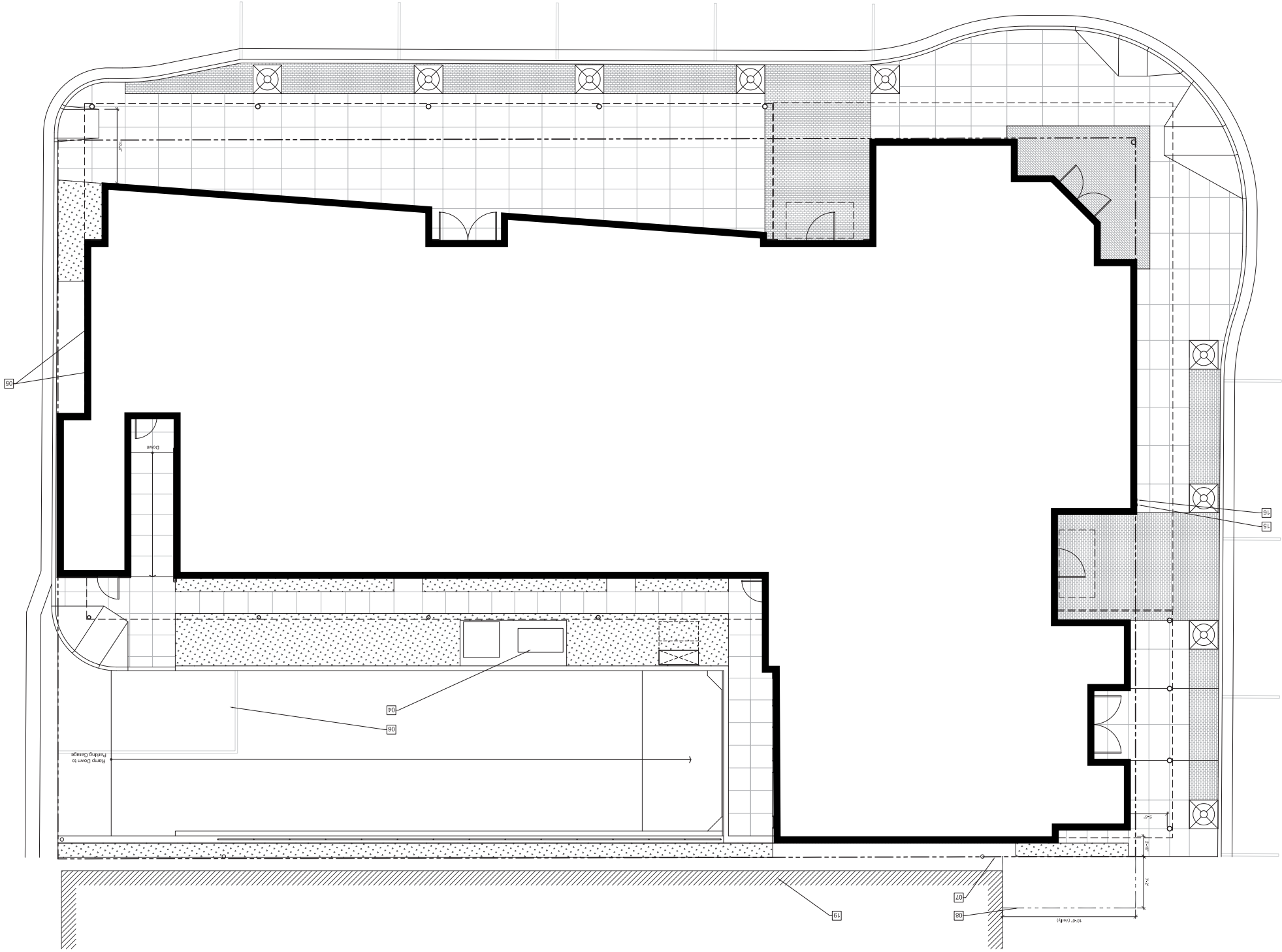


FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
- 03 Overhead door
- 04 Electrical Transformer
- 05 Dumpsters, (Overhead door access)
- 06 11'-6" x 25'-0" Loading Zone.
- 07 See vehicle access diagrams
- 08 Requested fire separation distance access
- 09 Gutter at sidewalk canopy, connected to internal drains within building.
- 10 Daylight location at face of curb for sidewalk canopy drain system
- 11 Roof drain and overflow, connected to storm water drainage system via internal drains. See C&I drawings for preliminary storm water system design.
- 12 Rooftop access ladder, typical as shown.
- 13 Rooftop equipment pad (for air conditioner compressors)
- 14 Evacuated tube solar water pre-heat array, typical as shown.
- 15 Fire Department connection
- 16 Fire alarm strobe
- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended signage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator

Room Key

- 101 Commercial / Retail Space "L"
- 102 Lobby
- 103 Men's Restrooms
- 104 Women's Restrooms
- 105 Commercial / Retail Space "M"
- 106 Commercial / Retail Space "N"
- 107 Commercial / Retail Space "O"
- 108 Employee Housing Unit "P"
- 109 Employee Housing Unit "Q"
- 110 Employee Housing Unit "R"



01  
A101  
Grade Level Floor Plan  
1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



Glenwood + Simpson Mixed Use Building  
(Phase II of the Milward + Simpson PMD)

Lots 11 & 12, Block 2, 2nd Wort Addition  
Jackson, Wyoming 83001

Civil Engineering & Landscape Architecture  
Y2 Consultants, Inc.  
215 E. Simpson St.  
Jackson, WY 83001  
Phone: 307.732.9299  
Structural Engineering:  
Mechanical Engineering:  
Electrical Engineering:

Owner:  
Aria District Development, LLC  
PO Box 1569  
Jackson, WY 83001  
Developer:  
Spectrum Capital, LLC  
781 Larson Street  
Jackson, MS 39202

Harger Architects, LLC  
P.O. Box 467  
Jackson, Wyoming 83001  
Phone: 307.688.9585  
Info@hargerarchitects.com



Date: 03 / 01 / 2018  
Revisions:

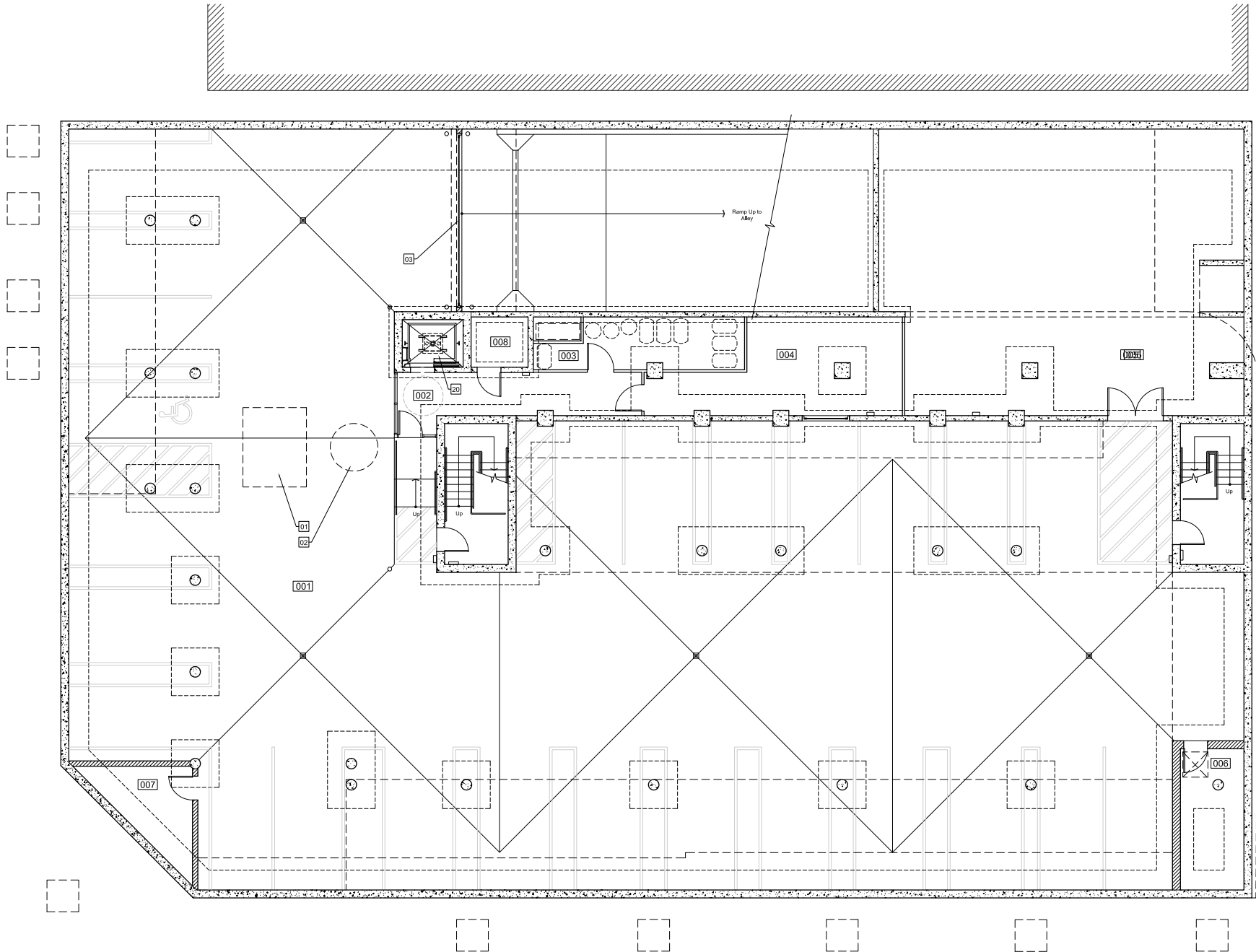
Exhibit J  
SITE  
PLAN

FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
- 03 Overhead door
- 04 Electrical Tranformer
- 05 Dumpsters, (Overhead door access)
- 06 11'-6" x 25'-0" Loading Zone.  
See vehicle access diagrams
- 07 Project property boundary
- 08 Requested fire separation distance access easement at parking garage entry plaza on Town of Jackson property.
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- 13 Rooftop equipment pad (for air conditioner compressors)
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- 15 Fire Department connection
- 16 Fire alarm strobe
- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended singage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator

Room Key

001	Parking Garage
002	Elevator Lobby
003	Recycling
004	Electrical Equipment
005	Mechanical Equipment
006	Mechanical Equipment (Garage Ventilation)
007	Mechanical Equipment
008	Elevator Equipment



01

A101

Basement Level Floor Plan

1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



Glenwood + Simpson Mixed Use Building  
(Phase II of the Milward + Simpson PMD)

Lots 11 & 12, Block 2, 2nd Ward Addition  
Jackson, Wyoming 83001

Date 03 / 01 / 2018

Revisions

Exhibit K

Sheet Number

A-100

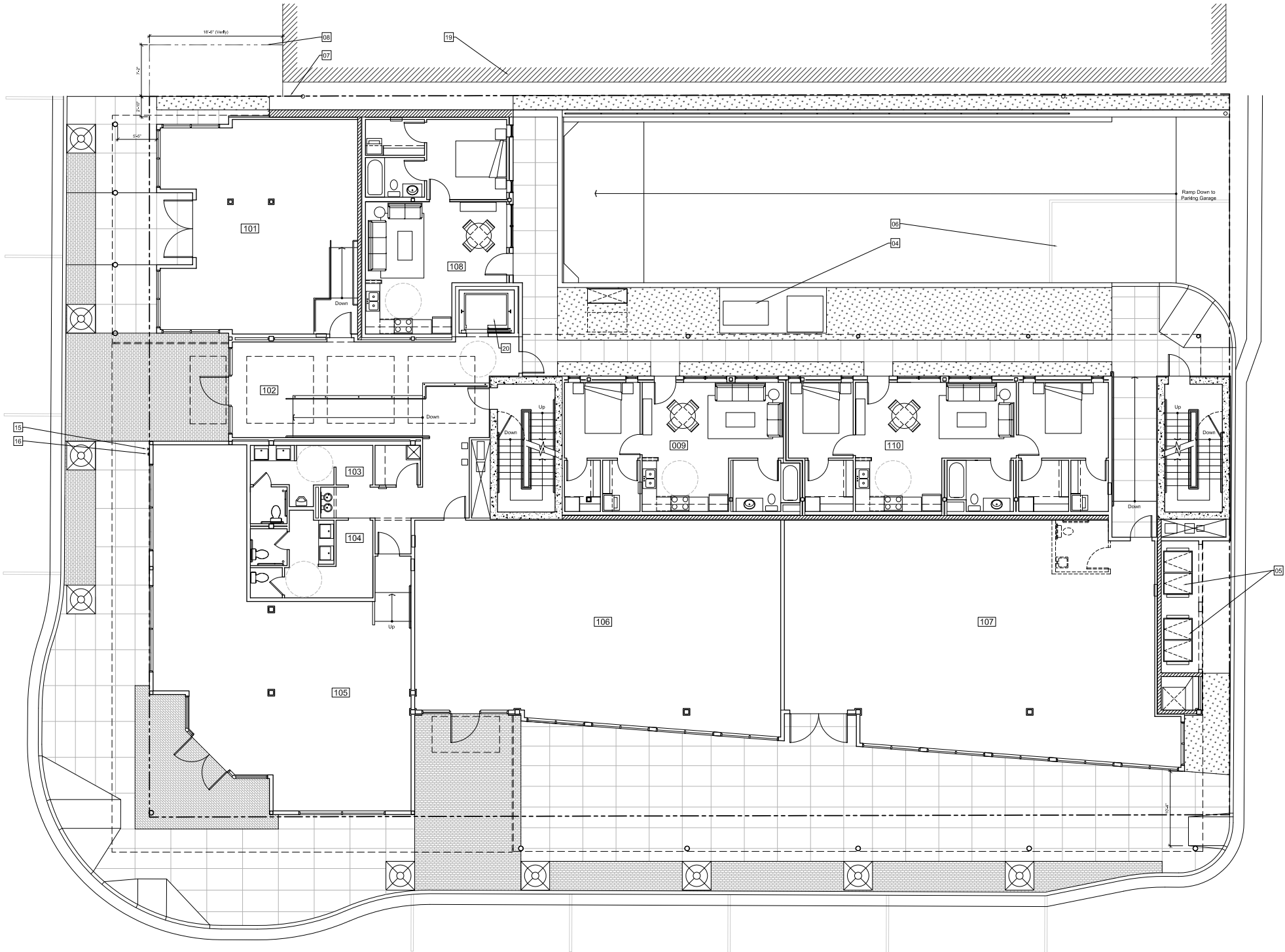
Basement Level  
Floor Plan

FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
- 03 Overhead door
- 04 Electrical Tranformer
- 05 Dumpsters. (Overhead door access)
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- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended singage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator

Room Key

- 101 Commercial / Retail Space "L"
- 102 Lobby
- 103 Men's Restrooms
- 104 Women's Restrooms
- 105 Commercial / Retail Space "M"
- 106 Commercial / Retail Space "N"
- 107 Commercial / Retail Space "O"
- 108 Employee Housing Unit "P"
- 109 Employee Housing Unit "Q"
- 110 Employee Housing Unit "R"



01 Grade Level Floor Plan

1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



Glenwood + Simpson Mixed Use Building  
(Phase II of the Milward + Simpson PMD)

Lots 11 & 12, Block 2, 2nd Ward Addition  
Jackson, Wyoming 83001

Date 03 / 01 / 2018

Revisions

Sheet Number

A-101

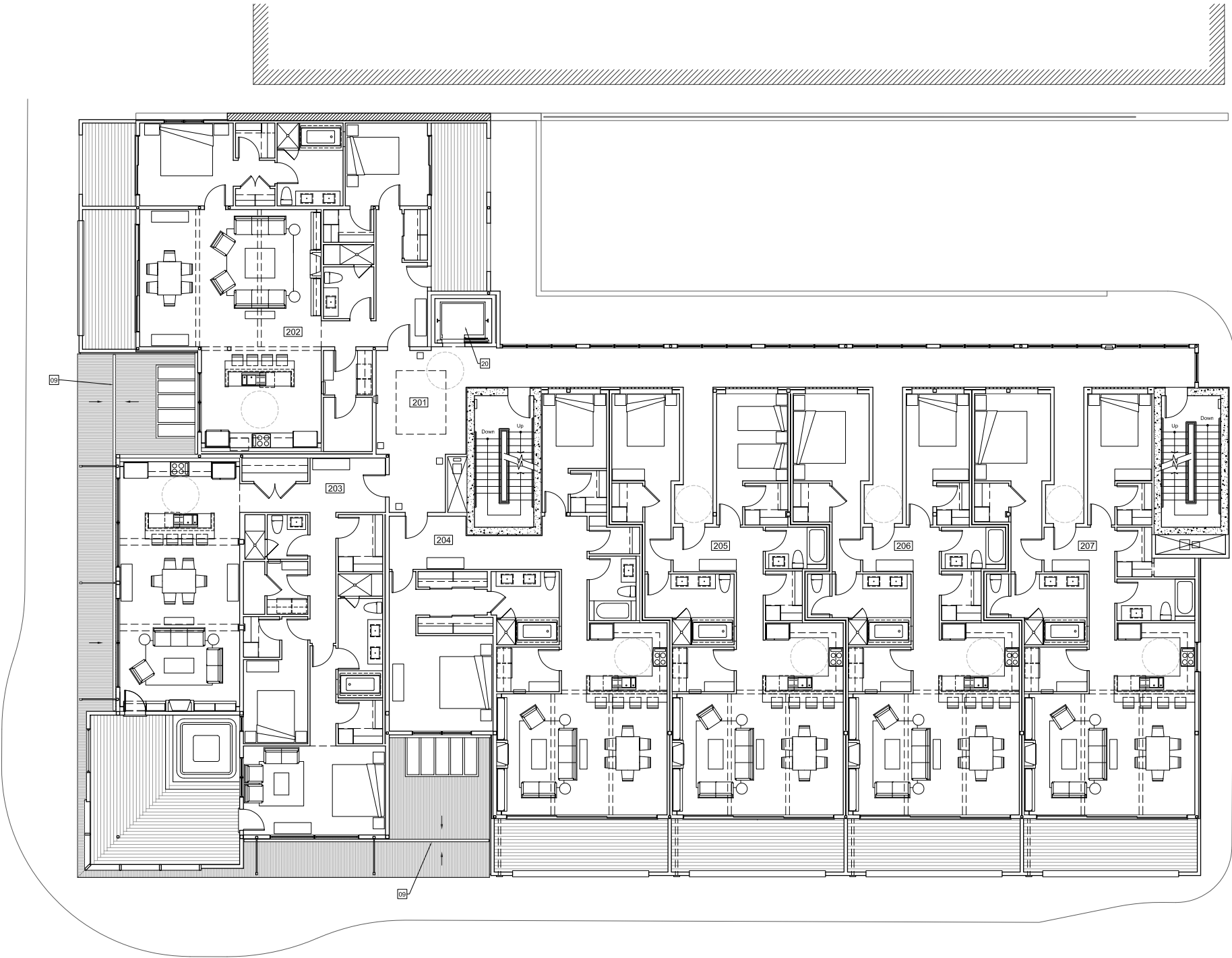
Grade Level  
Floor Plan

FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
- 03 Overhead door
- 04 Electrical Tranformer
- 05 Dumpsters, (Overhead door access)
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See vehicle access diagrams
- 07 Project property boundary
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- 15 Fire Department connection
- 16 Fire alarm strobe
- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended singage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator

Room Key

- 201 Lobby / Corridor
- 202 Lodging / Residential Unit "F"
- 203 Lodging / Residential Unit "G"
- 204 Lodging / Residential Unit "H"
- 205 Lodging / Residential Unit "I"
- 206 Lodging / Residential Unit "J"
- 207 Lodging / Residential Unit "K"



01

Second Level Floor Plan

1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



Glenwood + Simpson Mixed Use Building  
(Phase II of the Milward + Simpson PMD)

Lots 11 & 12, Block 2, 2nd Wort Addition  
Jackson, Wyoming 83001

Date 03 / 01 / 2018

Revisions

Sheet Number  
A-102

Second Level  
Floor Plan



FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
- 03 Overhead door
- 04 Electrical Tranformer
- 05 Dumpsters, (Overhead door access)
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See vehicle access diagrams
- 07 Project property boundary
- 08 Requested fire separation distance access easement at parking garage entry plaza on Town of Jackson property.
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- 14 Evacuated tube solar water pre-heat array, typical as shown.
- 15 Fire Department connection
- 16 Fire alarm strobe
- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended singage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator

Room Key

- 301 Lobby / Corridor
- 302 Lodging / Residential Unit "A"
- 303 Lodging / Residential Unit "B"
- 304 Lodging / Residential Unit "C"
- 305 Lodging / Residential Unit "D"
- 306 Lodging / Residential Unit "E"



01  
A103  
Third Level Floor Plan  
1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)

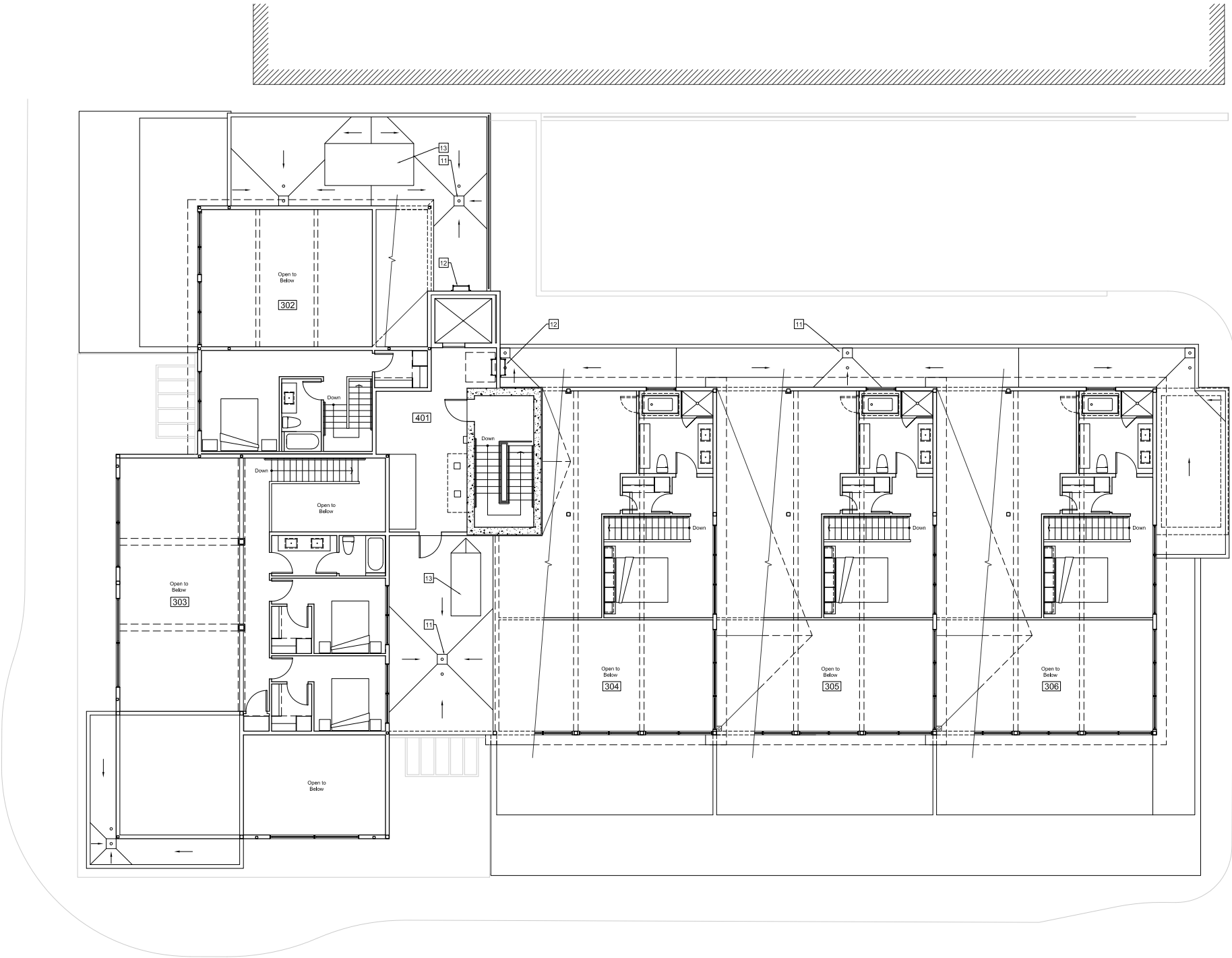


FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
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- 04 Electrical Tranformer
- 05 Dumpsters, (Overhead door access)
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- 07 Project property boundary
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- 15 Fire Department connection
- 16 Fire alarm strobe
- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended singage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator

Room Key

302	Lodging / Residential Unit "A"
303	Lodging / Residential Unit "B"
304	Lodging / Residential Unit "C"
305	Lodging / Residential Unit "D"
306	Lodging / Residential Unit "E"
401	Mechanical Penthouse & Roof Access

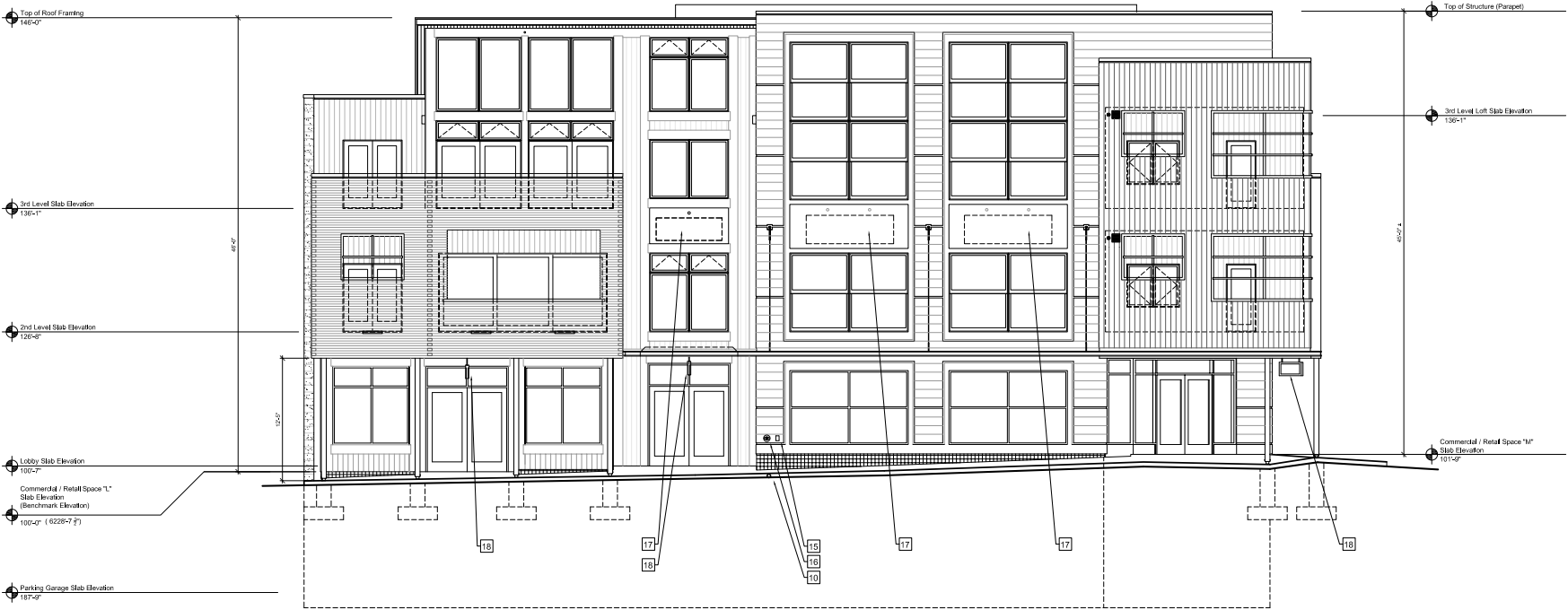


01 Third Level Loft Floor Plan  
A104 1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
- 02 Oil and sand separator for garage floor drainage, located below slab.
- 03 Overhead door
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- 05 Dumpsters. (Overhead door access)
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- 15 Fire Department connection
- 16 Fire alarm strobe
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- 18 Suspended slngage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator



01

A200

South (Simpson Avenue) Elevation

1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



02

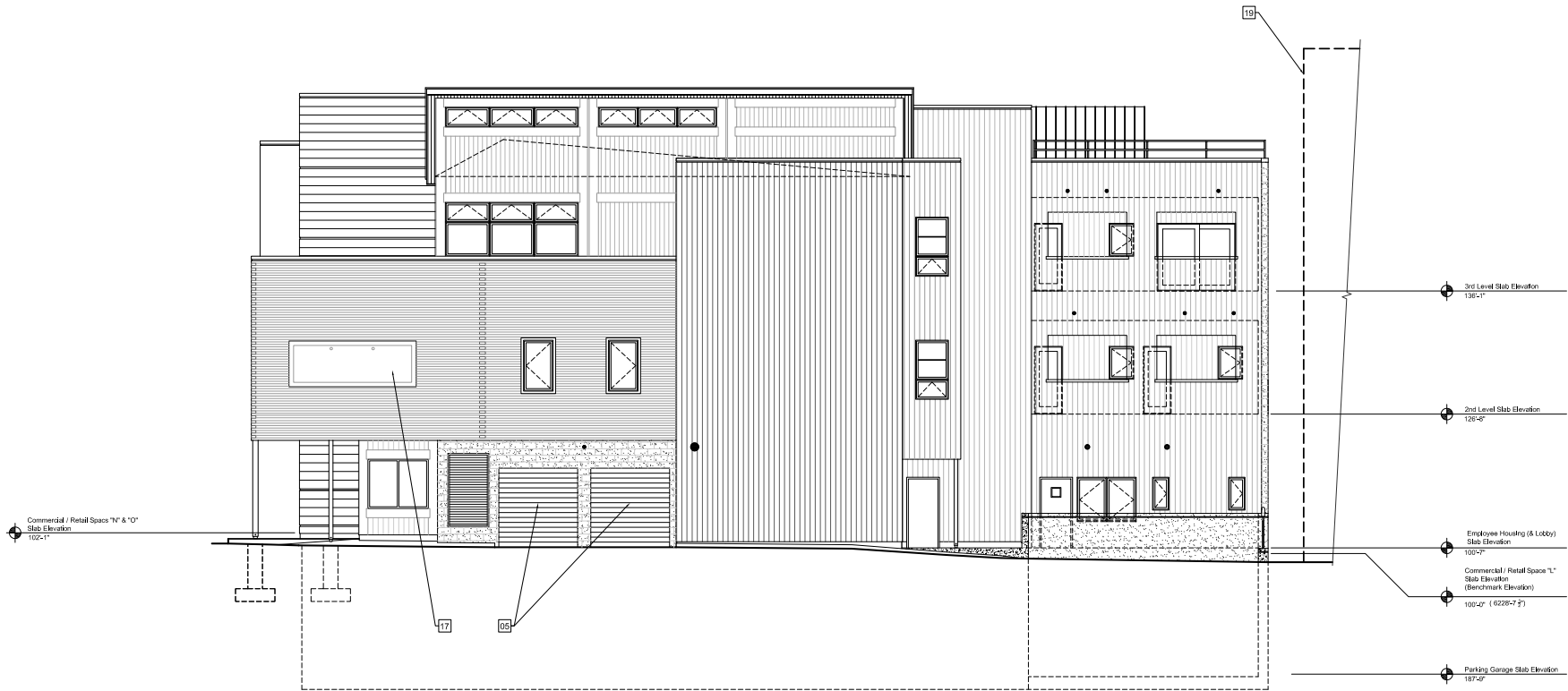
A200

East (Glenwood Street) Elevation

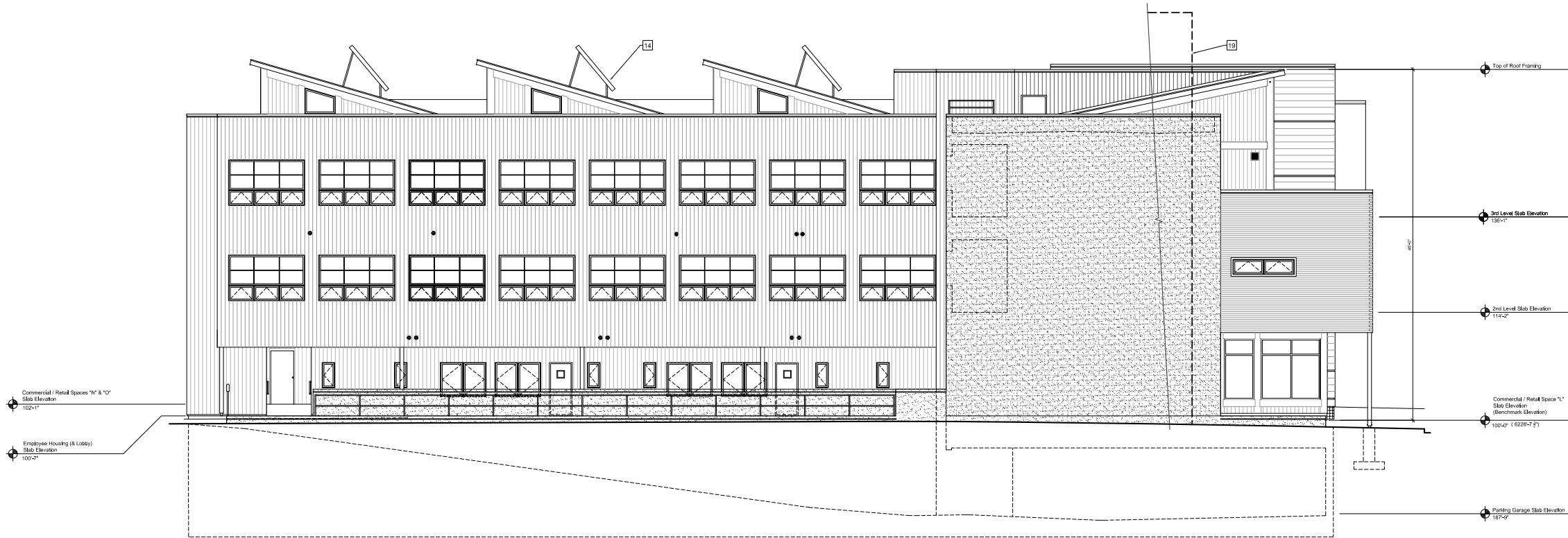
1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)

FDP Drawing Notes

- 01 Catchment basin and sump, for stormwater and roof drainage, located below slab.
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- 04 Electrical Tranformer
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- 17 Wall signage location, with indirect lighting locations indicated. See lighting fixture cut sheets provided with FDP application.
- 18 Suspended singage below sidewalk canopy, typical as shown.
- 19 Town parking garage structure
- 20 Elevator



01 North (Alley) Elevation  
A200 1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)



02 West (Parking Ramp) Elevation  
A200 1/8" = 1'-0" (Scale accurate when printed full size on 24"x36" media only)

## **NOTICE OF PUBLIC HEARING**

**JACKSON TOWN COUNCIL: DATE and TIME**

**Location of Hearing: Council Chambers, Town Hall  
150 E Pearl Avenue  
Jackson, WY**

**Request: FINAL DEVELOPMENT PLAN**

**Proposal: FDP FOR THE GLENWOOD + SIMPSON PLANNED MIXED-USE DEVELOPMENT**

**A mixed-use development combining commercial/retail and  
employee housing units of the lower floor  
with market residential/lodging units above.**

**Project Number: P18-001**

**For information regarding this application, please contact:  
Y2 Consultants at (307) 733-2999**

**-or-**

**Jackson Planning and Building Department at (307) 733-0440**

**Posting Date: insert date posted**

## **NOTICE OF PUBLIC HEARING**

**PLANNING AND ZONING COMMISSION/BOARD OF ADJUSTMENT: DATE and TIME**

**Location of Hearing: Council Chambers, Town Hall  
150 E Pearl Avenue  
Jackson, WY**

**Request: FINAL DEVELOPMENT PLAN**

**Proposal: FDP FOR THE GLENWOOD + SIMPSON PLANNED MIXED-USE DEVELOPMENT**

**A mixed-use development combining commercial/retail and  
employee housing units of the lower floor  
with market residential/lodging units above.**

**Project Number: P18-001**

**For information regarding this application, please contact:  
Y2 Consultants at (307) 733-2999**

**-or-**

**Jackson Planning and Building Department at (307) 733-0440**

**Posting Date: insert date posted**

**AFFIDAVIT AND AGREEMENT RELATING TO THE  
1st AMENDMENT OF THE  
MILLWARD AND SIMPSON  
PLANNED MIXED-USE DEVELOPMENT  
MASTER PLAN**

**Property subject to the Millward and Simpson Planned Mixed Use Development  
Master Plan pursuant to its 1st Amendment:**

Lots 11 and 12, Block 2, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County, Wyoming  
as Plat 129; and

Lots 1, 2, 3, 4, 5 and 6, Block 7, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County, Wyoming  
as Plat 129.

**Property subject to the originally approved Millward and Simpson Planned  
Mixed-Use Development Master Plan NO LONGER under the Master Plan  
pursuant to its 1st Amendment:**

Lots 7, 8, 9, 10, 11 and 12, Block 3, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County, Wyoming  
as Plat 129; and

Lots 1, 2, 3, and 4, Block 6, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County, Wyoming  
as Plat 129.

This Affidavit and Agreement is executed by Sara Flitner, as Mayor of the  
Town of Jackson, a municipal corporation of the State of Wyoming, and by the  
following:

1. Arts District Development, LLC, a Wyoming limited liability company,  
owner of said Lots 11 and 12, Block 2, 2nd Wort Addition, and
2. Jackson Hotel Investors, LLC, a Utah limited liability company,  
owner of said Lots 1, 2, 3, 4, 5 and 6, Block 7, 2nd Wort Addition.

This Affidavit and Agreement is made and recorded pursuant to Subsections C.2.d. and C.2.a.(3) of the now repealed Section 2325 of the Town of Jackson Land Development Regulations, which provided for the Planned Mixed-Use Development Option. Said Section 2325 of the Town of Jackson Land Development Regulations was in effect at the time of the approval of the Millward and Simpson Planned Mixed-Use Development Master Plan, and continues to be a governing document of said Master Plan.

The undersigned, being first duly sworn upon their oaths, agree and state the following:

1. **THAT** on September 16, 2002 the Jackson Town Council approved a Planned Mixed-Use Development Master Plan referred to as the Millward and Simpson Planned Mixed-Use Development Master Plan, which was memorialized in that instrument titled "AFFIDAVIT AND AGREEMENT BETWEEN THE TOWN OF JACKSON, TETON COUNTY, WYOMING AND THE UNDERSIGNED APPLICANT RELATING TO A PLANNED MIXED USE DEVELOPMENT MASTER PLAN PURSUANT TO ORDINANCE NO. 680, SECTION 2325 OF THE TOWN OF JACKSON LAND DEVELOPMENT REGULATIONS" of record in the Office of the Clerk of Teton County Clerk, Wyoming in Book 480 of Photo, pages 638-760, and which was appurtenant to the following described real property located in the Town of Jackson:

Lots 11 and 12, Block 2, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County,  
Wyoming as Plat 129;

Lots 1, 2, 3, 4, 5 and 6, Block 7, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County,  
Wyoming as Plat 129;

Lots 7, 8, 9, 10, 11, and 12, Block 3, 2nd Wort Addition to Town of Jackson,  
a subdivision of record in the Office of the Clerk of Teton County,  
Wyoming as Plat 129; and

Lots 1, 2, 3, and 4, Block 6, 2nd Wort Addition to Town of Jackson, a  
subdivision of record in the Office of the Clerk of Teton County,  
Wyoming as Plat 129.

AFFIDAVIT AND AGREEMENT RELATING TO THE 1st AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

Page 2 of 8



2. **THAT** on April 8, 2013 the Jackson Town Council, pursuant to Sub-Section C.2.f. of said now repealed Section 2325 of the Town of Jackson Land Development Regulations, approved an extension of the Millward and Simpson Planned Mixed-Use Development Master Plan, which extension was memorialized in that instrument titled "AFFIDAVIT AND AGREEMENT RELATING TO EXTENSION AND AMENDMENT OF A PLANNED MIXED USE DEVELOPMENT MASTER PLAN" of record in the Office to the Clerk of Teton County, Wyoming in Book 849 of Photo, pages 640-645.
3. **THAT** the April 8, 2013 Jackson Town Council approval of the extension of the Millard and Simpson Planned Mixed-Use Development Master Plan (hereinafter referred to as the "2013 Extension") contains certain conditions and stipulations, which include, but are not limited to the following:
  - The applicant shall submit an amendment to the Master Plan removing the ten (10) lots located on the west side of Millward Street from the Master Plan.
  - The applicant would be allowed to apply for an amendment to the Master Plan including changes to the proposed parking requirements, etc. concurrently with a Final Development Plan application.
4. **THAT** an application that is in accord with the now repealed Section 2325 of the Town of Jackson Land Development Regulations and the conditions and stipulations of the 2013 Extension was made to the Town of Jackson for an amendment to the Millward and Simpson Planned Mixed-Use Development Master Plan (under Item P14-070) (hereinafter referred to as the "1st Amendment to the Master Plan"), and was approved by the Jackson Town Council on December 15, 2014.
5. **THAT** in accord with the conditions of approval of the 2013 Extension, the lands included in the approved 1st Amendment to the Master Plan does not include the ten (10) lots located on the west side of Millward Street, which are more particularly described as follows:

Lots 7, 8, 9, 10, 11, and 12, Block 3, 2nd Wort Addition to Town of Jackson, a subdivision of record in the Office of the Clerk of Teton County, Wyoming as Plat 129; and

AFFIDAVIT AND AGREEMENT RELATING TO THE 1st AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

Lots 1, 2, 3, and 4, Block 6, 2nd Wort Addition to Town of Jackson, a subdivision of record in the Office of the Clerk of Teton County, Wyoming as Plat 129.

6. **THAT** attached hereto, and by this reference made a part hereof, are true and correct copies of the following:

- **EXHIBIT A** - December 17, 2014 letter from Paul Anthony, Town of Jackson Principal Planner, setting forth the conditions of approval of the 1st Amendment to the Millward and Simpson Planned Mixed-Use Development Master Plan, and
- **EXHIBIT B** - the 1st Amendment Master Plan document, which is titled "Millward + Simpson PMD Master Plan – 1<sup>st</sup> Amendment" and dated December 15, 2014.

7. **THAT** it is specifically understood, acknowledged and agreed that pursuant to said now repealed Section 2325 of the Town of Jackson Land Development Regulations this instrument and the EXHIBITS A and B attached hereto shall be recorded in the land records of Teton County, Wyoming and in the Town of Jackson Clerk's records.

8. **THAT** this instrument may be executed in several counterparts and each counterpart hereof shall be deemed to be an original instrument, but all such counterparts together shall constitute but one instrument and the combined counterparts shall form one original instrument for recordation.

9. **THAT** the effective date of this instrument is to be the date of its recordation in the records of the Office of the Clerk of Teton County, Wyoming.

THE REST OF THIS PAGE INTENTIONALLY LEFT BLANK

AFFIDAVIT AND AGREEMENT RELATING TO THE 1<sup>st</sup> AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

Page 4 of 8

Town of Jackson,  
a municipal corporation of the State of Wyoming

By: [Signature]  
Sara Flitner  
Its: Mayor

Attest: [Signature]  
By: [Signature]  
Olivia Goodale  
Town of Jackson Town Clerk

STATE OF WYOMING     )  
                                      ) SS.  
COUNTY OF TETON     )

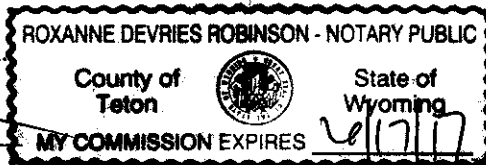
On the 2nd day of May, 2016, before me personally appeared Sara Flitner, to me personally known, who being by me duly sworn, did say that she is the Mayor of the Town of Jackson, Teton County, Wyoming and that this instrument was signed on behalf of said Town of Jackson by authority of its Town Council, and further that this instrument is the free act and deed of said Town of Jackson.

Witness my hand and official seal.

[Signature]

Notary Public

My Commission Expires:



STATE OF WYOMING     )  
                                      ) SS.  
COUNTY OF TETON     )

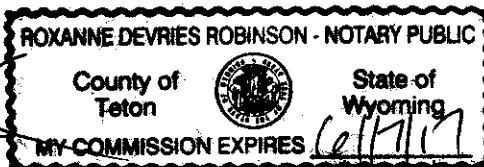
The foregoing instrument was acknowledged before me by Olivia Goodale, acting in her capacity as Town Clerk of the Town of Jackson this 2nd day of May, 2016.

Witness my hand and official seal.

[Signature]

Notary Public

My Commission Expires:



AFFIDAVIT AND AGREEMENT RELATING TO THE 1st AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

Arts District Development, LLC,  
a Wyoming limited liability company

By: John S. Varley, Jr.  
John S. Varley, Jr.,  
Its: Sole Member

STATE OF WYOMING       )  
  ) SS.  
COUNTY OF TETON       )

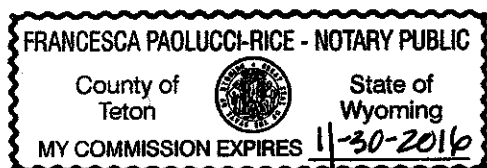
On this this 13<sup>th</sup> day of April, 2016 before me personally appeared John S. Varley, Jr. to me personally known, who being by me duly sworn, did say that he is the Sole Member of Arts District Development, LLC, a Wyoming limited liability company, and that this instrument was signed on behalf of said limited liability company, and further that this instrument is the free act and deed of said limited liability company.

Witness my hand and official seal.

Francesca Paolucci-Rice

Notary Public

My Commission Expires: November 30, 2016

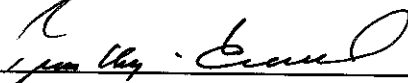


AFFIDAVIT AND AGREEMENT RELATING TO THE 1st AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

Page 6 of 8

Jackson Hotel Investors, LLC,  
a Utah limited liability company

By: Brown Manager IV LLC,  
a Delaware limited liability company  
Its: Co-Manager

By:   
Print Name: Timothy M. Gisriel  
Its: Vice President

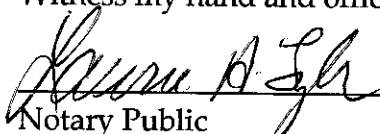
By: Bingham Family Alaska, LLC,  
an Alaska limited liability company  
Its: Co-Manager

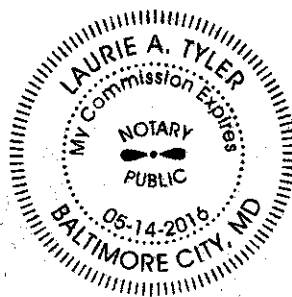
By: \_\_\_\_\_  
Michael C. Bingham  
Its: Manager

STATE OF MARYLAND     )  
  ) SS.  
CITY OF BALTIMORE     )

On this this 27<sup>th</sup> day of April, 2016 before me personally appeared Timothy M. Gisriel to me personally known, who being by me duly sworn, did say that he is the Vice President of Brown Manager IV LLC, a Delaware limited liability company, and that this instrument was signed on behalf of said limited liability company, and further that this instrument is the free act and deed of said limited liability company, which is acting for and on behalf of Jackson Hotel Investors, LLC, a Utah limited liability company, as a Co-Manager of said Utah limited liability company.

Witness my hand and official seal.

  
Notary Public  
My Commission Expires:



AFFIDAVIT AND AGREEMENT RELATING TO THE 1st AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

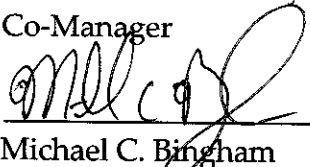
Page 7 of 8

Jackson Hotel Investors, LLC,  
a Utah limited liability company

By: Brown Manager IV LLC,  
a Delaware limited liability company  
Its: Co-Manager

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_

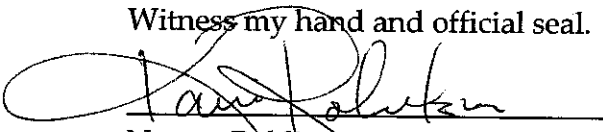
By: Bingham Family Alaska, LLC,  
an Alaska limited liability company  
Its: Co-Manager

By:   
Michael C. Bingham  
Its: Manager

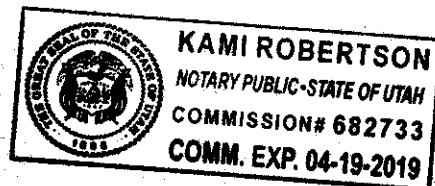
STATE OF Utah )  
 ) SS.  
COUNTY OF Utah )

On this this 25<sup>th</sup> day of April, 2016 before me personally appeared Michael C. Bingham to me personally known, who being by me duly sworn, did say that he is the Manager of Bingham Family Alaska, LLC, an Alaska limited liability company, and that this instrument was signed on behalf of said limited liability company, and further that this instrument is the free act and deed of said limited liability company, which is acting for and on behalf of Jackson Hotel Investors, LLC, a Utah limited liability company, as a Co-Manager of said Utah limited liability company.

Witness my hand and official seal.

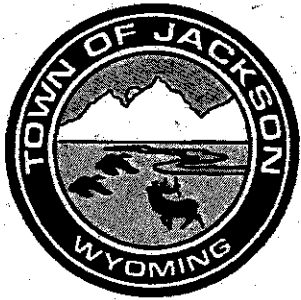
  
Notary Public

My Commission Expires: 4-19-2019



AFFIDAVIT AND AGREEMENT RELATING TO THE 1st AMENDMENT OF THE  
MILLWARD AND SIMPSON PLANNED MIXED-USE DEVELOPMENT MASTER PLAN

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PLANNING & BUILDING DEPARTMENT

December 17, 2014

Carney Logan Burke Architects LLC  
Attn: Matt Thackray  
P.O. Box 9218  
Jackson, WY 83002

RE: Items P14-070, P14-071 & P14-072  
Amendment to Millward + Simpson PMD Master Plan, Final (Major) Development Plan  
for Phase 1 (hotel), & Conditional Use Permit (dormitory)  
130 – 180 West Simpson Avenue and 235 South Glenwood Street

Dear Mr. Thackray:

This letter is to confirm that on December 15, 2014 the Jackson Town Council voted to **approve** your request for approval of an amendment to the Millward + Simpson PMD Master Plan, a Final (Major) Development Plan for Phase 1 (hotel), and a Conditional Use Permit (dormitory) to allow a 92,219 sf hotel that will include 121 keys of lodging rooms, nine short-term rental condominiums, a 3,041 sf restaurant, four employee housing units, and 6-bedroom dormitory in the Urban Commercial - Two (UC-2 (LO)) zoning district on the property addressed as 275 North Willow Street subject to the following conditions of approval and attached departmental reviews, as applicable:

1. P-14-070: Amendment to Millward + Simpson PMD Master Plan, subject to the following one condition:
  - a. The phasing-related elements of the Affidavit shall be included into the amended Master Plan document to ensure that all phasing requirements are located in one place.
2. P-14-071: Final (Major) Development Plan for Phase 1 (hotel), subject to the following three conditions and attached departmental reviews:
  - a. The final design for any improvements, such as snow storage and paving and widening of the alley shall be approved by the Town Engineer.
  - b. The landscape strip on Glenwood Street shall be a minimum of 5' in width.
  - c. The applicant shall provide a landscape plan that clearly demonstrates compliance with the landscape area requirements for the hotel project.
3. P-14-072: Conditional Use Permit (dormitory), subject to no conditions but to attached

EXHIBIT A



departmental reviews.

All conditions of approval shall be satisfied prior to approval of any building permits related to Phase 1 (hotel) of the Master Plan.

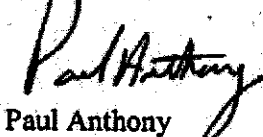
The approval of the proposed Master Plan amendment and FDP includes approval of a 2.05 FAR (92,219 sf) for the 6-lot hotel. Given that a maximum FAR of 2.0 is allowed across the entire PMD Master Plan area, the FAR for the two remaining lots for Phase 2 will be reduced to whatever number is required to ensure the average FAR of does not exceed 2.0 — this would appear to be an FAR of approximately 1.85 for Phase 2 but the final FAR shall be determined during the future FDP review process for Phase 2. The only exception to the 2.0 FAR limit is if the Town Council makes a finding of "extraordinary benefit" according to Sec. 2315.D.2.e in the LDRs.

Approval of any changes to the PMD Master Plan shall be in accordance with Sections 5140.H Minor Deviations and 2325.C.2.d Amendment of Master Plan. Approval of any changes to the Final Development Plan shall be in accordance with Sections 51200.J Minor Deviations, and 51200.K, Amendment to a Development Plan Permit, of the Town of Jackson Land Development Regulations. Approval of any changes to the Conditional Use Permit shall be in accordance with Sections 5140.H Minor Deviations, 2325.C.2.d Amendment of Master Plan, and 5140.I Amendment to Development Permit for Conditional or Special Use.

With this approval of the FDP for the Phase 1 hotel project, the Master Plan requires that a building permit for the six-lot hotel be submitted before **March 18, 2015** and that within 60 days of approval of the building permit that construction begins with continuous progress to completion. If these conditions are not met, the PMD Master Plan shall expire.

Should you have any questions or require further information on this matter, please feel free to contact me at 733-0440, Ext. 1303.

Respectfully,



Paul Anthony  
Principal Planner

Enclosure

EXHIBIT A

## **Millward + Simpson PMD Master Plan – 1<sup>st</sup> Amendment**

**December 15, 2014**

Applicant/Owner:  
**John S. (Jay) Varley,**  
**Arts Center View LLC and Arts District Development LLC**  
25 East Simpson  
Jackson, WY 83001

**PEG Development**  
180 N. University Avenue, #200  
Provo, UT 84601

In partnership with **ScanlanKemperBard**

Land Planning + Landscape Architecture:  
**Hershberger Design**  
560 South Glenwood Street  
PO Box 1648  
Jackson, WY 83001  
307.739.1001

Engineering:  
**Jorgensen Associates, PC**  
1315 South Hwy 89, Suite 203  
PO Box 9550  
Jackson, WY 83002  
307.733.5150

**EXHIBIT B**

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**PURPOSE & INTENT ..... 2**

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**Project Description**

This application is submitted on behalf of PEG Development in partnership with ScanlanKemperBard Companies, and John S. (Jay) Varley, Arts Center View LLC and Arts District Development LLC, as required as part of the Affidavit and Agreement Relating to Extension and Amendment of a Planned Mixed Use Development Master Plan (hereinafter referred to as Extension Agreement). The Extension Agreement contains conditions of approval which have been incorporated into this Amended Master Plan for purposes of consolidation and clarity. As such, this Amended Master Plan supersedes the conditions of approval in the Extension Agreement.

The land included in this Amended Master Plan is comprised of 8 lots (60,000 square feet) under ownership or ownership agreement by the submitting entities, located along West Simpson Avenue between Millward Street and Glenwood Street. Underlying Zoning on the site is UC-2/LO; all 8 lots are within the Lodging Overlay and Downtown Special Parking Area. The development described in this proposal amounts to the redevelopment of a neighborhood central to the Town of Jackson; Redevelopment will be in two phases more specifically described in later sections. The scope of the development provides an opportunity to redevelop and significantly improve the streetscape of the multiple blocks of public street that face the site. The proposed Amended Master Plan will develop sidewalks and pedestrian spaces that will be a positive contribution to the Town while complimenting the existing pedestrian character of downtown Jackson. The redevelopment program calls for the addition of a mix of commercial space that is complementary to the fabric of Town, along with the addition of residential / lodging units within the downtown core. The building program for development within this mixed-use Master Plan combines a hotel, office, commercial / retail and restaurant space on street level with employee and market housing / lodging at the street level and above.

**Purpose & Intent**

The purpose of the Planned Mixed-Use Development is to provide flexibility in encouraging mixed-use development that will, through an overall unified approach, achieve results superior to those produced when development occurs lot by lot and adheres to rigid standards. The proposed Amended Master Plan presents the opportunity to integrate a mix of lodging, office, commercial/retail and residential uses. The Amended Master Plan considers structural mass, vehicular access and circulation, pedestrian use, pedestrian streetscape and architectural space in order to respond creatively to a broad array of community issues and development situations.

The proposed Amended Master Plan seeks to create an economically, environmentally and socially sustainable mixed-use development responsive to the Downtown context, providing a pedestrian emphasis and a mix of synergistic uses.

The following objectives were established to guide the master planning effort:

- Jointly plan the 8 contiguous lots to provide a mix of compatible and complementary land uses that support one another so that the "whole is greater than the sum of its parts";

- Support the downtown core/urban neighborhood concepts in the Town's Comprehensive Plan and the downtown character district concepts currently in development as part of LDR amendments;
- Prioritize Pedestrians (sidewalks, covered walkways, pedestrian-scaled spaces, articulated entries, separation of walkways from traffic, appropriate sun/shade - all to make walking desirable);
- Contribute to the long-term parking/transportation solution. (Parking is provided as a shared utility between uses within the Master Plan and in a manner that promotes the use of other modes).
- Effectively address bicycle and transit transportation modes.
- Create a mixed-use development to incorporate lodging and residential / lodging units in the downtown core.

Additionally:

**1. Encouraging flexibility and creativity in the development of the land to promote its most appropriate and efficient use;**

- This proposal was developed keeping in mind both the downtown core and transportation concepts of the Town's Comprehensive Plan, and the location of the project site adjacent to current and future urban uses & activities.
- Achieves an appropriate density of development for a Town Center location, with a significant proportion of housing – an important part of a more sustainable future development mix for the town.
- Includes a significant amount of lodging in close proximity to the Downtown core which strengthens commercial activity and pedestrian modes of transportation – goals behind the Lodging overlay and the Transportation Plan.

**2. Improving the design character and quality of the development beyond that which would be achievable by strict application of underlying land development regulations;**

- By accommodating higher density and a more efficient parking solution, this proposal provides for a more comfortable and inviting pedestrian environment.
- Includes the mix and density of uses required to support the construction of covered pedestrian walkways and arcades.
- Providing the opportunity for a different type of Downtown urban-style multi-family residential / lodging development to occur that currently has limited availability.

**3. Facilitating the efficient and economical provision of street improvements and utilities;**

- Includes the provision of improved street and alley services & pedestrian sidewalks.
- Includes a significant contribution to the infrastructure of the Town.
- Increases density where utilities are already provided; upgrades existing utilities rather than extending Town commitments by building new infrastructure.

**4. Preserving significant natural features of a site;**

- Carefully considers the sloping aspect of the land and the topographic position of the site in relation to the surrounding neighborhood. The proposed 46' height with 110% bonus for a sloped site allowance is consistent with the allowable development under the PMD and allows for the best density configuration and character benefits to the Town and neighborhood while maintaining views of such landmarks as Snow King Mountain, Nowlin Peak, Cache Creek Canyon, the Snake River Range and East Gros Ventre Butte.

**5. Providing a functional and interconnected system of pedestrian walkways and streetscape, and pedestrian friendly areas;**

- By minimizing surface parking and eliminating curb-cuts, and by including features such as improved sidewalks and south-facing greenspaces, this proposal connects to existing sidewalks and provides for a significant improvement to the pedestrian realm.
- The connection of sidewalks throughout the proposed development creates a porous, contiguous streetscape that encourages pedestrian movement into and through the area.

**6. Encouraging the conservation of energy;**

- This proposal was conceived with the goal of providing for the kind of development which will foster within the Town of Jackson a thriving, pedestrian-oriented Town Center where people live, work and spend their leisure time.
- To the extent that the proposal actively encourages pedestrian activity and adds residential and lodging development wherein people may live and stay right in the center of town, this proposal is moving in the direction of a town that is less dependent on vehicular travel.
- The proposed buildings are oriented toward south-facing open spaces, taking maximum advantage of solar gain.

**7. Allowing creative alternatives to surface parking, and encouraging and permitting shared parking between proposed uses;**

- All off-street parking is to be accommodated below grade. Access to the parking structures will be from the adjacent alleys – reducing the number of points where automobiles cross sidewalks to maintain the pedestrian emphasis of the streetscape.
- On street parking spaces coincident with the Master Plan boundaries are used only as buffer spaces available for high-season peaking.
- The parking proposal provides a model of sharing facilities to make more efficient use of this costly but necessary infrastructure.

**8. Accommodating alternative transportation including transit, bikeways and pathways where appropriate as consistent with the Transportation Master Plan;**

- The combination of residential, office, lodging, commercial/retail and restaurant uses in such close proximity to the center of Town significantly encourages non-vehicular travel.

- The plan meets the Town's LDR's by providing bicycle parking at 10% of the vehicular parking supporting the ease of using alternative transportation within Town.

**9. Providing a mix of compatible commercial, office, lodging and residential uses;**

- Lodging
- Office & Services
- Commercial/Retail
- Restaurants
- Residential

**Existing Conditions**

The land included in this proposal is comprised of 8 Lots (60,000 square feet) located along West Simpson Avenue between Millward Street and Glenwood Street. Existing Zoning on the site is UC-2/LO; all 8 Lots are within the Lodging Overlay and within the Downtown Special Parking District. Six of the Lots comprise Phase One of the Amended Master Plan and currently contain two single family dwelling units that are rented either short or long term, 29 units of the Western Motel, five mobile homes used for housing and offices and associated parking. Two of the Lots comprise Phase Two of the Amended Master Plan and currently contain 10 units of the Western Motel and associated parking.

Adjacent to the site on Pearl Street to the north are a row of commercial buildings including the Art Association, Post Office, First Interstate Bank, Pearl Place commercial building, the Town-owned parking structure at Millward & Simpson and a proposed greenhouse operation. To the east is the current Center for the Arts. To the south are a block of single-family and multi-family residences and to the west is the Snake River Brew Pub.

The Phase One and Phase Two properties are situated 2½ blocks from the Town Square, in a transition zone between more intense commercial activity to the north and a mostly multi-family residential neighborhood to the south.

The Phase One site is situated on the western slope of the Downtown area, and drops in elevation approximately 7 feet across the block running from east to west. Phase Two is adjacent to the Town parking structure and has minimal topographic change.

There are 10 structures existing on the 8 Lots:

Phase One – Block 3	(Approx. Area)
130 West Simpson	1600 sf Office
150 West Simpson	3400 sf Lodging
180 West Simpson #1	1000 sf Residential
180 West Simpson #2	1000 sf Residential
180 West Simpson #3	1000 sf Residential
180 West Simpson #4	1000 sf Residential
180 West Simpson #5	1000 sf Residential
225 South Glenwood	8000 sf Lodging



247 South Glenwood	1200 sf Lodging
Phase Two – Block 2 175 South Glenwood	5000 sf Lodging

There are 31 existing legal off-street parking spaces (per Town of Jackson documentation) serving the buildings on the 6 West Simpson lots and 10 existing legal off-street parking spaces serving the building on South Glenwood in October of 1988. Given the existing structures, uses and parking provided on site, this project would be eligible for a parking credit, as calculated according to Section 4240.B.9. The Millward & Simpson PMD proposal, however, does not propose to claim any credit under Section 4240. It is proposed instead that parking demand be evaluated through a shared parking analysis (see Transportation Summary).

### **Master Site Plan**

The purpose of this Amended Master Plan is to establish the development standards and serve as a guide to all future development within the Amended Master Plan area.

### **Site Design Intent**

One of the main objectives driving the planning process for the Amended Millward & Simpson Planned Mixed-Use Development Master Plan is to place a priority on the development of pedestrian spaces and connections. To the pedestrian the site is primarily experienced along its most public faces. The proposed Amended Master Plan incorporates new sidewalks, arcades articulated entrances and courtyards to offer this area a sense of place .

Covered pedestrian walkways extend over sidewalks, providing shelter from the elements and an inviting walkway for pedestrians. Buildings at street level extend to the lot line in Phase Two providing the immediate street/building connection that lends such a strong character to the center of the Town of Jackson. Phase One building will be setback from the north, east and west streets 5.75-feet minimum to 17-feet maximum with an average of 9.55-feet. Street level in Phase One and Phase Two is proposed to have a number of commercial/retail, restaurant and office tenants; the pedestrian walkways acting as a unifying element addressing the individualized commercial/retail storefronts and entrances. The human-scale spaces created by canopied walkways reduces the perceived mass of the buildings and increases the comfort of approaching the buildings on foot. Where practical, cantilevered canopies can eliminate the need for support columns allowing the arcades to provide the cover and character described above while keeping the walkway clear for pedestrian circulation, and snow storage or removal.

The corner of Glenwood and Simpson is the most central position to the Amended Master Plan development, and will include restaurant space and/or office/retail space addressing this street corner. Restaurant space will offer a convenient location adjacent to Center for the Arts to grab a bite before or after events and performances.

In Phase One, the building form is proposed to wrap around a south-facing courtyard providing a central greenspace that could serve at various times as an extension of the lobby/lounge and conference space. This courtyard would be screened from the alley behind, forming an enclosed outdoor space for the use of hotel guests and visitors. The "U" shape of the building sets the majority of the building mass back 70-feet from the alley, minimizing mass along the alley and providing a significant transition and buffer to the adjacent properties to the south.

Automobile parking in a subgrade structure is proposed to be accessed from the alleys in both Phase One and Phase Two. The full parking requirement is proposed underground. Adjacent on-street spaces typically allowed in the Town code to be used toward a project's requirement, would only provide buffer spaces for high-season peaking. Entrances to underground parking structures are located as far in from the street as is practical to minimize conflicts with street and sidewalk traffic.

Service areas are consolidated, and loading docks, waste and recycling areas are incorporated along the alleys and meet the Town regulations. Trash areas will be enclosed.

### **Architectural Intent**

The Amended Master Plan will compliment other development in the immediate area such as the Center for the Arts and buildings and infrastructure on Pearl Avenue. Development within this Master Plan will contribute to the ongoing evolution of a vibrant, mixed-use, pedestrian-friendly neighborhood; a neighborhood that will be a welcome discovery for visitors while also being geared toward the people who live and work in Jackson. Street level uses will include employee housing, office, restaurants and uses associated with a hotel, including conference spaces. The upper floors will provide market rate short term rental apartments / lodging.

The buildings in the Amended Master Plan are 4-story, 46-foot to a maximum 50.6-feet (when utilizing the 110% bonus for sloped sites) in height with a 3-story façade along public streets and alleys. The fourth floor steps back from the footprint to reduce the perceived mass of the buildings from the pedestrian realm as measured from the immediately adjacent property boundaries (measurement per Town Design Guidelines). This stepping-back also allows southern exposure, natural light and views of the surrounding mountains and buttes to penetrate to the street level and the interior of the buildings. Utility elements of the buildings (elevator run-outs, mechanical, etc) may be an additional 4-feet above the allowed building height as consistent with the Town of Jackson Design Guidelines.

The ordering principles that have shaped the design are to provide a positive streetscape and significant public open space and to ensure compatibility of uses and scale with surrounding potential development based on its current zoning. The resulting project is a positive contribution to the heart of the Town by optimizing in-town land and offering commercial, residential and lodging unit types that currently have limited availability in the marketplace, therefore combating the tendency for sprawl.

## Program Summary

The Amended Master Plan Program Summary provides the maximum and minimum floor areas for residential/lodging, and commercial uses:

Proposed Amended Master Plan Program Summary			
Location/Use	sf*	Lot Size	FAR*
Phase One - Block 3, 6 Lots - Hotel/short term rental lodging/restaurant	93,311	45,000	2.07
**Phase Two - Block 3, 2 Lots - short term rental lodging/restaurant/commercial	26,689	15,000	1.78 (No greater than 2.0 as averaged over all 8 Lots)
			* excludes Employee Housing provided on site

\*\* Phase Two had an approved FDP of 30,000SF or 2.0 FAR. It is intended that the future Phase Two application will be allowed to be submitted using the previously approved building permit documents for consideration within the submission process.

Proposed non-residential uses shall not exceed 50%.

## Dimensional Limitations Schedule

The proposed Amended Master Plan dimensional limitations schedule, including a comparison of the proposed development standards for the UC-2 zoning district, is as follows:

Development type	Min. LSR	Max Gross Density (du/ac)	Max. Floor Area Ratio	Min. Site Area (sf)	Min. Lot Size (sf)	Min. Street Yard (ft)	Min. Side Yard (ft)	Min. Rear Yard (ft)	Max Height (ft)
UC-2 Single Family	0.3	8.7	0.45	15,000	5,000	12	5	20	24/28
UC-2 Non-Residential	0.2	n/a	0.65	n/a	7,500	10	0	20	28/35
UC-2/LO Lodging	0.2	n/a	0.8	n/a	7,500	10	0	20	28/35
Amended Master Plan Phase One - Block 3	0.05	n/a	2.11	22,500	n/a	5.75 feet min.-17 feet max. 9.55-foot avg	5.75 feet min.-17 feet max. 9.55-foot avg	0	46 (plus 110% bonus allowed)
Amended Master Plan Phase Two - Block 2	0.05	n/a	No greater than 2.0 as averaged over all 8 Lots	15,000	n/a	0	0	0	46 (plus 110% bonus allowed)

This application proposes to meet the bonus development standards as follows:

**"Bonus Criteria.** An applicant may propose development standards provided any two of the following criteria are met:

- (1) The master plan proposes 50% or more of the total square footage as residential uses or lodging uses (within the LO);
- (2) The master plan proposes sub-grade parking to satisfy the majority of the parking requirement (excepting surface spaces for loading/unloading or similar short-term uses);
- (3) The master plan proposes to exceed the required employee housing requirements (not including allowable credits) by at least 20%;
- (4) The master plan includes design and/or use features that substantially advance the goals of the Transportation Section within the Comprehensive Plan.

The Amended Master Plan proposes to meet the bonus requirement by meeting criteria (1) and (2) above:

- Residential & lodging uses will comprise at least 50% of the development - meeting criteria #1.
- Parking spaces are proposed to be accommodated in an underground parking structure – meeting criteria #2.

## Permitted Uses

<b>Table 2200. Use Schedule (Abbreviated)</b>	
Zoning District:	UC-2/LO under existing zoning
<b>Residential</b>	
Conventional Single Family Unit	Y
Planned Residential	Y
Planned Unit Development	Y
Accessory Residential Unit	Y
Institutional Residential	C
<b>Nonresidential</b>	
<b>Institutional</b>	
Institutional	C
Utilities	C
Day Care Center, Group	Y
<b>Commercial</b>	
Office	Y
Commercial Retail	Y
Heavy Retail / Services	C
Services	Y
Post Office	Y
Restaurant/Bar	Y
Drive-in Facility	Y
Commercial Lodging	Y
Bed & Breakfast	Y
Residential Short-term Rental	Y
<b>Resort</b>	
Commercial Amusement	C
Outdoor Recreational	C
Indoor Recreational	Y
Tour Operators/Outfitters	Y
<b>Home Uses</b>	
Home Occupations	Y
Home Businesses	C
Day Care Home, Family	Y
Day Care Home, Group	C
<b>Industrial</b>	
Light Industry	C
<b>Temporary Uses</b>	
Christmas Tree Sales	Y
Contractor's Office	Y
Special Events	Y
Real Estate Sales Office	Y
Shelter	Y
Farm Stand	Y
Gravel Extraction & Processing	Y

The permitted uses within the Amended Master Plan will be those permitted under the existing underlying zoning.

The existing zoning of the lands within the proposed PMD is UC-2 / LO; the permitted uses are as indicated in the adjacent Table 2200, Use Schedule.

## **Design Guidelines**

Final Development Plan applications under the Amended Master Plan will comply with the then-current Town of Jackson Design Guidelines. The Town Design Guidelines were written and adopted after the original Millward and Simpson PMD Master Plan approval, and are wholly consistent with design intent and substantially similar in prescriptive language to the original Millward and Simpson PMD Master Plan design guidelines. Compliance with the Town Design Guidelines is intended to coordinate with current Town regulations and simplify the review of FDP applications under the Amended Master Plan.

### **General character and design.**

The Amended Master Plan is envisioned to allow, in its simplest form, a redevelopment of this low-density, relatively-low-aesthetic-quality area that is slightly off the beaten path into a vibrant pedestrian-oriented anchor to the neighborhood. The position of the Amended Master Plan area is key to defining the appropriate character. The Master Plan site is not on the Town Square, nor is it in the residential neighborhoods to the south; the proposed Amended Master Plan sits along a line of transition that makes it an appropriate location for short term rental lodging development of an urban character, offices and retail businesses that cater to visitors as well as local residents, and restaurant space that compliments the adjacent Center for the Arts.

The following objectives were established in Chapter 6 of the Jackson / Teton County Comprehensive Plan addressing Commercial and Resort Development:

- To achieve commercial development which is sensitive to the scale and character of Teton County and which minimizes disruption of existing neighborhoods.
- To ensure that commercial development places the most minimal possible economic and natural resource demands on the community.
- To control sprawl and strip commercial development, and to provide for the effective control of commercial signs.
- To develop effective mechanisms for providing employee housing.
- To encourage the continuation of ranching and to minimize the disruption of agricultural activities by new development.
- To encourage further economic growth only when the higher priority objectives of community character, natural resources, and affordable housing are achieved.
- To allow resort expansion only in a community-wide context, and to achieve balance between the community and the resorts.

Additionally, the following neighborhood concerns were identified as part of the community vision:

- Safe, secure residential neighborhoods with quiet streets.
- A variety of housing types to support a diverse community.
- An efficient transportation system which is safe for pedestrians and cyclists as well as vehicles.

- A vital, pedestrian-oriented downtown area which welcomes both visitors and locals.
- Major streets which are attractive and set a positive community image.
- Residential and commercial buildings which reflect Jackson's heritage, character, and image.

Factors and characteristics that are important to the proposed Amended Master Plan include:

- Making use of the opportunity to re-develop the land to a much higher use and aesthetic value
- Capitalizing on the strengths of this slightly off-center location and the ability to provide elements that are missing in the downtown core
- Creating an active, attractive, pedestrian streetscape along Simpson Avenue, Millward, & Glenwood Streets
- Making attractive, safe and direct pedestrian connections to Pearl Avenue & the Town Square to the north, the Center for the Arts to the east, and the adjacent neighborhoods to the south and west
- Providing attractive screening for the Town Parking Lot on the east side of Glenwood & Simpson, providing a more comfortable and inviting pedestrian streetscape
- Minimizing conflicts between pedestrians and vehicles, both parked and moving
- Putting parking in its place; finding ways to provide efficient and convenient parking that will not dominate the street frontage, thereby allowing the development to create an inviting pedestrian realm
- Creating a porous streetscape throughout the development that encourages pedestrian movement into and through the area
- Providing for a continuity of architecture and activities within the Amended Master Plan area, creating a multi-use sense of place

The proposed Amended Master Plan framework allows the opportunity to address all of the above objectives and provide positive additions to the fabric of the Town. The type of development allowed, the position of development in its context within the Town and the ability to respond to the above objectives combine to make the proposed Amended Master Plan an excellent vehicle to allow the continued evolution and strengthening of the Town's character. The following design objectives address these concerns and goals in further detail.

**Character and design objectives.**

The design intent of the Amended Master Plan shall have an emphasis on communicating integration, pedestrian circulation, and creating "a sense of place". A "sense of place" is created when site planning and architecture:

- Create spaces for gathering and activities;
- Create buildings and spaces with complimentary uses, character, scale, design and materials;
- Incorporate the natural features and cultural heritage of the area within the design; and
- Reflect the western architectural styles and themes of the region.



Development shall be compatible with the surrounding built and allowable environment in both scale and character.

## ***Transportation Summary***

### **Traffic Impact Analysis**

#### **I. Introduction**

The following analysis was part of the approved original Millward + Simpson PMD Master Plan. The same analysis is proposed to be used under the Amended Master Plan to determine the amount of additional traffic that will be generated by the Amended Master Plan, and to identify the impacts this incremental increase in traffic may have on the surrounding roadway network. This section describes the procedure for performing the analysis, and summarizes the findings.

#### **II. Project Location**

The location of the Amended Master Plan has significant bearing on the impacts to traffic and the community. Located within 2 blocks of Town Square, this Amended Master Plan is located in the downtown core. It is in close proximity to other motels/hotels, commercial businesses, professional offices, and retail stores. It is across the street from the Center for the Arts (CCA). The CCA houses a 500 seat theatre, conference room spaces, and 19 non-profit art and education organizations and hosts numerous events, classes, exhibits, and meetings throughout the year attracting residents and visitors alike. As such, the mixed-use nature of the proposal is consistent with downtown developments. Close proximity to where people live, shop, eat, socialize, and work makes this location much more appropriate than other locations further west in Town and throughout the County. It is consistent with the Town's Comprehensive Plan. Increased density in Town will increase the total number of trips made in Town. However, it is important to realize that a majority of these trips will be of shorter distances, thereby increasing the ability for these trips to be made by walking, biking, and transit. For this reason an increase in downtown density would not be expected to create increased traffic volumes to the same extent as development outside the downtown area. A great many of the vehicle trips that do originate from downtown will be non-peak and/or in the reverse direction of peak flows. In addition, this area of Town has a gridded roadway network allowing route choices depending on congestion, time of day, etc. Unfortunately, traffic congestion in Town is somewhat inevitable if Town is to remain a vibrant center. However, many more choices are available to alleviate this congestion in the Town center than in locations outside the Town center.

### III. Traffic Counts

Traffic counts at key intersections were conducted in summer 2002 at the time of the original Master Plan submission. Morning and evening peak hour traffic counts were performed at the Pearl Avenue intersections of Jackson Street, Millward Street, and Glenwood Street; the West Kelly Avenue and Jackson Street Intersection; and the Snow King intersections of Millward Street and Glenwood Street. These intersections are referred to as the study intersections. The counts were made in fifteen-minute intervals between the hours of 7:00 and 9:00 A.M and 4:00 and 6:00 P.M. on June 12, 13, and 14, 2001 (Tuesday, Wednesday, and Thursday). For each intersection, the A.M. and P.M. peak hours were determined by identifying the four consecutive fifteen-minute intervals that totaled the highest amount of traffic.

### IV. Trip Generation

The trip generation of the Amended Master Plan was calculated using the *ITE Trip Generation 7<sup>th</sup> Edition* manual, which identifies generation rates for specific land uses. Because the proposed development is spread out among two (2) town blocks, trip generation and distribution was conducted for each block separately. For this study, Phase Two - Block 2 is the northeast block (2 Glenwood lots) and Phase One - Block 3 is the southeast block (six Simpson lots). The trips generated by the existing land uses were subtracted from the trips generated by the proposed Amended Master Plan to determine the incremental increase caused by this development. These trips were then distributed on the adjacent street network based on our best assumption of travel directions to and from the Amended Master Plan. At the study intersections, the trips were assigned directionally based on the directional splits identified during the turning movement counts. The trip generations for the existing conditions and the Amended Master Plan are summarized in the tables below.

#### EXISTING TRIP GENERATION

ITE Trip Gen. Manual Land Use	Units	Units	AM Peak Hour Rate	Total Trips	PM Peak Hour Rate	Total Trips
<b>Phase Two - BLOCK 2</b>						
Motel (320)	rooms	10	0.64	7	0.58	6
<b>Total Trips Generated</b>				<b>7</b>		<b>6</b>
<b>Phase One - BLOCK 3</b>						
Motel (320)	rooms	29	0.64	19	0.58	17
Residential (220)	D.U.	6	0.51	3	0.62	4
<b>Total Trips Generated</b>				<b>22</b>		<b>21</b>

Trip generation for the Amended Master Plan has been developed based on the Master Plan included in this submittal. It represents the best estimate available based on the amended Master Plan. Many of the ITE Land Use trip generations assume non-integrated development patterns. In other words, they do not anticipate integrated developments such as this one that contain a certain amount of interdependency (i.e. a resident of the PMD that works in an office or restaurant within the Amended Master Plan). The table below identifies trip generation rates for the land uses that will reside within the Amended Master Plan as identified in the *ITE Trip Generation 7<sup>th</sup> Edition* manual. Consistent with the Parking Analysis, it also shows a modal factor that takes the location and mixed-use nature of this development into account. For example, for the residential component, we are reducing the generation rate by 25% to account for the amount of non-vehicular trip making that occurs in Town. As discussed below in the Transportation Demand Management section, the Teton County Travel Study 2001 identifies Town residents making 54% of all trips by modes other than single occupant vehicles. Furthermore, it is expected that a large proportion of the employee housing residents will be employed by businesses within the Amended Master Plan; this makes for an easy commute by foot. Based on this information and our experience with employees of businesses in this vicinity, we believe the mode splits assumed below are appropriate.

PROPOSED DEVELOPMENT LAND USES

	ITE Trip Generation, 6th Edition Land Use	Independent Variable	AM Peak Hour Rate	PM Peak Hour Rate	Mode Split	Adjusted AM Peak Rate	Adjusted PM Peak Rate
Market Residential	(230) Residential Condominium/Townhouse	Dwelling Unit	0.44	0.54	75%	0.33	0.41
Employee Housing	(220) Apartment	Dwelling Unit	0.51	0.62	75%	0.38	0.47
Retail	(814) Specialty Retail Center	1000 sf	6.41	4.93	75%	4.81	3.70
Hotel	(310) Hotel	Rooms	0.67	0.71	80%	0.54	0.57
Restaurant	(831) Quality Restaurant	1000 sf	0.81	7.49	38%	0.31	2.85

The trip generation for the Amended Master Plan is shown in the tables below.

PROPOSED TRIP GENERATION

Land Use	Units	Units	AM Peak Hour		PM Peak Hour	
			Rate	Total Trips	Rate	Total Trips
<b>Phase Two - BLOCK 2</b>						
Residential (230)	D.U.	13	0.33	5	0.41	6
Residential (220)	D.U.	4	0.38	2	0.47	2
Retail Space (814)	1000 sf	5.83	4.81	28	3.70	22
<b>Total Trips Generated</b>				<b>35</b>		<b>30</b>
<b>Phase One - BLOCK 3</b>						
Hotel (310)	rooms	121	0.54	65	0.57	69
Residential (220)	D.U.	3+Dorm	0.38	6	0.47	2
Residential (230)	D.U.	9	0.33	3	0.41	4
Restaurant (831)	1000 sf	3.04	0.31	1	2.85	9
<b>Total Trips Generated</b>				<b>75</b>		<b>84</b>

**VI. Level of Service Analysis**

In the 2001 Traffic Impact Study, capacity analysis was performed for the following adjacent street intersections:

Pearl / Jackson (NB / SB)  
Pearl / Millward  
Pearl / Glenwood (NB / SB)  
W Kelly / Jackson (NB / SB)  
Snow King / Millward  
Snow King / Glenwood (NB / SB)

The level of service (LOS) of these intersections did not fall below LOS C. Given that the traffic generated by the Amended Master Plan is estimated to be less than that used in the original analysis, the Amended Master Plan will not degrade the LOS at these intersections beyond LOS C.

**Transportation Demand Management**

The purpose of the Transportation Demand Management Plan is to demonstrate how the travel behavior of visitors and employees generated by the plan will be managed to minimize the number of vehicle trips on the roadway network resulting from the development.

The location of this particular development will play a large role in the ability to manage travel behavior. The Amended Master Plan is consistent with the recently adopted (May 2012) Jackson/Teton County Comprehensive Plan. Section 7: Multimodal Transportation is based upon residents and visitors safely, efficiently, and economically moving throughout the region using alternative modes. The Amended Master Plan proposes residential, retail, lodging, restaurant and office professional. Located within two blocks of Town Square, adjacent to the Center for the Arts, in the vicinity of several professional and public offices, and close to a number of commercial businesses and hotels/motels, the Amended Master Plan will, by its very location, encourage trips by modes other than the single occupant vehicles. The Amended Master Plan is consistent with Principle 7.3 - Coordinate land use and transportation plan of the Comprehensive plan. Dense, mixed-use development patterns as proposed with this Amended Master Plan promote this principle. The Amended Master Plan location is within the town core area, and is consistent with Strategy 7.3.S.1 which states "Reevaluate parking standards and other regulations that currently promote travel by single occupant vehicles". Consistent with measures included in the Teton Village Master Plan, the parking requirement has been limited to 0.75 spaces per room to promote the use of other modes. The Teton Village Master Plan has been very successful in reducing the rate of traffic growth on WY390. The Amended Master Plan is within 2 blocks of the nearest START Bus stop.

The Teton County Travel Study 2001 identifies Town residents making 54% of all trips by modes other than single occupant vehicle. As an anecdotal comparison, an informal survey

of employees of the three firms previously working on this project (Design Workshop, Carney Architects, and Jorgensen Engineering and Land Surveying, P.C.) was performed. The three firms all had or have offices within 3 blocks of the subject PMD, and are business types that are likely to reside within the Amended Master Plan area. In a poll of these firms, 15 out of 51, or 29.4% full time employees either bike or walk to work almost daily, year-round. By comparison, the Travel Study conducted in 1996 as part of the Jackson Hole Transportation Planning Process identified a modal split of only 15% of all trips for biking and walking in Town and County. In addition, Chapter 8 – Transportation of the former Teton County/Town of Jackson Comprehensive Plan (included as Appendix E of the current Comprehensive Plan) targets a goal of 23% for biking and walking. 19 of these firm's employees reside within 1 mile of their respective offices, which is an ideal distance for getting to work by modes other than a single occupant vehicle year-round. We strongly believe that this specific development is in concert with the Comprehensive Plan. We therefore believe any type of monitoring of the travel demand management program is unnecessary.

The businesses and residents within the Amended Master Plan will be encouraged to utilize modes other than the single occupant vehicle. Potential measures for the Transportation Demand Management Plan that will be explored are:

- Communicating that a vehicle is not necessary for hotel visitors in promotional materials based on location and availability of START Bus.
- Providing an airport shuttle during peak season.
- Purchasing START passes for employees (particularly those residing out of the downtown area).
- On-site shower and locker facilities for employees.

## **Shared Parking Formula**

### **Summary**

The shared parking formula shall be applied to each FDP proposal under the Amended Master Plan to determine the peak parking demand of that Phase.

Application of the shared parking formula produces a reasonable calculation of peak parking demand for the proposed mix of uses. This formula shall be the acceptable calculation to determine the peak parking requirement for future Final Development Plan applications.

### **Methodology**

The shared parking formula has been developed following the shared parking model developed by the Urban Land Institute (ULI), with modifications as suggested by the Institute of Traffic Engineers (ITE). This methodology follows four steps:

- Project Review
- Adjustment for Peak Parking Factor (Parking Generation Rates)
- Analysis of Hourly Accumulation
- Shared Parking Formula

The assumptions underlying each of the four steps are described in more detail below:

### 1. Project Review

Potential Master Plan development includes offices, commercial/retail space, restaurant/lounge, employee housing, one-, two- and three-bedroom short term rental lodging units, and a hotel with meeting space. The number of units and square footages for each use will be part of future Final Development Plan applications for each Phase.

### 2. Adjustment for Peak Parking Factor (Parking Generation Rates)

The following parking demand generation rates shall be used for the shared parking formula:

use	spaces per unit	spaces per X/SF
a. Residential / Lodging 1-Bed	1.0/unit	
a. Residential / Lodging 2-Bed	1.0/unit	
a. Residential / Lodging 3-Bed	1.0/unit	
a. Employee Housing 1-Bed	1.5/unit	
a. Employee Housing 2-Bed	1.5/unit	
a. Employee Housing Dormitory	0.5/BR	
b. Office		2.2/1,000 SF
b. Retail		3/1,000 SF
c. Restaurant	0.2/seat	
d. Hotel (w/conference space) - rooms	0.75/room	
d. Assembly Space		1/150 SF

#### a. Residential Parking Generation ratios.

These ratios are based on the ULI Shared Parking study of actual residential parking demand within mixed-use developments:

"In remote *suburban* areas, the average peak demand was 1.5 vehicles per occupied unit, with a range of 1.2 to 1.85... in other areas, the average peak was 0.5 vehicles per occupied unit, with a range of 0.35 to 1.0"

Given its urban location, the Amended Master Plan uses the upper range of the "other area" ratio, or 1.0 vehicles per occupied unit for the short term rental unit program.. Given the center-of-town location and hotel relationship there is likely to be a significantly reduced use of second and third vehicles for these units – making it likely that this rate proves to err well on the conservative side.

#### b. Office and Retail Parking Generation ratios:

These ratios are taken from "Table 2.5 – Downtown Parking Generation Rates" in The Parking Handbook for Small Communities, published by the Institute of Transportation Engineers (ITE) in 1994. In their discussion of generation rates they caution:

"*Parking generation rates* have been determined empirically by surveying typical building uses. Table 2.5 illustrates typical parking generation rates taken from a number of studies of downtown parking over the past 20 years. These rates represent the peak number of parkers likely to patronize a

specific use in a downtown location. *Be sure to use parking generation rates for downtown as opposed to suburban rates, since the latter are much higher and do not reflect the multi-purpose vehicle trips typical of people who drive downtown.*" (Their italics)

Note that while the table gives a parking generation ratio of 2 spaces per 1000 sf retail space, we have opted to use the more conservative rate of 3 spaces per 1000 sf; this is equivalent to the rate given for banks. Without knowing the exact mix of commercial retail tenants that may be in Phase Two of the Master Plan development, it is prudent to use a more conservative generation ratio for this space.

**c. Restaurant Parking Generation ratio:**

As there is no downtown generation rate given for restaurant uses in the study mentioned above, we have proposed a ratio of 1 parking space per 5 seats. This reduction of the parking requirement from what is currently called for in the Town's LDR's follows the same reasoning for reduced parking demand generation in downtown locations put forth by the ITE. As a comparison, the following table compares the restaurant parking ratios utilized by similar mountain communities:

	Restaurant Parking Ratio	Equivalent Ratio per Seat (based on 20sf/seat)
Town of Jackson	1/55SF dining area	1:2.75 seats
Telluride, CO	1/500sf seating area	1:25 seats
Vail, CO	1/250 sf seating area	1:12.5 seats
Aspen, CO	1/500sf gross area	1:12.5 seats

**d. Hotel Parking Generation Ratios:**

The Amended Master Plan location is within the town core area, and is consistent with Strategy 7.3.S.1: Reevaluate parking standards and other regulations that currently promote travel by single occupant vehicles by reducing the parking requirement to 0.75 spaces per room. An 80% maximum auto use is expected, which equates to a 20% mode split for the parking demand generated per hotel room. Please see the discussion of mode split below.

**e. Seasonal and Time-of-Day demand adjustment factors:**

The shared parking analysis uses the seasonal and time-of-day factors given for the methodology presented in Shared Parking by the ULI. Adjustments have been made to these factors that will in fact produce a more conservative result:

**e1. Seasonal:**

The parking demand ratio for Retail space has been increased 25% to reflect the fact that Jackson retail businesses experience their peak season in the summer (as opposed to the more typical December retail peak). This brings the seasonal factor to 100%, which also reflects the less seasonal nature of the retail businesses likely to occupy this space.



**e2. Time of Day:**

The parking demand ratio for Restaurant space has been increased 10% for the 1:00pm generation table to reflect the fact that a restaurant in this location will likely do a greater-than-average lunch business.

**f. Mode Split:**

As discussed under Transportation Demand Management, three businesses within the neighborhood of the proposed PMD were polled to determine the rate of vehicular use by employees. The results suggest that roughly 29% of the people working in this neighborhood either walk or bike to work, and 37% live within walking distance. It is suggested that a 25% non-vehicular mode split is a conservative assumption.

- Note that this mode split is not the same as a reduction for multi-purpose trips characteristic of a downtown location (multi-purpose trips are part of the reasoning behind the base parking generation rates given by the ITE discussed in 1.b, above, and are factored into those rates). Rather, the mode split accounts for those people who do not use a vehicle to arrive at the offices, retail or restaurant spaces within the Amended Master Plan; who choose to leave their cars at home or place of lodging. For this reason, mode split is not factored into the parking demand for residential, short term lodging or employee housing units; when these people choose not to drive, their vehicles will remain at home and require parking spaces. A mode split of 20% has been factored into the hotel room calculations as recommended by the ULI study.
- The reasoning behind applying a 25% non-vehicular mode split to the restaurant parking requirement is twofold: first, to account for the proportion of restaurant patrons who live and work in close proximity (similar to the segment accounted for in the office & retail mode split). Second, to account for the significant amount of lodging units within walking distance, which can be assumed to generate a portion of the total restaurant patrons - especially at peak season. The presence of significant quantities of lodging within and near the Amended Master Plan will also provide a captive market for the proposed retail that will further increase the expected mode split.
- Because of the capture of patronage by internal guests, the mode split of the restaurant within the hotel takes the 25% non-vehicular trip rate assumed for the rest of the development multiplied by an assumed 50% guest patronage. The ULI study recommends an even higher assumption of internal captive market effect: "For hotel guests, the potential for market synergy appears stronger... the questionnaire data indicated strong links between hotel guests and nearby restaurant or retail land uses (within or adjacent to the hotel). For eight hotels, 73 to 100 percent of the guests indicated they were also patrons of retail establishments and/or restaurants. Results for six hotels indicated a smaller range, 80 to 90 percent. These results appeared to be consistent for both downtown and suburban hotels."
- It is also worth noting that although hard to quantify, restaurants in this location will likely capture a significant number of their patrons from the pre- and post-theater

crowd at the Center for the Arts across the street. Parking for these patrons will have already been provided. This captive market segment would suggest a further reduction in the total parking demand generated by the restaurants.

- The 2001 Teton County Travel Study identifies the current modal split for the whole Town of Jackson as 26% non-auto.
- The Travel Study also identifies that the modal split rises to 67% for all trips less than ½ mile; given that a ½ mile radius from this project encompasses most of the lodging and a significant portion of housing in town, it would suggest that a 25% modal split is actually quite conservative.
- There is some precedent for using the modal split projections found in Chapter 8 of the Comprehensive Plan as a basis for planning; the 2030 projection of a 28% modal split is assumed in the Transportation Impact Study that has been submitted for the Porter Trust Lands Master Plan. We chose to use a more conservative factor in our calculations.

**3. Analysis of Hourly Accumulation**

Once a baseline of peak demand by use has been established, the parking requirements of each use are analyzed for time of day, day of the week and seasonal cycles of demand.

**4. Shared Parking Formula**

The shared parking analysis follows the methodology established by the Urban Land Institute (ULI). This methodology hinges on a series of calculations based on the following formula:

□

□

□

□

□

Area  
or  
# Units

×

Seasonal  
Adjustment  
Factor

×

Time-  
of-Day  
Factor

×

Mode  
Split

×

= Parking Demand

This formula shall establish the peak parking demand for each Phase of the Amended Master Plan. Each Phase of the Amended Master Plan will include the peak parking demand calculation for that Phase as part of each individual FDP applications.

**5. Parking Requirement Calculation**

It was determined as part of the original Master Plan approval that the month of July at 9:00pm was the season and time resulting in a peak parking demand. The rates/factors for Parking Generation, Seasonal, Time of Day and Mode Split that shall be used to determine the parking requirement for future Final Development Plan applications shall be as follows:

Use				
Short term Lodging/Res. 1-Bed	1	98%	100%	1
Short term Lodging/Res. 2-Bed	1	98%	100%	1
Short term Lodging/Res. 3-Bed	1	98%	100%	1
Employee Housing Unit	1.5	98%	100%	1
Employee Dorm	0.5	98%	100%	1
Office	0.0022	3%	100%	0.75
Retail	0.003	61%	100%	0.75
Restaurant	0.2	100%	100%	0.75
Hotel (w/ meeting space) - rooms	0.75	95%	100%	0.8
Hotel - Meeting space	1/150SF	100%	100%	0.8

**A note on assumptions:**

The intent of the shared parking analysis is to arrive at a conservative yet realistic determination of parking demand. The following assumptions have been made which lead the analysis to err on the conservative side, raising the level of confidence that the development will be adequately parked by allowing a sizable margin of error:

- None of the **adjacent on-street parking spaces** will be included in the tally of parking supply to meet the parking requirement – providing a sizable buffer. While the development must meet the entire parking requirement on site, these on-street spaces will likely serve as convenient short-term spaces for visitors, guests and patrons of the development.
- The base generation rates for residential units of 1.0/unit are double the “other area” (read urban) average peak parking demand for multi-family housing of 0.5 spaces/unit measured by the ULI study. The resulting calculations for peak demand are conservatively high for this use.
- The projected parking demand for the hotel assumes 100% occupancy. According to statistics compiled by the Jackson Hole Chamber of Commerce, summertime peak lodging occupancy for downtown Jackson averaged, over the last 3 years, 79%. Our assumption of maximum occupancy results in a conservative projected demand for the hotel.
- Standard traffic engineering practice is to plan for 85% of peak demand. Traffic counts completed as part of the background study of the Teton County / Town of Jackson Transportation Plan indicated that 10 months of the year see traffic that is never more than 75% of the peak. This shared parking analysis, however, makes no seasonal adjustment. The analysis identifies the peak demand at the highest seasonal peak; from 7:00 pm to 9:00 pm in the first two weeks of July. This peak demand occurs for 0.3% of the calendar year. As discussed above, there is evidence to suggest that the 25% mode split used in this analysis is quite conservative; the 2001 Teton County Travel Study suggests that the mode split for this location may be as high as 67%.

Based on the conservative assumptions, no monitoring is proposed for parking use within the Amended Master Plan development area.

### **Housing Mitigation Plan**

The Amended Master Plan will address the Employee housing demand created by this development, as required by Section 49500 of the Town of Jackson LDR's and Teton County Housing Authority regulations outlining the provision of Employee housing.

Employee housing shall be provided in conjunction with nonresidential development pursuant to Division 49500 Employee Housing Standards of the current LDR's at the time of submission of Final Development Plan applications, with the exception of the following:

Fee in-lieu payment shall not be permitted as a method of providing required employee housing with the exception of satisfying a fractional requirement.

The number of employees required to be housed and the location where they will be housed shall be finalized as Final Development Plans within the Amended Master Plan are reviewed and acted upon. Each approved Final Development Plan shall establish the square footage of employee housing required in accordance with applicable regulations and the locations in which they will be housed for that portion of the Amended Master Plan.

Requirements of the Town of Jackson applicable at the time of FDP application shall be the regulations applicable to any Final Development Plan application actually filed by the applicant or their successors.

For units provided on-site it is proposed that the developer may retain title to the employee housing units and make them available for rent with preference for employees of businesses within the Amended Master Plan, according to the LDR's and the Housing Authority's guidelines. Alternately, the employee housing units might be deed-restricted according to the requirements of the LDR's and sold.

## Capital Improvements Plan

### Stormwater Summary

The proposed West Simpson Avenue and East Millward Street Amended Master Plan will be located on Lots 11-12 of Block 2, , and Lots 1 through 6 of Block 7 of the Second Wort Addition in the Town of Jackson.

Existing surface areas within the proposed Amended Master Plan include gravel and paved parking areas, building roofs, concrete walkways, and lawns and other related landscaping. Presently, stormwater runoff flows in west-southwest direction off-site to West Simpson Avenue and to the alley between West Simpson Avenue and West Hansen Avenue. Eventually, the stormwater runoff enters the Town of Jackson stormwater line on South Clissold Street, which conveys the stormwater to the "Kelly Tube" under West Kelly Avenue.

Development and design requirements for stormwater management within the Town of Jackson are contained in the Town of Jackson Land Development Regulations (LDR's), Section 4910 General Provisions and Section 4920 Design Requirements for Stormwater Management Facilities. Currently, these provisions allow post-development stormwater flows to be released from a proposed development at a rate equal to or lower than the pre-development runoff rate. These requirements also state that *"No development or subdivision shall cause adjacent landowners, water courses, or conduits to receive stormwater runoff from the proposed development site at a higher peak flow rate or at higher velocities than would have resulted from the same storm event occurring over the site of the proposed subdivision and/or development with the land in its previous condition"*.

Overall, the proposed Amended Master Plan will reduce the current total of pervious surface area. Small courtyards and landscaped areas are planned so that some pervious surface area will be incorporated within the Amended Master Plan. Onsite parking will primarily be sited in underground parking garages beneath large portions of each block. Post-development stormwater flows will be routed away from underground parking ramps and properties that are not included in the Amended Master Plan. Handling drainage from the parking garages will be coordinated with the Architect. Most likely it will be pumped from the garage; however, a sub-floor percolation drain may be viable pending further investigation of soil conditions. Stormwater from underground parking areas should be the only water requiring on-site cleaning; the rest is roof runoff and other basically 'clean' water. The lack of groundwater at this site makes foundation drain requirements minimal.

### Stormwater Analysis Summary

The stormwater analysis, completed by Jorgensen Associates, P.C., is summarized in the following tables:

**Block 2 – Lots 7 thru 12:**

Basin 7: (Existing Town of Jackson Public Parking, not part of proposed AMENDED MASTER PLAN)

Storm Frequency (years)	Post Development Peak Flow (ft <sup>3</sup> /s)	Allowable Release (ft <sup>3</sup> /s)	Projected Total Inflow (ft <sup>3</sup> )	Minimum Required Storage (ft <sup>3</sup> )	Post-
10	0.92	0.92	2,866	0	
25	1.10	1.10	3,057	0	
50	1.29	1.29	3,451	0	
100	1.53	1.53	3,981	0	

**Development Basin 3**

Storm Frequency (years)	Post Development Peak Flow (ft <sup>3</sup> /s)	Allowable Release "Pre" 100-Year (ft <sup>3</sup> /s)	Projected Total Inflow (ft <sup>3</sup> )	Minimum Required Storage (ft <sup>3</sup> )	Block 7 – Lots 1 thru 6: Post-
10	0.55	0.52	164	8	
25	0.66	0.52	197	41	
50	0.77	0.52	444	148	
100	0.91	0.52	575	217	

**Development Basin 5**

Storm Frequency (years)	Post Development Peak Flow (ft <sup>3</sup> /s)	Allowable Release "Pre" 100-Year (ft <sup>3</sup> /s)	Projected Total Inflow (ft <sup>3</sup> )	Minimum Required Storage (ft <sup>3</sup> )
10	1.62	1.58	485	11
25	1.94	1.58	582	108
50	2.26	1.58	1,255	402
100	2.69	1.58	1,649	606

In general, two concepts are available for handling stormwater generated at the Amended Master Plan. The first, which is in keeping with the LDR's, consists of mitigating the Amended Master Plan's stormwater impacts onsite. The existing stormwater runoff patterns into the public rights of way would generally neither be improved nor worsened. The second concept would involve a more urban treatment. Rather than providing for stormwater management onsite, the stormwater would be tied to a public system much like urban water and sewer systems. The discussion below presents an overview of both approaches.

### ***Onsite Stormwater Management***

In order to maintain the post-development runoff rate from the proposed Amended Master Plan that is equal to or lower than the pre-development runoff rate, stormwater facilities for storage and controlled releases will be required.

More often than not, the choices for stormwater retention facilities within an urban development are somewhat limited. This is most always due to a lack of sufficient area in which to place these structures. The calculated post-development minimum required storage volumes for this proposed Amended Master Plan are not especially large and are proposed as subsurface or underground storage.

Two approaches to underground stormwater storage facilities have been used in the Town of Jackson with good results.

Perforated 24-inch diameter, or larger, CMP set in 1.5- to 2-inch washed rock. The perforated CMP and washed rock occupy an excavation of desired volume and dimension. The entire structure is lined with a geotextile fabric to reduce silt from entering the washed rock and allow the stormwater to exfiltrate into the underlying soil.

Subsurface chambered stormwater storage systems such as *The Infiltrator* or *Rainstore*<sup>3</sup>. The advantage of these types of stormwater storage systems is the reduction of the amount of washed rock that otherwise would be considered necessary. Typically, the washed rock occupies approximately 65% of the total void area or volume, which only leaves about 35% available for storage. Storage chambers can be used in place of the washed rock increasing the total storage volume available for the same area. As with the CMP-washed rock systems, these systems are lined with a geotextile fabric to help control siltation and allow the stormwater to exfiltrate into the surrounding soil. These chambers also have the advantage of different configurations such as trench and bed layouts and stacking or layering.

As with any subsurface retention or detention structure, careful consideration must be taken to incorporate up-stream sediment traps to handle siltation before it enters the system. In a retention storage system, the complete runoff volume is stored and exfiltrated into the underlying soil. The long-term effects of siltation clog the infiltrative surface of the soil reducing permeability. Accumulated silt within the system also reduces the total available

storage volume. In addition to sediment traps an overflow structure is recommended to handle storm events greater than the design storm and frequency.

Detention systems are similar to retention systems except that stormwater is held for later release through a normal outflow such as a storm sewer or curb and gutter. The goal of the detention system is to store runoff during peak storm conditions and slowly meter the outflow into an existing drainage system. By providing an outlet structure the risks of depending on total infiltration are eliminated.

Providing good accessibility to these structures is necessary as it permits easier maintenance. Without proper maintenance, system performance may be affected. Ice, snow, leaves and silt, if allowed to accumulate, may clog the system. Localized flooding can occur and aesthetic qualities may be affected.

### ***Public Stormwater Management***

Presently, the Town of Jackson is developing a Surface Water Drainage Infrastructure Master Plan that is intended to develop further public stormwater infrastructure while developing an assessment program whereby new development and re-development share in the cost of establishing new infrastructure, and maintaining existing infrastructure. Consistent with this program, we propose that the entire stormwater volume generated by this development be conveyed to the public stormwater infrastructure in a manner that does not have adverse impacts on the system. We propose developing a stormwater master plan for this specific project whereby we will develop an equitable assessment to this development for the impacts of the additional post-development runoff. We may determine that it is more cost effective and equitable for the Amended Master Plan to construct portions of public stormwater infrastructure in lieu of constructing a system that interconnects each detention/retention facility across public right of way.

The stormwater analysis indicates that the post development volume of stormwater generated by the Amended Master Plan will not adversely impact the existing infrastructure. Constructing a new stormwater line from the Amended Master Plan to the line in Glenwood appears viable. Handling the stormwater conveyed from the Town parking lot, which currently flows to the adjacent streets will also be taken into consideration. Coordination is required with the Town Engineer to determine the stormwater infrastructure requirements, the actual assessment methodology and amount, and when and how payment would be required. Ideally, the timing of this particular Amended Master Plan will be in line with the adoption of a Stormwater Master Plan by the Town of Jackson.

### ***Conclusions and Recommendations***

Discussions with the Town during the Pre-application Conference indicate that the Surface Water Drainage Infrastructure Master Plan faces an uncertain future. Therefore, we propose developing a stormwater line that conveys stormwater from all of the area encompassed by the Amended Master Plan (the Amended Master Plan lots and adjacent public streets and



alleys) to the existing stormwater line in Glenwood. Accommodating the stormwater from the Town public streets will be considered equitable compensation for the Town allowing the Amended Master Plan access to the public stormwater system.

The advantage of densely developed, urban development patterns is that they can be served by community infrastructure. Requiring stormwater to be managed onsite in an urban area is similar to requiring water to be provided by individual wells or sewer to be handled in septic systems, neither of which are either practical or environmentally sound solutions. The Amended Master Plan regulations allow multiple Town lots to be planned in a cohesive, mixed-use pattern that results in well-designed developments that enhance and promote urban centers. We recommend designing a stormwater management system that effectively and efficiently conveys the stormwater to the Town system, while meeting the requirements of future NPDES regulations and the considerations of the Stormwater Management Plan of the Town of Jackson.

### **Utility Summary**

Existing utilities in the area consist of waterlines, sanitary sewer lines, gas lines, communication lines, and overhead power lines. Town of Jackson water mains run in Millward Street, Jackson Street, and Simpson Avenue. The project will coordinate with the Town of Jackson to identify appropriate water service tap locations. The water mains within Simpson and Glenwood were upgraded to 8" ductile iron pipe in 2004-2005. Based on the size of the lines, it is expected that adequate capacity is available. An analysis of the capacity will be conducted as part of the Wyoming DEQ Permit to Construct Water application.

The alleys between Pearl and Simpson and Simpson and Hansen contain utilities including sanitary sewer, gas, overhead power, and communication lines. Sewer, underground telephone, gas, and overhead power also run along Jackson Street. Confirmation on the adequacy of sewer lines to handle flows from the proposed Amended Master Plan will be provided as part of the DEQ Permit to Construct Water and Wastewater. Connection to the sanitary sewer lines will be coordinated with the Town of Jackson to identify appropriate tap locations. The project will coordinate with Lower Valley Energy to identify exact gas and power line locations within the alley and potential connection locations. The project will coordinate with Qwest to identify optimal connection locations as well.

At this time, it is uncertain as to the limits of Amended Master Plan impacts within public right of way. It is assumed that the developer of each individual FDP application within the Amended Master Plan will pay for the associated surface impacts (sidewalks, curb and gutters, pavement, etc.) of the development proposal. Should the limits of the project impacts extend into the street such that pavement removal is required, water and sewer lines within the street will be evaluated for replacement. The cost of upgrading any water and/or lines within the public right of way due to poor physical condition will be reviewed with the Town of Jackson. We would anticipate upgrades necessary due to poor physical pipe condition to be paid for by the Town from the water and sewer general fund. The Amended Master Plan desires to have the cost of improvements made to the public sewer and/or water

systems by the Amended Master Plan due to insufficient capacity to be credited towards the required tap fees, as these improvements may benefit other people served by the system. The construction would be administered by the Amended Master Plan as part of the overall project. This proposal may prove irrelevant if the existing system is of sufficient capacity, which will be determined as the utility demands of each phase of the Amended Master Plan are more specifically defined within each FDP application.

## Phasing Plan

The sequence in which the various projects within the Amended Master Plan are likely to be constructed will ultimately be determined by such things as the state of the regional real-estate market, project financing, and the timing of other developments in Jackson. It is required that the redevelopment proposed in the Amended Master Plan would be phased per the conditions of the Extension Agreement which are summarized as follows:

*The PMD Master Plan expiration date is established as March 18, 2015 and that within this time period a Final Development Plan (FDP) would be approved by the Town for Phase One - a six lot hotel development by SKB, an associated Building Permit for the FDP would be submitted and upon issuance the applicant would commence construction on Phase One within sixty (60) days of issuance of the building permit with continuous progress to completion. Should these conditions of the extension be satisfied, an additional two (2) year increment would be allowed beginning on the date of the issuance of a certificate of occupancy for Phase One under the same conditions to allow for the development of Phase Two - the remaining two(2) lots. Should at any time the conditions of the extension not be satisfied, the Master Plan would expire and all unvested and unexercised rights established by the Master Plan would lapse and all the remaining lands would thereafter be subject to the then applicable Land Development Regulations. Conditions of the extension would be as follows:*

- 1. The applicant shall submit an amendment to the Master Plan removing the ten (10) lots located on the west side of Millward Street from the Master Plan. Said amendment shall be reviewed and approved by Town Council prior to any additional approvals under the Master Plan. Should the Master Plan Amendment not be approved, the Master Plan would expire and all unvested and unexercised rights established by the Master Plan would lapse and all the remaining lands would thereafter be subject to the then applicable Land Development Regulations.*
- 2. SKB would be allowed to proceed immediately with applications to the Town for future development of the six (6) lot hotel portion of the Master Plan including but not limited to pre-application conference, Master Plan Amendment (if necessary) and/or Final Development with the understanding that the Town Council will not take any action on any application(s) until such time that condition #1 has been satisfied.*

The following phasing chart is intended to show the portions of the Master Plan would be developed in a logical sequence, including amenities and necessary public service improvements.

Element	Functional Phasing
Hotel-six Simpson lots.	Phase One
Short term rental/Lodge units/retail/office/restaurant – two Glenwood lots	Phase Two/Buildout
Pedestrian/Streetscape improvements	As individual developments are proposed, curb, gutter and sidewalk improvements to immediately adjacent streetscape sections are required. Encroachment Agreements granted/executed.
Parking	Requirement calculated as per the shared parking analysis methodology for individual development proposals.
Employee Housing	As individual developments are proposed, Requirement for square footage as per then current Town LDR Section 49560. Requirement for unit sizes as per Town LDR's. Required Special Restrictions agreement granted/executed.
Water	Individual development constructs all on-site water infrastructure improvements.  Utility easements will be granted as appropriate for individual developments.
Sewer	Individual development constructs all on-site sewer infrastructure improvements and/or connection to the central system.  Utility easements will be granted as appropriate for individual developments.
Stormwater drainage	Individual development constructs conveyance into the Town stormwater system  Storm sewer infrastructure will be completed simultaneously with streetscape improvements

## Amended Master Plan - Findings for Approval

As required by the Town of Jackson Land Development Regulations, Section 2325.E:

**1. Consistency with Comprehensive Plan.** The Amended Master Plan is consistent with the goals and objectives of the Jackson / Teton County Comprehensive Plan and the Transportation Plan with its Town as Heart of the Region policy.

The goals of the Town's Comprehensive Plan played a significant role in shaping the proposed Amended Master Plan. The proposed PMD will achieve an appropriate density of development for this location, adding a variety of quality housing and lodging, and complimentary commercial space to this neighborhood. The proposed PMD is an example of the type of redevelopment needed if the Town is going to meet its downtown urban character goals; adding new dwelling units downtown "to ease the employee housing problem, to decrease employee-generated traffic and parking downtown, and to increase the vitality of downtown Jackson"<sup>1</sup>.

**2. Consistency with Purpose and Intent.** The Amended Master Plan is consistent with the purpose and intent of this Section, as set forth in Subsection A, Purpose and Intent.

The proposed Amended Master Plan provides flexibility to produce a redevelopment plan that will significantly improve the level of use, mix of uses, pedestrian streetscape, architectural character, amount and efficiency of off-street parking and residential density on this site. The Amended Master Plan proposes a redevelopment scenario that "responds creatively to a broad array of community issues and development situations" to achieve a unified mix of development that is truly synergistic.

Additionally, please refer to the earlier section titled 'Purpose and Intent'.

**3. Design Guidelines.** The Amended Master Plan will comply with the Town's design guidelines that:

- a. *Establish standards for buildings, open spaces, landscape areas, signs, and lighting within the Plan;*
- b. *Promote the design concepts set forth in Subsection D.5, Design Element; and*
- c. *Establish a method for consistent implementation of the guidelines.*

Please refer to the earlier section titled "Design Guidelines".

**4. Transportation Element.** The Amended Master Plan contains a Traffic Impact Analysis and Transportation Demand Management Plan that promotes alternative forms of transportation consistent with the transportation goals of the Jackson / Teton County Comprehensive Plan.

The proposed Amended Master Plan demonstrates that the traffic generated by this development will result in no significant impact on the level of service on the adjacent existing street network. As noted in the Transportation Demand Management Plan,

<sup>1</sup> Town of Jackson Redevelopment Opportunities and Parking Analysis, Fregonese Calthorpe Associates, December 1999.

the proposed project – by virtue of its mix of uses in this downtown location – will by its very nature encourage less reliance on the single-occupant vehicle. The proposed Amended Master Plan provides a model of development that will encourage people to live, work and recreate in Town, accomplishing higher levels of sustainability and livability, and less dependence on the automobile. This project engages the concept of mixing uses within a development to achieve a more efficient end result; an appropriate maximization of the development potential of the site. This type of development allows more people to live and work in Town, focusing on enhancing and making efficient use of existing infrastructure rather than creating the need to expand the infrastructure network. At the same time, the development will provide a significant contribution to the quality of the public realm, further supporting the goal of maintaining and enhancing the Town as a welcoming environment for pedestrians.

**5. Employee Housing.** The Amended Master Plan ensures a supply of Employee housing that is in accordance with the requirements for housing created by development within the plan.

The Amended Master Plan demonstrates a process by which the employee housing needs generated by this redevelopment will be met on site. The Housing Mitigation Plan demonstrates that the housing requirements calculated as per the current Town of Jackson Land Development Regulations can be met on site. This Amended Master Plan accounts for the necessary parking, infrastructure and servicing required in accommodating more people in affordable, livable housing in the center of Town.

**6. Capital Improvement Plan.** The Amended Master Plan contains a Capital Improvement Plan that ensures infrastructure and essential services will be provided in an efficient and timely manner to accommodate projected plan demands.

Each Phase of development within the Amended Master Plan will participate in a tap fee as typically required of developments within the Town

The proposed Amended Master Plan has identified the location, jurisdictional control and mechanisms necessary for connection to adjacent water, sewer, gas, communication and power utilities. In addition to identifying and coordinating the necessary utility connections for the proposed Amended Master Plan, the development is also exploring the feasibility of burying the existing overhead lines located on poles adjacent to the site, with the cooperation of other property owners, Lower Valley Energy, and the Town. The time of construction of the proposed development would appear to be an efficient and appropriate time for the burial of such lines, and the development is willing to share in the costs of making these improvements.

**7. Phasing Plan.** The Amended Master Plan contains a Phasing Plan that ensures development of the plan, its amenities, and public facilities necessary to serve the Plan, occur in logical sequence.

The sequence in which the various projects within the Amended Master Plan are likely to be constructed will ultimately be determined by such things as the state of the regional real-estate market, project financing, and the timing of other developments in

Jackson. The proposed phasing plan accounts for any sequence of portions of the Master Plan to be developed in a logical sequence, including amenities and necessary public service improvements. The plan identifies the functional requirements of the different elements of the Planned Mixed-Use Development, and addresses the impacts associated with the development of each specific element in turn.

**8. Development Standards.** The Amended Master Plan meets the required criteria in Subsection D.2, Development Standards, and includes design and/or use features, which substantially advance the goals of the Transportation Section of the Comprehensive Plan.

The Amended Master Plan proposes development standards; please refer to the Dimensional Limitations Schedule and corresponding discussion of how the proposed development meets the established criteria for bonus dimensional limitations.

The two Glenwood lots, Phase Two – Block 2, would be allowed a 0' front, side and rear setbacks consistent with the surrounding zoning and allowing the development to provide a continuous, inviting pedestrian connection with the adjacent streetscape. The site of the proposed Amended Master Plan is in between a more urban higher-density commercial area and a less urban lower-density mixed commercial and residential (largely multi-family) neighborhood. The six Simpson lots, Phase One – Block 3, will meet a 5.75-foot minimum/17-foot maximum and 9.55-foot average setback from the property line.

Likewise, while the proposed Amended Master Plan has a maximum building height of 46' and is allowed to use the 110% bonus for sloped sites, it does so stepped back from the property boundary. The buildings step down toward the South so that the portions of the building next to adjacent development are buffered from neighboring buildings within the AR zone.

The Amended Master Plan proposes a maximum FAR of 2.0 averaged over all 8 Lots with the Employee Housing subtracted. As discussed above, compliance with the Town's Design Guidelines requires a number of architectural strategies that result in a building form that reduces the perceived bulk, scale and mass of the structure from the street. As determined by the Traffic Impact Analysis and Transportation Demand Management Plan, the proposed development will not result in traffic or any external impacts having a substantial adverse impact on the surrounding neighborhood or adjacent property. By maximizing the density of development, the Amended Master Plan achieves an efficiency that will allow the provision of sub-grade parking, a generous amount of Employee Housing on site, and significant improvements to the public realm. This is entirely consistent with the intent of the LDR's to allow redevelopment which will allow more people to live and work in this type of in-town location, moving toward the goal of a more sustainable, vibrant Town.

**AFFIDAVIT AND AGREEMENT RELATING TO EXTENSION AND  
AMENDMENT OF A PLANNED MIXED USE DEVELOPMENT MASTER PLAN**

STATE OF WYOMING     )  
                                      ) ss.  
COUNTY OF TETON     )

Released	
Indexed	<input checked="" type="checkbox"/>
Abstracted	<input checked="" type="checkbox"/>
Scanned	

Subject Property:   **Lots 11 and 12, Block 2, 2<sup>nd</sup> Wort Addition, Town of Jackson,  
Teton County, Wyoming**

**Lots 1, 2, 3, 4, 5 and 6, Block 7, 2<sup>nd</sup> Wort Addition, Town of  
Jackson, Teton County, Wyoming**

**Lots 7, 8, 9, 10, 11 and 12, Block 3, 2<sup>nd</sup> Wort Addition, Town of  
Jackson, Teton County, Wyoming**

**Lots 1, 2, 3, and 4, Block 6, 2<sup>nd</sup> Wort Addition, Town of Jackson,  
Teton County, Wyoming**

This Affidavit and Agreement is executed by the Town of Jackson, by Robert F. Lenz, Vice-Mayor, and by the following:

John S. Varley, Jr., owner of JH Development, LLC, as Applicant.

Arts District Development, LLC, owner of Lots 11 and 12, Block 2, 2nd Wort Addition, Town of Jackson, Teton County, Wyoming.

Arts Center View, LLC, owner of Lots 1,2, 3, 4, 5, and 6 of Block 7, 2nd Wort Addition, Town of Jackson, Teton County, Wyoming

John S. Varley, Jr., owner of Lots 7 & 8 of Block 3, 2nd Wort Addition, Town of Jackson, Teton County, Wyoming

Church View, LLC, owner of Lots 9, 10, 11 & 12 of Block 3, 2nd Wort Addition, Town of Jackson, Teton County, Wyoming

Pub View, LLC, owner of Lots 1, 2, 3 & 4 of Block 6, 2nd Wort Addition, Town of Jackson, Teton County, Wyoming

Scanlan Kemper Bard Companies as potential developer of the hotel on part of the subject properties identified above.

This Affidavit and Agreement is made and recorded pursuant to Section 2325.C.2.f of the Land Development regulations of the Town of Jackson as duly adopted by the Town Council of the Town of Jackson as Ordinance No. 680. The undersigned being first duly sworn upon their oaths agree and state the following:

1.     On September 16, 2002, the Jackson Town Council voted to approve a Planned Mixed-Use Development Master Plan for the Subject Property pursuant to Section 2325 - Planned Mixed-Use Development of the Town's Land Development Regulations consisting of approximately 289,471 square feet of above grade development consisting of a mix of residential, office, commercial retail, restaurant and short-term lodging uses in addition to below grade parking garages.

2.     The approved Millward-Simpson Planned Mixed-Use Development Master Plan was extended by the Town of Jackson, at its meeting on April 8, 2013. By letter dated May 1, 2013, from Tyler Sinclair, AICP, Director of Planning, and Building for the

GRANTOR: TOWN OF JACKSON ET AL

GRANTEE: THE PUBLIC

Doc 0841300 bk 849 pg 640-645 Filed At 16:09 ON 07/25/13

Sherry L. Daigle Teton County Clerk fees: 35.00

By Michele Fairhurst Deputy

Exhibit N



Town of Jackson, a true and correct copy of which is attached hereto as **Exhibit A**, set forth the conditions of approval of the Extension of the approved Millward-Simpson Planned Mixed-Use Development Master Plan [02.02.2] and Final Development Plan [P-6-030]. This Affidavit and Agreement is being executed pursuant to that letter.

**Consent of Owners**

3. By their signatures hereto, the undersigned owners of the subject real estate consent to the terms and conditions on which approval of the Master Plan extension was based.


4. By their signature hereto ScanlanKemperBard Companies and Its Affiliated Assigns consent to the terms and conditions on which approval of the Master Plan extension was based.

5. The undersigned parties, and each of them, do acknowledge and agree that **Exhibit A** sets forth in detail the conditions of approval of the extension of the existing Master Plan and Final Development Plan.

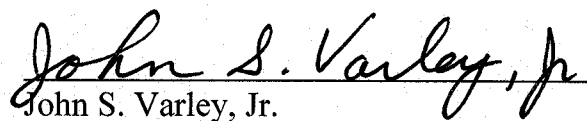
6. It is specifically understood, acknowledged and agreed that this document the Exhibit attached hereto and made a part hereof shall, pursuant to Section 2325 of the Town of Jackson Land Development Regulations be recorded in the land records of Teton County, Wyoming and in the Town of Jackson, Wyoming Clerk's Office.

DATED this 23<sup>rd</sup> day of <sup>July</sup>~~June~~, 2013.

**TOWN OF JACKSON:**

By:   
Robert F. Lenz  
Its: Vice-Mayor

**APPLICANT: JH Development, LLC**

By:   
John S. Varley, Jr.  
Its: Manager and Sole Member

**PROPERTY OWNER APPLICANTS:**

Arts Center View, LLC  
Arts District Development, LLC  
Church View, LLC  
Pub View, LLC

By: John S. Varley Jr.  
John S. Varley, Jr., Individually and  
Manager and/or Sole Member of the  
above Wyoming Limited Liability  
Companies

**APPROVED AGREED AND  
ACKNOWLEDGED BY:**

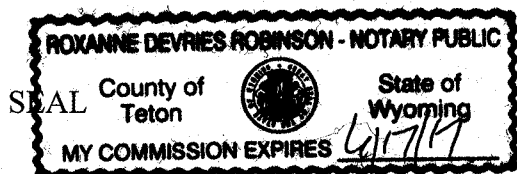
ScanlanKemperBard Companies on its own  
behalf and on behalf of Its Affiliated Assigns

By: Robert D. Scanlan  
Robert D. Scanlan  
Its: Chairman and CEO

STATE OF WYOMING     )  
                                      ) ss.  
COUNTY OF TETON     )

On this 23<sup>rd</sup> day of July 2013, before me personally appeared **ROBERT F. LENZ**, to me personally known, who, being by me duly sworn, did say that he is the Vice-Mayor of the Town of Jackson, Teton County, Wyoming and that said instrument was signed on behalf of said Town of Jackson by authority of its Town Council, and said Vice-Mayor of Teton County, Wyoming acknowledged said instrument to be the free act and deed of said Town of Jackson.

Given under my hand and seal the date first above written.



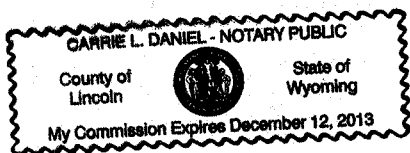
Roxanne Devries Robinson  
Notary Public  
My Commission Expires: 6/17/17


STATE OF WYOMING:     )  
                                      ) ss.  
COUNTY OF TETON:     )

On this 27<sup>th</sup> day of June, 2013, before me personally appeared **JOHN S. VARLEY, JR.**, to me personally known, who, being by me duly sworn, did say that he is the Manager and Sole Member of JH Development, LLC, and that said instrument was signed on behalf of said limited liability company, and said Manager and Sole Member acknowledged said instrument to be the free act and deed of said limited liability company.

Given under my hand and seal the date first above written.

SEAL



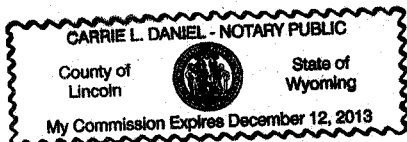
  
Notary Public  
My Commission Expires: 12/12/2013


STATE OF WYOMING:     )  
                                      ) ss.  
COUNTY OF TETON:     )

On this 27<sup>th</sup> day of June, 2013, before me personally appeared **JOHN S. VARLEY, JR.**, to me personally known, who, being by me duly sworn, did say that he Individually, and Manager and/or Sole Member of the Arts Center View, LLC, Arts District Development, LLC, Church View, LLC, and Pub View, LLC, and that said instrument was signed on behalf of said limited liability companies, and said Individual, Manager and Sole Member acknowledged said instrument to be the free act and deed of said limited liability company.

Given under my hand and seal the date first above written.

SEAL



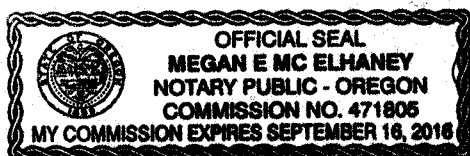
  
Notary Public  
My Commission Expires: 12/12/2013

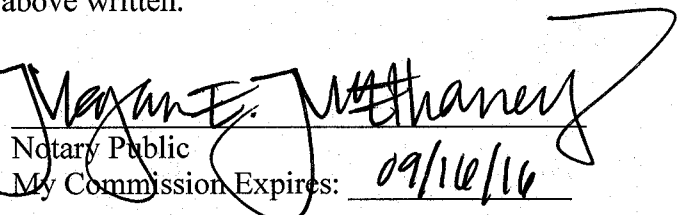
STATE OF OREGON:     )  
                                      ) ss.  
COUNTY OF MULTNOMAH:     )

On this 28<sup>th</sup> day of June, 2013, before me personally appeared **ROBERT D. SCANLAN**, to me personally known, who, being by me duly sworn, did say that he is the Chairman and CEO of ScanlanKemperBard Companies (SKB) and that said instrument was signed on behalf of SKB and that he is duly authorized to act on behalf of SKB and that the acknowledgment of the instrument as the free act of SKB

Given under my hand and seal the date first above written.

SEAL



  
Notary Public  
My Commission Expires: 09/16/16

AFFIDAVIT AND AGREEMENT RELATING TO EXTENSION AND AMENDMENT  
OF A PLANNED MIXED USE DEVELOPMENT MASTER PLAN



PLANNING & BUILDING DEPARTMENT

May 1, 2013

John S. Varley, Jr.  
P.O. Box 1569  
Jackson, WY 83001

RE: Item P12-093  
Millward-Simpson Master Plan Amendment  
165-235 S Millward Street  
175-247 S Glenwood Street  
130-275 W Simpson Avenue

Dear Mr. Varley:

This letter is to confirm that on April 8, 2013, the Jackson Town Council voted to **approve** your request for an Extension to the Millward and Simpson Planned Mixed Use Development (PMD) Master Plan subject to the following conditions:

- An Affidavit and Agreement shall be reviewed and approved by Staff and the Town Attorney and recorded in the Teton County Clerk's Office within sixty (60) days of Town Council approval, unless extended with the approval of the Planning Director establishing the following:
  - The PMD Master Plan expiration date as March 18, 2015 and that within this time period a Final Development Plan (FDP) would be approved by the Town for a six lot hotel development by SKB, an associated Building Permit for the FDP would be submitted and upon issuance the applicant would commence construction within sixty (60) days of issuance of the building permit with continuous progress to completion. Should these conditions of the extension be satisfied, an additional two (2) year increment would be allowed beginning on the date of the issuance of a certificate of occupancy for the previous phase under the same conditions to allow for the development of the remaining two (2) lots. Should at any time the conditions of the extension not be satisfied, the Master Plan would expire and all unvested and unexercised rights established by the Master Plan would lapse and all the remaining lands would thereafter be subject to the then applicable Land Development Regulations. Conditions of the extension would be as follows:
    1. The applicant shall submit an amendment to the Master Plan removing the ten (10) lots located on the west side of Millward Street from the Master Plan. Said amendment shall be reviewed and approved by Town Council prior to any additional approvals under the Master Plan. Should the Master Plan Amendment not be

P.O. Box 1687 • Jackson, Wyoming 83001 • 307-733-0440 or 0520 Fax 307-734-3563 [www.townofjackson.com](http://www.townofjackson.com)

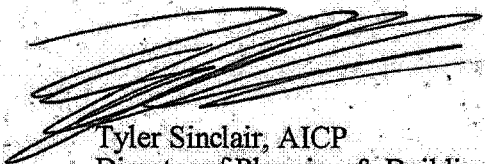
EXHIBIT A, To Affidavit and Agreement

approved, the Master Plan would expire and all unvested and unexercised rights established by the Master Plan would lapse and all the remaining lands would thereafter be subject to the then applicable Land Development Regulations.

2. SKB would be allowed to proceed immediately with applications to the Town for future development of the six (6) lot hotel portion of the Master Plan including but not limited to pre-application conference, Master Plan Amendment (if necessary) and/or Final Development with the understanding that the Town Council will not take any action on any application(s) until such time that condition #1 has been satisfied.
3. SKB agrees to the following items related to the future development of the six (6) lot hotel portion of the Master Plan:
  - A reduction in the size of the hotel from 103,600 square feet to 95,000 square feet excluding required onsite employee housing.
  - That the maximum allowable height will be 46' with no 110% bonus given for the sloped site; with the understanding that the proposed partial fourth floor will not be visible from Simpson, Glenwood or Millward Streets.
  - That the future building plans will incorporate an average building setback of 8 feet from the north, west and east property lines. However the 8 foot setback would be an average setback - a 6 foot minimum and a 10 foot maximum, so as to allow a proper architectural design.
  - That the applicant would be allowed to apply for an amendment to the Master Plan including changes to the proposed parking requirements, etc. concurrently with a Final Development Plan application.

Should you have any questions or require further information on this matter please feel free to contact me at 307-733-0440, Ext. 1301.

Respectfully,



Tyler Sinclair, AICP  
Director of Planning & Building

TS:sth

2. That the proposed project substantially meets the character objectives of preservation or enhancement of the zoning district and neighborhood in which it is to be located. Projects which are out of scale and character with their surroundings will not be approved;
3. That streets and intersections serving the project will not be reduced to unacceptable levels of service, nor will the safety of motorists, pedestrians, and cyclists be jeopardized;
4. That the density and distribution of population resulting from the project will not overburden schools, parks, utilities, or other public services; and
5. That all adverse impacts associated with the proposed project are effectively mitigated to the extent possible. [Ord. 505 § 1, 1995]

### **SECTION 2325 PLANNED MIXED-USE DEVELOPMENT**

**A. Purpose and intent.** The purpose of the Planned Mixed-Use Development option is to provide flexibility in encouraging mixed-use commercial, office, and lodging (within the Lodging Overlay (LO)) and/or residential development which will, through an overall unified approach, achieve results superior to those produced when development occurs lot by lot and adheres to rigid standards. This option presents the opportunity to integrate a mix of commercial, office, residential and/or lodging (within LO) uses, structural mass, vehicular access and circulation, pedestrian use, pedestrian streetscape and architectural space in order to respond creatively to a broad array of community issues and development situations in furtherance of the health, safety and general welfare of the citizens by:

1. Encouraging flexibility and creativity in the development of the land to promote its most appropriate and efficient use;
2. Improving the design character and quality of the development beyond that which would be achievable by strict application of underlying land development regulations;
3. Facilitating the efficient and economical provision of street improvements and utilities;
4. Preserving significant natural features of a site;
5. Providing a functional and interconnected system of pedestrian walkways and streetscape, and pedestrian-friendly areas;
6. Encouraging the conservation of energy;
7. Allowing creative alternatives to surface parking, and encouraging and permitting shared parking between proposed uses;
8. Accommodating alternative transportation including transit, bikeways and pathways where appropriate as consistent with the Transportation Master Plan.
9. Providing a mix of compatible commercial, office, lodging (within the LO) and residential uses;

**B. Where Established.** Lands within the commercial zoning districts, UC, UC2, AC, OP2, OP, BP-R shall be eligible for the Planned Mixed-Use Development (hereinafter PMD) development option, provided a master plan is submitted, reviewed and approved pursuant to subsection C. Procedure. A minimum site area of 22,500 square feet of contiguous land (excluding public streets) shall be required to exercise the PMD development option. Non-contiguous sites for providing the required employee and/or affordable housing shall be allowed subject to the dimensional limitations of those sites.



Smaller parcels may be considered by the Town Council due to special and unusual circumstances and on the basis of their potential to satisfy the intent of these regulations. The Town Council shall make a preliminary determination on whether an application is able to meet the above-described criteria before a formal application is made under the PMD option.

**C. Procedure.** One or more landowners may propose a PMD Master Plan, and all the proposing owners shall jointly be deemed the applicant as identified herein. Two stages of review are required prior to commencement of construction or operation of land uses within a PMD: PMD Master Plan review and approval and Final Development Plan review and approval.

1. **Unified Planning.** The development site of a Planned Mixed-Use Development shall be planned as a whole by all owner/applicants working in cooperation.
2. **Application and Review Procedures.** All Planned Mixed-Use Developments shall be submitted, processed, and reviewed, according to the provisions of Section 51200, Development Plan and this section.

a. **PMD Master Plan. Public review and approval for a PMD Master Plan** follows the procedures set forth for Sketch Plans and serves as a Sketch Plan pursuant to Section 51200, Development Plan. The standards for review of the Master Plan, however, are the standards set forth in this Section, in order to allow for flexibility and creativity in the Master Plan and discretionary review thereof.

(1) **Purpose and intent of Master Plan.** The purpose of a PMD Master Plan is to establish the development standards and serve as a guide to all future development within the PMD. The PMD Master Plan is intended to be of sufficient detail to describe the amount, type, size, location, and impact of the proposed development, but detail and technical specifications of the proposed development, such as fully engineered plans or fully detailed architectural drawings, are not required.

(2) **Submittal components.** A PMD Master Plan application shall include only lands as listed in subsection B, Where Established. The minimum requirements for a Master Plan application shall include:

- (a) Statement of Purpose
- (b) Master Site Plan
- (c) Dimensional Limitation Plan
- (d) Design Guidelines
- (e) Traffic Impact analysis and Transportation Demand Management Plan
- (f) Housing Mitigation Plan
- (g) Capital Improvements Plan (sewer, water, stormwater, etc.)
- (h) Phasing Plan for all or each separate component of the Master Plan.

(3) **Recordation.** Upon approval. The PMD Master Site Plan and a Certificate of Standards and Conditions, and any amendments thereto, shall be recorded in the land records of Teton County, Wyoming and in the Town of Jackson, Wyoming Clerk's Office. The Certificate shall be in the form of an affidavit and agreement executed by an authorized representative of the Town of Jackson and each applicant and shall detail the PMD Master Plan, conditions of approval and the development standards to be applied within the PMD, as well as any other

standards, conditions, or agreements pertaining to future development or responsibilities of landowners within the PMD. The applicant shall prepare the affidavit to be reviewed, and approved by the Planning Director in a form acceptable to the Town Attorney with the participation and written consent of each owner/applicant prior to execution. The Certificate shall comply in all respects with the requirements for recordation of the State of Wyoming.

- b. **Final Development Plan review and approval.** After approval of a PMD Master Plan, Final Development Plan and building permit approvals are required prior to commencement of any construction or operation of any new land use within the PMD.

(1) **Final Development Plan application.** Final Development Plan applications shall be in accordance with the PMD Master Plan and shall be reviewed and approved pursuant to Section 51200, Development Plan. No Sketch Plan review is required. No Final Development Plan shall be approved unless the proposal is consistent with the PMD Master Plan, and any amendment thereto.

(2) **Phasing.** A Final Development Plan application may encompass only an increment of the total development, in accordance with the approved Master Plan and the Phasing Plan included therein.

- c. **Standing of PMD Master Plan.** Upon approval of a PMD Master Plan any amendments to these Land Development Regulations shall not affect the approval of the PMD Master Plan unless otherwise specified in this section or the conditions of approval, provided the PMD Master Plan has not expired or been revoked, pursuant to subsections C.2.e, Expiration and C.2.g. (1) Revocation.

- d. **Amendment of Master Plan.** Any landowner within a PMD Master Plan site may apply for amendment to the PMD Master Plan only with the written consent of all governing associations within the development. The amendment shall be reviewed and acted upon pursuant to the procedures set forth in this Section for review and action on a PMD Master Plan. The amendment shall be subject to all applicable standards of this Section that are in effect at the time of review of the amendment. Notwithstanding, minor deviations from a PMD Master Plan may be approved by the Planning Director, pursuant to Section 51200.J, Minor deviations, or a process for approval of minor deviations may be proposed as part of the PMD application.

- e. **Expiration.**

(1) **Time-frame.** A PMD Master Plan shall expire three (3) years from the date of its Recordation following final approval, unless prior to that date an application for Final Development Plan is filed with the Planning Department. The Master Plan shall expire five (5) years from the date of its Recordation following final approval unless prior to that date an application for a building permit has been filed with the building department for new development on site to establish the use authorized and demonstrates that substantial and continuous progress toward the Master Plan has been made in accordance with the Phasing Plan specified in the conditions of approval.



- (2) **Effect.** Upon expiration, approval of a PMD Master Plan and all unvested and all unexercised rights that are established by the Master Plan shall lapse and the remaining lands shall thereafter be subject to the then applicable Land Development Regulations.
- f. **Extension.** The expiration date of an approved PMD master plan may be extended by the Town Council provided a written request for extension is received by the Planning Department at least sixty (60) calendar days prior to expiration of the PMD master plan.
- (1) **Procedure.** The request for extension shall be reviewed by the Town Council at a regularly scheduled meeting, by which time a public hearing notice shall be advertised and any necessary information pertinent to the extension request can be made available at least ten (10) business days in advance thereof. The PMD Master Plan shall be deemed extended until Town Council takes final action upon the request for extension.
- (2) **Grounds for extension.** The ground for extending a PMD Master Plan approval shall be specified by the Council and shall include, but not be limited to, the following:
- (a) **No change in conditions.** Conditions in the community have not substantially changed since the Master Plan approval. An extension may be denied if the Council finds that specific enumerated changes in the community result in the Master Plan being inconsistent with the community's land use patterns, or the community's ability to provide infrastructure and services to accommodate the development.
- (b) **Good faith efforts.** Activities such as securing a building permit for new development on site that demonstrates substantial and continuous progress toward the Master Plan on the part of the landowners within the PMD demonstrate good faith efforts in pursuing the development permitted by the Master Plan.
- g. **Reconsideration.** If the development within a PMD fails to proceed in general accordance with the approved Phasing Plan, the Town Council may require reconsideration of the PMD Master Plan and revoke or amend the Master Plan.
- (1) **Revocation.** Revocation of the Master Plan shall have the effect of forfeiting all unvested or unexercised rights within the PMD to any further development according to the Master Plan and shall be appropriate if:
- (a) No material progress has been made in development of the site for seven (7) consecutive years, or;
- (b) There is substantial noncompliance with the performance objectives, standards and/or Phasing Plan specified in the conditions of approval, and no agreement can be reached between representatives of the landowners within the PMD or applicant of record and the Town Council for bringing the development into compliance with the standards of this Section.
- (2) **Procedure.** The Town Council shall not less than sixty (60) days after notice to the applicants or their successors hold a public hearing, in accordance with Section 5120.E, Notice of public hearings, and Section 5120.F, Public hearing

procedure, for the purpose of examining the development that has occurred within the PMD and its consistency with the Master Plan. The notice to the applicants shall include specific grounds and reasons for the proposed revocation and detailed description of facts, documents and other information upon which the Town relies in seeking revocation. The Town Council shall issue a determination as to whether amendment or revocation of the Master Plan is appropriate, in accordance with the above-specified standards. Amendments to the Master Plan shall be accomplished pursuant to subsection C.2.d, Amendment of Master Plan. Revocation of the Master Plan shall be accomplished in accordance with Section C.2.a(3), Recordation, herein.

**D. Standards applying to all Planned Mixed-Use Developments.**

**1. Consistency with Comprehensive Plan.** PMD Master Plans shall be consistent with the goals and objectives of the Town of Jackson Comprehensive Plan.

**2. Development Standards.**

a. **Deviation from Land Development Regulations.** In order to allow design flexibility, deviation from all LDR standards may be allowed except for the Standards in Table 2325.A or the Bonus Standards in Table 2325.B. based on the merits of the plan itself. It is fully consistent with this Section that PMD's may have dimensional, design, and other development standards different from and more flexible than those described in other sections of these Land Development Regulations due to the unique circumstances of, and community objectives for, mixed use development, based upon the following:

(1) **Front setbacks (street yards).** Front setbacks shall reflect the general allowable standards of the neighborhood, character area, and zoning district in which the Planned Mixed Use Development is located.

(2) **Side and rear setbacks.** Setbacks for side and rear yards are important factors in terms of neighborhood compatibility. Generally, side and rear setbacks in Planned Mixed Use Developments should be generally compatible with those allowed within the immediate neighborhood but need not mirror those allowed on adjacent properties.

While side setbacks may be reduced to zero in appropriate urban applications, no setback shall be reduced to the extent that drainage of rain, snow, or snow melt falls on to adjacent property.

(3) **Density.** In a Planned Mixed Use Development, density is a function of the development standards, the type and mix of development proposed, and the allowed character of the surrounding neighborhood. The density proposed should be appropriate and compatible with that allowed within the neighborhood in terms of total population and bulk, scale, and massing of structures. Project density should not result in traffic or any other external impacts, which will have a substantial adverse impact the surrounding neighborhood or adjacent property.

(4) **Height of structures.** Height shall be measured consistent with the Division 8300 Definitions: Height, Building or Structure of these LDR's or as otherwise approved as part of the Master Plan. Structures in a PMD shall not be limited as to

the number of levels above finished grade. Each building proposed in a Master Plan shall be evaluated based upon the following criteria and additional criteria found in Section D.6 Design Element:

- (a) The proposed building height should be in scale with the allowable height in the surrounding neighborhood;
- (b) The proposed building height should be appropriate to the terrain of the project site and to the type of development proposed;
- (c) The proposed building height should be compatible with the character of the immediate vicinity of the land proposed for development;
- (d) The design, development and bulk and scale of the proposed structures shall mitigate the adverse effects, including visual impact of the proposed use on adjacent lands.

- b. **Development standards.** The development standards for FAR (floor area ratio), height, and LSR (landscape surface ratio), for all structures are found in Table 2325.A. Development Standards for the Planned Mixed Use Development Option.

Zoning District	Avg. FAR	Height	Min. LSR	Min. Lot Area ft <sup>2</sup> *
AC	0.4	35'	0.25	22,500
BP-R	0.4	35'	0.25	22,500
OP	0.75	35'	0.10	22,500
AC/LO	0.9	35'	0.05	22,500
OP2	1.5	42'	0.05	22,500
UC2	1.5	42'	0.05	22,500
UC	1.83	42'	0.0	22,500
UC - TSO	1.83	35'	0.0	22,500

\*See subsection B.

- c. **Bonus Criteria.** An applicant may propose the development standards in Table 2325.B Bonus Development Standards for Planned Mixed Use Development Option, provided any two of the following criteria are met:

- (1) The master plan proposes 50% or more of the total square footage as residential uses or lodging uses (within the LO);
- (2) The master plan proposes subgrade parking to satisfy the majority of the parking requirement (excepting surface spaces for loading/unloading or similar short-term uses);
- (3) The master plan proposes to exceed the required affordable and employee housing requirements by at least 20%. Applications shall not be allowed to utilize any existing employee and affordable housing exemptions in order to satisfy this criterion; (Rev. Ord. 884 § 1, 2008.)
- (4) The master plan includes design and/or use features that substantially advance the goals of the Transportation Plan with its Town as Heart of the Region policy.

Table 2325.B Bonus Development Standards for Planned Mixed Use Development Option				
Zoning District	Avg. FAR	Height	Min. LSR	Min. Lot Area ft <sup>2</sup> *
AC	0.5	35'	0.25	22,500
BP-R	0.5	46'**	0.25	22,500
OP	0.9	35'	0.05	22,500
AC/LO	1.25	42'	0.05	22,500
OP2	2.0	46'	0.05	22,500
UC2	2.0	46'	0.05	22,500
UC	2.0	46'	0.0	22,500
UC – TSO	2.0	35'	0.0	22,500

\* See subsection B.

\*\* Subject to the conditions established in Section 2368

- d. **FAR.** Average FAR shall be calculated using the total square footage proposed in the master plan divided by the base site area within the master plan boundaries. Square footage of proposed affordable and/or employee housing provided on site shall be exempt from the FAR calculations.
  - e. Additional deviation from the LDR standards including those set forth in Table 2325A and 2325B may be allowed by the Town Council upon finding that the PMD provides an extraordinary benefit to the Town of Jackson.
3. **Statement of purpose.** The PMD Master Plan shall have a Statement of Purpose that describes the applicant's rationale. The statement also shall describe how the Master Plan fulfills the intents of this Section, as specified in subsection A, Purpose and intent.
  4. **Master Site Plan.** The PMD Master Plan shall have a Master Site Plan that clearly illustrates the proposed development and the site. Refer to Section 2325.D.6, Design element for design standards and performance criteria.
  5. **Dimensional Limitation Plan.** The PMD Master Plan shall have a Dimensional Limitation Plan, which specifies dimensional limitations necessary to achieve the design theme identified by the applicant. The plan shall include floor areas and floor area ratios, densities, landscape ratios, height, setbacks, building footprints, lot coverage, maximum building size, easements and other data on which restrictions of development are to be imposed and areas in square feet for each lot or building. The applicant shall provide a summary of the existing permitted and proposed dimensional limitations for comparison.  
  
Any dimensional limitations unspecified by the PMD Master Plan shall be established by the standards in the applicable zoning district.
  6. **Design element.** The PMD Master Plan shall include detailed design guidelines, and a mechanism for their implementation, that establish design parameters for both buildings, open spaces and landscape areas in the PMD. The design theme shall be defined by the applicant and be consistent with the Standards of this Section. This subsection establishes design standards and performance criteria that the master plan must address. The resulting design guidelines shall address these design standards. The design

guidelines shall be prepared by an architect or landscape architect licensed in the State of Wyoming.

a. **General.** The design theme of the PMD Master Plan shall have an emphasis on communicating integration, pedestrian circulation, and creating “a sense of place”. A “sense of place” is created when site planning and architecture:

- Create spaces for gathering and activities;
- Create buildings and spaces with common character, scale, design and materials;
- Incorporate the natural features and cultural heritage of the area within the design; and
- Reflect the western architectural styles and themes of the region.

Development shall be compatible with the surrounding built and allowable environment in both scale and character.

b. **Architecture.** Building design guidelines shall include and reflect the following:

- (1) The community’s and district’s architectural character, themes, and goals for future development;
- (2) A human scale, pedestrian-orientation, which are created when:
  - The height of buildings does not overwhelm people walking in the vicinity of the buildings; and
  - Ground level doors, windows and design features of buildings create an interesting diversity for pedestrians.
- (3) Development should be consistent with community goals and aesthetic values;
- (4) Natural attributes of the immediate vicinity shall be incorporated into the site design and architectural style; and
- (5) Building materials and colors compatible with the surrounding natural and built environment.

c. **Bulk and scale.** The design guidelines shall ensure that the bulk, scale and orientation of individual buildings achieve compatibility with:

- (1) Other structures within the PMD master plan site when the development is completed;
- (2) Neighboring properties and structures including allowed development thereon that are not a part of the development including other master plan sites; and
- (3) The Town development goals as set forth in the Comprehensive Plan and the Transportation Plan with its Town as Heart of the Region studies.

d. **Site planning.**

- (1) **Orientation and aspect.** Structures and public spaces within the PMD Master plan site generally, shall be arranged to take advantage of southern exposure where practicable.
- (2) **Entrance features.** Entrances to the PMD master plan site shall create a “sense of arrival”. A “sense of arrival” is created when the entrance into the PMD site is easily identifiable and is consistent with the design theme, thereof.
- (3) **Natural resources.** The site design shall highlight available natural resources and integrate them into the layout in order to promote a connection to the natural

- environment. Consequently, natural features of the site, such as significant vegetation, rock outcroppings, water bodies, etc., shall be preserved and incorporated into the project design to the extent practicable.
- (4) **Walkways and pedestrian facilities.** Walkways and pedestrian facilities, including access for the disabled, shall be integral components of the site design. The site shall provide an attractive, outdoor atmosphere that encourages use and reliance upon walkways and pedestrian spaces. Within the site, a strong pedestrian orientation shall be achieved through the use of outdoor seating areas, gathering and queuing areas, transit stop locations, and information areas. Walkways shall form a logical, safe and convenient system for pedestrian access to all on-site uses and major off-site destinations.
  - (5) **Transportation facilities.** Site design shall integrate safe, convenient, and direct access to transportation services and facilities (i.e., bus shelters, information sites) and shall incorporate the facilities necessary for the proper functioning of the Transportation Demand Management Plan. Alternatives to surface parking, such as parking below structures, parking below grade, and/or parking structures should be used to the greatest extent practical.
  - (6) **Circulation.** The layout of local streets, alleyways, and parking lots shall be sensitive to the natural terrain and landscape. Cut and fill areas shall be minimized, and natural features of the site such significant trees shall be preserved to the extent practical. Circulation should be free-flowing. Conflicts with pedestrians and vehicles entering and exiting the site should be avoided.
  - (7) **Access.** Safe vehicular access appropriate for refuse removal, recycling, emergency services, and delivery shall be provided. Service access should generally be located to the rear of structures and off alleyways where practical. Curb cuts shall be minimized and access points consolidated.
  - (8) **Streetscape.** Structures shall be on or near the front property boundary, with no more than a 10-foot setback along street frontages.
  - (9) **Landscape.** Project landscaping shall be consistent with the overall design theme of the PMD Master Plan. Use of indigenous plant materials is encouraged and shall provide visual relief by softening structural mass and screening parking, driveways and loading areas.
- e. **Signs.** The design guidelines shall include a sign component that sets forth the sign theme for development and specifies criteria for determining permitted sign sizes, types, and locations. The guidelines shall contain prototypical examples of all types of signs, including wall, canopy, freestanding, directional, and informational signs.
- f. **Lighting.** The design guides shall establish the design criteria for project lighting. Areas to be illuminated (parking areas, walkways, entries, etc.) shall be identified, and general standards should be set forth. Identification of models and types of standards and fixtures is encouraged, but specific illumination plans and photometric footprints are not required. Generally, lighting shall be low-intensity, low-profile, and shielded to avoid "light pollution" and glare to off-site areas. General illumination standards are set forth in Section 49370, Exterior Lighting and Glare.



7. **Transportation Element.** The PMD Master Plan shall have a transportation element to ensure that the development does not produce an amount of vehicular traffic that undermines the community's character, and endangers the public health, safety and welfare (i.e., noise, air quality and traffic impacts.) The PMD Master Plan shall provide an optimum mix of automobile, transit, and walkway, sidewalk and/or pathway facilities within the plan, encourage coordination of facilities with Town and County-wide transportation system, and promote design, which encourages other transportation modes.
- a. **Traffic impact analysis.** A traffic impact and access analysis shall be required. This analysis shall contain the following:
    - (1) Projections of external vehicle trips generated by the Plan.
    - (2) Analysis of levels of service (LOS) impacts on roadway system segments and/or intersections serving the Plan area.
    - (3) Identification of any improvements needed to roadway system segments and/or intersections as a result of increased traffic from the Plan.
  - b. **Transportation Demand Management Plan.** A Transportation Demand Management (TDM) Plan shall be required that demonstrates how the travel behavior of visitors and employees generated by the plan will be managed to minimize the number of vehicle trips on the roadway network resulting from the development. A goal of the applicant's TDM Plan shall be to manage the transportation demands of the development so that it is consistent with the Transportation Chapter of the Jackson/Teton County Comprehensive plan and the Town of Jackson Transportation Master Plan. Potential mechanisms for managing travel behavior may include the following if applicable:
    - (1) Providing incentives for residents, visitors and employees of the development to use public transit.
    - (2) Providing incentives for residents, visitors and employees of the development to use walking, bicycling and other non-motorized means.
    - (3) Reducing vehicular trips through internal capture associated with mixed land use patterns.
  - c. **Parking and loading.** The PMD Master Plan shall provide parking and loading areas of sufficient amount and type to accommodate the plan's projected demand including parking for visitors and lodging guests, waiting and loading areas for transit vehicles and their passengers, and loading areas for delivery vehicles. Parking shall be designed to encourage non-motorized transportation; transit and high occupancy vehicle use and discourage single-occupancy vehicle use. Scenarios that share parking between compatible uses are encouraged.
8. **Capital Improvements Element.** The PMD Master Plan shall have a capital improvements element to ensure that infrastructure and essential services will be provided in an efficient and timely manner to accommodate projected development demands. PMD Master Plans shall include a capital improvement element that identifies service providers and proposes a capital improvement plan for facilities and services needed by the plan. Such facilities and services may include: parking; pathways; potable

water and wastewater treatment services; utilities; stormwater management and snow storage facilities.

a. **Identification and acknowledgement of service providers.** The applicant shall identify the provider of all infrastructure facilities and services included in the plan. A document from the service provider shall demonstrate the commitment and ability to provide such service.

b. **Impact Analysis.** An impact analysis may be required by the Planning Director. The impact analysis shall identify the following if applicable:

- (1) The maximum daily peak capacity of existing facilities.
- (2) The current daily peak demand on existing capacity.
- (3) The daily peak capacity available for new development.
- (4) The projected daily peak demand generated by new development in the plan.
- (5) Any planned improvements by other entities and the timing of such improvements.
- (6) An analysis or explanation of the anticipated shared use of the various facilities by users, residents and employees.

In the event of undeveloped or underdeveloped property within the Master Plan site the Impact Analysis shall also set forth, as a baseline, the daily peak capacity of the land if developed with structure and uses allowed under the zoning and LDR's applicable before Master Planning.

c. **Capital improvements.** The capital improvement plan includes descriptions of the infrastructure improvements, the responsibility and sources of funding for the improvements, and the timing for completion of improvements. The capital improvement plan shall also be consistent with the impact analyses if required, and specify how any deficiencies in infrastructure attributable to the Master Plan Development will be remedied or mitigated. A conceptual capital improvement plan shall be included in the PMD master plan. Engineered capital improvement plans shall be provided in the final development plan application for subsequent development.

d. **Infrastructure standards.** All infrastructure proposed within the Master Plan shall meet the minimum public standards even if proposed for private ownership and maintenance. This shall include but not be limited to water distribution and sanitary collection system elements, storm drainage facilities, streets and pedestrian ways. Deviations from these standards shall be allowed with approval of the Town engineer.

9. **Housing element.** The PMD Master Plan shall have a housing element to ensure a supply of affordable and employee housing that is commensurate with the demand for housing created by development within the plan, under the then current Land Development Regulations including if applicable:



- a. **Affordable Housing.** Affordable housing shall be provided in conjunction with residential development pursuant to Division 49400, Residential Affordable Housing Standards of the current LDR's at the time of submission of Final Development Plan applications, with the exception of the following:
- (1) Conveyance of land to the Town shall not be permitted as a method of providing required affordable housing;
  - (2) Fee in-lieu payment shall not be permitted as a method of providing required affordable housing, with the exception of satisfying a fractional requirement.
- b. **Employee Housing.** Employee housing shall be provided in conjunction with nonresidential development pursuant to Division 49500, Employee Housing Standards of the current LDR's at the time of submission of Final Development Plan applications, with the exception of the following:
- (1) Fee in-lieu payment shall not be permitted as a method of providing required employee housing with the exception of satisfying a fractional requirement;
- c. **Master Plan Estimate.** The number of employees required to be housed and the location where they will be housed, as presented in the PMD Master Plan, shall be treated as an estimate/concept, and shall be finalized as Final Development Plans within the PMD are reviewed and acted upon. Each approved Final Development Plan shall establish the actual number of employees required to be housed in accordance with applicable regulations and the locations in which they will be housed for that portion of the Master Plan.
- (1) In order to encourage development of Employee and/or Affordable housing within the boundaries of the Town of Jackson and in consideration of the time required and expense incurred by the applicants in conjunction with PMD Master Plans and Final Development Planning, and in further consideration of the limitations of this Section 2325 prohibiting compliance with affordable and/or employee housing requirements by payment of fee-in-lieu or conveyance of land, the affordable and employee housing requirements of the Town of Jackson applicable on the date of Town Council approval of the PMD Master Plan shall continue to be the only regulations applicable to any Final Development Plan application actually filed by the applicant or their successors within the initial three (3) year timeframe referenced in Section 2325 C.2e.(1), and not extended under the provision of Section 2325.2.f or revoked under the provision of Section 2325.2.g. hereof.
  - (a) In addition, and to encourage prompt development of Employee and/or Affordable housing, any applicant or their successor may satisfy all of the employee or affordable housing requirements for the entire PMD Master Plan or any separate phase thereof by actually housing the quantity of Affordable and/or Employee occupants as set forth in the approved Master Plan Estimate prior to issuance of a Certificate of Occupancy for the first phase of a multiphase PMD and further provided that the building permit for affordable

and/or employee housing units be issued prior to the expiration of the three (3) year timeframe set forth in Section 2325 C.2.e.(1). In calculating the requirement of this section, available allowable credits may be counted and applied. Thereafter, the applicant and their successors will be deemed to have satisfied all applicable requirements for Employee and/or Affordable housing for all subsequent Final Development Plans. If at Master Plan buildout the actual quantity of affordable and/or employee occupants to be housed (as calculated using the LDR requirements used to quantify the Master Plan Estimate) differs from the quantity provided under this section by more than ten percent (10%), any additional requirement shall be satisfied by the applicant or their successors by providing the actual housing, or by paying a fee in lieu for the incremental increase, and any excess shall be credited to the applicant or their successors to be used as credit by them or others toward future requirements.

- (b) In addition, and to encourage early development of Employee and/or Affordable housing in the Town of Jackson, any applicant or their successor may propose within any Final Development Plan application to satisfy the then-applicable requirements for Employee and/or Affordable housing for any and all subsequent phases by actually providing same in accordance with Section (1)(a) above. This provision is applicable only to Final Development Plan applications filed after the three (3) year timeframe set forth in Section 2325 C.2.e.(1).
  - (c) The Town Council may at the request of the applicant, and upon a finding of substantial and extraordinary benefit to the Town of Jackson, permit an applicant or their successor to propose, prior to any Final Development Plan application, to satisfy the approved Master Plan Estimate requirement for Employee and/or Affordable housing by actually providing same in accordance with Section (1)(a) above.
  - d. **Location.** It is encouraged that Master Plan proposals include affordable and/or employee housing on-site or within reasonable walking distance to the Master Plan boundary and within the Town of Jackson in conjunction with a proposed Transportation Demand Management Plan.
- (1) All affordable and/or employee housing requirements may be proposed off-site in conjunction with an approved TDM Plan. On-site requirements, if any, shall be determined at Master Plan approval and that on-site requirement (whether expressed in number of units, number of employees to be housed, total square footage, a percentage of total requirements, or otherwise) shall not increase with subsequent changes to the LDR's. The exact number of employees generated by any phase of Master Plan implementation shall be determined at Final Development Plan application according to the then-current LDR's. Any requirement exceeding the on-

site requirement established at Master Plan approval shall be allowed to be satisfied off-site in accordance with an approved TDM Plan.

- 10. Phasing Element.** The PMD development shall have a phasing element to ensure that development within a PMD occurs in logical sequence including amenities and necessary capital improvements. PMD master plans shall contain a Phasing Plan that identifies the sequence of structures, uses and amenities, installation of infrastructure, implementation of the Transportation Demand Management Plan, Housing Mitigation Plan, and implementation of PMD Master Plan conditions of approval. Phasing shall be coordinated with the capital improvements program as identified in the Capital Improvement Element. The Phasing Plan may contain more than one sequence for development of different major components of the Master Plan.
- 11. Conformance with other applicable regulations.** Except for those requirements and standards listed in this Section 2325, deviation from standards above, Planned Mixed-Use Developments shall conform to all requirements of these Land Development Regulations, The Jackson Municipal Code/other Town of Jackson regulations, and the Wyoming Statutes.
- 12. Uses permitted.** In any Planned Mixed-Use Development, the allowed and conditional uses are to be determined by Table 2200, Use Schedule, provided however, the conditional uses shall be determined at the time of and as part of the Final Development Plan Application and Approval unless otherwise approved as part of the Master Plan.
- 13. Multiple or Mixed Uses.** Under the Planned Mixed-Use Development option, a mix of at least two compatible uses is required in order to attain some degree of internal interaction.
  - (a) For purposes of this section, multiple use shall mean a Planned Mixed-Use Development project with at least two (2) or more separate uses from among:
    1. The classification for allowed non-residential uses found in Table 2200, Use Schedule, for the underlying and existing zoning and;
    2. Residential development described and defined in Section 2220 A.2.
  - (b) At a minimum, one proposed use must be residential unless the proposed property is within the Lodging Overlay, in which case one proposed use must be lodging or residential.
  - (c) No non-residential use may occupy more than seventy percent (70%) of the total gross floor area within the total Master Plan area of the development.

**E. Findings for approval.**

A PMD Master Plan shall be approved only if all of the following findings are made.

1. **Consistency with Comprehensive Plan.** The PMD Master Plan is consistent with the goals and objectives of the Jackson/Teton County Comprehensive Plan and the Transportation Plan with its Town as Heart of the Region policy.
2. **Consistency with purpose and intent.** The PMD Master Plan is consistent with the purpose and intent of this Section, as set forth in subsection A, Purpose and intent.
3. **Design guidelines.** The PMD Master Plan contains design guidelines that:
  - a. Establish standards for buildings, open spaces, landscape areas, signs, and lighting within the Plan;
  - b. Promote the design concepts set forth in subsection D.5, Design element; and
  - c. Establish a method for consistent implementation of the guidelines.
4. **Transportation element.** The PMD Master Plan contains a Traffic Impact Analysis and Transportation Demand Management Plan that promotes alternative forms of transportation consistent with the transportation goals of the Jackson/Teton County Comprehensive Plan.
5. **Affordable and employee housing.** The PMD Master Plan ensures a supply of affordable and employee housing that is in accordance with the requirements for housing created by development within the plan.
6. **Capital improvement plan.** The PMD Master Plan contains a capital improvement plan that ensures infrastructure and essential services will be provided in an efficient and timely manner to accommodate projected plan demands.
7. **Phasing plan.** The PMD Master Plan contains a Phasing Plan that ensures development of the plan, its amenities, and public facilities necessary to serve the Plan, occur in logical sequence.
8. **Development standards.** The PMD Master Plan meets the required criteria in subsection D.2 Development Standards, and includes design and/or use features, which substantially advance the goals of the Transportation Plan with its Town as Heart of the Region policy.

(Ord. 680 § 1, 2001)



# Glenwood+Simpson

## Mixed-Use Building

Phase One - Millward + Simpson PMD Master Plan  
Lots 11-12; Block 2; 2nd Wort Subdivision  
JACKSON, WYOMING

### DETAIL KEY

Sym. # / Sheet	Description
<b>A</b> 1/14.01	Ornamental Grass Over Structure
<b>B</b> 2/14.01	Perennial Over Structure
<b>C</b> 3/14.01	Deciduous Tree Planting
<b>D</b> 4/14.01	Street Tree w/ Grate
<b>E</b> 5/14.01	Bike Rack
<b>F</b> 6/14.01	Concrete - 4" Slab
<b>G</b> 7/14.01	Expansion Joint
<b>H</b> 8/14.01	Mortar Set Precast Paver
<b>I</b> 9/14.01	Sand/Gravel Precast Paver
<b>J</b>	<b>At-Grade Planter</b>

### LAYOUT NOTES

- Lay out and verify dimensions prior to construction. If discrepancies exist contact Landscape Architect for direction before proceeding.
- Refer to architect drawings for all building layout information.
- Written dimensions take precedence over scale. Do not scale drawings.
- Where dimensions are called as "equal," space referenced items equally, measured to their center lines.
- Measurements are to finished face of building, wall or the fixed site improvement. Dimensions to center lines are indicated.
- Install intersecting elements at 90 degree angles to each other unless otherwise noted.
- Provide expansion joints where concrete flamework meets vertical structures such as walls, curbs, steps and building elements unless otherwise noted.

### IRRIGATION NOTES

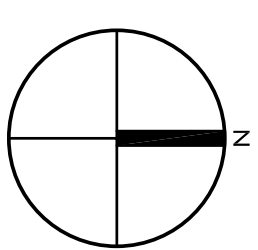
- Provide an automated underground drip irrigation system, designed and installed to serve all proposed plantings such that all plantings receive irrigation at the following RELATIVE rates:  
Trees shall receive irrigation at a rate of 12 GPH  
Shrubs " " " " " " " " 1 " " at every 8" O.C.  
Planting beds " " " " " " " " 1 " " at every 8" O.C.  
2. At the building's potable water supply, downstream from the water meter, install a tee to a ball-valve shut-off and 1" irrigation supply Main Line. Isolate the irrigation system from the potable water with a reverse pressure principle backflow preventer as approved by the Town Engineer; provide fittings on either side of BFP to allow for removal and servicing.  
3. Provide appropriate fittings for forced-air winterization. Slope Main Line and any rigid piping to manual drains at low points.  
4. Run all irrigation components (piping and control wires) beneath pavements in sleeves, 12"-18" below grade.  
5. Install an automatic controller at the location designed by the Architect.

## HERSHBERGER DESIGN

Landscape Architecture · Environmental Planning · Urban Design  
560 South Glenwood P.O. Box 1648 Jackson, Wyoming 83001 T307.239.1001 F307.234.8322

#### Issue Dates:

28 November 2007 - Building Permit
8 August 2008 - GMP Pricing Set
4 April 2018 - REVISED 2018 FDP



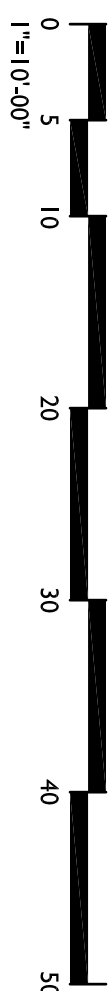
#### Drawing Title:

**SITE MATERIALS**  
**PLAN**  
**REVISED 2018 FDP**

#### Drawing Number:

**L1.01**

### Exhibit P





# Glenwood+Simpson

## Mixed-Use Building

Phase One - Millward + Simpson PMD Master Plan  
Lots 11-12; Block 2; 2nd Wort Subdivision  
JACKSON, WYOMING

### PLANT LIST

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY.	NOTE
DECIDUOUS TREES					
	<del>Fr. Fraxinus nigra 'Fullleaf'</del>	<del>Fullleaf Ash</del>	<del>2" GAL.</del>	<del>8</del>	<del>B&amp;B</del>
	<b>PTC. Populus tremula 'Erecta'</b>	<b>Columbian Aspen</b>	<b>3" cal.</b>	<b>10</b>	<b>B&amp;B</b>
PERENNIALS & GRASSES:					
	Brunnera macrophylla	Falses Forget-Me-Not	1 GAL.	73	12" O.C.
	Bm Jack Frost Sedum	Dead Needle	4" POT	36	12" O.C.
	White Nancy	Tufted Hairgrass	1 GAL.	104	18" O.C.
	Dc Deschampsia cespitosa				
	U Ligularia 'Little Rocket'	Ragwort	1 GAL.	200	12" O.C.
	Lm Lamium maculatum	Dead Needle	4" POT	108	12" O.C.
	White Nancy				
	Lg Ligularia 'The Rocket'	Ragwort	1 GAL.	48	18" O.C.

#### Irrigation:

All proposed plant material shall be irrigated by a pressurized subsurface irrigation system with automatic controller. Irrigation system shall include a Watts series 009 reduced pressure zone backflow prevention assembly, to be installed at the point of connection to possible water supply.

#### Landscape Cales:

1) Minimum Landscape Area:  
0.05 LSR x 15,000 SF Site Area = **750 SF Required Landscape Area**  
Landscape Area Provided = **752.2 SF (750.2 sq.ft.)**

2) Plant Units:  
1 Plant Unit / 1,000 SF Required Landscape Area = 10 Plant Units  
Plant Material Shown = 3,442 Plant Units (Based on an Average Plant Unit Cost of \$2460)

### PLANTING NOTES

1. Refer to civil engineer's, utility plans. If site conditions vary from what is shown, contact the landscape architect and civil engineer for direction before proceeding.
2. Verify locations and timing of site improvements installed under other actions. If any part of the work cannot be completed due to site conditions, contact the landscape architect.
3. Obtain approval of finish grading from landscape architect prior to installing any plant material.
4. Excavation near underground utilities shall be done carefully and, if necessary, by hand. The contractor is responsible for the location and depth of all underground utilities or damage to the site and/or improvements shall be repaired immediately at no expense to the owner.
5. Confirm all plant counts and square footages quantities shown are provided as owner information only. If quantities indicated in the plant list differ from symbols shown on the plans, then the plans shall govern the plant count. If discrepancies exist, contact LA for direction before proceeding.
6. The landscape architect reserves the right to reject any unacceptable plant material either at the source or when delivered to the project site.
7. The final location of plant materials is to be approved by the landscape architect on site prior to installation. The contractor is responsible for staking or marking the location of all plant materials on site prior to delivery to the project site. The landscape architect reserves the right to adjust the exact locations of plants on site.

#### Landscape Area Provided:

West property line, screening = 199.0 sq.ft.  
Planting bed, south-west corner = 31.2 sq.ft.  
Planting bed, employee housing = 520.0 sq.ft.  
750.2 sq.ft. \*

In addition:  
Street tree planters, 10 x 16 = 160.0 sq.ft.  
\* NOTE: The Applicant reserves the right to add additional movable planters (outside the pedestrian corridor) in future.

## HERSHBERGER DESIGN

Landscape Architecture · Environmental Planning · Urban Design  
560 South Glenwood P.O. Box 1648 Jackson, Wyoming 83001 T307.239.1001 F307.234.8322

Issue Dates:

28 November 2007 - Building Permit  
8 August 2008 - GMP Pricing Set  
**14 April 2018 - REVISED 2018 FDP**

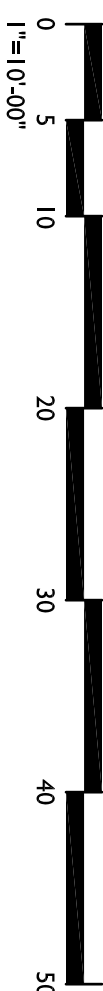
Drawing Title:

**LANDSCAPE PLAN**  
**REVISED 2018 FDP**

Drawing Number:

**L3.01**

Scale:



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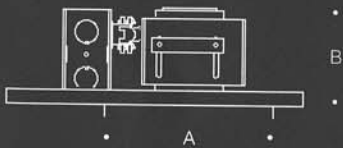
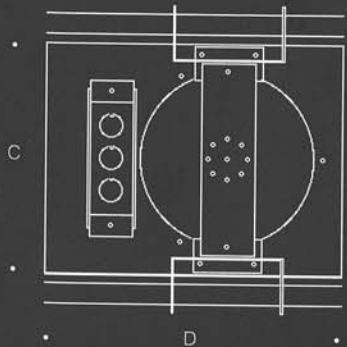




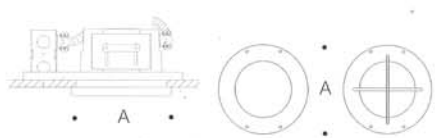
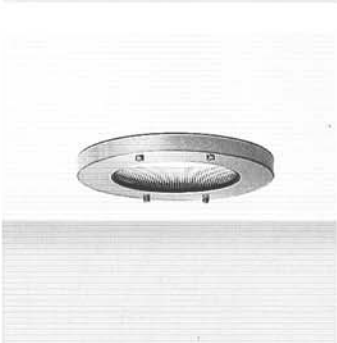
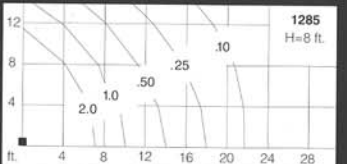
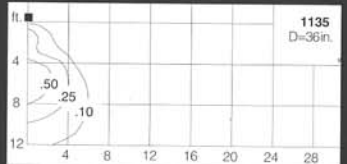
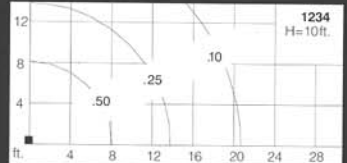
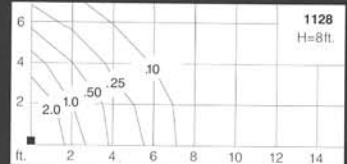
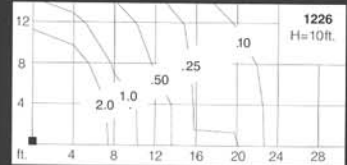
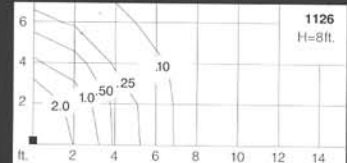
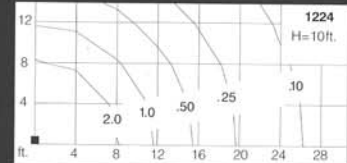
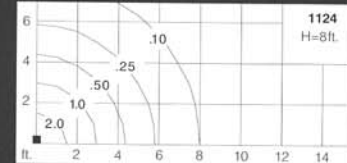
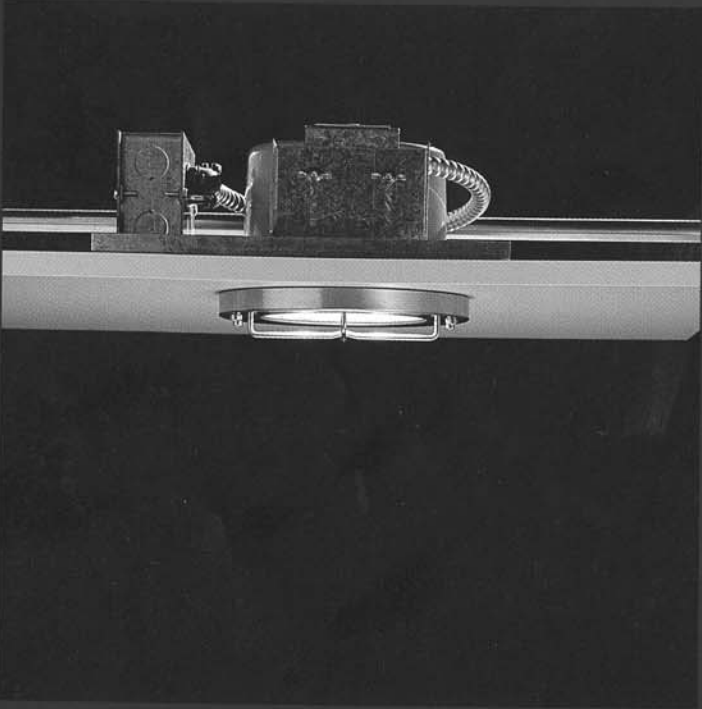


Recessed ceiling luminaires  
for wet locations - stainless steel

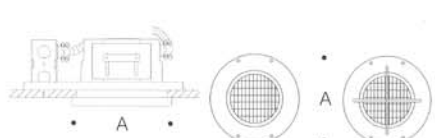
Small scale, extremely durable recessed ceiling luminaires with high performance tungsten halogen or long life compact fluorescent light sources. Stainless steel requires regular cleaning and maintenance, much like household appliances, to maintain its luster and to prevent tarnishing or the appearance of rust like stains. Thermally protected, U.L. listed for wet locations. Specify the trim/housing style and rough-in kit number - ie: 1124/540 for complete luminaire.



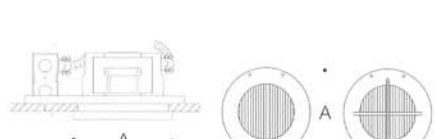
		A	B	C	D
540	Rough-in kit only for the 4 3/4" $\phi$ luminaire	4 3/8"	4 9/16"	8 1/2"	11"
560	Rough-in kit only for the 6 3/4" $\phi$ luminaire	6 1/4"	4 9/16"	8 1/2"	11"



	Lamp	Lumen	A
1124/540	1 20W G4, 12V	350	4 3/4"
1125/540 %guard	1 20W G4, 12V	350	4 3/4"
1224/560	1 50W GY6.35, 12V	1000	6 3/4"
1223/560 %guard	1 50W GY6.35, 12V	1000	6 3/4"



	Lamp	Lumen	A
1126/540	1 20W G4, 12V	350	4 3/4"
1127/540 %guard	1 20W G4, 12V	350	4 3/4"
1226/560	1 50W GY6.35, 12V	1000	6 3/4"
1227/560 %guard	1 50W GY6.35, 12V	1000	6 3/4"



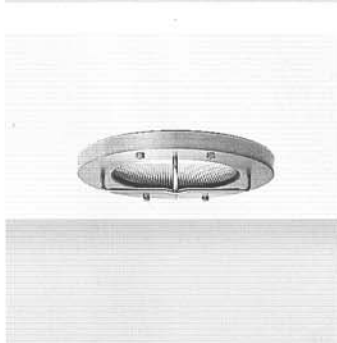
	Lamp	Lumen	A
1128/540	1 20W G4, 12V	350	4 3/4"
1129/540 %guard	1 20W G4, 12V	350	4 3/4"
1234/560	1 50W GY6.35, 12V	1000	6 3/4"
1233/560 %guard	1 50W GY6.35, 12V	1000	6 3/4"



	Lamp	Lumen	A
1135/540	1 20W G4, 12V	350	4 3/4"
1136/540 %guard	1 20W G4, 12V	350	4 3/4"
1235/560	1 50W GY6.35, 12V	1000	6 3/4"
1236/560 %guard	1 50W GY6.35, 12V	1000	6 3/4"



	Lamp	Lumen	A
1285P/565	1 9W PLC	575	6 3/4"
1286P/565 %guard	1 9W PLC	575	6 3/4"





Recessed wall luminaires  
- low voltage - stainless steel

Designed for low mounting heights for the illumination of steps, stairs, ramps, aisles and other locations indoors and outdoors where guidance and security lighting is required. These small scale luminaires feature high output asymmetrical light distribution.

**Housing:** Constructed of die cast aluminum with integral wiring compartment.

**Enclosure:** Die formed, .035" stainless steel faceplate, secured by four (4) socket head, stainless steel, captive screws threaded into stainless steel inserts in the housing casting. 3/16" thick, tempered glass spread lens with 14 linear prisms per inch and translucent ceramic mask. Continuous high temperature silicone rubber O-ring gasket for weather tight operation.

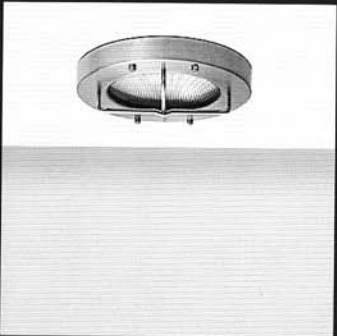
**Electrical/Optical:** All components are assembled together on a removable gear tray incorporating a G4 (20W) or GY 6.35 (50W), bi-pin lampholder with ceramic insulator and high temperature leads. Integral electronic 120V/11.6V transformer. An internal thermal protection device is provided. Reflector is semi-specular anodized aluminum. Available in 120V only.

**Through Wiring:** Maximum of four (4) No. 12 AWG conductors (plus ground) suitable for 90°C. Two 7/8" knockouts provided for 1/2" conduit.

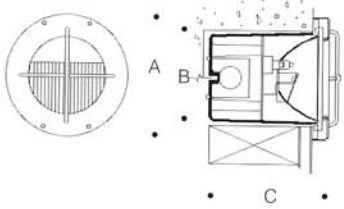
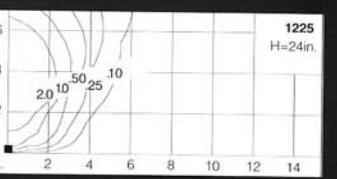
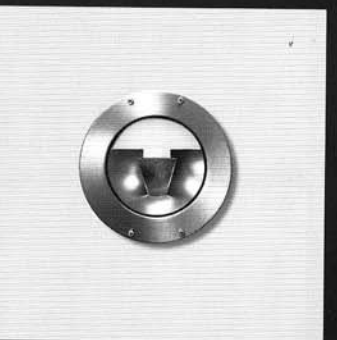
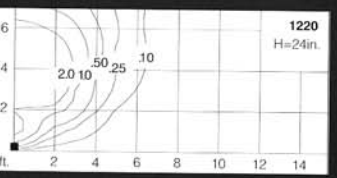
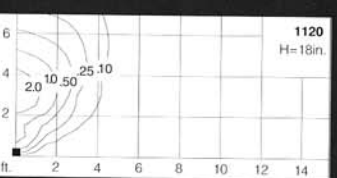
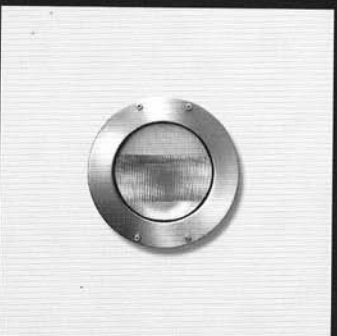
**Finish:** Natural brushed #4 stainless steel. Stainless steel requires regular cleaning and maintenance, much like household appliances, to maintain its luster and to prevent tarnishing or the appearance of rust like stains. Custom colors supplied on special order.

**U.L. listed,** suitable for wet locations and for installation within 3 feet of ground. Suitable for all types of construction including poured concrete.

**Optional CPC, Concrete Protection Cover:** Consists of a molded polymer sleeve which is recommended for poured concrete construction as a "rough-in" housing forming a corrosion barrier between the luminaire recessed housing and the concrete. Also contains its own through wiring box, provides a clean finished installation cavity and facilitates perfect rotational orientation.

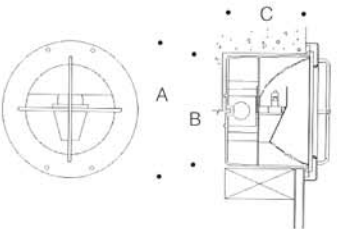


For recessed ceiling luminaires for wet locations - see pages 42 & 43.



Brushed stainless steel trim with or without guard. Tempered, ribbed glass lens with mask. Asymmetrical reflector. Integral 120V-11.6V electronic transformer. Lamp supplied with luminaire. 1120/1121 Opening: 3 1/16"  $\phi$  x 4" 1220/1222 Opening: 5 3/4"  $\phi$  x 4"

		Lamp		Lumen	A	B	C
1120	ADA	1 20W G4, 12V		350	4 3/4	3 3/8	4
1121 w/ Guard	ADA	1 20W G4, 12V		350	4 3/4	3 3/8	4
1220	ADA	1 50W GY6.35, 12V		1000	6 3/4	5 9/16	4
1222 w/ Guard	ADA	1 50W GY6.35, 12V		1000	6 3/4	5 9/16	4
500	C.P.C., Concrete Protection Cover for 1120, 1121						
510	C.P.C., Concrete Protection Cover for 1220, 1222						



Brushed stainless steel trim with or without guard. Tempered, clear glass with mask. Asymmetrical reflector with lamp shield. Integral 120V-11.6V electronic transformer. Lamps supplied with luminaire. 1225/1228 Opening: 5 3/4"  $\phi$  x 4"

		Lamp		Lumen	A	B	C
1225	ADA	2 20W G4, 12V		700	6 3/4	5 9/16	4
1228 w/ Guard	ADA	2 20W G4, 12V		700	6 3/4	5 9/16	4
510	C.P.C., Concrete Protection Cover for 1225, 1228						



Round recessed wall luminaires with asymmetrical distribution

Designed for low mounting heights for the illumination of steps, stairs, ramps aisles and other locations indoor and outdoor where guidance and security lighting is required. These luminaires feature high output controlled distribution illumination without glare.

**Housing:** Constructed of die cast aluminum with integral wiring compartment.

**Enclosure:** One piece die cast aluminum faceplate, 1/4" thick, domed, molded clear tempered glass. Faceplate is secured by three (3) hex socket head stainless steel captive screws threaded into stainless steel inserts in the housing casting. High temperature one piece molded U-channel gasket for weather tight operation.

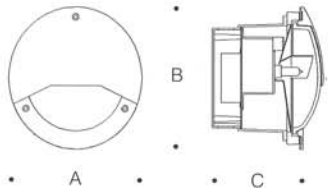
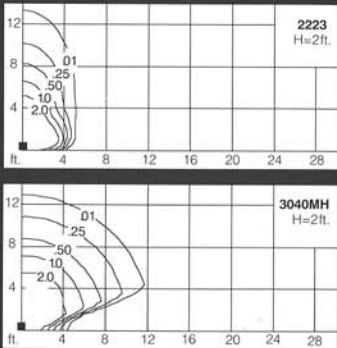
**Electrical:** Incandescent: G9, ceramic, bi-pin lampholder with high temperature leads. Internal thermal protection device is provided. Internal reflector is semi-specular anodized aluminum. H.I.D.; Lampholder: Single ended porcelain G12 bi-pin with nickel plated contacts supplied with 180°C high temperature leads, rated 600V pulse rated 5KV. Ballasts: Magnetic HPF. Available in 120V or 277V - specify.

**Through Wiring:** Maximum of four (4) No. 12 AWG conductors (plus ground) suitable for 90°C. Two 3/8" knockouts provided for 1/2" conduit.

**Finish:** Standard finish is an eight step process consisting of two coats of black or white polyurethane, one with light texture over a phosphate base. Custom colors supplied on special order.

**U.L.** listed, suitable for wet locations and for installation within 3 feet of ground. Suitable for all types of construction including poured concrete.

**Optional CPC, Concrete Protection Cover:** Consists of a molded polymer sleeve which is recommended for poured concrete construction as a "rough-in" housing forming a corrosion barrier between the luminaire recessed housing and the concrete. Also contains its own through wiring box, provides a clean finished installation cavity and facilitates perfect rotational orientation.



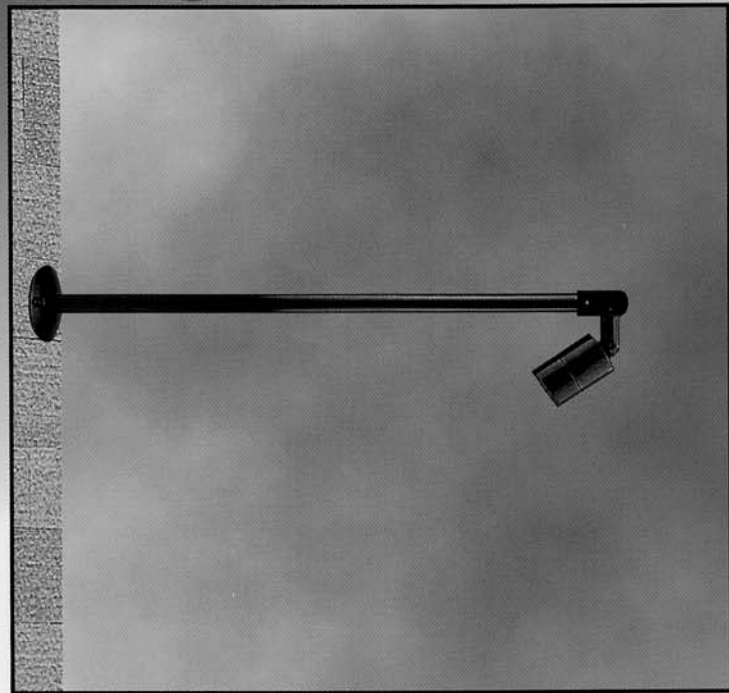
Die cast aluminum faceplate with eyelid. Molded clear tempered glass. Full internal reflector for asymmetrical distribution. Stainless steel fasteners. Color: Black or white.

			Lamp	Lumen	A	B	C
2223	Recessed	ADA	1 60W G9, 120V	830	7 1/2	7 1/2	4
3040MH	Recessed	ADA	1 39W G12T6MH	3300	9 7/8	9 7/8	4 7/8
521	C.P.C., Concrete Protection Cover for 2223						
523	C.P.C., Concrete Protection Cover for 3040MH						







# Sign Star™ Style 'C'



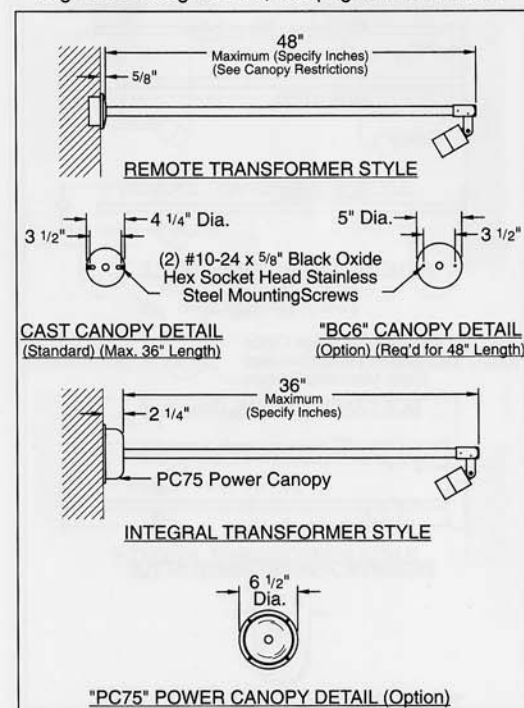
## Features

- Tamper proof design.
- 1" diameter machined aluminum stem with stainless steel hardware.
- Aluminum canopy. (Box gasket by others.)

The **Sign Star™ Style 'C'** provides the least visual impact of all the Sign Stars when mounted above or below a building mounted sign. Its straight, sleek appearance can be mounted to any building and provide a precise lighting pattern to that very important sign. Manufactured from all aluminum and stainless steel components and finished in one of eight polyester powder coat finishes, Sign Star will illuminate your sign for many years to come.

- Utilizes machined aluminum Nite Star™.
-  &  Listed with MR16 lamps to 50 watts.
- For remote transformers, see page 79.

Sign Star Design Guide, see pages 102 and 103.



See page 78 for additional Power Canopy™ details.

## CATALOG NUMBER LOGIC

**Example:** SN - 15 - SAP - 9 - 30" - C - PC75

**Series**

**Lamp Type**

0 - By others	16 - EYS(42W), 25° N. Flood
1 - ESX(20W), 12° Spot	17 - EYP(42W), 40° Flood
2 - BAB(20W), 40° Flood	6 - EXT(50W), 13° Spot
3 - FRB(35W), 12° Spot	7 - EXZ(50W), 26° N. Flood
4 - FRA(35W), 23° N. Flood	8 - EXN(50W), 40° Flood
5 - FMW(35W), 40° Flood	9 - FNV(50W), 60° W. Flood
15 - EYR(42W), 12° Spot	

**Finish**

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White(Gloss)	WHP	WHW
Aluminum	SAP	
Verde		VER

**Lens Type**

9 - Clear (Standard), 10 - Spread, 13 - Rectilinear

**Projection From Wall** (Specify Inches)

18", 24", 30", 36" or \*48" (\*Requires use of BC6 canopy option.)

**Style**

C - Straight Mount

**Options**

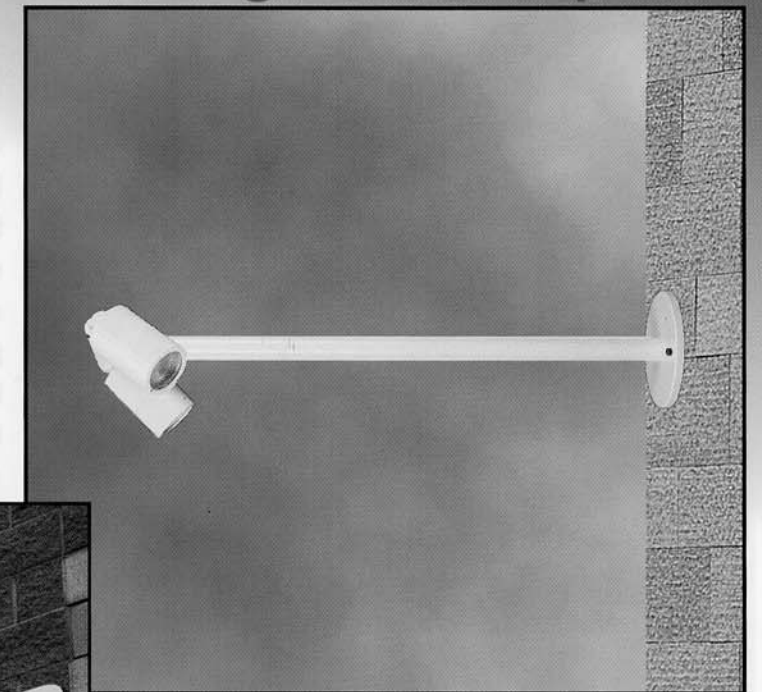
PC75 - Power Canopy™ with 75W Transformer (For use with maximum 36" length.)

BC6 - Machined Aluminum Wall Plate (Must be specified for over 36" length.)



B-K LIGHTING



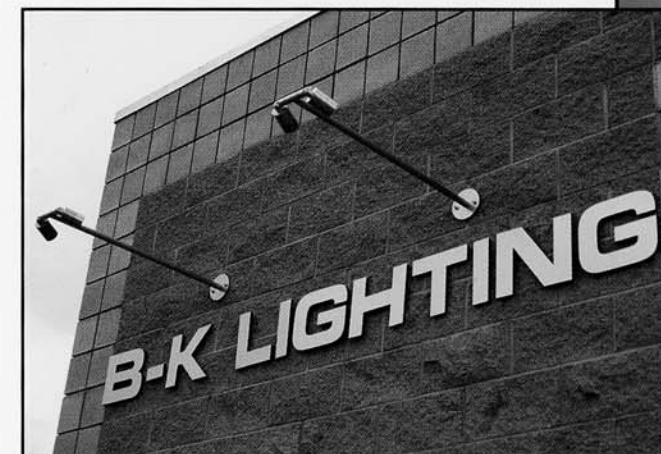
# Twin Sign Star™ Style 'C'



## Features

- Tamper proof design.
- 1" diameter machined aluminum stem with stainless steel hardware.
- Machined aluminum canopy. (Box gasket by others.)
- Utilizes two machined aluminum Nite Stars™.
-  &  Listed with MR16 lamps to 50 watts.
- For remote transformer, see page 79.

Sign Star Design Guide, see pages 102 and 103.



## CATALOG NUMBER LOGIC

**Example:** ST - 6 - SAP - 13 - 36" - C - PC150

**Series**

**Lamp Type**

0 - By others	16 - EYS(42W), 25° N. Flood
1 - ESX(20W), 12° Spot	17 - EYP(42W), 40° Flood
2 - BAB(20W), 40° Flood	6 - EXT(50W), 13° Spot
3 - FRB(35W), 12° Spot	7 - EXZ(50W), 26° N. Flood
4 - FRA(35W), 23° N. Flood	8 - EXN(50W), 40° Flood
5 - FMW(35W), 40° Flood	9 - FNV(50W), 60° W. Flood
15 - EYR(42W), 12° Spot	

**Finish**

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White(Gloss)	WHP	WHW
Aluminum	SAP	
Verde		VER

**Lens Type**

9 - Clear (Standard), 10 - Spread, 13 - Rectilinear

**Projection From Wall** (Specify Inches)

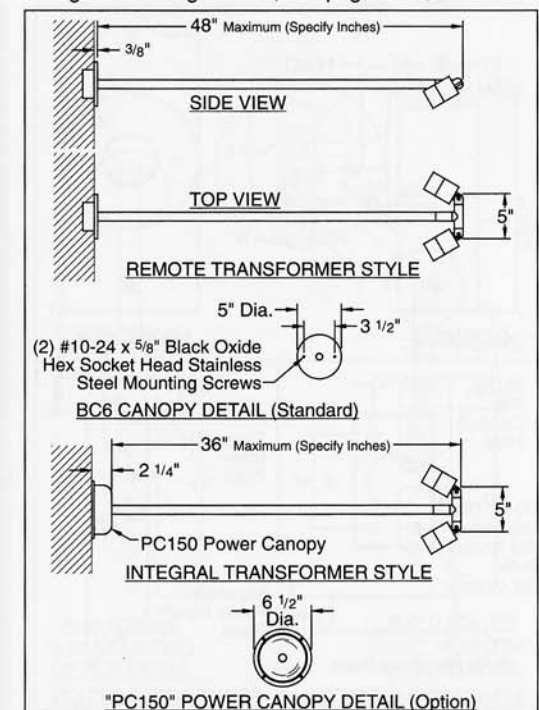
18", 24", 30", 36" or \*48" (\*Not available with "PC150" option.)

**Style**

C - Straight Mount

**Options**

PC150 - Power Canopy™ with 150W Transformer (For use with maximum 36" length.)



See page 78 for additional Power Canopy™ details.

B-K LIGHTING





## WOMACK & ASSOCIATES, INC.

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• Geotechnical Engineering

• Geology

June 30, 2008

Keith Harger, AIA  
Harger & Hoyt Architects  
P.O. Box 1129  
Jackson, Wyoming 83001

### RE: GEOTECHNICAL REVIEW, LOT AT SIMPSON AND GLENWOOD, JACKSON, WYOMING

Dear Keith:

We are pleased to present this geotechnical review for the proposed development at Simpson and Glenwood in Jackson, Wyoming. Three copies are enclosed. If you have any questions or if we may be of further assistance, please contact us.

If you have any questions about this report, or if we may provide other services to you, please contact us. As the project progresses, we will be available to answer questions for you.

Respectfully submitted,

**WOMACK & ASSOCIATES, INC.**

*J. Rolfe (by rw)*

Jason Rolfe, P.G.

*Ray Womack*

Ray Womack, P.E., P.G.  
Enclosure: Reports

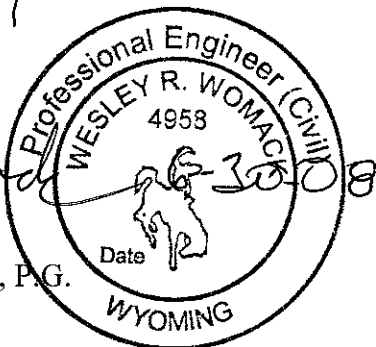


Exhibit R

**GEOTECHNICAL REVIEW  
LOT AT SIMPSON AND GLENWOOD  
JACKSON, WYOMING**

**Prepared for:**

**Keith Harger, AIA  
Harger & Hoyt Architects  
P.O. Box 1129  
Jackson, Wyoming 83001**

**Prepared by:**

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

**June 30, 2008**

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<b>Appendix A – Borehole and Test Pit Logs</b>
<b>Appendix B – Laboratory Test Data</b>

## **1.0 INTRODUCTION**

As authorized by Keith Harger of Harger & Hoyt Architects, Womack & Associates conducted a geotechnical review of existing subsurface data for the proposed development at the northwest corner of Simpson Avenue and Glenwood Street in the town of Jackson, Wyoming (Figure 1). The scope of services included review of subsurface soil and water conditions at adjacent developments, review of soil-engineering properties, and development of recommendations for construction of foundation elements. Available geotechnical data includes two test pits logs from the Center for the Arts Building, located across Glenwood Street to the East, and five borehole logs from the Town of Jackson Parking Garage, located west of the proposed development.

No new subsurface data were acquired for this project and it is important to note that the extrapolation of existing subsurface data involves an element of risk. We must stress the importance of observation during the excavation phase of this project. If unexpected soils or other subsurface conditions are encountered during the construction of this property, significant design changes may be required. No warrant of performance is made or implied.

## **2.0 PROPOSED CONSTRUCTION**

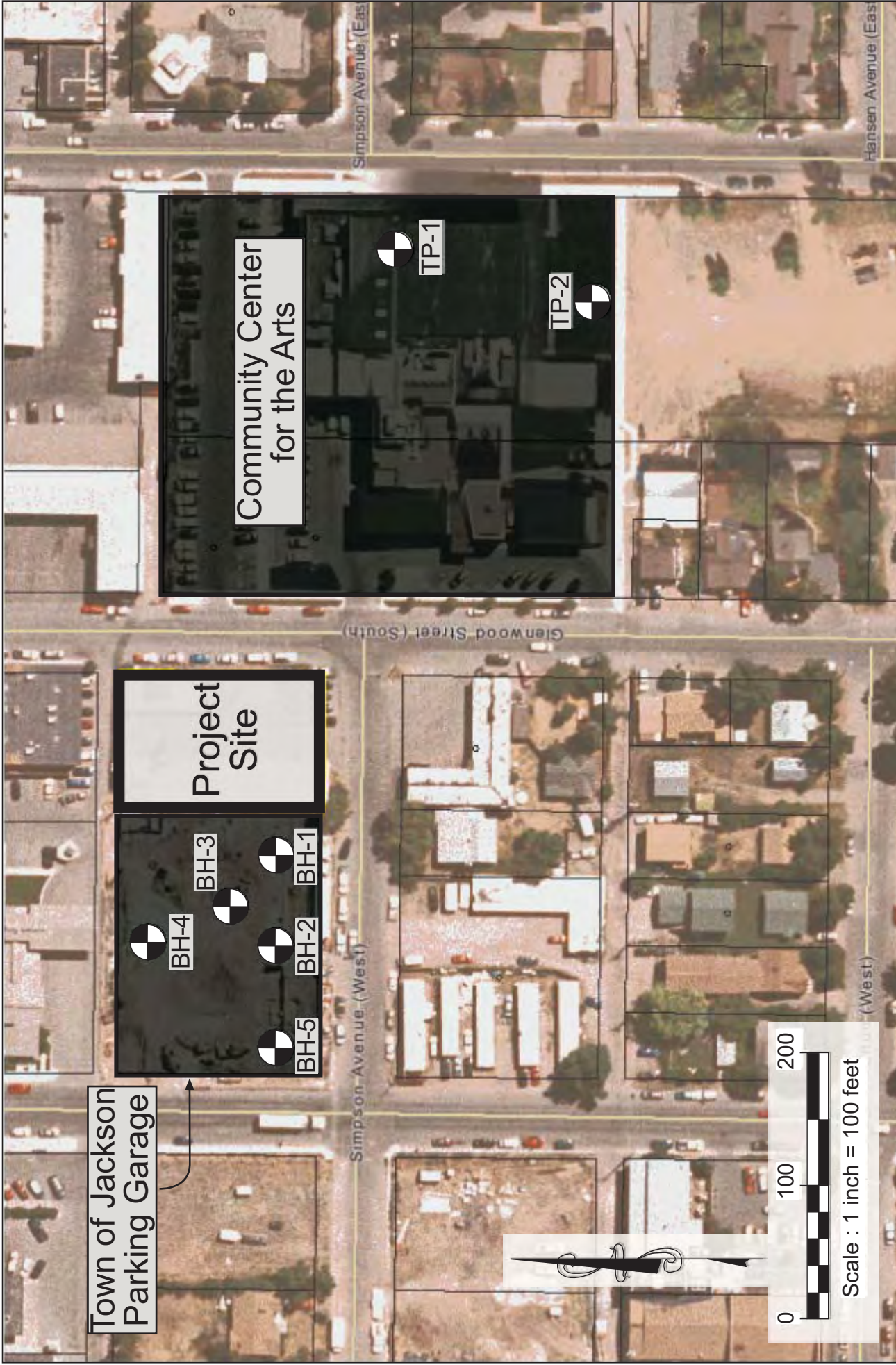
According to preliminary site development plans, a mixed use building with underground parking is planned for the site. Project documents indicate that the basement will be approximately twelve feet below existing grade.

## **3.0 INVESTIGATION PROCEDURES**

### **3.1 Geotechnical Report Review**

Two existing reports were utilized for the geotechnical review of this project. The first, dated August 17, 1999, was completed by Womack & Associates, Inc., for Harry Teague Architects and is titled "Geotechnical Site Investigation, Community Center for the Arts, Jackson, Wyoming," and includes two test pit logs. The second, dated September 2005, was completed by Nelson Engineering for the Town of Jackson and includes five borehole logs..





<p>Pre-Existing Test Pit and Borehole Location Map Geotechnical Review Report Lot at Simpson and Glenwood Jackson, Wyoming</p>	<p><b>WOMACK &amp; ASSOCIATES, INC.</b></p> <p>FIGURE <b>1</b></p>
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### **3.2 Laboratory Analysis**

Laboratory test results from the previous site investigations were used in the engineering calculations and recommendations for this report. No new laboratory data were generated and no new samples were taken for this report.

### **3.4 Report Preparation**

This report presents a geotechnical review of previous investigations near the project site, in lieu of a site specific investigation. The soil and groundwater conditions discussed in this report may differ from actual conditions at the project site. Test pit and borehole logs and laboratory data are appended. The engineering analyses and foundation recommendations are based on previous investigations. We note that allowable bearing capacity and other parameters vary substantially between the two reports.

## **4.0 SITE CONDITIONS**

### **4.1 Description**

The project site is located in the Town of Jackson, on the northwest corner of the intersection between Glenwood Street and Simpson Avenue. A single story hotel occupies the lot. An unpaved alleyway bounds the property to the north and a public multi-story parking garage exists to the west.

Preliminary plans indicate the new structure will be a mixed use, multi-story building with an underground parking garage. The site is flat and has an elevation of about 6,238 feet. At the time of this report, no demolition, site grading, excavation, or construction activity had been initiated for the new building.

### **4.2 Geology**

A geologic map of the Grand Teton National Park (Figure 2), which encompasses the town of Jackson and the project site, was published by Love, et al, in 1992. The map shows the location of surficial deposits, bedrock units, and geologic structures (i.e., faults and folds). As depicted on the map, the project site is covered by Holocene to Quaternary aged alluvial fan deposits (Qf). The alluvial fan deposits are presumably underlain at depth by Tertiary and Paleozoic aged bedrock. Bedrock was not encountered in the boreholes, and depth to bedrock is unknown.





Qc - Colluvium  
Qf - Alluvial-Fan Deposits

Qls - Landslide Debris  
Qs - Swamp Deposits

Ql - Loess  
Kb - Bacon Ridge Sandstone

Site Location and Geologic Map

Geotechnical Review Report  
Lot at Simpson and Glenwood  
Jackson, Wyoming



**WOMACK & ASSOCIATES, INC.**

\\server\JH\HargerHoyt\varley\Figure 2 Glenwood and Simpson geo map.pdf

**FIGURE**

**2**



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

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

#### **4.3 Soils**

Similar soil conditions were encountered at both of the previous geotechnical investigation sites. Test pits TP-1 and TP-2, excavated at the Community Center for the Arts, encountered alluvial gravel and cobble with a clayey sand matrix below depths of 2.2 and 3.4 feet, respectively, down to the bottom of the pits at about 18 feet below ground surface (bgs). Gravel, cobble, and boulders up to two feet in diameter were estimated to account for 60% to 70% of the volume. Clasts of limestone, sandstone, and igneous rock types were encountered. The gravel was estimated to be medium dense to dense. Occasional pockets of loose sand and gravel were observed.

Exploratory boreholes at the adjacent Town of Jackson Parking Garage encountered dense to very dense sandy gravel and cobbles overlying dense clayey silty sandy gravel and cobbles below about 20 feet. Borings were advanced using eight-inch diameter, hollow stem augers, and samples were taken using Standard Penetration Tests, which involves driving a split spoon sampler and recording the hammer blows required to drive the sampler one foot. When adjusted to account for variables such as hammer energy and overburden pressure, blow counts were more than 50 blows per foot (bpf) down to about 20 feet, and in the range 34 to 44 bpf below 20 feet. Laboratory tests on the matrix classify the material as a well graded gravel with silt and sand (GW-GM). Occasional sand lenses were recorded in the boring logs. Four of the five boreholes were taken to 25.5 feet below the ground surface, and the fifth met refusal at 16 feet.

#### **4.4 Groundwater**

Groundwater was not encountered at either site to depths of more than 25 feet bgs.

#### 4.5 Earthquakes and Ground Shaking

Jackson Hole is located within the Intermountain Seismic Belt, a zone of seismicity that extends from southern Utah through eastern Idaho, western Wyoming, and western Montana (Smith and Arabasz, 1991). The Teton fault along the eastern margin of the Teton Range about 6 miles west of the project site is considered an important structural element of the Intermountain Seismic Belt. Predicted recurrence intervals for maximum credible earthquakes have passed for most of the fault systems capable of generating magnitude 7.5 events in western Wyoming (Case, 1997), implying that the risk of major earthquakes may be high.

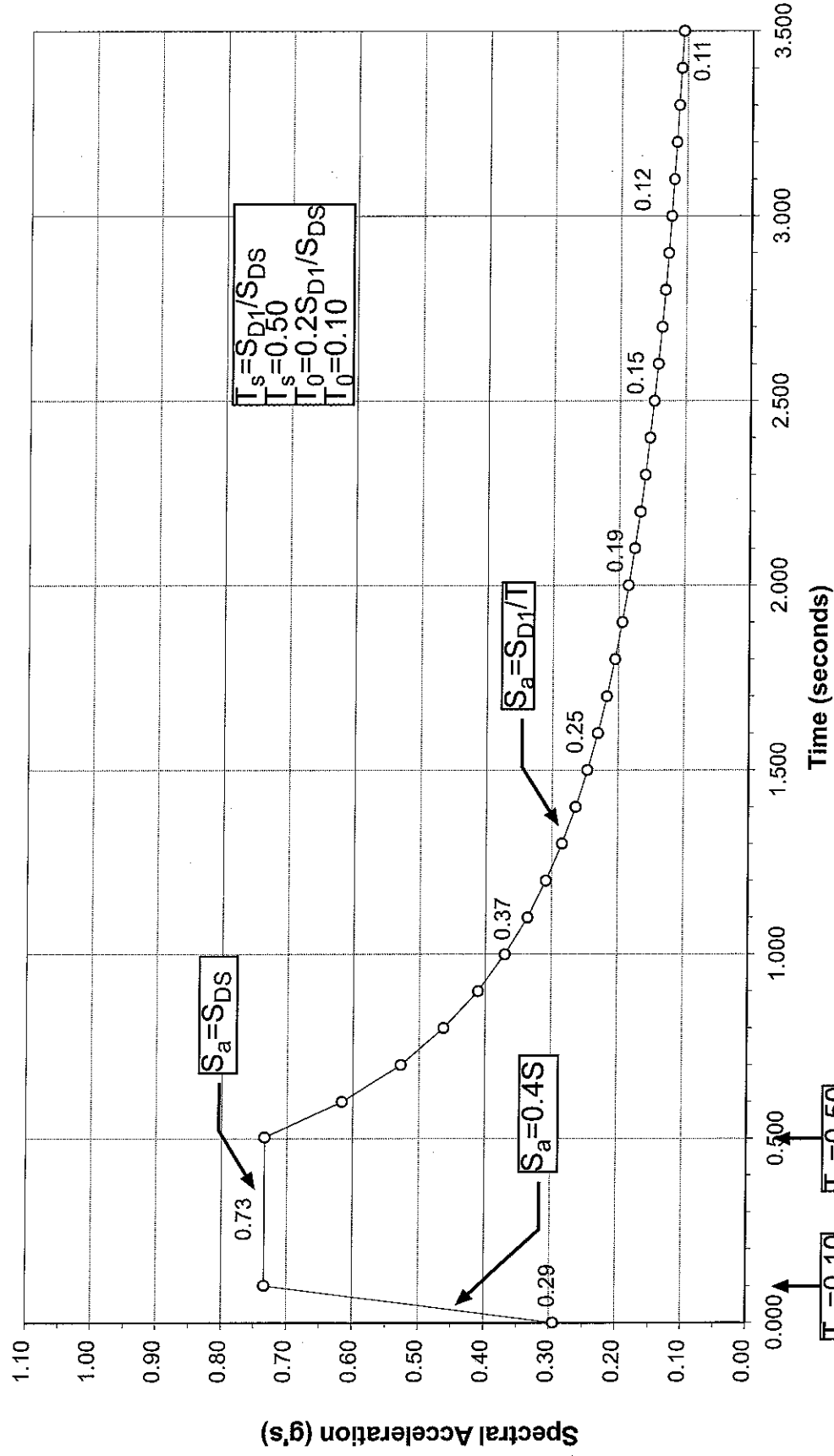
Gilbert et al (1983) estimated that an earthquake of approximately magnitude  $M_s$  6.5 might be anticipated along the Teton fault about once in 500 years, which is consistent with the design earthquake specified by the IBC (2006). Historically, no significant earthquake epicenters have been associated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

The recurrence interval for a magnitude 7.5 event on the Teton fault is estimated to be in the range of 700 to 2,000 years (Case, 1997; Machette et al, 2001). To put this recurrence interval into perspective, an earthquake with a 10% chance of occurrence in 250 years (commonly used for design of major dams and sensitive structures) has an average recurrence interval of about 2,500 years. Such an event would cause shaking typical of the *maximum considered earthquake* (MCE). The owner should be aware that, although the *design* ground motion (2/3 MCE) is consistent with the 2006 International Building Code (IBC) for the site, much larger earthquakes are possible, although the risk is smaller.

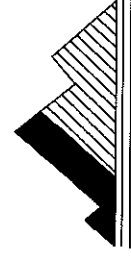
Site ground motion accelerations and a design response spectrum were derived in accordance with the general procedure defined in the 2006 International Building Code (IBC). The provisions of the 2006 IBC are intended to provide uniform levels of performance for structures, depending on their occupancy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

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

# Design Response Spectrum (2006 IBC) - Site Class C Lot at Simpson and Glenwood, Jackson, Wyoming



Design Response Spectrum  
 Geotechnical Review Report  
 Lot at Simpson and Glenwood  
 Jackson, Wyoming



WOMACK & ASSOCIATES, INC.

\\server\clients\JH\hargeth\hvt\figure 3 design response spectrum.pdf

FIGURE

3

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

Approximate Site Location: **Latitude = 43.477° Longitude = -110.764°**

Mapped Maximum Considered Earthquake (MCE) Spectral Response Acceleration Parameters:  
(Tables 1615.1-10) Short Period ( $S_s$ ) = **1.101**

1-Sec Period ( $S_1$ ) = **0.395**

Site Class Definition:

**C - Very Dense Soil** – Site Class Definitions (Table 1615.1.1)

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

$S_{MS} = 1.101$

$S_{MI} = 0.554$

$F_a = 1.0$  \*interpolated from table

$F_v = 1.405$  \*interpolated from table

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

$S_{DS} = 0.734$

$S_{D1} = 0.370$

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

### **4.6 Liquefaction Potential**

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

The previous investigations encountered sandy gravel and cobbles that appear to be too coarse and dense to liquefy in a seismic event. Furthermore, groundwater does not occur down to at least 25 feet. It is possible that liquefiable materials occur below the exploration depth. At this flat-lying location, liquefaction could potentially cause damaging differential settlement. However, there appears to be little risk of “lateral spreading”, which is a major slope movement that is a common source of catastrophic failure during earthquakes.

### **4.7 Geologic Hazards**

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

## **5.0 ENGINEERING ANALYSIS**

### **5.1 Settlement**

Significant consolidation or settlement of the dense coarse-grained gravel and cobble alluvial fan material is not anticipated. Topsoil, fill, or other fine-grained material should be removed.

### **5.2 Bearing Capacity**

Bearing capacity of soil refers to its ability to resist shear failure under load. The bearing capacity of the coarse-grained alluvial fan deposits was estimated using Meyerhof's bearing capacity equation for strip footings (Bowles, 1996). Soil properties were estimated based on the previous geotechnical investigations. The average unit weight of the soil is estimated to be about 135 pcf and the friction angle is estimated to be about 36 degrees (Pit Slope Manual, 1982; Huang, 1983). The foundation footings are assumed to be 16 inches wide, and placed on the sandy gravel and cobble alluvial fan material. Assuming continuous 16-inch strip footings at a depth of 12 feet, an allowable bearing capacity for the coarse-grained alluvial material is estimated to be about 8,000 psf for full dead and 50% live load.

### **5.3 Lateral Pressures**

Lateral pressures against foundation and retaining walls can be estimated using several methods, and there is no overwhelming consensus favoring any one technique. We have used what we believe to be reasonably conservative values that can be justified from normal practice and the technical literature. The main variables are assumptions regarding seismic forces, wall friction, and surcharge pressures created by slopes. As discussed above, the Jackson Hole area is potentially susceptible to ground shaking from earthquakes. A maximum horizontal seismic acceleration  $k_h$  in bedrock of 0.23g has been selected for this site (USGS, 2002). Lateral pressures have been calculated assuming horizontal backslope conditions. Table 5-1 summarizes lateral pressure parameters applicable to the site.



**Table 5-1: Lateral Pressure Parameters**

Condition	Coefficient of Earth Pressure	$\gamma K$ (equivalent fluid pressure)
<b>Static Conditions</b> Level Backfill	$K_o = 0.41$ $K_a = 0.26$ $K_p = 3.85$	56 pcf 35 pcf 520 pcf
<b>Earthquake Conditions</b> Level Backfill Level Backfill	$K_{ac} = 0.32$ $K_{pe} = 3.62$	44 pcf 489 pcf

### 5.3.1 Active Pressures

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

Research has indicated that lateral pressures due to earthquakes are non-hydrostatic in distribution, and the resultant acts above the lower third-point of the wall (Bakeer, et al, 1990). Accordingly, active soil pressures have been divided into two components that act at different wall heights. The static force acts at the lower third-point, as discussed above. The Mononobe-Okabe equations are often used to estimate dynamic forces against retaining walls. Although there is considerable debate about the theoretical applicability of these equations to rigid walls, they have been used for many years for seismic design and the performance record of underground walls during earthquakes has generally been good. The Mononobe-Okabe equations were applied using half the maximum horizontal acceleration (Bowles, 1996; Whitman, 1990). This force would be in addition to static active earth pressure, equivalent to  $4.5H^2$  pounds per horizontal foot of wall applied at 50% of the wall height above the base.

### 5.3.2 Passive Pressures

For passive pressures, an equivalent fluid pressure ( $\gamma K_p$ ) of about 520 pcf was estimated for static conditions and about 489 pcf for seismic conditions. Passive earth pressures were calculated using the Coulomb and Mononobe-Okabe equations, respectively (Bowles, 1996).

### 5.3.3 At-Rest Pressures

For lateral pressure design of foundation walls, which are restrained and not allowed to deflect, the calculated at rest earth pressure ( $\gamma K_o$ ) is about 56 pcf, assuming a horizontal ground surface behind the foundation wall. Use the at-rest pressure or the active pressure under seismic conditions for foundation wall design, whichever creates the larger resultant force.

## **5.4 Soil Friction**

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

## **5.5 Shoring**

It is our understanding that the basement footings may be more than 12 feet below ground surface. Shoring will likely be required adjacent to buildings and along the streets adjacent to the new building. The Occupational Safety & Health Administration (OSHA) classifies granular materials (sand and gravel) as Type C soils, which would require unsupported excavation slopes to be no steeper than 1.5H:1V.

### **5.5.1 Shoring Alternatives**

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

### **5.5.2 Soil Nail Design Parameters**

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

Unit weight:  $\gamma = 135$  pcf

Friction angle:  $\phi' = 36$  degrees

Unit ultimate bond stress = 20 psi

$K_a = 0.26$

$\gamma K_a = 35$  pcf

At least two sacrificial soil nails should be placed and tested to failure. During production, at least 3 soil nails should be tested to design loads. This office should observe testing of the soil nails. Should the actual soils differ from those at adjacent project sites, additional design considerations may be necessary.

## **6.0 RECOMMENDATIONS**

### **6.1 Foundations**

In our opinion, the coarse-grained sandy gravel and cobble alluvium observed at adjacent developments will provide adequate support for anticipated foundation loads of the proposed structure. This office should be regularly involved in the excavation portion of this project to observe actual site conditions. Design change is possible should observed soils differ from adjacent project sites. Excavation for the foundation footings should remove fine-grained soil, fill, or other inappropriate soils, and expose the underlying gravel and cobbles. Foundation footings may be placed directly on the coarse-grained alluvium. If any layers of clay, silt, or loose sand are encountered, this office should be notified and additional excavation or design considerations may be necessary.

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

In the unlikely event that shallow groundwater is encountered, this office should be notified. Shallow groundwater would significantly alter the design of the basement/underground parking area and would require waterproofing. At this point we do not consider it necessary to address dewatering procedures.

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

### **6.2 Final Grading and Backfilling**

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

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

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

### 6.3 Site Grading and Preparation

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

Alluvial gravel and cobbles are relatively easy to compact, and due to the assumed coarse, granular nature of the materials, nuclear density testing can yield variable compaction results. Place coarse, granular fill in lifts and compact using the methods specification described below. If the methods specification is consistently applied, density testing is not required. Gravel will compact into a dense, strong, well-drained structural fill, and tight moisture control is usually not required. Any disturbed soil should be compacted with a vibrating smooth-drum roller prior to footing construction. Table 5-2 contains compaction parameters for the coarse-grained alluvial soils.

**Table 5-2: Compaction Parameters for Coarse-Grained Fill**

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

\* Occasional clasts to 12-inch are permitted, but should not be nested

The actual number of passes should be determined by observing the compaction after each pass to determine if the surface is non-yielding. If the fill surface appears to be yielding, the number of passes should be increased until a non-yielding condition is observed. Fill should be placed in horizontal lifts.

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

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

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

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

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

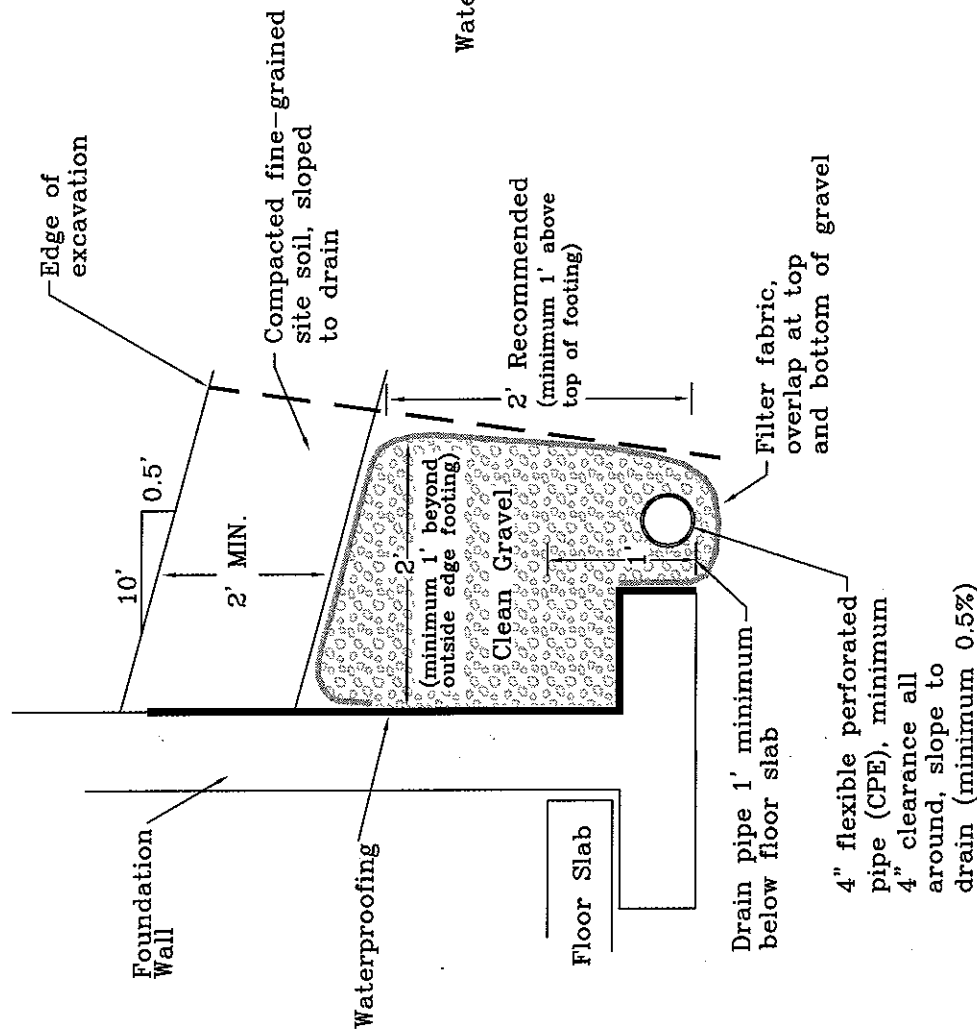
#### **6.4 Foundation Drainage**

Foundation footing drains are recommended if the basement is not waterproofed and is within 5 feet of seasonal groundwater highs. Footing drains will reduce the potential for seepage from perched water. Although code does not require drains in coarse granular soils, experience has shown that they can reduce the risk of seepage from leaking pipes.

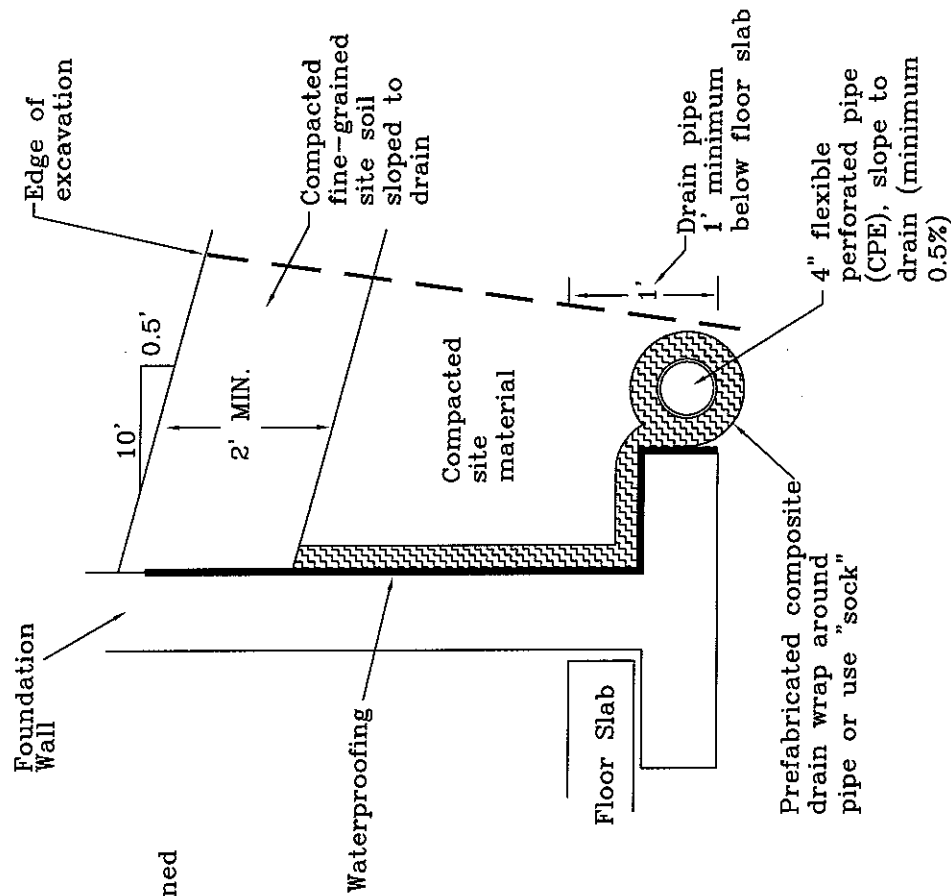
Two drainage alternatives are illustrated on Figure 4. The least expensive technique would probably be a prefabricated composite drain. The composite drain consists of an open wick layer laminated to filter fabric to reduce infiltration of soil. The exterior (upslope side) of the wall is waterproofed,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

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

# USING GRAVEL DRAIN AND FILTER



# USING PREFABRICATED COMPOSITE DRAIN



Geotechnical Review Report  
Lot at Simpson and Glenwood  
Jackson, Wyoming

FOUNDATION AND RETAINING WALL  
DRAINAGE ALTERNATIVES

FIGURE

4



## **6.5 Interior Slabs-on-Grade**

Basement floor slabs or other interior slabs should be at least 4 inches thick, and any slabs bearing vehicles should be at least 6 inches thick, or as approved by the structural engineer. Minor floor cracking of slab-on-grade construction is difficult if not impossible to prevent. Such cracking is normal and should be expected to occur with time. Buildings are almost never free of cracks, and cracking is caused by many factors other than soil movement, such as concrete shrinkage and daily and seasonal variability in temperature and humidity.

## **6.6 Exterior Slabs-on-Grade**

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

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

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

## **6.7 Ventilation and Radon**

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

## **6.8 Reinforcing, Concrete Considerations, and Utilities Testing**

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

## **6.9 Observation during Construction**

Observation is critical during construction considering that no subsurface data was collected for this site. It is very important that a representative of this office observe site grading, foundation excavations, soil compaction and construction of any foundation or drainage elements recommended in this report. If any suspicious soils or conditions are revealed during construction, this office should be notified immediately to survey the conditions and make necessary modifications.

## **7.0 LIMITATIONS**

This report relies on previous site investigations prepared for adjacent properties. The owner should be aware that extrapolation of subsurface data from offsite sources involves an element of risk. No new geotechnical investigations, including, but not limited to: boreholes, test pits, groundwater readings, or laboratory tests, were performed for this site. Actual site conditions may vary. This report, including engineering analysis, recommendations, figures, and design details are exclusive to the referenced site. Under no circumstances shall the figures be separated from the text and used independently. No warranty or guarantee is made or implied.

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**APPENDIX A**  
**BOREHOLE AND TEST PIT LOGS**

## GENERAL GEOTECHNICAL NOTES

SPT values given in the logs are corrected for overburden utilizing the Liao and Whitman (1986) method for overburden pressure greater than 500 PSF, Skempton (1986) method for overburden pressures less than 500 PSF

### DRILLING, SAMPLING, SOIL PROPERTIES ABBREVIATIONS AND SYMBOLS

N: Standard Penetration Test number

$U_c$ : Unconfined compressive strength, Pounds/ft<sup>2</sup> (PSF)

Pp: Pocket Penetrometer values, Ton/ft<sup>2</sup> (TSF)


**FILGC**: Fragments indicate gravels and cobbles larger than split spoon diameter.

w: Water content, %

LL: Liquid limit, %

PI: Plasticity index, %

$\gamma_d$ : In-situ dry density, lbs/ft<sup>3</sup> (PCF)

 Ground water level

SS: Split-Spoon Sample

ST: Shelby Tube Sampler

CS: Cylindrical Brass Lined Sample



Monitoring Well, diagonal hatching indicates screened interval

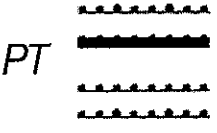
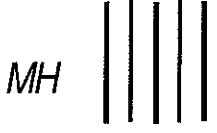
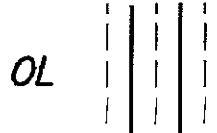
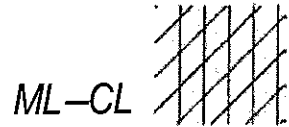
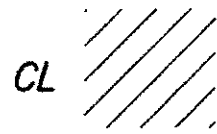
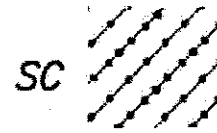
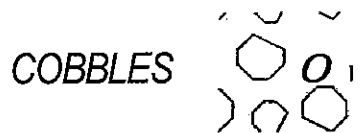
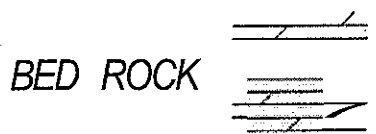
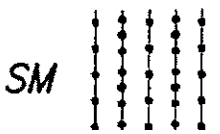
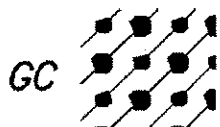
### RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

Non-Cohesive Soils	Standard Penetration	Cohesive Soils	Pp-(tons/ft <sup>2</sup> )
Very Loose	0 - 4	Very Soft	0 - 0.25
Loose	4 - 10	Soft	0.25 - 0.50
Slightly Compact	8 - 15	Firm (Medium)	0.50 - 1.00
Medium Dense	10 - 30	Stiff	1.00 - 2.00
Dense	30 - 50	Very Stiff	2.00 - 4.00
Very Dense	50+	Hard	4.00+

### PARTICLE SIZE

Boulders: 8 in.+	Coarse Sand: 5 mm(#4)-0.6 mm(#30)	Silts: 0.074mm(#200)
Cobbles: 8 in.-3in.	Medium Sand: 0.6 mm(#30)-0.2mm(#80)	-0.005mm
Gravel: 3in.-5mm(#4)	Fine Sand: 0.2mm(#80)-0.074mm(#200)	Clays: 0.005mm & Smaller

# SOIL GRAPHICS



NOTE: ANGLED DEMARCATIONS ON THE LOGS INDICATE APPROXIMATE OR POORLY DEFINED BOUNDARIES BETWEEN SOIL TYPES.

PROJECT NAME: <b>TOJ Parking Garage</b>	DRILL HOLE No. <b>1</b>	PAGE: <b>1 of 2</b>
DATE STARTED / FINISHED: <b>August 24, 2005</b>	DRILLER: <b>AGEC</b>	
LOGGED BY: <b>JR</b>	DRILL TYPE: <b>CME 750</b>	
BOREHOLE LOCATION/ELEVATION: <b>SE corner of lot</b>	HOLE DIAMETER: <b>6" Hollow Stem Auger</b>	
	HAMMER TYPE: <b>140# with 30" fall</b>	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORRECTED SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
							<p>This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.</p> <p>Asphaltic concrete, 3" thick 3/4" Crushed base, structural fill</p> <p>Gravel with sand and cobbles, tan to yellow brown, low to non-plastic fines, dry, very dense slow drilling, grinding</p> <p>slightly dry</p> <p>Gravel with sand and cobbles, trace clay, tan to yellow brown, low to moderately plastic fines, dry to slightly moist, very dense moderately slow drilling</p> <p>Gravel with clayey sand and cobbles, yellow brown, moderate to highly plastic fines, moist, very dense</p> <p>sand lense, red brown, approx. 6" thick</p> <p>Gravel with clayey sand and cobbles, yellow brown, fines are red brown, moderate to highly plastic fines, slightly moist to moist, very dense</p>						
		1											Spud @ 12:50
		2											
		3											
		4											
		5	20			BH1-1 2" SS 72				148			
		6	33										
		7	50										
		8											
		9	26			BH1-2 2" SS 77				76			
		10	28										
		11	32										
		12											
		13											
		14	17			BH1-3 2" SS 38				>50			
		15	50										
		16											
		17											
		18											
		19	21			BH1-4 2" SS 88				66			
		20	31										
		21	43										

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CLIENT: **Highland Associates**  
**Town of Jackson Public Parking Garage**  
**Jackson, WY**

WELL LOG	PHIC LOG	DEEP (FT)	SAMPLES			SA #	ID	RECD Y (%)	MATERIAL DESCRIPTION	LIQUID IT	PLASTIC LIM IT	CORRECTION	DRY DETENT (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDI	RIBED										
		22							- smooth drilling, Eittle grinding  Gravel with clayey sand and cobbles, yellow brown, fines are red brown, moderate to highly plastic fines, slightly moist to moist, dense						
		23													
		24													
		25													
		26													
		27							Bottom of drill hole at 25.5'. no groundwater encountered, drill hole backfilled with cuttings						End @ 14:18
		28													
		29													
		30													
		31													
		32													
		33													
		34													
		35													
		36													
		37													
		38													
		39													
		40													
		41													
		42													
		43													
		44													

PROJECT NAME: <b>TOJ Parking Garage Geotech.</b>	DRILL HOLE No. <b>2</b>	PAGE: <b>1 of 2</b>
DATE STARTED / FINISHED: <b>August 24, 2005</b>	DRILLER: <b>AGEC</b>	
LOGGED BY: <b>JR</b>	DRILL TYPE: <b>CME 750</b>	
BOREHOLE LOCATION/ELEVATION: <b>S side center of lot, See Map</b>	HOLE DIAMETER: <b>8" Hollow Stem Auger</b>	
	HAMMER TYPE: <b>140# with 30" fall</b>	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORRECTED SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
							Asphaltic concrete, 3" thick ¾" Crushed base, structural fill  - hard grinding, slightly moist cuttings  Gravel with sand and cobbles, tan to yellow brown, low to non-plastic fines, dry to slightly moist, very dense  - rough grinding - smooth drilling  Gravel with silty to clayey sand and cobbles, yellow brown, low to moderately plastic fines, slightly moist, very dense - moderately slow drilling  Gravel with silt and sand, cobbles FILGC, yellow brown, low to moderately plastic fines, slightly moist, very dense  - smooth, moderately easy drilling  Gravel with silt and sand, GW-GM, yellow brown, fines are red brown, moderate to highly plastic fines, slightly moist to moist, dense, FILGC						Spud @ 14:46
		1											
		2											
		3											
		4											
		5	27			BH2-1 2" SS 83				157			
		6	50										
		7	38										
		8											
		9											
		10	19			BH2-2 2" SS 83				68			
		11	26										
		12	28										
		13											
		14											
		15	23			BH2-3 2" SS 77				>50			
		16	48										
		17	50										
		18											
		19											
		20	18			BH2-4 2" SS 77		19	17	41		5	
		21	26										
			20										

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**Town of Jackson Public Parking Lot**  
**Jackson, WY**

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PROJECT NAME: <b>TOJ Parking Garage</b>	DRILL HOLE No. <b>3</b>	PAGE: <b>1 of 2</b>
DATE STARTED / FINISHED: <b>August 25, 2005</b>	DRILLER: <b>AGEC</b>	
LOGGED BY: <b>JR</b>	DRILL TYPE: <b>CME 750</b>	
BOREHOLE LOCATION/ELEVATION: <b>Center of lot. See Map</b>	HOLE DIAMETER: <b>8" Hollow Stem Auger</b>	
	HAMMER TYPE: <b>140# with 30" fall</b>	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORRECTED SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
							<p>This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.</p>						
		1					Asphaltic concrete, 3" thick						Spud © 08:25
		2					¾" Crushed base, structural fill						
		3					- moderate drilling, grinding						
		4					Gravel with silty sand and cobbles, dark brown, low plasticity fines, moist, medium dense			13			
		5					- debris/trash in cuttings						
		6					- cuttings change: gravel with clayey sand, yellow brown to moderate brown in color						
		7					- moderately difficult drilling						
		8					- slow grinding						
		9					Gravel with silt and sand and cobbles, medium to dark brown, moderately plastic fines, moist, very dense			128			
		10					- moderately slow drilling						
		11											
		12											
		13											
		14					Gravel with silt and sand and cobbles, medium to dark brown, moderately plastic fines, moist, very dense			>50			
		15					- grinding, slow advance						
		16											
		17											
		18											
		19					Gravel with silt and sand and cobbles, medium to dark brown, moderately plastic fines, moist, very dense			56			
		20											
		21											

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L LOG	S ADHIC LOG	DE H ( )	SAMPLES			SMPLF ID	RCO R Y %	This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.	LIQUD LIM IT	PLASTIC LI IT	CORREC ED S PT	DRY DENI TY (P CF)	MOISTUI ( )	REMARKS
			DI VE	UI JUSTIFIED	BL K									
MATERIAL DESCRIPTION														
		22						- slow drilling, abundant grinding						
		23												
		24												
		25	33			BH3-5	77	Gravel with silt and sand and cobbles, medium to dark brown, moderately plastic fines, moist, dense			34			
		26	26			2" SS								
		27	16											
		28						Bottom of drill hole at 25.5'. no groundwater encountered. drill hole backfilled with cuttings						End @ 10:53
		29												
		30												
		31												
		32												
		33												
		34												
		35												
		36												
		37												
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		41												
		42												
		43												
		44												

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PROJECT NAME: <b>TOJ Parking Garage</b>	DRILL HOLE No. <b>4</b>	PAGE: <b>1 of 2</b>
DATE STARTED / FINISHED: <b>August 25, 2005</b>	DRILLER: <b>AGEC</b>	
LOGGED BY: <b>JR</b>	DRILL TYPE: <b>CME 750</b>	
BOREHOLE LOCATION/ELEVATION: <b>N side center of lot, See Map</b>	HOLE DIAMETER: <b>8" Hollow Stem Auger</b>	
	HAMMER TYPE: <b>140# with 30" fall</b>	

WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES		SAMPLE ID	RECOVERY (%)	This log is part of a report prepared by Nelson Engineering for this project and should be read with the report. This summary applies only at the location of the boring and at the time of the drilling. Subsurface conditions may differ at other locations and may change at this location with passage of time. The data presented is a simplification of actual conditions encountered.	LIQUID LIMIT	PLASTIC LIMIT	CORRECTED SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED									
							MATERIAL DESCRIPTION						
							Asphaltic concrete, 3" thick ¾" Crushed base, structural fill						Spud @ 11:28
							Gravel with sand and cobbles, yellow brown to medium brown, non-plastic fines, slightly dry, very dense  - slightly moist, smooth drilling			98			
							Gravel with clayey sand and cobbles, yellow brown to red brown, moderately to highly plastic fines, moist, very dense  - slow drilling, infrequent grinding			68			
							Gravel with clayey sand and cobbles, yellow brown to red brown, moderately to highly plastic fines, moist, very dense  - smooth drilling, minor grinding			>50			
							Gravel with silt and sand and cobbles, yellow brown to red brown, moderately to highly plastic fines, moist, very dense			>50			

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**NELSON  
ENGINEERING**

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

CLIENT: **Highland Associates**  
**Town of Jackson Public Parking Lot**  
**Jackson, WY**

ELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			ID	RY (%)	REOV	MATERIAL DESCRIPTION	ILUD	PLT	IC LIM IT	CCE XCJ D IET	BDE NS (EF)	ISTUR ( )	REMARKS
			DRITE	UNES	BUK											
		22							- smooth drilling							
		23														
		24														
		25							Gravel with clayey sand and cobbles, yellow brown to red brown, moderately to highly plastic fines, moist, dense				34			
		26							Bottom of drill hole at 25.5', no groundwater encountered, drill hole backfilled with cuttings							End @ 12:45
		27														
		28														
		29														
		30														
		31														
		32														
		33														
		34														
		35														
		36														
		37														
		38														
		39														
		40														
		41														
		42														
		43														
		44														

**NELSON  
ENGINEERING**

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

CLIENT:

Highland Associates  
Town of Jackson Public Parking Lot  
Jackson, WY

PROJECT NAME: <b>TOJ Parking Garage</b>	DRILL HOLE No. <b>5</b>	PAGE: <b>1 of 2</b>
DATE STARTED / FINISHED: <b>August 25, 2005</b>	DRILLER: <b>AGEC</b>	
LOGGED BY: <b>JR</b>	DRILL TYPE: <b>CME 750</b>	
BOREHOLE LOCATION/ELEVATION: <b>N side center of lot, See Map</b>	HOLE DIAMETER: <b>8" Hollow Stem Auger</b>	
	HAMMER TYPE: <b>140# with 30" fall</b>	

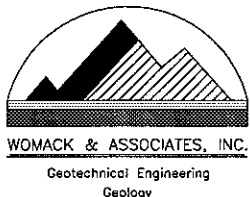
WELL LOG	GRAPHIC LOG	DEPTH (FT)	SAMPLES			RECOVERY (%)	MATERIAL DESCRIPTION	LIQUID LIMIT	PLASTIC LIMIT	CORRECTED SPT	DRY DENSITY (PCF)	MOISTURE (%)	REMARKS
			DRIVE	UNDISTURBED	BULK								
		1					Asphaltic concrete, 3" thick 3" Crushed base, structural fill Sandy silt with gravel, dark brown, low to moderately plastic fines, moist, roots						Spud @ 16:20
		2											
		3					- moderately loose, rocky drilling to 3.5'						
		4											
		5					Gravel with silt and sand, FILGC, medium brown to yellow brown, moderate to highly plastic fines, moist, very dense	20	19	145		3	
		6					- slow drilling, abundant grinding						
		7											
		8											
		9					Gravel with silt and sand and cobbles, medium brown to yellow brown, moderate to highly plastic fines, moist, very dense, some free water noted in sample but material was not saturated			75			
		10					- slow drilling, abundant grinding						
		11											End @ 17:30
		12											
		13											
		14					Gravel with silt and sand and cobbles, medium brown to yellow brown, moderate to highly plastic fines, moist, very dense			>50			
		15											
		16											
		17					Drill refusal at 16.0' after 15 minutes with no advancement, no groundwater encountered, drill hole backfilled with cuttings, monitoring well installed						
		18					2 additional holes attempted 10' south and 20' south, refusal met at 12.5' and 15.5', respectively						
		19											
		20											
		21											

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**NELSON ENGINEERING**

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

CLIENT: **Highland Associates**  
**Town of Jackson Pubic Parking Lot**  
**Jackson, WY**



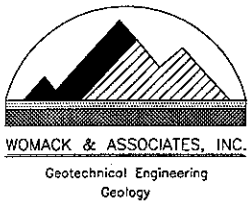
5825 Lazy Lane  
Billings, MT 59106  
Telephone: (406) 656-5398  
Fax: (406) 656-8912

# TEST HOLE LOG

PAGE 1 OF 1

PROJECT NAME: Community Center for the Arts							DATE: 6/22/99					
PROJECT LOCATION: Lots 8-14, east 1/2 of 15, Block1, 2nd Wort Addition, and portion of NE1/4NE1/4 Sec. 33, T41N, R116W, Jackson, Wyoming							HOLE NO.: TP-1 (P-1)					
TEST HOLE LOCATION: 200' south and 40' west of the northeast corner of the property												
ELEVATION G.S.: 6238			TOTAL DEPTH: 18.5		GROUNDWATER LEVEL: na			MEASURED FROM:				
DRILL TYPE: DAEWOO DH-130Z Track Excavator			HAMMER:		DRILL CO: Westwood Construction			DRILLER: Jim Shlinger		LOGGED BY: ccvs		
DEPTH (FT.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	WELL COMPLETION
1							0.0-0.6' GRAVEL - moist, dark brown, base coarse gravel and sod [TOPSOIL/FILL]					
2							0.6-2.2' GRAVEL - moist, loose to medium dense, well rounded, with bricks, concrete pieces, and wood from demolition of part of old school [FILL]					
3							2.2-4.8' GRAVEL and COBBLES - moist to very moist, medium dense, sub- to well rounded, in a light to medium brown, slightly Clayey Sand matrix; Gravels were imbricated, stratified, and oriented generally with the ground surface, various lithologies (gray limestone, red sandstone, and igneous types) [ALLUVIUM]					
4							4.8-7.0' GRAVEL and COBBLES - moist to very moist, medium dense to dense (some patches are more cemented), sub- to well rounded, in a light to medium brown, Clayey Sand matrix; Gravels were, stratified, and oriented generally with the ground surface and most were coated with white salts, various lithologies (gray limestone, red sandstone, and igneous types), some pockets of loose, finer gravel and sand; ~40-50% Gravel (1-3-inch), 20-30% oversized (up to 2'-diameter), 15-20% Sand, and 5% fines [ALLUVIUM]					
5							7.0-18.0' GRAVEL and COBBLES - as above but wet, loose to medium dense, less cementation, some caving of sides below 13', but no seepage observed in test pit					
6												
7												
8												
9												
10												
11												
12												
13		D1										
14												
15												
16												
17												
18												
19												

TEST\_HOLE\_LOG2 J\_CCA99.GPJ WOMACK.GDT 8/17/99



5825 Lazy Lane  
 Billings, MT 59106  
 Telephone: (406) 656-5398  
 Fax: (406) 656-8912

# TEST HOLE LOG

PAGE 1 OF 1

PROJECT NAME: Community Center for the Arts							DATE: 6/22/99					
PROJECT LOCATION: Lots 8-14, east 1/2 of 15, Block1, 2nd Wort Addition, and portion of NE1/4NE1/4 Sec. 33, T41N, R116W, Jackson, Wyoming							HOLE NO.: TP-2 (P-2)					
TEST HOLE LOCATION: 10' north and 80' west of the southeast corner of the property												
ELEVATION G.S.: 6235			TOTAL DEPTH: 19		GROUNDWATER LEVEL: na			MEASURED FROM:				
DRILL TYPE: DAEWOO DH-130Z Track Excavator			HAMMER:		DRILL CO: Westwood Construction			DRILLER: Jim Shlinger		LOGGED BY: ccvs		
DEPTH (FT.)	GRAPHICAL LOG	SAMPLE	S.P.T. (N) BLOWS/FT.	RECOVERY (%)	UNCONFINED STRENGTH (TSF)	CLASSIFICATION	DESCRIPTION	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	WELL COMPLETION
1							0.0-1.5' Silty CLAY - moist, dark brown, with sod on top, possibly imported [TOPSOIL/FILL]					
2							1.5-3.4' Clayey GRAVEL - moist to very moist, dark brown, medium dense [TOPSOIL]					
3												
4							3.4-7.5' GRAVEL and COBBLES - moist to very moist, medium dense to dense (some patches are more cemented), sub- to well rounded, in a light to medium brown, Clayey Sand matrix; Gravels were, stratified, and oriented generally with the ground surface and most were coated with white salts, various lithologies (gray limestone, red sandstone, and igneous types), some pockets of loose, finer gravel and sand; ~40-50% Gravel (1-3-inch), 20-30% oversized (up to 2'-diameter), 15-20% Sand, and 5% fines [ALLUVIUM]					
5												
6												
7												
8							7.5-19.0' GRAVEL and COBBLES - very moist to wet, loose to medium dense, sub- to well rounded, in a lightly Clayey Sand matrix; Gravels were imbricated, stratified, and oriented generally with the ground surface, various lithologies (gray limestone, red sandstone, and igneous types), few Boulders up to 2'-diameter [ALLUVIUM]					
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

TEST\_HOLE\_LOG2.J.CCA98.GPJ WOMACK.GDT 8/17/99



**APPENDIX B**

**LABORATORY TEST DATA**

Soil Classification Report  
 Nelson Engineering  
 P.O Box 1599  
 430 South Cache  
 Jackson, WY 83001  
 (307) 733-2087

Project: TOJ Parking Lot  
 Job Number: 5-220-1  
 Sample ID: BH2-4  
 Visual ID: Tan Brown Gravelly Clay

Sampled By: JR  
 Date: 8/24/2005  
 Tested By: AP  
 Date: 9/20/2005

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1"	25	114.6	154.2	39.6	4%	96%
3/4"	18.75	114.6	214.7	100.1	16%	84%
#4	4.75	114.6	398.7	284.1	48%	52%
#10	2.00	114.6	236.1	121.5	62%	38%
#40	0.425	114.6	234.1	119.5	75%	25%
#200	0.075	114.6	262.1	147.5	92%	8%
Pan	0	114.6	186.7	72.1	100%	0%
Total Weight of Sample (g)				884.4		

Moisture Content	
Wet Wt. + Tare (g)	1044.3
Dry Wt. + Tare (g)	998.5
Wt of Water (g)	45.8
Tare Wt. (g)	114.1
Dry Wt. (g)	884.4
Moisture Content	5.2%
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	884.4
Post Wash Dry (g)	812.3
Tare Wt. (g)	114.1
Wt. Of Minus #200 =	72.1

Unified Soils Classification:  
 Well Graded Gravel with Silt and Sand (GW-GM)

Gravel 48%  
 Fines 44%

Fines	
Liquid Limit:	19
Plastic Limit:	17
Plasticity Index:	2

In-Situ Moisture Content	5.2%
--------------------------	------

Particle Size

D60= 6.9  
 D30= 0.81  
 D10= 0.092  
 Cu= 75  
 Cc= 1

Soil Classification Report  
 Nelson Engineering  
 P.O Box 1599  
 430 South Cache  
 Jackson, WY 83001  
 (307) 733-2087

Project: TOJ Parking Garage  
 Job Number: 5-220-1  
 Sample ID: BH5-1  
 Visual ID: Tan Gravelly Sand

Sampled By: JR  
 Date: 8/25/2005  
 Tested By: AP  
 Date: 9/20/2005

Standard Sieve No.	Particle Size (mm)	Tare Weight (g)	Sample + Tare (g)	Sample Weight (g)	Cumulative % Retained	Percent Passing
1"	25	110.2	177.3	67.1	7%	93%
3/4"	18.75	110.2	199.0	88.8	17%	83%
#4	4.75	110.2	396.8	286.6	48%	52%
#10	2.00	110.2	235.1	124.9	61%	39%
#40	0.425	110.2	260.9	150.7	77%	23%
#200	0.075	110.2	255.3	145.1	93%	7%
Pan	0	110.2	175.0	64.8	100%	0%
Total Weight of Sample (g)				928.0		

Moisture Content	
Wet Wt + Tare (g)	1065.7
Dry Wt. + Tare (g)	1038.0
Wt of Water (g)	27.7
Tare Wt. (g)	110.0
Dry Wt. (g)	928.0
Moisture Content	3.0%
Wash	
Wet Wt. + Tare (g)	
Pre Wash Dry (g)	928.0
Post Wash Dry (g)	863.2
Tare Wt. (g)	110.0
Wt. Of Minus #200 =	64.8

Unified Soils Classification:  
 Well Graded Gravel with Silt and Sand (GW-GM)

Gravel	48%
Sand	45%
Fines	7%

Liquid Limit:	20
Plastic Limit:	20
Plasticity Index:	0

In-Situ Moisture Content	3.0%
--------------------------	------

Particle Size

D60= 6.9  
 D30= 0.88  
 D10= 0.12  
 Cu= 58  
 Cc= 1

## GENERAL NOTES

NOTES:

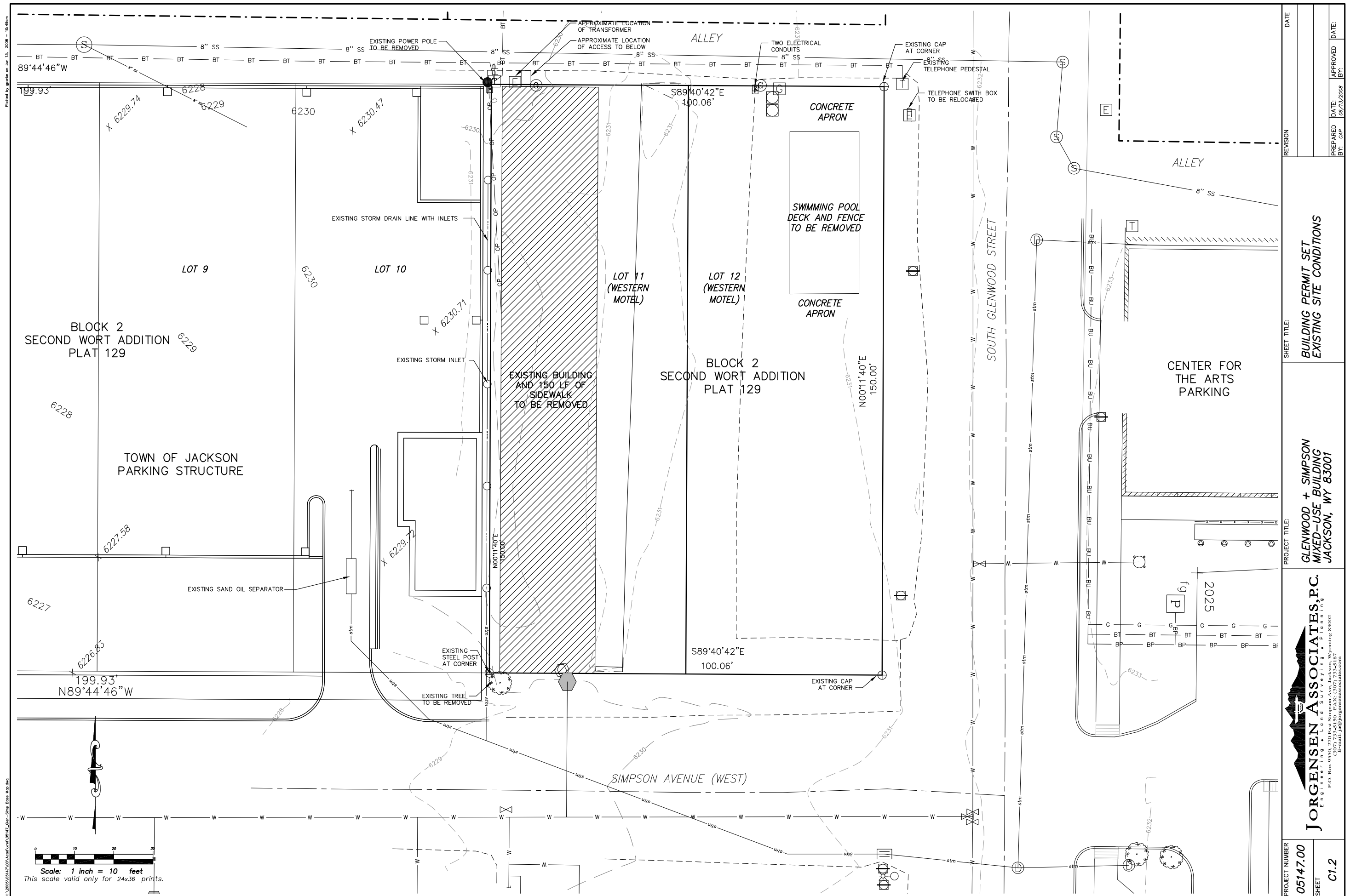
1. CONTACT THE ENGINEER FOR ABBREVIATIONS NOT LISTED.
2. SOME ABBREVIATIONS MAY APPEAR ON THIS AND NOT ON THE DRAWINGS.

## WATER EROSION CONTROL NOTES

1. ALL WORK IS TO BE COMPLETED IN ACCORDANCE WITH THE FOLLOWING GENERAL SPECIFICATIONS OR AS MODIFIED BY THE SPECIAL PROVISIONS OR SUPPLEMENTARY SPECIFICATIONS:
    - a. 2001 EDITION OF THE WYOMING PUBLIC WORKS STANDARD SPECIFICATIONS
    - b. WYOMING DEQ RULES AND REGULATIONS CHAPTERS 11 & 12
    - c. AMERICAN WATERWORKS ASSOCIATION A100
  2. EXISTING BASE MAPPING IS BASED ON FIELD TOPOGRAPHIC SURVEYS PERFORMED BY NELSON ENGINEERING IN 2004, JORGENSEN ASSOCIATES, P.C. IN 2005 AND COMMUNITY CENTER FOR THE ARTS RECORD INFORMATION, AND TOWN OF JACKSON PARKING GARAGE RECORD INFORMATION.
  3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING PERMITS:
    - WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT TO CONSTRUCT
    - TOWN OF JACKSON BUILDING PERMIT
  4. BURIED UTILITIES
    - a. CONTRACTOR SHALL VERIFY LOCATION OF ALL BURIED AND OVERHEAD UTILITIES PRIOR TO ANY EXCAVATION IN THE MONITY. UTILITY LOCATIONS SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. ENGINEER DOES NOT WARRANT THE ACCURACY NOR COMPLETENESS OF THE INFORMATION SHOWN FOR EXISTING UTILITIES.
    - b. CONTRACTOR SHALL COORDINATE WITH THE OWNER TO LOCATE AND AVOID DAMAGE TO ANY FUEL PUMPING FACILITIES, IRRIGATION FACILITIES, WATER UTILITIES, AND STATE MONITORING WELLS AND PIPING
    - c. THE CONTRACTOR WILL CALL THE UTILITY NOTIFICATION WYOMING ONE CALL AT 1-800-348-1030 FOR UTILITY LOCATIONS AT LEAST 3 BUSINESS DAYS, NOT INCLUDING THE DAY OF ACTUAL NOTIFICATION, PRIOR TO ANY EXCAVATION.
  5. CONTRACTOR SHALL MAINTAIN WATER, SEWER, AND FORCE MAIN SLOPES CONSISTENT WITH THE PROFILES. ABRUPT ELEVATION CHANGES ARE NOT PERMITTED AND MAY REQUIRE ADDITIONAL AIR RELEASE VALVES OR BLOW-OFFS AT THE CONTRACTORS EXPENSE.
  6. TYPE A TRENCH BACKFILL SHALL BE REQUIRED ON ALL TRENCH AREAS WITHIN THE ROAD, DRIVEWAY OR PATHWAY SURFACE AND BEYOND THE OUTSIDE EDGE OF SUCH SURFACE WITHIN A HORIZONTAL DISTANCE OF TWENTY FEET; ALL TRENCH AREAS LOCATED WITHIN AN EMBANKMENT FILL SLOPE; ALL OVEREXCAVATED TRICH ZONES; AND WHEN USING TRENCH BACKFILL MATERIAL THAT CANNOT BE TESTED BY AASHTO T-99 OR T-180 SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 02210.
- TYPE B TRENCH BACKFILL WILL BE ALLOWED AT TRENCH AREAS ACROSS OPEN LOTS AND FIELDS WHICH DO NOT FALL WITHIN THE LOCATIONS SPECIFIED ABOVE FOR TYPE A TRENCH BACKFILL.
7. ALL WATER MAINS INSTALLED THAT ARE NOT ADJACENT TO SEWER MAINS SHALL BE INSTALLED WITH MAGNETIC LOCATOR DETECTABLE WARNING TAPE. TAPE SHALL BE BLUE WITH "CAUTION BURIEDWATER MAIN" PRINTED CLEARLY AND PERMANENTLY ON THE TAPE AND SHALL BE INSTALLED 24-36 INCHES ABOVE THE PIPE.
  8. CONTINUOUS RIGID TYPE B PIPELINE INSULATION SHALL BE PROVIDED AS SHOWN ON THE PLANS. PROVIDE THE DETAIL, AT ALL LOCATIONS WHERE DEPTH OF COVER IS LESS THAN 5 FEET FOR SEWER MAINS AND SERVICES; LESS THAN 7 FEET FOR SEWER FORCE MAINS, WATER MAINS AND SERVICES OR AS SHOWN ON THE PLANS.
  9. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN WATER PIPES AND SEWER PIPES/MANHOLES, MEASURED EDGE TO EDGE. MAINTAIN A MINIMUM OF 18 INCHES VERTICAL SEPARATION AT WATER-SEWER PIPE CROSSINGS. WHERE SEWER PIPE CROSSES ABOVE WATER PIPE, SPECIAL CONSTRUCTION IS REQUIRED. SEE TYPE DETAILS.
  10. DEFLECT PIPE AS NECESSARY TO MAINTAIN 10' SEPARATION BETWEEN WATER LINES AND SEWER LINES. MAXIMUM DEFLECTION 3' OR 11 INCHES FOR 8" AND 10" PIPE. DEFLECTION MAY ONLY BE MADE AFTER JOINING.
  11. WATER MAINS SHALL BE DUCTILE IRON PIPE (DIP) CL 350. FITTINGS FOR WATER MAINS SHALL BE DUCTILE IRON, CONFORMING TO AWWA C110 OR C153.
  12. SANITARY SEWER LINES AND FITTINGS SHALL BE SDR 35 PVC AND CONFORM TO ASTM D-3034.
  13. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION DESIGNATED TO REMAIN, FROM DAMAGE DURING CONSTRUCTION OPERATIONS. ANY EXISTING MONUMENTS DISTURBED BY THE CONTRACTOR SHALL BE RESET AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR AND ENGINEER SHALL NOTE THOSE MONUMENTS IN THE FIELD PRIOR TO CONSTRUCTION.
  14. WHERE IT IS REQUIRED TO CUT EXISTING PAVEMENT, THE CUTTING SHALL BE DONE TO A NEAT WORK LINE WITH A SAWCUT OR OTHER METHOD AS APPROVED BY THE ENGINEER.

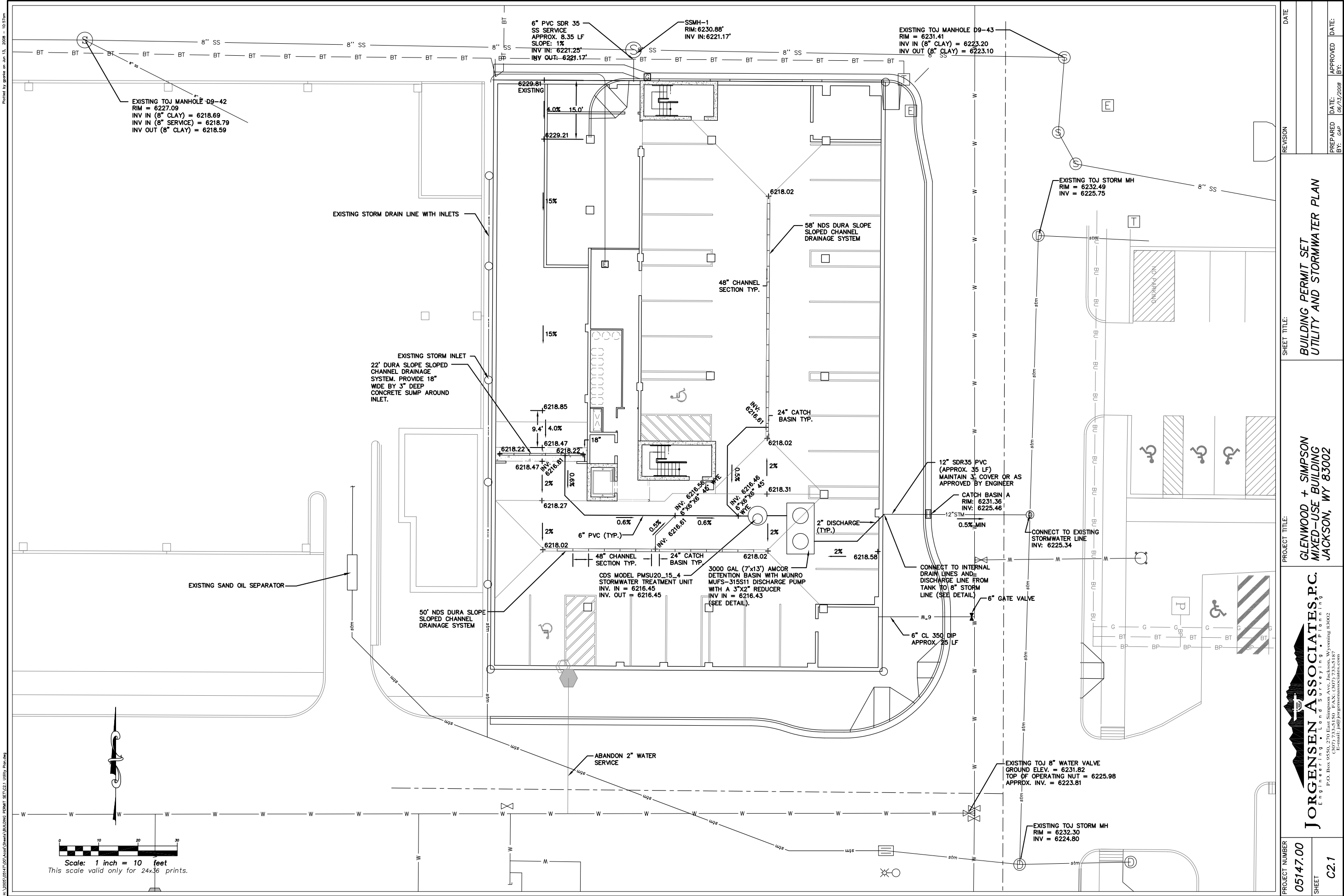
### LEGEND

PROPOSED	EXISTING	
12"STM	stm	STORM SEWER
ugp	BP BP BP	BURIED POWER
	BU BU BU	BURIED UTILITIES
GAS	G G G	GAS LINE
8"S	BT BT	BURIED TELEPHONE
6"W	s	SEWER LINE
	w	WATER LINE
	OP OP	OVERHEAD POWER LINE
	---	CENTERLINE
	---	TOP BACK CURB
	---	SIDEWALK
	---	EDGE OF PAVEMENT
	---	SAWCUT
	---	EDGE OF GRAVEL
	---	BUILDINGS
	---	SUBJECT LOT LINES
	---	ADJACET LOT LINES
	x x	FENCE
	---	CONTOURS MAJOR (5' INTERVALS)
	---	CONTOURS MINOR (1' INTERVALS)
⊙	⊙	SEWER MAN HOLE
⊕	●	SEWER CLEAN OUT
⊕	⊕	WATER VALVE
	⊙	DECIDUOUS TREE
	⊙	CONIFER TREE
	⊙	3/8" STEEL REINFORCEMENT ROD W/ ALUMINUM CAP (PE-LS 578) "FOUND THIS SURVEY"
	⊕	3/8" STEEL REINFORCEMENT ROD W/ PLASTIC CAP (PLS 3831) "FOUND THIS SURVEY"
	◇	3/8" STEEL REINFORCEMENT BAR (NO CAP) "FOUND THIS SURVEY"
	●	POWER POLE
	⊕	SWIMMING POOL UTILITIES
	●	ELECTRICAL VAULT
	⊕	GAS VALVE
	⊕	GAS METER
	●	GAS MAN HOLE
	⊕	STREET SIGN
	⊕	IRRIGATION CONTROL VALVE
	○	FINISH SPOT ELEVATION
	⊕	STORM INLET
	⊕	STORM MANHOLE
	⊕	TELEPHONE PEDESTAL
	⊕	ELECTRICAL TRANSFORMER
	⊕	WATER SERVICE
	⊕	FIRE HYDRANT









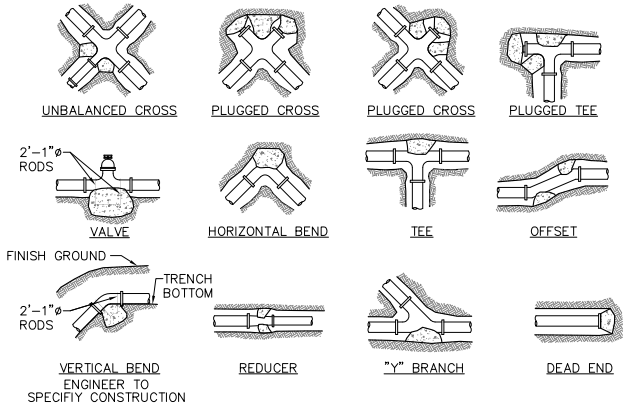
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H:\2005\05147\05147.dwg (Sheet) BUILDING PERMIT SET C2.1 Utility Permit

PROJECT NUMBER <b>05147.00</b>	SHEET <b>C2.1</b>	PROJECT TITLE: <b>GLENWOOD + SIMPSON MIXED-USE BUILDING JACKSON, WY 83002</b>	SHEET TITLE: <b>BUILDING PERMIT SET UTILITY AND STORMWATER PLAN</b>	REVISION	DATE
				DATE: 06/13/2008 BY: GPC	APPROVED: [Signature] DATE: [Blank]

**JORGENSEN ASSOCIATES, P.C.**  
Engineering • Land Surveying • Planning  
P.O. Box 9550, 270 East Simpson Ave. Jackson, Wyoming 83002  
Phone: 307.733.8887  
E-mail: jae@jorgensenassociates.com

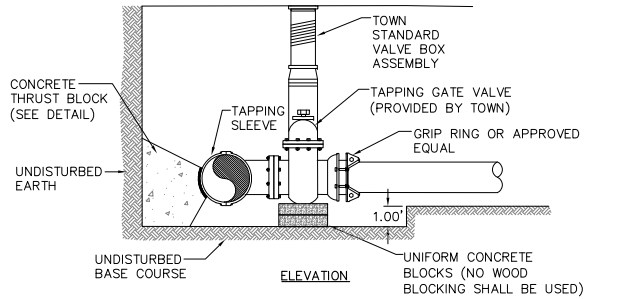
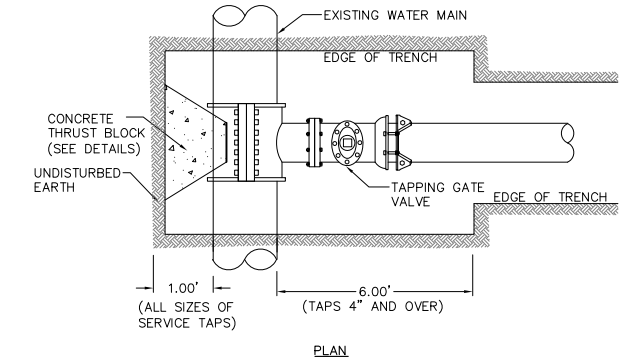
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JORGENSEN ASSOCIATES, P.C. Engineering, Land Surveying & Planning  
P.O. Box 9550, 270 East Simpson Ave. Jackson, Wyoming 83002  
Phone: 307.733.8888  
E-mail: jae@jorgensenassociates.com



MINIMUM DIMENSIONS FOR THRUST BLOCKING										
FITTING SIZE	TEES & PLUGS		90° BENDS		45° BENDS & WYES		REDUCERS & 22 1/2° BENDS		11 1/4° BENDS	
	A	B	A	B	A	B	A	B	A	B
4"	1'-7"	1'-2"	1'-9"	1'-6"	1'-8"	0'-10"	1'-7"	0'-6"	0'-6"	0'-6"
6"	2'-0"	1'-11"	2'-5"	2'-2"	1'-10"	1'-7"	1'-9"	0'-10"	1'-0"	0'-6"
8"	2'-8"	2'-6"	3'-2"	3'-0"	2'-5"	2'-1"	1'-9"	1'-6"	1'-0"	1'-0"
10"	3'-4"	3'-3"	4'-0"	3'-10"	3'-0"	2'-9"	2'-2"	1'-11"	1'-6"	1'-0"
12"	4'-0"	3'-10"	4'-8"	4'-8"	3'-8"	3'-3"	2'-7"	2'-3"	2'-0"	1'-0"
14"	5'-5"	3'-10"	6'-6"	4'-11"	4'-9"	3'-5"	3'-5"	2'-5"	2'-0"	1'-6"
20"	5'-0"	5'-0"	6'-0"	6'-0"	5'-0"	4'-0"	3'-6"	3'-0"	3'-0"	2'-0"
24"	6'-0"	6'-0"	7'-0"	7'-0"	5'-0"	5'-0"	4'-6"	3'-0"	3'-0"	3'-0"
30"	7'-6"	7'-6"	8'-0"	8'-0"	6'-3"	6'-3"	4'-9"	4'-6"	3'-3"	3'-3"

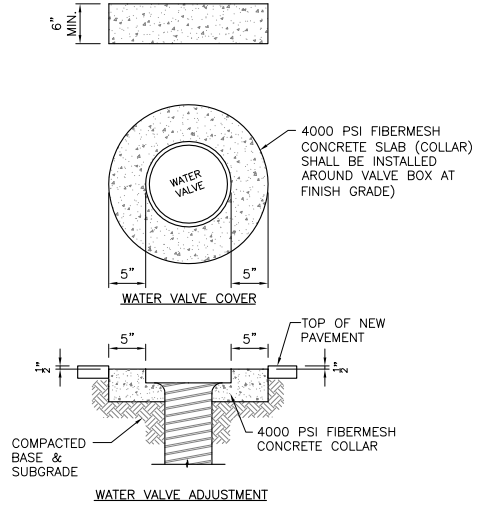
- NOTES:
1. SIZE BLOCKS SHALL BE A MINIMUM OF 6" THICK.
  2. ALL BLOCKING SHALL BEAR AGAINST UNDISTURBED MATERIAL.
  3. DESIGN IS BASED ON 150 PSI MAIN PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
  4. 4 MIL POLYETHYLENE PLASTIC BOND BREAKER SHALL BE PROVIDED BETWEEN THRUST BLOCK AND WATER PIPE.

THRUST BLOCK DETAILS  
NO SCALE



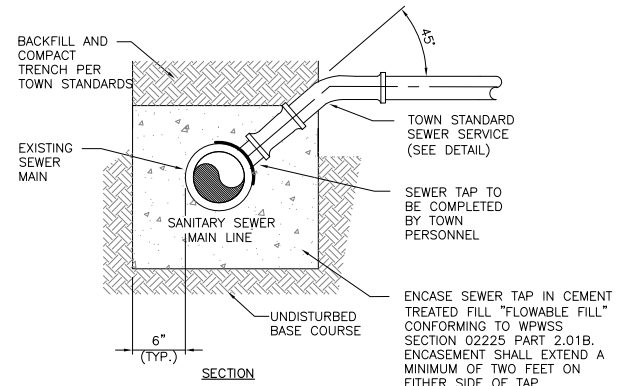
- NOTES:
1. THE TOWN SHALL COMPLETE THE TAPPING OF THE MAIN. NO OTHER PERSONS SHALL COMPLETE TAP WITHOUT CONSENT OF TOWN. ALL OTHER WATER MAIN WORK SHALL BE THE RESPONSIBILITY OF THE OWNER.
  2. TRENCH WILL BE EXCAVATED TO MEET ALL WYOSHA STANDARDS PRIOR TO TAPPING.

WATER MAIN TAPPING DETAIL  
NO SCALE



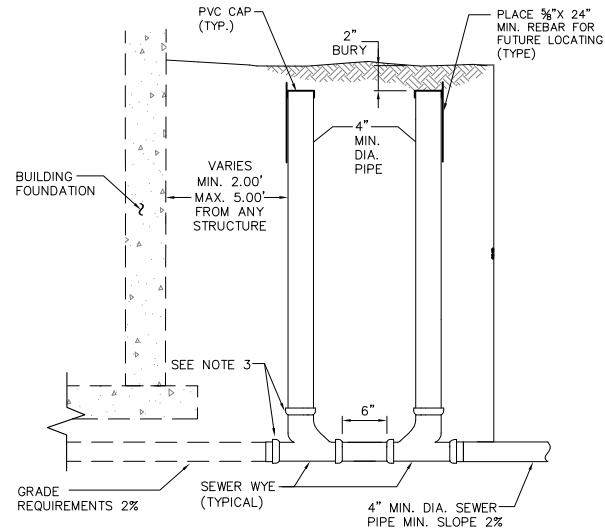
- NOTES:
1. ADJUST WATER VALVES UPWARD OR DOWNWARD AS REQUIRED. FINAL ADJUSTMENT SHALL BE MADE AFTER PAVING AND BEFORE SEAL COATING. NO PAYMENT SHALL BE MADE FOR ADJUSTMENT OF NEW VALVES TO FINAL GRADE.
  2. WHEN CONCRETE COLLAR IS POURED ABUTTING CONCRETE PAVEMENT, DEPTH SHOULD EQUAL THAT OF PAVEMENT SECTION OR 6", WHICHEVER IS GREATER.

WATER VALVE COLLAR DETAIL  
NO SCALE



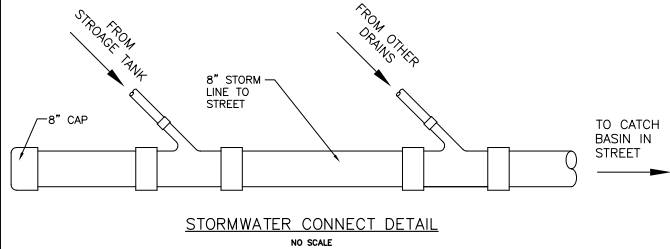
- NOTES:
1. TOWN WILL PERFORM TAP AT THE EXPENSE OF THE OWNER. ALL OTHER WORK SHALL BE PERFORMED BY THE OWNERS/CONTRACTOR.
  2. TOWN SHALL PERFORM TAP ONLY WITHIN TRENCHES WHICH MEET OR EXCEED THE STANDARDS SET BY OSHA. THE TOWN RESERVES THE RIGHT TO REQUIRE ADDITIONAL TRENCH EXCAVATIONS BE COMPLETED SHOULD IT BE DETERMINED BY TOWN PERSONNEL THAT THE TRENCH IS NOT IN COMPLIANCE WITH OSHA STANDARDS.

SANITARY SEWER MAIN TAPPING DETAIL  
NO SCALE

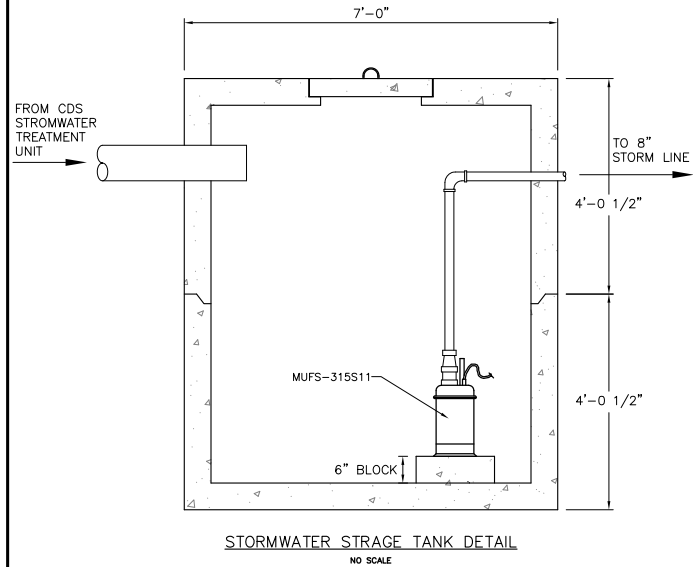


- NOTES:
1. INSPECTION: PRIOR TO BACKFILL. SECURE ACCEPTANCE BY THE TOWN PUBLIC WORKS DEPARTMENT FOR ALL PIPE, FITTINGS, COUPLINGS AND GRADE.
  2. BACKFILL: INSTALL AND COMPACT ALL BACKFILL MATERIAL PER TOWN PUBLIC WORKS DEPARTMENT STANDARD SPECIFICATIONS AND AS SHOWN WITHIN THE TRENCH DETAIL.
  3. ALL PVC FITTINGS SHALL MEET ASTM D3034 SPECIFICATIONS, AND SHALL ALSO MEET ASTM D312 SPECIFICATIONS FOR RUBBER GASKETED BELL AND SPIGOT TYPE WITH INTEGRAL BELL.

SANITARY SEWER LATERAL CLEANOUT DETAIL  
NO SCALE



STORMWATER CONNECT DETAIL  
NO SCALE

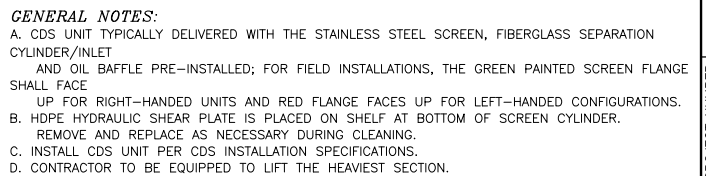
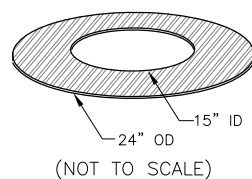


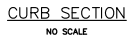
STORMWATER STRAGE TANK DETAIL  
NO SCALE





### STORM DRAIN MANHOLE FRAME AND COVER DETAIL





- STREET STRIPING  
NO SCALE



- STREET STRIPING  
NO SCALE



- STREET INTERSECTION  
NO SCALE



- STREET INTERSECTION  
NO SCALE



- VALLEY GUTTER AND CURB TURN FILLET



- VALLEY GUTTER AND CURB TURN FILLET



- CONCRETE SIDEWALK  
NO SCALE

PROJECT NUMBER	PROJECT TITLE:		SHEET TITLE:		REVISION	DATE
05147.00	 <b>JORGENSEN ASSOCIATES, P.C.</b> Engineering • Land Surveying • Planning P.O. Box 99 • Jackson, Wyoming 83002 (307) 733-8150 FAX: (307) 733-8187 E-mail: jae@jorgensenassociates.com		<b>GLENWOOD + SIMPSON MIXED-USE BUILDING JACKSON, WY 83001</b>		<b>BUILDING PERMIT SET LANDSCAPE AND ROADWAY DETAILS</b>	
SHEET						
C3.3	PREPARED BY: GAP DATE: 06/13/2008 APPROVED BY:		DATE:			





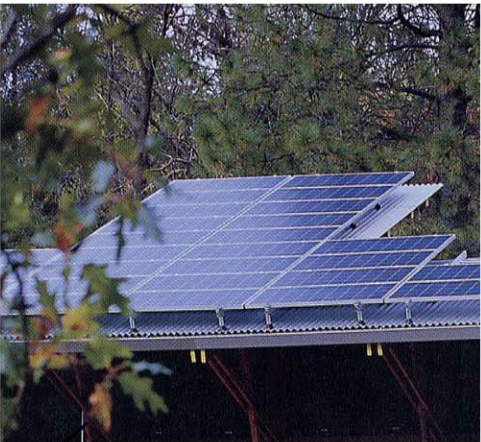
**Exposed Metal Hardware & Structural Components**  
(at canopy structure, cloumns)

- Galvanized Steel
- Patined to dull-grey color



**Metal Roofing**

- Standing-seam profile
- "Bondurized" steel finish  
(etched galvanized coating  
to yield non-reflective dull-gray color)



**Solar Panels**

- (At sloped roofs)
- By nature, are dark blue/black color with mill-finish aluminum frame
  - Obscured from most views



**Wood Paneling at Interior of Porches / Balconies, and at Underside of Sidewalk Canopy**

- New Material
- Smooth-sawn Western Red Cedar  
In tounge and groove profile
- Transparent stain in light, warm golden shade to contrast starkly with weathered finish of exterior siding types



**Aluminum-framed Glazing System, (Showing New Soffit Material)**

- Extruded aluminum frames throughout  
(same at residences and commercial)
- Integral thermal break
- Narrow sight-lines
- Clear-anodized finish
- Rough-sawn Douglas Fir timbers, with highly articulated joinery, used as casing between windows at exterior



**Exterior Vertical Siding**

- New material
- Rough-sawn Western Red Cedar, in square-edge tounge & groove profile
- Semi-transparent weathering stain in warm tan/grey color, to approximate color of weathered fir "corn-crib" siding



**Patterned Horizontal Siding (at Primary Corner Volume only)**

- New material
- Rough-sawn Western Red Cedar, installed in banded-pattern to reduce visual scale of wall
- Flush siding and trim/casing details, with slight reveal expressed between components
- Weathering stain, as at left



**Simulated "Corn Crib" Siding (at 2nd Floor Balconies)**

- New, rough-sawn, dimensional Douglas Fir
- Finish surface knocked-down slightly, after installation, to yield even, planar surface
- Installed over vertical furring to create "vented" weep space
- Bleaching oil applied, then allowed to patina to natural silver/tan color

**EXTERIOR MATERIALS**





BALCONY SIDING AND TIMBER CASING  
(WEATHERED, R.S. DOUGLAS FIR.)



METAL HARDWARE  
(GALVANIZED STEEL)



SOFFITS & BALCONY INTERIORS  
(SMOOTH CEDAR W/ CLEAR STAIN)



WINDOW CLADDING  
(CLEAR ANODIZED ALUMINUM)



TYPICAL EXTERIOR SIDING  
(R.S. CEDAR W/ WEATHERING TREATMENT)



SLOPED METAL ROOFING  
(BONDURIZED STEEL)