

# Jackson Town Council Regular Meeting

July 17, 2023

6:00 PM

Town Council Chambers

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

## I. ZOOM LINK FOR PUBLIC PARTICIPATION

To join, click the link or copy to your browser: <https://us02web.zoom.us/j/81008526702?pwd=OHp5eWk2Z0ZveU85aTBkCS3lZQT09>

If the link does not work, join at zoom.com with Webinar ID **810 0852 6702** Password: **83001**

or join by phone **+1 253 205 0468** with Webinar ID **810 0852 6702** and Password: **83001**

## II. OPENING

- A. Call to Order and Roll Call
- B. Pledge of Allegiance
- C. Land Acknowledgement
- D. Announcements/Proclamations
  - 1. Employee Introductions

## III. PUBLIC COMMENT

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

## IV. CONSENT CALENDAR

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

- A. Meeting Minutes
  - 1. July 10, 2023 Special Town Council Meeting
- B. Disbursements
- C. June Municipal Court Report
- D. P23-057 Temporary Sign Permit for Hole Food Rescue (Paul Anthony)
- E. P23-115 Temporary Sign Permit for Stomping the Divots (Paul Athony)
- F. Selection of Firm for Energy Audit (Tanya Anderson)
- G. 2023 Fall Patching Contract (Brian Lenz)

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

- A. Community Development
  - 1. Request for Proposals for Relocation of the Mercer Cabin (Tanya Anderson)
- B. Pathways

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

1. Virginian RV Park and Virginian Lodge: Pathway Easements (Brian Schilling & April Norton)
- C. Planning
  1. P23-079 Karns Meadow Zoning Map Amendment (Tyler Valentine)
  2. P23-016 LDR Amendment to Parking and Loading Standards Relating to Bicycle Parking (Katelyn Page)

## **VI. RESOLUTIONS**

- A. Resolution 23-14: Fee Schedule (Kelly Thompson)

## **VII. ORDINANCES**

- A. Ordinance Q: An Ordinance Relating to Short-term Rental Uses (P21-333) (First reading, Paul Anthony)
- B. Ordinance R: An Ordinance Amending Pathways Speed Limits and Signage (First reading, Lea Colasuonno)
- C. Ordinance S: An Ordinance Repealing Pathways Penalty Provision (First reading, Lea Colasuonno)

## **VIII. MATTERS FROM MAYOR AND COUNCIL**

## **IX. MATTERS FROM THE TOWN MANAGER**

- A. Town Manager's Report

## **X. ADJOURN**

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

Francisco Zumaya  
Public Works – Meter Reader and Street Operator

Francisco is excited for the opportunity to be part of the town of Jackson Public works department and is looking forward to meeting all of the town of Jackson team members. Francisco loves nature and enjoys hiking, camping, and taking long walks in the wilderness. He likes to exercise, be active, and is very enthusiastic about experiencing new things. He also loves good food and drinks and having a good time with friends and family.

## TOWN COUNCIL PROCEEDINGS

JULY 10, 2023

JACKSON, WYOMING

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

TOWN COUNCIL: Mayor Morton Levinson, Arne Jorgensen, Jessica Sell Chambers and Jim Rooks. Via Zoom: Jonathan Schechter.

STAFF: Tyler Sinclair, Roxanne Robinson, Lea Colasuonno, Paul Anthony, Tanya Anderson, Floren Poliseo, Johnny Ziem, Brian Lenz, Michelle Weber, Steve Jellie, and Riley Taylor.

Mayor Morton Levinson Alberto Locsin, Riley Horton, and Walker Jackson.

**Public Comment.** There was no public comment.

**Consent Calendar.** A motion was made by Jessica Sell Chambers and seconded by Arne Jorgensen to approve the consent calendar including items A-D as presented with the following motions:

- A. **Meeting Minutes.** To approve the meeting minutes from the June 26, 2023 Special Town Council Workshop and June 26, 2023 Special Town Council Meeting.
- B. **Disbursements.** To approve disbursements as presented. 4IMPRINT \$308.55; ACE HARDWARE \$1,625.35; ADVANCED PUMP & EQUIPMENT, INC \$8,517.11; AFLAC \$2,399.87; ALFARO, ALICIA \$63.59; AMAZON \$938.18; ANDERS GLASS AND TINT \$380.00; AT&T \$1,094.83; BAILEY, DAMIEN \$1,137.01; BEARING & INDUSTRIAL SALE \$585.86; BIG R RANCH & HOME \$71.98; BRIGGS, ERIC L \$444.79; COLORADO DOORWAYS INC \$592.16; CONRAD & BISCHOFF INC. \$33,905.08; DIMIGLIO, FRANCESCO \$3,000.00; DIVISION OF CHILD SUPPORT ENFORCEMENT \$509.23; E.R. OFFICE EXPRESS \$72.95; ELECTRICAL WHSLE SUPPLY CO INC \$95.50; ENERGY CONSERVATION WORKS \$8,750.00; ENERGY LABORATORIES INC. \$682.00; EVANS CONSTRUCTION INC \$14,696.21; FERGUSON ENTERPRISES, INC \$16.59; FRONTIER PRECISION, INC \$1,642.50; HACH CHEMICAL CO. \$133.90; HIGH COUNTRY LINEN \$559.96; HUNT CONSTRUCTION INC \$3,947.45; INTERSTATE BATTERY \$599.40; JACKSON CURBSIDE INC. \$1,480.00; JACKSON GROUP LOCKBOX \$1,049.78; JACKSON GROUP PETERBILT \$321.96; JACKSON HOLE LAW, PC \$3,510.00; JACKSON HOLE NEWS & GUIDE \$1,331.90; JACKSON HOLE TROUT UNLIMITED \$1,000.00; JACKSON HOLE WILD \$4,000.00; JACKSON WHOLE FAMILY HEALTH \$380.00; JEZIERSKI, LEE \$690.00; JH20 WATER CONDITIONING & FILTRATION \$99.50; JORGENSEN ASSOCIATES, PC \$78,701.37; KENWORTH SALES COMPANY DEPT #1 \$1,205.68; KILMER'S BG DISTRIBUTING \$1,256.00; MACY'S SERVICES \$3,255.50; MSC INDUSTRIAL SUPPLY CO \$488.77; NAPA AUTO PARTS INC. \$3,557.45; NELSON ENGINEERING \$787.50; PEAK WATER SERVICES, LLC \$9,000.00; PREMIER TRUCK- SALT LAKE CITY \$345.62; PROFORCE LAW ENFORCEMENT \$15,978.96; QUICK BROWN FOX LLC \$330.00; RACZ, DONALD \$350.00; RAFTELIS \$13,192.50; RAUSCH, AUSTIN \$39.38; RIDGELINE EXCAVATION INC \$6,600.00; SAFETY SUPPLY & SIGN CO., INC. \$5,959.46; SERENITY DEVELOPMENT \$2,000.00; SHERWIN-WILLIAMS CO. \$553.63; SLUDER, KELLY \$1,977.08; SNAKE RIVER SUPPLY, LLC \$71,208.51; SPRING CREEK ANIMAL HOSPITAL \$120.68; ST JOHN'S HOSPITAL \$390.00; STINKY PRINTS, INC \$16.74; STOUT, RICHARD D. \$62.50; TETON COUNTY SHERIFF'S-JAIL \$792.00; TETON EXCAVATION LLC \$925.00; TETON MOTORS INC \$32,367.46; TETON MOUNTAIN RANCH \$2,300.00; WILLIAMS, BAILEY \$867.78
- C. **P23-097 Temporary Sign Permit for Backcountry Hunters and Anglers.** To approve temporary banner application (P23-097) for the Beer, Deer, and Gear Outdoor Gear Consignment Sale, including the three conditions of approval recommended by the Planning Director in the staff report dated July 10, 2023.
- D. **Appointment of Special Municipal Officers.** To appoint Alberto Locsin, Walker Jackson, and Riley Horton as Special Municipal Officers of the Town of Jackson.

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

**P23-034 Conditional Use Permit – 1490 Gregory Lane.** Katelyn Page made staff comment. Council held discussion with staff. Matt Scott made public comment. A motion was made by Arne Jorgensen and seconded by Jessica Sell Chambers to approve Conditional Use Permit P23-034 for Outfitter/Tour Operator use at the property addressed 1490 Gregory Lane based upon the findings presented in the staff, the departmental reviews, this staff report dated July 10, 2023, and subject to the conditions listed below:



1. The applicant is required to pave the parking facility, providing a minimum eleven (11) outdoor vehicle parking spaces, to a standard that meets or exceeds the paving standards of the Town.
2. The Property owner shall ensure the exchange of employee and company vehicles is not permitted conducted within the public right of way.
3. The Property owner shall ensure tenants locating in remaining suites shall comply with the use standards of LDR Section 2.3.10.C for the Business Park (BP) zone. This CUP shall not be issued until all existing tenants spaces comply with the use standards in the LDRs.
4. The applicant is not permitted to occupy floor area on the Property other than that specifically designated in this application as Outfitter/Tour Operator use without further approval from the Town.
5. The applicant is required to post no parking signage on the northwest corner of the parcel adjacent to, and west of, the utility boxes.
6. The applicant Property owner is required to receive approval from the Planning Director for a habitat restoration and improvement plan within 45 days of conditional use permit approval by Town Council. A bond equal to 125% of the cost of the habitat restoration plan shall be provided to the Town prior to issuance of the CUP.

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

**P23-016 LDR Amendment to Parking and Loading Standards Relating to Bicycle Parking.** Katelyn Page made staff comment. Council held discussion with staff. There was no public comment. A motion was made by Jessica Sell Chambers and seconded by Jim Rooks to continue item P23-016 to the regularly scheduled Town Council meeting on July 17, 2023. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**P23-102 Partial Vacation without Replat – 125 N. Gros Ventre Street.** Katelyn Page made staff comment. Council held discussion with staff.

Council recessed at 6:31pm and reconvened at 6:40pm.

Discussion continued. There was no public comment. A motion was made by Arne Jorgensen and seconded by Jim Rooks to acknowledge a Partial Vacation without Replat for Lot 12 and Lot 13 of the L.G. Gill Subdivision, subject to the Town LDRs, the departmental reviews, minor changes by staff, and the staff report dated July 10, 2023. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Ordinances.** A motion was made by Jessica Sell Chambers and seconded by Arne Jorgensen to read ordinances in short title. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Ordinance M: A Charter Ordinance Exempting the Town from the Requirement for President and Acting President of Council and Creating a Mayor Pro Tempore and Acting Mayor Pro Tempore.**  
AN ORDINANCE ADDING SECTIONS 2.02.022 AND SECTION 2.02.024 TO THE TOWN OF JACKSON MUNICIPAL CODE, A CHARTER ORDINANCE RELATING TO EXEMPTING THE TOWN FROM WYOMING STATUTE SECTION 15-3-203 REGARDING PRESIDENT AND ACTING PRESIDENT OF COUNCIL; AND PROVIDING FOR AN EFFECTIVE DATE.

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

A motion was made by Arne Jorgensen and seconded by Jessica Sell Chambers to approve Charter Ordinance M on third reading and designated it Charter Ordinance 1-G. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Ordinance N: An Ordinance Repealing Outdated Appointment of Vice Mayor.**  
AN ORDINANCE REPEALING SECTION 1 OF ORDINANCE NO. 1300 AND JACKSON MUNICIPAL CODE SECTION 2.04.070 REGARDING VICE MAYOR; AND PROVIDING FOR AN EFFECTIVE DATE.

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

A motion was made by Arne Jorgensen and seconded by Jessica Sell Chambers to approve Ordinance N on third reading and designated it Ordinance 1345. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Ordinance O: An Ordinance Amending Excused Absences and Vacancies Related to Mayor Pro Tempore Responsibilities.**

AN ORDINANCE AMENDING AND REENACTING SECTION 1 OF TOWN OF JACKSON ORDINANCE NO. 1300; AND SECTION 2.04.060 OF THE TOWN OF JACKSON MUNICIPAL CODE REGARDING EXCUSED ABSENCES AND VACANCY PROCEDURES FOR TOWN COUNCIL AND PROVIDING FOR AN EFFECTIVE DATE.

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

A motion was made by Arne Jorgensen and seconded by Jessica Sell Chambers to approve Ordinance O on third reading and designated it Ordinance 1346. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Ordinance P: An Ordinance Regarding Construction Management Plans.**

AN ORDINANCE AMENDING AND REENACTING SECTION 1 OF TOWN OF JACKSON ORDINANCE NOS. 571, 943, 947, AND 1228; SECTION 2 OF TOWN OF JACKSON ORDINANCE NO. 579; AND SECTIONS 12.08.040, 12.08.045, AND 12.08.380 OF THE TOWN OF JACKSON MUNICIPAL CODE REGARDING CONSTRUCTION MANAGEMENT PLANS AND PROVIDING FOR AN EFFECTIVE DATE.

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

A motion was made by Arne Jorgensen and seconded by Jessica Sell Chambers to approve Ordinance P on third reading and designated it Ordinance 1347. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Town Manager’s Report.** Tyler Sinclair made staff comment. The Town Manager’s report contained updates on START Winter Staff Housing, the all-employee meeting, and an upcoming culture survey. A motion was made by Jessica Sell Chambers and seconded by Jim Rooks to approve the Town Manager’s report. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried.

**Adjourn.** A motion was made by Jessica Sell Chambers and seconded by Jim Rooks to adjourn. Mayor Morton Levinson called for the vote. The vote showed all in favor. The motion carried. The meeting adjourned at 6:45 p.m.

TOWN OF JACKSON

ATTEST:

\_\_\_\_\_  
Hailey Morton Levinson, Mayor

\_\_\_\_\_  
Riley Taylor, Town Clerk

## Report Criteria:

Detail report.

Invoices with totals above \$0 included.

Paid and unpaid invoices included.

| Vendor      | Vendor Name                       | Invoice Number | Description               | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|-----------------------------------|----------------|---------------------------|--------------|--------------------|-------------|------------|
| 7272        | A+ ELEVATORS & LIFTS              | 11344          | ELEVATOR REPAIR           | 06/08/2023   | 320.00             | .00         |            |
| Total 7272: |                                   |                |                           |              | 320.00             | .00         |            |
| 51          | ACE HARDWARE                      | 829500         | KEY                       | 06/16/2023   | 14.95              | .00         |            |
| 51          | ACE HARDWARE                      | 829810         | MOUSE TRAP                | 06/19/2023   | 7.99               | .00         |            |
| 51          | ACE HARDWARE                      | 829813         | TOOL SET                  | 06/19/2023   | 179.98             | .00         |            |
| 51          | ACE HARDWARE                      | 830000         | SUPPLIES                  | 06/20/2023   | 7.37               | .00         |            |
| 51          | ACE HARDWARE                      | 830203         | TEFLON TAPE               | 06/22/2023   | 3.58               | .00         |            |
| 51          | ACE HARDWARE                      | 830338         | WALL PLATES               | 06/22/2023   | 3.28               | .00         |            |
| 51          | ACE HARDWARE                      | 830383         | SUPPLIES                  | 06/23/2023   | 44.46              | .00         |            |
| 51          | ACE HARDWARE                      | 830401         | PLUNGER                   | 06/23/2023   | 7.99               | .00         |            |
| 51          | ACE HARDWARE                      | 830981         | WEED KILLER               | 06/27/2023   | 34.99              | .00         |            |
| 51          | ACE HARDWARE                      | 831087         | TORCH                     | 06/28/2023   | 72.62              | .00         |            |
| 51          | ACE HARDWARE                      | 831235         | SUPPLIES                  | 06/29/2023   | 117.59             | .00         |            |
| 51          | ACE HARDWARE                      | 831246         | CONNECTORS                | 06/29/2023   | 23.96              | .00         |            |
| 51          | ACE HARDWARE                      | 831422         | SPLICE                    | 06/30/2023   | 53.97              | .00         |            |
| 51          | ACE HARDWARE                      | 831799         | SPRINKLERS                | 07/03/2023   | 13.48              | .00         |            |
| 51          | ACE HARDWARE                      | 831808         | HEX WRENCH                | 07/03/2023   | .99                | .00         |            |
| Total 51:   |                                   |                |                           |              | 587.20             | .00         |            |
| 7278        | ALL WEATHER GLASS TINTING         | 01171          | WINDOW TINT ON PD VEHICLE | 07/06/2023   | 275.00             | .00         |            |
| Total 7278: |                                   |                |                           |              | 275.00             | .00         |            |
| 6686        | Allegiance Benefit Plan Manage, I | 070123         | premium                   | 07/01/2023   | 90,228.41          | 90,228.41   | 07/03/2023 |
| Total 6686: |                                   |                |                           |              | 90,228.41          | 90,228.41   |            |
| 5726        | AMAZON                            | 114-8248412-2  | CREDIT                    | 06/01/2023   | 339.99-            | .00         |            |
| 5726        | AMAZON                            | 114-8248412-2  | HINGE WELD                | 06/01/2023   | 13.98-             | .00         |            |
| 5726        | AMAZON                            | 114-8248412-2  | CREDIT                    | 06/01/2023   | 339.99-            | .00         |            |
| 5726        | AMAZON                            | 13H6-XYT7-YJ   | supplies                  | 07/03/2023   | 844.17             | .00         |            |
| 5726        | AMAZON                            | 1X1H-YK7V-C    | CARTRIDGE TIP             | 06/23/2023   | 113.89             | .00         |            |
| Total 5726: |                                   |                |                           |              | 264.10             | .00         |            |
| 7245        | AMERICAN LEAK DETECTION           | 30150          | COMMERCIAL DETECTION      | 05/17/2023   | 996.25             | .00         |            |
| Total 7245: |                                   |                |                           |              | 996.25             | .00         |            |
| 3487        | ARCHITECTURAL BUILDING SU         | 5810222        | GLASS DOOR                | 06/27/2023   | 1,383.98           | .00         |            |
| 3487        | ARCHITECTURAL BUILDING SU         | 5810304        | TOWN HALL DOORS           | 06/27/2023   | 3,687.96           | .00         |            |
| Total 3487: |                                   |                |                           |              | 5,071.94           | .00         |            |
| 1783        | AT&T                              | 287272169264   | MONTHLY ACCOUNT 287272169 | 06/12/2023   | 43.23              | .00         |            |
| 1783        | AT&T                              | 287279795460   | MONTHLY ACCOUNT 287279795 | 06/11/2023   | 251.88             | .00         |            |
| Total 1783: |                                   |                |                           |              | 295.11             | .00         |            |
| 6757        | AXON ENTERPRISES, INC             | INUS162104     | BODY CAM PRO LICENSE BUN  | 06/01/2023   | 5,939.00           | .00         |            |

| Vendor      | Vendor Name              | Invoice Number | Description                       | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|--------------------------|----------------|-----------------------------------|--------------|--------------------|-------------|------------|
| Total 6757: |                          |                |                                   |              | 5,939.00           | .00         |            |
| 7170        | BADURA, KYLE             | 051723         | SAFETY BOOTS                      | 05/17/2023   | 100.00             | .00         |            |
| Total 7170: |                          |                |                                   |              | 100.00             | .00         |            |
| 7261        | BAILEY, DAMIEN           | 070623         | REIMBURSE                         | 07/06/2023   | 36.42              | .00         |            |
| Total 7261: |                          |                |                                   |              | 36.42              | .00         |            |
| 4774        | BIG R RANCH & HOME       | 1620154        | MOWER                             | 06/14/2023   | 354.98             | .00         |            |
| Total 4774: |                          |                |                                   |              | 354.98             | .00         |            |
| 1560        | BLUE SPRUCE CLEANERS,INC | 063023         | DRY CLEANING SAM JEWISON          | 06/30/2023   | 83.46              | .00         |            |
| Total 1560: |                          |                |                                   |              | 83.46              | .00         |            |
| 6727        | BRIGGS, ERIC L           | 22712          | M18 FUEL HACKZ                    | 06/29/2023   | 489.90             | .00         |            |
| Total 6727: |                          |                |                                   |              | 489.90             | .00         |            |
| 7077        | BURKHOLDER, SHAWN        | 062023         | JULY RENTAL                       | 06/20/2023   | 1,850.00           | 1,850.00    | 07/07/2023 |
| 7077        | BURKHOLDER, SHAWN        | 070523         | AUGUST RENT                       | 07/05/2023   | 1,850.00           | .00         |            |
| Total 7077: |                          |                |                                   |              | 3,700.00           | 1,850.00    |            |
| 5           | CARQUEST AUTO PARTS INC. | 6090-617399    | DASH MOUNT                        | 06/27/2023   | 43.60              | .00         |            |
| Total 5:    |                          |                |                                   |              | 43.60              | .00         |            |
| 7279        | CARRILLO-HERNANDEZ, AARO | 070323         | CANDY FOR PARADE                  | 07/03/2023   | 335.10             | .00         |            |
| Total 7279: |                          |                |                                   |              | 335.10             | .00         |            |
| 102         | CASELLE INC.             | 125102         | JULY SUPPORT                      | 06/01/2023   | 1,867.00           | .00         |            |
| 102         | CASELLE INC.             | 125823         | august SUPPORT                    | 07/01/2023   | 1,867.00           | .00         |            |
| Total 102:  |                          |                |                                   |              | 3,734.00           | .00         |            |
| 447         | CDW-GOVERNMENT           | KK35190        | MIMECAST                          | 06/26/2023   | 3,848.79           | .00         |            |
| Total 447:  |                          |                |                                   |              | 3,848.79           | .00         |            |
| 544         | CENTURYLINK              | 307-733-3106-  | 307-733-3106 742B                 | 06/13/2023   | 48.12              | .00         |            |
| 544         | CENTURYLINK              | 644979041      | Monthly bill for account 75912352 | 06/20/2023   | 335.91             | .00         |            |
| Total 544:  |                          |                |                                   |              | 384.03             | .00         |            |
| 5967        | CITY OF DRIGGS           | BBSTART2023    | JULY BUS BARN RENT                | 07/05/2023   | 1,692.66           | .00         |            |
| Total 5967: |                          |                |                                   |              | 1,692.66           | .00         |            |
| 6001        | CIVICPLUS                | 263261         | ADFS ANNUAL FEE RENEWAL           | 06/29/2023   | 11,235.99          | .00         |            |
| Total 6001: |                          |                |                                   |              | 11,235.99          | .00         |            |

| Vendor | Vendor Name                 | Invoice Number | Description                | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid |
|--------|-----------------------------|----------------|----------------------------|--------------|--------------------|-------------|-----------|
| 6114   | CLIMB WYOMING               | 063023         | 4TH QUARTER                | 06/30/2023   | 1,531.25           | .00         |           |
|        | Total 6114:                 |                |                            |              | 1,531.25           | .00         |           |
| 605    | CNA SURETY                  | 58177209 0723  | BOND FOR CLERKS & TREASU   | 07/01/2023   | 609.50             | .00         |           |
|        | Total 605:                  |                |                            |              | 609.50             | .00         |           |
| 7269   | COLORADO DOORWAYS INC       | 978324         | CORE FACILITY              | 05/15/2023   | 13,125.91          | .00         |           |
|        | Total 7269:                 |                |                            |              | 13,125.91          | .00         |           |
| 1691   | CORE & MAIN LP              | 110609         | 2 METER FLANGE             | 06/28/2023   | 996.88             | .00         |           |
|        | Total 1691:                 |                |                            |              | 996.88             | .00         |           |
| 3001   | CREATIVE ENERGIES, LLC      | 8704           | BI-ANNUAL O + M WORK       | 06/15/2023   | 3,459.00           | .00         |           |
| 3001   | CREATIVE ENERGIES, LLC      | 8713           | O&M BUS SHELTER            | 06/16/2023   | 2,647.00           | .00         |           |
|        | Total 3001:                 |                |                            |              | 6,106.00           | .00         |           |
| 611    | CUMMINS SALES AND SERVICE   | 40-50133       | INSITE LITE                | 06/27/2023   | 1,440.00           | .00         |           |
|        | Total 611:                  |                |                            |              | 1,440.00           | .00         |           |
| 6243   | DAY WIRELESS SYSTEMS        | INV781304      | SERVICE CALL               | 06/26/2023   | 514.10             | .00         |           |
|        | Total 6243:                 |                |                            |              | 514.10             | .00         |           |
| 4918   | DEAN'S PEST CONTROL LLC     | 813336         | RODENT CONTROL             | 06/15/2023   | 100.00             | .00         |           |
| 4918   | DEAN'S PEST CONTROL LLC     | 81652          | RODENT CONTROL             | 06/20/2023   | 55.00              | .00         |           |
| 4918   | DEAN'S PEST CONTROL LLC     | 81685          | RODENT CONTROL             | 06/29/2023   | 100.00             | .00         |           |
|        | Total 4918:                 |                |                            |              | 255.00             | .00         |           |
| 65     | DELCON INC                  | 1719           | HOME RANCH PUMP            | 06/25/2023   | 5,597.20           | .00         |           |
|        | Total 65:                   |                |                            |              | 5,597.20           | .00         |           |
| 4225   | DERO BIKE RACKS             | 63324          | BIKE RACKS                 | 06/05/2023   | 6,070.96           | .00         |           |
|        | Total 4225:                 |                |                            |              | 6,070.96           | .00         |           |
| 7037   | DICK ANDERSON CONSTRUCTI    | 22-06 063023   | START OFFICE               | 06/30/2023   | 108,803.52         | .00         |           |
| 7037   | DICK ANDERSON CONSTRUCTI    | 22-06 063023   | CORE FACILITY              | 06/30/2023   | 1,646,239.61       | .00         |           |
|        | Total 7037:                 |                |                            |              | 1,755,043.13       | .00         |           |
| 2175   | DIVISION OF VICTIM SERVICES | 070623         | Crime Victim SurchAGE JUNE | 07/06/2023   | 1,200.00           | .00         |           |
|        | Total 2175:                 |                |                            |              | 1,200.00           | .00         |           |
| 6939   | DYNAMIC CONTROLS, LLC       | 36912          | BASEMENT DOOR              | 06/12/2023   | 9,898.00           | .00         |           |
|        | Total 6939:                 |                |                            |              | 9,898.00           | .00         |           |
| 3408   | E.R. OFFICE EXPRESS         | 0725CM         | cREDIT                     | 07/06/2023   | 249.48-            | .00         |           |
| 3408   | E.R. OFFICE EXPRESS         | 21179          | TABLES                     | 06/23/2023   | 5,981.93           | .00         |           |

| Vendor      | Vendor Name              | Invoice Number | Description               | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|--------------------------|----------------|---------------------------|--------------|--------------------|-------------|------------|
| 3408        | E.R. OFFICE EXPRESS      | 21208          | Office Supplies           | 07/06/2023   | 351.72             | .00         |            |
| Total 3408: |                          |                |                           |              | 6,084.17           | .00         |            |
| 1134        | ENERGY LABORATORIES INC. | 554149         | INFLUENT AND EFFLUENT     | 05/26/2023   | 203.00             | .00         |            |
| 1134        | ENERGY LABORATORIES INC. | 554766         | INFLUENT AND EFFLUENT     | 05/31/2023   | 464.00             | .00         |            |
| 1134        | ENERGY LABORATORIES INC. | 561431         | INFLUENT AND EFFLUENT     | 06/28/2023   | 200.00             | .00         |            |
| Total 1134: |                          |                |                           |              | 867.00             | .00         |            |
| 4556        | ENTERSECT                | 523EP31284     | ONLINE CONTRACT           | 05/31/2023   | 1,000.00           | .00         |            |
| Total 4556: |                          |                |                           |              | 1,000.00           | .00         |            |
| 6552        | ETNA TRADE PARK LLC      | 062023         | JULY RENT                 | 06/20/2023   | 4,062.00           | 4,062.00    | 07/07/2023 |
| 6552        | ETNA TRADE PARK LLC      | 070523         | AUGUST RENT               | 07/05/2023   | 4,062.00           | .00         |            |
| Total 6552: |                          |                |                           |              | 8,124.00           | 4,062.00    |            |
| 7228        | EVANS, SARA              | 070623         | RESTITUTION JUNE          | 07/06/2023   | 314.00             | .00         |            |
| Total 7228: |                          |                |                           |              | 314.00             | .00         |            |
| 3550        | EXPOSURE SIGNS INC       | 7873           | DECALS                    | 05/31/2023   | 110.00             | .00         |            |
| Total 3550: |                          |                |                           |              | 110.00             | .00         |            |
| 3195        | FERGUSON ENTERPRISES, IN | 0852600        | SWR                       | 05/30/2023   | 1,605.84           | .00         |            |
| 3195        | FERGUSON ENTERPRISES, IN | 1644050        | REP KIT                   | 06/21/2023   | 13.24              | .00         |            |
| Total 3195: |                          |                |                           |              | 1,619.08           | .00         |            |
| 5463        | FIGJAM ENTERPRISES, LLC  | 1233           | SK HOUSING WINDOWS        | 05/09/2023   | 3,000.00           | .00         |            |
| Total 5463: |                          |                |                           |              | 3,000.00           | .00         |            |
| 7273        | FOWLER, LIAM             | 062723         | TRAVEL REIMBURSE          | 06/27/2023   | 2,021.71           | .00         |            |
| Total 7273: |                          |                |                           |              | 2,021.71           | .00         |            |
| 6844        | GE SOFTWARE              | 211611         | FUEL SITE MODULE          | 06/30/2023   | 80.00              | .00         |            |
| Total 6844: |                          |                |                           |              | 80.00              | .00         |            |
| 6794        | GRANICUS, LLC            | 166752         | AVIOR                     | 06/09/2023   | 21,300.00          | .00         |            |
| Total 6794: |                          |                |                           |              | 21,300.00          | .00         |            |
| 6666        | HANDY PLUMBING LLC       | 1495           | PLUMBING REPAIR @ SNOW KI | 11/06/2022   | 240.81             | .00         |            |
| Total 6666: |                          |                |                           |              | 240.81             | .00         |            |
| 96          | HIGH COUNTRY LINEN       | 0383003        | MATS @ TOWN HALL          | 06/16/2023   | 264.04             | .00         |            |
| 96          | HIGH COUNTRY LINEN       | 0383926        | STREET                    | 06/22/2023   | 20.75              | .00         |            |
| 96          | HIGH COUNTRY LINEN       | 0383926        | ADMIN                     | 06/22/2023   | 3.32               | .00         |            |
| 96          | HIGH COUNTRY LINEN       | 0383926        | SHOP SUPPLIES             | 06/22/2023   | 6.85               | .00         |            |
| 96          | HIGH COUNTRY LINEN       | 0383926        | FACILITY                  | 06/22/2023   | 13.30              | .00         |            |
| 96          | HIGH COUNTRY LINEN       | 0383926        | SEWER                     | 06/22/2023   | 14.67              | .00         |            |

| Vendor      | Vendor Name               | Invoice Number | Description              | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|---------------------------|----------------|--------------------------|--------------|--------------------|-------------|------------|
| 96          | HIGH COUNTRY LINEN        | 0383926        | WATER                    | 06/22/2023   | 19.38              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | 0383926        | BUILD MAINT              | 06/22/2023   | 12.32              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | 0383926        | WWTP                     | 06/22/2023   | 13.30              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | 0383926        | FLEET                    | 06/22/2023   | 30.79              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | 0383926        | ADMIN                    | 06/22/2023   | 3.33               | .00         |            |
| 96          | HIGH COUNTRY LINEN        | 0384603        | MATS@ SI FERRIN          | 06/26/2023   | 17.75              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | 0384606        | MATS @ HOME RANCH        | 06/26/2023   | 54.56              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | S0384173       | TOWELS                   | 06/22/2023   | 40.00              | .00         |            |
| 96          | HIGH COUNTRY LINEN        | S0385289       | GARBAGE CAN LINERS       | 06/28/2023   | 145.00             | .00         |            |
| Total 96:   |                           |                |                          |              | 659.36             | .00         |            |
| 7064        | HUB INTERNATIONAL         | 063023         | ADMIN FEES               | 06/30/2023   | 3,179.00           | 3,179.00    | 06/30/2023 |
| 7064        | HUB INTERNATIONAL         | 3205514        | CONSULTANT FEES FY24     | 06/05/2023   | 8,000.00           | .00         |            |
| Total 7064: |                           |                |                          |              | 11,179.00          | 3,179.00    |            |
| 503         | HUNT CONSTRUCTION INC     | 10610          | DUSTGUARD                | 05/30/2023   | 5,967.00           | .00         |            |
| Total 503:  |                           |                |                          |              | 5,967.00           | .00         |            |
| 36          | IDAHO STATE TAX COMMISSIO | 062923         | JUNE STATE TAX           | 06/30/2023   | 7,516.00           | 7,516.00    | 06/30/2023 |
| Total 36:   |                           |                |                          |              | 7,516.00           | 7,516.00    |            |
| 2640        | INTERNAL REVENUE SERVICE  | 07012023       | 720 TAXES                | 07/01/2023   | 813.00             | .00         |            |
| Total 2640: |                           |                |                          |              | 813.00             | .00         |            |
| 6954        | IVY OUTDOOR SERVICES LLC  | 000042         | JUNE TRASH SERVICE       | 07/03/2023   | 2,002.00           | .00         |            |
| Total 6954: |                           |                |                          |              | 2,002.00           | .00         |            |
| 6931        | JACKSON DOWNTOWNER, LLC   | 1022           | START ON DEMAND          | 06/15/2023   | 12,778.69          | .00         |            |
| 6931        | JACKSON DOWNTOWNER, LLC   | 1022           | START ON DEMAND          | 06/15/2023   | 40,973.85          | .00         |            |
| 6931        | JACKSON DOWNTOWNER, LLC   | 1022B          | START ON DEMAND          | 06/15/2023   | 41,079.00          | .00         |            |
| Total 6931: |                           |                |                          |              | 94,831.54          | .00         |            |
| 44          | JACKSON HOLE CHAMBER      | 78224          | OLD WEST DAYS PARADE FEE | 05/24/2023   | 25.00              | .00         |            |
| Total 44:   |                           |                |                          |              | 25.00              | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 353556         | AD#417478                | 05/31/2023   | 629.60             | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 353558         | AD#417382                | 05/31/2023   | 1,572.48           | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354292         | AD#418758                | 06/21/2023   | 638.40             | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354293         | AD#418679                | 06/21/2023   | 638.40             | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354480         | AD#418954                | 06/28/2023   | 40.50              | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354527         | AD#418919                | 06/28/2023   | 216.60             | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354528         | AD#418792                | 06/28/2023   | 228.00             | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354969         | AD#419036                | 07/05/2023   | 433.20             | .00         |            |
| 131         | JACKSON HOLE NEWS & GUID  | 354970         | AD#419032                | 07/05/2023   | 638.40             | .00         |            |
| Total 131:  |                           |                |                          |              | 5,035.58           | .00         |            |
| 5810        | JACKSON HOLE RADIO        | 23050218       | BEARWISE ADS             | 05/31/2023   | 800.00             | .00         |            |

| Vendor      | Vendor Name                | Invoice Number | Description                  | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid |
|-------------|----------------------------|----------------|------------------------------|--------------|--------------------|-------------|-----------|
| Total 5810: |                            |                |                              |              | 800.00             | .00         |           |
| 114         | JACKSON LUMBER INC         | 0000891012-0   | 2X4 MATERIAL                 | 06/20/2023   | 175.80             | .00         |           |
| 114         | JACKSON LUMBER INC         | 0000891678-0   | DEWALT BATTERY               | 06/21/2023   | 339.50             | .00         |           |
| 114         | JACKSON LUMBER INC         | 0000895206-0   | 2X6 material                 | 06/30/2023   | 201.22             | .00         |           |
| Total 114:  |                            |                |                              |              | 716.52             | .00         |           |
| 5914        | LENZ, BRIAN                | 062823         | REIMBURSE                    | 06/28/2023   | 172.62             | .00         |           |
| 5914        | LENZ, BRIAN                | 062823         | SAFETY BOOTS                 | 06/28/2023   | 100.00             | .00         |           |
| Total 5914: |                            |                |                              |              | 272.62             | .00         |           |
| 5691        | LEPCO                      | 53050          | CHEM DELIVERY                | 06/15/2023   | 473.70             | .00         |           |
| Total 5691: |                            |                |                              |              | 473.70             | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,118.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 4,400.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,627.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,281.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,828.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,843.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 15,974.00          | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,409.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 13,413.00          | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 145.00             | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 3,545.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,993.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,415.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 3,051.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 3,217.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,553.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 422.00             | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,145.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,668.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,765.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 422.00             | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,654.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 3,049.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 3,795.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 1,483.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 3,447.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,514.00           | .00         |           |
| 2224        | LOCAL GOV'T LIABILITY POOL | 14635          | LIABILITY PREMIUM FY2024     | 07/01/2023   | 2,729.00           | .00         |           |
| Total 2224: |                            |                |                              |              | 86,905.00          | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-002 06-  | 3150 S ADAMS CANYON DR, JA   | 06/30/2023   | 176.47             | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-003 06-  | SPRUCE DR PUMP HOUSE, JA     | 06/30/2023   | 352.35             | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-005 06-  | CACHE KUDAR LT, JACKSON,     | 06/30/2023   | 49.15              | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-006 06-  | N CACHE ST LIGHTING, JACKS   | 06/30/2023   | 29.11              | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-008 06-  | CEMETERY, JACKSON, WY   20   | 06/30/2023   | 30.98              | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-010 06-  | ELY SPRINGS RD WELL 6,7,8, J | 06/30/2023   | 4,116.94           | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-014 06-  | 135 E BROADWAY AVE HEAT TA   | 06/30/2023   | 17.79              | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-016 06-  | 210 N CACHE ST HOME RANCH    | 06/30/2023   | 44.55              | .00         |           |
| 156         | LOWER VALLEY ENERGY INC    | 92050-017 06-  | WASTE WATER TRTMT INTERM     | 06/30/2023   | 16.00              | .00         |           |



| Vendor | Vendor Name             | Invoice Number | Description                   | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid |
|--------|-------------------------|----------------|-------------------------------|--------------|--------------------|-------------|-----------|
| 156    | LOWER VALLEY ENERGY INC | 92050-019 06-  | RANGEVIEW DR LIFT PUMP CO     | 06/30/2023   | 67.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-020 06-  | S HWY 89 PATHWAY TUNNEL LT    | 06/30/2023   | 35.63              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-021 06-  | 150 E PEARL AVE, JACKSON, W   | 06/30/2023   | 1,115.55           | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-023 06-  | RANGEVIEW DR LOTS 18,19 LT    | 06/30/2023   | 16.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-024 06-  | 1605 BERGER LN SEWER LIFT     | 06/30/2023   | 19.08              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-025 06-  | 450 W SNOW KING AVE NEW S     | 06/30/2023   | 541.40             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-026 06-  | 450 W SNOW KING AVE SHOP, J   | 06/30/2023   | 153.27             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-027 06-  | RANGEVIEW DR LOTS 20,21 LT    | 06/30/2023   | 18.05              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-028 06-  | RANGEVIEW DR LOTS 26,27 LT    | 06/30/2023   | 18.05              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-030 06-  | RANGEVIEW DR LOTS 95,96 LT    | 06/30/2023   | 17.86              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-031 06-  | MOUNTAIN VIEW LN LOT 38,39    | 06/30/2023   | 17.99              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-032 06-  | LILAC LN LOTS 88, 89 LTS, JAC | 06/30/2023   | 17.86              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-034 06-  | LILAC LN LOTS 80, 81 LTS, JAC | 06/30/2023   | 16.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-035 06-  | RANGEVIEW DR LOTS 41,42 LT    | 06/30/2023   | 20.89              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-036 06-  | RANGEVIEW DR LOTS 12,13 LT    | 06/30/2023   | 16.56              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-039 06-  | LILAC LN LOTS 86, 87 LTS, JAC | 06/30/2023   | 17.86              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-040 06-  | CORNER CREEK & LILAC LOTS     | 06/30/2023   | 16.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-041 06-  | LILAC & DAISY LOTS 99, 101 LT | 06/30/2023   | 16.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-043 06-  | CORNER CREEK LOTS 68,69 LT,   | 06/30/2023   | 16.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-044 06-  | SNOW KING ESTATES BOOSTE      | 06/30/2023   | 505.27             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-045 06-  | TOWN SQUARE LIGHTS, JACKS     | 06/30/2023   | 75.71              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-047 06-  | WASTE WATER TRTMT UV BLD      | 06/30/2023   | 16.00              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-049 06-  | WASTE WATER TRTMT PTB 545     | 06/30/2023   | 14,757.55          | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-050 06-  | 2 MG TANK, JACKSON, WY   200  | 06/30/2023   | 18.17              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-051 06-  | WELL #5 KARNS MEADOW DR,      | 06/30/2023   | 3,576.76           | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-052 06-  | 675 E BROADWAY AVE WELL #1    | 06/30/2023   | 825.20             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-053 06-  | WELLS #2 & #3, JACKSON, WY    | 06/30/2023   | 2,651.70           | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-054 06-  | CITY WELL ELK REF 1, JACKSO   | 06/30/2023   | 50.69              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-055 06-  | CITY WELL ELK REF 2, JACKSO   | 06/30/2023   | 9.30               | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-059 06-  | 440 W SNOW KING AVE POLICE    | 06/30/2023   | 32.95              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-060 06-  | 400 W SNOW KING AVE S GAR,    | 06/30/2023   | 41.82              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-061 06-  | 400 W SNOW KING AVE PUBLIC    | 06/30/2023   | 109.80             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-074 06-  | CRABTREE LN THAW WELL #2,     | 06/30/2023   | 16.24              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-078 06-  | 145 W HANSEN AVE FRONT, JA    | 06/30/2023   | 120.89             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-079 06-  | 145 W HANSEN AVE BACK, JAC    | 06/30/2023   | 98.64              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-081 06-  | IRR CONTROL & LTS PEARL ST,   | 06/30/2023   | 22.51              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-082 06-  | 400 W SNOW KING AVE E STOR    | 06/30/2023   | 40.34              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-090 06-  | 955 MAPLE WAY, JACKSON, WY    | 06/30/2023   | 51.37              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-092 06-  | 3150 S ADAMS CANYON DR ANI    | 06/30/2023   | 150.41             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-102 06-  | 145 W HANSEN AVE FRONT, JA    | 06/30/2023   | 40.34              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-105-382  | MULTIPLE STREET LIGHTS        | 06/30/2023   | 1,917.09           | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-106 06-  | 940 SIMON LN, JACKSON, WY     | 06/30/2023   | 128.19             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-111 06-3 | PEARL & WILLOW ST LTS, JACK   | 06/30/2023   | 18.31              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-114 06-3 | 210 N CACHE ST HOME RANCH     | 06/30/2023   | 264.44             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-126 06-  | SPRING WATER LN LIFT STATIO   | 06/30/2023   | 34.59              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-127 06-  | 3337 S CODY CREEK DR LIFT S   | 06/30/2023   | 414.13             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-130 06-  | 3 CREEK RANCH AFFORDABLE      | 06/30/2023   | 22.51              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-131 06-  | 195 E DELONEY AVE RESTROO     | 06/30/2023   | 184.29             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-132 06-  | 160 S MILLWARD ST PARKING     | 06/30/2023   | 1,222.36           | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-134 06-  | 160 S MILLWARD ST PARKING     | 06/30/2023   | 6.34               | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-332 06-  | 185 N GLENWOOD ST LTS, JAC    | 06/30/2023   | 29.17              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-334 06-  | JOSEPHINE LOOP LOT 15 LIFT    | 06/30/2023   | 105.31             | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-336 06-  | HIDDEN RANCH PATHWAY TUN      | 06/30/2023   | 22.44              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-341 06-  | 210 N CACHE ST HOME RANCH     | 06/30/2023   | 29.99              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-342 06-  | 25 S REDMOND ST LT PEDESTA    | 06/30/2023   | 30.78              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-345 06-  | 930 SIMON LN, JACKSON, WY     | 06/30/2023   | 93.38              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-353 06-  | W DELONEY & BROADWAY LTS,     | 06/30/2023   | 71.05              | .00         |           |
| 156    | LOWER VALLEY ENERGY INC | 92050-355 06-  | S CACHE SE OF CENTER ARTS     | 06/30/2023   | 66.01              | .00         |           |

| Vendor      | Vendor Name                | Invoice Number | Description                  | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|----------------------------|----------------|------------------------------|--------------|--------------------|-------------|------------|
| 156         | LOWER VALLEY ENERGY INC    | 92050-356 06-  | 55 KARNs MEADOW DR START     | 06/30/2023   | 285.69             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-357 06-  | 55 KARNs MEADOW DR START     | 06/30/2023   | 5,273.94           | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-358 06-  | 650 W BROADWAY PATHWAY LT    | 06/30/2023   | 60.91              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-359 06-  | MILLER PARK PARKING LOT CH   | 06/30/2023   | 205.82             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-360 06-  | 1035 W BROADWAY AVE PATH     | 06/30/2023   | 28.14              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-361 06-  | 625 W BROADWAY AVE NEW P     | 06/30/2023   | 23.03              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-362 06-  | STELLARIA LN/S HWY 89 LIGHT  | 06/30/2023   | 20.06              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-363 06-  | 455 VINE ST UTIL, JACKSON, W | 06/30/2023   | 48.24              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-364 06-  | 65 VIRGINIAN LN #5, JACKSON, | 06/30/2023   | 39.61              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-365 06-  | 65 VIRGINIAN LN #7, JACKSON, | 06/30/2023   | 48.70              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-367 06-  | 455 VINE ST APT #3, JACKSON, | 06/30/2023   | 30.31              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-368 06-  | 455 VINE ST APT #4, JACKSON, | 06/30/2023   | 45.30              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-370 06-  | 2022 WILDFLOWER CT, JACKS    | 06/30/2023   | 55.11              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-371 06-  | 2022 WILDFLOWER CT, JACKS    | 06/30/2023   | 45.36              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-374 06-  | 455 VINE ST APT #1, JACKSON, | 06/30/2023   | 47.04              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-375 06-  | 155 E PEARL AVE, JACKSON, W  | 06/30/2023   | 24.20              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-376 06-  | 149 E PEARL AVE, JACKSON, W  | 06/30/2023   | 65.37              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-378 06-  | 145 E PEARL AVE #A EAST, JAC | 06/30/2023   | 27.49              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-381 06-  | 915 SIMON LN, JACKSON, WY    | 06/30/2023   | 81.17              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-382 06-  | BUDGE DR LT SYSTEM, JACKS    | 06/30/2023   | 19.80              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-383 06-  | SNOW KING DR WATER TANK C    | 06/30/2023   | 17.73              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-385 06-  | 85 N SPRING GULCH RD SPRIN   | 06/30/2023   | 329.56             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-388 06-  | 121 SHERWOOD CT BLDG 2 BU    | 06/30/2023   | 30.59              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-389 06-  | 1640 MARTIN LN LIFT STATION, | 06/30/2023   | 21.28              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-390 06-  | 400 W SNOW KING AVE HOUSI    | 06/30/2023   | 220.66             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-391 06-  | 400 W SNOW KING AVE PARK M   | 06/30/2023   | 62.51              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-392 06-  | 400 W SNOW KING AVE ADMIN,   | 06/30/2023   | 357.51             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-393 06-  | 400 W SNOW KING AVE EMPLO    | 06/30/2023   | 282.54             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-395 06-  | 145 E PEARL AVE #C LOFT, JAC | 06/30/2023   | 32.01              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-396 06-  | 145 E PEARL AVE HSE/CMN, JA  | 06/30/2023   | 78.67              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-397 06-  | 145 E PEARL AVE #B WEST, JA  | 06/30/2023   | 47.98              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-398 06-  | 155 E PEARL AVE, JACKSON, W  | 06/30/2023   | 24.94              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-399 06-  | 155 E PEARL AVE, JACKSON, W  | 06/30/2023   | 45.89              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-401 06-  | 455 VINE ST APT #2, JACKSON, | 06/30/2023   | 51.98              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-405 06-  | 3585 S CANADIAN DR, JACKSO   | 06/30/2023   | 61.99              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-406 06-  | 3585 S CANADIAN DR, JACKSO   | 06/30/2023   | 25.14              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-407 06-  | 130 E KELLY AVE #23, JACKSO  | 06/30/2023   | 21.84              | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-409 06-  | 6905 W HWY 22 RENTAL, WILS   | 06/30/2023   | 100.07             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-410 06-  | 910 SMITH LN, JACKSON, WY    | 06/30/2023   | 124.50             | .00         |            |
| 156         | LOWER VALLEY ENERGY INC    | 92050-413 06-  | 76 E CIRCLE DR, THAYNE, WY   | 06/30/2023   | 167.91             | .00         |            |
| Total 156:  |                            |                |                              |              | 43,444.46          | .00         |            |
| 7112        | MARKMAN, JASON             | 062023         | JULY RENT                    | 06/20/2023   | 1,900.00           | 1,900.00    | 07/07/2023 |
| 7112        | MARKMAN, JASON             | 070523         | AUGUST RENT                  | 07/05/2023   | 1,900.00           | .00         |            |
| Total 7112: |                            |                |                              |              | 3,800.00           | 1,900.00    |            |
| 3839        | MATTHEW BENDER & CO., INC. | 37246003       | WY STATS                     | 06/08/2023   | 452.36             | .00         |            |
| 3839        | MATTHEW BENDER & CO., INC. | 37246011       | WY COURT RULES               | 06/08/2023   | 285.31             | .00         |            |
| Total 3839: |                            |                |                              |              | 737.67             | .00         |            |
| 6770        | MOBILITY FOREFRONT LLC     | MFFINV0189     | JULY MONTHLY RENT            | 06/01/2023   | 35,000.00          | .00         |            |
| 6770        | MOBILITY FOREFRONT LLC     | MFFINV0195     | MONTHLY RENT                 | 07/01/2023   | 35,000.00          | .00         |            |
| Total 6770: |                            |                |                              |              | 70,000.00          | .00         |            |

| Vendor      | Vendor Name                | Invoice Number | Description                 | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|----------------------------|----------------|-----------------------------|--------------|--------------------|-------------|------------|
| 5973        | MURDOCH MEMORIALS          | 230296         | ROCKS                       | 06/12/2023   | 1,000.00           | .00         |            |
| Total 5973: |                            |                |                             |              | 1,000.00           | .00         |            |
| 257         | NAPAAUTO PARTS INC.        | 141978         | OUTLET                      | 06/27/2023   | 12.29              | .00         |            |
| 257         | NAPAAUTO PARTS INC.        | 148892         | O2 SENSOR                   | 06/27/2023   | 119.68             | .00         |            |
| 257         | NAPAAUTO PARTS INC.        | 149318         | battery                     | 06/28/2023   | 153.20             | .00         |            |
| 257         | NAPAAUTO PARTS INC.        | 149539         | FILTERS                     | 06/29/2023   | 13.32              | .00         |            |
| Total 257:  |                            |                |                             |              | 298.49             | .00         |            |
| 187         | NELSON ENGINEERING         | 61605          | SCOTT LANE PLANNING         | 05/31/2023   | 1,072.50           | .00         |            |
| 187         | NELSON ENGINEERING         | 61622          | TOJ NETWORK IMPROVEMENT     | 05/31/2023   | 4,714.00           | .00         |            |
| 187         | NELSON ENGINEERING         | 61720          | 23-223 ASPEN CEMETARY       | 06/28/2023   | 295.00             | .00         |            |
| Total 187:  |                            |                |                             |              | 6,081.50           | .00         |            |
| 7271        | PALIMERI, DANIEL           | 070623         | RETURN BOND 23-02-0366      | 07/06/2023   | 1,500.00           | 1,500.00    | 07/06/2023 |
| Total 7271: |                            |                |                             |              | 1,500.00           | 1,500.00    |            |
| 7070        | PEAK WATER SERVICES, LLC   | INVPWS1415     | CAPACITOR KIT               | 06/10/2023   | 2,639.12           | .00         |            |
| Total 7070: |                            |                |                             |              | 2,639.12           | .00         |            |
| 6454        | PROCTOR, CJ                | 062923         | HORSE LEASE                 | 06/29/2023   | 350.00             | .00         |            |
| Total 6454: |                            |                |                             |              | 350.00             | .00         |            |
| 4371        | PROFORCE LAW ENFORCEME     | 522125         | TARGET                      | 06/20/2023   | 342.18             | .00         |            |
| Total 4371: |                            |                |                             |              | 342.18             | .00         |            |
| 6649        | QUADIENT LEASING USA, INC. | N9995994       | POSTAGE MACHINE LEASE       | 06/21/2023   | 468.69             | .00         |            |
| Total 6649: |                            |                |                             |              | 468.69             | .00         |            |
| 7234        | RAMSEY, BETH               | 062823         | TRAVEL REIMBURSE            | 06/28/2023   | 54.06              | .00         |            |
| Total 7234: |                            |                |                             |              | 54.06              | .00         |            |
| 5838        | Rendezvous Insurance Inc.  | 3653           | INSURANCE START             | 07/03/2023   | 137,222.75         | .00         |            |
| Total 5838: |                            |                |                             |              | 137,222.75         | .00         |            |
| 4869        | RIDGELINE EXCAVATION INC   | 062623         | W. GILL SEWER SERVICE PAY A | 06/26/2023   | 209,585.93         | .00         |            |
| 4869        | RIDGELINE EXCAVATION INC   | 1638           | FLAT CREEK BOULDERS         | 06/30/2023   | 1,358.84           | .00         |            |
| Total 4869: |                            |                |                             |              | 210,944.77         | .00         |            |
| 7277        | ROPPIA, DERRICK            | 063023         | TRAVEL REIMBURSEMENT        | 06/30/2023   | 350.00             | .00         |            |
| Total 7277: |                            |                |                             |              | 350.00             | .00         |            |
| 2597        | RUSCHILL, RUSSELL          | 062923         | HORSE LEASE                 | 06/29/2023   | 575.00             | .00         |            |
| Total 2597: |                            |                |                             |              | 575.00             | .00         |            |

| Vendor      | Vendor Name                    | Invoice Number | Description             | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|--------------------------------|----------------|-------------------------|--------------|--------------------|-------------|------------|
| 7189        | SAUNDERS RANCH COMPANY         | 050923         | HAUL START BUS          | 05/09/2023   | 930.00             | .00         |            |
| Total 7189: |                                |                |                         |              | 930.00             | .00         |            |
| 201         | SENIOR CENTER OF JACKSON       | 17233          | RANCHER PROPERTY RENTAL | 06/30/2023   | 1,000.00           | .00         |            |
| 201         | SENIOR CENTER OF JACKSON       | 17233          | RANCHER PROPERTY RENTAL | 06/30/2023   | 3,200.00           | .00         |            |
| 201         | SENIOR CENTER OF JACKSON       | 17233          | RANCHER PROPERTY RENTAL | 06/30/2023   | 15,800.00          | .00         |            |
| Total 201:  |                                |                |                         |              | 20,000.00          | .00         |            |
| 4548        | SILVER CREEK SUPPLY            | 0011315821-00  | CLYCOL                  | 06/16/2023   | 127.14             | .00         |            |
| Total 4548: |                                |                |                         |              | 127.14             | .00         |            |
| 4720        | SILVERSTAR                     | 54639 0723     | 54639 SERVICES          | 07/01/2023   | 2,695.41           | .00         |            |
| 4720        | SILVERSTAR                     | 654791 0723    | MONTHLY SERVICES        | 07/01/2023   | 1,739.46           | .00         |            |
| Total 4720: |                                |                |                         |              | 4,434.87           | .00         |            |
| 5632        | SNAKE RIVER MEP COMPLETE,      | 042523         | BOILER PUMPS AT START   | 04/25/2023   | 6,536.97           | .00         |            |
| Total 5632: |                                |                |                         |              | 6,536.97           | .00         |            |
| 7050        | SOSA'S JANITORIAL SERVICE      | 061923         | CLEANING TOWN HALL      | 06/19/2023   | 4,800.00           | .00         |            |
| 7050        | SOSA'S JANITORIAL SERVICE      | 063023         | JUNE CLEANING           | 06/30/2023   | 2,400.00           | .00         |            |
| Total 7050: |                                |                |                         |              | 7,200.00           | .00         |            |
| 1505        | SPRING CREEK ANIMAL HOSPI      | 5334611541     | ANIMAL SUPPLIES         | 06/28/2023   | 125.97             | .00         |            |
| 1505        | SPRING CREEK ANIMAL HOSPI      | 5334611542     | ANIMAL CARE             | 06/28/2023   | 36.52              | .00         |            |
| 1505        | SPRING CREEK ANIMAL HOSPI      | 5334611543     | ANIMAL CARE             | 06/28/2023   | 120.00             | .00         |            |
| Total 1505: |                                |                |                         |              | 282.49             | .00         |            |
| 6838        | SPSC POA - South Park Services | 070323         | LOT FEE AND WATER FEE   | 07/03/2023   | 301.38             | .00         |            |
| Total 6838: |                                |                |                         |              | 301.38             | .00         |            |
| 4513        | STANARD & ASSOCIATES, INC      | SA000054641    | POLICE TEST             | 06/29/2023   | 96.00              | .00         |            |
| 4513        | STANARD & ASSOCIATES, INC      | SA000054715    | SELECTION TESTS         | 06/30/2023   | 245.00             | .00         |            |
| Total 4513: |                                |                |                         |              | 341.00             | .00         |            |
| 7088        | STONE, KIRK                    | 062023         | JULY RENT               | 06/20/2023   | 2,800.00           | 2,800.00    | 07/07/2023 |
| 7088        | STONE, KIRK                    | 070523         | AUGUST RENT             | 07/05/2023   | 2,800.00           | .00         |            |
| Total 7088: |                                |                |                         |              | 5,600.00           | 2,800.00    |            |
| 1443        | TETON COUNTY CLERK             | 070522PR       | JULY PARK AND REC       | 07/05/2022   | 119,601.58         | .00         |            |
| 1443        | TETON COUNTY CLERK             | 070523FE       | JULY FIRE EMS           | 07/05/2023   | 113,078.50         | .00         |            |
| 1443        | TETON COUNTY CLERK             | 070523H        | JULY HOUSING            | 07/05/2023   | 32,102.25          | .00         |            |
| Total 1443: |                                |                |                         |              | 264,782.33         | .00         |            |
| 581         | TETON COUNTY INTEGRATED        | 8595           | CARDBOARD               | 07/01/2023   | 345.00             | .00         |            |
| Total 581:  |                                |                |                         |              | 345.00             | .00         |            |

| Vendor      | Vendor Name               | Invoice Number | Description              | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|-------------|---------------------------|----------------|--------------------------|--------------|--------------------|-------------|------------|
| 996         | TETON COUNTY SPECIAL FIRE | 053023F        | MAY 2023                 | 05/30/2023   | 9,215.84           | .00         |            |
| 996         | TETON COUNTY SPECIAL FIRE | 070323CF       | JUNE CAPITAL FIRE 2023   | 07/03/2023   | 1,158.34           | .00         |            |
| 996         | TETON COUNTY SPECIAL FIRE | 070323S        | JUNE 2023                | 07/03/2023   | 18,699.38          | .00         |            |
| Total 996:  |                           |                |                          |              | 29,073.56          | .00         |            |
| 1614        | TETON COUNTY-FUND 10      | 070323D        | JUNE 2023 DISPATCH       | 07/03/2023   | 44,517.17          | .00         |            |
| 1614        | TETON COUNTY-FUND 10      | 070323P        | JUNE 2023 PATHWAYS       | 07/03/2023   | 17,960.99          | .00         |            |
| 1614        | TETON COUNTY-FUND 10      | 070323PLAN     | JUNE 2023 PLANNING       | 07/03/2023   | 11,681.44          | .00         |            |
| Total 1614: |                           |                |                          |              | 74,159.60          | .00         |            |
| 3027        | TETON COUNTY-FUND 13      | 070323C        | JUNE 2023 CAPITAL        | 07/03/2023   | 92,321.22          | .00         |            |
| Total 3027: |                           |                |                          |              | 92,321.22          | .00         |            |
| 268         | TETON MOTORS INC          | 5105577        | HUB'                     | 03/14/2023   | 229.25             | .00         |            |
| 268         | TETON MOTORS INC          | 5105792        | PUMP                     | 04/03/2023   | 382.34             | .00         |            |
| 268         | TETON MOTORS INC          | 5105967        | ACTUATRO                 | 04/19/2023   | 335.84             | .00         |            |
| 268         | TETON MOTORS INC          | 5106698        | TPMS                     | 06/26/2023   | 386.32             | .00         |            |
| 268         | TETON MOTORS INC          | 8019759        | REPAIR                   | 06/30/2023   | 2,514.97           | .00         |            |
| Total 268:  |                           |                |                          |              | 3,848.72           | .00         |            |
| 270         | TETON RENTAL CENTER       | 129031         | BUBBA ROPE               | 06/27/2023   | 480.00             | .00         |            |
| Total 270:  |                           |                |                          |              | 480.00             | .00         |            |
| 3162        | TETON TRASH REMOVAL, INC. | 23 JUL 488     | TRASH 145 west hansen    | 07/01/2023   | 51.50              | .00         |            |
| 3162        | TETON TRASH REMOVAL, INC. | 23 JUL 488     | TRASH 145 west hansen 2a | 07/01/2023   | 51.50              | .00         |            |
| Total 3162: |                           |                |                          |              | 103.00             | .00         |            |
| 6941        | THE CONNOR E FIELD TRUST  | 062023         | JULY RENT                | 06/20/2023   | 2,575.00           | 2,575.00    | 07/07/2023 |
| 6941        | THE CONNOR E FIELD TRUST  | 070523         | AUGUST RENT              | 07/05/2023   | 2,575.00           | .00         |            |
| Total 6941: |                           |                |                          |              | 5,150.00           | 2,575.00    |            |
| 6810        | THE TIRE RACK, INC.       | KW91401        | TIRES                    | 06/29/2023   | 594.96             | .00         |            |
| Total 6810: |                           |                |                          |              | 594.96             | .00         |            |
| 3955        | THOMSON WEST              | 848551638      | LIBRARY PLAN CHANGES     | 07/01/2023   | 460.47             | .00         |            |
| 3955        | THOMSON WEST              | 848551638      | LIBRARY PLAN CHANGES     | 07/01/2023   | 460.47             | .00         |            |
| Total 3955: |                           |                |                          |              | 920.94             | .00         |            |
| 6591        | T-MOBILE                  | 9532286066     | GPS LOCATE               | 04/28/2023   | 100.00             | .00         |            |
| 6591        | T-MOBILE                  | 9675291416 06  | JUNE SERVICES            | 06/30/2023   | 30.91              | .00         |            |
| Total 6591: |                           |                |                          |              | 130.91             | .00         |            |
| 6363        | TMSC LLC                  | 2023-005-3FM   | 155 E PEARL              | 04/10/2023   | 1,596.60           | .00         |            |
| 6363        | TMSC LLC                  | 2023-005-4FM   | FACILITIES MAINTENANCE   | 06/28/2023   | 3,846.30           | .00         |            |
| Total 6363: |                           |                |                          |              | 5,442.90           | .00         |            |
| 777         | UPPER CASE PRINTING INK   | 565            | FOOD WASTER FLYER        | 06/06/2023   | 197.54             | .00         |            |

| Vendor      | Vendor Name               | Invoice Number | Description              | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid |
|-------------|---------------------------|----------------|--------------------------|--------------|--------------------|-------------|-----------|
| Total 777:  |                           |                |                          |              | 197.54             | .00         |           |
| 3881        | VALLEY OFFICE SYSTEMS     | AR1188625      | CONTRACT COPIER          | 06/23/2023   | 586.66             | .00         |           |
| Total 3881: |                           |                |                          |              | 586.66             | .00         |           |
| 7176        | VICTOR VILLAGE, LLC       | 062023         | JULY RENT                | 06/20/2023   | 1,500.00           | .00         |           |
| 7176        | VICTOR VILLAGE, LLC       | 070523         | AUGUST RENT              | 07/05/2023   | 1,500.00           | .00         |           |
| Total 7176: |                           |                |                          |              | 3,000.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 1,731.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 1,575.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 445.00             | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 9,764.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 15,742.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 11,960.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 10,794.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 73,136.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 4,933.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 29,345.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 24,946.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 37,584.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 8,055.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 4,546.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 1,667.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 32,508.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 4,203.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 798.00             | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 17,437.71          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 6,581.00           | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1533           | PROPERTY ASSESSMENT FY20 | 07/01/2022   | 11,298.00          | .00         |           |
| 2736        | W.A.R.M. PROPERTY INSURAN | 1574           | CRIME INSURANCE          | 07/01/2023   | 811.50             | .00         |           |
| Total 2736: |                           |                |                          |              | 309,860.21         | .00         |           |
| 192         | WEBER, MICHELLE           | 062923         | HORSE LEASE              | 06/29/2023   | 575.00             | .00         |           |
| Total 192:  |                           |                |                          |              | 575.00             | .00         |           |
| 6226        | WEST COAST CODE CONSULT   | UT23-579-005   | PLAN REVIEW SERVICES     | 06/01/2023   | 4,455.00           | .00         |           |
| Total 6226: |                           |                |                          |              | 4,455.00           | .00         |           |
| 563         | WESTBANK SANITATION       | 4285104T22     | TRASH PICK UP @ WWTP-    | 07/01/2022   | 984.70             | .00         |           |
| 563         | WESTBANK SANITATION       | 4287255T022    | 940 Simon Lane           | 07/01/2023   | 198.28             | .00         |           |
| 563         | WESTBANK SANITATION       | 4288147T022    | 3585 CANADIAN DR         | 07/01/2023   | 160.80             | .00         |           |
| 563         | WESTBANK SANITATION       | 4288166T022    | 910 SIMON LANE           | 07/01/2023   | .84                | .00         |           |
| Total 563:  |                           |                |                          |              | 1,344.62           | .00         |           |
| 2802        | WESTWOOD CURTIS           | 060623         | PAY APP#2 FLAT CREEK DR  | 06/06/2023   | 50,000.00          | .00         |           |
| 2802        | WESTWOOD CURTIS           | 060623         | PAY APP#2 FLAT CREEK DR  | 06/06/2023   | 49,797.80          | .00         |           |
| 2802        | WESTWOOD CURTIS           | 060623         | PAY APP#2 FLAT CREEK DR  | 06/06/2023   | 201,380.00         | .00         |           |
| Total 2802: |                           |                |                          |              | 301,177.80         | .00         |           |

| Vendor        | Vendor Name                | Invoice Number | Description            | Invoice Date | Net Invoice Amount | Amount Paid | Date Paid  |
|---------------|----------------------------|----------------|------------------------|--------------|--------------------|-------------|------------|
| 472           | WHITE GLOVE CLEANING, INC. | 8960           | SK HOUSING             | 06/30/2023   | 400.00             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8961           | PUBLIC WORKS           | 06/30/2023   | 1,500.00           | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8962           | PARKING GARAGE         | 06/30/2023   | 250.00             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8964           | BUNKHOUSE              | 06/30/2023   | 125.00             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8993           | SUPPLIES               | 06/30/2023   | 338.50             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8994           | SUPPLIES               | 06/30/2023   | 407.25             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8995           | SUPPLIES               | 06/30/2023   | 886.75             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8996           | SUPPLIES               | 06/30/2023   | 551.00             | .00         |            |
| 472           | WHITE GLOVE CLEANING, INC. | 8997           | SOAP                   | 06/30/2023   | 442.00             | .00         |            |
| Total 472:    |                            |                |                        |              | 4,900.50           | .00         |            |
| 7081          | WILMA D SORSBY TRUST       | 062023         | JULY RENT              | 06/20/2023   | 3,000.00           | 3,000.00    | 07/07/2023 |
| 7081          | WILMA D SORSBY TRUST       | 070523         | AUGUST RENT            | 07/05/2023   | 3,000.00           | .00         |            |
| Total 7081:   |                            |                |                        |              | 6,000.00           | 3,000.00    |            |
| 6117          | WILSON, JOHN               | 062023         | JULY RENT              | 06/20/2023   | 2,200.00           | 2,200.00    | 07/07/2023 |
| 6117          | WILSON, JOHN               | 070523         | AUGUST RENT            | 07/05/2023   | 2,200.00           | .00         |            |
| Total 6117:   |                            |                |                        |              | 4,400.00           | 2,200.00    |            |
| 7274          | WRAP TECHNOLOGIES, INC     | INV1500        | SAFETY CAPS            | 06/29/2023   | 931.50             | .00         |            |
| Total 7274:   |                            |                |                        |              | 931.50             | .00         |            |
| 4139          | WY WORKERS' SAFETY & COM   | 053123         | MAY PREMIUM            | 06/30/2023   | 18,494.58          | 18,494.58   | 06/30/2023 |
| 4139          | WY WORKERS' SAFETY & COM   | 06302023       | JUNE PREMIUM           | 06/30/2023   | 29,582.62          | 29,582.62   | 06/30/2023 |
| Total 4139:   |                            |                |                        |              | 48,077.20          | 48,077.20   |            |
| 406           | WYOMING LAW ENFORCEMEN     | 070623         | EDUCATION FEE JUNE     | 07/06/2023   | 125.00             | .00         |            |
| Total 406:    |                            |                |                        |              | 125.00             | .00         |            |
| 7065          | WYOMING LAW ENFORCEMEN     | C12066         | PEACE OFFICER TRAINING | 06/22/2023   | 1,229.25           | .00         |            |
| Total 7065:   |                            |                |                        |              | 1,229.25           | .00         |            |
| 329           | WYOMING RETIREMENT SYST    | 063023         | JUNE CONTRIBUTIONS     | 06/30/2023   | 230,228.05         | 230,228.05  | 06/30/2023 |
| Total 329:    |                            |                |                        |              | 230,228.05         | 230,228.05  |            |
| 1764          | WYOMING.COM INC            | 2155084        | DOMAIN HOSTING         | 07/05/2023   | 5.00               | .00         |            |
| Total 1764:   |                            |                |                        |              | 5.00               | .00         |            |
| 5539          | Y2 CONSULTANTS, LLC        | 20219          | SRV-CNST02             | 06/23/2023   | 11,158.50          | .00         |            |
| Total 5539:   |                            |                |                        |              | 11,158.50          | .00         |            |
| 2842          | YELLOW IRON EXCAVATION, LL | 85697          | 155 E PEARL            | 06/30/2023   | 120.00             | .00         |            |
| Total 2842:   |                            |                |                        |              | 120.00             | .00         |            |
| Grand Totals: |                            |                |                        |              | 4,125,648.47       | 399,115.66  |            |

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

Dated: \_\_\_\_\_

Mayor: \_\_\_\_\_

City Council: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

City Recorder: \_\_\_\_\_

City Treasurer: \_\_\_\_\_

Report Criteria:

Detail report.

Invoices with totals above \$0 included.

Paid and unpaid invoices included.



**TOWN OF JACKSON  
MUNICIPAL COURT  
MONTHLY REPORT FOR JUNE 2023**

During the month of June, the Court received \$42,572 in fines, costs, and fees.  
605 charges were filed: 528 parking violations, 77 summons.  
48 cases were dismissed: 33 parking violations.

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

**CLOSED CASES (Non-Parking only)**

| <b><u>CITATION</u></b> | <b><u>OFFENSE</u></b>                                 | <b><u>DISPOSITION</u></b>           | <b><u>\$</u></b> |
|------------------------|-------------------------------------------------------|-------------------------------------|------------------|
| 99901N                 | Driver & Passenger Req. to wear seat belt             | BF                                  | 25               |
| 99903N                 | Driver & Passenger Req. to wear seat belt             | BF                                  | 25               |
| 95357J                 | Driver & Passenger Req. to wear seat belt             | BF                                  | 25               |
| 99907N                 | Driver & Passenger Req. to wear seat belt             | BF                                  | 25               |
| 99905N                 | Driver & Passenger Req. to wear seat belt             | BF                                  | 25               |
| 186005680AC            | Failure to Appear                                     | BF                                  | 50               |
| 186005306AC            | Failure to Display Taxi Fares                         | BF                                  | 100              |
| 99829N                 | Failure to display valid license plate, tabs, permits | BF                                  | 100              |
| 186004740AC            | Failure to stop at a red light                        | BF                                  | 140              |
| 99376N                 | Failure to yield ROW                                  | BF                                  | 100              |
| 99377N                 | Failure to yield ROW approaching intersections        | BF                                  | 100              |
| 01250M                 | Following too Close                                   | BF                                  | 100              |
| 01863M                 | Following too Close                                   | BF                                  | 100              |
| 01394M                 | Following too Close                                   | BF                                  | 90               |
| 186004635AC            | Improper Display of Tabs-registration                 | BF                                  | 90               |
| 186005183AC            | Improper Display of Tabs-registration                 | BF                                  | 90               |
| 186005364AC            | Improper Display of Tabs-registration                 | BF                                  | 90               |
| 98965N                 | Limitations on Backing                                | BF                                  | 90               |
| 98955N                 | Limitations on Backing                                | BF                                  | 90               |
| 186005433AC            | MPH over limit Bond 40/25                             | BF                                  | 195              |
| 99286N                 | MPH over limit Bond 40/30                             | BF                                  | 140              |
| 99279N                 | MPH over limit Bond 40/30                             | BF                                  | 140              |
| 95356J                 | MPH over limit Bond 43/30                             | BF                                  | 181              |
| 186005255AC            | MPH over limit Bond 46/30                             | BF                                  | 202              |
| 186005511AC            | MPH over limit Bond 46/30                             | BF                                  | 202              |
| 98956N                 | Obey traffic control device designating lane          | BF                                  | 90               |
| 98966N                 | Passing a school Bus                                  | BF                                  | 440              |
| 01949M                 | Public intoxication                                   | BF                                  | 135              |
| 01605M                 | Public intoxication                                   | BF                                  | 110              |
| 98939N                 | Public intoxication                                   | BF                                  | 110              |
| 99807N                 | Speed Limits Generally 49/30                          | BF                                  | 233              |
| 99378N                 | Speeding in a school zone 30/20                       | BF                                  | 295              |
| 01948M                 | state statute 31-7-106                                | BF                                  | 150              |
| 186005572AC            | Unsafe Turning Movement                               | BF                                  | 90               |
| 98957N                 | Unsafe Turning Movement                               | BF                                  | 90               |
| 186004898AC            | Vehicle shall have at least 2 headlamps               | BF                                  | 90               |
| 98680N                 | Yielding ROW on sidewalks                             | BF                                  | 90               |
| 186005435AC            | Driver & Passenger Req. to wear seat belt             | D- Per Town's Motion                | 0                |
| 01475M                 | Failure to Maintain Lane                              | D- Per Town's Motion                | 0                |
| 186004897AC            | Operating Under Suspended or revoked license          | D- Per Town's Motion                | 0                |
| 01864M                 | Public intoxication                                   | D- Per Town's Motion                | 0                |
| 186005416AC            | Signals by hand or arm & signal lamps                 | D- Per Town's Motion                | 0                |
| 186005417AC            | Tail Lamps required                                   | D- Per Town's Motion                | 0                |
| 01393M                 | Use of cell phone while driving prohibited            | D- Per Town's Motion                | 0                |
| 99988N                 | Compulsory Auto Insurance                             | D- Provided valid information       | 0                |
| 98278N                 | Compulsory Auto Insurance                             | D- Provided valid information       | 0                |
| 99991N                 | Compulsory Auto Insurance                             | D- Provided valid information       | 0                |
| 186005254AC            | MPH over limit Bond 48/30                             | D- TS                               | 0                |
| 99987N                 | Speeding urban - 30 mph zone                          | D- Not filed within 14 days         | 0                |
| 186002823AC            | Driving/Control of vehicle while intox                | DA - In accordance with WS 7-13-301 | 760              |

|             |                                        |                                     |     |
|-------------|----------------------------------------|-------------------------------------|-----|
| 186002959AC | Driving/Control of vehicle while intox | DA - In accordance with WS 7-13-301 | 760 |
| 01071M      | DUI                                    | DA - In accordance with WS 7-13-301 | 760 |
| 186005318AC | Limitations on Backing                 | NCP                                 | 240 |

# STAFF REPORT



|                               |                                                    |                        |                         |
|-------------------------------|----------------------------------------------------|------------------------|-------------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                      | <b>Meeting Title:</b>  | Council Regular Meeting |
| <b>Submitting Department:</b> | Planning Department                                | <b>Presenter:</b>      | Paul Anthony            |
| <b>Agenda Item:</b>           | P23-057: TEMPORARY SIGN PERMIT<br>Hole Food Rescue | <b>Public Comment:</b> | Yes                     |

## **Purpose & Policy Considerations.**

To approve or deny a temporary sign not requiring a special event or exposition license under the Town's sign standards.

## **Requested Action.**

Hole Food Rescue has requested to display one (1) temporary banner under Section 5.6.1.C.4.c of the LDRs to advertise their Million Pound Party (see attached for design details).

- 105 Buffalo Way – Albertson's during:
  - August 13, 2023 – August 25, 2023

Section 5.6.1.C.4.c of the Town's Land Development Regulations allows Council to approve up to four (4) off-site banners. The event does not require any Town services; therefore, a special event license is not required. Staff recommends approval, as the Town has permitted such signs in the past, as long as all other regulations for signage are complied with.

## **Recommendations.**

The Planning Director recommends approval based on finding that the request is consistent with the LDRs subject to the following conditions:

1. The use of site shall be granted by the property owner.
2. The sign shall not be located on the sidewalks or in the public right of way.
3. The sign is approved for the following location:
  - 105 Buffalo Way – Albertson's during:
    - August 13, 2023 – August 25, 2023

## **Background.**

NA

## **Analysis.**

NA

## **Alternatives (Optional).**

NA

**Fiscal Impact.**

None

**Staff Impact.**

Preparation of this report took approximately 2 hours of staff time to process.

**Attachments or Links.**

Applicant Submittal

**Suggested Motion.** *Council always has the option to adopt, approve with conditions, continue, or deny items.*

I move to **approve** temporary banner application (P23-057) for Hole Food Rescue including the three conditions of approval recommended by the Planning Director in this staff report dated July 17, 2023.

**Location:** 105 Buffalo Way (Albertson's)

**Banner Design:** Albertson's: 8' x 6'

**Material:** Vinyl





## TEMPORARY SIGN PERMIT APPLICATION

### Planning & Building Department

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

**First, go to [www.townofjackson.com/245/Temporary-Sign-Permit](http://www.townofjackson.com/245/Temporary-Sign-Permit)  
for process and other necessary information.**

#### EVENT NAME:

Event Name: Million Pound Party Physical Address of Event: 240 S Glenwood St, Jackson, WY 83001  
Description of Event: Hole Food Rescue's annual celebration of reducing food waste  
Grand Opening ☐ Yes ☒ No

#### EVENT SPONSOR/APPLICANT: Name:

Mailing Address: PO BOX 2955 JACKSON WY Phone: 716-969-1340  
E-mail: emily@holefoodrescue.org ZIP: 83001  
Non-Profit: ☒ For Profit: ☐

#### TEMPORARY BANNER LOCATION: Consent from Property Owner Required

|                                                                                                  |                                                                                       |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Business/Description: <u>Albertson's</u>                                                         | Business/Description: _____                                                           |
| Physical Address: <u>105 Buffalo Way</u>                                                         | Physical Address: _____                                                               |
| Dates of Display: <u>Aug 13 - 25</u>                                                             | Dates of Display: _____                                                               |
| Consent from Owner Obtained? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | Consent from Owner Obtained? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Business/Description: _____                                                                      | Business/Description: _____                                                           |
| Physical Address: _____                                                                          | Physical Address: _____                                                               |
| Dates of Display: _____                                                                          | Dates of Display: _____                                                               |
| Consent from Owner Obtained? Yes <input type="checkbox"/> No <input type="checkbox"/>            | Consent from Owner Obtained? Yes <input type="checkbox"/> No <input type="checkbox"/> |

#### SUBMITTAL REQUIREMENTS. Have you attached the following? Please answer accordingly.

Yes ☒ No ☐ Illustration of each proposed sign that includes dimensions, colors, materials and type of sign.  
Yes ☒ No ☐ Installation specifications, and any structural details or specifications required for freestanding signs.

*Under penalty of perjury, I hereby certify that I have read this application 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 the Town of Jackson 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 Authorized Event Applicant

Emily Wuebbolt

\_\_\_\_\_  
Applicant Name Printed

4/25/2023

\_\_\_\_\_  
Date

\_\_\_\_\_  
Communications and Development Assistant

\_\_\_\_\_  
Title

# STAFF REPORT



|                               |                                                      |                        |              |
|-------------------------------|------------------------------------------------------|------------------------|--------------|
| <b>Meeting Date:</b>          | July 17, 2023                                        | <b>Meeting Title:</b>  | Town Council |
| <b>Submitting Department:</b> | Planning Department                                  | <b>Presenter:</b>      | Paul Anthony |
| <b>Agenda Item:</b>           | P23-115 TEMPORARY SIGN PERMIT<br>Stomping the Divots | <b>Public Comment:</b> | Yes          |

## Purpose & Policy Considerations.

To approve or deny a temporary sign not requiring a special event or exposition license under the Town's sign standards.

## Requested Action.

Jackson Hole Therapeutic Riding has requested to display one temporary banner under Section 5.6.1.C.4.c of the LDRs to advertise their Stomping the Divots event (see attached for design details).

- 105 Buffalo Way, Albertson's during:
  - July 30, 2023- August 5, 2023

Section 5.6.1.C.4.c of the Town's Land Development Regulations allows Council to approve up to four (4) off-site banners. The event does not require any Town services; therefore, a special event license is not required. Staff recommends approval, as the Town has permitted such signs in the past, as long as all other regulations for signage are complied with.

## Recommendations.

The Planning Director recommends approval based on finding that the request is consistent with the LDRs subject to the following conditions:

1. The use of site shall be granted by the property owner.
2. The sign shall not be located on the sidewalks or in the public right of way.
3. The sign is approved for the following location:

- 105 Buffalo Way, Albertson's during:
  - July 30, 2023- August 5, 2023

## Background.

NA

## Analysis.

NA

## Alternatives (Optional).

NA

**Fiscal Impact.**

None

**Staff Impact.**

Preparation of this report took approximately 2 hours of staff time to process.

**Attachments or Links.**

Applicant Submittal

**Suggested Motion.** *Council always has the option to adopt, approve with conditions, continue, or deny items.*

I move to **approve** temporary banner application (P23-115) for Stomping the Divots, including the three conditions of approval recommended by the Planning Director in this staff report dated July 17, 2023.



## Albertson's: 10' x 14' Vinyl



# STOMPING *the* DIVOTS

AUG  
**13**  
2022

MELODY RANCH  
POLO FIELDS

**JHTR.ORG** 307.733.1374

**5:00**  
O'CLOCK IN  
THE EVENING

**POLO • DINNER • DANCING • LIVE AUCTION**



Albertsons:

- 14'H x 10' W
- Thickness: 13 oz Vinyl
- Printed Sides: Single Sided
- Edge Finish: Welded Hem
- Grommets: Every 2-3 ft
- Pole Pockets: None
- Accessories: None



## TEMPORARY SIGN PERMIT APPLICATION

### Planning & Building Department

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

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

**First, go to [www.townofjackson.com/245/Temporary-Sign-Permit](http://www.townofjackson.com/245/Temporary-Sign-Permit)  
for process and other necessary information.**

#### EVENT NAME:

Event Name: Stomping the Divots Physical Address of Event: 5305 Ricks Rd  
Description of Event: Annual Fundraiser for Jackson Hole Therapeutic Riding  
Grand Opening ☐ Yes ☒ No ☐

#### EVENT SPONSOR/APPLICANT: Name:

Mailing Address: Tori Plennes Phone: (307)-733-1374  
E-mail: PO Box 415 Teton Village, WY ZIP: 83025  
director@jhtr.org Non-Profit: ☒ For Profit: ☐

#### TEMPORARY BANNER LOCATION: Consent from Property Owner Required

|                                                                                                  |                                                                                       |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Business/Description: <u>Albertsons</u>                                                          | Business/Description: _____                                                           |
| Physical Address: <u>105 Buffalo Way</u>                                                         | Physical Address: _____                                                               |
| Dates of Display: <u>7/30/23 - 8/5/23</u>                                                        | Dates of Display: _____                                                               |
| Consent from Owner Obtained? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Consent from Owner Obtained? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Business/Description: _____                                                                      | Business/Description: _____                                                           |
| Physical Address: _____                                                                          | Physical Address: _____                                                               |
| Dates of Display: _____                                                                          | Dates of Display: _____                                                               |
| Consent from Owner Obtained? Yes <input type="checkbox"/> No <input type="checkbox"/>            | Consent from Owner Obtained? Yes <input type="checkbox"/> No <input type="checkbox"/> |

#### SUBMITTAL REQUIREMENTS. Have you attached the following? Please answer accordingly.

Yes ☒ No ☐ Illustration of each proposed sign that includes dimensions, colors, materials and type of sign.  
Yes ☒ No ☐ Installation specifications, and any structural details or specifications required for freestanding signs.

*Under penalty of perjury, I hereby certify that I have read this application 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 the Town of Jackson 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 Authorized Event Applicant

Tori Plennes

Applicant Name Printed

6.29.23

Date

Executive Director

Title

# STAFF REPORT



|                               |                                    |                        |                   |
|-------------------------------|------------------------------------|------------------------|-------------------|
| <b>Meeting Date:</b>          | July 17, 2023                      | <b>Meeting Title:</b>  | Regular - Consent |
| <b>Submitting Department:</b> | Community Development              | <b>Presenter:</b>      | Tanya Anderson    |
| <b>Agenda Item:</b>           | Selection of firm for Energy Audit | <b>Public Comment:</b> | Yes               |

## **Purpose & Policy Considerations.**

The purpose of this item is for Council to review and approve the selection of a firm to conduct an energy audit on Town-owned buildings.

## **Requested Action.**

Consider and approve a firm to conduct an energy audit on Town-owned buildings.

## **Recommendations.**

Staff recommends approving Alternative Energy Systems Consulting, Inc. (AESC) to conduct an energy audit on eleven Town-owned buildings. The review team determined AESC to be the most qualified among applicants who responded to the Request for Proposals (RFP) released on April 18<sup>th</sup>, 2023.

## **Background.**

At the April 17, 2023, regular Town Council Meeting, Council approved staff's request to release a Request for Proposals (RFP) for an Energy Audit on Town-owned buildings in the consent agenda. The purpose of energy audit is to hire building energy professionals to evaluate eleven Town buildings for their energy consumption and propose cost-effective energy efficiency upgrades to reduce both energy bills and greenhouse gas emissions for Town-owned buildings.

Upon approval of the consent agenda, staff released the RFP on April 18<sup>th</sup> and published a notice in the Jackson Hole News and Guide in the next available edition.

## **Analysis.**

Four proposals for the energy audit were received. The review committee read the proposals, conducted interviews and contacted references for the top firms, and evaluated firms based on the scoring criteria that was released in the RFP, including project approach, work-related experience, personnel qualifications, and references. AESC scored the highest among the proposers using the criteria outlined in the RFP.

## **Possible Alternatives.**

Possible alternatives for this item include:

1. Not approving the firm selected by the review committee and directing staff to return with a different firm.
2. Approving the firm selected by the review committee and directing staff to negotiate a reduced scope of work.
3. Directing staff to end the search for a firm to conduct an energy audit without selecting any of the applicants.

## **Comprehensive Plan & Priority Alignment.**

### Principle 2.1 – Reduce energy consumption of non-renewable energy

To reduce the emission of greenhouse gases that contribute to climate change, the community should reduce its consumption of energy from non-renewable sources. The Town and County will lead by example and encourage reductions in energy demand and the use of renewable energy sources. However, it is the daily responsibility of the entire community to reduce greenhouse gas emissions whether for climate, financial or other reasons.

Principle 2.4 – Increase energy efficiency in buildings

It is the community's goal to achieve carbon neutral buildings by 2030. Increasing the energy efficiency of buildings and reducing the energy used for the construction of buildings will greatly increase the community's energy conservation efforts, as the construction and operation of buildings accounts for close to 15% of energy use in Jackson and Teton County. Publicly funded construction projects will lead by example in implementing this policy, and incentives will be provided to reduce the energy demand of new and existing private buildings.

**Fiscal Impact.**

The budget submitted by AESC in their proposal amounts to \$67,000. In the FY24 budget, \$140,500 was allocated for professional services for ecosystem stewardship for an energy audit, an updated greenhouse gas emissions inventory, and graphic design for the Town sustainability plan. Energy audit proposals came in above the amount estimated when the budget was set. Staff recommends reducing the scope of work and funding allocated for the greenhouse gas emissions inventory and prioritizing funding a complete energy audit this year. Professional services will not exceed the \$140,500 budgeted; the amount allocated to each project may shift.

**Staff Impact.**

It took an estimated 10 hours of staff time from the Community Development, Administration, and Public Works departments to release the RFP, review proposals, select a consultant, and communicate with applicants. It will take an estimated 4 hours of staff time from the Legal and Community Development departments to negotiate a contract with the selected firm. It took staff less than one hour to write this report.

**Attachments or Links.**

RFP for Energy Audit  
Proposal submitted by AESC

**Suggested Motion.**

I move to approve the selection of AESC firm to conduct an energy audit on Town-owned buildings and direct staff to negotiate a contract with said firm for review and consideration at a future Council meeting.

## CALL FOR Experienced Energy Audit Professionals

### REQUEST FOR PROPOSALS, JACKSON HOLE, WYOMING

Requested By: Town of Jackson

Proposal Due Date: 5:00 PM MST May 12<sup>th</sup>, 2023

Proposal Submission: via e-mail or hard copy delivered by hand or delivery service to:

Town of Jackson  
C/O: Riley Taylor  
150 Pearl Avenue  
P.O. Box 1687  
Jackson, WY 83001  
[rtaylor@jacksonwy.gov](mailto:rtaylor@jacksonwy.gov)

RFP Available from: April 18<sup>th</sup>, 2023

Contact and Questions: Tanya Anderson, Ecosystem Stewardship Administrator  
[tanderson@jacksonwy.gov](mailto:tanderson@jacksonwy.gov)

The Town of Jackson reserves the right to **reject any or all responses submitted**, in whole or part, and to waive any informalities.

#### **I: SUMMARY**

The Town of Jackson intends to enter into a contract with a consultant to conduct an energy audit for Town-owned buildings.

#### **A: BACKGROUND AND PURPOSE**

The Town of Jackson is a community in Northwest Wyoming with just over 10,000 residents. It is the sole municipality within Teton County, Wyoming. The Town has engaged in emissions reduction and sustainability efforts since 2006. The most recent municipal sustainability plan had target dates of 2020, and the Town exceeded its goals in six out of seven categories. Initial improvements in building energy efficiency were significant. However, energy use as measured in BTU/square foot has held relatively steady since 2015. The Town of Jackson is in the process of creating a new Sustainability Plan that embodies the [Net Zero by 2030 Resolution](#) that was unanimously approved by the Town Council on April 6th, 2020. As the Town pursues this goal, it seeks to contract a business or organization to conduct an energy audit that will provide information on current building inefficiencies and opportunities for upgrades.

## **II: STATEMENT OF WORK**

### **A: Intent**

The Town of Jackson's goal is to award a contract for an energy audit of Town-owned buildings, including the Town Hall, Si Ferrin building, Public Works building, START bus facility, Wastewater Treatment Plant buildings, Home Ranch building, Deloney Street public restrooms, parking garage, and other Town-owned buildings. Staff housing units are not included in the scope of work unless they are located in one of the other municipal buildings.

### **B: Scope of Work**

The Town of Jackson seeks a firm to conduct an energy audit of its buildings. The selected firm will be expected to meet with Town staff prior to embarking on the audit, provide a clear timeline and regular progress reports, produce a draft report for review at least two weeks prior to completion, and submit a final report.

The final report should incorporate the following:

- An introduction to the audit and overview of methods
- A detailed energy audit of each of the following buildings:
  - Town Hall
  - Si Ferrin building
  - 155 Pearl
  - Ice Rink
  - The Bunkhouse
  - Public Works building
  - START Bus facility
  - Home Ranch building
  - Deloney Street public restrooms
  - Parking Garage
  - Wastewater Treatment Plant buildings
- Recommendations for efficiency upgrades that include:
  - Estimated cost for the upgrade
  - Estimated installation cost and/or staff time needed
  - Estimated energy savings (BTUs)
  - Estimated energy bill savings (\$)
  - Estimated cost recovery time
  - Estimated maintenance costs of upgrade
  - Expected life expectancy of upgrade
  - Potential alternatives
- A recommended timeline for implementation of upgrades that takes cost, staff capacity, and technical feasibility into account.



## **C: Qualifications**

The applicant must have the experience and knowledge necessary to supply the work and perform services specified in this RFP, and the time capacity to complete the project within the to be determined timeline. The timeline will be mutually agreed upon and set within the contract. The energy audit will require being physically present in Jackson, WY. Transportation and accommodation costs must be included within the proposal.

## **D. Project Budget**

Applicants should include a detailed budget in their proposal. The Town of Jackson may choose to eliminate or delay some items within the proposal to reduce the budget.

## **III. SELECTION PROCESS AND TIMELINE**

### **A: Timeline and Process**

A selection committee will review the proposals. The committee may select consultants for further consideration or may directly select and negotiate for a scope of service with the leading candidate. If more than one applicant is considered, then interviews may be conducted, or additional information requested. The schedule is contingent upon the Town of Jackson's project schedule and may be changed at any time. The selection process will proceed on the following schedule:

**April 18, 2023** – RFP released.

**May 12, 2023** – Deadline for RFP submittal.

- Proposals must be received at the Town of Jackson by **5:00 PM MST May 12<sup>th</sup>, 2023**. Proposals may be transmitted via e-mail or hard copy delivered by hand or delivery service (Fed /Ex etc.) to Town of Jackson, C/O: Riley Taylor, 150 Pearl Avenue, P.O. Box 1687, Jackson, WY 83001. Please email submissions to [rtaylor@jacksonwy.gov](mailto:rtaylor@jacksonwy.gov).
- The Town of Jackson cannot accept responsibility for delayed delivery of proposals so please plan accordingly.

**June 1, 2023** – Review and Selection of Consultant

- The selection panel will select the consultant from proposals received. This process will include a review of proposals, references, and other information as necessary. The Town of Jackson may conduct interviews with the potential consultant(s) if applicable. In making this selection, the Town of Jackson reserves the right to request information from any applicant to clarify their proposal or to supply any additional material deemed necessary to assist in the evaluation of the proposal. The Town of Jackson also reserves the right to make a selection without conducting interviews.
- One finalist will be identified based on the selection criteria listed below and enter into an agreement with the Town of Jackson and produce a final report.

## B: Submittal Requirements

Consultants are invited to submit a proposal at their own cost. The Town of Jackson assumes no obligation of any kind for expenses incurred by any respondent to this solicitation.

- a) Proposals submitted electronically must be submitted through the Town Clerk, Riley Taylor, at [rtaylor@jacksonwy.gov](mailto:rtaylor@jacksonwy.gov) and must be compiled into a single Word or .pdf document named "Energy Audit – [proposer company name]".
- b) Proposals must be received by 5:00 pm MST May 12<sup>th</sup>, 2023 in order to be considered.
- c) Proposals should be submitted as follows:

### Section 1:

1. Six (6) page maximum proposal response to the RFP. Cover letters will be considered part of the maximum page limit.

### Section 2:

2. Three (3) resumes maximum that must include the project manager/ team leader. Two (2) page maximum per resume.
3. Two (2) examples of previous work.
4. Two (2) professional references.
5. List of all subcontractors, if needed.

## C: Selection Criteria

The Selection Panel will refer to the criteria listed below while evaluating qualifications.

| EVALUATION CRITERIA                                                                                                                                                                                                                            | POINT VALUE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Project Approach</b> – What is the ability of the applicant to deliver a successful report within a designated timeline? Does the applicant understand the project goals? Does the applicant propose an innovative approach to the project? | 40          |
| <b>Work-related Experience</b> – Does the applicant have experience doing energy audits or similar work? What is the quality of the examples of previous work included in the application?                                                     | 30          |
| <b>Personnel Qualifications</b> – Does the personnel have previous training and experience relate to the proposed scope of work?                                                                                                               | 20          |
| <b>Quality of past project references</b> – How strong and relevant are the references provided for similar work?                                                                                                                              | 10          |
| <b>TOTAL MAXIMUM SCORE</b>                                                                                                                                                                                                                     | <b>100</b>  |



#### **IV. LEGAL**

Any and all documents submitted to the Town of Jackson may be deemed public records subject to examination and inspection by third parties.

The Town of Jackson reserves the right to:

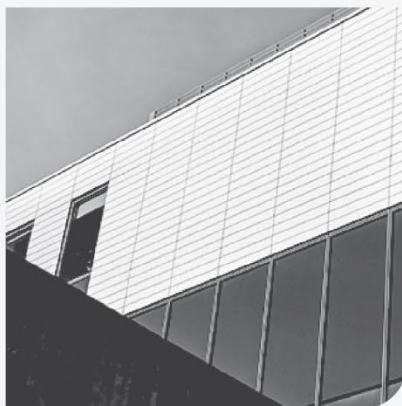
- Reject any or all proposals or accept what is, in its judgment, the proposal which is in the Town of Jackson's best interest.
- Accept a late submittal or to waive any technical defects or irregularities in any or all proposals.
- Discuss proposals with proposers whose submittals are reasonably susceptible to selection in order to clarify, assure a full understanding of, and ensure responsiveness to the RFP requirements.
- Not fund the project if it does not receive any proposals that, in its sole discretion, meet the goals of the project.
- Alter the makeup of the Selection Panel or re-issue this RFP.

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



# Town of Jackson

EXPERIENCED ENERGY AUDIT PROFESSIONALS



## SUBMITTED BY

Alternative Energy Systems Consulting, Inc.  
May 12, 2023

## Table of Contents

|                                                                                                                                                                                                         |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>Section 1. Proposal Response.....</b>                                                                                                                                                                | <b>1</b> |
| 1.1 Cover Letter.....                                                                                                                                                                                   | 1        |
| 1.2 Project Approach.....                                                                                                                                                                               | 2        |
| 1.2.1 Comprehensive Site Audits.....                                                                                                                                                                    | 2        |
| 1.2.2 Building Systems and Types of Opportunities Assessed.....                                                                                                                                         | 3        |
| 1.2.3 Report Development .....                                                                                                                                                                          | 3        |
| 1.3 Work-Related Experience.....                                                                                                                                                                        | 4        |
| 1.3.1 City of Los Angeles General Services Department – Comprehensive Energy and Water Audits and Existing Building Energy and Water Efficiency (EBEWE) Ordinance Compliance Support (2014 – 2020)..... | 4        |
| 1.3.2 SDG&E Local Government Partnership – County of San Diego Facility Audits (2019 – 2020).....                                                                                                       | 4        |
| 1.3.3 District of Columbia Sustainable Energy Utility (DCSEU) Affordable Multi-Family Efficiency and Electrification Audits (2022 – current) .....                                                      | 5        |
| 1.3.4 PG&E RAPIDS Wastewater Treatment Optimization Program (2020 – current) .....                                                                                                                      | 5        |
| 1.4 Personnel Qualifications .....                                                                                                                                                                      | 6        |
| 1.5 Project Budget.....                                                                                                                                                                                 | 6        |
| <b>Section 2. Resumes, Work Examples, and References .....</b>                                                                                                                                          | <b>7</b> |
| 2.1 Resumes .....                                                                                                                                                                                       | 7        |
| 2.2 Examples of Previous Work.....                                                                                                                                                                      | 7        |
| 2.3 Professional References .....                                                                                                                                                                       | 7        |

## Section 1. Proposal Response

### 1.1 Cover Letter

May 12, 2023

Town of Jackson  
C/O: Riley Taylor  
150 Pearl Avenue  
PO Box 1687  
Jackson, WY 83001

Dear Ms. Taylor,

Alternative Energy Systems Consulting, Inc. (AESC) is pleased to respond to the Town of Jackson's Call for Experienced Energy Audit Professionals. Over the last decade, AESC engineers have performed over 500 energy audits, many of which were for state and local government buildings.

Founded in 1994, AESC is an energy engineering and consulting firm that delivers solutions in energy efficiency, renewable energy, and software for utilities, governments, and the private sector. AESC combines technical excellence and Integrated Demand Side Management (IDSM) experience to provide a comprehensive suite of engineering and project management services. AESC's 65+ person team includes experts in energy efficiency engineering, water and wastewater system optimization, distributed energy resources (DERs), retrocommissioning (RCx), measurement and verification (M&V), and energy resiliency.

AESC engineers are formally trained and certified in energy auditing, including the Association for Energy Engineer's (AEE) Certified Energy Auditor and the American Society of Heating, Refrigeration, and Air-Conditioning (ASHRAE) Building Energy Modeling Professional. AESC leverages experience from a variety of audit programs to lend best practices. Our facility audit and assessment services range from simplified, remote energy assessments and ASHRAE Level 1 audits to comprehensive ASHRAE Level 3 Investment Grade Audits (IGAs) that address electric, gas, water, carbon, energy efficiency, electrification, demand response, renewables, and resiliency. We understand the factors that will drive a customer to install a recommendation, and we customize audits to drive the implementation of practical, viable measures that increase value while meeting customer goals and regulatory requirements. AESC's software platform, Praxis, offers tools and calculators to maximize operational efficiency and generates customer-friendly reports incorporating measures, incentives, paybacks, and graphics to support decision making.

We look forward to your review of our proposal and hope to have the opportunity to support the Town of Jackson's sustainability and zero net energy goals.

Sincerely,



Antonio Corradini, PE  
CEO and Principal Engineer

---

## 1.2 Project Approach

AESC understands a successfully completed energy audit establishes customer trust, generates interest, and provides the key information necessary for the customer, or customer's advocate, to take the next steps for financing, procurement, and implementation. We make action a priority and focus on the potential for implementation of projects with defensible savings and real impacts. While engineering is the core of the audit, engaging and educating the customer on the technical and financial benefits of the energy efficiency measures, and ensuring they are aware of available financial and implementation resources, is how projects come to fruition.

### 1.2.1 Comprehensive Site Audits

Each audit engineer works from a standardized efficient process to develop an inventory of the customer's existing equipment, assess the facility's operating practices and constraints, identify opportunities (within the known constraints), and evaluate measure savings, economic, and environmental benefits. AESC considers factors such as the facility type, staff knowledge, access to funds, payback requirements, and others in making measure recommendations. Given the unique situation and needs of each customer, the engineer always customizes the audit to address the specific building, site, technology interest, available utility programs and/or other concerns.

The typical audit process includes the following steps:

- **Analyze utility data:** AESC analyzes the available utility data to determine how and when the building uses energy and identifies potential energy and cost savings opportunities before the site visit.
- **Initial customer contact and site visit:** We use the initial customer discussion as the beginning of building a strong and trusting relationship. A kickoff call includes review of the property owner's particular goals and any submitted data. During the site visit, our engineers will identify and inventory all the equipment pertinent to the scope of work, record operating conditions and critical end-users, and facilitate on-site measurements to support detailed calculations.
- **Initial measure list and action plan:** We will work with the customer to develop the initial measures list which is the first step in developing an actionable plan. Our engineers document the site visit beyond initial notes typically within a day following the site visit.
- **Information analysis and report development:** AESC calculates savings based on the agreed upon measures in the initial measure list. Engineering and economic analysis of each measure determines whether they become recommendations that are documented in the audit report.
- **Financial and cost analysis:** Based on key economic indicators preferred by the customer, AESC can provide financial metrics including Simple Payback, Net Present Value (NPV), Internal Rate of Return (IRR), Return on Investment (ROI), and Lifecycle Cost.
- **Customer presentation:** We put great importance on the customer presentation and see it as a final opportunity to generate interest and enthusiasm for proceeding with recommended measures, and to hone in on the key opportunities for implementation, as well as key barriers that may need to be addressed to implement recommended solutions – whether addressing health and safety issues or increasing electrical panel size.
- **Project implementation services:** After project options are explained, we then work with the customer to help make decisions about the best projects to pursue, in what order, and support them throughout the project process including unbiased input on contractor selection, contractor oversight, and close out documentation.

---

### **1.2.2 Building Systems and Types of Opportunities Assessed**

In addition to identifying energy efficiency opportunities, AESC's engineers have the skills and expertise to conduct audits that can include benchmarking, demand reduction, retrocommissioning (RCx), solar and other renewable strategies, energy storage, and water efficiency opportunities. Depending on the building type, assessed systems and technologies could include:

- Lighting and controls
- HVAC systems and controls: Including retrofits, repairs, and RCx
- Building Automation Systems (BAS)
- Building Envelope: Including fenestrations and building shading
- Electrification measures including air to water heat pumps, heat pump domestic hot water heaters, geothermal heat pumps, air source heat pumps, induction cooking, and heat pump clothes dryers
- Roofs: Age, condition, and potential for cool roofs
- Solar potential: Including building suitability, roof age and condition, and potential capacity
- Battery Storage potential
- Plug loads
- Equipment repair and operational adjustments
- Water conservation equipment: Low flow plumbing fixtures, irrigation controls, water-efficiency appliances, and usage monitors
- Associated infrastructure and envelope improvement, including upgrades to accommodate electrification and health and safety measures

Information on rebates, incentives, and financing programs, including utility, local, state, and federal funding, and financing resources, will be universally included in recommendations and calculations to help improve the simple payback of each measure and provide financing sources. Final recommendations always consider the cost analysis, customer staff capacity, and technical feasibility.

### **1.2.3 Report Development**

Adding value to the audit process is AESC's ability to streamline audit report writing, resulting in cost and time efficient deliverables to the customer. AESC's internal software team has built tools to automate utility bill analysis, develop measure savings estimates, and develop customizable formatted audit reports. AESC's internally developed software platform, Praxis, utilizes a custom pre-determined report format to allow engineers to input narrative, data, and images into a web-based application. Once the information is entered into the tool, a number of subsequent functions are automated, including utility bill analysis, energy savings calculations, charting and graphing, and organization of the narrative. The engineer can then initiate report generation through Praxis to develop a draft according to the specified format. In addition to streamlining the report writing function, Praxis allows the report writing process to take place concurrently with the calculation process—a distinct advantage to AESC's process. Additionally, Praxis saves time during quality control checks by notifying the author of any missing information. Reports summarize the technical analysis into a digestible format for the customer and include clear, actionable recommendations tailored to the goals of the customer.

---

### **1.3 Work-Related Experience**

AESC has extensive experience supporting customers with their sustainability and zero net energy goals. Our engineers have performed thousands of energy audits for commercial, institutional, industrial, and agricultural customers. Examples of projects similar in scope to the statement of work are included below.

#### **1.3.1 *City of Los Angeles General Services Department – Comprehensive Energy and Water Audits and Existing Building Energy and Water Efficiency (EBEWE) Ordinance Compliance Support (2014 – 2020)***

From 2014 to 2020, AESC conducted ASHRAE Level III energy audits for the City of Los Angeles General Services Department (GSD) facilities in support of the Los Angeles Department of Water and Power's (LADWP) Energy Efficiency Technical Assistance Program (EETAP). EETAP's comprehensive requirements exceeded ASHRAE Guidelines for the representative audit level. For nearly four years, until EETAP was discontinued, AESC assisted the City of Los Angeles by navigating the program on their behalf, developing an action plan to complete the contracted number of audits in the given fiscal year, and ensuring that all project deliverables complied with the EETAP Technical Guidelines. AESC's ability to properly plan, deliver quality audits, and successfully progress projects through EETAP based on compliance led the City of Los Angeles to select AESC as their sole vendor for energy auditing services. AESC continues to perform ASHRAE Level III energy audits for the City of Los Angeles that adhere to the EETAP program guidelines, even though the program is no longer available. AESC completed 114 facility audits resulting in recommended savings of 31,302,405 kWh, 5,619 kW, 179,396 therms, and 6,122,317 gallons of water per year.

AESC was later contracted by the GSD to plan for compliance of 109 impacted buildings with the City's Existing Buildings Energy and Water Efficiency Ordinance (EBEWE), which included benchmarking and RCx requirements. AESC coordinated with the Los Angeles Mayor's Office and the City of LA Department of Building and Safety (LADBS), the ordinance enforcement agency, to advise the GSD on a comprehensive compliance plan to meet EBEWE requirements. The plan included performing ordinance exemption validation, evaluating past audit efforts for compliance status, conducting building energy and water efficiency audits and RCx for non-exempt buildings, and tracking planned, in-progress, and completed retrofit projects to support 15% target energy use reduction for the next compliance cycle.

#### **1.3.2 *SDG&E Local Government Partnership – County of San Diego Facility Audits (2019 – 2020)***

In support of the County of San Diego's (CoSD) Climate Action Plan and clean energy goals, San Diego Gas and Electric (SDG&E) contracted AESC in July 2019 to plan and execute comprehensive site-level energy audits of 80 CoSD buildings across 27 sites to identify energy saving measures, electrification potential, and low-cost high impact RCx opportunities. Building types audited included community and recreational centers, office buildings, airport facilities, emergency shelters, libraries, and detention centers.

The contract was designed and executed as a customized audit program capitalizing on preferred and utility pre-qualified measures including LED lamps, RCx measures, electrification of domestic hot water (DHW), and solar photovoltaic (PV). The primary objective was to achieve a project-ready process, working to avoid the known barriers to implementation. To successfully complete audits in an accelerated timeframe, AESC used a two-stage process. The first stage was a short rigorous planning step where the lead engineer collaborated with the CoSD's Energy and Sustainability and Facility



Operations teams. This stage was important to review and align with the COSD's overall sustainability, Zero Net Energy, and Local Government Partnership (LGP) goals, confirm internal and external roles, establish appropriate communication channels, and ultimately increase the consistency, efficiency, and value of each report. The second stage involved coordination with key stakeholders, on-site audit of facilities, and the development and delivery of audit reports and findings. Audits were geographically grouped, and the work was completed in multiple phases to support on-time completion.

To summarize portfolio recommendations and support implementation strategy, AESC developed a cloud-based portal for key personnel and decision makers that contained the key performance indicators of each site including energy savings, demand savings, gas savings, project costs, utility incentives, simple payback, and greenhouse gas savings. The portal allowed approved CoSD personnel to access the data and perform data analysis based on a combination of selected buildings and measures.

### ***1.3.3 District of Columbia Sustainable Energy Utility (DCSEU) Affordable Multi-Family Efficiency and Electrification Audits (2022 – current)***

AESC was contracted by the DCSEU, Washington, DC's energy efficiency program administrator, to perform comprehensive energy efficiency and electrification audits for affordable multifamily properties larger than 50,000 SF that benchmark at or below an ENERGY STAR score of 66 under the District's Building Energy Performance Standards (BEPS) program. The \$17M program implemented by DCSEU on behalf of the DC Department of Energy and Environment is designed to support affordable multifamily building owners with energy performance compliance recommendations and implementation strategies to comply with BEPS energy performance requirements (mandating a 41% improvement over baseline) without affecting DC's affordable housing stock. AESC has completed four and is in process on one additional comprehensive affordable multi-family building audits, which cover building core and shell, HVAC, lighting, solar, electrification measures, and compartmentalization testing. Because there are no cost effectiveness thresholds for measure recommendations, and implementation funding will be provided by DCSEU and DC Department of Energy and Environment grants and federal funding, audits and measures recommendations are more comprehensive and in-depth than typical audits. Electrification measures evaluated have included air to water heat pumps, heat pump domestic hot water heaters, geothermal heat pumps (evaluated but not recommended), and air source heat pumps.

### ***1.3.4 PG&E RAPIDS Wastewater Treatment Optimization Program (2020 – current)***

RAPIDS is a pay-for-performance, third-party program available to municipal and public agency wastewater customers in PG&E's service area that was designed and has been implemented by AESC since 2020. The goal of RAPIDS—which stands for Risk Assessment, Process Improvement, and Decision Support services—is to deliver energy savings by eliminating energy waste in the treatment process, while enhancing operational control and reliability.

AESC's team offers customers process engineering expertise, strategic energy action planning, energy efficiency measure (EEM) analysis, design assistance, and incentive and financing support. RAPIDS targets comprehensive energy efficiency savings and demand response opportunities through process, capital, and operational projects. The team engages a wide variety of stakeholders to understand customer objectives and risks, site conditions and project requirements, allowing them to align program support to customer capital and operational priorities. In addition to technical support, the team provides operators with knowledge and tools to monitor and continuously improve system performance and savings persistence, with a focus on key objectives including reliability, resilience, and operational efficiency. This can be supported by submetering, data tracking, and performance monitoring.



## 1.4 Personnel Qualifications

AESC's experienced staff is well suited to support energy audits for the Town of Jackson. The following table identifies the proposed staff and qualifications. Resumes are included in Section 2. **Lead Engineer Joseph Ling** will serve as the project manager/team leader.

| AESC Personnel                                     | Qualifications                                                                                                                                    | Certifications                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Joseph Ling, PE<br>Engineering<br>Technical Lead   | 15 years of experience in energy engineering. Leads technical review, energy audits, and RCx projects for AESC's Southern California clients.     | <ul style="list-style-type: none"> <li>• Certified Energy Auditor (CEA), <i>AEE</i></li> <li>• Existing Building Commissioning Professional (EBCP), <i>AEE</i></li> </ul>                                                                                                                                                                                                                                   |
| Cliff Alberts, PE<br>Engineering<br>Technical Lead | 25 years of experience in energy engineering. Subject matter expert in RCx.                                                                       | <ul style="list-style-type: none"> <li>• Building Energy Modeling Professional (BEMP), <i>ASHRAE</i></li> <li>• Certified Energy Manager (CEM), <i>AEE</i></li> <li>• Certified Measurement &amp; Verification Professional (CMVP), <i>AEE</i></li> <li>• Certified Water Efficiency Professional (CWEP), <i>AEE</i></li> <li>• Certified Building Commissioning Professional (CBCP), <i>AEE</i></li> </ul> |
| Kusum Shekhliya, EIT<br>Senior Engineer            | 15 years of experience in energy engineering. Performed 32 ASHRAE Level 3 energy and water audits and 20 RCx studies for the City of Los Angeles. | <ul style="list-style-type: none"> <li>• Certified Energy Manager (CEM), <i>AEE</i></li> <li>• Existing Building Commissioning Professional (EBCP), <i>AEE</i></li> <li>• Leadership in Energy and Environmental Design Accredited Professional (LEED AP), <i>US Green Building Council (USGBC)</i></li> </ul>                                                                                              |

## 1.5 Project Budget

AESC's budget for each building is outlined below. The budget includes transportation and accommodation expenses for two trips and assumes that these costs will be distributed proportionately within the overall budget. AESC is willing to accept a reduced scope of services, however, enough buildings should be included to justify travel and accommodation expenses. AESC will work with the Town to understand the revised scope and would request the opportunity to review and revise the project budget if a substantial number of buildings are removed.

- Town Hall – \$10,000
- Si Ferrin building – \$3,000 (reduced from \$10,000)
- 155 Pearl – \$4,000 (reduced from \$10,000)
- Ice Rink – \$10,000
- The Bunkhouse – \$3,000 (reduced from \$10,000)
- Public Works building – \$6,000
- START Bus facility – \$6,000
- Home Ranch building – \$6,000
- Deloney Street public restrooms – \$3,000 (reduced from \$6,000)
- Parking Garage – \$6,000
- Wastewater Treatment Plant buildings – \$10,000

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## Section 2. Resumes, Work Examples, and References

### 2.1 Resumes

Resumes for Joseph Ling, PE, Cliff Alberts, PE, and Kusum Shekhlia, EIT follow.

### 2.2 Examples of Previous Work

The following are provided as examples of AESC's previous work:

- Energy and Water Audit and RCx Investigation Report for a municipal city hall
- Energy Efficiency and Peak Load Reduction Study for a California State Agency building

### 2.3 Professional References

| Reference Name and Organization               | Email                                                                                    | Telephone      |
|-----------------------------------------------|------------------------------------------------------------------------------------------|----------------|
| Christopher Thornberry<br>City of Los Angeles | <a href="mailto:Christopher.Thornberry@lacity.org">Christopher.Thornberry@lacity.org</a> | (213) 978-1385 |
| Susan Freed<br>County of San Diego            | <a href="mailto:Susan.Freed@sdcounty.ca.gov">Susan.Freed@sdcounty.ca.gov</a>             | (858) 694-3900 |



# Joseph Ling, PE

## Engineering Technical Lead

CEA, EBCP

15+ Years of Industry Experience



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## Bio

Joseph brings a variety of energy simulation experience, with tools such as eQUEST, Trace 700, HAP, York Calc, custom hourly bin calculations, and AirMaster+. He has completed thousands of technical reviews, energy models and energy audits for utility clients.

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## Industry Experience

### AESC, Inc. / Engineer Technical Lead

Since 2007

Joseph provides engineering expertise for Sothern California Edison (SCE) Customized Offering projects, energy audits, retrocommissioning (RCx) projects, and work paper development. He has been a primary commercial project technical reviewer for AESC's work on SCE's RCx program. He recently has completed several ASHRAE Level 3 energy and water audits for the City of Los Angeles. His primary expertise includes refrigeration, data center optimization (hot aisle/cold aisle and server virtualization), HVAC, air compressor and large industrial processes such as cement plants. Secondary expertise includes measures such as thermal oxidizers, municipal and agricultural pumps, and chiller optimization (Hartman loop).

## Project Experience

- Completed over 200 Customized Solutions incentive program technical reviews in 2015.
- Completed over 20 technical reviews for projects each with savings exceeding 5 million kWh.
- Conducted audits which included the construction of full energy simulations using eQUEST for Haines Hall in UCLA, the LA Air Operations Base, Warner Center Tower, and multiple buildings on the Fresno City College campus.

## Areas of Expertise

**Engineering:** Energy Audits • Demand Response • Building Envelope Modifications • RCx • Lighting Retrofits • Data Centers • Refrigeration • Compressed Air • Measure Development

**M&V:** Whole Building Models

## Education/Certifications

- Professional Engineer, *California*
- BS, Mechanical Engineering, *California State Polytechnic University, Pomona*
- Certified Energy Auditor (CEA), *Association of Energy Engineers*
- Existing Building Commissioning Professional (EBCP), *Association of Energy Engineers*

## Industry Involvement

- Member, *American Society of Heating, Refrigeration, Air-Conditioning Engineers (ASHRAE)*
- Member, *Association of Energy Engineers*



## Cliff Alberts, PE

### Lead Engineer

CEM, BEMP, CMVP, CWEP, CBCP

25+ Years of Industry Experience



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## Bio

Cliff spent the first part of his career specifying and troubleshooting robotic equipment in Silicon Valley. His experiences with building controls and VFDs evolved into a focus on energy conservation. Cliff excels at in-depth facility technical analysis and opportunity identification for energy efficiency, conservation, generation, demand reduction, and demand response. He has a proven track record of identifying actionable opportunities and supporting his customers through the process of measure identification, project scoping, and utility incentives.

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## Industry Experience

### AESC / Lead Engineer

#### Since 2010

He contributes to the demand side management programs at PG&E, SCE, SoCal Gas, SDG&E and Duke Energy. Programs include core custom incentive programs, 3rd party programs such as HEEP and Lodging Savers, analytics enabled RCx, hydraulic pump test program, and emerging technologies. He has also been a senior auditor in energy audit programs at SCE, LADWP, SDG&E, PG&E, SoCal Gas, the SoCalREN and Arizona Public Service. Through several of the audit programs, Mr. Alberts has been directly involved in supporting the implementation of his and other auditor's recommendations. Projects and audits typically include hourly simulation software models, custom Excel calculations, measurement & verification data, manufacturer proposals, specifications and invoices. He provides engineering support for the State of California and California Department of Corrections and Rehabilitation under AESC's current Program Administrative Management role administered by PG&E. He has also managed the SCE Energy Help Desk that responded to over 1000 Business Energy Advisor consultation requests in 2014 and 2015. Utilizes eQUEST, Excel, and PowerPoint proficiently.

### Partner / Engineer

#### Tenure – 1.5 Years

Cliff conducted facility energy audits at commercial clients including LA World Airport, Texas Health Hospital, Raytheon, Union Pacific Railroad, Cal State San Marcos, San Diego Gas & Electric, Oncor Electric. He prepared energy audit reports including energy savings, installation costs, return on investment, and technical narratives. Recommended retrofits for air side and water side HVAC systems, lighting and lighting controls, solar window film, solar PV and retro-commissioning.

## Areas of Expertise

**Engineering:** Energy Audits • Demand Response • RCx • Wastewater Audits • Measure Development

**Management:** Program Implementation • Project Scoping • Utility Incentive Reviews

**M&V:** Whole Building Models • NMEC

## Education/Certifications

- Professional Engineer, *Licensed in California and Arizona*
- Building Energy Modeling Professional (BEMP), *ASHRAE*
- Certified Energy Manager (CEM), *Association of Energy Engineers*
- Certified Measurement & Verification Professional (CMVP), *Association of Energy Engineers*
- Certified Water Efficiency Professional (CWEP), *Association of Energy Engineers*
- Certified Building Commissioning Professional (CBCP), *Association of Energy Engineers*
- BS Mechanical Engineering, *University of Illinois*

## Industry Involvement

- Member, *Association of Energy Engineers*
- Member, *ASHRAE*

## **Sain Engineering / Engineer**

### **Tenure – 1 Year**

Cliff developed and managed energy conservation projects such as retrocommissioning variable air volume HVAC at base fitness center, chiller waste heat reclamation to hot water heating at base fitness center. Identified low cost lighting controls renovations for the main exchange, logistics warehouse, and several housing facilities at Fort MacArthur. He provided technical consultation on solar thermal hot water generation, radiant window film. Oversaw the construction of a test well to determine thermal conductivity of a 100-ton ground source heat pump.

## **CA Consulting / Energy Auditor**

### **Tenure – 6 Years**

Cliff served as a subcontractor in energy auditing roles at Federal Facilities within the Department of Homeland Security, Department of Energy and the Department of Housing and Urban Development. He also worked under direct contracts with a wide variety of projects within industrial, agricultural, and commercial facilities.

## **Awards and Accomplishments**

- Cliff performed “start to finish” energy efficiency consulting services at a 300,000 ft<sup>2</sup> county courthouse. The county approved all the recommendations which included a chiller plant replacement, several retrocommissioning opportunities on mal-functioning air side systems and erroneous automation system graphics, variable air volume system renovation, and currently in process of lighting and lighting control system renovations. The consulting services included the initial energy audit (which included a whole building eQUEST simulation), identification of and application for utility custom incentives, presentation of findings to the Administrator of the Courts (AOC) as well as the county engineering team, and lastly project scoping assistance and support to county project managers.
- Cliff performed an energy audit for a 560,000 ft<sup>2</sup> office building in San Diego. The recommendations included several retro-commissioning opportunities for air side systems, a chiller plant renovation, an Energy Management Control System (EMCS) and several lighting renovations. The consulting services included the initial energy audit (which included a C-BOA tool hourly simulation), identification of utility incentives, and presentation of findings to the ownership representatives. The client has moved forward with many of the recommendations and is currently in process of installing the EMCS.
- Several anecdotal opportunities where low cost and no cost opportunities have been identified such as saving \$25,000/year in chiller plant energy savings through identification of one reverse wired cooling coil valve, saving \$20,000/year through no-cost, behavioral light control practices at a county water facility, or saving \$7,000 in HVAC energy at a manufacturing facility, utilizing an early morning walk through that confirmed the A/C thermostat schedule (24 hours) was overriding the global schedule (6am-5pm, M-F) in a Building Automation System.
- Cliff led an RCx project at a high school campus in Arizona encompassing eight buildings, 150,00 ft<sup>2</sup> of conditioned space and a central plant.





**Kusum Shekhliya, EIT**  
**Senior Engineer**  
CEM, EBCP, LEED AP  
**15 Years of Industry Experience**



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## Bio

Kusum has extensive experience performing ASHRAE level energy and water audits on a wide variety of building types. She methodically assesses facilities and exceeds customer expectations in identifying cost effective projects that significantly improve overall building performance. Her background in design engineering provides her with a unique perspective in developing energy models and recommending financially attractive efficiency measures.

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## Industry Experience

### AESC / Staff Engineer

#### Since 2017

Kusum performs ASHRAE Level III energy and water audits for the City of Los Angeles adhering strictly to the Los Angeles Department of Water and Power (LADWP) Energy Efficiency and Technical Assistance Program (EETAP) Guidelines. She has experience with energy simulation tools such as eQUEST, EnergyPro and Trane Trace and often uses advanced engineering spreadsheets and Customized Calculation Tool Software. She has performed quality control of several customized incentive program technical reviews.

She is a lead engineer for the San Diego Gas and Electric's (SDG&E) Virtual Power Plant (VPP) project and is responsible for customer acquisition and assistance, behind the meter installation support, testing, reporting and analysis.

### Willdan

#### Tenure – 3.5 Years

Kusum was a Lead Audit Engineer responsible for performing ASHRAE Level II and Level III audits to identify energy efficiency measures (EEMs). She performed over 75 energy audits that resulted in significant kWh reductions for commercial properties including hotels, hospitals, medical centers public and private schools, large office building and laboratories. She supported major utility energy efficiency programs for SDG&E and Southern California Edison (SCE), San Diego Gas and Electric (SDG&E) and direct-to-customer projects. She performed energy savings and financial analysis of each measure and presented the savings.

## Areas of Expertise

**Engineering:** Energy Audits • Demand Response • RCx • Measure Development  
• Utility Incentive Reviews • Project Scoping • Emerging Technologies

**Management:** Program Implementation  
• Strategic Oversight • Quality Control

**M&V:** Whole Building Models • NMEC

## Education/Certifications

- Engineer-in-Training (EIT), *California*
- MS Mechanical Engineering, *Stevens Institute of Technology, New Jersey*
- BS Mechanical Engineering, *Nirma Institute of Technology, India*
- Certified Energy Manager (CEM), *Association of Energy Engineers (AEE)*
- Existing Building Commissioning Professional (EBCP), *AEE*
- Leadership in Energy and Environmental Design Accredited Professional (LEED AP), *United States Green Building Council (USGBC)*

## Industry Involvement

- Member, *American Society of Heating, Refrigeration, Air-Conditioning Engineers (ASHRAE)*
- Member, *AEE*

## **PBS Engineers**

### **Tenure – 4.5 Years**

Kusum performed load calculations using EnergyPro and selected HVAC equipment for central plant system and airside systems. She was involved in HVAC design for existing and new building including educational facilities, office buildings, airport facilities, healthcare facilities and residential buildings. She was involved in construction activities including submittal reviews, RFI reviews, shop drawing reviews and construction meetings.

## **Awards and Accomplishments**

- Kusum led the largest audit in AESC's company history at the 1.3 million ft<sup>2</sup> City of Los Angeles Piper Tech multi-use facility. She identified 28 measures and recommended 15 for implementation for a total of 3.5M kWh in savings and 672 kW in peak demand reduction. These savings represent a 42% reduction in facility's current electricity consumption and peak demand.
- At AESC, Kusum performed 32 ASHRAE Level III energy and water audits for the City of Los Angeles adhering strictly to LADWP's Energy Efficiency and Technical Assistance Program (EETAP) Guidelines and 20 Retro-commissioning (RCx) studies for the building owned by city of Los Angeles adhering to City of Los Angeles Existing Building Energy and Water Efficiency (EBEWE) Program.
- At PBS Engineers, she was responsible for performing LEED approved calculations and LEED online documentation.

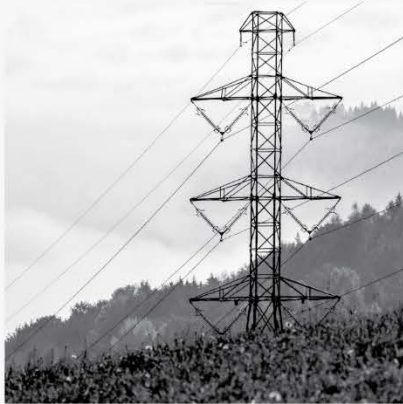






# City Hall

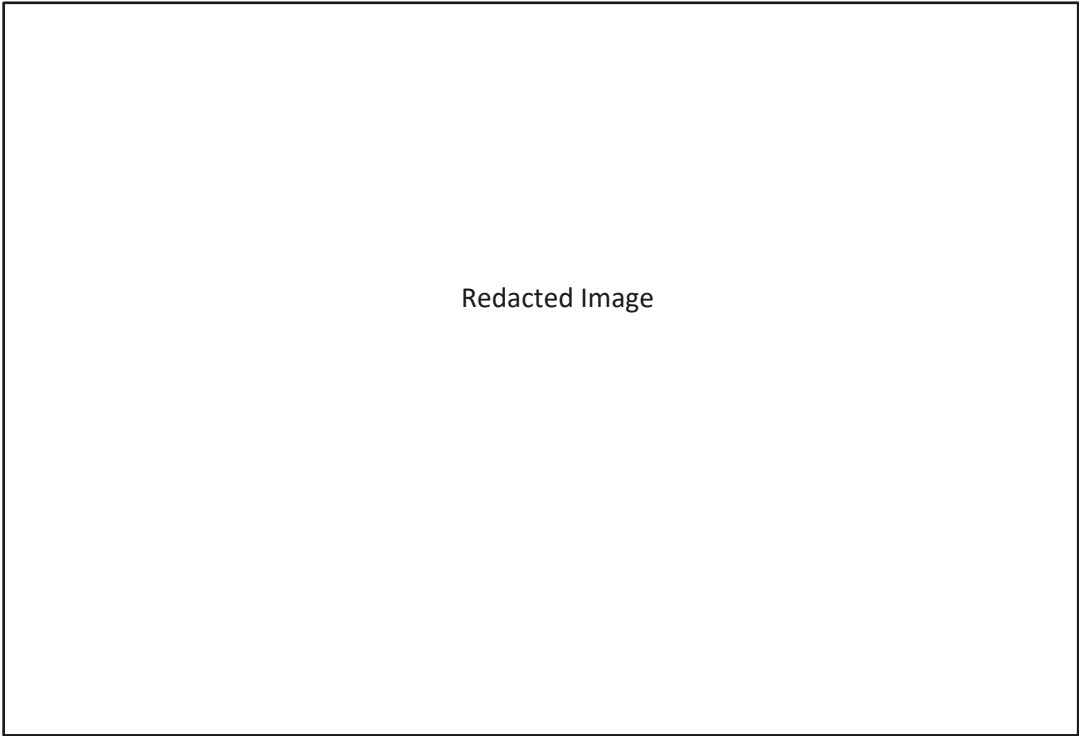
## ENERGY AND WATER AUDIT AND RETRO-COMMISSIONING INVESTIGATION REPORT



### SUBMITTED BY

Alternative Energy Systems Consulting, Inc.  
December 2022



A large rectangular box with a black border, containing the text "Redacted Image" in the center.

Redacted Image

Figure 1 [REDACTED] City Hall

### Disclaimer

The intent of this audit and retro-commissioning (RCx) investigation report is to identify energy savings opportunities associated with recommended upgrades to the facility's equipment systems at this site as well as verify whether the site's energy consuming equipment/systems are operating as per the design or owners' requirements and identify energy savings opportunities associated with recommended retro-commissioning and equipment/system tune-up. Approximate saving ranges are included in this report to make decisions about reducing energy use at the facility. However, this report is not intended to serve as a detailed engineering design document. It should be noted that detailed design efforts are required to implement several of the improvements evaluated as part of this energy analysis.

As a result, Alternative Energy Systems Consulting, Inc. (AESC) is not liable if estimated savings ranges or economics are not actually achieved. All savings and cost estimates in the report are for informational purposes and are not to be construed as a design document or as guarantees.

In no event will AESC be liable for the failure of the customer to achieve a specified amount of energy savings, the operation of customer's facilities, or any incidental or consequential damages of any kind in connection with this report or the installation of recommended measures.

## Table of Contents

|      |                                                 |    |
|------|-------------------------------------------------|----|
| 1.0  | Executive Summary .....                         | 5  |
| 2.0  | Project Team and Facility Information .....     | 10 |
| 3.0  | RCX Plan and Methodology .....                  | 12 |
| 4.0  | Energy Using Systems .....                      | 15 |
| 5.0  | Site Energy Use and Costs .....                 | 22 |
| 6.0  | Energy Project Opportunities .....              | 42 |
| 7.0  | Operational & Maintenance Training .....        | 54 |
| 8.0  | Maintenance of Savings .....                    | 55 |
| 9.0  | Appendix A Functional Performance Testing ..... | 56 |
| 10.0 | Appendix B Attachments .....                    | 57 |
| 11.0 | Photo-Log .....                                 | 68 |

## Figures

|                                                           |    |
|-----------------------------------------------------------|----|
| Figure 1 [REDACTED] City Hall .....                       | 2  |
| Figure 2 Arial View of the Site .....                     | 11 |
| Figure 3 ENERGY STAR Metrics Comparison .....             | 23 |
| Figure 4 Electricity Consumption .....                    | 26 |
| Figure 5 Natural Gas Consumption .....                    | 28 |
| Figure 6 Water Consumption .....                          | 30 |
| Figure 7 eQUEST Energy Model .....                        | 31 |
| Figure 8 Energy Model Electric Calibration .....          | 32 |
| Figure 9 Energy Model Peak Demand Calibration .....       | 32 |
| Figure 10 Energy Model Natural Gas Calibration .....      | 33 |
| Figure 11 Electricity Consumption End-Use Breakdown ..... | 34 |
| Figure 12 Electric Demand End-Use Breakdown .....         | 34 |
| Figure 13 Gas Consumption End-Use Breakdown .....         | 35 |

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|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| Figure 14 Sample Light Level Reading in Office Space.....                            | 36 |
| Figure 15 AC-1 Amps.....                                                             | 37 |
| Figure 16 AC-2 Amps.....                                                             | 38 |
| Figure 17 AC-7 Amps.....                                                             | 39 |
| Figure 18 Thermostat Temperature in [REDACTED] Housing Department Office Space ..... | 40 |
| Figure 19 Thermostat Temperature in College Lobby Area.....                          | 41 |
| Figure 20 Typical Advanced Power Strips .....                                        | 50 |

## Tables

|                                                             |    |
|-------------------------------------------------------------|----|
| Table 1 Savings and Cost Summary .....                      | 6  |
| Table 2 Energy Savings and Cost Summary by Measure .....    | 7  |
| Table 3 Renewable Energy Measures .....                     | 8  |
| Table 4 Non-Recommended Energy Measures .....               | 8  |
| Table 5 Incentive Summary.....                              | 9  |
| Table 6 Energy Audit Contacts .....                         | 10 |
| Table 7 Hours of Operation.....                             | 15 |
| Table 8 RTU List.....                                       | 16 |
| Table 9 Split System List.....                              | 17 |
| Table 10 Exhaust Fan List .....                             | 17 |
| Table 11 Plug Load List.....                                | 19 |
| Table 12 Domestic Hot Water List .....                      | 20 |
| Table 13 Plumbing Fixture List .....                        | 21 |
| Table 14 TOU Periods.....                                   | 24 |
| Table 15 Historical Electricity Consumption and Demand..... | 25 |
| Table 16 Historical Natural Gas Consumption .....           | 27 |
| Table 17 Historical Water Consumption .....                 | 29 |
| Table 18 Model Calibration Results .....                    | 31 |

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## 1.0 Executive Summary

The City of [REDACTED] requested Alternative Energy Systems Consulting (AESC) to perform this ASHRAE Level 3 Energy and water Audit and retro-commissioning (RCx) and measure tune-up investigation for the City of [REDACTED] City Hall. The audit report adheres to ASHRAE Level 3 audit guidelines and complies with the [REDACTED] ordinance, leading to reduced energy costs and protecting our environment by offering energy reduction options.

The [REDACTED] Building Maintenance Department initiated an energy and water audit and RCx investigation of [REDACTED] City Hall in [REDACTED] CA to determine possible energy efficiency measures (EEMs) and retro-commissioning and equipment/system tune-up measures. The goal of this Audit and RCx investigation is to provide the City of [REDACTED] with an Action Plan that identifies and prioritizes potential energy, demand, and water savings.

Significant rebates and incentives are available from [REDACTED] to reduce the cost of energy project implementation. Coordinate with your Utility account manager for assistance in applying for incentives before proceeding with equipment purchase and installation.

This study was conducted by AESC, as part of a comprehensive effort to assist the City of [REDACTED] [REDACTED] Building Maintenance Division in controlling energy costs and protecting our environment by offering a full spectrum of energy management options. The goal of an Integrated Audit and RCx investigation is to identify high-value energy, demand, natural gas, and water savings. The results of the [REDACTED] City Hall Audit and RCx investigation are summarized in Table 1 which includes all recommended energy efficiency measures (EEMs), retro-commissioning measures (RCx), renewable energy measures (REM) and electrification measures (ELM).

Table 1 Savings and Cost Summary

| Estimated Annual Savings Summary                    | Savings   | Reduction |
|-----------------------------------------------------|-----------|-----------|
| Estimated Annual Energy Savings (kWh)               | 122,504   | 48%       |
| Estimated Peak Demand Savings (kW)                  | 41.78     | 41%       |
| Estimated Natural Gas Savings (therms)              | -59       | -21%      |
| Estimated Water Savings (gallons)                   | 0.00      | 0%        |
| Estimated Annual Utility Cost Savings <sup>1</sup>  | \$31,896  | 47%       |
| Greenhouse Gas (GHG) Reduction (Metric Tons)        | 22.47     | 46%       |
| <b>Investment Overview</b>                          |           |           |
| Estimated Installation Costs                        | \$166,785 |           |
| Estimated Incentive Available <sup>2</sup>          | \$6,567   |           |
| Estimated Net Measure Cost                          | \$160,219 |           |
| Estimated Simple Payback Period (with incentive)    | 5.0       |           |
| Estimated Simple Payback Period (without incentive) | 5.2       |           |

## 1.1 Cost Reduction Opportunities

With support and input from the City of maintenance staff, AESC identified eight energy conservation measures in energy efficiency, retro-commissioning and renewable energy that, if implemented, could reduce future energy consumption by 122,504 kWh and -59 therms per year. Gas usage will increase because most of the recommended measures will reduce the facility's internal heat gain/load and require additional space heating. The energy efficiency projects, if implemented simultaneously with the incentives, would pay for themselves in 5.0 years while reducing the overall Greenhouse Gas (GHG) emissions by approximately 22.47 metric tons per year<sup>3</sup>. The calculated simple payback was estimated using the average electric and gas rates identified in Section 5 of the report. Table 2 summarizes the measures that are recommended for this facility.

<sup>1</sup> Estimated annual utility cost savings is based on the calculated virtual rate for each energy commodity. Refer to Section 5 of report.

<sup>2</sup> Incentives are based on estimated energy savings and are considered preliminary findings; realized savings and incentives will depend on the actual work performed and the measures implemented.

<sup>3</sup> Based on the CPUC Approved values which factors in all Greenhouse Gases.

Table 2 Energy Savings and Cost Summary by Measure

| Measure Description                                                                | Annual Energy and Cost Savings |                      |                     |             |                          | Project Costs, Incentives & Payback |                          |                      |                             |
|------------------------------------------------------------------------------------|--------------------------------|----------------------|---------------------|-------------|--------------------------|-------------------------------------|--------------------------|----------------------|-----------------------------|
|                                                                                    | Demand Reduction (kW)          | Energy Savings (kWh) | Natural Gas (therm) | Water (gal) | Annual Cost Savings (\$) | Estimated Installed Cost (\$)       | Potential Incentive (\$) | Simple Payback (yrs) | GHG Reduction (Metric Tons) |
| RCx-1 Revise HVAC Operating Schedule to Align with Respective Department Operation | 1.6                            | 5,876                | 10                  | 0.0         | \$1,564                  | \$277                               | \$0                      | 0.2                  | 1.15                        |
| RCx-2 RCx Economizer Controls on all RTUs                                          | 0.0                            | 9,288                | 0                   | 0.0         | \$2,430                  | \$4,095                             | \$1,393                  | 1.1                  | 1.73                        |
| EEM-3 Replace Interior Lamps/Fixtures with LEDs                                    | 3.3                            | 31,442               | -60                 | 0.0         | \$8,070                  | \$19,615                            | \$2,515                  | 2.1                  | 5.53                        |
| EEM-4 Implement Quality Maintenance Program to Improve Efficiency of RTUs          | 4.9                            | 8,779                | 6                   | 0.0         | \$2,312                  | \$4,926                             | \$0                      | 2.1                  | 1.66                        |
| EEM-5 Replace Existing Supply Fan Motors with Switched Reluctance Motors (SRM)     | 0.4                            | 4,069                | -7                  | 0.0         | \$1,046                  | \$3,975                             | \$1,221                  | 2.6                  | 0.72                        |
| EE-6 Install Advanced Power Strips to Control PC Plug Loads                        | 0.6                            | 5,116                | -8                  | 0.0         | \$1,318                  | \$4,892                             | \$767                    | 3.1                  | 0.91                        |
| EEM-7 Replace Exterior Fixtures with LEDs                                          | 1.1                            | 8,375                | 0                   | 0.0         | \$2,191                  | \$9,006                             | \$670                    | 3.8                  | 1.56                        |
| <b>Recommended Measure Totals</b>                                                  | <b>11.8</b>                    | <b>72,946</b>        | <b>-59</b>          | <b>0.0</b>  | <b>\$18,931</b>          | <b>\$46,785</b>                     | <b>\$6,567</b>           | <b>2.1</b>           | <b>13.26</b>                |

**Table 3 Renewable Energy Measures**

| Measure Description                         | Annual Energy and Cost Savings |                      |                      |             | Project Costs, Incentives & Payback |                               |                          |                      |                             |
|---------------------------------------------|--------------------------------|----------------------|----------------------|-------------|-------------------------------------|-------------------------------|--------------------------|----------------------|-----------------------------|
|                                             | Demand Reduction (kW)          | Energy Savings (kWh) | Natural Gas (therms) | Water (gal) | Annual Cost Savings (\$)            | Estimated Installed Cost (\$) | Potential Incentive (\$) | Simple Payback (yrs) | GHG Reduction (Metric Tons) |
| REM-1 Install Solar Panels on Building Roof | 30.0                           | 49,558               | 0                    | 0.0         | \$12,965                            | \$120,000                     | \$0                      | 9.3                  | 9.22                        |

**Table 4 Non-Recommended Energy Measures**

| Measure Description                                                       | Annual Energy and Cost Savings |                      |                      |             | Project Costs, Incentives & Payback |                               |                          |                      |                             |
|---------------------------------------------------------------------------|--------------------------------|----------------------|----------------------|-------------|-------------------------------------|-------------------------------|--------------------------|----------------------|-----------------------------|
|                                                                           | Demand Reduction (kW)          | Energy Savings (kWh) | Natural Gas (therms) | Water (gal) | Annual Cost Savings (\$)            | Estimated Installed Cost (\$) | Potential Incentive (\$) | Simple Payback (yrs) | GHG Reduction (Metric Tons) |
| NRM-1 Replace Gas Fired Domestic Water Heater with Heat Pump Water Heater | -0.8                           | -7,410               | 87                   | 0.0         | -\$1,712                            | \$3,750                       | \$0                      | 0.0                  | -0.92                       |

Table 5 Incentive Summary

| Incentive Categories       | Incentive Rates |
|----------------------------|-----------------|
|                            |                 |
|                            |                 |
|                            |                 |
| Controls/ RCx              | \$0.15          |
| Envelope                   | \$0.25          |
| HVAC/ Refrigeration        | \$0.30          |
| Lighting                   | \$0.24*         |
| Lighting (Lamp Only)       | \$0.08*         |
| Lighting (Non-Conforming)  | \$0.08          |
| Lighting Controls          | \$0.15*         |
| Plug/ Process/ Other       | \$0.15          |
| Thermal Energy Storage     | \$750           |
| Water Conservation Measure | \$1.31          |
| Project Cost Cap           | 75%             |

\*Project cost cap of 100% applies only to measures under lighting categories.

## 1.2 Implementation Planning

This energy audit aligns with City Green New Deal and supports the following targets:

- Supply 50% renewable energy by 2025; 80% by 2036; and 100% by 2045
- Reduce building energy usage per sq.ft. for all types of buildings 22% by 2025; 34% by 2035; and 44% by 2050
- Reduce Municipal GHG emissions 55% by 2025 and 65% by 2035 from 2008 baseline levels, reaching carbon neutral by 2045

The RCx Investigation is compliant with the City Program requirements and adheres to applicable sections of the ASHRAE Guideline 0.2 Commissioning Process for Existing Systems and Assemblies guidelines.

The goal of an RCx and measure tune-up investigation is to identify, and implement, the following types of measures:

- Correct deficiencies with existing controls



- Enhance the control and operation of existing equipment
- Make limited upgrades to existing equipment so that it will operate more efficiently

The City of [REDACTED] is strongly encouraged to consider the recommendations contained within this report for the [REDACTED] City Hall. The portfolio of identified projects will bring benefits to the bottom line, support [REDACTED] Green New Deal targets, and improve system reliability. [REDACTED] will also assist the City of [REDACTED] in identifying available financial incentives for which they qualify to implement selected measures.

## 2.0 Project Team and Facility Information

### 2.1 Site Visits and Acknowledgements

A site visit was conducted on October 13, 2022. During the initial site visit, Kusum Shekhliya of AESC met with City of [REDACTED] Building Maintenance Department representatives to review the facility operations and energy-using systems.

AESC would like to thank the staff at the City of [REDACTED] for their hospitality, facilitating the job walk and providing additional information to help with this audit.

### 2.2 Project Contacts

This section of the report identifies the project team members and includes contact information.

**Table 6 Energy Audit Contacts**

| Name                                           | Role                       | Contact Information                           |
|------------------------------------------------|----------------------------|-----------------------------------------------|
| City of [REDACTED] Energy and Water Management |                            |                                               |
| [REDACTED]                                     | [REDACTED]                 | [REDACTED]                                    |
| AESC, Inc.                                     |                            |                                               |
| Joseph Ling, P.E.                              | Engineering Technical Lead | E: jling@aesc-inc.com<br>P: 626-260-4806      |
| Kusum Shekhliya                                | Staff Engineer             | E: kshekhliya@aesc-inc.com<br>P: 919-802-5996 |
| Briana Rogers                                  | Vice President             | E: brogers@aesc-inc<br>P: 626-483-6834        |

## 2.3 Site Background Information

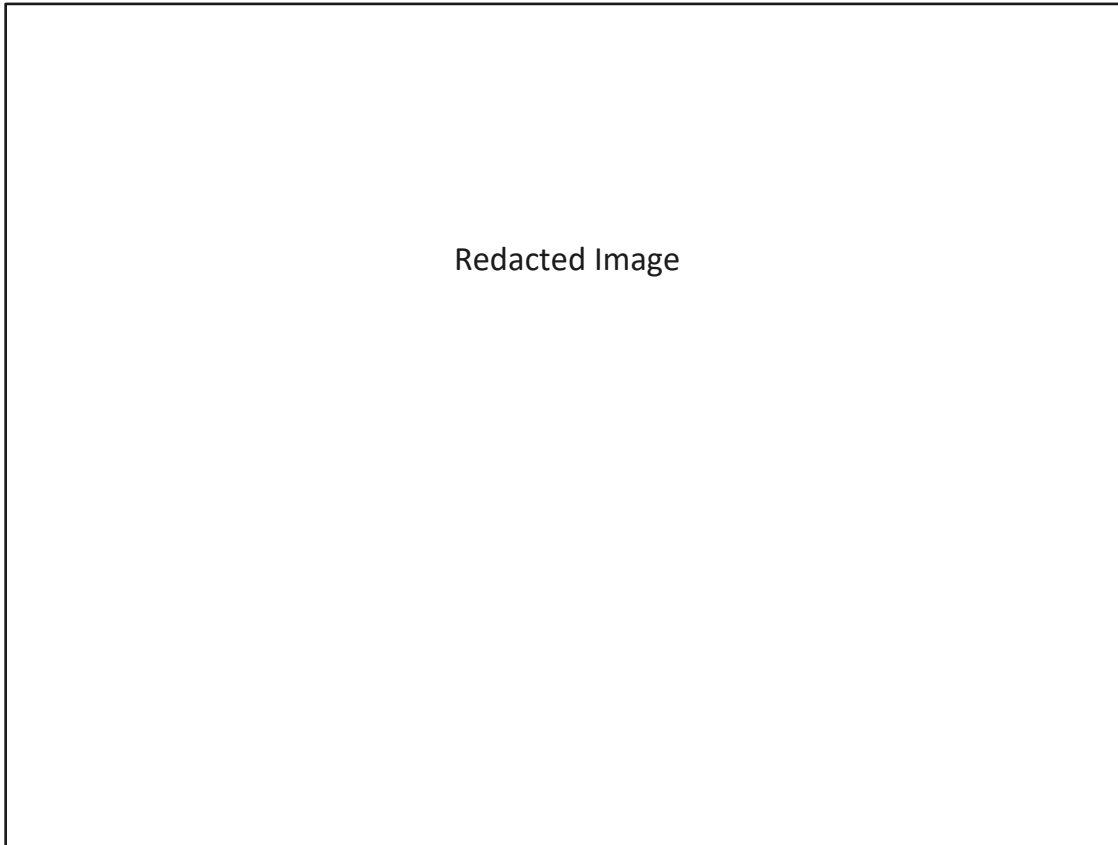


Figure 2 Arial View of the Site

|                                |                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------|
| Facility name:                 | City Hall                                                                                           |
| Location:                      |                                                                                                     |
| Building type:                 | Office                                                                                              |
| Total building square footage: | 32,962                                                                                              |
| Year building completed:       | 1923                                                                                                |
| Number of levels:              | 2                                                                                                   |
| Climate zone:                  | CZ09                                                                                                |
| Hours of operation:            | Varies                                                                                              |
| HVAC equipment:                | Packaged direct expansion (DX) gas heating roof top units (RTUs), Split DX systems and exhaust fans |

## 3.0 RCX Plan and Methodology

Existing building commissioning (EBCx) or “Retro-commissioning” (RCx) is a systematic process for improving and optimizing a building’s operations to ensure that building systems perform interactively to meet the owner’s current operational needs. The RCx and measure tune-up investigation at [REDACTED] City Hall will improve building performance, reduce energy usage, lengthen equipment life, and improve indoor air quality and occupant comfort.

### 3.1 RCx Objectives

The primary objective of the RCx and measure tune-up investigation at this facility was to identify deficiencies in the operation of a facility’s HVAC, lighting, plug load systems and their related controls and determine opportunities for corrective action and other operational and maintenance (O&M) improvements that reduce energy consumption and demand.

### 3.2 RCx Investigation Process

To perform the investigation, AESc assessed the facility’s equipment and operations through visual inspection, review of programmable thermostats and functional testing. AESc used the Tune-up Measure List, included in Appendix B, as the basis for its investigation.

The basic process involves four fundamental procedures:

1. Investigation and data collection
2. Analysis of data
3. Implementation of recommendations
4. Verification/Retesting of Implemented Improvements

Each of these procedures is discussed in detail below.

#### 3.2.1 Investigation and Data Collection

For this site, the RCx and Measure Tune-up Investigation was conducted along with the energy audit. Billing history and mechanical drawings were requested, however only billing history was received and reviewed before the site visit. AESc conducted a site visit to evaluate operating parameters and conditions, interviewing maintenance staff, reviewing equipment operating schedules and inspecting and testing equipment. Since several of the programmable thermostats were locked and inaccessible, the HVAC operating schedule could not be confirmed. AESc deployed current transducers (CTs)/loggers on

three rooftop units (RTUs) to monitor the power consumptions and verify operation of equipment. Further, to facilitate the investigation and to ensure that all systems were examined, AESC used the Tune-up Measure list. The assessment identified several significant findings identified in Section 6.

Since the site does not have a Building Automation System (BAS), no functional testing could be performed on HVAC units. However, it was visually observed that the economizer controls on all RTUs were not functioning. The compressors on most RTUs were operating to provide conditioned air when the outside air temperature was 65 °F and free cooling could be utilized.

A test was performed to check functionality of ceiling mounted lighting occupancy sensors in a few spaces. During the visit, light fixtures in the [REDACTED] office space (Room 274) were off. The lights turned on automatically when the ceiling mounted occupancy sensors detected an occupant in the space. A similar test was performed in the women's restroom on second floor (opposite to [REDACTED]) and community room women's restroom confirming that the occupancy sensors are functioning properly.

Refer to appendix A for functional performance testing reports.

### 3.2.2 Analysis of Data

AESC analyzed the investigation site notes, which included discussions with the facility engineers and visual observations and reviewed all the information made available by EWM STAFF. Based on this data, AESC identified several energy efficiency measures (EEMs), retro-commissioning measures (RCx) and renewable energy measures (REM) and estimated energy savings and costs associated with measure implementation. No water conservation measures were identified at this site since all the plumbing fixtures are low flow fixtures.

An eQUEST energy model was developed which provides a breakout of the building's electrical energy by end use, which is helpful in understanding the relative uses of electricity within the building. eQUEST quantifies facility energy consumption and energy demand. It calculates hour-by-hour building energy consumption over an entire year (8,760 hours) using local, hourly weather data for the location under consideration. Basic input parameters include a detailed building description, hourly occupant schedules, existing lighting characteristics, existing airside, waterside, and miscellaneous equipment, and current thermostat settings and set points.

Implementation costs for each measure was estimated based on contractor budgetary cost estimates, R.S. Means, Online vendors and quotes from similar projects. Energy savings, cost savings and implementation costs were determined for each measure, compiled into a summary spreadsheet, and prioritized based on payback.

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### **3.2.3 Implementation of Recommendation**

AESC will meet with City of [REDACTED] EWM staff to discuss the identified measures and develop a plan for implementation in accordance with the [REDACTED] ordinance. Once the City has selected the measures with which they want to proceed, the next step is measure implementation. Low-cost measures are usually well suited for in-house implementation to save project costs, although they can be contracted out. Capital improvements are usually contracted out directly to an installation contractor or turned over to a performance contractor for financing and implementation. The City should have their facility personnel implement all the measures within their capability and hire outside contractors for those measures beyond the staff's ability.

### **3.2.4 Verification of Implemented Improvements**

After the measures are implemented, the City of [REDACTED] will inform AESC. AESC will retest and/or visually observe to confirm that the installed measures are functioning properly. Additionally, the site's utility use will be tracked using EnergyStar Portfolio Manager.

## 4.0 Energy Using Systems

The City Hall is located at CA and has an estimated facility area of 32,962 square feet (sq.ft.). The facility was originally constructed in 1923 and was dedicated as the In 2007, the city purchased the building to complete the civic center at Due to considerable damage to the building during an earthquake in 2008, the building was seismically retrofitted in 2011 while retaining the historic features of the building. The building was officially opened in August 2013 as the community's new city hall also referred to as civic center.

The building currently houses different departments: The building has several private and open office spaces, breakrooms, meeting rooms and a community room.

The departments within the building have different hours of operation which are specified in the table below.

**Table 7 Hours of Operation**

| Department | Hours of Operation                                       |
|------------|----------------------------------------------------------|
|            | 7AM to 9 AM and 2:30PM to 3:30 PM                        |
|            | 9AM to 1 PM, Monday - Thursday                           |
|            | 9AM to 4 PM Monday to Friday                             |
|            | 8AM to 7PM, Monday - Thursday<br>8 AM to 4:30 PM, Friday |
|            | 9 AM to 5 PM, Monday to Friday<br>9 am to 1 PM, Saturday |
|            | 11 AM to 7 PM, Monday - Thursday<br>9 AM to 5 PM, Friday |

### 4.1 Heating, Ventilation, and Air Conditioning (HVAC)

The building is fully air-conditioned and is served by a combination of direct-expansion (DX) gas heating rooftop units (RTUs) and split systems. The RTUs vary in size between 5 and 25 tons and the units were manufactured in 2011, 2012 and 2013. The units have Energy Efficiency Ratio (EER) ratings between 10.6

and 11.6 and appeared in below average condition at the time of energy audit site visit. All RTUs that are greater than or equal to 10 tons have supply fans equipped with variable frequency drives (VFDs). All units have economizer controls which were not functional at the time of audit. The compressors on most RTUs were operating to provide conditioned air when the outside air temperature was 65 °F and free cooling could be utilized. All RTUs are controlled by local programmable thermostats.

The [REDACTED] is conditioned by a split heat pump unit. The units, HP-1 and HP-2 are located to the right side of the building, and each have a capacity of 4 tons. The units were manufactured in 2013 and have a Seasonal Energy Efficiency Ratio (SEER) of 13. The supporting areas, like the communication rooms, are conditioned by split cooling only units and vary in size between 2 and 3 tons.

The facility has multiple exhaust fans serving supporting areas like restrooms, storage rooms, and electrical rooms that are either controlled by room thermostat or are interlocked with the corresponding RTUs. All the RTUs, split systems, and exhaust fans are listed in Table 8, Table 9 and Table 10.

**Table 8 RTU List**

| Tag  | Type                   | Manufacturer | Model #  | Serial #   | Cooling Capacity (MBH) | Tons | Efficiency (EER) | CFM  | Supply Fan Motor (hp) | Heating Capacity (MBH) | Area Served |
|------|------------------------|--------------|----------|------------|------------------------|------|------------------|------|-----------------------|------------------------|-------------|
| AC-1 | DX Cooling Gas Heating | York         | ZJ300N24 | N1D3662317 | 290                    | 25   | 10.6             | 7000 | 7.5                   | 400                    | [REDACTED]  |
| AC-2 | DX Cooling Gas Heating | York         | ZF060N08 | N1M1407965 | 50.6                   | 5    | 10.8             | 1750 | 1.04                  | 100                    | [REDACTED]  |
| AC-3 | DX Cooling Gas Heating | York         | ZH120N15 | N1K1296368 | 127.8                  | 10   | 11               | 4000 | 2.69                  | 180                    | [REDACTED]  |
| AC-4 | DX Cooling Gas Heating | York         | ZH090N10 | N1E1047045 | 93.6                   | 7.5  | 11.4             | 3000 | 1.74                  | 180                    | [REDACTED]  |
| AC-5 | DX Cooling Gas Heating | York         | ZJ240N24 | N1A2538316 | 253.3                  | 20   | 11.6             | 8000 | 6.1                   | 300                    | [REDACTED]  |
| AC-6 | DX Cooling Gas Heating | York         | ZH150N15 | N1A2501375 | 162.1                  | 12.5 | 11.2             | 5000 | 4.36                  | 180                    | [REDACTED]  |
| AC-7 | DX Cooling Gas Heating | York         | ZH150N15 | N1A2501374 | 162.1                  | 12.5 | 11.2             | 5000 | 4.36                  | 180                    | [REDACTED]  |

Table 9 Split System List

| Tag  | Type       | Manufacturer | Model #      | Serial #   | Tonnage | SEER/EER  | Area Served |
|------|------------|--------------|--------------|------------|---------|-----------|-------------|
| AC-1 | DX Cooling | Fujitsu      | AOU36CLX1    | HBN015321  | 3       | -         |             |
| AC-2 | DX Cooling | Fujitsu      | AOU36CLX1    | HBN015320  | 3       | -         | -           |
| CU-1 | DX Cooling | Mitsubishi   | MUY-GE24NA   | 1004876    | 2       | 17.5 SEER |             |
| CU-2 | DX Cooling | Mitsubishi   | MUY-GE24NA   | 1004872    | 2       | 17.5 SEER |             |
| CU-3 | DX Cooling | Mitsubishi   | PUY-A12NHA4  | 26U065449C | 1       | 12.8 EER  |             |
| HP-1 | Heat Pump  | York         | YHJD48S43S3A | W1L3173518 | 4       | 13 SEER   |             |
| HP-2 | Heat Pump  | York         | YHJD48S43S3A | -          | 4       | 13 SEER   |             |

Table 10 Exhaust Fan List

| Location | Tag  | Manufacturer  | Model #  | Fan Motor (Hp) | CFM  | External Static Pressure (in WG) | Area Served                           |
|----------|------|---------------|----------|----------------|------|----------------------------------|---------------------------------------|
| Roof     | EF-1 | Twin City Fan | BCRD100C | 0.25           | 1000 | 0.75                             | Men and Women RR Room 171,173,105,104 |
| Roof     | EF-2 | Twin City Fan | BCRD070C | 0.25           | 220  | 0.5                              | Men and Women RR Room 153, 153        |
| Roof     | EF-3 | Twin City Fan | BCRD100C | 0.25           | 600  | 0.5                              | Men and Women RR Room 207,206         |
| Roof     | EF-4 | Twin City Fan | BCRD070C | 0.25           | 300  | 0.5                              | Men and Women RR Room 116, 117        |
| Roof     | EF-5 | Twin City Fan | BCRD100C | 0.25           | 545  | 0.5                              | Electrical Room and Storage           |
| Roof     | EF-6 | Twin City Fan | BCRD100C | 0.25           | 390  | 0.5                              | Elevator Room 106                     |

## 4.2 Building Automation System

No building automation system (BAS) front-end workstation exists at the site. All RTUs are controlled by programmable thermostats which are programmed with occupied and unoccupied schedules. This schedule varies between departments. Most of the thermostats were inaccessible during the audit, and therefore the actual operating schedule of all RTUs could not be determined. Typical thermostat setpoints are between 72 °F and 74 °F for cooling and 68 °F for heating during occupied hours. The unoccupied setpoints for all RTUs are 85 °F and 55 °F for cooling and heating, respectively.



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### 4.3 Lighting Equipment

The building interior is lit by a combination of linear fluorescent (LF) lamps and compact fluorescent lamps (CFLs). Most of the offices have 4-foot T8 LF fixtures with 1, 2, or 3-lamp combinations. A few CFL can fixtures with 26 W lamps and T5 linear fluorescent fixtures with 1-lamp and 2-lamp configuration were observed throughout the building. The main entrance and second floor corridor have decorative pendant fixtures with 6 CFL lamps. The interior lighting is controlled by a combination of ceiling mounted occupancy sensors and a lighting control panel.

Exterior lights are comprised of metal halide wall packs and 2-lamp metal halide pole fixtures in the parking lot. Exterior lighting is controlled by photocell control.

The full lighting inventory for the site can be found in Appendix B.

### 4.4 Plug Loads

The facility primarily consists of office spaces which include typical plug loads such as computer workstations, printers, and copiers. The break rooms are equipped with refrigerators and a microwave. All the plug loads are listed in Table 11.

Table 11 Plug Load List

| Standard Plug Loads   |     |         |               |           |     |           |
|-----------------------|-----|---------|---------------|-----------|-----|-----------|
|                       | PCs | Copiers | Refrigerators | Microwave | TV  |           |
| Location              | Qty | Qty     | Qty           | Qty       | Qty | Other     |
|                       | -   | 1       | -             | -         | -   | -         |
|                       | 2   | -       | -             | -         | -   | -         |
|                       | 2   | -       | -             | -         | -   | -         |
|                       | 2   | -       | -             | -         | -   | -         |
|                       | 1   | -       | -             | -         | -   | -         |
|                       | 2   | -       | -             | -         | -   | -         |
| Offices               | 10  | 2       | -             | -         | -   | -         |
| Break Room            | -   | -       | 1             | 1         | 1   | -         |
|                       | 3   | -       | -             | 1         | -   | 1 Printer |
|                       | 4   | 1       | -             | -         | -   | 1 Printer |
| Storage               | -   | -       | -             | 1         | -   | -         |
|                       | 4   | -       | -             | -         | -   | 2 Printer |
| Breakroom             | -   | -       | 2             | 1         | -   | -         |
| Breakroom 1405 Office | 2   | -       | -             | -         | -   | -         |
| Breakroom Open Office | 11  | 1       | -             | -         | -   | 1 Printer |
| 1401 Meeting Room     | 1   | -       | -             | -         | -   | -         |
| 1402 Meeting Room     | 1   | -       | -             | -         | -   | -         |
| 1403 Meeting Room     | 1   | -       | -             | -         | -   | -         |
| Cubicle 1             | 1   | -       | -             | -         | -   | -         |
| Cubicle 2             | 1   | -       | -             | -         | -   | -         |
| Cubicle 3             | 1   | -       | -             | -         | -   | -         |
| Manager Office        | 1   | -       | -             | -         | -   | -         |
| Office                | 1   | -       | -             | -         | -   | -         |
| 1501 Training Room    | 1   | -       | -             | -         | -   | -         |
| 1503 Admin            | 3   | 2       | -             | -         | -   | -         |
| 1504 Lounge           | 3   | 1       | -             | 1         | 1   | -         |

## 4.5 Water Systems

Domestic hot water (DWH) is produced by two Bradford White Corporation water heaters. WH-1 is a gas fired water heater with 76 MBH capacity and 75-gallon storage tank whereas WH-2 is an electric water heater with 18 kW capacity and 30-gallon storage tank. Domestic hot water is primarily consumed in the restrooms and kitchen sink. All domestic water heaters are listed in Table 12.

**Table 12 Domestic Hot Water List**

| Location         | Tag  | Manufacturer               | Model #       | Input Capacity (MBH) | Thermal Efficiency | Serves                   | Storage Tank Capacity (Gallons) |
|------------------|------|----------------------------|---------------|----------------------|--------------------|--------------------------|---------------------------------|
| Custodian Closet | WH-1 | Bradford White Corporation | 75T80B3N      | 76                   | 0.8                | Whole Building           | 75                              |
| Closet           | WH-2 | Bradford White Corporation | 30A-18-3-107A | 18 kW                | -                  | Community Room Restrooms | 30                              |

The site is equipped with reduced flow toilets, sinks, and urinals. The site has a total of sixteen toilets, sixteen lavatory sinks and three urinals. All the lavatory sinks are 0.5 gallons per minute (GPM) with aerators. Toilets are 1.28 gallons per flush (GPF), and urinals are 0.125 GPF versions. All plumbing fixtures are listed in Table 13.

Table 13 Plumbing Fixture List

| Location                | Type   | Qty | GPM | GPF   | Aerator |
|-------------------------|--------|-----|-----|-------|---------|
| Women RR                | Toilet | 4   | -   | 1.28  | -       |
|                         | Sink   | 4   | 0.5 | -     | Yes     |
| Women RR                | Toilet | 2   | -   | 1.28  | -       |
|                         | Sink   | 3   | 0.5 | -     | Yes     |
| Men RR                  | Toilet | 1   | -   | 1.28  | -       |
|                         | Sink   | 2   | 0.5 | -     | Yes     |
|                         | Urinal | 1   | -   | 0.125 | -       |
| Main Entry Women RR     | Toilet | 1   | -   | 1.28  | -       |
|                         | Sink   | 1   | 0.5 | -     | Yes     |
| Main Entry Men RR       | Toilet | 1   | -   | 1.28  | -       |
|                         | Sink   | 1   | 0.5 | -     | Yes     |
| Community Room Women RR | Toilet | 4   | -   | 1.28  | -       |
|                         | Sink   | 2   | 0.5 | -     | Yes     |
| Community Room Men RR   | Toilet | 1   | -   | 1.28  | -       |
|                         | Sink   | 1   | 0.5 | -     | Yes     |
|                         | Urinal | 2   | -   | 0.125 | -       |
| Front Offices Women RR  | Toilet | 1   | -   | 1.28  | -       |
|                         | Sink   | 1   | 0.5 | -     | Yes     |
| Front Offices Men RR    | Toilet | 1   | -   | 1.28  | -       |
|                         | Sink   | 1   | 0.5 | -     | Yes     |

## 4.6 Operations and Maintenance Procedures

Currently, in-house personnel perform most equipment operation and maintenance. This includes adjusting thermostats, replacing light bulbs, replacing filters in the AC units and general repairs. Outside contractors are used if facility staff are unable to remedy equipment and/or system issues or to perform more complex maintenance procedures.

# 5.0 Site Energy Use and Costs

## 5.1 Benchmarking

Based on the building information entered in ENERGY STAR Portfolio Manager, such as size, location, number of workers on main shift, etc., the rating system estimates how much energy the building would use if it were the best performing, the worst performing, and every level in between. The system then compares the actual energy data entered and the estimate to determine how the building ranks in relation to comparable facilities.

To be eligible to receive an ENERGY STAR score, at least 50% of the Gross Floor Area must be comprised of a single Property Type that is eligible to receive a score. Since the building type is other-public services, the ENERGY STAR Portfolio manager does not provide score; therefore, the weather-normalized source Energy Use Intensity (EUI) is used to evaluate the energy performance, both against the national median and by comparing the site's current and baseline periods. Figure 3 below shows the benchmarking metric summary from ENERGY STAR Portfolio manager.

The Energy Use Intensity (EUI) for the site energy usage is 28.1 kBtu per square foot per year. According to ENERGY STAR portfolio Manager, the average annual energy intensity for median property is 32.6 kBtu per square foot per year. The site uses approximately 13.8% less energy than the average median property. Miscellaneous/Other category buildings have a different occupancy and daytime, nighttime, and weekend operating hours than the [REDACTED] City Hall, which has standard office operating hours throughout the year, resulting in lower electricity EUI.

| Metrics Comparison for Your Design and/or Target |                               |                               |                               |                               |
|--------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Metric                                           | Design Project                | Design Target*                | Median Property*              | Property Measurement in Use   |
| ENERGY STAR score (1-100)                        | <a href="#">Not Available</a> | <a href="#">Not Available</a> | 50                            | <a href="#">Not Available</a> |
| Source EUI (kBtu/ft²)                            | <a href="#">Not Available</a> | <a href="#">Not Available</a> | 89.3                          | 77.0                          |
| Site EUI (kBtu/ft²)                              | <a href="#">Not Available</a> | <a href="#">Not Available</a> | 32.6                          | 28.1                          |
| Source Energy Use (kBtu)                         | <a href="#">Not Available</a> | <a href="#">Not Available</a> | 2,656,941.8                   | 2,292,923.5                   |
| Site Energy Use (kBtu)                           | <a href="#">Not Available</a> | <a href="#">Not Available</a> | 969,449.5                     | 836,628.5                     |
| Energy Cost (\$)                                 | <a href="#">Not Available</a> | <a href="#">Not Available</a> | <a href="#">Not Available</a> | <a href="#">Not Available</a> |
| Total GHG Emissions (Metric Tons CO2e)           | 0.0                           | <a href="#">Not Available</a> | 65.9                          | 56.9                          |

\* To perform calculations for your design target, we use the fuel mix that you've entered for your design energy estimates. If you have not entered estimated design energy, we'll use the average for your state. To perform calculations for the national median, we will assume the fuel mix and operational details of your property measurement in use, if available. Otherwise, we will use your design estimates.

Figure 3 ENERGY STAR Metrics Comparison

## 5.2 Historical Energy Consumption Analysis

### 5.2.1 Electric Meter

The facility has three electric meters and purchases all its electricity from [REDACTED]. The meter is billed under the alternative time-of-use (A-TOU) A-2 and A-2[i] schedule, which sets rates based on the time of day the kilowatt-hours are consumed. Different unit costs are charged for summer and winter periods. The summer period is from June through September. The winter period begins in October and continues through May. During both summer and winter periods, each day is separated into three blocks High Peak (highest energy charge), Base Peak (medium energy charge), and Low Peak (lowest energy charge). These periods are defined in Table 14.

Table 14 TOU Periods

| Daily Period     | Time of Day                                                                      | Weekday hours      |
|------------------|----------------------------------------------------------------------------------|--------------------|
| High Peak Period | 1:00 p.m. - 4:59 p.m.<br>Monday through Friday                                   | 20 hours per week  |
| Low Peak Period  | 10:00 a.m. - 12:59 p.m.<br>5:00 p.m. - 7:59 p.m.<br>Monday through Friday        | 30 hours per week  |
| Base Period      | 8:00 p.m. - 9:59 a.m.<br>Monday through Friday<br>All day Saturday and<br>Sunday | 118 hours per week |

Annual electricity usage analysis is beneficial in understanding the yearly variation in consumption and cost. AESC used 12 months of facility electrical usage for the period of September 2021 through August 2022. The total annual electricity use over this one-year period was 254,302 kWh, with a maximum peak demand of 100.9 kW and total cost of \$66,531. Historical electricity consumption is summarized in Table 15.

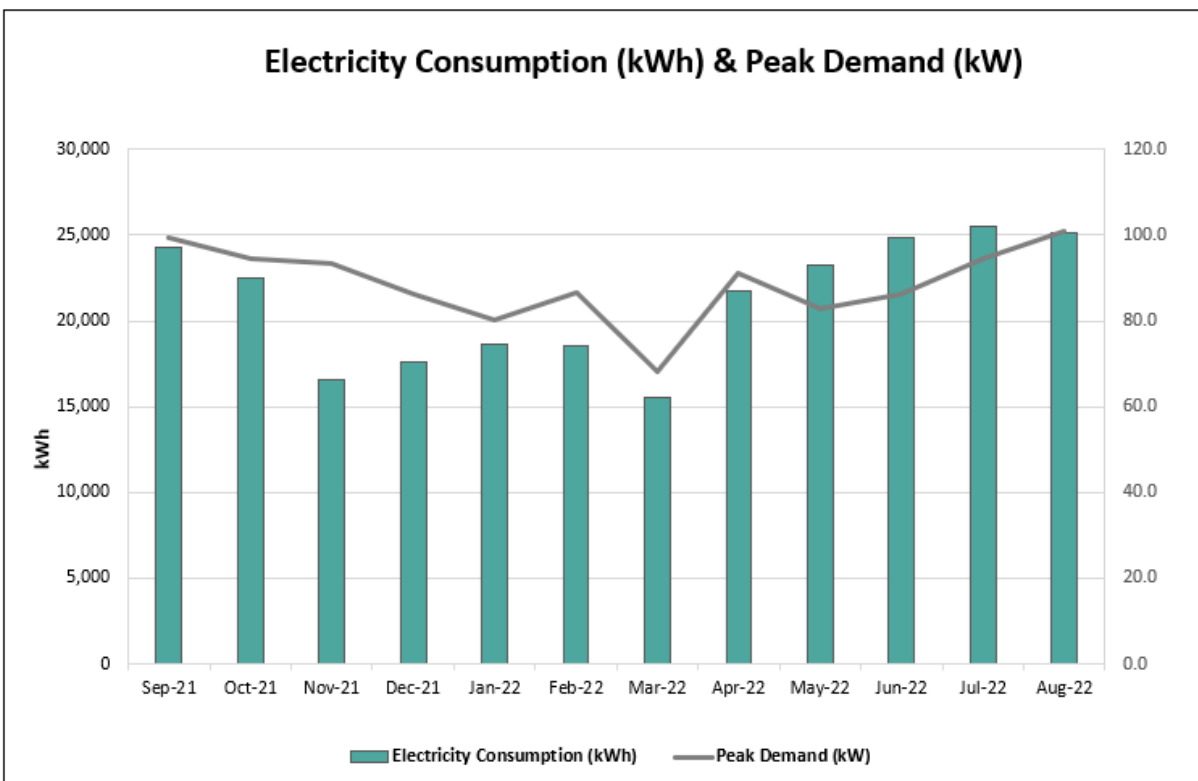
Table 15 Historical Electricity Consumption and Demand

| Month            | Peak Demand (kW) | Electricity Consumption (kWh) | Electricity Cost (\$) |
|------------------|------------------|-------------------------------|-----------------------|
| Sep-21           | 24,288           | 99.5                          | \$6,688               |
| Oct-21           | 22,532           | 94.6                          | \$5,615               |
| Nov-21           | 16,600           | 93.4                          | \$4,133               |
| Dec-21           | 17,609           | 86.2                          | \$4,540               |
| Jan-22           | 18,618           | 80.0                          | \$4,947               |
| Feb-22           | 18,581           | 86.7                          | \$4,873               |
| Mar-22           | 15,532           | 68.2                          | \$4,019               |
| Apr-22           | 21,737           | 91.0                          | \$5,441               |
| May-22           | 23,284           | 82.8                          | \$5,648               |
| Jun-22           | 24,887           | 86.3                          | \$6,638               |
| Jul-22           | 25,469           | 94.6                          | \$7,003               |
| Aug-22           | 25,167           | 100.9                         | \$6,986               |
| <b>Total/Max</b> | <b>254,302</b>   | <b>100.9</b>                  | <b>\$66,531</b>       |

The virtual rate, the overall averaged annual rate per unit of consumption paid for electricity, is a valuable metric in utility and Energy Efficiency Measure (EEM) analysis. Virtual rate is determined by dividing the total cost to the facility for a given period by the units of consumption for the same period. The average unit cost of electricity for this site was approximately \$0.26/kWh, which includes commodity, transportation, and public purpose program charges.

Figure 4 plots electricity consumption relative to time of year. Electricity consumption at this facility displays a strong correlation to weather. Significantly more electricity is utilized in the summer months due to increased demand for cooling.





**Figure 4 Electricity Consumption**

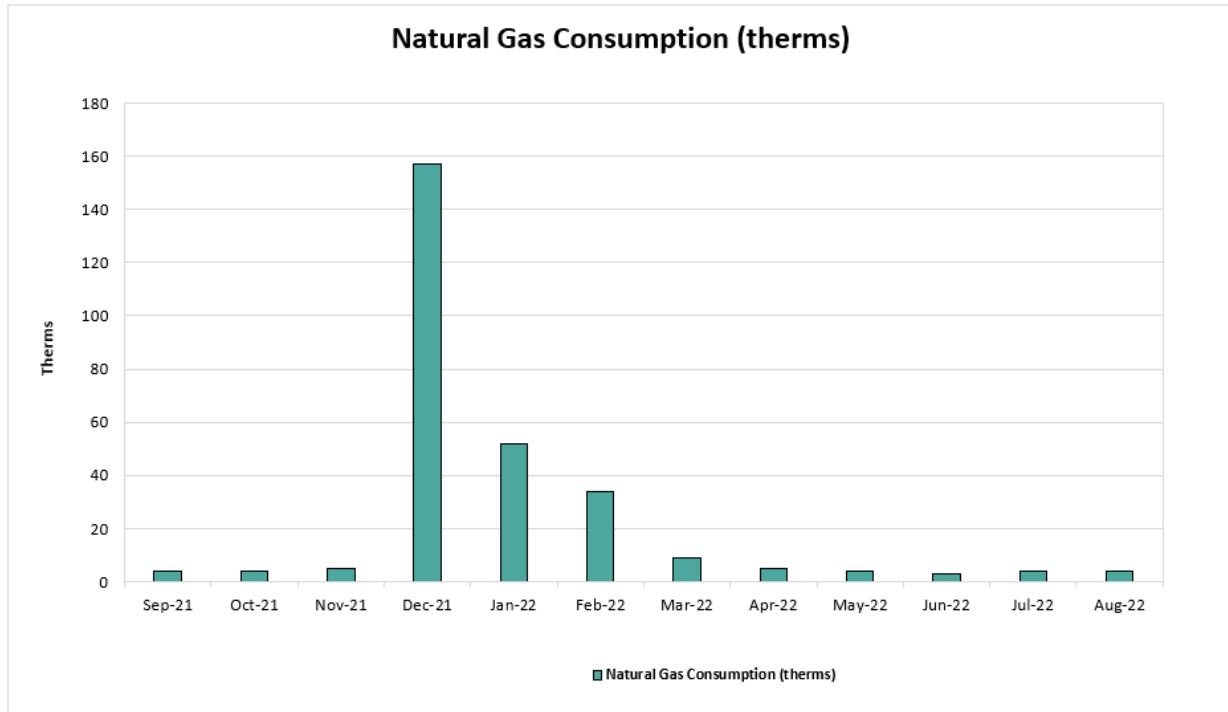
### 5.2.2 Gas Meter

The facility has one meter. The meter is billed under schedule G-10 Nonresidential (core commercial and industrial service), which sets rates based on tier allotments. Based on meter data collected, AESC tabulated 12 months of data from September 2021 through August 2022. The total annual gas consumption during this 12-month period was 285 therms, with a total cost of \$745. Historical gas consumption is summarized in Table 16.

Table 16 Historical Natural Gas Consumption

| Month        | Natural Gas Consumption (therms) | Natural Gas Cost (\$) |
|--------------|----------------------------------|-----------------------|
| Sep-21       | 4                                | \$21                  |
| Oct-21       | 4                                | \$23                  |
| Nov-21       | 5                                | \$25                  |
| Dec-21       | 157                              | \$316                 |
| Jan-22       | 52                               | \$127                 |
| Feb-22       | 34                               | \$81                  |
| Mar-22       | 9                                | \$31                  |
| Apr-22       | 5                                | \$25                  |
| May-22       | 4                                | \$24                  |
| Jun-22       | 3                                | \$24                  |
| Jul-22       | 4                                | \$24                  |
| Aug-22       | 4                                | \$25                  |
| <b>Total</b> | <b>285</b>                       | <b>\$745</b>          |

The average unit cost of natural gas was calculated as \$2.61/therm which includes commodity, transportation, and public purpose program charges. Figure 5 plots gas consumption relative to time of year.



**Figure 5 Natural Gas Consumption**

Natural gas consumption at this facility is primarily used for domestic hot water (DHW) heating and space heating. Natural gas usage peaked in December due to space heating demands.

### 5.2.3 Water Meter

The building is served by one meter. The meter is billed under the water schedule C (for commercial, industrial, and governmental customers), which sets rates based on tier allotments.

Based on the actual meter data collected, 12 months of data, from September 2021 through August 2022, was tabulated in Table 17. The total annual water consumption during this 12-month period was 599,937 gallons of water, with a total cost of \$7,358.

**Table 17 Historical Water Consumption**

| Month        | Water Consumption<br>(Gallons) | Water Cost (\$) |
|--------------|--------------------------------|-----------------|
| Sep-21       | 125,673                        | \$1,529         |
| Oct-21       | 77,797                         | \$939           |
| Nov-21       | 34,410                         | \$405           |
| Dec-21       | 59,096                         | \$708           |
| Jan-22       | 23,938                         | \$283           |
| Feb-22       | 29,174                         | \$356           |
| Mar-22       | 54,608                         | \$682           |
| Apr-22       | 47,127                         | \$586           |
| May-22       | 31,418                         | \$382           |
| Jun-22       | 31,418                         | \$382           |
| Jul-22       | 32,914                         | \$418           |
| Aug-22       | 52,364                         | \$689           |
| <b>Total</b> | <b>599,937</b>                 | <b>\$7,358</b>  |

The average cost of water was calculated to be \$0.012 per gallon. Figure 6 plots water consumption relative to time of year.

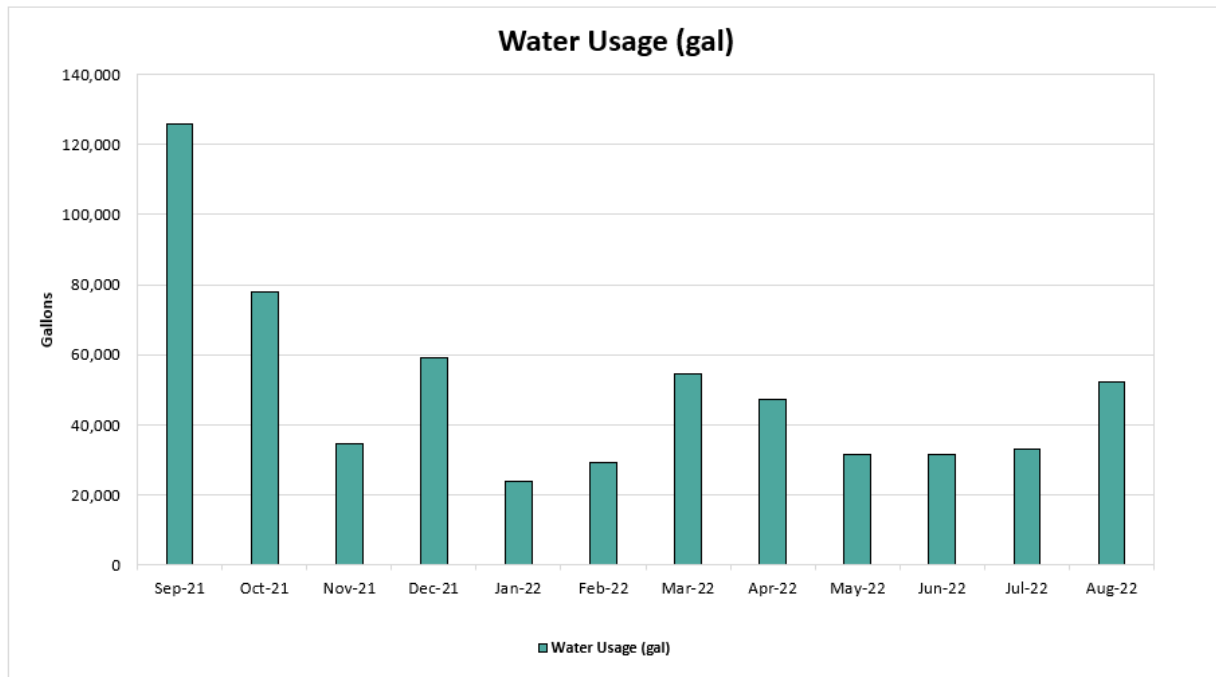


Figure 6 Water Consumption

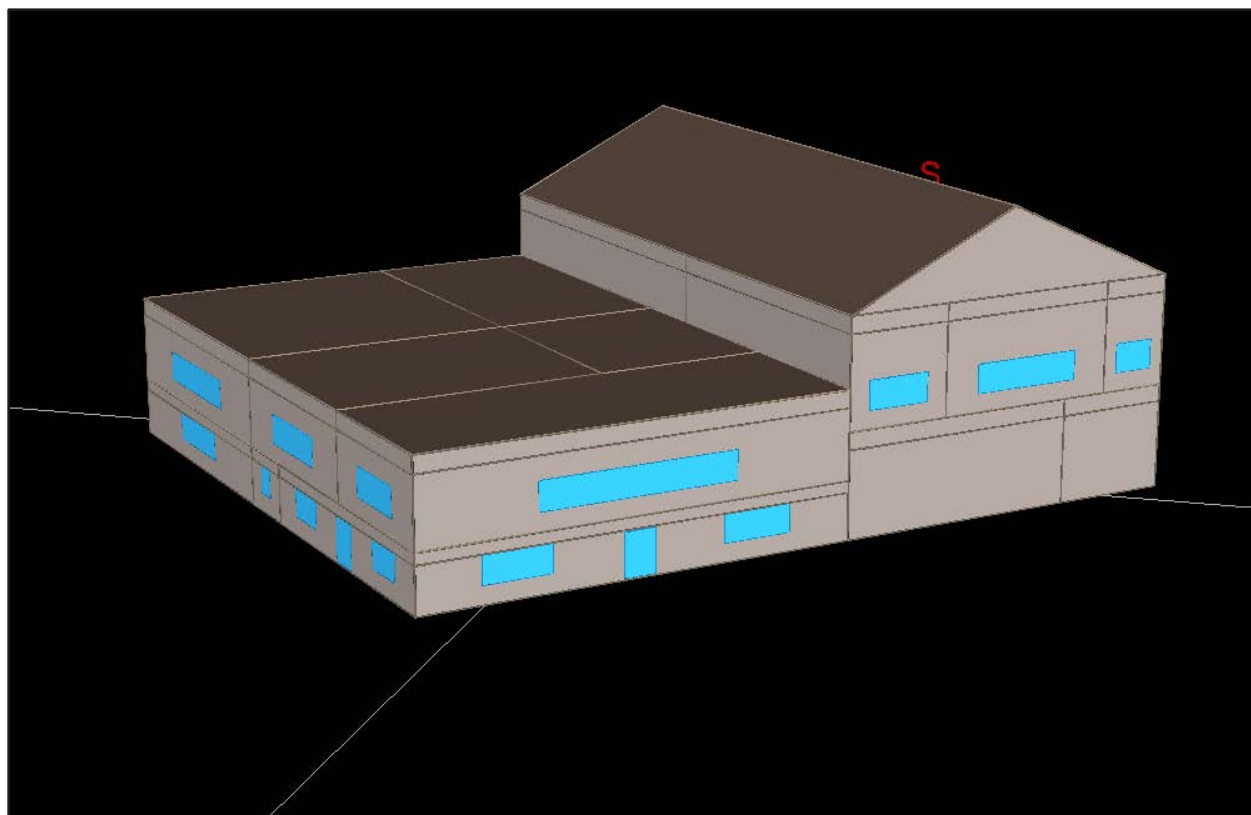
### 5.3 Energy Analysis Methodology

An energy model was developed using the eQUEST modeling software to verify the validity of assumed baseline conditions as well as to determine the potential energy savings for each proposed energy efficiency measure (EEM). The building energy model provides a breakout of the building's electrical energy by end use, which is helpful in understanding the relative uses of electricity within the building.

The local climate is a key factor in a building's energy use. The site is located in climate zone 9 (CZ09). This inland valley zone is influenced by both coastal and interior weather. The inland winds bring hot and dry air, and marine air brings cool and moist air. Summers are warmer, and winters are cooler. The weather file used for the energy model is [REDACTED]

The calibration criterion for the model was to match the results with actual meter data within a  $\pm 5\%$  level of tolerance for annualized energy usage and  $\pm 10\%$  for month usage. The energy used by the facility for the most recent 12 months was compared to the energy model, for the purpose of calibration. Adjustments were made to the HVAC schedules, plug load demand, and plug load volume to achieve calibration within program tolerances. The electric utility data shows usage of 254,302 kWh per year; the model predicted usage of 242,800 kWh per year, which is within 4.5% of actual utility billing data.

Calibration is within acceptable tolerances on a monthly basis for electricity, peak demand, and natural gas usage.



**Figure 7 eQUEST Energy Model**

Table 18 summarizes the energy model calibration. Figures 8 through 10 show the graphical representations of calibration results by utility, broken down by month.

**Table 18 Model Calibration Results**

|                        | Adjusted Annual Billed | Annual Modeled | % Difference |
|------------------------|------------------------|----------------|--------------|
| Electric (kWh)         | 254,302                | 242,800        | 4.5%         |
| Max Electric Peak (kW) | 100.9                  | 105.0          | -4.1%        |
| Gas (therms)           | 285                    | 265            | 7.0%         |

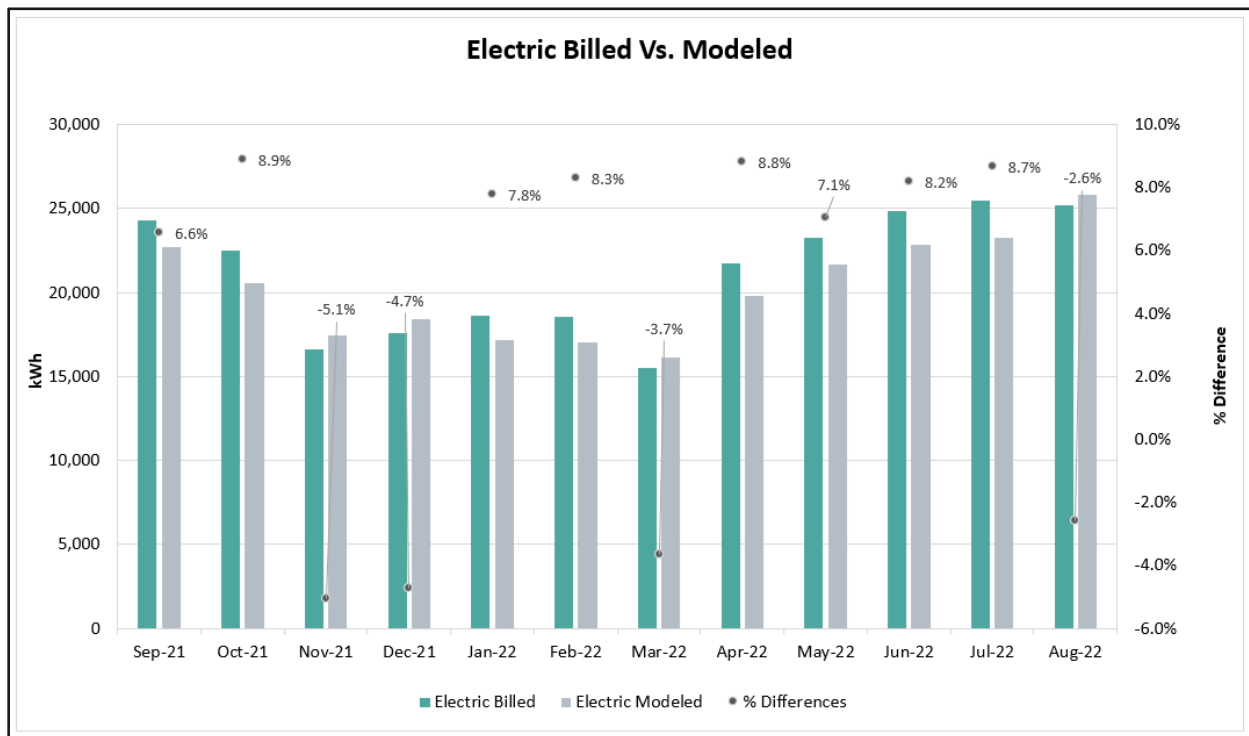


Figure 8 Energy Model Electric Calibration

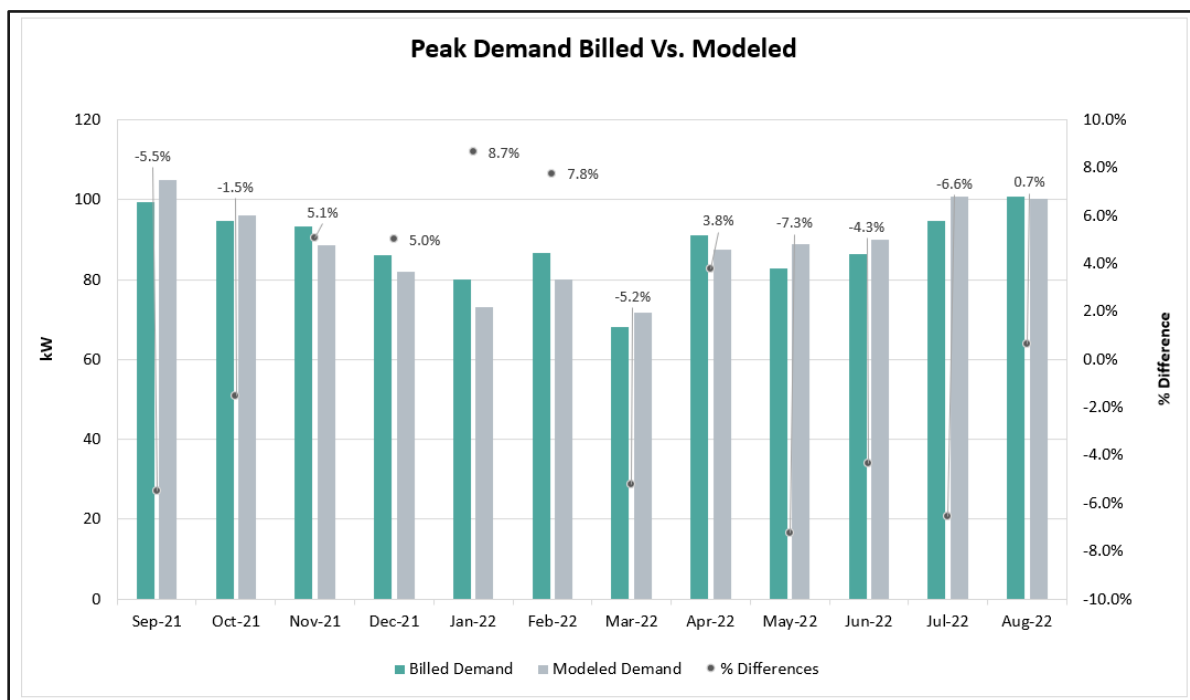


Figure 9 Energy Model Peak Demand Calibration

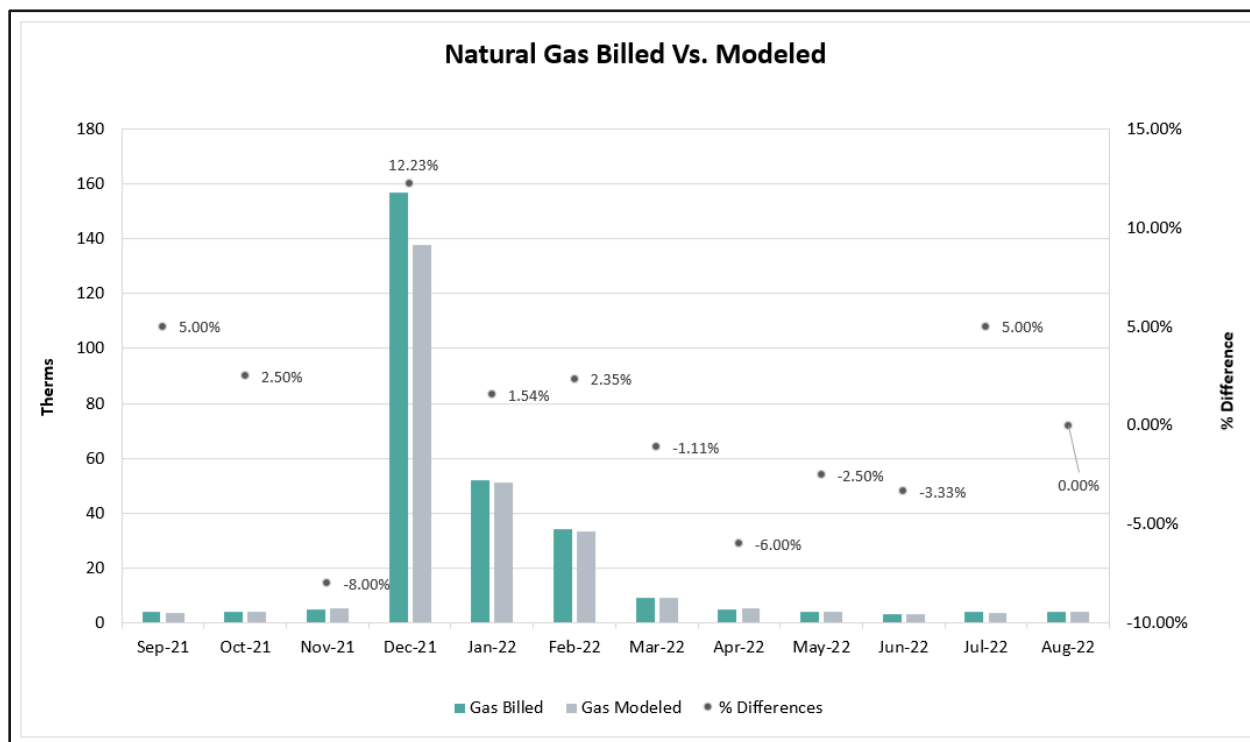


Figure 10 Energy Model Natural Gas Calibration

## 5.4 Load Balance

An approximate breakdown of electricity consumption, peak demand and natural gas usage by facility end-use is presented in Figure 11, Figure 12 and Figure 13, respectively.



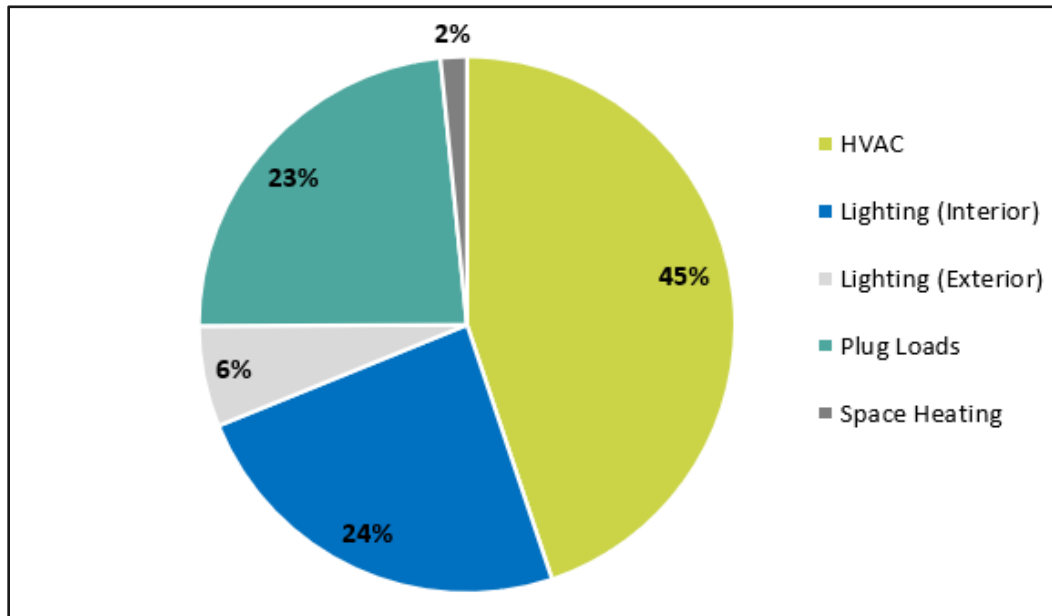


Figure 11 Electricity Consumption End-Use Breakdown

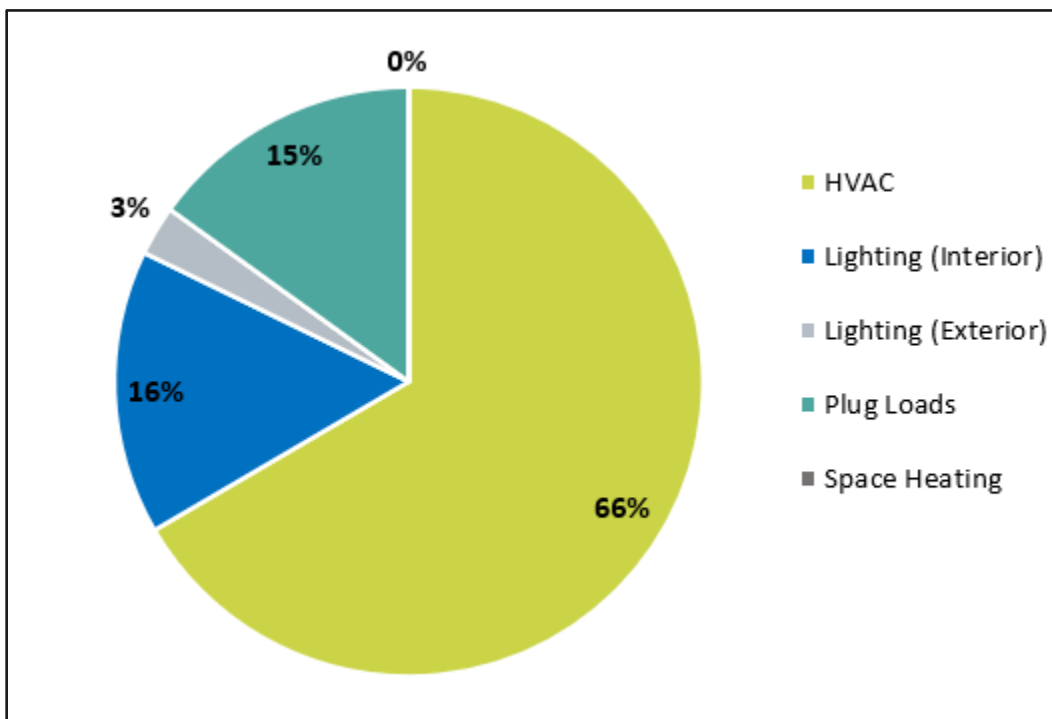
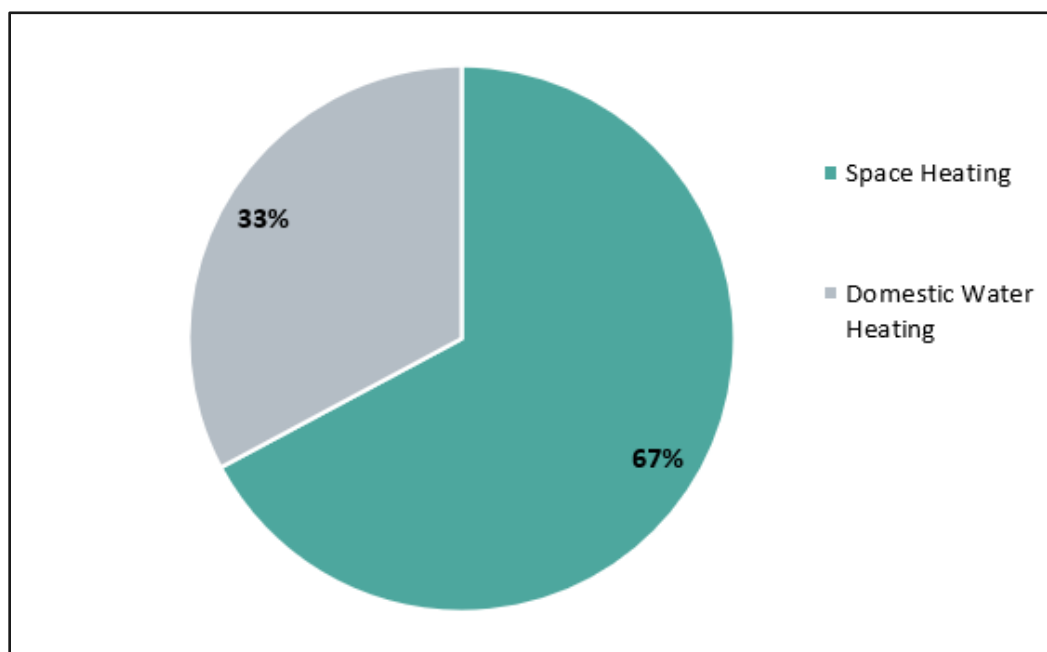


Figure 12 Electric Demand End-Use Breakdown



**Figure 13 Gas Consumption End-Use Breakdown**

Figure 11 shows that the HVAC energy, including space cooling, heating and fans, accounts for 47% of the total building electric energy use and the lighting (interior and exterior) accounts for 30%. Energy efficiency measures targeting HVAC and lighting can significantly reduce the energy consumption of the building.

Space heating accounts for 67% of total natural gas usage and is primarily used in winter months only. The domestic water heating load is at 33% since hot water is only used at restroom sinks and kitchen sinks.

## 5.5 Trends and Data Analysis

During the audit, amp loggers and temperature loggers were installed to monitor power consumption and temperatures, respectively, throughout the facility. The primary purpose of deploying the loggers was to understand typical setpoints maintained in different spaces and verify the operation of different equipment.

### 5.5.1 Light Levels

The typical light level noted was 20.1 Foot-candle (fc) for the office space. Illuminating Engineering Society (IES) standards recommend light levels between 30-50 fc for offices. The light level in the office is low compared to the recommended range. Interviews with the occupants revealed that the light levels were appropriate to conduct their daily tasks.



Figure 14 Sample Light Level Reading in Office Space

### 5.5.2 Amperage Data

Current transducers/ loggers were placed on RTUs AC-1, AC-2, and AC-7 to better understand the operating schedule of the RTUs. Figure 15, Figure 16, and Figure 17 demonstrate that AC-1 is currently scheduled to operate from 8:30 AM to 10 PM, Monday to Friday with the supply fan ON 24/7, AC-2 is operating from 7 AM to 7 PM, Monday to Saturday and AC-7 is scheduled to operate from 7 AM to 10 PM, Monday to Saturday, respectively. The trend data confirms that the RTUs operation does not align with department operating hours and requires thermostat reprogramming, which is recommended in Section 6 of the report.

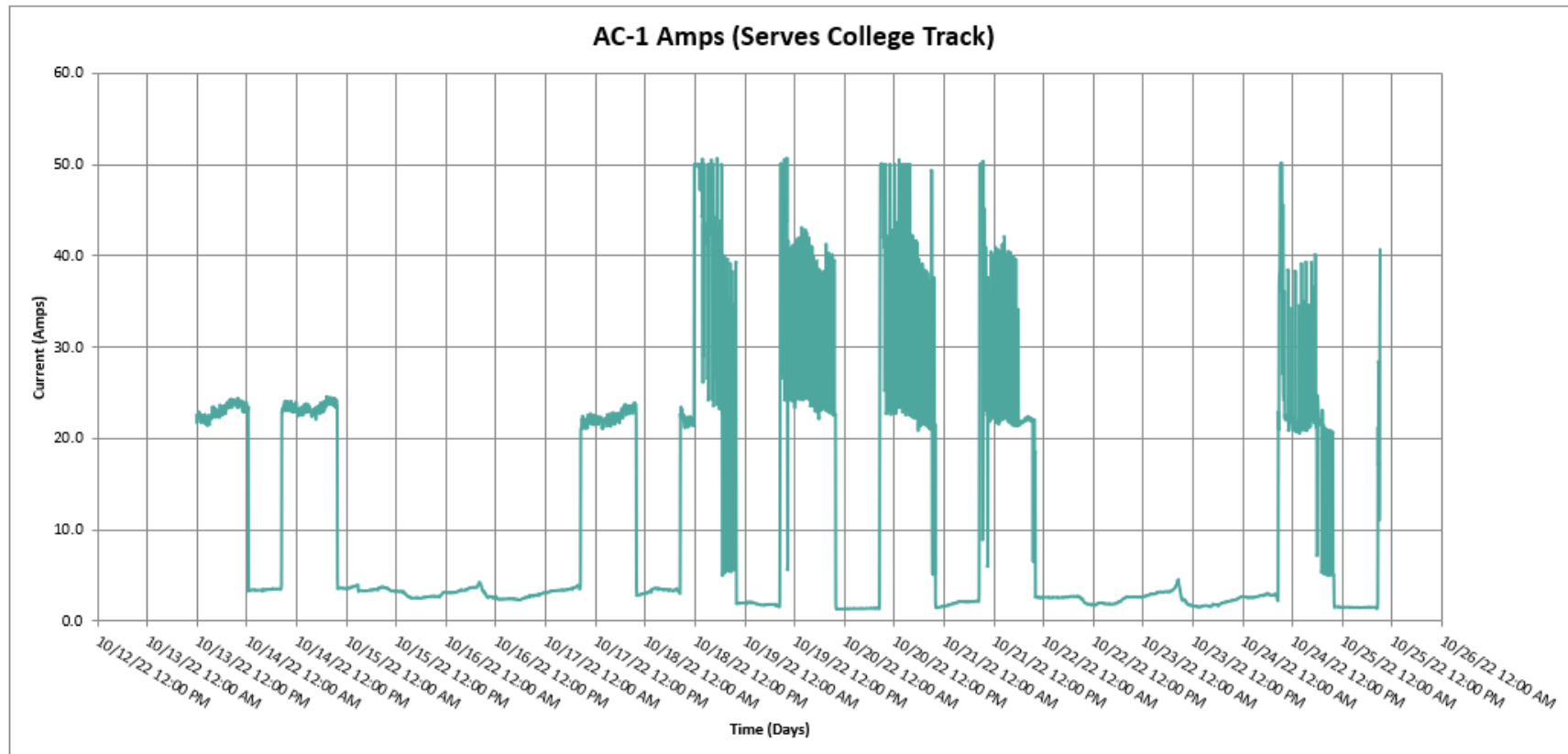


Figure 15 AC-1 Amps

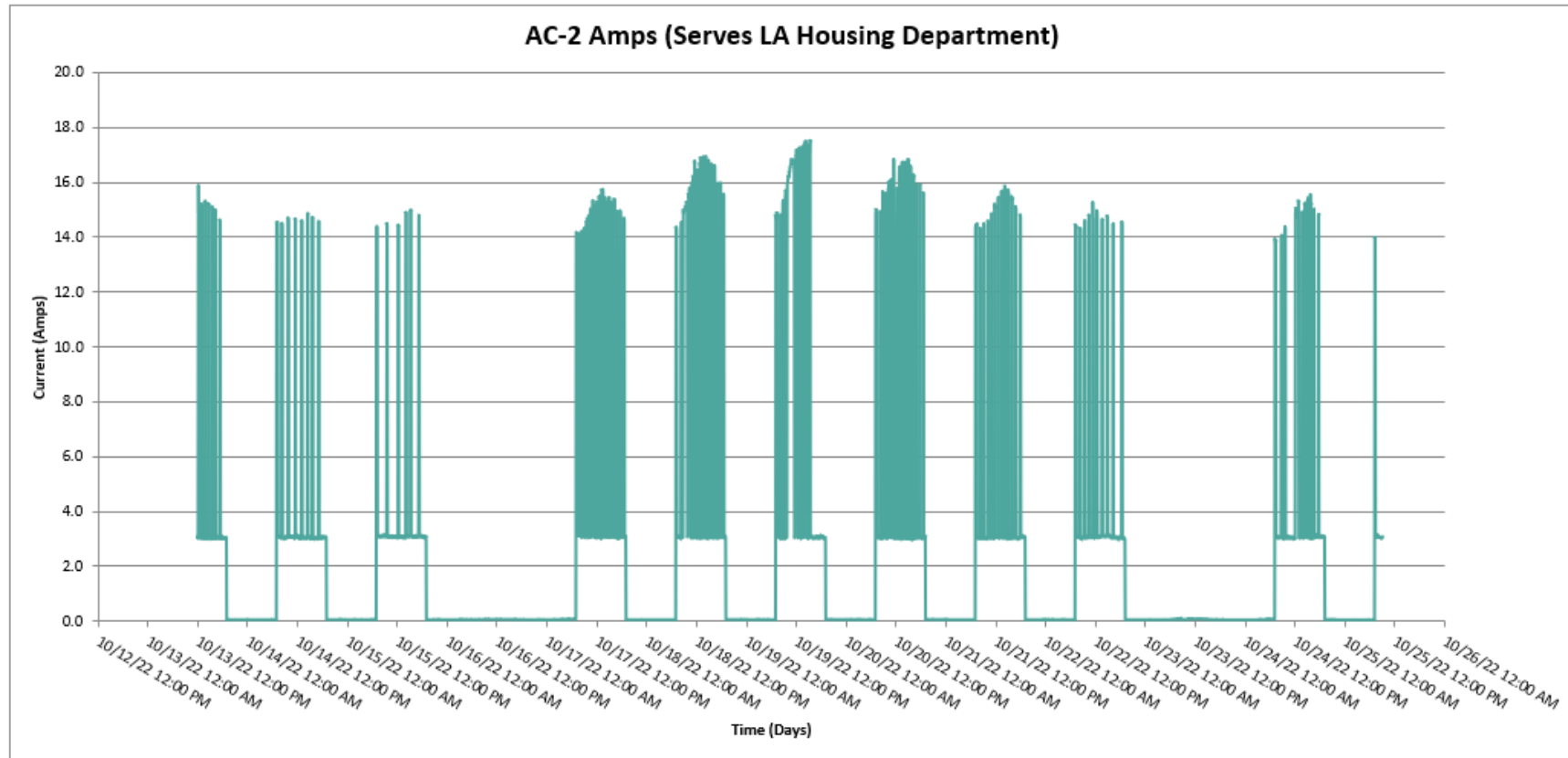


Figure 16 AC-2 Amps

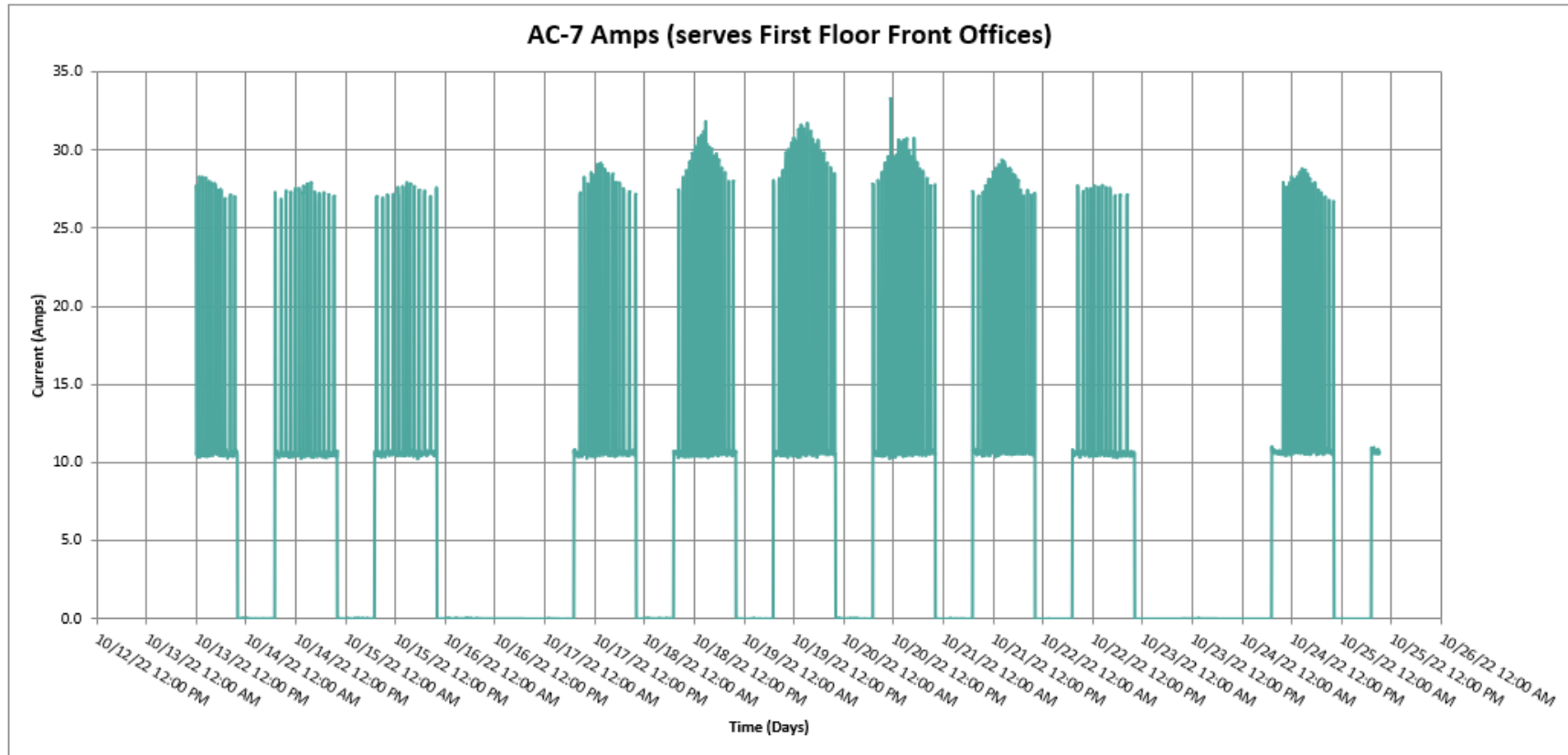


Figure 17 AC-7 Amps

### 5.5.3 Thermostat Data

Temperature loggers were placed adjacent to the thermostats in the office spaces to better understand the typical set points used within the facility. Figure 18 and Figure 19 demonstrate that the average temperatures maintained in the office spaces are between 70 °F and 75 °F during occupied hours.

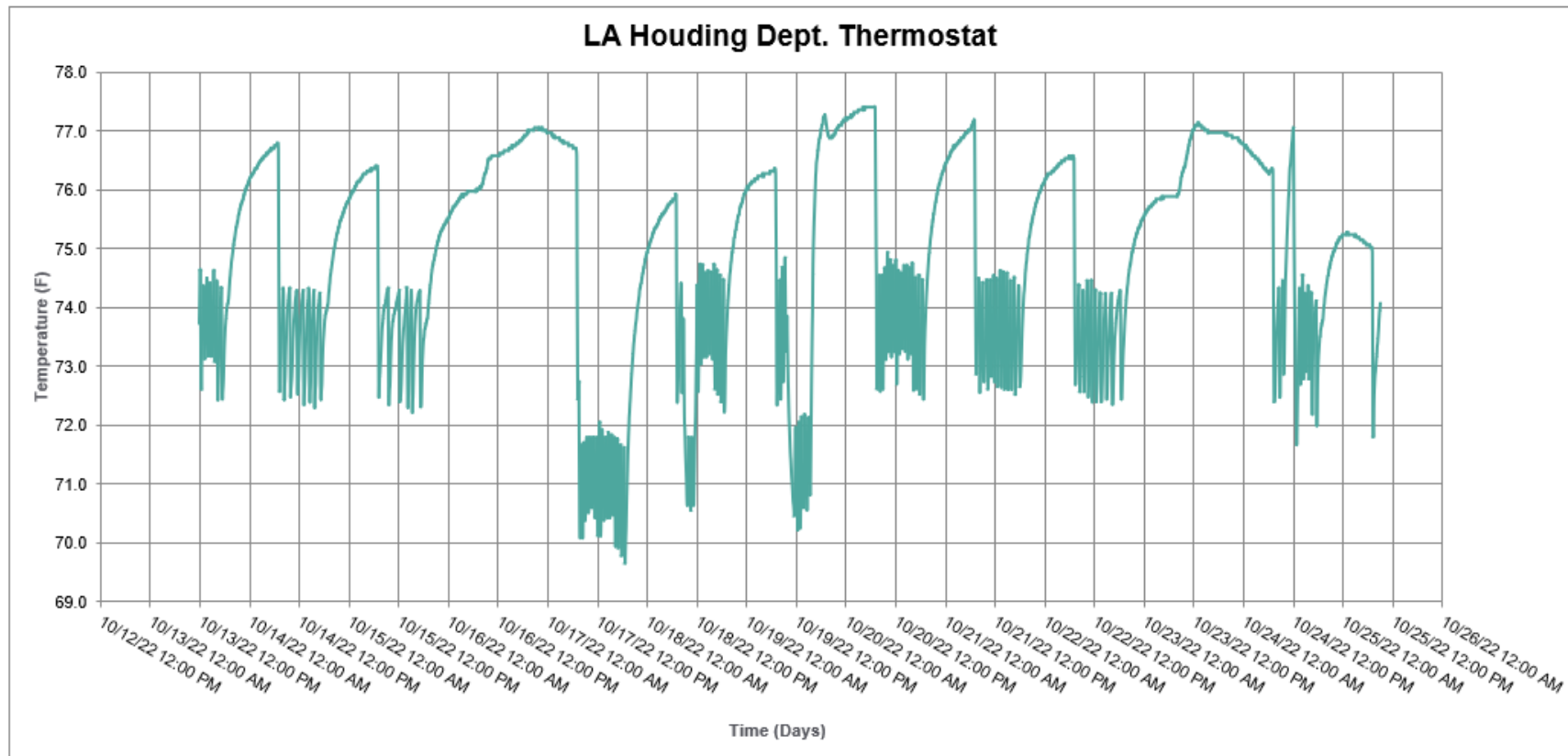


Figure 18 Thermostat Temperature in Housing Department Office Space

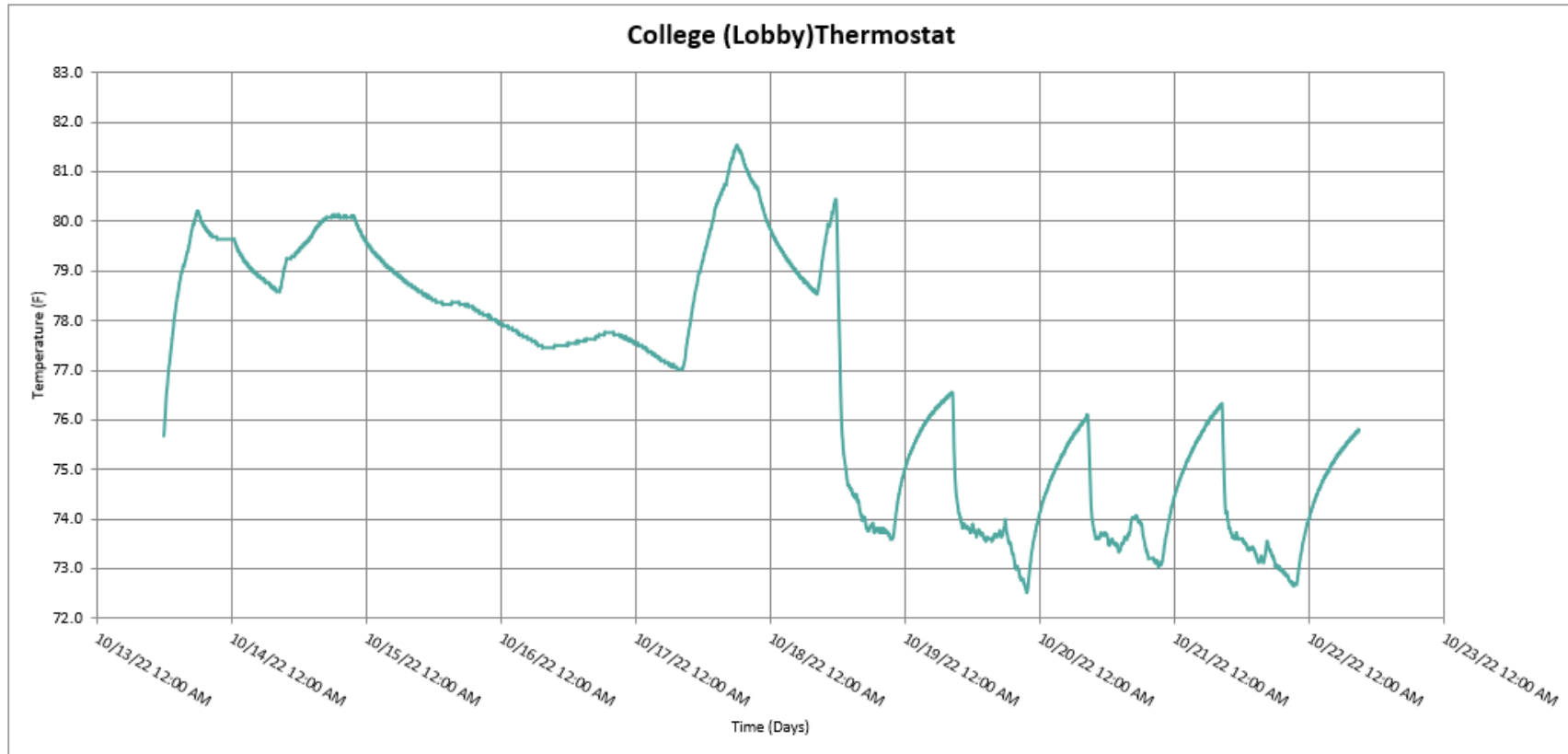


Figure 19 Thermostat Temperature in College Lobby Area



## 6.0 Energy Project Opportunities

AESC has based its evaluation and recommendations on field observations and input from on-site operations personnel. Potential energy efficiency savings were calculated using standard engineering calculations, which are outlined in the measure summary sections.

The reference material is included to support assumptions made in the measure analysis and does not constitute an endorsement of a specific manufacturer or distributor.

### 6.1 Description of Recommended Measures

The following section includes detailed calculations of the energy conservation measures (EEMs), RCx measure (RCx) and renewable energy measures (REM) in accordance with the modified ASHRAE Level 3 audit as specified in the scope of work.

#### 6.1.1 RCx-1 Revise HVAC Operating Schedule to Align with Respective Department Operation

| Measure Description                | Revise HVAC Operating Schedule to Align with Respective Department Operation |
|------------------------------------|------------------------------------------------------------------------------|
| Electric Demand Savings (kW)       | 1.6                                                                          |
| Electric Consumption Savings (kWh) | 5,876                                                                        |
| Natural Gas Savings (therms)       | 10                                                                           |
| Water Savings (kgal)               | 0.00                                                                         |
| Annual Cost Savings                | \$1,564                                                                      |
| Gross Implementation Cost (\$)     | \$277                                                                        |
| Estimated Incentive (\$)           | \$0                                                                          |
| Simple Payback (yrs)               | 0.2                                                                          |
| GHG Reduction (Metric Tons)        | 1.15                                                                         |

#### Existing Conditions

Seven packaged roof top units (RTU) and two heat pumps (HP) provide cooling and heating to the building's occupants. All RTUs and HPs are controlled by programmable thermostats located in the respective spaces. During the audit, the thermostats were not accessible (locked) and the operating schedule of the RTUs could not be determined. The auditor deployed current transducers/ loggers on three RTUs AC-1, AC-2, and AC-7 to better understand the operating schedule of the RTUs. Based on the

trend data, AC-1 is currently scheduled to operate from 8:30 AM to 10 PM, Monday to Friday with the supply fan ON 24/7, AC-2 is operating from 7 AM to 7 PM, Monday to Saturday and AC-7 is scheduled to operate from 7 AM to 10 PM, Monday to Saturday. It is assumed that all the RTUs and HPs operate after working hours and their operating schedule does not align with their respective department operating hours.

### **Potential Measure(s)**

AESC recommends reprogramming all nine space thermostats with weekly schedules according to the occupied schedules in the corresponding spaces. Since each department within the building has different operating hours, it is recommended to apply one hour early start up to ensure comfort and one hour after occupancy shutdown.

### **Calculations**

eQUEST was used to calculate savings using the “parametric runs” feature. This allows users to alter only the specific parameters necessary to calculate savings for each EEM within the same model, rather than creating a whole new model for each measure. The parametric runs “cascade,” such that each EEM “run” (or scenario) is based on the previous run, to account for interactive effects between the measures and prevent overestimation of savings.

Within the calculation model, HVAC availability schedules were altered for the areas served by AC-1, AC-2, and AC-7 of the building to align with the actual occupancy schedule. One hour early start and one hour post occupancy shut down was incorporated.

### **Measurement and Verification (M&V)**

The proposed M&V method for this measure is to visually verify that all the thermostats are reprogrammed to align with the actual occupancy schedule.

### **Costs**

The thermostats can easily be reprogrammed by EWM personnel. The cost is estimated based on the assumption that reprogramming will take 30 minutes of a technician’s time. The labor cost was estimated using a construction cost estimate from the City of [REDACTED]

### 6.1.2 RCx-2 RCx Economizer Controls on all RTUs

| Measure Description                | RCx Economizer Controls on all RTUs |
|------------------------------------|-------------------------------------|
| Electric Demand Savings (kW)       | 0.00                                |
| Electric Consumption Savings (kWh) | 9,288                               |
| Natural Gas Savings (therms)       | 0                                   |
| Water Savings (kgal)               | 0.00                                |
| Annual Cost Savings                | \$2,430                             |
| Gross Implementation Cost (\$)     | \$4,095                             |
| Estimated Incentive (\$)           | \$1,393                             |
| Simple Payback (yrs)               | 1.1                                 |
| GHG Reduction (Metric Tons)        | 1.73                                |

#### Existing Conditions

There are seven RTUs located on the building's roof that serve different spaces throughout the building. All RTUs have economizer controls which were observed to be non-functional at the time of site visit. The outside air intake and exhaust dampers were observed to be closed with compressors running to condition the building when the outside air temperature was 65 °F, indicating that the economizer control is ineffective.

#### Potential Measure(s)

Recommissioning the economizer control to enable full economizer operation at all suitable outside-air temperatures will save energy. Implementing this measure will save energy by modulating the position of the outside-air damper to an open position, providing free cooling whenever outdoor conditions allow.

#### Calculations

eQUEST was used to calculate savings for this measure using the parametric runs feature. Under the parametric run feature, the outside air control was changed from fixed fraction to economizing controls.

### Measurement and Verification (M&V)

The proposed measurement and verification method for this measure is to obtain and analyze two weeks of system trend data gathered by deploying temperature loggers and verify post-implementation economizer control operation.

### Costs

The cost estimation considers the hours spent by programmers to reprogram the economizer sequence of operation for all RTUs and cost associated with installing an outside air temperature sensor. Four hours of labor is assumed for each RTU.

#### 6.1.3 EEM-3 Replace Interior Lamps/Fixtures with LEDs

| Measure Description                | Replace Interior Lamps/Fixtures with LEDs |
|------------------------------------|-------------------------------------------|
| Electric Demand Savings (kW)       | 3.3                                       |
| Electric Consumption Savings (kWh) | 31,442                                    |
| Natural Gas Savings (therms)       | -60                                       |
| Water Savings (kgal)               | 0.00                                      |
| Annual Cost Savings                | \$8,070                                   |
| Gross Implementation Cost (\$)     | \$19,615                                  |
| Estimated Incentive (\$)           | \$2,515                                   |
| Simple Payback (yrs)               | 2.1                                       |
| GHG Reduction (Metric Tons)        | 5.53                                      |

### Existing Conditions

The building interior is lit by a combination of linear fluorescent (LF) lamps and compact fluorescent lamps (CFLs). Most of the offices have 4-foot T8 LF fixtures with 1, 2, or 3-lamp combinations. A few CFL can fixtures with 26 W lamps and T5 linear fluorescent fixtures with 1 and 2-lamp configuration were observed throughout the building. The main entrance and second floor corridor have pendant fixtures with 6 CFL lamps. The interior lighting is controlled by a combination of ceiling mounted occupancy sensors and a lighting control panel.

### Potential Measure(s)

Retrofit existing T8 and T5 linear fluorescent lamps with LEDs lamps. Linear fluorescent lamps can be replaced with LED ranging from 15 W to 18 W lamps. CFL can fixtures can be retrofitted with 14 W LED can fixtures. This would result in a post case with reduced power consumption. LEDs have the greatest luminaire efficacy (lumens/watt) of any lamp type, which means that minimal electricity is required to

provide the desired amount of light. LED technologies have an effective useful life of over 100,000 hours. In addition to energy savings, maintenance cost savings are also realized by decreasing the fixture life-cycle costs. See Appendix A, Interior Lighting Table for space specific lamp/fixture retrofit recommendations.

### Calculations

eQUEST was used to calculate savings for this measure using the parametric runs feature. For this measure, a revised lighting power density (LPD) was calculated, based on the reduced interior lighting wattage, and used in eQUEST to determine savings. The estimated savings include both direct savings and interactive effects. Refer to “BHCH Calcs Spreadsheet.Xlsx,” “Interior Lighting” tab for the LPD calculations and eQUEST inputs.

### Measurement and Verification (M&V)

The proposed measurement and verification approach for this measure is to confirm sample fixture types and quantities during post-installation site visits and using the final invoices to confirm type and quantity of installed fixtures.

### Costs

The measure cost was estimated using a construction cost estimate from the City of [REDACTED]

#### 6.1.4 EEM-4 Implement Quality Maintenance Program to Improve Efficiency of RTUs

| Measure Description                | Implement Quality Maintenance Program to Improve Efficiency of RTUs |
|------------------------------------|---------------------------------------------------------------------|
| Electric Demand Savings (kW)       | 4.9                                                                 |
| Electric Consumption Savings (kWh) | 8,779                                                               |
| Natural Gas Savings (therms)       | 6                                                                   |
| Water Savings (kgal)               | 0.00                                                                |
| Annual Cost Savings                | \$2,312                                                             |
| Gross Implementation Cost (\$)     | \$4,926                                                             |
| Estimated Incentive (\$)           | \$0                                                                 |
| Simple Payback (yrs)               | 2.1                                                                 |
| GHG Reduction (Metric Tons)        | 1.66                                                                |

### Existing Conditions

All existing RTUs appeared to be in average condition with some dirty condenser coils. This buildup can lead to reduced efficiency, unattractive surface deterioration and equipment failure. Additionally, reduced heat rejection may occur, resulting in an increased compressor head pressure and lowered cooling capacity, which in turn increases the power usage. As the system works harder, it experiences more breakdowns and has higher maintenance costs.

### Potential Measure(s)

#### 6.1.4.1 Clean and Comb DX Cooling Coils

Clean and comb the evaporator and condenser fins on all roof top units (RTUs) and outdoor condenser units. Cleaning coils should be an essential part of the annual tune-up which removes all the dirt from the coils and ensures that the condensing unit is able to operate efficiently and effectively year-round.

#### 6.1.4.2 Implement Quality Maintenance Program Bi-Annually

Implement a quality maintenance program. This program would include scheduled cleaning of evaporative and condenser coils, combing the evaporative and condenser fins, replacing the filter, and testing and adjusting the refrigerant charge to preserve the system's ability to achieve energy efficiency and indoor air quality standards in the building.

### Calculations

A customized spreadsheet was used to calculate energy savings. A Southern California Edison (SCE) workpaper was used as a reference to estimate savings. The workpaper baseline condition assumes that each RTU undergoes typical maintenance, with only minimal service being performed, and that the unit operates until it fails. The quality maintenance includes refrigerant charge adjustment, condenser and evaporator coil cleaning, air flow adjustment, economizer repair and thermostat programming. Based on the work paper for a given climate zone (CZ09) and building type (office), a deemed annual savings amount of 127 kWh per ton, 0.052 kW per ton and 0.1 therm per ton was used to estimate energy savings. Refer to "BHCH Calcs Spreadsheet.Xlsx", "QM" tab for the calculations.

### Measurement and Verification (M&V)

Not Applicable.

### Costs

This measure can easily be implemented by in-house facility personnel to save on project cost. The measure cost was estimated using a material cost from the workpaper and an installation labor cost based on price quotations provided by the City of [REDACTED]

### 6.1.5 EEM-5 Replace Existing Supply Fan Motors with Switched Reluctance Motors (SRM)

| Measure Description                | Replace Existing Supply Fan Motors with Switched Reluctance Motors (SRM) |
|------------------------------------|--------------------------------------------------------------------------|
| Electric Demand Savings (kW)       | 0.4                                                                      |
| Electric Consumption Savings (kWh) | 4,069                                                                    |
| Natural Gas Savings (therms)       | -7                                                                       |
| Water Savings (kgal)               | 0.00                                                                     |
| Annual Cost Savings                | \$1,046                                                                  |
| Gross Implementation Cost (\$)     | \$3,975                                                                  |
| Estimated Incentive (\$)           | \$1,221                                                                  |
| Simple Payback (yrs)               | 2.6                                                                      |
| GHG Reduction (Metric Tons)        | 0.72                                                                     |

#### Existing Conditions

Currently the supply fan motors in the RTUs are standard induction motor equipped with variable frequency drives (VFDs), except for unit AC-2 and AC-4.

#### Potential Measure(s)

There is an opportunity to save energy by replacing the existing induction motors with switch reluctance motors (SRM) which work on the principle of magnetic reluctance. Since the rotor material has the lowest reluctance, it minimizes the magnetic reluctance and operates the motor at higher efficiency when compared to a standard induction motor. The SRMs with software-controlled inverters have the potential to save energy in RTU indoor fan applications when compared to equivalent sized induction motors that operate at a single speed or are controlled by a VFD. This measure is recommended for RTU AC-6 and AC-7 only due to limited motor sizes available in the market.

#### Calculations

A Southern California Edison (SCE) workpaper was used as a reference to estimate savings. eQUEST was used to calculate savings for this measure using the parametric runs feature. The supply fan power intensity (kw/CFM) was reduced by 15 percent for the proposed case.

#### Measurement and Verification (M&V)

The proposed measurement and verification method for this measure is to visually verify that new SR motors have been installed as well as obtain and analyze two weeks of supply fan amperage data gathered by deploying current transducers/loggers' post-implementation.

### Costs

Measure cost was estimated based on the motor cost provided by the vendor and installation labor cost based on price quotations provided by the City of [REDACTED]. Three hours of labor is assumed per RTU.

#### 6.1.6 EEM-6 Install Advanced Power Strips to Control PC Plug Loads

| Measure Description                | Install Advanced Power Strips to Control PC Plug Loads |
|------------------------------------|--------------------------------------------------------|
| Electric Demand Savings (kW)       | 0.6                                                    |
| Electric Consumption Savings (kWh) | 5,116                                                  |
| Natural Gas Savings (therms)       | -8                                                     |
| Water Savings (kgal)               | 0.00                                                   |
| Annual Cost Savings                | \$1,318                                                |
| Gross Implementation Cost (\$)     | \$4,892                                                |
| Estimated Incentive (\$)           | \$767                                                  |
| Simple Payback (yrs)               | 3.1                                                    |
| GHG Reduction (Metric Tons)        | 0.91                                                   |

### Existing Conditions

There are approximately twenty-six (26) computer workstations at the site. It is very likely that these computers are left ON while not in use.

### Potential Measure(s)

There is an opportunity to save energy by installing advanced power strips to turn off computers when employees are not at their desks for extended periods of time. The advanced power strips monitor equipment usage patterns to determine when the user is and is not actively using the personal computer (PC) equipment. When the PC equipment is inactive, peripheral devices such as monitors, and speakers are de-energized, and the computer is put into standby, thus avoiding any lost unsaved data.



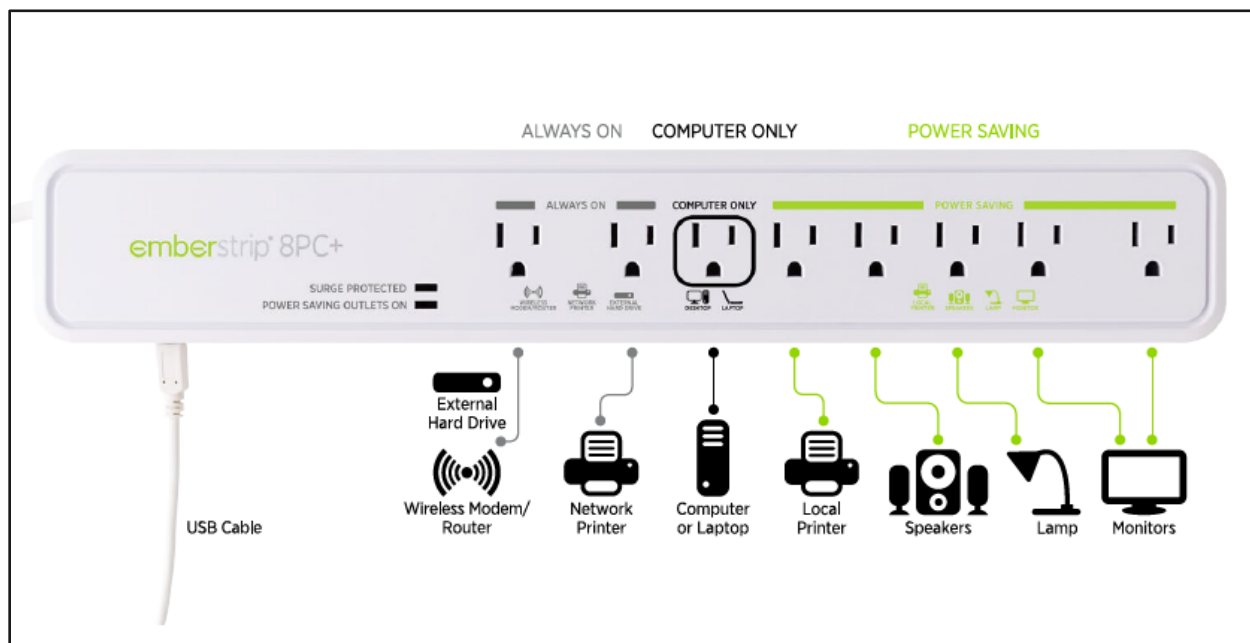


Figure 20 Typical Advanced Power Strips

### Calculations

Savings calculations were performed using an eQUEST model parametric run. Interior office loads were reduced by an amount equivalent to the calculated savings for this measure. A statewide California Investor-Owned Utility (IOU) work paper for this measure type was referenced to estimate savings. A conservative approach was taken and the lower end of the savings range, 220 kWh saved per workstation, was used to estimate annual measure savings. Refer to "BHCH Calcs Spreadsheet.Xlsx," "Advanced PS" tab for the calculations.

### Measurement and Verification (M&V)

The proposed measurement and verification method for this measure is to visually verify that new advanced power strips have been installed.

### Costs

Online sources and labor cost from the City of [REDACTED] were used to estimate the measure cost.

### 6.1.7 EEM-7 Replace Exterior Fixtures with LEDs

| Measure Description                | Replace Exterior Fixtures with LEDs |
|------------------------------------|-------------------------------------|
| Electric Demand Savings (kW)       | 1.1                                 |
| Electric Consumption Savings (kWh) | 8,375                               |
| Natural Gas Savings (therms)       | 0                                   |
| Water Savings (kgal)               | 0.00                                |
| Annual Cost Savings                | \$2,191                             |
| Gross Implementation Cost (\$)     | \$9,006                             |
| Estimated Incentive (\$)           | \$670                               |
| Simple Payback (yrs)               | 3.8                                 |
| GHG Reduction (Metric Tons)        | 1.56                                |

#### Existing Conditions

Exterior lights are comprised of metal halide wall packs and 2-lamp metal halide pole fixtures in the parking lot. Exterior lighting is controlled by photocell control.

#### Potential Measure(s)

Replacing the exterior MH fixtures with LED fixtures would result in a post case with less than half the power consumption. The proposed LED fixtures will use wattages varying from 42 W to 136 W. LEDs have the greatest luminaire efficacy (lumens/watt) of any lamp type, which means that minimal electricity is required to provide the desired amount of light. LED technologies have an effective useful life of over 100,000 hours. In addition to energy savings, maintenance cost savings are also realized by decreasing the fixture life-cycle costs. LEDs are ideal for directional lighting applications such as parking structures, eliminating the need for a reflector kit and minimizing outdoor light pollution. See Appendix A, Exterior Lighting Table for space specific fixture replacement recommendations.

#### Calculations

The savings calculations were performed using an Excel spreadsheet. Refer to "[REDACTED]" "Exterior Lighting" tab for the existing and proposed exterior lighting wattages; and savings calculations.

#### Measurement and Verification (M&V)

The proposed measurement and verification approach for this measure is to confirm sample fixture types and quantities during post-installation site visits and using the final invoices to confirm type and quantity of installed fixtures.

## Costs

The measure cost was estimated using a construction cost estimate from the City of [REDACTED]

## 6.2 Renewable Energy Measures

### 6.2.1 REM-1 Install Solar Panels on the Building Roof

| Measure Description                | Install Solar Panels on the Building Roof |
|------------------------------------|-------------------------------------------|
| Electric Demand Savings (kW)       | 30.00                                     |
| Electric Consumption Savings (kWh) | 49,558                                    |
| Natural Gas Savings (therms)       | 0.00                                      |
| Water Savings (kgal)               | 0.00                                      |
| Annual Cost Savings                | \$12,965                                  |
| Gross Implementation Cost (\$)     | \$120,000                                 |
| Estimated Incentive (\$)           | \$0                                       |
| Simple Payback (yrs)               | 9.3                                       |
| GHG Reduction (Metric Tons)        | 9.22                                      |

## Existing Conditions

The upper building roof does not experience shadowing and has minimal HVAC systems on roof, making it an ideal location to install solar arrays. However, the roof is pitched, so the backside of the upper deck is not an optimal location. Also, the property is registered as a historic building and hence, it is recommended to contact the State Historic Preservation Officer (SHPO) for guidance regarding the eligibility and review process.

## Potential Measure(s)

The proposed array size is 30 kW (direct current rating) and consists of 75 solar photovoltaic (PV) modules. All energy generated by the array would be consumed by the site, offsetting the high-cost electricity that would otherwise be purchased from [REDACTED]. PV technology converts sunlight directly into electricity. Currently emerging as a major power source, it provides many environmental and economic benefits. This electricity generating process does not produce pollution or hazardous waste, and the technology is known to be long-lasting and reliable, requiring minimal maintenance. A structure study of the roof is recommended to ensure that roof is suitable to support a PV array.

This measure exceeds the City of [REDACTED] financial criteria by less than 7 years for measure implementation. However, the city should still consider the installation of solar PV at the site, as the EUL of the solar PV

system exceeds the simple payback. There are additional benefits to solar PV, such as lowering the facilities carbon footprint and reducing peak power consumption.

#### Measurement and Verification (M&V)

Not Applicable.

#### Calculations

Savings were calculated using the NREL PVWatts calculator.

#### Costs

The measure cost estimate was provided by EVA. Please see Appendix A for cost estimate documentation

### 6.3 Measures Evaluated, but Not Recommended

#### 6.3.1 NRM-1 Replace Gas Fired Domestic Water Heater with Heat Pump Water Heater

| Measure Description                | Replace Gas Fired Domestic Water Heater with Heat Pump Water Heater |
|------------------------------------|---------------------------------------------------------------------|
| Electric Demand Savings (kW)       | -0.8                                                                |
| Electric Consumption Savings (kWh) | -7,410                                                              |
| Natural Gas Savings (therms)       | 87                                                                  |
| Water Savings (kgal)               | 0.00                                                                |
| Annual Cost Savings                | -\$1,712                                                            |
| Gross Implementation Cost (\$)     | \$3,750                                                             |
| Estimated Incentive (\$)           | \$0                                                                 |
| Simple Payback (yrs)               | 0                                                                   |
| GHG Reduction (Metric Tons)        | -0.92                                                               |

#### Existing Conditions

Domestic hot water (DWH) is produced by two Bradford White Corporation water heaters. WH-1 is a gas fired water heater with 76 MBH capacity and 75-gallon storage tank, whereas WH-2 is an electric water heater with 18 kW capacity and 30-gallon storage tank. Domestic hot water is primarily consumed in the restrooms and in the kitchen sink.

---

**Potential Measure(s)**

When the existing gas-fired water heater reaches its effective useful life, the unit can be replaced with a heat pump water heater. Traditional gas-fired water heaters create heat via combustion, but heat pump water heaters move heat from the surrounding air to the water and hence are more efficient.

Although the city is interested in electrification measures, this measure is not recommended because it does not result in GHG emissions reduction.

**Calculations**

eQUEST was used to calculate savings for this measure using the parametric runs feature. The water heater type was changed to "heatpump," and the energy input ratio (EIR) was of 0.37 was specified.

**Measurement and Verification (M&V)**

The proposed measurement and verification approach for this measure is to confirm that new heat pump water heater is installed and comparing annual utility bills pre and post installation.

**Costs**

The measure cost was estimated using a workpaper "Large Heat Pump Water Heater, Commercial and Multifamily, Fuel Substitution." A cost estimate of \$5,000 per 100 gallons storage water heater was used, from which the measure cost was extrapolated. The total cost includes the cost associated with the gas pipe removal and new electrical connection.

## 7.0 Operational & Maintenance Training

At the end of the installation phase, facility personnel should receive training on the proper operation and maintenance of the lighting systems, HVAC equipment and related control systems. This is critical because if users do not understand the controls, they may attempt to override or bypass them.

---

## 8.0 Maintenance of Savings

### 8.1 Implementation Persistence

Continued maintenance is an essential factor in ensuring the success of retro-commissioning and tune-up measure savings over time. Retro-commissioning often involves the implementation of measures that can degrade over time if not maintained or managed properly, reducing the net positive cash flow the owner can realize.

### 8.2 Benchmarking & Continuous Monitoring of Energy Use

To secure measure persistency over time and the overall success of the project, the building can be benchmarked and utility usage, normalized for weather data or other operating conditions, tracked over time. This continuous monitoring can be configured to notify the owner of any deviation from the savings plan to allow for active changes and adjustments in the building's operation to maintain projected savings.

### 8.3 Energy Reduction Targeting

Once the building is benchmarked, a target can be set to encourage further building operations improvements and energy awareness efforts. Many times, building owners are unaware of the energy use of their own buildings. Having the tools to track and reduce energy usage is the first step toward being able to optimize a building's operations.

### 8.4 Recommissioning

Periodically, the facility should be recommissioned to verify that changes made to the building's operations and equipment during the original retro-commissioning and tune-up process are still applicable and being maintained over time. Recommissioning helps to guard against degradation of savings and helps to ensure the net positive cash flow throughout the life of the project that results from the owner's investment. The optimum frequency of recommissioning may vary from once quarter to once every five years depending on the size and nature of the project. For this project, annual recommissioning is recommended.

## 9.0 Appendix A Functional Performance Testing

### Functional Performance Test for Lighting Controls

| Baseline Information |                      |
|----------------------|----------------------|
| Testing Date         | 10/13/2022           |
| Building Name        | [REDACTED] City Hall |
| Address              | [REDACTED]           |
| Testing Engineer     | Kusum Shekhliya      |
| Assisted By          | Stephen Ornelas      |

#### System Description:

Several ceiling mounted lighting occupancy sensors were noted during the site investigation. A functional test was performed to verify that the occupancy sensors are functioning properly.

#### Functional Performance Test

| Room No.                        | Sensor Location | Test Procedures                                | Expected Result                                           | Pass/Fail | Notes |
|---------------------------------|-----------------|------------------------------------------------|-----------------------------------------------------------|-----------|-------|
| [REDACTED] Room 274)            | Ceiling         | Activate Sensors by crossing its beam coverage | Light come on in the area the sensor is design to operate | Pass      | NA    |
| [REDACTED] Women's Restroom     | Ceiling         | Activate Sensors by crossing its beam coverage | Light come on in the area the sensor is design to operate | Pass      | NA    |
| Community Room Women's Restroom | Ceiling         | Activate Sensors by crossing its beam coverage | Light come on in the area the sensor is design to operate | Pass      | NA    |
| Comments: N/A                   |                 |                                                |                                                           |           |       |

## 10.0 Appendix B Attachments

### Interior Lighting Table

| Room Location | Space Description      | Mechanical Cooling (Y/N) | Controls | Fixture Qty. | Fixture Type     | Fixture Wattage (W) | Proposed Replacement      | Proposed Watts |
|---------------|------------------------|--------------------------|----------|--------------|------------------|---------------------|---------------------------|----------------|
|               | Communication Room 285 | Y                        | OS       | 3            | 4' T8 LF, 3 Lamp | 96                  | 4' T8 LED Tube, 3 Lamp    | 54             |
|               |                        | Y                        | OS       | 1            | 4' T8 LF, 1 Lamp | 32                  | 4' T8 LED Tube, 1 Lamp    | 18             |
|               | Corridor               | Y                        | OS       | 4            | Can CFL 26 W     | 26                  | 6" round recessed LED     | 14             |
|               |                        | Y                        | OS       | 2            | 4' T8 LF, 1 Lamp | 32                  | 4' T8 LED Tube, 1 Lamp    | 18             |
|               | Office 282             | Y                        | OS       | 2            | Can CFL 26 W     | 26                  | 6" round recessed LED     | 14             |
|               |                        | Y                        | OS       | 2            | 4' T8 LF, 1 Lamp | 32                  | 4' T8 LED Tube, 1 Lamp    | 18             |
|               | Office 281             | Y                        | OS       | 2            | 4' T8 LF, 1 Lamp | 32                  | 4' T8 LED Tube, 1 Lamp    | 18             |
|               | Office 284             | Y                        | OS       | 2            | 4' T8 LF, 1 Lamp | 32                  | 4' T8 LED Tube, 1 Lamp    | 18             |
|               | Study Area             | Y                        | MS       | 8            | 42 W CFL, 4 Lamp | 168                 | LED Lamp Replacement, 18W | 72             |
|               |                        | Y                        | OS       | 9            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp    | 36             |
|               |                        | Y                        | OS       | 9            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp    | 36             |
|               |                        | Y                        | OS       | 6            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp    | 36             |
|               |                        | Y                        | OS       | 6            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp    | 36             |
|               |                        | Y                        | OS       | 9            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp    | 36             |

Controls: MS = Manual Switch; OS = Occupancy Sensor; PS = Photosensor; MT = Mechanical Timer; ET = Electronic Timer; NS = No Switch



| Room Location | Space Description   | Mechanical Cooling (Y/N) | Controls | Fixture Qty. | Fixture Type                  | Fixture Wattage (W) | Proposed Replacement       | Proposed Watts |
|---------------|---------------------|--------------------------|----------|--------------|-------------------------------|---------------------|----------------------------|----------------|
|               |                     | Y                        | OS       | 10           | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |
|               | Office 272          | Y                        | OS       | 2            | 4' T8 LF, 1 Lamp              | 32                  | 4' T8 LED Tube, 1 Lamp     | 18             |
|               | Office 271          | Y                        | OS       | 2            | 4' T8 LF, 1 Lamp              | 32                  | 4' T8 LED Tube, 1 Lamp     | 18             |
|               | Women RR            | Y                        | OS       | 3            | 4' T8 LF, 1 Lamp              | 32                  | 4' T8 LED Tube, 1 Lamp     | 18             |
|               |                     | Y                        | OS       | 3            | 4' T5 LF, 2 Lamp              | 56                  | 4' T5 LED Tube, 2 Lamp     | 30             |
|               |                     | Y                        | OS       | 1            | Can CFL 26 W                  | 26                  | 6" round recessed LED      | 14             |
|               | Foyer               | Y                        | OS       | 3            | Pendant Fixture - 6L CFL 26 W | 156                 | LED Lamp Replacement, 12 W | 72             |
|               | Storage (4th Floor) | N                        | MS       | 2            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |
|               |                     | N                        | MS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |
|               | Entrance            | Y                        | OS       | 1            | Can CFL 26 W                  | 26                  | 6" round recessed LED      | 14             |
|               | Office Area         | Y                        | OS       | 6            | Pendant Fixture - 6L CFL 26 W | 156                 | LED Lamp Replacement, 12 W | 72             |
|               | Break Room          | Y                        | MS       | 1            | 4' T8 LF, 3 Lamp              | 96                  | 4' T8 LED Tube, 3 Lamp     | 54             |
|               | Lobby               | Y                        | OS       | 7            | Pendant Fixture - 6L CFL 26 W | 156                 | LED Lamp Replacement, 12 W | 72             |
| Department    | Offices             | Y                        | OS       | 4            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |
|               | Entry               | Y                        | MS       | 2            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |
|               | Admin               | Y                        | OS       | 6            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |
|               | Storage             | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp     | 36             |

Controls: MS = Manual Switch; OS = Occupancy Sensor; PS = Photosensor; MT = Mechanical Timer; ET = Electronic Timer; NS = No Switch

| Room Location        | Space Description      | Mechanical Cooling (Y/N) | Controls | Fixture Qty. | Fixture Type          | Fixture Wattage (W) | Proposed Replacement                  | Proposed Watts |
|----------------------|------------------------|--------------------------|----------|--------------|-----------------------|---------------------|---------------------------------------|----------------|
| 2300 Conference Room | No Access              | Y                        | OS       | 0            | Not Known             | 0                   | No Recommendation: Replace on burnout | 0              |
| 2400 Conference Room | No Access              | Y                        | OS       | 0            | Not Known             | 0                   | No Recommendation: Replace on burnout | 0              |
| 241 Council          | No Access              | Y                        | OS       | 0            | Not Known             | 0                   | No Recommendation: Replace on burnout | 0              |
|                      | Office                 | N                        | OS       | 5            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | 1408 Director's Office | N                        | OS       | 1            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | 1406 Break Room        | Y                        | OS       | 2            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | 1405 Office            | Y                        | OS       | 2            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Electrical Equipment   | N                        | MS       | 1            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Men RR                 | Y                        | OS       | 2            | 4' T5 LF, 2 Lamp      | 56                  | 4' T5 LED Tube, 2 Lamp                | 30             |
|                      |                        | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Women RR               | Y                        | OS       | 1            | 4' T5 LF, 2 Lamp      | 56                  | 4' T5 LED Tube, 2 Lamp                | 30             |
|                      |                        | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Corridor               | Y                        | OS       | 5            | 2' T8 LF 17 W, 2 Lamp | 34                  | 2' LED Tube, 2 Lamp                   | 17             |
|                      |                        | Y                        | OS       | 3            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | 1404 Conference Room   | Y                        | OS       | 2            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Open Office            | Y                        | MS       | 12           | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Storage (4th Floor)    | N                        | MS       | 1            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                      | Custodian              | N                        | MS       | 1            | 4' T8 LF, 2 Lamp      | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |

Controls: MS = Manual Switch; OS = Occupancy Sensor; PS = Photosensor; MT = Mechanical Timer; ET = Electronic Timer; NS = No Switch

| Room Location       | Space Description | Mechanical Cooling (Y/N) | Controls | Fixture Qty. | Fixture Type                  | Fixture Wattage (W) | Proposed Replacement                  | Proposed Watts |
|---------------------|-------------------|--------------------------|----------|--------------|-------------------------------|---------------------|---------------------------------------|----------------|
|                     | 1401 Meeting Room | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                     | 1402 Meeting Room | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                     | 1403 Meeting Room | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                     | Front Lobby       | Y                        | OS       | 1            | Pendant Fixture - 6L CFL 26 W | 156                 | LED Lamp Replacement, 12 W            | 72             |
| Main Entry          | Central Corridor  | Y                        | N        | 6            | Pendant Fixture - 6L CFL 26 W | 156                 | LED Lamp Replacement, 12 W            | 72             |
|                     | Women RR          | N                        | OS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                     | Men RR            | N                        | OS       | 1            | 4' T8 LF, 2 Lamp              | 64                  | 4' T8 LED Tube, 2 Lamp                | 36             |
|                     | Main Lobby        | Y                        | OS       | 16           | CFL Pendant Fixture           | 32                  | LED Lamp Replacement, 18W             | 18             |
|                     |                   | Y                        | OS       | 5            | 4' T5 LF, 1 Lamp              | 28                  | 4' T5 LED Tube, 1 Lamp                | 15             |
|                     |                   | Y                        | OS       | 5            | 4' T5 LF, 2 Lamp              | 56                  | 4' T5 LED Tube, 2 Lamp                | 30             |
|                     |                   | Y                        | OS       | 3            | Can CFL 26 W                  | 26                  | 6" round recessed LED                 | 14             |
|                     | Staff Room        | Y                        | OS       | 4            | 4' T5 LF, 1 Lamp              | 28                  | 4' T5 LED Tube, 1 Lamp                | 15             |
|                     | Cubicle 1         | Y                        | OS       | 2            | 2' T8 LF 17 W, 2 Lamp         | 34                  | 2' LED Tube, 2 Lamp                   | 17             |
|                     | Cubicle 2         | Y                        | OS       | 2            | 2' T8 LF 17 W, 2 Lamp         | 34                  | 2' LED Tube, 2 Lamp                   | 17             |
|                     | Cubicle 3         | Y                        | OS       | 2            | 2' T8 LF 17 W, 2 Lamp         | 34                  | 2' LED Tube, 2 Lamp                   | 17             |
|                     | Manager Office    | Y                        | OS       | 4            | 2' T8 LF 17 W, 2 Lamp         | 34                  | 2' LED Tube, 2 Lamp                   | 17             |
|                     | Office            | Y                        | OS       | 4            | 2' T8 LF 17 W, 2 Lamp         | 34                  | 2' LED Tube, 2 Lamp                   | 17             |
| 1101 Community Room | Community Room    | Y                        | OS       | 14           | Not Known                     | 0                   | No Recommendation: Replace on burnout | 0              |

Controls: MS = Manual Switch; OS = Occupancy Sensor; PS = Photosensor; MT = Mechanical Timer; ET = Electronic Timer; NS = No Switch

| Room Location | Space Description       | Mechanical Cooling (Y/N) | Controls | Fixture Qty. | Fixture Type     | Fixture Wattage (W) | Proposed Replacement   | Proposed Watts |
|---------------|-------------------------|--------------------------|----------|--------------|------------------|---------------------|------------------------|----------------|
|               | Women RR                | Y                        | OS       | 4            | Can CFL 26 W     | 26                  | 6" round recessed LED  | 14             |
|               |                         | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Men RR                  | Y                        | OS       | 3            | Can CFL 26 W     | 26                  | 6" round recessed LED  | 14             |
|               |                         | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Storage                 | N                        | OS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Elec Room               | Y                        | MS       | 2            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Storage                 | Y                        | OS       | 8            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Exterior Storage Room   | N                        | MS       | 5            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Main Communication Room | Y                        | MS       | 4            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
| Main Offices  | Corridor                | Y                        | OS       | 5            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | 1501 Training Room      | Y                        | OS       | 6            | 4' T8 LF, 3 Lamp | 96                  | 4' T8 LED Tube, 3 Lamp | 54             |
|               | 1502 Training Room      | Y                        | OS       | 8            | 4' T8 LF, 3 Lamp | 96                  | 4' T8 LED Tube, 3 Lamp | 54             |
|               | 1503 Admin              | Y                        | OS       | 3            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | 1504 Lounge             | Y                        | OS       | 7            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Mech Room               | Y                        | MS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Communication Room      | Y                        | MS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Men RR                  | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |
|               | Women RR                | Y                        | OS       | 1            | 4' T8 LF, 2 Lamp | 64                  | 4' T8 LED Tube, 2 Lamp | 36             |

Controls: MS = Manual Switch; OS = Occupancy Sensor; PS = Photosensor; MT = Mechanical Timer; ET = Electronic Timer; NS = No Switch

### Exterior Lighting Table

| Location    | Existing Lamp Type   | Existing Lamp Wattage | Fixture Quantity | Total Demand (kW) | Proposed Replacement | Proposed Fixture Wattage |
|-------------|----------------------|-----------------------|------------------|-------------------|----------------------|--------------------------|
| Wall Packs  | 100 W MH Wallpacks   | 128                   | 4                | 0.512             | LED Wallpack         | 42.7                     |
| Parking Lot | 250 W MH Pole Lights | 295                   | 8                | 2.36              | LED Pole Light       | 136                      |

## Cost for Solar PV on Roof from EVA



Prepared For  
Redacted

### PV System Details

| General Information  |                                         |
|----------------------|-----------------------------------------|
| Facility             | Redacted                                |
| Address              | Redacted                                |
| System Information   |                                         |
| kWDC                 | 30                                      |
| Number of Panels     | 75                                      |
| Panel Type           | 400W Polycrystalline Modules            |
| Inverter Type        | Rapid Shutdown Equipped String Inverter |
| Equipment Warranties |                                         |
| Solar Panels:        | 20-Year Linear Warranty                 |
| Inverters:           | 10-Year Warranty                        |

### Costs and Incentives

|                                     |                  |
|-------------------------------------|------------------|
| Solar Power System Cost:            | \$120,000        |
| Federal Tax Credit:                 | N/A              |
| Federal - MACRS Bonus Depreciation: | N/A              |
| State (CA) MACRS Depreciation:      | N/A              |
|                                     | \$ -             |
| <b>Net Solar Power System Cost:</b> | <b>\$120,000</b> |

### Cash Purchase Summary

| Year | Savings   | Cumulative Cash Flow |
|------|-----------|----------------------|
| 0    | \$ -      | \$ (120,000)         |
| 1    | \$ 12,965 | \$ (107,035)         |
| 2    | \$ 13,120 | \$ (93,915)          |
| 3    | \$ 13,276 | \$ (80,639)          |
| 4    | \$ 13,434 | \$ (67,205)          |
| 5    | \$ 13,594 | \$ (53,611)          |
| 6    | \$ 13,756 | \$ (39,855)          |
| 7    | \$ 13,920 | \$ (25,935)          |
| 8    | \$ 14,085 | \$ (11,850)          |
| 9    | \$ 14,253 | \$ 2,403             |
| 10   | \$ 14,423 | \$ 16,826            |
| 11   | \$ 14,594 | \$ 31,420            |
| 12   | \$ 14,768 | \$ 46,188            |
| 13   | \$ 14,944 | \$ 61,132            |
| 14   | \$ 15,122 | \$ 76,254            |
| 15   | \$ 15,302 | \$ 91,556            |
| 16   | \$ 15,484 | \$ 107,039           |
| 17   | \$ 15,668 | \$ 122,708           |
| 18   | \$ 15,855 | \$ 138,563           |
| 19   | \$ 16,044 | \$ 154,606           |
| 20   | \$ 16,235 | \$ 170,841           |

## Solar Calculator Output – Roof

11/3/22, 11:48 AM



Caution: Photovoltaic system performance predictions calculated by PVWatts® include many inherent assumptions and uncertainties and do not reflect variations between PV technologies nor site-specific characteristics except as represented by PVWatts® inputs. For example, PV modules with better performance, are not differentiated within PVWatts® from lesser performing modules. Both NREL and private companies provide more sophisticated PV modeling tools (such as the System Advisor Model at <https://sam.nrel.gov>) that allow for more precise and complex modeling of PV systems.

The expected range is based on 30 years of actual weather data at the given location and is intended to provide an indication of the variation you might see. For more information, please refer to this NREL report: The Error Report.

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The energy output range is based on analysis of 30 years of historical weather data, and is intended to provide an indication of the possible interannual variability in generation for a fixed (open rack) PV system at this location.

PVWatts Calculator

RESULTS

49,557 kWh/Year\*

System output may range from 47,213 to 50,503 kWh per year near this location.

| Month         | Solar Radiation<br>( kWh / m <sup>2</sup> / day ) | AC Energy<br>( kWh ) |
|---------------|---------------------------------------------------|----------------------|
| January       | 4.43                                              | 3,214                |
| February      | 5.03                                              | 3,240                |
| March         | 6.24                                              | 4,340                |
| April         | 6.78                                              | 4,561                |
| May           | 6.85                                              | 4,764                |
| June          | 7.02                                              | 4,595                |
| July          | 7.50                                              | 5,069                |
| August        | 7.56                                              | 5,060                |
| September     | 6.82                                              | 4,423                |
| October       | 5.79                                              | 3,940                |
| November      | 5.01                                              | 3,390                |
| December      | 4.08                                              | 2,962                |
| <b>Annual</b> | <b>6.09</b>                                       | <b>49,558</b>        |

Location and Station Identification

Requested Location

Weather Data Source

Latitude

Longitude

PV System Specifications

DC System Size

Module Type

Array Type

Array Tilt

Array Azimuth

System Losses

Inverter Efficiency

DC to AC Size Ratio

Performance Metrics

Capacity Factor

https://pvwatts.nrel.gov/pvwatts.php

1/1

## EBEWE Tune-Up Measure List

### Basic Measures for Buildings without Central HVAC Plants

| Measure ID | Type of Measure        | Measure Name                             | Measure Application          | Measure Description                                                                                                                 | Tab                              | Data Fields Needed for Measure                       | Answer Options                                                                                     | Potential Measure (Y/N/NA) ? | AESC Notes                                                                                             |
|------------|------------------------|------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------|--------------------------------------------------------------------------------------------------------|
| 1          | Equipment Scheduling   | Reduce Equipment Runtime                 | Lighting - Interior          | Adjust the operating schedule of a device or system to a more efficient range of hours based on building operating hours and needs. | Lighting                         | Building Schedule and Lighting Schedule              | M-F, S, S, Holidays, Start and stop time, Ability to add multiple schedules for seasonal buildings | No                           | Majority of the lighting is controlled by ceiling mounted occupancy sensors and lighting control panel |
| 2          | Equipment Scheduling   | Reduce Equipment Runtime                 | Lighting - Exterior          | Adjust the operating schedule of a device or system to a more efficient range of hours based on building operating hours and needs. | Lighting                         | Building Schedule and Lighting Schedule              | M-F, S, S, Holidays, Start and stop time, Ability to add multiple schedules for seasonal buildings | No                           | Exterior Lights controlled by photosensors                                                             |
| 3          | Equipment Scheduling   | Reduce Equipment Runtime                 | Unitary HVAC                 | Adjust the operating schedule of a device or system to a more efficient range of hours based on building operating hours and needs. | HVAC Systems                     | Building Schedule and HVAC Schedule                  | M-F, S, S, Holidays, Start and stop time, Ability to add multiple schedules for seasonal buildings | Yes                          | Revise HVAC Operating Schedule to Align with Respective Department Operation - measure recommended     |
| 4          | Equipment Scheduling   | Reduce Equipment Runtime                 | Plug Load - Computers        | Adjust the operating schedule of a device or system to a more efficient range of hours based on building operating hours and needs. | Plug Load which should be added. | Building Schedule and Plug Load - Computers Schedule | M-F, S, S, Holidays, Start and stop time, Ability to add multiple schedules for seasonal buildings | Yes                          | Install Advanced Power Strips to Control PC Plug Loads - measure recommended                           |
| 5          | Maintenance and Repair | Air Side Economizer Repair               | Unitary HVAC                 | Test and repair/optimize existing economizer                                                                                        | HVAC Systems - Distribution      | Air Side Economizer present and operational status   | Present - Y<br>Operational - Needs attention                                                       | Yes                          | RCx Economizer Controls on all RTUs - measure recommended                                              |
| 6          | Maintenance and Repair | HVAC and Refrigeration System Insulation | HVAC Air Distribution System | Minimize energy loss within a device by restoring system insulation.                                                                | HVAC Systems - Distribution      | Insulation Condition                                 | Fair                                                                                               | No                           | In Fair condition                                                                                      |
| 7          | Maintenance and Repair | Calibrate HVAC sensors                   | Unitary HVAC                 | Test and replace failed actuators or linkages and calibrate HVAC sensors.                                                           | HVAC Systems                     | HVAC Sensors Operational                             | Needs attention                                                                                    | Yes                          | Economizer not functional, RCx Economizer Controls on all RTUs - measure recommended                   |



**Basic Measures for Buildings without Central HVAC Plants**

| Measure ID | Type of Measure        | Measure Name                           | Measure Application                | Measure Description                                                                                                                                 | Tab                         | Data Fields Needed for Measure | Answer Options | Potential Measure (Y/N/NA)? | AESC Notes                                                                               |
|------------|------------------------|----------------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|----------------|-----------------------------|------------------------------------------------------------------------------------------|
| 8          | Maintenance and Repair | Lighting Controls                      | Interior Lighting                  | Test and repair/replace occupancy sensors, dimmers, and/or daylighting controls on lighting system to reduce lighting output and power consumption. | Lighting                    | Controls Operational?          | Yes            | No                          | Lighting controls are working properly                                                   |
| 9          | Maintenance and Repair | Lighting Controls                      | Exterior Lighting                  | Test and repair/replace occupancy sensors, dimmers, and/or daylighting controls on lighting system to reduce lighting output and power consumption. | Lighting                    | Controls Operational?          | Yes            | No                          | Lighting controls are working properly                                                   |
| 10         | Maintenance and Repair | Lighting Controls                      | Parking Garage Lighting            | Test and repair/replace occupancy sensors, dimmers, and/or daylighting controls on lighting system to reduce lighting output and power consumption. | Lighting                    | Controls Operational?          | Yes            | No                          | Lighting controls are working properly                                                   |
| 11         | Maintenance and Repair | Repair/Replace Carbon Monoxide Sensors | Air Handling Unit - Parking Garage | Test and repair or replace carbon monoxide sensors in parking garage in order to reduce ventilation fan run time.                                   | HVAC Systems - Distribution | Sensors Operational?           | NA             | NA                          | NA                                                                                       |
| 12         | Maintenance and Repair | Repair Pipe Leaks                      | Compressed Air Distribution System | Reduce the leakage, infiltration, and energy lost due to a damaged pipeline by resealing it.                                                        | Operations                  | Signs of leaks?                | NA             | NA                          | NA                                                                                       |
| 13         | Maintenance and Repair | Repair Pipe Leaks                      | Domestic Water Distribution System | Reduce the leakage, infiltration, and energy lost due to a damaged pipeline by resealing it.                                                        | Service Hot Water System    | Signs of leaks?                | No             | No                          | No leaks observed                                                                        |
| 14         | Maintenance and Repair | Reduce Infiltration                    | Building Envelope                  | Reduce building infiltration by repairing/resealing leaking windows, doors, walls, roof, and skylights.                                             | Construction                | Signs of infiltration?         | No             | No                          | Dual-pane windows, envelope appears to be in decent condition                            |
| 15         | Maintenance and Repair | Solar PV System Maintenance            | Solar Panels                       | Clean and repair solar panels to improve generation efficiency.                                                                                     | Process Loads/Generation    | Solar Panels Condition         | NA             | No                          | No solar panels at site, Install Solar Panels on the Building Roof - measure recommended |
| 16         | Maintenance and Repair | Solar PV System Maintenance            | Electrical                         | Check and repair system electrical components to ensure maximum output to meter/building.                                                           | Process Loads/Generation    | Solar PV Electrical Condition  | NA             | NA                          | NA                                                                                       |

**Basic Measures for Buildings without Central HVAC Plants**

| Measure ID | Type of Measure            | Measure Name                       | Measure Application                 | Measure Description                                                                                                                                                                                                | Tab                           | Data Fields Needed for Measure           | Answer Options          | Potential Measure (Y/N/NA) ? | AESC Notes |
|------------|----------------------------|------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|-------------------------|------------------------------|------------|
| 17         | Optimize System Operations | Optimize Zone Temperature Deadband | HVAC Controls                       | Adjust temperature deadband to eliminate simultaneous heating and cooling.                                                                                                                                         | HVAC Systems                  | Temperature deadband appropriately set?  | NA                      | NA                           | NA         |
| 18         | Optimize System Operation  | Variable Speed Optimization        | Unitary HVAC                        | Test and restore malfunctioning VFD or optimize existing VFD to enable the equipment to change speeds to the minimum required in order to save energy.                                                             | HVAC Systems                  | VFD Operational Condition                | Functioning as intended | No                           | No         |
| 19         | Optimize System Operation  | Variable Speed Optimization        | Pump Swimming Pool / Water Features | Test and restore malfunctioning VFD or optimize existing VFD to enable the equipment to change speeds to the minimum required in order to save energy.                                                             | Operations                    | VFD Operational Condition                | NA                      | NA                           | NA         |
| 20         | Training                   | Building Staff Training            | Building Systems                    | Send one or more building staff to Building Operator Certification training. Or, send one or more building staff to system equipment/controls operation and maintenance training for one or more building systems. | Audit Team and Building Staff | Building Operator's most recent training | Not Known               | NA                           | NA         |

## 11.0 Photo-Log

|                 |                 |
|-----------------|-----------------|
| Redacted Image  | Redacted Image  |
| Picture 1: AC-1 | Picture 2: AC-2 |
| Redacted Image  | Redacted Image  |
| Picture 3: AC-3 | Picture 4: AC-4 |
| Redacted Image  | Redacted Image  |
| Picture 5: AC-5 | Picture 6: AC-6 |

|                            |                                   |
|----------------------------|-----------------------------------|
| Redacted Image             | Redacted Image                    |
| Picture 7: AC-7            | Picture 8: CU-1 and CU-2          |
| Redacted Image             | Redacted Image                    |
| Picture 9: HP-1 and HP-2   | Picture 10: Domestic Water Heater |
| Redacted Image             | Redacted Image                    |
| Picture 11: Indoor Fancoil | Picture 12: Typical Thermostat    |

|                                             |                                           |
|---------------------------------------------|-------------------------------------------|
| Redacted Image                              | Redacted Image                            |
| Picture 13: Outside Air and Exhaust Dampers | Picture 14: Lavatory Sinks with Aerators  |
| Redacted Image                              | Redacted Image                            |
| Picture 15: Lighting Control Panel          | Picture 16: Low Flow Toilets              |
| Redacted Image                              | Redacted Image                            |
| Picture 17: T8 LF Fixtures                  | Picture 18: Pendant Fixture in Lobby Area |

|                                         |                                    |
|-----------------------------------------|------------------------------------|
| Redacted Image                          | Redacted Image                     |
| Picture 19: Refrigerators in Break Room | Picture 20: Copier in Office Space |
| Redacted Image                          |                                    |
| Picture 21: Front Façade                |                                    |

# Energy Efficiency and Peak Load Reduction Study



Prepared for:



June 28, 2021

## **Disclaimer**

The intent of this energy analysis report is to identify energy savings opportunities associated with recommended upgrades to the facility's equipment systems at this site. Approximate saving ranges are included in this report to make decisions about reducing energy use at the facility. However, this report is not intended to serve as a detailed engineering design document. It should be noted that detailed design efforts are required in order to implement several of the improvements evaluated as part of this energy analysis.

While the recommendations in this report have been reviewed for technical accuracy and are believed to be reasonably accurate, the findings are estimates and actual results may vary. As a result, Alternative Energy Systems Consulting, Inc. (AESC) is not liable if estimated savings ranges or economics are not actually achieved. All savings and cost estimates in the report are for informational purposes and are not to be construed as a design document or as guarantees.

In no event will AESC be liable for the failure of the customer to achieve a specified amount of energy savings, renewable generation and/or storage capacity, the operation of customer's facilities, or any incidental or consequential damages of any kind in connection with this report or the installation of recommended measures.



# TABLE OF CONTENTS

|                                                                  |    |
|------------------------------------------------------------------|----|
| SECTION 1 EXECUTIVE SUMMARY .....                                | 5  |
| 1.1 Cost Reduction Opportunities and Cost Benefit Analysis ..... | 6  |
| 1.2 Implementation Planning.....                                 | 8  |
| SECTION 2 PROJECT TEAM AND FACILITY INFORMATION.....             | 9  |
| 2.1 Site Visit .....                                             | 9  |
| 2.2 Project Contacts .....                                       | 9  |
| 2.3 Site Background Information .....                            | 10 |
| SECTION 3 ENERGY USING SYSTEMS .....                             | 12 |
| 3.1 Heating, Ventilation, and Air Conditioning (HVAC) .....      | 12 |
| 3.2 Building Automation System .....                             | 12 |
| 3.3 Lighting Equipment.....                                      | 12 |
| 3.4 Plug Loads .....                                             | 12 |
| 3.5 Water Systems .....                                          | 13 |
| SECTION 4 SITE ENERGY USE AND COSTS .....                        | 15 |
| 4.1 Historical Energy Consumption Analysis.....                  | 15 |
| 4.1.1 Electric Meter .....                                       | 15 |
| 4.1.2 Gas Meter .....                                            | 16 |
| 4.2 Approximate Load Balance .....                               | 19 |
| SECTION 5 ENERGY PROJECT OPPORTUNITIES.....                      | 20 |
| 5.1 Energy Efficiency Measures .....                             | 20 |
| 5.1.1 EEM-1 Replace Exterior Canopy Lighting with LED .....      | 20 |
| 5.1.1 EEM-2 Advanced Power Strips.....                           | 20 |
| 5.1.1 EEM-3 Variable Flow Pumping .....                          | 21 |
| 5.1.1 EEM-4 Install Occupancy Sensors .....                      | 22 |
| 5.1.1 EEM-5 Demand Control Ventilation .....                     | 23 |
| 5.1.2 EEM-6 Install Interior LED Tubes .....                     | 23 |
| 5.1.3 EEM-7 BAS Upgrade and Expansion .....                      | 24 |
| 5.1.4 DR-1 Building Setpoint Adjustment.....                     | 25 |
| 5.2 Additional Recommendations .....                             | 26 |
| SECTION 6 RESILIENCY OPPORTUNITIES .....                         | 27 |
| 6.1 Resiliency Battery Sizing and Modeling .....                 | 27 |

|                   |                                                                    |           |
|-------------------|--------------------------------------------------------------------|-----------|
| 6.2               | Project Pricing and Cash flow Assumptions .....                    | 29        |
| 6.2.1             | Cash Purchase Economics .....                                      | 29        |
| 6.2.2             | BESS as a Service Economics .....                                  | 32        |
| 6.2.3             | Financial Recommendation .....                                     | 35        |
| 6.3               | Interconnection & Upgrades for the BESS to Existing Facility ..... | 36        |
| 6.4               | Owner Project Requirement Specifications .....                     | 39        |
| 6.5               | Operations and Maintenance Requirements for the BESS .....         | 40        |
| 6.6               | Solar Inverter Replacement Cost and Equipment Specification .....  | 41        |
|                   |                                                                    |           |
| <u>APPENDIX A</u> | <u>20-YEAR CASH FLOW ANALYSIS CASH PURCHASE &amp; BESS AS A</u>    |           |
| <u>SERVICE</u>    | <u>.....</u>                                                       | <u>42</u> |
|                   |                                                                    |           |
| <u>APPENDIX B</u> | <u>SERVICE DISCONNECT CALCULATIONS.....</u>                        | <u>50</u> |
|                   |                                                                    |           |
| <u>APPENDIX C</u> | <u>BATTERY COST ESTIMATES.....</u>                                 | <u>51</u> |
|                   |                                                                    |           |
| <u>APPENDIX D</u> | <u>LOAD CATEGORIZATION .....</u>                                   | <u>53</u> |

## SECTION 1 EXECUTIVE SUMMARY

At the request of the [REDACTED] Alternative Energy Systems Consulting (AESC) performed this Energy Resiliency Study, consisting of an energy efficiency (EE) audit paired with a battery energy storage system (BESS) assessment, at the [REDACTED] located at [REDACTED]

The objective of the EE audit is to identify and qualify potential energy efficiency measures (EEMs) and provide [REDACTED] an action plan that identifies and prioritizes potential energy, demand, and natural gas savings. Identified EEMs can be implemented to reduce the overall energy consumption of the facility. The resiliency assessment identifies opportunities for a BESS, paired with existing solar, to meet [REDACTED] energy resiliency goals at this facility. The BESS was sized for two timeframes: six or 24 hours of energy self-sufficiency. The energy efficiency measures can be implemented prior to (or in conjunction with) the BESS to reduce the load that the BESS will need to cover, reduce the size and cost of the system, and reduce the payback of the BESS.

This report lists energy efficiency rebates and incentives that may be available from Pacific Gas and Electric (PG&E) to reduce the cost of EE measure implementation. Be sure to coordinate with your utility account executive for assistance in applying for incentives.

The results of the [REDACTED] EE audit are summarized in Table 1.1.

**Table 1.1 Recommended Energy Efficiency Measures - Savings and Cost Summary**

| Estimated Annual Savings Summary - EE  | Savings         | Reduction  |
|----------------------------------------|-----------------|------------|
| Estimated Peak Demand Savings (kW)     | 113             | 21%        |
| Estimated Annual Energy Savings (kWh)  | 311,500         | 24%        |
| Estimated Natural Gas Savings (therms) | 10,700          | 30%        |
| Estimated Annual Utility Cost Savings  | <b>\$91,356</b> | <b>42%</b> |

The energy resiliency assessment involves reviewing the existing building electrical system, building baseline energy usage, all recommended EEMs, existing solar, and physical site constraints. Based on the study results, two scenarios for each timeframe are feasible for implementation.

**Table 1.2 Battery Scenarios modeled**

| Scenario     | Hours of Backup | EE Measures Implemented | Battery Size     |
|--------------|-----------------|-------------------------|------------------|
| Scenario 1 A | 6               | None                    | 450kW / 1,638kWh |
| Scenario 1 B | 24              | None                    | 450kW / 2,612kWh |
| Scenario 2 A | 6               | All                     | 450kW / 1,024kWh |

|              |    |     |                  |
|--------------|----|-----|------------------|
| Scenario 2 B | 24 | All | 450kW / 1,626kWh |
|--------------|----|-----|------------------|

This system is designed to provide options for six hours or 24 hours of required energy resiliency per the baseline energy usage and solar production. To accommodate the new battery, it is necessary to replace the existing main disconnect with a 1600A breaker with relay capabilities for islanding along with a new load side battery breaker.

The savings and upfront cost associated with two different financing options are presented in the table below for scenario 2A. As it is the most cost-effective installation to achieve the resiliency goal, AESC recommends this option. The numbers presented assume that the energy efficiency measures described in this report are implemented and that an SGIP incentive is received for the battery installation.

**Table 1.3 Battery Financials**

|                   | System Size    | Installation Cost | Proposed Annual Utility Costs | Service Costs | First Year Savings |
|-------------------|----------------|-------------------|-------------------------------|---------------|--------------------|
| BESS as a Service | 450kW/1,025kWh | \$ -              | \$ 114,305.00                 | \$ 58,250.00  | \$ 69,355.00       |
| Cash Purchase     | 450kW/1,025kWh | \$ 826,277.00     | \$ 114,305.00                 | \$ -          | \$ 127,605.00      |

Additional detail regarding project financing and cashflows are provided in section 6 of this report. This information can be used by [REDACTED] in a Request for Proposal (RFP) to procure this equipment.

## 1.1 Cost Reduction Opportunities and Cost Benefit Analysis

With support and input from [REDACTED] Energy and Sustainability staff, AESC identified seven energy efficiency measures that, if implemented, will reduce energy consumption by 311,500 kWh and 10,700 therms annually. The energy efficiency projects would pay for themselves in seven years. The calculated simple payback was estimated using the average electric and gas rates of \$0.254 per kWh and \$1.136 per therm. Table 1.2 summarizes the measures that are recommended for this facility. [REDACTED] may want to consider these measures based on other factors such as equipment nearing the end of its useful life.

**Table 1.2 Recommended Measures - Energy Savings and Cost Summary**

| Measure Description                              |                       |                      |                      |                   | Project Costs, Incentives, and Payback |                                  |                                   |                       |
|--------------------------------------------------|-----------------------|----------------------|----------------------|-------------------|----------------------------------------|----------------------------------|-----------------------------------|-----------------------|
|                                                  | Demand Reduction (kW) | Energy Savings (kWh) | Natural Gas (therms) | Cost Savings (\$) | Estimated Install Cost (\$)            | Potential Incentive/ Rebate (\$) | Simple Payback <sup>1</sup> (yrs) | Effective Useful Life |
| EEM-1: Replace Exterior Canopy Lighting with LED | 0                     | 7,800                | 0                    | \$1,981           | \$2,280                                | \$0                              | 1.2                               | 12                    |
| EEM-2: Advanced Power Strips                     | 0                     | 27,500               | 0                    | \$6,985           | \$12,188                               | \$0                              | 1.7                               | 5                     |
| EEM-3: Variable Flow Pumping                     | 12                    | 20,900               | 0                    | \$5,309           | \$15,760                               | \$1,250                          | 2.7                               | 15                    |
| EEM-4: Install Occupancy Sensors                 | 18                    | 17,100               | -400                 | \$3,889           | \$15,938                               | \$0                              | 4.1                               | 15                    |
| EEM-5: Demand Control Ventilation                | 3                     | 49,000               | 300                  | \$12,787          | \$42,000                               | \$2,940                          | 3.1                               | 15                    |
| EEM-6: Install Interior LED Tubes                | 46                    | 63,900               | -900                 | \$15,208          | \$83,760                               | \$1,920                          | 5.4                               | 12                    |
| EEM-7: BAS Upgrade and Expansion                 | 17                    | 133,100              | 11,700               | \$47,099          | \$480,000                              | \$0                              | 10.2                              | 15                    |
| DR-1: Building Setpoint Adjustment               | 22                    | 0                    | 0                    | \$380.00          | \$1,000                                | \$0                              | 2.6                               | 15                    |
| <b>Recommended Measure Totals</b>                | <b>118</b>            | <b>311,500</b>       | <b>10,700</b>        | <b>\$91,656</b>   | <b>\$650,645</b>                       | <b>\$6,110</b>                   | <b>7.0</b>                        |                       |

---

<sup>1</sup> Simple payback is calculated as: (Estimated Install Cost – Potential Incentive)/Cost Savings

## 1.2 Implementation Planning

The portfolio of identified projects below will bring significant cost benefits, improve system reliability, and should be considered for implementation. The report's estimated costs are based on generalized industry standards, thus [REDACTED] should obtain a detailed cost quote from a contractor to determine actual payback period. AESC can assist [REDACTED] in identifying available financial incentives. [REDACTED] can finance the energy savings projects through the Golden State Financial Marketplace (GS \$Mart) or PG&E On-Bill Financing (OBF). [REDACTED] may also consider an energy savings performance contract with an Energy Service Company (ESCO), many of whom offer options to help achieve energy savings at an individual site or portfolio of properties. More information about these different options is listed in the table below.

**Table 1.3 Resources for [REDACTED]**

| Program                                        | Description                                                                                                                                                                                                                                                                                                              | Contact Information                                                                                                                                                                                                                                                                 |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Golden State Financial Marketplace (GS \$Mart) | GS \$Mart is an innovative acquisition finance program designed to facilitate State of California agencies and local governments with installment or lease purchases, while meeting all requirements of a competitively bid process.                                                                                     | <a href="https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Finance-an-Acquisition-through-GS-\$Mart">https://www.dgs.ca.gov/PD/Services/Page-Content/Procurement-Division-Services-List-Folder/Finance-an-Acquisition-through-GS-\$Mart</a> |
| PG&E On-Bill Financing                         | PG&E On-Bill Financing (OBF) Program offers interest free (0%) loans without fees, pre-payment penalties or other charges. The loans are designed to be bill-neutral, and the loan is paid back on the customer's PG&E bill in monthly installments that are based on energy savings from the energy efficiency project. | <a href="https://www.pge.com/en_US/sm-all-medium-business/save-energy-and-money/energy-efficiency-financing.page">https://www.pge.com/en_US/sm-all-medium-business/save-energy-and-money/energy-efficiency-financing.page</a>                                                       |
| Energy Services Company (ESCO) Financing       | An energy savings performance contract (ESPC) is a model where an Energy Services Company (ESCO) achieves energy savings at a property or portfolio of properties as a service. This model guarantees savings for a set period of time in exchange for payment from the energy cost savings.                             | <a href="https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/ESCO%20Financing%20Summary.pdf">https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/ESCO%20Financing%20Summary.pdf</a>                                       |

## SECTION 2 PROJECT TEAM AND FACILITY INFORMATION

### 2.1 Site Visit

On February 18, 2021, AESC performed an energy audit at [REDACTED] building located at [REDACTED] California. Chazrick Branson of AESC met with [REDACTED] to discuss facility operations and review energy-using systems.

### 2.2 Project Contacts

This section of the report identifies the project team members and includes contact information.

Table 2.1 Contacts

| Name                 | Role                    | Organization | Contact Information                                                              |
|----------------------|-------------------------|--------------|----------------------------------------------------------------------------------|
| [REDACTED]           | [REDACTED]              | [REDACTED]   | [REDACTED]                                                                       |
| Sarah Sturdy         | Program Manager         | AESC         | 503-928-9804<br><a href="mailto:ssurdy@aesc-inc.com">ssurdy@aesc-inc.com</a>     |
| Miranda Goar, PE     | Sr. Electrical Engineer | AESC         | 707-332-9625<br><a href="mailto:mgoar@aesc-inc.com">mgoar@aesc-inc.com</a>       |
| Chazrick Branson, PE | Senior Engineer         | AESC         | 541-848-0322<br><a href="mailto:cbranson@aesc-inc.com">cbranson@aesc-inc.com</a> |
| Dara Salour, PE      | Program Manager         | AESC         | 925-200-0499<br><a href="mailto:dsalour@aesc-inc.com">dsalour@aesc-inc.com</a>   |
| Nick Bonse           | Engineer                | AESC         | 760-809-5580<br><a href="mailto:Nbonse@aesc-inc.com">Nbonse@aesc-inc.com</a>     |

## 2.3 Site Background Information

Redacted Image

Figure 2.1 Aerial View of the Site

Facility name: [REDACTED]

Location: [REDACTED]

Building type: Large Office

Total building square footage: 120,000 square feet



Year building completed: 1978

Number of levels: 4

CA climate zone: CZ3

Hours of operation: 8AM to 5PM, Monday - Friday

HVAC equipment type: Multiple-zone VAV System with Electric and Hot Water Reheat

██████████ is a four-story building constructed in 1978, used for criminal and traffic court activities. According to design floor plans the building is approximately 120,000 square-feet. It is a standard steel and wood frame over stucco construction. The roof is pitched with red concrete tile roofing material.

The first floor includes the sally port, booking, sheriff's department, and other various administrative rooms and offices. The second floor consists of six court rooms, 601 – 606, with office space. Each court room has a holding cell which has a stairwell to the third floor with additional holding cells. The third floor consists of holding cells, a jury assembly area with office space, and a secure corridor around the perimeter. A significant portion of the third floor is inaccessible, unconditioned empty/void space that sits atop the high ceilings of the 2<sup>nd</sup> floor court rooms. The fourth floor includes the engineering room and various mechanical and storage rooms.

There have not been any significant energy upgrades in the last five years. However, the site's engineering team has been replacing failed exterior parking lot lamps with LED lamps.

## SECTION 3 ENERGY USING SYSTEMS

The primary energy using systems are HVAC, Lighting, and Plugloads. See Table 3.1 for all major energy using systems.

### 3.1 Heating, Ventilation, and Air Conditioning (HVAC)

The facility spaces are conditioned with 13 Air Handling Units (AHUs) with a multiple-zone variable air volume (VAV) distribution system. The AHUs heat and cool with hot and chilled water coils. The VAV boxes are primarily electric re-heat with some hot water re-heat. VAV and zone level controls are pneumatic, supported by a 10 HP air compressor, while AHU controls are digital. All AHUs are equipped with supply and return fan variable frequency drives (VFDs) and outdoor air economizers.

Chilled water is supplied by two 130 ton air-cooled rotary chillers, which were installed in 1998 (22 years old) and past their effective useful life of 20 years.

Heating hot water is supplied by two 1,999 MBtu (84% efficient) force draft modulating natural gas boilers, which were installed in 2013.

Hot water and chilled water pumps are constant speed.

There is a 4-ton direct expansion (DX) split system that serves the IT room.

### 3.2 Building Automation System

The HVAC system is controlled by a Schneider Electric (Vista 5.16) central building automation system (BAS). The HVAC is schedule from 5 AM to 8 PM (weekdays) with a 30-minute warmup period. The one exception is the boiler system, which operates at temperature, 24/7, for concern that the old distribution pipe will leak. The BAS system controls schedules and setpoints of the AHUs, Chillers, and Boilers. Zone level controls are pneumatic.

### 3.3 Lighting Equipment

The facility interior is primarily illuminated with linear fluorescent and compact fluorescent lighting. 4' 2L T8, 2' (2L and 4L) T8 troffers and 4' 2L T8s indirect pendants are the primary lighting types throughout the facility. Common area lighting is controlled with a main switch panel and room lighting is controlled by wall switches. There are no occupancy sensors.

Exterior lighting includes 100-Watt Mercury Vapor lamps. [REDACTED] has been installing 25-Watt screw-in LEDs as lamps fail. Exterior lighting is controlled by an astronomical timeclock.

### 3.4 Plug Loads

The facility consists of a mixture of office spaces and break areas. Office spaces include typical plug loads such as computer workstations, printers, and copiers. Break areas were equipped with microwaves, coffee machine and water dispenser machines.

The site estimated approximately 125 computer workstations in the court space. It is estimated that another 25 workstations exist outside of the court (Public Defender, District Attorney, and Sheriff's Office), for a total of 150 computer workstations in the building.

### **3.5 Water Systems**

Domestic hot water (DHW) is supplied by the primary heating hot water boilers through a heat exchanger. DHW is circulated by a 1/8 HP constant speed pump.

**Table 3.1 Major Energy Using Systems**

| Unit Tag | Equipment Type             | Manufacturer       | Model                        | Location                     | Service                                      | Capacity               |
|----------|----------------------------|--------------------|------------------------------|------------------------------|----------------------------------------------|------------------------|
| CLR01    | Air-Cooled Chiller         | Trane              | RTAA1304XP01A3DIB            | Floor 4, Outside on Roof     | AHU01-AHU13                                  | 130 ton,<br>1.3 kW/ton |
| CLR02    | Air-Cooled Chiller         | Trane              | RTAA1304XT01A3D1BDFN         | Floor 4, Outside on Roof     | AHU01-AHU13                                  | 130 ton,<br>1.3 kW/ton |
| AHU01    | Air Handler, (VFD SF & EF) | Trane              | CF-24-A-2-SW-3-CCW-UB-S-X    | 2nd Floor Fan Room 2A        | FL1 - Marshalls                              | 10, 1.5 HP             |
| AHU02    | Air Handler, (VFD SF & EF) | Trane              | CF-27-A-2-SW-3-CW-TAU-S-X    | 2nd Floor Fan room 2B        | FL1 - Traffic Offices                        | 10, 1.5 HP             |
| AHU03    | Air Handler, (VFD SF & EF) | Trane              | CF-27-A-2-SW-3-CCW-TAU-S-X   | 2nd Floor Fan Room 2C        | FL1 - Public Defender                        | 10, 2 HP               |
| AHU04    | Air Handler, (VFD SF & EF) | Trane              | CF-27-A-2-SW-3-CW-TAU-S-X    | 2nd Floor Fan Room 2D        | FL1 - District Attorney                      | 10, 1.5 HP             |
| AHU05    | Air Handler, (VFD SF & EF) | Trane              | CF-24-A-2-SW-3-CW-UB-S-X     | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 604                    | 7.5, 1.5 HP            |
| AHU06    | Air Handler, (VFD SF & EF) | Trane              | CF-24-A-2-SW-3-CW-UB-S-X     | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 603                    | 7.5, 1.5 HP            |
| AHU07    | Air Handler, (VFD SF & EF) | Trane              | CF-24-A-2-SW-3-CW-UB-S-X     | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 602                    | 7.5, 1.5 HP            |
| AHU08    | Air Handler, (VFD SF & EF) | Trane              | CF-24-A-2-SW-3-CW-UB-S-X     | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 601                    | 7.5, 2 HP              |
| AHU09    | Air Handler, (VFD SF & EF) | Trane              | CF-20-A-2-SW-9-CCW-UB-S-X    | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 607                    | 7.5, 2 HP              |
| AHU10    | Air Handler, (VFD SF & EF) | Trane              | CF-20-A-2-SW-9-CW-UB-S-X     | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 608                    | 7.5, 2 HP              |
| AHU11    | Air Handler, (VFD SF & EF) | Trane              | CF-22-A-2-SW-9-CCW-UB-S-X    | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 605                    | 7.5, 1.5 HP            |
| AHU12    | Air Handler, (VFD SF & EF) | Trane              | CF-22-A-2-SW-9-CW-UB-S-X     | Roof Room w/two AHUs         | FL2 - Courtroom Dept. 606                    | 7.5, 1 HP              |
| AHU13    | Air Handler, (VFD SF & EF) | Trane              | CF-24-A-2-SW-3-CW-UB-S-X     | Room Off Air Compressor Room | FL3 - Jury Assembly                          | 10, 1.5 HP             |
| PCH01-02 | Chilled Water Pumps        | Baldor-Reliance    | EM3311T                      | Floor 4, Boiler Room         | AHU01-AHU13                                  | 7.5 HP, 91% Eff        |
| BLR03-04 | NG Boilers                 | Raypack            | H7-2004A                     | Floor 4, Boiler Room         | AHU01-AHU13, VAVs                            | 1,999.4 Mbtu, 84% Eff  |
| PHW03-04 | Hot Water Pumps            | Baldor-Reliance    | EM3218T                      | Floor 4, Boiler Room         | AHU01-AHU13, VAVs                            | 5 HP, 89.5% Eff        |
| HWP01    | DHW Pump                   | Taco               | 009-BF5-3                    | Floor 4, Air Compressor Room | All DHW Fixtures                             | 1/8 HP                 |
| ACU02    | Split AC                   | York               | H1RA048S06D                  | Roof, Floor 4                | IT Room                                      | 4 Ton, 10 SEER         |
| BAS      | Building Automation System | Schneider Electric | Vista 5.16                   | Engineering Office           | AHUs, Chillers, Boilers                      | n/a                    |
| CMP04    | Control Air Compressor     | Chicago Pneumatic  | Floor 4, Air Compressor room | Floor 4, Air Compressor Room | All pneumatic controls<br>(dampers are DDC)  | 10 HP                  |
| GEN01    | Diesel Standby Generator   | Kohler             | 100R0271                     | Floor 4, Boiler Room         | Emergency Circuits<br>(egress and elevators) | 100 kW                 |

## SECTION 4 SITE ENERGY USE AND COSTS

### 4.1 Historical Energy Consumption Analysis

#### 4.1.1 Electric Meter

The facility has one electric meter. Electricity is supplied by a Community Choice Aggregator, East Bay Community Energy, on a A6-Bright Choice rate schedule and delivered and billed by PG&E on a net-metering (NEM) rate schedule. The facility also has a 225 kWAC car-port solar array which generates a portion of the annual electricity while also exporting excess generation to the electrical grid. Electric meter details are included in Table 4.1

Table 4.1 Electric Meter Details

| Electric Meter # | Account # |
|------------------|-----------|
| 1009904834       | 472626332 |

Analyzing annual electricity usage highlights variation in consumption and costs. For this analysis AESC reviewed 12 months of facility electrical usage - January 2019 through December 2019 – which were prior to the COVID 19 pandemic and thus demonstrate ‘normal’ conditions. Site staff expects operation and occupancy levels to return to normal after the COVID 19 pandemic has ended. The total annual electricity use over this one-year period was 866,296 kWh, with a total cost of \$219,938.85. Historical electricity consumption is summarized in Table 4.2.

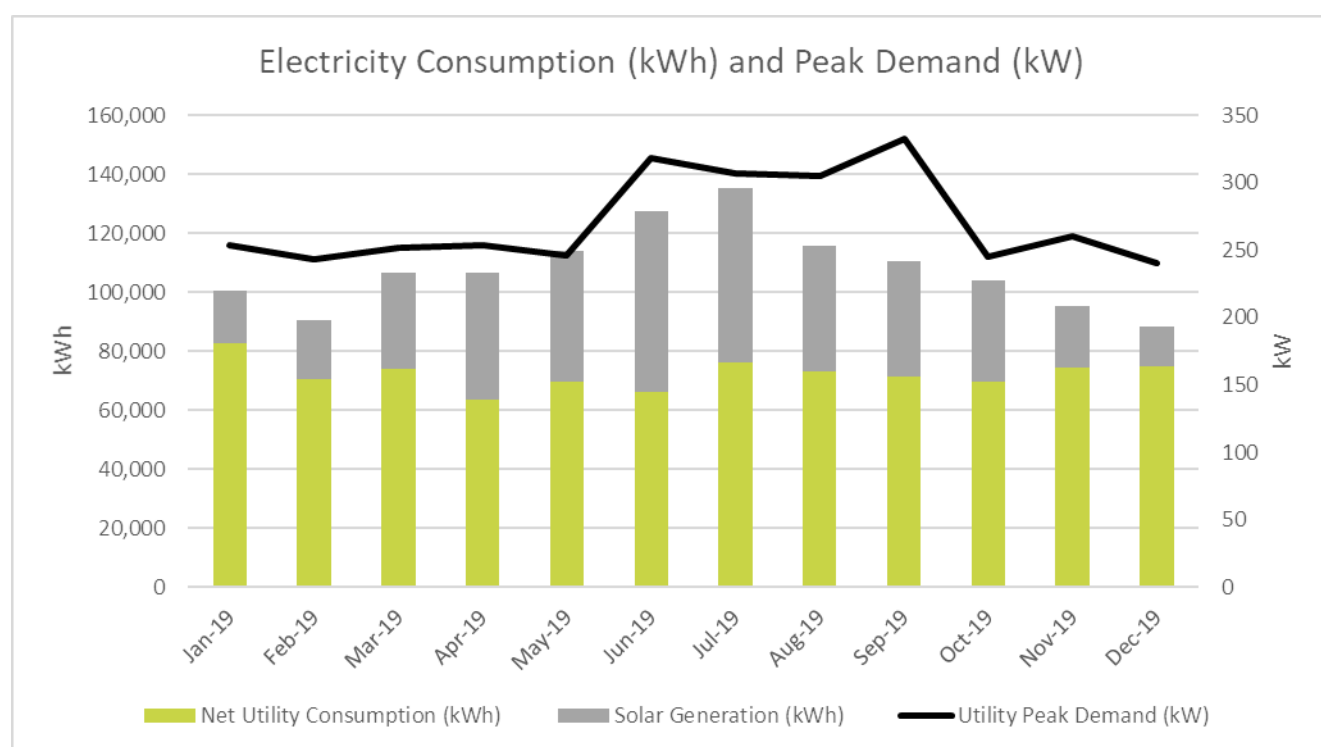
Table 4.2 Historical Electricity Consumption and Demand

| Month             | Net Utility Consumption (kWh) | Utility Peak Demand (kW) | Electricity Cost (\$) | Solar Generation (kWh) | Total Energy Consumption (kWh) |
|-------------------|-------------------------------|--------------------------|-----------------------|------------------------|--------------------------------|
| Jan-19            | 82,799                        | 253                      | \$21.03               | 17,515                 | 100,314                        |
| Feb-19            | 70,401                        | 244                      | \$31,796.23           | 20,167                 | 90,568                         |
| Mar-19            | 74,028                        | 252                      | \$14,198.86           | 32,721                 | 106,749                        |
| Apr-19            | 63,514                        | 253                      | \$14,698.37           | 43,256                 | 106,770                        |
| May-19            | 69,577                        | 246                      | \$19,885.70           | 44,425                 | 114,002                        |
| Jun-19            | 66,165                        | 318                      | \$17,690.05           | 61,381                 | 127,546                        |
| Jul-19            | 76,330                        | 307                      | \$23,604.35           | 58,934                 | 135,264                        |
| Aug-19            | 73,285                        | 305                      | \$22,567.99           | 42,621                 | 115,906                        |
| Sep-19            | 71,295                        | 332                      | \$22,444.14           | 39,182                 | 110,477                        |
| Oct-19            | 69,865                        | 245                      | \$20,672.19           | 34,110                 | 103,975                        |
| Nov-19            | 74,235                        | 260                      | \$16,152.94           | 20,906                 | 95,141                         |
| Dec-19            | 74,802                        | 240                      | \$16,207.00           | 13,596                 | 88,398                         |
| <b>Total/ Max</b> | <b>866,296</b>                | <b>332</b>               | <b>\$219,938.85</b>   | <b>428,813</b>         | <b>1,295,109</b>               |

Note that the energy use and cost summarized in the above table is directly from the utility bills and only includes utility imports/exports and reflects bill corrections that occurred in January and February, resulting in a lower energy cost in January and higher energy cost in February. In 2019 the facility's solar generation amounted to 428,813 kWh, and utility net consumption was 866,296 kWh, making the facility's total energy consumption 1,295,109 kWh.

The virtual rate is a valuable metric in utility bill and EEM analysis. Virtual rate is determined by dividing the total cost to the facility for a given time period by the units of consumption for the same time period. **The virtual rate of electricity for this site was approximately \$0.254/kWh.**

Figure 4.1 plots monthly electricity consumption. The energy usage follows a typical pattern for California buildings -- the bulk of energy use occurs during the summer months and is reduced during the colder winter months.



**Figure 4.1 Electricity Consumption**

### 4.1.2 Gas Meter

The facility has one gas meter which serves the entire building. Natural gas is procured and delivered by PG&E under a GNR1 rate schedule. The two HHW/DHW boilers are the only gas consuming equipment. Gas meter details are included in Table 4.3.

**Table 4.3 Gas Meter Details**

| Gas Meter # | Account # |
|-------------|-----------|
| 62071718    | 472626332 |

Annual natural gas usage analysis identifies the yearly variation in consumption and costs. For this analysis AESC reviewed 12 months of facility natural gas usage - January 2019 through December 2019 – which were prior to the COVID 19 pandemic and thus demonstrate ‘normal’ conditions. The total annual natural gas use over this one-year period was 35,532 therms, with a total cost of \$40,375.59. Historical natural gas consumption is summarized in Table 4.4.

**Table 4.4 Historical Natural Gas Consumption**

| Month        | Natural Gas Consumption (therms) | Natural Gas Cost (\$) |
|--------------|----------------------------------|-----------------------|
| Jan-19       | 3,761                            | \$4,872.99            |
| Feb-19       | 4,285                            | \$5,525.28            |
| Mar-19       | 3,320                            | \$4,113.60            |
| Apr-19       | 3,134                            | \$3,320.56            |
| May-19       | 3,376                            | \$3,275.04            |
| Jun-19       | 2,263                            | \$2,200.42            |
| Jul-19       | 2,122                            | \$2,222.65            |
| Aug-19       | 1,497                            | \$1,555.81            |
| Sep-19       | 2,123                            | \$2,087.78            |
| Oct-19       | 2,630                            | \$2,660.79            |
| Nov-19       | 3,856                            | \$4,574.04            |
| Dec-19       | 3,165                            | \$3,966.63            |
| <b>Total</b> | <b>35,532</b>                    | <b>\$40,375.59</b>    |

**The virtual rate of natural gas for this site was approximately \$1.136/therm.**

Figure 4.2 plots monthly natural gas consumption. The energy usage follows a typical pattern for buildings with natural gas heating. However, the significant gas consumption during summer could be a sign of simultaneous heating and cooling, heat loss, or other inefficient use of heating.

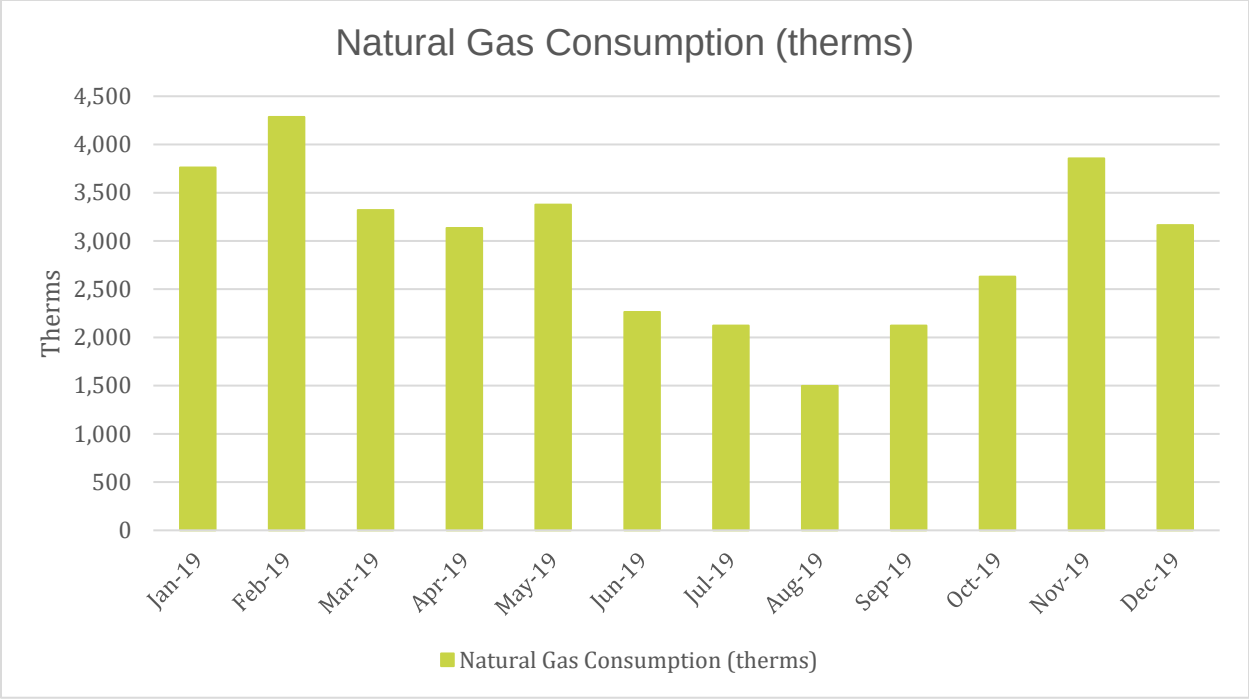


Figure 4.2 Natural Gas Consumption



## 4.2 Approximate Load Balance

Using an eQuest (v3.65-7175) whole building simulation AESC approximated the breakdown of baseline electricity consumption and natural gas usage by facility end-use, per Figure 4.3

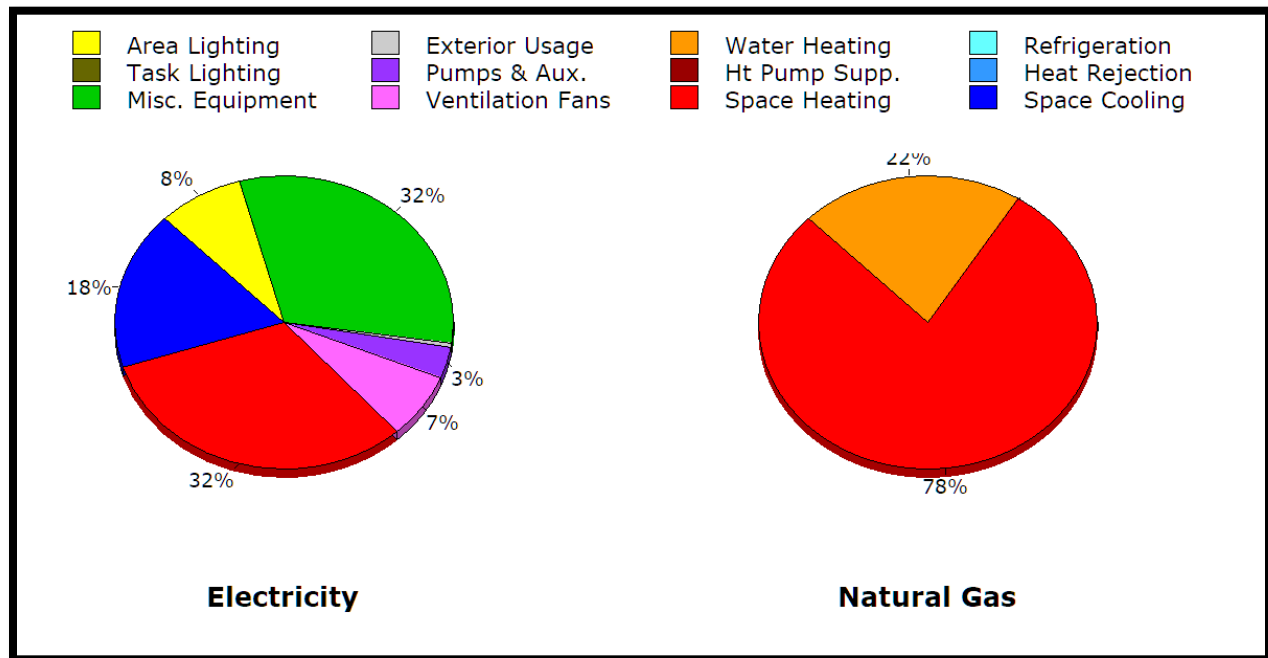


Figure 4.3 Approximate Breakdown of Electricity and Natural Gas Consumption by End-Use

## SECTION 5 ENERGY PROJECT OPPORTUNITIES

AESC has based its evaluation and recommendations on field observations and input from on-site operations personnel. Potential energy efficiency savings were calculated using eQuest (v3.65-7175) whole building simulation mode, which are outlined in the measure summary sections.

### 5.1 Energy Efficiency Measures

The following section includes detailed calculations of the EEMs.

#### 5.1.1 EEM-1 Replace Exterior Canopy Lighting with LED

##### Energy Savings and Financial Analysis Table

| Measure Description                   | Replace Exterior Canopy Lighting with LED |
|---------------------------------------|-------------------------------------------|
| Electric Demand Savings (kW)          | 0                                         |
| Electric Consumption Savings (kWh/yr) | 7,800                                     |
| Natural Gas Savings (therms/yr)       | 0                                         |
| Annual Cost Savings (\$)              | \$1,981.20                                |
| <b>Gross Implementation Cost (\$)</b> | <b>\$2,280</b>                            |
| Estimated Incentive (\$)              | \$0                                       |
| Simple Payback (yrs)                  | 1.2                                       |
| Effective Useful Life (yrs)           | 12                                        |

##### Existing Conditions

Exterior lighting is a mixture of 125-Watt Mercury Vapor (MV) and 25-Watt LEDs. Engineering has been replacing 125-Watt MV lamps with 25-Watt LED lamps as lamps burn out. Exterior lighting is controlled by an astronomical timeclock and operates sunrise to sunset.

##### Potential Measure(s)

Replace all existing MV lamps with 25-Watt LED lamps to reduce nighttime energy consumption. Material and in-house labor were estimated at \$95 per fixture replacement.

#### 5.1.1 EEM-2 Advanced Power Strips

##### Energy Savings and Financial Analysis Table

| Measure Description                   | Advanced Power Strips |
|---------------------------------------|-----------------------|
| Electric Demand Savings (kW)          | 0                     |
| Electric Consumption Savings (kWh/yr) | 27,500                |

|                                       |                 |
|---------------------------------------|-----------------|
| Natural Gas Savings (therms/yr)       | 0               |
| Annual Cost Savings (\$)              | \$6,985.00      |
| <b>Gross Implementation Cost (\$)</b> | <b>\$12,188</b> |
| Estimated Incentive (\$)              | \$0             |
| Simple Payback (yrs)                  | 1.7             |
| Effective Useful Life (yrs)           | 5               |

### Existing Conditions

The facility has approximately 125 workstations throughout the court areas, 25 within the District Attorney offices, 27 within the Public Defender's offices, and four in the Sheriff's office. The computer and monitor shifts into stand-by mode after long periods of inactivity; however, the peripheral devices remain "on" while not in use.

### Potential Measure(s)

There is an opportunity to save energy by installing 125 advanced power strips in the court space to turn off the peripheral devices when employees are not at their desks for extended periods of time. The advanced power strip monitors background and user computer processes to determine when the user is and is not actively using the PC equipment. When the PC equipment is inactive, peripheral devices such as monitors and speakers are de-energized, and the computer is put into standby, thus avoiding any lost unsaved data. Other offices outside of the court can benefit from advanced power strips but were intentionally excluded from the measure in case the measure is not feasible in those areas. This measure can be implemented by in-house facility personnel to save project costs. The labor cost is based on hourly rate of \$125 assuming 30 minutes for each workstation. The per unit cost for this measure is \$97.50 per workstation.

## 5.1.1 EEM-3 Variable Flow Pumping

### Energy Savings and Financial Analysis Table

| Measure Description                   | Variable Flow Pumping |
|---------------------------------------|-----------------------|
| Electric Demand Savings (kW)          | 12                    |
| Electric Consumption Savings (kWh/yr) | 20,900                |
| Natural Gas Savings (therms/yr)       | 0                     |
| Annual Cost Savings (\$)              | \$5,308.60            |
| <b>Gross Implementation Cost (\$)</b> | <b>\$15,760</b>       |
| Estimated Incentive (\$)              | \$1,250               |
| Simple Payback (yrs)                  | 2.7                   |
| Effective Useful Life (yrs)           | 15                    |

## Existing Conditions

The existing system includes two 7.5 HP chilled water pumps and two 5 HP heating hot water pumps. The pumps operate at a constant speed and are scheduled with the HVAC system. Chilled water pumps are schedule with the air-side HVAC system and hot water pumps operate 24/7. Pumping power increases as water loop pressure increases (cooling/heating valves close), causing excess energy consumption.

## Potential Measure(s)

Install VFDs and pressure feedback control on the chilled and hot water pumps to allow the pumps to modulate speed and maintain pressure as cooling or heating demand changes. Energy savings will be realized according to the pump affinity law. Measure cost is based on previous project experience and online cost resources. Variable flow pumping is eligible for PG&E incentive.

### 5.1.1 EEM-4 Install Occupancy Sensors

#### Energy Savings and Financial Analysis Table

| Measure Description                   | Install Occupancy Sensors |
|---------------------------------------|---------------------------|
| Electric Demand Savings (kW)          | 18                        |
| Electric Consumption Savings (kWh/yr) | 17,100                    |
| Natural Gas Savings (therms/yr)       | -400                      |
| Annual Cost Savings (\$)              | \$3,889.00                |
| <b>Gross Implementation Cost (\$)</b> | <b>\$15,938</b>           |
| Estimated Incentive (\$)              | \$0                       |
| Simple Payback (yrs)                  | 4.1                       |
| Effective Useful Life (yrs)           | 15                        |

## Existing Conditions

All interior lighting fixtures are controlled by wall switches. The private offices, open offices, and restrooms all have intermittent occupancy. It is not uncommon for the light fixtures within these areas to be left on even when vacant.

## Potential Measure(s)

Replace existing light switches with ones containing occupancy sensors in the intermittently occupied spaces. Occupancy sensors decrease energy usage by reducing the “on” time of the lights under their control. Sensors turn the lights on when they detect occupancy in an area, and then turn the lights off some time after sensing the room is empty. These sensors are best suited in spaces that are used infrequently or unpredictably. Occupancy sensors can be mounted on the ceiling or integrated into the light switches. Material and Labor is estimated at \$127.50 per sensor (based on previous project experience).

### 5.1.1 EEM-5 Demand Control Ventilation

Energy Savings and Financial Analysis Table

| Measure Description                   | Demand Control Ventilation |
|---------------------------------------|----------------------------|
| Electric Demand Savings (kW)          | 3                          |
| Electric Consumption Savings (kWh/yr) | 49,000                     |
| Natural Gas Savings (therms/yr)       | 300                        |
| Annual Cost Savings (\$)              | \$12,786.80                |
| <b>Gross Implementation Cost (\$)</b> | <b>\$42,000</b>            |
| Estimated Incentive (\$)              | \$2,940                    |
| Simple Payback (yrs)                  | 3.1                        |
| Effective Useful Life (yrs)           | 15                         |

#### Existing Conditions

Currently outside air ventilation is controlled by the BAS through the outside air damper position of each AHU. The outside air damper position is controlled to a minimum position based on the design (maximum) occupancy for the space it serves. The spaces are rarely at design occupancy and heating and cooling energy can be saved by reducing the amount of outside air that requires conditioning.

#### Potential Measure(s)

Install demand control ventilation for AHUs serving large spaces with intermittent occupancy, such as court rooms and meeting rooms, to supply only minimum outside air ventilation requirements based on measured carbon dioxide (CO<sub>2</sub>). Demand control ventilation will provide real-time CO<sub>2</sub> feedback via CO<sub>2</sub> sensors to the BAS which will allow AHU outdoor air dampers to reduce below design values when the space served is at less than design occupancy. Material and labor for this measure is estimated at \$1,500/sensor (based on previous project experience) with an estimated 28 sensors required. Demand control ventilation is eligible for PG&E incentive.

### 5.1.2 EEM-6 Install Interior LED Tubes

Energy Savings and Financial Analysis Table

| Measure Description                   | Install Interior LED Tubes |
|---------------------------------------|----------------------------|
| Electric Demand Savings (kW)          | 46                         |
| Electric Consumption Savings (kWh/yr) | 63,900                     |
| Natural Gas Savings (therms/yr)       | -900                       |
| Annual Cost Savings (\$)              | \$15,208.20                |
| <b>Gross Implementation Cost (\$)</b> | <b>\$83,760</b>            |

|                             |         |
|-----------------------------|---------|
| Estimated Incentive (\$)    | \$1,920 |
| Simple Payback (yrs)        | 5.4     |
| Effective Useful Life (yrs) | 12      |

### Existing Conditions

The facility interior is primarily illuminated with linear fluorescent and compact fluorescent lighting. 4' 2L T8, 2' (2L and 4L) T8 troffers, and 4' 2L T8s indirect pendants are the primary lighting types throughout the facility. Common area lighting is controlled with a main switch panel and room lighting is controlled by wall switches. Lighting is typically on during occupied hours. It is estimated that the whole building lighting power density is approximately 0.9 W/square foot based on fixture type and space activity type.

### Potential Measure(s)

Retrofit existing T8 fixtures with Type C LED tubes to save energy. Typically LED tube replacements save 60% of energy consumption compared to standard T8s. Type C LED tubes utilize the existing fixture but require removal of the existing fluorescent ballast and installation of an LED driver wired to the fixture sockets. Replace common area (corridor) fluorescents with dimmable LEDs to increase the depth of savings. High efficacy Type C LED tubes are eligible for PG&E incentive.

## 5.1.3 EEM-7 BAS Upgrade and Expansion

### Energy Savings and Financial Analysis Table

| Measure Description                   | BAS Upgrade and Expansion |
|---------------------------------------|---------------------------|
| Electric Demand Savings (kW)          | 17                        |
| Electric Consumption Savings (kWh/yr) | 133,100                   |
| Natural Gas Savings (therms/yr)       | 11700                     |
| Annual Cost Savings (\$)              | \$47,098.60               |
| <b>Gross Implementation Cost (\$)</b> | <b>\$480,000</b>          |
| Estimated Incentive (\$)              | \$0                       |
| Simple Payback (yrs)                  | 10.2                      |
| Effective Useful Life (yrs)           | 15                        |

### Existing Conditions

The HVAC system is controlled by a Schneider Electric (Vista 5.16) central building automation system (BAS). The HVAC is schedule from 5 AM to 8 PM (weekdays) with a 30-minute warm-up period. The BAS controls the schedule and setpoints of the AHUs. Zones/VAVs are pneumatically controlled. The BAS currently has the following energy efficient programming:

- Return air or space temperature reset

- Cooling, heating, and economizer control and lockout
- Scheduled warmup
- Chilled water supply temperature reset
- Duct static pressure reset

#### Potential Measure(s)

Upgrade the BAS system with a modern control system that includes energy efficient programming and expand digital controls to the VAV boxes. It is common for systems without VAV control to experience over ventilation and simultaneous heating and cooling issues. Without visibility at the VAV boxes, it is more difficult to diagnose and correct issues or inefficient operation. The new controls can be installed with advanced commissioning to detect and fix existing issues and install the following efficient programming to reduce runtime, ventilation rates, and excessive heating and cooling.

- Optimized start/stop
- Seasonal programming changes
- Zone level temperature resets
- Hot water temperature reset
- Dual Min/Max VAV control
- Demand control ventilation capability

Measure cost is estimated based on previous project experience and \$4/square foot of building area.

### 5.1.4 DR-1 Building Setpoint Adjustment

Energy Savings and Financial Analysis Table

| Measure Description                   | Building Setpoint Adjustment |
|---------------------------------------|------------------------------|
| Electric Demand Savings (kW)          | 22                           |
| Electric Consumption Savings (kWh/yr) | 0                            |
| Natural Gas Savings (therms/yr)       | 0                            |
| Annual Cost Savings (\$)              | \$380.00                     |
| <b>Gross Implementation Cost (\$)</b> | <b>\$1,000</b>               |
| Estimated Incentive (\$)              | \$0                          |
| Simple Payback (yrs)                  | 2.6                          |
| Effective Useful Life (yrs)           | 15                           |

#### Existing Conditions

The BAS system currently operates with fixed temperature setpoints, approximately 72°F for cooling and 70°F for heating, that are schedule by the BAS.

#### Potential Measure(s)

Supply and zone temperature cooling setpoints can be increased in response to a utility demand event or when the building is isolated from the grid. This measure requires sophisticated BAS

software with DR capability. *EEM-7 BAS Upgrade and Expansion* is a prerequisite for this measure. Cooling setpoints can be increased by 3°F or more to achieve a peak demand reduction. It is estimated that this measure will require approximately \$1,000 in additional programming if installed in conjunction with *EEM-7 BAS Upgrade and Expansion*. This measure's primary purpose is to reduce peak demand during days where the building is experiencing peak kW and thereby reducing the capacity requirement of the proposed solar and battery solution. Therefore, the cost savings are indirect and not fully represented in the measure financial analysis table. PG&E financial incentives are available for qualifying installations of Automated Demand Response compatible BAS or BAS programming.<sup>2</sup>

## 5.2 Additional Recommendations

During the billing analysis, it was discovered that the site has a significant nighttime load that could not be explained by the information gathered during the EE audit. It appears that the building has a nighttime electrical demand between 50-70 kW. A nighttime audit should be conducted to ensure HVAC systems are shutting down per BAS schedules. Further investigation should be done to identify energy waste during off-hours.

The existing chillers are at the end of their useful life and should be considered for replacement. More efficient variable speed, water-cooled, chillers can be installed to save energy, however, a comprehensive engineering and financial analysis is required to determine feasibility. Typically, air-cooled to water-cooled chiller conversions have a payback greater than 10 years.

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<sup>2</sup> <https://pge-adr.com/>



## SECTION 6 RESILIENCY OPPORTUNITIES

### 6.1 Resiliency Battery Sizing and Modeling

The team reviewed the building's unique load profile through a detailed analysis of the existing building solar production data and building utility meter data. The existing 225kW solar array is estimated to offset 34% of the building load. The typical operating hours are 8 AM to 5 PM, depending on the time of year. Additionally, the building has a constant 70kW load through the nighttime hours.

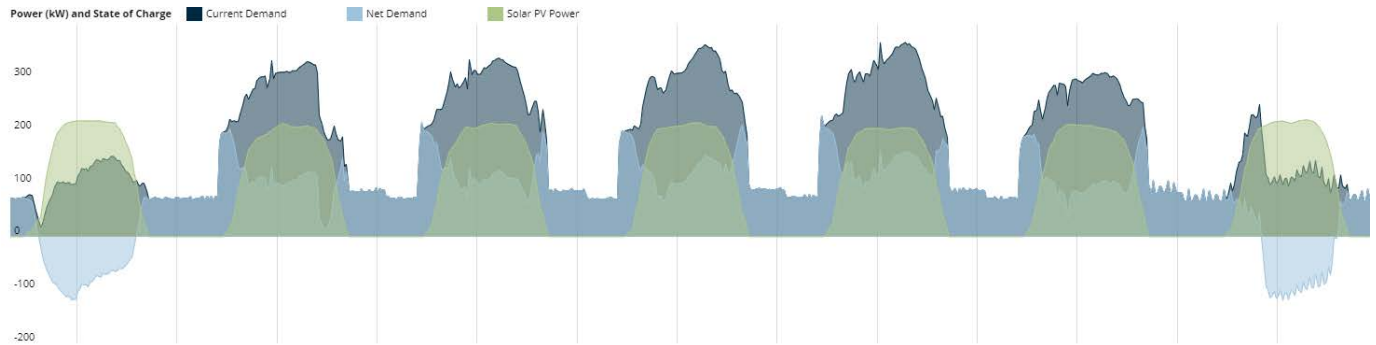


Figure 6.1: Typical Summer Week Load Profile of [REDACTED]

Using the solar production and utility meter data provided, two models were created. The first model includes the implementation of EEMs as outlined in Section 5 above, the second model was built without EEM implementation. See below for additional assumptions.

#### Model Assumptions:

- The building was modeled utilizing January 2019 - December 2019 utility and solar data. 2020 data was not used since COVID reduced building occupancy and consequently building loads.
- The local utility will provide 24-hour notice of planned PSPS events. This means there will be time to fully charge the BESS prior to the shut-down. Accordingly, the BESS was modeled with a 100% state of charge at the beginning of an outage event.
- The onsite backup generator will continue to support energy loads during on outage.
- The HVAC system will be set to 75°F during an outage to reduce electrical usage in the building. All other loads will continue under normal operations.
- Interval data was not provided for the existing solar array. As a result, the 15-minute interval production profile was estimated utilizing the monthly total kWh data provided.
- The building was modeled as operating from 8 AM to 5 PM, in concurrence with the normal hours the site is open to the public.

## Scenarios:

The building was modeled under four different scenarios, each resulting in a unique BESS size for resiliency. The four scenarios illustrate the difference in battery sizes and project costs for two timeframes (six hours versus 24-hours) and the uptake of energy efficiency measures (implemented or not).

Scenario 1 A: Building backup for 6 hours with no new EE measures implemented. The existing HVAC system is manually set to 75°F at the beginning of the outage.

Scenario 1 B: Building backup for 24 hours with no new EE measures implemented. The existing HVAC system is manually set to 75°F at the beginning of the outage.

Scenario 2 A: Building backup for 6 hours with all EE measures outlined in Section 5 implemented. The existing HVAC system set to 75°F at the beginning of the outage utilizing the new BAS.

Scenario 2 B: Building backup for 24 hours with all EE measures outlined in Section 5 implemented. The existing HVAC system set to 75°F at the beginning of the outage utilizing the new BAS.

| Scenario     | Hours of Backup | EE Measures Implemented | Battery Size     |
|--------------|-----------------|-------------------------|------------------|
| Scenario 1 A | 6               | None                    | 450kW / 1,638kWh |
| Scenario 1 B | 24              | None                    | 450kW / 2,612kWh |
| Scenario 2 A | 6               | All                     | 450kW / 1,024kWh |
| Scenario 2 B | 24              | All                     | 450kW / 1,626kWh |

**Table 6.1 BESS Sizes Per Scenario**

## Sizing Methodology:

Sizing energy storage for resiliency is dependent on two major factors: desired operation duration (hrs) and peak demand (kW).

Operation duration: Operation duration is arbitrary in nature, but it is critical to determining the amount of energy storage needed. After an operation duration is selected the energy storage calculation is performed by analyzing the expected energy consumption and production in the event of an outage, throughout the entire year, and finding the maximum amount of energy required to ride through an outage. This method ensures that in the event of an outage the storage will provide the requested operation duration. Due to the cost of storage, it is important to also define the expected operating hours of the building, which for this report were defined as the hours open to the public. Two parameters were also implemented to reduce the expected base load during an outage event. The first is raising the HVAC setpoint to 75F which was modeled in all four scenarios. The second is implementing all the EE measures, which was modeled in two scenarios. Both parameters lower the

quantity of storage needed, and the EE measures have the added benefit of providing year-round energy savings.

Inverter size: The inverter size for the energy storage system is bound by the existing electrical equipment and the peak demand of the building during an outage event. The existing electrical equipment is very important for the sizing as it caps the amount of power the inverter can output and, if the equipment is not large enough, will require the installation of new electrical equipment, which greatly increases costs. To determine the peak demand of the existing facility, the onsite generation was overlayed on the utility metered energy data. The inverter was sized to support a black start, which means the BESS will support the full building load during the 5-minute interval the solar inverters will reboot.

## **6.2 Project Pricing and Cash flow Assumptions**

The financials for the project were viewed along the basis of two options: Cash Purchase or BESS as a Service. The cash flows for each scenario are determined using the same major assumptions regarding pricing, SGIP incentive, and a 10-year battery replacement, which are outlined below.

Pricing: Each project scenario requires its own equipment needs and estimates. These cost breakdowns can be found in Appendix C.

SGIP Incentive: The SGIP incentive is broken down into two portions: upfront and performance based. The performance-based incentive is paid out on a basis of the battery performing 104 equivalent discharges per year. Unfortunately, only Scenario 2 A reaches this threshold. Since the other scenario's battery models will not meet this threshold, their calculated incentives were reduced accordingly. All scenarios received the upfront incentive.

10-year battery replacement: The current standard warranty for stationary storage equipment is 10 years, after which the batteries will hold a max charge state of less than 85%. Consequently, the cash flows factor in a battery replacement charge in Year 11 of \$200/kWh. This is significantly cheaper than the overall system costs since storage companies simply need to replace the batteries in the enclosures.

### **6.2.1 Cash Purchase Economics**

In this option the client puts down the money upfront for the battery system and owns it outright. This will require contracting, usually with the battery manufacturer, for system operations and controls, but generally yields more savings due to eliminating payments to third parties.

For a non-taxable entity, the net costs of a battery are significantly higher than they would be for a taxable entity. Although a higher SGIP incentive is provided to those who do not take part in the federal investment tax credit, that additional SGIP money only accounts for approximately 8-12% of the total price of a system. The inability to claim tax credits and write offs such as the federal investment tax credit and state and federal depreciation removes a cost savings of approximately 52%.

The terms below are used in the cash purchase summaries for all four scenarios.

Battery Net Investment: The sum of the battery costs and incentives available for the system.

Total Net Costs: The cost of the battery after all incentives are factored in.

First Year Energy Savings: The utility bill savings for the first year of system operation.

20 Year Cumulative Savings: The sum of the 20-year utility bill savings minus the costs associated with the storage system including Installation, O&M and the 10-year battery replacement.

NPV: The net present value of the system for its lifetime assuming a 5% discount rate.

IRR: The rate of return for the battery storage system over its lifetime.

Break Even (years): The time after install for the project to yield a positive cumulative savings.

See below cash purchase summaries for each scenario modeled and full 20-year cash flow in Appendix A.

| SUMMARY CASH PURCHASE - SCENARIO 1 A |           |                  |
|--------------------------------------|-----------|------------------|
| Total System kW                      |           | 450              |
| Battery System kWh                   |           | 1,638            |
| Annual Elec Escalation Rate          |           | 3.0%             |
| Annual Baseline Energy Use [kWh]     |           | 1,245,205        |
| Annual Solar Production [kWh]        |           | 428,813          |
| % Annual kWh Served by Solar         |           | 34.4%            |
| Battery Costs                        | \$        | 1,301,227        |
| Investment Tax Credit                | \$        | -                |
| Utility Incentives (if any)          | \$        | (305,658)        |
| CA Accelerated depreciation          | \$        | -                |
| Accelerated depreciation             | \$        | -                |
| Battery Net Investment               | \$        | 995,569          |
| <b>Total Net Costs</b>               | <b>\$</b> | <b>995,569</b>   |
| <b>First year Energy Savings</b>     | <b>\$</b> | <b>59,816</b>    |
| <b>20 Year Cumulative Savings</b>    | <b>\$</b> | <b>284,100</b>   |
| <b>NPV</b>                           | <b>\$</b> | <b>(247,560)</b> |
| <b>IRR</b>                           |           | <b>2%</b>        |
| <b>Break-Even (years)</b>            |           | <b>17.2</b>      |

Table 6.2 Cash Purchase Scenario 1 A

| SUMMARY CASH PURCHASE - SCENARIO 1 B |           |                     |
|--------------------------------------|-----------|---------------------|
| Total System kW                      |           | 450                 |
| Battery System kWh                   |           | 2,612               |
| Annual Elec Escalation Rate          |           | 3.0%                |
| Annual Baseline Energy Use [kWh]     |           | 1,245,205           |
| Annual Solar Production [kWh]        |           | 428,813             |
| % Annual kWh Served by Solar         |           | 34.4%               |
| Battery Costs                        | \$        | 1,816,595           |
| Investment Tax Credit                | \$        | -                   |
| Utility Incentives (if any)          | \$        | (285,748)           |
| CA Accelerated depreciation          | \$        | -                   |
| Accelerated depreciation             | \$        | -                   |
| Battery Net Investment               | \$        | 1,530,847           |
| <b>Total Net Costs</b>               | <b>\$</b> | <b>1,530,847</b>    |
| <b>First year Energy Savings</b>     | <b>\$</b> | <b>59,895</b>       |
| <b>20 Year Cumulative Savings</b>    | <b>\$</b> | <b>(443,847)</b>    |
| <b>NPV</b>                           | <b>\$</b> | <b>(862,892)</b>    |
| <b>IRR</b>                           |           | <b>-3%</b>          |
| <b>Break-Even (years)</b>            |           | <b>&gt;20 years</b> |

Table 6.3 Cash Purchase Scenario 1 B

| SUMMARY CASH PURCHASE - SCENARIO 2 A |           |                  |
|--------------------------------------|-----------|------------------|
| Total System kW                      |           | 450              |
| Battery System kWh                   |           | 1,025            |
| Annual Elec Escalation Rate          |           | 3.0%             |
| Annual Baseline Energy Use [kWh]     |           | 1,245,205        |
| Annual Solar Production [kWh]        |           | 428,813          |
| % Annual kWh Served by Solar         |           | 34.4%            |
| Battery Costs                        | \$        | 826,277          |
| Investment Tax Credit                | \$        | -                |
| Utility Incentives (if any)          | \$        | (288,750)        |
| CA Accelerated Depreciation          | \$        | -                |
| Federal Accelerated Depreciation     | \$        | -                |
| Battery Net Investment               | \$        | 537,527          |
| <b>Total Net Costs</b>               | <b>\$</b> | <b>537,527</b>   |
| <b>First year Energy Savings</b>     | <b>\$</b> | <b>127,605</b>   |
| <b>20 Year Cumulative Savings</b>    | <b>\$</b> | <b>2,686,280</b> |
| <b>NPV</b>                           | <b>\$</b> | <b>1,289,116</b> |
| <b>IRR</b>                           |           | <b>22%</b>       |
| <b>Break-Even (years)</b>            |           | <b>4.2</b>       |

Table 6.4 Cash Purchase Scenario 2 A

| SUMMARY CASH PURCHASE - SCENARIO 2 B |           |                  |
|--------------------------------------|-----------|------------------|
| Total System kW                      |           | 450              |
| Battery System kWh                   |           | 1,626            |
| Annual Elec Escalation Rate          |           | 3.0%             |
| Annual Baseline Energy Use [kWh]     |           | 1,245,205        |
| Annual Solar Production [kWh]        |           | 428,813          |
| % Annual kWh Served by Solar         |           | 34.4%            |
| Battery Costs                        | \$        | 1,291,723        |
| Investment Tax Credit                | \$        | -                |
| Utility Incentives (if any)          | \$        | (326,073)        |
| CA Accelerated depreciation          | \$        | -                |
| Accelerated depreciation             | \$        | -                |
| Battery Net Investment               | \$        | 965,650          |
| <b>Total Net Costs</b>               | <b>\$</b> | <b>965,650</b>   |
| <b>First year Energy Savings</b>     | <b>\$</b> | <b>127,719</b>   |
| <b>20 Year Cumulative Savings</b>    | <b>\$</b> | <b>2,141,006</b> |
| <b>NPV</b>                           | <b>\$</b> | <b>812,943</b>   |
| <b>IRR</b>                           |           | <b>12%</b>       |
| <b>Break-Even (years)</b>            |           | <b>6.9</b>       |

Table 6.5 Cash Purchase Scenario 2 B

### 6.2.2 BESS as a Service Economics

In this option a 3<sup>rd</sup> party purchases, operates, and maintains the system on your site in exchange for an operation fee. This generally yields lower savings than a cash purchase but has the benefits of not requiring the initial capital.

For a taxable entity, the net costs of a battery are significantly lower than they would be for a tax-exempt entity. The 3<sup>rd</sup> party buyer can take advantage of the SGIP, federal investment tax credit, and federal and state depreciation. Our model assumes the third-party service provider would realize a 11% rate of return on their investment over the course of 20 years.

The terms below are used in the BESS as a Service for all four scenarios.

Annual Battery Service Cost: The sum of the battery costs and incentives available for the system.

Initial Investment: The upfront cost to [REDACTED] for the BESS.

Current Electricity Costs: The current electricity costs paid by [REDACTED] to PG&E.

New Electricity Costs: The electricity costs paid by [REDACTED] to PG&E and the BESS Service provider after BESS installation.

First Year Electricity Cost Savings: The difference between the current and new electricity cost in \$ (dollars) or % (percent).

20 Year Cumulative Savings: The sum of the 20-year utility bill savings minus the Battery Service Costs.

See below BESS as a Service summary for each scenario modeled and full 20-year cash flow in Appendix A.

| SUMMARY BESS AS A SERVICE - SCENARIO 1 A    |           |                  |
|---------------------------------------------|-----------|------------------|
| Total System kW                             |           | 450              |
| Battery System kWh                          |           | 1,638            |
| Annual Elec Escalation Rate                 |           | 3.0%             |
| Annual PPA Escalation Rate                  |           | 2.0%             |
| Annual Baseline Energy Use [kWh]            |           | 1,245,205        |
| Annual Solar Production [kWh]               |           | 428,813          |
| % Annual kWh Served by Solar                |           | 34.4%            |
| Annual Battery Service Cost                 | \$        | 102,000          |
| Initial Investment                          |           | <b>ZERO</b>      |
| Current Electricity Cost - (PG&E)           | \$        | 241,910          |
| New Electricity Cost - (3rd Party & PG&E)   | \$        | 284,094          |
| <b>First year Electricity Costs savings</b> | <b>\$</b> | <b>(42,184)</b>  |
| <b>First year Electricity Costs savings</b> |           | <b>-17%</b>      |
| <b>20 Year Cumulative Savings</b>           | <b>\$</b> | <b>(871,062)</b> |

Table 6.6 Summary Scenario 1 A

| SUMMARY BESS AS A SERVICE - SCENARIO 1 B    |           |                    |
|---------------------------------------------|-----------|--------------------|
| Total System kW                             |           | 450                |
| Battery System kWh                          |           | 2,612              |
| Annual Elec Escalation Rate                 |           | 3.0%               |
| Annual PPA Escalation Rate                  |           | 2.0%               |
| Annual Baseline Energy Use [kWh]            |           | 1,245,205          |
| Annual Solar Production [kWh]               |           | 428,813            |
| % Annual kWh Served by Solar                |           | 34.4%              |
| Annual Battery Service Cost                 | \$        | 154,000            |
| Initial Investment                          |           | <b>ZERO</b>        |
| Current Electricity Cost - (PG&E)           | \$        | 241,910            |
| New Electricity Cost - (3rd Party & PG&E)   | \$        | 336,015            |
| <b>First year Electricity Costs savings</b> | <b>\$</b> | <b>(94,105)</b>    |
| <b>First year Electricity Costs savings</b> |           | <b>-39%</b>        |
| <b>20 Year Cumulative Savings</b>           | <b>\$</b> | <b>(2,132,395)</b> |

Table 6.7 Summary Scenario 1 B

| SUMMARY BESS AS A SERVICE - SCENARIO 2 A    |           |                  |
|---------------------------------------------|-----------|------------------|
| Total System kW                             |           | 450              |
| Battery System KWh                          |           | 1,025            |
| Annual Elec Escalation Rate                 |           | 3.0%             |
| Annual PPA Escalation Rate                  |           | 2.0%             |
| Annual Baseline Energy Use [kWh]            |           | 1,245,205        |
| Annual Solar Production [kWh]               |           | 428,813          |
| % Annual kWh Served by Solar                |           | 34.4%            |
| Annual Battery Service Cost                 | \$        | 58,250           |
| Initial Investment                          |           | <b>ZERO</b>      |
| Current Electricity Cost - (PG&E)           | \$        | 241,910          |
| New Electricity Cost - (3rd Party & PG&E)   | \$        | 172,555          |
| <b>First year Electricity Costs savings</b> | <b>\$</b> | <b>69,355</b>    |
| <b>First year Electricity Costs savings</b> |           | <b>29%</b>       |
| <b>20 Year Cumulative Savings</b>           | <b>\$</b> | <b>2,013,486</b> |

Table 6.8 Summary Scenario 2 A



| SUMMARY BESS AS A SERVICE - SCENARIO 2 B    |           |                  |
|---------------------------------------------|-----------|------------------|
| Total System kW                             |           | 450              |
| Battery System kWh                          |           | 1,626            |
| Annual Elec Escalation Rate                 |           | 3.0%             |
| Annual PPA Escalation Rate                  |           | 2.0%             |
| Annual Baseline Energy Use [kWh]            |           | 1,245,205        |
| Annual Solar Production [kWh]               |           | 428,813          |
| % Annual kWh Served by Solar                |           | 34.4%            |
| Annual Battery Service Cost                 | \$        | 99,500           |
| Initial Investment                          |           | <b>ZERO</b>      |
| Current Electricity Cost - (PG&E)           | \$        | 241,910          |
| New Electricity Cost - (3rd Party & PG&E)   | \$        | 213,691          |
| <b>First year Electricity Costs savings</b> | <b>\$</b> | <b>28,219</b>    |
| <b>First year Electricity Costs savings</b> |           | <b>12%</b>       |
| <b>20 Year Cumulative Savings</b>           | <b>\$</b> | <b>1,014,268</b> |

Table 6.9 Summary Scenario 2 B

### 6.2.3 Financial Recommendation

Of the four scenarios presented, AESC recommends Scenario 2 A, in which [REDACTED] implements all recommended EEMs in Section 5 and installs a six-hour backup battery.

Scenario 2 A is the most beneficial option, as evident when considering the advantages of implementing EEMs and receiving SGIP incentives for the six-hour batteries. Completing the EEMs has the dual benefits of saving money independent of the BESS while also reducing the load that the BESS needs to cover. For the six-hour duration, this amounts to a 37.5% reduction of back-up power needed, and an associated reduction in BESS costs. Additionally, the six-hour backup, after completion of EEMs, has the highest SGIP incentive rate per kWh installed. It has the smallest discharge duration at maximum power and was the only battery model to have enough equivalent discharge cycles to receive the full performance incentive.

In addition to the revenue streams shown in the models the battery could be used for enrollment in demand response programs available in the area.

## 6.3 Interconnection & Upgrades for the BESS to Existing Facility

The interconnection method for the new BESS and changes to the existing service equipment are crucial to ensure the building can properly island with support of the new BESS and existing solar in a PSPS event. This will be comprised of four pieces: BESS interconnection breaker, microgrid controller, main disconnect downsize and relays, and new solar meter and disconnect.

### Interconnection and Facility Upgrades:

The new BESS will be interconnected load side in the Main Switchboard in a spare breaker position with a new battery breaker. To island the building from the utility grid during an outage a new relay control scheme will be installed on the building's main disconnect. The relay will be installed and programmed to read utility voltage and open the main disconnect if a loss in utility voltage is seen. This will result in the building being islanded from the utility grid.

During the installation of the BESS a microgrid controller is to be installed to manage the building during a PSPS event. The controller will also require monitoring of the building load and solar production.

To accommodate the new BESS system the existing 2500A main disconnect will be replaced with a 1600A breaker with relay capabilities and a new relay. The breaker will be downsized to 1600A to accommodate the BESS connected load side. Appendix B contains a detailed calculation for downsizing the main breaker.

The existing solar array will need to be retrofitted with a new utility Net Generation Output Meter (NGOM) and additional AC disconnect. This is a PG&E requirement for all solar installations paired with a battery system. See Single Line in Figure 6.2.

### Outage Operation:

The existing critical loads on the existing backup generator will continue to be supported exclusively by the backup generator during a power outage. The vital and non-vital loads will now be supported by the BESS and solar power during a utility outage. Please refer to Appendix D for a detailed load categorization for loads to be supported by existing backup generator and loads to be supported by the new BESS.

Redacted Image

Redacted Image

## 6.4 Owner Project Requirement Specifications

The following specifications can be used for planning and procuring a BESS through an RFP process to provide energy storage and energy resiliency.

### BESS Specifications:

- Provide a standby battery power system to supply electrical power, in event of failure of normal supply, which will consist of an outdoor battery and inverter combination.
- The BESS, its installation, and on-site testing shall conform to all relevant local codes. Including but not limited to:
  - o UL 9540
  - o UL 9540A
  - o UL 1741
  - o UL 1642
  - o UL 1973
  - o IEC 62897
  - o IEEE 1547
- The battery system shall operate at 277/480 Volts, three phase, 4 wire, Wye connected, 60 Hertz.
- The battery system shall have a minimum capacity of 450kW / 1,024kWh.
- The BESS to utilize Lithium-ion (Li-ion) batteries.
- A degradation curve shall be provided assuming the use cases as dictated by the revenue sources. State those use cases with the specific degradation curve.
- BESS Efficiency
  - o Minimum 87% AC round trip for Li-ion and lead acid technologies.
  - o Minimum 65% AC round trip for flow battery technology.
  - o THD < 5% as per inverter specification and IEEE 519.
  - o Ambient temperature range -30°F to 110°F.
- All components to operate at safe rated sustainable operating temperatures over the required ambient temperature range.
- BESS will be required to be installed with a load and solar production monitoring. These will tie into the microgrid controller to make real time decisions for the microgrid during an outage.
- Monitoring requirements must include, but are not limited to:

|                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>o AC Voltage</li><li>o DC Voltage</li><li>o State of charge</li><li>o DC charge energy available</li><li>o DC discharge energy available</li><li>o String Current</li><li>o DC current</li><li>o AC current</li><li>o DC power</li><li>o AC power</li></ul> | <ul style="list-style-type: none"><li>o AC power factor</li><li>o AC VARS</li><li>o AC total harmonic distortion</li><li>o AC discharge energy</li><li>o AC charge energy</li><li>o AC auxiliary load energy</li><li>o AC auxiliary load power</li><li>o Internal container temperature</li><li>o Module temperature</li><li>o Event record and fault codes.</li></ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
- The BESS shall be supplied with an outdoor rated enclosure for the site-specific conditions.
- BESS system to be furnished with integrated fire suppression system per all local and national applicable codes.

## 6.5 Operations and Maintenance Requirements for the BESS

The operations and maintenance requirements will be the same regardless of whether the system is obtained in a cash purchase or as a service. However, if you have contracted with a 3<sup>rd</sup> party to obtain the BESS as a Service then they should oversee the operations and maintenance of the system as part of that service. This is usually included in service costs by default as it benefits the 3<sup>rd</sup> party to ensure system operations that provide savings. Operations and Maintenance services should include:

- Annual Preventive Maintenance cleaning and inspection:
  - o Cleaning should clear any current or potential blockages in the ventilation system, enclosure interior and exterior, and heat sinks.
  - o Inspections should involve checking for electrical issues, enclosure leaks, and communication system integrity.
- Monthly performance reports which should provide the following:
  - o Cycles per month, used to track performance-based incentive progress.
  - o Charge and discharge ratios, used to track parasite loads for the BESS.
  - o State of charge health, used to track the battery cell health and indicate if replacement batteries are needed.
  - o Typical daily operations for that month, should include a visual for an average day at the site for that month plotting building load, solar, and battery production. This can be useful for finding load shifting opportunities or other savings in the future.
- Require 72-hour service for battery faults/notifications or battery outage
  - o This is a requirement for the maintenance provider to send a tech out to the site within 3 days of a battery error or outage to diagnose the system and create a plan to address the issue and make the repairs in a timely manner.
- Able to perform year 10 battery refresh/replacement
  - o The batteries will usually be warrantied for up to a 10-year maximum, covering the batteries before their max state of charge falls below 85% of nameplate. The maintenance provider should be capable of swapping the batteries out at the end of year 10 to ensure system longevity.

## 6.6 Solar Inverter Replacement Cost and Equipment Specification

The existing solar array at [REDACTED] is a single Xantrax 225kW inverter located in the shed south of the building. As space is limited inside the shed, and to avoid additional rework of both the DC and AC system, AESC recommends [REDACTED] procure a similar size and specification inverter as the existing inverter. As the solar industry has moved away from large central inverters in past years sourcing a similar inverter will become increasingly difficult as technology continues to progress.

Below is a high-level specification to procure a similar inverter and avoid additional rework to the AC and DC systems.

### New inverter specifications:

- Operate at 120/208 Volts, three phase, 4 wire, Wye connected, 60 Hertz.
- Minimum capacity of 225kVA.
- Maximum AC output of 800A.
- The inverter shall be compatible with 600V maximum DC wiring.
- The inverter will need to accommodate 2-4 DC inputs.
- The inverter shall be compliant with Rule 2, smart inverter requirements for interconnection.

### Estimated Inverter Replacement Cost:

| Inverter Replacement - Estimated Project Cost |                               |             |              |             |              |              |
|-----------------------------------------------|-------------------------------|-------------|--------------|-------------|--------------|--------------|
| Quantity                                      | Item                          | Description | Materials    | Tax         | Labor        | Total        |
| 1                                             | Inverter                      | 225kW       | \$ 35,000.00 | \$ 1,334.38 |              | \$ 36,334.38 |
| 1                                             | Electrical Engineering        |             | \$ -         | \$ -        | \$ 4,000.00  | \$ 4,000.00  |
| 1                                             | Project Management            |             | \$ -         | \$ -        | \$ 2,500.00  | \$ 2,500.00  |
| 1                                             | Additional Design Contractors |             | \$ -         | \$ -        | \$ 1,000.00  | \$ 1,000.00  |
| 2                                             | Interconnection Costs         |             | \$ -         | \$ -        | \$ 132.00    | \$ 132.00    |
| 1                                             | Permit                        |             | \$ -         | \$ -        | \$ 800.00    | \$ 800.00    |
| 1                                             | Installation                  |             | \$ -         | \$ -        | \$ 11,250.00 | \$ 11,250.00 |
| 1                                             | Balance of System Equipment   |             | \$ 2,000.00  | \$ 76.25    | \$ -         | \$ 2,076.25  |
| 1                                             | Contingency                   | 0.1         | \$ 1,425.83  | \$ -        | \$ -         | \$ 1,425.83  |
| 0                                             | Seller G&A                    |             | \$ -         | \$ -        | \$ 14,879.61 | \$ 14,879.61 |
| Project Cost Total                            |                               |             |              |             |              | \$ 74,398    |

Table 6.10 BESS Inverter Replacement Estimated Cost

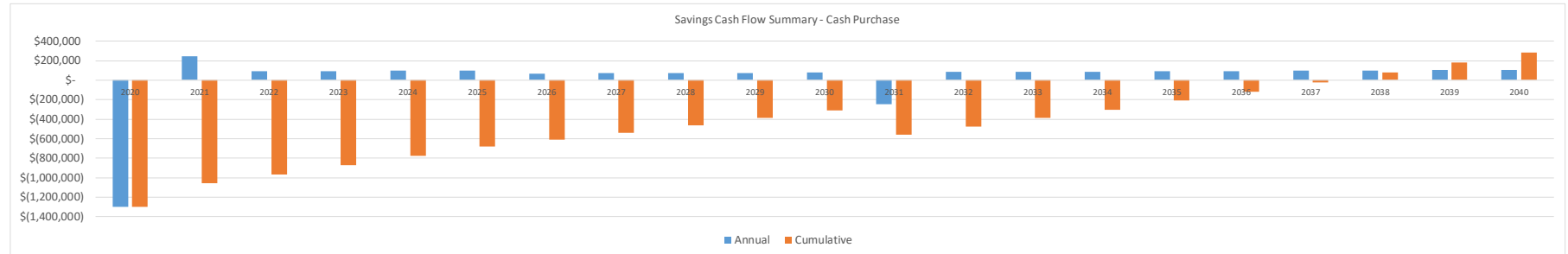
# Appendix A 20-year Cash Flow Analysis Cash Purchase & BESS as a Service



## Cash Purchase Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

|                     |    | Annual Electricity Escalation Rate: 3.0% |             |           |           |           |           |           |           |           |           | Annual Solar DegradationRate : 0.8% |          |         |         |         |         |         |         |         |         |      |
|---------------------|----|------------------------------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| Years               | 0  | 1                                        | 2           | 3         | 4         | 5         | 6         | 7         | 8         | 9         | 10        | 11                                  | 12       | 13      | 14      | 15      | 16      | 17      | 18      | 19      | 20      |      |
| Energy Use          |    | 2021                                     | 2022        | 2023      | 2024      | 2025      | 2026      | 2027      | 2028      | 2029      | 2030      | 2031                                | 2032     | 2033    | 2034    | 2035    | 2036    | 2037    | 2038    | 2039    | 2040    |      |
| Grid kWh            |    | 834,867                                  | 834,867     | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867                             | 834,867  | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 |      |
| Solar kWh           |    | -                                        | -           | -         | -         | -         | -         | -         | -         | -         | -         | -                                   | -        | -       | -       | -       | -       | -       | -       | -       | -       |      |
| Total kWh           |    | 834,867                                  | 834,867     | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867   | 834,867                             | 834,867  | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 | 834,867 |      |
| Baseline Cost       |    | 2021                                     | 2022        | 2023      | 2024      | 2025      | 2026      | 2027      | 2028      | 2029      | 2030      | 2031                                | 2032     | 2033    | 2034    | 2035    | 2036    | 2037    | 2038    | 2039    | 2040    |      |
| Demand kW           | \$ | -                                        | -           | -         | -         | -         | -         | -         | -         | -         | -         | -                                   | -        | -       | -       | -       | -       | -       | -       | -       | -       |      |
| kWh                 | \$ | 241,910                                  | 249,167     | 256,642   | 264,342   | 272,272   | 280,440   | 288,853   | 297,519   | 306,445   | 315,638   | 325,107                             | 334,860  | 344,906 | 355,253 | 365,911 | 376,888 | 388,195 | 399,841 | 411,836 | 424,191 |      |
| Total               | \$ | 241,910                                  | 249,167     | 256,642   | 264,342   | 272,272   | 280,440   | 288,853   | 297,519   | 306,445   | 315,638   | 325,107                             | 334,860  | 344,906 | 355,253 | 365,911 | 376,888 | 388,195 | 399,841 | 411,836 | 424,191 |      |
| Projected Cost      |    | 2021                                     | 2022        | 2023      | 2024      | 2025      | 2026      | 2027      | 2028      | 2029      | 2030      | 2031                                | 2032     | 2033    | 2034    | 2035    | 2036    | 2037    | 2038    | 2039    | 2040    |      |
| Grid Demand kW      | \$ | 37,193                                   | 38,309      | 39,459    | 40,642    | 41,862    | 43,117    | 44,411    | 45,743    | 47,116    | 48,529    | 49,985                              | 51,484   | 53,029  | 54,620  | 56,258  | 57,946  | 59,685  | 61,475  | 63,319  | 65,219  |      |
| Grid kWh            | \$ | 144,901                                  | 149,248     | 153,726   | 158,337   | 163,087   | 167,980   | 173,019   | 178,210   | 183,556   | 189,063   | 194,735                             | 200,577  | 206,594 | 212,792 | 219,176 | 225,751 | 232,524 | 239,499 | 246,684 | 254,085 |      |
| Battery Operation   | \$ | -                                        | -           | -         | -         | -         | -         | -         | -         | -         | -         | -                                   | -        | -       | -       | -       | -       | -       | -       | -       | -       |      |
| Total               | \$ | 182,094                                  | 187,557     | 193,184   | 198,980   | 204,949   | 211,097   | 217,430   | 223,953   | 230,672   | 237,592   | 244,720                             | 252,061  | 259,623 | 267,412 | 275,434 | 283,697 | 292,208 | 300,974 | 310,004 | 319,304 |      |
| Cash flow           |    | 2020                                     | 2021        | 2022      | 2023      | 2024      | 2025      | 2026      | 2027      | 2028      | 2029      | 2030                                | 2031     | 2032    | 2033    | 2034    | 2035    | 2036    | 2037    | 2038    | 2039    | 2040 |
| Cash purchase       | \$ | (1,301,227)                              |             |           |           |           |           |           |           |           |           |                                     |          |         |         |         |         |         |         |         |         |      |
| ITC                 | \$ | -                                        |             |           |           |           |           |           |           |           |           |                                     | -327,600 |         |         |         |         |         |         |         |         |      |
| Depreciation        | \$ | -                                        | -           | -         | -         | -         | -         | -         | -         | -         | -         | -                                   | -        | -       | -       | -       | -       | -       | -       | -       | -       |      |
| Utility Incentives  | \$ | 183,395                                  | 30,566      | 30,566    | 30,566    | 30,566    | -         | -         | -         | -         | -         | -                                   | -        | -       | -       | -       | -       | -       | -       | -       | -       |      |
| O&M                 | \$ | -                                        | -           | -         | -         | -         | -         | -         | -         | -         | -         | -                                   | -        | -       | -       | -       | -       | -       | -       | -       | -       |      |
| Electricity savings | \$ | 59,816                                   | 61,610      | 63,458    | 65,362    | 67,323    | 69,343    | 71,423    | 73,566    | 75,773    | 78,046    | 80,387                              | 82,799   | 85,283  | 87,841  | 90,477  | 93,191  | 95,987  | 98,866  | 101,832 | 104,887 |      |
| Tax                 |    |                                          |             |           |           |           |           |           |           |           |           |                                     |          |         |         |         |         |         |         |         |         |      |
| Annual              | \$ | (1,301,227)                              | 243,211     | 92,176    | 94,024    | 95,928    | 97,889    | 99,843    | 101,895   | 103,946   | 106,000   | 108,056                             | 110,114  | 112,174 | 114,236 | 116,300 | 118,366 | 120,434 | 122,503 | 124,574 | 126,647 |      |
| Cumulative          | \$ | (1,301,227)                              | (1,058,017) | (965,841) | (871,816) | (775,888) | (678,000) | (578,171) | (475,604) | (370,781) | (263,855) | (155,868)                           | (47,720) | 50,592  | 107,828 | 169,074 | 234,220 | 303,266 | 376,203 | 453,027 | 533,740 |      |



## Cash Purchase – Scenario 1 A

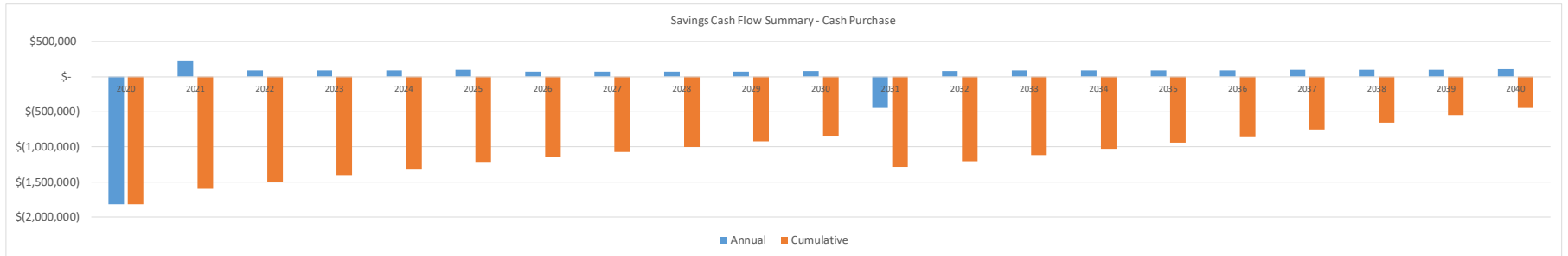




# Cash Purchase Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

| Annual Electricity Escalation Rate: 3.0% |    |             |             |             |             |             |             |             |             |           |           |           |           |           |           |           |         | Annual Solar DegradationRate : 0.8% |         |         |         |      |  |  |  |  |  |
|------------------------------------------|----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-------------------------------------|---------|---------|---------|------|--|--|--|--|--|
| Years                                    | 0  | 1           | 2           | 3           | 4           | 5           | 6           | 7           | 8           | 9         | 10        | 11        | 12        | 13        | 14        | 15        | 16      | 17                                  | 18      | 19      | 20      |      |  |  |  |  |  |
| Energy Use                               |    | 2021        | 2022        | 2023        | 2024        | 2025        | 2026        | 2027        | 2028        | 2029      | 2030      | 2031      | 2032      | 2033      | 2034      | 2035      | 2036    | 2037                                | 2038    | 2039    | 2040    |      |  |  |  |  |  |
| Grid kWh                                 |    | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325   | 835,325   | 835,325   | 835,325   | 835,325   | 835,325   | 835,325   | 835,325 | 835,325                             | 835,325 | 835,325 | 835,325 |      |  |  |  |  |  |
| Solar kWh                                |    | -           | -           | -           | -           | -           | -           | -           | -           | -         | -         | -         | -         | -         | -         | -         | -       | -                                   | -       | -       | -       |      |  |  |  |  |  |
| Total kWh                                |    | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325     | 835,325   | 835,325   | 835,325   | 835,325   | 835,325   | 835,325   | 835,325   | 835,325 | 835,325                             | 835,325 | 835,325 | 835,325 |      |  |  |  |  |  |
| Baseline Cost                            |    | 2021        | 2022        | 2023        | 2024        | 2025        | 2026        | 2027        | 2028        | 2029      | 2030      | 2031      | 2032      | 2033      | 2034      | 2035      | 2036    | 2037                                | 2038    | 2039    | 2040    |      |  |  |  |  |  |
| Demand kW                                | \$ | -           | -           | -           | -           | -           | -           | -           | -           | -         | -         | -         | -         | -         | -         | -         | -       | -                                   | -       | -       | -       |      |  |  |  |  |  |
| kWh                                      | \$ | 241,910     | 249,167     | 256,642     | 264,342     | 272,272     | 280,440     | 288,853     | 297,519     | 306,445   | 315,638   | 325,107   | 334,860   | 344,906   | 355,253   | 365,911   | 376,888 | 388,195                             | 399,841 | 411,836 | 424,191 |      |  |  |  |  |  |
| Total                                    | \$ | 241,910     | 249,167     | 256,642     | 264,342     | 272,272     | 280,440     | 288,853     | 297,519     | 306,445   | 315,638   | 325,107   | 334,860   | 344,906   | 355,253   | 365,911   | 376,888 | 388,195                             | 399,841 | 411,836 | 424,191 |      |  |  |  |  |  |
| Projected Cost                           |    | 2021        | 2022        | 2023        | 2024        | 2025        | 2026        | 2027        | 2028        | 2029      | 2030      | 2031      | 2032      | 2033      | 2034      | 2035      | 2036    | 2037                                | 2038    | 2039    | 2040    |      |  |  |  |  |  |
| Grid Demand kW                           | \$ | 36,294      | 37,383      | 38,505      | 39,660      | 40,850      | 42,075      | 43,337      | 44,638      | 45,977    | 47,356    | 48,777    | 50,240    | 51,747    | 53,300    | 54,899    | 56,545  | 58,242                              | 59,989  | 61,789  | 63,642  |      |  |  |  |  |  |
| Grid kWh                                 | \$ | 145,721     | 150,092     | 154,595     | 159,233     | 164,010     | 168,930     | 173,998     | 179,218     | 184,595   | 190,133   | 195,837   | 201,712   | 207,763   | 213,996   | 220,416   | 227,028 | 233,839                             | 240,854 | 248,080 | 255,522 |      |  |  |  |  |  |
| Battery Operation                        | \$ | -           | -           | -           | -           | -           | -           | -           | -           | -         | -         | -         | -         | -         | -         | -         | -       | -                                   | -       | -       | -       |      |  |  |  |  |  |
| Total                                    | \$ | 182,015     | 187,476     | 193,100     | 198,893     | 204,860     | 211,005     | 217,336     | 223,856     | 230,571   | 237,489   | 244,613   | 251,952   | 259,510   | 267,295   | 275,314   | 283,574 | 292,081                             | 300,843 | 309,869 | 319,165 |      |  |  |  |  |  |
| Cash flow                                |    | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        | 2026        | 2027        | 2028      | 2029      | 2030      | 2031      | 2032      | 2033      | 2034      | 2035    | 2036                                | 2037    | 2038    | 2039    | 2040 |  |  |  |  |  |
| Cash purchase                            | \$ | (1,816,595) |             |             |             |             |             |             |             |           |           |           | -522,400  |           |           |           |         |                                     |         |         |         |      |  |  |  |  |  |
| ITC                                      | \$ | -           |             |             |             |             |             |             |             |           |           |           |           |           |           |           |         |                                     |         |         |         |      |  |  |  |  |  |
| Depreciation                             | \$ | -           | -           | -           | -           | -           | -           | -           | -           | -         | -         | -         | -         | -         | -         | -         | -       | -                                   | -       | -       | -       |      |  |  |  |  |  |
| Utility Incentives                       | \$ | 171,449     | 28,575      | 28,575      | 28,575      | 28,575      | 28,575      | -           | -           | -         | -         | -         | -         | -         | -         | -         | -       | -                                   | -       | -       | -       |      |  |  |  |  |  |
| O&M                                      | \$ | -           | -           | -           | -           | -           | -           | -           | -           | -         | -         | -         | -         | -         | -         | -         | -       | -                                   | -       | -       | -       |      |  |  |  |  |  |
| Electricity savings                      | \$ | 59,895      | 61,692      | 63,543      | 65,449      | 67,412      | 69,435      | 71,518      | 73,663      | 75,873    | 78,149    | 80,494    | 82,909    | 85,396    | 87,958    | 90,597    | 93,314  | 96,114                              | 98,997  | 101,967 | 105,026 |      |  |  |  |  |  |
| Tax                                      |    |             |             |             |             |             |             |             |             |           |           |           |           |           |           |           |         |                                     |         |         |         |      |  |  |  |  |  |
| Annual                                   | \$ | (1,816,595) | 231,344     | 90,267      | 92,117      | 94,024      | 95,987      | 97,987      | 99,987      | 101,967   | 103,967   | 105,987   | 108,024   | 110,087   | 112,167   | 114,264   | 116,388 | 118,539                             | 120,717 | 122,923 | 125,157 |      |  |  |  |  |  |
| Cumulative                               | \$ | (1,816,595) | (1,585,251) | (1,494,985) | (1,402,867) | (1,308,844) | (1,212,856) | (1,114,422) | (1,011,904) | (908,241) | (800,274) | (687,000) | (569,026) | (441,343) | (304,050) | (157,236) | (0,000) | 122,923                             | 243,640 | 366,563 | 491,710 |      |  |  |  |  |  |



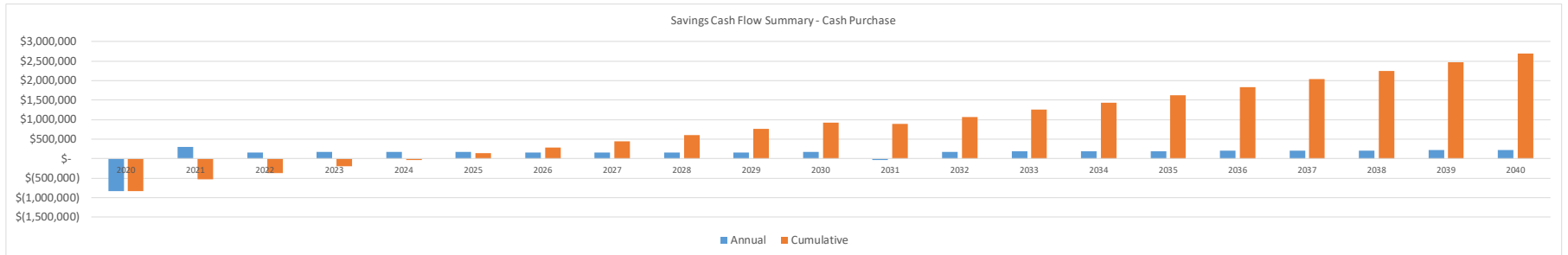
## Cash Purchase – Scenario 1 B



### Cash Purchase Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

| Annual Electricity Escalation Rate: 3.0% |    |           |              |              |              |             |            |            |            |            |            |            |              |              |              |              |              | Annual Solar DegradationRate : 0.8% |              |              |              |      |  |  |  |  |  |
|------------------------------------------|----|-----------|--------------|--------------|--------------|-------------|------------|------------|------------|------------|------------|------------|--------------|--------------|--------------|--------------|--------------|-------------------------------------|--------------|--------------|--------------|------|--|--|--|--|--|
| Years                                    | 0  | 1         | 2            | 3            | 4            | 5           | 6          | 7          | 8          | 9          | 10         | 11         | 12           | 13           | 14           | 15           | 16           | 17                                  | 18           | 19           | 20           |      |  |  |  |  |  |
| Energy Use                               |    | 2021      | 2022         | 2023         | 2024         | 2025        | 2026       | 2027       | 2028       | 2029       | 2030       | 2031       | 2032         | 2033         | 2034         | 2035         | 2036         | 2037                                | 2038         | 2039         | 2040         |      |  |  |  |  |  |
| Grid kWh                                 |    | 516,455   | 516,455      | 516,455      | 516,455      | 516,455     | 516,455    | 516,455    | 516,455    | 516,455    | 516,455    | 516,455    | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      | 516,455                             | 516,455      | 516,455      | 516,455      |      |  |  |  |  |  |
| Solar kWh                                |    | -         | -            | -            | -            | -           | -          | -          | -          | -          | -          | -          | -            | -            | -            | -            | -            | -                                   | -            | -            | -            |      |  |  |  |  |  |
| Total kWh                                |    | 516,455   | 516,455      | 516,455      | 516,455      | 516,455     | 516,455    | 516,455    | 516,455    | 516,455    | 516,455    | 516,455    | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      | 516,455                             | 516,455      | 516,455      | 516,455      |      |  |  |  |  |  |
| Baseline Cost                            |    | 2021      | 2022         | 2023         | 2024         | 2025        | 2026       | 2027       | 2028       | 2029       | 2030       | 2031       | 2032         | 2033         | 2034         | 2035         | 2036         | 2037                                | 2038         | 2039         | 2040         |      |  |  |  |  |  |
| Demand kW                                | \$ | -         | \$           | -            | \$           | -           | \$         | -          | \$         | -          | \$         | -          | \$           | -            | \$           | -            | \$           | -                                   | \$           | -            | \$           |      |  |  |  |  |  |
| kWh                                      | \$ | 241,910   | \$ 249,167   | \$ 256,642   | \$ 264,342   | \$ 272,272  | \$ 280,440 | \$ 288,853 | \$ 297,519 | \$ 306,445 | \$ 315,638 | \$ 325,107 | \$ 334,860   | \$ 344,906   | \$ 355,253   | \$ 365,911   | \$ 376,888   | \$ 388,195                          | \$ 399,841   | \$ 411,836   | \$ 424,191   |      |  |  |  |  |  |
| Total                                    | \$ | 241,910   | \$ 249,167   | \$ 256,642   | \$ 264,342   | \$ 272,272  | \$ 280,440 | \$ 288,853 | \$ 297,519 | \$ 306,445 | \$ 315,638 | \$ 325,107 | \$ 334,860   | \$ 344,906   | \$ 355,253   | \$ 365,911   | \$ 376,888   | \$ 388,195                          | \$ 399,841   | \$ 411,836   | \$ 424,191   |      |  |  |  |  |  |
| Projected Cost                           |    | 2021      | 2022         | 2023         | 2024         | 2025        | 2026       | 2027       | 2028       | 2029       | 2030       | 2031       | 2032         | 2033         | 2034         | 2035         | 2036         | 2037                                | 2038         | 2039         | 2040         |      |  |  |  |  |  |
| Grid Demand kW                           | \$ | 26,326    | \$ 27,116    | \$ 27,929    | \$ 28,767    | \$ 29,630   | \$ 30,519  | \$ 31,434  | \$ 32,377  | \$ 33,349  | \$ 34,349  | \$ 35,380  | \$ 36,441    | \$ 37,534    | \$ 38,660    | \$ 39,820    | \$ 41,015    | \$ 42,245                           | \$ 43,512    | \$ 44,818    | \$ 46,162    |      |  |  |  |  |  |
| Grid kWh                                 | \$ | 87,979    | \$ 90,618    | \$ 93,337    | \$ 96,137    | \$ 99,021   | \$ 101,992 | \$ 105,051 | \$ 108,203 | \$ 111,449 | \$ 114,793 | \$ 118,236 | \$ 121,783   | \$ 125,437   | \$ 129,200   | \$ 133,076   | \$ 137,068   | \$ 141,180                          | \$ 145,416   | \$ 149,778   | \$ 154,272   |      |  |  |  |  |  |
| Battery Operation                        | \$ | -         | \$           | -            | \$           | -           | \$         | -          | \$         | -          | \$         | -          | \$           | -            | \$           | -            | \$           | -                                   | \$           | -            | \$           |      |  |  |  |  |  |
| Total                                    | \$ | 114,305   | \$ 117,734   | \$ 121,266   | \$ 124,904   | \$ 128,651  | \$ 132,510 | \$ 136,486 | \$ 140,580 | \$ 144,798 | \$ 149,142 | \$ 153,616 | \$ 158,224   | \$ 162,971   | \$ 167,860   | \$ 172,896   | \$ 178,083   | \$ 183,425                          | \$ 188,928   | \$ 194,596   | \$ 200,434   |      |  |  |  |  |  |
| Cash flow                                |    | 2020      | 2021         | 2022         | 2023         | 2024        | 2025       | 2026       | 2027       | 2028       | 2029       | 2030       | 2031         | 2032         | 2033         | 2034         | 2035         | 2036                                | 2037         | 2038         | 2039         | 2040 |  |  |  |  |  |
| Cash purchase                            | \$ | (826,277) |              |              |              |             |            |            |            |            |            |            | -205,000     |              |              |              |              |                                     |              |              |              |      |  |  |  |  |  |
| ITC                                      | \$ | -         |              |              |              |             |            |            |            |            |            |            |              |              |              |              |              |                                     |              |              |              |      |  |  |  |  |  |
| Depreciation                             | \$ | -         | \$           | -            | \$           | -           | \$         | -          | \$         | -          | \$         | -          | \$           | -            | \$           | -            | \$           | -                                   | \$           | -            | \$           |      |  |  |  |  |  |
| Utility Incentives                       | \$ | 173,250   | \$ 28,875    | \$ 28,875    | \$ 28,875    | \$ 28,875   | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -       | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -                                | \$ -         | \$ -         | \$ -         |      |  |  |  |  |  |
| O&M                                      | \$ | -         | \$           | -            | \$           | -           | \$         | -          | \$         | -          | \$         | -          | \$           | -            | \$           | -            | \$           | -                                   | \$           | -            | \$           |      |  |  |  |  |  |
| Electricity savings                      | \$ | 127,605   | \$ 131,434   | \$ 135,377   | \$ 139,438   | \$ 143,621  | \$ 147,930 | \$ 152,368 | \$ 156,939 | \$ 161,647 | \$ 166,496 | \$ 171,491 | \$ 176,636   | \$ 181,935   | \$ 187,393   | \$ 193,015   | \$ 198,805   | \$ 204,769                          | \$ 210,912   | \$ 217,240   | \$ 223,757   |      |  |  |  |  |  |
| Tax                                      |    |           |              |              |              |             |            |            |            |            |            |            |              |              |              |              |              |                                     |              |              |              |      |  |  |  |  |  |
| Annual                                   | \$ | (826,277) | \$ 300,855   | \$ 160,309   | \$ 164,252   | \$ 168,313  | \$ 172,496 | \$ 176,930 | \$ 181,647 | \$ 186,647 | \$ 191,935 | \$ 197,519 | \$ 203,406   | \$ 209,603   | \$ 216,119   | \$ 222,955   | \$ 230,112   | \$ 237,591                          | \$ 245,394   | \$ 253,523   | \$ 261,978   |      |  |  |  |  |  |
| Cumulative                               | \$ | (826,277) | \$ (525,422) | \$ (365,113) | \$ (200,861) | \$ (32,548) | \$ 139,948 | \$ 287,878 | \$ 440,245 | \$ 597,184 | \$ 758,831 | \$ 925,327 | \$ 1,096,818 | \$ 1,273,254 | \$ 1,454,647 | \$ 1,641,082 | \$ 1,832,567 | \$ 2,029,102                        | \$ 2,230,696 | \$ 2,437,439 | \$ 2,649,347 |      |  |  |  |  |  |



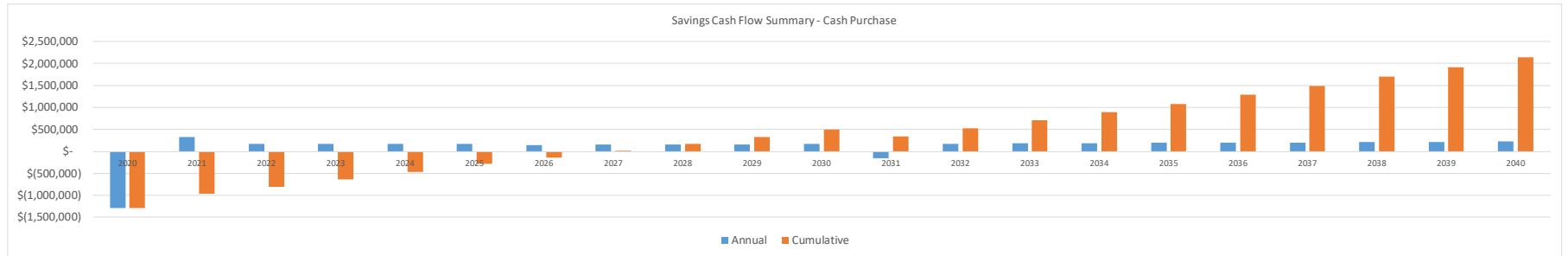
### Cash Purchase – Scenario 2 A



### Cash Purchase Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

| Annual Electricity Escalation Rate: 3.0% |    |             |           |           |           |           |           |           |         |         |         |         |           |         |         |         |           | Annual Solar DegradationRate : 0.8% |           |           |           |           |  |  |  |  |  |
|------------------------------------------|----|-------------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|---------|---------|-----------|---------|---------|---------|-----------|-------------------------------------|-----------|-----------|-----------|-----------|--|--|--|--|--|
| Years                                    | 0  | 1           | 2         | 3         | 4         | 5         | 6         | 7         | 8       | 9       | 10      | 11      | 12        | 13      | 14      | 15      | 16        | 17                                  | 18        | 19        | 20        |           |  |  |  |  |  |
| Energy Use                               |    | 2021        | 2022      | 2023      | 2024      | 2025      | 2026      | 2027      | 2028    | 2029    | 2030    | 2031    | 2032      | 2033    | 2034    | 2035    | 2036      | 2037                                | 2038      | 2039      | 2040      |           |  |  |  |  |  |
| Grid kWh                                 |    | 517,632     | 517,632   | 517,632   | 517,632   | 517,632   | 517,632   | 517,632   | 517,632 | 517,632 | 517,632 | 517,632 | 517,632   | 517,632 | 517,632 | 517,632 | 517,632   | 517,632                             | 517,632   | 517,632   | 517,632   |           |  |  |  |  |  |
| Solar kWh                                |    | -           | -         | -         | -         | -         | -         | -         | -       | -       | -       | -       | -         | -       | -       | -       | -         | -                                   | -         | -         | -         |           |  |  |  |  |  |
| Total kWh                                |    | 517,632     | 517,632   | 517,632   | 517,632   | 517,632   | 517,632   | 517,632   | 517,632 | 517,632 | 517,632 | 517,632 | 517,632   | 517,632 | 517,632 | 517,632 | 517,632   | 517,632                             | 517,632   | 517,632   | 517,632   |           |  |  |  |  |  |
| Baseline Cost                            |    | 2021        | 2022      | 2023      | 2024      | 2025      | 2026      | 2027      | 2028    | 2029    | 2030    | 2031    | 2032      | 2033    | 2034    | 2035    | 2036      | 2037                                | 2038      | 2039      | 2040      |           |  |  |  |  |  |
| Demand kW                                | \$ | -           | -         | -         | -         | -         | -         | -         | -       | -       | -       | -       | -         | -       | -       | -       | -         | -                                   | -         | -         | -         |           |  |  |  |  |  |
| kWh                                      | \$ | 241,910     | 249,167   | 256,642   | 264,342   | 272,272   | 280,440   | 288,853   | 297,519 | 306,445 | 315,638 | 325,107 | 334,860   | 344,906 | 355,253 | 365,911 | 376,888   | 388,195                             | 399,841   | 411,836   | 424,191   |           |  |  |  |  |  |
| Total                                    | \$ | 241,910     | 249,167   | 256,642   | 264,342   | 272,272   | 280,440   | 288,853   | 297,519 | 306,445 | 315,638 | 325,107 | 334,860   | 344,906 | 355,253 | 365,911 | 376,888   | 388,195                             | 399,841   | 411,836   | 424,191   |           |  |  |  |  |  |
| Projected Cost                           |    | 2021        | 2022      | 2023      | 2024      | 2025      | 2026      | 2027      | 2028    | 2029    | 2030    | 2031    | 2032      | 2033    | 2034    | 2035    | 2036      | 2037                                | 2038      | 2039      | 2040      |           |  |  |  |  |  |
| Grid Demand kW                           | \$ | 25,551      | 26,318    | 27,107    | 27,921    | 28,758    | 29,621    | 30,510    | 31,425  | 32,368  | 33,339  | 34,339  | 35,369    | 36,430  | 37,523  | 38,649  | 39,808    | 41,002                              | 42,233    | 43,499    | 44,804    |           |  |  |  |  |  |
| Grid kWh                                 | \$ | 88,640      | 91,299    | 94,038    | 96,859    | 99,765    | 102,758   | 105,841   | 109,016 | 112,286 | 115,655 | 119,124 | 122,698   | 126,379 | 130,171 | 134,076 | 138,098   | 142,241                             | 146,508   | 150,903   | 155,430   |           |  |  |  |  |  |
| Battery Operation                        | \$ | -           | -         | -         | -         | -         | -         | -         | -       | -       | -       | -       | -         | -       | -       | -       | -         | -                                   | -         | -         | -         |           |  |  |  |  |  |
| Total                                    | \$ | 114,191     | 117,617   | 121,145   | 124,780   | 128,523   | 132,379   | 136,350   | 140,441 | 144,654 | 148,994 | 153,463 | 158,067   | 162,809 | 167,694 | 172,724 | 177,906   | 183,243                             | 188,741   | 194,403   | 200,235   |           |  |  |  |  |  |
| Cash flow                                |    | 2020        | 2021      | 2022      | 2023      | 2024      | 2025      | 2026      | 2027    | 2028    | 2029    | 2030    | 2031      | 2032    | 2033    | 2034    | 2035      | 2036                                | 2037      | 2038      | 2039      | 2040      |  |  |  |  |  |
| Cash purchase                            | \$ | (1,291,723) |           |           |           |           |           |           |         |         |         |         | -325,200  |         |         |         |           |                                     |           |           |           |           |  |  |  |  |  |
| ITC                                      | \$ | -           |           |           |           |           |           |           |         |         |         |         |           |         |         |         |           |                                     |           |           |           |           |  |  |  |  |  |
| Depreciation                             | \$ | -           | -         | -         | -         | -         | -         | -         | -       | -       | -       | -       | -         | -       | -       | -       | -         | -                                   | -         | -         | -         |           |  |  |  |  |  |
| Utility Incentives                       | \$ | 195,644     | 32,607    | 32,607    | 32,607    | 32,607    | -         | -         | -       | -       | -       | -       | -         | -       | -       | -       | -         | -                                   | -         | -         | -         |           |  |  |  |  |  |
| O&M                                      | \$ | -           | -         | -         | -         | -         | -         | -         | -       | -       | -       | -       | -         | -       | -       | -       | -         | -                                   | -         | -         | -         |           |  |  |  |  |  |
| Electricity savings                      | \$ | 127,719     | 131,551   | 135,497   | 139,562   | 143,749   | 148,061   | 152,503   | 157,078 | 161,791 | 166,644 | 171,644 | 176,793   | 182,097 | 187,560 | 193,186 | 198,982   | 204,951                             | 211,100   | 217,433   | 223,956   |           |  |  |  |  |  |
| Tax                                      |    |             |           |           |           |           |           |           |         |         |         |         |           |         |         |         |           |                                     |           |           |           |           |  |  |  |  |  |
| Annual                                   | \$ | (1,291,723) | 323,363   | 164,158   | 168,104   | 172,169   | 176,356   | 148,061   | 152,503 | 157,078 | 161,791 | 166,644 | (153,556) | 176,793 | 182,097 | 187,560 | 193,186   | 198,982                             | 204,951   | 211,100   | 217,433   | 223,956   |  |  |  |  |  |
| Cumulative                               | \$ | (1,291,723) | (968,360) | (804,203) | (636,098) | (463,929) | (287,573) | (139,512) | 12,992  | 170,070 | 331,860 | 498,505 | 344,948   | 521,741 | 703,838 | 891,398 | 1,084,584 | 1,283,566                           | 1,488,517 | 1,699,617 | 1,917,050 | 2,141,006 |  |  |  |  |  |



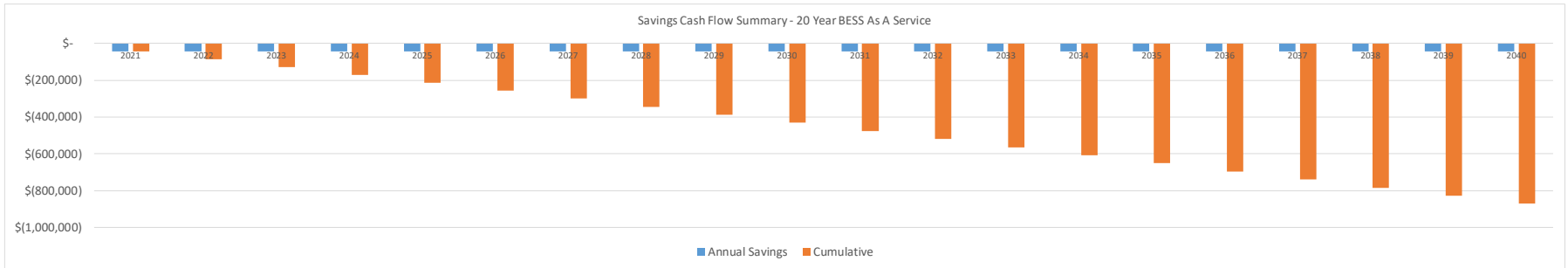
### Cash Purchase – Scenario 2 B



20 Year BESS As A Service Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

|                     | Solar PPA Cost per kWh: \$ |             |              |              | Annual Electricity Escalation Rate: 3.0% |              |              |              | PPA Escalation Rate: 2.0% |              |              |              | Annual Solar DegradationRate : 0.8% |              |              |              |              |              |              |              |
|---------------------|----------------------------|-------------|--------------|--------------|------------------------------------------|--------------|--------------|--------------|---------------------------|--------------|--------------|--------------|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Years               | 1                          | 2           | 3            | 4            | 5                                        | 6            | 7            | 8            | 9                         | 10           | 11           | 12           | 13                                  | 14           | 15           | 16           | 17           | 18           | 19           | 20           |
| Energy Use          | 2021                       | 2022        | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031         | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Grid kWh            | 834,867                    | 834,867     | 834,867      | 834,867      | 834,867                                  | 834,867      | 834,867      | 834,867      | 834,867                   | 834,867      | 834,867      | 834,867      | 834,867                             | 834,867      | 834,867      | 834,867      | 834,867      | 834,867      | 834,867      | 834,867      |
| Solar kWh           | -                          | -           | -            | -            | -                                        | -            | -            | -            | -                         | -            | -            | -            | -                                   | -            | -            | -            | -            | -            | -            | -            |
| Total kWh           | 834,867                    | 834,867     | 834,867      | 834,867      | 834,867                                  | 834,867      | 834,867      | 834,867      | 834,867                   | 834,867      | 834,867      | 834,867      | 834,867                             | 834,867      | 834,867      | 834,867      | 834,867      | 834,867      | 834,867      | 834,867      |
| Baseline Cost       | 2021                       | 2022        | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031         | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Demand kW           | \$ -                       | \$ -        | \$ -         | \$ -         | \$ -                                     | \$ -         | \$ -         | \$ -         | \$ -                      | \$ -         | \$ -         | \$ -         | \$ -                                | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |
| kWh                 | \$ 241,910                 | \$ 249,167  | \$ 256,642   | \$ 264,342   | \$ 272,272                               | \$ 280,440   | \$ 288,853   | \$ 297,519   | \$ 306,445                | \$ 315,638   | \$ 325,107   | \$ 334,860   | \$ 344,906                          | \$ 355,253   | \$ 365,911   | \$ 376,888   | \$ 388,195   | \$ 399,841   | \$ 411,836   | \$ 424,191   |
| Total               | \$ 241,910                 | \$ 249,167  | \$ 256,642   | \$ 264,342   | \$ 272,272                               | \$ 280,440   | \$ 288,853   | \$ 297,519   | \$ 306,445                | \$ 315,638   | \$ 325,107   | \$ 334,860   | \$ 344,906                          | \$ 355,253   | \$ 365,911   | \$ 376,888   | \$ 388,195   | \$ 399,841   | \$ 411,836   | \$ 424,191   |
| Projected Cost      | 2021                       | 2022        | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031         | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Grid Demand kW      | \$ 37,193                  | \$ 38,309   | \$ 39,459    | \$ 40,642    | \$ 41,862                                | \$ 43,117    | \$ 44,411    | \$ 45,743    | \$ 47,116                 | \$ 48,529    | \$ 49,985    | \$ 51,484    | \$ 53,029                           | \$ 54,620    | \$ 56,258    | \$ 57,946    | \$ 59,685    | \$ 61,475    | \$ 63,319    | \$ 65,219    |
| Grid kWh            | \$ 144,901                 | \$ 149,248  | \$ 153,726   | \$ 158,337   | \$ 163,087                               | \$ 167,980   | \$ 173,019   | \$ 178,210   | \$ 183,556                | \$ 189,063   | \$ 194,735   | \$ 200,577   | \$ 206,594                          | \$ 212,792   | \$ 219,176   | \$ 225,751   | \$ 232,524   | \$ 239,499   | \$ 246,684   | \$ 254,085   |
| Battery Operation   | \$ 102,000                 | \$ 104,040  | \$ 106,121   | \$ 108,243   | \$ 110,408                               | \$ 112,616   | \$ 114,869   | \$ 117,166   | \$ 119,509                | \$ 121,899   | \$ 124,337   | \$ 126,824   | \$ 129,361                          | \$ 131,948   | \$ 134,587   | \$ 137,279   | \$ 140,024   | \$ 142,825   | \$ 145,681   | \$ 148,595   |
| Total               | \$ 284,094                 | \$ 291,597  | \$ 299,305   | \$ 307,223   | \$ 315,357                               | \$ 323,714   | \$ 332,299   | \$ 341,119   | \$ 350,181                | \$ 359,491   | \$ 369,057   | \$ 378,886   | \$ 388,984                          | \$ 399,360   | \$ 410,021   | \$ 420,976   | \$ 432,232   | \$ 443,799   | \$ 455,685   | \$ 467,898   |
| Total Savings       | 2021                       | 2022        | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031         | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Electricity Savings | \$ (42,184)                | \$ (42,430) | \$ (42,662)  | \$ (42,881)  | \$ (43,085)                              | \$ (43,273)  | \$ (43,446)  | \$ (43,600)  | \$ (43,737)               | \$ (43,854)  | \$ (43,950)  | \$ (44,025)  | \$ (44,078)                         | \$ (44,107)  | \$ (44,110)  | \$ (44,088)  | \$ (44,038)  | \$ (43,958)  | \$ (43,849)  | \$ (43,708)  |
| Additional costs    | \$ -                       | \$ -        | \$ -         | \$ -         | \$ -                                     | \$ -         | \$ -         | \$ -         | \$ -                      | \$ -         | \$ -         | \$ -         | \$ -                                | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |
| Net Annual Savings  | \$ (42,184)                | \$ (42,430) | \$ (42,662)  | \$ (42,881)  | \$ (43,085)                              | \$ (43,273)  | \$ (43,446)  | \$ (43,600)  | \$ (43,737)               | \$ (43,854)  | \$ (43,950)  | \$ (44,025)  | \$ (44,078)                         | \$ (44,107)  | \$ (44,110)  | \$ (44,088)  | \$ (44,038)  | \$ (43,958)  | \$ (43,849)  | \$ (43,708)  |
| Cumulative          | \$ (42,184)                | \$ (84,614) | \$ (127,277) | \$ (170,158) | \$ (213,243)                             | \$ (256,516) | \$ (299,962) | \$ (343,562) | \$ (387,298)              | \$ (431,152) | \$ (475,102) | \$ (519,127) | \$ (563,205)                        | \$ (607,312) | \$ (651,422) | \$ (695,510) | \$ (739,547) | \$ (783,506) | \$ (827,355) | \$ (871,062) |



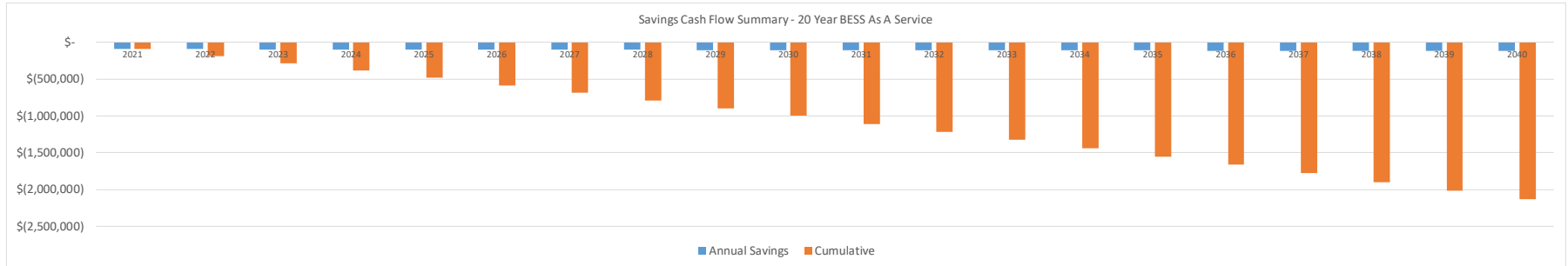
BESS As A Service – Scenario 1 A



# 20 Year BESS As A Service Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

|                     | Solar PPA Cost per kWh: \$ - |              |              |              | Annual Electricity Escalation Rate: 3.0% |              |              |              | PPA Escalation Rate: 2.0% |              |                |                | Annual Solar Degradation Rate: 0.8% |                |                |                |                |                |                |                |
|---------------------|------------------------------|--------------|--------------|--------------|------------------------------------------|--------------|--------------|--------------|---------------------------|--------------|----------------|----------------|-------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Years               | 1                            | 2            | 3            | 4            | 5                                        | 6            | 7            | 8            | 9                         | 10           | 11             | 12             | 13                                  | 14             | 15             | 16             | 17             | 18             | 19             | 20             |
| Energy Use          | 2021                         | 2022         | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031           | 2032           | 2033                                | 2034           | 2035           | 2036           | 2037           | 2038           | 2039           | 2040           |
| Grid kWh            | 835,325                      | 835,325      | 835,325      | 835,325      | 835,325                                  | 835,325      | 835,325      | 835,325      | 835,325                   | 835,325      | 835,325        | 835,325        | 835,325                             | 835,325        | 835,325        | 835,325        | 835,325        | 835,325        | 835,325        | 835,325        |
| Solar kWh           | -                            | -            | -            | -            | -                                        | -            | -            | -            | -                         | -            | -              | -              | -                                   | -              | -              | -              | -              | -              | -              | -              |
| Total kWh           | 835,325                      | 835,325      | 835,325      | 835,325      | 835,325                                  | 835,325      | 835,325      | 835,325      | 835,325                   | 835,325      | 835,325        | 835,325        | 835,325                             | 835,325        | 835,325        | 835,325        | 835,325        | 835,325        | 835,325        | 835,325        |
| Baseline Cost       | 2021                         | 2022         | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031           | 2032           | 2033                                | 2034           | 2035           | 2036           | 2037           | 2038           | 2039           | 2040           |
| Demand kW           | \$ -                         | \$ -         | \$ -         | \$ -         | \$ -                                     | \$ -         | \$ -         | \$ -         | \$ -                      | \$ -         | \$ -           | \$ -           | \$ -                                | \$ -           | \$ -           | \$ -           | \$ -           | \$ -           | \$ -           | \$ -           |
| kWh                 | \$ 241,910                   | \$ 249,167   | \$ 256,642   | \$ 264,342   | \$ 272,272                               | \$ 280,440   | \$ 288,853   | \$ 297,519   | \$ 306,445                | \$ 315,638   | \$ 325,107     | \$ 334,860     | \$ 344,906                          | \$ 355,253     | \$ 365,911     | \$ 376,888     | \$ 388,195     | \$ 399,841     | \$ 411,836     | \$ 424,191     |
| Total               | \$ 241,910                   | \$ 249,167   | \$ 256,642   | \$ 264,342   | \$ 272,272                               | \$ 280,440   | \$ 288,853   | \$ 297,519   | \$ 306,445                | \$ 315,638   | \$ 325,107     | \$ 334,860     | \$ 344,906                          | \$ 355,253     | \$ 365,911     | \$ 376,888     | \$ 388,195     | \$ 399,841     | \$ 411,836     | \$ 424,191     |
| Projected Cost      | 2021                         | 2022         | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031           | 2032           | 2033                                | 2034           | 2035           | 2036           | 2037           | 2038           | 2039           | 2040           |
| Grid Demand kW      | \$ 36,294                    | \$ 37,383    | \$ 38,505    | \$ 39,660    | \$ 40,850                                | \$ 42,075    | \$ 43,337    | \$ 44,638    | \$ 45,977                 | \$ 47,356    | \$ 48,777      | \$ 50,240      | \$ 51,747                           | \$ 53,300      | \$ 54,899      | \$ 56,545      | \$ 58,242      | \$ 59,989      | \$ 61,789      | \$ 63,642      |
| Grid kWh            | \$ 145,721                   | \$ 150,092   | \$ 154,595   | \$ 159,233   | \$ 164,010                               | \$ 168,930   | \$ 173,998   | \$ 179,218   | \$ 184,595                | \$ 190,133   | \$ 195,837     | \$ 201,712     | \$ 207,763                          | \$ 213,996     | \$ 220,416     | \$ 227,028     | \$ 233,839     | \$ 240,854     | \$ 248,080     | \$ 255,522     |
| Battery Operation   | \$ 154,000                   | \$ 157,080   | \$ 160,222   | \$ 163,426   | \$ 166,695                               | \$ 170,028   | \$ 173,429   | \$ 176,898   | \$ 180,436                | \$ 184,044   | \$ 187,725     | \$ 191,480     | \$ 195,309                          | \$ 199,215     | \$ 203,200     | \$ 207,264     | \$ 211,409     | \$ 215,637     | \$ 219,950     | \$ 224,349     |
| Total               | \$ 336,015                   | \$ 344,556   | \$ 353,321   | \$ 362,319   | \$ 371,554                               | \$ 381,034   | \$ 390,765   | \$ 400,753   | \$ 411,007                | \$ 421,533   | \$ 432,338     | \$ 443,431     | \$ 454,819                          | \$ 466,511     | \$ 478,514     | \$ 490,837     | \$ 503,490     | \$ 516,481     | \$ 529,819     | \$ 543,514     |
| Total Savings       | 2021                         | 2022         | 2023         | 2024         | 2025                                     | 2026         | 2027         | 2028         | 2029                      | 2030         | 2031           | 2032           | 2033                                | 2034           | 2035           | 2036           | 2037           | 2038           | 2039           | 2040           |
| Electricity Savings | \$ (94,105)                  | \$ (95,388)  | \$ (96,679)  | \$ (97,977)  | \$ (99,282)                              | \$ (100,594) | \$ (101,911) | \$ (103,234) | \$ (104,562)              | \$ (105,895) | \$ (107,231)   | \$ (108,571)   | \$ (109,913)                        | \$ (111,258)   | \$ (112,603)   | \$ (113,949)   | \$ (115,295)   | \$ (116,640)   | \$ (117,983)   | \$ (119,323)   |
| Additional costs    | \$ -                         | \$ -         | \$ -         | \$ -         | \$ -                                     | \$ -         | \$ -         | \$ -         | \$ -                      | \$ -         | \$ -           | \$ -           | \$ -                                | \$ -           | \$ -           | \$ -           | \$ -           | \$ -           | \$ -           | \$ -           |
| Net Annual Savings  | \$ (94,105)                  | \$ (95,388)  | \$ (96,679)  | \$ (97,977)  | \$ (99,282)                              | \$ (100,594) | \$ (101,911) | \$ (103,234) | \$ (104,562)              | \$ (105,895) | \$ (107,231)   | \$ (108,571)   | \$ (109,913)                        | \$ (111,258)   | \$ (112,603)   | \$ (113,949)   | \$ (115,295)   | \$ (116,640)   | \$ (117,983)   | \$ (119,323)   |
| Cumulative          | \$ (94,105)                  | \$ (189,493) | \$ (286,172) | \$ (384,149) | \$ (483,432)                             | \$ (584,025) | \$ (685,937) | \$ (789,171) | \$ (893,733)              | \$ (999,628) | \$ (1,106,860) | \$ (1,215,431) | \$ (1,325,344)                      | \$ (1,436,602) | \$ (1,549,205) | \$ (1,663,154) | \$ (1,778,449) | \$ (1,895,089) | \$ (2,013,072) | \$ (2,132,395) |



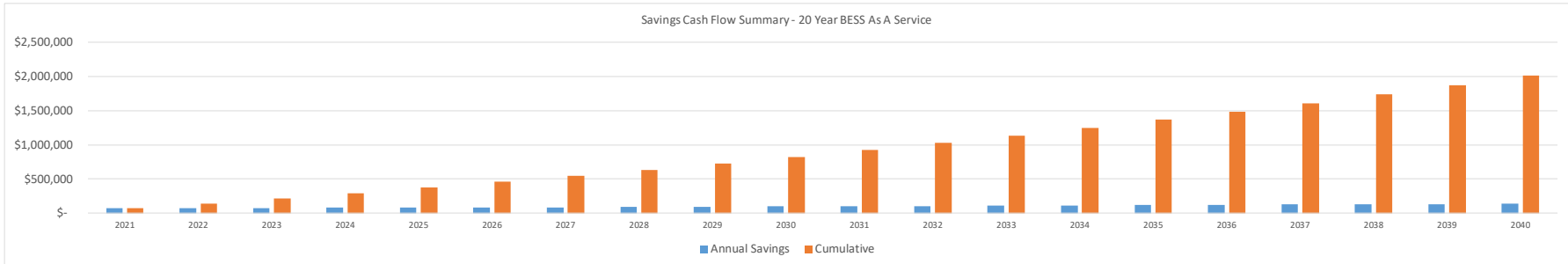
## BESS As A Service – Scenario 1 B



20 Year BESS As A Service Cash Flow Analysis

Date: 6/1/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

|                     |                              |            |            |            |                                          |            |            |            |                           |            |            |              |                                     |              |              |              |              |              |              |              |
|---------------------|------------------------------|------------|------------|------------|------------------------------------------|------------|------------|------------|---------------------------|------------|------------|--------------|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                     | Solar PPA Cost per kWh: \$ - |            |            |            | Annual Electricity Escalation Rate: 3.0% |            |            |            | PPA Escalation Rate: 2.0% |            |            |              | Annual Solar DegradationRate : 0.8% |              |              |              |              |              |              |              |
| Years               | 1                            | 2          | 3          | 4          | 5                                        | 6          | 7          | 8          | 9                         | 10         | 11         | 12           | 13                                  | 14           | 15           | 16           | 17           | 18           | 19           | 20           |
| Energy Use          | 2021                         | 2022       | 2023       | 2024       | 2025                                     | 2026       | 2027       | 2028       | 2029                      | 2030       | 2031       | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Grid kWh            | 516,455                      | 516,455    | 516,455    | 516,455    | 516,455                                  | 516,455    | 516,455    | 516,455    | 516,455                   | 516,455    | 516,455    | 516,455      | 516,455                             | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      |
| Solar kWh           | -                            | -          | -          | -          | -                                        | -          | -          | -          | -                         | -          | -          | -            | -                                   | -            | -            | -            | -            | -            | -            | -            |
| Total kWh           | 516,455                      | 516,455    | 516,455    | 516,455    | 516,455                                  | 516,455    | 516,455    | 516,455    | 516,455                   | 516,455    | 516,455    | 516,455      | 516,455                             | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      | 516,455      |
| Baseline Cost       | 2021                         | 2022       | 2023       | 2024       | 2025                                     | 2026       | 2027       | 2028       | 2029                      | 2030       | 2031       | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Demand kW           | \$ -                         | \$ -       | \$ -       | \$ -       | \$ -                                     | \$ -       | \$ -       | \$ -       | \$ -                      | \$ -       | \$ -       | \$ -         | \$ -                                | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |
| kWh                 | \$ 241,910                   | \$ 249,167 | \$ 256,642 | \$ 264,342 | \$ 272,272                               | \$ 280,440 | \$ 288,853 | \$ 297,519 | \$ 306,445                | \$ 315,638 | \$ 325,107 | \$ 334,860   | \$ 344,906                          | \$ 355,253   | \$ 365,911   | \$ 376,888   | \$ 388,195   | \$ 399,841   | \$ 411,836   | \$ 424,191   |
| Total               | \$ 241,910                   | \$ 249,167 | \$ 256,642 | \$ 264,342 | \$ 272,272                               | \$ 280,440 | \$ 288,853 | \$ 297,519 | \$ 306,445                | \$ 315,638 | \$ 325,107 | \$ 334,860   | \$ 344,906                          | \$ 355,253   | \$ 365,911   | \$ 376,888   | \$ 388,195   | \$ 399,841   | \$ 411,836   | \$ 424,191   |
| Projected Cost      | 2021                         | 2022       | 2023       | 2024       | 2025                                     | 2026       | 2027       | 2028       | 2029                      | 2030       | 2031       | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Grid Demand kW      | \$ 26,326                    | \$ 27,116  | \$ 27,929  | \$ 28,767  | \$ 29,630                                | \$ 30,519  | \$ 31,434  | \$ 32,377  | \$ 33,349                 | \$ 34,349  | \$ 35,380  | \$ 36,441    | \$ 37,534                           | \$ 38,660    | \$ 39,820    | \$ 41,015    | \$ 42,245    | \$ 43,512    | \$ 44,818    | \$ 46,162    |
| Grid kWh            | \$ 87,979                    | \$ 90,618  | \$ 93,337  | \$ 96,137  | \$ 99,021                                | \$ 101,992 | \$ 105,051 | \$ 108,203 | \$ 111,449                | \$ 114,793 | \$ 118,236 | \$ 121,783   | \$ 125,437                          | \$ 129,200   | \$ 133,076   | \$ 137,068   | \$ 141,180   | \$ 145,416   | \$ 149,778   | \$ 154,272   |
| Battery Operation   | \$ 58,250                    | \$ 59,415  | \$ 60,603  | \$ 61,815  | \$ 63,052                                | \$ 64,313  | \$ 65,599  | \$ 66,911  | \$ 68,249                 | \$ 69,614  | \$ 71,006  | \$ 72,427    | \$ 73,875                           | \$ 75,353    | \$ 76,860    | \$ 78,397    | \$ 79,965    | \$ 81,564    | \$ 83,195    | \$ 84,859    |
| Total               | \$ 172,555                   | \$ 177,149 | \$ 181,869 | \$ 186,719 | \$ 191,703                               | \$ 196,823 | \$ 202,085 | \$ 207,491 | \$ 213,047                | \$ 218,756 | \$ 224,622 | \$ 230,651   | \$ 236,846                          | \$ 243,213   | \$ 249,756   | \$ 256,480   | \$ 263,390   | \$ 270,492   | \$ 277,791   | \$ 285,293   |
| Total Savings       | 2021                         | 2022       | 2023       | 2024       | 2025                                     | 2026       | 2027       | 2028       | 2029                      | 2030       | 2031       | 2032         | 2033                                | 2034         | 2035         | 2036         | 2037         | 2038         | 2039         | 2040         |
| Electricity Savings | \$ 69,355                    | \$ 72,019  | \$ 74,773  | \$ 77,623  | \$ 80,569                                | \$ 83,617  | \$ 86,769  | \$ 90,028  | \$ 93,398                 | \$ 96,882  | \$ 100,485 | \$ 104,209   | \$ 108,060                          | \$ 112,040   | \$ 116,155   | \$ 120,408   | \$ 124,805   | \$ 129,348   | \$ 134,044   | \$ 138,898   |
| Additional costs    | \$ -                         | \$ -       | \$ -       | \$ -       | \$ -                                     | \$ -       | \$ -       | \$ -       | \$ -                      | \$ -       | \$ -       | \$ -         | \$ -                                | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         | \$ -         |
| Net Annual Savings  | \$ 69,355                    | \$ 72,019  | \$ 74,773  | \$ 77,623  | \$ 80,569                                | \$ 83,617  | \$ 86,769  | \$ 90,028  | \$ 93,398                 | \$ 96,882  | \$ 100,485 | \$ 104,209   | \$ 108,060                          | \$ 112,040   | \$ 116,155   | \$ 120,408   | \$ 124,805   | \$ 129,348   | \$ 134,044   | \$ 138,898   |
| Cumulative          | \$ 69,355                    | \$ 141,374 | \$ 216,148 | \$ 293,770 | \$ 374,340                               | \$ 457,957 | \$ 544,725 | \$ 634,753 | \$ 728,151                | \$ 825,033 | \$ 925,517 | \$ 1,029,727 | \$ 1,137,787                        | \$ 1,249,827 | \$ 1,365,982 | \$ 1,486,390 | \$ 1,611,195 | \$ 1,740,543 | \$ 1,874,588 | \$ 2,013,486 |



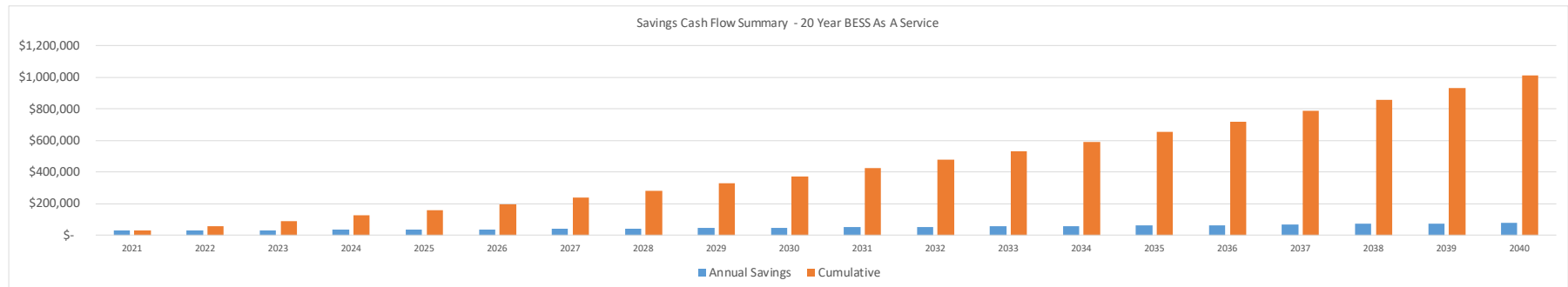
BESS As A Service – Scenario 2 A



20 Year BESS As A Service Cash Flow Analysis

Date: 6/24/21  
Customer: [REDACTED]  
Project Site: [REDACTED]  
Utility: PG&E

|                     | Solar PPA Cost per kWh: \$ - |            |            |            |            | Annual Electricity Escalation Rate: 3.0% |            |            |            |            | PPA Escalation Rate: 2.0% |            |            |            |            | Annual Solar Degradation Rate: 0.8% |            |            |            |              |
|---------------------|------------------------------|------------|------------|------------|------------|------------------------------------------|------------|------------|------------|------------|---------------------------|------------|------------|------------|------------|-------------------------------------|------------|------------|------------|--------------|
| Years               | 1                            | 2          | 3          | 4          | 5          | 6                                        | 7          | 8          | 9          | 10         | 11                        | 12         | 13         | 14         | 15         | 16                                  | 17         | 18         | 19         | 20           |
| Energy Use          | 2021                         | 2022       | 2023       | 2024       | 2025       | 2026                                     | 2027       | 2028       | 2029       | 2030       | 2031                      | 2032       | 2033       | 2034       | 2035       | 2036                                | 2037       | 2038       | 2039       | 2040         |
| Grid kWh            | 517,632                      | 517,632    | 517,632    | 517,632    | 517,632    | 517,632                                  | 517,632    | 517,632    | 517,632    | 517,632    | 517,632                   | 517,632    | 517,632    | 517,632    | 517,632    | 517,632                             | 517,632    | 517,632    | 517,632    | 517,632      |
| Solar kWh           | -                            | -          | -          | -          | -          | -                                        | -          | -          | -          | -          | -                         | -          | -          | -          | -          | -                                   | -          | -          | -          | -            |
| Total kWh           | 517,632                      | 517,632    | 517,632    | 517,632    | 517,632    | 517,632                                  | 517,632    | 517,632    | 517,632    | 517,632    | 517,632                   | 517,632    | 517,632    | 517,632    | 517,632    | 517,632                             | 517,632    | 517,632    | 517,632    | 517,632      |
| Baseline Cost       | 2021                         | 2022       | 2023       | 2024       | 2025       | 2026                                     | 2027       | 2028       | 2029       | 2030       | 2031                      | 2032       | 2033       | 2034       | 2035       | 2036                                | 2037       | 2038       | 2039       | 2040         |
| Demand kW           | \$ -                         | \$ -       | \$ -       | \$ -       | \$ -       | \$ -                                     | \$ -       | \$ -       | \$ -       | \$ -       | \$ -                      | \$ -       | \$ -       | \$ -       | \$ -       | \$ -                                | \$ -       | \$ -       | \$ -       | \$ -         |
| kWh                 | \$ 241,910                   | \$ 249,167 | \$ 256,642 | \$ 264,342 | \$ 272,272 | \$ 280,440                               | \$ 288,853 | \$ 297,519 | \$ 306,445 | \$ 315,638 | \$ 325,107                | \$ 334,860 | \$ 344,906 | \$ 355,253 | \$ 365,911 | \$ 376,888                          | \$ 388,195 | \$ 399,841 | \$ 411,836 | \$ 424,191   |
| Total               | \$ 241,910                   | \$ 249,167 | \$ 256,642 | \$ 264,342 | \$ 272,272 | \$ 280,440                               | \$ 288,853 | \$ 297,519 | \$ 306,445 | \$ 315,638 | \$ 325,107                | \$ 334,860 | \$ 344,906 | \$ 355,253 | \$ 365,911 | \$ 376,888                          | \$ 388,195 | \$ 399,841 | \$ 411,836 | \$ 424,191   |
| Projected Cost      | 2021                         | 2022       | 2023       | 2024       | 2025       | 2026                                     | 2027       | 2028       | 2029       | 2030       | 2031                      | 2032       | 2033       | 2034       | 2035       | 2036                                | 2037       | 2038       | 2039       | 2040         |
| Grid Demand kW      | \$ 25,551                    | \$ 26,318  | \$ 27,107  | \$ 27,921  | \$ 28,758  | \$ 29,621                                | \$ 30,510  | \$ 31,425  | \$ 32,368  | \$ 33,339  | \$ 34,339                 | \$ 35,369  | \$ 36,430  | \$ 37,523  | \$ 38,649  | \$ 39,808                           | \$ 41,002  | \$ 42,233  | \$ 43,499  | \$ 44,804    |
| Grid kWh            | \$ 88,640                    | \$ 91,299  | \$ 94,038  | \$ 96,859  | \$ 99,765  | \$ 102,758                               | \$ 105,841 | \$ 109,016 | \$ 112,286 | \$ 115,655 | \$ 119,124                | \$ 122,698 | \$ 126,379 | \$ 130,171 | \$ 134,076 | \$ 138,098                          | \$ 142,241 | \$ 146,508 | \$ 150,903 | \$ 155,430   |
| Battery Operation   | \$ 99,500                    | \$ 101,490 | \$ 103,520 | \$ 105,590 | \$ 107,702 | \$ 109,856                               | \$ 112,053 | \$ 114,294 | \$ 116,580 | \$ 118,912 | \$ 121,290                | \$ 123,716 | \$ 126,190 | \$ 128,714 | \$ 131,288 | \$ 133,914                          | \$ 136,592 | \$ 139,324 | \$ 142,111 | \$ 144,953   |
| Total               | \$ 213,691                   | \$ 219,107 | \$ 224,665 | \$ 230,370 | \$ 236,225 | \$ 242,235                               | \$ 248,403 | \$ 254,735 | \$ 261,234 | \$ 267,905 | \$ 274,753                | \$ 281,783 | \$ 288,999 | \$ 296,407 | \$ 304,013 | \$ 311,820                          | \$ 319,835 | \$ 328,065 | \$ 336,513 | \$ 345,188   |
| Total Savings       | 2021                         | 2022       | 2023       | 2024       | 2025       | 2026                                     | 2027       | 2028       | 2029       | 2030       | 2031                      | 2032       | 2033       | 2034       | 2035       | 2036                                | 2037       | 2038       | 2039       | 2040         |
| Electricity Savings | \$ 28,219                    | \$ 30,061  | \$ 31,977  | \$ 33,972  | \$ 36,047  | \$ 38,205                                | \$ 40,450  | \$ 42,784  | \$ 45,210  | \$ 47,733  | \$ 50,354                 | \$ 53,077  | \$ 55,907  | \$ 58,846  | \$ 61,898  | \$ 65,068                           | \$ 68,359  | \$ 71,776  | \$ 75,323  | \$ 79,003    |
| Additional costs    | \$ -                         | \$ -       | \$ -       | \$ -       | \$ -       | \$ -                                     | \$ -       | \$ -       | \$ -       | \$ -       | \$ -                      | \$ -       | \$ -       | \$ -       | \$ -       | \$ -                                | \$ -       | \$ -       | \$ -       | \$ -         |
| Net Annual Savings  | \$ 28,219                    | \$ 30,061  | \$ 31,977  | \$ 33,972  | \$ 36,047  | \$ 38,205                                | \$ 40,450  | \$ 42,784  | \$ 45,210  | \$ 47,733  | \$ 50,354                 | \$ 53,077  | \$ 55,907  | \$ 58,846  | \$ 61,898  | \$ 65,068                           | \$ 68,359  | \$ 71,776  | \$ 75,323  | \$ 79,003    |
| Cumulative          | \$ 28,219                    | \$ 58,280  | \$ 90,257  | \$ 124,229 | \$ 160,275 | \$ 198,481                               | \$ 238,931 | \$ 281,715 | \$ 326,925 | \$ 374,658 | \$ 425,011                | \$ 478,089 | \$ 533,995 | \$ 592,841 | \$ 654,739 | \$ 719,807                          | \$ 788,167 | \$ 859,943 | \$ 935,265 | \$ 1,014,268 |



BESS As A Service – Scenario 2 B

## Appendix B Service Disconnect Calculations

### NEC 120% Rule Calculation to size Main OCPD

#### Calculation values:

- Existing Main Panel Bus Rating: 2500A
- Existing Main OCPD Rating: 2500A
- Existing Solar interconnection: 600A load side breaker
- New Battery interconnection: 600A load side breaker

#### Calculation:

$$2500A \times 120\% = 3000A$$

$$\text{Bus Rating} \times 120\% = \text{Bus Potential}$$

$$3000A - 2500A (\text{OCPD}) = 500A \leq (600A + 600A)$$

Bus Potential – Main OCPD = Remaining Potential for additional Generation or Batteries

Result must decrease 2500A main breaker to accommodate additional generation on the bus.

$$3000A - 1600A (\text{new OCPD}) = 1600A \geq (600A + 600A)$$



## Appendix C Battery Cost Estimates

| Scenario 1 A- Estimated Project Cost |                                   |               |               |              |               |               |
|--------------------------------------|-----------------------------------|---------------|---------------|--------------|---------------|---------------|
| Quantity                             | Item                              | Description   | Materials     | Tax          | Labor         | Total         |
| 1                                    | BESS                              | 450kW/1638kWh | \$ 766,052.00 | \$ 29,205.73 |               | \$ 795,257.73 |
| 1                                    | Electrical Engineering            |               | \$ -          | \$ -         | \$ 18,000.00  | \$ 18,000.00  |
| 1                                    | Project Management                |               | \$ -          | \$ -         | \$ 8,000.00   | \$ 8,000.00   |
| 1                                    | Additional Design Contractors     |               | \$ -          | \$ -         | \$ 4,690.00   | \$ 4,690.00   |
| 2                                    | Interconnection Costs             |               | \$ -          | \$ -         | \$ 264.00     | \$ 264.00     |
| 1                                    | Solar Net Generation Output Meter |               | \$ -          | \$ -         | \$ 3,500.00   | \$ 3,500.00   |
| 1                                    | Permit                            |               | \$ -          | \$ -         | \$ 2,500.00   | \$ 2,500.00   |
| 1                                    | Installation                      |               | \$ -          | \$ -         | \$ 163,800.00 | \$ 163,800.00 |
| 1                                    | Balance of System Equipment       |               | \$ 20,056.00  | \$ 764.64    | \$ -          | \$ 20,820.64  |
| 1                                    | All Communication Equipment       |               | \$ 4,431.36   | \$ 168.95    | \$ -          | \$ 4,600.31   |
| 1                                    | Contingency                       | 0.1           | \$ 19,548.49  | \$ -         | \$ -          | \$ 19,548.49  |
| 0                                    | Seller G&A                        |               | \$ -          | \$ -         | \$ 260,245.29 | \$ 260,245.79 |
| Project Cost Total                   |                                   |               |               |              |               | \$ 1,301,227  |

| Scenario 1 B- Estimated Project Cost |                                   |               |                 |              |               |                 |
|--------------------------------------|-----------------------------------|---------------|-----------------|--------------|---------------|-----------------|
| Quantity                             | Item                              | Description   | Materials       | Tax          | Labor         | Total           |
| 1                                    | BESS                              | 450kW/2162kWh | \$ 1,060,000.00 | \$ 40,412.50 |               | \$ 1,100,412.50 |
| 1                                    | Electrical Engineering            |               | \$ -            | \$ -         | \$ 18,000.00  | \$ 18,000.00    |
| 1                                    | Project Management                |               | \$ -            | \$ -         | \$ 8,000.00   | \$ 8,000.00     |
| 1                                    | Additional Design Contractors     |               | \$ -            | \$ -         | \$ 4,690.00   | \$ 4,690.00     |
| 2                                    | Interconnection Costs             |               | \$ -            | \$ -         | \$ 264.00     | \$ 264.00       |
| 1                                    | Solar Net Generation Output Meter |               | \$ -            | \$ -         | \$ 3,500.00   | \$ 3,500.00     |
| 1                                    | Permit                            |               | \$ -            | \$ -         | \$ 2,500.00   | \$ 2,500.00     |
| 1                                    | Installation                      |               | \$ -            | \$ -         | \$ 261,200.00 | \$ 261,200.00   |
| 1                                    | Balance of System Equipment       |               | \$ 20,056.00    | \$ 764.64    | \$ -          | \$ 20,820.64    |
| 1                                    | All Communication Equipment       |               | \$ 4,431.36     | \$ 168.95    | \$ -          | \$ 4,600.31     |
| 1                                    | Contingency                       | 0.1           | \$ 29,288.49    | \$ -         | \$ -          | \$ 29,288.49    |
| 0                                    | Seller G&A                        |               | \$ -            | \$ -         | \$ 363,318.98 | \$ 363,318.98   |
| Project Cost Total                   |                                   |               |                 |              |               | \$ 1,816,595    |

| Scenario 2 A - Estimated Project Cost |                                   |               |               |              |               |               |
|---------------------------------------|-----------------------------------|---------------|---------------|--------------|---------------|---------------|
| Quantity                              | Item                              | Description   | Materials     | Tax          | Labor         | Total         |
| 1                                     | BESS                              | 450kW/1025kWh | \$ 465,000.00 | \$ 17,728.13 |               | \$ 482,728.13 |
| 1                                     | Electrical Engineering            |               | \$ -          | \$ -         | \$ 18,000.00  | \$ 18,000.00  |
| 1                                     | Project Management                |               | \$ -          | \$ -         | \$ 8,000.00   | \$ 8,000.00   |
| 1                                     | Additional Design Contractors     |               | \$ -          | \$ -         | \$ 4,690.00   | \$ 4,690.00   |
| 2                                     | Interconnection Costs             |               | \$ -          | \$ -         | \$ 264.00     | \$ 264.00     |
| 1                                     | Solar Net Generation Output Meter |               | \$ -          | \$ -         | \$ 3,500.00   | \$ 3,500.00   |
| 1                                     | Permit                            |               | \$ -          | \$ -         | \$ 2,500.00   | \$ 2,500.00   |
| 1                                     | Installation                      |               | \$ -          | \$ -         | \$ 102,500.00 | \$ 102,500.00 |
| 1                                     | Balance of System Equipment       |               | \$ 20,056.00  | \$ 764.64    | \$ -          | \$ 20,820.64  |
| 1                                     | All Communication Equipment       |               | \$ 4,431.36   | \$ 168.95    | \$ -          | \$ 4,600.31   |
| 1                                     | Contingency                       | 0.1           | \$ 13,418.49  | \$ -         | \$ -          | \$ 13,418.49  |
| 0                                     | Seller G&A                        |               | \$ -          | \$ -         | \$ 165,255.39 | \$ 165,255.39 |
| Project Cost Total                    |                                   |               |               |              |               | \$ 826,277    |

| Scenario 2 B- Estimated Project Cost |                                   |               |               |              |               |               |
|--------------------------------------|-----------------------------------|---------------|---------------|--------------|---------------|---------------|
| Quantity                             | Item                              | Description   | Materials     | Tax          | Labor         | Total         |
| 1                                    | BESS                              | 450kW/1626kWh | \$ 760,000.00 | \$ 28,975.00 |               | \$ 788,975.00 |
| 1                                    | Electrical Engineering            |               | \$ -          | \$ -         | \$ 18,000.00  | \$ 18,000.00  |
| 1                                    | Project Management                |               | \$ -          | \$ -         | \$ 8,000.00   | \$ 8,000.00   |
| 1                                    | Additional Design Contractors     |               | \$ -          | \$ -         | \$ 4,690.00   | \$ 4,690.00   |
| 2                                    | Interconnection Costs             |               | \$ -          | \$ -         | \$ 264.00     | \$ 264.00     |
| 1                                    | Solar Net Generation Output Meter |               | \$ -          | \$ -         | \$ 3,500.00   | \$ 3,500.00   |
| 1                                    | Permit                            |               | \$ -          | \$ -         | \$ 2,500.00   | \$ 2,500.00   |
| 1                                    | Installation                      |               | \$ -          | \$ -         | \$ 162,600.00 | \$ 162,600.00 |
| 1                                    | Balance of System Equipment       |               | \$ 20,056.00  | \$ 764.64    | \$ -          | \$ 20,820.64  |
| 1                                    | All Communication Equipment       |               | \$ 4,431.36   | \$ 168.95    | \$ -          | \$ 4,600.31   |
| 1                                    | Contingency                       | 0.1           | \$ 19,428.49  | \$ -         | \$ -          | \$ 19,428.49  |
| 0                                    | Seller G&A                        |               | \$ -          | \$ -         | \$ 258,344.61 | \$ 258,344.61 |
| Project Cost Total                   |                                   |               |               |              |               | \$ 1,291,723  |

## Appendix D Load Categorization

Definitions:

- Emergency System Loads: Systems that are legally required for automatic illumination or power for safe exiting and panic control in buildings essential for safety to human life (as defined by CEC article 700,701,702, CFC chapter 12, NFPA 110, and NFPA 111), such as:
  - o Fire pumps
  - o Egress path lighting and exit signs
  - o Fire alarm and life-safety systems (including emergency voice alarms)
  - o Doors and locks for cells
  - o Elevator systems
  - o Communication systems
  - o Security Systems
  - o Emergency responder radio coverage
  - o Horizontal sliding doors
  - o Smoke control System
- Uninterruptible System Loads: Systems where an outage of 10 seconds (to transfer from normal to emergency power) could damage essential equipment or impair safety shall be on UPS power. The areas served by the UPS shall include, but are not limited to:
  - o Security operations center, main and secondary equipment locations, including cameras and communication systems;
  - o Computer servers (MDF, IDF, BMS); and
  - o Telephone switches.
- Non-vital Loads: Systems that do not require power in the event of failure to the normal source. These systems are not essential for safety to human life.

| Emergency System Loads |              |                                               |
|------------------------|--------------|-----------------------------------------------|
| Panel                  | Source Panel | Load Summary                                  |
| E                      | ATS          | Emergency Panels, Emergency Ltgs, Fuel Pump   |
| 1E                     | E            | Gate, IEL, Stair Ltgs                         |
| 1EL                    | 1E           | Video Monitoring, Alarm Panel, Office Outlets |
| ELA                    | E            | Unknown - Not found at Site                   |

| Uninterruptible System Loads |              |                           |
|------------------------------|--------------|---------------------------|
| Panel                        | Source Panel | Load Summary              |
| 1LAA                         | 1LA          | Server room loads & UPS   |
| 1LAAA                        | 1LAA         | UPS for Servers & AC West |

| Non-Vital Loads |              |                                                                         |
|-----------------|--------------|-------------------------------------------------------------------------|
| Panel           | Source Panel | Load Summary                                                            |
| Main            | N/A          | All Loads                                                               |
| DHB             | Main         | DHC, Motor Control #3,4,5, Boilers #1&2, #1 Main Elevator*              |
| 1HC             | Main         | 1LC, Door Control, Exterior Ltgs                                        |
| 2HC             | Main         | Second Floor Office Ltgs & Fan Room 2B                                  |
| DHA             | Main         | Panels: 1HA, 1HB, 2HA, 2HB, 2HD, DLA                                    |
| 1HA             | DHA          | First Floor Office Ltgs                                                 |
| 2HA             | DHA          | Second Floor Ltgs & Fan Room 2D                                         |
| 1HB             | DHA          | First Floor Outlets                                                     |
| 2HD             | DHA          | Second Floor Office Ltgs & Fan Room 2C                                  |
| 2HB             | DHA          | Second Floor Office Ltgs & Fan Room 2A                                  |
| 4HA             | DHA          | 4th Floor Ltgsing, Audio Visual 3rd floor                               |
| DLA             | DHA          | Panels: Microwave, Coffee Cart                                          |
| 1LA             | DLA          | 1LAA, Office Loads                                                      |
| 1LB             | DLA          | First Floor Ltgs                                                        |
| 1LD             | DLA          | First Floor Office Outlets                                              |
| 2LA             | DLA          | Second Floor Outlets, Courtroom Ltgs, TV Monitors                       |
| 2LB             | DLA          | Second Floor Office Outlets                                             |
| 2LD             | DLA          | Second Floor Kitchen Outlets & Equipment                                |
| 2LE             | DLA          | Second Floor Office Outlets                                             |
| 3LA             | DLA          | Outlets for Security Corridor, Jury Control Lobby, Vending Machines     |
| 4LA             | DLA          | Water Heater, Mech room outlets, Hot Water Pumps                        |
| DHC             | DHB          | Judge & Holding Elevators, Motor Control #1,2,6, Air Compressors RM 404 |
| 1LC             | 1HC          | Panel: 2LC, First Floor Outlets, Exterior Flag Pole Ltgs, Park Ltgsing  |
| 1LBA            | 1LB          | First Floor Outlets, Copy Machine, Roll up Grille                       |
| 2LC             | 1LC          | Second Floor Office Outlets & TV Monitors                               |
| A               | Unknown      | Traffic Counter                                                         |

\*Main Elevator is served by the Non-Vital Load system at the time of inspection. Meaning the Main Elevator currently does not have power during a power outage. The Main Elevator should be moved to the Emergency System when the resiliency plan is implemented. This will ensure the Main Elevator is powered by the backup generator during a power outage.

# STAFF REPORT



|                               |                                                                    |                        |                           |
|-------------------------------|--------------------------------------------------------------------|------------------------|---------------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                                      | <b>Meeting Title:</b>  | Town Council Regular      |
| <b>Submitting Department:</b> | Public Works                                                       | <b>Presenter:</b>      | Brian Lenz, Town Engineer |
| <b>Agenda Item:</b>           | 2023 Fall Street Patching Contract – <b><u>Reject All Bids</u></b> | <b>Public Comment:</b> | Yes                       |

## **Purpose & Policy Considerations.**

The purpose of this item is Council consideration of rejecting all bids for Fall Street Patching (TOJ Project 23-11).

## **Requested Action.**

Staff requests Council reject all bids and rebid at a later date.

## **Recommendations.**

Staff recommends that Town Council reject all bids received for Fall Street Patching and rebid at a later date.

## **Background.**

The Spring and Fall patching programs have been in place for many years in an effort to address spot locations within the Town of Jackson's road network that are deteriorating. Patching locations are throughout Town and determined early in the Spring after the snow and ice have melted. The Fall patching work is required to be performed between September 5 and September 22, 2023.

The project was advertised in the JH News & Guide Weekly for two weeks beginning June 7, 2023.

## **Analysis.**

This year's target quantity and basis of the bid request was 25,000 square feet of patching throughout town. The Town received one construction bid for the project on June 22, 2023.

- |                                                        |              |
|--------------------------------------------------------|--------------|
| 1. Avail Valley Construction-WY, LLC, Jackson, Wyoming | \$453,777.00 |
|--------------------------------------------------------|--------------|

At \$18.15 per square foot, Avail Valley's bid exceeds (by over double) both the past 3-year average and the 2023 Spring Patching project. Staff does not recommend accepting the bid because we do not have adequate funding to complete the desired scope.

Staff also does not recommend postponing the project, as that further contributes to a backlog of roadway maintenance projects and could exacerbate the current issues this project intends to address. Postponing projects also often increases the future funding necessary to put the Town's streets back into a state of good repair.

As stated above, staff recommends rejecting this bid and re-bidding the project at a later date. Staff is confident that a second round of bidding will provide competitive bids.

## **Alternatives (Optional).**

1. Accept the bid and reduce the scope of work by approximately 40% to meet the project budget.
2. Reject the bid and hold the patching project until Spring of 2024.

### **Comprehensive Plan & Priority Alignment.**

This project supports the Town Comprehensive Plan under Common Value #3- Quality of Life, Section 8 - Quality Community Service Provision.

Common Value #3 - Quality of Life, Section 8. Quality Community Service Provision

- Principle 8.1- Maintain current, coordinated service delivery
  - o Policy 8.1.a: Maintain current, coordinated plans for delivery of desired service levels
- Principle 8.2 - Coordinate the provision of infrastructure and facilities needed for service delivery
  - o Policy 8.2.c: Require mitigation of the impacts of growth on service levels
- Strategy 8.1.S.3: Identify critical services and services requiring redundancy in service provision.
- Strategy 8.2.S.1: Coordinate the creation and maintenance of communitywide Major Capital Project List for all services listed in Principle 8.1.

### **Fiscal Impact.**

No fiscal impact for rejecting all bids.

### **Staff Impact.**

No staff impact for rejecting all bids. To offer the project for bidding again, Town Engineering staff will commit approximately 4 hours to re-posting, advertising, opening bids, and selecting a contractor.

### **Attachments or Links.**

None.

### **Suggested Motion.**

I move to reject all bids received for the 2023 Fall Patching Project, and direct staff to rebid the project at a later date.

# STAFF REPORT



|                               |                                                          |                        |                              |
|-------------------------------|----------------------------------------------------------|------------------------|------------------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                            | <b>Meeting Title:</b>  | Regular Town Council Meeting |
| <b>Submitting Department:</b> | Community Development                                    | <b>Presenter:</b>      | Tanya Anderson               |
| <b>Agenda Item:</b>           | Request For Proposals for relocation of the Mercer Cabin | <b>Public Comment:</b> | Yes                          |

## Purpose & Policy Considerations.

The purpose of this item is for Council to review and approve a Request for Proposals (RFP) to purchase and move the Mercer Cabin off the Karns Meadow property and relocate it.

## Requested Action.

Consider and approve release of an RFP to purchase and move the Mercer Cabin.

## Recommendations.

Staff recommends approving release of the RFP.

## Background.

The Mercer Cabin was originally built on Cache Street in 1938 by Phil Baux. The Cabin was moved by the Mercer family to the Sagebrush Motel and then to 265 E. Broadway where they ran the Alpine Pawn Shop. In 2014, the Cabin was moved to Karns Meadow. The intent was for the Cabin to be stored temporarily at Karns Meadow and potentially moved to May Park to be a XC ski warming hut. The plan to use it locally never came to fruition. It has been stored at Karns Meadow, unused, since 2014. Storage of the Cabin at Karns Meadow is out of compliance with the Town's conservation easements for the property.

The Mercer Cabin is 17 feet deep by 20 feet tall by 23 feet long. In 2014, the Teton County Historic Preservation Board determined the Cabin had historical significance because of its connection to Phil Baux, its unique design characteristics including a steep roof and wavy shingles, and because it was featured in Life Magazine in 1948. The Cabin's materials and design retain historical integrity from its original construction and historic era.

## Analysis.

Town Council prioritized the creation of a plan for Karns Meadow in fiscal year 2023. Prior to the creation of any plan, the property must be rezoned, and a permanent home for the Mercer Cabin must be found. The Cabin is out of compliance with the conservation easements for the property. Thus, the Cabin must either be removed from the property or the Town must pursue an amendment to the conservation easement.

To retain the Mercer Cabin on the Karns Meadow property, staff would need to work with the Jackson Hole Land Trust and the previous owner to amend the conservation easement. They may or may not approve an amendment. The Town would also need to commit to incorporating the Cabin into the Karns Meadow park design and dedicating staff time and funding to repair and maintain the cabin.

Staff recommends removal of the cabin from Karns Meadow for the following reasons:

1. The Cabin was never located at Karns Meadow for any use other than temporary storage and has no historical relationship to the property.
2. The Town of Jackson does not have the staff capacity to repair and maintain a historic cabin.
3. The Town does not have capacity to staff an indoor facility at Karns Meadow.
4. The Cabin is not large enough to be repurposed as a restroom or other facility and does not accommodate ADA accessibility.

The Mercer Cabin has historic value. However, the Town of Jackson is not the best entity to steward that history. In the nine years since the Cabin has been at Karns Meadow, it has not been maintained or opened to the public. Other members of the community may be better able to care for and preserve the Cabin. An RFP to purchase the Mercer Cabin, remove it from Karns Meadow and relocate it will bring the Town into compliance with our conservation easements, allow for the development of a plan for Karns Meadow, and enable the Cabin to find a permanent home where it is better utilized and appreciated.

Staff proposes the following timeline for release of the RFP:

- July 18, 2023 5:00 pm MST – RFP is released.
- July 28, 2023 5:00 pm MST – Questions must be received.
- August 4, 2023 5:00 pm MST – Responses to questions will be available.
- August 11, 2023 5:00 pm MST – Deadline for RFP submittal.
- September 1, 2023 5:00 pm MST – Review and selection of proposal
- October 31, 2023 5:00 pm MST – Removal of the Cabin from Town property is complete.

Staff proposes the following criteria to be used by the selection panel while evaluating proposals.

| EVALUATION CRITERIA                                                                                                                                                                                                                                                                                                                               | POINT VALUE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Project Approach</b> – What is the ability of the proposer to successfully coordinate all aspects of the work required to move the Mercer Cabin from Karns Meadow to a permanent location within the designated timeline? Does the proposer have experience moving and maintaining historic structures? Are they contracting someone who does? | 35          |
| <b>Budget</b> – Appendix A: Relocation costs and purchase price for the Cabin (minimum bid \$1).                                                                                                                                                                                                                                                  | 25          |
| <b>Relocation</b> – Will the Mercer Cabin be relocated within the Town? Will it be located within Teton County or the greater Teton region? Will it be located where the public can see it, or will it be hidden from view? Priority will be given to proposers who will keep the Cabin local and visible to the public.                          | 20          |
| <b>Future Use</b> – Will the Cabin be utilized? For what? Will the proposed use be private or public? Projects that will utilize the Cabin and are available to the public will receive higher points.                                                                                                                                            | 15          |
| <b>Clarity of Proposal</b> – Did the proposer follow the directions and include all of the requested materials?                                                                                                                                                                                                                                   | 5           |
| <b>TOTAL MAXIMUM SCORE</b>                                                                                                                                                                                                                                                                                                                        | <b>100</b>  |

### Possible Alternatives.

Possible alternatives for this item include:

1. Not approving the RFP as presented and directing staff to write an RFP with different objectives.
2. Not approving the removal of the Mercer Cabin from the Karns Meadow property and directing staff to pursue an amendment to the conservation easement.
3. Not approving the RFP and directing staff to demolish the cabin.

### Comprehensive Plan & Priority Alignment.

#### Principle 1.4 – Protect and steward open space.

Protecting open space preserved habitat and scenery and maintains our western agricultural heritage. Avoiding development in critical wildlife areas and providing recreational opportunities that reduce pressure on habitat help maintain a healthy ecosystem. Agriculture, conservation easements, and other methods to protect open space from development while providing active stewardship of the land should continue to be encouraged.



#### Character Defining Feature 4.5 - Karns Meadow

This PRESERVATION Subarea should continue to serve as wildlife habitat and a key wildlife movement corridor in the future. Moving forwards wildlife needs will need to be carefully balanced with providing the recreational and other amenities envisioned in the original landowner's conveyance of the property. The future addition of a street connection through this district will improve connectivity for all modes of transportation and create a separation between the developed and undeveloped portions of the area.

#### Strategy 4.4.S.6 - Evaluate future active use of Karns Meadow

##### **Fiscal Impact.**

In the RFP scoring criteria, proposals in which the Town will not incur financial costs will receive higher scores. If there are no interested parties, the Town of Jackson will either have to demolish the Cabin or will need to invest staff time in pursuing an amendment to the easement and designate funding for maintenance and upkeep of the Cabin. Soliciting interest from potential parties to purchase and move the Cabin is likely to cost the Town less than the other options. The minimum purchase price in the RFP is \$1.

##### **Staff Impact.**

It will take an estimated 12 hours of staff time from Administration, Community Development, Parks & Recreation, and Public Works to release the RFP, review proposals, select a qualified applicant, and work with the applicant to set a timeline for moving the Cabin. It took staff 3 hours to draft and review the RFP and write this report.

##### **Attachments or Links.**

RFP

Appendix A - Budget

Public comment related to the Mercer Cabin

[Life Magazine Feature](#)

##### **Suggested Motion.**

I move to approve the release of the RFP to purchase and remove Mercer Cabin from the Karns Meadow property.

**CALL FOR Historic Building Relocation Experts**  
**REQUEST FOR PROPOSALS, JACKSON HOLE, WYOMING**

Requested By: Town of Jackson

Proposal Due Date: 5:00 PM MST August 11, 2023

Proposal Submission: via e-mail or hard copy delivered by hand or delivery service to:

Town of Jackson  
C/O: Riley Taylor  
150 East Pearl Avenue  
P.O. Box 1687  
Jackson, WY 83001  
rtaylor@jacksonwy.gov

RFP Available from: July 18, 2023

Contact and Questions: Tanya Anderson, Ecosystem Stewardship Administrator  
tanderson@jacksonwy.gov

The Town of Jackson reserves the right to **reject any or all responses submitted**, in whole or part, and to waive any informalities.

**I: SUMMARY**

The Town of Jackson seeks proposers interested in purchasing, removing from Town property, and relocating the historic Mercer Cabin to a new location from its current temporary storage location at Karns Meadow. intends to enter into a contract with a qualified proposer for such purchase, removal, and relocation.

**A: BACKGROUND AND PURPOSE**

The Mercer Cabin was originally built on Cache Street in 1938 by Phil Baux. The Cabin was moved by the Mercer family to the Sagebrush Motel and then to 265 E. Broadway where they ran the Alpine Pawn Shop. In 2014, the Cabin was moved to Karns Meadow. The intent was for the Cabin to be stored temporarily at Karns Meadow and potentially moved to May Park to be a XC ski warming hut. The plan to use it locally never came to fruition. It has been stored at Karns Meadow, unused, since 2014. Storage of the Cabin at Karns Meadow out of compliance with the Town's conservation easements for the property; the Town seeks a qualified proposer to purchase the Cabin and relocate it.

The Mercer Cabin is 17 feet deep by 20 feet tall by 23 feet long. In 2014, the Teton County Historic Preservation Board determined the Cabin's historical significance because of its connection to Phil Baux, its unique design characteristics including a steep roof and wavy shingles, and because it was featured in Life Magazine in 1948. The Cabin's materials and design retain historical integrity from its original construction and historic era.

Because the Mercer Cabin has historic value, proposals to preserve the Cabin rather than destroy it will be scored more highly, and proposals that keep the Cabin local and available to the public will be scored even higher.

## **II: STATEMENT OF WORK**

### **A: Intent**

The Town of Jackson's goal is to award a contract to a proposer that will purchase the Cabin, remove it from Town property, and relocate it (ideally locally and for public viewing) and use qualified movers to execute these steps.

### **B: Scope of Work**

The Town of Jackson seeks a proposer to purchase, remove from Town property, and relocate the Mercer Cabin. The selected proposer will be expected to meet with Town staff to coordinate removal, to use a qualified mover for the relocation, and to complete the removal by October 31<sup>st</sup>, 2023.

### **C: Qualifications**

The successful proposer must have the experience and knowledge necessary to move a historic structure or must contract with a mover who does, and must have the capacity to complete the project by October 31, 2023, including milestones mutually agreed to within that deadline. The timeline will be mutually agreed upon and set via contract.

### **D. Project Budget**

Proposers should include a budget in their proposal that includes a purchase price for the Cabin and the cost of moving the Cabin. Proposals that include paying the full cost of removal and relocation will be prioritized. The purchase price must be \$1 or greater.

### **E. Communications and Tour of Facility**

Requests for additional information or a tour of the Cabin at its current temporary location can be submitted until 5:00pm Mountain Standard Time July 28, 2023. Such requests must be in writing via email and submitted to [rtaylor@jacksonwy.gov](mailto:rtaylor@jacksonwy.gov). The Town will respond to any request for additional information or will schedule a tour of the Cabin at its current temporary location via email by 5:00 pm Mountain Standard Time August 4, 2023. Any communications will be considered unofficial and non-binding on the Town.

## **III. SELECTION PROCESS AND TIMELINE**

### **A: Timeline and Process**

A selection committee will review the proposals. The committee may select proposers for further consideration or may directly select and negotiate a contract with the leading proposer. If more than one proposer is considered, then interviews may be conducted, or additional information requested. The final selection schedule is contingent upon the proposals received and may be changed at any time. The selection process will proceed on the following schedule:

**July 18, 2023 5:00 MST**– RFP released.

**July 28, 2023 5:00pm MST**– Questions must be received.

**August 4, 2023 5:00pm MST**– Responses to questions will be available.

**August 11, 2023 5:00pm MST** – Deadline for RFP submittal.

- Proposals must be received at the Town of Jackson by 5:00 PM MST August 11<sup>th</sup>, 2023. Proposals may be transmitted via e-mail or hard copy delivered by hand or delivery service (Fed /Ex etc.) to Town of Jackson, C/O: Riley Taylor, 150 Pearl Avenue, P.O. Box 1687, Jackson, WY 83001. Please email submissions to [rtaylor@jacksonwy.gov](mailto:rtaylor@jacksonwy.gov).
- The Town of Jackson cannot accept responsibility for delayed delivery of proposals so please plan accordingly.

**September 1, 2023 5:00pm MST** – Review and selection of proposal.

- The selection panel will select the proposer from proposals received. This process will include a review of proposals and other information as necessary. The Town of Jackson may conduct interviews with the potential proposer(s) if applicable. In making this selection, the Town of Jackson reserves the right to request information from any proposer to clarify their proposal or to supply any additional material deemed necessary to assist in the evaluation of the proposal. The Town of Jackson also reserves the right to make a selection without conducting interviews.
- One proposer will be identified based on the selection criteria listed below and enter into an agreement with the Town of Jackson.

**October 31, 2023 5:00pm MST**– Removal of the Cabin from Town property is complete.

## **B: Submittal Requirements**

Proposers are invited to submit a proposal at their own cost. The Town of Jackson assumes no obligation of any kind for expenses incurred by any respondent to this RFP.

- Proposals submitted electronically must be submitted through the Town Clerk, Riley Taylor, at [rtaylor@jacksonwy.gov](mailto:rtaylor@jacksonwy.gov) and must be compiled into a single Word or .pdf document named "Mercer Cabin Relocation – [proposer name]".
- Proposals must be received by 5:00 pm MST August 11<sup>th</sup>, 2023 in order to be considered.
- Proposals must be submitted as follows:

### **Section 1:**

1. Five (5) page maximum proposal . Cover letters will be considered part of the maximum page limit.
  - a. Brief (1 page) cover letter. The cover letter shall include:
    - i. Proposer's legal name and address.
    - ii. The name, title, and contact information of the person authorized to negotiate the contract on behalf of the proposer.
    - iii. The name, title, and contact information of the person to be contacted for clarification of the proposal.
    - iv. Acknowledgement that the conditions governing this RFP have been read and accepted.
  - b. Project approach (1 page maximum): Narrative explaining how the proposer will complete the project. This section must include a proposed timeline.
  - c. Budget (1 page maximum): Proposer must use the Appendix A table.
  - d. Relocation (1 page maximum): Statement describing the new Cabin location.
  - e. Future Use (1 page maximum): Statement describing how the Cabin will be used.
2. List of all subcontractors, including statement of experience, if subcontractors will be used. If no subcontractors will be used, include a statement to that effect in the proposal.

### **Section 2: Proof of Liability and Worker's Compensation Insurance.**

**C: Selection Criteria**

The Selection Panel will refer to the criteria listed below while evaluating proposals.

| EVALUATION CRITERIA                                                                                                                                                                                                                                                                                                                               | POINT VALUE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| <b>Project Approach</b> – What is the ability of the proposer to successfully coordinate all aspects of the work required to move the Mercer Cabin from Karns Meadow to a permanent location within the designated timeline? Does the proposer have experience moving and maintaining historic structures? Are they contracting someone who does? | 35          |
| <b>Budget</b> – Appendix A: Relocation costs and purchase price for the Cabin (minimum bid \$1).                                                                                                                                                                                                                                                  | 25          |
| <b>Relocation</b> – Will the Mercer Cabin be relocated within the Town? Will it be located within Teton County or the greater Teton region? Will it be located where the public can see it, or will it be hidden from view? Priority will be given to proposers who will keep the Cabin local and visible to the public.                          | 20          |
| <b>Future Use</b> – Will the Cabin be utilized? For what? Will the proposed use be private or public? Projects that will utilize the Cabin and are available to the public will receive higher points.                                                                                                                                            | 15          |
| <b>Clarity of Proposal</b> – Did the proposer follow the directions and include all of the requested materials?                                                                                                                                                                                                                                   | 5           |
| <b>TOTAL MAXIMUM SCORE</b>                                                                                                                                                                                                                                                                                                                        | <b>100</b>  |

**IV. LEGAL**

Any and all documents submitted to the Town of Jackson may be deemed public records subject to examination and inspection by third parties.

The Town of Jackson reserves the right to:

- Reject any or all proposals or accept what is, in its judgment, the proposal which is in the Town of Jackson's best interest.
- Accept a late submittal or to waive any technical defects or irregularities in any or all proposals.
- Discuss proposals with proposers whose submittals are reasonably susceptible to selection in order to clarify, assure a full understanding of, ensure responsiveness to the RFP requirements, and eliminate some proposal elements.
- Not fund the project if it does not receive any proposals that, in its sole discretion, meet the goals of the project.
- Alter the makeup of the Selection Panel or re-issue this RFP.

Instructions: For Cabin Bid: enter an amount one dollar or greater. For Relocation Cost: if you will be paying the cost of relocation, enter zero. If your proposal includes a cost to the Town for relocation, enter the amount. Relocation Cost includes, but is not limited to, staffing, freight, fuel, insurance, and all other costs.

| Activity                     | Dollar Amount |
|------------------------------|---------------|
| Cabin Bid                    | \$0.00        |
| Relocation Cost              | \$0.00        |
| Other Costs (please explain) | \$0.00        |
| Total Project Cost/Bid       | \$0.00        |



March 1, 2023

Re: Historic Structures in Jackson Town Parks

Dear Mayor and Town Council,

When the Town Council voted in 2021 to adopt the Historic Preservation ordinances into the Town's Land Development Regulations, it significantly expanded the responsibilities of the Teton County Historic Preservation Board (TCHPB). In addition to our Board's responsibilities in advocating for historic preservation throughout Teton County, the new ordinances tasked the Board with approving the addition of structures to the Town Historic Register, reviewing applications for Certificates of Appropriateness, and continuing to review Demolition Permit applications. We are happy to fulfill these responsibilities and appreciate the Town's confidence in our abilities to serve as trusted expert advisors on historic preservation issues.

However, the core mission of the TCHPB still remains "to identify, protect, and preserve Teton County's architectural and archaeological heritage to ensure respectful planning and development that preserves our sense of place and community character". It is for this reason that I write to share with you the concerns of the board regarding two important situations that do not represent "respectful planning and development". This is in the planning and development of two existing town parks: May Park and Karns Meadow Park. Both of these parks contain significant historic structures that are at risk of disappearing from our public landscape in – ironically – the most public of settings.

Both parks have been the topic of development discussions for decades and, while there are always many different perspectives and constituencies in park planning, they have suffered from indifferent attention to the historic structures and landscapes that are their origins. The TCHPB urges you to correct this approach by directing staff to pay closer attention to preserving and utilizing those historic resources as publicly accessible reminders of our historic community character.

May Park contains not only two historic barns – the George Lamb barns – but also remnants of the original farm landscape, which are not adequately respected and preserved in the current plan that is moving through the CUP process, and will soon come before you. Our board has been monitoring this design process and sent a letter (attached) expressing our concerns to Director Ashworth in 2021, without any response. Given the fact that these structures have remained idle and deteriorating for many years, we commend the effort to move forward with a development plan, but do not understand why this important part of our heritage is being so neglected. Both the historic structures and remnant landscape could easily form the basis of a more sensitive park plan.

Karns Meadow Park represents a slightly different form of neglect. In 2014, the TCHPB recognized the Mercer Cabin – originally built by Phil Baux – as historically significant and sponsored an agreement that moved it to Karns Meadow, temporarily. The anticipation at the time was that it would become a part of the future park, perhaps as a warming hut for Nordic ski activities on the site. It has remained on blocks in that location ever since. Our board's current concern is that the town staff is actively seeking to dispose of the cabin, due to a misunderstanding of the restrictions of the conservation easements on Karns Meadow, and an apparent indifference to its historic and architectural significance. Again, this small, unique structure could easily be incorporated into a park plan, if that were a priority.

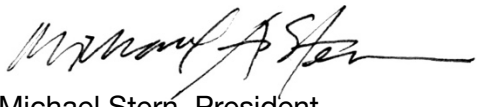
One has to ask the question – if the purpose of the recent Preservation LDRs is to foster historic preservation by creating a variety of incentives for private property owners, why are our public entities so seemingly indifferent to that mission? Historic preservation that is publicly accessible and visible ought to be the overriding goal, not banishing our dwindling number of historic structures to Idaho, or worse, the scrap heap.

It only requires one look at how successful the "Save the Block" campaign was, and how successful the outcome has been. Our public entities need to make the same commitment to preservation as our whole community made in seeing that project come to fruition.

In summary, we make the following recommendations:

- We request that you instruct the Parks & Recreation Department to consult with the TCHPB on the design plans for both May and Karns Meadow Parks as they are developed and *before* any final plans are submitted to you for approval.
- Please also instruct Town staff to stop efforts to relocate the Mercer Cabin until a design has been developed for Karns Meadow Park that incorporates that building into the public landscape.

Respectfully yours,

A handwritten signature in black ink, appearing to read "Michael Stern", with a long horizontal flourish extending to the right.

Michael Stern, President

Teton County Historic Preservation Board

cc. T. Sinclair, S. Ashworth, Parks and Rec. Board



# STAFF REPORT



|                               |                                                                    |                        |                      |
|-------------------------------|--------------------------------------------------------------------|------------------------|----------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                                      | <b>Meeting Title:</b>  | Regular Town Council |
| <b>Submitting Department:</b> | Pathways                                                           | <b>Presenter:</b>      | Brian Schilling      |
| <b>Agenda Item:</b>           | Virginian RV Park, LLC and Virginian Lodge, LLC: Pathway Easements | <b>Public Comment:</b> | Yes                  |

## Purpose & Policy Considerations.

The purpose of this item is for Council to consider pathway easements across 90 Virginian Lane (the Virginian RV Park) and 750 W Broadway Ave (the Virginian Lodge).

## Requested Action.

Staff requests Council review and consider the easement agreements attached to this staff report.

## Recommendations.

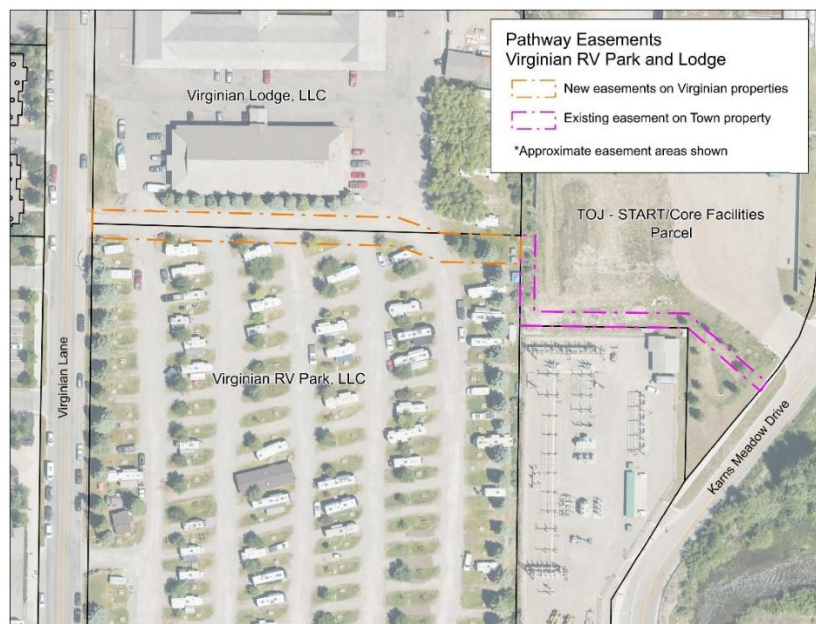
Staff recommends Council review, consider, and approve the easement agreements attached to this staff report.

## Background.

The Jackson/Teton County Affordable Housing Department is under contract to purchase 90 Virginian Lane (commonly referred to as the Virginian RV Park) for the purpose of developing affordable housing units on the property. As described in the Jackson/Teton County Comprehensive Plan, the Virginian RV Park and the adjacent Virginian Lodge parcels are located in the “Midtown” Subarea of the Town of Jackson. The Comprehensive Plan notes that the future vision for the Midtown Subarea is to:

*... create a walkable mixed-use district with improved connectivity and increased residential population” and that “key to achieving this vision will be the creation of a concentrated and connected land use pattern with a smaller block system than currently exists.*

In order to achieve this smaller block system a pathway is envisioned along the property line between the RV Park and Virginian Lodge parcels and its creation was secured in the purchase process. This provides an east-west non-motorized route along the north edge of the RV Park parcel and create a mid-block connection between Virginian Lane and the Town of Jackson parcel that houses the START facility and future Core Maintenance facility. There is an existing pathway easement on the Town parcel to complete the link between the Virginian easement and Karns Meadow Drive.



The pathway envisioned and depicted in the map is achieved via two easements: The Virginian Lodge, LLC (current owner of the northern parcel) will grant an easement over the southern-most fifteen feet of their property to the Town of Jackson and Virginian RV Park, LLC (current owner of the southern parcel) will grant an easement over the northern-most fifteen feet of their parcel to the Town of Jackson. As a result, the Town will hold, in total, a thirty-foot easement for pathway purposes. The closing and final sale of the RV Park parcel is scheduled to occur in the next few weeks, and the easements are required as of closing, thus time is of the essence in approving the two easements.

### **Analysis & Key Policy Questions.**

The policy question is whether the Town wants to approve the easements. There is really no known downside to approving the easements. The easements in no way impose any obligation to the Town until the Town decides to construct a pathway. From a policy perspective, it is in line with Town policy and the Comprehensive Plan to pursue easements in this specific location for pathways and public access.

### **Possible Alternatives.**

The alternative would be to not approve the easements.

### **Comprehensive Plan & Priority Alignment.**

Acquiring these easements is in alignment with the Comprehensive Plan and the priority for improving multi-modal access and mobility in the Town of Jackson. Referencing the Midtown Subarea "Illustrating Our Vision" section, the Comprehensive Plan states:

*"Today, the land use pattern [of the Midtown Subarea] is automobile-oriented and made up of large superblocks containing low intensity single-use structures (both residential and non-residential) surrounded by significant surface parking, with little connectivity between blocks and lots."*

*"The future vision is to create a walkable mixed-use district with improved connectivity and increased residential population. Key to achieving this vision will be the creation of a concentrated and connected land use pattern with a smaller block system than currently exists."*

### **Fiscal Impact.**

There is a minor fiscal impact to the Town for approving the easements in recording the documents. This is estimated at less than \$100 for the two easements.

### **Staff Impact.**

There will be minor impacts of 1-2 hours for staff to obtain signatures and record the easements. Thus far, staff has spent approximately 4 hours (legal and pathways staff) to prepare the easements and coordinate with the property owners, and approximately 1 hour to prepare the staff report.

### **Attachments or Links.**

1. Pathway Access and Easement Agreement for 90 Virginian Lane
2. Pathway Access and Easement Agreement for 750 W. Broadway Avenue

### **Suggested Motion.**

I move to approve the Pathway Access and Easement Agreement with the Virginian RV Park, LLC for a pathway across 90 Virginian Lane, and the Pathway Access and Easement Agreement with the Virginian Lodge LLC for a pathway across 750 W. Broadway Ave, and authorize the mayor to execute the necessary documents subject to minor changes by staff.

## PATHWAY ACCESS EASEMENT AND AGREEMENT

This Pathway Access Easement and Agreement ("Agreement") is made to be effective as of the date this Agreement is recorded in the land records of Teton County, Wyoming, in the office of the Teton County Clerk (the "Effective Date"), by and between the Virginian RV PARK LLC, a Wyoming Limited Liability Company, P.O. Box 7396, Jackson, Wyoming 83002, its successors and assigns ("Grantor") and the Town of Jackson, Wyoming, of P.O. Box 1687, Jackson, Wyoming 83001 ("Grantee") (the Grantor and the Grantee may be referred to herein collectively as the "Parties" or individually as a "Party").

### RECITALS

WHEREAS, the Grantor is the owner in fee simple (subject to existing recorded encumbrances) of that certain real estate situated in Teton County, Wyoming, more particularly described and shown in Exhibit 1 attached hereto, over which the Grantee wishes to obtain a right for the public to enter and pass for non-motorized transportation and recreational purposes, under circumstances where the Grantor is provided the immunity from liability recorded by W.S. §34-19-101 (1977) *et seq*; and

WHEREAS, Grantee is a governmental body whose powers include the authority to receive easements in land for the public that has joined in the creation and funding of the Jackson Hole Community Pathways Program; and

NOW, THEREFORE, in consideration of the foregoing recitals, which are incorporated herein by this reference, and other good and valuable consideration, in hand paid, the receipt and sufficiency of which is hereby acknowledged and confessed, the Parties agree as follows:

1. Easement Grant. The Grantor hereby grants to the Grantee a non-exclusive easement ("Easement") over and across that real property of the Grantor described on Exhibit 1 attached hereto and incorporated herein by this reference ("Easement Land"), for the purpose of permitting the Grantee to construct and maintain a Pathway for non-motorized bicycle (including any "electric bicycle" as defined under Wyoming law), pedestrian, equestrian, and ski passage and repassage by the public on and along the pathway easement as described in Exhibit 1 and further shown in Exhibit 2, attached hereto and incorporated herein by this reference, under the terms and conditions herein.

2. Maintenance. The Grantee, for itself and for its successors and assigns, covenants and agrees that, once constructed, it will maintain the Pathway for public transportation and recreational purposes for and by pedestrian, bicycle, equestrian, and ski passage and repassage at its expense in a neat, orderly, and safe condition, in an efficient and expedient manner, and it shall undertake periodic inspections to ensure that the Pathway is maintained in a neat, orderly, and safe manner and that the terms and conditions of this Agreement are met. For purposes of this Agreement, "maintenance" shall mean, at a minimum, upkeep, maintenance, and repair of the Pathway surface and sub-surface, once constructed, to ensure the Pathway may be safely used by the public as intended by this Agreement.

3. Limitations on Use of Easement.

a) Motorized Vehicles Prohibited Except for Emergency and Maintenance Vehicles. There shall be no operation of motorcycles, all-terrain vehicles, snowmobiles, or any other type of motorized vehicle, except that (i) the Grantee, its agents, contractors, and subcontractors may operate and permit the operation of vehicles by the Grantee in a manner and to an extent satisfactory to the Grantor for the initial construction and periodic maintenance and repairs of the Pathway, including plowing, grooming, sweeping, and inspection; (ii) emergency

vehicles may access and use the Pathway as necessary; and (iii) “electric bicycles” as defined under Wyoming law may be utilized on the Pathway.

- b) Preservation of Habitat. There shall be no removal, destruction, cutting, or alteration of any vegetation, whether dead or alive, nor any disturbance or change in the natural habitat in any manner beyond that necessary for construction, maintenance, and/or repairs of the Pathway for public passage and prevention of trail deterioration or erosion.
- c) Use of Chemicals. There shall be only such spraying or application of biocides as are necessary to control noxious weeds or plants interfering with the use of the Easement.
- d) Hunting Prohibited. There shall be no hunting, discharging of firearms, killing, trapping, or harassing of wildlife in any manner on or from the Easement Land.
- e) No Improvements Other than Pathway. There shall be no improvements placed within the Easement Land by the Grantee other than the Pathway without the express prior written consent of the Grantor. Such prohibited improvements include without limitation any structures, but shall not include signs, culverts, retaining walls, interpretative stations, pathway-related amenities, benches, or fences.
- f) Impact of Construction and Maintenance Activity upon Lands of Grantor. All construction, replacement, and maintenance of the Pathway shall be done in a good and workmanlike manner as quickly and efficiently as reasonably possible to minimize the impact of such activities upon the surrounding lands of the Grantor.
- g) Restoration. Upon completion of the initial construction and any subsequent maintenance and repair of the Pathway, the Grantee shall return the surrounding lands of the Grantor to the condition in which they were found at the commencement of such activities to the extent reasonably possible. In the event vegetation is removed or destroyed, like vegetation shall be replaced, replanted, and restored.
- h) No Camping or Fires. Camping and fires shall be prohibited within the Easement Land. The Grantee shall take such measures as are reasonably necessary to inform the public that camping and fires are prohibited, and to enforce this restriction within the Easement Land and any affected surrounding lands of the Grantor.

4. Termination if Not Constructed. The Parties understand that, by acceptance of this Easement and entering into this Agreement, the Grantee is not obligated to construct any pathway immediately but must do so within twenty (20) years of the date hereof or this Easement shall be deemed to be abandoned and shall terminate. The Grantor hereby authorizes the Grantee to enter upon the property for purposes of clearing, grading, and constructing the Pathway, including paving and building culverts, retaining walls, and bridges, etc., as may be necessary to utilize the Easement granted. However, there shall be no construction or placement of any other structures (except signs, interpretative stations, pathway-related amenities, benches, or fences) in addition to the Pathway improvements without the express consent of the Grantor.

5. Termination upon Condemnation or Eminent Domain. In the event that the Easement Land or any part thereof is condemned or taken by eminent domain, or as a result of an inverse condemnation action, then the Easement herein granted shall terminate automatically as to the portion of the property so taken.

6. Indemnification of Grantor. The Grantee, and its successors in interest and assigns, hereby agrees to indemnify, defend, and hold harmless the Grantor and his successors in interest and assigns, from any and all losses, damages, claims, causes of action, or rights of action, including reasonable attorney's fees, which the Grantor may incur as a result of the Easement granted herein, other than from losses, damages, claims, causes of action, or rights of action caused by the Grantor's negligent acts or omissions. Nothing in this Agreement shall alter, amend, modify, or diminish the existing statutory, constitutional, or legal defenses of the Grantee in relation to such claims under Wyoming law.

7. Other Grounds for Termination. The Grantor may terminate this Easement upon the occurrence of any of the following events (each a "**Default**"), after the Grantor has given the Grantee written notice of the Default(s) and the Grantee failed to cure the Default(s) within thirty (30) days after written notice or fails to diligently complete the cure as soon as reasonably possible after beginning such cure within thirty (30) days of written notice:

- a) The Grantee no longer enjoys governmental immunity as set forth in Wyoming Statutes §1-39-101 *et. seq.*, or any amendments or replacements thereto; or
- b) The Pathway is abandoned by the Grantee by failure to keep the Pathway open for passage by the general public for a period of one (1) year, not including periods of closure for regular maintenance or the replacement of the Pathway; or
- c) The Grantor's reserved rights as defined in this Agreement are impaired or restricted.

8. Rights Reserved to the Grantor. Notwithstanding any of the foregoing covenants to the contrary, the Grantor specifically reserves for itself, its directors, affiliate companies, officers, employees, tenants, invitees, licensees, successors, and assigns the following reserved rights:

- a) All rights as owner of the Easement Land, including the right to use the property for all purposes not inconsistent with this instrument.
- b) The right, in a reasonable manner and at reasonable times, to enforce, by proceedings at law or in equity, the terms and conditions of this instrument. Nothing herein shall be construed to entitle the Grantee to institute any enforcement proceedings against the Grantor for any changes to the granted Easement due to causes beyond the Grantor's control, such as changes caused by fire, storm, landslide, erosion, falling trees or branches, plant growth, water, or any other act of nature, or the unauthorized acts of third persons.

9. No Obligations on the Grantor. It is understood and agreed that this instrument imposes no other obligations with respect to the creation, maintenance, or removal of the Pathway upon the Grantor.

10. Preexisting Interests. Nothing herein shall be deemed to affect any mortgage, lien, or other interest in the Easement Land as described herein which was in existence at the time of the execution of this instrument.

11. Recordation; Binding Effect. This Agreement shall be recorded in the land records of the County Clerk of Teton County, Wyoming, and shall run with the lands underlying the Easement Land and shall be binding upon and inure to the benefit of the Grantor and the Grantee, their successors and assigns.

12. No Public Dedication. Nothing herein shall be deemed to be a gift or dedication of all or any portion of the Easement Land for the general public. Any use of the Easement Land by the public shall be pursuant to the terms and conditions of this Agreement only or as otherwise may be allowed by the Grantor from time to time, in its discretion.

13. Miscellaneous.

- a) Governing Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Wyoming. Venue for any dispute concerning this Agreement shall be the 9<sup>th</sup> District Court in Teton County, Wyoming, and each of the parties hereto consents to the jurisdiction of such court in any such action or proceeding and waives any objection to venue laid therein. Process in any action or proceeding referred to in the preceding sentence may be served on any party anywhere in the world.
- b) Time. Time is of the essence of this Agreement.
- c) Interpretation. Any rule of interpretation construing any provision against the drafter of this Agreement shall not apply. The headings contained herein are for convenience only and shall not be used in the interpretation of this Agreement. As used in this Agreement, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.
- d) Entire Agreement. This Agreement represents the entire agreement of the Parties hereto and supersedes any prior agreements or negotiations of the Parties, whether oral or written.
- e) Attorneys' Fees. In the event of any suit or other proceeding for the interpretation or enforcement of this Agreement, the substantially prevailing party in such suit or other legal proceeding shall be entitled to recover its costs and expenses incurred, including, without limitation, reasonable attorneys' fees.
- f) Amendment. The Agreement shall only be amended by the consent of the Grantor and the Grantee in writing duly executed and recorded in the land records of the County Clerk of Teton County, Wyoming.
- g) Severability. If any provision of this Agreement is held invalid by a court or other tribunal of full and proper jurisdiction, then such provision shall be stricken here from, but the remainder of this Agreement shall continue in full force and effect.
- h) Counterparts. This Agreement may be executed in any number of counterparts which when taken together shall constitute a whole and complete original of this Agreement.
- i) No Waiver. The failure of either of the Parties to enforce the terms and conditions of this Agreement at any time shall not operate as a waiver of such Party's ability to enforce any violation of the terms and conditions of this Agreement in the future.
- j) No Third-Party Beneficiaries. The Parties do not intend to create in any other individual or entity the status of third-party contract beneficiary, and this Agreement shall not be construed so as to create such status.

- k) Governmental Immunity. The Grantee reserves and does not waive its governmental immunity as to any issues or matters not governed by the express terms of this Agreement.
- l) Estoppel Certificates. Each party shall, from time to time and upon not less than twenty (20) days' notice from the other, execute and deliver to a prospective lender, purchaser, or tenant of any portion of the property subject to this Agreement an estoppel certificate stating: (i) that this Agreement is in full force and effect and that it has entered into no other amendments, modifications or supplements of the same, or if such party has entered into any such amendments, modifications or supplements, then listing them, (ii) whether or not to its actual knowledge the other party is in default in any respect under this Agreement, and if in default, specifying the nature of such default, and (iii) that the party delivering such estoppel certificate acknowledges that it may be relied upon by purchasers, assignees, tenants, or mortgagees of the par-ty requesting the estoppel certificate. In the event of an error or omission within an estoppel certificate, the certifying party shall not be liable therefor, but such certifying party shall be estopped from claiming any facts or statements contained in such estoppel certificate to be otherwise.

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the Effective Date

**GRANTOR:**

VIRGINIAN RV PARK, LLC

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

STATE OF WYOMING                    )  
                                                  ) ss  
COUNTY OF TETON                 )

The foregoing instrument was acknowledged before me by \_\_\_\_\_, as the \_\_\_\_\_ of Virginian RV PARK, LLC, who is personally known to me or has established their identity and authority to me by reasonable proof, this \_\_\_\_ day of \_\_\_\_\_, 2023.

WITNESS my hand and official seal.

(Seal)

\_\_\_\_\_  
Notary Public

My commission expires:



**GRANTEE:**

TOWN OF JACKSON, WYOMING

By: \_\_\_\_\_

Hailey Morton Levinson, Mayor

**ATTEST:**

By: \_\_\_\_\_

Riley Taylor, Town Clerk

STATE OF WYOMING                    )  
                                                      ) ss  
COUNTY OF TETON                    )

The foregoing Pathway and Access Easement and Agreement was acknowledged before me by Hailey Morton Levinson, as Mayor of the Town of Jackson, and Riley Taylor, as the Town Clerk of the Town of Jackson, who are personally known to me or have established their identity and authority to me by reasonable proof, this \_\_\_\_ day of \_\_\_\_\_, 2023.

WITNESS my hand and official seal.

(Seal)

\_\_\_\_\_  
Notary Public

My commission expires:

## PATHWAY ACCESS EASEMENT AND AGREEMENT

This Pathway Access Easement and Agreement ("Agreement") is made to be effective as of the date this Agreement is recorded in the land records of Teton County, Wyoming, in the office of the Teton County Clerk (the "**Effective Date**"), by and between Virginian Lodge, LLC, a Wyoming Limited Liability Company, P.O. Box 7396, Jackson, Wyoming 83002, its successors and assigns ("Grantor") and the Town of Jackson, Wyoming, of P.O. Box 1687, Jackson, Wyoming 83001 ("Grantee") (the Grantor and the Grantee may be referred to herein collectively as the "**Parties**" or individually as a "**Party**").

### **RECITALS**

WHEREAS, the Grantor is the owner in fee simple (subject to existing recorded encumbrances) of that certain real estate situated in Teton County, Wyoming, more particularly described and shown in Exhibit A attached hereto, over which the Grantee wishes to obtain a right for the public to enter and pass for non-motorized transportation and recreational purposes, under circumstances where the Grantor is provided the immunity from liability recorded by W.S. §34-19-101 (1977) *et seq*; and

WHEREAS, Grantee is a governmental body whose powers include the authority to receive easements in land for the public that has joined in the creation and funding of the Jackson Hole Community Pathways Program; and

NOW, THEREFORE, in consideration of the foregoing recitals, which are incorporated herein by this reference, and other good and valuable consideration, in hand paid, the receipt and sufficiency of which is hereby acknowledged and confessed, the Parties agree as follows:

1. Easement Grant. The Grantor hereby grants to the Grantee a non-exclusive easement ("Easement") over and across that real property of the Grantor described on Exhibit A attached hereto and incorporated herein by this reference ("Easement Land"), for the purpose of permitting the Grantee to construct and maintain a Pathway for non-motorized bicycle (including any "electric bicycle" as defined under Wyoming law), pedestrian, equestrian, and ski passage and repassage by the public on and along the pathway easement as described in Exhibit A and further shown in Exhibit B, attached hereto and incorporated herein by this reference, under the terms and conditions herein.

2. Maintenance. The Grantee, for itself and for its successors and assigns, covenants and agrees that, once constructed, it will maintain the Pathway for public transportation and recreational purposes for and by pedestrian, bicycle, equestrian, and ski passage and repassage at its expense in a neat, orderly, and safe condition, in an efficient and expedient manner, and it shall undertake periodic inspections to ensure that the Pathway is maintained in a neat, orderly, and safe manner and that the terms and conditions of this Agreement are met. For purposes of this Agreement, "maintenance" shall mean, at a minimum, upkeep, maintenance, and repair of the Pathway surface and sub-surface, once constructed, to ensure the Pathway may be safely used by the public as intended by this Agreement.

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vehicles may access and use the Pathway as necessary; and (iii) “electric bicycles” as defined under Wyoming law may be utilized on the Pathway.

- b) Preservation of Habitat. There shall be no removal, destruction, cutting, or alteration of any vegetation, whether dead or alive, nor any disturbance or change in the natural habitat in any manner beyond that necessary for construction, maintenance, and/or repairs of the Pathway for public passage and prevention of trail deterioration or erosion.
- c) Use of Chemicals. There shall be only such spraying or application of biocides as are necessary to control noxious weeds or plants interfering with the use of the Easement.
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- f) Impact of Construction and Maintenance Activity upon Lands of Grantor. All construction, replacement, and maintenance of the Pathway shall be done in a good and workmanlike manner as quickly and efficiently as reasonably possible to minimize the impact of such activities upon the surrounding lands of the Grantor.
- g) Restoration. Upon completion of the initial construction and any subsequent maintenance and repair of the Pathway, the Grantee shall return the surrounding lands of the Grantor to the condition in which they were found at the commencement of such activities to the extent reasonably possible. In the event vegetation is removed or destroyed, like vegetation shall be replaced, replanted, and restored.
- h) No Camping or Fires. Camping and fires shall be prohibited within the Easement Land. The Grantee shall take such measures as are reasonably necessary to inform the public that camping and fires are prohibited, and to enforce this restriction within the Easement Land and any affected surrounding lands of the Grantor.

4. Termination if Not Constructed. The Parties understand that, by acceptance of this Easement and entering into this Agreement, the Grantee is not obligated to construct any pathway immediately but must do so within twenty (20) years of the date hereof or this Easement shall be deemed to be abandoned and shall terminate. The Grantor hereby authorizes the Grantee to enter upon the property for purposes of clearing, grading, and constructing the Pathway, including paving and building culverts, retaining walls, and bridges, etc., as may be necessary to utilize the Easement granted. However, there shall be no construction or placement of any other structures (except signs, interpretative stations, pathway-related amenities, benches, or fences) in addition to the Pathway improvements without the express consent of the Grantor.

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- a) The Grantee no longer enjoys governmental immunity as set forth in Wyoming Statutes §1-39-101 *et. seq.*, or any amendments or replacements thereto; or
- b) The Pathway is abandoned by the Grantee by failure to keep the Pathway open for passage by the general public for a period of one (1) year, not including periods of closure for regular maintenance or the replacement of the Pathway; or
- c) The Grantor's reserved rights as defined in this Agreement are impaired or restricted.

8. Rights Reserved to the Grantor. Notwithstanding any of the foregoing covenants to the contrary, the Grantor specifically reserves for itself, its directors, affiliate companies, officers, employees, tenants, invitees, licensees, successors, and assigns the following reserved rights:

- a) All rights as owner of the Easement Land, including the right to use the property for all purposes not inconsistent with this instrument.
- b) The right, in a reasonable manner and at reasonable times, to enforce, by proceedings at law or in equity, the terms and conditions of this instrument. Nothing herein shall be construed to entitle the Grantee to institute any enforcement proceedings against the Grantor for any changes to the granted Easement due to causes beyond the Grantor's control, such as changes caused by fire, storm, landslide, erosion, falling trees or branches, plant growth, water, or any other act of nature, or the unauthorized acts of third persons.

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11. Recordation; Binding Effect. This Agreement shall be recorded in the land records of the County Clerk of Teton County, Wyoming, and shall run with the lands underlying the Easement Land and shall be binding upon and inure to the benefit of the Grantor and the Grantee, their successors and assigns.

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13. Miscellaneous.

- a) Governing Law; Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of Wyoming. Venue for any dispute concerning this Agreement shall be the 9<sup>th</sup> District Court in Teton County, Wyoming, and each of the parties hereto consents to the jurisdiction of such court in any such action or proceeding and waives any objection to venue laid therein. Process in any action or proceeding referred to in the preceding sentence may be served on any party anywhere in the world.
- b) Time. Time is of the essence of this Agreement.
- c) Interpretation. Any rule of interpretation construing any provision against the drafter of this Agreement shall not apply. The headings contained herein are for convenience only and shall not be used in the interpretation of this Agreement. As used in this Agreement, the singular shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.
- d) Entire Agreement. This Agreement represents the entire agreement of the Parties hereto and supersedes any prior agreements or negotiations of the Parties, whether oral or written.
- e) Attorneys' Fees. In the event of any suit or other proceeding for the interpretation or enforcement of this Agreement, the substantially prevailing party in such suit or other legal proceeding shall be entitled to recover its costs and expenses incurred, including, without limitation, reasonable attorneys' fees.
- f) Amendment. The Agreement shall only be amended by the consent of the Grantor and the Grantee in writing duly executed and recorded in the land records of the County Clerk of Teton County, Wyoming.
- g) Severability. If any provision of this Agreement is held invalid by a court or other tribunal of full and proper jurisdiction, then such provision shall be stricken here from, but the remainder of this Agreement shall continue in full force and effect.
- h) Counterparts. This Agreement may be executed in any number of counterparts which when taken together shall constitute a whole and complete original of this Agreement.
- i) No Waiver. The failure of either of the Parties to enforce the terms and conditions of this Agreement at any time shall not operate as a waiver of such Party's ability to enforce any violation of the terms and conditions of this Agreement in the future.
- j) No Third-Party Beneficiaries. The Parties do not intend to create in any other individual or entity the status of third-party contract beneficiary, and this Agreement shall not be construed so as to create such status.

- k) Governmental Immunity. The Grantee reserves and does not waive its governmental immunity as to any issues or matters not governed by the express terms of this Agreement.
- l) Estoppel Certificates. Each party shall, from time to time and upon not less than twenty (20) days' notice from the other, execute and deliver to a prospective lender, purchaser, or tenant of any portion of the property subject to this Agreement an estoppel certificate stating: (i) that this Agreement is in full force and effect and that it has entered into no other amendments, modifications or supplements of the same, or if such party has entered into any such amendments, modifications or supplements, then listing them, (ii) whether or not to its actual knowledge the other party is in default in any respect under this Agreement, and if in default, specifying the nature of such default, and (iii) that the party delivering such estoppel certificate acknowledges that it may be relied upon by purchasers, assignees, tenants, or mortgagees of the par-ty requesting the estoppel certificate. In the event of an error or omission within an estoppel certificate, the certifying party shall not be liable therefor, but such certifying party shall be estopped from claiming any facts or statements contained in such estoppel certificate to be otherwise.

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the Effective Date

**GRANTOR:**

VIRGINIAN LODGE, LLC

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

STATE OF WYOMING                    )  
                                                  ) ss  
COUNTY OF TETON                 )

The foregoing instrument was acknowledged before me by \_\_\_\_\_, as the \_\_\_\_\_ of Virginian Lodge, LLC, who is personally known to me or has established their identity and authority to me by reasonable proof, this \_\_\_\_ day of \_\_\_\_\_, 2023.

WITNESS my hand and official seal.

(Seal)

\_\_\_\_\_  
Notary Public

My commission expires:

**GRANTEE:**

TOWN OF JACKSON, WYOMING

By: \_\_\_\_\_

Hailey Morton Levinson, Mayor

**ATTEST:**

By: \_\_\_\_\_

Riley Taylor, Town Clerk

STATE OF WYOMING                    )  
                                                      ) ss  
COUNTY OF TETON                    )

The foregoing Pathway and Access Easement and Agreement was acknowledged before me by Hailey Morton Levinson, as Mayor of the Town of Jackson, and Riley Taylor, as the Town Clerk of the Town of Jackson, who are personally known to me or have established their identity and authority to me by reasonable proof, this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

WITNESS my hand and official seal.

(Seal)

\_\_\_\_\_  
Notary Public

My commission expires:



# STAFF REPORT



|                               |                                                      |                        |                              |
|-------------------------------|------------------------------------------------------|------------------------|------------------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                        | <b>Meeting Title:</b>  | Town Council Regular Meeting |
| <b>Submitting Department:</b> | Planning Department                                  | <b>Presenter:</b>      | Tyler Valentine              |
| <b>Agenda Item:</b>           | Item P23-079 – Zoning Map Amendment for Karns Meadow | <b>Public Comment:</b> | Yes                          |

## Purpose & Policy Considerations.

This is the Town Council's opportunity to review a proposed Zoning Map Amendment per Section 8.7.3 in the Town of Jackson Land Development Regulation (LDRs). No physical development is included in this request.

## Requested Action.

The applicant, Teton County / Jackson Parks & Recreation, is requesting approval of a Zoning Map Amendment (ZMA) for Karns Meadow, which consists of six tracts of land owned by the Town of Jackson (Tracts 1-6), and one tract owned by Jackson Hole Land Trust (Tract 8). Below is a summary of the ZMA request for each tract of land:

- **Tract 1** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 2** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 3** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 4** – Neighborhood Low Density-1 to Park & Open Space and Neighborhood Low Density-3 (24,000-sf portion of land adjacent to Flat Creek Drive)
- **Tract 5** – Neighborhood Low Density-1 to Public/Semi-Public
- **Tract 6** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 8** – Neighborhood Low Density-1 to Park & Open Space

## Key Issues

A key issue for this application is whether the proposed rezoning to the P zone, P/SP zone, and NL-3 zone will allow for the intended future uses of the site.

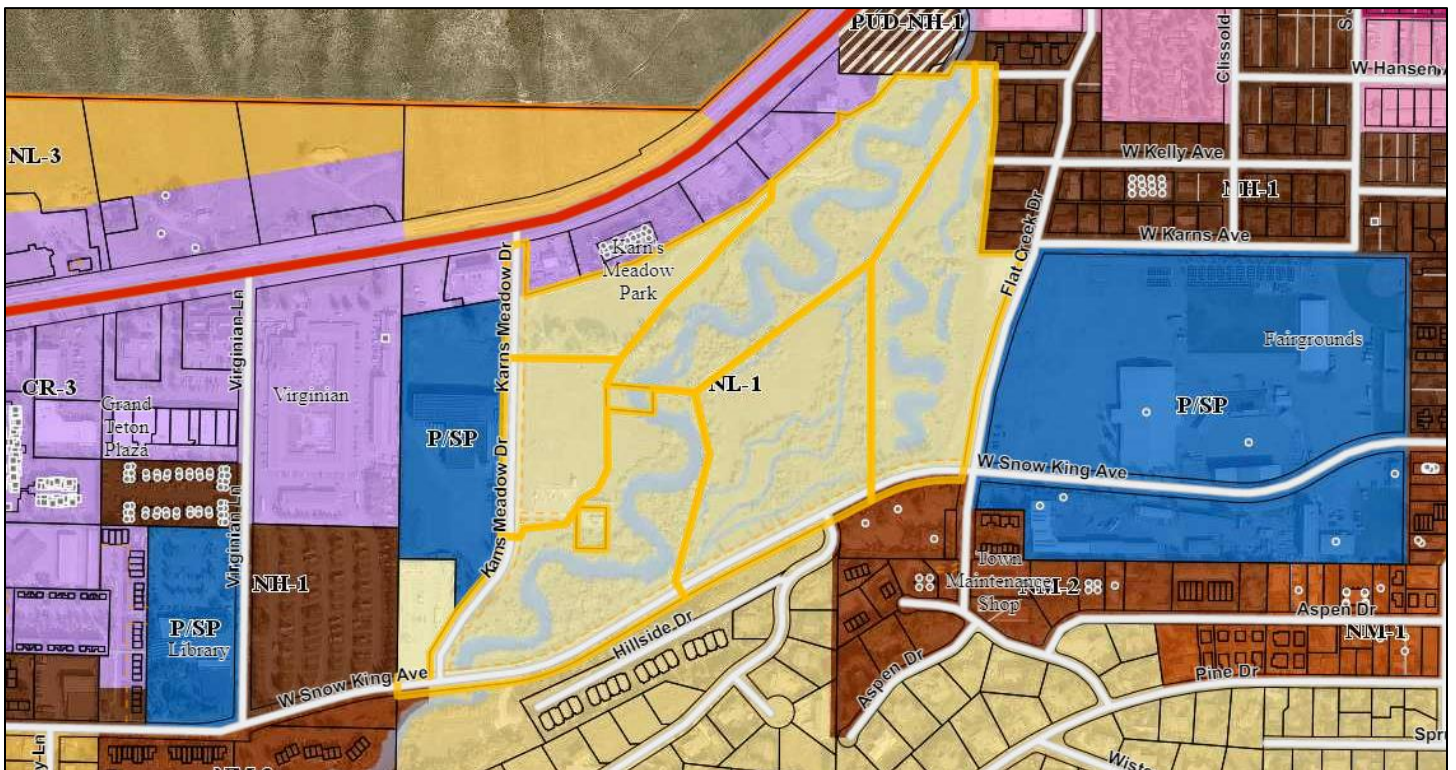
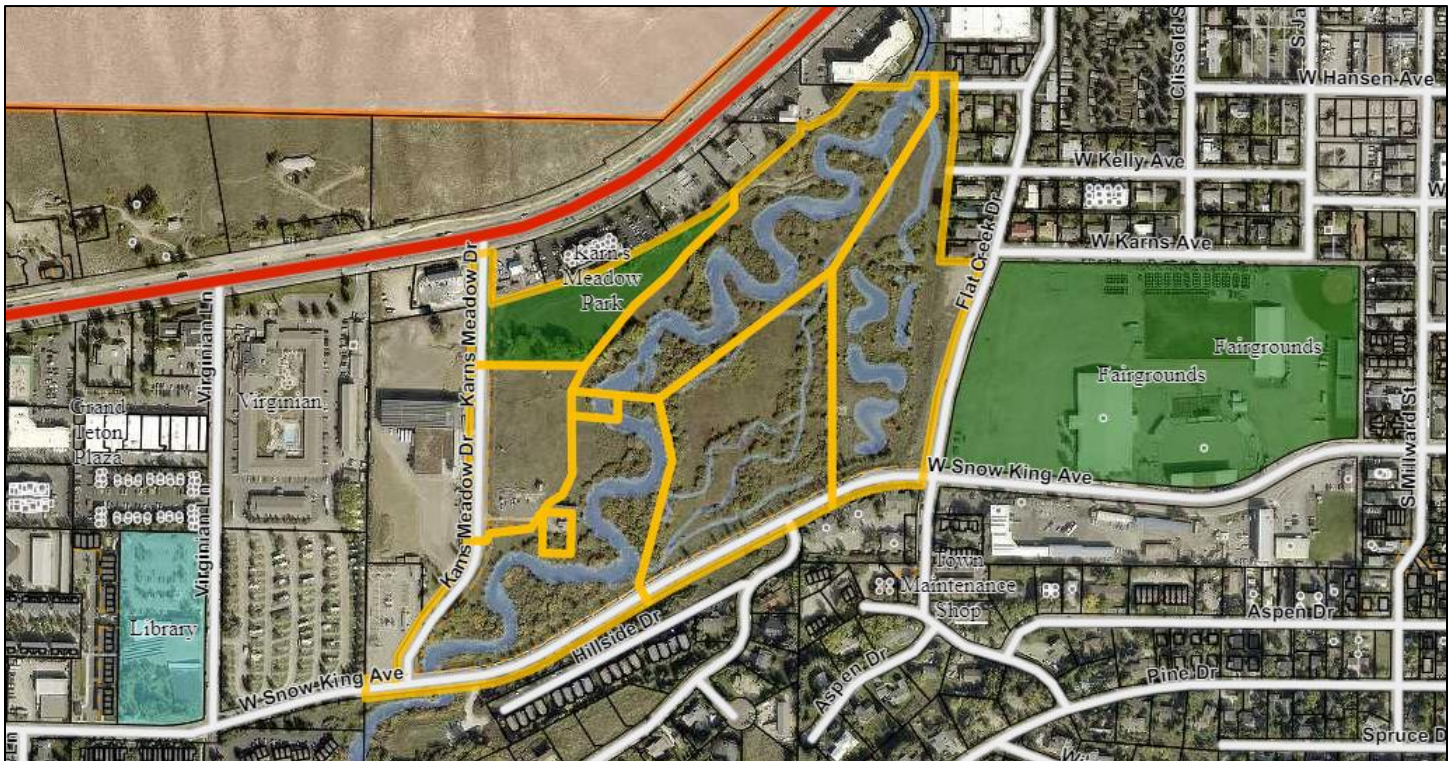
## Recommendations.

The Planning Director and Planning Commission recommend **approval** of the Zoning Map Amendment (P23-079).

## Project Location.

The subject property, Karns Meadow, consists of Tracts 1-6 & Tract 8. An aerial photo and zoning map are shown on the following page:





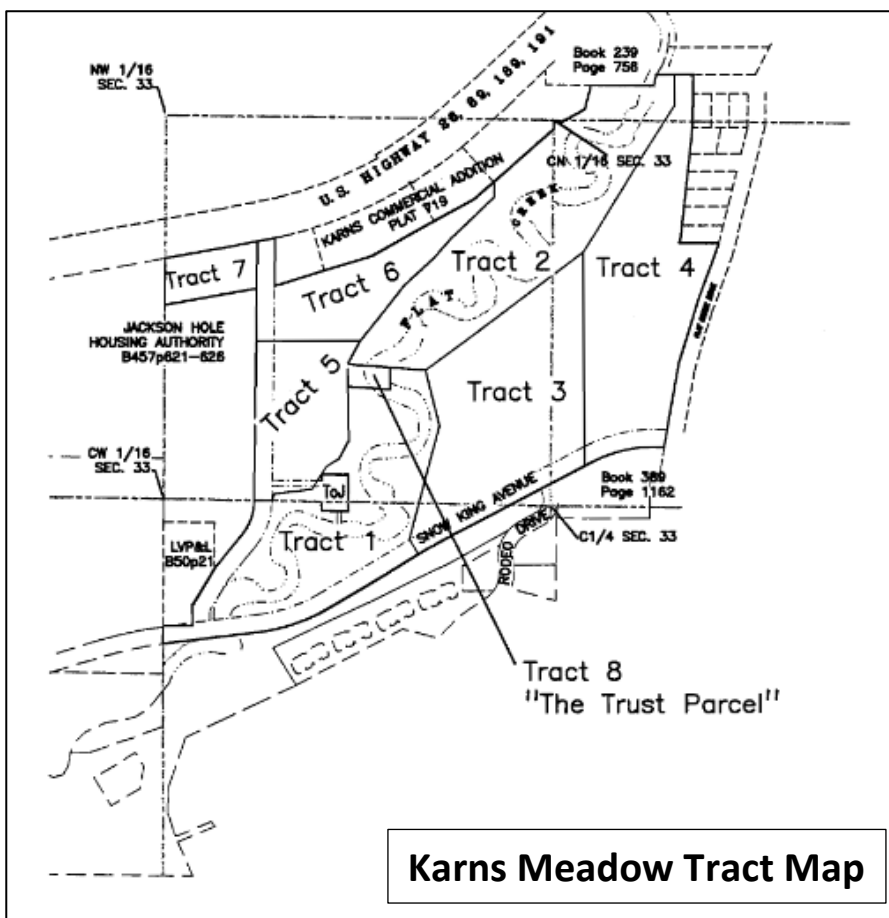
### Background.

During the summer of 2003 representatives from the Town of Jackson and the Karns family began discussions and negotiations for the purchase/sale of an approximate 42-acre tract of land known as “Karns Meadow”. To

assist the Town financially and to secure the property for public use in perpetuity, the parties partnered with the Jackson Hole Land Trust to encumber the property with a conservation easement. The easement created allowed uses for each tract through the partnership between the original landowner, Jackson Hole Land Trust (the Trust), and the Town of Jackson, and guides future use and conservation of the property. The splitting of the parcel into tracts allowed for the Town of Jackson to purchase the property over time. It also allowed for slightly different uses in the various tracts based on their location, ecological value, and unique characteristics. The Jackson Hole Land Trust contributed \$1,000,000 to the purchase/sale of the property for the easement consideration. In December of 2003, the Land Trust completed the Natural Resource Inventory for the property, and the first tract purchase by the Town of the property was completed on December 19, 2003. The Town of Jackson acquired the remaining 6 tracts of the property over the next several years with the final tract purchase being completed in 2008.

Staff would like to point out that at the time of purchasing Karns Meadow, the previous Suburban zoning would have allowed the 42 acres to be subdivided into potentially 80-100 single-family home lots. Through the efforts made by the Town, Karns family, and Land Trust, this large area of centrally-located land was conserved in a significant way. Now that the majority of conservation has been achieved, the outstanding effort is to follow through with the intended desire of the Karns family to make this a public park, which is one of the main reasons the Karns family sought to sell the land to the Town.

Karns Meadow consists of 6 Town-owned parcels (Tracts 1-6) plus a Trust-owned parcel (Tract 8) that all have conservation easements with varying types of allowable uses. Tract 7 on the parcel map is not owned by the Town and has been developed by the landowners. Karns Meadow is approximately 42 acres, and the site is bordered by Karns Meadow Drive to the west, Snow King Avenue to the south, and Flat Creek Drive to the east. All Town Karns Meadow property is currently zoned as Neighborhood Low Density-1 (NL-1), which is inconsistent with the allowed uses in each tract according to the conservation easements. Thus, rezoning all tracts to a more appropriate zone will be necessary before the intended development can take place and before creating a Master Plan. A map of the tracts can be viewed to the right.



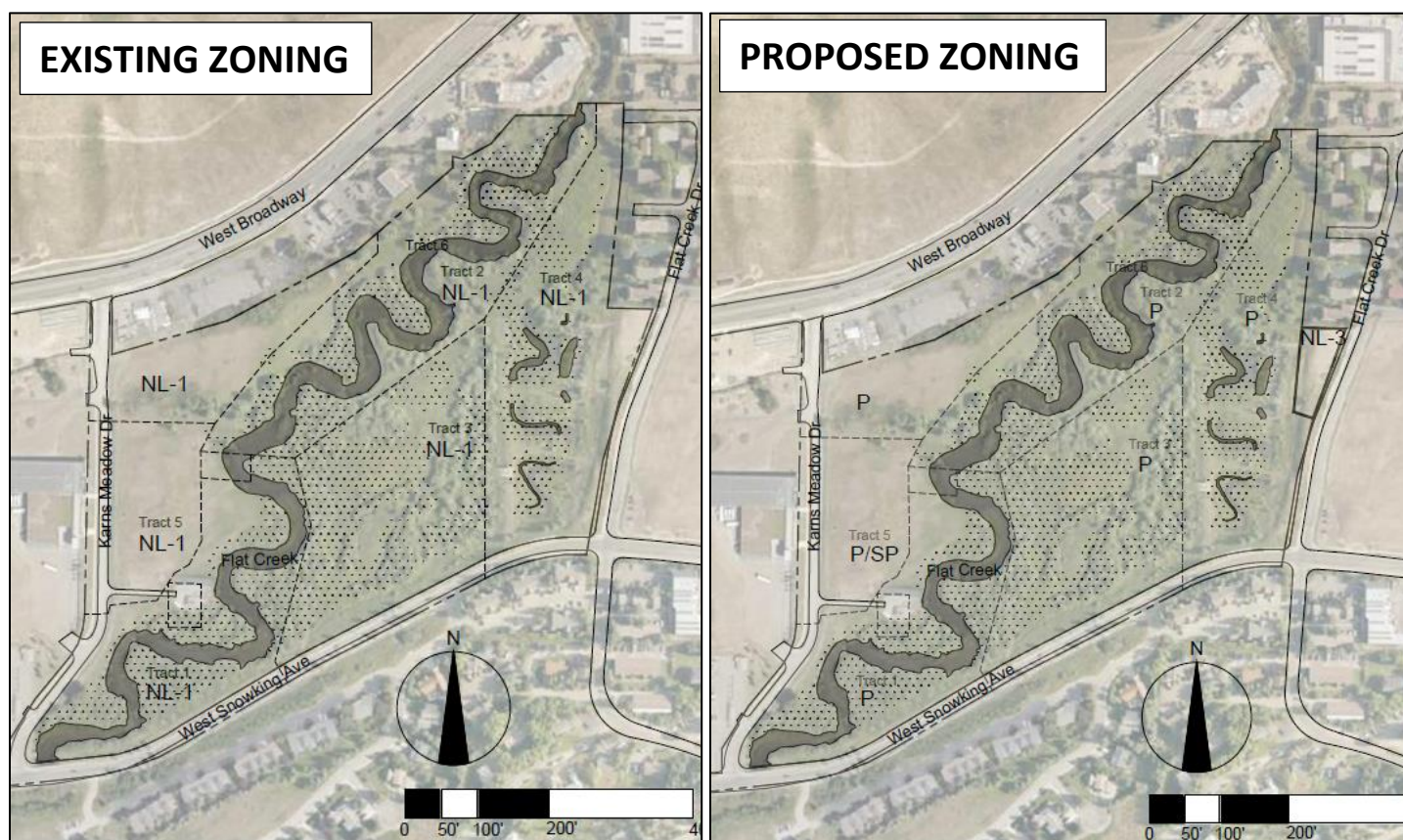


On October 17, 2022, the Town Council directed staff to move forward on a rezoning application for the Karns Meadow tracts, which this ZMA application satisfies. In addition, Town Council directed staff to move forward with Public Engagement Alternative Number One and present the draft site plans (site plans from 2003, 2014 & 2016) to the public for input. The specific improvements in those site plans included a perimeter non-motorized pathway, picnic shelter, and parking lot and will be presented to the Council through a separate Conditional Use Permit process in the near future.

On March 9 and 10, 2023, Parks & Recreation hosted a neighborhood meeting to familiarize the community with the proposed ZMA and the allowed uses directed by Town Council. Public opinion on the project was collected through a public input survey, conducted from March 9-31 (see applicant submittal).

### Analysis.

Currently, all Karns Meadow tracts are zoned NL-1, which is inconsistent with the allowed future uses. In order to have zoning consistent with the allowed uses and with the conservation easements, the applicant is requesting a rezone of Karns Meadow Tracts 1, 2, 3, 6, and 8 to Park and Open Space (P). In addition, tract 4 would also be rezoned to the P, with the exception of approximately 24,000 ft, which is reserved for future housing and would be rezoned to NL-3. Finally, Tract 5 would be rezoned to Public/Semi-Public (P/SP). No physical development is being proposed with this request. Please see the attached conservation easement map of allowed uses in the applicant's submittal. Existing and proposed zoning maps can be found below.



The purpose of the P zone (LDR Section 4.2.2), which would apply to Tracts 1-4, 6 & 8, is “to designate land which is owned by the Town, County, State or Federal agencies, or special districts, and whose primary purpose is to provide public recreational opportunities for residents, tourists, and visitors.” In addition, “the P zone provides for active recreational facilities or open space opportunities in these areas.” Since the current NL-1 zone does not allow the uses listed in the conservation easements for these tracts, staff finds that changing it to P is appropriate.

The purpose of the P/SP zone (LDR Section 4.2.1), which would apply to Tract 5, is “to provide locations for new and existing uses and facilities of a public or semi-public nature.” In addition, it is intended to be under the control of “federal, state, or local governments, or other governmental entities such as a school district or hospital district.” As such, the Town of Jackson qualifies as a legitimate P/SP landowner that intends to later improve the P/SP-zoned tract for public facilities (i.e., public parking lot) to serve and support the nonmotorized pathway and picnic shelter. Since the current NL-1 zone does not allow public parking lots and the conservation easement does, staff finds that changing the zoning to P/SP is appropriate.

Finally, the purpose of the NL-3, which would apply to a +/-24,000 sf portion of Tract 4, is to allow the development of single-family detached homes and is intended for Stable neighborhoods where increased residential density is not intended. Karns Meadow is not intended for increased development, however, as part of the original purchase agreement, a 24,000-sf portion of the park was designated for 3 future residential lots. At first glance, it would seem unnecessary to change the zoning since both NL-1 and NL-3 have the same density maximum of one single-family home and one Accessory Residential Unit. However, the NL-1 zone has a 1-acre minimum lot size which is too large and would not allow 3 lots to be created within the 24,000 sf. Since the NL-3 zone has a lesser minimum lot size of 7,500 sf, the Town would be able to create 3 single-family lots within the 24,000 sf of land and staff finds this to be the appropriate zone. A visual of the proposed NL-3 zoned portion can be seen to the right and is located along the west side of Flat Creek Drive just south of West Karns Avenue.



Sites with multiple zones, such as the proposed P and NL-3 zoning for Tract 4, are permitted according to LDR Section 1.7.5. After the 24,000-sf area is rezoned to NL-3, the Town will likely divide that area into three lots or parcels in the future.

Separate from this ZMA request, the Town is currently reviewing an update to the Karns Meadow Environmental Analysis (EA) that was originally done in 2019 (Planning Item P23-006). Staff anticipates the EA will be completed

in mid-late summer 2023. After the ZMA and EA are completed, Parks & Recreation will complete the public review process by submitting a Conditional Use Permit that will include a plan showing all proposed uses and facilities to be located in Karns Meadow which will be reviewed by the Planning Commission and Town Council.

### Planning Commission

The Planning Commission (PC) considered this item on June 21, 2023, and recommend approval to the Town Council (5-1 vote). The PC had the following comments:

- A few Commissioners asked why Tract 5 is proposed to be rezoned to P/SP and not P.  
**Response:** Staff explained that since the public parking lot needs to be located on Tract 5 per the conservation easement, P/SP is the appropriate zone because parking is permitted in P/SP as a primary use, but not in P zone. Staff acknowledged that parking associated with a park is allowed in the P zone, but the amount of parking that can be built would be directly tied/limited to the intensity of the park uses alone. Ultimately, staff was tasked with bringing an appropriate zone to Council that would facilitate a future parking lot that might serve users beyond just the park, so the P/SP zone is proposed because it provides the most flexibility for a parking lot.
- The Commissioners asked if there was talk of a structured parking garage and snow storage on Tract 5.  
**Response:** Staff clarified that at this time, there is no talk of a structured parking garage or snow storage for Tract 5.
- The Commissioners asked if the Town has a minimum requirement for the surface of a parking area, such as gravel or pavers.  
**Response:** Staff clarified that a paved surface is required, but that could change based on the Environmental Analysis.
- The Commission asked about the EA process and if there was any insight into parking when the EA was done.  
**Response:** Staff explained that the 2019 EA broadly analyzed every allowable use in the conservation easement. However, the EA consultant is currently analyzing the impacts of the specific improvements that the Council recently identified as a potential option (i.e., parking lot, nonmotorized pathway, picnic shelter). Essentially, the updated EA will inform the Town of the impacts of parking once completed.

Overall, the Commissioners supported the rezoning request. There were some lingering concerns about the greater development and use flexibility in P/SP compared to P on Tract 5. There were some specific concerns that “if we zone for it, it will come” raising concerns that P/SP zoning opens the door to increased use and increased wildlife impacts. However, the Commission agreed that the existing conservation easement should limit development to uses that will protect wildlife values and that increasing the use/development of Tract 5 beyond the current desires of this Town Council would not be a quick and easy task, but would require the approval of the Council, an updated EA, and a new CUP.

### Public Comment

No written comments were submitted but staff did field a few inquiring phone calls. At the Planning Commission meeting, the following comment were made:

- Kevin Krasnow, on behalf of the Conservation Alliance, expressed concerns over a parking garage and snow storage on Tract 5 and pushed for the zoning of Tract 5 to be P instead of P/SP.
- Francis Clark, Wilson resident, was supportive of Karns Meadow being used by the public but opposed a parking garage on Tract 5.

### **Findings:**

Pursuant to Section 8.7.3.C 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 that the proposed request to be consistent with the purpose and intent of the LDRs.

The purpose of the P zone (LDR Section 4.2.2) is “to designate land which is owned by the Town, County, State or Federal agencies, or special districts, and whose primary purpose is to provide public recreational opportunities for residents, tourists, and visitors. The P zone provides for active recreational facilities or open space opportunities in these areas.” As such, the Town of Jackson qualifies as a legitimate P landowner and intends to later use the P-zoned tracts for passive recreational use and open space for the public (i.e., pathway and picnic shelter) in line with the conservation easements.

The purpose of the P/SP zone (LDR Section 4.2.1) is “to provide locations for new and existing uses and facilities of a public or semi-public nature.” In addition, it is intended to be under the control of “federal, state, or local governments, or other governmental entities such as a school district or hospital district.” As such, the Town of Jackson qualifies as a legitimate P/SP landowner that intends to later use the P/SP-zoned tract for public facilities (i.e., parking lot) to serve and support the nonmotorized pathway and picnic shelter.

Finally, the purpose of the NL-3 is “to allow the development of single-family detached homes with up to one Accessory Residential Unit (ARU) in a way that is consistent with the existing neighborhood character. This zone is intended for Stable neighborhoods where increased residential density is not intended.” Since Karns Meadow is a Stable area and not intended for increased density, staff finds that NL-3 is appropriate because 1) it maintains the same density as the current NL-1 zone (1 primary unit + 1 ARU), 2) it is consistent with the allowed uses in the conservation easement and in the purchase and sale agreement, and 3) it has a smaller minimum lot size of 7,500 sf which would allow 3 residential lots to be created within the 24,000 sf area designated to the Town for housing.

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

**N/A.** Per a recent Wyoming Supreme Court case, this finding is not applicable until further notice.

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

**Complies.** The rezone is intended to facilitate the development of certain improvements within Karns Meadow that are consistent with the conservation easements and consistent with the Town Council's direction at the October 17, 2022, meeting. The P, P/SP, and NL-3 zones are the appropriate zones to facilitate the desired future uses in each tract.

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

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

**Fiscal Impact.**

None.

**Staff Impact.**

The amount of staff time to review, research, and write this report, including future work to send final letters, was about 25 hours.

**Attachments or Links.**

Department Reviews

Applicant Submittal

**Suggested Motion.**

I move to **approve** a Zoning Map Amendment (P23-079) to rezone the Karns Meadow Tracts listed below, based upon the findings as presented in the staff report, the departmental reviews, and subject to this staff report dated July 17, 2023:

- **Tract 1** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 2** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 3** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 4** – Neighborhood Low Density-1 to Park & Open Space and Neighborhood Low Density-3 (24,000-sf portion of land adjacent to Flat Creek Drive)
- **Tract 5** – Neighborhood Low Density-1 to Public/Semi-Public
- **Tract 6** – Neighborhood Low Density-1 to Park & Open Space
- **Tract 8** – Neighborhood Low Density-1 to Park & Open Space





**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: Karns Meadow Masterplan Development  
Physical Address: Karns Meadow Dr, Jackson, WY 83001  
Lot, Subdivision: see attached PIDN: see attached

**PROPERTY OWNER.**

Name: Town of Jackson/ Jackson Hole Land Trust Phone: 307-733-3932/ 307-733-4707  
Mailing Address: PO Box 1687/ P.O. Box 2897, Jackson, WY ZIP: 83001  
E-mail: \_\_\_\_\_

**APPLICANT/AGENT.**

Name: Teton County/ Jackson Parks & Recreation Phone: 307-732-8485  
Mailing Address: PO Box 811, Jackson, WY ZIP: 83001  
E-mail: rrudd@tetoncountywy.gov

**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](http://www.townofjackson/200/Planning)

|                                    |                                       |                                                   |
|------------------------------------|---------------------------------------|---------------------------------------------------|
| <b>Use Permit</b>                  | <b>Physical Development</b>           | <b>Interpretations</b>                            |
| _____ Basic Use                    | _____ Sketch Plan                     | _____ Formal Interpretation                       |
| _____ Conditional Use              | _____ Development Plan                | _____ Zoning Compliance Verification              |
| _____ Special Use                  | _____ Design Review                   | <b>Amendments to the LDRs</b>                     |
| <b>Relief from the LDRs</b>        | <b>Subdivision/Development Option</b> | _____ LDR Text Amendment                          |
| _____ Administrative Adjustment    | _____ Subdivision Plat                | <input checked="" type="checkbox"/> Map Amendment |
| _____ Variance                     | _____ Boundary Adjustment (replat)    | <b>Miscellaneous</b>                              |
| _____ 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](http://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 #: P22-267 & 268 Environmental Analysis #: P23-006  
Original Permit #: \_\_\_\_\_ Date of Neighborhood Meeting: 3/9/23

**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](http://www.townofjackson.com/200/Planning) and select the relevant application type for submittal requirements.

Have you attached the following?

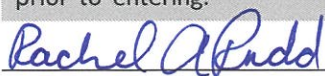
N/A **Application Fee.** Fees are cumulative. Go to [www.townofjackson.com/200/Planning](http://www.townofjackson.com/200/Planning) and select the relevant application type for the fees.

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

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

Rachel Rudd

Name Printed

4/12/2023

Date

Park Planner

Title

Legal Descriptions:

- PT. SE1/4NW1/4 & PT. NE1/4SW1/4 SEC. 33, TWP. 41, RNG. 116 KARNS MEADOW TRACT 1 - 22-41-16-33-2-00-026
- PT. W1/2NE1/4 & PT. SE1/4NW1/4 SEC. 33, TWP. 41, RNG. 116 KARNS MEADOW TRACT 2- 22-41-16-33-1-00-033
- PT. SW1/4NE1/4, PT. SE1/ENW1/4 & PT. NE1/4SW1/4 SEC. 33, TWP. 41, RNG. 116 KARNs MEADOW TRACT 3- 22-41-16-33-1-00-034
- PT. W1/2NE1/4 SEC. 33, TWP. 41, RNG. 116 KARNs MEADOW TRACT 4- 22-41-16-33-1-00-035
- PT. SE1/ENW1/4 SEC. 33, TWP. 41, RNG. 116 KARNs MEADOW TRACT 5 - 22-41-16-33-2-00-028
- PT SE1/4NW1/4, SEC 33, TWP 41, RNG 116. KARNs MEADOW TRACT 6- 22-41-16-33-2-00-031



Karns Meadow Park  
Zoning Map Amendment Narrative  
Tracts 1, 2, 3, 4, 5, & 6

Karns Meadow is located on Karns Meadow Dr. in the Town of Jackson, Wyoming. This 41.6 acre undeveloped park consists of 6 Tracts and is bordered by roads on all sides with sidewalks on the southern, and a portion of the eastern sides. The Flat Creek runs diagonally through the site, from the northeast to the southwest. All of Karns Meadow is within the Natural Resources Overlay and provides habitat for many species and ecosystem services for the Jackson community.

Presently, all Karns Meadow Park Tracts are zoned Neighborhood Low Density (NL-1), which is inconsistent with the present and desired future use of the park. We are asking for consideration of a rezone of Karns Meadow Park Tracts 1, 2, 3, and 6 to the Park and Open Space (P) zone. Tract 4 would also be rezoned to the Park and Open Space (P) zone, with the exception of approximately 24,000 ft<sup>2</sup> on the eastern side of the park, which is reserved for housing and would be rezoned to NL-3, which is the most consistent zone for the conservation easement allowed use (See Attached Map). Tract 5 would be rezoned to Public/Semi-Public. A rezone to P and P/SP for these Tracts will also be consistent with the allowable uses found in the conservation easements (See Attached Map).

A neighborhood meeting was held on March 9th and 10th, 2023, to familiarize the community with the proposed ZMA and also the allowed uses directed by Town Counsel. Public opinion on the project was collected through a Public Input survey, March 9-31 (see attached).

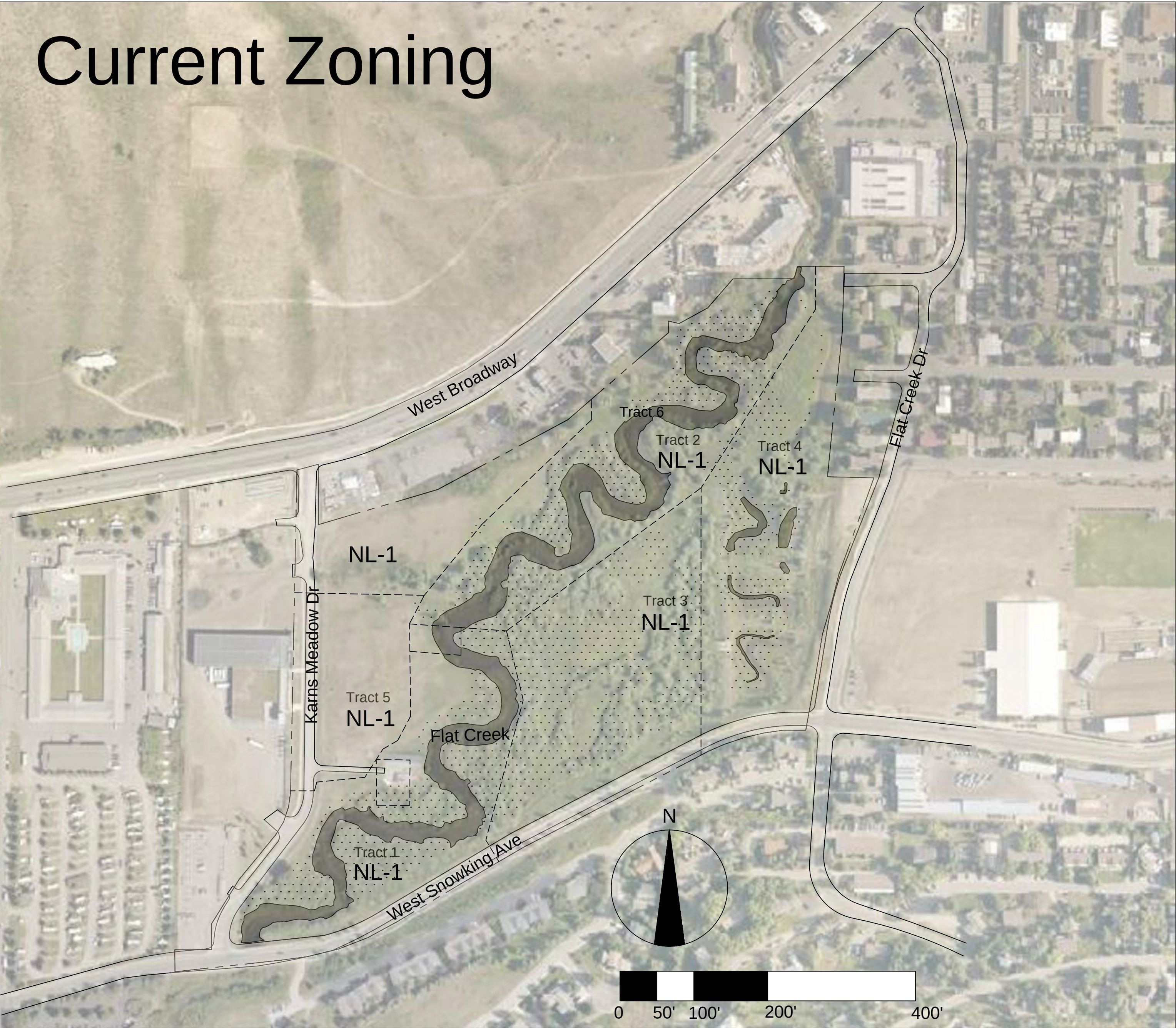
#### Findings for Approval

1. Is consistent with the purposes and organization of the LDRs;
  - Complies- The Town of Jackson Land Development Regulations Div. 1.3 Purpose and Intent states that focus is on the Community Vision and Implementation of the Common Values of Community Character. The proposed rezone of Karns Meadow Park Tracts 1, 2, 3, 4, 5, and 6 will align with these as it is a step toward the Park contributing to the Community Vision and Character.
2. Improves implementation of the desired future character defined in the Illustration of Our Vision chapter of the Comprehensive Plan;
  - Complies- A rezone to P will align with the Comprehensive Plan Illustration of Our Vision as it states that wildlife use and recreational opportunities will need to be carefully balanced in Karns Meadow, moving forward. Rezoning these Tracts will allow for this balance.
3. Is necessary to address changing conditions or a public necessity; and
  - Complies- Complete Neighborhoods require Quality Open Space. The Midtown Subarea is dependent on Karns Meadow Park to fill this role and the rezone to P or P/SP (Tract 5) is the first step in allowing it to function as a Quality Open Space.
4. Is consistent with the other adopted Town Ordinances.
  - Complies.



# Karns Meadow Zoning Map Amendment

Current Zoning



Proposed Zoning



| Tract        | Current Zoning                  | Proposed Zoning                                                          |
|--------------|---------------------------------|--------------------------------------------------------------------------|
| 1, 2, 3, & 6 | Neighborhood Low Density (NL-1) | Park (P)                                                                 |
| 4            | Neighborhood Low Density (NL-1) | Park (P) & Neighborhood Low Density (NL-3) for approx 24,000 square feet |
| 5            | Neighborhood Low Density (NL-1) | Public/Semi-Public (P/SP)                                                |





|                                                |          |                 |               |                 |                                              |
|------------------------------------------------|----------|-----------------|---------------|-----------------|----------------------------------------------|
| Project: Karns Meadow ZMA                      | Address: | Date: 5/25/2023 | Scale: 1"=40' | Sheet #: 1 of 1 | For Information Only<br>Not For Construction |
| Drawing Title: Housing Zone NL-3<br>Dimensions |          | Drawn By: RR    | Version: 2    |                 |                                              |





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

Date:

## LETTER OF AUTHORIZATION

### NAMING APPLICANT AS OWNER'S AGENT

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

Being duly sworn, deposes and says that Jackson Hole Land Trust is the owner in fee of the premises located at:

Name of property owner as listed on deed

Address of Premises: Karns Meadow Park, Karns Meadow Dr., Jackson, WY 83001

Legal Description: PT. SE1/4NW1/4 SEC. 33, TWP. 41, RNG. 116, Parcel 22-41-16-33-2-00-027

Please attach additional sheet for additional addresses and legal descriptions

And, that the person named as follows: Name of Applicant/agent: Teton County/Jackson Parks & Recreation

Mailing address of Applicant/agent: PO Box 811, Jackson, WY 83001

Email address of Applicant/agent: rrudd@tetoncountywy.gov

Phone Number of Applicant/agent: 307-732-8485

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

- ☐ Development/Subdivision Plat Permit Application      ☐ Building Permit Application  
☐ Public Right of Way Permit    ☐ Grading and Erosion Control Permit      ☐ Demolition Permit  
☒ Other (describe) Zoning Amendment

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

Property Owner Signature

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

STATE OF Wyoming )  
 ) SS.  
COUNTY OF Teton )



The foregoing instrument was acknowledged before me by Roxanne Rosales this 9th day of January. WITNESS my hand and official seal.

Notary Public

My commission expires: 3/31/2024





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

Date:

## LETTER OF AUTHORIZATION

### NAMING APPLICANT AS OWNER'S AGENT

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

Tyler Sinclair, Town Manager

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

Address of Premises: Karns Meadow Tracts 1-6

Legal Description: See Attached

Please attach additional sheet for additional addresses and legal descriptions

Teton County/Jackson Parks & Recreation:

Steve Ashworth, Director

And, that the person named as follows: Name of Applicant/agent: Rachel Rudd, Park Planner

Mailing address of Applicant/agent: PO Box 811, Jackson, WY 83001

Email address of Applicant/agent: rrudd@tetoncountywy.gov

Phone Number of Applicant/agent: 307-355-9499

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

☒ Development/Subdivision Plat Permit Application ☒ Building Permit Application

☒ Public Right of Way Permit ☒ Grading and Erosion Control Permit ☐ Business License Application

☒ Demolition Permit ☐ Home Occupation ☐ Other (describe) \_\_\_\_\_

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

Property Owner Signature

Tyler Sinclair Town Manager

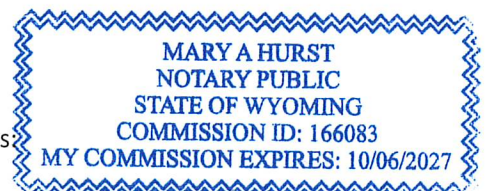
Title if signed by officer, partner or member of corporation, LLC (secretary or corporate owner) partnership or other non-individual Owner

STATE OF Wyoming )  
 ) SS.  
 COUNTY OF Teton )

The foregoing instrument was acknowledged before me by Tyler Sinclair this 20<sup>th</sup> day of April 2023. WITNESS my hand and official seal.

Mary A Hurst  
 Notary Public

My commission expires





- Additional Legal Descriptions:
- PT. W1/2NE1/4 & PT. SE1/4NW1/4 SEC. 33, TWP. 41, RNG. 116 KARNNS MEADOW TRACT 2-22-41-16-33-1-00-033
  - PT. SW1/4NE1/4, PT. SE1/4NW1/4 & PT. NE1/4SW1/4 SEC. 33, TWP. 41, RNG. 116 KARNNS MEADOW TRACT 3-22-41-16-33-1-00-034
  - PT. W1/2NE1/4 SEC. 33, TWP. 41, RNG. 116 KARNNS MEADOW TRACT 4-22-41-16-33-1-00-035
  - PT SE1/4NW1/4, SEC 33, TWP 41, RNG 116. KARNNS MEADOW TRACT 6-22-41-16-33-2-00-031

# Karns Meadow Park Plan

Project Engagement

| VIEWS | PARTICIPANTS | RESPONSES | COMMENTS |
|-------|--------------|-----------|----------|
| 1,418 | 468          | 12,685    | 569      |

## In which county do you live?

|     |                     |       |
|-----|---------------------|-------|
| 91% | Teton County, WY    | 401 ✓ |
| 3%  | Other               | 14 ✓  |
| 3%  | Teton County, ID    | 12 ✓  |
| 3%  | Lincoln County, WY  | 12 ✓  |
| 0%  | Sublette County, WY | 1 ✓   |
| 0%  | Not Sure            | 1 ✓   |

440 Respondents

I am against development for human recreation in Karns Meadow. It needs to be left to the critters, so they can make it across town.

18 days ago

I've been a resident for 30 years and like my neighbors have observed the unmitigated growth of the Jackson sprawl.

18 days ago

Lovely idea, a bike pathway would be useful. Thanks.

18 days ago

Lived in Jackson and come back to visit friends.

19 days ago

Born and raised in Jackson.

19 days ago

Teton county

19 days ago

I lived on the 6 bar k ranch as a kid. I am the oldest son of Donna Martin. Please make it for the wild life and the people. The ambitious can find other entertainments.

19 days ago

I am so disappointed that this land is being developed at all. It was GIFTED to the town of JH to be used as a public park by the Karns Family. It is disgusting to me that you all are trying to develop a gift! The things you are trying to do wasn't what was intended.

19 days ago

I grew up in Teton County.

19 days ago

leave it alone for now. finish what you have started already.

19 days ago

Boise, ID

20 days ago

We think it's a great idea. Keeping the developers away from that property will help preserve what little is left of the old jackson.

21 days ago

This area needs to remain as wild as possible. There is an issue with illegal camping, but it is the only area left in town for the animals. Before the huge Sage Brush condo,s the deer went there to water and have babies. Now, that little spot is all that is left of the other animals. PLEASE leave it alone. As more and more and MORE people move in, it becomes more and more important for the remaining wildlife. Those that are not killed by the increased traffic...

21 days ago

arapahoe

22 days ago

I live in Alpine and work in the Centennial Building which is adjacent to Karns Meadow

22 days ago

I have lived by Karns Meadow for 16 years and am so angry and sad that it will be developed!!! There is to much wildlife using this corridor to have pathways, or DOG parks, or any other improvements.

24 days ago

Everything needs to be done possible to protect wildlife and preserve the environment--this means Karns!

26 days ago

I Was a member of the JHLT when we protected Karns Meadow, with the expectation of creating a green space to benefit residents and visitors. I urge the Town to keep Karns Meadow as a green space affording residents and visitors a special place near the town center. T. A. Brooks

26 days ago

Do not develop Karns Meadow. It was meant to be preserved. Wildlife are continuously being pressured has humans develop more and more. Give this one to the wildlife for once!

26 days ago

Karns Meadow is a critically important and high quality wildlife, stream, wetland, and riparian resource in the Town. It is my opinion that future development and uses need to consider this irreplaceable resource. Is a pathway and groomed trails with lights compatible with crucial winter range, migration routes, and habitat? Let's make wildlife habitat and Flat Creek a priority in Karns Meadow and and human uses second, or not at all. Seasonal winter closures are a good start. Retaining high quality habitat and mitigating habitat should also be implemented. Avoidance of human impacts, both use and direct impacts, should be priority number one for this property.

I think the Town and County could repurpose the potential funds spent to build a pathway in Karns to a more meaningful connection to make it safer for cycle commuters somewhere else in the Town or County. There are real pathway connector needs to keep our children safe. A win- win situation would be to protect Karns Meadow for wildlife and water resources while improving pathway safety and connections for school kids around the intersection of High School Road and Hwy 89 leading to the schools.

28 days ago

First and foremost, we live in the Greater Yellowstone Ecosystem. It is our responsibility to preserve and protect wildlife and its habitat. Leave Karns Meadows for the wildlife, that should be the first priority. There should be no development, no pathway (we have enough), no picnic shelter, no parking, no restrooms and no dogs allowed.

28 days ago

I would like to see a passive park with minimal development.

29 days ago

Karns Meadow is meant to be a wildlife refuge in the center of town. Adding anything to it that interferes with that special habitat is simply selfish and against the intent of that protected zone. Adding bathrooms, benches.....a RIDING PATH???.....these are not needed by us, not needed by wildlife, and the arrogance of suggesting a riding path is shocking. Why would anyone go out of their way to bring a horse to town to ride around that tiny island of preserved space? God help us. Nothing should be added to Karns that is for people. Why can't we leave anything alone?

29 days ago

Limit is the key word when I read your intro. This is a good use for this parcel.....however our wildlife are getting squeezed to the 9th degree and we need to recognize that and stop simply pay that lip service. IMO the JH Conservation Alliance has some good input and ideas on this topic so I won't parrot all of those statements, however clustering any development towards the southern end of this property.....and keeping a bike path gravel or some sort of pervious surface so as to keep wildlife disturbance to a minimum should be part of any responsible plan here. And while we're talking.....let's have some enforcement around the illegal camping that happens here more and more every year, shall we?

29 days ago

I live in MN, but my brother lives on Hansen St. and is constantly sending me photos of wildlife in the meadow and spilling onto his back yard. I get great enjoyment seeing these wildlife photos. When I visit my brother we hike in the mountains and would hike in the meadow.

one month ago

yes I live in the town of Jackson with my husband Sid Karin. We are filling this out together

one month ago

This sounds like a great addition to the community. I like to fish the stream in the early part of the season, and it has always surprised me how inaccessible this area is, especially when it comes to parking.

one month ago

I lived on Flat Creek Drive near Karns Meadow for 17 years before moving to Victor in 2020.

one month ago

lived on karns meado for 14 years

one month ago

Preserve this park for wildlife.

one month ago

Harris County, TX

one month ago

Visit Jackson regularly

one month ago

Fortunately, I live in the townhomes that are right off the Karns Meadow area.

one month ago

Please minimize the impact to our wildlife neighbors by not building the park.

one month ago

I have lived in Teton Count since 1979, 44 years.

one month ago

The development of Karns Meadow should be minimal to avoid a negative impact on wildlife habitat and the movement corridor. Tread lightly.

one month ago

I believe the development of Karns Meadow should be minimal so there would be a negative impact on wildlife habitat and the movement corridor. Tread lightly.

one month ago

King Count,WA

one month ago

Mar s Meadow does not need any development. Less is more with this critical wetlands habitat. Keep it an untouched area

one month ago

Do you live in Jackson, WY?

|     |          |       |
|-----|----------|-------|
| 75% | Yes      | 315 ✓ |
| 25% | No       | 106 ✓ |
| 0%  | Not Sure | 2 ✓   |

422 Respondents

What is your age?

|     |       |       |
|-----|-------|-------|
| 25% | 47-57 | 105 ✓ |
| 24% | 58-68 | 103 ✓ |
| 19% | 36-46 | 83 ✓  |
| 18% | 69-79 | 77 ✓  |
| 10% | 26-35 | 43 ✓  |
| 2%  | >80   | 10 ✓  |
| 1%  | 19-25 | 5 ✓   |
| 0%  | 13-18 | 1 ✓   |
| 0%  | 5-12  | 0 ✓   |

427 Respondents

## How will you get to Karns Meadow Park? (Multiple Selections)

|     |                  |       |
|-----|------------------|-------|
| 62% | Bicycling        | 259 ✓ |
| 51% | Walking          | 216 ✓ |
| 42% | Personal Vehicle | 178 ✓ |
| 10% | Not Sure         | 44 ✓  |
| 8%  | Bus/Transit      | 33 ✓  |
| 7%  | Carpool          | 28 ✓  |

420 Respondents

## How often do you anticipate using Karns Meadow Park? (Multiple Selections)

|     |                    |       |
|-----|--------------------|-------|
| 31% | Weekly             | 128 ✓ |
| 26% | A few times a year | 108 ✓ |
| 19% | Monthly            | 78 ✓  |
| 16% | Not Sure           | 66 ✓  |
| 11% | Never              | 44 ✓  |
| 7%  | Daily              | 31 ✓  |

416 Respondents

## How likely are you to engage in these summer activities in Karns Meadow?

|                                         | Not At All        | Somewhat Likely        | Likely        | Very Likely        |
|-----------------------------------------|-------------------|------------------------|---------------|--------------------|
| Walking/Jogging                         | 16%<br>Not At All | 30%<br>Somewhat Likely | 25%<br>Likely | 29%<br>Very Likely |
| Bicycling                               | 30%<br>Not At All | 23%<br>Somewhat Likely | 22%<br>Likely | 26%<br>Very Likely |
| Fishing                                 | 62%<br>Not At All | 19%<br>Somewhat Likely | 11%<br>Likely | 8%<br>Very Likely  |
| Wildlife Watching                       | 15%<br>Not At All | 24%<br>Somewhat Likely | 31%<br>Likely | 31%<br>Very Likely |
| Picnicking                              | 32%<br>Not At All | 33%<br>Somewhat Likely | 21%<br>Likely | 14%<br>Very Likely |
| Art/Photography                         | 45%<br>Not At All | 28%<br>Somewhat Likely | 15%<br>Likely | 12%<br>Very Likely |
| Education/Research                      | 60%<br>Not At All | 24%<br>Somewhat Likely | 8%<br>Likely  | 8%<br>Very Likely  |
| Gatherings/Events                       | 36%<br>Not At All | 36%<br>Somewhat Likely | 18%<br>Likely | 10%<br>Very Likely |
| No Activity in Spring, Summer, and Fall | 74%<br>Not At All | 17%<br>Somewhat Likely | 4%<br>Likely  | 6%<br>Very Likely  |
| Other                                   | 58%<br>Not At All | 17%<br>Somewhat Likely | 11%<br>Likely | 15%<br>Very Likely |
| 423 respondents                         |                   |                        |               |                    |

A nice option in town.

17 days ago

I am opposed to human recreation in Karns Meadow.

18 days ago

Landing my paraglider.

18 days ago

I always visit open spaces in town and around town

18 days ago

Leave Karns Meadow for wildlife. we have enough.

18 days ago

cross country skiing in winter would be fun.

18 days ago

Keep in mind noise for locals, traffic on SK ave.

18 days ago



bad survey  
stewardship.ecosyst/connectivity R impor  
18 days ago

No pathways in Karen's Meadow Pathways  
18 days ago

NA  
18 days ago

Often  
18 days ago

Just enjoying the habitat.  
18 days ago

Thanks for small footprint. Prioritize wildlife!  
18 days ago

There should be no developed trails & tent camps.  
19 days ago

Keep the meadow as natural as possible  
19 days ago

It would be great to have a low impact park  
19 days ago

No further comment  
19 days ago

Thanks!  
19 days ago

I look forward to being able to walk from work.  
19 days ago

Help Karns family wishes and values come to life.  
19 days ago

Karns Meadow needs to be left for outdoor activiti  
19 days ago

I will use in Spring Summer and Fall  
19 days ago

I would love to be able to use this land as a park  
19 days ago

If Nordic skiing was added, we would do that too.  
19 days ago

I am an original Karns descendant.  
19 days ago

This looks like a wonderful community resource.  
19 days ago

Do not do a thing. Leave it as a wild open space

19 days ago

Our family enjoyed many activities in the meadow

19 days ago

I am in full support of this project.

19 days ago

Protect flat creek and the precious nature ❤️

19 days ago

It would be a boon for the community

19 days ago

dont touch it

19 days ago

Please follow through with this plan

19 days ago

The park should be horse friendly.

19 days ago

It would be nice to keep some wild space in town.

19 days ago

I like to fly my remote control plane in the field

19 days ago

Would urge wildlife study prior to development!

19 days ago

Leave it to the wildlife.

19 days ago

Leave it undeveloped.

19 days ago

This should not be developed. Leave it alone.

19 days ago

Do not allow campers living there

19 days ago

summer activities in Karns Meadow will be great.

19 days ago

no dogs allowed

19 days ago

Protect Karns Meadow & keep it light human use

20 days ago

I would prefer there not be a park in Karns meadow

20 days ago

Drive to Jackson daily, park would be great !

20 days ago

The town is over developed, with no room left.

21 days ago

We have enough parks...why develop wildlife space?

21 days ago

We need to preserve stormwater quality.

22 days ago

This has such wonderful potential!

22 days ago

A family friendly 9 hole disc golf course in town.

22 days ago

Keep Karns natural and minimally developed.

22 days ago

Leave Karns to wildlife, we hv enough trails etc

22 days ago

Paragliding!

22 days ago

Minimal change to natural condition of the Meadows

22 days ago

I believe Karns meadows should be left WILD.

22 days ago

Please groom trails for Nordic skiing

22 days ago

Keep it for the native undomesticated locals!

22 days ago

Open space is for the animals not for car parking

22 days ago

Wildlife should take top priority.

22 days ago

Pls allowdogs

23 days ago

Wasn't sure how to answer the "no activity in spri

24 days ago

Should be left alone

25 days ago

Leave it wild. Reinstate youth-only fishing regs.

25 days ago

Karns needs to be preserved for everything and all

26 days ago

Karns Meadows doesn't need summer activities

26 days ago

Oppose further development of this area.

26 days ago

Do not develop Karns Meadow.

26 days ago

Please keep the Meadow wild. No development.

28 days ago

Stop developing wildlife habitat.

28 days ago

Existing wetland willows prevents creek views

28 days ago

Wonderful addition for the Community

29 days ago

Passive park with minimal development.

29 days ago

Again, no new activity for Karns Meadow, please!

29 days ago

Excited for Karns to become a park the town enjoys

29 days ago

Would definitely walk the trail(s) often.

one month ago

-

one month ago

No development in Karns Meadow!

one month ago

Yes on Picnic, toilet by START bus. NO pathways!

one month ago

I am against creating a park in Karns Meadow.

one month ago

Karns is a natural gem and key wildlife area

one month ago

Looking forward to it!

one month ago

please incorporate historic cabin into the design

one month ago

Skiing! would it be groomed for Nordic!? I hope so

one month ago

no parking, access by town start bus only.

one month ago

Karns Meadow should have minimal development.

one month ago

Please no pathways in the riparian corridor.

one month ago

wildlife area keep it wild

one month ago

Best to preserve undeveloped area for wildlife.

one month ago

This is an underutilized piece of public land.

one month ago

Parking not needed - keep it green

one month ago

Packed snow pathways (noplow) pls in Karns Meadows

one month ago

Thank you!

one month ago

Keep it undeveloped for the sake of wildlife

one month ago

Do not develop Karns Meadow!

one month ago

Leave it alone!

one month ago

Please leave Karns Meadow alone.

one month ago

Please leave this area undeveloped.

one month ago

I'd prefer to see no human activity there.

one month ago

We have PLENTY of parks in and around town.

one month ago

This space is for wildlife, not people.

one month ago

Let the wildlife have this space.

one month ago

floating, paddling Flat Creek

one month ago

Preserve the meadow for wildlife. Top priority

one month ago

Would love any access to this great space!

one month ago

I would walk here more often if dogs are allowed.

one month ago

Preserve the Meadow as is for wildlife haven

one month ago

ok

one month ago

enjoying the waterway and willows etc.

one month ago

Must we ruin wintering wildlife's only corridor?

one month ago

I would not disrupt this fragile ecosystem

one month ago

I would never wonder into this wildlife habitat

one month ago

sounds like a good idea for all items..

one month ago

Keep wildlife corridor by RodeoDr easy for animals

one month ago

I live very close by and plan to use Karns often!

one month ago

We are surrounded by parks, leave this space alone

one month ago

Confusing. Wildlife and Activities incompatible.

one month ago

Karns meadow is a vital space for town wildlife

one month ago

Please keep this area wild/untouched.

one month ago

Only would be there if nature sanctuary

one month ago

Use will depend on layout and stuff

one month ago

No activities == more wildlife.

one month ago

Please leave the meadow as it is.

one month ago

I would be very likely to utilize Karns Meadow.

one month ago

Don't build the park. Year round wildlife needs it

one month ago

If you develop any of Karns Meadow wildlife will s

one month ago

No development. Should be a wildlife refuge.

one month ago

Presumption that Karns Mdws will be developed.

one month ago

Open space maximized. human minimized.

one month ago

Totally against this nature area development

one month ago

Parking is important in the area zoned for that!

one month ago

bike path along Snow King Ave. separated from rd.

one month ago

I would like Karns Meadow to remain wild.

one month ago

Are animals welfare being considered?

one month ago

I am concerned about the welfare of animals!

one month ago

Are you considering the welfare of the animals?

one month ago

Leave the meadow alone. Protect it for wildlife

one month ago

How are people supposed to answer "No Activity in

one month ago

Sounds like a great mid-town place to take kids!

one month ago

## How likely are you to engage in these winter activities in Karns Meadow?

|                                | Not At All        | Somewhat Likely        | Likely        | Very Likely        |
|--------------------------------|-------------------|------------------------|---------------|--------------------|
| Ungroomed Cross-country Skiing | 53%<br>Not At All | 28%<br>Somewhat Likely | 10%<br>Likely | 9%<br>Very Likely  |
| Groomed Cross Country Skiing   | 35%<br>Not At All | 23%<br>Somewhat Likely | 19%<br>Likely | 23%<br>Very Likely |
| Snowshoeing                    | 69%<br>Not At All | 19%<br>Somewhat Likely | 8%<br>Likely  | 4%<br>Very Likely  |
| Skate Skiing                   | 64%<br>Not At All | 12%<br>Somewhat Likely | 11%<br>Likely | 13%<br>Very Likely |
| Sledding                       | 67%<br>Not At All | 17%<br>Somewhat Likely | 10%<br>Likely | 6%<br>Very Likely  |
| Wildlife Watching              | 23%<br>Not At All | 27%<br>Somewhat Likely | 23%<br>Likely | 26%<br>Very Likely |
| Art/Photography                | 51%<br>Not At All | 25%<br>Somewhat Likely | 12%<br>Likely | 12%<br>Very Likely |
| Gatherings/Events              | 54%<br>Not At All | 29%<br>Somewhat Likely | 12%<br>Likely | 6%<br>Very Likely  |
| Education/Research             | 64%<br>Not At All | 21%<br>Somewhat Likely | 9%<br>Likely  | 7%<br>Very Likely  |
| No Activity in WInter          | 65%<br>Not At All | 14%<br>Somewhat Likely | 6%<br>Likely  | 14%<br>Very Likely |
| Other (Comment)                | 77%<br>Not At All | 9%<br>Somewhat Likely  | 4%<br>Likely  | 10%<br>Very Likely |
| 387 respondents                |                   |                        |               |                    |

How about a winter closure?

18 days ago

I always enjoy mtg friends in open spaces in town

18 days ago

Wonderful opportunity.

18 days ago

Keep in mind noise for local neighbors &amp; traffic.

18 days ago

human impact on wildlife  
habitat  
winter closure

18 days ago



No pathways in Karns

18 days ago

A

18 days ago

Please cater to ecological value/habitat first.

18 days ago

Karns Meadow should be closed to public in winter.

19 days ago

No further comment

19 days ago

Will use daily.

19 days ago

This WAS our childhood playground.Keep it that way

19 days ago

Please, keep area wild accessible & no motor vehic

19 days ago

Sorry - I didn't see the winter section. ;)

19 days ago

Sounds great!

19 days ago

Yes to more nordic trails

19 days ago

dont touch it

19 days ago

I would love to be able to go to the Karns meadow

19 days ago

They could groom in a sweet snow bike route

19 days ago

Wildlife only in winter.

19 days ago

This is pristine animal habitat, leave it alone.

19 days ago

I am over 80, so my needs at Karn's Meadow are,

19 days ago

Winter activities will be great for all here.

19 days ago

Winter closure would be wise.

19 days ago

passive park #1. Groomed nordic #2.

19 days ago

I advocate for lowest amount of human use possible

20 days ago

I would prefer there not be a park in Karns meadow

20 days ago

I'm STRONGLY opposed to any pathways. Enough now!

20 days ago

Would love groomed XC in winter

20 days ago

Let the wildlife have their space, stop developing

21 days ago

Let the wildlife have their space! Stop developing

21 days ago

This is critical habitat for wildlife.

22 days ago

Please consider this central, yet quiet rec space.

22 days ago

Minimum change to natural conditions of meadows

22 days ago

should be left to the animals.

22 days ago

It should be left to animals, birds.

22 days ago

A big negative on winter use, protect the animals

22 days ago

WILDLIFE should take top priority.

22 days ago

Pls allow dogs

23 days ago

I am firmly against any development at Karns.

24 days ago

There should be NO WINTER ACTIVITY

24 days ago

Should be left

25 days ago

Leave it alone and leave it wild.

25 days ago

Karns Meadow doesn't need winter activities

26 days ago

Keep this for wildlife. Do not develop Karns Meado

26 days ago

This land was set aside to be USED by people!

28 days ago

Please keep the Meadow wild. No Development.

28 days ago

Stop developing wildlife habitat.

28 days ago

There should be a winter winter wildlife.

28 days ago

Meadow is a safe food source for many mammals

28 days ago

Winter is a safe food source for many mammals

28 days ago

Yahoo more space to recreate outside, our passion

29 days ago

No activity.

29 days ago

Fat biking

one month ago

Fat Biking?

one month ago

-

one month ago

like knowing a place for wildlife without people

one month ago

No development in Karns Meadow!

one month ago

No winter activity should be permitted here.

one month ago

no further comments

one month ago

please make this a wildlife winter closure area.

one month ago

Already lots of otherplaces for winter activities.

one month ago

no winter use

one month ago

)

one month ago

Fat Biking too! Pls don't plow any pathways!Unsafe

one month ago

Prefer winter closure. Can ski elsewhere.

one month ago

-

one month ago

Leave this area alone.

one month ago

Let wildlife and wildlife alone, use this area!

one month ago

Preserve the area for wildlife.

one month ago

This space should be designated for wildlife.

one month ago

Prefer no winter activities to protect wildlife

one month ago

Sounds amazing!

one month ago

Again, I am more likely to use if dogs are allowed

one month ago

should be closed in winter for wildlife

one month ago

Skiing would be great

one month ago

the area is best left alone in winter

one month ago

None! SO MANY OTHER BETTER OPTIONS.

one month ago

The wildlife are most stressed in winter.

one month ago

This park should be closed in winter for wildlife.

one month ago

Fatbiking, commuter biking and regular walking

one month ago

Seeing what animals winter in park

one month ago

It would be amazing to use the park in winter!

one month ago

Please leave this space natural for wildlife

one month ago

Crucial Swan Winter Habitat!!

one month ago

Please keep it safe for wildlife.

one month ago

Activities stress wildlife. Wildlife viewing only

one month ago

Winter fire pit for gathering would be nice

one month ago

No activity == more wildlife's

one month ago

No activity == more wildlife.

one month ago

Critical winter wildlife habitat.

one month ago

The Karns family should not have a say in this

one month ago

I'm opposed to ant development in this area.

one month ago

Presumption of development.

Poorly written surge

one month ago

No winter use should be allowed.

one month ago

Leave this area to the wildlife only

one month ago

Keep it wild

one month ago

I keep seeing posts that animals are starving!

one month ago

Are the animals being cared for properly?

one month ago

I am concerned about the animals welfare!

one month ago

Leave the meadow alone. Humans have lots of space

one month ago



How important are the following to you regarding the design for Karns Meadow?

|                                             | Not At All        | Somewhat Important        | Important        | Very Important        |
|---------------------------------------------|-------------------|---------------------------|------------------|-----------------------|
| Recreational Amenities                      | 32%<br>Not At All | 26%<br>Somewhat Important | 20%<br>Important | 22%<br>Very Important |
| Accessibility                               | 23%<br>Not At All | 27%<br>Somewhat Important | 24%<br>Important | 25%<br>Very Important |
| Parking                                     | 43%<br>Not At All | 28%<br>Somewhat Important | 18%<br>Important | 11%<br>Very Important |
| Preserving Ecological Functions and Habitat | 3%<br>Not At All  | 6%<br>Somewhat Important  | 14%<br>Important | 78%<br>Very Important |
| Other (Comment)                             | 53%<br>Not At All | 8%<br>Somewhat Important  | 8%<br>Important  | 32%<br>Very Important |
| 393 respondents                             |                   |                           |                  |                       |

Birding and wildlife viewing. Enjoying coexistence

17 days ago

Leave it for the critters.

18 days ago

All aspects of the design are vital

18 days ago

A quiet space for nature and people to gather.

18 days ago

Be mindful of locals in area & traffic on SK ave!

18 days ago

address concerns raised in the EA and incorporate,

18 days ago

issues r nuanced so impossible to answer in format

18 days ago

Just one place in town that's really natural!

18 days ago

Can't wait!

18 days ago

Karns Meadow should be kept as-is for wildlife.

19 days ago

Groomed xc & skate skiing.

19 days ago

Keep any pathway on the perimeter and do not make.

19 days ago

It's Important that wildlife + people can coexist

19 days ago

None

19 days ago

Maybe allow dogs only on leashes.

19 days ago

Allow all to enjoy my heritage gift of Karns Park!

19 days ago

Keeping it wild with minimal human interaction ide

19 days ago

best to keep this area for wildlife & minimal huma

19 days ago

Supporting the creek and the wildlife around it

19 days ago

Why is track 6 now showing as the Karns Meadow?

19 days ago

Do not do anything. Leave it as a wild open space.

19 days ago

Do not do a thing. Leave it as a wild open space

19 days ago

Do the right thing!!

19 days ago

leave it be

19 days ago

Make the park horse friendly.

19 days ago

Leave it to the wildlife.

19 days ago

I do not think there should be development

19 days ago

Keeping Karns Meadow an ecological spot can be don

19 days ago

Karns Meadows should remain UNTOUCHED!!!!

19 days ago



Use Karns to help improve Flat Creek H2O quality

20 days ago

I would prefer there not be a park in Karns meadow

20 days ago

Wish we could "Leave It As It Is" Teddy Roosevelt

20 days ago

Winter dog park across from bus building.

20 days ago

PLEASE think of the few animals we have left.

21 days ago

Wildlife>Human recreation

21 days ago

This should stay undeveloped.

22 days ago

Connecting trails across flat creek is good

22 days ago

Minimum change to natural conditions in meadows

22 days ago

Wildlife animal crossing on Broadway.

22 days ago

NO night lights on the trail if it goes in!

22 days ago

Wildlife is top priority. They were here first.

22 days ago

do not build housing at eastern edge of karns

22 days ago

restrict dogs & cats - fence lg. apt complex adjo

22 days ago

Pls allow dogs

23 days ago

We do not need another manufactured park.

24 days ago

Leave it alone the way it is

24 days ago

Should be left alone

25 days ago

Leave it alone and leave it wild.

25 days ago

Wildlife,wildlife,wildlife,wildlife, wildlife!!!!

26 days ago

Karns Meadow doesn't need recreational anything

26 days ago

Development pressures an already stressed wildlife

26 days ago

Protecting the wildlife that use and travel thru.

27 days ago

This was always meant to be for people to use

28 days ago

Please keep the Meadow wild. No development.

28 days ago

Stop developing wildlife habitat.

28 days ago

Access to KM should be limited to western edge.

28 days ago

Just don't do it.

29 days ago

How about dog walking?

29 days ago

isn't the meadow part of the wildlife corridor ?

29 days ago

Please do not allow dogs in Karns Meadow.

29 days ago

Keep it simple, limited parking with paths

29 days ago

Do not disturb the wildlife!

one month ago

The original plan for a loop pathway trail is need

one month ago

Parking should occur on street, not on site.

one month ago

-

one month ago

No development in Karns Meadow!

one month ago

Leave room for wildlife please!

one month ago

Consider the no park option or reducing park featu

one month ago

Karns is already accessible by being right in town

one month ago

quiet, tranquility. think the LRP goals.

one month ago

Wildlife need this space more than humans do.

one month ago

Please preserve ecological function and habitat.

one month ago

Utilize existing cabin on Karns in park design

one month ago

TOJ is surrounded by park land for rec use.

one month ago

The preservation and reuse of the Mercer Cabin

one month ago

Don't need parking - keep all parks green

one month ago

Please don't plow any pathways - grooming is fine

one month ago

Don't provide trash pick-up or recycling.

one month ago

Leave Karns Meadow alone.

one month ago

We don't need any more parks in town!

one month ago

Preserve the habitat for wildlife.

one month ago

Space for wildlife, not for people.

one month ago

Rodeo grounds& Wildlife Ln TH parking r good;

one month ago

Karns attracts deer over roadways! death ensues!

one month ago

Wildlife is top priority

one month ago

Mercer Cabin? I do not see on plan.

one month ago

Depends on what the amenities are.

one month ago

I live nearby and I know preservation is important

one month ago

Park should be a balance of public rec and habitat

one month ago

other parks offer recreation amenities

one month ago

Is this going to be a winter wildlife closure?

one month ago

This seems a pointless, heartless endeavor.

one month ago

Last natural wildlife habitat in Jackson.

one month ago

Prioritize wildlife needs over human wants.

one month ago

Human presence and wildlife habitat are symbiotic.

one month ago

Keeping willows and growth by creek for wildlife

one month ago

I just want to be able to enjoy it!

one month ago

Limit nodes of activity near cleaner Flat Creek

one month ago

Same as above

one month ago

Easy and safe for elderly. No wheels, dogs etc.

one month ago

Minimal development/use to protect wildlife.

one month ago

There is no need for development. Keep it wild

one month ago

Don't build it!

one month ago

Consider the many dogs that will hurt wildlife

one month ago

I'm opposed to any development. Save wildlife!

one month ago

Is development inevitable? Wildlife's last bastio

one month ago

Open space and wildlife habitat is priority.

one month ago

Open space and wildlife habitat is primary concern

one month ago

Please do not ruin the area!

one month ago

Preserve the meadow as is. Lots of places for folk

one month ago

We need habitat more than parks

one month ago

Other? No camping

one month ago

unpaved walkway -sidewalk already provides paved

one month ago

one month ago

Respect the original vision of the karns family

one month ago

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Please share any additional thoughts and comments about this project.

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Karns Meadow is a remarkable, still natural place, which is increasingly rare in the Town of Jackson. The combination of Flat Creek and associated wetlands, the still-abundant wild birds, plus the capacity to offer habitat for mule deer and other species is critical

17 days ago

Don't do it. There's plenty of town accessible recreation.

18 days ago

I am in full support of the plans Pete Karns and his sisters had in mind for this space. I agree that the wildlife there should not be disrupted, but a walking path, preferably unpaved, and cross country ski trails in the Winter, are highly recommended and supported.

18 days ago

I live in teton village. I very much enjoy and visit these open spaces in town .

18 days ago

A legacy project preserving an ecosystem!

18 days ago

Please make as minimal impact in all aspects of this project. Protect the green space and habit of animals first.

18 days ago

The design of this survey is highly unsatisfactory.

There is no reference to the components and recommendations of the EA prepared by Eco-Connect and so no way to address those issues and concerns or for you to assess the level of support in the community for the issues raised by the EA

The Comp plan community value of ecosystem stewardship is missing in this solicitation. It should be included in any survey

18 days ago

Wildlife watching and development are incompatible! leave Karns Meadow as it is. It provides critical habitat for mule deer and nesting areas for waterfowl. We need to protect undeveloped green spaces in town. Bikers already have a safe way to commute in this area.

18 days ago

You can't have wildlife watching and biking, skiing etc.. leave Karins Meadow as is! It provides critical habitat for mule deer and nesting areas for waterfowl. We need to protect undeveloped green spaces in town. Bikers already have a safe way to commute in this area. There are already plentiful spaces for in town recreation.

18 days ago

xyz

18 days ago

The Karns family wants it to be a park. You should follow their wishes. This can be a park and recreational space without destroying habitat. Please implement this plan.

18 days ago

Paving and adding lots of infrastructure to this space would be horrible! Please preserve the one place in the town of Jackson that's actually the way it's meant to be

18 days ago

I don't like the potential for development in Tracts 4, 5. It will squeeze the habitat. Light amenities (restroom, shelter, outer pathway) are great. Leave it at that. We are choking out the inhabitants that were here before us and compromising the Creek's ability to sustain itself.

18 days ago

Need to provide access to nature and outdoor activities within access to the over built downtown area.

18 days ago

I like the idea of a trail along the outside to allow use of a natural space. I don't like the idea of a parking space as the park is already next to a bike path and it will only encourage more driving in our congested town. I imagine the space more like Russ Garaman Park in terms of amenities - just trails and maybe a shelter.

18 days ago

I like the idea of a trail along the outside edge of the park to allow for enjoyment of a natural space. I don't think there should be bathrooms or a parking area. A parking area would just further encourage people driving in our congested town. I'm imagining it more of a space like Russ Garaman park in terms of amenities - trail and maybe a shelter but parking seems like too much considering it is close to east and west Jackson. Since it is along the bike path it should still be very accessible.

18 days ago

I am opposed to installing lighting in the meadow.

18 days ago

Please do not develop Karns Meadow. It is heavily used by wildlife year-round and is critical in the winter months. Please remove tent camps that occur in the meadow during the summer.

19 days ago

This area should not have lights, pavement or excessive infrastructure to maintain the natural feel and wildlife habitat value. Mule deer use this property to connect from the south facing butte to snow king mtn and it provides good cover for movement in an otherwise urban surrounding. Ideally a wildlife crossing on Broadway as envisioned in the master planning document would be part of the planning of this space. Humans have many other similar spaces to recreate in the area. Josie's, Garman's , etc. Gravel trails seem more appropriate if needed.

19 days ago

Keep the meadow natural. We are already overdeveloping everywhere with more people living here and encroaching on wildlife habitat. Can't we have one place we don't mess with???

19 days ago

Parking at rodeo grounds?

Hopefully dogs will not be permitted and there will be clear signage at every entry point.

19 days ago

19 days ago

Please don't build trails, parking or bathrooms. The wildlife needs the area more than we do.

19 days ago

Do not overbuild!! There is enough of that already!!!

19 days ago

The Karns Meadow was my back yard growing up in Jackson Hole. 45 acres of wild lands that my siblings, friends, neighbors and family worked, explored and ran around in..Played among the willows, fished and floated Flat Creek, rode horses, cross country skied, built forts, foraged, studied nature, witnessed wildlife and immersed ourselves in a type of "Narnia"..for years! My childhood was unlike many others. I am who I am by and large from that experience and coming of age in and around the Karns Meadow.

When my grandparents passed away, our family had to sell/pay inheritance taxes on prime undeveloped land in Jackson Hole. Instead of selling or developing it, we opted to work with the government and have it turned into a Town Park, so that ALL OF YOU could experience the magic of the meadow the way we did when it was our families' ranch, private property, nature park and homestead for over 100 years!!

For 20 years now it has been my father and aunts' legacy and wish to have a pathway built around the perimeter, picnic tables, wildlife viewing areas/blinds, parking areas and access. The Town of Jackson, Parks and Rec, Land Trust and several other organizations have had a plan, yet they continue to postpone, while environmental groups fight and fight against any development and other Town projects take precedent. It's not going to be condos, shopping malls or highways for goodness sakes! The deer and fox and fish have plenty of room to migrate, wander and coexist, while people get to enjoy nature right in the heart of the town of Jackson. Please fill out this survey and ENCOURAGE our town planners to follow through with our family wishes for the Karns Meadow to connect to the pathways and be enjoyed by all!

19 days ago

I grew up adjacent to the meadows. It WAS our childhood playground and I would not have wanted it any other way. Ha I g this in town spot to be able to enjoy nature is vitally important to our community.

19 days ago

IT'S a diamond in the ruff. Do it right . Thanks

19 days ago

Please keep the original legacy alive!

19 days ago

Being able to ski or hike thru area is nice but leaving it wild for wildlife habitat to coexist with humans is more important

19 days ago

Keep it wild for wildlife. Parking lot sufficient in size for limited visitation 4 season like LRP. Parking lot size limits park capacity.

19 days ago

I love that this has the potential to be the Central Park of Wyoming.

19 days ago

Big kudos to the Karns family for their vision.

19 days ago

i was born and raised in jackson, and continue to reside in jackson. what better way to support this community than to create a space for all to enjoy!

19 days ago

Check the proposal. Track 5 'parking garage'. The town is starting their nibbles, just like the rodeo grounds. How long until they want employee housing?

19 days ago

I hope it happens. We need more space like this in our communities around the world. Thank you!!

19 days ago



Please keep any development to a minimum. Where are the deer and foxes going to go? What about the songbirds and ducks in there? Do we have to impose a human presence on every square foot of Jackson?

19 days ago

My family enjoyed the meadow for 20+ years. It would be a shame not to be able to continue.

19 days ago

I am part of the Karns Family and I would like to see the Town of Jackson follow through with the agreement that we had when we sold the Karns Ranch 20 years ago!

19 days ago

If there is a picnic area parking will be important though street side is fine

19 days ago

I love low-amenity parks like this design and May Park (which in my opinion should remain minimally developed.) Walking biking paths around and adjacent to natural features like streams and vegetation are the best places for both kid and adult recreation. They foster a relationship to nature and give us all a chance to practice sports like learning to ride a bike or rollerskate or skateboard. They also allow moderately good habitat for birds and deer, etc. It's a win-win design. Let's make it happen instead of building stuff like pickleball courts and butterfly gardens, etc.

19 days ago

No more building, leave this for the community

19 days ago

I think it's really important that the town use this land for what it was gifted for. Our county is surrounded by a million acres of national forest, there is plenty of space in the park and outside of it for wildlife.

19 days ago

It would be great to be able to use the park to exercise horses. The arena is just across the road and the preservation of our western heritage is important. If you are offering trails for bikes you should also have trails for horses.

19 days ago

Keep the cabin! Please don't pave any land or use any more of it for parking cars. Create natural surface universally accessible trails only and maintain the runway for the paragliders. Thanks

19 days ago

Often development is NOT progress.

19 days ago

Wildlife study! Don't develop if it would disrupt. Also have you considered the number of people who campout there illegally? You need to address that when planning...

19 days ago

This land should only be used as parkland. No housing.

19 days ago

Please do not develop this piece of land. The animals are already being squeezed out of habitats. Please just leave it alone.

19 days ago

Please protect the wildlife corridor that is Karns meadows. We do not need more play and park walking areas in town.

19 days ago

I think Karns should be closed in winter and limited activity in other months. Too important an area for wildlife in town

19 days ago

Please and thank you for protecting this open space in town. Not only is it very important for us people residents, but it's a nice little sanctuary for our animal friends to have to help them feel safer and more comfortable right in town. Those two details are extremely valuable in making this place as special to live in as it is.

19 days ago

Opening Karns Meadow for more/easier recreation activities will be beneficial for all. We can preserve it while letting the public enjoy it in harmony with our abundant wildlife.

19 days ago

This habitat should be conserved, not trampled by humans, bikes and pets

19 days ago

Karns is a valuable wildlife habitat. i would prefer it be monitored and left alone. Given taht some development will happen, my primary interest is in a groomed nordic track.

19 days ago

Please ensure this is open for fishing, especially for kids.

20 days ago

Thank you Karns family. I hope we can protect this land further for wildlife and water quality.

20 days ago

I would prefer there not be a park in Karns meadow. It's one of the few less-disturbed, open, green areas that remains in Jackson. I prefer that we don't touch it. We have a lot of good parks. If you want to build a park, tear down a luxury hotel and build one there. If you're going to build anything on Karns, build affordable, deed-restricted housing.

20 days ago

If some development has to happen, PLEASE NO PATHWAYS. We have so many options already. The meadows need protection for wildlife--humans have dominated every. Let the meadows be.

20 days ago

Karns Meadow should be adapted for people to use. Wildlife has extensive habitat in Teton County, and besides, Pinedale's town parks, which are developed to a certain extent, are moose and deer habitat, especially in the open grassy areas. Two winters ago, there were 5-6 moose in the Pinedale American Legion Park for significant periods, and there are moose there every winter. Just because you take out willows and put in grass for people to use, does not mean that wildlife will leave the park. In fact, I would bet that deer and moose would be better off in the winter if the Karn's Wildlife Preserve was transformed into a proper town park that people could enjoy, aka Pinedale's town parks.

20 days ago

Somewhere along the line didn't this community agree that wildlife is of the number one importance in the vision for this community? I do believe that may still hold true today so why would we as a community do anything to interfere with that?

I understand the Karn's families vision for this parcel though if the majority of the community were behind the more responsible vision of "leaving it to the wildlife" I would hope they would be on board. If not return the parcel to them, save a considerable amount of tax payer money and let them develop it, maintain it and accept the consequences.

21 days ago

I agree with the Conservation Alliance. They advocate for minimizing the negative impact on wildlife habitat and movement corridors (through development and human use). I also encourage the following actions:

A pathway that does not encircle the meadow.  
Minimizing impermeable (paved) surfaces.  
Contain as much infrastructure as possible next to the bus barn (parking area, public bathroom) rather than on the meadow parcels.  
Instate a winter closure of the interior of the meadow (area between Flat creek and Broadway).  
Town enforcement of a no camping policy in the meadow during summer.  
No dogs allowed in the park to reduce wildlife conflict.

21 days ago

Don't do it. Leave it alone. Just patrol more to keep the illegal campers out.

21 days ago

Don't pave more of our paradise!

21 days ago

This is an essential space for mule deer, birds, etc. Jackson has SO many parks that have been developed for human use. Safe, human-free spaces in town are getting less and less, especially for mule deer in the winter. This development is NOT NECESSARY.

21 days ago

We are loving JH to death. Back off. Do nothing. People and wilderness are incompatible and everything around here seems to offer more amenities that bring more people.

22 days ago

This should stay undeveloped, natural resource for wildlife habitat.

22 days ago

Connecting trails across flat creek is good

22 days ago

Paragliding

22 days ago

Once we wreck this area for human use, we'll never get the animals who call this home. Let's be wise... it's an amazing parcel.

22 days ago

I wholly support Karns Meadow being used for passive recreation! The location of this area should be Jackson's "Central Park." I am excited to see things moving in that direction!

22 days ago

I feel the deer and birds in town need a natural place to live. Please don't put people/dogs/bikes in this pristine area. I thought it would always be a safe place for wildlife.

22 days ago

This land is quite sensitive and an important natural wildlife habitat in an otherwise busy urban area. Limit disturbances by keeping the proposed pathway away from the riparian habitat and do not provide a parking lot! This is a dense urban area that will only get denser (according to the master plan) no new parking except for ADA only spots

22 days ago

This represents the last eco-habitat friendly area in town and it is critical for our wildlife. Moose, deer, fox use this area as a refuge for it is free from the intrusion of people and tourists.

22 days ago

Wildlife is top priority. Taking their land for more recreation is silly; if it "must" be done, do it in a way that minimizes impact on wildlife the least.

22 days ago

I would love to see Karns Meadow park developed for public use, although I don't know how it can be done without being overrun by a million dogs. It doesn't take an environmental impact study to deduce that large numbers of dogs will disturb the deer population and other wildlife. The town needs a designated dog park for the spring, summer, and fall months or this is going to be a problem.

22 days ago

fence to restrict dogs & cats, but not wildlife. fence large apt complex on Broadway from pet access to meadows.

22 days ago

It's wishful thinking, but the true success story here would be to leave Karns Meadow completely alone as a haven of natural habitat for the wildlife that depend on it.

24 days ago

I would like to see Karns Meadow stay wild. There are plenty of opportunities in our area to recreate in the ways mentioned above. The wildlife need refuge and this area can continue to provide that.

25 days ago

We have enough parks and pathways already. This is one of the very last pieces of habitat that provides wildlife connectivity through town. Please limit the amount of development and human activity in this area in the design and keep human activity to the periphery. This area should be closed in the winter.

25 days ago

Leave it alone and leave it wild.

25 days ago

No Pathway inside W boundary of Tract 1!!

26 days ago

no other sixth extinction

26 days ago

We really do NOT need any more buildings or structures. Let's try to keep SOMETHING in Jackson as it currently is if we can't remove what has been placed there already. Thank you for the opportunity to comment.

26 days ago

Why does everything have to be developed? There are some places, especially sensitive wetlands that does need human activity. Keep it pristine-no people necessary!!!

26 days ago

Leave the parcel alone. Preservation was the intent when purchased from the Karns Family. Don't go back on your promise!

26 days ago

It has taken far too long for the town to move forward with a plan to make this land accessible and usable for our WHOLE community. Two or three neighbors screaming about wildlife is ridiculous.

28 days ago

Karns Meadow is a critically important and high quality wildlife, stream, wetland, and riparian resource in the Town. It is my opinion that future development and uses need to consider this irreplaceable resource. Is a pathway and groomed trails with lights compatible with crucial winter range, migration routes, and habitat? Let's make wildlife habitat and Flat Creek a priority in Karns Meadow and human uses second, or not at all. Seasonal winter closures are a good start. Retaining high quality habitat and mitigating habitat should also be implemented. Avoidance of human impacts, both use and direct impacts, should be priority number one for this property.

I think the Town and County could repurpose the potential funds spent to build a pathway in Karns to a more meaningful connection to make it safer for cycle commuters somewhere else in the Town or County. There are real pathway connector needs to keep our children safe. A win- win situation would be to protect Karns Meadow for wildlife and water resources while improving pathway safety and connections for school kids around the intersection of High School Road and Hwy 89 leading to the schools.

28 days ago

We should focus on preserving/protecting wildlife/habitat in the Greater Yellowstone Ecosystem. Leave Karns Meadow Park alone. Stop developing wildlife habitat.

28 days ago

KM should not be disturbed due to dense willows that provide a safe habitat for wildlife. No dogs should be allowed in the area since so many residents do not obey leash laws. I suggest a small enclosed blind for quiet viewing into a small overlook of the creek and no more access. Excess noise for routine gatherings will disturb this quiet zone for wildlife in the city.

28 days ago

How did we get here? So sad, so sad.

29 days ago

Dog walking or Dog park?

29 days ago

As I understand it, the Kearns family wanted the land to remain a refuge for wildlife, with some incidental use by humans, but not to be paved over and broken up by trails and picnic areas.

29 days ago

Leave it natural without any development

29 days ago

It would be nice to see Karns developed in a wildlife friendly manner. There is already rogue camping and filth. Please help clean it up and keep it wild.

29 days ago

It's a great resource that needs protecting  
maybe some visual screening of the bus barn

29 days ago

We are lucky to live in a community where local families have donated lands for the benefit of the entire community. Jackson has done a good job balancing the importance of wildlife protection and community enhancement and this project should continue the city and Karns's family legacy. We have spent many summers fishing from the banks of flat creek through Karns but have not spent time there in the past few years with safety concerns. We have personally cleaned Karns during spring clean up and it is sad to see the current state of the open space. Hopefully re-engaging this plan will activate the space and bring it back to a cleaner and safer environment for families in our city to enjoy.

29 days ago

Karns Meadow is beautiful. The Fairgrounds is a noisy, dusty, polluted eyesore used only by a small segment of our community. The Fairgrounds should be transformed partly into natural wildlife habitat, and partly into a public park and green space that will quietly and peacefully benefit the whole community, along with Karns Meadow.

one month ago

I look forward to a future when Karns Meadow is a more accessible for people to enjoy. I believe that a well-designed Park and pathway can improve access while maintaining the natural and wild qualities of the area.

one month ago

Let's pause before we build in Karns Meadow. Once built we can never go back. There is so much movement and ideas taking place in Wyoming regarding recreational activities. I don't think we necessarily require parking lots and picnic tables. We can use our experiences to consider human/wildlife interfaces. We don't need another Miller Park. We don't need access until we can think through our new options. Increasingly the character and demographics of Jackson are changing. What do the permanent residents want? How much of an impact will tourists have on our town's Karns Meadow? Do we want tourists to have more impact on our treasured places? I do not. My husband does not. How will future (the next 5 years) residents and visitors feel about the loss of this town treasure. Yes. The Karns family wanted the parcel to be used for recreation. Can recreation be a virtual concept; to enjoy knowing we keep Karns Meadow as a wildlife, wetland, botanical preserve? I derive a great amount of pleasure and satisfaction thinking about Karns Meadow as it is. I love to bicycle by and drive my car on existing roads. I do not need to access it physically.... it is in my mind. I think and wonder what treasures are hidden from me in that "wild" place. There is a recreational concept we have not explored. What is the recreational character of our town, of our desires? Let's pause. There should be no hurry. If we act now we will lose this virtual opportunity. I think instead of paths we can have audio, video, educational, a look into the parcel without actually being there. Who indeed is living there and who will be displaced? What an opportunity to revise our conceptual thinking.

one month ago

I am a business owner on South Glenwood. I have staff housing on site. We feel this project could be a wonderful community asset and we look forward to following this project as it progresses.

one month ago

-

one month ago

Love the existing layout! This is well designed to both protect core habitat used by wildlife and birds, and allow for running/walking/biking around the exterior the meadow. I live in town and if this gets built I would regularly use this as an addition to my running loop. I disagree that the paths will impact deer any more than the existing highway. Deer may change their time of day usage, but will still access the meadow after dark, and individuals that are more tolerant of humans (e.g. the deer that winter in town) will likely hardly change behavior due to addition of trails on the Park's perimeter. Would love to see more invasive species control here. Also - park has been used (especially the area behind the gas station) as a refuge for homeless during summer. Surprised this is not more a part of the conversation. This should probably be taken into account and local shelter space ensured. Gotta have courage to fight the NIMBYs though! Once/if sufficient shelter space is available, camping/dog leash/dog poop restrictions should all be enforced if possible. And insane amount of dog poop from the 15% of people who don't pick up poop is already washing into the creek here and at other locations along the creek.

A good compromise with "environmentalists" would be to not have XC skiing (focus grooming on existing pathways) and to enforce dog leash laws with citations especially in winter.

Lastly, consider working with Trout Unlimited to determine if fish habitat could be improved? This goes for all of Flat Creek through Town. Seems like amount of "holding water" could be improved.

one month ago

Karns Meadow is of immense importance for our ecosystem. One of the last vestiges of open space in town, it serves as a critically important corridor for numerous species. Given the crisis faced by the Jackson Hole ecosystem as a result of human activities, this proposal to expand the human footprint in Karns Meadow is utterly reckless and irresponsible.

one month ago

Please keep in mind how much Jackson has been developed over the last decade alone. Wildlife are running out of safe spaces in our town. Please consider their needs too when building this park. I am all for another green space in town, but there are a lot of deer and birds and other wildlife that call that area home or at least pass through it regularly. We need to consider them in this plan moving forward or we will face more wildlife/human conflict over time. The wildlife is part of what makes this town so special. Thank you!

one month ago

If a park is approved, consider minimal improvements. This is the last piece of habitat left in the town of Jackson. It should be preserved.

one month ago

We already have plenty of bike paths right around town, this area should be preserved as a natural space for wildlife, with minimal footpaths to allow for quiet, unobtrusive viewing. It's location right in town means there does not need to be additional parking.

one month ago

Repurpose existing log cabin for infrastructure needs - celebrate the historic value (Karns homestead) in addition to ecological value/natural resources

one month ago

Please incorporate the historic cabin into the design.

one month ago

I'm very excited for this. I wonder if dogs would be allowed? I've noticed there are tons of dogs at May park and they really make it hard to skate/ski there. . but I know dog owners would love another place to walk the dogs. Is there a lot of wildlife that uses that area? I hope the wildlife will be taken into account. I am very excited about this, thank you!

one month ago

Karns Meadow is a valuable and unique ecological refuge, in the middle of town. it is critical for the deer crossing from east Gros Ventre Butte, over to Flat Creek. it has importance to many other species-- remember the fox family that could be seen from Snow King Ave?

it also has importance as a refuge for folk. Nowhere else in town has such a tranquil area, shielded with trees and other vegetation, and Flat Creek.

The conservation easement would be fulfilled by a few short paths, some benches or other viewing platforms, and maybe a few signs that highlight the ecological importance of Karns Meadow. I would like to see a survey of the flora and fauna that live in, or use this precious mid-town gem.

I am very opposed to putting in parking lots, as this is a small area which would be made smaller by parking lots, and goes against the town and county encouraging alternative transportation.

Access should be by the town street bus, not by encouraging car driving. some bike parking stands could also encourage access by bike (but NOT bike paths in the meadow).

I am opposed to any other development, such as bike paths, groomed winter trails, horses and dogs (too small) and even structures for picnics. town has a number of parks that serve these purposes, not to mention the forest trails (hike and bike) on nearby Snow King.

Don't blow this by trying to make this a multi-activity area, which would destroy the essence of a small urban ecological refuge for both wildlife and people.

one month ago

I don't agree with this project at all. The additional bike/walking paths are indirect routes which aren't needed. We should be protecting the wildlife habitat. Every winter I see numerous mice, deer, foxes, etc using this area as a safe haven. Our town has enough public land for recreating, this is fluff.

one month ago

This is a very important wildlife corridor that has already been constrained by all of the past and recent development right along the river. Please keep it an open space and migration corridor. We have plenty of bike paths and other recreational amenities already.

one month ago

This area is critical habitat for deer and moose in the winter and should not be developed. I lived on Flat Creek Drive for 17 years and in the winter frequently observed moose and many deer there along Snow King Avenue and around the ponds along Flat Creek Drive. And they often travel in and out of this area from the Butte to the north. (That is why there have been so many auto/deer collisions on the Highway 89). Karns Meadow is also frequently traveled wildlife corridor between the Butte and Snow King Mountain. It is extremely unique to have this inside the Town limits. Why can't it be left as is as an undeveloped park? Or minimally developed with just a few summer trails? For a community that claims to care so much about wildlife, it is unconscionable that nordic trails have to be built here. Are these 1-2 km of nordic trails more important than protecting wintering wildlife? This is completely unnecessary. Based on my 17 years of observing wildlife there, from the sidewalk or from my window, I believe the area should be closed to humans during the winter until May 1.

one month ago

development by the bus barm could be an option.

one month ago

Please leave Karns as is.

one month ago

The preservation and reuse of the Mercer Cabin should be a high priority. I understand that the cabin was placed there temporarily, but it is now the Town's responsibility to preserve and reuse it on site, not relocated it to some other place. To suggest that it cannot be restored and reused as a park structure, whether restrooms or shelter, or other public use, is an unacceptable failure of design imagination. This building is historically and architecturally significant dating back to the 1930's and should remain in public view; incorporating it into the park design is a perfect solution.

one month ago

please don't encircle with a path and don't make asphalt/paved surfaces

one month ago

Extend Garaman Pathway to Wildlife lane and across to Karns. Get bikes off the streets where possible.

one month ago

This is an important wetland and place for wildlife. Please do not disturb this ecosystem.

one month ago

Thank You for adding another park - with so many people here now - we need more and more open/green places for people and don't need places for parking in the park - this will make people use non-motorized methods to get there and keep the air cleaner and less vehicles on our roads

one month ago

I'd prefer if this park was left for wildlife habitat. How about giving this park to the wildlife? To much human intervention everywhere you look.

one month ago

Pete and his family envisioned a cross country ski training area. please follow the Karns family gift designation. thank you

one month ago

There are many public parks and pathways for groomed skiing and biking. Karns Meadow is special due to the creek, the meadows, and the wildlife. It should be designed for slow recreation (walking, fishing, wildlife watching, art), not as a high speed pass through. Gravel walking paths, no dogs, no lights, winter closure.

one month ago



Put PERMANENT electronic & enhanced flashing "Wildlife Crossing" signage on Snow King Ave. so the already beleaguered DEER will be spared some further carnage!

one month ago

We don't need anymore parks in town. Leave this area alone and let wildlife have a place and some peace.

one month ago

Karns meadow is an island of safety for wildlife that manage to survive crossing Snow King or Broadway. Let's leave it that way. Seriously, we have tons of space to recreate in and around town. Building housing and parks at the fairground makes way more sense. Please leave Karns Meadow undeveloped.

one month ago

It should remain 100% wild and untouched by development. It must have connectivity to other wild areas.

one month ago

Most important: preserving the wildness of Karns Meadow Park. Minimal to zero infrastructure. No pathways for walking or bike or skiing that would cut into, bisect, or circle the space. This space is surrounded by roads and bike paths. Keep that traffic out of park interior. Let this space be truly for wildlife. Maybe at some point we can connect this land with the butte to the north and the hill sides of Snow King with wild life overpasses and begin to restore some of the wild life corridors.

one month ago

Please allow the wildlife to continue to remain undisturbed in this space. They have already been disrupted enough. We have record numbers of wildlife being hit and killed by cars in the county and this sort of development is part of the cause. Please be kind to them and preserve their habitat - it is theirs, not ours. Thank you.

one month ago

I'd like to have non-motorized access to K Meadow from the four corners at least, doesn't have to be paved; even better would be an X pathway instead of one that circumscribes the Meadow.

one month ago

Good job

one month ago

The original intent for Karns' meadow when sold to TOJ at a bargain sale under conservation easement by the Karns family was for the space to be a community park. Currently the space is not managed for that purpose, and the TOJ has been influenced by private home owner neighbors to ignore that original intention for their own personal interests and gains. Karns Meadow is public property and should be managed as such. TOJ has an obligation to create a development and management plan for responsible use that balances community access and wildlife-friendly recreation.

Additionally, TOJ has an obligation to review the developable lots on the Eastern border of the Meadow and leverage that land already owned by the Town for affordable/workforce housing opportunities. This is a sensible solution to one of our community's largest problems that is again being blocked by private land owner neighbors.

one month ago

Protect our wildlife and wild places!

one month ago

Please incorporate Mercer Cabin in plan. It is important to preservation of our community

one month ago

I feel protecting winter habitat for wildlife should take priority but would immensely enjoy developed pathways for late Spring, Summer and early Fall. (similar to Elk Refuge open and closing dates)

one month ago

Thanks. Lots of birds, deer etc use this area

one month ago

Keep the Meadow for wildlife as is

one month ago

The public access and wetland habitat in Karns Meadow are both extremely important. I like the design of the pathway as currently proposed because it avoids wetland infringements and allows much better public access. While I appreciate the mule deer use in the park, the development around the park has isolated it to the point of making it deadly for deer to attempt to cross into the park. We should keep the focus on wetland and creek health in the park.

one month ago

I'd like to see the natural area maintained. Due to flooding, creek gorging, and other geotechnical issues, a paved pathway makes little sense to me. A bark or gravel surface would encourage people to go slowly and enjoy the place rather than racing through. Paved sidewalks and a bike lane exist nearby.

one month ago

Didn't an ecological study advise against any/all development? Why is this being pursued? Even if it was 'developed' why create parking? Picnicking? Isn't town trying to encourage bike lanes, in out flat, easily and eminently bikeable valley? It would also seem that a wintering wildlife closure should be an important part of this conversation.

one month ago

Developing Karns meadow is a bad idea all around. It is the last natural habitat in Jackson and needs to be protected at all costs for the wildlife living in and passing through the meadow. We have excellent established pathways on all side of the meadow and a pathway through the meadow adds nothing for Jackson recreationists. Keep this land safe for wildlife.

one month ago

I do not have any criticisms of the proposed plan, and I would be perfectly satisfied with this proposal. I know that there is a lot of pushback from organizations like the Conservation Alliance. This is unfortunate that they take specious science and attack recreation. The mule deer that frequent Karns meadow cross a five lane highway, two bike paths, two sidewalks, an office center, raft company, gas stations, and so on. A walk and bike path is of no consequence to them. That said, my strongest suggestion is to make a path from the end of Kelly Avenue connect to virginian lane by bisecting the virginian hotel property. This would be a huge improvement to the hotel guests as it would give them easy access nature access and it would give the residents a way to cross town, either on foot or bike, without having to deal with the high traffic intersections on Flat Creek ave, Snow King ave, and Virginian Lane. This would be a huge benefit in the Winter time when the bollards are gone and snow king ave gets downright hostile to bicyclists. I do no see a strong need for the second bridge and the other pathways (yellow and red) but I have no opposition to them. The blue pathway, while perfectly fine where it is would be far cheaper, easier to construct, and less likely to stir the ire of antirecreation organizations, if it was constructed more directly to the end of Kelly Ave.

My hope would be for keeping the Karns Meadow a year long walking and biking route through town, and hopefully someday a pathway would go from the high school to dairy queen so we can promote nature based transportation that this beutiful place deserves Adding improved infrastructure for winter cycling gives the residents another important option for transportation as the Start bus is limited, walking is slow, and cars should be a last resort instead of a first. Fat ebikes with appropriate studded tires are an amazingly effective tool for navigating the town of Jackson and their usage should be subsidized and encouraged whenever possible. For the most part, the Town should pride itself on taking steps in this direction by plowing the Russ Garaman trail in the winter time.

one month ago

This plan was made in a prior era here in Jackson when groomed winter trails and pathways were scarce. This plan should be modernized with a conservation lens and truly balance human use and wildlife habitat conservation. Let's consider plans that close the park in the winter and don't encircle the meadow with a paved pathway. Let's not allow dogs in the park, minimize impermeable surfaces, and locate any new infrastructure close to the bus barn.

one month ago

Listening to coyotes in Karns meadow, seeing foxes, birdwatching, having opportunities for animals to overwinter is more important to me than a highly groomed park.

one month ago

Please, please, please do something soon. It's been years since the land was donated and I have been waiting for a long time to be able to enjoy the scenic, quiet space that it is walkable or rideable from my home. Compared to other neighborhoods, this particular part of JH has so little to offer as far as scenic, quiet spaces that are easily accessible - instead we have the dusty/dirty rodeo grounds, crazy busy Snow King, and crowded Phil Baux.

one month ago

This project is unnecessary it is home to a wildlife and with respect should be left alone! Please stop overbuilding the community, we LOVE open spaces that's why we moved here 40 years ago. Leave JH Wild

one month ago

Please review activity vs wildlife docs by Bruce Thompson:people,bikes,speed,dogs, proximity, off trail use all affect migration corridors, wildlife refuge, flyway, critical habitat and Flat Creek degradation ie town watershed. Please take this into consideration.

one month ago

This key corridor and important wildlife habitat in the center of Jackson needs maximum protection. Have required public use focus on the rare quiet opportunity to observe, appreciate and understand the ecological value of this "nature sanctuary": Wetlands, Flat Creek, fish, many birds, moose, deer, bear, badger, beaver, (all seen there) and critical connection to habitat/natural areas north and south. There is no need for a pedestrian or biking loop trail as there are already pathways north and south, and an interior loop trail will disturb wildlife needing critical resting sites and water in winter, and resting/feeding areas for mammals and nesting habitat for birds in summer, not to mention fish and other aquatics. Have 2-3 strategic small viewing platforms/blinds (for instance on west side and from south side) for people to stop, walk in a bit, and view wildlife, but do not have lengthy trails, loops (certainly not paved), picnic area, or restroom. Minimum parking. Quiet zone would have particular appeal to elders as well as families with children who wish to have an intimate, safe connection to local birds, small mammals etc. amidst increasing development and commotion - an oasis. The current "park" parcel could accommodate a short trail.

This opportunity for quiet enjoyment in natural habitat is not found elsewhere in the heart of Jackson. Don't allow dogs, wheels of any kind except wheel chairs...No restroom needed if no picnic shelter. These added facilities are unnecessary, expensive, and require ongoing maintenance. Other urbanized areas now appreciate the value to the public of such low key "nature sanctuaries." Already there are plenty of other recreational options (including pathways!), and access to nearby local town parks with picnic shelters as well as extensive trail systems on national forest lands. Most of our population can access them easily, while the very young and elderly cannot. Keep development to a minimum while adhering to the strictures of the easement. Karns Meadow is not needed for human recreation; however, it is essential for wildlife moving north and south and along Fish Creek and for localized species. It is a valuable wetland habitat and flood control. With minimum development, it can be a wonderful quiet nature park/sanctuary for public enjoyment.

one month ago

I would like to see the park continue to be a haven for wildlife especially in the winter.

one month ago

It's a perfect place for an outdoor/nature based summer camp which would help serve working families in Jackson

one month ago

Less is more, go light on the land, critters need space, too.

one month ago

Leaving the Meadows undeveloped is the best option for wildlife, preservation, and peace and tranquility in Jackson.

one month ago

This survey was written with the presumption that Karns Meadows will be developed. No room for those of us concerned about development to respond.

one month ago

If wildlife is a high priority in our county, then a no development policy needs to be in place.

one month ago

Please only cluster any development near the Start bus parking area. Minimize any human needs. Bathroom only. No picnic area, no facilities, no parking. We have many parks with picnic facilities, not necessary here. Strict Winter wildlife closure with absolutely no grooming or winter trails. Summer walking/bike path should be minimal and possibly gravel. Must maintain open space. Wildlife habitat and water protection are priorities and human recreation needs come last.

one month ago

Plan is well done. Would like to see separate bike path along Snow King Ave.

one month ago

Interesting in protecting wildlife throughout the year.

one month ago

I am afraid through progress the beauty and the animals may loose!

one month ago

The creation of paved pathways should really be limited. It's very important to me that any pathway does not fully encircle the meadow, allowing free wildlife movement. Winter skiing and snowshoeing should be limited to established pathways. Limited public parking and restrooms such as those found at Rendezvous Park should be located as near as possible to the bus barn. Town or County Law Enforcement should ticket and/or arrest those who defy regulations for no camping and no dogs in Karns Meadow, where there should never be a need to use mutt mitts (which are so often left behind).

one month ago

What is the length of the path? Just curious

one month ago

Karns Meadow is a refuge for wildlife and should remain as undeveloped as possible

one month ago

Already places for humans. Leave meadow for wildlife. No pathways thru/around meadow.

one month ago

I'm opposed to this project. I live on the Karns hillside and I constantly see how many animals use this area as the last area in town for them to migrate thru and live in. As humans, we have many options but our wildlife has become incredibly limited within town limits. Please don't take this last resource from them. Thank you, Pamela Stockton

one month ago

I am not opposed to the current plan for a pathway, shelter, bathroom and parking lot. It appears the majority will remain a wetlands area.

one month ago

This is a treasured riparian wetland area and undisturbed habitat should be a priority. Isn't that what our community supported as a #1 priority with the revised Comp Plan?

one month ago

The plan made for this park is 20 years old and should be revised. Times have changed and the community's need and support for a park have waned. Undisturbed habitat here is much more valuable than a park. This riparian corridor should be conserved, not heavily used by humans.

one month ago

Finally there is some attention to this area, town continues to violate the conservation easements. This survey is not well.

Site plan, south creek crossing could be connected to existing bridge, because it will have less impact to natural resources.

Is there an actual study of the winter deer/moose use or just casual observations.

one month ago

oops! meant to say lots not adjacent to riparian zone.

one month ago

I see that current zoning is residential. I would much rather see thoughtfully developed park that emphasizes appreciation of nature in this location. Housing could make more sense in places like the rodeo grounds or other lots adjacent to riparian zone.

one month ago

one month ago

---

How likely are you to engage in these winter activities in Karns Meadow?

|                       | Not At All        | Somewhat Likely        | Likely        | Very Likely        |
|-----------------------|-------------------|------------------------|---------------|--------------------|
| Walking/Jogging       | 40%<br>Not At All | 20%<br>Somewhat Likely | 20%<br>Likely | 20%<br>Very Likely |
| Bicycling             | 56%<br>Not At All | 22%<br>Somewhat Likely | 11%<br>Likely | 11%<br>Very Likely |
| Fishing               | 78%<br>Not At All | 11%<br>Somewhat Likely | -<br>Likely   | 11%<br>Very Likely |
| Wildlife Watching     | 33%<br>Not At All | 33%<br>Somewhat Likely | 22%<br>Likely | 11%<br>Very Likely |
| Picnicking            | 89%<br>Not At All | -<br>Somewhat Likely   | -<br>Likely   | 11%<br>Very Likely |
| Art/Photography       | 56%<br>Not At All | 11%<br>Somewhat Likely | 22%<br>Likely | 11%<br>Very Likely |
| Education/Research    | 78%<br>Not At All | 11%<br>Somewhat Likely | -<br>Likely   | 11%<br>Very Likely |
| Gatherings/Events     | 67%<br>Not At All | 22%<br>Somewhat Likely | -<br>Likely   | 11%<br>Very Likely |
| No Activity in WInter | 86%<br>Not At All | 14%<br>Somewhat Likely | -<br>Likely   | -<br>Very Likely   |
| Other (Comment)       | 50%<br>Not At All | -<br>Somewhat Likely   | 17%<br>Likely | 33%<br>Very Likely |
| 10 respondents        |                   |                        |               |                    |

Close in winter to support wildlife  
one month ago

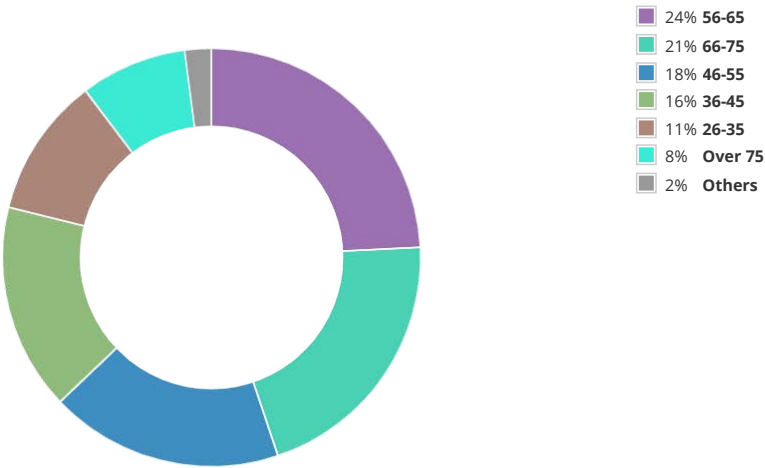
There should be NO grooming or skiing  
one month ago

should be closed in the winter for wildlife.  
one month ago

one month ago

xctry skiing  
one month ago

What is your age?



194 respondents

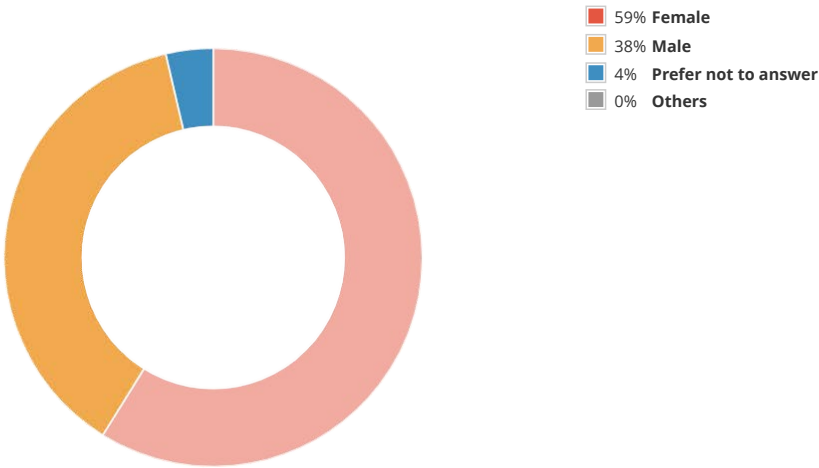
What is your race/ethnicity?

|     |                                           |       |
|-----|-------------------------------------------|-------|
| 91% | White                                     | 175 ✓ |
| 7%  | I prefer not to answer                    | 13 ✓  |
| 2%  | Hispanic, Latino, or Spanish              | 4 ✓   |
| 1%  | Asian                                     | 1 ✓   |
| 1%  | Other                                     | 1 ✓   |
| 0%  | Black or African-American                 | 0 ✓   |
| 0%  | American Indian or Alaska Native          | 0 ✓   |
| 0%  | Native Hawaiian or Other Pacific Islander | 0 ✓   |

192 Respondents

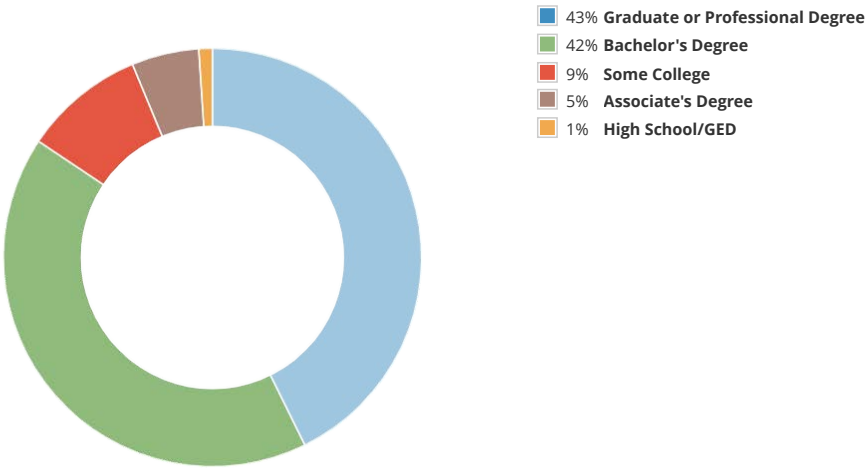
Teton County - Report Creation

What is your gender?



192 respondents

What is your highest formal education level?



192 respondents

Loading more report objects...



NOTICE OF NEIGHBORHOOD MEETING

March 9, 2023, 5pm-7pm

March 10, 2023, 1pm-3pm

Location of Meeting: Teton County Library, 125 Virginian Ln,  
Jackson, WY 83001

A neighborhood meeting will be held to inform interested  
parties about:

REQUEST: Zoning Map Amendment (ZMA)

PROPOSAL: Karns Meadow Park Tracts Zoning Change

For information regarding this meeting, please contact:  
Rachel Rudd at (307)732-8485  
Posting Date: 2/27/2023





**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#: P22-267 & 268  
Date of Conference: 01/04/22  
Planning Staff: Tyler Valentine

**PROJECT.**

Name/Description: Karns Meadow Masterplan Development – Rezone Track 5 to Public /Semi-Public, Tracks 1-3 & 6 to Park & Open Space, and Track 4 to Park & Open Space and NL-3  
(this request includes The JH Land Trust parcel and Well #5 owned by the Town)  
Physical Address: No address  
Lot, Subdivision Tracks 1-6 of Karns Meadow PIDN: \_\_\_\_\_  
Zoning District(s): Tracks 1-6 are zoned Neighborhood Low Density-1 (NL-1)  
Overlay(s): Natural Resource Overlay (NRO)

**STAKEHOLDERS.**

Applicant: Teton County Park & Recreation – Steve Ashworth  
Owner: Town of Jackson & JH Land Trust  
Agent: \_\_\_\_\_

**REQUIRED APPLICATIONS.** *This project will require the following applications:*

| Application                                                     | Reason                                                                                                                | Fee |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----|
| Neighborhood Meeting                                            | Required for all Zoning Map Amendments                                                                                | n/a |
| Zoning Map Amendment (ZMA)                                      | Required to change the zoning to P/SP, P, & NL-3                                                                      | n/a |
| Environmental Analysis (EA) – can run concurrently with the ZMA | Required prior to physical development or use within Karns Meadow                                                     | n/a |
| Conditional Use Permit (CUP)                                    | Required for all uses in the P/SP & P zones                                                                           | n/a |
| Grading Pre-App                                                 | Required prior to Building Permit for site disturbance greater than 3,000 sf or required at Town Engineer discretion. | n/a |

|                 |                                       |     |
|-----------------|---------------------------------------|-----|
| Building Permit | Required for all physical development | TBD |
|-----------------|---------------------------------------|-----|

#### MEETING ATTENDEES:

| Name            | Company                             | Phone/Email          |
|-----------------|-------------------------------------|----------------------|
| Tyler Valentine | Town Planning                       | (307) 733-0440 x1305 |
| Tanya Anderson  | Ecosystem Stewardship Administrator | 307-734-4419         |
| Rachel Rudd     | Parks & Recreation                  | 307-732-8485         |
|                 |                                     |                      |

**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                                 |
|----------------------|-------------|-------------------|------------------------------------------|
| Neighborhood Meeting |             |                   | Must be done prior to submittal of ZMA   |
| ZMA<br>EA            | 14 days     | Town Council      | 90-120 days after sufficiency            |
| CUP                  | 14 days     | Town Council      | 90-210 days after sufficiency            |
| Grading Pre-App      | 1 week      | Town Engineer     | 3-4 weeks                                |
| Building Permit      |             | Building Official | First round review is typically 4 weeks. |

#### 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.

Required if the applicant is different than the owner.

|     |                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                      |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| √   | <b>Application Fees.</b> 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.                                                                                                                        | Please see above.                                                                                                    |
| n/a | <b>Review fees.</b> 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.                                                            | Waived for Town and County applications.                                                                             |
| n/a | <b>Mailed Notice fee.</b> 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.                                                                                                                                                                                  |                                                                                                                      |
| √   | <b>Digital Format.</b> All applications submitted to the Town Planning Department must be submitted in digital format.                                                                                                                                                                                                                                                      | Please provide digital copy with application.                                                                        |
| √   | <b>Response to Submittal Checklist.</b> 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. | This checklist serves as a guideline for process, but has additional concerns/recommendations throughout.            |
| n/a | <b>Title Report.</b> 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.                                           |                                                                                                                      |
| √   | <b>Narrative description of the proposed development.</b> Describe in detail the existing condition of the property and the proposed development, use, or subdivision for which you are seeking approval.                                                                                                                                                                   |                                                                                                                      |
| √   | <b>Findings for approval.</b> Include in your narrative a response to the findings for approval found in LDR Sec. 8.3.2, as applicable.                                                                                                                                                                                                                                     | The ZMA, EA, and CUP each have their own findings that need to be addressed in writing in the application submittal. |
| √   | <b>Proposed Development Program.</b> Provide a table that summarizes the projects compliance with the primary development standards (setbacks, heights, FAR, LSR, etc.).                                                                                                                                                                                                    |                                                                                                                      |
| √   | <b>Site Plan.</b> Provide a detailed site plan of the proposed project. A list of minimum standards for a site plan are established in the Administrative Manual.                                                                                                                                                                                                           | Please provide a site plan for the EA and CUP. Not required for the ZMA.                                             |
| n/a | <b>Floor Plans.</b> 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.                                                                                                                                                                               |                                                                                                                      |
| √   | <b>Neighborhood Meeting Summary.</b> See Section 8.2.3 for Neighborhood Meeting requirements.                                                                                                                                                                                                                                                                               | Required for the ZMA.                                                                                                |
| √   | <b>Posted Notice.</b> 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: Public/Semi-Public (Sec. 4.2.1.) & Park and Open Space (Sec. 4.2.2.)

Applicable LDR Section: Sec. 4.2.1. & 4.2.2.

**PHYSICAL DEVELOPMENT.** *Please see Subsection B in applicable Zone District for specific standards.*

| Requirement                                                                                                                                                                                                                                                                                                        | Notes                                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| √ <b>Structure Location and Mass</b> (setbacks, height, FAR, etc.)                                                                                                                                                                                                                                                 | Show structures, setbacks, height, details, etc.], as part of the EA and CUP if any structures are proposed. Structures are defined as anything taller than 4'. |
| n/a <b>Maximum Scale of Development</b> (individual building size)                                                                                                                                                                                                                                                 |                                                                                                                                                                 |
| n/a <b>Design Review</b> (Design Guidelines and Design Review Committee)                                                                                                                                                                                                                                           |                                                                                                                                                                 |
| √ <b>Site Development</b> (Driveway and Access limits)                                                                                                                                                                                                                                                             |                                                                                                                                                                 |
| √ <b>Landscaping</b> (see Div. 5.5 for more information)                                                                                                                                                                                                                                                           |                                                                                                                                                                 |
| √ <b>Fencing</b> (see Sec. 5.1.2 for more information)                                                                                                                                                                                                                                                             |                                                                                                                                                                 |
| √ <b>Environmental Standards (see Div. 5.1 and 5.2 for more information)</b> <ul style="list-style-type: none"> <li>• Natural Resource Buffers</li> <li>• Irrigation Ditch Setback</li> <li>• Wild Animal Feeding</li> <li>• Natural Resource Overlay Standards</li> <li>• Bear Conflict Area Standards</li> </ul> | An EA is required. As staff understands it, the EA was already completed but has not yet gone through the Town's EA review process.                             |
| √ <b>Scenic Standards (see Div. 5.3 for more information)</b> <ul style="list-style-type: none"> <li>• Exterior Lighting</li> <li>• Scenic Resource Overlay (SRO) Standards</li> </ul>                                                                                                                             | Provide exterior lighting worksheet with building permit submittal, and provide manufacturer cut sheets.                                                        |
| √ <b>Natural Hazards to Avoid (see Div. 5.4 for more information)</b> <ul style="list-style-type: none"> <li>• Steep Slopes</li> <li>• Areas of Unstable Soils</li> <li>• Fault Areas</li> <li>• Floodplains</li> <li>• Wildland Urban Interface</li> </ul>                                                        | Only if applicable                                                                                                                                              |
| √ <b>Signs (see Div. 5.6 for more information)</b>                                                                                                                                                                                                                                                                 | Signage should be shown with the CUP.                                                                                                                           |
| √ <b>Grading, Erosion Control, Stormwater (see Div. 5.7 for more information)</b> <ul style="list-style-type: none"> <li>• Grading</li> <li>• Erosion Control</li> <li>• Stormwater Management</li> </ul>                                                                                                          | Grading pre-app will be required. All grading info will be included in the building permit.                                                                     |

**USE STANDARDS.** *Please see Subsection C in applicable Zone District for specific standards.*

| Requirement                                               | Notes                                    |
|-----------------------------------------------------------|------------------------------------------|
| √ <b>Allowed Uses</b> (see Div. 6.1 for more information) |                                          |
| √ <b>Parking</b> (see Div. 6.2 for more information)      | Any parking proposed along Karns Meadow? |

\_\_\_n/a\_\_\_ **Employee Housing** (see Div. 6.3 for more information)

\_\_\_n/a\_\_\_ **Maximum Scale of Use**

\_\_\_√\_\_\_ **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

\_\_\_n/a\_\_\_ **Allowed Subdivision and Development Options** (see Div. 7.1 and 7.2 for more information)

\_\_\_n/a\_\_\_ **Residential Subdivision Requirements** (see Div. 7.4 and 7.5 for more information)

- School and Parks Exactions

\_\_\_√\_\_\_ **Infrastructure (see Div. 7.6 and 7.7 for more information)**

- Transportation Facilities
- Required Utilities

## OTHER APPLICABLE LDR STANDARDS

### Requirement

### Notes:

|     |                                                          |
|-----|----------------------------------------------------------|
| n/a | <b>Division 1.9, Nonconformities</b>                     |
|     | 1.9.2 Nonconforming Physical Development                 |
|     | 1.9.3 Nonconforming Uses                                 |
|     | 1.9.4 Nonconforming Development Options and Subdivisions |
|     | 1.9.5 Nonconforming Signs                                |

## ADDITIONAL COMMENTS

1. The portion of land along Flat Creek Drive within Track 4, which the Master Plan calls out as 3 future single-family home lots, should be rezoned to NL-3. The current NL-1 zoning has a minimum lot size of 1 acre which does not align with the master plan. The appropriate zone is NL-3 which has a minimum lot size of 7,500 sf and allows no more than 1 single-family home per lot. The area to be zoned NL-3 should be at least 22,500 sf in order to obtain 3 future lots.

**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: |
|----------------------------------------------------------------------------|---------------|
| <input checked="" type="checkbox"/> Building Official                      |               |
| <input checked="" type="checkbox"/> Town Attorney                          |               |
| <input checked="" type="checkbox"/> Town Engineer                          |               |
| <input checked="" type="checkbox"/> Title Company – for subdivision plat   |               |
| <input checked="" type="checkbox"/> County Surveyor – for subdivision plat |               |
| <input checked="" type="checkbox"/> Jackson Hole Fire EMS                  |               |
| <input checked="" type="checkbox"/> Housing Authority                      |               |
| <input type="checkbox"/> Integrated Solid Waste & Recycling                |               |
| <input type="checkbox"/> National Park Service                             |               |

|                                     |                                                                                   |
|-------------------------------------|-----------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Parks and Recreation Department                                                   |
| <input checked="" type="checkbox"/> | Pathways Coordinator                                                              |
| <input type="checkbox"/>            | Public and Environmental Health                                                   |
| <input checked="" type="checkbox"/> | Police Department                                                                 |
| <input type="checkbox"/>            | Teton Conservation District                                                       |
| <input type="checkbox"/>            | Teton County School District                                                      |
| <input type="checkbox"/>            | Teton County (required when subdividing land within one mile of the Teton County) |
| <input type="checkbox"/>            | U.S. Forest Service (if adjacent to or accessing through forest service lands)    |
| <input type="checkbox"/>            | Wyoming Department of Environmental Quality                                       |
| <input checked="" type="checkbox"/> | Wyoming Department of Game & Fish                                                 |
| <input type="checkbox"/>            | Other                                                                             |



# Workflow Notes

| Permit Number | Begin Date | Step Type                                              | Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Created By              | End Date   |
|---------------|------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------|
| P23-079       |            | ENGINEERING<br>DEPARTMENT<br>COMMENTS                  | Zone Map Amendment Approved<br><br>P23-079<br>ADDRESS: Karns Meadow Dr.<br>OWNER: Town of Jackson / Jackson Hole Land Trust<br>APPLICANT: Teton County / Jackson Parks and Rec<br><br>May 11, 2023<br>Jeff Silliman, 733-3079<br><br>DATE OF SUBMITTAL: 4/19/2023<br>DATE OF MATERIALS:<br>REVISION NO.:<br><br>The engineering division has reviewed your application for a ZONING MAP AMENDMENT submitted on and with application materials as dated above.<br><br>*Please be advised that the following comments are being provided for use in preparation of future Development Plan submittals and are required for sufficiency.<br><br>No Comment. |                         |            |
| P23-079       |            | PC PUBLIC NOTICE                                       | PC Proof of Publication                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |            |
|               | 04/19/2023 | PARKS AND<br>RECREATION<br>DEPARTMENT<br>COMMENTS      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ALANGLEY@JACKSONWY.GOV  |            |
|               | 05/11/2023 | PATHWAYS<br>DEPARTMENT<br>COMMENTS                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | JSILLIMAN@JACKSONWY.GOV | 05/11/2023 |
|               | 06/07/2023 | INITIAL REPORT                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ALANGLEY@JACKSONWY.GOV  |            |
|               |            | TOWN COUNCIL<br>1ST READING                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |            |
|               |            | PC KEY ISSUES                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |            |
|               |            | FINAL LETTER                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |            |
|               |            | PLANNING<br>COMMISSION<br>REVIEW AND<br>RECOMMENDATION |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |            |

Workflow Notes

| Permit Number | Begin Date | Step Type                               | Text | Created By | End Date |
|---------------|------------|-----------------------------------------|------|------------|----------|
|               |            | BUILDING<br>DEPARTMENT<br>COMMENTS      |      |            |          |
|               |            | TOWN COUNCIL<br>MEETING                 |      |            |          |
|               |            | TOWN COUNCIL<br>3RD READING             |      |            |          |
|               |            | LEGAL<br>DEPARTMENT<br>COMMENTS         |      |            |          |
|               |            | POLICE<br>DEPARTMENT<br>COMMENTS        |      |            |          |
|               |            | JOINT HOUSING<br>DEPARTMENT<br>COMMENTS |      |            |          |
|               |            | PLANNING<br>DEPARTMENT<br>COMMENTS      |      |            |          |
|               |            | PC ROUGH DRAFT                          |      |            |          |
|               |            | FIRE DEPARTMENT<br>COMMENTS             |      |            |          |
|               |            | TC PUBLIC NOTICE                        |      |            |          |
|               |            | TOWN COUNCIL<br>2ND READING             |      |            |          |
|               |            | START<br>DEPARTMENT<br>COMMENTS         |      |            |          |
|               |            | COMPLETENESS<br>REVIEW                  |      |            |          |
|               |            | FINAL REPORT                            |      |            |          |
|               |            | COMPLETE<br>REPORT                      |      |            |          |
|               |            | PC FINAL DRAFT                          |      |            |          |
|               |            | DETERMINATION<br>OF SUFFICIENCY         |      |            |          |

# STAFF REPORT



|                               |                                                                                                                                          |                        |                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                                                                                                            | <b>Meeting Title:</b>  | Regular Town Council Meeting |
| <b>Submitting Department:</b> | Planning Department                                                                                                                      | <b>Presenter:</b>      | Katelyn Page                 |
| <b>Agenda Item:</b>           | P23-016: Request for a Land Development Regulation (LDR) Text Amendment to the Parking and Loading Standards Relating to Bicycle Parking | <b>Public Comment:</b> | Yes                          |

## Purpose & Policy Considerations.

All Text Amendments to the Town of Jackson Land Development Regulations (LDRs) require review and approval by Town Council.

## Requested Action.

The applicant, Jackson Hole Community Pathways (“Pathways”), is proposing an LDR Text Amendment to the Town of Jackson’s Parking and Loading Standards relating to bicycle parking requirements.

The proposed text amendment would modify LDR Section 6.2.2.D – Required Bicycle Parking and LDR Section 6.2.2.A.1 – Administrative Adjustment (Required Parking)

Staff is requesting Council make a determination on whether to move forward with this requested amendment.

## Recommendation.

The Community Development Director recommends Council direct staff to prepare an ordinance for consideration for LDR Text Amendment P23-016 and present that ordinance for first reading at the next available meeting.

## Background.

The Pathways Department is a joint department of Jackson/Teton County which works to advance alternative transportation goals adopted by the Jackson/Teton County Community.

The Jackson/Teton County Comprehensive Plan includes the following principles and policies that were established in support of multimodal transportation including:

- Policy 2.3a to Meet future transportation demand through the use of alternative modes;
- Policy 2.3b to Create a safe, efficient, interconnected multimodal transportation network;
- Principle 7.1 to Meet future transportation demand with walk, bike, carpool, transit, and micro-mobility infrastructure; and
- Policy 7.1.c to Interconnect all modes of transportation.

The Jackson Hole Pathways Master Plan was initially adopted in 2007 to guide the development of bicycle, pedestrian and supporting multimodal infrastructure including off-road facilities. Since at least 2016, the annual workplan for the Town of Jackson and Teton County Pathways program has included an item to “develop bicycle-parking regulations for adoption into Town and County land development regulations.” The workplan also includes an item to develop community street design guidelines and standards for new construction or

reconstruction of sidewalks and pathways. Though some workplan items remained unaddressed for many years due to insufficient staff capacity, Pathways has revisited strategic planning for the above workplan items starting in May 2022.

According to the Pathways Department, the purpose of establishing new bicycle parking requirements is primarily to promote bicycling as a viable transportation option as directed by the Comprehensive Plan, Pathways Master Plan, and Integrated Transportation Plan. Access to convenient, secure bicycle parking and other “end of ride” facilities is one of several components key to encouraging people to ride and increasing bicycle mode share (along with the provision of safe bicycling facilities such as protected bike lanes, access to bicycles, and connections between bike facilities and transit). Bicycle parking also encourages stopping and spending time and resources at local businesses, and by encouraging more people to ride, makes cycling safer.

For many years, the Pathways Department has noted that existing bike parking requirements have been insufficient to meet the demand for bike parking—the quantity requirements have failed to generate enough bike parking supply, and the design standards have not met the basic rack or parking layout guidelines necessary to make bike parking convenient and secure. As a result, staff has had to spend considerable time requesting and/or negotiating for improved bike parking during development reviews. This has unnecessarily consumed staff time and has frequently failed to produce a better outcome, as staff suggestions to meet a higher standard are rarely taken into consideration. Improved bike parking standards will help the Town (and County) achieve their transportation goals by encouraging more people to bike, shifting trips away from single occupancy vehicles and to other more efficient modes.

#### Existing Requirement

The Town’s existing standard for bicycle parking requires that all nonresidential uses provide on-site parking spaces for use by non-motorized vehicles at a ratio of 1 bicycle parking space for every 10 vehicle spaces required by a use and further specifies location and facility requirements (Section 6.2.2.D). Notably, the current standard does not apply to any residential use, including multi-unit residential buildings or residential uses within a mixed-use building. In addition, the current standard does not distinguish between short-term and long-term bicycle parking, thus all bike parking has been provided as short-term parking facilities.

#### Proposed Amendment

Per the applicant, the proposed text amendment seeks to clarify and improve the existing bicycle parking standards to better meet the alternative transportation goals adopted by the Jackson/Teton County Community. In addition, the proposed amendment seeks to provide support to codify bicycle parking requests commonly made by the Pathways Coordinator to developers during project review. The proposal also introduces engineering guidelines for allowed bicycle rack designs and installation requirements to be added as an exhibit to the Town of Jackson Utility Standards. Changes to the current utility standards would be accomplished via Resolution and approved by Town Council.

The proposed text amendment includes provision for long-term and short-term bicycle parking spaces to both residential and nonresidential uses with the amount of required spaces varying by use. Short-term parking is generally designed for use of two hours or less, is targeted toward visitors or customers, and is provided in a

visible location near a building's entrance or along the street frontage. Long-term parking is intended for those users leaving their bicycles unattended for long periods of time such as at places of employment, a transit hub, or overnight at a residence. Long-term parking is typically provided in an enclosed and secure area to protect from weather exposure and theft. Some developments in Town currently provide enclosed, long-term bicycle parking in order to meet owner or market demand. However, the introduction of required long-term bicycle parking represents the most significant change due to their higher cost and greater potential to impact site design.

A draft table of proposed bicycle parking requirement by use is attached to this staff report. Should Council direct Staff to draft an ordinance to increase and clarify bicycle standards, Staff would present a more comprehensive version of the text amendment at a future Council date for First Reading.

The proposed amendment would introduce a long-term bicycle parking requirement for residential uses of 3 or more units per lot and most nonresidential uses would see an increased requirement for bicycle parking based on floor area, rather than vehicle parking spaces, to be split between long-term and short-term bicycle parking. Long-term bicycle parking would be provided on private property and not within the public right of way.

The proposed amendment would also introduce flexibility in applying the bicycle parking requirement, to be approved by the Planning Director, for a reduction of required vehicle spaces in exchange for bicycle parking spaces and for converting existing vehicle parking spaces to bicycle spaces.

#### Planning Commission Workshop

This proposed text amendment appeared before the Planning Commission in a workshop format at the April 5, 2023, meeting. Commission feedback during the workshop meeting was in general support of the proposed amendment for increased and clarified standards. The Commission was also in general support of allowing bicycle parking to fulfill some level of vehicle parking requirement or replace some amount of existing vehicle parking but stressed that specific maximums or "guardrails" should be in place to ensure such incentives do not result in "under parking" sites that may result in spill-over impacts to neighboring properties.

In response to department reviews from staff and feedback from Planning Commission during the April 5, 2023, workshop, the applicant made some minor revisions to their proposed text amendment. These revisions include updating applicable use categories to better match use categories established in the Town's LDRs, removing occupancy as a basis of measurement for required bicycle parking, and adjusting the 'alternative compliance' option available to the Planning Director to replace up to 10% rather than 25% of required vehicle parking with bicycle parking.

#### Planning Commission

Next, this proposed text amendment appeared before a Planning Commission regular meeting on June 7, 2023. Discussion mirrored that of the original workshop, including that incentives for reduction or replacement of any level of vehicle parking requirement for bicycle parking should include maximums or "guardrails" to ensure those incentives do not result in "under parking" sites or produce spill-over impacts to neighboring properties. Additionally, Planning Commission clarified that their workshop discussion on bicycle requirement for

residential uses was intended to introduce a per unit basis such 3 or more units per lot rather than a configuration basis such as 3 attached or 3 detached units. The table proposed below reflects that discussion and clarification.

### **Analysis.**

The text amendment changes will effectively set higher standards for bicycle parking facilities in most new development and align with the goals of the following Comprehensive Plan language:

*Policy 2.3.a (Meet future transportation demand through the use of alternative modes)*

*Policy 2.1.c (Create a safe, efficient, interconnected multimodal transportation network)*

*Principle 7.1 (Meet future transportation demand with walk, bike, carpool, transit, and micromobility infrastructure) which states: If the fastest way to travel around the community and region is by walking, biking, carpooling or taking transit, residents, and visitors will move in a way that benefits the environment, their pocketbook, and their health. To achieve this goal, capital investment in transportation must be focused on walking, biking, carpooling, and transit. Single occupancy vehicle solutions have the most significant environmental footprint while providing transportation access to a limited portion of the population. Increasingly, the transportation network will be an interconnection of walking, biking, carpool, and transit infrastructure that makes the single-occupancy vehicle the least convenient mode of travel.*

*Policy 7.1.c (Interconnect all modes of transportation) which states: Our alternative transportation system will provide a means to connect all modes of travel. Park 'n' Rides, last-mile solutions, bicycle parking, complete streets, transit, micro-transit, and pathways will be incorporated into an integrated transportation system. A system of trails to connect our parklands and trailheads should be considered as part of the transportation system. The Town and County will work jointly to identify opportunities for connections between various transportation modes to make walking, biking, carpooling, and transit the quickest way to move around the community. Our new pathways should be modeled to accommodate new changes in transportation technology.*

Notably, LDR text amendments focusing on a specific, individual Section of text often have “rippling” implications on other LDR sections that require minor updates to correct section numbering, cross-references, or conflicts. Should Council direct Staff to move forward with this requested amendment, Staff will present any such minor changes at the time of ordinance reading.

### **Key Policy Question.**

The primary policy question is whether Council would like to increase and clarify the Town’s existing bicycle parking requirements.

The second key policy question is whether Council concurs with the amount of bicycle parking required by use as proposed in draft table attached hereto.

The third key policy question is whether Council supports a reduction in vehicle parking spaces by Planning Director as mentioned above.

Subsequent questions for consideration are whether the proposed amendment strikes the right balance between improving bike facilities for the community with the increased costs to developers (e.g., long-term bicycle storage), especially for providers of affordable housing in the community and whether the proposed amendment appropriately requires bicycle parking on both public and private properties.

**Public Comment.**

No public comment has been received by Staff at the time of this report.

**Staff Findings.**

Pursuant to Section 8.7.2 of the Town of Jackson Land Development Regulations, the advisability of amending the text of these LDRs 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 LDR text 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.** The purposes of the LDRs per Division 1.3 are generally to implement the Comprehensive Plan and to promote the health, safety, and general welfare of the present and future inhabitants of the community. Staff finds the proposed amendment is supportive of our community's comprehensive plan goals and is consistent with the purpose and organization of the LDRs.

***2. Improves the consistency of the LDRs with other provisions of the LDRs;***

**Complies.** The amendment proposes more detailed, use-specific standards for bicycle parking consistent with provisions of the broader Required Parking and Loading Standards (Section 6.2.2), including vehicle and disability parking requirements.

***3. Provides flexibility for landowners within standards that clearly define desired character;***

**Complies.** The amendment defines a minimum standard for bicycle parking while offering flexibility for alternative compliance if, when strictly applied, the proposed standard results in specific constraints or unforeseen circumstances.

***4. Is necessary to address changing conditions, public necessity, and/or state or federal legislation;***

**Complies.** The amendment proposes more detailed, use specific standards for bicycle parking aimed at increasing the availability and occurrence of bicycle parking infrastructure. This infrastructure is supportive of a broader network of bicycle infrastructure, including paths and multi-modal facilities, which foster alternative modes of transportation for visitors and residents.



**5. Improves implementation of the Comprehensive Plan; and**

**Not Applicable.** Per Wyoming State statute.

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

**Complies.** As conditioned, the proposed amendment does not conflict with any other Town Ordinances.

**Fiscal Impact.**

None.

**Staff Impact.**

The amount of Staff time to review this Conditional Use Permit, including research and report drafting is approximately 30 hours. Preparing the ordinance for presentation at an upcoming meeting is estimated at 5 additional hours of staff time.

**Attachments or Links.**

Draft Table of Proposed Bicycle Parking Requirement

Department Reviews

Applicant Submittal

**Suggested Motion.** *Council always has the option to adopt, approve with conditions, continue, or deny items.*

I move to direct staff to prepare an ordinance for LDR Text Amendment P23-016 as directed by Council and based upon the findings presented in the staff report, the departmental reviews, and subject to this staff report dated July 17, 2023, and present that ordinance for first reading at the next available opportunity.

## P23-016 Draft Proposed Table of Bicycle Parking Requirement

| Required Bicycle Parking                                   |                         |                         |                         |
|------------------------------------------------------------|-------------------------|-------------------------|-------------------------|
| Use                                                        | Standard                | Long-term Parking       | Short-term Parking      |
| Open Spaces Uses                                           |                         |                         |                         |
| Agriculture                                                | n/a                     | n/a                     | n/a                     |
| Outdoor Recreation                                         | Independent calculation | Independent calculation | Independent calculation |
| Residential Uses                                           |                         |                         |                         |
| Fewer than 3 units per lot                                 | n/a                     | n/a                     | n/a                     |
| 3 or more units per lot                                    | 1 per bedroom           | 100%                    | n/a                     |
| Mobile Home                                                | n/a                     | n/a                     | n/a                     |
| Group Home                                                 | Independent calculation | Independent calculation | Independent calculation |
| Lodging Uses                                               |                         |                         |                         |
| Conventional Lodging                                       | 1 per 10 guest rooms    | 25%                     | 75%                     |
| Short-term Rental<br>(applies within Lodging Overlay only) | 1 per bedroom           | 50%                     | 50%                     |
| Commercial Uses                                            |                         |                         |                         |
| Office                                                     | 1 per 1,500sf           | 50%                     | 50%                     |
| Retail                                                     | 1 per 1,000sf           | 10%                     | 90%                     |
| Service                                                    | 1 per 1,500sf           | 50%                     | 50%                     |
| Restaurant/Bar                                             | 1 per 20 seats          | First 3 spaces          | Remainder               |
| Heavy Retail/Service                                       | 4 per business          | 25%                     | 75%                     |
| Mini-Storage Warehouse                                     | 2 per business          | 100%                    | n/a                     |
| Nursery                                                    | 2 per business          | 100%                    | n/a                     |

| Required Bicycle Parking (cont.)                                                       |                                                         |                         |                         |
|----------------------------------------------------------------------------------------|---------------------------------------------------------|-------------------------|-------------------------|
| Use                                                                                    | Standard                                                | Long-term Parking       | Short-term Parking      |
| Amusement/Recreation                                                                   |                                                         |                         |                         |
| Amusement                                                                              | 1 per 1,000sf                                           | 25%                     | 75%                     |
| Developed Recreation                                                                   | Independent calculation                                 | Independent calculation | Independent calculation |
| Outfitter / Tour Operator                                                              | 4 per business                                          | 75%                     | 25%                     |
| Adult Entertainment Business                                                           | 1 per 1,000sf                                           | 10%                     | 90%                     |
| Institutional                                                                          |                                                         |                         |                         |
| Assembly                                                                               | 1 per 2,000sf                                           | 25%                     | 75%                     |
| Daycare / Education (does not apply to daycare use)                                    | 5 per classroom for elementary school and higher grades | 25%                     | 75%                     |
| Industrial                                                                             |                                                         |                         |                         |
| Light Industry                                                                         | 2 per business                                          | n/a                     | 100%                    |
| Heavy Industry                                                                         | 2 per business                                          | n/a                     | 100%                    |
| Disposal                                                                               | 2 per business                                          | n/a                     | 100%                    |
| Transportation / Infrastructure                                                        |                                                         |                         |                         |
| Parking                                                                                | 20% of vehicle spaces provided                          | 25%                     | 75%                     |
| All other Transportation / Infrastructure                                              | n/a                                                     | n/a                     | n/a                     |
| Accessory Uses                                                                         |                                                         |                         |                         |
| Accessory Residential Unit (where residential unit density is 3 or more units per lot) | 1 per unit                                              | 100%                    | n/a                     |
| Bed and Breakfast                                                                      | 1 per 2 guest rooms                                     | n/a                     | 100%                    |
| All other Accessory Uses                                                               | n/a                                                     | n/a                     | n/a                     |
| Temporary Uses                                                                         | n/a                                                     | n/a                     | n/a                     |



# PERMIT NOTES

Permit # P23-016

Parcel # :

Site Address:

Project Name: LDR Text Amend -6.2.2.D Bicycle Parking

| Note Type | Note Code | Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Created By              | Begin Date | End Date |
|-----------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------|----------|
| GENERAL   |           | <p>P23-016 Smart Gov Notes</p> <p>The Planning Dept. has reviewed your submission for an LDR Text Amendment and leaves the following department review comments:</p> <p>General:</p> <p>Narrative or presentations - Staff highly recommends applicant prepare cost estimates for the additional impact of required short-term and long-term parking. For example, how much estimated additional building cost will be incurred to incorporate proposed Long-term parking on a multi-unit residential building).</p> <p>Narrative or presentations - Staff highly recommends applicant share their proposed public outreach strategy, if any, for proposed text amendment.</p> <p>Revise all references to authority of Pathways Coordinator to read as Planning Director as the LDRs to not currently grant authority to the Pathways Coordinator.</p> <p>Verify consistency of requested requirement amounts. For example, application with cover letter dated 12.28.22 requests residential rate of 2 spaces per bedroom but subsequent files (attachment received via email on 3.16.23 from B. Schilling and revised use table) mentions 1 space per bedroom. Staff utilized the 1 per bedroom residential rate during PC workshop)</p> <p>Provided narrative detail in application of what timing and steps will be required for inclusion of new Bicycle Parking Installation Exhibit into the Engineering Standards. Please confirm with Public Works.</p> <p>Consider reorganization of proposed red-line text to include exemptions section addressing various exemptions currently incorporated throughout text.</p> <p>Address applicants preference for handling rounding issues. For example if 14.5 total bicycle spaces are required with a split of 75% LT and 25% ST how should the property apply the resulting 10.875 LT spaces and 3.625 ST spaces? Round up to 11 and 4?</p> <p>Applicability:</p> <p>Planning staff suggests narrowing the applicability language. For example, as currently proposed, the amendment would trigger additional cycle parking requirements on minor building and planning applications that would otherwise not require a review of parking or bicycle parking standards. Staff suggests consolidating proposed sections 1a-1c. Staff suggests the following language All new and expanded uses that generate off street parking shall provide parking for nonmotorized vehicles</p> | KPAGE@JACKS<br>ONWY.GOV | 04/21/23   | 4/21/23  |



# PERMIT NOTES

as set forth below unless otherwise exempt by this subsection.

Revise language in proposed section 1d to reference accurate use types. Staff suggests applicability language such as single detached dwellings and 2 attached dwelling units are exempt from the provisions of this section.

Required parking (proposed use categories and requirement table)

In general, Staff suggests consolidating/simplifying uses into similar groupings where able. For example Residential uses of 3 or more attached units or Industrial rather than breaking out each subcategory.

In general, revise proposed use table to remove all lines with question marks / outstanding questions, discretionary?, or per employee?, temporary shelter, family home daycare, home daycare center. Please propose a standard.

Revise application to include updated use categories and proposed bike parking requirement table which was submitted to Planning Staff by Mila Dunbar-Irwin on March 20, 2023. (separately from initial application)

Revise to list standards/requirements for a use category instead of referencing another use. (example: ARU requirement should be listed rather than referring back to residential use category as there are several residential use categories) Current description is unclear. Same comment for bed and breakfast use and Short-term rental use.

Revise to better define requirement for parking use. The currently listed 30 spaces minimum would effectively require 30 spaces for all parking lots regardless of size. Please clarify standard, for example, amount based off number of parking spaces.

Revise to remove asterisks noting at the discretion of the planning director.

Revise proposed use categories and proposed bike parking requirement table to remove table note planning director shall determine parking requirements for any use for which a minimum has not been established. This is broad, unclear, does not include a mechanism for calculation guidance, and may be captured in proposed subsection 4 alternative compliance.

Standards and installation guidelines

(3.a.i.3) Staff does not support language in a vehicle space or area within a public street. The applicant may keep this language, however, staff will include suggestion in staff report to alter/remove.

(3.a.i.6) Staff does not support inclusion of language in addition to the Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines as this introduces a separate compliance document for consideration.

Alternative Compliance

To the greatest extent possible, please provide methodology for determining flexibility under



# PERMIT NOTES

section 4a.

(4.a.iii) Remove. During review of a building or planning application where bicycle parking would be required, a corresponding use determination would be assigned to any unclassified use making this line unneeded.

(4.b-c) Staff is open to substitution for off-street vehicle parking and supports inclusion of guidelines/maximums so incentive does not create "underparked" issues.

(4.d) Please clarify if the exception in this line is for altering a bicycle parking requirement or altering an LSR requirement.

|            |                                             |                             |          |         |
|------------|---------------------------------------------|-----------------------------|----------|---------|
| GENERAL    | Workshop completed.                         | KPAGE@JACKS<br>ONWY.GOV     | 04/05/23 | 4/5/23  |
| GENERAL    | No comment                                  | KPAGE@JACKS<br>ONWY.GOV     | 03/17/23 | 3/17/23 |
| CONDITIONS | LDR Text Amendment Approved with Conditions | JSILLIMAN@JAC<br>KSONWY.GOV | 02/17/23 | 2/17/23 |

P23-016  
OWNER: Teton County  
APPLICANT: Brian Schilling

2/16/2023  
Jeff Silliman, 733-3079

DATE OF SUBMITTAL: 1/27/2023  
DATE OF MATERIALS: 6/30/2022 (Detail  
Sheets)  
REVISION NO.:

The engineering division has reviewed your application for Amendment to Section 6.2.2 of the Town of Jackson Land Development Regulations submitted on and with application materials as dated above.

## NOTES FOR APPROVAL:

1. Include a detail for parallel bike parking.
2. For Mounting Detail on New Concrete Pad:
  - a. 6 concrete for new pads is excessive. Use 4 minimum.
  - b. Fill with anchoring cement or epoxy grout to secure rack. Secure rack plumb and level until cured.
3. Part D.3.a.i.2:
  - a. Replace Must with Should. (Should be located in visible, publicity)
4. Part D.3.a.i.5:
  - a. Provide the standard or how to modify the standard.
5. Include TOJ logo in title blocks.
6. Change font on detail sheets to Calibri.



# PERMIT NOTES

| Note Type  | Note Code | Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Created By | Begin Date | End Date |
|------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|----------|
| CONDITIONS |           | <p>(2/1/2023 8:03 AM AL)</p> <p>The findings for approval are succinct, well-written, and in the spirit of the Comprehensive Plan. The proposed LDR amendments reflect national best practices as well as local needs.</p> <p>One additional thought which may not belong in formal comments but rather as commentary for your staff report: the guiding Comprehensive Plan principles for transportation are to meet future demand for transportation with non-SOV modes and reduce GHG emissions from transportation. This proposed amendment is a key step to making bicycle ownership and operation easier, thus making it more competitive with auto. In the future, we may need to develop LDR amendments for building frontages to encourage the on-street bike infrastructure to further support biking as a viable alternative to auto. That infrastructure may fall into Town ROW, thus may not be a subject of the LDRs, but I did want to call attention to the need.</p> <p>Thank you again for the opportunity to review!<br/>Charlotte</p> | MIGRATION  | 02/01/23   | 2/13/23  |
| CONDITIONS |           | <p>(1/30/2023 9:44 AM AL)</p> <p>Comment from JH Fire for Trans Memo P23-016 (LDR Text Amendment to 6.2.2D Bicycle Parking in the Town of Jackson).</p> <p>Fire hydrant and fire department connection access requirements must be maintained.</p> <p>Thank you,<br/>Lisa</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | MIGRATION  | 01/30/23   | 2/13/23  |



May 17, 2023

Town of Jackson Planning  
c/o Katelyn Page  
150 E Pearl Ave  
Jackson WY 83001

**RE: P23-016 Bike Parking Standards Text Amendment**

Dear Katelyn,

We have prepared a response to comments and updated the proposed redline for our text amendment application. Departmental reviews have been annotated and are attached, and our response to substantive comments are included here. The redline includes all other changes.

Engineering Department Comments:

- Applicant will submit revised version of details under separate cover

Fire Department Comments:

- Bike parking should not interfere with fire hydrant and fire department connection access and this should be assessed during the site planning process

Planning Department Comments (see attached for completed items):

- *Cost Estimates* – applicant will prepare the requested cost estimates for the next Planning Commission meeting and will share them with staff ahead of time
- *Public Outreach Strategy* – applicant will enlist assistance from the Chamber of Commerce to inform business owners about the LDR update and will inform the public via Planning Commission and Board of County Commission regular public information channels
- *Inclusion in Engineering Standards* – applicant proposes to include the design details and installation standards in the next update to the Town of Jackson Engineering Standards. If the next planned update is more than four months out, staff will pursue a standalone update process for Council consideration (or internal approval if that is sufficient)
- *Rounding Method* – applicant proposes to round up to the nearest whole number of parking spaces required (for example – 14.5 total spaces at 75%/25% LT/ST results in 10.875 LT spaces and 3.625 ST spaces – these become 11 LT and 4 ST)
- *Parking Lots* – minimum number of 20% of required vehicle parking (change in redline)
- *Alternative Compliance Methodology* – applicant will research and propose a methodology for flexibility under 4.a
- *Alternative Compliance Substitution Rate* – applicant proposes capping this rate at 10% and would like to continue to include this option for discussion

We appreciate your consideration and are available for further discussion at any time.

## Draft Update to Section 6.2.2.D Bicycle Parking (Teton County and Town of Jackson LDRs)

### D. Required Bicycle Parking

~~All nonresidential uses shall provide on-site parking spaces for use by non-motorized vehicles~~

~~1. Standard. One bicycle parking space shall be provided for every 10 vehicle spaces required.~~

~~2. Required Facilities. Bicycle parking requirements shall be fulfilled through the installation of lockers, racks, or equivalent structures in or upon which a bicycle may be locked by the user. All racks shall be securely anchored to the ground or building surface. Racks shall be designed to accommodate U-shaped locks.~~

1) -Applicability. The provisions of this article shall apply to:

a) All new and expanded uses that generate off-street parking shall provide parking for non-motorized vehicles as set forth below unless otherwise exempt by this subsection.

b) The provisions of this article do not apply to single detached dwellings or duplexes (-two attached dwelling units).

1)2) Required parking

| <u>Required Parking</u>            |                                                   |                      |
|------------------------------------|---------------------------------------------------|----------------------|
| <u>Use</u>                         | <u>Parking Spaces</u>                             |                      |
|                                    | <u>Long-Term</u>                                  | <u>Short-Term</u>    |
| <u>Open Space Uses</u>             | <u>at the discretion of the Planning Director</u> |                      |
| <u>Residential Uses</u>            |                                                   |                      |
| <u>Detached single-family unit</u> |                                                   | <u>N/A</u>           |
| <u>Attached single-family unit</u> |                                                   | <u>1 per bedroom</u> |
|                                    | <u>50%</u>                                        | <u>50%</u>           |
| <u>Apartment</u>                   |                                                   | <u>1 per bedroom</u> |
|                                    | <u>50%</u>                                        | <u>50%</u>           |
| <u>Mobile Home</u>                 |                                                   | <u>N/A</u>           |
| <u>Dormitory</u>                   |                                                   | <u>1 per bed</u>     |
|                                    | <u>25%</u>                                        | <u>75%</u>           |
| <u>Group Home</u>                  | <u>at the discretion of the Planning Director</u> |                      |
| <u>Lodging Uses</u>                |                                                   |                      |
| <u>Conventional lodging</u>        | -                                                 | -                    |
|                                    | <u>1 per 10 guest rooms</u>                       |                      |
|                                    | <u>25%</u>                                        | <u>75%</u>           |
| <u>Short-term rental</u>           | <u>same as residential use category</u>           |                      |
| <u>Campground</u>                  | <u>N/A</u>                                        |                      |
| <u>Commercial Uses</u>             |                                                   |                      |
| <u>Office</u>                      | -                                                 | -                    |
|                                    | <u>1 per 1500sf</u>                               |                      |
|                                    | <u>50%</u>                                        | <u>50%</u>           |
| <u>Retail</u>                      |                                                   | <u>1 per 1000sf</u>  |
|                                    | <u>10%</u>                                        | <u>90%</u>           |
| <u>Service</u>                     |                                                   | <u>1 per 1500sf</u>  |

|                                         |                                                                                           |                       |                  |
|-----------------------------------------|-------------------------------------------------------------------------------------------|-----------------------|------------------|
| <u>Restaurant/Bar</u>                   | <u>50%</u>                                                                                | <u>1 per 20 seats</u> | <u>50%</u>       |
|                                         | <u>3</u>                                                                                  |                       | <u>remainder</u> |
| <u>Heavy retail/Service</u>             |                                                                                           | <u>4 per business</u> |                  |
|                                         | <u>25%</u>                                                                                |                       | <u>75%</u>       |
| <u>Mini-storage warehouse</u>           |                                                                                           | <u>2 per business</u> |                  |
|                                         | <u>100%</u>                                                                               |                       |                  |
| <u>Nursery</u>                          |                                                                                           | <u>2 per business</u> |                  |
|                                         | <u>100%</u>                                                                               |                       |                  |
| <hr/>                                   |                                                                                           |                       |                  |
| <b><u>Amusement/Recreation Uses</u></b> | -                                                                                         |                       | -                |
| <u>Amusement</u>                        |                                                                                           | <u>1 per 1000sf</u>   |                  |
|                                         | <u>25%</u>                                                                                |                       | <u>75%</u>       |
| <u>Developed recreation</u>             | <u>at the discretion of the Planning Director</u>                                         |                       |                  |
| <u>Outfitter/Tour operator</u>          |                                                                                           | <u>4 per business</u> |                  |
|                                         | <u>75%</u>                                                                                |                       | <u>25%</u>       |
| <u>Adult Entertainment Business</u>     |                                                                                           | <u>N/A</u>            |                  |
| <hr/>                                   |                                                                                           |                       |                  |
| <b><u>Institutional Uses</u></b>        | -                                                                                         |                       | -                |
| <u>Assembly</u>                         |                                                                                           | <u>1 per 2000sf</u>   |                  |
|                                         | <u>25%</u>                                                                                |                       | <u>75%</u>       |
| <u>Daycare/Education</u>                | <u>5 per classroom for elementary school and up</u><br><u>(not applicable to daycare)</u> |                       |                  |
|                                         | <u>25%</u>                                                                                |                       | <u>75%</u>       |
| <hr/>                                   |                                                                                           |                       |                  |
| <b><u>Industrial Uses</u></b>           |                                                                                           | <u>2 per business</u> |                  |
| <hr/>                                   |                                                                                           |                       |                  |
| <b><u>Infrastructure Uses</u></b>       | -                                                                                         |                       | -                |
| <u>Parking</u>                          | <u>20% of vehicle spaces provided</u>                                                     |                       |                  |
|                                         | <u>25%</u>                                                                                |                       | <u>75%</u>       |
| <u>All Others</u>                       | <u>N/A</u>                                                                                |                       |                  |
| <hr/>                                   |                                                                                           |                       |                  |
| <b><u>Accessory Uses</u></b>            | -                                                                                         |                       | -                |
| <u>Accessory residential unit</u>       |                                                                                           | <u>1 per unit</u>     |                  |
| <u>Bed and breakfast</u>                |                                                                                           | <u>1 per 2 rooms</u>  |                  |
| <u>All Others</u>                       | <u>N/A</u>                                                                                |                       |                  |
| <hr/>                                   |                                                                                           |                       |                  |
| <b><u>Temporary Uses</u></b>            | <u>N/A</u>                                                                                |                       | -                |

*Notes: a) all parking would require 25% spaces available for large / alternative bicycles as defined below, at the discretion of the Planning Director to waive or increase this requirement*

*b) all long- and short-term parking percentage requirements may be adjusted depending on the specific application at the discretion of the Planning Director in consultation with Planning Director*

### 3) Standards and installation guidelines

- a) All bicycle parking spaces shall be provided on the same parcel as the building or use for which such spaces are required

i) Short-term parking

- (1) Short-term parking is generally designed for parking of two hours or less, and is targeted to visitors, customers, and other short-term users
- (2) Must be located in a visible, publicly accessible space within 50' of a pedestrian entrance to the uses served by the required bicycle parking
- (3) Short-term parking may be adjacent to public streets and sidewalks, and can sometimes be allowed in the right-of-way, in a vehicle space on a public street, or replacing a vehicle space in a private parking lot
- (4) Acceptable types of short-term parking will allow for two points of contact between the bicycle and the rack, one of which includes the frame, and must be designed so that the bicycle frame and one wheel can be locked to a secure portion of the rack with a U-lock, with both wheels left on the bicycle. Wave, ribbon, loop, and other serpentine-style racks are not permitted.
- (5) A minimum of 25% of the required spaces must accommodate larger and alternative bicycles, including cargo bikes / bikes with trailers, tricycles, hand cycles, tandems, and electric motor assisted bicycles
- (6) See Figure XXXX for standard dimensions and details

ii) Long-term parking

- (1) Long-term parking is generally designed for parking of two hours or more, and is targeted towards those who will be leaving their bicycles unattended for long periods of time such as at residences, transit centers, or places of employment
- (2) All long-term parking must be secure, conveniently-accessed from a pedestrian entrance, well-lit, and covered to protect bicycles from precipitation and theft
- (3) Acceptable forms of long-term parking include a secure, monitored location, a locked enclosure, or dedicated space within a building
- (4) Clustered inverted-U racks, wall racks, or individual bike lockers are acceptable (\*detail to be provided in a future update)

4) Alternative compliance

- a) The Planning Director may approve alternative compliance from the provisions of this article, which may include, but is not limited to, a reduction or deviation in the number, type, or location of the required bicycle parking, and may include a waiver of the requirement. Considerations include but are not limited to the following:
  - i) Physical site planning constraints
  - ii) Proximity to existing bicycle parking
  - iii) Provision of enhanced bicycle facilities provided within the development
  - iv) Inclusion of the site within a larger development for which adequate bicycle parking is already provided
  - v) Unforeseen circumstances or land use changes
- b) The Planning Director may approve replacing up to 10% of required vehicle parking spaces with bicycle parking
- c) In certain circumstances, existing vehicle parking may be converted to required bicycle parking with approval from the Planning Director

d) The Planning Director may grant an exception to the required Landscape Surface Ratio to allow for the durable surface of the required bicycle parking on a particular site

The Planning Dept. has reviewed your submission for an LDR Text Amendment and leaves the following department review comments:

General:

- see narrative • Narrative or presentations - Staff highly recommends applicant prepare cost estimates for the additional impact of required short-term and long-term parking. For example, how much estimated additional building cost will be incurred to incorporate proposed Long-term parking on a multi-unit residential building).
- see narrative • Narrative or presentations - Staff highly recommends applicant share their proposed public outreach strategy, if any, for proposed text amendment.
- ✓ • Revise all references to authority of Pathways Coordinator to read as Planning Director as the LDRs to not currently grant authority to the Pathways Coordinator.
- ✓ • Verify consistency of requested requirement amounts. For example, application with cover letter dated 12.28.22 requests residential rate of 2 spaces per bedroom but subsequent files (attachment received via email on 3.16.23 from B. Schilling and revised use table) mentions 1 space per bedroom. Staff utilized the 1 per bedroom residential rate during PC workshop)
- see narrative • Provided narrative detail in application of what timing and steps will be required for inclusion of new Bicycle Parking Installation Exhibit into the Engineering Standards. Please confirm with Public Works.
- see narrative • Consider reorganization of proposed red-line text to include exemptions section addressing various exemptions currently incorporated throughout text.
- see narrative • Address applicant's preference for handling rounding issues. For example if 14.5 total bicycle spaces are required with a split of 75% LT and 25% ST... how should the property apply the resulting 10.875 LT spaces and 3.625 ST spaces? Round up to 11 and 4?

Applicability:

- Planning staff suggests narrowing the applicability language. For example, as currently proposed, the amendment would 'trigger' additional cycle parking requirements on minor building and planning applications that would otherwise not require a review of parking or bicycle parking standards. Staff suggests consolidating proposed sections 1a-1c. Staff suggests the following language "All new and expanded uses that generate off street parking shall provide parking for nonmotorized vehicles as set forth below unless otherwise exempt by this subsection."
- ✓ • Revise language in proposed section 1d to reference accurate use types. Staff suggests applicability language such as "single detached dwellings and 2 attached dwelling units" are exempt from the provisions of this section.

Required parking (proposed use categories and requirement table)

- ✓ • In general, Staff suggests consolidating/simplifying uses into similar groupings where able. For example "Residential uses of 3 or more attached units" or "Industrial" rather than breaking out each subcategory.

- ✓ • In general, revise proposed use table to remove all lines with question marks / outstanding questions, “discretionary?”, or “per employee?”, temporary shelter, family home daycare, home daycare center. Please propose a standard.
- ✓ • Revise application to include updated use categories and proposed bike parking requirement table which was submitted to Planning Staff by Mila Dunbar-Irwin on March 20, 2023. (separately from initial application)
- ✓ • Revise to list standards/requirements for a use category instead of referencing another use. (example: ARU requirement should be listed rather than referring back to residential use category as there are several residential use categories) Current description is unclear. Same comment for “bed and breakfast” use and “Short-term rental” use.
- ✓ • Revise to better define requirement for “parking use”. The currently listed “30 spaces minimum” would effectively require 30 spaces for all parking lots regardless of size. Please clarify standard, for example, amount based off number of parking spaces.
- ✓ • Revise to remove asterisks noting “at the discretion of the planning director”.
- ✓ • Revise proposed use categories and proposed bike parking requirement table to remove table note “planning director shall determine parking requirements for any use for which a minimum has not been established”. This is broad, unclear, does not include a mechanism for calculation guidance, and may be captured in proposed subsection 4 “alternative compliance”.

#### Standards and installation guidelines

- ✓ • (3.a.i.3) – Staff does not support language “in a vehicle space on a public street, or replacing a vehicle space in a private parking lot”. The applicant may keep this language, however, staff will include suggestion in staff report to alter/remove.
- ✓ • (3.a.i.6) – Staff does not support inclusion of language “in addition to the Association of Pedestrian and Bicycle Professionals’ Bicycle Parking Guidelines” as this introduces a separate compliance document for consideration. Staff suggests

#### Alternative Compliance

- To the greatest extent possible, please provide methodology for determining flexibility under section 4a.
- ✓ • (4.a.iii) – Remove. During review of a building or planning application where bicycle parking would be required, a corresponding use determination would be assigned to any “unclassified” use making this line unneeded.
- (4.b-c) Staff does not support this substitution for vehicle parking. The applicant may keep this language, however, staff will include suggestion in staff report to alter/remove. Also, please clarify what “certain circumstances” would include (part c). Need to better define offered flexibility.
- ✓ • (4.d) – Please clarify if the “exception” in this line is for altering a bicycle parking requirement or altering an LSR requirement.





## MEMO

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**Prepared for Teton County by Jorgensen Associates**  
**June 30, 2022**

### **SUBJECT: Bicycle Parking Standards**

**SUMMARY:** Teton County and the Town of Jackson have been recognized at the “Gold” level of Bicycle Friendly Communities by the League of American Bicyclists. This outstanding award recognizes the current and past efforts these communities have made towards becoming an enjoyable, safe, and convenient place to ride bikes for all purposes. In a continued effort to improve the quality and quantity of infrastructure and facilities available to cyclists, Teton County requested that Jorgensen Associates, Inc. (JA) research and prepare a summary of comparable community bicycle parking standards including locations, required quantities, materials and physical design, and other items as found. In addition, JA was asked to draw a sketch level design standard or other illustrative drawing to depict bicycle rack standard composition, dimensions, and site details.

The other communities consulted for this work were Davis, CA, Portland, OR, Cambridge, MA, and Boulder, CO, as well as the Association of Pedestrian and Bicycle Professionals. Each of these reference communities, with the exception of Cambridge, have achieved the “Platinum” award status from the League of American Bicyclists, and are exceptional examples. Cambridge, MA has previously been awarded “Gold” status, though they did not renew their application in the latest round of awards and are not currently listed.

This work was completed in consultation with Brian Schilling, Pathways Coordinator, and Charlotte Frei, PhD, PE, Regional Transportation Planning Administrator, at Teton County, Wyoming.

Attachments with this memo include the following additional files for use by Teton County and Town of Jackson:

- Red-line Draft LDR Update to Section 6.2.2.D
- Standard Details in .dwg format
- Code comparison and quantity comparison tables in .xls format

## SECTION 1: BICYCLE PARKING STANDARDS RESEARCH and COMPARISON

The Town of Jackson Land Development Regulations, and Teton County Land Development Regulations, each includes a short section called “Required Bicycle Parking” (Section 6.2.2.D) which requires one bicycle parking space per ten vehicle spaces and allows for any rack design which is anchored to the ground and can accommodate a U-lock. Parking is required to be in a “clearly designated, safe and convenient location.” These requirements provide a good foundation from which to build more specifics in regards to rack design, location, and spacing requirements, as well as materials, and more nuanced quantity requirements.

Following is a narrative description of the municipal codes dealing with bicycle parking standards, and some of the similarities that were found between reference communities. These can be found in table form in Appendix A, and code sections in full are in Appendix B.

### *Physical Design Standards*

Most communities used language very similar to, if not directly from, the Association of Pedestrian and Bicycle Professionals guides. The City of Davis, California, references the *Bicycle Parking Guidelines* as a preferred document for design standards, rather than re-stating them all in their own code, though they do have some additional language addressing physical development and design. Across all communities, the “inverted-U” rack was by far the preference, with “post-and-ring” and “swerve” called out as acceptable alternatives in Cambridge. All communities listed specific criteria, largely based on the APBP suggestions, as requirements for a rack to be approved, allowing the Community Development or Planning official to be the ultimate arbiter of acceptable alternative rack designs. All communities suggested the “Inverted-U” as the preferred standard. In addition, both Cambridge and Portland had additional requirements to accommodate larger and alternative bicycles when required spaces were more than 20, but below that accommodations were only suggestions. These criteria could be adapted easily for addition to Teton County and Town of Jackson standards, were that to be desired.

An inverted-U standard detail, which has been reviewed by Teton County staff, is included in Section 2 of this report. This could be used in lieu of or in addition to language describing required criteria for rack design.

### *Applicability*

All communities researched and referenced in this memo applied their bicycle parking standards to new developments and the uses in the categories listed in the requirements table. Some communities required bicycle parking standards to also apply on a change of use, or if new development reaches a certain percent increase above that which was existing (15%), at which point the required bicycle parking was calculated based on the entire use, not just the incremental increase. None of the researched standards applied to single family residential homes or duplexes.

### *Long-Term vs Short-Term Parking*

All reference communities required long and short term parking at different quantities depending on the intended use of the development. Specific requirements can be found in the tables located in Appendix C. Definitions for long-term parking varied a bit, but were centered on *security* and *weather protection*. Security was allowed to be achieved various ways, from locked structures to guarded enclosures, and weather protection was paramount. Communities recommended long term parking for

residences, work places, and transit hubs, as these are places where bikes tend to be left unattended for longer periods of time. Long-term is generally defined as greater than two hours. Long-term parking was generally allowed to be further from a pedestrian entrance (up to 300') than short-term parking. Teton County and Town of Jackson currently do not differentiate between the two, and could incorporate such requirements into developments such as transit centers / bus stops and multi-family residential developments as a starting point.

Short-term parking requirements were based on an assumption that visitors or customers would be in an establishment for less than two hours, and the most important criteria were accessibility, proximity, security, and ease of use. A distance of no more than 50' from the pedestrian entrance to a building was generally required, and options such as bike corrals in a vehicle parking space, racks in right-of-ways, and on sidewalks were allowed in Davis, Cambridge, and Portland, in cooperation with the respective City. The APBP states "bear in mind that perceived demand may be lower than the demand that develops once quality parking appears." This is key to developing forward-thinking requirements and a truly bike-friendly community.

### *Signs*

Generally, signs were not required, because parking was intended to be readily visible from the entrance to the building, and racks are intended to be intuitive enough for easy use. Portland was the exception, requiring signs at light rail and transit centers and a permanent sign at the entrance to a building where parking was not immediately visible.

### *Alternatives, Exceptions, and Incentives*

All communities had some type of alternative compliance option, generally determined at the discretion of the Community Development Director / Planning Director equivalent, and in Cambridge, the Planning Board. Alternatives and exceptions were granted based on site constraints or the existence of nearby parking. Portland and Cambridge have established a fee-in-lieu option Bicycle Parking Fund as a last resort alternative, which the City uses to construct bicycle parking facilities where possible.

Davis, Portland, and Cambridge all offered reduced vehicle parking incentives for more bicycle parking, and in the case of Portland, required vehicle parking could be reduced by whatever amount necessary to accommodate required bicycle parking as a priority. In addition, Davis offered up to 5% reduction in vehicle parking requirements to achieve additional bike-related amenities such as showers, lockers, or more secure bicycle parking. Reducing vehicle parking requirements in favor of more bicycle parking can help to achieve required bicycle parking quantities with less difficulty and prioritizes active transportation over vehicular traffic.

**SECTION 2: UPDATES to TETON COUNTY and / or TOWN OF JACKSON LDRs**

Following this research and compilation effort, Teton County and Town of Jackson could pursue LDR Text Amendments to update code language to better reflect the intention and goals of the community. After consultation with County staff, the following items were desired to be included in a code update to Section 6.2.2.D, organized into the categories above for ease of reference:

*Applicability*

- All new developments in use categories with required bicycle parking
- Existing developments requesting a change in use, expansion, intensification of use, or physical addition requiring a planning or building permit
- Pathways Coordinator may waive bicycle parking requirement if the anticipated use would not be expected to generate bicycle parking needs

*Alternative Bicycles / Types of Bicycles*

- Design standard racks to include space for cargo bikes, in particular, due to local prevalence in the community
- Require a percentage of spaces (25% - 50%) to be available for cargo bikes / bikes with trailers
- “Standards are designed for standard bicycles, tricycles, hand cycles, tandems, electric motor assisted cycles, cargo bicycles, and bicycles with trailers”

*Long Term Parking*

- Required to be secure, conveniently-accessed from a pedestrian entrance, well-lit, and covered to protect bicycles from weather/precipitation and theft
- Should be located in a secure or monitored location or in a locked enclosure
- Clustered inverted-U racks, wall racks, or external bike lockers are acceptable

*Short Term Parking*

- Generally designed for parking two hours or less, targeted to visitors, customers, and other short term users
- Must be located in a visible, publicly accessible space nearby a pedestrian entrance to the uses served by the bicycle parking
- May be adjacent to public streets and sidewalks, and can be sometimes allowed in the right-of-way

*Quantity Requirements*

Below is a draft table to be adjusted for inclusion in the LDRs. These are starting quantities developed in consultation with the Pathways Coordinator, and should be finalized prior to inclusion in code. The suggested numbers are based on the experience of the Pathways Coordinator, reference community consultation, and current Teton County / Town of Jackson requirements. It is suggested that these requirements be applied only to developments within the Town of Jackson, and perhaps be lessened for Teton County.

|                    |                         | <i>Long-Term</i> | <i>Short-Term</i> |
|--------------------|-------------------------|------------------|-------------------|
| <i>Residential</i> |                         |                  |                   |
|                    | Single-family or duplex | N/A              | N/A               |

|                        |                                                      |                                           |           |
|------------------------|------------------------------------------------------|-------------------------------------------|-----------|
|                        | Multi-family /<br>townhouse / condo                  | 1 per bedroom                             |           |
|                        |                                                      | 50%                                       | 50%       |
|                        | Hotel or Motel                                       | 1 per 10 guest rooms                      |           |
|                        |                                                      | 25%                                       | 75%       |
|                        | Dormitory                                            | 1 per bed                                 |           |
|                        |                                                      | 25%                                       | 75%       |
| <b>Non-Residential</b> |                                                      |                                           |           |
|                        | Restaurant                                           | 1 per 20 seats                            |           |
|                        |                                                      | 3                                         | Remaining |
|                        | Bar                                                  | 1 per 10 seats                            |           |
|                        |                                                      | 3                                         | Remaining |
|                        | Office                                               | 1 per 1500 sf                             |           |
|                        |                                                      | 50%                                       | 50%       |
|                        | Retail – general                                     | 1 per 1000 sf                             |           |
|                        |                                                      | 10%                                       | 90%       |
|                        | Retail – industrial, light<br>industrial, automotive | 4 per business                            |           |
|                        |                                                      | 25%                                       | 75%       |
|                        | Schools                                              | 5 per classroom                           |           |
|                        |                                                      | 25%                                       | 75%       |
|                        | Religious assemblies                                 | 10% max occupancy                         |           |
|                        |                                                      | 25%                                       | 75%       |
|                        | Other Public<br>Institutions                         | 10% of max occupancy                      |           |
|                        |                                                      |                                           |           |
|                        | Parks and Recreation<br>Facilities                   | At the discretion of Pathways Coordinator |           |
|                        |                                                      |                                           |           |

*\*Note: all parking would require 25% spaces available for large / alternative bicycles as defined above, at the discretion of the Pathways Coordinator to waive or increase this requirement*

#### *Exceptions and Incentives*

- Bicycle parking may substitute up to 25% of vehicle parking
- Existing vehicle parking may be converted to required bicycle parking
- Does not count as LSR (landscape surface ratio)
- Pathways Coordinator may allow exceptions based on surrounding bicycle parking availability, site constraints, or other trade-offs as needed

See Appendix A and below for a draft code update including the above concepts. These may be used for discussion or inclusion in any necessary documents for an update to the LDRs.

#### **Draft Update to Section 6.2.2.D Bicycle Parking (Teton County and Town of Jackson LDRs)**

##### **D. Required Bicycle Parking**

~~All nonresidential uses shall provide on-site parking spaces for use by non-motorized vehicles~~

~~1. Standard. One bicycle parking space shall be provided for every 10 vehicle spaces required.~~

2. Required Facilities. Bicycle parking requirements shall be fulfilled through the installation of lockers, racks, or equivalent structures in or upon which a bicycle may be locked by the user. All racks shall be securely anchored to the ground or building surface. Racks shall be designed to accommodate U-shaped locks.

1) Applicability. The provisions of this article shall apply to:

- a) All new developments which uses fall under the categories set forth in Table XXX requiring bicycle parking
- b) Existing developments that involve a change in use requiring planning approval or a building permit
- c) Existing developments that involve expansion, intensification, addition, or any other changes to the site requiring planning approval or a building permit
- d) The provisions of this article do not apply to single-family residences or duplexes.

2) Required parking

|                               |                                                              | <u>Long-Term</u>                                 | <u>Short-Term</u> |
|-------------------------------|--------------------------------------------------------------|--------------------------------------------------|-------------------|
| <u><b>Residential</b></u>     |                                                              |                                                  |                   |
|                               | <u>Single-family or duplex</u>                               | <u>N/A</u>                                       | <u>N/A</u>        |
|                               | <u>Multi-family /<br/>townhouse / condo</u>                  | <u>1 per bedroom</u>                             |                   |
|                               |                                                              | <u>50%</u>                                       | <u>50%</u>        |
|                               | <u>Hotel or Motel</u>                                        | <u>1 per 10 guest rooms</u>                      |                   |
|                               |                                                              | <u>25%</u>                                       | <u>75%</u>        |
|                               | <u>Dormitory</u>                                             | <u>1 per bed</u>                                 |                   |
|                               |                                                              | <u>25%</u>                                       | <u>75%</u>        |
| <u><b>Non-Residential</b></u> |                                                              |                                                  |                   |
|                               | <u>Restaurant</u>                                            | <u>1 per 20 seats</u>                            |                   |
|                               |                                                              | <u>3</u>                                         | <u>Remaining</u>  |
|                               | <u>Bar</u>                                                   | <u>1 per 10 seats</u>                            |                   |
|                               |                                                              | <u>3</u>                                         | <u>Remaining</u>  |
|                               | <u>Office</u>                                                | <u>1 per 1500 sf</u>                             |                   |
|                               |                                                              | <u>50%</u>                                       | <u>50%</u>        |
|                               | <u>Retail – general</u>                                      | <u>1 per 1000 sf</u>                             |                   |
|                               |                                                              | <u>10%</u>                                       | <u>90%</u>        |
|                               | <u>Retail – industrial, light<br/>industrial, automotive</u> | <u>4 per business</u>                            |                   |
|                               |                                                              | <u>25%</u>                                       | <u>75%</u>        |
|                               | <u>Schools</u>                                               | <u>5 per classroom</u>                           |                   |
|                               |                                                              | <u>25%</u>                                       | <u>75%</u>        |
|                               | <u>Religious assemblies</u>                                  | <u>10% max occupancy</u>                         |                   |
|                               |                                                              | <u>25%</u>                                       | <u>75%</u>        |
|                               | <u>Other Public<br/>Institutions</u>                         | <u>10% of max occupancy</u>                      |                   |
|                               |                                                              |                                                  |                   |
|                               | <u>Parks and Recreation<br/>Facilities</u>                   | <u>At the discretion of Pathways Coordinator</u> |                   |
|                               |                                                              |                                                  |                   |

\*Notes: a) all parking would require 25% spaces available for large / alternative bicycles as defined above, at the discretion of the Pathways Coordinator to waive or increase this requirement  
b) all long and short term parking percentage requirements are at the discretion of the Pathways Coordinator and may be adjusted depending on the specific application

### 3) Standards and installation guidelines

a) All bicycle parking spaces shall be provided on the same parcel as the building or use for which such spaces are required

#### i) Short-term parking

- (1) Short-term parking is generally designed for parking of two hours or less, and is targeted to visitors, customers, and other short-term users
- (2) Must be located in a visible, publicly accessible space within 50' of a pedestrian entrance to the uses served by the required bicycle parking
- (3) Short-term parking may be adjacent to public streets and sidewalks, and can sometimes be allowed in the right-of-way, in a vehicle space on a public street, or replacing a vehicle space in a private parking lot
- (4) Acceptable types of short-term parking will allow for two points of contact between the bicycle and the rack, one of which includes the frame, and must be designed so that the bicycle frame and one wheel can be locked to a secure portion of the rack with a U-lock, with both wheels left on the bicycle
- (5) A minimum of 25% of the required spaces must accommodate larger and alternative bicycles, including cargo bikes / bikes with trailers, tricycles, hand cycles, tandems, and electric motor assisted cycles
- (6) See Figure XXXX for standard dimensions and details, in addition to the Association of Pedestrian and Bicycle Professionals' *Bicycle Parking Guidelines*

#### ii) Long-term parking

- (1) Long-term parking is generally designed for parking of two hours or more, and is targeted towards those who will be leaving their bicycles unattended for long periods of time such as at residences, transit centers, or places of employment
- (2) All long-term parking must be secure, conveniently-accessed from a pedestrian entrance, well-lit, and covered to protect bicycles from precipitation and theft
- (3) Acceptable forms of long-term parking include a secure, monitored location, a locked enclosure, or dedicated space within a building
- (4) Clustered inverted-U racks, wall racks, or individual bike lockers are acceptable

### 4) Alternative compliance

a) The Pathways Coordinator may approve alternative compliance from the provisions of this article, which may include, but is not limited to, a reduction or deviation in the number, type, or location of the required bicycle parking, and may include a waiver of the requirement. Considerations include but are not limited to the following:

- i) Physical site planning constraints
- ii) Proximity to existing bicycle parking
- iii) Projects that cannot be classified into the provided land use categories
- iv) Provision of enhanced bicycle facilities provided within the development
- v) Inclusion of the site within a larger development for which adequate bicycle parking is already provided
- vi) Unforeseen circumstances or land use changes

b) In consultation with the Planning Director, the Pathways Coordinator may approve up to a 25% substitution of bicycle parking for required vehicle parking

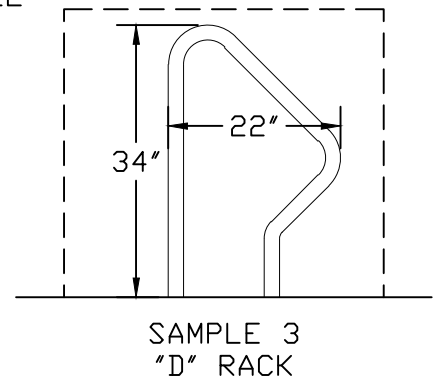
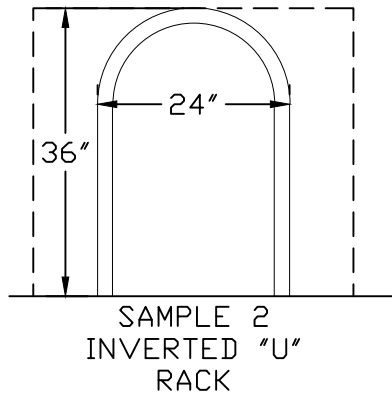
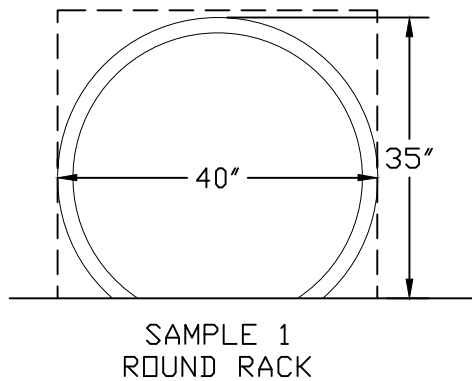
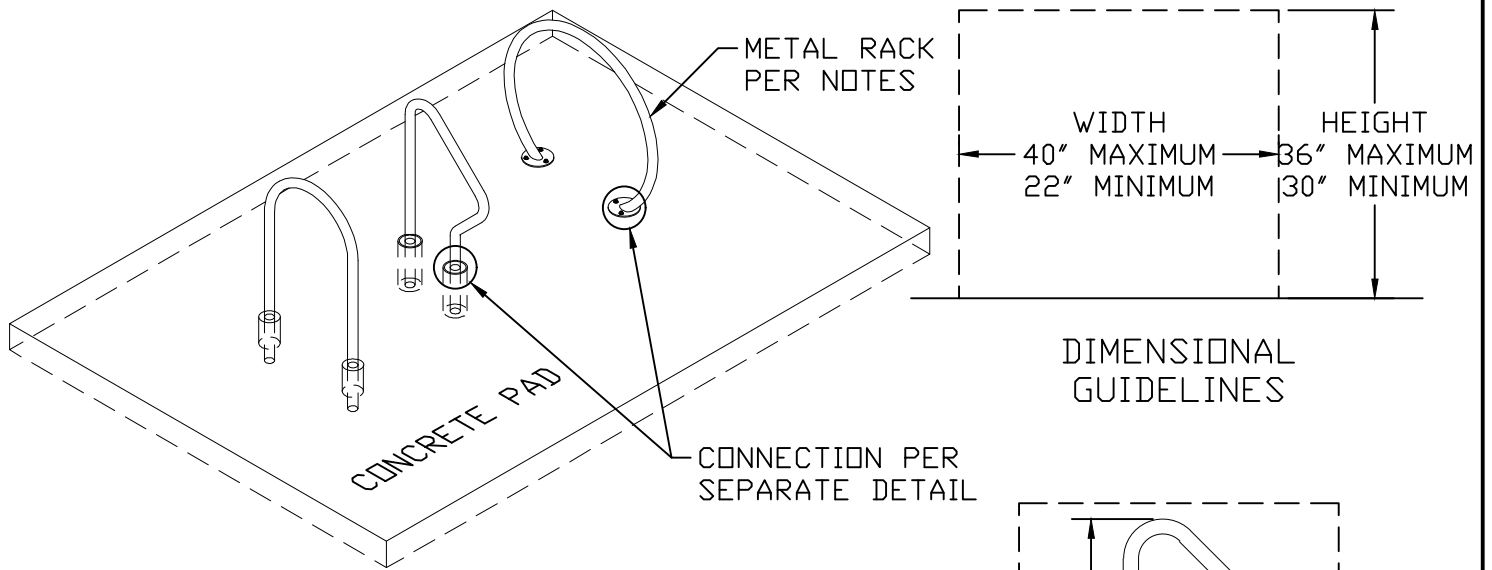
- c) In certain circumstances, existing vehicle parking may be converted to required bicycle parking with approval from the Pathways Coordinator and in consultation with the Planning Director
- d) The Planning Director may grant an exception for bicycle parking if the Landscape Surface Ratio is prohibitive to allow for the durable surface of the required bicycle parking on a particular site



### **SECTION 3: BICYCLE PARKING STANDARD DETAILS**

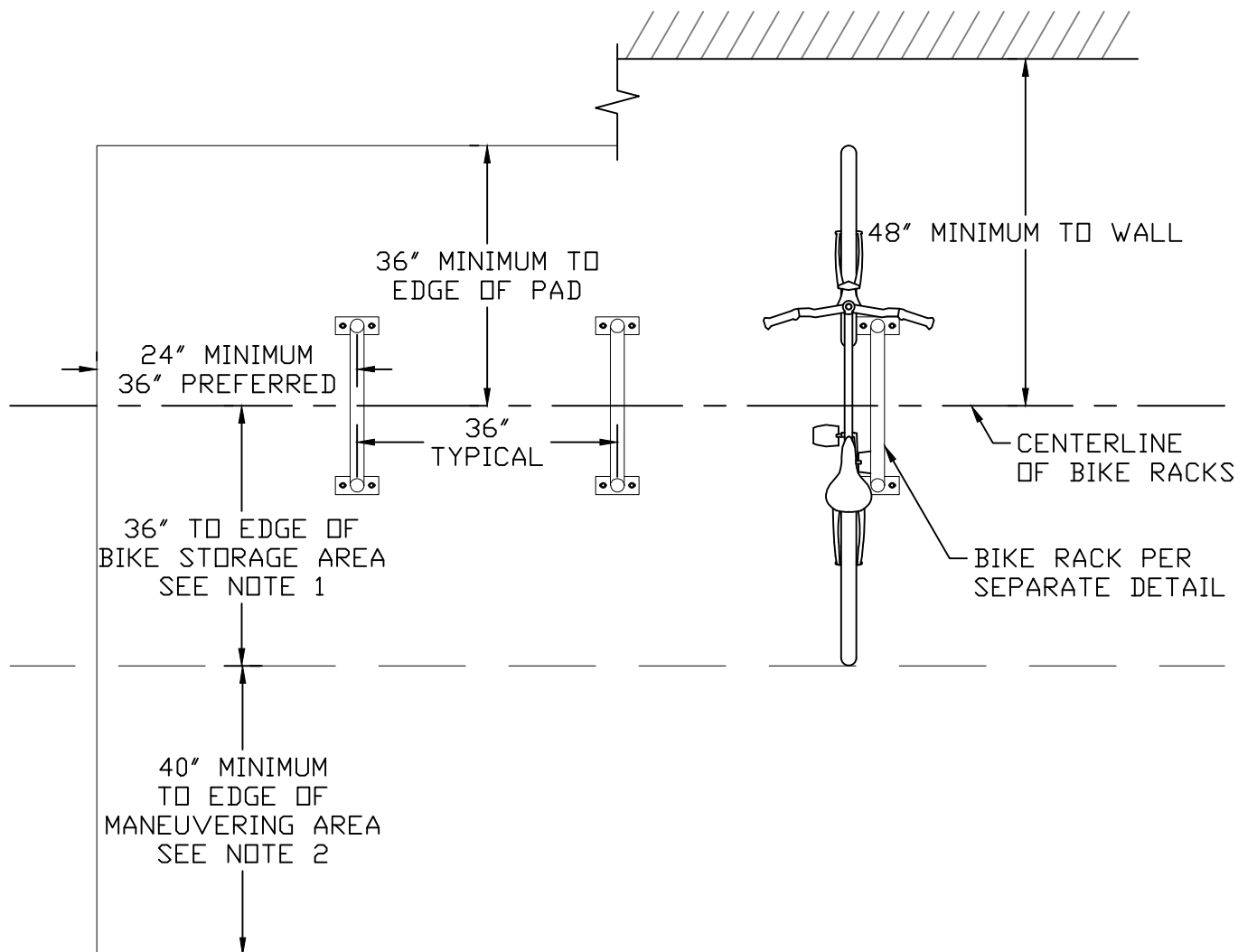
In consultation with Teton County staff, the following standard details were developed for the use of Teton County and the Town of Jackson. These include standards for rack design, spacing, locating, and attachment to the ground. They may be modified as needed for inclusion and use. Included are the following:

1. Bike Rack Styles Detail
2. Bike Rack Spacing Detail
3. Bike Rack Mounting Detail



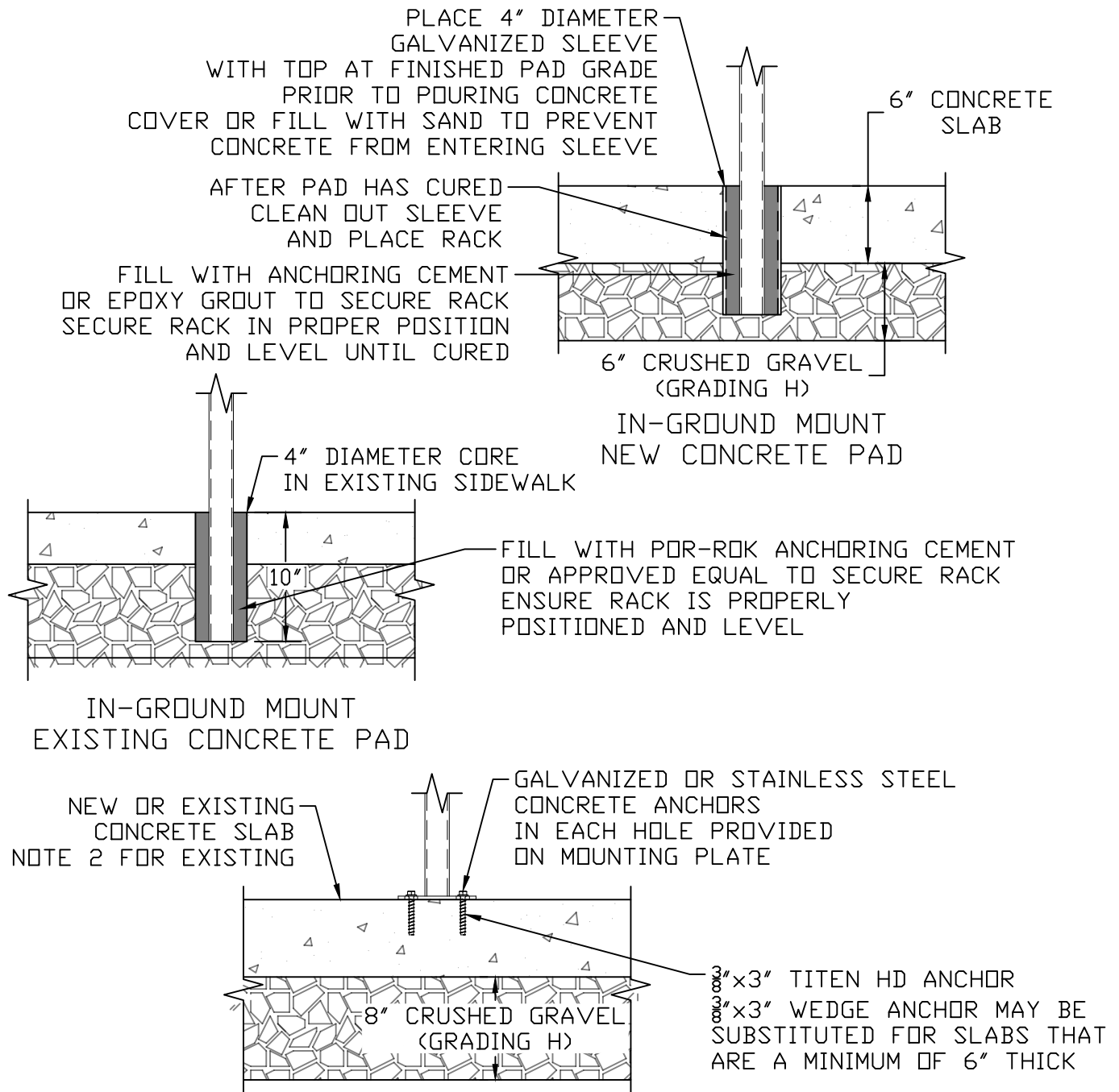
#### NOTE

1. ALL BIKE RACKS MUST COMPLY WITH THE FOLLOWING STANDARDS. ADDITIONAL STYLES NOT LISTED IN THIS DETAIL MAY BE APPROVED BY THE PATHWAYS COORDINATOR.
  - 1.1. ALL RACKS SHALL BE SECURELY ANCHORED TO A PERMANENT FOUNDATION
  - 1.2. RACKS SHALL BE METAL TUBE WITH A MINIMUM DIAMETER OF 1.5"
  - 1.3. ALLOWABLE FINISHES ARE GALVANIZED, STAINLESS STEEL AND THERMOPLASTIC OR VINYL PAINT
  - 1.4. RACKS MUST PROVIDE SUPPORT TO BIKE FRAME IN TWO PLACES
  - 1.5. RACK MUST PROVIDE SPACE TO SECURE THE FRAME AND ONE OR BOTH WHEELS TO THE RACK WITH A CABLE, CHAIN OR U-LOCK
2. RACKS THAT REQUIRE WHEELS TO BE LIFTED OFF THE GROUND ARE NOT ALLOWED



#### NOTE

1. FOR OVERSIZED BIKES THIS DIMENSION SHALL BE INCREASED TO 84".
2. THE MANEUVERING AREA MAY BE ANY TRAVERSABLE SURFACE INCLUDING SIDEWALK, PATHWAYS OR OTHER HARDSCAPE, AND PORTIONS OF PARKING NOT ALLOCATED TO PARKING STALLS. THIS AREA MAY NOT INCLUDE VERTICAL OBSTRUCTIONS OR TRAFFIC STREETS.



#### NOTE

1. SURFACE MOUNTED RACKS MAY BE PLACED ON EXISTING CONCRETE SLABS PROVIDED THEY DO NOT HAVE EXCESSIVE CRACKING AND HAVE A MINIMUM THICKNESS OF 4".
2. MULTIPLE RACKS MAY BE MOUNTED ON RAILS PROVIDED THE RAIL IS SECURELY ANCHORED TO A PERMANENT FOUNDATION

## **SECTION 4: APPENDICES**

**APPENDIX A – Bicycle Standard Reference Code Comparison Table**

**APPENDIX B – Bicycle Rack Quantity Requirements Comparison Tables**

**APPENDIX C – Bicycle Standard Reference Codes**

**Bike Parking Standard Comparison**  
**Prepared for Teton County**  
**June, 2022**

|               | Section of Code                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Applicability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Alternative Bicycles / Types of Bicycles                                                                                                                                                                                                                                                                                                                                                                                           | Long Term Parking                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Short Term Parking                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quantity Requirements                                                                                                                                                                                                      |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Davis, CA     | <ul style="list-style-type: none"> <li>Municipal Code, Chapter 6 - Bicycles (Operating Standards) (<a href="https://library.qcode.us/lib/davis_ca/pub/municipal_code/item/chapter_6">https://library.qcode.us/lib/davis_ca/pub/municipal_code/item/chapter_6</a>)</li> <li>Municipal Code, Chapter 40.25A - Bicycle Parking Standards (<a href="https://library.qcode.us/lib/davis_ca/pub/municipal_code/item/chapter_40-article_25a">https://library.qcode.us/lib/davis_ca/pub/municipal_code/item/chapter_40-article_25a</a>)</li> </ul>                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>all new development in the listed use categories</li> <li>existing developments with a change in use, expansion, intensification, or addition requiring planning or building permit</li> <li>does NOT apply to single-family residential or duplexes</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p>"Nontraditional bicycles with larger parking space requirements, including but not limited to, cargo bikes, bikes with trailers, recumbent bikes, etc."</p> <p>*not required</p>                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>longer than two hours and targeted to residents, employees</li> <li>increased levels of security in lit, covered, and permanently anchored locations</li> <li>accompanied or used in conjunction with storage lockers, locked rooms or enclosures, and parking areas internal to the building</li> </ul>                                                                                                                                                      | <ul style="list-style-type: none"> <li>two hours or less and are targeted to visitors, customers and other short term users</li> <li>shall provide two points of contact for a bicycle, allow for locking of the frame to the rack, and be securely anchored to the ground or wall.</li> <li>shall be in a visible location, as near as possible to entrances. (Ord. 2421 § 2, 2013)</li> </ul>                                                                                                              | <p>See attached document and Section 40.25A.040.a</p> <ul style="list-style-type: none"> <li>"Alternative Compliance" as determined by Community Development Director per site restrictions</li> </ul>                     |
| Boulder, CO   | <ul style="list-style-type: none"> <li>Municipal Code, Title 9 - Land Use Code, Chapter 9 - Development Standards, Section 9-9-6 Parking Standards, Subsection (g) (<a href="https://library.municode.com/co/boulder/codes/municipal_code?nodeId=TIT9LAUSCO_CH9DEST_9-9-6PAST">https://library.municode.com/co/boulder/codes/municipal_code?nodeId=TIT9LAUSCO_CH9DEST_9-9-6PAST</a>)</li> <li>Design and Construction Standards, Chapter 2 - Transportation Design, Section 2.11.E Bicycle Parking</li> </ul>                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>all new development listed in use categories</li> <li>silent on new vs existing vs triggering permits</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | silent                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Design and Construction Standards: "Bicycle lockers provide secure weatherproof storage for bike parking. Lockers are recommended for employee and longer-term parking and require adequate space, since they require more area than bicycle racks."</li> <li>required to be covered and include one of either a locked room, fenced area with locked gate, area within view of attendant, guard, or security camera, area visible from work areas</li> </ul> | <ul style="list-style-type: none"> <li>located on the public access level of a building</li> <li>within 50' of the main entrance</li> <li>outside the building</li> </ul>                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                            |
| Portland, OR  | <p>Title 33, Planning and Zoning, Chapter 26 Parking, Loading, Transportation and Parking Demand Management, Section 200, Bicycle Parking (<a href="https://www.portland.gov/sites/default/files/code/266-parking_1.pdf">https://www.portland.gov/sites/default/files/code/266-parking_1.pdf</a>)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>all new development listed in use categories</li> <li>silent on new vs existing vs triggering permits</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>standards are designed for "standard bicycles, tricycles, hand cycles, tandems, electric motor assisted cycles, and cargo bicycles"</li> <li>for sites with more than 20 long-term spaces at least 5% must be for "larger bicycles" as per Subparagraph D.3.a Figure 266-14 and have an electrical outlet accessible</li> <li>no larger space requirement for short-term parking</li> </ul> | <ul style="list-style-type: none"> <li>number required determined by use table</li> <li>detailed spacing and design standards contained in 33.266.210</li> <li>permit review requires location, access-route to long-term, # of spaces for each, model or design, dimensions of all aisles and maneuvering areas, other information</li> </ul>                                                                                                                                                       | <ul style="list-style-type: none"> <li>number required determined by use table</li> <li>detailed spacing and design standards contained in 33.266.210</li> <li>permit review requires location, access-route to long-term, # of spaces for each, model or design, dimensions of all aisles and maneuvering areas, other information</li> </ul>                                                                                                                                                               | See attached document and Table 266-6                                                                                                                                                                                      |
| Cambridge, MA | <ul style="list-style-type: none"> <li>Zoning Ordinance, Article 6 - Off Street Parking and Loading Requirements and Nighttime Curfew on Large Commercial Through Trucks (<a href="https://library.municode.com/ma/cambridge/codes/zoning_ordinance?nodeId=ZONING_ORDINANCE_ART6.0000_FSTPALORENICULACOTHTR">https://library.municode.com/ma/cambridge/codes/zoning_ordinance?nodeId=ZONING_ORDINANCE_ART6.0000_FSTPALORENICULACOTHTR</a>)</li> <li>Article 6.100 Bicycle Parking</li> <li>Bicycle Parking Guide (<a href="https://www.cambridgema.gov/-/media/Files/CDD/Transportation/Bike/Bicycle_Parking_Guide_20130926_2017PictureEdits.pdf">https://www.cambridgema.gov/-/media/Files/CDD/Transportation/Bike/Bicycle_Parking_Guide_20130926_2017PictureEdits.pdf</a>)</li> </ul> | <ul style="list-style-type: none"> <li>all new structures and uses requiring bike parking</li> <li>increase of 15% or more in number of residential dwelling units on a lot or in the amount of non-residential gross floor area</li> <li>conversion of existing gross floor area to new category of non-residential use where conversion results in at least 15% increase in total number of bicycle parking spaces that would be required for the entire building</li> <li>not required for one or two-family dwellings</li> <li>not required for enlargement / expansion / conversion of existing building where difference required would be 2 or fewer spaces</li> <li>not required for existing building expansion resulting in 3 or fewer dwelling units</li> <li>bike parking requirements are applied to entirety of use and not to incremental increase</li> </ul> | <ul style="list-style-type: none"> <li>when 20 or more bike parking spaces are required, at least 5% must provide 2' additional space to accommodate tandems or bike trailers</li> <li>long-term and short-term parking requires same</li> </ul>                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>must be provided within the building containing the use it serves or within 200' from a pedestrian entrance to the building</li> <li>must include a physical barrier if it is adjacent to motor vehicle parking or loading</li> <li>must be enclosed and limited-access to "protect bicycles from precipitation and theft"</li> </ul>                                                                                                                         | <ul style="list-style-type: none"> <li>must be located in a publicly accessible space near pedestrian entrance to served uses</li> <li>8 of the required spaces must be within 50' of pedestrian entrance; remaining spaces may be further away</li> <li>primarily for visitors or customers</li> <li>may be adjacent to public streets and sidewalks, sometimes allowed within right-of-way</li> </ul>                                                                                                      | <ul style="list-style-type: none"> <li>see attached document and Section 6.107.2 - Schedule of Long Term Bicycle Parking Requirements and Section 6.107.3 - Schedule of Short-Term Bicycle Parking Requirements</li> </ul> |
| APBP          | <p>Essentials of Bike Parking (<a href="https://www.apbp.org/assets/docs/EssentialsOfBikeParking_FINAL.pdf">https://www.apbp.org/assets/docs/EssentialsOfBikeParking_FINAL.pdf</a>)</p> <p>*see also Bicycle Parking Guidelines at apbp.org (\$20)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>for long-term parking consider trailers, long bikes, children's bikes, long-tails and more - suggested that a portion of racks be on the group and have an addition 36" in-line clearance</li> </ul>                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>high value for security and protection</li> <li>may be a room within a building, a secure enclosure within a parking garage, cluster of lockers, and / or staffed and guarded area</li> <li>may also need high-density racks, which are allowed to have slightly less than ideal design</li> </ul>                                                                                                                                                            | <ul style="list-style-type: none"> <li>effectiveness depends on proximity and ease of use</li> <li>typically lasts up to two hours</li> <li>visitors may be infrequent users of the location so parking needs to be readily visible and self-explanatory</li> <li>50' or less to the entrance</li> <li>weather protection and lit areas are best</li> <li>demand can increase once quality parking is installed</li> <li>bike corrals are a good option for on-street vehicle parking replacement</li> </ul> | <ul style="list-style-type: none"> <li>see full recommendations in Bicycle Parking Guidelines</li> </ul>                                                                                                                   |

#### Design Guidelines

- APBP *Bicycle Parking Guideline's*
- City of Davis *Project Development Standard Guidelines*

#### Signage

- silent

#### Exceptions & Incentives

- Director of Community Development may offer incentives including reducing vehicle parking space requirement by up to 5%, or other design requirements to accommodate space for secure bicycle parking and / or other amenities (incl locker rooms, showers, or indoor bicycle parking)

#### Bicycle Rentals

- see Article 6.05 in Davis Municipal Code ([https://library.qcode.us/lib/davis\\_ca/pub/municipal\\_code/item/chapter\\_6-article\\_6\\_05](https://library.qcode.us/lib/davis_ca/pub/municipal_code/item/chapter_6-article_6_05))

- See Design and Construction Standards

- Director of Public Works may approve alternative designs provided it has 1) two contact points, 2) a 2' x 6' parking space without needing to lift handlebars over another, 3) allows frame and wheel to be locked to the rack with a standard U-lock, 4) uncomplicated and intuitively simple
- City Manager may require a parking study
- if needs are determined to be met through on or off-street parking requirements can be reduced

- must have adequate signage, a name, and traffic law information as required by City Manager

- See 33.366.210 Bicycle Parking Development Standards for detailed spacing and design requirements

- light rail and transit must have sign at station or center indicating location
- if bicycle parking not visible from street or main entrance a permanent sign must be posted at the main entrance

- bicycle parking may substitute up to 25% of required vehicle parking
- for every 5 non-required bike spaces, 1 vehicle space can be replaced
- existing required vehicle parking may be converted to required bicycle parking by whatever number necessary to accommodate required bike parking
- City of Portland bike sharing station can substitute for required vehicle parking
- Bicycle Parking Fund may be contributed to as fee in lieu

- see Bicycle Parking Guide for illustrations and layout
- require 2 points of contact and ability to lock by cable, chain, U-lock or shackle
- specifically: Inverted U, Swerve, Post-and-Ring styles are allowed
- Wave racks are not allowed
- more details in Section 6.105.1
- bicycle parking may not require bikes to be lying down or need a kickstand, may not be hung with any wheels suspended, may not be required to be lifted off the ground without assistance

- silent

- fee-in-lieu is allowed as determined by "the City" to the Public Bicycle Parking Fund
- City can use these funds to install public bike parking wherever they choose, including the sidewalk in front of the property in question; maintenance can then fall on the property owner as per a required agreement (if so desired)
- the Planning Board may grant special permit for modifications to any requirements in Section 6.100 so long as it provides equal or greater benefits to bicycle users
- non-residential uses may convert 20% or 4 spaces of long-term to short-term
- residential may also but must be covered

- silent in these sections

- hard surface / concrete allows for secure mounting
- upright support of bike without putting stress on wheels with two points of frame contact
- accommodate a variety of bicycles and attachments
- allows locking of frame and at least one wheel with a U-lock
- provides security and longevity appropriate for the location and use
- rack use is easy and intuitive

- silent - intended to be readily visible without the need for signs

N/A

N/A

**Bike Parking Quantity Requirements**  
**Prepared for Teton County**  
**June, 2022**

|                 |                          | Davis                                           |            |  | Boulder                                                               |            |  | Cambridge                                                |                                 |  | Portland                |                          |
|-----------------|--------------------------|-------------------------------------------------|------------|--|-----------------------------------------------------------------------|------------|--|----------------------------------------------------------|---------------------------------|--|-------------------------|--------------------------|
|                 |                          | Long Term                                       | Short Term |  | Long Term                                                             | Short Term |  | Long Term                                                | Short Term                      |  | Long Term               | Short Term               |
| Residential     |                          |                                                 |            |  |                                                                       |            |  |                                                          |                                 |  | 2 or...                 | 2 or...                  |
|                 | Single Family            | N/A                                             |            |  | N/A                                                                   |            |  | No Minimum                                               | No Minimum                      |  |                         |                          |
|                 | Town House, Multi Family | 1 per bedroom                                   |            |  | 1 per 5 beds                                                          |            |  | 1 per unit for the first 20 1.05 per unit for additional | 0.1 per unit                    |  | 1 per 4 bedrooms        | 1 per 20 bedrooms        |
|                 |                          | 75%                                             | 25%        |  | 75%                                                                   | 25%        |  |                                                          |                                 |  |                         |                          |
|                 | Elderly                  | N/A                                             |            |  | N/A                                                                   |            |  | 0.5 per unit                                             | 0.05 per unit                   |  | 1 per 8 or 10 units     | 1 per 20 units           |
|                 | Hotel, Motels            | 1 per 10 guest rooms                            |            |  | 1 per 5 beds                                                          |            |  | 0.02 per sleeping room                                   | 0.05 per sleeping room          |  | 1 per 20 rentable rooms | 1 per 20 rentable rooms  |
|                 |                          | 50%                                             | 50%        |  | 75%                                                                   | 25%        |  |                                                          |                                 |  |                         |                          |
|                 | Dormitories              | 1 per bed                                       |            |  | 1 per 3 beds                                                          |            |  | 0.5 per unit                                             | 0.05 per bed                    |  | 1 per 4 bedrooms        | 4 spaces                 |
|                 |                          | 75%                                             | 25%        |  | 75%                                                                   | 25%        |  |                                                          |                                 |  |                         |                          |
| Non-Residential |                          |                                                 |            |  |                                                                       |            |  |                                                          |                                 |  |                         |                          |
|                 | Office                   | 1 per 1500 sf                                   |            |  | 1 per 1,500 square feet of floor                                      |            |  | 0.3 per 1000 sf. of floor area                           | 0.06 per 1000 sf. of floor area |  | 1 per 1800 or 3500 sf   | 1 per 20000 or 33000 sf. |
|                 |                          | 25%                                             | 75%        |  | 50%                                                                   | 50%        |  |                                                          |                                 |  |                         |                          |
|                 | Restaurant/Bar           | Quick Serve 1 per 150 sf; Sit Down 1 per 500 sf |            |  | 1 per 750 square feet of floor area, minimum of 4                     |            |  | 0.2 per 1000 sf. of floor area                           | 1 per 1000 sf. of floor area    |  | 1 per 2300 or 4800 sf.  | 1 per 1000 or 1600 sf    |
|                 |                          | 25%                                             | 75%        |  | 25%                                                                   | 75%        |  |                                                          |                                 |  |                         |                          |
|                 | Open Space, Parks        |                                                 |            |  | 1 per 750 square feet of floor area, outside use determined by review |            |  |                                                          |                                 |  |                         |                          |
|                 |                          | N/A                                             |            |  | 25%                                                                   | 75%        |  |                                                          |                                 |  | none                    | per CU review            |
|                 | Banks                    |                                                 |            |  | 1 per 1,500 square feet of floor                                      |            |  | 0.3 per 1000 sf. of floor area                           | 0.5 per 1000 sf. of floor area  |  |                         |                          |
|                 |                          | N/A                                             |            |  | 50%                                                                   | 50%        |  |                                                          |                                 |  |                         |                          |
|                 | Schools                  | 1 per 2500 sf                                   |            |  | 5 per classroom                                                       |            |  | See zoning                                               | see zoning                      |  | 6 or 5 per classroom    | 1 per 25000 or 100000 sf |
|                 |                          | 25%                                             | 75%        |  | 50%                                                                   | 50%        |  |                                                          |                                 |  |                         |                          |
|                 | Retail Store             | 1 per 1000 sf                                   |            |  | 1 per 750 square feet of floor                                        |            |  | 0.1 per 1000 sf of floor area                            | 0.6 per 1000 sf. of floor area  |  | 1 per 3800 or 7500 sf   | 1 per 2700 or 4400 sf    |
|                 |                          | 25%                                             | 75%        |  | 25%                                                                   | 75%        |  |                                                          |                                 |  |                         |                          |



**Davis, California**[Article 40.25A BICYCLE PARKING STANDARDS \(qcode.us\)](#)[Article 6.01 IN GENERAL \(qcode.us\)](#)**40.25A.040.a Bicycle Parking Standards**

|                                      | Standard (SF = Gross Square Foot)                                      | Short Term | Long Term |
|--------------------------------------|------------------------------------------------------------------------|------------|-----------|
| Residential - Group Living           | 1 per Bed                                                              | 25%        | 75%       |
| Residential - Multi Family           | 1 per Bedroom                                                          | 25%        | 75%       |
| Lodging                              | 1 per 10 guest room                                                    | 50%        | 50%       |
| Restaurant - Quick Serve             | 1 per 150 SF                                                           | 75%        | 25%       |
| Restaurant - Sit Down                | 1 per 500 SF                                                           | 75%        | 25%       |
| Retail, General Commercial           | 1 per 1000 SF                                                          | 75%        | 25%       |
| Commercial Services Auto Dealership) | 1 per 1000 SF                                                          | 75%        | 25%       |
| Office                               | 1 per 1500 SF                                                          | 75%        | 25%       |
| Shopping Center                      | 1 per 1750 SF                                                          | 75%        | 25%       |
| Institutional                        | 1 per 2500 SF                                                          | 75%        | 25%       |
| Light Industrial                     | 1 per 2000 SF                                                          | 25%        | 75%       |
| Industrial                           | 1 per 7500 SF                                                          | 25%        | 75%       |
| Civic, Cultural, Religious Center    | 10% of Max. Occupancy or Seats                                         | 75%        | 25%       |
| Commercial Recreation                | 10% of Max. Occupancy or Seats                                         | 75%        | 25%       |
| Open Space, Parks, Recreational Uses | As determined by the Community Development and Sustainability Director |            |           |
| Downtown (Core Area)                 | Apply same standard for land use above when feasible.                  |            |           |

**Portland, Oregon**

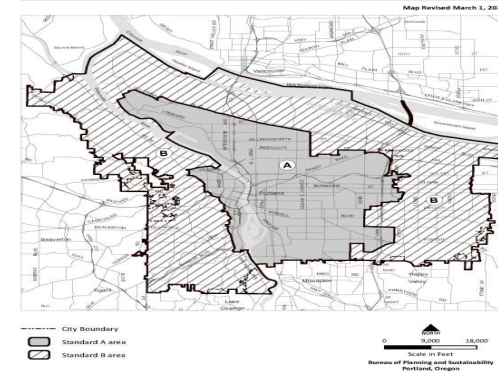
[Transportation And Demand Management \(portland.gov\)](https://www.portland.gov/transportation-and-demand-management)

Minimum Required Bicycle Parking Spaces [1]

|                          |                                          |                                      | Long Term                                     |                                               | Short Term                                                                        |                                                                                  |
|--------------------------|------------------------------------------|--------------------------------------|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Residential              |                                          |                                      | Standard A                                    | Standard B                                    | Standard A                                                                        | Standard B                                                                       |
|                          | Household living                         | 5 or More Unites                     | 2 or 1 per 1.5 per Unit                       | 2, or 1 per 1.1 per Unit                      | 2, or 1 per 20 per Unit                                                           | 2, or 1 per 20 per Unit                                                          |
|                          |                                          | Elderly and Disabled Housing         | 2, or 1 per 8 Units                           | 2, or 1 per 10 Units                          | 2, or 1 per 20 Units                                                              | 2, or 1 per 20 Units                                                             |
|                          | Group living                             |                                      | 2, or 1 per 4 Bedrooms                        | 2, or 1 per 4 Bedrooms                        | 2, or 1 per 20 Bedrooms                                                           | 2, or 1 per 20 Bedrooms                                                          |
|                          |                                          | Units with Restricted Tenancy        | 2, or 1 per 5 Bedrooms                        | 2, or 1 per 10 Bedrooms                       | 2, or 1 per 20 Bedrooms                                                           | 2, or 1 per 20 Bedrooms                                                          |
|                          |                                          | Dormitory                            | 2, or 1 per 4 Bedrooms                        | 2, or 1 per 4 Bedrooms                        | 4 Spaces                                                                          | 4 Spaces                                                                         |
| Commercial Categories    |                                          |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          | Retail Sales and Services                |                                      | 2, or 1 per 3800 sq. ft. of net building area | 2, or 1 per 7500 sq. ft. of net building area | 2, or 1 per 2700 sq. ft. of net building area                                     | 2, or 1 per 4400 sq. ft. of net building area                                    |
|                          |                                          | Temporary Lodging                    | 2, or 1 per 20 rentable rooms                 | 2, or 1 per 20 rentable rooms                 | 2, or 1 per 40 rentable rooms and 1 per 10000 sq. ft. or conference, meeting room | 2, or 1 per 40 rentable rooms and 1 per 5000 sq. ft. or conference, meeting room |
|                          |                                          | Restaurant and Bar                   | 2, or 1 per 2300 sq. ft. of net building area | 2, or 1 per 4800 sq. ft. of net building area | 2, or 1 per 1000 sq. ft. of net building area                                     | 2, or 1 per 1600 sq. ft. of net building area                                    |
|                          | Office                                   |                                      | 2, or 1 per 1800 sq. ft. of net building area | 2, or 1 per 3500 sq. ft. of net building area | 2, or 1 per 20000 sq. ft. of net building area                                    | 2, or 1 per 33000 sq. ft. of net building area                                   |
|                          | Commercial Parking                       |                                      | 10, or 1 per 10 auto spaces                   | 10, or 1 per 10 auto spaces                   | none                                                                              | none                                                                             |
|                          | Commercial Outdoor Recreation            |                                      | 2, or 1 per 12500 sq. ft. net building area   | 2, or 1 per 25000 sq. ft. net building area   | 2, or 1 per 3 acres                                                               | 2, or 1 per 2 acres                                                              |
|                          | Major Event Entertainment                |                                      | 10, or 1 per 10000 sq. ft. net building area  | 10, or 1 per 20000 sq. ft. net building area  | 10, or 1 per 40 seats                                                             | 10, or 1 per 40 seats                                                            |
|                          | Self-Service Storage                     |                                      | 2, or 1 per 5000 sq. ft. net building area    | 2, or 1 per 9000 sq. ft. net building area    | 2, or 1 per 26000 sq. ft. net building area                                       | 2, or 1 per 53000 sq. ft. net building area                                      |
| Industrial Categories    |                                          |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          | Manufacturing and Production             |                                      | 2, or 1 per 5000 sq. ft. net building area    | 2, or 1 per 9000 sq. ft. net building area    | 2, or 1 per 67000 sq. ft. net building area                                       | 2, or 1 per 111000 sq. ft. net building area                                     |
|                          | Warehouse and Freight Movement           |                                      | 2, or 1 per 12500 sq. ft. net building area   | 2, or 1 per 25000 sq. ft. net building area   | 2, or 1 per 200000 sq. ft. net building area                                      | 2, or 1 per 333000 sq. ft. net building area                                     |
|                          | Wholesale Sales                          |                                      | 2, or 1 per 12500 sq. ft. net building area   | 2, or 1 per 25000 sq. ft. net building area   | 2, or 1 per 91000 sq. ft. net building area                                       | 2, or 1 per 152000 sq. ft. net building area                                     |
| Institutional Categories |                                          |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          | Basic Utilities                          |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          |                                          | Transit Center                       | 30 spaces                                     | 30 spaces                                     | 12 spaces                                                                         | 12 spaces                                                                        |
|                          |                                          | Light Rail Stations                  | 12 spaces                                     | 12 spaces                                     | 4 spaces                                                                          | 5 spaces                                                                         |
|                          | Community Service                        |                                      | 2, or 1 per 6700 sq. ft. net building area    | 2, or 1 per 6700 sq. ft. net building area    | 2, or 1 per 6300 sq. ft. net building area                                        | 2, or 1 per 10000 sq. ft. net building area                                      |
|                          |                                          | Libraries, Community Center, Museums | 2, or 1 per 3000 sq. ft. net building area    | 2, or 1 per 3000 sq. ft. net building area    | 2, or 1 per 1200 sq. ft. net building area                                        | 2, or 1 per 2000 sq. ft. net building area                                       |
|                          |                                          | Park and Ride                        | 12, or 5 per acre                             | 12, or 5 per acre                             | 6 Spaces                                                                          | 6 Spaces                                                                         |
|                          | Parks and Open Areas                     |                                      | none                                          | none                                          | Per CU Review                                                                     | Per CU Review                                                                    |
|                          | Schools                                  |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          |                                          | Grade K-8                            | 6 per classroom                               | 6 per classroom                               | 2, or 1 per 25000 sq. ft. net building area                                       | 2, or 1 per 100000 sq. ft. net building area                                     |
|                          |                                          | Grades 9-12                          | 5 per classroom                               | 5 per classroom                               | 2, or 1 per 25000 sq. ft. net building area                                       | 2, or 1 per 100000 sq. ft. net building area                                     |
|                          | Colleges                                 | Excluding Dormitories                | 2, or 1 per 10000 sq. ft. net building area   | 2, or 1 per 10000 sq. ft. net building area   | 2, or 1 per 10000 sq. ft. net building area                                       | 2, or 1 per 16000 sq. ft. net building area                                      |
| Uses                     |                                          |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          | Medical Centers                          |                                      | 2, or 1 per 2700 sq. ft. net building area    | 2, or 1 per 2700 sq. ft. net building area    | 2, or 1 per 50000 sq. ft. net building area                                       | 2, or 1 per 100000 sq. ft. net building area                                     |
|                          | Religious Institutions                   |                                      | 2, or 1 per 11000 sq. ft. net building area   | 2, or 1 per 11000 sq. ft. net building area   | 2, or 1 per 14000 sq. ft. net building area                                       | 2, or 1 per 25000 sq. ft. net building area                                      |
|                          | Daycares                                 |                                      | 2, or 1 per 3000 sq. ft. net building area    | 2, or 1 per 3000 sq. ft. net building area    | 2, or 1 per 25000 sq. ft. net building area                                       | 2, or 1 per 33000 sq. ft. net building area                                      |
| Other Categories         |                                          |                                      |                                               |                                               |                                                                                   |                                                                                  |
|                          | Aviation and Surface Passenger Terminals |                                      | 2, or 1 per 4500 sq. ft. net building area    | 2, or 1 per 4500 sq. ft. net building area    | None                                                                              | None                                                                             |
|                          | Detention Facilities                     |                                      | 2, or 1 per 5000 sq. ft. net building area    | 2, or 1 per 5000 sq. ft. net building area    | None                                                                              | None                                                                             |

**Bicycle Parking Areas**

**Map 266-1**



Boulder, CO

[https://library.municode.com/co/boulder/codes/municipal\\_code?nodeId=TIT9LAUSCO\\_CH9DEST\\_9-9-6PAST](https://library.municode.com/co/boulder/codes/municipal_code?nodeId=TIT9LAUSCO_CH9DEST_9-9-6PAST)

Table 6-1: Use Table

|                                                                                                   | <b>Minimum Number of Off-Street Bicycle Spaces</b>                                                                        | <b>Long-Term</b> | <b>Short-Term</b> |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|
| <b>Residential Uses</b>                                                                           |                                                                                                                           |                  |                   |
| Dwelling units <sup>(a)</sup> with a private garage <sup>(b)</sup>                                | no requirement                                                                                                            | n/a              | n/a               |
| Dwelling units without a private garage <sup>(b)</sup>                                            | 2 per unit                                                                                                                | 75%              | 25%               |
| Accessory units                                                                                   | no requirement                                                                                                            | n/a              | n/a               |
| Group quarters - fraternities, sororities, and dormitories, boarding houses, transitional housing | 1 per 3 beds                                                                                                              | 75%              | 25%               |
| Group quarters - all others                                                                       | 1 per 5 beds                                                                                                              | 75%              | 25%               |
| <b>Dining and entertainment</b>                                                                   |                                                                                                                           |                  |                   |
| Restaurants, brewpubs and taverns                                                                 | 1 per 750 square feet of floor area, minimum of 4                                                                         | 25%              | 75%               |
| Lodging uses                                                                                      | 1 per 3 guest rooms, minimum of 4                                                                                         | 50%              | 50%               |
| All other dining and entertainment uses                                                           | 1 per 1,500 square feet of floor area                                                                                     | 25%              | 75%               |
| Mobile food vehicle and temporary outdoor entertainment                                           | no requirement                                                                                                            | n/a              | n/a               |
| <b>Public and Institutional Uses</b>                                                              |                                                                                                                           |                  |                   |
| Daycare center, daycare, home                                                                     | Determined through review: parking needs of use must be adequately served through on- or off-street parking, minimum of 4 | 50%              | 50%               |
| Public and private elementary, junior, and senior high schools                                    | 5 per classroom                                                                                                           | 50%              | 50%               |
| Public and private colleges and universities                                                      | 5 per classroom                                                                                                           | 50%              | 50%               |
| Religious assemblies                                                                              | The greater of 1 per 15 seats or 1 per 150 square feet of assembly area                                                   | 25%              | 75%               |

|                                                                                                                                                                                                                                |                                                                                                                                                                                                  |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| All other public and institutional uses                                                                                                                                                                                        | 1 per 1,500 square feet of floor area, minimum of 4                                                                                                                                              | 50% | 50% |
| <b>Office, Medical and Financial Uses</b>                                                                                                                                                                                      |                                                                                                                                                                                                  |     |     |
| Data processing facilities, financial institutions, hospitals, medical and dental laboratories, medical or dental clinics or offices, addiction recovery facilities, all office uses, and all other medical and financial uses | 1 per 1,500 square feet of floor area, minimum of 4                                                                                                                                              | 75% | 25% |
| <b>Parks and Recreation Uses</b>                                                                                                                                                                                               |                                                                                                                                                                                                  |     |     |
| Campgrounds, outdoor entertainment, park and recreation uses, indoor recreational or athletic facilities                                                                                                                       | 1 per 750 square feet of floor area; requirements for outdoor uses are determined through review: parking needs of use must be adequately served through on- or off-street parking, minimum of 4 | 25% | 75% |
| <b>Commercial, Retail, and Industrial Uses</b>                                                                                                                                                                                 |                                                                                                                                                                                                  |     |     |
| Service uses and retail sales uses                                                                                                                                                                                             | 1 per 750 square feet of floor area, minimum of 4                                                                                                                                                | 25% | 75% |
| Vehicle-related uses and industrial uses and all other                                                                                                                                                                         | 1 per 1,125 square feet of associated office space or production areas                                                                                                                           | 25% | 75% |
| <b>Agriculture &amp; Natural Uses</b>                                                                                                                                                                                          |                                                                                                                                                                                                  |     |     |
| Agriculture & Natural Uses                                                                                                                                                                                                     | no requirement                                                                                                                                                                                   | n/a | n/a |
| <b>Other Uses Not Listed in Table 9-8</b>                                                                                                                                                                                      |                                                                                                                                                                                                  |     |     |
| Other uses not listed in Table 9-8                                                                                                                                                                                             | 1 per 1,500 square feet of floor area, minimum of 4                                                                                                                                              | 50% | 50% |

## Cambridge, Massachusetts

[ARTICLE 6.000 - OFF STREET PARKING AND LOADING REQUIREMENTS AND NIGHTTIME CURFEW ON LARGE COMMERCIAL THROUGH TRUCKS](#) | [Zoning Ordinance](#) | [Cambridge, MA](#) | [Municode Library](#)

### Section 6.107.2 /6.107.3

| Residential            |                                                                              | Long Term                                                                                        | Short Term                                                 |
|------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------|
|                        | Single Family, two family, rectories, parsonages                             | No Minimun                                                                                       | No Minimun                                                 |
|                        | Townhouse, Multi Family                                                      | 1 space per unit for the first 20 units in a building; 1.05 spaces per unit for additional units | .1 space per unit on a lot (for lots with 4 or more units) |
|                        | Elderly Oriented Congregate Housing                                          | .5 spaces per unit                                                                               | .05 spaces per unit                                        |
|                        | Lodging Houses, Convents, Monasteries, Dormitories, Fraternities, Sororities | .5 spaces per bed                                                                                | .05 spaces per bed                                         |
|                        | Hotels, Motels, Tourist Houses                                               | .02 spaces per sleeping room                                                                     | .05 spaces per sleeping room                               |
| <b>Non-Residential</b> |                                                                              | (Minimum spaces per 1000 sq. ft. of floor area)                                                  |                                                            |
|                        | General or Professional Offices                                              | 0.3                                                                                              | 0.06                                                       |
|                        | Technical Offices                                                            | 0.22                                                                                             | 0.06                                                       |
|                        | Banks, Financial Offices                                                     | 0.3                                                                                              | 0.5                                                        |
|                        | Retail Stores, Consumer Service                                              | 0.1                                                                                              | 0.6                                                        |
|                        | Food, Convenicene Stores, Entertainment, Recreation                          | 0.1                                                                                              | 1                                                          |
|                        | Restaurants, Bars                                                            | 0.2                                                                                              | 1                                                          |
|                        | Theaters, Gathering Halls                                                    | 0.08                                                                                             | 1                                                          |
|                        | Industrial, Auto Repair, Auto Sales                                          | 0.08                                                                                             | 0.06                                                       |
|                        | Churches                                                                     | 0.08                                                                                             | 0.5                                                        |
|                        | Medical Offices                                                              | 0.3                                                                                              | 0.5                                                        |
|                        | Medical Clinics                                                              | 0.2                                                                                              | 0.5                                                        |
|                        | Hospitals                                                                    | 0.2                                                                                              | 0.1                                                        |
|                        | College or University Academic or Admin. Facilities                          | 0.2                                                                                              | 0.4                                                        |
|                        | College or University Student Activity Facilities                            | 0.2                                                                                              | 1                                                          |
|                        | Primary, Secondary or other schools other uses                               | See Zoning                                                                                       |                                                            |

## **Reference Community Code Sections**

**Davis, CA**

**Portland, OR**

**Boulder, CO**

**Cambridge, MA**

**Association of Pedestrian and Bicycle Professionals**

Prepared for: Teton County and Town of Jackson

By: Jorgensen Associates, P.C.

June, 2022

## Contents

|                                                                                                                                          |    |
|------------------------------------------------------------------------------------------------------------------------------------------|----|
| Davis, CA .....                                                                                                                          | 3  |
| Code Section: Municipal Code, Chapter 40.25A – Bicycle Parking Standards.....                                                            | 3  |
| Article 40.25A BICYCLE PARKING STANDARDS.....                                                                                            | 3  |
| 40.25A.010 Purpose. ....                                                                                                                 | 3  |
| 40.25A.020 Applicability. ....                                                                                                           | 3  |
| 40.25A.030 Definitions.....                                                                                                              | 3  |
| 40.25A.040 Bicycle parking standards.....                                                                                                | 4  |
| 40.25A.050 Detailed standards and installation guidelines. ....                                                                          | 6  |
| 40.25A.060 Calculation of required spaces. ....                                                                                          | 6  |
| 40.25A.070 Alternative compliance. ....                                                                                                  | 6  |
| 40.25A.080 Incentives. ....                                                                                                              | 7  |
| Portland, OR .....                                                                                                                       | 8  |
| Code Section: Municipal Code, Chapter 33.266 Parking, Loading, and Transportation and Parking Demand Management .....                    | 8  |
| 33.266.200 Minimum Required Bicycle Parking .....                                                                                        | 8  |
| 33.266.210 Bicycle Parking Development Standards.....                                                                                    | 9  |
| Cambridge, MA.....                                                                                                                       | 15 |
| Code Section: Municipal Code, Section 6.10 Intent and Applicability of Parking, Bicycle Parking and Loading Requirements .....           | 15 |
| 6.11 Intent .....                                                                                                                        | 15 |
| 6.12 Applicability .....                                                                                                                 | 15 |
| 6.13 Scope of Off Street Parking Regulations. ....                                                                                       | 17 |
| 6.14 Restoration.....                                                                                                                    | 17 |
| 6.15 Existing Parking Facilities. ....                                                                                                   | 17 |
| 6.16 Dedicated Off Street Parking Facilities .....                                                                                       | 18 |
| 6.17 Compatibility with the E.P.A. Clean Air Regulations.....                                                                            | 18 |
| 6.18 Compatibility with Handicapped Access Rules. ....                                                                                   | 18 |
| Boulder, CO.....                                                                                                                         | 19 |
| Code Section: Municipal Code, Design and Construction Standards, Chapter 2 - Transportation Design, Section 2.11.E Bicycle Parking ..... | 19 |
| APBP Association of Pedestrians and Bicycle Professionals.....                                                                           | 24 |
| Code Section: Essentials of Bike Parking, Selecting and installing bicycle parking that works .....                                      | 24 |

|                                                           |           |
|-----------------------------------------------------------|-----------|
| <b>SHORT-TERM PARKING .....</b>                           | <b>24</b> |
| Location .....                                            | 24        |
| Security .....                                            | 24        |
| Quantity .....                                            | 24        |
| BIKE CORRALS .....                                        | 24        |
| <b>LONG-TERM PARKING .....</b>                            | <b>24</b> |
| Location .....                                            | 24        |
| Security .....                                            | 25        |
| Quantity .....                                            | 25        |
| <b>SPECIAL CONSIDERATIONS FOR LONG-TERM PARKING .....</b> | <b>25</b> |
| Density .....                                             | 25        |
| Bicycle design variety .....                              | 25        |
| Performance criteria .....                                | 25        |
| <b>INSTALLATION .....</b>                                 | <b>25</b> |
| INSTALLATION SURFACE .....                                | 25        |
| INSTALLATION FASTENERS .....                              | 26        |
| INSTALLATION TECHNIQUES .....                             | 26        |
| <b>BICYCLE RACK SELECTION .....</b>                       | <b>26</b> |



## Davis, CA

### Code Section: Municipal Code, Chapter 40.25A – Bicycle Parking Standards

Link: [https://library.qcode.us/lib/davis\\_ca/pub/municipal\\_code/item/chapter\\_40-article\\_40\\_25a](https://library.qcode.us/lib/davis_ca/pub/municipal_code/item/chapter_40-article_40_25a)

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#### Article 40.25A BICYCLE PARKING STANDARDS

##### 40.25A.010 Purpose.

The purpose of this article is to establish definitions and standards for bicycle parking throughout the City of Davis. (Ord. 2421 § 2, 2013)

##### 40.25A.020 Applicability.

(a) The provisions of this article shall apply to:

(1) All new multiple dwelling developments, non-residential developments, community facilities and commercial uses set forth in the provisions of this article requiring planning approval or a building permit.

(2) Existing developments that involve a change in use (e.g. from retail to quick serve restaurant, or residential to office) requiring planning approval or a building permit.

(3) Existing developments that involve expansion, intensification, addition or any other changes to the site requiring planning approval or a building permit.

(b) The provisions of this article do not apply to single-family residences and duplexes. (Ord. 2421 § 2, 2013)

##### 40.25A.030 Definitions.

The terms in this article have the meanings set forth below:

**Alternative compliance.** The determination that the prescribed bicycle parking standard per land use type is not warranted for a particular project because of the use or location and that an adjustment to the standard for the project is necessary, based on the considerations established for alternative compliance.

**Bicycle parking space.** The volume of space that is used to accommodate the storage of one locked bicycle. Bicycle parking spaces are to be designed and spaced in a way that accommodates for typical two-wheel bicycles and alternative bicycles.

**Alternative bicycle.** Nontraditional bicycles with larger parking space requirements, including but not limited to, cargo bikes, bikes with trailers, recumbent bikes, etc.

**Long term bicycle parking.** Bicycle parking spaces intended to be used for periods of time that are longer than two hours and are targeted to residents, employees and other long term users. Long term bicycle parking typically offers increased levels of security in lit, covered, and permanently anchored locations, which are proximate to employee or resident locations/entrances. Long term bicycle parking may be accompanied or used in conjunction with storage lockers, locked rooms or enclosures, and parking areas internal to the building.

**Short term bicycle parking.** Bicycle parking spaces intended to be used for periods of time that are two hours or less and are targeted to visitors, customers and other short term users. Short term bicycle parking racks shall provide two points of contact for a bicycle, allow for locking of the frame to the rack, and be securely anchored to the ground or wall. Short term bicycle parking shall be in a visible location, as near as possible to entrances. (Ord. 2421 § 2, 2013)

#### **40.25A.040 Bicycle parking standards.**

(a) This article establishes bicycle parking standards as follows, except as further noted:

##### **City of Davis Bicycle Parking Standards**

| <b>Land Uses</b>           | <b>Examples</b>                                                                 | <b>Standard<br/>(sf = gross sq.<br/>ft.)</b> | <b>Short<br/>Term<br/>Parking</b> | <b>Long<br/>Term<br/>Parking</b> |
|----------------------------|---------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------|----------------------------------|
| Residential - group living | Fraternity, sorority, co-op housing                                             | 1 per bed                                    | 25%                               | 75%                              |
| Residential - multifamily  | Apartments, condominiums                                                        | 1 per bedroom                                | 25%                               | 75%                              |
| Lodging                    | Hotel, motel                                                                    | 1 per 10 guest rooms                         | 50%                               | 50%                              |
| Restaurant – quick serve   | Deli, coffee shop, bar                                                          | 1 per 150 sf                                 | 75%                               | 25%                              |
| Restaurant – sit down      | Restaurant                                                                      | 1 per 500 sf                                 | 75%                               | 25%                              |
| Retail, general commercial | Grocery store, hardware, furniture                                              | 1 per 1000 sf                                | 75%                               | 25%                              |
| Commercial services        | Garden supply, appliance stores, auto repair, auto dealership (office/showroom) | 1 per 1000 sf                                | 75%                               | 25%                              |
| Office                     | Professional, medical, dental, government, clinic, bank                         | 1 per 1,500 sf                               | 75%                               | 25%                              |

|                                      |                                                          |                                                                                                                                   |     |     |
|--------------------------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----|-----|
| Shopping center                      | Mix of personal services, retail, restaurants, offices   | 1 per 1,750 sf                                                                                                                    | 75% | 25% |
| Institutional                        | Schools, day care                                        | 1 per 2,500 sf                                                                                                                    | 75% | 25% |
| Light industrial                     | R&D, business park                                       | 1 per 2,000 sf                                                                                                                    | 25% | 75% |
| Industrial                           | Warehouse, manufacturing, hospital                       | 1 per 7,500 sf                                                                                                                    | 25% | 75% |
| Civic, cultural, religious centers   | Library or museum (occupancy), places of worship (seats) | 10% of maximum occupancy or seats                                                                                                 | 75% | 25% |
| Commercial recreation                | Theater (seats), health club (occupancy)                 | 10% of maximum occupancy or seats                                                                                                 | 75% | 25% |
| Open space, parks, recreational uses | Ball field, driving range, playground, parks             | As determined by the community development and sustainability director                                                            |     |     |
| *Downtown (core area)                | Includes all nonresidential land use types in downtown   | Apply same standards for land use above when feasible. City provides an on-going bicycle rack program for the downtown core area. |     |     |

(b) **\*Downtown core area—All nonresidential uses.** The city employs an on-going bicycle parking program within the public right-of-way for the downtown core area. Businesses and developments within the downtown core area are not required to provide bicycle parking if adequate on-site space is not available, as determined by the community development and sustainability director. Downtown multifamily developments shall comply with the requirements of this article.

(c) **Minimum requirements.** All nonresidential uses shall provide a minimum of two bicycle parking spaces per site. In the case of multi-tenant buildings minimum required bicycle parking shall be two spaces per tenant. Alternative compliance may supersede this requirement.

(d) Alternative compliance, as established in Section 40.25A.070, may be applied to all land use classifications.

(e) Short-term and long-term percentages listed in the table are intended as guidelines subject to a final determination by the community development and sustainability director. (Ord. 2421 § 2, 2013)

#### **40.25A.050 Detailed standards and installation guidelines.**

All accessory bicycle parking spaces shall be provided on the same parcel as the building or use to which such spaces are required. Bicycle rack installation locations must be near or within visual site distance of building entrances. Further detailed standards and findings, such as acceptable dimensions, are provided in the Association of Pedestrian and Bicycle Professionals' *Bicycle Parking Guidelines* and the City of Davis *Project Development Standards Guide*, which is maintained by the department of community development and sustainability. (Ord. 2421 § 2, 2013)

#### **40.25A.060 Calculation of required spaces.**

- (a) When a tract of land is developed with a mixed use building or development such as residential/commercial, residential/office, or retail/office, but is developed under single ownership or control, the required bicycle parking will be determined by calculating the required parking for each individual land use and then adding the individual requirements together to create a total bicycle parking requirement.
- (b) When the required number of spaces is based on net building area, the net building area of any accessory use is included with the primary use in the calculation (e.g., manufacturing site with accessory office space).
- (c) After the bicycle parking requirement has been calculated, if the requirement results in a fraction of a space to be provided, the parking space requirement shall be rounded to the nearest whole number. (Ord. 2421 § 2, 2013)

#### **40.25A.070 Alternative compliance.**

- (a) Upon written request by the applicant, the community development and sustainability director or her/his designee may approve alternative compliance from the provisions of this article, which may include, but is not limited to, a reduction or deviation in the number, type, or location of the required bicycle parking, and may include a waiver of the requirement.
- (b) Considerations used in the determination may include, but are not limited to:
  - (1) Physical site planning constraints;
  - (2) Proximity to existing bicycle parking;
  - (3) Projects that cannot be classified into the provided land use categories;
  - (4) Provision of enhanced bicycle facilities provided in the development;

(5) Inclusion of the site within a larger development for which adequate bicycle parking is already provided; or

(6) Unforeseen circumstances or individual land use changes. (Ord. 2421 § 2, 2013)

#### **40.25A.080 Incentives.**

Should a business or institution be interested in going above and beyond the bicycle parking requirements and amenities as specified in this article, certain measures can be taken. The director of community development or her/his designee reserves the right to implement certain incentives to help assist the implementation of increased bicycle amenities, such as, locker rooms, showers, or indoor secure bicycle parking. Potential incentives may include offsetting the required number of vehicle parking spaces (two spaces maximum or five percent of required vehicle parking), or other design requirements to accommodate space for secure bicycle parking, and other bicycle commuter amenities. (Ord. 2421 § 2, 2013)

## Portland, OR

Code Section: Municipal Code, Chapter 33.266 Parking, Loading, and Transportation and Parking Demand Management

Link: [https://www.portland.gov/sites/default/files/code/266-parking\\_1.pdf](https://www.portland.gov/sites/default/files/code/266-parking_1.pdf)

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### Bicycle Parking

#### 33.266.200 Minimum Required Bicycle Parking

A. **Purpose.** Bicycle parking is required for most use categories to encourage the use of bicycles by providing secure and convenient places to park bicycles. These regulations ensure adequate short and long-term bicycle parking based on the demand generated by different uses.

Minimum bicycle parking facilities are based on the City's mode split goals, while acknowledging the usage rates for different uses. These regulations will help meet the City's goal that 25 percent of all trips be made by bicycle, while still acknowledging that to meet the citywide goal the bicycle mode split will vary by geographic area.

**B. Number of spaces required.**

1. The required minimum number of bicycle parking spaces for each use category is shown in Table 266-6. No bicycle parking is required for uses not listed. Minimum bicycle parking is calculated on a geographic hierarchy based on the current and future bicycle usage. Standard A in Table 266-6 applies to the areas shown as Standard A on Map 266-1. Standard B in Table 266-6 applies to all other areas of the city.
2. Until June 30, 2022, no bicycle parking is required for projects that are eligible to use the alternative bicycle parking standards specified in Ordinance 189785. To qualify for this exemption the applicant must provide a letter from the Portland Housing Bureau certifying that the project is eligible to use, and has met, the alternative bicycle parking standards specified in Ordinance 189785.
3. The required minimum number of bicycle parking spaces is based on the primary uses on a site. When there are two or more separate primary uses on a site, the required bicycle parking for the site is the sum of the required parking for each primary use

**Table 266-6 Minimum Required Bicycle Parking Spaces [1]**

Notes:

[1] Wherever this table indicates two numerical standards, such as "2, or 1 per 3,000 sq. ft. of net building area," the larger number applies.

*[2] Group Living units with restricted tenancy are units that are regulated affordable housing per the Portland Housing Bureau requirements. The applicant must provide a letter from the Portland Housing Bureau certifying that the group living development meets any income restrictions and administrative requirements. The letter is required to be submitted before a building permit can be issued for the development but is not required in order to apply for a land use review. The applicant must also execute a covenant with the City that complies with the requirements of Section 33.700.060. The covenant must ensure that the group living use will remain limited to households meeting any income restrictions and administrative requirements of the Portland Housing Bureau.*

*[3] No long-term bicycle parking is required for a Commercial Parking facility with less than 10 vehicle parking spaces.*

### **33.266.210 Bicycle Parking Development Standards**

**A. Purpose.** These standards ensure that required bicycle parking is designed so people of all ages and abilities can access the bicycle parking and securely lock their bicycle without undue inconvenience. Bicycle parking is in areas that are reasonably safeguarded from theft and accidental damage. The standards allow for a variety of bicycle types, including but not limited to standard bicycles, tricycles, hand cycles, tandems, electric motor assisted cycles and cargo bicycles. Long-term bicycle parking is in secure, weather protected facilities and is intended for building and site occupants, and others who need bicycle parking for several hours or longer. Short-term bicycle parking is located in publicly accessible, highly visible locations that serve the main entrance of a building. Short-term bicycle parking is visible to pedestrians and bicyclists on the street and is intended for building and site visitors.

**B. Where these standards apply.** The standards of Subsection C and D apply to required longterm bicycle parking, and the standards of Subsection C and E apply to required short-term bicycle parking.

**C. Standards for all bicycle parking.** The Bureau of Transportation maintains a bicycle parking handbook that includes information on rack standards, siting guidelines and other standards of this code chapter. Long-term and short-term bicycle parking must be provided in lockers or racks that meet the following standards:

1. Bicycle parking area standards. The area devoted to bicycle parking must be hard surfaced.
2. Bicycle racks. Where bicycle parking is provided in racks, the racks must meet the following standards:
  - a. The rack must be designed so that the bicycle frame and one wheel can be locked to a rigid portion of the rack with a U-shaped shackle lock, when both wheels are left on the bicycle;
  - b. If the rack is a horizontal rack, it must support the bicycle at two points, including the frame; and

- c. The rack must be securely anchored with tamper-resistant hardware.

**Table 266-7 Minimum Dimensions for Bicycle Parking Spaces [1]**

Notes:

[1] See Figures 266-8 through 266-14.

[2] The alternative spacing allowed for vertical bicycle parking spaces requires a minimum vertical stagger of 8 inches between each space.

[3] The alternative spacing allowed for stacked bicycle parking spaces requires a vertical stagger to be included in the manufacturer design.

3. Bicycle Parking Space, Maneuvering Area, and Clearance Dimensions. Bicycle parking spaces, aisles and clearances must meet the minimum dimensions contained in Table 266-7.
  - a. Standard Bicycle Parking Space Requirements.
    - (1) The standard required bicycle space is 2 feet wide, 6 feet long and 3 feet 4 inches tall. See Figure 266-8;
    - (2) There must be at least 5 feet behind all bicycle parking spaces to allow room for bicycle maneuvering. Where short-term bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way.
    - (3) A wall clearance of 2 feet 6 inches must be provided. See Figure 266-9.
  - b. Alternative Spacing Requirements. The following bicycle parking layouts may be provided as an exception to the standard spacing requirements in Subparagraph C.3.a. See Table 266-7 for the alternative spacing dimensions.
    - (1) Horizontal bicycle parking spaces. Horizontal bicycle parking spaces secure the parked bicycle horizontal to the ground.
      - Horizontal: Side by Side. Horizontal bicycle parking that is placed side by side as shown in Figure 266-9 may meet the alternative side by side dimensions in Table 266-7.
      - Horizontal: Wall Attached. Horizontal bicycle parking that is attached to the wall as shown in Figure 266-10 may meet the alternative wall attached dimensions in Table 266-7.
      - Horizontal: Diagonal. Horizontal bicycle parking that is placed at a diagonal as shown in Figure 266-11 may meet the alternative diagonal, 45-60 degree dimensions in Table 266-7.
    - (2) Vertical bicycle parking space. Vertical bicycle parking secures the parked bicycle perpendicular to the ground. Vertical bicycle parking that is placed as shown in Figure 266-12 may meet the alternative vertical dimensions in Table 266-7.
    - (3) Stacked bicycle parking spaces. Stacked bicycle parking are racks that are stacked, one tier on top of another. Bicycles are horizontal when in the final



stored position. Stacked bicycle parking that is placed as shown in Figure 266-13 may meet the alternative stacked dimensions in Table 266-7 and the following:

- The rack must include a mechanically assisted lifting mechanism to mount the bicycle on the top tier.
4. Bicycle lockers. Bicycle lockers are fully enclosed and secure bicycle parking spaces.
    - a. The locker must be securely anchored to the ground.
    - b. There must be an aisle at least 5 feet wide behind all bicycle lockers to allow room for bicycle maneuvering.
    - c. Locker Dimensions. All bicycle lockers must meet one of the following:
      - (1) The locker space has a minimum depth of 6 feet and an access door that is a minimum of 2 feet wide.
      - (2) A locker provided in a triangle locker layout for two bicycle parking spaces must have a minimum depth of 6 feet and an access door that is a minimum of 2 feet wide on each end.
  5. Signage
    - a. Light rail stations and transit centers. If bicycle parking is not visible from the light rail station or transit center, a sign must be posted at the station or center indicating the location of the bicycle parking.
    - b. other uses. If bicycle parking is not visible from the streets or main building entrances, a sign must be permanently posted at the main entrance indicating the location of the bicycle parking.
  6. Bicycle parking information in plans. The following information must be submitted with applications for a building permit or land-use review:
    - a. Location, access route to long-term bicycle parking and number of bicycle parking spaces for short-term and long-term bicycle parking requirements;
    - b. The model or design of the bicycle parking facilities to be installed;
    - c. Dimensions of all aisles and maneuvering areas; and d. If applicable, information adequate to illustrate the racks and spaces that satisfy the minimum horizontal requirement, and the racks and spaces that accommodate a larger bicycle footprint.

#### **D. Standards for Long-Term Bicycle Parking.**

1. Development Standards. Long-term bicycle parking must be provided in lockers or racks that meet the following standards. Long-term bicycle parking for Schools may choose between (1) or (5) or a combination of those two locations:
  - a. Location Standards. Long-term bicycle parking may be provided in one or more of the following locations:
    - (1) Within a building, including on the ground floor or on individual building floors;
    - (2) On-site, including in parking areas and structured parking;
    - (3) In an area where the closest point is within 300 feet of the site; or
    - (4) In a residential dwelling unit. Up to 50 percent of long-term bicycle parking spaces may be provided in a residential dwelling unit, if they meet the following.

Long-term bicycle parking provided in a residential dwelling unit does not need to meet the requirements for Paragraph C.2. above. Adjustments and modifications to this Sub subparagraph are prohibited.

- The bicycle parking is located within 15 feet of the entrance to the dwelling unit.
- The bicycle parking is located in a closet or alcove of the dwelling unit that includes a rack that meets the standard bicycle parking spacing dimensions in Table 266-7.
- For buildings with no elevators, long-term bicycle parking must be located in the ground floor units.

(5) For Schools, long-term bicycle parking must be placed where the closest space is within 100 feet of a main entrance.

- b. Exceptions. Sites containing residential development with 12 or fewer dwelling units may provide up to 100 percent of required long-term bicycle parking spaces in the dwelling units. All other in-unit standards in Sub subparagraph D.1.a.(4)., above must be met.
- c. For sites with multiple primary uses, long-term bicycle parking must be provided in an area that can be accessed from each use. If bicycle parking is provided in a common area on the site, the area must be accessible for all tenants.
- d. Covered bicycle parking. All long-term bicycle parking must be covered. Where covered bicycle parking is not within a building or locker, the cover must be:
  - (1) Permanent;
  - (2) Impervious; and
  - (3) The cover must project out a minimum of 2 feet beyond the bicycle parking spaces on the portion of the structure that is not enclosed by a wall.

1. Security Standards.

- a. Long-term bicycle parking must meet the following security standards:
  - (1) Long-term bicycle parking for residential uses must be provided in one of the following:
    - A restricted access, lockable room or enclosure, designated primarily for bicycle parking;
    - A bicycle locker; or
    - In a residential dwelling unit meeting Sub subparagraph 1.a.(4), above.
  - (2) Long-term bicycle parking for all other uses must be located in one of the following locations. For Schools, a minimum of 10 percent of bicycle parking must be located in the following:
    - A restricted access, lockable room or enclosure; or

- A bicycle locker. b. All access routes and the bicycle parking spaces must be lighted to a level where the system can be used at night by the employees and residents.
2. Additional Development Standards. The following standards apply to sites with more than 20 long-term bicycle parking spaces:
    - a. Minimum number of horizontal bicycle parking spaces. At least 30 percent of spaces must be in a horizontal rack, or on the lower level of a stacked bicycle parking rack. For Schools (K-8), all spaces located outside of the building must be in a horizontal rack
    - b. Parking for larger bicycle space. At least 5 percent of spaces must accommodate a larger bicycle space, placed in a horizontal rack. These spaces may be included to meet the requirement for Subparagraph D.3.a. See Figure 266-14.
    - c. Electrical outlet requirement. At least 5 percent of spaces must have electrical sockets accessible to the spaces. Each electrical socket must be accessible to horizontal bicycle parking spaces.

#### **E. Standards for Short-Term Bicycle Parking.**

1. Development Standards. Short-term bicycle parking must meet the following standards:
  - a. Location Standards. Short-term bicycle parking must meet the following location standards:
    - (1) On-site, outside a building;
    - (2) At the same grade as the sidewalk or at a location that can be reached by an accessible route; and
    - (3) Within the following distances of the main entrance:
      - Building with one main entrance. For a building with one main entrance, the bicycle parking must be within 50 feet of the main entrance to the building as measured along the most direct pedestrian access route. (See Figure 266-15)
      - Building with more than one main entrance. For a building with more than one main entrance, the bicycle parking must be along all façades with a main entrance, and within 50 feet of at least one main entrance on each façade that has a main entrance, as measured along the most direct pedestrian access route. (See Figure 266-16)
      - Sites with more than one primary building. For sites that have more than one primary building, but are not an institutional campus, the bicycle parking must be within 50 feet of a main entrance as measured along the most direct pedestrian access route, and must be distributed to serve all primary buildings (See Figure 266-17);

- Institutional Campus. On an institutional campus with more than one building or main entrance, the bicycle parking must be either:
    - Within 50 feet of a main entrance as measured along the most direct pedestrian access route; or
    - If the short-term bicycle parking is more than 50 feet from a main entrance, it must be in a common bicycle parking location along a pedestrian access route.
- b. Bicycle Parking Fund
- (1) This option may be used if any of the required short-term bicycle parking cannot be provided on site in a way that complies with all of the standards in Subsection C and E. This option may not be used if:
- There are surface parking areas, plazas, exterior courtyards, or other open areas on the site, other than required landscaping; Chapter 33.266 Title 33, Planning and Zoning Parking, Loading, And Transportation And Parking Demand Management 3/1/22 266-38
  - Those open areas are large enough, separately or in combination, to accommodate all short-term bicycle parking; and
  - The open areas meet the location requirements of Subparagraph E.1.a., above.
- (2) Fund use and administration. The Bicycle Parking Fund is collected and administered by the Bureau of Transportation. The funds collected will be used to install bicycle parking and associated improvements in the right-of way.

## Cambridge, MA

### Code Section: Municipal Code, Section 6.10 Intent and Applicability of Parking, Bicycle Parking and Loading Requirements

Link: [https://library.municode.com/ma/cambridge/codes/zoning\\_ordinance?nodeId=ZONING\\_0RDINANCE\\_ART6.000OFSTPALORENICULACOTHTR](https://library.municode.com/ma/cambridge/codes/zoning_ordinance?nodeId=ZONING_0RDINANCE_ART6.000OFSTPALORENICULACOTHTR)

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**6.11 Intent.** It is the intent of this Article 6.000 to reduce traffic congestion, noise, vibrations, fumes and safety hazards caused by large commercial trucks, thereby promoting the safety, health and welfare of the public, by establishing requirements for off street parking, bicycle parking and loading and restrictions on the use of City street during the night-time by large commercial trucks with points of origin and destinations outside the City of Cambridge in order to implement the purposed of the The Zoning Act, Section 2A of Chapter 808, and Article 1.000. Section 1.30 of the Cambridge Zoning Ordinance, including:

- to lessen congestion in the streets;
- to conserve health;
- to conserve the value of land and buildings;
- to prevent pollution of the environment;
- to protect residential neighborhoods from incompatible activities; and
- to preserve and increase the amenities of the city.

The number of parking and loading spaces required herein varies according to type, location and intensity of development in the different zoning districts, and to proximity of public transit facilities. This Article 6.000 requires development of adequate parking facilities to meet the reasonable needs of all building and land users without establishing regulations which unnecessarily encourage automobile usage. The parking and bicycle parking standards contained herein are intended to encourage public transit, bicycle usage and walking in lieu of automobiles where a choice of travel mode exists. It is also the purpose of this Article to allow flexibility in providing required parking through shared or off site arrangements in order to accommodate the automobile in the urban environment in a less disruptive way. Development regulations and design standards have been established to reduce hazard to pedestrians on public sidewalks, to ensure the usefulness of parking, bicycle parking and loading facilities, and where appropriate, to avoid potential adverse impacts on adjacent land uses, and to enhance the visual quality of the city.

**6.12 Applicability.** The off street parking and loading provisions of this Article 6.000 shall apply as follows:

- (a) For new structures erected and new uses of land established or authorized after the effective date of this Article 6.000 or any amendment thereto, as well as for external additions of Gross Floor Area to existing structures for any use, accessory off street

parking and loading facilities shall be provided as required by the regulations for the districts in which such structures or uses are located.

In the case of an addition of Gross Floor Area to an existing structure (lawfully erected prior to the effective date of this Article 6.000 or any amendment thereto), which addition contains nonresidential uses, off street parking and loading facilities shall only be required when the total of such additions occurring from the effective date of this Article 6.000 or any amendment thereto increases the Gross Floor Area of the existing structure by fifteen (15) percent or more. If such an increase occurs, additional off street parking or loading facilities as required herein shall be provided for the total increase in intensity subsequent to the effective date of this Article 6.000 or any amendment thereto.

- (b) When the intensity of an existing use within any existing structure (or lot in the case of 6.36.7 l and m and 6.36.8 f and g) is increased through addition of dwelling units, floor area, seating capacity or other units of measurement specified in Section 6.30 or Section 6.60 (but not including any uses in a new external addition to that structure, which shall be subject to the provisions of Paragraph (a) above), off street parking and loading facilities shall be provided as required for such increase in intensity of use.

However, a nonresidential use lawfully established prior to the effective date of this Article 6.000 or any amendment thereto shall not be required to provide off street parking and loading facilities for such increase unless and until the aggregate increase in units of measure shall equal fifteen (15) percent or more of the units of measurement existing upon said effective date. If such an increase occurs, additional off street parking or loading facilities as required herein shall be provided for the total increase in intensity subsequent to the effective date of this Article 6.000 or any amendment thereto.

- (c) When the use of an existing structure (but not including the use of a new external addition to that structure, which shall be subject to the provisions of Paragraph (a) above) is changed to a new nonresidential use, off street parking and loading facilities shall be provided as required in the schedule of parking requirements in Subsection 6.36 and the schedule of loading requirements in Subsection 6.60. Any maximum requirements specified in Subsection 6.36, as well as minimum requirements, shall be applicable to such changes in use.

However, if said structure was lawfully erected prior to the effective date of this Article 6.000 or any amendment thereto, additional off street parking and loading facilities shall be required only to the extent that the required amount for the new nonresidential use would exceed the amount required for the previous use if said previous use were subject to the schedule of parking and loading requirements.

In either case, the first four (4) spaces required need not be provided.

- (d) When the nonresidential use of an existing structure is changed to a residential use, off street parking facilities shall be provided as required in the schedule of parking

requirements in Subsection 6.36. Any maximum requirements specified in Subsection 6.36, as well as minimum requirements, shall be applicable to such changes in use.

- (e) *Bicycle Parking*. Bicycle parking shall be provided according to the requirements set forth in Section 6.100. Wherever the term "parking" is used in this Zoning Ordinance without specific reference to bicycles, such term shall refer to parking for motor vehicles and not bicycles.

However, if said structure was lawfully erected prior to the effective date of this Article 6.000 or any amendment thereto and the nonresidential use of the structure is proposed to be changed to an Affordable Housing Project as herein defined, additional off street parking facilities shall be required as provided above, except that for that portion of the Project consisting of Affordable Units additional off street parking shall be provided at the rate of 60% of the parking otherwise required in Section 6.36.

For purposes of this Section 6.12 (d) an Affordable Housing Project shall be a residential development in which at least fifty percent (50%) of the dwelling units are considered Affordable Units for occupancy by Eligible Households as defined in Section 11.200 of the Zoning Ordinance.

**6.13 Scope of Off Street Parking Regulations.** All accessory parking facilities shall conform to all regulations set forth in this Article governing the use, design and operation of such facilities. However, the provisions of this Article 6.000, notwithstanding, any special parking requirements for townhouse developments specified in Section 11.10, for planned unit developments specified in Article 13.000, for projects in the Mixed Use Development District specified in Article 14.000 or for special permits specified elsewhere in this Ordinance shall be applicable for those projects.

**6.14 Restoration.** When an existing structure or use is restored and resumes operation after being destroyed or damaged by fire, explosion, or other catastrophe, off street parking, bicycle parking and loading facilities shall be provided at least equivalent to that in existence at the time of such destruction or damage. If the extent of such damage is such that the cost of restoration is fifty (50) percent or more of the replacement value of the structure or use, then parking, bicycle parking and loading facilities meeting the requirements of this Article 6.000 shall be provided. However, in no case shall it be necessary to replace or continue any parking, bicycle parking or loading facilities which were in excess of those required by the schedules of parking and loading requirements for equivalent amounts of new uses or construction.

**6.15 Existing Parking Facilities.** Accessory off street parking facilities established after March 15, 1961, shall not hereafter be reduced below - of if already less than, shall not be further reduced below - the minimum requirements under the provisions of this Article 6.000. Accessory off street parking facilities in existence as of March 15, 1961 shall only be required if such facilities have been used to satisfy parking requirements after March 15, 1961.

- 6.16 Dedicated Off Street Parking Facilities.** Required off street parking facilities which after development are later dedicated to and accepted by the City and maintained by the City for off street parking purposes, shall be deemed to continue to serve the structures or uses to meet the requirements for which they were originally provided.
- 6.17 Compatibility with the E.P.A. Clean Air Regulations.** In addition to the regulations contained in this Article, all off street parking facilities must comply with restrictions contained in the Transportation Control Plan for the Metropolitan Boston Interstate Air Quality Control Region as promulgated by the United State Environmental Protection Agency to the extent the same are in force and effect.
- 6.18 Compatibility with Handicapped Access Rules.** In addition to the regulations contained in this Article 6.000, all off street parking facilities must comply with the currently applicable "Rules and Regulations of the Architectural Barriers Board of the Commonwealth of Massachusetts" to the extent the same are in force and effect.



## Boulder, CO

### Code Section: Municipal Code, Design and Construction Standards, Chapter 2 - Transportation Design, Section 2.11.E Bicycle Parking

Link: [https://library.municode.com/co/boulder/codes/municipal\\_code?nodeId=TIT9LAUSCO\\_CH9DEST\\_9-9-6PAST](https://library.municode.com/co/boulder/codes/municipal_code?nodeId=TIT9LAUSCO_CH9DEST_9-9-6PAST)

(g) Bicycle Parking:

- (1) Required Bicycle Spaces: Bicycle parking spaces must be provided as required by Table 9-8 of this section.

**TABLE 9-8: OFF-STREET BICYCLE PARKING REQUIREMENTS**

| <i>Land Use Category(based on use categories of Table 6-1 of Section 9-6-1, "Schedule of Permitted Land Uses," B.R.C. 1981)</i> | <i>Minimum Number of Off-Street Bicycle Spaces</i>      | <i>Long-Term</i> | <i>Short-Term</i> |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------|-------------------|
| <b>Residential Uses</b>                                                                                                         |                                                         |                  |                   |
| Dwelling units <sup>(a)</sup> with a private garage <sup>(b)</sup>                                                              | no requirement                                          | n/a              | n/a               |
| Dwelling units without a private garage <sup>(b)</sup>                                                                          | 2 per unit                                              | 75%              | 25%               |
| Accessory units                                                                                                                 | no requirement                                          | n/a              | n/a               |
| Group quarters - fraternities, sororities, and dormitories, boarding houses, transitional housing                               | 1 per 3 beds                                            | 75%              | 25%               |
| Group quarters - all others                                                                                                     | 1 per 5 beds                                            | 75%              | 25%               |
| <b>Dining and entertainment</b>                                                                                                 |                                                         |                  |                   |
| Restaurants, brewpubs and taverns                                                                                               | 1 per 750 square feet of floor area, minimum of 4       | 25%              | 75%               |
| Lodging uses                                                                                                                    | 1 per 3 guest rooms, minimum of 4                       | 50%              | 50%               |
| All other dining and entertainment uses                                                                                         | 1 per 1,500 square feet of floor area                   | 25%              | 75%               |
| Mobile food vehicle and temporary outdoor entertainment                                                                         | no requirement                                          | n/a              | n/a               |
| <b>Public and Institutional Uses</b>                                                                                            |                                                         |                  |                   |
| Daycare center, daycare, home                                                                                                   | Determined through review: parking needs of use must be | 50%              | 50%               |

|                                                                                                                                                                                                                                |                                                                                                                                                                                                  |     |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|
|                                                                                                                                                                                                                                | adequately served through on- or off-street parking, minimum of 4                                                                                                                                |     |     |
| Public and private elementary, junior, and senior high schools                                                                                                                                                                 | 5 per classroom                                                                                                                                                                                  | 50% | 50% |
| Public and private colleges and universities                                                                                                                                                                                   | 5 per classroom                                                                                                                                                                                  | 50% | 50% |
| Religious assemblies                                                                                                                                                                                                           | The greater of 1 per 15 seats or 1 per 150 square feet of assembly area                                                                                                                          | 25% | 75% |
| All other public and institutional uses                                                                                                                                                                                        | 1 per 1,500 square feet of floor area, minimum of 4                                                                                                                                              | 50% | 50% |
| <b>Office, Medical and Financial Uses</b>                                                                                                                                                                                      |                                                                                                                                                                                                  |     |     |
| Data processing facilities, financial institutions, hospitals, medical and dental laboratories, medical or dental clinics or offices, addiction recovery facilities, all office uses, and all other medical and financial uses | 1 per 1,500 square feet of floor area, minimum of 4                                                                                                                                              | 75% | 25% |
| <b>Parks and Recreation Uses</b>                                                                                                                                                                                               |                                                                                                                                                                                                  |     |     |
| Campgrounds, outdoor entertainment, park and recreation uses, indoor recreational or athletic facilities                                                                                                                       | 1 per 750 square feet of floor area; requirements for outdoor uses are determined through review: parking needs of use must be adequately served through on- or off-street parking, minimum of 4 | 25% | 75% |
| <b>Commercial, Retail, and Industrial Uses</b>                                                                                                                                                                                 |                                                                                                                                                                                                  |     |     |
| Service uses and retail sales uses                                                                                                                                                                                             | 1 per 750 square feet of floor area, minimum of 4                                                                                                                                                | 25% | 75% |
| Vehicle-related uses and industrial uses and all other                                                                                                                                                                         | 1 per 1,125 square feet of associated office space or production areas                                                                                                                           | 25% | 75% |
| <b>Agriculture &amp; Natural Uses</b>                                                                                                                                                                                          |                                                                                                                                                                                                  |     |     |
| Agriculture & Natural Uses                                                                                                                                                                                                     | no requirement                                                                                                                                                                                   | n/a | n/a |
| <b>Other Uses Not Listed in Table 9-8</b>                                                                                                                                                                                      |                                                                                                                                                                                                  |     |     |
| Other uses not listed in Table 9-8                                                                                                                                                                                             | 1 per 1,500 square feet of floor area, minimum of 4                                                                                                                                              | 50% | 50% |

Footnotes to Table 9-8, Off-Street Bicycle Parking Requirements:

- (a) For purposes of this Table 9-8, the "dwelling units" subcategories include all types of residential uses listed in Table 6-1, Use Table, of Section 9-6-1, "Schedule of Permitted Uses," B.R.C. 1981, except those separately listed in Table 9-8.
- (b) Private garage, for purposes of this table, means a building or indoor space that is associated with an individual dwelling unit for purposes of parking or keeping a motor vehicle, is fully enclosed, and has a secure door.
- (2) Bicycle Facilities: Both bicycle lockers and racks shall:
  - (A) Provide for storage and locking of bicycles, either in lockers or medium-security racks or equivalent installation in which both the bicycle frame and the wheels may be locked by the user.
  - (B) Be designed so as not to cause damage to the bicycle.
  - (C) Facilitate easy locking without interference from or to adjacent bicycles.
  - (D) Consist of racks or lockers anchored so that they cannot be easily removed and of solid construction, resistant to rust, corrosion, hammers, and saws.
  - (E) Be consistent with their environment in color and design and be incorporated whenever possible into building or street furniture design.
  - (F) Be located in convenient, highly visible, active, well-lighted areas but not interfere with pedestrian movements.
- (3) Short-Term Bicycle Parking: Short-term bicycle parking is intended to offer a convenient and accessible area to park bicycles for customers and other visitors. Short-term bicycle parking shall be located:
  - (A) On the public access level;
  - (B) Within fifty feet of the main building entrances; and
  - (C) Outside the building.
- (4) Long-Term Bicycle Parking: Long-term bicycle parking offers a secure and weather protected place to park bicycles for employees, residents, commuters, and other visitors who generally stay at a site for several hours. Long-term bicycle parking shall meet the following standards:
  - (A) Long-term bicycle parking is required to be covered and shall include use of one of the following:
    - (i) A locked room;
    - (ii) An area enclosed by a fence with a locked gate;
    - (iii) An area within view of an attendant or security guard or monitored by a security camera; or
    - (iv) An area visible from employee work areas.

- (B) The bicycle parking area shall be located on site or in an area within three hundred feet of the building it serves.
  - (C) Adequate lighting shall be provided for the bicycle parking area and the route to the building entrance.
  - (D) The bicycle parking area shall include adequate clearance around racks or lockers to give cyclists room to maneuver, and to prevent conflicts with pedestrians or parked cars.
  - (E) If the bicycle parking is provided in an auto parking garage, the bicycle parking spaces shall be clearly marked as such and shall be separated from auto parking.
- (5) Bicycle Rental Stations. Bicycle rental stations that have permission to locate on public property or private property shall post signs with the following information:
- (A) Location of the station on a map of the area;
  - (B) Name of the station if applicable;
  - (C) Traffic law information that the city manager may require, including information about areas where riding bicycles on sidewalks is permitted or prohibited; and
  - (D) Sponsor identification or logo, if applicable, that meets the requirements of Subsection 8-6-11(b), B.R.C. 1981. The sign permitting requirements in Section 9-9-21, "Signs," B.R.C. 1981, do not apply to any such sponsor identification or logo.
- (6) Parking Reductions and Modifications for Bicycle Parking. Upon submission of documentation by the applicant of how the project meets the following criterion, the approving agency may approve reductions to the minimum number of off-street bicycle parking or modifications to the ratio of long-term and short-term bike parking requirements of Table 9-8 if it finds that the long-term and short-term bicycle parking needs of the use will be adequately accommodated through on-street parking or off-street parking.
- (7) Parking Study: At the discretion of the city manager, a parking study may be required to demonstrate that adequate parking is provided either for parking provided per Boulder Revised Code requirements or in conjunction with a parking reduction request. The scope of a parking study may consist of analysis of any or all of the following factors: joint use of parking areas, peak parking demand for each land use, unusual parking demand based on type of land use, availability of nearby on-street parking, vicinity of high frequency transit, and Institute of Transportation Engineers Parking Generation estimates.
- (h) Parking and Storage of Recreational Vehicles: No person shall park, store, or use a travel trailer, tent trailer, pickup camper or coach, motorized dwelling, boat and boat trailer, snow vehicle, cycle trailer, utility trailer and van, horse trailer or van, or similar vehicular equipment in a residential district unless the following requirements are met:
- (1) Such vehicular equipment is stored or parked on private property no closer than eighteen inches to any proposed or existing public sidewalk and so as not to project into the public right-of-way;

- (2) On corner lots, any such vehicular equipment that exceeds thirty-six inches in height is not parked in the triangular area formed by the three points established by the intersection of property lines at the corner and the points thirty feet back from this intersection along each property line;
  - (3) No travel trailer, tent trailer, pickup camper or coach, motorized dwelling or van is used for the conduct of business or for living or housekeeping purposes except when located in an approved mobile home park or in a campground providing adequate sanitary facilities;
  - (4) Any travel trailer, tent trailer, detached pickup camper or coach, boat and boat trailer, cycle trailer, utility trailer and van, horse trailer and van parked or stored out-of-doors is adequately blocked or tied down or otherwise secured so that such vehicle does not roll off the lot and is not moved about by high winds; and
  - (5) No vehicular equipment regulated by this section is stored out-of-doors on a residential lot unless it is in condition for safe and effective performance of the functions for which it is intended.
- (i) Parking Costs Separated From Housing Costs in New Residential Buildings: In the RH-7 and MU-4 zoning districts, all off-street parking spaces accessory to residential uses in new structures of ten dwelling units or more, or in new conversions of nonresidential buildings to residential use of ten dwelling units or more, shall be leased or sold separately from the rental or purchase fees for dwelling units for the life of the dwelling units, such that potential renters or buyers have the option of renting or buying a residential unit at a price lower than would be the case if there were a single price for both the residential unit and the parking space. Parking spaces that are unused or unsold with a residential unit may be leased or otherwise permitted to be used by persons who are not residents, tenants, or visitors to the property.

Ordinance Nos. 7484 (2006); 7522 (2007); 7568 (2007); 7577 (2007); 7589 (2008); 7597 (2008); 7646 (2009); 7655 (2009); 7681 (2009); 7777 (2011); 7850 (2012); 7878 (2012); 7938 (2013); 8005 (2014) ; 8235 (2018) ; 8256 (2018); 8409 (2020); 8510 (2021)

## **APBP Association of Pedestrians and Bicycle Professionals**

Code Section: Essentials of Bike Parking, Selecting and installing bicycle parking that works

Link: [https://www.apbp.org/assets/docs/EssentialsofBikeParking\\_FINAL.pdf](https://www.apbp.org/assets/docs/EssentialsofBikeParking_FINAL.pdf)

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### **SHORT-TERM PARKING**

#### **SITE PLANNING**

##### **Location**

Short-term bike parking should be visible from and close to the entrance it serves—50' or less is a good benchmark. Weather-protected parking makes bicycle transportation more viable for daily and year-round use, and it can reduce the motivation for users to bring wet bicycles into buildings. Area lighting is important for any location likely to see use outside of daylight hours.

##### **Security**

All racks must be sturdy and well-anchored, but location determines the security of short-term parking as much as any other factor. Users seek out parking that is visible to the public, and they particularly value racks that can be seen from within the destination. Areas with high incidence of bicycle theft may justify specific security features such as specialty racks, tamper-proof mounting techniques, or active surveillance.

##### **Quantity**

Many jurisdictions have ordinances governing bike parking quantity. APBP's full Bicycle Parking Guidelines offers complete recommendations for the amount and type of parking required in various contexts. In the absence of requirements, it's okay to start small—but bear in mind that perceived demand may be lower than the demand that develops once quality parking appears.

#### **BIKE CORRALS**

Some cities with limited sidewalk space and strong bicycle activity place bike parking in on-street "bike corrals" located in the street area adjacent to the curb. Bike corrals can sometimes make use of on-street areas that are unsuitable for auto parking. When replacing a single auto parking space, a corral can generally fit 8 to 12 bicycles. APBP's full Bicycle Parking Guidelines provides details about designing and siting bike corrals

### **LONG-TERM PARKING**

#### **SITE PLANNING**

##### **Location**

Appropriate locations for long-term parking vary with context. Long-term parking users are typically willing to trade a degree of convenience for weather protection and increased security.

Long-term installations emphasize physical security above public visibility. Signage may be needed for first-time users.

#### Security

Security is paramount for quality long-term parking. Access to parked bicycles can be limited individually (as with lockers) or in groups (as with locked bike rooms or other secure enclosures). Options for access control include usersupplied locks, keys, smart cards, and other technologies.

#### Quantity

Refer to local ordinances or the comprehensive APBP Bicycle Parking Guidelines to determine the amount and type of parking required for various contexts.

### SPECIAL CONSIDERATIONS FOR LONG-TERM PARKING

In many ways, short-term and long-term parking function similarly and are served by the same guidelines. Some exceptions are noted below.

#### Density

The competition of uses for high-security and sheltered locations creates particular pressure on long-term parking to fit more bicycles in less space. When parking needs cannot be met with standard racks and spacing recommended in this guide, consider rack systems designed to increase parking density. See the high-density racks table on page 7. Note that increasing density without careful attention to user needs can create parking that excludes people because of age, ability, or bicycle type. This may result in people parking bicycles in other less desirable places or choosing not to bike at all.

#### Bicycle design variety

Long-term parking facilities should anticipate the presence of a variety of bicycles and accessories, including—depending on context—recumbents, trailers, children’s bikes, long-tails, and others. To accommodate trailers and long bikes, a portion of the racks should be on the ground and should have an additional 36” of in-line clearance.

#### Performance criteria

The bike rack criteria in the next section apply to racks used in any installation, regardless of its purpose. Long-term installations often use lockers and group enclosures not discussed in this guide. Such equipment raises additional considerations that are discussed in detail in APBP’s full Bicycle Parking Guidelines

## INSTALLATION

### INSTALLATION SURFACE

A sturdy concrete pad is an ideal surface for installing bicycle parking. Other surfaces often encountered include asphalt, pavers, and soft surfaces such as earth or mulch. These surfaces can accommodate in-ground mounting or freestanding bike racks such as inverted-U racks mounted to rails. See APBP’s Bicycle Parking Guidelines for details.

### INSTALLATION FASTENERS

When installing racks on existing concrete, consider the location and select appropriate fasteners. Drill any holes at least three inches from concrete edges or joints. Some locations benefit from security fasteners such as concrete spikes or tamper-resistant nuts on wedge anchors. Asphalt is too soft to hold wedge and spike anchors designed for use in concrete. Installing bike parking on asphalt typically requires freestanding racks and anchor techniques specific to asphalt

### INSTALLATION TECHNIQUES

When installing racks on existing concrete, choose those with a surfacemount flange and install with a hammer drill according to the specifications of the mounting hardware selected. When pouring a new concrete pad, consider bike parking fixtures designed to be embedded in the concrete. Because replacing or modifying an embedded rack is complicated and costly, this installation technique requires particular attention to location, spacing, rack quantity, and material

**BICYCLE RACK SELECTION – Diagrams and Tables in this section**



# STAFF REPORT



|                               |                     |                        |                              |
|-------------------------------|---------------------|------------------------|------------------------------|
| <b>Meeting Date:</b>          | July 17, 2023       | <b>Meeting Title:</b>  | Special Town Council Meeting |
| <b>Submitting Department:</b> | Administration      | <b>Presenter:</b>      | Roxanne Robinson             |
| <b>Agenda Item:</b>           | FY2024 Fee Schedule | <b>Public Comment:</b> | Yes                          |

## **Purpose & Policy Considerations.**

The Town Council sets fees for the organization through resolutions.

## **Requested Action.**

Staff requests that Council adopt the proposed amended fee schedule.

## **Recommendations.**

Staff recommends the Town Council consider and discuss the proposed fees, make any changes, and adopt the fee schedule.

## **Background.**

The Town adopted a fee schedule by resolution on March 17, 2021. Town Council reviews the fee schedule during the budget process and adopts a new fee schedule with an effective date coinciding with the new fiscal year. Council is not required to adopt a new fee schedule each year. Council may also adopt fee schedule changes during the fiscal year, not just at the beginning of the fiscal year.

## **Analysis & Key Questions.**

At the June 26, 2023 Special Town Council Workshop, Council directed staff to increase the fee for new Bar and Grill liquor licenses to \$10,500 and to adjust the fee for annual renewals to \$3,000. This resolution formalizes the fee schedule with an effective date of July 18, 2023. This will have an immediate impact with the application process in September for the Town of Jackson's four (4) new Bar and Grill liquor licenses. Staff has informed current Bar and Grill liquor license holders of these fee adjustments.

## **Alternatives.**

- Council could defer the effective date beyond July 18, 2023.
- Council could change the new liquor license or renewal amounts.

## **Comprehensive Plan & Priority Alignment.**

Establishing and maintaining a clear and transparent fee schedule aligns with Quality Community Service Provision in the Comp Plan: Timely, efficiently and safely deliver quality services and facilities in a fiscally responsible and coordinated manner.

## **Fiscal Impact.**

The fiscal impact of the Council adopting the fee schedule will increase revenues approximately \$42,000 for the four new licenses. Renewal revenue will remain consistent with prior fee schedule adoption.

## **Staff Impact.**

The staff impact of updated fees is approximately 2 hours to update all related applications, documents, etc. that are tied to the fee schedule.

**Attachments or Links.**

Fee Schedule Resolution 23-14

Appendix A: Fee Schedule

**Suggested Motion.** *Council always has the option to adopt, approve with conditions, continue, or deny items.*

I move to approve Resolution 23-14, setting forth and amending the Town of Jackson Fee Schedule.

RESOLUTION 23-14

A RESOLUTION SETTING FEES, COSTS, AND CHARGES (A FEE SCHEDULE)

EFFECTIVE JULY 18, 2023

**WHEREAS**, the Town Council acknowledges there are fees and costs identified in the Town of Jackson Municipal Code; and

**WHEREAS**, the Town Council acknowledges that in order to continue to maintain quality community services, fee amounts need to be reviewed on an ongoing basis and adjusted from time to time to offset the cost of providing those services; and

**WHEREAS**, the Town Council plans to expand community engagement during the annual budget process to include fee updates; and

**WHEREAS**, on March 15, 2021, the Town Council approved Ordinance 1280 which amended and reenacted sections of the Jackson Municipal Code allowing fees that may be set by resolution, to be set by resolution, and removes those fees from the Jackson Municipal Code; and

**WHEREAS**, The Town Council, by adoption of this resolution amends the **Town of Jackson Fee Schedule**, attached hereto as **Appendix A**; and

**WHEREAS**, this Fee Schedule is not applicable to governmental entities doing business with the Town of Jackson, nor is it applicable for interdepartmental transactions; and

**NOW THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF JACKSON, WYOMING**, having duly met on July 17, 2023, at a Regular Town Council Meeting, which was properly noticed and open to the public, and having fully considered the matter at hand, that the fee schedule is hereby amended as follows:

The Jackson Town Council adopts this Resolution #23-14, replacing the previous Town of Jackson Fee Schedule, with the updated Fee Schedule attached hereto as Appendix A.

**PASSED, APPROVED, AND ADOPTED** this 17<sup>th</sup> day of July 2023.

TOWN OF JACKSON

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Hailey Morton Levinson, Mayor

ATTEST:

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Riley Taylor, Town Clerk

**RESOLUTION 23-09, APPENDIX A  
FEE SCHEDULE, EFFECTIVE 7/3/2023**

*This Schedule excludes Water, Sewer, and Capacity Fees found in Title 13*

| <b>Business License</b>      |                                                                                                                     | <b>\$ Current Fee</b> |
|------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------|
| 5.16.010                     | <b>Sales Tax Collecting</b>                                                                                         |                       |
|                              | less than 10 employees                                                                                              | 126.00                |
|                              | 11-49 employees                                                                                                     | 252.00                |
|                              | 50-99 employees                                                                                                     | 378.00                |
|                              | 100 employees, or more                                                                                              | 630.00                |
| 5.16.020                     | <b>Non-Sales Tax Collecting</b>                                                                                     |                       |
|                              | less than 10 employees                                                                                              | 164.00                |
|                              | 11-49 employees                                                                                                     | 365.00                |
|                              | 50-99 employees                                                                                                     | 492.00                |
|                              | 100 employees, or more                                                                                              | 819.00                |
| 5.16.025                     | <b>Independent Contractors and Agents</b>                                                                           | 126.00                |
| 5.16.027                     | <b>Commercial Rentals</b>                                                                                           | 128.00                |
| 5.16.027                     | <b>Residential Rentals</b>                                                                                          | 128.00                |
| 5.06.130                     | <b>Solicitation - Commercial</b>                                                                                    | 128.00                |
| 5.06.150                     | <b>Solicitation - Highway or Street</b>                                                                             | 128.00                |
| 5.60.040 C                   | <b>Short Term Rental</b>                                                                                            | 114.00                |
| 5.20.010                     | <b>Installation Permit</b>                                                                                          | 32.00                 |
| 5.32.040                     | <b>Pawnbroker</b>                                                                                                   | 33.00                 |
| 5.20.020                     | <b>Exposition Licenses</b>                                                                                          |                       |
|                              | 5 or fewer vendors; for-profit expositions                                                                          | 131.00                |
|                              | more than 5 vendors; for-profit expositions                                                                         | 263.00                |
|                              | 5 or fewer vendors; non-profit expositions                                                                          | 66.00                 |
|                              | more than 5 vendors; non-profit expositions                                                                         | 131.00                |
| 5.12.080 A                   | <b>Application Fee, Non-Refundable Portion</b>                                                                      |                       |
|                              | processing fee for denied license                                                                                   | 47.00                 |
| 5.12.080 B                   | <b>Renewal Late Fee</b>                                                                                             |                       |
|                              | \$32 per month on January 30th not to exceed \$128                                                                  | 32.00                 |
| 5.12.130                     | <b>Change of Location Fee</b>                                                                                       |                       |
|                              | notice given on new application                                                                                     | 47.00                 |
| <b>Ground Transportation</b> |                                                                                                                     | <b>\$ Current Fee</b> |
| 5.50.040 B                   | <b>Transportation License</b>                                                                                       |                       |
|                              | < 10 employees                                                                                                      | 126.00                |
|                              | > 10 employee                                                                                                       | 252.00                |
| 5.50.050 B                   | <b>Vehicle License Permit</b>                                                                                       |                       |
|                              | >30 mpg                                                                                                             | 48.00                 |
|                              | < 30 mpg                                                                                                            | 72.00                 |
| 5.50.060 B                   | <b>Operator License Permit</b>                                                                                      |                       |
|                              | new                                                                                                                 | 120.00                |
|                              | renewal                                                                                                             | 61.00                 |
| 5.50.085                     | <b>Taxi Fares</b>                                                                                                   |                       |
|                              | see Resolution #21-10 "A RESOLUTION ESTABLISHING A<br>GROUND TRANSPORTATION FARE MAP"                               |                       |
|                              | <a href="https://www.jacksonwy.gov/575/Taxi-Fee-Information">https://www.jacksonwy.gov/575/Taxi-Fee-Information</a> |                       |

| <b>Miscellaneous</b>                              |                                                                  | <b>\$ Current Fee</b> |
|---------------------------------------------------|------------------------------------------------------------------|-----------------------|
| <b>Public Records</b>                             |                                                                  |                       |
|                                                   | <b>Copy</b>                                                      |                       |
|                                                   | electronic document, <i>per document</i>                         | 11.00                 |
|                                                   | black and white paper                                            | 0.27 /page            |
|                                                   | color paper                                                      | 0.53 /page            |
|                                                   | <b>Plotted Map</b>                                               |                       |
|                                                   | size 11x17, each                                                 | 15.00                 |
|                                                   | size 24x36, each                                                 | 38.00                 |
|                                                   | size 36x54, each                                                 | 53.00                 |
|                                                   | <b>Photograph</b>                                                | 15.00                 |
|                                                   | <b>Police Report</b>                                             | 15.00                 |
|                                                   | <b>LDRs and Comprehensive Plan</b>                               | 62.00                 |
|                                                   | <b>Research / Compilation Services</b>                           | 16.00                 |
|                                                   | <b>External electronic media (disk, usb drive, etc.)</b>         | 15.00                 |
|                                                   | <b>Postage / shipping</b>                                        | actual cost           |
|                                                   | <b>Other special circumstances</b>                               | actual cost           |
|                                                   | <b>Vehicle Inspection</b>                                        | 10.00                 |
|                                                   | <b>Public Intoxication Administrative Fee (Set by Ordinance)</b> | 25.00                 |
|                                                   | <b>DUI Administrative Fee (Set by Ordinance)</b>                 |                       |
|                                                   | Convicted                                                        | 800.00                |
|                                                   | Deferred                                                         | 750.00                |
|                                                   | <b>Boot list Administrative Fee (Set by Ordinance)</b>           | 50.00                 |
|                                                   | <b>Municipal Court Record Search</b>                             | 10.00                 |
| <b>Jackson Hole Airport</b>                       |                                                                  | <b>\$ Current Fee</b> |
| 2.36.120                                          | <b>Passenger Boarding Fee</b>                                    |                       |
|                                                   | Per passenger enplaning commercial aircraft, not to exceed       | 6.00                  |
| <b>Liquor License</b>                             |                                                                  | <b>\$ Current Fee</b> |
| 6.20.006 C                                        | <b>Annual Liquor License</b>                                     |                       |
|                                                   | Bar and Grill: renewal                                           | 3,000.00              |
|                                                   | Bar and Grill: new application                                   | 10,500.00             |
|                                                   | Limited Retail (Club)                                            | 500.00                |
|                                                   | Microbrewery                                                     | 500.00                |
|                                                   | Resort                                                           | 3,000.00              |
|                                                   | Restaurant                                                       | 3,000.00              |
|                                                   | Retail                                                           | 1,500.00              |
|                                                   | Satellite Manufacturer                                           | 100.00                |
|                                                   | Satellite Winery                                                 | 100.00                |
|                                                   | Winery                                                           | 500.00                |
| 6.20.006 D                                        | <b>Temporary, 24-Hour Permits</b>                                |                       |
|                                                   | Catering                                                         | 50.00                 |
|                                                   | Malt Beverage                                                    | 50.00                 |
|                                                   | Manufacturer's Off-Premises                                      | 100.00                |
| <b>Animal Shelter Impounding, Board, Adoption</b> |                                                                  | <b>\$ Current Fee</b> |
| 7.02.040 B                                        | <b>Capture of Animals, Impoundment</b>                           |                       |
|                                                   | First                                                            | 33.00                 |
|                                                   | Same animal, second within one year                              | 46.00                 |
|                                                   | Same animal, third within one year                               | 65.00                 |
|                                                   | Same animal fourth and more within one year                      | 130.00                |
|                                                   | <b>Impoundment, Boarding</b>                                     |                       |
|                                                   | First 24-hours included in impoundment fee                       | -                     |
|                                                   | per animal for each 24-hours                                     | 19.00                 |
| 7.02.050                                          | <b>Adoption</b>                                                  |                       |
| Res 09-04                                         | Dog, impounded for 7+ days                                       | 117.00                |
| Res 09-04                                         | Cat, impounded for 7+ days                                       | 101.00                |

| <b>Animal Control, Dog and Cat License</b> |                             | <b>\$ Current Fee</b> |
|--------------------------------------------|-----------------------------|-----------------------|
| 7.12.020                                   | <b>Dog, annual fee</b>      | 64.00                 |
|                                            | <b>Cat, annual fee</b>      | 64.00                 |
|                                            | <b>Owner Surrender</b>      | 37.00                 |
|                                            | <b>Rabies voucher</b>       | 27.00                 |
|                                            | <b>Teton County License</b> | 27.00                 |
|                                            | Altered                     | 11.00                 |
|                                            | Unaltered                   | 27.00                 |

| <b>Health and Safety, Alarms</b> |                                         | <b>\$ Current Fee</b> |
|----------------------------------|-----------------------------------------|-----------------------|
| 8.32.090                         | <b>Police response to a false alarm</b> | 207.00                |

| <b>Waste Reduction Fee (Plastic Bag)</b> |                                                           | <b>\$ Current Fee</b> |
|------------------------------------------|-----------------------------------------------------------|-----------------------|
| 8.36.020 J                               | <b>Consumer Waste Reduction Fee, paper or plastic bag</b> | 0.20                  |
| 8.36.050 A                               | Store retains                                             | 0.10                  |
| 8.36.050 B                               | Remit to Town of Jackson                                  | 0.10                  |
| 8.36.070 D                               | Late remittance to Town of Jackson                        | 10.00                 |
| 8.36.070                                 | <b>Audit and Violations</b>                               |                       |
| 8.36.070 C                               | First conviction                                          | 55.00                 |
| 8.36.070 C                               | Second conviction                                         | 110.00                |
| 8.36.070 C                               | Third Conviction goes to Municipal Court                  | -                     |

| <b>Encroachment Permit</b> |                                                                                                                                                                                                  | <b>\$ Current Fee</b> |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 12.08.030                  | <b>Encroachment Agreements</b>                                                                                                                                                                   |                       |
|                            | Deposit on Application: Non-Refundable, applied to final request                                                                                                                                 | 50.00                 |
|                            | Request for Encroachment                                                                                                                                                                         | 601.00                |
|                            | Encroachment Agreement                                                                                                                                                                           | 601.00                |
|                            | Crane in PROW (set in crane agreements, per license)                                                                                                                                             |                       |
|                            | Crane Swing in PROW (set in crane agreements, per license)                                                                                                                                       |                       |
|                            | Amendments to Agreements: Half the cost of the Agreement Fee                                                                                                                                     |                       |
| 12.08.060                  | Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work)                                                                                               |                       |
|                            | <b>Encroachment Activity:</b>                                                                                                                                                                    |                       |
|                            | Minimum Fee: Non-Refundable, applied to full Permit Fee                                                                                                                                          | 50.00                 |
|                            | Amendment to Permit: Non-refundable                                                                                                                                                              | 25.00                 |
|                            | Utility Excavation in public street - per utility                                                                                                                                                | 500.00                |
|                            | Utility Excavation in public alley - per utility                                                                                                                                                 | 300.00                |
|                            | Utility Excavation in public easement - per utility                                                                                                                                              | 300.00                |
|                            | Driveway cuts/curb cuts installation/replacement - each                                                                                                                                          | 180.00                |
|                            | Curb and gutter installation - each block                                                                                                                                                        | 180.00                |
|                            | Sidewalk installation - each block                                                                                                                                                               | 180.00                |
|                            | Construction-related, occupy street travel lane - per 50 ft of lane/day                                                                                                                          | 75.00                 |
|                            | Construction-related, occupy bike travel lane/pathway/cycle track - per 50 ft of lane/day                                                                                                        | 20.00                 |
|                            | Construction-related, occupying sidewalk and buffer area - per 50 ft of lane/day                                                                                                                 | 15.00                 |
|                            | Construction-related, occupy public alley - per day                                                                                                                                              | 180.00                |
|                            | Construction-related, occupy time-restricted parking space - per space/day                                                                                                                       | 89.00                 |
|                            | Construction-related, occupy non-time restricted parking space - per space/day                                                                                                                   | 50.00                 |
|                            | House moving, per Town staff assistance                                                                                                                                                          | 45.00                 |
|                            | Other, as deemed appropriate by Public Works Director                                                                                                                                            |                       |
|                            | Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work)                                                                                               |                       |
|                            | Excavation, Construction, and Occupancy fees are cumulative                                                                                                                                      |                       |
|                            | Fees are per the table unless otherwise noted, conditioned, or regulated (e.g. restrictions for winter snow removal ordinance). Minimum permit fees may apply. Minimum pay quantity is as shown. |                       |
|                            | Fees, other than the Deposit on Permit, are non-refundable unless staff determines that it was notified prior to the permitted dates that the permit activity would not occur.                   |                       |

Full lane closure is inclusive of adjacent parking, does not include sidewalk and buffer area fee.

Fee Waivers are in accordance with the Planning Permit Fee Waiver policy or other established agreements.

| Special Event Permit | \$ Current Fee |
|----------------------|----------------|
|----------------------|----------------|

12.28.050 F

**Applicants:**

|                                             |          |
|---------------------------------------------|----------|
| Non-Profit                                  | 29.00    |
| For-Profit, including commercial film/photo | 1,000.00 |
| Expressive Activity                         | -        |

| Planning Permit | \$ Current Fee |
|-----------------|----------------|
|-----------------|----------------|

**Fee Waiver**

The Town Council may reduce, defer, or waive application fees upon request if the proposed project advances significant community goals, which include but are not limited to, the following:

1. A project that is sponsored by a governmental entity, or a project that received public funding.

2. A project that provides extraordinary charitable, civic, educational, or similar benefits to the community.

Such requests shall be submitted, for action by the Town Council, to the Planning Director within 30 days of receipt and prior to the submittal of an application. All requests shall be made prior to initiating a project as set forth in LDR Division 5100.

Fees are non-refundable once processing has commenced unless staff has determined that the permit is unnecessary.

**General Pre-Application Conference** (per Pre-App meeting)

|                                                    |              |
|----------------------------------------------------|--------------|
| Sketch Plan, Special Use, Planned Unit Development | 767.00       |
| Conditional Use, Development Plan, Map Amendment   | 384.00       |
| Development Option Plan                            | 384.00       |
| Grading & Erosion Control                          | 192.00       |
| Optional/Elective Conference with:                 |              |
| Staff                                              | 192.00       |
| Planning Commission or Town Council                | original fee |
| Design Review Committee                            | 255.00       |

**Physical Development**

|                               |          |
|-------------------------------|----------|
| Sketch Plan, Development Plan | 3,198.00 |
|-------------------------------|----------|

**Sign Permit**

|                     |        |
|---------------------|--------|
| Per Sign            | 96.00  |
| Master Signage Plan | 384.00 |

**Basic Use Permit**

|  |        |
|--|--------|
|  | 640.00 |
|--|--------|

**Conditional Use Permit**

|                                                      |          |
|------------------------------------------------------|----------|
| Use Permit only                                      | 3,198.00 |
| Concurrent with application requiring public hearing | 640.00   |

|                           |          |
|---------------------------|----------|
| <b>Special Use Permit</b> | 3,198.00 |
|---------------------------|----------|

**Development Option or Subdivision**

|                                                    |           |
|----------------------------------------------------|-----------|
| Development Option Plan                            | 640.00    |
| Subdivision Plat, <i>plus technical review fee</i> | 1,279.00  |
| Exempt Land Division                               | no charge |

**Boundary Adjustment**

|                                                 |          |
|-------------------------------------------------|----------|
| Plat Required, <i>plus technical review fee</i> | 1,279.00 |
| Without Plat, <i>plus technical review fee</i>  | 576.00   |

|                                                                                                         |                  |
|---------------------------------------------------------------------------------------------------------|------------------|
| <b>Interpretations</b>                                                                                  |                  |
| Formal Interpretation                                                                                   | 640.00           |
| Zoning Compliance Verification                                                                          | 640.00           |
| <b>Amendments</b>                                                                                       |                  |
| LDR Text                                                                                                | 1,919.00         |
| Zoning Map                                                                                              | 1,919.00         |
| Planned Unit Development                                                                                | 1,919.00         |
| <b>Relief</b>                                                                                           |                  |
| Administrative Adjustment                                                                               | 640.00           |
| Variance                                                                                                | 640.00           |
| Appeal of Administrative Decision                                                                       | 640.00           |
| Beneficial Use Determination                                                                            | 1,279.00         |
| <b>Enforcement</b>                                                                                      |                  |
| After-the-Fact Permit                                                                                   | initial fee x 2  |
| <b>Amendments of Permits or Approvals</b>                                                               |                  |
| Re-Submittal while in review process                                                                    | half initial fee |
| To approved plans and permits, <i>fee for permit review required by net change in density/intensity</i> | calculation      |
| To condition requiring Council approval                                                                 | 640.00           |
| <b>Miscellaneous</b>                                                                                    |                  |
| Administrative decision elevated to public hearing                                                      | 640.00           |
| Planner of Day, miscellaneous services, research, <i>per hour</i>                                       | 100.00           |

| <b>Building Permit (IBC)</b>                  |                                                                                                                         | <b>\$ Current Fee</b> |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 15.04.020 7                                   | <b>Deposit on Building Permit</b>                                                                                       |                       |
|                                               | Non-refundable, applied to full BP fee                                                                                  | 532.00                |
| 15.04.090                                     | <b>New Buildings and Additions</b>                                                                                      |                       |
|                                               | Single Family Residence                                                                                                 | 1.60/sf               |
|                                               | Commercial, Office, Multi-family and similar                                                                            | 1.06/sf               |
|                                               | Warehouse, storage and similar                                                                                          | 1.06/sf               |
| 15.04.090                                     | <b>Remodels and Alterations</b>                                                                                         |                       |
| <u>Total Valuation</u> <u>Fee Calculation</u> |                                                                                                                         |                       |
| \$1 to 17,000                                 |                                                                                                                         | 272.00                |
| \$17,001 to 40,000                            | \$272 for the first \$17,000 plus \$11 for each additional \$1000 or fraction thereof, to and including \$40,000        |                       |
| \$40,001 to 100,000                           | \$518 for the first \$40,000 plus \$9 for each additional \$1,000 or fraction thereof, to and including \$100,000       |                       |
| \$100,001 to 500,000                          | \$1,093 for the first \$100,000 plus \$7.00 for each additional \$1,000 or fraction thereof, to and including \$500,000 |                       |
| \$500,001 to \$1million                       | \$4,072 for the first \$50,000 plus \$5 for each additional \$1,000 or fraction thereof, to and including \$100,000     |                       |
| \$1,000,001 to \$5million                     | \$6,732 for the first \$100,000 plus \$3 for each additional \$1,000 or fraction thereof, to and including \$5,000,000  |                       |
| \$5million +                                  | \$19,501 for the first \$500,000 plus \$1 for each additional \$1,000 or fraction thereof                               |                       |
| 15.04.090                                     | <b>Other Inspections</b>                                                                                                |                       |
|                                               | Plan review assessed @ 65% of building permit fee                                                                       |                       |
|                                               | outside normal business hours                                                                                           | 106.00/hr             |
|                                               | Re-inspection under Section 305(g)                                                                                      | 80.00/hr              |
|                                               | No fee specifically indicated                                                                                           | 80.00/hr              |
|                                               | Review of revisions made to Approved Plan                                                                               | 106.00/hr             |



| Mechanical Permit (IMC) | \$ Current Fee |
|-------------------------|----------------|
|-------------------------|----------------|

|           |                                                                             |        |
|-----------|-----------------------------------------------------------------------------|--------|
| 15.12.030 | <b>Mechanical / Fuel Gas Permit</b>                                         |        |
|           | For the issuance of each permit                                             | 53.00  |
|           | For issuing each supplemental permit                                        | 21.00  |
|           | Install or relocate gravity/forced air furnace to 100,000 btu/h             | 27.00  |
|           | Install or relocate gravity/forced air furnace over 100,000 btu/h           | 32.00  |
|           | Install or relocate each floor furnace, including vent                      | 23.00  |
|           | Install or relocate suspended, recessed or floor mounted heater             | 23.00  |
|           | Install, relocate or replace appliance vent                                 | 16.00  |
|           | Repair or alter any heating, cooling, absorption or evaporative system      | 21.00  |
|           | Install or relocate boiler or compressor to 3 hp                            | 23.00  |
|           | Install or relocate absorption system to 100,000 btu/h                      | 23.00  |
|           | Install or relocate boiler or compressor 3-15 hp                            | 43.00  |
|           | Install or relocate absorption system 100,000-500,000 btu/h                 | 43.00  |
|           | Install or relocate boiler or compressor 15-30 hp                           | 59.00  |
|           | Install or relocate absorption system 500,000-1,000,000 btu/h               | 59.00  |
|           | Install or relocate boiler or compressor 30-50 hp                           | 90.00  |
|           | Install or relocate absorption system 1,000,000-1,750,000 btu/h             | 90.00  |
|           | Install or relocate boiler or compressor over 50 hp                         | 160.00 |
|           | Install or relocate absorption system over 1,750,000 btu/h                  | 160.00 |
|           | Each air-handling unit up to 10,000 cfm and attached ducts                  | 21.00  |
|           | Each air-handling unit over 10,000 cfm                                      | 32.00  |
|           | Each evaporative cooler other than portable type                            | 21.00  |
|           | Each ventilation fan attached to a single duct                              | 16.00  |
|           | Each ventilation system not part of heating or air conditioning system      | 21.00  |
|           | Installation of hood system serving any mechanical exhaust, including ducts | 21.00  |
|           | Install or relocate domestic type incinerator                               | 32.00  |
|           | Install or relocate commercial or industrial incinerator                    | 122.00 |
|           | Install, relocate or alter any unclassified equipment                       | 21.00  |
|           | Install Hydronic Heating- up to 1000 sq. ft                                 | 23.00  |
|           | Install Hydronic Heating- 1001 sq. ft. - 2500 sq. ft                        | 37.00  |
|           | Install Hydronic Heating- 2501 sq. ft. - 5000 sq. ft                        | 53.00  |
|           | Install Hydronic Heating- 5001 sq. ft. and over                             | 80.00  |
|           | Gas-piping Systems to 5 outlets                                             | 16.00  |
|           | For each additional Gas-piping System outlet, per outlet                    | 5.00   |

|           |                                                                                                               |               |
|-----------|---------------------------------------------------------------------------------------------------------------|---------------|
| 15.12.030 | <b>Inspections</b>                                                                                            |               |
|           | Inspections outside normal business hours                                                                     | 106.00/hr min |
|           | Re-inspection fee                                                                                             | 80.00/hr min  |
|           | For which no fee is specifically indicated                                                                    | 80.00/hr min  |
|           | Additional plan review required by changes, additions, or revisions to approved plans (minimum charge 1 hour) | 106.00/hr min |

| Electrical Code | \$ Current Fee |
|-----------------|----------------|
|-----------------|----------------|

|             |                                     |        |
|-------------|-------------------------------------|--------|
| 15.20.010 3 | <b>Valuation of Electrical Work</b> |        |
|             | 1.00 to 500                         | 38.00  |
|             | 500.01 to 600                       | 44.00  |
|             | 600.01 to 700                       | 49.00  |
|             | 700.01 to 800                       | 53.00  |
|             | 800.01 to 900                       | 59.00  |
|             | 900.01 to 1,000                     | 64.00  |
|             | 1,000.01 to 1,100                   | 68.00  |
|             | 1,100.01 to 1,200                   | 73.00  |
|             | 1,200.01 to 1,300                   | 79.00  |
|             | 1,300.01 to 1,400                   | 84.00  |
|             | 1,400.01 to 1,500                   | 88.00  |
|             | 1,500.01 to 1,600                   | 94.00  |
|             | 1,600.01 to 1,700                   | 99.00  |
|             | 1,700.01 to 1,800                   | 103.00 |
|             | 1,800.01 to 1,900                   | 109.00 |
|             | 1,900.01 to 2,000                   | 114.00 |
|             | 2,000.01 to 3,000                   | 129.00 |

|                                                                                                                                                           |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| 3,000.01 to 4,000                                                                                                                                         | 149.00 |
| 4,000.01 to 5,000                                                                                                                                         | 168.00 |
| 5,000.01 to 6,000                                                                                                                                         | 188.00 |
| 6,000.01 to 7,000                                                                                                                                         | 209.00 |
| 7,000.01 to 8,000                                                                                                                                         | 229.00 |
| 8,000.01 to 9,000                                                                                                                                         | 249.00 |
| 9,000.01 to 10,000                                                                                                                                        | 269.00 |
| 10,000.01 to 11,000                                                                                                                                       | 288.00 |
| 11,000.01 to 12,000                                                                                                                                       | 309.00 |
| 12,000.01 to 13,000                                                                                                                                       | 329.00 |
| 13,000.01 to 14,000                                                                                                                                       | 349.00 |
| 14,000.00 to 15,000                                                                                                                                       | 369.00 |
| 15,000.01 to 16,000                                                                                                                                       | 389.00 |
| 16,000.01 to 17,000                                                                                                                                       | 429.00 |
| 17,000.01 to 18,000                                                                                                                                       | 449.00 |
| 18,000.01 to 19,000                                                                                                                                       | 469.00 |
| 19,000.01 to 20,000                                                                                                                                       | 489.00 |
| 20,000.01 to 21,000                                                                                                                                       | 510.00 |
| 21,000.01 to 22,000                                                                                                                                       | 529.00 |
| 22,000.01 to 23,000                                                                                                                                       | 549.00 |
| 23,000.01 to 24,000                                                                                                                                       | 569.00 |
| 24,000.01 to 25,000                                                                                                                                       | 591.00 |
| 25,000.01 to 50,000 = \$591.00 for the first \$25,000.00, plus \$11.00 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00   |        |
| 50,000.01 to 100,000 = \$966.00 for the first \$50,000.00, plus \$10.00 for each additional \$1,000.00 or fraction thereof, to and including \$100,000.00 |        |
| 100,000.01 and Up = \$1,467.00 for the \$100,000.00 plus \$8.00 for each additional \$1,000.00 or fraction thereof                                        |        |
| Connect all temporary services                                                                                                                            | 35.00  |

| Plumbing Permits |                                                                                                                                                         | \$ Current Fee |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 15.24.030        | <b>Plumbing and Fuel Gas Permits</b>                                                                                                                    |                |
|                  | For issuing each permit                                                                                                                                 | 53.00          |
|                  | For each plumbing fixture on one trap or set of fixtures on one trap (including water, drainage piping and backflow protection)                         | 16.00          |
|                  | For each building sewer and trailer park sewer                                                                                                          | 27.00          |
|                  | Rainwater systems – per drain (inside building)                                                                                                         | 16.00          |
|                  | For each water heater and/or vent                                                                                                                       | 16.00          |
|                  | For each gas-piping system of one to five outlets                                                                                                       | 16.00          |
|                  | For each additional gas-piping system outlet, per outlet                                                                                                | 5.00           |
|                  | For each industrial waste pretreatment interceptor including its trap and vent, excepting kitchen type grease interceptors functioning as fixture traps | 16.00          |
|                  | For each installation, alteration or repair of water piping and/or water treating equipment, each fixture                                               | 16.00          |
|                  | For each repair or alteration of drainage or vent piping, each fixture                                                                                  | 16.00          |
|                  | For each lawn sprinkler system on any one meter including backflow protection devices                                                                   | 16.00          |
|                  | For atmospheric-type vacuum breakers not included in Item #10:                                                                                          | -              |
|                  | 1 to 5 each                                                                                                                                             | 16.00          |
|                  | over 5 each                                                                                                                                             | 5.00           |
|                  | For each backflow protective device, other than atmospheric-type vacuum breakers:                                                                       | -              |
|                  | 2 inch diameter and smaller                                                                                                                             | 16.00          |
|                  | over 2 inches in diameter                                                                                                                               | 27.00          |
|                  | Install Hydronic Heating- up to 1000 sq. ft                                                                                                             | 23.00          |
|                  | Install Hydronic Heating- 1001 sq. ft. - 2500 sq. ft                                                                                                    | 37.00          |
|                  | Install Hydronic Heating- 2501 sq. ft. - 5000 sq. ft                                                                                                    | 53.00          |
|                  | Install Hydronic Heating- 5001 sq. ft. and over                                                                                                         | 80.00          |
|                  | For each Fire Sprinkler System                                                                                                                          | 16.00          |
|                  | <b>Inspections</b>                                                                                                                                      |                |
|                  | Inspections outside normal business hours                                                                                                               | 106.00/hr min  |
|                  | Re-inspection fee                                                                                                                                       | 80.00/hr min   |

|                                                                                                               |               |
|---------------------------------------------------------------------------------------------------------------|---------------|
| Inspections for which no fee is specifically indicated                                                        | 80.00/hr min  |
| Additional plan review required by changes, additions, or revisions to approved plans (minimum charge 1 hour) | 106.00/hr min |

### **Flood Damage Prevention**

**\$ Current Fee**

15.30.110

#### **Floodplain Development Permit**

|                                                                                                                                     |             |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Deposit on Permit: Non-Refundable, applied to full Permit Fee                                                                       | 50.00       |
| Scale of project is determined by the Floodplain Administrator and examples of projects are included in the application:            |             |
| Small Scale                                                                                                                         | 300.00      |
| Large Scale                                                                                                                         | 750.00      |
| Floodplain Map Revision (CLOMR and LOMR) Application                                                                                | 1,200.00    |
| Permit Revisions: half the cost of the original permit                                                                              |             |
| Variance Application                                                                                                                | 750.00      |
| No Fee Specifically Indicated                                                                                                       | 150.00/hour |
| Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work - not including Emergency Waiver) |             |
| Third Party Technical Review                                                                                                        | actual cost |

### **Contractor Licensing**

**\$ Current Fee**

15.36.040 i

#### **Classification:**

|                                           |        |
|-------------------------------------------|--------|
| General Contractor (Class A)              | 426.00 |
| Building Contractor (Class B)             | 426.00 |
| Building Contractor Restricted (Class Br) | 426.00 |
| Residential Contractor (Class C)          | 426.00 |
| Electrical Contractor                     | 426.00 |
| Low Voltage Electrical Contractor         | 426.00 |
| Plumbing Contractor                       | 426.00 |
| HVAC Contractor                           | 426.00 |
| Woodstove/Gas Stove Installer             | 426.00 |
| Gas Service Contractor                    | 426.00 |
| Lawn Sprinkler Installer                  | 426.00 |
| Water Conditioning Installer              | 426.00 |
| Refrigerator Contractor                   | 426.00 |
| Fire Sprinkler Contractor                 | 426.00 |

15.36.050 G

#### **Certificates of Qualification**

|                        |        |
|------------------------|--------|
| Initial Certificate    | 160.00 |
| Renewal of Certificate | 80.00  |

| <b>Demolition Standards</b> |                                                                                                                                     | <b>\$ Current Fee</b> |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 15.38.010                   | <b>Demolition Permit</b>                                                                                                            |                       |
|                             | Deposit on Permit: Non-Refundable, applied to full Permit Fee                                                                       | 50.00                 |
|                             | Demolition Permit                                                                                                                   | 250.00                |
|                             | Permit Revisions: half the cost of the original permit                                                                              |                       |
|                             | No Fee Specifically Indicated                                                                                                       | 150.00/hour           |
|                             | Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work - not including Emergency Waiver) |                       |
|                             | Third Party Technical Review                                                                                                        | actual cost           |

| <b>Grading, Erosion Control, and Stormwater Management</b> |                                                                                                                                     | <b>\$ Current Fee</b> |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| LDR: 5.7                                                   | <b>Grading Permit</b>                                                                                                               |                       |
|                                                            | Deposit on Grading Permit: Non-Refundable, applied to full Grading Permit Fee                                                       | 50.00                 |
|                                                            | Individual Residential (Primary + 1 accessory):                                                                                     |                       |
|                                                            | Statement                                                                                                                           | 200.00                |
|                                                            | Plan Level                                                                                                                          | 600.00                |
|                                                            | Multi-Unit Residential (3+ Units)                                                                                                   |                       |
|                                                            | Statement                                                                                                                           | 200.00/unit           |
|                                                            | Plan Level                                                                                                                          | 350.00/unit           |
|                                                            | Multi-Lot Residential/Subdivision: Plan Level Only                                                                                  | 350.00/lot            |
|                                                            | Commercial Development: \$0.10/square foot of total development area; minimum fee \$200                                             |                       |
|                                                            | Permit Revisions: half the cost of the original permit                                                                              |                       |
|                                                            | Fee Specifically Indicated: \$100/hour/reviewer                                                                                     |                       |
|                                                            | Compliance Fees: Two times the regular fee (Failure to obtain permit prior to commencing the work - not including Emergency Waiver) |                       |
|                                                            | Third Party Technical Review                                                                                                        | actual cost           |

| <b>Cemetery</b> |                                     | <b>\$ Current Fee</b> |
|-----------------|-------------------------------------|-----------------------|
| Res 05-28       | <b>Fees:</b>                        |                       |
|                 | Internment - Open/Close Full        | 493.00                |
|                 | Internment - Open/Close Cremation   | 70.00                 |
|                 | Weekend / Holiday Charge            | 140.00                |
|                 | Deed Filing Fee                     | 28.00                 |
|                 | Winter Charge ( Dec 1 - April 30 )  | 140.00                |
|                 | Plot Purchase - Full                | 422.00                |
|                 | Plot Purchase - Cremation/Infant    | 140.00                |
|                 | Disinterment - Open/Close Full      | 634.00                |
|                 | Disinterment - Open/Close Cremation | 140.00                |

# STAFF REPORT



|                               |                                                                |                        |                      |
|-------------------------------|----------------------------------------------------------------|------------------------|----------------------|
| <b>Meeting Date:</b>          | July 17, 2023                                                  | <b>Meeting Title:</b>  | Regular Town Council |
| <b>Submitting Department:</b> | Community Development                                          | <b>Presenter:</b>      | Paul Anthony         |
| <b>Agenda Item:</b>           | <b>SUBJECT: ITEM P21-333:</b><br>First Reading for Ordinance Q | <b>Public Comment:</b> | Yes                  |

## **Purpose & Policy Considerations.**

To approve at First Reading Ordinance Q to update the Town of Jackson's Land Development Regulations (LDRs) to update the definitions and standards related to short-term rentals in residential neighborhoods.

## **Requested Action.**

Staff requests consideration of Ordinance Q to modify the following sections of the Town of Jackson's LDRs as it relates to related to short-term rentals in residential neighborhoods:

1. LDR Section 6.1.4 Residential Uses
2. LDR Section 6.1.5 Lodging Uses
3. LDR Sections 2.2.2.C; 2.2.3.C; 2.2.4.C; 2.2.5.C; 2.2.6.C; 2.2.7.C; 2.2.8.C; 2.2.9.C; 2.2.10.C; 3.3.1.C.
4. LDR Section 6.3.2.C

## **Recommendation.**

The Community Development Director recommends approval of Ordinance Q as presented in this staff report.

## **Background.**

At the May 1, 2023, Town Council regular meeting, Town Council approved the proposed amendments and directed staff to prepare an Ordinance to amend the LDRs as presented. In its discussion on this item (P21-333) during the same meeting, Town Council asked that staff add a penalty provision for properties found to have violated the new STR program. Council agreed that a 3-year penalty or probation period would be appropriate both as a reasonable penalty and to deter future violations. This penalty provision has been added by staff to the first reading for Ordinance Q for Council's consideration. No other changes were made to the proposed STR amendment.

In addition to approval of Ordinance Q, the Council will separately need to approve resolutions to repeal 5.60 in the Municipal Code and the Fee resolution. These two resolutions will be presented concurrent with the third reading of this ordinance.

## **Factors for Consideration**

Below are the factors that the Council considered at a regular meeting on May 1, 2023.

Zoning Text Amendment (P21-333): Pursuant to Section 8.7.1.C of the Town of Jackson Land Development Regulations, the advisability of amending the text of these LDRs 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 LDR text 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.** One of the primary purposes of the LDRs is to implement the community's goals in the Comprehensive Plan for protecting community character in both our commercial and residential areas. The Town's zone districts, more particularly, are crafted to specify the amount, type, and location of development to best balance the community's goals for development and to create transparent and enforceable regulations. The proposed amendment is consistent with this goal by clarifying the rules for Short-term Rentals that have been very confusing in residential neighborhoods.

**2. *Improves the consistency of the LDRs with other provisions of the LDRs;***

**Complies.** The proposed LDR amendment will improve consistency and clarity between how STRs are regulated compared to all other uses. The current reliance on the 2007 STR interpretation has created much confusion among, staff, the public, and landowners. Addressing neighbor complaints has been a challenge because of the lack of transparency in how the STR program is supposed to work in residential areas. The proposed amendment seeks to address these deficiencies by providing a clear STR framework and process in which the roles of Town staff, neighbors, and landowners is much more clearly defined.

**3. *Provides flexibility for landowners within standards that clearly define desired character;***

**Complies.** Staff finds that the proposed text amendment provides adequate flexibility for landowners to reasonably use their property for STR rental use in a way that also protects the residential character in our residential zones, including those in Stable subareas.

**4. *Is necessary to address changing conditions, public necessity, and/or state or federal legislation;***

**Complies.** The proposed amendment is driven largely by the need to respond to a significant increase in demand for STRs and the rapidly changing online marketplace for booking STRs. Covid too has increased local demand for a wider variety of STR options throughout the year. Thus, current STR forces have overwhelmed our existing STR program and created the need for the proposed amendment.

**5. *Improves implementation of the Comprehensive Plan; and***

Not Applicable per Wyoming State statute.

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

**Complies.** The proposed amendment will improve consistency between how STRs are regulated in the LDRs and in the Municipal Code. The current Municipal Code requirements create special rules for STRs inside of the Lodging Overlay that are different from all other allowed uses in the LDRs and so creates confusion. Adoption of the proposed LDRs amendments, coupled with the repeal of 5.60 in the Municipal Code, will significantly improve of the LDRs with other Town Ordinances.

Ordinance Q

**SUGGESTED MOTION**

I move to approve Ordinance Q on first reading.

## ORDINANCE Q

AN ORDINANCE AMENDING AND REENACTING SECTION 1 OF TOWN OF JACKSON ORDINANCE NOS. 1196, 1198, 1210 THROUGH 1217, 1222, 1278, 1299, 1313, 1314, 1316, 1324, AND SECTIONS 2.2.2.C THROUGH 2.2.10.C, 2.3.13.C, 3.3.1.C, 6.1.4, 6.1.5, AND 6.3.2 OF THE TOWN OF JACKSON LAND DEVELOPMENT REGULATIONS REGARDING SHORT TERM RENTAL UNITS.

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

### SECTION I.

Section 1 of Town of Jackson Ordinance Nos. 1198 and 1313 and Section 6.1.4 of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

## LDR Section 6.1.4 Residential Uses

### 6.1.4.A. All Residential Uses

**1. Definition.** A residential use is a living facility, certified under the International Residential or Building Code or by HUD, that includes permanent provision for **long-term permanent** living, sleeping, eating, cooking, and sanitation **and not for short-term transient lodging or short-term rental use.**

### 6.1.4.A.2. Standards

- a. No residential unit or portion of a residential unit may be rented such that occupancy by the lessee is limited to **less fewer** than **30 consecutive 31** days **unless approved for short-term rental use.** Short-term rental of **less fewer** than **30 31 consecutive** days shall be considered a lodging use subject to the standards of Sec. 6.1.5. A time-share condominium is considered a residential use as long as the ownership intervals are **more than 30 31 consecutive** days **or longer.** Any ownership intervals of less duration shall be considered a lodging use.

### SECTION II.

Section 1 of Town of Jackson Ordinance No. 1196 and Section 6.1.5 of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

## LDR Section 6.1.5 Lodging Uses

### 6.1.5.A. All Lodging Uses

**1. Definition.** A lodging use is a sleeping unit or residential unit, **or portion of a residential unit,** rented such that occupancy is limited to **less fewer** than **30 consecutive 31** days.

### 6.1.5.C. Short-term Rental Unit



**1. Definition.** Short-term rental means the rental of all or a portion of a residential unit such that occupancy is limited to ~~less~~ fewer than 30 consecutive ~~31~~ days.

## 2. Standards

- a. No residential unit or portion of a residential unit may be rented so as to limit occupancy to ~~less~~ fewer than 30 consecutive ~~31~~ days unless permitted for short-term rental.

Example of prohibited residential use: The owner of a house located in a residential zoning district outside of the Lodging Overlay (e.g., NL-5), executes a lease for 30 days but restricts occupancy of the tenant to only 7 days. This arrangement, or any other similar lease arrangement, is not a residential use. It is a short-term rental use that requires a BUP permit per the LDRs.

- b. Developments that have been approved for short-term rental use of ~~less~~ fewer than 30 consecutive ~~31~~ days prior to November 9, 1994, will be allowed to continue such rental use in accordance with Div. 1.9. or in accordance with the PUD approval, whichever is applicable.
- c. A short-term rental unit shall be subject to the stricter of the two standards when residential and nonresidential standards ~~would~~ both apply.

**EXAMPLE:** A short-term rental unit is subject to lodging affordable workforce housing requirements rather than residential affordable workforce housing requirements. See also 6.3.5.C.1.a when changing use from residential to short-term rental

- d. Short-term rental use in residential zone districts NL-1 to NL-5, NM-1, NM-2, NH-1, R, MHP, and OR is limited to a maximum of three separate rentals per calendar year for a maximum of 60 total rental days.
- e. Short-term rental use in the NL-1 to NL-5, NM-1, NM-2, NH-1, R, MHP, and OR zones requires notification of neighbors, including any HOA governing the applicant's property, according to the requirements of Sec. 8.2.14.C.2. prior to approval of the BUP. Notice shall be done by applicant and shall contain the contact information, including phone number and email address, of person(s) designated to be responsible to address all questions and complaints on a 24-hour/365-day basis about the operation of the Short-term rental.
- f. A business license shall be approved either prior to or concurrent with issuance of the BUP.
- g. All BUPs for short-term rental use in a residential zone expire on December 31 annually.
- h. A property found to be in violation of any requirement in Section 6.1.5.C shall not be issued a BUP for a short-term rental unit for a minimum of five years.

## SECTION III.

Section 1 of Town of Jackson Ordinance Nos. 1210, 1313, and 1324 and Section 2.2.2.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

Add “Short-term Rental Unit” use as a Basic Use Permit (BUP) in each residential zone as an Accessory Use as shown below (NL-1 through NL-5, NM-1, NM-2, NH-1, OR, and R).

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                |                      | 2. Use Requirements                                  |                                                      |
|----------------------------------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Accessory Uses                                     |        |                |                      |                                                      |                                                      |
| Accessory Residential Unit (6.1.11.B.) (E.2.)      | B      | 1 unit per lot | (E.2.)               | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |
| Home Occupation (6.1.11.D.)                        | B      | n/a            | n/a                  | n/a                                                  | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a            | n/a                  | 1/employee                                           | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a            | n/a                  | 1/employee + 1 off-street pick-up/drop-off           | exempt                                               |
| Home Daycare Center (6.1.11.G.)                    | C      | n/a            | n/a                  | 1/employee + 2 off-street pick-up/drop-off           | exempt                                               |
| Temporary Uses                                     |        |                |                      |                                                      |                                                      |
| Temporary Shelter (6.1.12.D.)                      | B      | 1 unit per lot | n/a                  | 2/DU                                                 | exempt                                               |
| Temp. Gravel Extraction and Processing (6.1.12.F.) | B      | n/a            | n/a                  | 1/employee                                           | exempt                                               |

Add: “Short-term Rental Unit” as BUP as shown above as an Accessory Use

Y=Use allowed, no use permit required, B=Basic Use Permit (Sec. 8.4.2.), C=Conditional Use Permit (Sec. 8.4.3.)

#### SECTION IV.

Section 1 of Town of Jackson Ordinance Nos 1211, 1313, 1324 and Section 2.2.3.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                |                      | 2. Use Requirements                                  |                                                      |
|----------------------------------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Wireless Communications Facilities (6.1.10.D.)     |        |                |                      | 1/employee + 1 per stored vehicle                    | 0.000123 * sf                                        |
| Minor                                              | B      | n/a            | n/a                  |                                                      |                                                      |
| Accessory Uses                                     |        |                |                      |                                                      |                                                      |
| Accessory Residential Unit (6.1.11.B.) (E.2)       | B      | 1 unit per lot | (E.2)                | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |
| Home Occupation (6.1.11.D.)                        | B      | n/a            | n/a                  | n/a                                                  | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a            | n/a                  | 1/employee                                           | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a            | n/a                  | 1/employee + 1 off-street pick-up/drop-off           | exempt                                               |
| Home Daycare Center (6.1.11.G.)                    | C      | n/a            | n/a                  | 1/employee + 2 off-street pick-up/drop-off           | exempt                                               |
| Temporary Uses                                     |        |                |                      |                                                      |                                                      |
| Temporary Shelter (6.1.12.D.)                      | B      | 1 unit per lot | n/a                  | 2                                                    |                                                      |
| Temp. Gravel Extraction and Processing (6.1.12.F.) | B      | n/a            | n/a                  | 1/employee                                           | exempt                                               |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION V.

Section 1 of Town of Jackson Ordinance Nos 1212, 1313, 1324 and Section 2.2.4.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                |                                       | 2. Use Requirements                                  |                                                           |
|----------------------------------------------------|--------|----------------|---------------------------------------|------------------------------------------------------|-----------------------------------------------------------|
| Use                                                | Permit | Density (max)  | Individual Use (max)                  | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.)      |
| Open Space                                         |        |                |                                       |                                                      |                                                           |
| Agriculture (6.1.3.B.)                             | B      | n/a            | n/a                                   | n/a                                                  | exempt                                                    |
| Residential                                        |        |                |                                       |                                                      |                                                           |
| Detached Single-Family Unit (6.1.4.B.)             | Y      | 1 unit per lot | 8,000 sf habitable excluding basement | 2/DU                                                 | $0.000017(sf) + (Exp(-15.49 + 1.59 \cdot \ln(sf)))/2.176$ |
| Transportation/Infrastructure                      |        |                |                                       |                                                      |                                                           |
| Utility Facility (6.1.10C.C.)                      | C      | n/a            | n/a                                   | 1/employee + 1/stored vehicle                        | $0.000123 * sf$                                           |
| Wireless Communications Facilities (6.1.10.D.)     |        |                |                                       |                                                      |                                                           |
| Minor                                              | B      | n/a            | n/a                                   | 1/employee + 1 per stored vehicle                    | $0.000123 * sf$                                           |
| Accessory Uses                                     |        |                |                                       |                                                      |                                                           |
| Accessory Residential Unit (6.1.11.B.) (E.1)       | B      | 1 unit per lot | (E.1)                                 | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                                    |
| Home Occupation (6.1.11.D.)                        | B      | n/a            | n/a                                   | n/a                                                  | exempt                                                    |
| Home Business (6.1.11.E.)                          | C      | n/a            | n/a                                   | 1/employee                                           | exempt                                                    |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a            | n/a                                   | 1/employee + 1 off-street pick-up/drop-off           | exempt                                                    |
| Temporary Uses                                     |        |                |                                       |                                                      |                                                           |
| Temporary Shelter (6.1.12.D.)                      | B      | 1 unit per lot | n/a                                   | 2/DU                                                 | exempt                                                    |
| Temp. Gravel Extraction and Processing (6.1.12.F.) | B      | n/a            | n/a                                   | 1/employee                                           | exempt                                                    |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION VI.

Section 1 of Town of Jackson Ordinance Nos. 1213, 1313, 1324 and Section 2.2.5.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                 |                                       | 2. Use Requirements                                  |                                                           |
|----------------------------------------------------|--------|-----------------|---------------------------------------|------------------------------------------------------|-----------------------------------------------------------|
| Use                                                | Permit | Density (max)   | Individual Use (max)                  | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.)      |
| Open Space                                         |        |                 |                                       |                                                      |                                                           |
| Agriculture (6.1.3.B.)                             | B      | n/a             | n/a                                   | n/a                                                  | exempt                                                    |
| Residential                                        |        |                 |                                       |                                                      |                                                           |
| Detached Single-Family Unit (6.1.4.B.)             | Y      | 1 unit per lot  | 8,000 sf habitable excluding basement | 2/DU                                                 | $0.000017(sf) + (Exp(-15.49 + 1.59 \cdot \ln(sf)))/2.176$ |
| Transportation/Infrastructure                      |        |                 |                                       |                                                      |                                                           |
| Utility Facility (6.1.10.C.)                       | C      | n/a             | n/a                                   | 1/employee + 1/stored vehicle                        | 0.000123 * sf                                             |
| Wireless Communications Facilities (6.1.10.D.)     |        |                 |                                       |                                                      |                                                           |
| Minor                                              | B      | n/a             | n/a                                   | 1/employee + 1 per stored vehicle                    | 0.000123 * sf                                             |
| Accessory Uses                                     |        |                 |                                       |                                                      |                                                           |
| Accessory Residential Unit (6.1.11.B.) (E.1)       | B      | 2 units per lot | n/a                                   | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                                    |
| Home Occupation (6.1.11.D.)                        | B      | n/a             | n/a                                   | n/a                                                  | exempt                                                    |
| Home Business (6.1.11.E.)                          | C      | n/a             | n/a                                   | 1/employee                                           | exempt                                                    |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a             | n/a                                   | 1/employee + 1 off-street pick-up/drop-off           | exempt                                                    |
| Temporary Uses                                     |        |                 |                                       |                                                      |                                                           |
| Temporary Shelter (6.1.12.D.)                      | B      | 1 unit per lot  | n/a                                   | 2/DU                                                 | exempt                                                    |
| Temp. Gravel Extraction and Processing (6.1.12.E.) | B      | n/a             | n/a                                   | 1/employee                                           | exempt                                                    |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION VII.

Section 1 of Town of Jackson Ordinance Nos. 1214, 1299, 1313, 1324 and Section 2.2.6.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                 |                      | 2. Use Requirements                                  |                                                      |
|----------------------------------------------------|--------|-----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density (max)   | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Accessory Uses                                     |        |                 |                      |                                                      |                                                      |
| Accessory Residential Unit (6.1.11.B.) (E.1) (E.2) | B      | 2 units per lot | (E.1)                | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |
| Home Occupation (6.1.11.D.)                        | B      | n/a             | n/a                  | n/a                                                  | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a             | n/a                  | 1/employee                                           | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a             | n/a                  | 1/employee + 1 off-street pick-up/drop-off           | exempt                                               |
| Home Daycare Center (6.1.11.G.)                    | C      | n/a             | n/a                  | 1/employee + 2 off-street pick-up/drop-off           | exempt                                               |
| Temporary Uses                                     |        |                 |                      |                                                      |                                                      |
| Temporary Shelter (6.1.11.D.)                      | B      | 1 unit per lot  | n/a                  | 2/DU                                                 | exempt                                               |
| Temp. Gravel Extraction and Processing (6.1.12.E.) | B      | n/a             | n/a                  | 1/employee                                           | exempt                                               |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION VIII.

Section 1 of Town of Jackson Ordinance Nos. 1215, 1313, and 1324 and Section 2.2.7.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                |                                       | 2. Use Requirements                                  |                                                      |
|----------------------------------------------------|--------|----------------|---------------------------------------|------------------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density (max)  | Individual Use (max)                  | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Open Space                                         |        |                |                                       |                                                      |                                                      |
| Agriculture (6.1.3.B.)                             | B      | n/a            | n/a                                   | n/a                                                  | exempt                                               |
| Residential                                        |        |                |                                       |                                                      |                                                      |
| Detached Single-Family Unit (6.1.4.B.)             | Y      | (E.1)          | 8,000 sf habitable-excluding basement | 2/DU                                                 | $0.000017(sf) + (Exp(-15.49 + 1.59*Ln(sf)))/2.176$   |
| Attached Single-Family Unit (6.1.4.C.)             | B      | 1 unit per lot |                                       | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | $0.000017(sf) + (Exp(-14.17 + 1.59*Ln(sf)))/2.176$   |
| Apartment (6.1.4.D.) (E.1)                         | B      | (E.1)          |                                       |                                                      | $0.000017(sf) + (Exp(-14.17 + 1.59*Ln(sf)))/2.176$   |
| Dormitory (6.1.4.F.)                               | C      | n/a            | n/a                                   | 1/bed                                                | exempt                                               |
| Group Home (6.1.4.G.)                              | C      | n/a            | n/a                                   | 0.5/bed                                              | exempt                                               |
| Transportation/Infrastructure                      |        |                |                                       |                                                      |                                                      |
| Utility Facility (6.1.10.C.)                       | C      | n/a            | n/a                                   | 1/employee + 1/stored vehicle                        | 0.000123 * sf                                        |
| Wireless Communications Facilities (6.1.10.D.)     |        |                |                                       |                                                      |                                                      |
| Minor                                              | B      | n/a            | n/a                                   | 1/employee + 1 per stored vehicle                    | 0.000123 * sf                                        |
| Accessory Uses                                     |        |                |                                       |                                                      |                                                      |
| Accessory Residential Unit (6.1.11.B.) (E.2)       | B      | (E.1)          | (E.2)                                 | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |
| Home Occupation (6.1.11.D.)                        | B      | n/a            | n/a                                   | n/a                                                  | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a            | n/a                                   | 1/employee                                           | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a            | n/a                                   | 1/employee + 1 off-street pick-up/drop-off           | exempt                                               |
| Temporary Uses                                     |        |                |                                       |                                                      |                                                      |
| Temporary Shelter (6.1.11.D.)                      | B      | 1 unit per lot | n/a                                   | 2/DU                                                 | exempt                                               |
| Temp. Gravel Extraction and Processing (6.1.12.E.) | B      | n/a            | n/a                                   | 1/employee                                           | exempt                                               |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION IX.

Section 1 of Town of Jackson Ordinance Nos. 1216, 1313, 1316, and 1324 and Section 2.2.8.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:



| 1. Allowed Uses        |        |               |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|---------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max) | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | n/a           | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                |                      | 2. Use Requirements                        |                                                      |
|----------------------------------------------------|--------|----------------|----------------------|--------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                  | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Accessory Uses                                     |        |                |                      |                                            |                                                      |
| Home Occupation (6.1.11.D.)                        | B      | n/a            | n/a                  | n/a                                        | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a            | n/a                  | 1/employee                                 | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a            | n/a                  | 1/employee + 1 off-street pick-up/drop-off | exempt                                               |
| Home Daycare Center (6.1.11.G.)                    | C      | n/a            | n/a                  | 1/employee + 2 off-street pick-up/drop-off | exempt                                               |
| Temporary Uses                                     |        |                |                      |                                            |                                                      |
| Temporary Shelter (6.1.11.D.)                      | B      | 1 unit per lot | n/a                  | 1/employee                                 | exempt                                               |
| Temp. Gravel Extraction and Processing (6.1.12.F.) | B      | n/a            | n/a                  |                                            |                                                      |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION X.

Section 1 of Town of Jackson Ordinance Nos. 1217, 1313, 1316, and 1324 and Section 2.2.9.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |               |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|---------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max) | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | n/a           | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |



| 1. Allowed Uses                                    |        |                      |                      | 2. Use Requirements                        |                                                      |
|----------------------------------------------------|--------|----------------------|----------------------|--------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density              | Individual Use (max) | Parking (min) (Div. 6.2.)                  | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Accessory Uses                                     |        |                      |                      |                                            |                                                      |
| Home Occupation (6.1.11.D.)                        | B      | n/a                  | n/a                  | n/a                                        | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a                  | n/a                  | 1/employee                                 | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a                  | n/a                  | 1/employee + 1 off-street pick-up/drop-off | exempt                                               |
| Home Daycare Center (6.1.11.G.)                    | C      | n/a                  | n/a                  | 1/employee + 2 off-street pick-up/drop-off | exempt                                               |
| Temporary Uses                                     |        |                      |                      |                                            |                                                      |
| Temporary Shelter (6.1.11.D.)                      | B      | 1 unit per lot (max) | n/a                  | 1/employee                                 | exempt                                               |
| Temp. Gravel Extraction and Processing (6.1.12.F.) | B      | n/a                  | n/a                  | 1/employee                                 | exempt                                               |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION XI.

Section 1 of Town of Jackson Ordinance Nos. 1222, 1313, and 1324 and Section 2.2.10.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |               |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|---------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max) | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | n/a           | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                |        |                      |               | 2. Use Requirements                              |                                                      |
|------------------------------------------------|--------|----------------------|---------------|--------------------------------------------------|------------------------------------------------------|
| Use                                            | Permit | Individual Use (max) | Density (max) | Parking (min) (Div. 6.2.) (E.1)                  | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Wireless Communications Facilities (6.1.10.D.) |        |                      |               |                                                  |                                                      |
| Minor                                          | B      | n/a                  | n/a           | 0.75/employee + 0.75/stored vehicle              | 0.000123 * sf                                        |
| Accessory Uses                                 |        |                      |               |                                                  |                                                      |
| Accessory Residential Unit (6.1.11.B.)         | B      | n/a                  | n/a           | 1/DU                                             | exempt                                               |
| Home Occupation (6.1.11.D.)                    | B      | n/a                  | n/a           | n/a                                              | exempt                                               |
| Family Home Daycare (6.1.11.E.)                | B      | n/a                  | n/a           | 0.75/employee + 0.75 off-street pick-up/drop-off |                                                      |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION XII.

Section 1 of Town of Jackson Ordinance Nos. 1278, 1313, and 1324 and Section 2.2.13.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |               |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|---------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max) | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | n/a           | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |           |                | 2. Use Requirements               |                                                      |
|----------------------------------------------------|--------|-----------|----------------|-----------------------------------|------------------------------------------------------|
| Use                                                | Permit | BSA (min) | Density (max)  | Parking (min) (Div. 6.2.)         | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Residential                                        |        |           |                |                                   |                                                      |
| Mobile Home (6.1.4.E.) (E.1)                       | B      | 0 sf      | n/a            | 2/DU                              | exempt                                               |
| Transportation/Infrastructure                      |        |           |                |                                   |                                                      |
| Utility Facility (6.1.10.C.)                       | C      | 0 sf      | n/a            | 1/employee + 1/stored vehicle     | 0.000123 * sf                                        |
| Wireless Communications Facilities (6.1.10.D.)     |        |           |                |                                   |                                                      |
| Minor                                              | B      | 0 sf      | n/a            | 1/employee + 1 per stored vehicle | 0.000123 * sf                                        |
| Accessory Uses                                     |        |           |                |                                   |                                                      |
| Home Occupation (6.1.11.D.)                        | B      | 0 sf      | n/a            | n/a                               | exempt                                               |
| Temporary Uses                                     |        |           |                |                                   |                                                      |
| Temporary Shelter (6.1.12.D.)                      | B      | 0 sf      | 1 unit per lot |                                   |                                                      |
| Temp. Gravel Extraction and Processing (6.1.12.E.) | B      | 0 sf      | n/a            | 1/employee                        | exempt                                               |

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

## SECTION XIII.

Section 1 of Town of Jackson Ordinance Nos. 1074 and Section 3.3.1.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

| 1. Allowed Uses        |        |                |                      | 2. Use Requirements                                  |                                                      |
|------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                    | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| Short-term Rental Unit | B      | 1 unit per lot | n/a                  | 1 DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |

| 1. Allowed Uses                                    |        |                |                      | 2. Use Requirements                                  |                                                      |
|----------------------------------------------------|--------|----------------|----------------------|------------------------------------------------------|------------------------------------------------------|
| Use                                                | Permit | Density (max)  | Individual Use (max) | Parking (min) (Div. 6.2.)                            | Affordable Workforce Housing Units (min) (Div. 6.3.) |
| <b>Accessory Uses</b>                              |        |                |                      |                                                      |                                                      |
| Accessory Residential Unit (6.1.11.B.) (E.2.)      | B      | 1 unit per lot | (E.2.)               | 1/DU if < 2 bedrooms and < 500 sf; otherwise, 1.5/DU | exempt                                               |
| Home Occupation (6.1.11.D.)                        | B      | n/a            | n/a                  | n/a                                                  | exempt                                               |
| Home Business (6.1.11.E.)                          | C      | n/a            | n/a                  | 1/employee                                           | exempt                                               |
| Family Home Daycare (6.1.11.F.)                    | B      | n/a            | n/a                  | 1/employee + 1 off-street pick-up/drop-off           | exempt                                               |
| Home Daycare Center (6.1.11.G.)                    | C      | n/a            | n/a                  | 1/employee + 2 off-street pick-up/drop-off           | exempt                                               |
| <b>Temporary Uses</b>                              |        |                |                      |                                                      |                                                      |
| Temporary Shelter (6.1.12.D.)                      | B      | 1 unit per lot | n/a                  | 2/DU                                                 | exempt                                               |
| Temp. Gravel Extraction and Processing (6.1.12.F.) | B      | n/a            | n/a                  | 1/employee                                           | exempt                                               |

Y=Use allowed, no use permit required, B=Basic Use Permit (Sec. 8.4.2.), C=Conditional Use Permit (Sec. 8.4.3.)

Add: "Short-term Rental Unit" as BUP as shown above as an Accessory Use

#### SECTION XIV.

Section 1 of Town of Jackson Ordinance Nos. 1278 and 1313 and Section 6.3.2.C of the Town of Jackson Land Development Regulations are hereby amended and reenacted to read as follows:

14. Short-term rental unit in the following residential zones: NL-1, NL-2, NL-3, NL-4, NL-5, NM-1, NM-2, NH-1, MHP, OR, and R.

#### SECTION XV.

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

#### SECTION XVI.

If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed as a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of the ordinance.

#### SECTION XVII.

This Ordinance shall become effective after its passage, approval, and publication.

PASSED 1ST READING THE \_\_\_\_ DAY OF \_\_\_\_\_, 2023.

PASSED 2ND READING THE \_\_\_\_ DAY OF \_\_\_\_\_, 2023.

PASSED AND APPROVED THE \_\_\_\_ DAY OF \_\_\_\_\_, 2023.

TOWN OF JACKSON

BY: \_\_\_\_\_  
Hailey Morton Levinson, Mayor

ATTEST:

BY: \_\_\_\_\_  
Riley Taylor, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING    )  
                              ) ss.  
COUNTY OF TETON    )

I hereby certify that the foregoing Ordinance No. was duly published in the Jackson Hole News and Guide, a newspaper of general circulation published in the Town of Jackson, Wyoming, on the \_\_\_\_\_ day of \_\_\_\_\_, 2022.

I further certify that the foregoing Ordinance was duly recorded on page \_\_\_\_\_ of Book \_\_\_\_\_ of Ordinances of the Town of Jackson, Wyoming.

\_\_\_\_\_  
Riley Taylor, Town Clerk

# STAFF REPORT



|                               |                                                     |                        |                |
|-------------------------------|-----------------------------------------------------|------------------------|----------------|
| <b>Meeting Date:</b>          | July 17, 2023                                       | <b>Meeting Title:</b>  | Regular        |
| <b>Submitting Department:</b> | Legal                                               | <b>Presenter:</b>      | Lea Colasuonno |
| <b>Agenda Item:</b>           | Municipal Code Maintenance: Chapter 12.32, Pathways | <b>Public Comment:</b> | Yes            |

## **Purpose & Policy Considerations.**

The purpose of this item is for Council to review and consider an update to Chapter 12.32 as part of ongoing Municipal Code maintenance.

## **Requested Action.**

Staff requests Council review and consider the ordinances.

## **Recommendations.**

Staff recommends Council review and approve the amendment to Chapter 12.32 of the Jackson Municipal Code.

## **Background.**

The Municipal Code requires ongoing maintenance to keep it current and the ordinance attached to this staff report does that.

Ordinances R and S clarify that the speed limit on pathways will be set by the Town and by posting appropriate signage and, lastly, removes the penalty provision in the Chapter (the general penalty of the Code is in Title 1). Staff recommends these minor adjustments to provide greater clarity to the public.

## **Analysis.**

N/A

## **Possible Alternatives.**

Council could elect not to amend Chapter 12.32.

## **Comprehensive Plan & Priority Alignment.**

This item aligns with policy 8.1, the delivery of quality services to the community.

## **Fiscal Impact.**

The Town of Jackson contracts with the company MuniCode to host the Code and process changes enacted by Council. The supplement service to codify new ordinances costs \$3,000 annually and does not fluctuate with the number of ordinances enacted by Council, thus the fiscal impact of this ordinance (and all) codification is minimal.

The Town is, pursuant to statute, required to publish ordinances in a newspaper of general circulation in the community (which is the News & Guide weekly). The cost of publication varies, depending on ordinance length, and is a minimum of \$200 for short ordinances.

## **Staff Impact.**

The Legal Department spent 3 hours working on the ordinance and preparing this staff report.

The Clerk's Office anticipates spending approximately an hour coordinating with MuniCode when new ordinances are enacted.

**Attachments or Links.**

Ordinances R and S

**Suggested Motion.**

I move Ordinance R on first reading.

I move Ordinance S on first reading.

## ORDINANCE R

AN ORDINANCE AMENDING AND REENACTING SECTION 1 OF ORDINANCE NO. 1192 AND JACKSON MUNICIPAL CODE SECTION 12.32.030 REGARDING PATHWAYS SPEED LIMITS AND PROVIDING FOR AN EFFECTIVE DATE.

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

### SECTION I.

Section 1 of Town of Jackson Ordinance No. 1192 and Jackson Municipal Code 12.32.030(B) are hereby amended and reenacted to read as follows:

12.32.030 Speed limits.

A. No person shall operate a device on a pathway at a greater speed than is reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing.

B. Except when a special hazard exists that requires lower speed for compliance with subsection A above, the speed limit on the pathway shall be established by the Town and indicated and posted on appropriate signs.

(Ord. \_\_\_\_ § 1, 2023; Ord. 1192, § 1, 2018)

### SECTION II.

All ordinances and parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed.

### SECTION III.

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions of the Ordinance.

### SECTION IV.

This Ordinance shall become effective after its passage, approval, and publication.

PASSED 1ST READING THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

PASSED 2ND READING THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

PASSED AND APPROVED THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

TOWN OF JACKSON

BY: \_\_\_\_\_  
Hailey Morton Levinson, Mayor

ATTEST:

BY: \_\_\_\_\_  
Riley Taylor, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING            )  
                                          ) ss.  
COUNTY OF TETON            )

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---

Riley Taylor, Town Clerk



## ORDINANCE S

AN ORDINANCE REPEALING SECTION 1 (IN PART) OF ORDINANCE 1192 AND JACKSON MUNICIPAL CODE SECTIONS 12.32.040 AND 12.32.060 REGARDING PATHWAYS AND PROVIDING FOR AN EFFECTIVE DATE.

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

### SECTION I.

The following are hereby repealed:

- a. Section 1 (in part) of Ordinance No. 1192 and Jackson Municipal Code 12.32.040.
- b. Section 1 (in part) of Ordinance No. 1192 and Jackson Municipal Code 12.32.060.

### SECTION II.

All ordinances and parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed.

### SECTION III.

If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions of the Ordinance.

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PASSED AND APPROVED THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2023.

TOWN OF JACKSON

BY: \_\_\_\_\_  
Hailey Morton Levinson, Mayor

ATTEST:

BY: \_\_\_\_\_  
Riley Taylor, Town Clerk

ATTESTATION OF TOWN CLERK

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Riley Taylor, Town Clerk

# STAFF REPORT



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|-------------------------------|-----------------------------------------------------|------------------------|----------------|
| <b>Meeting Date:</b>          | July 17, 2023                                       | <b>Meeting Title:</b>  | Regular        |
| <b>Submitting Department:</b> | Legal                                               | <b>Presenter:</b>      | Lea Colasuonno |
| <b>Agenda Item:</b>           | Municipal Code Maintenance: Chapter 12.32, Pathways | <b>Public Comment:</b> | Yes            |

## **Purpose & Policy Considerations.**

The purpose of this item is for Council to review and consider an update to Chapter 12.32 as part of ongoing Municipal Code maintenance.

## **Requested Action.**

Staff requests Council review and consider the ordinances.

## **Recommendations.**

Staff recommends Council review and approve the amendment to Chapter 12.32 of the Jackson Municipal Code.

## **Background.**

The Municipal Code requires ongoing maintenance to keep it current and the ordinance attached to this staff report does that.

Ordinances R and S clarify that the speed limit on pathways will be set by the Town and by posting appropriate signage and, lastly, removes the penalty provision in the Chapter (the general penalty of the Code is in Title 1). Staff recommends these minor adjustments to provide greater clarity to the public.

## **Analysis.**

N/A

## **Possible Alternatives.**

Council could elect not to amend Chapter 12.32.

## **Comprehensive Plan & Priority Alignment.**

This item aligns with policy 8.1, the delivery of quality services to the community.

## **Fiscal Impact.**

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(Ord. \_\_\_\_ § 1, 2023; Ord. 1192, § 1, 2018)

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TOWN OF JACKSON

BY: \_\_\_\_\_  
Hailey Morton Levinson, Mayor

ATTEST:

BY: \_\_\_\_\_  
Riley Taylor, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING            )  
                                          ) ss.  
COUNTY OF TETON            )

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Riley Taylor, Town Clerk

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TOWN OF JACKSON

BY: \_\_\_\_\_  
Hailey Morton Levinson, Mayor

ATTEST:

BY: \_\_\_\_\_  
Riley Taylor, Town Clerk

ATTESTATION OF TOWN CLERK

STATE OF WYOMING            )  
                                          ) ss.  
COUNTY OF TETON            )

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Riley Taylor, Town Clerk



## MEMORANDUM

TO: Mayor and Town Council

FR: Tyler Sinclair, Town Manager

DT: July 17, 2023

RE: Town Manager's Report

### Letter of Support for National Elk Refuge Wildlife Crossings Grant Application

The National Elk Refuge seeks a letter of support from the Town of Jackson for their grant application to the Department of Transportation's Wildlife Crossings Pilot Program. The grant would provide funding to repair and replace fencing at the National Elk Refuge, some of which is adjacent to or just north of Town. The current fencing is more than 23 years old. Wildlife science has advanced in the past two decades, and upgrading the fencing will not only repair dilapidated sections through which elk leave the Refuge, but will allow the Refuge to apply best practices in wildlife fencing. Changing the alignment of the fencing and reducing the height of the one-way wildlife jumps will better facilitate movement to the Refuge and decrease the amount of time wildlife spend in or near traffic on highway 89. The Ecosystem Stewardship Administrator attended a presentation about the proposed fencing upgrades and is supportive of the project. Upon approval of this Town Manager report, staff will provide a letter of support (attached) to the Mayor to sign.

### Upcoming Summer Employee Events

There are a number of upcoming employee gatherings that Council is invited to attend and one that will feature the Town Council as the hosting team.

| Upcoming Employee Events             |                                           |                           |                                              |
|--------------------------------------|-------------------------------------------|---------------------------|----------------------------------------------|
| Event                                | Hosting Team                              | Date                      | Location                                     |
| Hot Dog Roast                        | Finance/Legal/Admin/Community Development | Thursday, July 13, 2023   | Town Hall Deck                               |
| Chicken Fry                          | START                                     | Thursday, August 31, 2023 | Transit Facility                             |
| Council Appreciation of Staff Picnic | Town Council                              | TBD September             | TBD Fireside Lounge at Snow King Ski Shelter |

Staff is looking for feedback from Council as to whether September 12 or September 14, 2023 will work and staff is still waiting to hear back from Snow King on those dates as well.

### START Offices and Dedicated Driver Lounge Remodel Work

START offices are currently undergoing a remodel project to better use the existing space in the facility for multiple needs in the department. This remodel will provide needed additional office and training space, as well as a dedicated driver 'ready room.'

The full build out of the Transit facility will not be realized for some time yet and the current office and driver area configuration is challenging to meet the needs of the Transit team. The remodel project will create a dedicated 'ready room' where Operators can eat and relax while

not on duty/between shifts on the main floor of the START facility. Currently Transit Operators have utilized the space next to the lobby area, but it doesn't offer any privacy from the public. This remodel project will utilize the largest office on the main floor for the driver 'ready room' and it will be adjacent to the north kitchen space on the main floor for easy access. Offices and a training room will be created on the second floor of the facility to free up room on the main floor for this dedicated driver 'ready room' as well as to provide small offices for existing staff in the Transit Department. The elevator is being installed in the facility as part of this remodel project and was always planned for the facility. Small offices will also be added adjacent to the public lobby area to provide Administrative Assistant reception space and office space for the ADA Operators. The Transit Operations Manager and Supervisor/Dispatcher offices will remain on the main floor to provide easy access and communication between these supervisory personnel and the Transit Operators. Staff felt this remodel project was necessary at this time to provide improved functionality as the full buildout of the facility and offices may not be realized for many years into the future.

Council and staff will be invited to see the newly remodeled space when the START team hosts the chicken fry in August at the facility.



## ADMINISTRATION DEPARTMENT

April 27, 2023

The Honorable Pete Buttigieg  
Secretary of Transportation  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Secretary Buttigieg,

I am writing to express the Town of Jackson's support of the U.S. Fish and Wildlife Service, Department of Interior's request for funding to the Federal Highway Administration (FHWA), Department of Transportation's (DOT) Wildlife Crossings Pilot Program (WCPP) to complete the wildlife fencing rehabilitation and enhancement projects on the National Elk Refuge. The Infrastructure and Jobs Act of 2021 established the WCPP to provide federal funding to projects that reduce wildlife vehicle collisions and enhance human safety while improving habitat connectivity and conservation for terrestrial and aquatic species. The Refuge projects align strongly with WCPP objectives; they also support the first principle of the Jackson/Teton County Comprehensive Plan, which is to maintain healthy populations of all native species.

The National Elk Refuge (Refuge) borders the Town of Jackson, with only a fence separating our homes, schools, hospital and streets from approximately 9,000 elk that migrate to the Refuge each winter. The Refuge also provides valuable habitat for a wide variety of wildlife species including ungulates like mule deer and bighorn sheep, large carnivores such as coyotes, wolves, and mountain lions, and a wide variety of birds including raptors, songbirds, trumpeter swans, and other waterfowl. Annually, the Refuge hosts over 495,000 visitors who come to the area for wildlife viewing and other wildlife based recreational opportunities. Visitors of the Refuge and the adjacent Grand Teton National Park and Bridger Teton National Forest significantly contribute to the economy of the Town of Jackson. Recent studies regarding the economic benefits of visitation to the Teton County area found more than \$1.6 billion in economic output.

The seven-mile-long portion of wildlife fence along the western boundary of the Refuge helps keep elk, deer, and moose from entering the Highway 89 corridor from the Refuge while allowing migrating animals to enter the Refuge through a series of one-way wildlife jumps located along the fence. This portion of the highway is a highly utilized primary route for visitors driving to and from Jackson, Wyoming to popular tourist destinations including the Refuge, Grand Teton National Park, Yellowstone National Park, and Bridger Teton National Forest. It hosts an average daily traffic volume of 8,473 vehicles with a maximum daily volume of 15,542 vehicles.

The current fence and wildlife jump design has reduced wildlife vehicle collisions and increased human safety since being installed in 2000. However, the fence is now more than 23 years old. Consequently, the fence needs to be rehabilitated, with portions of it realigned and replaced, and the wildlife jumps need to be redesigned to better facilitate one-way access for elk, deer, and moose from the highway onto the Refuge. The science around wildlife movement has progressed greatly in the past two decades,



providing the opportunity to utilize new science-based design standards as the fence is replaced. This portion of Highway 89, located directly north of the Town of Jackson, is a top priority in the Teton County Wildlife Crossings Master Plan which considers this area a high risk for human safety. Over the past year a contractor that specializes in wildlife crossing design was hired by Teton County to complete a design for the fence and associated wildlife jumps that, when implemented, will further reduce wildlife vehicle collisions, increase human safety, and increase wildlife permeability onto the Refuge.

On the northern boundary of the Refuge, there is 4-strand barb wire fence that needs to be replaced with wildlife friendly fencing. This portion of the Refuge serves as a major migration corridor for elk, pronghorn and mule deer. The current state and design of this fence has resulted in numerous wildlife mortalities and is a hazard to grazing operations. Replacement of this fence will greatly reduce wildlife mortality and result in a more permeable migration corridor, further supporting the goals of our community comprehensive plan. An award through the WCPP would give the National Elk Refuge an incredible opportunity to work with their local conservation partners to implement these “shovel ready” projects. Please give the National Elk Refuge’s application the highest consideration. Thank you.

Sincerely,

Mayor Hailey Morton Levinson  
Town of Jackson