAI, 2006)

**GEOTECHNICAL INVESTIGATION REPORT
MCCABE PROPERTY
185 NORTH GLENWOOD STREET
JACKSON, WYOMING**

Prepared for:

**Rick Benson
Eden Group
3395 North Pines Way
Wilson, WY 83014**

Prepared by:

**Womack & Associates, Inc.
P.O. Box 12650
Jackson, Wyoming**

October 17, 2006



WOMACK & ASSOCIATES, INC.

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• Geotechnical Engineering

• Geology

October 17, 2006

Rick Benson
Eden Group
3395 North Pines Way
Wilson, Wyoming 83014

**RE: GEOTECHNICAL INVESTIGATION REPORT, MCCABE PROPERTY PROJECT,
JACKSON, WYOMING**

Dear Rick:

We are pleased to present this report on our geotechnical investigation for the proposed development at the McCabe Property in Jackson, Wyoming. Two copies are enclosed. The report describes site conditions and presents engineering analyses and 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,

WOMACK & ASSOCIATES, INC.

Ray Womack 10-17-06
Ray Womack, P.E., P.G.

Enclosure: Reports

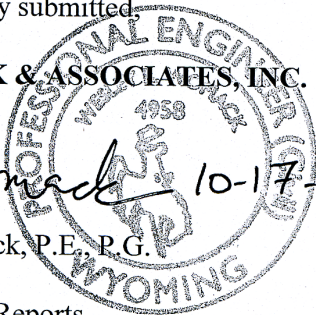


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1.0 INTRODUCTION

As authorized by Rick Benson of the Eden Group, Womack and Associates, Inc. conducted a geotechnical investigation for the proposed housing development at the McCabe Property in Jackson, Wyoming. The site is located in the Town of Jackson on the corner of North Glenwood Street and Gill St., just east of East Gros Ventre Butte. The purposes were to investigate soil and groundwater conditions, evaluate soil-engineering properties, and to provide recommendations for foundation construction.

2.0 PROPOSED CONSTRUCTION

Plans for the site include demolition of the existing multi-story office and printing complex and construction of a multi-story housing development with an underground parking structure.

3.0 INVESTIGATION PROCEDURES

3.1 Field Investigation

The field investigation conducted on September 14th and 15th, 2006, consisted of preliminary site reconnaissance and drilling and sampling of three exploratory boreholes. The boreholes were drilled to depths of about 25 to 30 feet in order to observe subgrade soil and groundwater conditions. Borehole locations are shown in Figure 1. Descriptive logs of the boreholes are in Appendix A.

ProSonic Drilling provided contract drilling services. The sonic drill rig had an interior diameter of 4" and returned continuous samples through the entire borehole depth. The sonic rig was equipped with a 140 lb. chain-drive hammer with a reported efficiency of 60%

Standard Penetration Tests (SPT) were performed using methods consistent with ASTM D 1586. The sample intervals were varied as judged appropriate by the engineering geologist. A 1 3/8-inch split-spoon sampler without liners was used for soil sampling. A 140-pound hammer dropped 30 inches was used to drive the split-barrel sampler, and the blows required to drive the sampler 18 inches were recorded in 6-inch increments. The blows for the final 12 inches were recorded as the unadjusted field "N-value", measured in blows per foot (bpf). Field N-values are presented on the logs in Appendix A. Field values should not be used for design purposes without correction.



APPROXIMATE
SCALE: 1" = 50'

Geotechnical Investigation Report
McCabe Property
185 North Glenwood St.
Jackson, Wyoming

Site Location
Map

FIGURE

1

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The industry standard sampling procedure is the Standard Penetration Test (SPT). The standard split-spoon sample has an outside diameter (o.d.) of 2 inches and inside diameter (i.d.) of 1.375-inch (or 1.5-inch if liners are not installed). Field N-values were corrected to $(N_1)_{60}$ using procedures suggested by Youd, et al (2001). Corrected $(N_1)_{60}$ values are in Appendix B.

The corrections account for differences in sampler size and configuration, hammer efficiency, overburden pressure, and other variables. The $(N_1)_{60}$ values represent SPT values adjusted to a standard of one atmosphere of overburden pressure and hammer efficiency of 60%. It is very important to use the $(N_1)_{60}$ values for consideration of rock and soil strength rather than the field N-values. There is often significant variability between the two sets of blow counts.

Soil types, consistencies, and stratigraphic thicknesses were observed and documented by an Engineering Geologist. Field conditions were described for all soil types observed and representative samples were obtained from critical soil horizons. General topography and site conditions were observed by the geologist in order to place the boreholes in representative locations. Note that site conditions may be variable and actual soil conditions may differ from those represented in the borehole logs.

3.2 Laboratory Analysis

Given the coarse character of soils encountered at the site, no laboratory testing was performed.

3.3 Previous Investigations

A Phase I environmental assessment was completed by Womack & Associates on September 6, 2006 for the McCabe property and consisted of a review of records provided by the Town of Jackson, Wyoming Department of Environmental Quality (WDEQ), and the Environmental Protection Agency (EPA). The result of this assessment indicates that, while several surrounding areas are locally contaminated with hydrocarbons, the McCabe property is not associated with any current or historic environmental hazards.

3.4 Report Preparation

The report presents the site soil and groundwater conditions, borehole and monitoring well logs, location maps, engineering analyses, and recommendations to support design of the foundation elements.

4.0 SITE CONDITIONS

4.1 Description

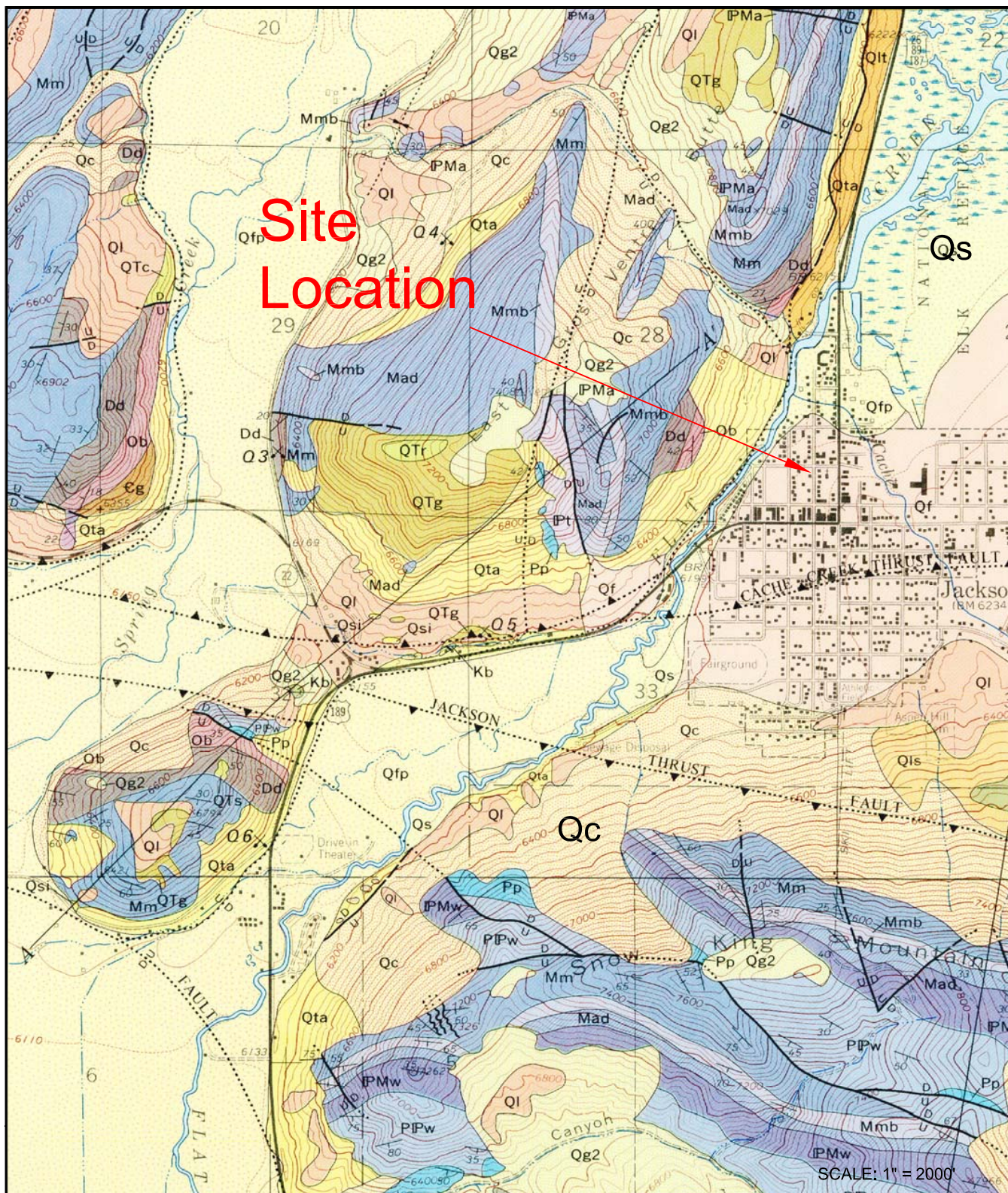
The project site is in the north part of the Town of Jackson, on the southwest corner of the intersection between Glenwood Street and Gill Street. The site is at the base of East Gros Ventre Butte about 1 block east of Flat Creek and 1 block south and west of Cache Creek. Currently, the southwest portion of the site is occupied by a building housing Grand Teton Lithography and several apartments. The north and east portions of the site are covered with asphalt paving and an unpaved (gravel) alley borders the west side of the parcel. Preliminary plans are to demolish the existing building and construct a new building for the Jackson Hole Community Housing Trust. As currently planned, the new structure will be a multi-story building with an underground parking garage. The site is relatively level to very gently sloping to the northwest toward Flat Creek. Elevation at the site is about 6,210 feet above sea level. At the time of our investigation, no demolition, site grading, excavation, or construction activity had been initiated for the new building.

4.2 Geology

A geologic map of the Grand Teton National Park (Figure 2), which encompasses the town of Jackson and the project site, was published by Love, et al, in 1992. The map shows the location of surficial deposits, bedrock units, and geologic structures (i.e., faults and folds). As depicted on the map, the project site is covered by Holocene to Quaternary aged alluvial fan deposits (Qf), although the material encountered in the boreholes drilled for this investigation is interpreted as alluvium (Qa) consisting of clay, silt, sand and gravel stream channel deposits. The alluvium is presumably underlain at depth by Tertiary and Paleozoic aged bedrock. Bedrock was not encountered in the boreholes, and depth to bedrock is unknown.

Numerous Quaternary aged (relatively young and potentially active) faults have been mapped in the Jackson area (Case, 1997, Machette et al, 2001), notably the East Gros Ventre fault, faults on the west side of West Gros Ventre Butte, and the Teton fault system along the east side (base) of the Teton Range. The surface trace of the Teton fault is located approximately 6 miles west of the project site. The mapped trace of the East Gros Ventre fault lies along the eastern base of East Gros Ventre Butte (Figure 2). This feature is mainly concealed beneath late Pleistocene to Holocene alluvium (Machette et al, 2001).

Two east-west trending buried fault segments, the Cache Creek thrust fault and the Jackson thrust fault, are mapped south of the project site (dotted lines with black triangles on Figure 2). The fault segments appear to be truncated by the north-south trending Teton fault system, and offset only the older geologic units (i.e., the Paleozoic and Tertiary aged rocks). These fault traces do not appear to offset the younger geologic units and therefore are inferred to be relatively old and inactive structures.



Map Symbols: Qa - Alluvium Qf - Alluvial Fan Deposits Qs - Swamp Deposits
 Qc - Colluvium Ql - Loess Deposits Qt - Talus Deposits

From Love et al, 1992, Geologic Map of Grand Teton National Park, USGS I-2031

Geotechnical Investigation Report
 McCabe Property
 185 North Glenwood
 Jackson, Wyoming

GEOLOGIC MAP

FIGURE

2

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WOMACK AND ASSOCIATES, INC.

4.3 Soils

Similar soil conditions were encountered in all of the boreholes drilled for this investigation. Borehole BH-1 was drilled to a depth of about 27 feet near the northeast corner of the site. Boreholes BH-2 and -3 were drilled to depths of about 27 and 28 feet in the lot's northwest corner and southeastern corner, respectively. A fourth borehole was planned for the alley on the lot's western side but was not drilled due to utility conflicts.

The site is underlain by stratified stream deposits consisting of fine-grained and coarse-grained alluvium. Some non-engineered fill was also encountered in the uppermost portion of the boreholes. As indicated by the borehole logs in Appendix A, most of the site is underlain by coarse sandy gravel and cobble alluvium. Based on field estimates, the coarse-grained alluvium consists of about 20-30% sand with the remainder of 5-inch minus subrounded gravel and cobbles. Adjusted blow count $(N_1)_{60}$ values in the coarse-grained alluvium are typically in the range of 20 to 50 bpf.

Two fine-grained deposits were encountered. The first was a 1 foot thick layer in borehole BH-2 at a depth of 24 feet. The deposit is very stiff, embedded with 1-inch minus angular weathered rock fragments, and appears to be an ancient landslide deposit from nearby West Gros Ventre Butte. This layer appears to lens out, as we did not encounter it in any of our other borings. The second fine-grained layer consisted of 10% sand, 30% subrounded 1-inch minus gravel, and 60% clay. This 1.4 foot thick layer was encountered at a depth of 25 feet below the ground surface in borehole BH-3. Given the sand and gravel content of this clay layer, we believe it is significantly different from the clay layer encountered in borehole BH-2 and likely lenses out as well. These thin, lenticular clays are unlikely to affect foundation performance

4.4 Groundwater

Groundwater was encountered in boreholes BH-1 and BH-2. At the time of our investigation in mid-September 2006, groundwater level varied from about 24.5 to 25.5 feet below the ground surface. Our site investigation was performed during what is typically considered the lowest time of year for groundwater levels. Groundwater levels at the site fluctuate in response to seasonal precipitation, long-term precipitation trends and flow levels in Flat and Cache Creeks.

Construction methods used for parking areas below grade will be informed by groundwater monitoring data from the well at borehole BH-2 through spring 2007. Recommendations for construction in areas of high groundwater are presented in Section 6.0

4.5 Earthquakes and Ground Shaking

Jackson Hole is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Wyoming, and western Montana (Smith and Arabasz, 1991). The Teton fault along the eastern margin of the Teton Range about 6 miles west of the project 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 events in western Wyoming (Case, 1997), implying that the risk of major earthquakes may be high.

Gilbert et al (1983) estimated that an earthquake of approximately magnitude M_s 6.5 might be anticipated along the Teton fault about once in 500 years, which is consistent with the design earthquake specified by the IBC (2006). Historically, no significant earthquake epicenters have been associated with the Teton fault, although earthquakes occurred in Jackson Hole along other faults during the last century. Research by Smith and others (1993), suggests that the southern portion of the Teton fault may have stored sufficient energy to produce a magnitude $M_s = \sim 7.2+$ earthquake. However, Machette, et al (2001), do not classify the Teton Fault as an active fault south of Phillips Canyon, and estimate that slip rates along the southern portion of the south end of the active fault (north of Phillips Canyon) and along fault splays in Phillips Canyon are less than 0.2 mm/yr (i.e., very low).

The recurrence interval for a magnitude 7.5 event on the Teton fault is estimated to be in the range 700 to 2,000 years (Case, 1997; Machette et al, 2001). To put this recurrence interval into perspective, an earthquake with a 10% chance of occurrence in 250 years (commonly used for design of major dams and sensitive structures) has an average recurrence interval of about 2,500 years. Such an event would cause shaking typical of the *maximum considered earthquake* (MCE). The owner should be aware that, although the *design* ground motion is consistent with the 2006 International Building Code (IBC) for the site, much larger earthquakes are possible, although the risk is smaller.

Site ground motion accelerations and a design response spectrum were derived in accordance with the general procedure defined in the 2006 International Building Code (IBC). The provisions of the 2006 IBC are intended to provide uniform levels of performance for structures, depending on their occupancy and use and the risk inherent to their failure.

The approach adopted in the 2006 IBC is intended to provide a uniform margin of safety against collapse at the *design* ground 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. The MCE ground motion is defined with a uniform likelihood of exceedance of 2 percent in 50 years (a return period of about 2,500 years). The Site Ground Motion and Design Response Spectrum for the 2000 IBC is presented in Figure 3.

Earthquake Loads – Site Ground Motion and Design Response Spectrum 2000 International Building Code (IBC)*

Approximate Site Location: **Latitude = 43° 28'59" Longitude = 110°45'43"**

Mapped Maximum Considered Earthquake (MCE) Spectral Response Acceleration Parameters: (Tables 1615.1-10)

Short Period (S_s) = **1.107**

1-Sec Period (S_1) = **0.400**

Site Class Definition:

D - Stiff Soil Profile – Site Class Definitions (Tables 1615.1.1)

Site Coefficients and Adjusted MCE Spectral Response Acceleration Parameters: [Equations 16-16 and 16-17 and Tables 1615.1.2(1) and 1615.1.2(2)]

S_{MS} = **1.173**

S_{M1} = **0.640**

F_a = **1.06** *interpolated from table

F_v = **1.60** *interpolated from table

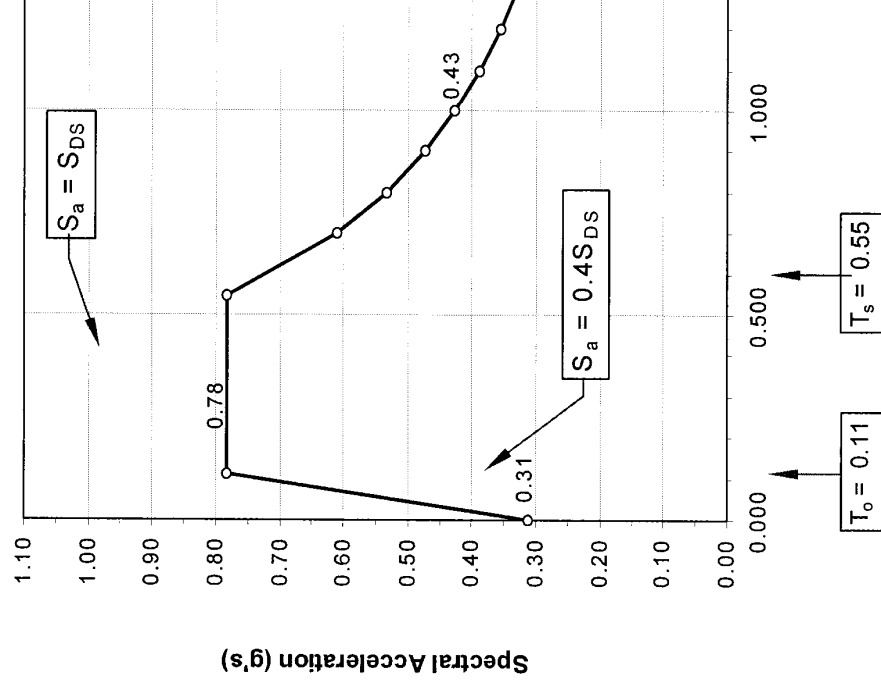
Design Spectral Response Acceleration Parameters: [Equations 16-18 and 16-19]

S_{DS} = **0.782**

S_{D1} = **0.427**

*2006 International Building Code, Chapter 16, Section 1615 - Earthquake Loads – Site Ground Motion.

Design Response McCabe Property, N



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4.6 Liquefaction Potential

Loose, saturated sands and silty sands, and in some cases silts and gravels, may liquefy when exposed to seismic shaking. Liquefaction has been most prevalent in areas where loose saturated sand occurs within about 30 feet or less of the ground surface, but in some instances, liquefaction has been reported in saturated deposits up to 60 feet deep (EERI, 1994).

The boreholes drilled to a depth of about 27 feet encountered sandy gravel and cobbles under the site that appear to be too coarse and dense to liquefy in a seismic event. It is possible that liquefiable materials occur at greater depths. At this flat-lying location, liquefaction could potentially cause damaging differential settlement. However, there appears to be little risk of “lateral spreading”, which is a major slope movement that is a common source of catastrophic failure during earthquakes.

4.7 Geologic Hazards

The owner should be aware that in the event of a large magnitude earthquake, there are several geologic hazards that could potentially cause damage to structures (Smith et al, 1993). Potential hazards at this site might include strong ground shaking, ground cracking, surface rupture along an un-mapped fault trace, and liquefaction (Section 4.6).

5.0 ENGINEERING ANALYSIS

5.1 Settlement

Foundation footings may be placed on the coarse-grained sandy gravel and cobbles. Significant consolidation of the dense coarse-grained gravel and cobble alluvium observed in the boreholes is not anticipated. Removal of topsoil and fill material from the upper 2-3 feet is necessary.

5.2 Bearing Capacity

Bearing capacity of soil refers to its ability to resist shear failure under load. The bearing capacity of the coarse-grained alluvial deposits was estimated using Meyerhof's bearing capacity equation for strip footings (Bowles, 1996). Soil properties were estimated based on visual soil classification. The average unit weight of the soil is estimated to be about 125 pcf, and the friction angle is estimated to be about 36 degrees (Pit Slope Manual, 1982; Huang, 1983). The foundation footings are assumed to be 16 inches wide, placed on the sandy gravel and cobble alluvium. Assuming continuous 16-inch strip footings, an allowable bearing capacity for the coarse-grained alluvial material is estimated to be about 5,000 psf for full dead and 50% live

load. If full dead and full live loads are considered, bearing capacity is estimated at 8,000 psf.

5.3 Lateral Pressures

Lateral pressures against foundation and retaining walls can be estimated using several methods, and there is no overwhelming consensus favoring any one technique. We have used what we believe to be reasonably conservative values that can be justified from normal practice and the technical literature. The main variables are assumptions regarding seismic forces, wall friction, and surcharge pressures created by slopes. As discussed above, the Jackson Hole area is potentially susceptible to ground shaking from earthquakes. A maximum horizontal seismic acceleration k_h in bedrock of 0.22g has been selected for this site (USGS, 2002). Lateral pressures have been calculated assuming horizontal backslope conditions. Table 5-1 summarizes lateral pressure parameters applicable to the site.

TABLE 5-1: Lateral Pressure Parameters

Condition	Coefficient of Earth Pressure	γK (equivalent fluid pressure)
Static Conditions		
Level Backfill	$K_o = 0.40$	55 pcf
	$K_a = 0.27$	35 pcf
	$K_p = 3.69$	480 pcf
Earthquake Conditions		
Level Backfill	$K_{ae} = 0.33$	43 pcf
Level Backfill	$K_{pe} = 3.49$	454 pcf

5.3.1 Active Pressures

For lateral pressure design of retaining walls, which are allowed to deflect and develop an active soil wedge, the calculated equivalent fluid pressure (γK_a) is about 35 pcf (pounds per cubic foot), assuming a horizontal ground surface behind the retaining wall. This pressure distribution would be equivalent to a force of approximately $18H^2$ pounds per horizontal foot of wall acting at one-third the wall height (H) above the base.

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). Accordingly, active soil pressures have been divided into two components that act at different wall heights. The static force acts at the lower third-point, as discussed above. The Mononobe-Okabe equations are often used to estimate dynamic forces against retaining walls. Although there is considerable debate about the theoretical applicability of these equations to rigid walls, they have been used for many years for seismic design and the performance record of

underground walls during earthquakes has generally been good. The Mononobe-Okabe equations were applied using half the maximum horizontal acceleration (Bowles, 1996; Whitman, 1990). This force would be in addition to static active earth pressure, equivalent to $4H^2$ pounds per horizontal foot of wall applied at 50% of the wall height above the base.

5.3.2 Passive Pressures

For passive pressures, an equivalent fluid pressure (γK_p) of about 480 pcf was estimated for static conditions and about 454 pcf for seismic conditions. Passive earth pressures were calculated using the Coulomb and Mononobe-Okabe equations, respectively (Bowles, 1996).

5.3.3 At-Rest Pressures

For lateral pressure design of foundation walls, which are restrained and not allowed to deflect, the calculated at rest earth pressure (γK_o) is about 55 pcf, assuming a horizontal ground surface behind the foundation wall. Use the at-rest pressure or the active pressure under seismic conditions for foundation wall design, whichever is greater.

5.4 Soil Friction

Terzaghi, et al (1996) suggests use of 30 degrees for the maximum friction angle along a concrete base in granular soils. Accordingly, a friction value of 0.58, which is the tangent of 30 degrees, is suggested. The friction value may be combined with the passive pressure to resist horizontal loads.

5.5 Shoring

It is our understanding that the basement footings may be more than 10 feet below ground surface. Shoring may be required adjacent to buildings and along the streets adjacent to the new building.

5.5.1 Shoring Alternatives

Shoring recommendations and alternatives include H-pile walls and soil nails. When a building design has been selected, this office should be involved in selection of shoring techniques, if necessary. Previous H-pile wall designs in this area have proven most effective when combined with tiebacks. This office is capable of designing the H-pile wall portion of the shoring, while design and construction of soil nail shoring elements is normally performed by specialized design/build contractors with assistance from our Geotechnical Engineer.

5.5.2 Soil Nail Design Parameters

We assume the soil nail design will be prepared by a specialized design-build contractor. The following parameters are recommended for design:

Unit weight: $\gamma = 135$ pcf
Friction angle: $\phi' = 36$ degrees
Unit ultimate bond stress = 20 psi
 $K_a = 0.27$
 $\gamma K_a = 35$ pcf

At least two sacrificial soil nails should be placed and tested to failure. During production, at least 3 soil nails should be tested to design loads.

6.0 RECOMMENDATIONS

6.1 Foundations

In our opinion, the coarse-grained sandy gravel and cobble alluvium below a depth of about 2 to 3 feet will provide adequate support for anticipated foundation loads of the proposed structure. Minor cracks in the foundation walls, floors, and sheetrock are normal and should not be a cause for concern. Excavation for the foundation footings should remove the upper 2 to 3 feet of finer-grained soil and fill, exposing the top of the underlying gravel and cobbles. Foundation footings may be placed directly on the coarse-grained alluvium. Given the depth and stiff character of the two clay layers encountered we believe that overexcavation will not be necessary.

To further reduce the risk from potential settlement, the owner may choose to compact the surface of the native alluvium prior to pouring the concrete footings. A vibrating, smooth-drum roller compactor or “whacker” may be used to densify the coarse-grained soils. If the groundwater level is above the bottom of the footing excavation, compaction may not be feasible.

Because of the possibility of relatively shallow groundwater conditions at the site, a full-basement or below grade parking structure may be vulnerable to seepage. If the owner and architect plan to construct the building with a full-basement or underground parking, we strongly recommend a foundation system that is fully waterproofed unless groundwater monitoring in spring 2007 indicates otherwise. The foundation footings, stem walls, and floor slab should be constructed as a monolithic unit to eliminate joints and completely wrapped with a waterproof membrane system. If necessary, adequate foundation reinforcement should be used to counteract buoyant forces that may be exerted on the floor slab.

Relying on a dewatering system to mitigate seepage into the lower levels of the building is not recommended. Mechanical means of dewatering may be problematical because of the high permeability of the coarse-grained alluvium and the anticipated large quantities of water that would need to be displaced. In addition, dewatering systems typically have high installation cost, long-term operation and maintenance expense, and reliability and water discharge issues.

During foundation construction, shallow groundwater may be encountered. Pumping to reduce water levels may be required during foundation construction. At this point we do not consider it

necessary to specify dewatering procedures during construction. Pumping may be required and discharge of water may be problematical at this site. Adequate planning is important to address proper discharge of the water. These issues will not be of concern if groundwater does not rise significantly from its current level.

A Structural engineer should review the plans to check that adequate support is provided to the foundation systems. Minor settlement of footings, foundation walls, and floor slabs may result in small fractures in the concrete walls, concrete floor slabs, and sheetrock. These occurrences are normal and should not be a cause for concern.

6.2 Final Grading and Backfilling

Properly compacted backfill will reduce settlement of the soil against foundation walls and beneath exterior concrete slabs. Exterior backfill around the building should consist of site materials placed in lifts no greater than 9 inches loose thickness and compacted. Existing site material may be used for exterior and utility trench backfill:

Structural fill should be used beneath exterior slabs-on-grade. Utility trenches should also be backfilled in lifts and compacted. Final grading should provide protection from frost. Do not overcompact exterior backfills against “green” foundation walls.

Prior to placement of structural fill for the foundation subgrade or exterior slabs-on-grade, the site should be cleared and grubbed. No brush, roots, sod, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill.

6.3 Site Grading and Preparation

Properly compacted backfill and good site drainage are extremely important. Structural fill should consist of imported granular fill placed in lifts no greater than 9 inches loose thickness and compacted using the methods specification described below.

Pre-roll the surface to compact materials that have been disturbed during excavation with **five passes** (5 ton static weight) of a 5-ton vibratory roller. 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.

Alluvial gravel and cobbles are relatively easy to compact, and due to the coarse granular nature of the materials, nuclear density testing can yield variable compaction results. Place coarse granular fill in lifts and compact using the methods specification described below. If the methods specification is consistently applied, density testing is not required. Gravel will

compact into a dense, strong, well-drained structural fill, and tight moisture control is usually not required.

Granular fill should be placed in a maximum loose lift thickness of 9-inches. Material should be compacted using a smooth drum or padfoot vibratory roller (vibratory mode). A minimum of **five passes** (5 ton static weight) of a vibratory roller should be applied to each lift. The actual number of passes should be determined by observing the 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. Fill should be placed in horizontal lifts.

All footings should be placed below the frost line. The building code for Teton County requires that footings be placed at a minimum depth of 36 inches from finished grade, with a minimum foundation exposure of 6 inches above finished grade.

Structural fill should be used beneath exterior slabs-on-grade. Do not overcompact exterior backfills against “green” foundation walls. Cohesive materials should be used in the upper 2 feet of the exterior backfill to provide a lower permeability cap.

Prior to placement of structural fill for exterior slabs-on-grade, the site should be cleared. No brush, roots, sod, frozen material, or other deleterious or unsuitable materials shall be incorporated in the foundation subgrade or structural fill.

Final grading should provide positive drainage of at least 1 foot in the first 12 feet away from the structure unless the surface is paved. Adequate gutters or other roof runoff measures are strongly recommended. Roof runoff should be discharged at least 3 feet away from the building or exterior slabs.

OSHA regulations (29CFR1926) appear to classify the soil at the site as Type C based on the granular nature of the alluvial soil. Therefore, temporary cut slopes should be no steeper than 1.5H:1V for excavations less than 20 feet in height. A trench box may be used if necessary to reduce trench excavation during utility installation. The contractor shall be responsible for adherence to OSHA and other safety regulations.

6.4 Foundation Drainage

Foundation footing drains are not required for a building with a deep waterproof basement. Foundation footing drains are recommended if the basement is not waterproofed and is within 5 feet of seasonal groundwater highs.

building avoids shallow groundwater. Footing drains will reduce the potential for seepage from perched water.

Two drainage alternatives are illustrated on Figure 4. The least expensive technique would probably be a prefabricated composite drain. The composite drain consists of an open wick layer laminated to filter fabric to reduce infiltration of soil. The exterior (upslope side) of the wall is waterproofed, and the drain is laid against the waterproofing layer. The excavation is backfilled with compacted site material, as discussed in Section 6.3, and the drain is covered by at least 2 feet of compacted site soil, sloped to drain (minimum 10%). The composite drain is wrapped around a perforated drain pipe at footing level. The drain pipe may slope at a minimum of 0.5%, and drain to a sump.

An alternative technique would involve placement of clean angular drain gravel between the foundation wall and the edge of the excavation. The gravel backfill is wrapped in filter fabric and a drain pipe is placed at the bottom of the trench. At least 2 feet of compacted backfill (sloped to drain) is placed above the gravel envelope. The advantage of this technique is that the gravel backfill can usually be placed without compaction, reducing backfill cost and difficulty.

6.5 Interior Slabs-on-Grade

The recommendations in this section apply only if the basement has not been fully waterproofed and is within 5 feet of the seasonal water table. The interior floor slab should be at least 4 inches thick, and any slabs bearing vehicles should be at least 6 inches thick. Minor floor cracking of slab-on-grade construction is difficult if not impossible to prevent. Such cracking is normal and should be expected to occur with time. Buildings are almost never free of cracks, and cracking is caused by many factors other than soil movement, such as concrete shrinkage, normal activities, and daily and seasonal variability in temperature and humidity.

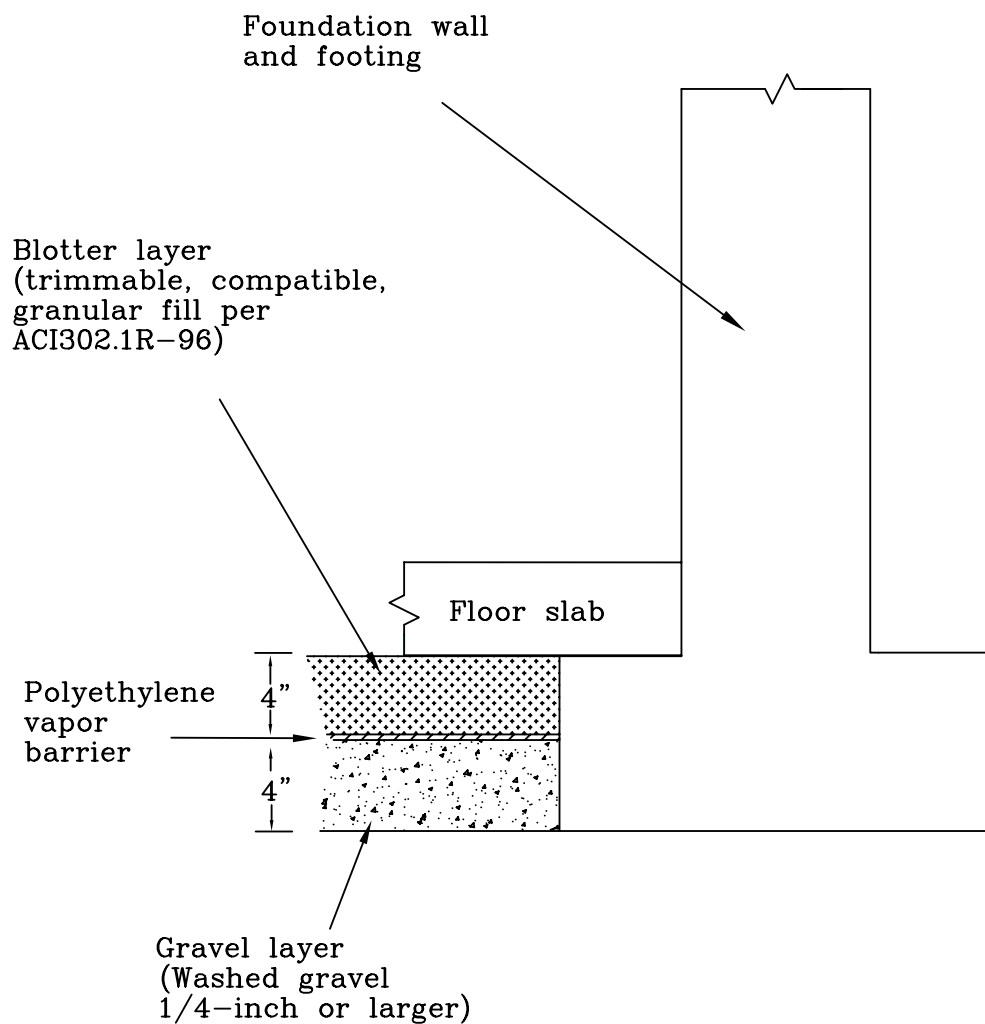
The following suggestions are recommended for standard slab-on-grade construction. An impermeable layer (usually plastic) is suggested beneath the slab, underlain by 4 inches of clean drain gravel that will act as a capillary break to reduce dampness (Figure 5). Two options are available to reduce the tendency for the concrete to crack as it dries. Three articles from the American Concrete Institute (ACI) that discuss these options are appended.

1. A blotter layer may be placed under the slab. In the past, loose sand has been used for this purpose, but is no longer recommended. A cover of 4 inches of trimmable, compactible, granular material may be placed over the sheeting to receive the concrete slab. This material usually consists of “crusher run material”, which varies in size from about 1.5-inch down to rock dust. Alternatively, 3 inches of fine graded material such as crusher fines or manufactured sand may be used.
2. The blotter layer may be eliminated if the concrete is reinforced properly. The attached article entitled “Controlling Curling and Cracking in Floors to Receive Coverings” provides a discussion of proper floor slab reinforcement. If the contractor needs additional guidance on reinforcement, a structural engineer should provide it.

The Teton County Building Department also requires a ventilation system similar to that shown in Figure 5 for slab-on-grade construction in inhabited buildings. A ventilation system is not required for a deep basement or parking garage below the groundwater level.

6.6 Exterior Slabs-on-Grade

Exterior slabs (sidewalks, patios, driveways, etc.) typically sustain the greatest damage. Cracking is almost impossible to avoid, and freeze-thaw adds to the difficulty caused by soil consolidation. The fine-grained alluvium, topsoil, silt and clay fill material could potentially cause severe frost or settlement damage. The following suggestions may reduce differential movement of exterior slabs.



Schematic Drawing
Not to Scale

Geotechnical Investigation Report
McCabe Property
185 North Glenwood
Jackson, Wyoming

Interior Slab-on-Grade
Detail

FIGURE

5



Exterior concrete slabs should be at least 4 inches thick, 6 inches if supporting vehicles. Exterior slabs should not be tied to foundation walls. Any movement of exterior slabs may be transmitted to the foundation walls, resulting in damage. Posts for patios or other exterior columns should not bear on exterior slabs. If the slabs settle or rise, the movement can be transmitted to the post, resulting in damage to the structure.

Exterior slabs placed on fine-grained soils may be very susceptible to frost heave, and any exterior flat work placed on these soils may perform poorly. Performance of the slabs may be improved by placement of at least 6 inches, preferably 12 inches, of gravel beneath the slab. Expansion joints are recommended in all concrete flatwork.

6.7 Ventilation and Radon

Teton County Building Code requires that slabs below living spaces be ventilated and sealed. Ventilation should also be provided for areas under crawl spaces. Examination of the site for potential radon levels was beyond the scope of this report. If the owner wishes to pursue this matter, we can recommend appropriate contractors.

6.8 Reinforcing, Concrete Considerations, and Utilities Testing

Footings, slabs, and foundation walls should be reinforced to resist differential movement. We strongly recommend consultation with a structural engineer to specify adequate reinforcement. Exterior concrete should contain 5% to 7% entrained air. We recommend pressure testing of water and sewer lines before backfilling.

6.9 Observation during Construction

A representative of this office should observe construction of any foundation or drainage elements recommended in this report. Site grading, foundation excavations, and soil compaction should be observed by a representative of this office. If any suspicious soils or conditions are revealed during construction, this office should be notified immediately to survey the conditions and make necessary modifications.

7.0 LIMITATIONS

This report has been prepared based on a limited amount of data. Actual site conditions may vary. This report, including engineering analysis, recommendations, figures, and design details are exclusive to the referenced site. Under no circumstances shall the figures be separated from the text and used independently. Recommendations in this report are not applicable to other construction sites. 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.

This report, including engineering analysis, recommendations, figures, and design details are exclusive to the referenced site. Under no circumstances shall the figures be separated from the text and used independently. Recommendations in this report are not applicable to other construction sites.

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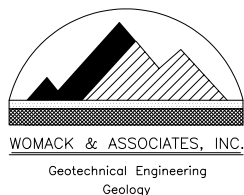
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APPENDIX A

BOREHOLE AND MONITORING WELL LOGS



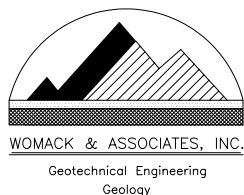
P.O. Box 12650
 Jackson, WY 83002
 Telephone: (307) 733-7209
 Fax: (307) 733-8005

TEST HOLE LOG

PAGE 1 OF 1

TEST_HOLE_LOG2 REVISED MCCABE0906.GPJ WOMACK.GDT 10/18/06

PROJECT NAME: McCabe Property, corner of Gill and Glenwood										DATE: 9/14/06				
PROJECT LOCATION: Jackson, Wyoming										HOLE NO.: BH-1				
TEST HOLE LOCATION: Northeast corner of lot														
ELEVATION G.S. (ft.):				TOTAL DEPTH (ft.): 27			GROUNDWATER LEVEL (ft.): 25.5			MEASURED FROM: Surface				
DRILL TYPE: Sonic				HAMMER:			DRILL CO: ProSonic			DRILLER: Gabriel		LOGGED BY: cro		
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION COMMENTS:	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION	
1								0.0-2.0ft FILL: Moist, dark brown, loose, massive, sandy GRAVEL, clasts subangular to 3" diameter						
2								2.0-3.5ft FILL: Moist, dark brown to black, loose, massive, sandy (20%), angular GRAVEL to 2" diameter						
3								3.5-8.0ft ALLUVIUM: Slightly moist, brown, dense, massive, SAND (60%), and fine grained to coarse subangular GRAVEL to 2" diameter						
4								8.0-13.0ft ALLUVIUM: Slightly moist, light brown to tan, dense, massive, sandy (30%) subrounded GRAVEL (40%) and COBBLE (30%) to 5" diameter						
5								13.0-14.0ft ALLUVIUM: Slightly moist, reddish brown, dense, soft, massive, clayey (<10%), sandy (30%) GRAVEL and COBBLE to 4" diameter						
6								14.0-17.0ft ALLUVIUM: Slightly moist, tan/reddish brown, dense, massive, sandy (30%), GRAVEL and COBBLE to 6" diameter 1/3 of which are severely weathered						
7								17.0-18.0ft ALLUVIUM: Slightly moist, white, dense, massive, silty sandy GRAVEL and COBBLE to 2" diameter						
8								18.0-21.0ft ALLUVIUM: Moist, reddish brown, dense, massive, sandy (20%) GRAVEL and sandstone COBBLE to 2" diameter						
9								21.0-22.0ft ALLUVIUM: Moist, tan, dense, massive, fine SAND (80%), medium gravel						
10								22.0-25.5ft ALLUVIUM: Moist, light brown, dense, massive, medium to coarse sand (30%), GRAVEL and COBBLE (60%) to 3" diameter						
11							25.5-27.0ft ALLUVIUM: As above, wet							
12							Groundwater level at 25.5' on 9/20/06.							
13														
14														
15														
16														
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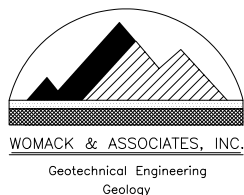
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TEST HOLE LOG

PAGE 1 OF 2

TEST_HOLE_LOG2 REVISED MCCABE0906.GPJ WOMACK.GDT 10/18/06

PROJECT NAME: McCabe Property, corner of Gill and Glenwood											DATE: 9/15/06					
PROJECT LOCATION: Jackson, Wyoming											HOLE NO.: BH-2					
TEST HOLE LOCATION: Northwest corner of lot																
ELEVATION G.S. (ft.):				TOTAL DEPTH (ft.): 27				GROUNDWATER LEVEL (ft.): 24.5				MEASURED FROM: Surface				
DRILL TYPE: Sonic				HAMMER:				DRILL CO: ProSonic				DRILLER: Gabriel		LOGGED BY: cro		
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION				MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION
1								0.0-2.0ft FILL: Moist, dark brown, medium stiff, silty sandy angular GRAVEL to 2" diameter								
2								2.0-2.6ft ALLUVIUM: Slightly moist, light brown, dense, massive, sandy GRAVEL with subrounded COBBLES to 4" diameter								
3								2.6-4.7ft ALLUVIUM: Slightly moist, light brown, massive, dense, coarse sand (20%), fine grained GRAVEL (40%) and subrounded COBBLE (40%)								
4								4.7-7.0ft ALLUVIUM: Slightly moist, light brown, dense, coarse sand (20%), fine grained GRAVEL (40%) and subrounded COBBLE (40%)								
5								7.0-13.0ft ALLUVIUM: Slightly moist, light brown, massive, dense, sandy (20%) GRAVEL (60%) and cobbles (20%) to 4" diameter								
6																
7																
8																
9																
10																
11																
12																
13																
14							13.0-14.0ft ALLUVIUM: Moist, brown, massive, dense, soft, clayey (5%), coarse sandy (20%), GRAVEL and subrounded COBBLE to 4" diameter									
15							14.0-17.0ft ALLUVIUM: Slightly moist, tan, massive, dense, silty sandy GRAVEL and COBBLES to 3" diameter									
16																
17																
18			19,22,19	21	80		17.0-18.5ft ALLUVIUM: Moist, light brown to brown, massive, firm, clayey coarse sandy GRAVEL with abundant 1" angular rock fragments									
19							18.5-20.3ft ALLUVIUM: Moist, brown, massive, dense, clayey coarse sandy GRAVEL 1" to 2" diameter									
20							20.3-23.0ft ALLUVIUM: Slightly moist, reddish brown, massive, dense, SAND (40%), subrounded GRAVEL to 2" diameter									
21																
22							23.0-24.0ft ALLUVIUM: Moist, brown, massive, dense, gravelly (20%) medium to coarse SAND									
23							24.0-25.0ft COLLUVIUM: Moist, brown with highly weathered rock fragments purple, green and red, massive, stiff to very stiff, CLAY									
24		D1				3										
25																
26																
27		U1					25.0-27.0ft ALLUVIUM: Wet, brown, massive, dense, silty coarse SAND and fine GRAVEL									
28																
29																
30							Groundwater level at 24.5' on 9/20/06.									
31							Completion: 4" PVC slotted pipe 17-27', 4" PVC solid pipe to surface, sand backfill 12-27', bentonite									



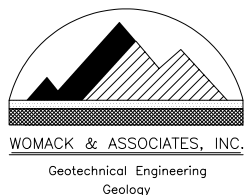
P.O. Box 12650
 Jackson, WY 83002
 Telephone: (307) 733-7209
 Fax: (307) 733-8005

TEST HOLE LOG

PAGE 2 OF 2

PROJECT NAME: McCabe Property, corner of Gill and Glenwood							DATE: 9/15/06						
PROJECT LOCATION: Jackson, Wyoming							HOLE NO.: BH-2						
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION COMMENTS:	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION
33								12' to surface, 6" steel flush mount cover at surface.					
34													
35													
36													
37													
38													
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41													
42													
43													
44													
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TEST_HOLE_LOG2 REVISED MCCABE0906.GPJ WOMACK.GDT 10/18/06



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TEST HOLE LOG

PAGE 1 OF 1

TEST_HOLE_LOG2 REVISED MCCABE0906.GPJ WOMACK.GDT 10/18/06

PROJECT NAME: McCabe Property, corner of Gill and Glenwood											DATE: 9/15/06						
PROJECT LOCATION: Jackson, Wyoming											HOLE NO.: BH-3						
TEST HOLE LOCATION: East side of lot																	
ELEVATION G.S. (ft.):				TOTAL DEPTH (ft.): 28.5				GROUNDWATER LEVEL (ft.): NA				MEASURED FROM: Surface					
DRILL TYPE: Sonic				HAMMER:				DRILL CO: ProSonic				DRILLER: Gabriel			LOGGED BY: cr		
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION				MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION	
1								COMMENTS: 0.0-1.0ft FILL: Moist, dark brown, loose to soft, clayey sandy GRAVEL and subangular COBBLE to 2" diameter 1.0-7.0ft ALLUVIUM: Slightly moist, light brown, dense, massive, sandy GRAVEL and subrounded COBBLE to 4" diameter									
2																	
3																	
4									7.0-8.5ft ALLUVIUM: Slightly moist, tan to white, medium dense, massive, sandy (10%),								
5																	
6																	
7									8.5-17.0ft ALLUVIUM: Slightly moist, tan, dense, massive, sandy (20%) GRAVEL with cobbles to 4" diameter								
8		D1	29,38,34	25	80												
9																	
10									17.0-18.5ft ALLUVIUM: Slightly moist, tan to brown, massive, dense, sandy (10%) GRAVEL, with angular clasts to 1" diameter 18.5-25.0ft As above								
11																	
12																	
13									25.0-26.4ft ALLUVIUM: Moist to wet, brown, massive, stiff, sandy (10%), subrounded gravel to 1" diameter (30%), CLAY								
14																	
15																	
16									26.4-27.0ft ALLUVIUM: Moist, brown, massive, dense, silty sandy medium GRAVEL								
17																	
18		D2	32,29,28	30	100												
19									27.0-28.5ft ALLUVIUM: Moist, brown, massive, dense, silty sandy GRAVEL								
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28		D3	23,34,44	53													
29																	
30																	
31																	

APPENDIX B

SPT BLOW COUNT ADJUSTMENTS

BH #	DEPTH	N(BL/FT)*	RS**	ER	UNIT WT	AV
BH-2	17-18.5	38	1	1	135	13
BH-3	7-8.5	68	1	1	135	13
	17-18.5	56	1	1	135	13
	27-28.5	78	1	1	135	13

APPENDIX C

CONCRETE SLAB AND DRAINAGE PUBLICATIONS

Controlling curling and cracking in floors to receive coverings

Do you worry about excessive cracking or curling in concrete floor slabs placed directly on a vapor retarder? Here are some hints on using reinforcing steel to minimize these defects and avoid floor-covering failures.

BY JERRY A. HOLLAND AND WAYNE WALKER

Because of an increasing number of moisture-related floor-covering failures in the past several years, some designers now recommend eliminating the granular blotter layer that's often used between the concrete and the vapor retarder or vapor barrier. Though a blotter layer offers several advantages, it can hold water from many possible sources and cause problems if the floor will receive moisture-sensitive coverings such as sheet vinyl, rubber, wood or similar materials (see reference).

Many designers, however, are reluctant to place concrete directly on a vapor retarder because they fear the floor slab will curl or crack excessively. These defects also can cause floor-covering failures that, in some cases, require remedial work after the building is in service. However, with the correct positioning and amount of reinforcing steel, both curling and cracking can be controlled.

Positioning is key

Cracks in a slab-on-grade floor surface are wider at the top than at the bottom. For the best crack control, then, you want the reinforcing steel to be as close to the surface as possible. And you must be able to



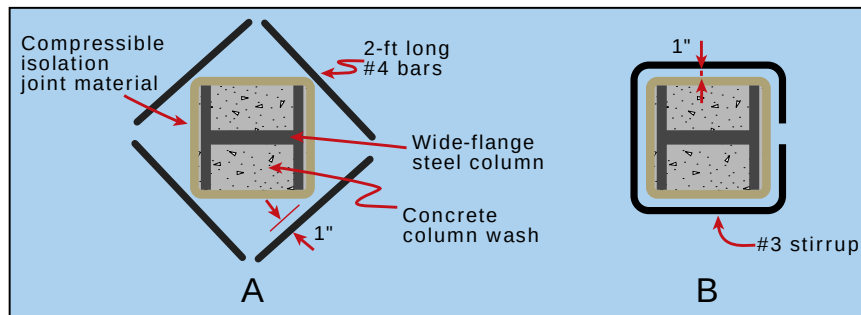
Rebar in concrete slabs placed directly on a vapor retarder help to control slab curling and cracking. Use supported deformed bars no smaller than #4, and space the bars far enough apart so workers can step between them.

control the location of the steel so it doesn't change during floor construction. Because of this, I prefer to use supported deformed bars no smaller than #4 instead of light-gauge mesh. Smaller-diameter bars are too limber, requiring too many bar supports, and light-gauge mesh is difficult to keep in the correct location.

For a 5-inch-thick floor slab, I prefer to use #4 bars near the top with 1 inch of clear cover, or #5 bars with 1½ inches of clear cover. For #5 bars,

greater cover depth is needed to control plastic settlement cracking over the bar.

Typically, I specify #4 bars spaced 18 inches on center both ways. This amount of steel holds crack faces together tightly enough for nonrigid floor coverings by maintaining aggregate interlock and significantly reducing slab curling. In some instances, closer spacing or larger-diameter bars may be needed. Constructability becomes an issue when bar spacing is so close that workers



Eliminate the normal isolation-joint box outs at wide-flange steel columns by wrapping the column with compressible material and using 2-foot lengths of #4 bars (A) to control cracking at the reentrant corners. To speed up steel placement at the columns, have the rebar supplier fabricate continuous #3 stirrups that workers can easily bend open to fit around the column (B). In either case, the steel should be positioned with a top-and-side clear cover of 1 inch.

can't step into openings between bars. Then larger-diameter bars may be the better choice.

Eliminate joints

Because the reinforcing steel limits crack width, I prefer to eliminate contraction joints and the traditional diamond-shaped isolation joints at columns when floors will receive a covering. I suggest wrapping wide-flange steel columns for the full floor depth with $\frac{1}{8}$ - to $\frac{1}{4}$ -inch-thick compressible isolation-joint material. For floors receiving coverings that won't tolerate wide cracks, such as ceramic tile, I also suggest placing four 2-foot-long #4 bars near the floor surface, with a top-and-side clear cover of 1 inch to control reentrant-corner cracking (Fig. A). As an alternative, the rebar supplier can fabricate #3 bars as a continuous stirrup that can easily be bent open so the ironworker can fit it around the column (Fig. B). This speeds placement of the steel when there are many columns to be treated. The stirrups also should have a 1-inch top-and-side clear cover.

Carpeting or other floor coverings can tolerate larger crack widths in the concrete subfloor without noticeable distress. When these coverings are used, crack-control measures at columns may not be needed. Simply wrap the columns to isolate them from the slab.

Construction considerations

Some designers use an upper and lower layer of reinforcing steel in the slab to control cracking at both the top and bottom. However, bottom-crack width doesn't affect floor-covering performance. And some of the advantages of these double layers of rebar are offset by placement difficulties; workers spreading the concrete have trouble stepping around the rebar and may displace it during concrete placement.

If the concrete is tailgated or struck off by a self-propelled laser-guided screed, ironworkers can lay out a single layer of steel on the vapor retarder and chair it up as concrete placement and strike-off proceeds. To prevent damage to the vapor retarder, workers can lay down thin sheets of plywood or several folds of plastic sheeting beneath the tires of the concrete truck or the screed. These materials are then moved back as the pour proceeds. The same procedure will help prevent damage to the vapor retarder if motorized buggies are used to place the concrete.

If the concrete is placed by pump or conveyor, all the steel can be chaired up before the pour begins, provided there's enough space between the rebar for workers' feet. If control of crack width requires rebar spacings of a foot or less both ways, I

sometimes require placement of a heavy-gauge welded-wire fabric (4x4-inch spacing of 4-gauge wire) on top of the bars. Workers can easily walk on this mesh without sinking into the concrete or twisting their ankles. The closely spaced mesh wires improve crack control, and the material cost is about the same because you can reduce the rebar diameter and maintain about the same steel cross-sectional area.

Weighing the costs

Although controlling curling and cracking by using rebar in the way I've described increases project costs by requiring more than the normal amount of steel, part of this cost increase is offset by savings in other areas. You eliminate the costs associated with overexcavation to accommodate the blotter-layer thickness and for purchasing, placing and compacting the granular material used for the layer. You also save money because workers don't have to cut contraction joints and fill them with a sealant. Nor do they have to form and strip column box outs and place the in-fill concrete later.

Use of a blotter layer is still a viable alternative for controlling curling and cracking. But if the floor will receive a moisture-sensitive floor covering and the blotter layer picks up excessive moisture before, during or after floor construction, a flooring failure is likely. The cost of correcting the failure almost always will be much higher than the cost of using more reinforcing steel. 🏠

Jerry A. Holland is structural engineering consultant and **Wayne Walker** is senior structural engineer for Lockwood Greene Engineers Inc., Atlanta. Holland has more than 30 years of experience and Walker has 20 years of experience designing and troubleshooting concrete slabs on grade.

Reference

Bruce A. Suprenant and Ward R. Malisch, "Where to Locate the Vapor Retarder," *Concrete Construction*, May 1998, pp. 427-433.

Where to place the vapor retarder

For slabs on grade, should the vapor retarder be located under a granular layer or directly under the concrete? Here are the pros and cons of each location.

BY BRUCE A. SUPRENANT AND WARD R. MALISCH

In the real estate industry, location is everything. The importance of location also applies to a hotly debated topic in the concrete industry—where to place the vapor retarder (or vapor barrier) for slabs on grade. Some specifiers require concrete to be placed directly on the vapor retarder, and others require placement of a granular blotter layer between the concrete and the vapor retarder. Advocates of each option argue that their preference results in a better concrete slab.

Like all engineering decisions, the location of a vapor retarder often is a compromise between minimizing water-vapor movement through the slab and providing the desired short- and long-term concrete properties. However, specifiers must consider the benefits and liabilities of the choice they make.

The case for a granular layer

Finishers prefer concrete placed on a granular base because the base absorbs mix water, shortens the bleeding period and allows floating to start earlier. Australian researchers noted that 4½-inch-slump concrete placed on a granular base lost its bleedwater sheen about two hours

faster than the same concrete placed directly on a vapor barrier (Ref. 1).

Base conditions also affect concrete stiffening. In tests performed by The Aberdeen Group, 2½-inch-slump concrete was used for two 4x4-foot, 4-inch-thick slabs. One slab was placed directly on a vapor re-

tarder and the other on a crushed-stone base. Technicians periodically set a steel-shot-filled rubber boot weighing 75 pounds on the surface and measured the footprint indentation (Fig. 1). Concrete on the stone base had stiffened enough after 90 minutes to allow a ¼-inch footprint



Figure 1. Concrete is generally considered to be ready for floating when finishers leave a ¼-inch-deep footprint in the surface. Using a boot filled with steel shot (inset) to produce footprints, we found that 2½-inch-slump concrete placed on a stone base was ready for floating about 45 minutes earlier than the same concrete placed directly on a vapor retarder.

indentation, an indication that floating could begin. Concrete placed directly on the vapor retarder required 45 more minutes of stiffening time before it was ready for floating.

Specifiers who require a granular blotter layer cite additional benefits, saying there is less chance of :

- Puncturing the vapor retarder
- Surface blistering or delaminations caused by an extended bleeding period
- Settlement cracking over reinforcing steel
- Slab curling during drying
- Cracking caused by plastic or drying shrinkage

Many specifiers recommend a 3- or 4-inch-thick layer of trimmable, compactible, self-draining granular fill for the blotter layer. Although concrete sand is sometimes recommended, it doesn't provide a stable working platform. Concrete placement and workers walking on the sand can disturb the surface enough to cause irregular floor thickness and create sand lenses in the concrete.

The case for placing concrete on a vapor retarder

Floor-covering contractors prefer to install their products on concrete slabs that are placed directly on a vapor retarder. If the vapor retarder effectively reduces moisture inflow from external sources, only water in the concrete pores must exit the slab. They believe the often-required vapor-emission rate of 3 pounds/1,000 square feet/24 hours is achieved faster under these conditions. They also believe the uncovered vapor retarder acts as a slip sheet, reducing slab restraint and thus reducing random cracking.

Placing concrete directly on a vapor retarder also eliminates a potential water reservoir that's created when using a blotter layer. Because more subgrade soil must be removed to accommodate the additional 3- to 4-inch-thick blotter layer, the layer is more likely to be placed below finished-grade level, thus increasing the chance of its holding water.

Specifiers who require concrete to

Table 1. Amount of water in granular layer per 1,000 square feet of floor*

Layer thickness	Water absorbed	Water in voids	Total water
2 in.	220 lbs	2,080 lbs	2,300 lbs
3 in.	330 lbs	3,120 lbs	3,450 lbs
4 in.	440 lbs	4,160 lbs	4,600 lbs

*Well-graded, compactible granular-base material with assumed density of 130 pounds per cubic foot, 1% absorption capacity and 20% voids. A 7% to 8% moisture content would normally be needed to achieve the compaction density typically required.

be placed directly on the vapor retarder cite these additional advantages:

- Reduced costs because of less excavation and no need for additional granular material
- Better curing of the slab bottom, since the vapor retarder minimizes moisture loss
- Less chance of floor moisture problems caused by water being trapped in the granular layer
- Less radon-gas infiltration

These specifiers recommend using a low water-cement-ratio concrete and water-reducing admixtures to reduce bleeding, shrinkage and curling of concrete placed directly on the vapor retarder. They believe the higher-quality concrete and better curing reduces cracking and produces a better floor.

Granular layer as a water reservoir

When a low-permeability floor covering will be installed on a concrete floor, special care is needed during construction to control moisture content of the subgrade, sub-base or granular layer (if used over the vapor retarder). It's best to place the floor after the building is enclosed and the roof is watertight. On many projects, however, this isn't possible, and the granular layer can become a water reservoir.

Water sources and access points. To provide unrestricted floor access for construction activities such as

tilt-up panel forming and casting, columns sometimes aren't erected and column blockouts aren't filled until months after floor placement. But rainwater can enter column blockouts that are left open. It can also penetrate joints and cracks, utility penetrations or open closure strips, and increase the moisture content of the subgrade, capillary break or granular layer.

Excessive sprinkling of a granular layer before concrete placement can create a moisture reservoir that will delay drying of the concrete floor. ACI 302.1R-96 (Ref. 2) recommends that the base be dry at the time of concreting unless severe drying conditions exist.

Wet-curing methods such as ponding or continuous sprinkling allow water to enter joints, cracks and other openings, again contributing to a higher than necessary moisture content beneath the floor slab.

Water from construction operations on a newly placed slab also can increase the granular-layer moisture content by entering joints, cracks or slab openings. Such operations include joint sawing, abrasive wet blasting or wet grinding, which may be needed to achieve a flatter floor profile. Sometimes power washing is used to clean debris or other contaminants from the floor.

Most slabs are constructed using a strip-placement sequence that leaves the granular layer exposed to rainwater in uncompleted portions of

the slab. Rollings (Ref. 3) determined that a tile-floor failure was caused by rainwater accumulating in a 3-inch-thick sand layer placed between a 5-inch-thick concrete slab and a polyethylene vapor retarder. One portion of the slab had been left uncompleted for an extended period, exposing the sand layer to prolonged rain and turning it into a reservoir of trapped water.

Water capacity of the granular layer. Table 1 shows the maximum amount of water that can be held in a layer of well-graded, compactible granular-base-course material of various thicknesses. If the floor concrete contained 250 pounds of mix water per cubic yard, 1,000 square feet of 6-inch-thick floor would contain 4,630 pounds of mix water. As shown in Table 1, a 4-inch-thick granular layer under the floor can contain about the same amount of water. And if sand or other high-void-content granular materials are used, the water capacity is much higher.

If the 250 pounds of mix water are used in concrete with a water-cement ratio of 0.50, about 100 pounds of the water will be free water that must evaporate as the floor dries (Ref. 4). Thus a 6-inch-thick, 1,000-square-foot floor slab would hold 1,850 pounds of free (evaporable) water.

Based on Brewer's work (Ref. 5), it would take about 82 days, or roughly three months, for enough free water to evaporate and produce a water-vapor emission rate of 3 lbs/1,000 sf/24 hours. A saturated 2-inch-thick granular layer would need to lose as much water as the concrete. And the water in the layer must move through the concrete. Thus it's likely that a 2-inch-thick saturated, well-graded granular layer could double the time required for the slab vapor-emission rate to reach 3 lbs/1,000 sf/ 24 hrs. It could even prevent the slab from ever reaching that emission rate.

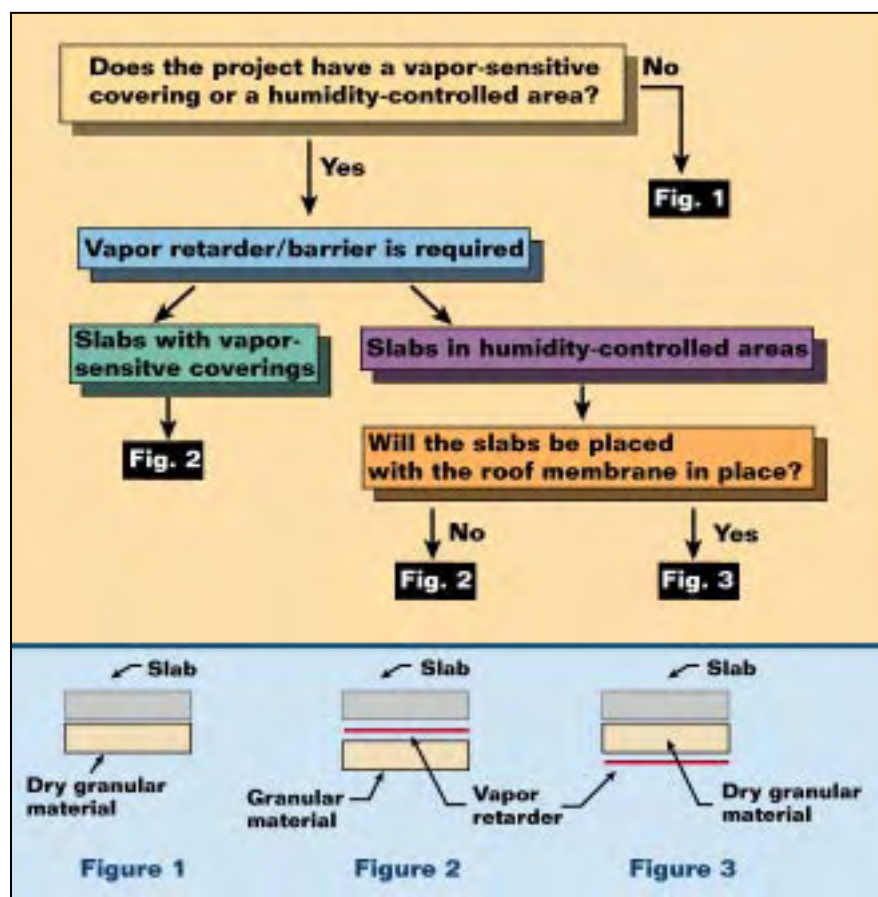


Figure 2. This flow chart helps designers decide if a vapor retarder or barrier is needed and where it should be placed.

Weighing the alternatives

Consulting engineers Jerry Holland and Wayne Walker, Lockwood-Greene Engineers, Atlanta, have developed a flow chart to help designers decide if a vapor retarder is required and, if so, where to place it (Fig. 2).

The chart gives designers the following three options based on the floor's in-service environment and the presence or absence of a vapor-sensitive floor covering:

- Use no vapor retarder
- Use a vapor retarder directly below the slab
- Sandwich a granular layer between the vapor retarder and the slab

ACI Committee 360 is considering inclusion of the flow chart in ACI 360R, *Design of Slabs on Grade*. Because curling is a major concern when concrete is placed directly on the vapor retarder or barrier, notes

in the flow chart will provide suggested design options for minimizing curling effects.

Establishing responsibility for moisture-related floor problems

Consider the following scenario based on a concrete subcontractor's actual experience. The subcontractor places and finishes a concrete floor. Flatness and levelness measurements show specification compliance, and test reports indicate the 28-day compressive strength is acceptable. He leaves the job and submits his bill.

Two months later, he's called back by the general contractor. Rainwater has penetrated the slab, which has curled. The floor-covering contractor is concerned about high water-vapor emission rates, and the general contractor worries that the required slab drying time will delay project completion.

The concrete subcontractor is being held responsible for:

- Curling, even though floor flatness met specifications when measured within 72 hours after concrete placement as required by ACI 117-90, *Standard Specification for Tolerances for Concrete Construction and Materials*
- Protecting the slab from external moisture, even though he has completed all the concrete work and is no longer at the site
- Water-vapor emissions from the slab, even though the general contractor followed specification requirements by placing a granular layer over a vapor retarder
- Delays in completion of the project due to these problems

Sound familiar? On this project, the floor contractor returned at his own expense to grind the slabs and minimize curl. Luckily, he was able to convince the design team that the other issues were not his responsibility.

All of these issues should be resolved with the general contractor,

design team and owner *before* the slab is placed. Concrete subcontractors should be held responsible for flatness and levelness within the time frame designated by ACI tolerance standards, but not longer. General contractors should be responsible for protecting the slab from external moisture. Only they can coordinate and direct the services of the roofer, excavator and other subcontractors who can help to minimize moisture infiltration. And, unlike the concrete subcontractor, the general is on the project from start to finish.

Concrete subcontractors need to resolve these issues at prepour planning meetings. If they don't, they had better be prepared for the phone call telling them they're responsible for fixing problems caused by rain-water infiltration. To avoid that call, add the items discussed here to your prepour conference checklist. 🏠

Editor's note

Discussions, pro and con, for differing vapor-retarder installation op-

tions are also given in ASTM E 1643, *Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs*.

References

1. T. Anderson and H. Roper, "Influence of an Impervious Membrane Beneath Concrete Slabs on Grade," Concrete Symposium, Brisbane, Australia, 1977, p. 51.
2. ACI 302.1R-96, *Guide for Concrete Floor and Slab Construction*, American Concrete Institute, Farmington Hills, Mich., February 1997.
3. Raymond S. Rollings, "Retail-Grocery — Floor Failure," *Journal of the Performance of Constructed Facilities*, American Society of Civil Engineers, Reston, Va., May 1995.
4. Herman G. Protze, III, "Construction of Concrete Slabs-On-Grade: Moisture Emission Problems," *Solving Moisture-Related Problems with Slabs-On-Grade*, Seminar 24-63, World of Concrete 1997.
5. Bruce A. Suprenant, "Moisture Movement through Concrete Slabs," *Concrete Construction*, November 1997, pp. 879-885.

Don't use loose sand under concrete slabs

A thin, loose sand layer reduces subgrade support, which can lead to increased slab cracking and poor joint performance

BY BRUCE A. SUPRENANT AND WARD R. MALISCH

Over the past five years, we've received phone calls from contractors who had built floors under which the specifier required a thin sand layer, with no compaction requirement for the sand. The contractors had been called back to repair cracks and joints 6 to 24 months after the slab was placed. The cracks didn't appear to be caused by drying shrinkage, and the joints were showing more than normal deterioration.

The problems occurred primarily in slabs subjected to forklift traffic.

The contractors were being held responsible for the repair costs, and they asked, "Is it possible that the sand layer reduces subgrade or subbase support, causing cracking and poor joint performance, especially under repeated loading such as forklift traffic?"



Figure 1. A technician applies load to a compacted soil specimen in a CBR mold. Specimens were loaded with and without sand layers to determine the effect of differing sand-layer thicknesses.

Table 1 Soil sample properties

Soil sample	Dry density (pcf)/moisture content (%)			Compaction test (standard Proctor)	Soil classification
	No sand	1-in. sand	2-in. sand	Density/moisture	
1A	100.1/19.2	99.8/19.6	100.6/19.0	104.9 pcf/19.5%	SC: A-6(5)
1B	100.1/19.7	99.7/19.8	99.8/19.6		
2A	109.5/14.5	109.5/14.5	109.8/14.4	115.0 pcf/14.7%	SC: A-6(3)
2B	109.3/14.6	109.5/14.6	109.4/14.7		
3A	125.4/8.9	125.1/9.1	125.7/9.1	131.9 pcf/9.1%	SC: A-2-4(0)
3B	125.2/9.0	125.1/9.2	125.3/9.0		

The soil is a sand with silty clay and a trace of gravel. The SC is a sand-plastic fines soil classification based on the Unified Soil Classification System. The A-soil classification system is based on the AASHTO soil classification system.

We developed a testing program to gather data that could help answer this question.

Testing subgrade support

To assess the effect of a thin, loose sand layer on subgrade support, we performed duplicate California Bearing Ratio tests (see “What’s a CBR Test”) using three soil samples with varying dry densities. Each test specimen was tested with no sand, a 1-inch sand layer and a 2-inch sand layer. In addition, we placed 1- and 2-inch sand layers over a steel base and tested that combination to show how the sand would affect subgrade support over a very stiff base.

To start the test, a technician placed the soil into a 6-inch-diameter cylinder mold and compacted it. After compaction, he removed the top extension collar and trimmed the soil to a 4½-inch height. He then inverted the mold and added a 10-pound surcharge weight to the top

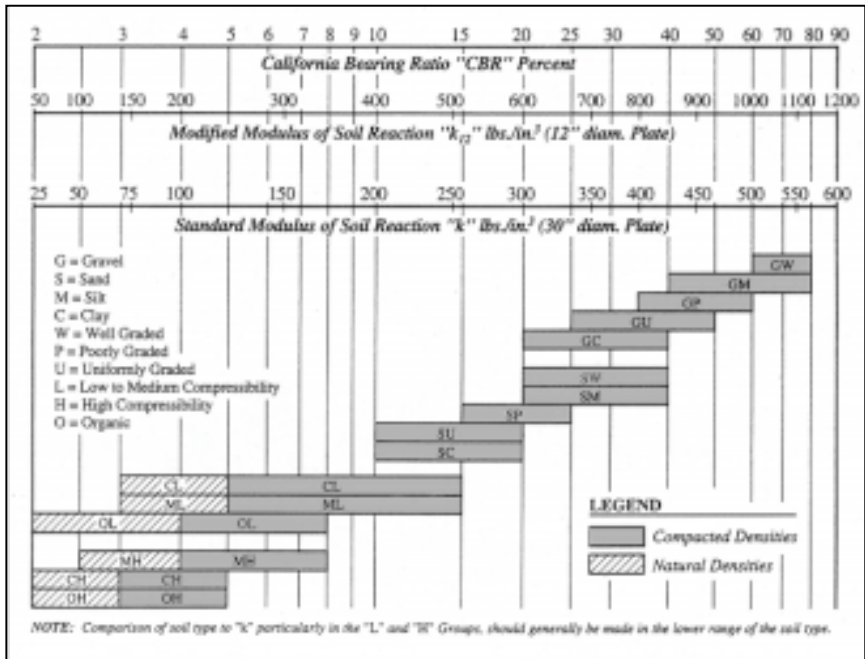


Figure 2. Interrelationships of CBR, k-values and soil classification (from Ref. 2).

surface. Consisting of steel discs with holes in the center to accom-

Table 2 Effect of a sand layer on measured CBR				
Soil sample	No sand	CBR value, %		
		1-in. sand	2-in. sand	
1A	4.0	2.6	1.0	
1B	4.0	3.1	2.1	
Average	4.0	2.9	1.6	
% of no-sand value	100	73	40	
2A	8.1	6.3	4.9	
2B	8.0	5.6	3.9	
Average	8.1	6.0	4.4	
% of no-sand value	100	74	54	
3A	11.4	4.6	2.5	
3B	11.5	4.8	2.6	
Average	11.5	4.7	2.6	
% of no-sand value	100	41	23	
Steel base - A	100*	5.2	2.5	
Steel base - B	100	4.9	2.6	
Average	100	5.1	2.6	
% of no-sand value	100	5.1	2.6	

* Not tested; maximum CBR is 100.

What's a CBR test?

.....

The California Bearing Ratio test, described in ASTM D 1883 (Ref. 1), is a penetration test commonly used to evaluate the potential strength of subgrade, subbase and base course material. To perform the test, a technician uses a cylindrical piston with a 3-square-inch cross section to penetrate the soil at a rate of 0.05 inch per minute. At each 0.1 inch penetration up to 0.5 inch, the technician records the stress needed to push the piston into the soil. The CBR value is the ratio of this stress at different penetration levels to the bearing value of a standard crushed rock. In most cases, CBR decreases as the penetration increases, so the ratio at 0.1-inch penetration is used as the recorded CBR value. Sometimes designers use this value to choose an appropriate slab thickness for anticipated loadings.

modate the piston, the surcharge weight is nearly equivalent to that of a 4½-inch-thick concrete slab. At this point in the test, it's possible to include a four-day wet soaking period. However, we omitted this step since we weren't interested in the CBR of a wet subgrade.

The soil specimen contained in the mold and loaded by the surcharge weights was placed in a testing machine (Fig. 1) that applied load to the piston. A technician measured load and piston penetration distances and used the resulting stress-vs.-penetration curve to compute the CBR values.

To measure the sand-layer effect, the technician placed loose concrete sand in the mold to completely and uniformly cover the compacted subgrade to a depth of 1 or 2 inches. For the steel base used to simulate a stiff base, the technician placed loose

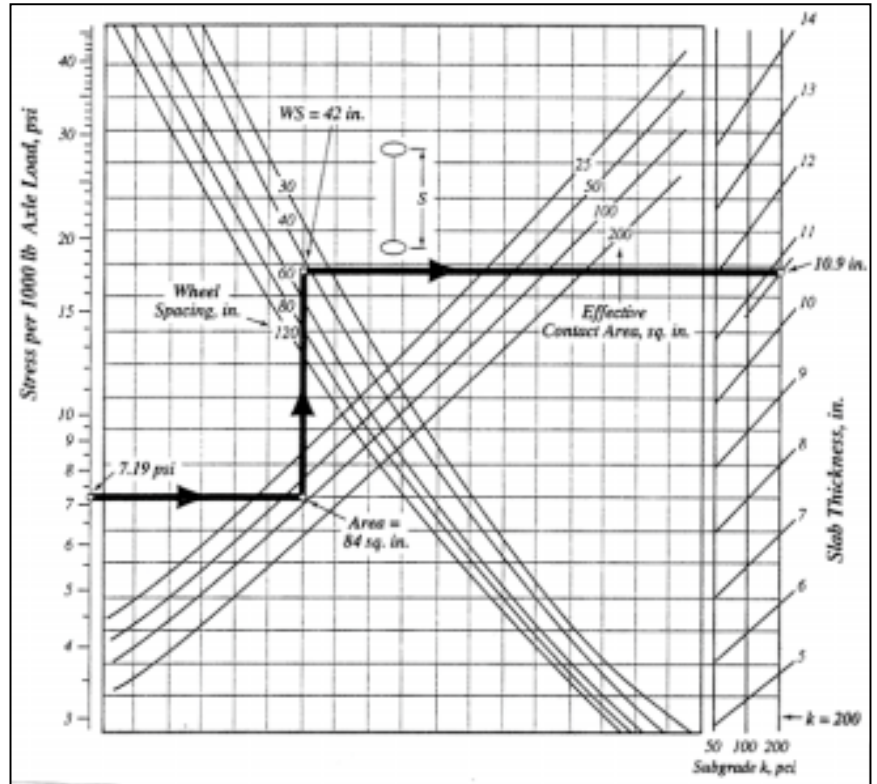


Figure 3. The example in this chart shows that decreasing the k-value from 200 to 50 increases the required slab thickness about an inch. For lighter loadings that yield a thinner slab, the same k-value reduction would still increase thickness about an inch.

sand over the base and added the surcharge weights before applying load to the piston.

The density and moisture content of the compacted specimens also were determined. A comparison of standard Proctor dry-density values shown in Table 1 with the dry densities of the soil samples, also given in the table, shows that all the CBR specimens reached about 95% compaction. Great care was exercised in making sure that the compacted density for a set of specimens was essentially the same. Thus, any measured changes in CBR value would be the result of the presence of a sand layer and not a change in specimen density.

For all the soil samples tested, CBR values decreased dramatically when a thin layer of loose sand was placed over the compacted sample

Table 3 Effect of sand layer on k-values*

Soil sample	No sand	1-in. sand	2-in. sand
1A	100	50	10**
1B	100	75	25
Average	100	63	18**
% of no-sand value	100	63	18
2A	175	145	125
2B	175	135	100
Average	175	140	113
% of no-sand value	100	80	64
3A	210	125	50
3B	210	125	50
Average	210	125	50
% of no-sand value	100	60	24
Steel base - A	650**	125	50
Steel base - B	650	125	50
Average	650	125	50
% of no-sand value	100	19	8

*The k-value is a modulus of soil reaction in lbs/in.³ for a 30-inch-diameter plate and was estimated using the CBR values shown in Table 2.

** Off the chart. In Figure 2, minimum k-value is 25 and maximum is 600. Since a CBR of 100 is possible, a k-value of 650 was estimated.

(Table 2). The decrease was especially large for the sand layer placed over the steel base. For soil sample No. 1 (lowest density), the 1-inch and 2-inch sand layers decreased CBR values to 73% and 40% of the original values, respectively. For sample No. 3 (highest density), the CBR decreases were to 41% and 23% of the original values.

The CBR values for sand layers placed over a steel base provided an interesting comparison. Percentage loss in CBR was very high, but the raw CBR values appear to show that the highest-density soil provided almost as stiff a base as the steel when

a sand layer was added. The CBR values for the lowest-density soil with a sand layer are lower, which is understandable given the weaker subgrade support. The CBR values for soil sample No. 2 don't follow this pattern, and we don't know whether this was the result of soil or sand variability or the variability of the test itself. The steel-base values do seem to indicate that if a designer uses a sand layer, the maximum CBR values he could reasonably expect to attain are about 5 and 2.5 for a 1- or 2-inch-thick layer, respectively.

Slab design: Using

loose sand requires more concrete

CBR values are sometimes used by floor designers to estimate the modulus of soil reaction (lbs/in.³), or k-value. Using Figure 2, we converted the CBR values from our study to k-values, as shown in Table 3. The k-values are used in slab-thickness design charts to represent the support of the underlying subgrade-subbase combination.

Figure 3 is a design chart from the Portland Cement Association's commonly used slab-on-grade design method. As Table 3 shows, the estimated k-value for soil sample No. 3 decreased from 210 to 50 when a 2-inch sand layer was used. The example problem shown on the chart illustrates the effect of this decrease. For a k of 200, the design slab thickness is about 11 inches, but for a k of 50 it increases to 12 inches (see Reference 3 for the complete example). For lighter loadings that yield thinner slabs, required thickness would still increase by about an inch for a k-value decrease from 200 to 50. For soil sample No. 1, the average k-value with a 2-inch sand layer is 18, which is lower than the lowest value (50) on the design chart.

What's the significance of an extra inch of concrete floor thickness? A value-engineering audit for a floor design sometimes results in slab-thickness decreases as small as ½ inch. Increasing the thickness of a 100,000-square-foot warehouse floor slab by 1 inch would cost about \$20,000. The cost of the extra concrete (more than 300 cubic yards) would be about equal to what the concrete floor contractor would be paid for placing and finishing.

What happens if the concrete slab is designed without considering the effect of the sand layer? Based on the design charts and other information (Refs. 2 and 3) for the example shown in Figure 3, the use of a loose sand layer that decreases the k-value from 200 to 50 would result in:

- A flexural stress increase of 25%
- A safety factor decrease from 2.0

Reasons to avoid using sand

There are many reasons for not placing a sand layer under a concrete slab (Ref. 1). These include difficulty in:

- Maintaining a flat, level sand surface during concrete placement
- Maintaining the specified reinforcing steel or dowel basket elevation due to sinking chair supports
- Producing a uniform slab thickness due to shifting sand displaced by concrete

In addition, one engineer (Ref. 2) has linked a sand layer to poor joint performance. He found that under forklift traffic, shifting sand beneath the joint resulted in reduced load-transfer efficiency across the joint. This was especially true at joints where aggregate interlock was the only means of load transfer.

ACI 302.1R-96 (Ref. 3) also discourages the use of a sand layer: "Base material should be a compactible, easy-to-trim, granular fill that will remain stable and support construction traffic. The use of so-called cushion sand or clean sand with uniform particle size, such as concrete sand meeting ASTM C 33, will not be adequate.

This type of sand will be difficult, if not impossible, to compact and maintain until concrete placement is complete."

In revising its "Concrete In Practice" series, the National Ready Mixed Concrete Association is eliminating references to a sand layer and using ACI 302 terminology for base material. But specifiers still call for sand cushions, and some articles and publications still suggest using a sand layer under a concrete slab (Refs. 4 and 5).

References

1. Carl Bimel, "No Sand, Please," *The Construction Specifier*, June 1995, p. 26.
2. William J. Brickey, "Try Crushed Stone Under Slabs-on-Grade," *The Construction Specifier*, July 1990, p. 9.
3. ACI 302.1R-96, "Guide for Concrete Floor and Slab Construction," American Concrete Institute, Farmington Hills, Mich., 1996, p. 16.
4. "Concrete Slab Surface Defects: Causes, Prevention, Repair," Portland Cement Association, Skokie, Ill., 1987, pp. 4, 7, 10.
5. Gregory Dobson, "Concrete Floor Slabs: Recognizing Problems Before They Happen," *Concrete International*, June 1995, p. 46.

to 1.6

- An actual flexural stress that exceeds the fatigue limit, meaning that floor failure would now be determined by load repetitions rather than maximum load
- Failure at 14,000 load repetitions, though the floor was designed for an unlimited number of load repetitions

When specifiers require contractors to place concrete over a sand layer, the contractors don't know if the designer has increased the slab thickness to account for the weaker sand-layer support shown by our data. If the slab thickness wasn't increased, more later-age cracking and poorer joint performance may result, especially for slabs subjected to

heavy construction loads, such as cranes or concrete trucks.

There are many good reasons for not using a sand layer under a concrete slab (see sidebar). If specifications call for a sand layer, contractors should discuss the implications with the architect and engineer before the project begins, and request that the sand layer be replaced with a compactible stone base. Based on our data, repair costs for slabs placed on thicker sand layers shouldn't necessarily be borne by the contractor.



References

1. ASTM D 1883-92 "Standard Test Method for CBR (California Bearing Ratio) of Laboratory-Compacted Soils,"

ASTM, West Conshohocken, Pa., 1992.

2. Boyd C. Ringo and Robert B. Andersen, *Designing Floor Slabs on Grade*, 2nd ed., The Aberdeen Group, 1996.

3. ACI 360R-92, "Design of Slabs on Grade," American Concrete Institute, Farmington Hills, Mich., 1997.

Acknowledgment

All of the laboratory work for this investigation was carried out by Blair G. Peterson, senior engineering technician, CTC-Geotek, Denver. We appreciate Blair's conscientious attention to detail while conducting the tests.

Publication #C99C0223

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APPENDIX B

2018 Borehole Logs



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TEST HOLE LOG

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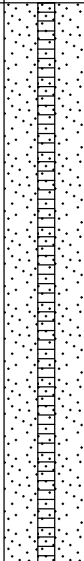
PROJECT NAME: 165 North Glenwood - Bear Development						DATE: 11/08/2018								
PROJECT LOCATION: Jackson, Wyoming						HOLE NO.: JG-18-1/MW-1								
TEST HOLE LOCATION: See Site Map														
ELEVATION G.S. (ft.):		TOTAL DEPTH (ft.): 31.5		GROUNDWATER LEVEL (ft.): N/A		MEASURED FROM: G.S								
DRILL TYPE: Simco 2800HS		HAMMER: Rope and Cathead		DRILL CO: LK Drilling		DRILLER: Steve		LOGGED BY: hc						
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION COMMENTS:	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION	
1								0.0-4.5ft SILT with sand - [FILL]						
2														
3		D1	4,3,1	2	27%			2.5ft SILT with sand: Dry to slightly moist, reddish to light brown, very loose, intact, 70-75% silt, 25-30% sand, occasional subrounded gravel to 3/4" in diameter, stone in shoe [FILL]						
4														
5														
6		D2	2,3,3	6	20%			4.5-14.5ft Clayey GRAVEL with sand - [ALLUVIAL FAN] 5.0ft Clayey GRAVEL with sand: Slightly moist, brown to dark brown, loose, intact, 35-40% clay, 60-65% fine gravel and sand, occasional subrounded and subangular pinkish to light brown gravel to 1" in diameter, stone in shoe, no HCL reaction on stones [ALLUVIAL FAN/FILL]						
7														
8		D3	3,7,20	24	40%			7.5ft Clayey GRAVEL with sand: Dry to slightly moist, light brown to greyish brown, medium dense, intact, shattered 55-60% subangular gravel, sand matrix with 5-10% clay, matrix reaction to HCL, stone in shoe [ALLUVIAL FAN]						
9														
10														
11		D4	23,22,25	29	60%			10.0ft Clayey GRAVEL with sand: Dry, white rock dust from gravel/cobble, brown to dark brown matrix, dense, intact, dark grey and white shattered gravel/cobble, clayey matrix with sand and fine gravel, occasional orange gravel [ALLUVIAL FAN]						
12														
13		D5	22,18,42	53	73%			12.5ft Clayey GRAVEL with sand: As above, very dense - split spoon bouncing during sampling						
14														
15														
16		D6	31,35,50 for 4"	50+	30%			14.5-17.0ft GRAVEL - [ALLUVIAL FAN] 15.0ft GRAVEL: Dry, white rock dust from gravel/cobble, very dense, intact, dark grey and white gravel/cobble, very little dark brown matrix clay and sand [ALLUVIAL FAN]						
17														
18		D7	15,50 for 5"	50+	42%			17.0-31.5ft Clayey GRAVEL with sand - [ALLUVIAL FAN] 17.5ft Clayey GRAVEL with sand: Moist, brown, very dense, intact, 25-30% clay, 25-30% sand, 35-40% subrounded gravel to 1/2 inch in diameter, appears to be matrix of above material [ALLUVIAL FAN]						
19														



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TEST HOLE LOG

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PROJECT NAME: 165 North Glenwood - Bear Development								DATE: 11/08/2018					
PROJECT LOCATION: Jackson, Wyoming								HOLE NO.: JG-18-1/MW-1					
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION COMMENTS:	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION
21		D8	20,27,13	22	73%			20.0ft Clayey GRAVEL with sand: Slightly moist to moist, brown, medium dense, intact, 25-30% silt and clay, 20-25% sand, 50-55% subrounded and rounded white, pink, and yellowish brown intact and shattered gravels [ALLUVIAL FAN]					
22													
23		D9	31,46,50 for 4"	50+	31%			22.5ft Clayey GRAVEL with sand: As above, very dense					
24													
25		D10	50 for 3"	50+	62%			25.0ft NO RECOVERY					
26													
27													
28													
29													
30								30.0ft Clayey GRAVEL with sand: Moist to very moist, brown, dense, intact, 20-25% clay, 30-35% sand, 35-40% subrounded to subangular dark and light grey shattered and intact gravels [ALLUVIAL FAN]					
31	D12	13,22,26	37	80%									
32								Notes: Stopped at request Monitoring well installed to 30 feet bgs 15 feet of 2' slotted pvc with 15 feet of solid 2' pvs Backfilled with silica sand to 15 feet bgs Backfilled with cutting to 5 feet bgs Capped with 5 feet of bentonite chips Covered with 8-inch flush mount vault					
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													



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TEST HOLE LOG

PAGE 1 OF 2

PROJECT NAME: 165 North Glenwood - Bear Development							DATE: 10/10/2018						
PROJECT LOCATION: Jackson, Wyoming							HOLE NO.: JG-18-2						
TEST HOLE LOCATION: See Site Map													
ELEVATION G.S. (ft.):			TOTAL DEPTH (ft.): 33			GROUNDWATER LEVEL (ft.): N/A			MEASURED FROM: G.S				
DRILL TYPE: Simco 2800HS			HAMMER: Rope and Cathead			DRILL CO: LK Drilling			DRILLER: Steve		LOGGED BY: hc		
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION COMMENTS:	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION
1								0.0-4.5ft Silty GRAVEL with sand - FILL					
2													
3		D1	5,14,18	35	37%			2.5ft Silty GRAVEL with sand: Dry to slightly moist, light to tannish brown, dense, intact, 55-60% shattered gravels, sandy matrix with some light brown subrounded intact gravels, stone in shoe [FILL]					
4													
5								4.5-29.5ft Clayey GRAVEL with sand - ALLUVIAL FAN					
6		D2	43,15,13	26	60%			5.0ft Clayey GRAVEL with sand: Dry, light to yellowish brown, medium dense, intact, 80-85% shattered light brown and yellowish brown gravels, 5-10% clay, 10-15 sand, stone in shoe [ALLUVIAL FAN]					
7													
8		D3	15,21,23	40	80%			7.5ft Clayey GRAVEL with sand: Moist, light to dark brown, dense, intact, 60-65% shattered and intact subrounded dark grey, light brown, and yellowish brown gravels, 35-4% dark brown sandy clay matrix [ALLUVIAL FAN]					
9													
10								10.0ft Clayey GRAVEL with sand: As above - Very dense					
11		D4	25,43,41	69	80%								
12													
13		D5	18,14,7	12	80%			12.5ft Clayey GRAVEL with sand: Very moist, brown to dark brown, medium dense, intact, 40-45% brown sandy matrix with clay, 55-60% intact rounded and subrounded gravels [ALLUVIAL FAN]					
14													
15								15.0ft Clayey GRAVEL with sand: As above - Dense with slightly more shattered gravels					
16		D6	22,18,30	40	87%								
17													
18		D7	13,20,32	42	87%			17.5ft Clayey GRAVEL with sand: Very moist, brown to dark brown, medium dense, intact, 40-45% brown sandy matrix with clay, 55-60% intact and shattered, yellow and orange, rounded and subrounded gravels [ALLUVIAL FAN]					
19													



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TEST HOLE LOG

PAGE 2 OF 2

PROJECT NAME: 165 North Glenwood - Bear Development									DATE: 10/10/2018				
PROJECT LOCATION: Jackson, Wyoming									HOLE NO.: JG-18-2				
DEPTH (ft.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/6 IN.	(N1)60 BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION COMMENTS:	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMITS (%)	PLASTICITY INDEX (%)	WELL COMPLETION
21		D8	12,17,22	33	60%			20.0ft Clayey GRAVEL with sand: As above - With large shattered stone in bottom 0.4 feet of sample					
22													
23		D9	17,28,30	47	87%			22.5ft Clayey GRAVEL with sand: Moist, brown, dense, intact, 35-40% clay matrix with some ~5% sand, 60-65% shattered and intact, subangular to rounded red, yellow, white, and dark grey gravels [ALLUVIAL FAN]					
24													
25													
26		D10	28,40,18	28	73%			25.0ft Clayey GRAVEL with sand: Moist, greyish brown to brownm, medium dense, intact, shattered orangish and grey gravels with sand matrix ~10-15% clay [ALLUVIAL FAN]					
27													
28		D11	47,50 for 5.5"	50+	53%		27.5ft Clayey GRAVEL with sand: As above - Very dense						
29													
30	D12	10,4,7	8	93%	29.5-33.0ft Lean CLAY - ALLUVIAL FAN 30.0ft Moist, greyish to orangish brown, medium stiff, massive, clay with trace sand [ALLUVIAL FAN]								
31								NOTES: Stopped at request No groundwater encountered at time of investigation Backfilled with cuttings					
32	U1			100%									
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													

APPENDIX C

USGS Seismic Design Maps Summary and Detailed Reports

 Design Maps Summary Report

User-Specified Input

Report Title Bear Development
Tue November 27, 2018 22:38:42 UTC

Building Code Reference Document 2012/2015 International Building Code
(which utilizes USGS hazard data available in 2008)

Site Coordinates 43.4815°N, 110.7641°W

Site Soil Classification Site Class D – “Stiff Soil”

Risk Category I/II/III



USGS-Provided Output

$S_s = 1.232\text{ g}$

$S_{Ms} = 1.241\text{ g}$

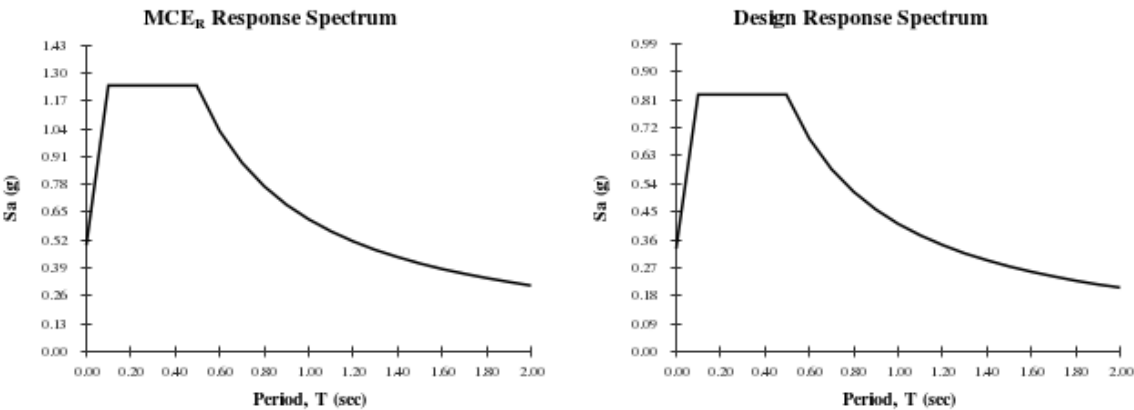
$S_{Ds} = 0.827\text{ g}$

$S_1 = 0.373\text{ g}$

$S_{M1} = 0.617\text{ g}$

$S_{D1} = 0.411\text{ g}$

For information on how the S_s and S_1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

 Design Maps Detailed Report

2012/2015 International Building Code (43.4815°N, 110.7641°W)

Site Class D – “Stiff Soil”, Risk Category I/II/III

Section 1613.3.1 — Mapped acceleration parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_s) and 1.3 (to obtain S_1). Maps in the 2012/2015 International Building Code are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 1613.3.3.

From Figure 1613.3.1(1) ^[1]	$S_s = 1.232\text{ g}$
From Figure 1613.3.1(2) ^[2]	$S_1 = 0.373\text{ g}$

Section 1613.3.2 — Site class definitions

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class D, based on the site soil properties in accordance with Section 1613.

2010 ASCE-7 Standard – Table 20.3-1
SITE CLASS DEFINITIONS

Site Class	$\bar{v}_s$	$\bar{N}$ or $\bar{N}_{ch}$	$\bar{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
Any profile with more than 10 ft of soil having the characteristics: • Plasticity index $PI > 20$, • Moisture content $w \geq 40\%$, and • Undrained shear strength $\bar{s}_u < 500\text{ psf}$			
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 1613.3.3 — Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters

TABLE 1613.3.3(1)
VALUES OF SITE COEFFICIENT F_a

Site Class	Mapped Spectral Response Acceleration at Short Period				
	$S_s \leq 0.25$	$S_s = 0.50$	$S_s = 0.75$	$S_s = 1.00$	$S_s \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_s

For Site Class = D and $S_s = 1.232$ g, $F_a = 1.007$

TABLE 1613.3.3(2)
VALUES OF SITE COEFFICIENT F_v

Site Class	Mapped Spectral Response Acceleration at 1-s Period				
	$S_1 \leq 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \geq 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_1

For Site Class = D and $S_1 = 0.373$ g, $F_v = 1.654$

Equation (16-37):

$$S_{MS} = F_a S_s = 1.007 \times 1.232 = 1.241 \text{ g}$$

Equation (16-38):

$$S_{M1} = F_v S_1 = 1.654 \times 0.373 = 0.617 \text{ g}$$

Section 1613.3.4 — Design spectral response acceleration parameters

Equation (16-39):

$$S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 1.241 = 0.827 \text{ g}$$

Equation (16-40):

$$S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.617 = 0.411 \text{ g}$$

Section 1613.3.5 — Determination of seismic design category

TABLE 1613.3.5(1)

SEISMIC DESIGN CATEGORY BASED ON SHORT-PERIOD (0.2 second) RESPONSE ACCELERATION

VALUE OF S_{DS}	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \leq S_{DS} < 0.33g$	B	B	C
$0.33g \leq S_{DS} < 0.50g$	C	C	D
$0.50g \leq S_{DS}$	D	D	D

For Risk Category = I and $S_{DS} = 0.827 g$, Seismic Design Category = D

TABLE 1613.3.5(2)

SEISMIC DESIGN CATEGORY BASED ON 1-SECOND PERIOD RESPONSE ACCELERATION

VALUE OF S_{D1}	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \leq S_{D1} < 0.133g$	B	B	C
$0.133g \leq S_{D1} < 0.20g$	C	C	D
$0.20g \leq S_{D1}$	D	D	D

For Risk Category = I and $S_{D1} = 0.411 g$, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category $\equiv$ "the more severe design category in accordance with Table 1613.3.5(1) or 1613.3.5(2)" = D

Note: See Section 1613.3.5.1 for alternative approaches to calculating Seismic Design Category.

References

1. Figure 1613.3.1(1): [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/IBC-2012-Fig1613p3p1\(1\).pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/IBC-2012-Fig1613p3p1(1).pdf)
2. Figure 1613.3.1(2): [https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/IBC-2012-Fig1613p3p1\(2\).pdf](https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/IBC-2012-Fig1613p3p1(2).pdf)



Traffic Impact Study for Club Lespri and McCabe Corner Gill Avenue, Jackson, Wyoming

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I. INTRODUCTION

Two developments are currently being proposed for the south side of Gill Avenue between Glenwood Street and Millward Street in Jackson, Wyoming. These two projects will result in the complete redevelopment this Gill Avenue frontage. This report is a study of the potential traffic impacts resulting from the construction of the two proposed developments. These developments will be neighbors and use the same alley for access. Both developments will be presented together in this report in an effort to examine the greatest impacts.

The McCabe Corner development is being proposed by The Eden Group of Wilson, WY. It is comprised of four town lots at the southwest corner of the Gill Avenue and Glenwood Street intersection. The site is better described as Lots 1 through 4, Block 6, Original Town Site, Jackson, Wyoming. The proposed development will consist of approximately 33 condominiums. Residential parking will be provided on site in and accessed via the alley between Glenwood Street and Millward Street.

Club Lespri is being proposed and developed by White Buffalo Development, LLC of Park City, Utah. The site is comprised of three lots at the southeast corner of the Gill Avenue and Millward Street intersection, better described as Lots 18 through 20, Block 6, Original Town Site, Jackson, Wyoming. The Club Lespri development will be limited to the east half of Lot 19 and the whole of Lot 20. The development will be a mixed-use private club consisting of a dinning room and lounge, wellness center, condominiums, and employee housing. Parking for the condominiums and employee housing will be accessed through the alley off Gill Avenue between Glenwood Street and Millward Street; the same alley used to access the McCabe Corner development.

The purpose of this study is to analyze the impacts to the traffic and safety of the surrounding Jackson, Wyoming roadway network as a result of the construction of these two developments. This report will identify and discuss any upgrades to the study area that may be necessary due to the impacts of the development.

All data, calculations, and worksheets can be found in the Appendix of this report.

II. EXISTING LAND USE AND TRANSPORTATION SYSTEM

Existing Land Uses

The McCabe Corner site consists of four town lots at the southwest corner of the Gill Avenue and Glenwood Street intersection. These lots are home to a mix of land uses including office space and apartments. The footprints of these land uses encompass approximately forty percent (40%) of the four lots total square footage. The remainder of the lot area contains walkways, landscaping, and parking lot.

Club Lespri will cover approximately one and a half town lots at the southeast corner of the Gill Avenue and Millward Street intersection. It will be located on all of Lot 20 and the east half of Lot 19. Currently these areas are a mix of landscaping and parking.

Existing Roadways

The two projects are separated by a north-south alley and are bordered on three sides by Town of Jackson Streets: Glenwood Street on the east, Gill Avenue on the north, and Millward Street on the west.

The Glenwood Street/Gill Avenue intersection is a two-way stop-controlled intersection with the Glenwood Street legs being controlled. Glenwood Street is stop-controlled at Delony Avenue one block south of Gill Avenue and is one-way to the north south of Delony Avenue. Two and half blocks north of Gill Avenue, Glenwood Street dead-ends.

The Millward Street/Gill Avenue intersection is a two-way stop-controlled intersection with the Gill Avenue legs being controlled. Two blocks south of Gill Avenue the Millward Street intersection with Broadway (State Highway 89) is signal-controlled. One block north of Gill Avenue, Millward Street intersects Mercill Avenue and access to North Cache Street (State Highway 89). Millward Street and Mercill Avenue combine to provide the truck route around the Town Square area of downtown Jackson.

Gill Avenue's eastern terminus is at Willow Street near the Teton County Recreation Center. It's western terminus is essentially at its intersection with Jackson Street. Gill Avenue is signal-controlled with North Cache Street and stop-controlled at Millward Street, a two-way stop controlled intersection.

All roadway segments in this area of Town have on-street parking and multiple access points. All roadway sections bordering the subject projects have sidewalks and striped crosswalks. Some sidewalk segments are missing from neighboring streets. Bicycles share the roads in the project area with other vehicles.

Existing Traffic

The existing traffic conditions presented herein are a combination of Chapter 8 Transportation of the Jackson/Teton County Comprehensive Plan, and 2002 Summer Traffic Counts conducted in Jackson.

Chapter 8 presents a summer Average Daily Traffic (ADT) volume of 9,000 vehicles per day (vpd) on Millward Street in the project area in 1996 (page 8-9). Chapter 8 also predicts a summer 2020 ADT of 13,000 vpd with the Chapter's implementation (page 8-23). This is a compounded average growth rate of approximately 1.54%. Interpolation of these numbers results in a 2007 summer ADT of approximately 10,650 vpd on Millward Street.

Traffic counts conducted in 2002 for the Town of Jackson show a summer ADT of 4172 vpd on Gill Avenue west of Glenwood Street. Applying the same compounded average growth rate of 1.54% to this volume yields a 2007 summer ADT of approximately 4,500 for Gill Avenue.

III. PROPOSED CONDITIONS

The proposed McCabe Corner and Club Lespri developments will redevelop approximately five and a half town lots into a mix of land uses.

The McCabe Corner development is comprised of four town lots at the southwest corner of the Gill Avenue and Glenwood Street intersection. The proposed development will consist of approximately 33 condominiums with 70% used as short term rentals and 30% used as long term residential units. Parking will be provided on site in and accessed via the alley between Glenwood Street and Millward Street.

Club Lespri is to be developed on one and a half town lots at the southeast corner of Gill Avenue and Millward Street. It will be a mixed-use private club consisting of a dinning room and lounge, wellness center, condominiums, and employee housing. While owned by individuals, the condominiums will act like short term rentals. Parking for the condominiums and employee housing will be accessed through the alley off Gill Avenue between Glenwood Street and Millward Street; the same alley used to access the McCabe Corner development.

Background Traffic

Background traffic refers to the current existing traffic and the future traffic that is anticipated without the proposed development. For this study the background traffic was calculated using information contained in Chapter 8 Transportation of the Jackson/Teton County Comprehensive Plan.

As stated above, Chapter 8 demonstrates a compounded average growth rate of 1.54% in the area of the proposed projects. This rate is applied to the 2002 summer ADT for Gill Avenue to predict the 2020 summer ADT for Gill Avenue.

Chapter 8 provides a prediction for the 2020 summer ADT on Millward Street.

Table 1 shows the summer ADT projections for Gill Avenue and Millward Street.

TABLE 1
SUMMER ADT VOLUMES

	1996	2002	2007	2020
Millward Street	9000		10652	13000
Gill Avenue		4172	4504	5497

Millward Street: 1996 and 2020 ADT provided by Chapter 8
2007 ADT calculated using 1.54% CAGR

Gill Avenue: 2002 ADT provided by TOJ counts
2007 and 2020 ADT calculated using 1.54% CAGR

Trip Generation

The proposed ADT volumes generated by the developments are estimated using *ITE Trip Generation, 7th Edition*. This manual provides trip generation rates for a myriad of land uses and is considered the standard for trip generation calculations in the traffic professions. For McCabe Corner 70% of the condominiums will operate as short term rentals. Those units are analyzed as ITE Land Use 311, All Suites Hotel. The remaining 30% are analyzed as Land Use 230, Residential Condominium/Townhouse. Club Lespri's Land Uses include Apartment (220), All Suites Hotel (311), Health/Fitness Club (492), and Quality Restaurant (931).

Trip generation spreadsheets are included in the appendix of this report. They show the equations used as well as the calculated volumes. Table 2 summarizes the ADT generated by the proposed developments on a weekday.

TABLE 2
TRIP GENERATION

Land Use	ITE Code	Variable	Value	Weekday ADT
Club Lespri				
Apartment	220	Dwelling Units	4	8
All Suites Hotel	311	Rooms	10	45
Health/Fitness Club	492	1000 sq. ft.	2.8	92
Quality Restaurant	931	Seats	53	152
McCabe Corner				
Residential Condominium/Townhouse	230	Dwelling Units	10	49
All Suites Hotel	311	Rooms	23	104
Total Trips Generated				449

These are the raw volumes calculated from *ITE Trip Generation, 7th Edition*. The Club Lespri condominiums are analyzed as an All Suites Hotel because that is the ITE Land Use that best fits the anticipated use of the condominiums. They will be owned by individuals as vacation properties and rented to vacationers when not in use by the owners.

The actual ADT generated by these developments will be significantly lower those presented in Table 2. The mix-use, private club nature of Club Lespri will greatly aid in trip reduction. Visitors staying in the condominiums will have the wellness center and restaurant on site to

reduce the need travel elsewhere. The apartments are for employees of the club so they will not commute. Shared trips are likely between the wellness canter and the restaurant. The downtown location of the development is sure to reduce the trips it generates. A 10% trip generation reduction could be expected because of the above mentioned reasons.

McCabe Corner should also generate fewer trips than reported in Table 2. The downtown location of this development is the key to its lower trip generation. The owners of the condominiums will most likely live in them, and the downtown location is likely to be a very attractive feature. The project site is one block from North Cache Street and all its amenities such as shops and restaurants. It is about two blocks from the Town Square, one block from Miller Park, and three blocks from the Teton County Recreation Center. Additionally there is a wide variety and high number of businesses and entertainment venues within just five blocks of the McCabe Corner site. Residents of McCabe Corner are very likely to work in the downtown area and take advantage of their proximity to the other downtown amenities. This proximity to downtown will also be very appealing to users of the short term rentals. All occupants of McCabe Corner are likely walk to many of their destinations rather than drive. The overall trip reduction for McCabe Corner could be as much as 20% due to its location alone. Additional trip generation reductions are usually made from the removal of existing land uses on a redevelopment site. No such reductions have been made.

Trip Distribution

The trips generated by the developments will spread out amongst the surrounding roadway network. The McCabe Corner trips will access Gill Avenue by way of the alley west of the project. The condominium and employee housing trips of Club Lespri will access the development via the same alley. Additional Club Lespri trips will terminate in the surrounding on street parking. The heaviest distribution routes for both developments will most likely be along Gill Avenue to and from the traffic signal at North Cache Street and along Millward Street to and from the traffic signal at Broadway. This report assumes half of the McCabe Corner traffic will use the North Cache intersection and half will use Millward Street. This report also assumes that one third of the Club Lespri traffic will utilize the traffic signal at Gill Avenue and North Cache Street and two thirds will be associated with Millward Street. These assumptions are fairly conservative as there are a number are route for traffic in the downtown's roadway grid.

Table 3 indicates the total generated trip distribution among Gill Avenue east of Glenwood Street and Millward Street.

TABLE 3
TOTAL TRIP DISTRIBUTION

	McCabe Corner	Club Lespri
Millward Street	76	199
Gill Avenue	76	98

Table 4 shows the trip distribution for the reduced volume of trip based on the reduction percentages mentioned above.

TABLE 4
REDUCED TRIP DISTRIBUTION

	McCabe Corner	Club Lespri
Millward Street	61	179
Gill Avenue	61	88

Total Traffic

Adding the developments trip generations to the background traffic calculates the total traffic that may occur with the implementation of these projects. Combining the volumes for 2007 and 2020 with the reduced distribution volumes in Table 4 yields the total traffic volumes in Table 5.

TABLE 5
TOTAL TRAFFIC

	2007	2020
Millward Street	10892	13240
Gill Avenue	4653	5646

IV. TRAFFIC ANALYSIS

The background ADT for 2020 actually incorporates much the traffic generated by these two developments. The intent of Chapter 8 was to understand the future transportation demands in Jackson and Teton County. Growth and redevelopment in downtown Jackson was part of that analysis. As such, the volumes reported in Table 4 and Table 5 should be considered conservative.

The construction of these two developments will add some delay to the Gill Avenue intersections with Glenwood Street and Millward Street. These intersections, however, currently operate at a high level of service. The minor, additional delays should not significantly reduce levels of service and therefore should not warrant any traffic mediation efforts.

In the worst case scenario, the Town of Jackson roadway network should be able to accommodate the addition of potentially 389 vehicles per day. With the grid network of streets, drivers will disperse themselves with routes that work best for their destinations. Additional congestion in the area of McCabe Corner and Club Lespri will not be caused solely by these developments. Rather, traffic congestion in this area, much like the whole of downtown Jackson, will be caused by growth of the entire Jackson Hole region. Presenting solutions to area wide traffic concerns is beyond the scope of this report.



**Traffic Impact Study for Club Lespri and McCabe Corner
Gill Avenue, Jackson, Wyoming**

APPENDIX

Club Lespri

Millward Street & Gill Avenue
Jackson, Wyoming

RESIDENTIAL LAND USES

ITE Land Use Category: **Apartment**
ITE Land Use Code: **220**
Independent Variable: Dwelling Units
Value: 4

Analysis Period				Directional Distribution			
				Entering	Exiting	Entering	Exiting
ADT	Weekday	T = 2.00(X)	8	50%	50%	4	4
ADT	Saturday	T = 2.84(X)	11	50%	50%	6	6
ADT	Sunday	T = 3.21(X)	13	50%	50%	6	6
A.M. Pk Hr Adjacent Street	Weekday	T = 0.1(X)	0	20%	80%	0	0
P.M. Pk Hr Adjacent Street	Weekday	T = 0.1(X)	0	65%	35%	0	0

Low end of Range of Rates because Dwelling Units are Employee Housing and located downtown.

LODGING LAND USES

Condo Units will be short term rentals and are expected to have Trip Gen rates similar to a hotel.

ITE Land Use Category: **All Suites Hotel**
ITE Land Use Code: **311**
Independent Variable: Rooms
Value: 10

Analysis Period				Directional Distribution			
				Entering	Exiting	Entering	Exiting
ADT	Weekday	T = 4.49(X)	45	50%	50%	22	22
ADT (Hotel: 310)	Saturday	T = 6.35(X)	64	50%	50%	32	32
ADT (Hotel: 310)	Sunday	T = 4.01(X)	40	50%	50%	20	20
A.M. Pk Hr Adjacent Street	Weekday	T = 0.28(X)	3	55%	45%	2	1
P.M. Pk Hr Adjacent Street	Weekday	T = 0.32(X)	3	45%	55%	1	2

Low end of Range of Rates because Units are located downtown.

RECREATIONAL LAND USES

ITE Land Use Category: **Health/Fitness Club**
ITE Land Use Code: **492**
Independent Variable: 1000 sq. ft.
Value: 2.8

Analysis Period				Directional Distribution			
				Entering	Exiting	Entering	Exiting
ADT	Weekday	T = 32.93(X)	92	50%	50%	46	46
ADT	Saturday	T = 20.87(X)	58	50%	50%	29	29
ADT	Sunday	T = 26.73(X)	75	50%	50%	37	37
A.M. Pk Hr Adjacent Street	Weekday	T = 0.3(X)	1	42%	58%	0	0
P.M. Pk Hr Adjacent Street	Weekday	T = 3.20(X)	9	67%	33%	6	3

Low end of Range of Rates because wellness center is a private club located downtown

DINING LAND USES

ITE Land Use Category: **Quality Restaurant**
ITE Land Use Code: **931**
Independent Variable: Seats
Value: 53

Analysis Period				Directional Distribution			
				Entering	Exiting	Entering	Exiting
ADT	Weekday	T = 2.86(X)	152	50%	50%	76	76
ADT	Saturday	T = 2.81(X)	149	50%	50%	74	74
ADT	Sunday	T = 2.15(X)	114	50%	50%	57	57
A.M. Pk Hr Adjacent Street	Weekday	T = 0.03(X)	2	55%	45%	1	1
P.M. Pk Hr Adjacent Street	Weekday	T = 0.26(X)	14	67%	33%	9	5

Average Rate because restaurant is a private club located downtown

McCabe Corner
Glenwood Street & Gill Avenue
Jackson, Wyoming

RESIDENTIAL LAND USES

Total Market Units 33
 Short Term: 70% 23
 Long Term: 30% 10
 Affordable Units: 3

ITE Land Use Category: **Residential Condominium/Townhouse**
 ITE Land Use Code: **230**
 Independent Variable: Dwelling Units
 Value: 10

<i>Analysis Period</i>		<i>Average Rate or Equation</i>	<i>Calc'd Trips</i>	<i>Directional Distribution</i>			
				<i>Entering</i>	<i>Exiting</i>	<i>Entering</i>	<i>Exiting</i>
ADT	Weekday	$T = (1.83 + 3.09) * (X)$	49	50%	50%	24	24
ADT	Saturday	$T = (1.17 + 3.10) * (X)$	42	50%	50%	21	21
ADT	Sunday	$T = (1.36 + 2.71) * (X)$	40	50%	50%	20	20
A.M. Pk Hr Adjacent Street	Weekday	$T = (0.15 + 0.69) * (X)$	8	17%	83%	1	7
P.M. Pk Hr Adjacent Street	Weekday	$T = (0.18 + 0.75) * (X)$	9	67%	33%	6	3

Low end of Range of Rates plus one standard deviation because Units are located downtown.

Short term rentals and are expected to have Trip Gen rates similar to a hotel.

ITE Land Use Category: All Suites Hotel
 ITE Land Use Code: **311**
 Independent Variable: Rooms
 Value: 23

<i>Analysis Period</i>		<i>Average Rate or Equation</i>	<i>Calc'd Trips</i>	<i>Directional Distribution</i>			
				<i>Entering</i>	<i>Exiting</i>	<i>Entering</i>	<i>Exiting</i>
ADT	Weekday	$T = 4.49(X)$	104	50%	50%	52	52
ADT (Hotel: 310)	Saturday	$T = 6.35(X)$	147	50%	50%	73	73
ADT (Hotel: 310)	Sunday	$T = 4.01(X)$	93	50%	50%	46	46
A.M. Pk Hr Adjacent Street	Weekday	$T = 0.28(X)$	6	55%	45%	4	3
P.M. Pk Hr Adjacent Street	Weekday	$T = 0.32(X)$	7	45%	55%	3	4

Low end of Range of Rates because Units are located downtown.

Club Lespri & McCabe Corner

Gill Avenue

Jackson, Wyoming

TRIP GENERATION SUMMARY

Peak Hour Summary

Land Use	ITE Code	Variable	Value	AM		PM	
				Entering	Exiting	Entering	Exiting
Club Lespri							
Apartment	220	Dwelling Units	4	0.1	0.3	0.3	0.1
All Suites Hotel	311	Rooms	10	1.5	1.3	1.4	1.8
Health/Fitness Club	492	1000 sq. ft.	2.8	0.4	0.5	6.0	3.0
Quality Restaurant	931	Seats	53	0.9	0.7	9.2	4.5
McCabe Corner							
Residential Condominium/Townhouse	230	Dwelling Units	9.9	1.4	6.9	6.2	3.0
All Suites Hotel	311	Rooms	23.1	3.6	2.9	3.3	4.1
Total Trips Generated				8	13	26	17

Weekday ADT Summary

Land Use	ITE Code	Variable	Value	Weekday ADT
Club Lespri				
Apartment	220	Dwelling Units	4	8
All Suites Hotel	311	Rooms	10	45
Health/Fitness Club	492	1000 sq. ft.	2.8	92
Quality Restaurant	931	Seats	53	152
McCabe Corner				
Residential Condominium/Townhouse	230	Dwelling Units	10	49
All Suites Hotel	311	Rooms	23	104
Total Trips Generated				449

Club Lespri & McCabe Corner
 Gill Avenue
 Jackson, Wyoming

BACKGROUND TRAFFIC GROWTH

Millward Street	Chapter 8		TIS Projection	
	Year	ADT	Year	ADT
	1996	9000	2007	10652
	2020	13000		
	CARG	1.54%		

Gill Avenue	TOJ Counts		TIS Projection	
	Year	ADT	Year	ADT
	2002	4172	2007	4504
			2020	5497

Summer ADT

	1996	2002	2007	2020
Millward Street	9000		10652	13000
Gill Avenue		4172	4504	5497

Distribution Rates

	McCabe	Lespri
Millward Street	50%	67%
Gill Avenue	50%	33%

Full Trip Distribution

	McCabe	Lespri	Total
Millward Street	76	199	275
Gill Avenue	76	98	174

Reduced Trip Distribution

	McCabe	Lespri	Total
Millward Street	61	179	240
Gill Avenue	61	88	149

Total Trips

	2007	2020
Millward Street	10892	13240
Gill Avenue	4653	5646

SECTION 5 – SUPPORTING MATERIALS

- **HOUSING MITIGATION PLAN & CALCULATIONS**
 - **PROJECTED PROGRAM**
- **COMP PLAN DISTRICT 2 – TOWN COMMERCIAL CORE**
 - **PARK AND SCHOOL EXACTIONS**
- **NEIGHBORHOOD MEETING SUMMARY & SIGN IN SHEETS**

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Housing Mitigation Plan

updated 7/20/18

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. The following worksheet is intended to assist in the calculation of the housing required for a project, but does not amend the actual standards.

Step 1: Location

Town of Jackson

The applicable regulations vary by jurisdiction please identify the location of your project.

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. Enter each existing 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, do not add the size of all units that have the same use. (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 single unit type (e.g. apartment floor plan, or commercial tenant space) is replicated multiple times use the "Use Quantity" column to avoid adding multiple rows. See Section 6.3.2 of the LDRs for specifics on the applicability of the affordable workforce housing standards and Section 6.3.3 for specifics on calculation of the requirement.

Existing Use	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	Housing Required
Office	0.000493*sف		7930	1	3.913
Light Industry	0.000246*sف		6160	1	1.514
Retail	0.000431*sف		1455	1	0.627
Outfitter/Tour Operator	0.002189*sف - independent calculation		2539	1	5.558
					?

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 not the net. (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
Attached Single-Family Unit (Unrestricted)	$0.000017 \cdot \text{sf} + (\text{Exp}(-14.17 + 1.59 \cdot \text{Ln}(\text{sf}))) / 2.176$	3	3,067	1	0.165
Attached Single-Family Unit (Unrestricted)	$0.000017 \cdot \text{sf} + (\text{Exp}(-14.17 + 1.59 \cdot \text{Ln}(\text{sf}))) / 2.176$	3	3,077	1	0.166
Attached Single-Family Unit (Unrestricted)	$0.000017 \cdot \text{sf} + (\text{Exp}(-14.17 + 1.59 \cdot \text{Ln}(\text{sf}))) / 2.176$	3	2,745	1	0.141
Attached Single-Family Unit (Unrestricted)	$0.000017 \cdot \text{sf} + (\text{Exp}(-14.17 + 1.59 \cdot \text{Ln}(\text{sf}))) / 2.176$	3	2,820	1	0.147
Short-Term Rental Unit	0.204*bedrooms	3	3,119	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,264	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,264	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,264	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,632	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,086	1	0.613
Workforce Housing Bonus Unit	exempt	3	3,281	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,280	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,280	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,280	1	0.000
Workforce Housing Unit	exempt	3	2,943	1	0.000
Workforce Housing Unit	exempt	2	1,946	1	0.000
Workforce Housing Unit	exempt	2	1,932	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,487	1	0.000
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	4	3,989	1	0.817
Short-Term Rental Unit	0.204*bedrooms	4	4,154	1	0.817
Short-Term Rental Unit	0.204*bedrooms	3	3,008	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,008	1	0.613
Workforce Housing Unit	exempt	3	2,481	1	0.000
Workforce Housing Unit	exempt	3	2,042	1	0.000

Affordable Workforce Housing Required: -1.390 units

Fee-in-Lieu Amount: \$ -

Housing Mitigation Plan

Below is the Applicability analysis and support for the attached Calculation required in a Housing Mitigation Plan. Because the calculation yields a requirement less than zero, no other required contents of the Housing Mitigation Plan are applicable.

Existing Development (Applicability, Sec. 6.3.2.)

Pursuant to Section 6.3.2.A.1. of the Town LDRs the development that can be credited as existing is the development that existed on the site as of December 18, 1995 or was built or permitted since that date.

185 N. Glenwood

On December 18, 1995 this portion of the site was the Jackson Hole Guide. The Guide included:

7,930 sf	Newsroom
6,160 sf	Pressroom
5,200 sf	4-2 bedroom apartments, 2-1bedroom apartments

These floor areas and uses were established in McCabe Corner PMD Final Development Plan. There has not been another use of the site since.

For the purpose of calculating credit for existing development, the newsroom is treated as an office use and the pressroom as a light industrial use. The newsroom is where the reporters, editors, publishers had their office space. The pressroom is where the paper was printed and distributed. This use distinction is consistent with the calculation of the housing requirements for the current Jackson Hole News and Guide building (reference building permits B01-032 and B03-017).

The apartments are not considered existing per Section 6.3.2.A.1.a and are therefore not included in the calculation of existing development.

165 N. Glenwood

On December 18, 1995 this portion of the site was a mix of uses.

1,455 sf	Teton Cycleworks – the 660 sf building on Glenwood was the retail area, the 795 sf building (including basement) behind it was the shop area for the store
2,539 sf	JH Mountain Guides – includes half of the ground floor and the basement, which was used as storage, of the main building
1,699 sf	3 apartments in the main building, 1 on the ground floor and 2 on the second floor
2,680 sf	4-2 bedroom apartments in the back building

The floor area numbers are Assessor data. The retail space has housed other retail and service businesses, but has never had an approved change of use. The main building no longer houses the JH Mountain Guides, but has never had an approved change of use.

The Teton Cycleworks space is treated as retail/service in the existing development calculation. The JH Mountain Guide space is Outfitter/Tour Operator use, which is an independent calculation that is described in more detail in the next section of this support documentation. The apartments are not considered existing per Section 6.3.2.A.1.a and are therefore not included in the calculation of existing development.

Outfitter/Tour Operator Independent Calculation

JH Mountain Guides is, and was in 1995, a dual seasonal outfitter/tour operator, offering guided backcountry experiences in both summer and winter (climbing, hiking, backpacking, skiing). As such, the below independent calculation focused on outfitter/tour operator spaces with dual seasonal or year-round operations. It is not applicable to a truly seasonal use that does not support employees year-round.

The housing requirement for any use is the result of 3 types of employee generation – construction employees to build the space, operational employees who work out of the space, and first responders who protect the space. The calculation for an outfitter/tour operator is provided below in the same format as it is calculated for other uses in the calculator provided online. Numbers in blue are the values proposed pursuant to 6.3.3.B.3. All other values are pursuant to the 2013 Nexus Study, or are the function of the calculation stated in 6.3.3.B.2.

Construction

The generation of construction employees depends on whether the space is finished or unfinished as it takes more construction employees to finish a space. The assumption in this independent calculation is that an outfitter/tour operator space will be a combination of finished space to interface with the customer and unfished space to store gear. Therefore, the construction employee generation was assumed to be halfway between the finished an unfinished number. This method was also used in the 2013 Nexus Study with regard to Institutional space. Otherwise, the standard career length, income, and household characteristics of a construction worker were used to calculate the housing requirement attributable to construction worker generation.

Operations

To determine the operational employee generation per square foot and the income characteristics of outfitter/tour operator employees, 3 local uses were surveyed. The results are below. The average employee generation per 1,000 sf is included directly.

To calculate the employees per unit and employees who can afford housing, the income characteristics of the employees were matched to the income characteristics of employees in other sectors. The best match from the 2013 Nexus Study were institutional employees, so the employees per unit and employees who can afford factors for

Outfitter/Tour Operator Calculation		
Construction		
	employees per 1,000 sf	0.927
	sf per room	
	Length of Construction Career	30
	employees per 1,000 sf/room	0.031
	employees per unit	1.774
	employees who can afford	28.87%
	units per 1,000 sf/room	0.012
Operations		
	employees per 1,000 sf/room	6.756
	employees per unit	1.678
	Employees who can afford	28.18%
	units per 1,000 sf/room	2.892
Fire/EMS		
	Fire/EMS employees per 1000 sf	0.00100
	employees per unit	1.797
	employees who can afford	25.56%
	Fire/EMS units per 1000 sf	0.00042
Law Enforcement		
	Law employees per 1000 sf	0.00301
	employees per unit	1.797
	employees who can afford	27.09%
	Law units per 1000 sf	0.00122
Total		
	Employees per 1000 sf/room	6.791
	units per 1,000 sf/room	2.906
	Town Yearround mitigation "rate"	55%
	Town Reduction factor	0.75
	Town Required units per 1,000 sf	2.189

institutional uses were applied to outfitter/tour operator use. For reference, the institutional affordability factors are middle of the road compared to other uses and very nearly equal to the average. It should be noted that the ability to afford factors have far less impact than the employee generation in determining the requirement from any sector – adjusting from the middle to the highest or lowest affordability factors would only change the calculated requirement by 0.03 units per 1,000 square feet.

	Exum	Mad River/ Scenic Safari	Brushbuck Tours	Average
Floor Area	2,820 sf	4,176 sf	1,300 sf	
Year-round Employees	14	35	9	
Employees/1,000 sf	4.965	8.381	6.923	6.756
Average Salary		\$56,796	\$64,000	\$60,400

Notes:

- In the case of Exum and Mad River/Scenic Safari year-round employees is a dual seasonal calculation representative of employment in the season with fewer employees.
- The Exum and Mad River/Scenic Safari information was gathered from staff or ex-staff.
- The Brushbuck information represents the year-round employee information from CUP file P17-102, except that the payroll information was supplemented with an assumption of tip income as well. The tip assumption was based on the tip information gathered for Mad River/Scenic Safari employees.

First Responders

All of the standard employee generation, income, and household characteristics for a nonresidential use were used to calculate the housing requirement attributable to first responder generation.

Result

The final step in the calculation is to utilize the general reduction factor applied to all commercial uses that was colloquially approved as applying a 55% mitigation rate instead of a 73% mitigation rate.

The result, a housing mitigation rate far greater than any other use, is simply explained by the logic that it does not take much floor area to launch a lot of tours into the field. As a result, an outfitter/tour operator can employ a lot of guides and other staff with little need for floor area. However, there is still a link to floor area for staging and storage so floor area can still be used to determine the calculation.

165-185 Glenwood
Unit Information

Unit	Phase	Unit Type	Bedrooms	Basement	First Floor	Second Floor	Third Floor	Total Habitable SF	Above Grade FAR
A1	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	566	937	803	761	3,067	2,501
A2	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	586	934	801	756	3,077	2,491
B1	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	290	936	760	759	2,745	2,455
B2	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	314	939	805	762	2,820	2,506
C1	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	835	884	3,119	2,729
C2	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	1,028	3,264	2,874
C3	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
C4	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	1,028	3,264	2,874
C5	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
C6	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	1,028	3,264	2,874
C7	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
D1	Phase 1	Short-Term Rental Unit	3 Br	426	1,123	942	1,141	3,632	3,206
E1	Phase 1	Short-Term Rental Unit	3 Br	286	926	851	1,023	3,086	2,800
E2	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	869	1,041	3,281	2,911
E3	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	868	1,041	3,280	2,910
E4	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	868	1,041	3,280	2,910
E5	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	868	1,041	3,280	2,910
E6	Phase 1	Workforce Housing Unit	3 Br	370	904	748	921	2,943	2,573
I1	Phase 1	Workforce Housing Unit	2 Br	-	122	858	966	1,946	1,946
I2	Phase 1	Workforce Housing Unit	2 Br	-	106	860	966	1,932	1,932
				-	-	-	-		
D2	Phase 2	Workforce Housing Bonus Unit	3 Br	426	1,123	942	996	3,487	3,061
C8	Phase 2	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
C9	Phase 2	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
G1	Phase 2	Short-Term Rental Unit	4 Br	505	1,334	1,154	996	3,989	3,484
H1	Phase 2	Short-Term Rental Unit	4 Br	437	1,403	1,175	1,139	4,154	3,717
F3	Phase 2	Short-Term Rental Unit	3 Br	321	950	787	950	3,008	2,687
F4	Phase 2	Short-Term Rental Unit	3 Br	321	950	787	950	3,008	2,687
J1	Phase 2	Workforce Housing Unit	3 Br	148	824	685	824	2,481	2,333
J2	Phase 2	Workforce Housing Unit	3 Br	148	673	541	680	2,042	1,894
				10,134	27,278	24,495	27,142	89,049	78,915

Projected Program

Project Program- 165 & 185 Glenwood						
	Basement	First Floor	Second Floor	Third Floor	Total Habitable SF	Total Above Grade Floor Area
Common Area	-	532	-	-	-	532
Affordable Housing Unit	-	-	-	-	-	-
Workforce Housing Unit	666	2,629	3,692	4,357	11,344	10,678
Workforce Housing Bonus Unit	1,906	5,127	4,415	5,160	16,608	14,702
Attached Single-Family Unit (Unrestricted)	1,756	3,746	3,169	3,038	11,709	9,953
Short-Term Rental Unit	5,806	15,776	13,219	14,587	49,388	43,582
Total Floor Area	10,134	27,810	24,495	27,142	89,049	79,447
Site Size (Acres)	0.96					
Site Size (SF)	41,818					
Floor Area- Above Grade	79,447					
Floor Area Ratio	1.90					
Downtown Core (DC) Maximum FAR	1.30					
Adjusted Floor Area (remove Workforce Housing & Workforce Housing Bonus Units)	54,067					
Adjusted FAR	1.293					

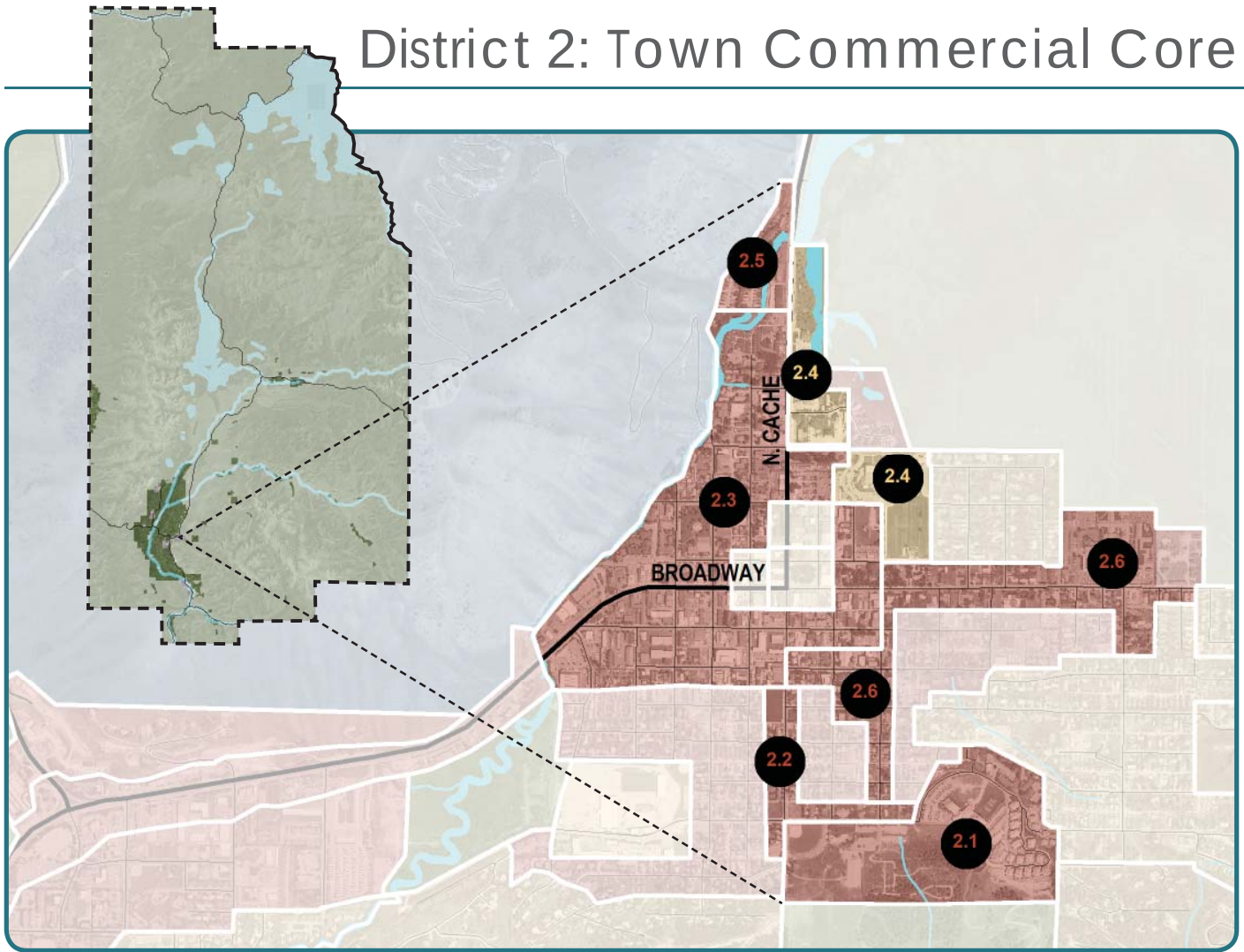
Project Program- Phase 1 (185 Glenwood)						
	Basement	First Floor	Second Floor	Third Floor	Total Habitable SF	Total Above Grade Floor Area
Common Area	-	532	-	-	-	532
Affordable Housing Unit	-	-	-	-	-	-
Workforce Housing Unit	370	1,132	2,466	2,853	6,821	6,451
Workforce Housing Bonus Unit	1,480	4,004	3,473	4,164	13,121	11,641
Attached Single-Family Unit (Unrestricted)	1,756	3,746	3,169	3,038	11,709	9,953
Short-Term Rental Unit	3,442	9,119	7,644	8,784	28,989	25,547
Total Floor Area	7,048	18,533	16,752	18,839	60,640	54,124
Site Size (Acres)	0.64					
Site Size (SF)	27,878					
Floor Area- Above Grade	54,124					
Floor Area Ratio	1.94					
Downtown Core (DC) Maximum FAR	1.30					
Adjusted Floor Area (remove Workforce Housing & Workforce Housing Bonus Units)	36,032					
Adjusted FAR	1.292					

Project Program- Phase 2 (165 Glenwood)						
	Basement	First Floor	Second Floor	Third Floor	Total Habitable SF	Total Above Grade Floor Area
Common Area	-	-	-	-	-	-
Affordable Housing Unit	-	-	-	-	-	-
Workforce Housing Unit	296	1,497	1,226	1,504	4,523	4,227
Workforce Housing Bonus Unit	426	1,123	942	996	3,487	3,061
Attached Single-Family Unit (Unrestricted)	-	-	-	-	-	-
Short-Term Rental Unit	2,364	6,657	5,575	5,803	20,399	18,035
Total Floor Area	3,086	9,277	7,743	8,303	28,409	25,323
Site Size (Acres)	0.32					
Site Size (SF)	13,939					
Floor Area- Above Grade	25,323					
Floor Area Ratio	1.82					
Downtown Core (DC) Maximum FAR	1.30					
Adjusted Floor Area (remove Workforce Housing & Workforce Housing Bonus Units)	18,035					
Adjusted FAR	1.294					

For Housing Mitigation Worksheet

	Unit Count	Total Bedrooms	Total Habitable SF
Affordable Housing Unit	0	-	-
Workforce Housing Unit	5	13	11,344
Workforce Housing Bonus Unit	5	15	16,608
Attached Single-Family Unit (Unrestricted)	4	12	11,709
Short-Term Rental Unit	15	47	49,388
	29	87	89,049

District 2: Town Commercial Core

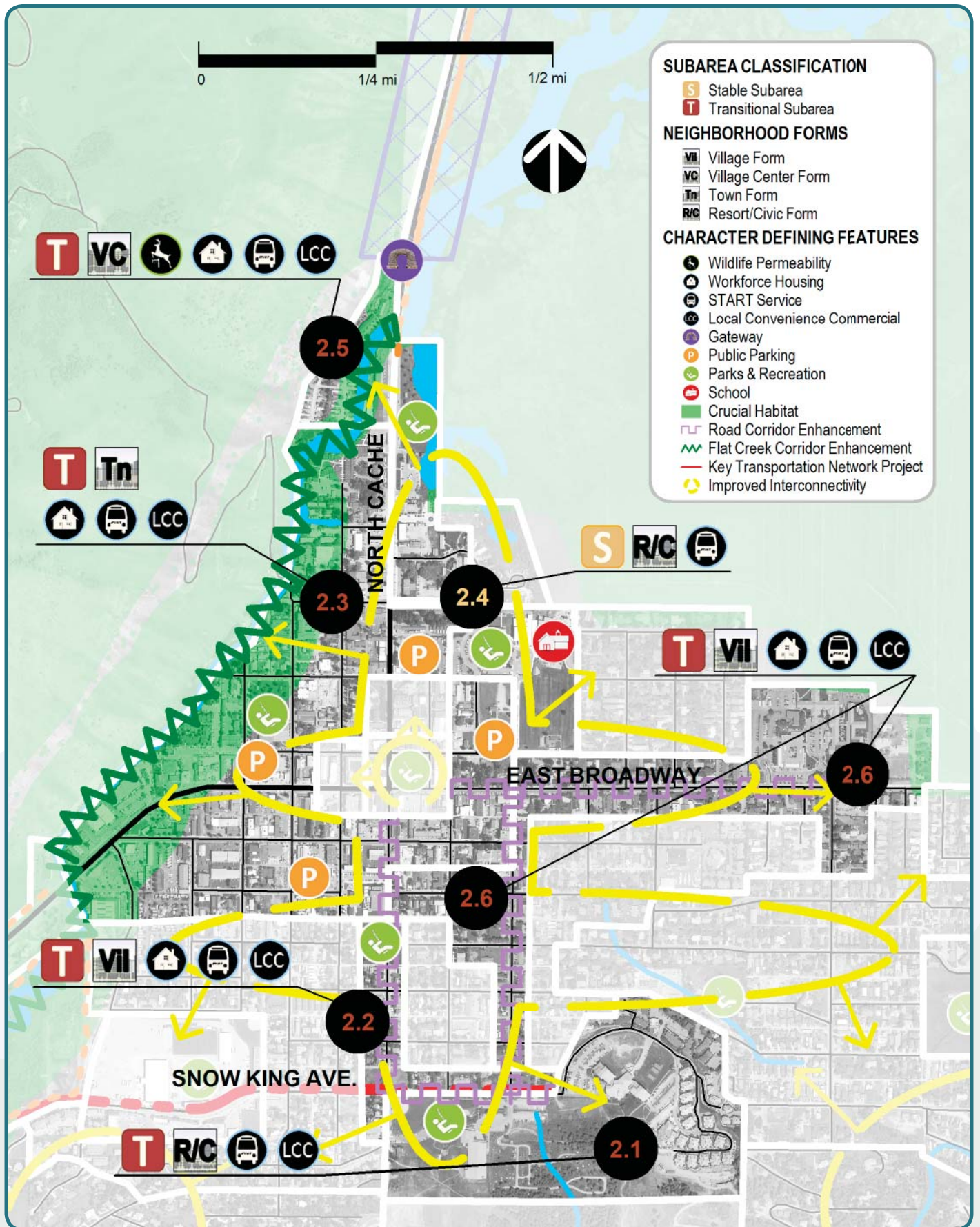


Complete Neighborhood + Rural Area Chart

	DEFINITION	EXST.	FUTURE	
COMPLETE NEIGHBORHOOD	Defined Character/High Quality Design			2-3 stories, vibrant pedestrian mixed use, street wall
	Public Utilities			Water, sewer, storm sewer
	Quality Public Space			Miller Park, Phil Baux Park, Snow King, Center for the Arts
	Variety of Housing Types			Duplex, condominiums, apartments, multifamily
	Walkable Schools, Commercial + Recreation			Post Office, START, Limited convenience commercial, school, parks, pathways
	Connection by Complete Streets			Alternative transportation a priority
RURAL	Viable Wildlife Habitat + Connectivity			Flat Creek enhancements
	Natural Scenic Vistas			
	Agricultural + Undeveloped Open Space			
	Abundance of Landscape over Built Form			
	Limited, Detached, Single family Res. Development			
	Minimal Nonresidential Development			

Legend: Generally Present; Partially Present; Generally absent

IV-18



Existing + Future Desired Characteristics

The Town Commercial Core is the economic hub of Teton County. The district contains a significant amount of the community's commercial uses, employment opportunities and lodging capacity. The future goal is to create a vibrant pedestrian-oriented mixed use district with a variety of non-residential and residential uses. A key component of achieving this goal will be to have visitors and residents visit the area more often and stay longer by increasing the availability of lodging and residential units and creating a vibrant Retail Shopping District.

Our community will strive to find creative solutions to develop the district into a year-round economic hub, by maintaining high lodging occupancy and sales tax collections during the shoulder seasons (April-May and October-November). Finding the correct balance of non-residential, non-profit and residential uses will be key to ensuring that the district remains economically and socially viable. In addition, it will be important to provide opportunities for local entrepreneurs and businesses that choose to locate in the community for our lifestyle.

The district is anchored by two primary economic and community centers, each with their own unique identity and role - Snow King Resort (Subarea 2.1) and Downtown (Subarea 2.3). A key goal of the district will be to better connect these subareas in order for each to benefit from the other's vitality, complementary uses, and activities while supporting the overall success of the district as the center for our tourist based economy.

Historically, buildings have been one, two or three stories, oriented both to the street and to large parking areas provided onsite. New buildings should be pulled to the street, creating an attractive street wall with parking located predominantly underground or out of sight. In the future the district should be defined by strategically located public parking lots and on street parking. This will create a welcoming pedestrian experience where visitors and residents park once and enjoy a variety of uses and community events on foot. Flat Creek is the significant natural feature of this district. Future enhancements and redevelopment should seek to incorporate Flat Creek as a recreational and ecological amenity for the entire community. An important goal of the district will also be the enhancement of the northern gateway into Town at the Flat Creek bridge consistent with Policy 4.4.b.

The existing gridded network of streets and alleys create connectivity and redundancy for both pedestrians and the automobile and should be maintained. Future improvements to the district's streetscape to create inviting public spaces and accommodate a wide array of complete street amenities will be essential to achieving a vibrant mixed use district. Public reinvestment in this district will be encouraged in order to create great public spaces and amenities for residents and visitors alike.



Policy Objectives

<i>Common Value 1: Ecosystem Stewardship</i>	N/A
<i>Common Value 2: Growth Management</i>	4.1.b: Emphasize a variety of housing types, including deed-restricted housing 4.1.d: Maintain Jackson as the economic center of the region 4.2.c: Create vibrant walkable mixed use subareas 4.2.d: Create a Downtown Retail Shopping District 4.2.f: Maintain lodging as a key component in the downtown 4.4.b: Enhance Jackson gateways 4.4.d: Enhance natural features in the built environment
<i>Common Value 3: Quality of Life</i>	5.2.d: Encourage deed-restricted rental units 6.2.b: Support businesses located in the community because of our lifestyle 6.2.c: Encourage local entrepreneurial opportunities 6.3.a: Ensure year-round economic viability 7.1.c: Increase the capacity for use of alternative transportation modes



Character Defining Features

2.1: Snow King Resort

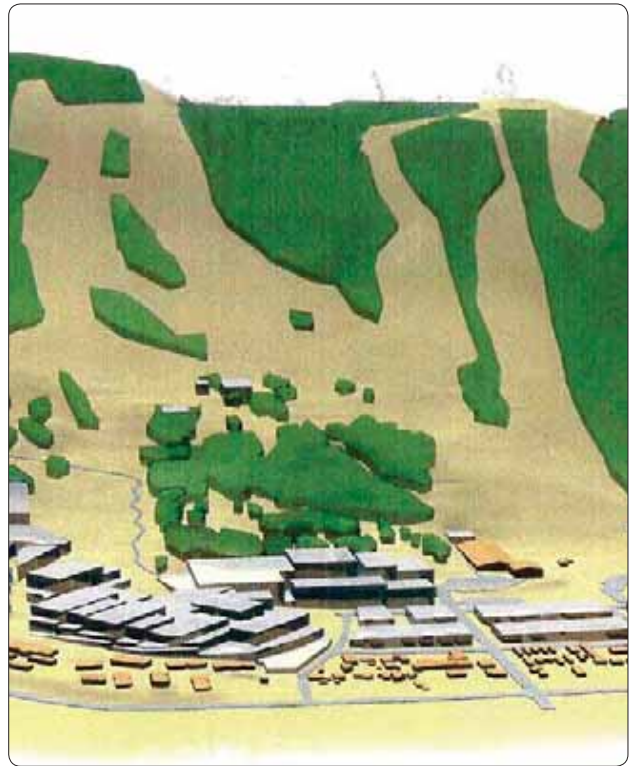


*Resort/ Civic
Form*

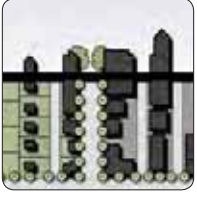
This TRANSITIONAL Subarea is currently subject to the Snow King Resort Master Plan. The plan seeks to create a vibrant mixed use resort complex, including a multi-faceted conference/convention center and community facility that contributes to the economy of Downtown and also serves as a permeable border between the Town and Snow King Mountain. The resort has long been an integral part of the community, playing the role of the “Town Hill”, providing a host of winter and summer recreational amenities.

In the future, the subarea will complement Downtown (Subarea 2.3) lodging and tourist amenities. Lodging will be provided in a variety of types and forms from hotel rooms to condominiums, in order to support the local tourism-based economy. The size and scale of structures will often be larger than those typically allowed in other subareas of Town, as resorts typically require a larger critical mass necessary to support visitor functions. Though buildings will tend to be larger than in other districts, the subarea will maintain an abundance of open space in relation to the built environment as a key to a successful resort experience.

Consistent with the master plan, Snow King Avenue will be developed into a mixed use corridor that includes a variety of commercial uses while still serving as a major transportation corridor in the community. Along with this it will be important to create a more visible and attractive base area along Snow King Avenue to attract residents and visitors to the many amenities and recreational opportunities found there.



2.2: Snow King and South Cache Corridors



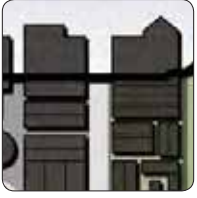
Village Form

This TRANSITIONAL Subarea is envisioned as a pedestrian-oriented mixed use corridor comprised of mixed use and/or multifamily residential structures. The goal of the corridor will be to provide an attractive pedestrian link between Snow King Resort (Subarea 2.1) and Downtown (Subarea 2.3). The corridor is anchored by the Center for the Arts, the community hub for cultural events and activities and other public spaces, including the Center for the Arts Park, Phil Baux Park and the Snow King base area.

The goal of this subarea will be to provide an attractive pedestrian link between Downtown, Snow King and the many under-utilized public spaces in the area. In order to achieve this, ground-level uses should add vitality and street life that support the Center for the Arts and attract residents and visitors to the subarea. Upper floors should provide residential uses, designed to promote workforce housing. Buildings should be two stories in height and front the street. Particular care and attention will be necessary to ensure a successful integration between this mixed use subarea and the adjacent Core Residential (Subarea 3.2). Particular attention will need to be given to the location of buildings, parking, types of uses, and intensity of uses to ensure a successful transition.



2.3: Downtown



Town Form

This large, mixed use, TRANSITIONAL Subarea currently consists of a variety of retail, restaurant, office and other commercial activities, along with long-term residences and lodging in a variety of building sizes and forms. Downtown is the center of civic, cultural, economic and social activity for our community as well as the center of the visitor experience, as a significant amount of lodging is located here. The existing character and built form is varied and inconsistent.

The goal of this subarea is to create a vibrant mixed use area by accommodating a variety of uses and amenities. The subarea will be the starting point for the development of a refined Lodging Overlay boundary and future discussion of the type and size of lodging desired. A key challenge will be to provide a balance between lodging and long-term residential housing. Future structures will be predominantly mixed use, while multifamily structures will be allowed if it properly addresses the street. Commercial uses that create an active and engaging pedestrian experience will be predominantly located on the first and second floors of buildings. Examples of these uses include restaurants, bars, a variety of retail shops and commercial amusement. Furthermore, as portions of the subarea will be located within a future Downtown Retail Shopping District, uses such as office, residential and lodging will be predominantly located on upper floors.

A goal of this subarea will be to create a consistent building size and form. In the future, a variety of two to three story buildings are desired. Buildings should be located to create an attractive street wall and take advantage of good urban design principles including massing, articulation and the provision of public space. The pedestrian realm will be of great importance in this mixed use subarea, and emphasis should be placed on adding improvements focusing on the pedestrian experience. Parking should continue to be provided predominately in public lots and on street to create a vibrant, walkable area that is oriented to the pedestrian. On-site parking should be predominantly underground or screened from view. Future redevelopment should enhance the Flat Creek corridor for recreational and ecological purposes. Buildings should front onto the creek to provide opportunities for interaction and enjoyment of this community resource.

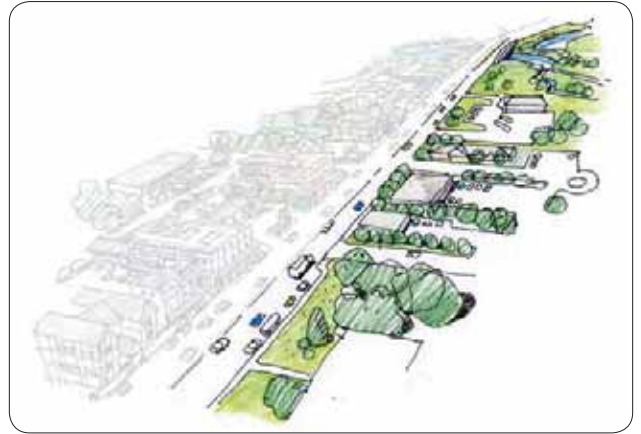


2.4: Public/Civic Campus

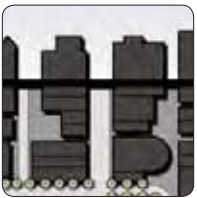


*Resort/ Civic
Form*

This STABLE Subarea is defined by institutional facilities such as the Davey Jackson Elementary School, the Teton County/Jackson Recreation Center, and the various State and Federal Agencies along North Cache Street. This area will continue to provide these essential public services in a central location consistent with the sustainability and community service policies of the Plan. In the event that lands within this subarea are conveyed into private ownership, any development of non-public uses could require this subarea to be amended.

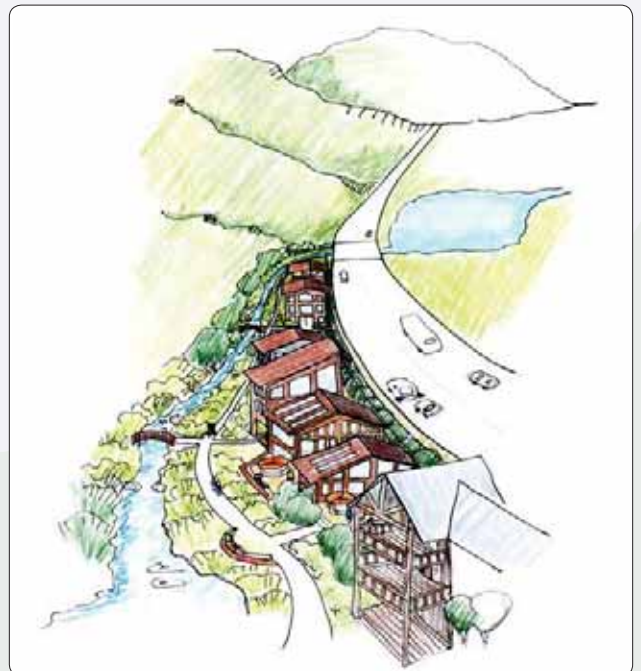
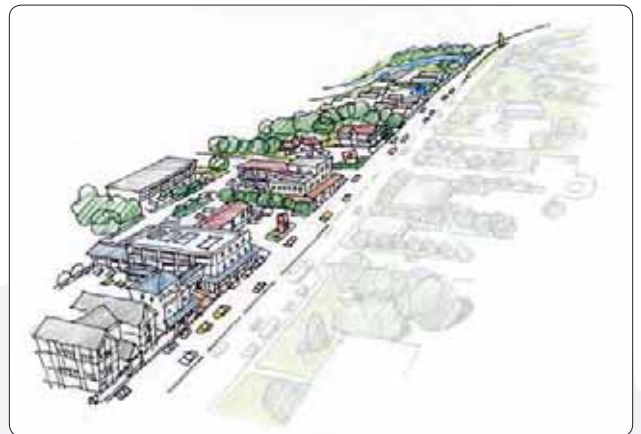


2.5: North Cache Gateway

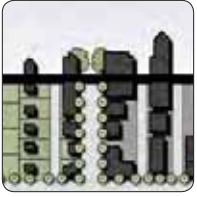


*Village Center
Form*

This mixed use, TRANSITIONAL Subarea will be characterized as a key gateway into the Town from the National Parks and the airport to the north. Flat Creek enhancement is of great importance here, and redevelopment should seek to promote Flat Creek as a recreational and ecological amenity. The existing mix of non-residential and residential uses, including workforce housing, are appropriate. The redevelopment of these uses should take the form of two and three story buildings that address North Cache Street and the Flat Creek corridor, with an emphasis on providing workforce housing. Future structures will be predominantly mixed use, while multifamily will be allowed if it properly addresses the street. Building designs should incorporate techniques to mitigate height such as stepping back upper floors from the streetscape.



2.6: Mixed Use Office and Residential



Village Form

This TRANSITIONAL Subarea is envisioned to be a pedestrian-oriented mixed use area comprised of mixed use office or multifamily residential structures. The subarea currently contains a variety of single family residential, multifamily residential, office and institutional uses such as St. John's Hospital, the National Elk

Refuge Headquarters and Town and County administrative facilities. The future development pattern should locate buildings toward the street predominantly two stories in height. Parking should be minimized and screened from the view of the public right of way. Office, residential and local convenience commercial should be located on the first level with residential above and behind. Some limited local convenience commercial is desirable to serve the surrounding residential areas with the goal of reducing trips outside the neighborhood. The existing institutional uses shall remain as anchors to the local economy that provide many jobs and services to the community. The bulk, scale and intensity of the St. John's campus has always been and will continue to be of a higher intensity than the surrounding mixed use and residential neighborhoods. Particular care and attention will be necessary to ensure a successful integration between this mixed use subarea and the adjacent Core Residential (Subarea 3.2). Particular attention will need to be given to the location of buildings, parking, types of uses, and intensity of uses to ensure a successful transition.



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Why Illustrate Our Vision?

Realizing our Vision requires proactively planning for what we want - rural open spaces and high quality Complete Neighborhoods - by identifying where we want them and what we want them to look like. Our Vision is that development be designed to enhance our community character and located in suitable areas in order to preserve and protect the ecosystem and western, rural character. The Illustration of Our Vision defines the type of preservation or development in each area of the community that will allow us to realize our Vision. In areas suitable for development, the Illustration of Our Vision describes how we will protect the character we love while ensuring that development enhances our Quality of Life. In all other areas, the Illustration of Our Vision describes how we will preserve and enhance wildlife habitat, wildlife connectivity, scenic vistas, and open space.

Defining desired character for all areas of the community provides predictability in planning and development, which has been absent in the past. Incremental, site-specific determinations of policy applicability that are emotionally, politically

and legally tied to a specific development plan are no longer the community's growth management principle. The Illustration of Our Vision bridges the gap between our Vision and the development of an individual site so that all community members can understand how an individual preservation or development project should contribute to the achievement of our Vision. The Illustration of Our Vision will inform land development regulations that ensure no policy of this Plan is forgotten and that all policies are implemented within the proper context.

The Illustration of Our Vision also provides accountability and measurability. By defining the existing and desired character of each area of the community, we can quantify our progress toward achieving our Common Values of Community Character. With this information we can determine what policies and strategies are appropriate in which locations. The Illustration of Our Vision will enable the rigorous analysis needed to continually adapt our implementation strategies to ensure that preservation and development occur in the desired amount, location and type.



How is the Vision Illustrated?

The Illustration of Our Vision depicts the policies of the community's three Common Values of Community Character through four levels of character classification.

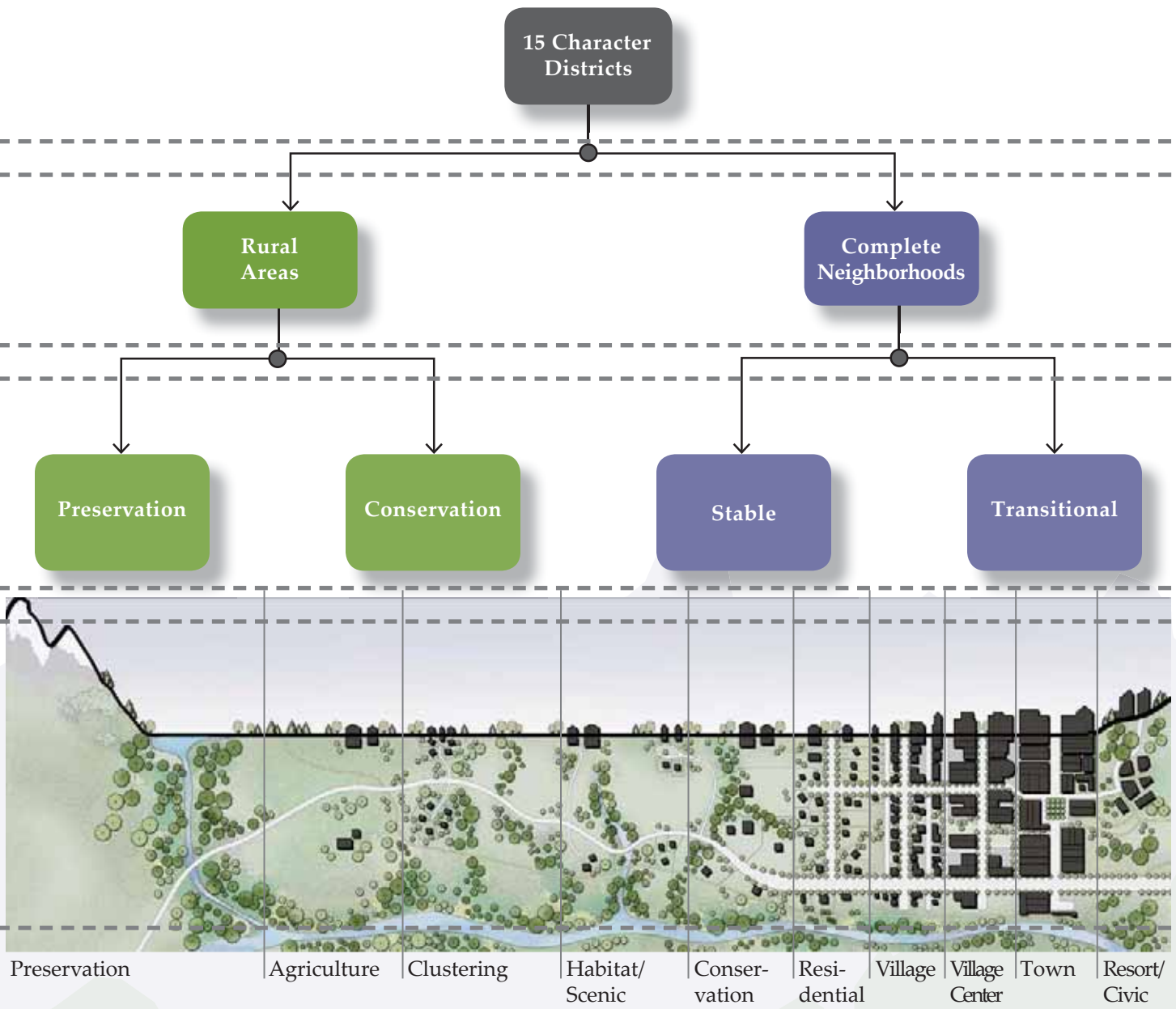
At the highest level, the private lands of the community are divided into Character Districts – areas with common natural, visual, cultural and physical attributes, shared values and social interaction. Character District boundaries are based on a layering of the best available quantitative and qualitative data for each of the three Common Values of Community Character (Ecosystem Stewardship, Growth Management, Quality of Life) in order to identify areas that share similar characteristics (see Appendix B Framework Maps).

While our community's 15 Character Districts share Common Values, each has a unique identity, based upon the presence or absence of specific characteristics, each Character District is classified as either a Rural Area focused on ecosystem stewardship or a Complete Neighborhood focused on enhancing Quality of Life. The map on pages IV-4 and IV-5 shows the Character District boundaries, defines Complete Neighborhood and Rural Area characteristics and identifies the classification of each Character District.

At the next level, each Character District is divided into subareas. Each subarea is categorized as Stable, Transitional, Preservation or Conservation based upon the existing character of the subarea and the desired future character for the entire Character District. Stable and Transitional Subareas are the most suitable locations for people to live, work and play. Subareas focused on Ecosystem Stewardship are designated as Preservation or Conservation. The map on pages IV-6 and IV-7 shows the subareas and defines the subarea classifications.

Finally, for each subarea, Character Defining Features are described to ensure the desired character is illustrated. The Character Defining Features provide the greatest level of site specific detail; however the characteristics are still conceptual and will inform specific regulations, incentives and programs. The characteristics valued by the community within a subarea are mapped, described and illustrated. On pages IV-8 and IV-9 is a legend that describes the symbols and graphics used on the Character Defining Features Maps. An appropriate Neighborhood Form(s) is also identified for each subarea. A Neighborhood Form identifies the general pattern and intensity of development that meets the desired character. On pages IV-10 and IV-11 is a transect that depicts the continuum of Neighborhood Forms that make up our community and shows the relationship between the various patterns and intensities.





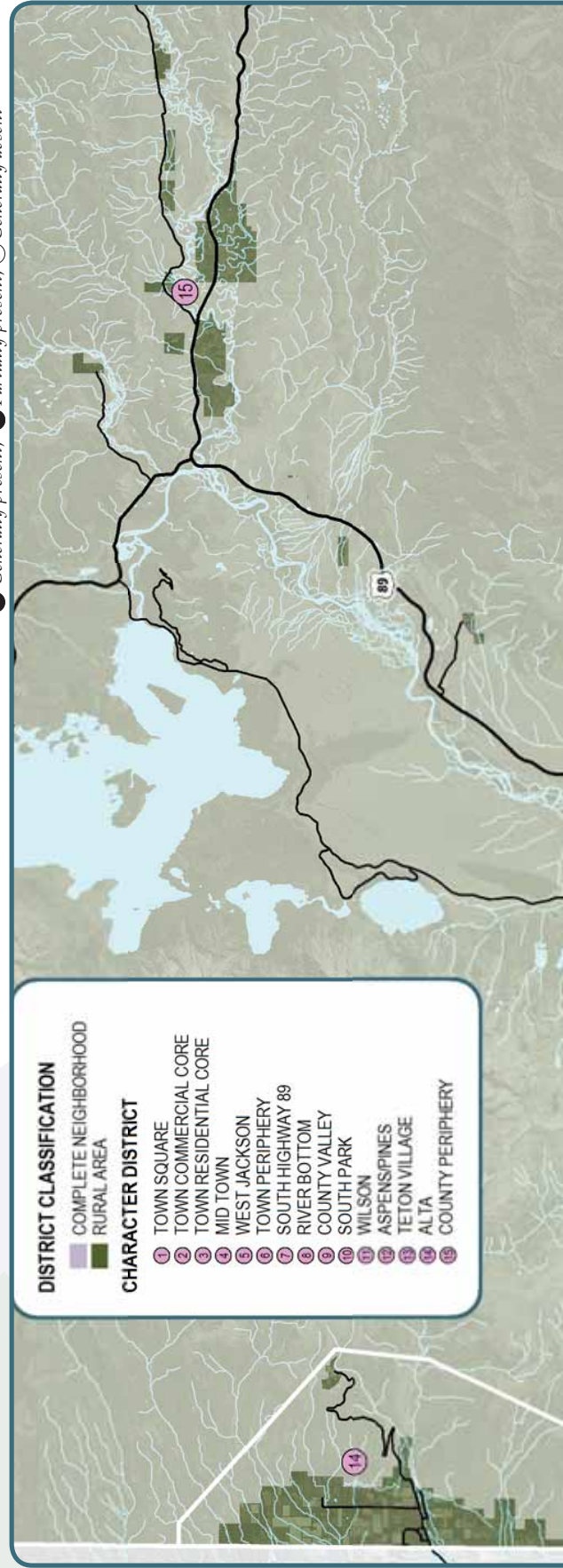
Complete Neighborhoods + Rural Areas

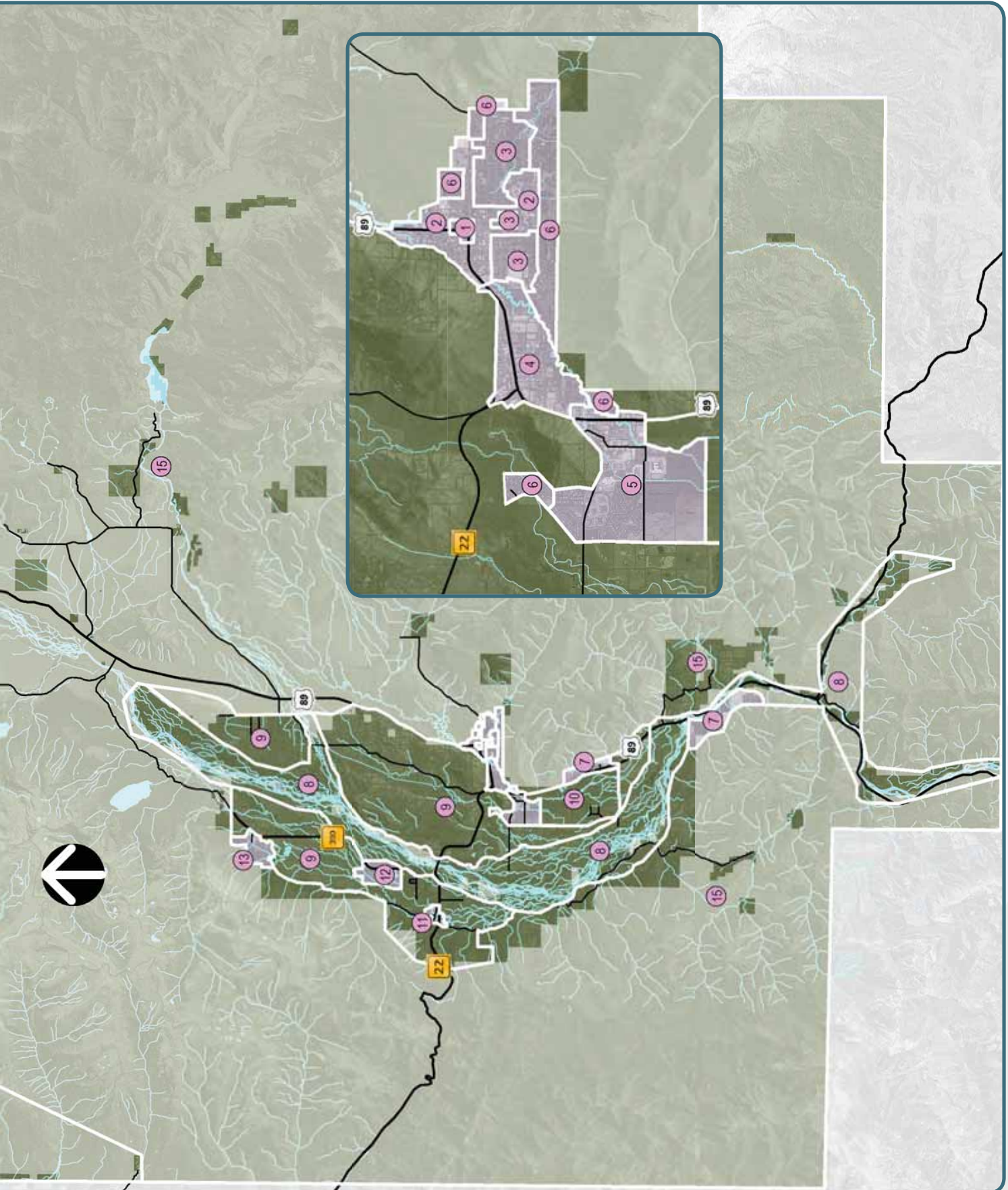
IV-4

Character Districts

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Defined character and high-quality design	●														
Public utilities (water, sewer, and storm sewer)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Quality public spaces	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
A variety of housing types		●	●	●	●	●	●	●	●	●	●	●	●	●	●
Schools, childcare, commercial, recreation, and other amenities within walking distance (1/4 to 1/2 mile) of residences	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Connection by complete streets that are safe for all modes of travel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Viable wildlife habitat and connections between wildlife habitat			●	●	●	●	●	●	●	●	●	●	●	●	●
Natural scenic vistas				●			●	●	●	●			●	●	●
Agricultural and undeveloped open space				●			●	●	●	●		●	●	●	●
Abundance of landscape over built form						●	●	●	●	●	●	●	●	●	●
Limited, detached single family residential development							●	●	●	●	●	●	●	●	●
Minimal additional nonresidential development			●					●	●	●				●	●

● Generally present; ● Partially present; ○ Generally absent





Stable, Transitional, Preservation + Conservation Subareas

IV-6

Stable Subarea

- Subareas in which no change to the existing character is necessary
- Development will be infill that maintains the existing identity or vitality
- The subarea may benefit from strategic infill or development of non-existing Complete Neighborhood amenities

Transitional Subarea

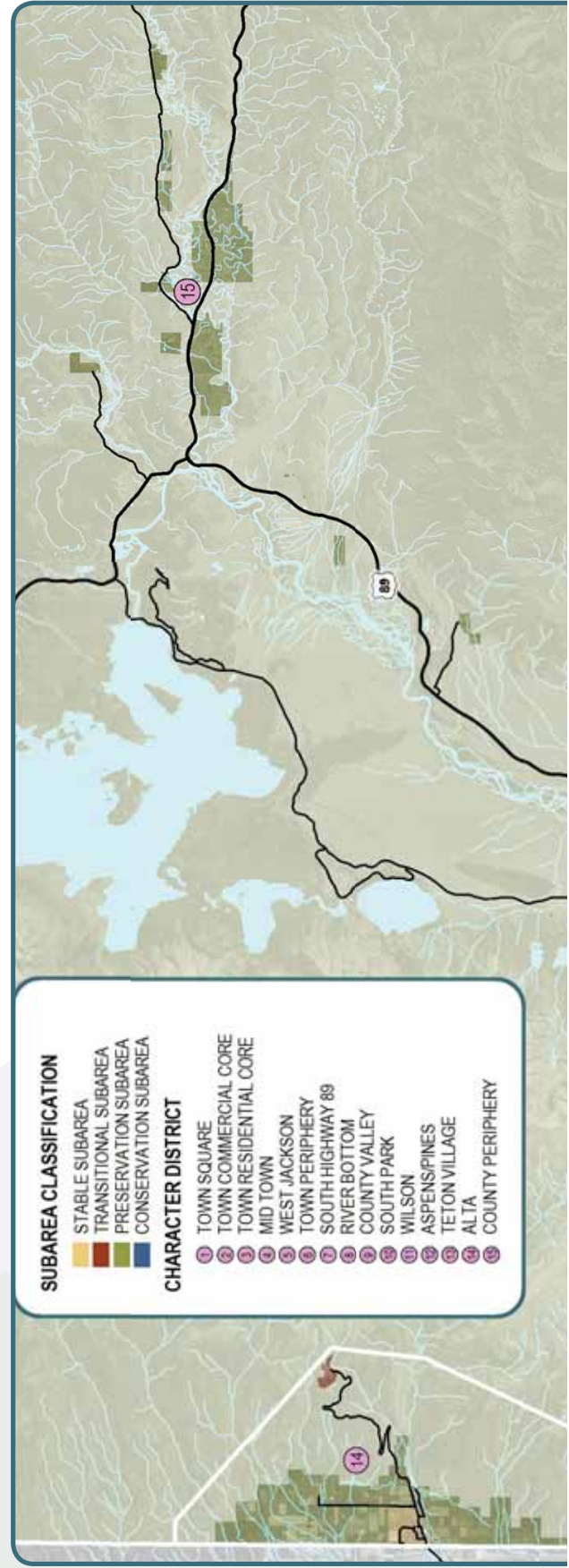
- Subareas where most of the community would agree that development/redevelopment or a change in character would be beneficial
- Subareas that would benefit from reinvestment and revitalization
- Goals for development include improving access to jobs, housing and services and reducing reliance on single-occupancy trips

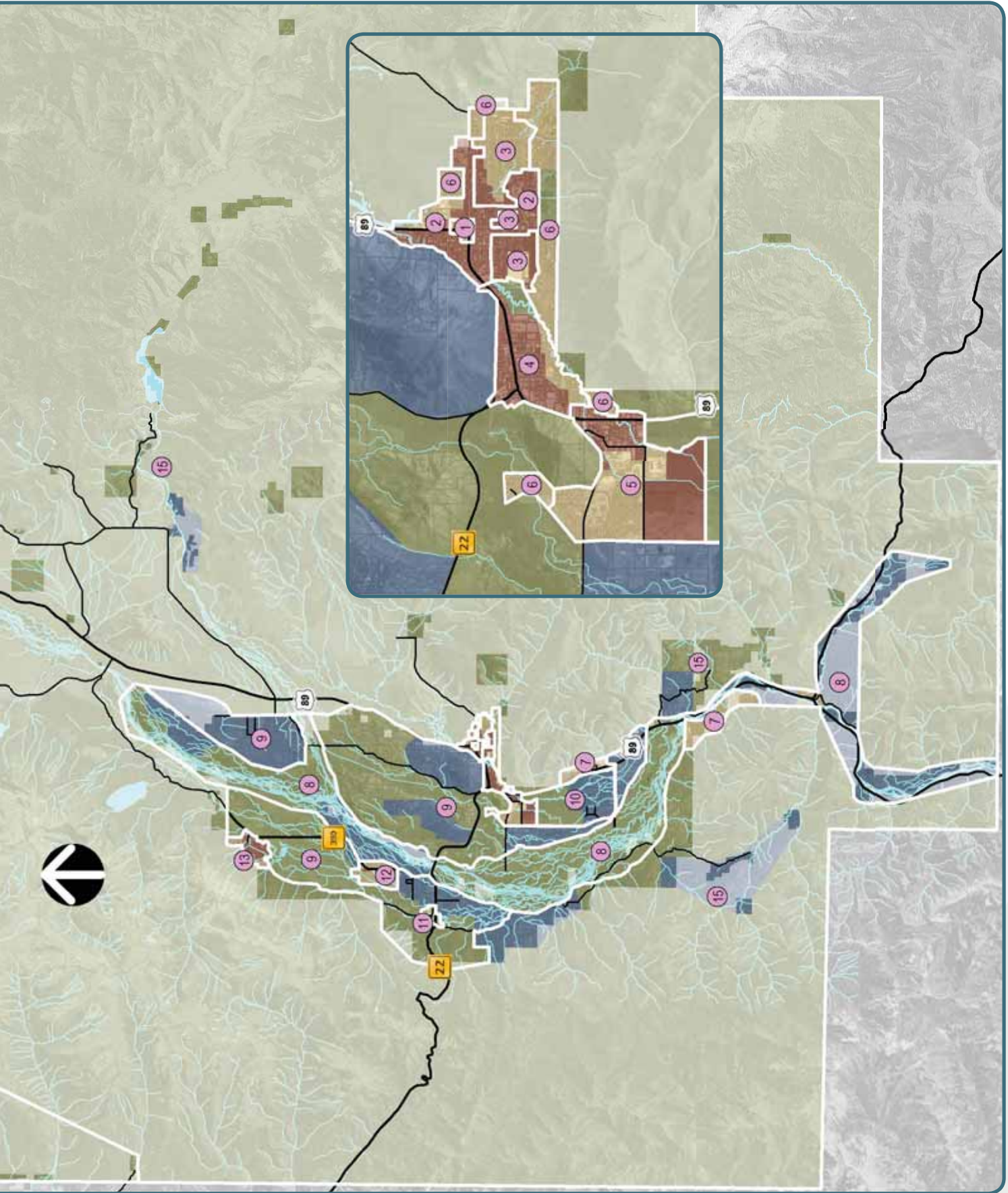
Preservation Subarea

- Subareas in which no change to the existing undeveloped character of the scenic resources and wildlife habitat is necessary
- Additional amenities and infrastructure are inappropriate
- May benefit from some clustered residential development that improves the overall preservation of open space

Conservation Subarea

- Areas of existing development and platted neighborhoods with high wildlife values, where development/redevelopment should focus on improved conservation
- Areas that benefit from an increase in open space, scenic resources, and habitat enhancement
- Goals include balancing existing development with improved wildlife permeability and scenic enhancements.





Character Defining Features - Map Symbols

The Character Defining Features Maps depict the characteristics that define each district and subarea. Below is a list of symbols and map attributes that are used on the maps. Characteristics that are locational are shown on the map using colored symbols or map attributes. Other characteristics depicted using black symbols, apply generally to a subarea, but are not location specific. All mapped features are illustrative of the character of an area and do not imply desired regulatory boundaries or specific locations for certain attributes.

Common Value 1 – Ecosystem Stewardship



Wildlife Permeability: Design for wildlife permeability should be a characteristic of the subarea.



Agriculture: Agricultural use should be characteristic of the subarea.



Wildlife Highway Crossing: Wildlife-vehicle collision mitigation emphasis site as identified by the Western Transportation Institute and Montana State University College of Engineering in 2012.



Crucial Habitat: Bald eagle, trumpeter swan, mule deer, elk, and/or moose crucial winter habitat; mule deer and/or elk migration corridor; and/or bald eagle and trumpeter swan nesting area; and/or cutthroat trout spawning area as identified by the Conservation Research Center of Teton Science Schools in 2008.



Scenic Corridor/Vista: Scenic highway corridors and vistas as identified on 1994 Community Issues Maps.

Common Value 2 – Growth Management



Gateway: A gateway into the community.



Public Parking: Existing parking provided by the Town of Jackson.



Road Corridor Enhancement: A roadway corridor that will be characterized in the future by enhanced pedestrian and commercial vitality.



Creek Corridor Enhancement: A creek within a Complete Neighborhood that will be characterized in the future by enhanced recreational opportunities and ecological value.



Common Value 3 – Quality of Life



Workforce Housing: Housing occupied by the workforce should be a characteristic of the subarea.



START Service: START service should be a characteristic of the subarea.



Local Convenience Commercial: Local convenience commercial should be located within the subarea.



Industrial: Light industrial and heavy retail use should occur in the subarea.



Parks and Recreation: Existing parks and recreation facilities.



School: Existing schools.



Key Transportation Network Project: Transportation network projects identified in Policy 7.2.d.



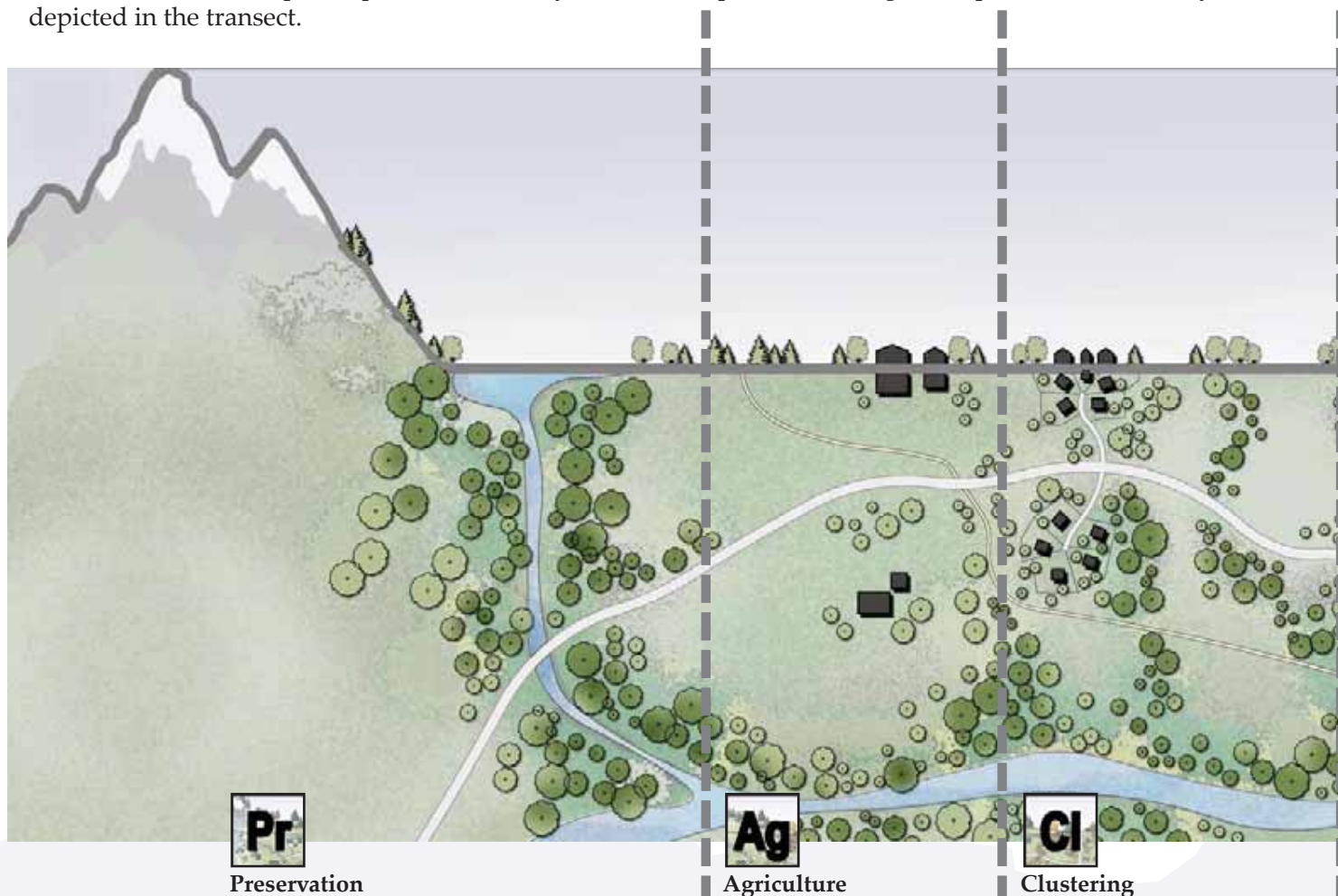
Existing/Proposed Pathways: Existing and proposed pathways identified in the Pathways Master Plan (2007).



Improved Interconnectivity: An area that will be characterized in the future by increased interconnectivity.

Character Defining Features - Neighborhood Form Continuum

A Neighborhood Form identifies the general pattern and intensity of development representative of a certain character. One or more Neighborhood Forms are associated with each subarea. Below is a transect that depicts the continuum of Neighborhood Forms that make up our community and shows the relationship between the various patterns and intensities that define our character. The table below the transect describes characteristic acreages, heights, uses, and special considerations for each Neighborhood Form. These general characteristics are not prescriptive and are only meant to help describe the general pattern and intensity depicted in the transect.



	Pr Preservation	Ag Agriculture	Cl Clustering
Acres	n/a	70+	35+
Height	n/a	n/a	2 story
Use	Preservation	Residential, Conservation	Residential, Conservation
Special Considerations	Preserved open space, wildlife habitat	Agricultural exemptions + incentives, scale of historic agricultural compounds	Improved wildlife habitat, open space and scenic protection with respect for private property rights, integrated transportation planning, scale of historic agricultural compounds





H/S

Habitat/Scenic

+/- 35

2 story

Residential, Conservation

Design for wildlife and/or scenery, scale of historic agricultural compounds

Cn

Conservation

1-5

2 story

Residential

Design for wildlife and/or scenery, predominance of landscape over built form

Rs

Residential

± 1

2 story

Residential

Design for wildlife and/or scenery, predominance of landscape over built form

Vl

Village

n/a

2 story

Residential, Local Convenience Commercial, Civic
Variety of housing types, complete streets, workforce housing

VC

Village Center

n/a

2-3 story

Residential, Commercial, Industrial, Civic

Mixed use, pedestrian oriented, complete streets, workforce housing

Tn

Town

n/a

2-3 story

Residential, Commercial, Civic

Pedestrian oriented, public spaces, complete streets, workforce housing, employment center

R/C

Resort/Civic

n/a

n/a

Resort, Civic

Master Planned, more intense development, public, semi-public facilities

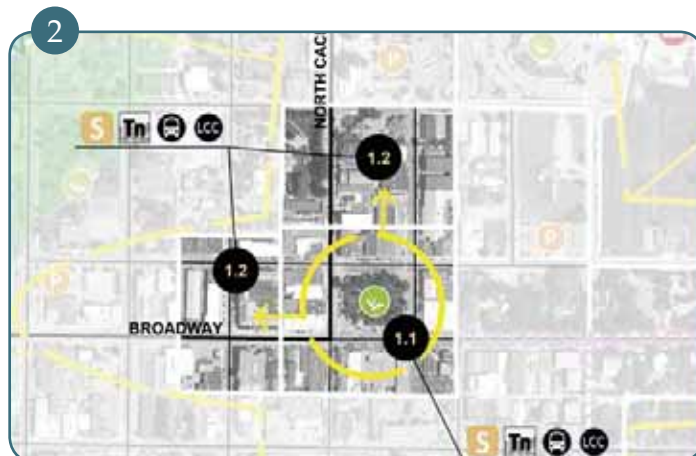
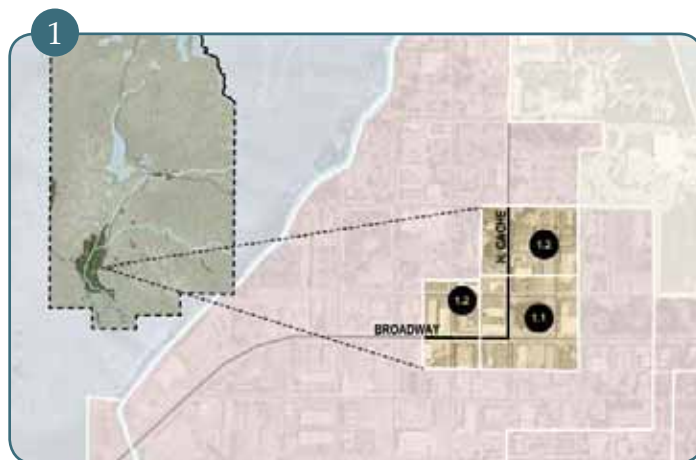
IV-11

What Does the Illustration of the Vision Address?

Our community's Vision is illustrated in 15 Character Districts. Each Character District has unique issues, opportunities and objectives. Each Character District contributes to the overall implementation of the Comprehensive Plan and will ensure that preservation and development occur in the desired amount, location and type throughout the community.

Each Character District is composed of 6 parts:

1. The Vicinity Map identifies the district boundaries and the size of the district in relation to the entire community. It also depicts the boundaries of the district subareas and their Stable, Transitional, Preservation, or Conservation classification.
2. The Character Defining Features Map depicts the characteristics that define each district and subarea. Characteristics are described through mapping or shown symbolically. Mapped features are illustrative of the character of an area and do not imply desired regulatory boundaries or specific locations of attributes. A complete list of symbols used on the maps can be found on pages IV-8 and IV-9.
3. The Complete Neighborhood/Rural Area Table indicates whether the district currently has the characteristics of a Complete Neighborhood or a Rural Area. It also indicates whether those characteristics will be maintained or enhanced in the future. This table serves to explain the classification of the district and identify the district's broad focus, basic issues, and opportunities.



3

Complete Neighborhood + Rural Area Chart

DEFINITION	EXISTING	FUTURE	
COMPLETE NEIGHBORHOOD			
Defined Character/High Quality Design	●	●	1-3 story, historic character, sidewalk, street wall
Public Utilities	●	●	Water, sewer, storm sewer
Quality Public Space	●	●	George Washington Memorial Park
Variety of Housing Types	●	●	Condominiums, lofts, apartments
Walkable Schools, Commercial + Recreation	●	●	Post Office, START, Local businesses, commercial, schools, parks
Connection by Complete Streets	●	●	Alternative transportation a priority
RURAL			
Viable Wildlife Habitat + Connectivity	○	○	
Natural Scenic Views	○	○	
Agricultural + Undeveloped Open Space	○	○	
Abundance of Landscape over Built Form	○	○	
Limited, Detached, Single Family Res. Development	○	○	
Minimal Nonresidential Development	○	○	

Legend: ● Generally Present, ○ Partially Present, ○ Generally Absent

IV-14

4. Existing + Future Characteristics describe in words the existing and future character of the district, focusing on the elements of character that should be preserved or enhanced. This section provides the overall goals and vision for the district.

4

Existing + Future Desired Characteristics

The Town Square District is the historic center of Jackson Hole and the central gathering space for residents and visitors alike. The district is home to iconic buildings and public spaces, including the Cowboy Bar, George Washington Memorial Park (the "Town Square"), and the sawtooth building profiles surrounding the Town Square. Preserving the existing western character and heritage found in the buildings and public spaces in this district will be key to maintaining the existing character. The district is the center of the experience in Town and plays an important role in defining our community's western heritage and overall community identity.

A future goal of the district is to have visitors and residents visit the area more often and stay longer, increasing the vitality of the area and supporting the local economy. To support this goal, commercial uses that create an active and engaging pedestrian experience, will be located on the first and second floors of buildings. Examples of these uses include restaurants, bars, a variety of retail shops and commercial amusement. In the future, the district will be the center of a Downtown Retail Shopping District, and office, residential and lodging uses will be predominantly located on upper floors.

Future community reinvestment in the district will create great public spaces and amenities for residents and visitors alike. This investment will not only create a positive visitor experience that supports our local economy, but will also continue the tradition of the Town Square as the gathering place for our community. The district will continue to be the center of community life, hosting a variety of events and community celebrations for residents and visitors. The temporary closure of streets, parking lots, parks and other public spaces will be encouraged to support such events. In addition, the community should consider the temporary and permanent closure of some streets to vehicles in order to create a vibrant pedestrian environment. *forward, the community will take great care and consideration in all future planning and redevelopment.*

5. The Policy Objectives are policies from the Common Values of Community Character chapters of the Comprehensive Plan that are particularly relevant and should be implemented in the district. There may be other policies that apply to the district, but these are the key objectives to be met in the district in order for the community to achieve our Vision.

5

Policy Objectives

<i>Common Value 1:</i> <i>Ecosystem Stewardship</i>	N/A
<i>Common Value 2:</i> <i>Growth Management</i>	4.1.d: Maintain Jackson as the economic center of the region 4.2.c: Create vibrant walkable mixed-use subareas 4.2.d: Create a Downtown Retail Shopping District 4.2.e: Protect the image and function of Town Square 4.2.f: Maintain lodging as a key component in the downtown 4.4.a: Maintain and improve public spaces 4.4.c: Continue traditions and community events 4.5.a: Identify and preserve historically significant structures and sites
<i>Common Value 3:</i> <i>Quality of Life</i>	6.2.a: Enhance tourism as the basis of the economy 6.3.a: Ensure year-round economic viability 7.1.c: Increase the capacity for use of alternative transportation modes

6. The Character Defining Features describe each subarea through text, Neighborhood Forms, and photos and/or drawings. The focus of the description is the character priorities that will allow for the desired character of the district, and consequently the community Vision, to be achieved. The Neighborhood Form(s) depict the general pattern and intensity of development that meets the desired character; while the illustrations and/or photos provide a more detailed illustration of the desired built form. The entire continuum of Neighborhood Forms can be found on pages IV-8 and IV-9.

6

Character Defining Features

1.1: Inner Square



Town Form

This STABLE Subarea will focus on maintaining western character by retaining or replicating the existing built environment. Building heights directly fronting the Town Square should not exceed two stories. Buildings should be located near the street to create an attractive street front. A desired western architectural style and approach will be defined. The continuation of covered wooden boardwalks is vital to maintaining the desired western character. Parking will be provided predominantly in public lots, underground, and on street to create a vibrant, walkable area oriented to pedestrians.



TOWN OF JACKSON
LAND DEVELOPMENT REGULATIONS
DIVISION 7.5.2 - PARK EXACTIONS
DATE: 4/10/2019

CASH-IN-LIEU OF LAND DEDICATION: SECTION 49660

1. PROJECT NAME: Glenwood Gill Condominiums
2. LOCATION: 165-185 N Glenwood Street
3. PROJECT NUMBER: P18-083

4. CALCULATE PROPOSED PROJECT POPULATION:

<u>UNIT TYPE</u>	<u># OF UNITS</u>	X	<u>PERSONS HOUSED PER UNIT</u>	<u>PROJECTED POPULATION</u>
STUDIO	<u> </u>		1.25	<u> </u>
1 BEDROOM	<u> </u>		1.75	<u> </u>
2 BEDROOM	<u>2</u>		2.25	<u>4.50</u>
3 BEDROOM	<u>25</u>		3.00	<u>75.00</u>
4 BEDROOM	<u>2</u>		3.75	<u>7.50</u>
5 BEDROOM	<u> </u>		4.50	<u> </u>
EACH ADDITIONAL BEDROOM	<u> </u>		0.50	<u> </u>
DORMITORY	<u> </u>		1 per 150 sf of net habitable area	<u> </u>
TOTAL				<u>87.00</u>

5. CALCULATE REQUIRED PARK ACREAGE:

$$\underline{87.00} \text{ TOTAL PROJECTED POPULATION} \times \frac{9 \text{ ACRES}}{1000 \text{ RESIDENTS}} = \underline{0.7830} \text{ REQUIRED ACRES}$$

6. CALCULATE CASH-IN-LIEU:

$$\underline{0.7830} \text{ REQUIRED ACRES} \times \$100,000 \text{ (VALUE OF LAND)} = \$ \underline{78,300} \text{ CASH-IN-LIEU}$$

7. FOR INFORMATION ON PROVIDING AN INDEPENDENT CALCULATION, SEE LDR SECTION 7.5.2 OPTION FOR INDEPENDENT CALCULATION OF DEDICATION STANDARDS

TOWN OF JACKSON
LAND DEVELOPMENT REGULATIONS
DIVISION 7.5.3 - SCHOOL EXACTIONS
DATE:4/10/2019

CASH-IN-LIEU OF LAND DEDICATION: SECTION 49770

1. PROJECT NAME: Glenwood Gill Condominiums
2. LOCATION: 165-185 N Glenwood Street
3. PROJECT NUMBER: P18-083

4. CALCULATE REQUIRED DEDICATION OF LAND:

LAND DEDICATION REQUIREMENT	X	# OF UNITS	=	LAND DEDICATION
.020 ACRES PER UNIT SINGLE & TWO-FAMILY		165-185 N Glenwood Street <u>29</u>		<u>0.4350</u>
.015 ACRES PER UNIT MULTI-FAMILY				

5. CALCULATE CASH IN-LIEU:

$$\frac{0.4350}{\text{LAND DEDICATION STANDARD}} \times \$100,000 \text{ (VALUE OF LAND)} = \$78,300 \text{ CASH-IN-LIEU}$$

6. FOR INFORMATION ON PROVIDING AN INDEPENDENT CALCULATION, SEE LDR SECTION 7.5.3 OPTION FOR INDEPENDENT CALCULATION OF DEDICATION STANDARDS

Neighborhood Meeting Overview

A neighborhood meeting was held on April 11, 2019 at Hanson Hall (170 N Glenwood Street). Nineteen attendees signed in and participated in the discussion regarding the project. Attendees shared comments and asked questions regarding the proposal. Items related to the design, parking, access and construction were discussed. Overall the meeting was positive and collaborative and the development team has taken into account the ideas that were mentioned.



165/185 Glenwood
Glenwood & Gill Condominium Project
Neighborhood Meeting

April 11, 2019

SIGN IN SHEET

NAME	REPRESENTING	EMAIL
Meredith Adams	SJEC	meredithwinnadams@gmail.com
FRANK LYONS	1ST INTERSTATE BANK	frank.lyons@sib.com
STEPHEN KING	SKCO	stephen.king@bellbooth.net
Loosee Barbere	SKCO	loosee@two-way-usa.com
Judith Weikle	myself	judithweikle@yahoo.com
Kendra Heimbeck	HABITAT	kendra@tetonhabitat.com
Christina Feuz	WTE	Cfeuz@wyomingtitle.com
Brandy Borts		bmborts@hotmail.com
Kathy Stuck	SJEC	stuckey@msn.com
Andrew Jakovac	SELF	JAKOVAC.ANDREW@GMAIL.COM
BRIGID MANDER	SELF	BRIGID.MANDER@GMAIL.COM
Whitney Wright	sub	whitney.marcella.wright@gmail.com



April 11, 2019

SIGN IN SHEET

194 of 219

SECTION 6 – APPLICATION MATERIALS

- **SKETCH PLAN APPLICATION**
- **PREAPPLICATION CONFERENCE CHECKLIST**
 - **DEED**
- **LETTER OF AUTHORIZATION**

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We Do More For Your Money

700 BUSSE RD.
ELK GROVE VILLAGE IL 60007
847-952-3700

70-2277
719

0001428117

OFFICIAL CHECK

REMITTER: ROSEVILLE VENTURES II LLC

DATE: 4/09/19

EXACTLY **2,500 AND 00/100 DOLLARS

AMOUNT: \$2,500.00

Pay To The
Order Of: TOWN OF JACKSON

Vicki M. Fleischman

AUTHORIZED SIGNATURE

⑈0001428117⑈ ⑆07192277⑆ 00020039501⑈



PLANNING PERMIT APPLICATION
Planning & Building Department

150 E Pearl Ave. | ph: (307) 733-0440
P.O. Box 1687 | www.townofjackson.com
Jackson, WY 83001

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: Glenwood Gill Condominiums
Physical Address: 165 & 185 N. Glenwood, Jackson, WY
Lot, Subdivision: 1-6, Blk 6 PIDN: 22-41-16-28-4-10-001 & 004

PROPERTY OWNER.

Name: Roseville Ventures II, LLC Phone: _____
Mailing Address: 4015 80th Street, Kenosha, WI ZIP: 53142
E-mail: _____

APPLICANT/AGENT.

Name: Mr. Nick Orthmann Phone: 262-842-0656
Mailing Address: 4011 80th Street, Kenosha, WI ZIP: 53142
E-mail: northmann@beardevelopment.com

DESIGNATED PRIMARY CONTACT.

____ Property Owner ☒ Applicant/Agent

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

Use Permit	Physical Development	Interpretations
____ Basic Use	☒ Sketch Plan	____ Formal Interpretation
____ Conditional Use	____ Development Plan	____ Zoning Compliance Verification
____ Special Use	____ Design Review	Amendments to the LDRs
Relief from the LDRs	Subdivision/Development Option	____ LDR Text Amendment
☒ Administrative Adjustment	____ Subdivision Plat	____ Map Amendment
____ Variance	____ Boundary Adjustment (replat)	Miscellaneous
____ Beneficial Use Determination	____ Boundary Adjustment (no plat)	____ Other: _____
____ Appeal of an Admin. Decision	____ Development Option Plan	____ 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 #: P18-083 Environmental Analysis #: _____
Original Permit #: _____ Date of Neighborhood Meeting: 04/11/2019

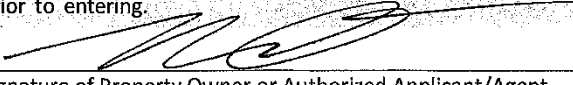
SUBMITTAL REQUIREMENTS. Please ensure all submittal requirements are included. The Planning Department will not hold or process incomplete applications. Partial or incomplete applications will be returned to the applicant. Go to www.townofjackson.com/200/Planning and select the relevant application type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

Have you attached the following?

- ☒ **Application Fee.** Fees are cumulative. Go to www.townofjackson.com/200/Planning and select the relevant application type for the fees.
- ☒ **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 www.townofjackson.com/DocumentCenter/View/102/Town-Fee-Schedule-PDF.
- ☒ **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.



Signature of Property Owner or Authorized Applicant/Agent

Nick Orthmann

Name Printed

4/25/2019

Date

Project Manager

Title



PRE-APPLICATION CONFERENCE SUMMARY

Planning & Development Department Planning Division

150 E Pearl Ave. | ph: (307) 733-0440
P.O. Box 687 | fax: (307) 734-3563
Jackson, WY 83001 | www.townofjackson.com

This Summary will be prepared by Planning Staff. The applicant, or the applicant's agent, shall receive a copy of this summary for their reference in submitting a sufficient application.

Staff may request additional materials during review as needed to determine compliance with the LDRs.

PRE-APPLICATION MEETING GENERAL INFORMATION.

PAP#: P18-083
Date of Conference: 5/15/18
Planning Staff: Paul Anthony, Alex Norton

PROJECT.

Name/Description: Preapplication for Glenwood Gill Condos Phase 1
Physical Address: 165 and 185 Glenwood Street
Lot, Subdivision: _____ PIDN: _____
Zoning District(s): DC
Overlay(s): Lodging

STAKEHOLDERS.

Applicant: S.R. Mills, Bear Development
Owner: Roseville Ventures II LLC
Agent: Arne Jorgensen

REQUIRED APPLICATIONS. *This project will require the following applications:*

Application	Reason	Fee
Sketch Plan Phase 1	Proposal is for greater than 39,000 sf	\$2,500
Development Plan Phase 1	Proposal is for greater than 39,000 sf	N/A
Design Review Committee	Commercial/Mixed-use projects go to DRC	N/A
Final Plat	To allow proposed condominiums	

MEETING ATTENDEES:

Name	Company	Phone/Email
Arne Jorgensen	Hawtin Jorgensen	
S.R. Mills (via phone)	Bear Development	

Paul Anthony	Town Principal Planner	
Alex Norton	County/Town Jointy Planner	

TIMELINES. *This table is intended to provide general information regarding the review process and timing of decisions. See Article 8 for a complete explanation of the review process.*

The following timelines are generally applicable:

Application Types:	Sufficiency	Decision-Maker	Timeline
Sketch Plan	14 days	Council	150 days from sufficiency
Development Plan	14 days	Council	150 days from sufficiency

Checklist Key.

✓ **Required.** Applicant must demonstrate compliance with this requirement.

N/A **Not Applicable.** Review requirement is not applicable to this project.

General Information

Requirement

Notes

- ✓ **Planning Permit Application.** The application should list all pertinent permits (use, physical development, interpretation, relief from the LDRs, Development Option/Subdivisions, Amendments to the LDRs) for which you are applying.
- ✓ **Notarized Letter of Authorization.** See "Permit and Applications" section on Planning Department website for copy of form.
- ✓ **Application Fees.** Fees are cumulative. Applications for multiple types of permits, or for multiple permits of the same type, require multiple fees. See the currently adopted Fee Schedule in the Administrative Manual for more information.
- ✓ **Review fees.** The applicant is responsible for paying any review fees and expenses from consulting services necessitated by the review of the application by the County Surveyor, Town Engineer, Title Company and any other required consultant. Such fees shall be paid prior to approval of the permit.
- ✓ **Mailed Notice fee.** See Section 8.2.14.C.2 for notice requirements. If mailed notices are required, the applicant is responsible for paying for any mailing in excess of 25 notices.
- ✓ **Digital Format.** All applications submitted to the Town Planning Department must be submitted in digital format.

<u>✓</u>	Response to Submittal Checklist. All applications require response to applicable review standards. For applications where a pre-application conference is required, applicable standards are identified below. If a pre-application conference is optional, see the submittal checklist for the relevant application type, established in the Administrative Manual.
<u>N/A</u>	Title Report. A title report, title certificate or record document guarantee prepared within the last six months that includes evidence of ownership and all encumbrances on the subject property. Copies of the documents referenced in the report should not be submitted unless requested by the planner during review.
<u>✓</u>	Narrative description of the proposed development. Describe in detail the existing condition of the property and the proposed development, use, or subdivision for which you are seeking approval.
<u>✓</u>	Findings for approval. Include in your narrative a response to the findings for approval found in LDR Div 8.5, as applicable.
<u>✓</u>	Proposed Development Program. Provide a table that summarizes the the projects compliance with the primary development standards (setbacks, heights, FAR, LSR, etc.). An example is found in the Administrative Manual.
<u>✓</u>	Site Plan. Provide a detailed site plan of the proposed project. A list of minimum standards for a site plan are established in the Administrative Manual.
<u>✓</u>	Floor Plans. Include floor plans for any existing buildings that will be occupied by a proposed use. If changes to existing buildings are proposed, indicate those on the floor plans.
<u>N/A</u>	Neighborhood Meeting Summary. See Section 8.2.3 for Neighborhood Meeting requirements.
<u>✓</u>	Posted Notice. See Section 8.2.14.C.4 for Posted Notice requirements for all public hearings.

ARTICLES 2 (COMPLETE NEIGHBORHOODS), 3 (RURAL AREA ZONES), and 4 (SPECIAL PURPOSE ZONES).

Applicable Zone: _____

Applicable LDR Section: _____

PHYSICAL DEVELOPMENT. *Please see Subsection B in applicable Zone District for specific standards.*

Requirement	Notes
<u>✓</u> Structure Location and Mass (setbacks, height, FAR, etc.)	
<u>N/A</u> Maximum Scale of Development (individual building size)	
<u>✓</u> Design Review (Design Guidelines and Design Review Committee)	
<u>✓</u> Site Development (Driveway and Access limits)	
<u>✓</u> Landscaping (see Div. 5.5 for more information)	
<u>✓</u> Fencing (see Sec. 5.1.2 for more information)	

N/A **Environmental Standards (see Div. 5.1 and 5.2 for more information)**

- Natural Resource Buffers
- Irrigation Ditch Setback
- Natural Resource Overlay Standards

✓ **Scenic Standards (see Div. 5.3 for more information)**

- Exterior Lighting
- Scenic Resource Overlay (SRO) Standards

✓ **Natural Hazards to Avoid (see Div. 5.4 for more information)**

- Steep Slopes
- Areas of Unstable Soils
- Fault Areas
- Floodplains
- Wildland Urban Interface

N/A **Signs (see Div. 5.6 for more information)**

✓ **Grading, Erosion Control, Stormwater (see Div. 5.7 for more information)**

- Grading
- Erosion Control
- Stormwater Management

USE STANDARDS. *Please see Subsection C in applicable Zone District for specific standards.*

Requirement	Notes
-------------	-------

<u>✓</u> Allowed Uses (see Div. 6.1 for more information)	
--	--

<u>✓</u> Parking (see Div. 6.2 for more information)	
---	--

<u>✓</u> Employee Housing (see Div. 6.3 for more information)	
--	--

<u>N/A</u> Maximum Scale of Use	
--	--

<u>✓</u> Operational Standards (see Div. 6.4 for more information)	
---	--

- Outside Storage
- Refuse and Recycling
- Noise
- Vibration
- Electrical Disturbances
- Fire and Explosive Hazards
- Heat and Humidity
- Radioactivity

DEVELOPMENT OPTIONS. *Please see Subsection D in applicable Zone District for specific standards.*

Requirement	Notes
-------------	-------

<u>✓</u>	Allowed Subdivision and Development Options (see Div. 7.1 and 7.2 for more information)
<u>✓</u>	Residential Subdivision Requirements (see Div. 7.4 and 7.5 for more information) • Affordable Housing • School and Parks Exactions
<u>✓</u>	Infrastructure (see Div. 7.6 and 7.7 for more information) • Transportation Facilities • Required Utilities

OTHER APPLICABLE LDR STANDARDS

Requirement	Notes:
<u>N/A</u>	Division 1.9, Nonconformities
	1.9.2 Nonconforming Physical Development
	1.9.3 Nonconforming Uses
	1.9.4 Nonconforming Development Options and Subdivisions
	1.9.5 Nonconforming Signs
<u>N/A</u>	Division 7.3, Open Space Standards
	7.3.3 Configuration and Location of Required Open Space
	7.3.4 Use of Open Space
	7.3.5 Physical Development Permitted in Open Space
	7.3.6 Record of Restriction
	7.3.7 Ownership of Open Space

ADDITIONAL COMMENTS

- We will need to discuss the impact that the proposed affordable housing mitigation requirements would have on the project. In short, after the moratorium is over, the project would be mitigated at the proposed new 'Short-term Rental' rate rather than the current residential long-term rate, which will likely be an increase in mitigation.
- Staff encourages the applicant to make sure that there are regular entrances to the residential/short-term units along the Glenwood and Gill frontages. The narrative commits to this goal but without doors shown on the plans it remains unclear where such entrances would be located.
- While there appears to be adequate parking, we should discuss how the parking will be allocated will be allocated.
- We will need to confirm what the final sidewalk cross-section/width will be given existing conditions.

PLAN REVIEW COMMITTEE. *The Plan Review Committee consists of the following listed agencies. Planning Staff will transmit pertinent portions of the application to each agency. **Other agencies and individuals not checked off on this list may be added to the PRC if necessary.***

Agency	Required for:
<u>✓</u> Building Official	
<u>✓</u> Town Attorney	
<u>✓</u> Town Engineer	
_____ Title Company – for subdivision plat	
_____ County Surveyor – for subdivision plat	

☒	Jackson Hole Fire EMS
☒	Housing Authority
☐	Integrated Solid Waste & Recycling
☐	National Park Service
☐	Parks and Recreation Department
☒	Pathways Coordinator
☐	Public and Environmental Health
☒	Police Department
☐	Teton Conservation District
☐	Teton County School District
☐	Teton County (required when subdividing land within one mile of the Teton County)
☐	U.S. Forest Service (if adjacent to or accessing through forest service lands)
☐	Wyoming Department of Environmental Quality
☐	Wyoming Department of Game & Fish
☐	Other

Town of Jackson
Project Plan Review History

PLANNING

Project Number	P18-083	Applied	3/19/2018	STOL
Project Name	Pre-App Devel Plan 165 & 185 Glennwood	Approved		
Type	PREAPPLICATION	Closed		
Subtype	DEVELOPMENT PLAN	Expired		
Status	STAFF REVIEW	Status		

Applicant	Owner	ROSEVILLE VENTURES II, LLC
------------------	--------------	----------------------------

Site Address	City	State	Zip
165 & 185 N GLENWOOD STREET	JACKSON	WY	83001

Subdivision	Parcel No	General Plan
JACKSON ORIGINAL-TOWNSITE	22411628410004	

Type of Review	Status	Dates			
Contact		Sent	Due	Received	Remarks
Notes					
Building	NO COMMENT	3/19/2018	4/9/2018		
Jim Green					

Fire	APPROVED W/CONDITI	3/19/2018	4/9/2018	3/26/2018	Notes will change bldg cost
Kathy Clay					

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					
MEMO					
FIRE REVIEW					

TO: Paul Anthony, Principal Planner
Tiffany Stolte, Office Manager

FROM: Kathy Clay, Fire Marshal

DATE: March 26, 2018

SUBJECT: Pre-Application Review/Bear Development
165, 185 N. Glenwood Street
P18-083

This office has received the request for a pre-application review at the above location. The most current edition of the International Fire Code (IFC) and the 2017 edition of the National Electric Code (NEC) shall be used for building design.

PLEASE TAKE SPECIAL NOTE OF ALL ***STARRED*** ITEMS.

Comments include, but are not limited to:

General Requirements

1. *****Fire apparatus access is not attainable. All buildings shall be sprinklered per NFPA 13 to accommodate inadequate fire department access. (2015 IFC 503.1.1)
2. Visible address numbers, a minimum of 4 inches in height and 0.5 inch stroke width, shall be installed on all structures. (IFC 505.1)
3. Portable fire extinguishers shall be placed in accordance with code requirements. (IFC 906).
4. Interior finishes shall meet fire code requirements. (IFC Chapter 8)
5. Means of egress shall meet fire code requirements. (IFC Chapter 10)
6. The means of egress, including exit discharge, shall be illuminated at all times building space served by means of egress is occupied. (IFC 1008.1)
7. Illumination shall be provided in the means of egress in accordance with (1008.2). Under emergency power, means of egress illumination shall comply with (1008.3).
8. Any hazardous material storage shall meet fire code requirement. (IFC Chapter 27)
9. Should any fuel-fired appliances be installed, requirements for carbon monoxide detection shall be followed. (IFC 908.7)
10. Final fire inspection shall be required before certificate of occupancy is released.
11. *****Plans submitted to Fire Department for review shall consist of one set of paper plans and one set of electronic plans (CD, thumb drive, or PDF format).

Emergency Responder Radio Coverage1. *****Where required, new building shall have approved radio coverage for emergency responders within the building base upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. (IFC 510)

Sprinklers

1. *****As determined by the Building Official, the structure will have an automatic fire sprinkler system in accordance with appropriate NFPA standard for the occupancy type. (IFC 903.2.7) Due to inadequate fire department access, NFPA 13 standards shall be required.
2. Fire Department Connection (FDC) location shall be determined by the AHJ and noted in the fire sprinkler plan review.
3. Knox Box shall be installed in an approved location at each structure having a fire sprinkler system. (IFC 506.1)
4. Water main shall be installed in accordance to NFPA 13 and NFPA 24 to provide for proper clearances, seismic requirements, flushing and hydro testing. (IFC 901.4.1)
5. Fire flow requirements shall meet Appendix B of the International Fire Code.
6. *****Pitot water flow test is required on all new fire sprinkler installations for NFPA 13R and NFPA 13 systems. Plans will not be approved without certified test. (NFPA 291)
7. Horn/strobe shall be installed above the fire department connection. (IFC 912.2.2.1)

Type of Review	Status	Dates			Remarks
		Sent	Due	Received	
Contact					
Notes					
8.	****	Room which houses fire sprinkler riser shall be no less than 5' x 7' in dimension and shall be accessible from outside grade (IFC 903.2.11.1.1)			
9.		Concealed spaces within NFPA 13 protected structures having combustible materials shall comply with the requirements and may require additional protection. (IFC 903.3)			
10.		Exterior overhangs exceeding 4 feet shall be protected using fire sprinklers when combustible construction is used (NFPA 13).			
11.		Exterior egress stairways built of combustible construction shall be protected with fire sprinklers (NFPA 13).			
12.		Roof top occupancy appears to be present and shall be reviewed for proper protection.			
Alarms					
13.		Building shall have a complete alarm system per NFPA 72. A full set of fire alarm plans from a fire alarm contractor shall be submitted with all calculations and cut sheets of all equipment. (IFC Chapter 9)			
14.		Tactile appliances shall be installed where needed to notify occupants unable to see or hear emergency alarms, per most current edition of NFPA 72.			
15.		Audible appliances provided for the sleeping areas to awaken occupants shall produce a low frequency alarm signal per most current edition of NFPA 72.			
16.		Any structure with Group R occupancy shall have required carbon monoxide detection as required. (IFC 915.1)			
Elevator					
17.		Elevator shall comply with ASME A17.1 with Phase I and Phase II of elevator emergency operations; subject to recall if required. (IFC Section 607)			

Please feel free to contact me if you have any further questions at kclay@tetoncountywy.gov or at 307-733-4732.

Legal	APPROVED	3/19/2018	4/9/2018	4/9/2018
A Cohen-Davis				

Parks and Rec	NO COMMENT	3/19/2018	4/9/2018
Steve Ashworth			

Pathways	NO COMMENT	3/19/2018	4/9/2018
Brian Schilling			

Planning	NO COMMENT	3/19/2018	4/9/2018
Paul Anthony			

Police	APPROVED W/CONDITI	3/19/2018	4/9/2018	3/21/2018
Todd Smith				
(3/21/2018 3:13 PM STOL)				
I am sure we will have questions going forward as the project takes on a more formalized plan. Good to see more parking compared to some other recent projects.				

Thanks,
Todd

Public Works	NO COMMENT	3/19/2018	4/9/2018
Brian Lenz			

Type of Review Contact Notes	Status	Dates			Remarks
		Sent	Due	Received	
START Darren Brugmann	NO COMMENT	3/19/2018	4/9/2018		
TC Housing Authority Stacy Stoker (3/20/2018 12:23 PM SAS) The applicant must submit a complete Housing Mitigation Plan to be reviewed at the initial review of the free market portion of the development plan.	APPROVED	3/19/2018	4/9/2018	3/20/2018	See Notes

WARRANTY DEED

Released	
Indexed	✓
Abstracted	✓
Scanned	

Cony Corporation, a Wyoming corporation, GRANTOR, of Teton County, Wyoming, for and in consideration of TEN DOLLARS (\$10.00) and other good and valuable consideration, in hand paid, receipt of which is hereby acknowledged, and pursuant to an I.R.C. § 1031 tax deferred exchange for benefit of Grantee, CONVEYS and WARRANTS to Roseville Ventures II, LLC, a Wisconsin limited liability company, GRANTEE whose address is 4011 80th Street, Kenosha, WI 53142, the following described real estate, situate in the County of Teton, State of Wyoming, hereby waiving and releasing all rights under and by virtue of the homestead exemption laws of the State of Wyoming, to-wit:

Lots 5 and 6 of Block 6 of the Original Townsite of Jackson, Teton County, Wyoming, according to that plat recorded in the office of the Teton County Clerk on July 18, 1901 as Plat No. 100.

PIN: 22-41-16-28-4-10-004

Together with and including all improvements thereon and all appurtenances and hereditaments thereunto belonging. Subject to all covenants, conditions, restrictions, easements, reservations, and rights-of-way of record.

WITNESS our hands this 28 day of December, 2016.

GRANTOR: CONY CORPORATION
GRANTEE: ROSEVILLE VENTURES II LLC
Doc 0919653 bk 937 pg 746-746 Filed At 14:34 ON 12/28/16
Sherry L. Daigle Teton County Clerk fees: 12.00
By Mary Smith Deputy

Cony Corporation, a Wyoming corporation:

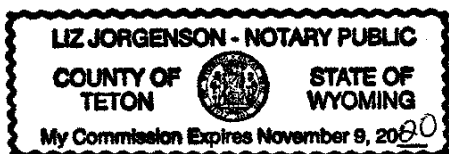
Andrew Evans Carson
Andrew Evans Carson, President/Director

James A. Roscoe
James A. Roscoe, Secretary/Director

STATE OF WYOMING)
COUNTY OF TETON)

The foregoing instrument was acknowledged before me this 28 day of December, 2016 by Andrew Evans Carson as President/Director and James A. Roscoe as Secretary/Director of Cony Corporation, a Wyoming corporation.

WITNESS my hand and official seal.



[Signature]
Notary Public
My Commission Expires: _____

GRANTOR: 185 N GLENWOOD LLC
GRANTEE: ROSEVILLE VENTURES II LLC
Doc 0919715 bk 937 pg 909-909 Filed At 13:39 ON 12/29/16
Sherry L. Daigle Teton County Clerk fees: 12.00
By Mary Smith Deputy

Space Above This Line for Recorder's Use Only

WARRANTY DEED

File No.: 614163JAC (mgm)

Released	
Indexed	
Abstracted	
Scanned	

185 N. Glenwood, LLC, a Wyoming limited liability company, GRANTOR(S), for Ten Dollars (\$10.00) and other good and valuable consideration in hand paid, receipt of which is hereby acknowledged, CONVEY(S) AND WARRANT(S) to

Roseville Ventures II, LLC, a Wisconsin limited liability company, GRANTEE(S),

whose mailing address is 4015 80th Street, Kenosha Wisconsin 53142, the following described real estate, situated in the County of **Teton**, State of **Wyoming**, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Wyoming, to-wit:

Lots 1, 2, 3 and 4 of Block 6 of the Original Townsite of Jackson, Teton County, Wyoming, according to that plat recorded in the Office of the Teton County Clerk on July 18, 1901 as Plat Number 100.

State Identification Number 22-41-16-28-4-10-001

Including and together with all and singular the tenements, hereditaments, appurtenances and improvements thereon or thereunto belonging, but subject to taxes, reservations, covenants, encroachments, conditions, restrictions, rights-of-way and easements of record.

WITNESS the due execution and delivery of this Warranty Deed

this 25 day of December, 2016.

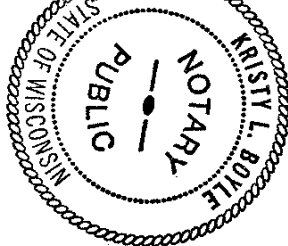
185 N. Glenwood, LLC, a Wyoming limited liability company

By: TNG 22, LLC, Its Sole Member

By: [Signature]
Name: Raymond C. Leffler
Title: Sole Member

State of Wisconsin
County of Lincoln

This instrument was acknowledged before me on this 25 day of December, 2016 by Raymond C. Leffler as Sole Member of TNG 22, LLC, as Sole Member of 185 N. Glenwood, LLC, a Wyoming limited liability company.



[Signature]
Notary Public
My Commission Expires: June 24, 2018

LETTER OF AUTHORIZATION

Roseville Ventures II, LLC

Kenosha, WI, 53142

, "Owner" whose address is: 4015 80th Street,

(NAME OF ALL INDIVIDUALS OR ENTITY OWNING THE PROPERTY)

Roseville Ventures II, LLC

, as the owner of property

more specifically legally described as: Lots 1-6, Blk 6, Original Town of Jackson, Plat 100

(If too lengthy, attach description)

HEREBY AUTHORIZES Bear Development, LLC & Jorgensen Associates

as

agent to represent and act for Owner in making application for and receiving and accepting on Owners behalf, any permits or other action by the Town of Jackson, or the Town of Jackson Planning, Building, Engineering and/or Environmental Health Departments relating to the modification, development, planning or replatting, improvement, use or occupancy of land in the Town of Jackson. Owner agrees that Owner is or shall be deemed conclusively to be fully aware of and to have authorized and/or made any and all representations or promises contained in said application or any Owner information in support thereof, and shall be deemed to be aware of and to have authorized any subsequent revisions, corrections or modifications to such materials. Owner acknowledges and agrees that Owner shall be bound and shall abide by the written terms or conditions of issuance of any such named representative, whether actually delivered to Owner or not. Owner agrees that no modification, development, platting or replatting, improvement, occupancy or use of any structure or land involved in the application shall take place until approved by the appropriate official of the Town of Jackson, in accordance with applicable codes and regulations. Owner agrees to pay any fines and be liable for any other penalties arising out of the failure to comply with the terms of any permit or arising out of any violation of the applicable laws, codes or regulations applicable to the action sought to be permitted by the application authorized herein.

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.

OWNER:

(SIGNATURE) (SIGNATURE OF CO-OWNER)

Title: Member

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

STATE OF Wisconsin

)

COUNTY OF Kenosha

)SS.

)

The foregoing instrument was acknowledged before me by Stephen R Mills this 5 day of April, 2019.

WITNESS my hand and official seal

Sarah E Bell

(Seal)

(Notary Public)

My commission expires: 5/10/22

SARAH E. BELL
Notary Public
State of Wisconsin

Housing Mitigation Plan

updated 7/20/18

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. The following worksheet is intended to assist in the calculation of the housing required for a project, but does not amend the actual standards.

Step 1: Location

Town of Jackson

The applicable regulations vary by jurisdiction please identify the location of your project.

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. Enter each existing 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, do not add the size of all units that have the same use. (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 single unit type (e.g. apartment floor plan, or commercial tenant space) is replicated multiple times use the "Use Quantity" column to avoid adding multiple rows. See Section 6.3.2 of the LDRs for specifics on the applicability of the affordable workforce housing standards and Section 6.3.3 for specifics on calculation of the requirement.

Existing Use	Housing Requirement (Sec. 6.3.3.A)	Use Size: bedrooms	Use Size: habitable sf	Use Quantity	Housing Required
Office	0.000493*sf		7930	1	3.913
Light Industry	0.000246*sf		6160	1	1.514
Retail	0.000431*sf		1455	1	0.627
Outfitter/Tour Operator	0.002189*sf - independent calculation		2539	1	5.558
					?
Total					11.611

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 not the net. (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
Attached Single-Family Unit (Unrestricted)	$0.000017 * sf + (Exp(-14.17 + 1.59 * \ln(sf))) / 2.176$	3	3,067	1	0.165
Attached Single-Family Unit (Unrestricted)	$0.000017 * sf + (Exp(-14.17 + 1.59 * \ln(sf))) / 2.176$	3	3,077	1	0.166
Attached Single-Family Unit (Unrestricted)	$0.000017 * sf + (Exp(-14.17 + 1.59 * \ln(sf))) / 2.176$	3	2,745	1	0.141
Attached Single-Family Unit (Unrestricted)	$0.000017 * sf + (Exp(-14.17 + 1.59 * \ln(sf))) / 2.176$	3	2,820	1	0.147
Short-Term Rental Unit	0.204*bedrooms	3	3,119	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,264	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,264	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,264	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,632	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,086	1	0.613
Workforce Housing Bonus Unit	exempt	3	3,281	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,280	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,280	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,280	1	0.000
Workforce Housing Unit	exempt	3	2,943	1	0.000
Workforce Housing Unit	exempt	2	1,946	1	0.000
Workforce Housing Unit	exempt	2	1,932	1	0.000
Workforce Housing Bonus Unit	exempt	3	3,487	1	0.000
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,120	1	0.613
Short-Term Rental Unit	0.204*bedrooms	4	3,989	1	0.817
Short-Term Rental Unit	0.204*bedrooms	4	4,154	1	0.817
Short-Term Rental Unit	0.204*bedrooms	3	3,008	1	0.613
Short-Term Rental Unit	0.204*bedrooms	3	3,008	1	0.613
Workforce Housing Unit	exempt	3	2,481	1	0.000
Workforce Housing Unit	exempt	3	2,042	1	0.000
Total					10.221

Affordable Workforce Housing Required: -1.390 units

Fee-in-Lieu Amount: \$ -

165-185 Glenwood
Unit Information

Unit	Phase	Unit Type	Bedrooms	Basement	First Floor	Second Floor	Third Floor	Total Habitable SF	Above Grade FAR
A1	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	566	937	803	761	3,067	2,501
A2	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	586	934	801	756	3,077	2,491
B1	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	290	936	760	759	2,745	2,455
B2	Phase 1	Attached Single-Family Unit (Unrestricted)	3 Br	314	939	805	762	2,820	2,506
C1	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	835	884	3,119	2,729
C2	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	1,028	3,264	2,874
C3	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
C4	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	1,028	3,264	2,874
C5	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
C6	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	1,028	3,264	2,874
C7	Phase 1	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
D1	Phase 1	Short-Term Rental Unit	3 Br	426	1,123	942	1,141	3,632	3,206
E1	Phase 1	Short-Term Rental Unit	3 Br	286	926	851	1,023	3,086	2,800
E2	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	869	1,041	3,281	2,911
E3	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	868	1,041	3,280	2,910
E4	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	868	1,041	3,280	2,910
E5	Phase 1	Workforce Housing Bonus Unit	3 Br	370	1,001	868	1,041	3,280	2,910
E6	Phase 1	Workforce Housing Unit	3 Br	370	904	748	921	2,943	2,573
I1	Phase 1	Workforce Housing Unit	2 Br	-	122	858	966	1,946	1,946
I2	Phase 1	Workforce Housing Unit	2 Br	-	106	860	966	1,932	1,932
			-	-	-	-	-	-	-
D2	Phase 2	Workforce Housing Bonus Unit	3 Br	426	1,123	942	996	3,487	3,061
C8	Phase 2	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
C9	Phase 2	Short-Term Rental Unit	3 Br	390	1,010	836	884	3,120	2,730
G1	Phase 2	Short-Term Rental Unit	4 Br	505	1,334	1,154	996	3,989	3,484
H1	Phase 2	Short-Term Rental Unit	4 Br	437	1,403	1,175	1,139	4,154	3,717
F3	Phase 2	Short-Term Rental Unit	3 Br	321	950	787	950	3,008	2,687
F4	Phase 2	Short-Term Rental Unit	3 Br	321	950	787	950	3,008	2,687
J1	Phase 2	Workforce Housing Unit	3 Br	148	824	685	824	2,481	2,333
J2	Phase 2	Workforce Housing Unit	3 Br	148	673	541	680	2,042	1,894
				10,134	27,278	24,495	27,142	89,049	78,915

	Phase 1 Only (185 Glenwood)	Phase 2 Only (165 Glenwood)	Phase 1 & Phase 2 Combined
Site Acreage	0.64	0.32	0.96
Site Square Footage	27,878	13,939	41,818
Base FAR	1.30	1.30	1.30
Base Square Footage Allowed	36,242	18,121	54,363
Market Residential- Base	9,953	-	9,953
Maket- Short Term Rental- Base	25,547	18,035	43,582
Common Area- Base	532	-	532
Total Base Square Footage	36,032	18,035	54,067
Base FAR	1.292	1.294	1.293
Market Residential- 2:1 Bonus	11,641	3,061	14,702
Workforce Residential- 2:1 Voluntary	6,451	4,227	10,678
Total 2:1 Square Footage	18,092	7,288	25,380
2:1 Ratio	1.805	0.724	1.377

*No affordable housing required per Housing Mitigation Plan

NOT FOR
CONSTRUCTION

Revisions Date

SKETCH PLAN

SCOPE DOCUMENTS

Drawing Date
04/26/2019

GLENWOOD GILL
CONDOMINIUMS

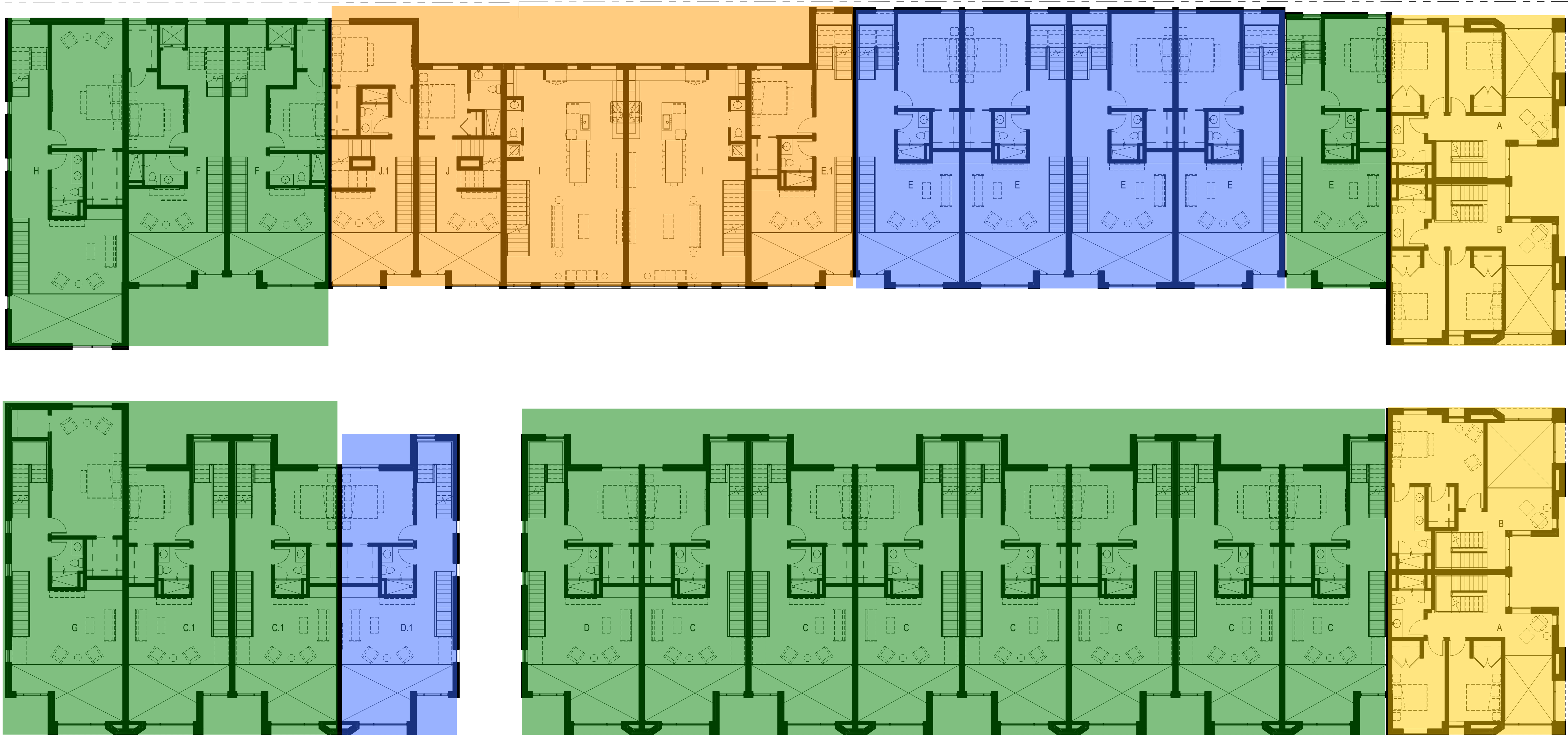
165 and 185 GLENWOOD ST.
JACKSON, WY 83001

Project No. 218062.00 BEAR
DEVELOPMENT

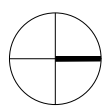
Sheet Title
SECOND FLOOR PLAN

Sheet No.

A112



1 02-2ND FLOOR
3/32" = 1'-0"



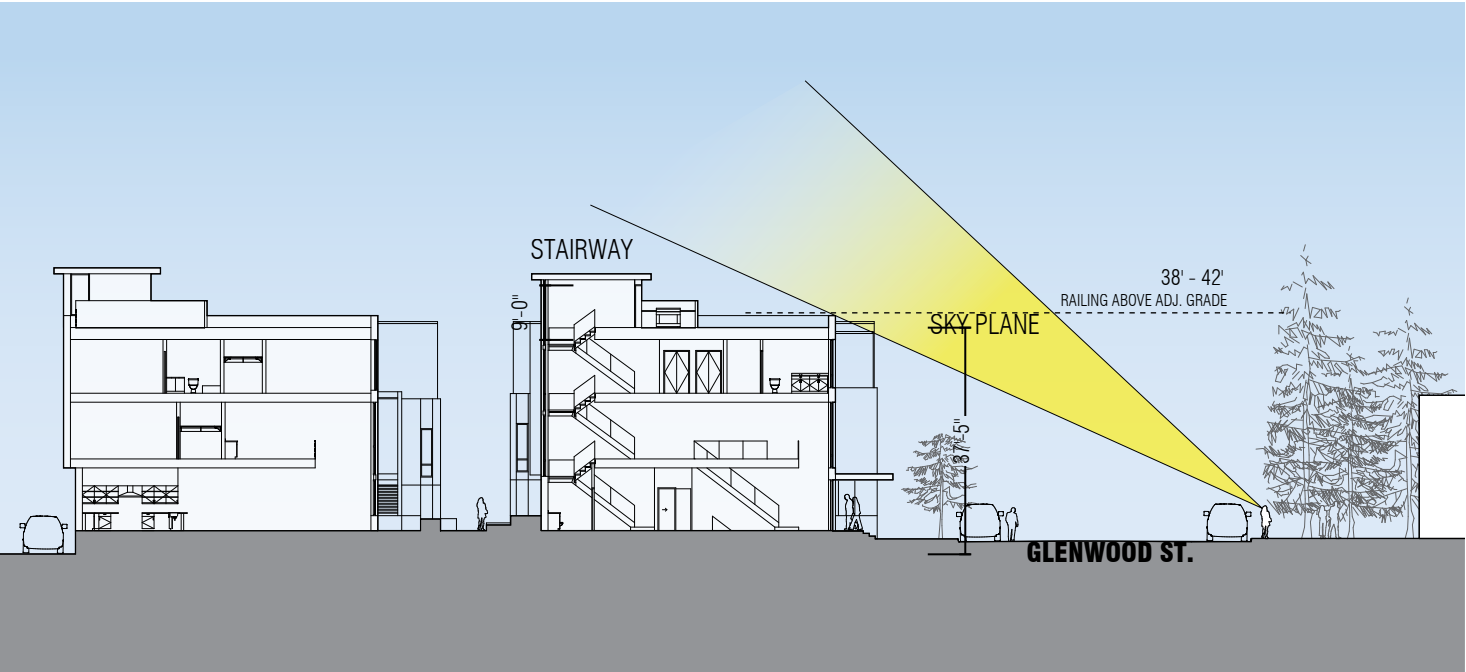


GLENWOOD GILL CONDOMINIUMS

TOWN OF JACKSON, WY

Kahler Slater

MAY 30, 2019



SKY PLANE DIAGRAMS

From: [Paul Anthony](#)
To: [Tiffany Stolte](#)
Subject: FW: Glenwood Ave.
Date: Monday, June 03, 2019 4:33:51 PM

-----Original Message-----

From: Jimmy Bartz [<mailto:jimmy@stjohnsjackson.org>]
Sent: Monday, June 03, 2019 3:27 PM
To: Paul Anthony <panthony@jacksonwy.gov>
Subject: Glenwood Ave.

Paul,

This email is just a follow up to our phone conversation week before last.

I wanted to put into writing our deep concern over here at St. John's Episcopal Church with the current plan to reduce the width of Glenwood. While it may seem as though there is plenty of room for traffic to move up and down Glenwood during the busy time in the summer and during the entirety of winter, Glenwood is too narrow for safe, two-way traffic. Our concern in this regard is for public safety. The most severe problem is traffic turning left from Gill onto Glenwood. Vehicles are forced to cross oncoming traffic on Gill and are often met by oncoming traffic on Glenwood with no room to proceed, resulting in cars getting stuck in the middle of a turn. During the summer cars, trucks and trailers park on the west side of Gill, often times taking up more space than necessary. I believe it would be helpful to have Planning Office officials visit the street during the busier times of year at peak hours to get a sense of the real problems with traffic flow.

When meeting with folks from the project across the street, we were notified that over hang was used in the calculations of whether there is existing room for the reduction. Of course, there are no over hangs during winter with snow berms and often loose of as much as 5 feet on either side of the road.

As you likely know, St. John's operates a pre-school, and we have many children and parents unloading and loading on Glenwood year round, as well as a number of elderly and disabled people coming to the church throughout the entirety of the week year round. It essential that Glenwood be safe for ALL the people using it.

We are keenly interesting in being the best neighbors. We are happy to see the "slab" finally developed, and we are willing to entertain alternative possibilities, such as turning Glenwood into a one way street allowing for plenty of room for traffic to flow safely or other solutions proposed by your office or others.

Further, there is some concern among church board members here that St. John's was asked to give up land for diagonal parking to exist along the east side of Glenwood, while it seems as though the town is leaning toward giving land on the west side of the street. It would be helpful for us to know the process that would allow such an exchange.

Thank you for your consideration of these concerns. We look forward to hearing from you.

Sincerely,

The Reverend Jimmy Bartz, Rector, St. John's Episcopal Church