



**CITY OF KETCHUM**

Planning & Building  
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P.O. Box 2315, 191 5th Street West, Ketchum, ID 83340  
ketchumidaho.org

**STAFF REPORT  
KETCHUM PLANNING AND ZONING COMMISSION  
REGULAR MEETING OF OCTOBER 10, 2023**

- PROJECT:** Warm Springs Ranch Residences Lots 32-34
- FILE NUMBER:** P23-017, P23-018, and P23-019
- APPLICATION TYPE:** Design Review
- REPRESENTATIVE:** John Shirley – Think Architecture (architect)
- PROPERTY OWNER:** Brennan Holdings No. 300 LLC
- REQUEST:** Design Review applications for the development of three (3) new single-family residences, ranging in size from 3,505 square feet to 3,988 square feet.
- LOCATION:** 160 Bald Mountain Road (Lot 32, Block 4, Warm Springs Ranch Residences)  
170 Bald Mountain Road (Lot 33, Block 4, Warm Springs Ranch Residences)  
180 Bald Mountain Road (Lot 34, Block 4, Warm Springs Ranch Residences)
- ZONING:** General Residential – Low Density (GR-L)
- OVERLAY:** None
- REVIEWER:** Paige Nied – Associate Planner
- NOTICE:** A public hearing notice for the project was mailed to all owners of property within 300 feet of the project site and all political subdivisions on August 23, 2023. The public hearing notice was published in the Idaho Mountain Express on August 23, 2023. A notice was posted on the project site and the City’s website on September 5, 2023. Story poles were documented on the project site as of September 6, 2023. The public hearing for this project has been continued from the Planning & Zoning Commission meeting on September 12, 2023.

**I. EXECUTIVE SUMMARY:**

The Planning and Zoning Commission reviewed the proposed development during their regular meeting on September 12, 2023 (see Attachment I for the staff report). At the meeting, concerns were raised by the public regarding the building height of the proposed residence on Lot 33. The Commission echoed these concerns regarding the height of the proposed residence on Lot 33 and its

visual impact along the Warm Spring Road view corridor. In addition, the Commission expressed concerns regarding the height of the proposed landscaping along Warm Springs Road on Lots 32-34.

Upon review of the application materials, staff and applicant presentation, and public comment, the Commission approved the Design Review application for Lot 35 only. The Commission moved to continue the Design Review applications for Lots 32-34 and requested the applicant provide the following information:

- A rendering of Lots 32-34 from the vantage point of the bike path on Warm Springs Road
- Comprehensive landscaping plan for Lots 32-34
- Specify the type of pine trees proposed on the plant legend for Lots 32-34
- Verify the roof materials for Lots 32-34
- Analyze the design of the roof on Lot 32 to mitigate the visual impact of bulk and flatness
- Evaluate the building height of the proposed home on Lot 33

The applicant has provided revised development proposals for Lots 32-34 (Attachments B, C, and D) and additional documentation (Attachments A and E) to address comments provided by the Commission. The following documents and development changes include:

- Comprehensive landscape plan for Lots 32-34
- Photomontage taken from the bike path looking east and west of the structures
- Renderings of the structures from Warm Springs Road
- Lot 32:
  - o Addition of a gable end to the north elevation of the roof facing Warm Springs Road
  - o Relocated rear fence to the south of the public utility easement and made the fence location consistent throughout the plan set
  - o Specified Mugo Pine and Subalpine Fir pine trees on the plant legend
  - o Added lilac shrubs to the rear of lot
- Lot 33:
  - o Building height reduced by 1'-6" (new maximum building height of 33'-2")
  - o Elevator shaft height reduced by 2'-2"
  - o Chimney height reduced by 2'
  - o Gravel ballast added to membrane roof
  - o Exterior siding color has been changed to a darker natural wood tone
  - o Relocated rear fence to the south of the public utility easement and made the fence location consistent throughout the plan set
  - o Specified Mugo Pine and Subalpine Fir pine trees on the plant legend
  - o Added lilac shrubs to the rear of lot
- Lot 34:
  - o Gravel ballast added to membrane roof
  - o Relocated rear fence to the south of the public utility easement and made the fence location consistent throughout the plan set
  - o Specified Mugo Pine and Subalpine Fir pine trees on the plant legend
  - o Added lilac shrubs to the rear of lot

Staff believes the applicant has adequately addressed the Commission's concerns and requests for clarifications in the revised plan sets and recommends approval of the Design Review applications.

## II. BACKGROUND:

The Planning and Building Department received the Design Review applications on March 28, 2023. Following the receipt of the applications, staff routed the application materials to all City departments for review. The applications were reviewed concurrently, and the applications were deemed complete on July 28, 2023, after two rounds of review. The Planning and Zoning Commission conducted a public hearing and reviewed the Design Review applications for the proposed homes on Lots 32-35 during their regular meeting on September 12, 2023, and moved to continue the Design Review applications for the proposed residences on Lots 32-34.

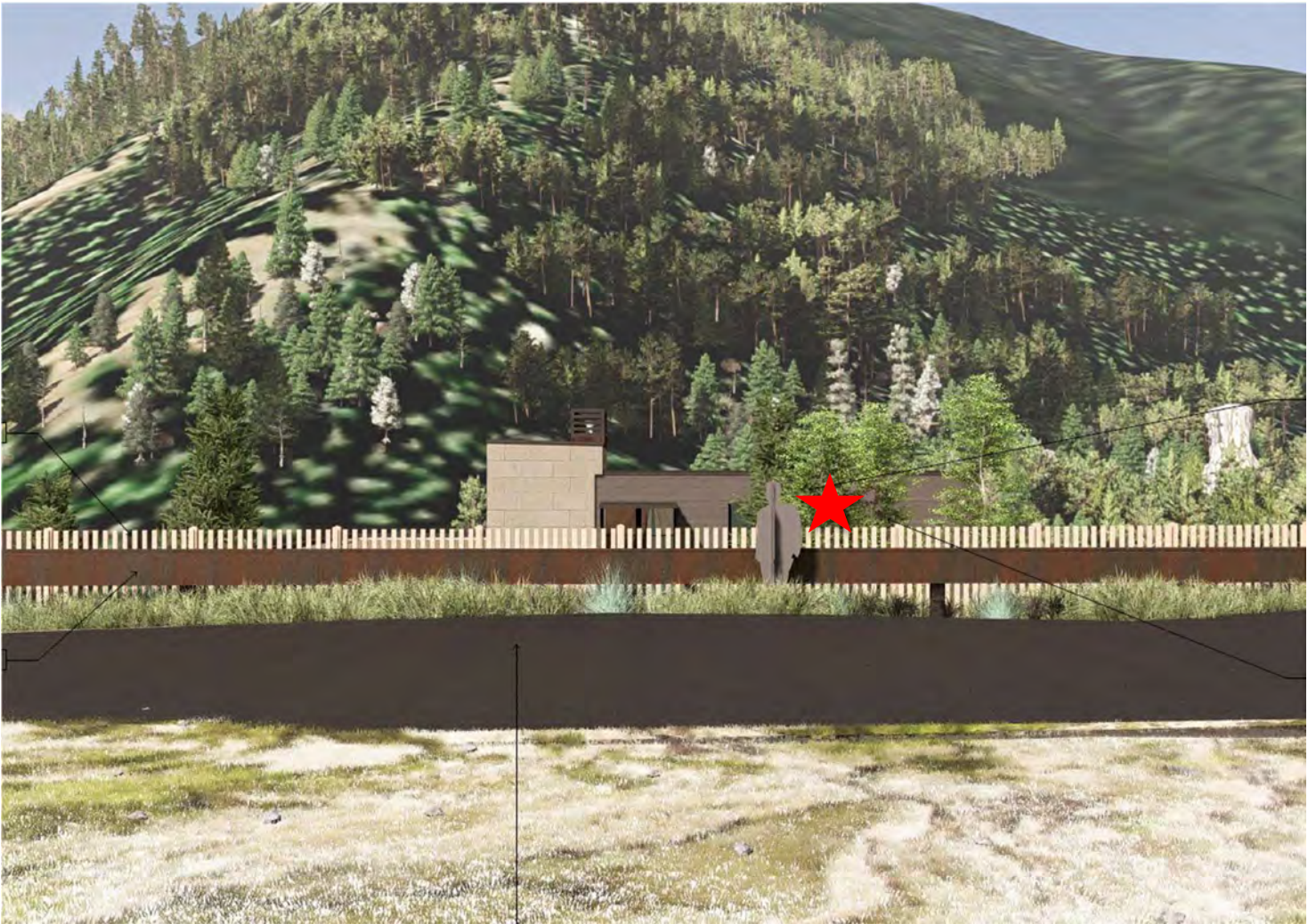
## III. CONFORMANCE WITH ZONING AND DESIGN REVIEW STANDARDS:

Prior to granting Design Review approval, the Commission must determine that the application meets two criteria: (1) the project doesn't jeopardize the health, safety, or welfare of the public, and (2) the project conforms to all Design Review standards and zoning regulations (KMC §17.96.050.A).

### ***Criteria #1: Health, Safety, and Welfare of the Public***

For a full review of Criteria #1, please see the staff report from the September 12 meeting, included as Attachment I. The Comprehensive Plan reads strongly about the protection and enhancement of mountain views and natural features. During the September 12<sup>th</sup> meeting, the Commission expressed concerns regarding the visual impact to the view corridor from Warm Springs Road due to the height of the structure on Lot 33. The revised plans indicate that the building height has been reduced by 1'-6" for a new maximum building height of 33'-2". The new building height projects just 6'-2" above the elevation of Warm Springs Road. Also, the height of the elevator shaft has been reduced by 2'-2" and the height of the chimney has been reduced by 2'. A new rendering of the structure on Lot 33, as shown in Figure 1 below, indicates how the structure on Lot 33 will be perceived from neighboring properties across Warm Springs Road and depicts a person for scale (indicated by a red star). Upon review of the rendering below, staff believes that the visual impact on Bald Mountain Road for neighboring properties will be minimal.

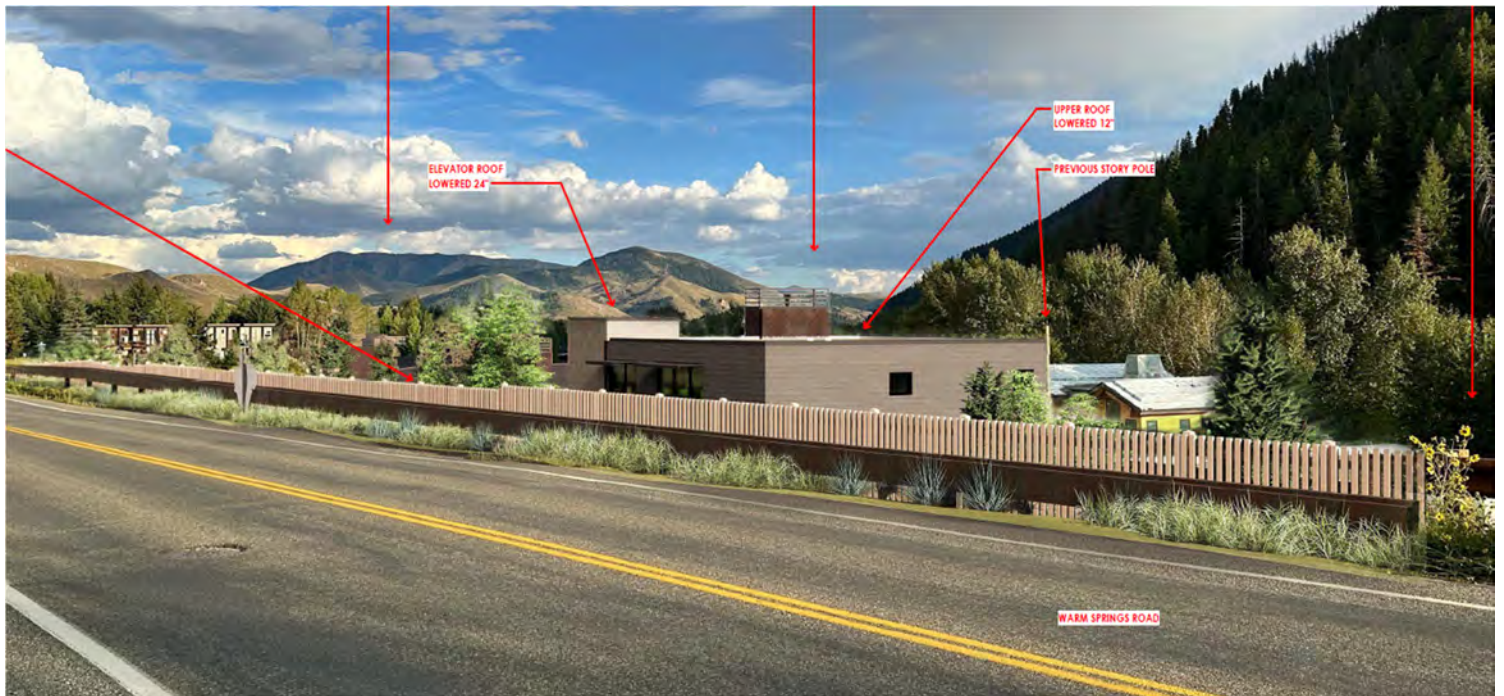
Figure 1: Rendering of Lot 33 Structure Across Warm Springs Road



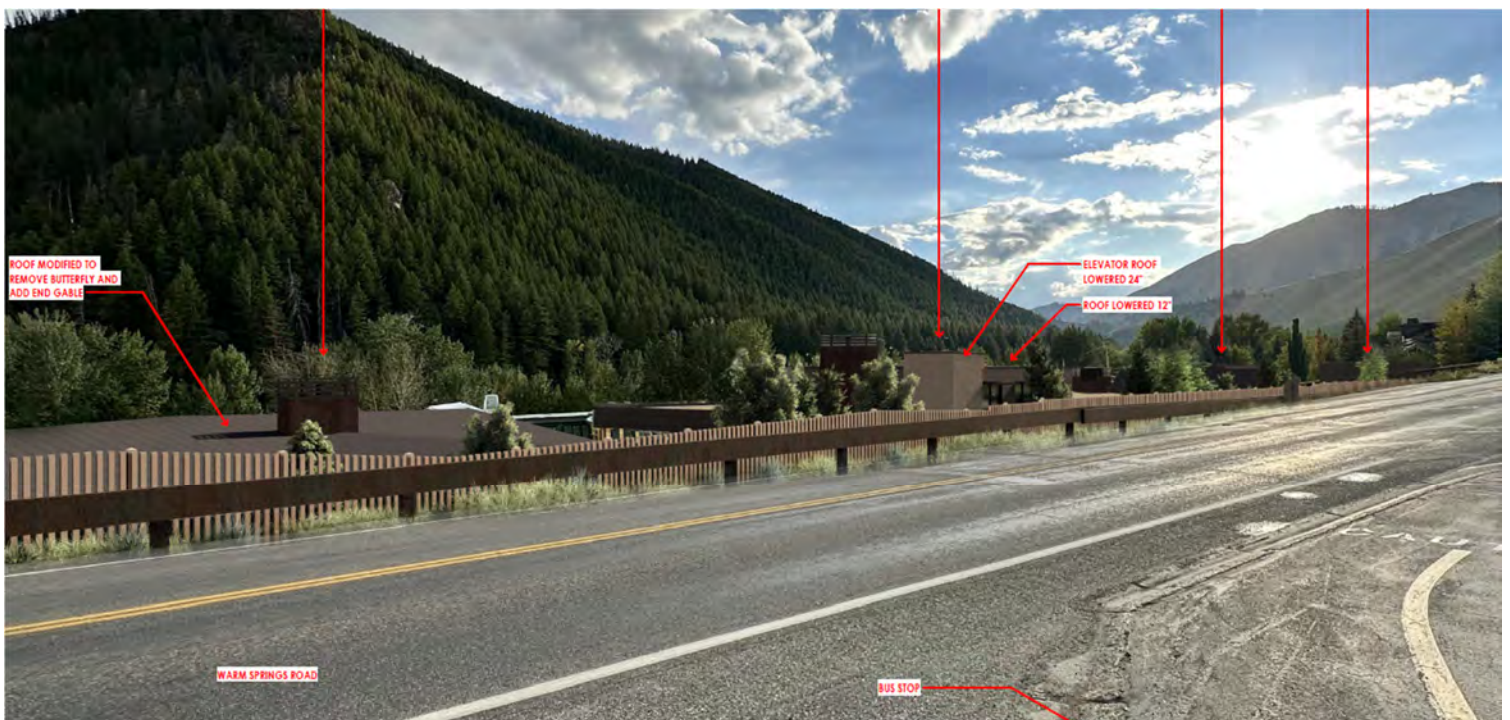
All four residences propose roof appurtenances which extend above the roof ridges; however, staff believes the proposed building heights on Lots 32-34 are reasonable because the visual impact on the Warm Springs Road view corridor is minimal. The structures' heights are well below the existing one- and two-story structures along Warm Springs Road to the east and west of the Warm Springs Ranch Residences Subdivision. The applicant included a photomontage looking east and west from the bike path within their resubmittal package. As shown in Figure 2 below, the photomontage provides a realistic representation of the minimal visual impact the structures will have on the view of Bald Mountain.

Figure 2: Photomontage of Lots 32-35 Looking East and West From Bike Path

Looking East From Bike Path



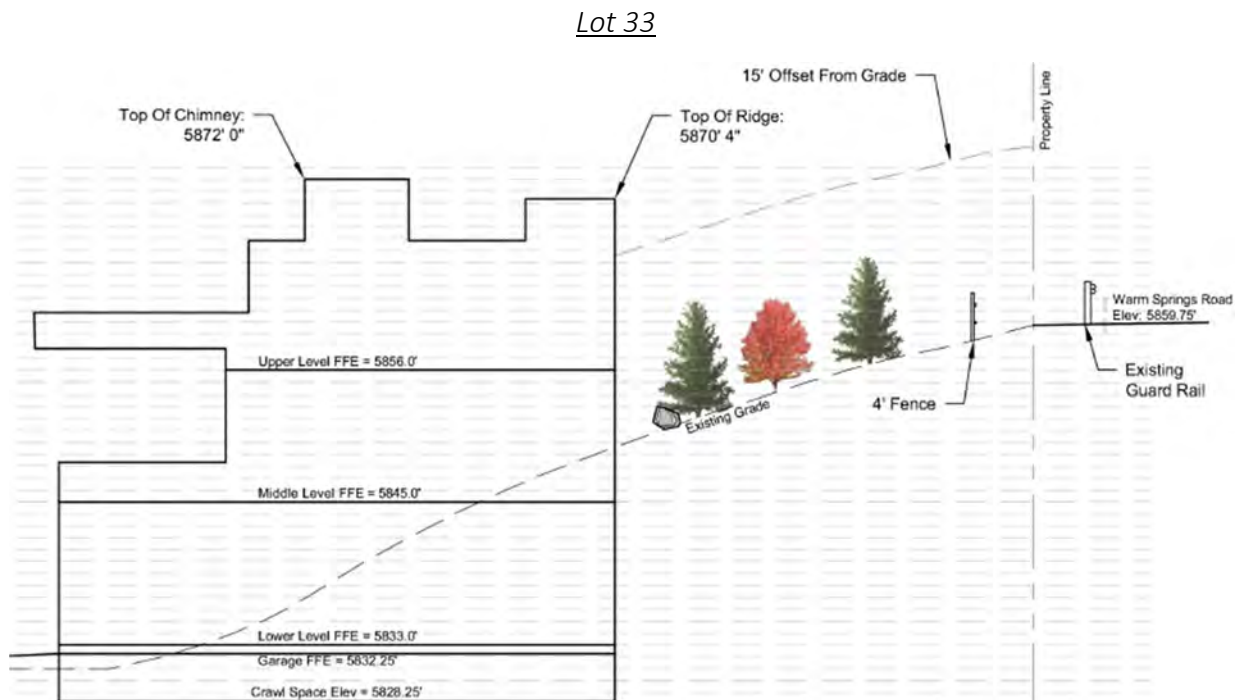
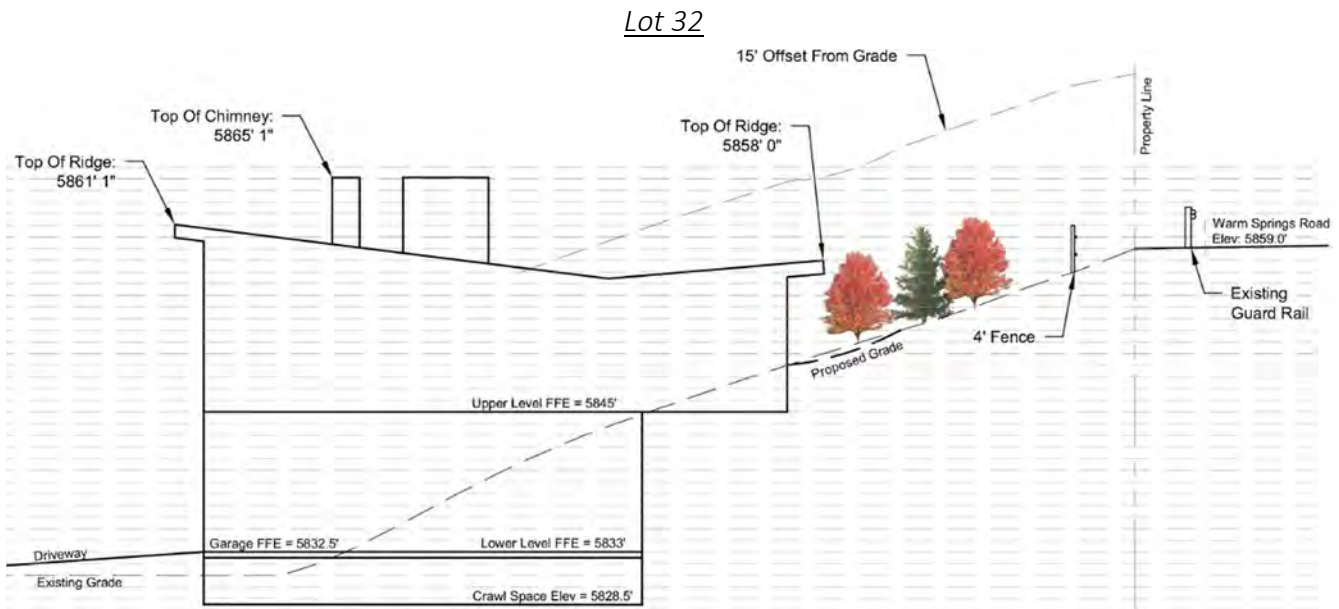
Looking West From Bike Path



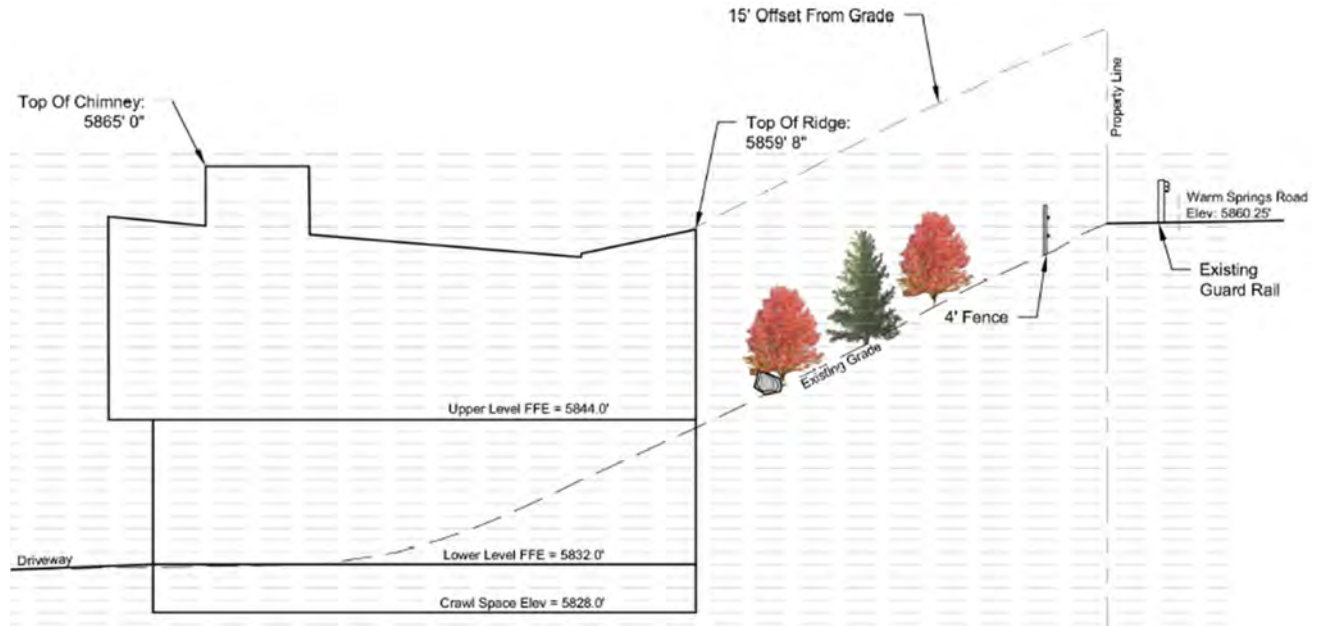
The Commission also expressed concerns related to the height of the landscaping on the rear of Lots 32-34 impacting the view from Warm Springs Road. The Commission requested that the applicant specify the type of pine tree proposed and provide a comprehensive landscape plan for Lots 32-34. The revised landscape plan plant legends indicate that the proposed pine trees are Mugo Pine and

Subalpine Fir. The plan sets indicate that Mugo Pine trees (12'-16' in size) and Ginnala Maple trees (6' in size) will be planted in the rear yards, which slope downhill from Warm Springs Road. The landscaping is sited approximately 4'-8' feet lower than the elevation of Warm Springs Road. By planting these trees downhill, only the tops of the tree crowns will be seen from Warm Springs Road and neighboring properties. The full extent of the height of the trees at their maturity will not be visible from their lower elevation. The applicant also provided a comprehensive landscaping plan, which includes cross sections for Lots 32-34 to compare the proposed trees in relation to the new residences from the elevation of Warm Springs Road (please see Figure 3 below for details). Staff does not believe that the landscaping will have a significant impact on the view corridor from Warm Springs Road.

Figure 3: Lots 32-34 Landscaping Cross Section



Lot 34



Upon review of the resubmittal package, staff believes that the goals and policies of the comprehensive plan related to the protection of mountain views and scenic areas are met with the project.

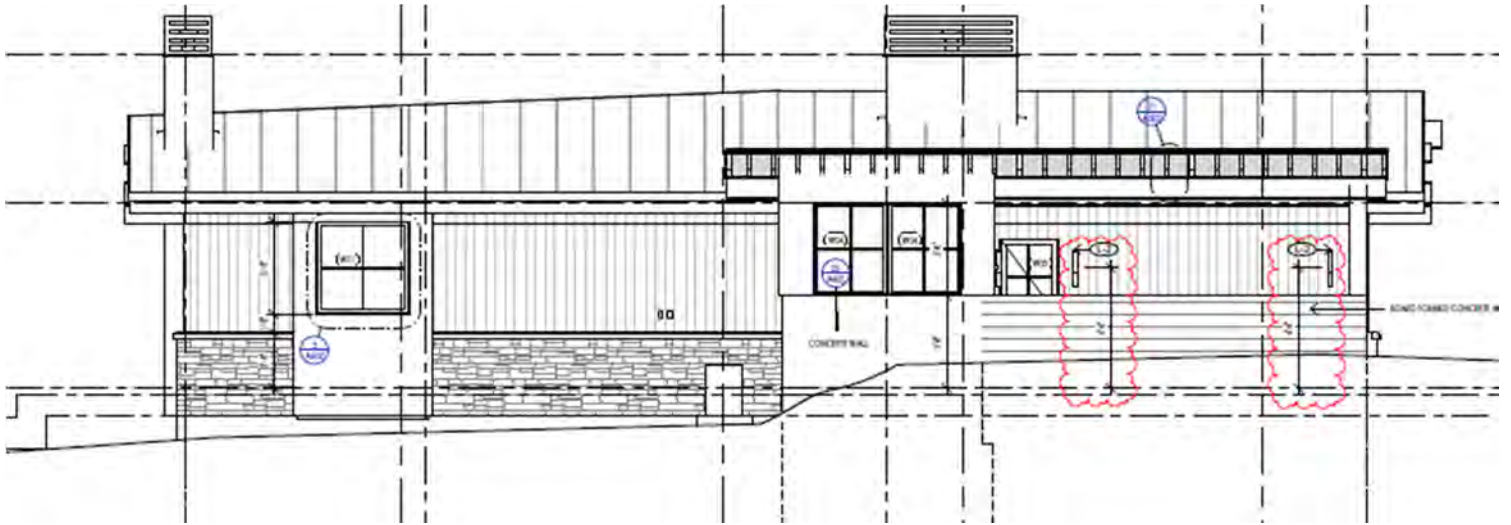
***Criteria #2: Applicable Standards and Criteria***

Conformance with Design Review Improvements and Standards

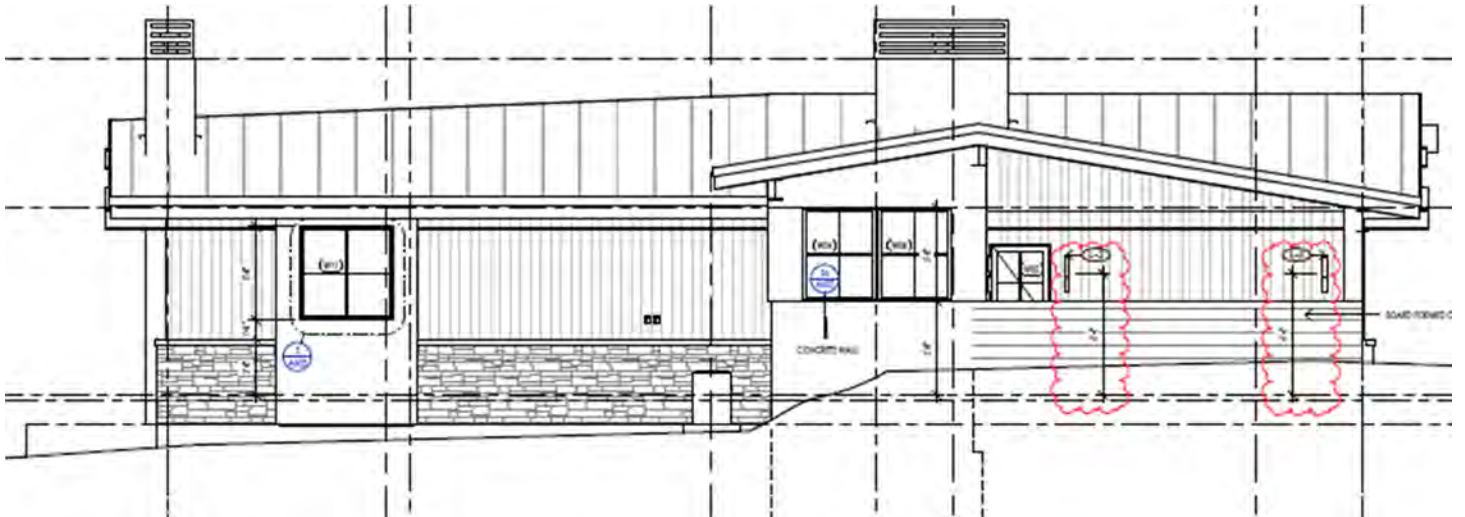
Due to the structures being situated at a lower elevation on Bald Mountain Road, all the roofs will be slightly visible along the Warm Springs Road view corridor. The Commission voiced concerns regarding the roof materials for Lots 32-34 and the appearance of bulk and flatness of the roof for the proposed residence on Lot 32. The Commission requested that for Lots 33 and 34 the roof material be verified and for Lot 32 verify that the roof material is nonreflective and to analyze the roof design. The revised plan set indicates that gravel ballast was added over the membrane roof for Lots 33 and 34. This was added in an effort to soften their visual appearance from Warm Springs Road. Also, the revised plan set for Lot 32 indicates that the roof material is a standing seam metal with a dark bronze color. As stated by the applicant in their response narrative, "This is a low reflectance color based on MBCI roofing color charts." Additionally, on the north elevation of Lot 32, the roof was modified to remove the butterfly and add a gable end to reduce the appearance of the roof's bulk and flatness from Warm Springs Road. Please see Figure 4 below for a comparison of the architectural plan's previous and revised illustration of the rear roof from the north elevation.

Figure 4: Lot 32 North Elevation Roof Comparison

Previous North Elevation



Revised North Elevation



Staff believes that the north elevation gable end reduces the roof's appearance of bulk and flatness on Lot 32 and that the addition of gravel ballast added to the roofs of Lots 33 and 34 softens their visual appearance. The project remains in conformance with all other Design Review improvements and standards requirements.

Conformance with Zoning Regulations

The initial plan sets for Lots 32-34 indicated that the 4' fence along the rear of the lots was on top of the public utility easement and that the locations of the fence shown on the plans were inconsistent. In the staff report from the September 12 meeting, staff recommended a condition of approval that stated all plan sets shall be revised to relocate the fence to the south of the public utility easement in a consistent location prior to building permit application. The applicant has revised all plan sets to show that the fence is located to the south of the public utility easement and is setback 5'-2" from the rear



property line. Therefore, staff no longer recommend the condition of approval related to the fence. The project remains in conformance with all other zoning regulations, including dimensional standards.

#### **STAFF RECOMMENDATION**

Staff recommends **approval** of the Design Review applications (File No. P23-017, P23-018, and P23-019) subject to the following conditions:

1. This Design Review approval is based on the project plans for Lots 32-34 presented at the October 10, 2023, Planning and Zoning Commission meeting. The project plans for all on-site improvements submitted for the building permits must conform to the approved design review plans unless otherwise approved in writing by the Planning and Zoning Commission or Administrator. Any building or site discrepancies which do not conform to the approved plans will be subject to review by the Commission and/or removal.
2. The applicant shall submit final civil drawings prepared by an engineer registered in the State of Idaho which include specifications for right-of-way, circulation design, utilities, and drainage improvements for review and approval by the City Engineer, Streets, and Utilities departments prior to issuance of a building permit for the project.
3. The term of Design Review approval shall be twelve (12) months from the date that the Findings of Fact, Conclusions of Law, and Decision are adopted by the Commission or upon appeal, the date the approval is granted by the Council subject to changes in zoning regulations.
4. In addition to the requirements set forth in this Design Review approval, this project shall comply with all applicable local, state, and federal laws.
5. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

#### **IV. RECOMMENDED MOTIONS**

Design Review:

"I move to approve the Lots 32-34, Block 4, Warm Springs Ranch Residences Design Review applications, as conditioned, and adopt the Findings of Fact, Conclusions of Law and Decision."

#### **ATTACHMENTS:**

- A. Design Review Applications for Lots 32-34 and Supplemental Documents
- B. Lot 32 – Plan Set
- C. Lot 33 – Plan Set
- D. Lot 34 – Plan Set
- E. Lots 32-34 – Renderings, Photomontage, and Comprehensive Landscaping Plan
- F. Design Review Standards Analysis
- G. Zoning and Dimensional Standards Analysis
- H. Warm Springs Ranch Subdivision Development Agreement
- I. Staff Report – September 12, 2023 Planning and Zoning Meeting
- J. Lot 32 – Draft Findings of Fact, Conclusions of Law and Decision
- K. Lot 33 – Draft Findings of Fact, Conclusions of Law and Decision
- L. Lot 34 – Draft Findings of Fact, Conclusions of Law and Decision



City of Ketchum

**Attachment A:**  
**Lots 32-34 Design Review**  
**Applications and Supplemental**  
**Documents**



**City of Ketchum  
Planning & Building**

OFFICIAL USE ONLY	
File Number:	P23-017
Date Received:	3/28/23
By:	HLN
Pre-Application Fee Paid:	
Design Review Fee Paid:	\$1400
Approved Date:	
Denied Date:	
By:	
ADRE: Yes	<input type="checkbox"/> No <input type="checkbox"/>

**Design Review Application**

APPLICANT INFORMATION			
Project Name: Warm springs Lot 32		Phone: 208.1875	
Owner: WSR Development LLC		Mailing Address: PO Box 284 sun Valley, Idaho 83353	
Email: robert@vpcompanies.com			
Architect/Representative: Think Architecture, John Shirley		Phone: 801.269.0055	
Email: jmshirley@thinkaec.com		Mailing Address: 7927 S. High Point Pkwy, Ste 300 Salt Lake City, UT 84094	
Architect License Number: #6247466-0301			
Engineer of Record: Benchmark Associates		Phone: 208-726-9512	
Email: rob@bma5b.com		Mailing Address: 100 Bell Dr, Ketchum, ID 83340	
Engineer License Number:			
<i>All design review plans and drawings for public commercial projects, residential buildings containing more than four (4) dwelling units and development projects containing more than four (4) dwelling units shall be prepared by an Idaho licensed architect or an Idaho licensed engineer.</i>			
PROJECT INFORMATION			
Legal Land Description: Warm springs Residences Block 4, Lot 32 - RPK05790040320			
Street Address: 160 Bald Mountain Road			
Lot Area (Square Feet): 9,552 sq. ft.			
Zoning District: GR-L			
Overlay District: <input type="checkbox"/> Floodplain <input type="checkbox"/> Avalanche <input type="checkbox"/> Mountain			
Type of Construction: <input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Remodel <input type="checkbox"/> Other			
Anticipated Use: Single Family Residence		Number of Residential Units: 1	
TOTAL FLOOR AREA			
	<b>Proposed</b>	<b>Existing</b>	
Basements	2,009 Sq. Ft.	0 Sq. Ft.	
1 <sup>st</sup> Floor	1,706 Sq. Ft.		Sq. Ft.
2 <sup>nd</sup> Floor			Sq. Ft.
3 <sup>rd</sup> Floor			Sq. Ft.
Mezzanine			Sq. Ft.
Total	3,715 Sq. Ft.		Sq. Ft.
FLOOR AREA RATIO			
Community Core:		Tourist:	General Residential-High:
BUILDING COVERAGE/OPEN SPACE			
Percent of Building Coverage: 3,343 sq. ft. allowed, 2,129.67 proposed or 22% proposed			
DIMENSIONAL STANDARDS/PROPOSED SETBACKS			
Front: 15'-0"	Side: 10'-0"	Side: 10'-0"	Rear: 30'-0"
Building Height: 29'-1"			
OFF STREET PARKING			
Parking Spaces Provided: (2) garage spaces. (2) driveway stalls			
Curb Cut: 26'-0"	Sq. Ft.	923 sq. ft.	%
WATER SYSTEM			
<input checked="" type="checkbox"/> Municipal Service		<input type="checkbox"/> Ketchum Spring Water	

The Applicant agrees in the event of a dispute concerning the interpretation or enforcement of the Design Review Application in which the city of Ketchum is the prevailing party, to pay the reasonable attorney fees, including attorney fees on appeal and expenses of the city of Ketchum. I, the undersigned, certify that all information submitted with and upon this application form is true and accurate to the best of my knowledge and belief.



---

Signature of Owner/Representative

2023.03.01

Date

Once your application has been received, we will review it and contact you with next steps.  
No further action is required at this time.

## DESIGN REVIEW EVALUATION STANDARDS

(May not apply to Administrative Design Review):

### 17.96.060: IMPROVEMENTS AND STANDARDS FOR ALL PROJECTS

#### A. Streets:

1. The applicant shall be responsible for all costs associated with providing a connection from an existing city streets to their development.
2. All streets designs shall be in conformance with the right-of-way standards and approved by the Public Works Director.

#### B. Sidewalks:

1. All projects under 17.96.010(A) that qualify as a "Substantial Improvement" shall install sidewalks in conformance with the right-of-way standards. Sidewalk improvements may be waived for projects that qualify as a "Substantial Improvement" which comprise additions of less than 250 square feet of conditioned space.
2. The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.
3. New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.
4. The city may approve and accept voluntary cash contributions in-lieu of the above described improvements, which contributions must be segregated by the city and not used for any purpose other than the provision of these improvements. The contribution amount shall be one hundred ten percent (110%) of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the Public Works Director. Any approved in-lieu contribution shall be paid before the city issues a certificate of occupancy.

#### C. Drainage:

1. All storm water shall be retained on site.
2. Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.
3. The Public Works Director may require additional drainage improvements as necessary, depending on the unique characteristics of a site.



**City of Ketchum  
Planning & Building**

OFFICIAL USE ONLY	
File Number:	P23-018
Date Received:	3/28/23
By:	HLN
Pre-Application Fee Paid:	
Design Review Fee Paid:	\$1400
Approved Date:	
Denied Date:	
By:	
ADRE: Yes	<input type="checkbox"/> No <input type="checkbox"/>

**Design Review Application**

APPLICANT INFORMATION				
Project Name: Warm springs Lot 33		Phone: 208.1875		
Owner: WSR Development LLC		Mailing Address: PO Box 284 sun Valley, Idaho 83353		
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Engineer of Record: Benchmark Associates		Phone: 208-726-9512		
Email: rob@bma5b.com		Mailing Address: 100 Bell Dr, Ketchum, ID 83340		
Engineer License Number:				
<i>All design review plans and drawings for public commercial projects, residential buildings containing more than four (4) dwelling units and development projects containing more than four (4) dwelling units shall be prepared by an Idaho licensed architect or an Idaho licensed engineer.</i>				
PROJECT INFORMATION				
Legal Land Description: Warm springs Residences Block 4, Lot 33 - RPK05790040330				
Street Address: 170 Bald Mountain Road				
Lot Area (Square Feet): 8,429 sq. ft.				
Zoning District: GR-L				
Overlay District: <input type="checkbox"/> Floodplain <input type="checkbox"/> Avalanche <input type="checkbox"/> Mountain				
Type of Construction: <input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Remodel <input type="checkbox"/> Other				
Anticipated Use: Single Family Residence		Number of Residential Units: 1		
TOTAL FLOOR AREA				
	Proposed		Existing	
Basements	1,811	Sq. Ft.	0	Sq. Ft.
1 <sup>st</sup> Floor	1,514	Sq. Ft.		Sq. Ft.
2 <sup>nd</sup> Floor	663	Sq. Ft.		Sq. Ft.
3 <sup>rd</sup> Floor		Sq. Ft.		Sq. Ft.
Mezzanine		Sq. Ft.		Sq. Ft.
Total	3,988	Sq. Ft.		Sq. Ft.
FLOOR AREA RATIO				
Community Core:		Tourist:	General Residential-High:	
BUILDING COVERAGE/OPEN SPACE				
Percent of Building Coverage: 35% or 2,950 sq. ft. allowed, 2,060 proposed or 24.4% proposed				
DIMENSIONAL STANDARDS/PROPOSED SETBACKS				
Front: 15'-0"	Side: 10'-0"	Side: 10'-0"	Rear: 30'-0"	
Building Height: 35'-0" allowed: 34'-7" Proposed				
OFF STREET PARKING				
Parking Spaces Provided: (2) garage spaces. (2) driveway stalls				
Curb Cut: 20'-0"	Sq. Ft.	931 sq. ft.	%	
WATER SYSTEM				
<input checked="" type="checkbox"/> Municipal Service		<input type="checkbox"/> Ketchum Spring Water		

The Applicant agrees in the event of a dispute concerning the interpretation or enforcement of the Design Review Application in which the city of Ketchum is the prevailing party, to pay the reasonable attorney fees, including attorney fees on appeal and expenses of the city of Ketchum. I, the undersigned, certify that all information submitted with and upon this application form is true and accurate to the best of my knowledge and belief.



2023.03.01

Signature of Owner/Representative

Date

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No further action is required at this time.

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3. New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.
4. The city may approve and accept voluntary cash contributions in-lieu of the above described improvements, which contributions must be segregated by the city and not used for any purpose other than the provision of these improvements. The contribution amount shall be one hundred ten percent (110%) of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the Public Works Director. Any approved in-lieu contribution shall be paid before the city issues a certificate of occupancy.

#### C. Drainage:

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Engineer License Number:		100 Bell Dr, Ketchum, ID 83340		
<i>All design review plans and drawings for public commercial projects, residential buildings containing more than four (4) dwelling units and development projects containing more than four (4) dwelling units shall be prepared by an Idaho licensed architect or an Idaho licensed engineer.</i>				
PROJECT INFORMATION				
Legal Land Description: Warm springs Residences Block 4, Lot 34 - RPK05790040340				
Street Address: 180 Bald Mountain Road				
Lot Area (Square Feet): 8,347 sq. ft.				
Zoning District: GR-L				
Overlay District: <input type="checkbox"/> Floodplain <input type="checkbox"/> Avalanche <input type="checkbox"/> Mountain				
Type of Construction: <input checked="" type="checkbox"/> New <input type="checkbox"/> Addition <input type="checkbox"/> Remodel <input type="checkbox"/> Other				
Anticipated Use: Single Family Residence		Number of Residential Units: 1		
TOTAL FLOOR AREA				
	Proposed		Existing	
Basements	1,693	Sq. Ft.	0	Sq. Ft.
1 <sup>st</sup> Floor	1,812	Sq. Ft.		Sq. Ft.
2 <sup>nd</sup> Floor		Sq. Ft.		Sq. Ft.
3 <sup>rd</sup> Floor		Sq. Ft.		Sq. Ft.
Mezzanine		Sq. Ft.		Sq. Ft.
Total	3,505	Sq. Ft.		Sq. Ft.
FLOOR AREA RATIO				
Community Core:		Tourist:	General Residential-High:	
BUILDING COVERAGE/OPEN SPACE				
Percent of Building Coverage: 35% or 2,921 sq. ft. allowed, 1,748 proposed or 21% proposed				
DIMENSIONAL STANDARDS/PROPOSED SETBACKS				
Front: 15'-0"	Side: 10'-0"	Side: 10'-0"	Rear: 30'-0"	
Building Height: 35'-0" allowed: 30'-1" Proposed				
OFF STREET PARKING				
Parking Spaces Provided: (2) garage spaces. (2) driveway stalls				
Curb Cut: 20'-0"	Sq. Ft.	923 sq. ft.	%	
WATER SYSTEM				
<input checked="" type="checkbox"/> Municipal Service		<input type="checkbox"/> Ketchum Spring Water		

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(May not apply to Administrative Design Review):

### 17.96.060: IMPROVEMENTS AND STANDARDS FOR ALL PROJECTS

#### A. Streets:

1. The applicant shall be responsible for all costs associated with providing a connection from an existing city streets to their development.
2. All streets designs shall be in conformance with the right-of-way standards and approved by the Public Works Director.

#### B. Sidewalks:

1. All projects under 17.96.010(A) that qualify as a "Substantial Improvement" shall install sidewalks in conformance with the right-of-way standards. Sidewalk improvements may be waived for projects that qualify as a "Substantial Improvement" which comprise additions of less than 250 square feet of conditioned space.
2. The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.
3. New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.
4. The city may approve and accept voluntary cash contributions in-lieu of the above described improvements, which contributions must be segregated by the city and not used for any purpose other than the provision of these improvements. The contribution amount shall be one hundred ten percent (110%) of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the Public Works Director. Any approved in-lieu contribution shall be paid before the city issues a certificate of occupancy.

#### C. Drainage:

1. All storm water shall be retained on site.
2. Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.
3. The Public Works Director may require additional drainage improvements as necessary, depending on the unique characteristics of a site.

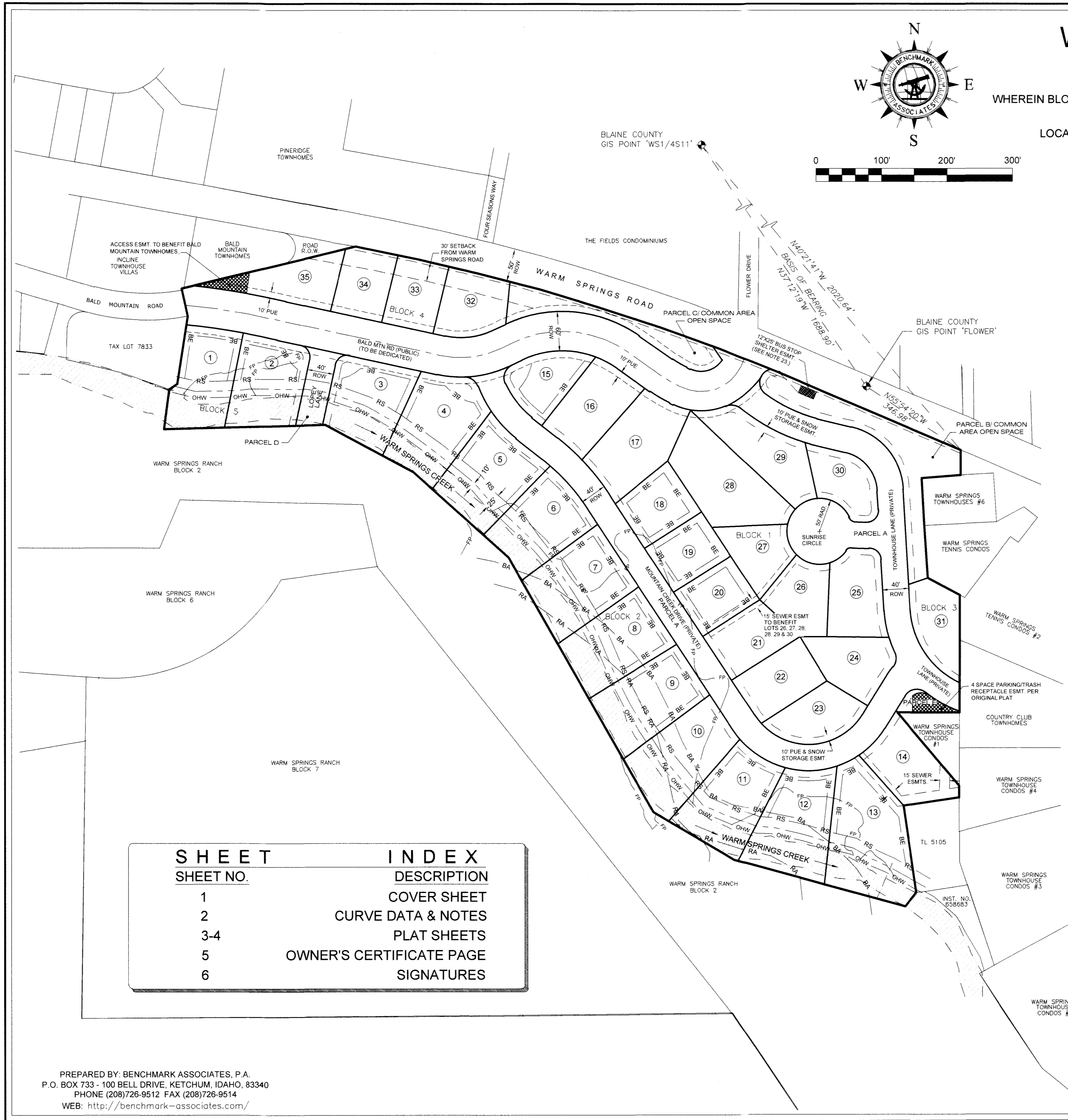
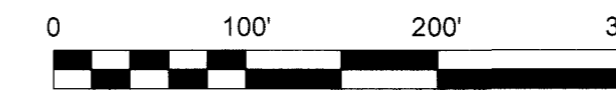
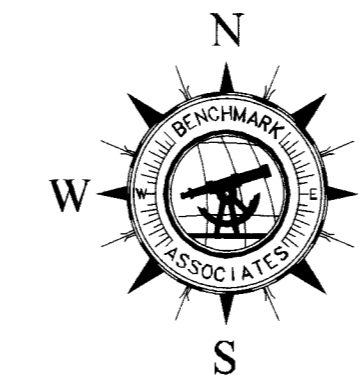


# WARM SPRINGS RANCH RESIDENCES

WHEREIN BLOCK 1, WARM SPRINGS RANCH LARGE BLOCK PLAT IS SUBDIVIDED,  
CREATING LOTS 1-35 & PARCELS A, B, C, D & E.

LOCATED WITHIN: SECTION 12, TOWNSHIP 4 NORTH, RANGE 17 EAST  
CITY OF KETCHUM, BLAINE COUNTY, IDAHO

OCTOBER 2021



## SURVEYOR'S NARRATIVE

1. THE PURPOSE OF THIS PLAT IS TO SUBDIVIDE BLOCK 1 OF WARM SPRINGS RANCH LARGE BLOCK PLAT, CREATING 35 LOTS & FIVE PARCELS. FOUND MONUMENTS WERE ACCEPTED AS EITHER ORIGINAL OR REPLACEMENTS OF ORIGINAL CORNERS. SET MONUMENT LOCATIONS WERE ESTABLISHED USING PROPORTIONED DISTANCES AND BEARINGS ADJUSTED TO BLAINE COUNTY GIS.

2. DOCUMENTS USED IN THE COURSE OF THIS SURVEY:

- A. FINAL PLAT OF "WARM SPRINGS RANCH RESORT PUD, INST. NO. 576508.
- B. FINAL PLAT OF WARM SPRINGS RANCH LARGE BLOCK PLAT, INST. NO. ~~618098~~

## LEGEND

	BLOCK BOUNDARY
	LOT/PARCEL BOUNDARY
	ADJOINING PROPERTY LINES
	BUILDING ENVELOPE
	CENTERLINE ROAD R.O.W.
	EASEMENT LINE - TYPE & WIDTH AS SHOWN
	10' PUE & SNOW STORAGE ESMT.
	1% ANNUAL CHANCE FLOOD LINE - PER FEMA 2010
	ORDINARY HIGH WATER (SEE NOTE 11)
	25' RIPARIAN SETBACK & SCENIC ESMT. (SEE NOTES 13 & 14)
	10' FISHERMAN'S & NATURE STUDY ESMT. (SEE NOTE 12)
	BLUE AVALANCHE LINE (SEE NOTE 10)
	RED AVALANCHE LINE (SEE NOTE 10)
	WARM SPRINGS CREEK
	LOT NUMBERS
	FOUND BRASS CAP

## HEALTH CERTIFICATE

Sanitary restrictions as required by Idaho Code Title 50, Chapter 13, have been satisfied. Sanitary restrictions may be reimposed, in accordance with Idaho Code Title 50, Chapter 13, Section 50-1326, by the issuance of a certificate of disapproval.

Dated: 11/01/2021

South Central Public Health District, REHS



SHEET NO.	DESCRIPTION
1	COVER SHEET
2	CURVE DATA & NOTES
3-4	PLAT SHEETS
5	OWNER'S CERTIFICATE PAGE
6	SIGNATURES

PREPARED BY: BENCHMARK ASSOCIATES, P.A.  
P.O. BOX 733 - 100 BELL DRIVE, KETCHUM, IDAHO, 83340  
PHONE (208)726-9512 FAX (208)726-9514  
WEB: <http://benchmark-associates.com/>

<b>WARM SPRINGS RANCH RESIDENCES</b>		
LOCATED WITHIN SECTION 12, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M., CITY OF KETCHUM, BLAINE COUNTY, IDAHO		
PREPARED FOR: BRENNAN HOLDINGS		
PROJECT NO. 20071	DWG BY: ROB/CPL	20071 BLOCK1-FINAL.DWG
FINAL PLAT	DATE: 10-29-2021	SHEET: 1 OF 6

# WARM SPRINGS RANCH RESIDENCES OCTOBER 2021

## LINE DATA:

LINE	BEARING	DISTANCE
L1	N07°38'03"E	60.91'
L2	N53°50'54"E	14.14'
L3	N08°50'54"E	13.38'
L4	N11°45'45"W	17.44'
L5	N11°45'45"W	25.42'
L6	N71°00'13"W	10.00'
L7	S00°00'59"E	38.17'
L8	S85°48'13"W	59.78'
L9	S62°04'40"E	55.18'
L10	S00°20'15"W	69.10'
L11	S00°16'51"W	65.21'
L12	S00°16'51"W	43.15'
L13	S00°16'51"W	1.48'
L14	N89°44'14"W	94.44'
L15	S00°00'11"W	18.23'
L16	S37°41'40"W	26.81'
L17	N64°48'59"E	23.06'
L18	S54°46'51"E	61.68'
L19	S63°47'55"E	5.88'
L20	S77°48'37"E	69.63'
L21	S77°48'37"E	79.97'
L22	S77°48'37"E	80.09'
L23	S77°48'37"E	19.11'
L24	N64°48'59"E	23.06'
L25	S54°46'51"E	61.68'
L26	S63°47'55"E	5.81'
L27	N34°00'40"W	25.30'
L28	S77°48'37"E	35.52'
L29	S77°48'37"E	78.00'
L30	S77°48'37"E	111.56'
L31	S77°48'37"E	24.28'
L32	N64°48'59"E	4.49'
L33	N64°48'59"E	18.56'
L34	S54°46'51"E	52.72'
L35	S54°46'51"E	8.96'
L36	S63°47'55"E	5.92'
L37	N11°52'53"E	102.14'
L38	N11°52'53"E	92.19'
L39	S51°44'23"E	50.81'
L40	S33°25'05"E	28.24'
L41	S33°25'05"E	114.02'
L42	S33°25'05"E	104.81'
L43	S33°25'05"E	92.28'
L44	S33°25'05"E	65.16'
L45	N32°01'13"E	32.63'
L46	N32°01'13"E	26.22'
L48	S03°26'00"E	38.49'
L49	S03°26'00"E	145.28'
L50	S76°20'34"E	54.53'
L51	S76°20'34"E	54.93'
L52	S03°26'00"E	29.18'
L53	S03°26'00"E	78.53'
L54	S31°59'20"W	54.38'
L55	S31°59'20"W	15.59'
L56	N33°25'05"W	65.61'
L57	N33°25'05"W	80.01'
L58	N33°25'05"W	80.46'
L59	N33°25'05"W	79.93'
L60	N33°25'05"W	81.62'
L61	N33°25'05"W	16.88'
L62	N51°44'23"W	31.52'
L63	N51°44'23"W	19.29'
L64	N11°15'43"E	146.40'
L65	N24°55'01"E	141.27'
L66	N37°14'32"E	147.90'
L67	N44°25'56"E	146.18'
L68	N53°25'57"E	143.82'
L69	N54°56'10"E	150.91'
L70	N58°19'00"E	157.20'
L71	N53°26'18"E	164.33'
L72	N41°15'56"E	165.04'
L73	N26°50'27"E	158.19'
L74	N06°09'53"E	180.63'
L75	N41°28'32"W	102.11'
L76	N40°04'18"W	3.77'
L77	N71°49'36"E	31.18'
L78	N57°36'11"E	102.92'
L79	N57°55'30"E	102.98'
L80	N57°34'26"E	103.00'
L81	S43°37'18"E	42.90'
L82	N08°15'58"E	32.91'

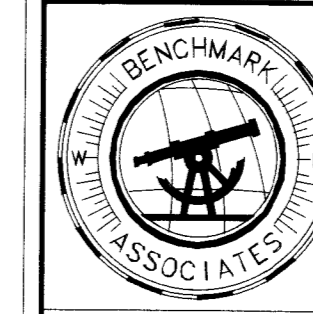
## CURVE DATA:

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE	CHORD LENGTH
C1	3205.76'	674.43'	S73°28'04"E	12°03'14"	673.19'
C2	3205.76'	66.21'	N78°54'11"W	1°11'00"	66.21'
C3	3205.76'	79.63'	N77°36'00"W	1°25'24"	79.63'
C4	3205.76'	95.82'	N76°01'55"W	1°42'46"	95.82'
C5	3205.76'	324.87'	N72°16'21"W	5°48'23"	324.73'
C6	3205.76'	51.18'	N68°54'43"W	0°54'53"	51.18'
C7	3205.76'	44.43'	N68°03'27"W	0°47'39"	44.43'
C8	3205.76'	12.29'	N67°33'02"W	0°13'11"	12.29'
C9	1084.15'	148.51'	S80°39'07"E	7°50'55"	148.40'
C10	142.44'	92.92'	N83°30'11"E	37°22'24"	91.28'
C11	173.57'	182.98'	S84°58'56"E	60°24'10"	174.62'
C12	177.25'	30.10'	S59°38'45"E	9°43'49"	30.06'
C13	68.52'	119.46'	N65°21'10"E	99°53'55"	104.90'
C14	1114.15'	143.36'	S80°25'43"E	7°22'20"	143.26'
C15	112.44'	73.35'	N83°30'11"E	37°22'24"	72.05'
C16	203.57'	214.61'	S84°58'56"E	60°24'10"	204.80'
C17	147.25'	25.18'	S59°40'50"E	9°47'58"	25.15'
C18	38.52'	55.40'	N73°48'01"E	82°24'13"	50.74'
C19	1054.15'	87.98'	S81°56'56"E	4°46'54"	87.95'
C20	1054.15'	52.36'	N78°08'07"W	2°50'44"	52.35'
C21	172.44'	42.06'	S84°47'53"E	13°58'33"	41.96'
C22	172.44'	70.42'	N76°30'55"E	23°23'51"	69.93'
C23	143.57'	114.52'	S87°40'09"W	45°42'19"	111.51'
C24	143.57'	36.83'	N62°07'46"W	14°41'51"	36.73'
C25	207.25'	35.00'	S59°37'09"E	9°40'36"	34.96'
C26	98.52'	27.63'	S72°35'02"E	16°04'14"	27.54'
C27	98.52'	54.17'	N83°37'48"E	31°30'06"	53.49'
C28	135.32'	71.67'	N50°09'53"E	30°20'37"	70.83'
C29	21.00'	20.04'	N54°53'36"E	54°40'16"	19.29'
C30	19.00'	29.74'	S32°57'52"E	89°41'29"	26.80'
C31	19.00'	29.95'	N57°02'08"E	90°18'31"	26.94'
C32	21.00'	26.14'	S56°07'35"E	71°19'09"	24.48'
C33	182.60'	43.73'	S27°19'39"E	13°43'18"	43.63'
C34	182.60'	55.94'	S42°57'50"E	17°33'05"	55.72'
C35	321.50'	16.79'	S50°14'35"E	2°59'35"	16.79'
C36	321.50'	86.01'	S41°04'56"E	15°19'43"	85.76'
C37	137.00'	16.87'	S36°56'42"E	7°03'15"	16.86'
C38	137.00'	82.47'	S57°43'03"E	34°29'27"	81.23'
C39	137.00'	80.24'	N88°15'21"E	33°33'32"	79.10'
C40	137.00'	37.59'	N63°36'57"E	15°43'16"	37.47'
C41	137.00'	56.83'	N43°52'19"E	23°45'59"	56.42'
C42	21.00'	35.65'	N80°38'43"E	97°15'12"	31.52'
C43	173.00'	59.82'	S60°38'05"E	19°48'47"	59.53'
C44	133.00'	141.57'	S33°55'41"E	60°59'22"	134.98'
C45	103.00'	131.07'	N39°53'17"W	72°54'34"	122.40'
C46	235.73'	87.72'	N64°28'51"W	21°19'17"	87.22'
C47	21.00'	29.83'	N13°07'52"W	81°22'41"	27.38'
C48	21.00'	32.84'	N20°00'48"E	89°36'24"	29.60'
C49	24.00'	25.82'	S81°18'03"E	61°38'25"	24.59'
C50	275.73'	111.05'	S62°01'06"E	23°04'33"	110.30'
C51	275.73'	8.06'	S74°23'39"E	1°40'32"	8.06'
C52	63.00'	80.17'	S39°53'17"E	72°54'34"	74.87'
C53	18.00'	29.13'	S42°55'35"W	92°43'10"	26.05'
C54	180.00'	19.83'	N87°33'27"W	6°18'46"	19.82'
C55	5.00'	3.98'	N61°36'52"W	45°34'23"	3.87'
C56	26.00'	5.95'	S32°16'24"E	13°06'35"	5.94'
C57	50.00'	59.13'	N59°35'47"W	67°45'21"	55.74'
C58	50.00'	38.57'	S64°25'39"W	44°11'46"	37.62'
C59	50.00'	25.29'	S27°50'24"W	28°58'43"	25.02'
C60	50.00'	50.99'	S15°52'00"E	58°26'07"	48.81'
C61	50.00'	55.76'	S77°02'01"E	63°53'55"	52.92'
C62	50.00'	30.38'	N53°36'41"E	34°48'41"	29.91'
C63	26.00'	4.26'	N40°54'10"E	9°23'40"	4.26'
C64	5.00'	4.38'	N70°40'35"E	50°09'11"	4.24'
C65	220.00'	28.17'	S87°54'53"E	7°20'08"	28.15'
C66	18.00'	27.69'	S47°30'29"E	88°08'57"	25.04'
C67	173.00'	40.76'	S10°11'00"E	13°30'00"	40.67'
C68	173.00'	24.65'	S21°00'56"E	8°09'51"	24.63'
C69	21.00'	23.68'	S07°12'13"W	64°36'08"	22.44'
C70	120.00'	15.74'	S35°44'48"W	7°30'57"	15.73'
C71	97.00'	179.57'	S85°01'19"W	106°03'57"	155.00'
C72	97.00'	14.44'	N37°40'54"W	8°31'38"	14.42'
C73	361.50'	67.39'	N38°45'30"W	10°40'50"	67.29'
C74	361.50'	48.21'	N47°55'09"W	7°38'28"	48.17'
C75	142.60'	67.07'	N38°15'53"W	26°56'59"	66.46'
C76	1114.15'	83.02'	N81°58'48"W	4°16'10"	83.00'

## NOTES:

- REFER TO THE PLAT OF WARM SPRINGS RANCH LARGE BLOCK PLAT, INST. NO. **688318**, FOR CONDITIONS, RESTRICTIONS, EASEMENTS & PLAT NOTES AFFECTING THIS PROPERTY.
- THE DECLARATION ESTABLISHING COVENANTS, CONDITIONS, AND RESTRICTIONS FOR THE WARM SPRINGS RANCH SUBDIVISION HOMEOWNERS ASSOCIATION IS RECORDED UNDER INST. NO. **688400**, RECORDS OF BLAINE COUNTY, IDAHO.
- REFER TO THE WARM SPRINGS RANCH REZONE AND DEVELOPMENT AGREEMENT RECORDED AS INSTRUMENT NO. 682013, RECORDS OF BLAINE COUNTY IDAHO.
- CURRENT ZONING FOR THIS SUBDIVISION IS GENERAL RESIDENTIAL LOW-DENSITY (GR-L).
- PARCELS A & D ARE PRIVATE ROADS AND SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION. PRIVATE ROADS SHALL MAINTAIN A FREE AND CLEAR WIDTH OF 26 FEET FOR EMERGENCY VEHICLES. A 40-FOOT-WIDE ACCESS AND PUBLIC UTILITY EASEMENT TO BENEFIT WARM SPRINGS RANCH LARGE BLOCK PLAT BLOCKS 2-7 IS GRANTED WITHIN PARCELS A & D AS SHOWN HEREON. A 10-FOOT WIDE SNOW STORAGE AND UTILITY EASEMENT IS GRANTED ADJACENT TO ALL PRIVATE ROAD PARCELS. NO PUBLIC PARKING IS PERMITTED IN PARCELS A & D.
- PARCELS B & C ARE COMMON AREA OPEN SPACE AND SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION. SNOW STORAGE IS GRANTED WITHIN ALL OF PARCELS B & C.
- A PUBLIC UTILITY EASEMENT IS GRANTED WITHIN ALL OF PARCELS A, B, C & D.
- PARCEL D IS DEDICATED AS A PUBLIC PEDESTRIAN EASEMENT FOR ACCESS TO THE 10' FISHERMAN'S AND NATURE STUDY EASEMENT.
- THE ACCESS AND PUBLIC UTILITY EASEMENT BENEFITING THE COUNTRY CLUB TOWNHOMES AND WARM SPRINGS TOWNHOUSE CONDOMINIUMS KNOWN AS TOWNHOUSE LANE IS RELOCATED WITHIN PARCEL A AS SHOWN HEREON.
- AVAILANCHE WARNING: PORTIONS OF THE WARM SPRINGS RANCH CONTAIN AVAILANCHE HAZARDS. THESE HAZARDS ARE IDENTIFIED ON THIS PLAT AND ARE DERIVED FROM THE AVAILANCHE HAZARD AND MAPPING ANALYSIS: WARM SPRINGS RANCH, PREPARED BY ARTHUR MEARS, P.E., INC. IN APRIL, 2001. THE CURRENT CONDITIONS ARE SUBJECT TO CHANGE DUE TO HUMAN ACTIVITY OR NATURAL OCCURRENCES. A SITE SPECIFIC AVAILANCHE STUDY MAY BE PERFORMED AND COULD CHANGE THE HAZARD BOUNDARY. ANY CONSTRUCTION IN THE AVAILANCHE OVERLAY ZONE SHALL MEET THE REQUIREMENTS OF KETCHUM ZONING CODE CHAPTER 17.92.
- ORDINARY HIGH WATER DELINEATION PER SAWTOOTH ENVIRONMENTAL CONSULTING, LLC, JUNE 2020. PERMITS MAY BE REQUIRED FROM LOCAL, STATE OR FEDERAL AGENCIES PRIOR TO CONSTRUCTION, EXCAVATION OR FILL ACTIVITIES.
- A 10-FOOT WIDE FISHERMAN'S/SPORTSMAN'S AND NATURE STUDY EASEMENT IS GRANTED ON BOTH SIDES OF THE CREEK FROM THE ORDINARY HIGH-WATER MARK ON WARM SPRINGS CREEK AND SHALL BE OPEN TO THE PUBLIC AFTER SUNRISE AND BEFORE SUNSET IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE IDAHO DEPARTMENT OF FISH AND GAME. PUBLIC FISHING ACCESS SHALL BE AVAILABLE FROM BLOCK 2 AND ACCESSED FROM PARCEL D OF THE SUBDIVISION. THE LOCATION OF SAID EASEMENT SHALL SHIFT IN ACCORDANCE WITH THE LOCATION OF THE ORDINARY HIGH WATER MARK.
- A 25-FOOT WIDE RIPARIAN SETBACK AND SCENIC EASEMENT IS GRANTED ALONG THE NORTH BANK OF WARM SPRINGS CREEK AS SHOWN HEREON. LOCATION OF SAID EASEMENT SHALL SHIFT IN ACCORDANCE WITH THE LOCATION OF THE ORDINARY HIGH WATER MARK.
- THE RIPARIAN ZONE IDENTIFIED WITHIN THIS SUBDIVISION SHALL BE DESIGNATED AS AN EASEMENT GOVERNED AND MANAGED BY AN OWNERS ASSOCIATION (HOA) TO ENSURE FUTURE MODIFICATIONS TO THE RIPARIAN ZONE AND THE STREAM BANK DO NOT OCCUR INDIVIDUALLY BUT OCCUR IN A COMPREHENSIVE COORDINATED APPROACH. PRIOR TO ANY MODIFICATION TO THE RIPARIAN ZONE OR STREAM BANK, AN OVERALL PLAN MUST BE DEVELOPED AND APPROVED BY KETCHUM. KETCHUM WILL NOT UNREASONABLY WITHHOLD, CONDITION, OR DELAY APPROVAL OF SUCH PLAN. ANY RIPARIAN AND STREAM BANK ALTERATIONS MUST CONFORM TO THE APPROVED PLAN.
- FLOODPLAIN: THE 1% CHANCE OF FLOOD LINE (FP), AS DESIGNATED ON THIS MAP IS CONSIDERED REASONABLE FOR REGULATORY PURPOSES. HOWEVER, BENCHMARK ASSOCIATES DOES NOT REPRESENT, GUARANTEE, WARRANT NOR IMPLY THAT AREAS OUTSIDE OF THE DESIGNATED FLOOD PLAIN AREA ARE SAFE AND FREE FROM FLOODS OR FLOOD DANGER. FLOOD INFORMATION IS BASED ON THE FLOOD INSURANCE STUDY FOR: BLAINE COUNTY, IDAHO, UNINCORPORATED AREAS) KETCHUM COMMUNITY NUMBER 160023 - PANEL NO. 0434 E - NOVEMBER 26, 2010.
- FLOODPLAIN LINES, ORDINARY HIGH WATER AND SETBACKS ARE SUBJECT TO CHANGE WITH UPDATED FLOOD STUDIES BY FEMA AND CHANGES IN THE COURSE OF THE CREEK OVER TIME. THIS PLAT REFLECTS THE CURRENT CONDITIONS BUT SHOULD NOT BE RELIED UPON AS THE DEFINITIVE SOURCE FOR THIS INFORMATION.
- FLOOD WARNING: SHEET FLOODING CAN AND WILL OCCUR ON THE PROPERTY AND FLOODING MAY EXTEND BEYOND THE FLOODWAY AND FLOODPLAIN BOUNDARY LINES IDENTIFIED.
- ANY DEVELOPMENT WITHIN THE REGULATORY FLOODPLAIN (AS MAY BE AMENDED) SHALL OBTAIN A FLOODPLAIN DEVELOPMENT PERMIT AND COMPLY WITH THE REQUIREMENTS IN KETCHUM ZONING CODE 17.88, AS MAY BE AMENDED.
- DEVELOPMENT IN THIS SUBDIVISION SHALL NOT BE ELIGIBLE FOR VARIANCES OR WAIVERS DUE TO THE CONFIGURATION, SLOPE, OR TOPOGRAPHY OF THE LOT. ALL DEVELOPMENT SHALL COMPLY WITH THE DEVELOPMENT STANDARDS SPECIFIED IN KETCHUM MUNICIPAL CODE AT THE TIME DEVELOPMENT IS PROPOSED.
- LOTS 15, 16 & 17 SHALL BE ACCESSED FROM MOUNTAIN CREEK DRIVE.
- DRIVEWAY ACCESS TO LOTS 32, 33, 34 AND 35 SHALL BE RESTRICTED TO BALD MOUNTAIN ROAD.
- DEVELOPMENT ON LOTS 32, 33, 34 AND 35 SHALL BE SUBJECT TO THE STANDARDS OF KETCHUM MUNICIPAL CODE, CHAPTER 17.96, DESIGN REVIEW. LOTS 32-35 ARE NOT CONSIDERED TO HAVE NATURAL SLOPES OR GRADES FOR PURPOSES OF SUBDIVISION OR ZONING STANDARDS.
- A BUS STOP SHELTER EASEMENT IS GRANTED WITHIN PARCEL B TO BENEFIT MOUNTAIN RIDES AS SHOWN HEREON. THE BUS SHELTER SHALL BE MAINTAINED BY MOUNTAIN RIDES, OR ITS SUCCESSORS.
- A 5-FOOT WIDE PUBLIC UTILITY EASEMENT ADJACENT TO WARM SPRINGS ROAD IS GRANTED AS SHOWN HEREON.
- A 10-FOOT WIDE PUBLIC UTILITY EASEMENT AND SNOW STORAGE EASEMENT ADJACENT TO TOWNHOUSE LANE, MOUNTAIN CREEK DRIVE, SUNRISE CIRCLE & LOPEY LANE IS GRANTED AS SHOWN HEREON.
- AN ACCESS EASEMENT TO BENEFIT BALD MOUNTAIN TOWNHOMES IS GRANTED WITHIN LOT 35, AS SHOWN HEREON.
- A PARKING/TRASH RECEPTACLE EASEMENT IS GRANTED WITHIN PARCEL E, AS SHOWN HEREON.
- A 15-FOOT WIDE SEWER EASEMENT IS GRANTED WITHIN LOTS 20, 21, 26 & 27 TO BENEFIT LOTS 26, 27, 28, 29 & 30 AND THE CITY OF KETCHUM AS SHOWN HEREON.
- A 15-FOOT WIDE SEWER EASEMENT IS GRANTED WITHIN LOTS 13 & 14 TO BENEFIT THE CITY OF KETCHUM, AS SHOWN HEREON.
- THE USE OF CHEMICALS, FERTILIZERS, PESTICIDES, HERBICIDES, ETC. IS SUBJECT TO THE RESTRICTIONS IN KETCHUM MUNICIPAL CODE 17.88.040.C.3-6, AND AS MAY BE AMENDED.
- CONSOLIDATION OF LOTS SHALL BE LIMITED. A MAXIMUM OF EIGHT LOTS MAY BE COMBINED WITH ONLY ONE OTHER LOT TOTALING 16 COMBINED LOTS OUT OF THE 35 LOTS.
- THE PUBLIC SHALL BE PERMITTED ACCESS ON ALL PRIVATE ROADS WITHIN THIS SUBDIVISION FOR THE PURPOSE OF WALKING AND DRIVING. NO PUBLIC PARKING OR OTHER USE SHALL BE PERMITTED ON PRIVATE ROADS. RESIDENT PARKING SHALL BE PERMITTED ON PRIVATE ROADS.

PREPARED BY: BENCHMARK ASSOCIATES, P.A.  
P.O. BOX 733 - 100 BELL DRIVE, KETCHUM, IDAHO, 83340  
PHONE (208)726-9512 FAX (208)726-9514  
WEB: <http://benchmark-associates.com/>



## WARM SPRINGS RANCH RESIDENCES

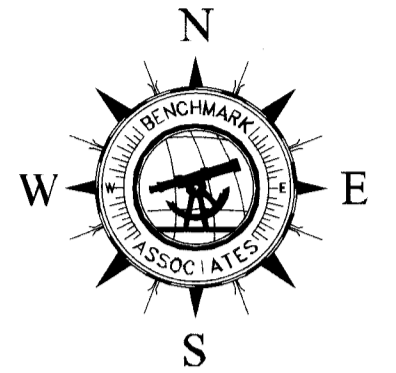
LOCATED WITHIN  
SECTION 12, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M.,  
CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PREPARED FOR: BRENNAN HOLDINGS

PROJECT NO. 20071	DWG BY: ROB/CPL	20071 BLOCK1-FINAL DWG
FINAL PLAT	DATE: 10-29-2021	SHEET: 2 OF 6

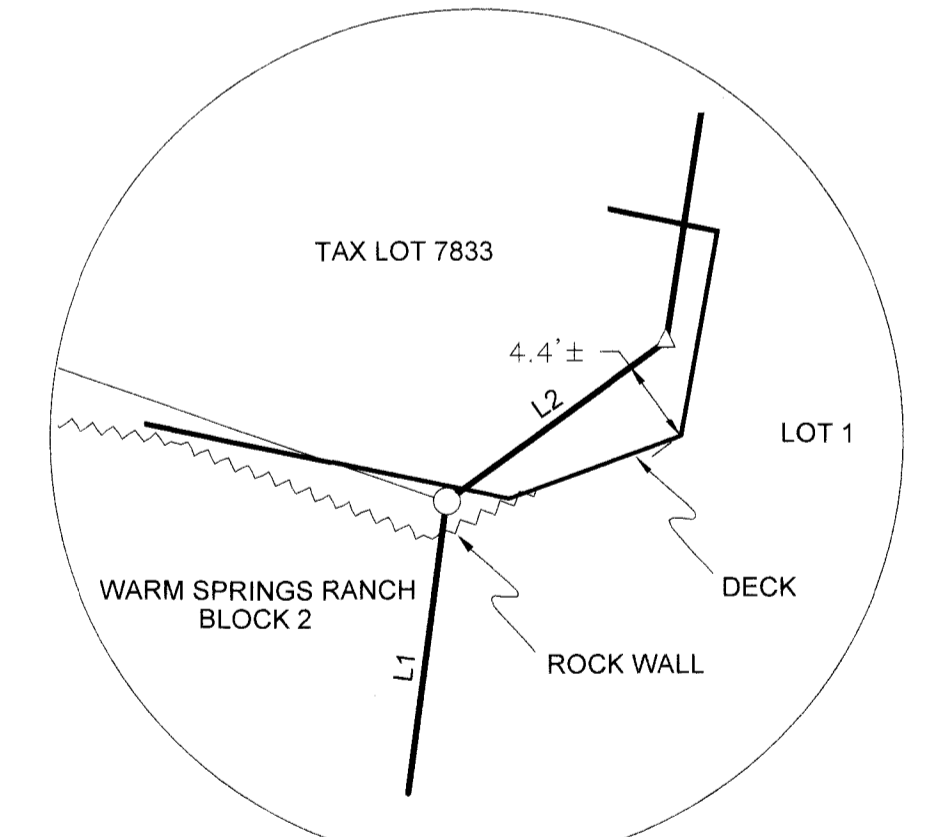
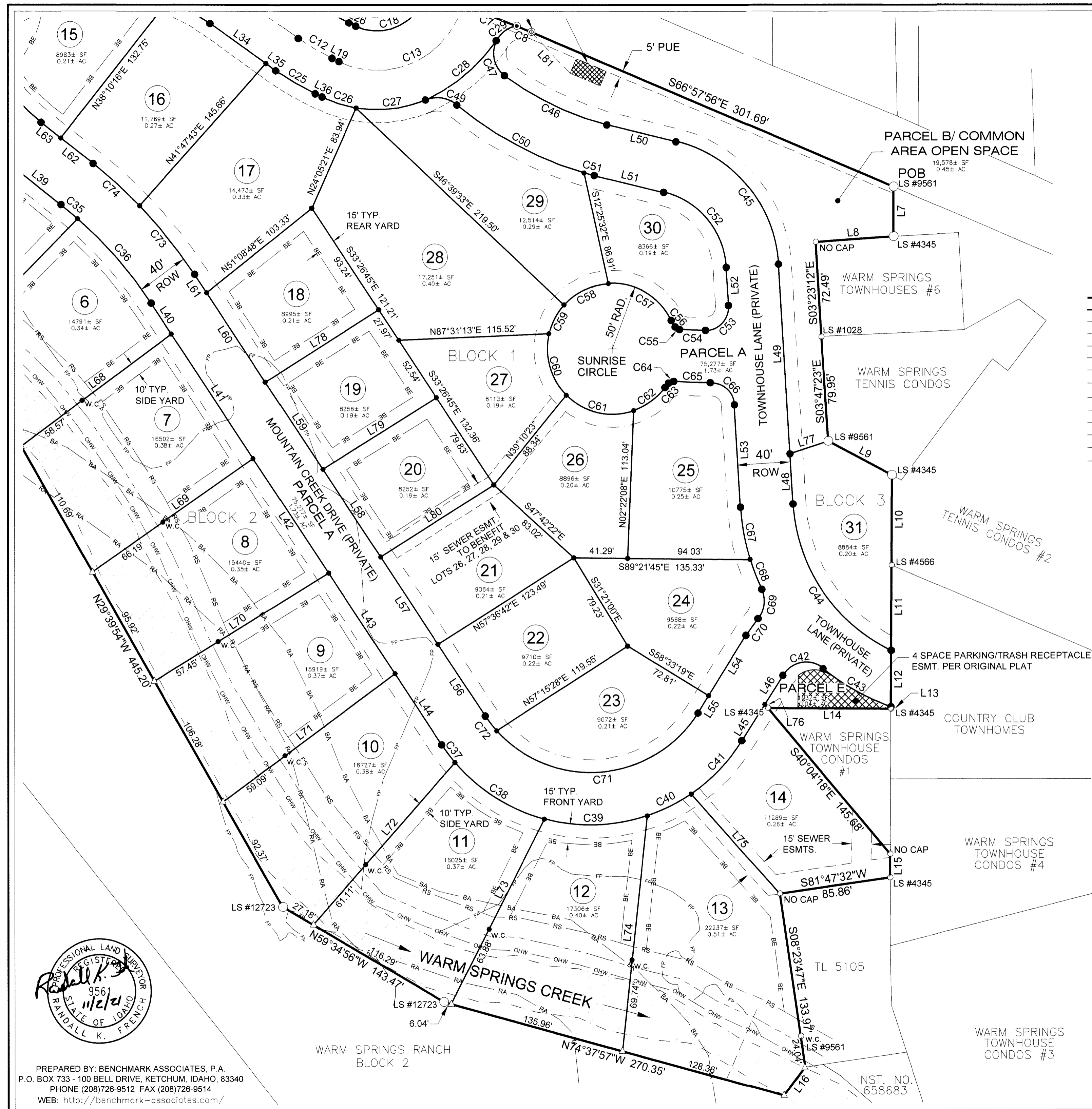


# WARM SPRINGS RANCH: RESIDENCES OCTOBER 2021

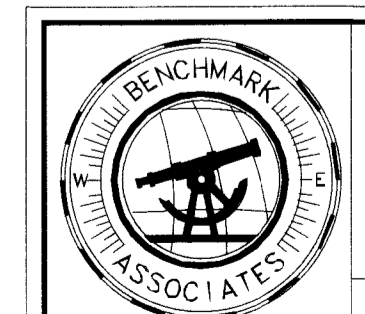


## LEGEND

	BLOCK BOUNDARY
	LOT/PARCEL BOUNDARY
	ADJOINING PROPERTY LINES
	BUILDING ENVELOPE
	CENTERLINE ROAD R.O.W.
	EASEMENT LINE - TYPE & WIDTH AS SHOWN
	10' PUE & SNOW STORAGE ESMT.
	1% ANNUAL CHANCE FLOOD LINE - PER FEMA 2010
	ORDINARY HIGH WATER (SEE NOTE 11)
	25' RIPARIAN SETBACK & SCENIC ESMT. (SEE NOTES 13 & 14)
	10' FISHERMAN'S & NATURE STUDY ESMT. (SEE NOTE 12)
	BLUE AVALANCHE LINE (SEE NOTE 10)
	RED AVALANCHE LINE (SEE NOTE 10)
	WARM SPRINGS CREEK
	LOT NUMBERS
	FOUND 1/2" REBAR
	FOUND 5/8" REBAR
	SET 1/2" REBAR, PLS #9561
	SET MAG NAIL W/BRASS CAP, PLS #9561
	SET 5/8" REBAR, PLS #9561
	FOUND ALUMINUM CAP
	FOUND BRASS CAP
	CALCULATED POINT - NO MONUMENT SET
	WITNESS CORNER



PREPARED BY: BENCHMARK ASSOCIATES, P.A.  
P.O. BOX 733 - 100 BELL DRIVE, KETCHUM, IDAHO, 83340  
PHONE (208)726-9512 FAX (208)726-9514  
WEB: <http://benchmark-associates.com/>



**WARM SPRINGS RANCH  
RESIDENCES**  
LOCATED WITHIN  
SECTION 12, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M.,  
CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PROJECT NO. 20071	DWG BY: ROB/CPL	20071 BLOCK1-FINAL.DWG
FINAL PLAT	DATE: 10-29-2021	SHEET 4 OF 6

INST. NO. 658683



# WARM SPRINGS RANCH RESIDENCES

**SURVEYOR'S CERTIFICATE**

I, Randall K. French, a duly Registered Professional Land Surveyor in the State of Idaho, do hereby certify that this is a true and accurate map of the land surveyed under my direct supervision in accordance with the State of Idaho Code relating to plats and surveys.

RANDALL K. FRENCH, P.L.S. #9561



**COUNTY SURVEYOR'S APPROVAL**

This is to certify that I, SAM YOUNG, County Surveyor for Blaine County, Idaho, have checked the foregoing plat and computations for making the same and have determined that they comply with the laws of the State of Idaho relating thereto.

*Sam Young*  
BLAINE COUNTY SURVEYOR

11/1/21  
DATE

**CITY OF KETCHUM APPROVAL**

I, Abby Rivin, Planner in and for the City of Ketchum, do hereby certify that the foregoing plat was duly accepted and approved according to the Ketchum Subdivision Ordinance.

By: *Abigail Rivin*

Certified by: *Tara Fenwick*  
TARA FENWICK, City Clerk



**CITY ENGINEER'S APPROVAL**

I, Sherri Newland, City Engineer for Ketchum, Idaho do hereby approve the foregoing plat.

By: *Sherri Newland*

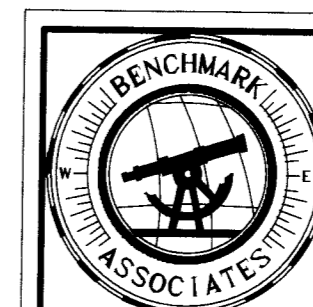
10/29/21  
DATE

**BLAINE COUNTY TREASURER'S CERTIFICATE**

On this 1 day of November, 2021, the foregoing plat was approved and accepted by the Blaine County Treasurer, Blaine County, Idaho.

By: *Janet Burrill*

Instrument # 688399  
HAILEY, BLAINE, IDAHO  
11-3-2021 12:15:08 PM No. of Pages: 6  
Recorded for: BENCHMARK ASSOCIATES  
STEPHEN MCDUGALL, GRAHAM Fee: 15.00  
Ex-Officio Recorder Deputy  
Index to: PLATS



## WARM SPRINGS RANCH RESIDENCES

SECTION 12, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M.,  
CITY OF KETCHUM, BLAINE COUNTY, IDAHO  
PREPARED FOR: BRENNAN HOLDINGS

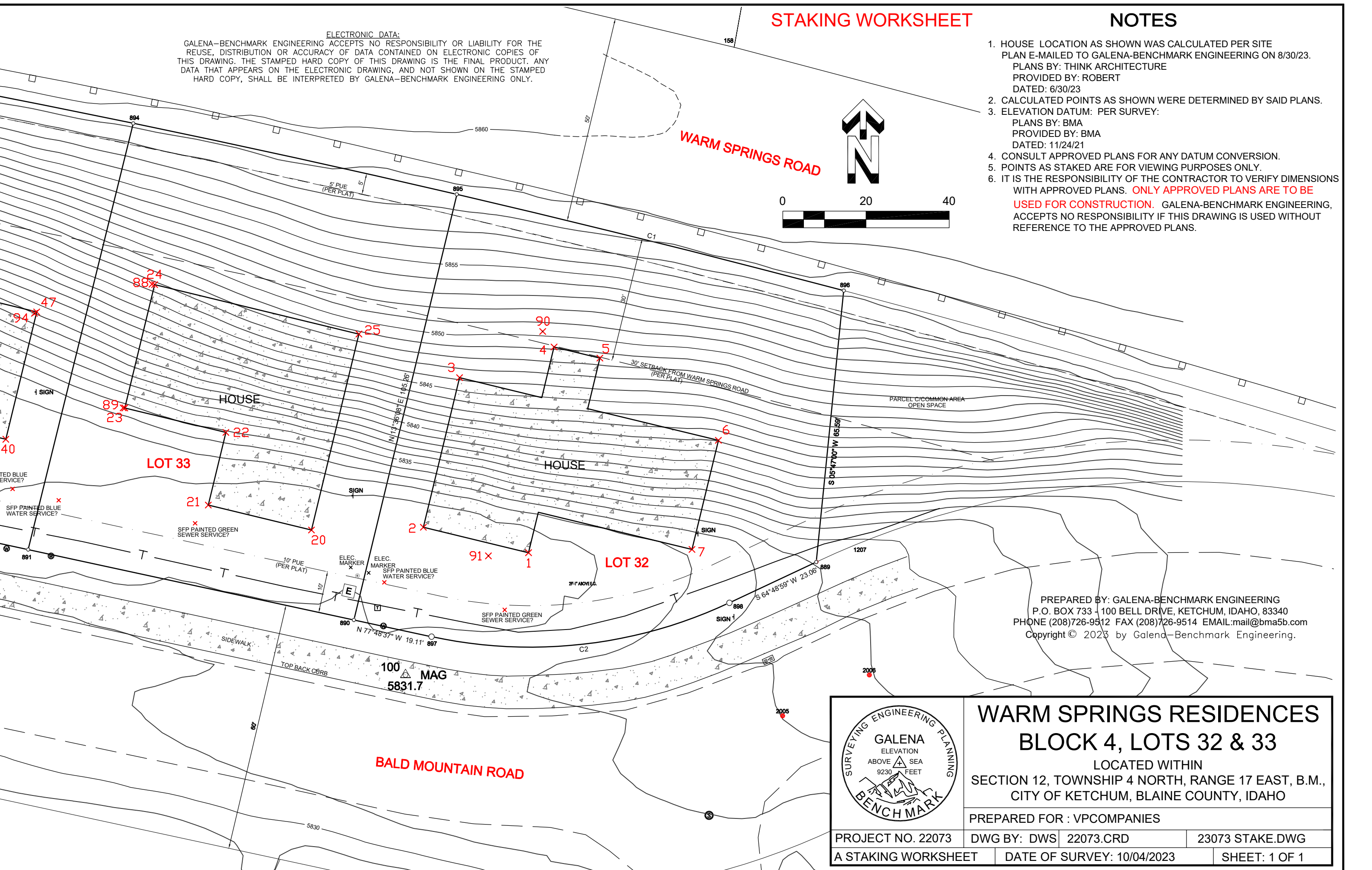
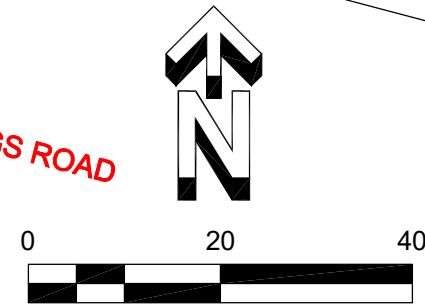
PROJECT NO. 20071	DWG BY: CPL	FILE: 20071CRT.DWG	
FINAL PLAT	DATE: OCTOBER 2021	SHEET: 6 OF 6	

# STAKING WORKSHEET

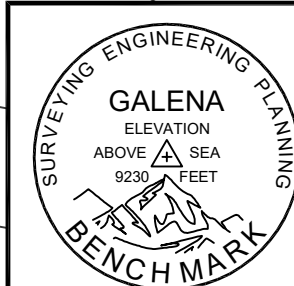
# NOTES

**ELECTRONIC DATA:**  
 GALENA-BENCHMARK ENGINEERING ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR THE REUSE, DISTRIBUTION OR ACCURACY OF DATA CONTAINED ON ELECTRONIC COPIES OF THIS DRAWING. THE STAMPED HARD COPY OF THIS DRAWING IS THE FINAL PRODUCT. ANY DATA THAT APPEARS ON THE ELECTRONIC DRAWING, AND NOT SHOWN ON THE STAMPED HARD COPY, SHALL BE INTERPRETED BY GALENA-BENCHMARK ENGINEERING ONLY.

- HOUSE LOCATION AS SHOWN WAS CALCULATED PER SITE PLAN E-MAILED TO GALENA-BENCHMARK ENGINEERING ON 8/30/23.  
 PLANS BY: THINK ARCHITECTURE  
 PROVIDED BY: ROBERT  
 DATED: 6/30/23
- CALCULATED POINTS AS SHOWN WERE DETERMINED BY SAID PLANS.
- ELEVATION DATUM: PER SURVEY:  
 PLANS BY: BMA  
 PROVIDED BY: BMA  
 DATED: 11/24/21
- CONSULT APPROVED PLANS FOR ANY DATUM CONVERSION.
- POINTS AS STAKED ARE FOR VIEWING PURPOSES ONLY.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY DIMENSIONS WITH APPROVED PLANS. **ONLY APPROVED PLANS ARE TO BE USED FOR CONSTRUCTION.** GALENA-BENCHMARK ENGINEERING, ACCEPTS NO RESPONSIBILITY IF THIS DRAWING IS USED WITHOUT REFERENCE TO THE APPROVED PLANS.



PREPARED BY: GALENA-BENCHMARK ENGINEERING  
 P.O. BOX 733 - 100 BELL DRIVE, KETCHUM, IDAHO, 83340  
 PHONE (208)726-9512 FAX (208)726-9514 EMAIL:mail@bma5b.com  
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**WARM SPRINGS RESIDENCES**  
**BLOCK 4, LOTS 32 & 33**  
 LOCATED WITHIN  
 SECTION 12, TOWNSHIP 4 NORTH, RANGE 17 EAST, B.M.,  
 CITY OF KETCHUM, BLAINE COUNTY, IDAHO

PROJECT NO. 22073	DWG BY: DWS	22073.CRD	23073 STAKE.DWG
A STAKING WORKSHEET		DATE OF SURVEY: 10/04/2023	SHEET: 1 OF 1



REAR FENCE EXAMPLE

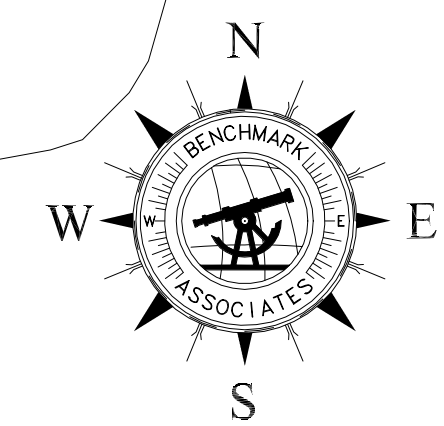
WARM SPRINGS ROAD

SLOPE FINISH GRADE MIN 6" IN 10'-0" FROM BUILDING EDGE, FULL PERIMETER

stake with height 5866'-3"

stake with height 5866'-3"

EXISTING VEHICULAR GAUDDRAIL  
PROPERTY LINE  
5'-0" P.U.E.  
4'-0" WOOD SLAT FENCE



MECHANICAL CONDENSER LOCATION

SLOPE FINISH GRADE MIN 6" IN 10'-0" FROM BUILDING EDGE, FULL PERIMETER

TRASH TO BE STORED WITHIN THE GARAGE

GAS AND ELECTRIC METERS, PROVIDE CLEARANCE AS REQUIRED

EXISTING TRANSFORMER TO BE LANDSCAPE SCREENED

20'-0" WIDE DRIVE AT SIDEWALK

TRASH TO BE STORED WITHIN THE GARAGE

NOTE:  
SEE CIVIL DOCUMENTS FOR UTILITIES  
SEE LANDSCAPE FOR GRADING

**SITE PLAN GENERAL NOTES**

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND LOCATIONS. PROTECT AS REQUIRED.
2. CONTRACTOR TO PROTECT EXISTING TREES TO BE PRESERVED.
3. UTILITY TRENCHING TO BE CONDUCTED IN A WAY TO NOT DISTURB EXISTING TREES.
4. ANY TREES LOCATED WITHIN 10'-0" HORIZONTAL OF THE STRUCTURE MUST BE MIN. 10'-0" HIGHER THAN THE ADJACENT STRUCTURE OR WILL NEED TO BE REMOVED IN ACCORDANCE TO THE FIRE CODE AS DEFENSIBLE SPACE.
5. ALL DEAD WOOD AND COMBUSTIBLE MATERIALS WITHIN 30'-0" OF THE STRUCTURE TO BE REMOVED BY CONTRACTOR AS PER THE FIRE CODE DEFENSIBLE SPACES.
6. INSTALL EROSION CONTROL MAT ON ALL SLOPES 3:1 AND GREATER.

**DATUM:**

LEVEL 1 100'-0" = 5,833.00 USGS  
LEVEL 2 112'-0" = 5,845.00 USGS  
LEVEL 3 124'-0" = 5,856.00 USGS

VERIFY FINISHED FLOOR HEIGHT WITH FINAL CIVIL ENGINEER'S DRAWINGS.

**SITE PLAN KEY NOTES**

**LOT SIZE:**

AREA = .19 ACRES OR 8,429 SQ. FT.  
ZONE: GR-1  
HEIGHT LIMIT: 35' MAX

**BUILDING PAD:**  
AREA = 3,384 SQ. FT.

**PROPOSED BUILDING FOOTPRINT:**  
AREA = 2,189 SQ. FT. - EQUALS 26%

**LOT COVERAGE ALLOWED: 35%, 2,950 SQ. FT.**

- RECESSED LIGHT LOCATION
- WALL SCONCE LOCATION

**LEGAL DESCRIPTION:**  
LOT 33 BALD MOUNTAIN ROAD

**SITE NOTES:**

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO TOWN STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO VERIFY PROPER DRAINAGE AWAY FROM HOUSE.
4. PROVIDE DRAINAGE SWALE FROM HIGH TO LOW SIDE OF HOUSE.
5. ZONING: GR-1
6. CONTRACTOR TO VERIFY EXISTING GRADES/TOPOGRAPHY PRIOR TO EXCAVATION AND/OR CONSTRUCTION. VERIFY DRIVEWAY DOES NOT EXCEED 10% GRADE.
7. EXISTING TOPOGRAPHY SHOWN IS BASED ON ROAD DESIGN GRADES & SITE OBSERVATIONS. CONTRACTORS/OWNER TO VERIFY.
8. HEIGHT LIMIT OF 35'-0" OVER EXISTING GRADE. 5'-0" ALLOWANCE FOR CHIMNEYS AND MECHANICAL.
9. SITE SETBACKS TO BE BASED ON 1/3 OF THE BUILDING HEIGHT

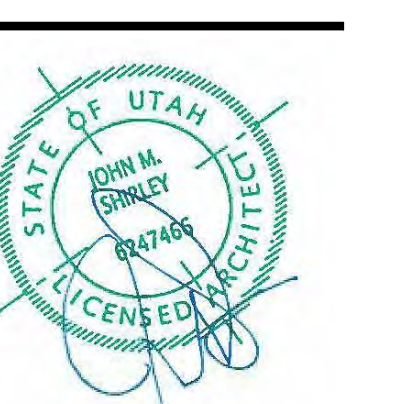


Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

7927 So. Highpoint Parkway, Suite 300  
Scottsdale, Utah 84094  
ph. 801.269.0555  
fax 801.269.1425  
www.thinkaiaec.com

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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:  
2 06-14-2023 PER CITY COMMENTS

SHEET TITLE:  
SITE PLAN

SHEET NUMBER:  
A101

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Architecture

+Architecture

+Landscape Architecture

+Land Planning

+Construction Management

+Interior Design

City of Ketchum  
Planning Department  
P.O. Box 2315 | 191 5th St. West | Ketchum, ID 83340  
o: 208.806.7013

2023.10.03

Attn: Paige Nied

Paige,

This letter is a summary of changes made to the Planning Commission requested information based on the planning commission meeting on September 12<sup>th</sup>, 2023.

**Lot 32 items:**

1. It was requested that the roof design be analyzed as it may be visible from Warm Springs Road.
  - a. The roof design is proposed to be revised with a gable end facing Warm Springs Road. This replaced the butterfly roof on the north side of the home.
  - b. Additional renderings provided showing the view from the pedestrian path along Warm Springs Road. This shows that the roof of home 32 is not visible.
2. Request to verify the roofing material.
  - a. The roof material on Lot 32 is a standing seam metal roof with a dark bronze color. This is a low reflectance color based on MBCI roofing color charts.
3. Landscape design. Request to view Lots 32-24 landscape plans combined as a single plan.
  - a. This plan has been included in the additional file "WARM SPRINGS VIEWS OF LOTS 32-34 2023.09.25.pdf".
  - b. Landscape trees are clustered for privacy purposed of the residences and to create a noise buffer from Warm springs Road.
  - c. Size of trees to be installed are 12-16' in height.
  - d. (9) evergreens proposed along Warm Springs Road across (3) lots.
  - e. Landscape legend defines species.
4. Rear fence along Warm springs road – location set outside of public utility easement.
  - a. Fence is located outside of P.U.E. set 5'-2" off of property line.
    - i. The proposed fence is 4'-0" in height designed to screen headlights of warm springs from the homes.
      1. 4'-0" in height has been designed to allow view over the fence.
      2. See renderings and photomontage showing fence location and screening of the homes while allowing view across the valley.
  - b. The existing vehicular guardrail is set just north of the property line and will remain in place.

**Lot 33 items:**

1. Building height. It has been requested to review the proposed building height of 34'.
  - a. It is proposed to reduce the upper building roof height by 18" to 33'-1" from the previous 34'-7". This height reduction was taken from the floor to floor height and reduced the parapet height.

7927 High Point Parkway

Suite 300

Sandy, Utah 84094

801-269-0055

[www.thinkaec.com](http://www.thinkaec.com)

- b. It is proposed that the clear height of the elevator be reduced. This was taken from the floor to floor height and the overhead roof structure thickness to the bare minimum. This reduction brought the elevator roof 2'-2".
  - i. This elevator roof is now 35' in height and fits within the allowable building height of this lot without using the mechanical equipment exception.
  - ii. The Chimney height is also brought down and is 35'-0" in height and within the allowable building height.
- 2. Landscape design. Request to view Lots 32-24 landscape plans combined as a single plan.
  - a. This plan has been included in the additional file "WARM SPRINGS VIEWS OF LOTS 32-34 2023.09.25.pdf".
  - b. Landscape trees are clustered for privacy purposed of the residences and to create a noise buffer from Warm springs Road.
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      - 1. 4'-0" in height has been designed to allow view over the fence.
      - 2. See renderings and photomontage showing fence location and screening of the homes while allowing view across the valley.
- 4. Material revisions.
  - a. The siding color has been revised to a darker natural wood tone in order to blend in with the surroundings.
  - b. Roofing material legend on sheet A107 calls for a gravel ballast over the roofing membrane.

**Lot 34 items:**

- 1. Landscape design. Request to view Lots 32-24 landscape plans combined as a single plan.
  - a. This plan has been included in the additional file "WARM SPRINGS VIEWS OF LOTS 32-34 2023.09.25.pdf".
  - b. Landscape trees are clustered for privacy purposed of the residences and to create a noise buffer from Warm springs Road.
  - c. Size of trees to be installed are 12-16' in height.
  - d. (9) evergreens proposed along Warm Springs Road across (3) lots.
  - e. Landscape legend defines species.
- 2. Rear fence along Warm springs road – location set outside of public utility easement.
  - a. Fence is located outside of P.U.E. set 5'-2" off of property line.
    - i. The proposed fence is 4'-0" in height designed to screen headlights of warm springs from the homes.
      - 1. 4'-0" in height has been designed to allow view over the fence.

2. See renderings and photomontage showing fence location and screening of the homes while allowing view across the valley.

**Overall**

1. Photomontage provided to show views looking West and East from Warm springs Road. Images have been taken from the pedestrian path to show the visual impact of lots 32,33 and 34. Lot 35 has also been included.
  - a. Across the (3) lots of roughly 250' linear feet of road, only 31'-0" extend above the grade level of Warm Springs Road.
  - b. Of the area which extends above the grade of Warm springs Road, This extends 6'-2" above road grade.

We hope this additional information and revisions will be found to satisfy the request of the community and Planning Commission.

Thank you,  
John M. Shirley AIA  
Principal

Think Architecture



City of Ketchum

# Attachment B: Lot 32 Plan Set



# WARM SPRINGS #32

PROJECT ADDRESS  
160 BALD MOUNTAIN ROAD KETCHUM, ID 83340  
PROPERTY I.D. NUMBER:

## DRAWING INDEX

GENERAL				STRUCTURAL			
SHEET #	SHEET NAME	#	DATE	SHEET #	SHEET NAME	#	DATE
COVER	COVER SHEET	1	04-27-2023	S101	Structural		
G002	GENERAL NOTES						
G003	BUILDING AREA ANALYSIS						
G004	SPECIFICATIONS						
G005	SPECIFICATIONS						
G006	SPECIFICATIONS	1	04-27-2023				
G007	SPECIFICATIONS						
G008	SPECIFICATIONS						
G009	SPECIFICATIONS						

CIVIL			
SHEET #	SHEET NAME	#	DATE
C101	Civil		

LANDSCAPE			
SHEET #	SHEET NAME	#	DATE
L101	Landscape		

ARCHITECTURAL			
SHEET #	SHEET NAME	#	DATE
A101	SITE PLAN	2	06-14-2023
A102	EROSION CONTROL DETAILS		
A103	FOUNDATION PLAN		
A104	LEVEL 1 FLOOR PLAN	2	06-14-2023
A105	LEVEL 2 FLOOR PLAN	1	04-27-2023
A106	ROOF PLAN	3	09-13-2023
A110	LEVEL 1 CEILING PLAN		
A111	LEVEL 2 CEILING PLAN		
A201	EXTERIOR ELEVATIONS	1	04-27-2023
A202	EXTERIOR ELEVATIONS	1	04-27-2023
A301	BUILDING SECTIONS	1	04-27-2023
A302	BUILDING SECTIONS	1	04-27-2023
A401	FIREPLACE ELEVATIONS		
A501	ARCHITECTURAL DETAILS	1	04-27-2023
A502	ARCHITECTURAL DETAILS		
A503	STAIR/ RAIL DETAILS		
A601	DOOR SCHEDULE & DETAILS		
A602	WINDOW SCHEDULE & DETAILS		

MECHANICAL			
SHEET #	SHEET NAME	#	DATE
M101	MECHANICAL GENERAL NOTES		
M102	MECHANICAL PLAN		

ELECTRICAL			
SHEET #	SHEET NAME	#	DATE
E101	ELECTRICAL GENERAL NOTES	1	04-27-2023
E102	ELECTRICAL PLANS	1	04-27-2023



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WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT TEAM	SEAL	GOVERNING BUILDING CODES & INFORMATION	ABBREVIATIONS	GRAPHIC SYMBOLS/ MATERIAL LEGENDS	VICINITY MAP																																																																																																																																																																																																																																																																																																				
<b>ARCHITECT:</b> <b>THINK ARCHITECTURE:</b> 7927 SOUTH HIGH POINT WAY, SUITE 300 SANDY, UT 84094 801.269.0555 <b>STRUCTURAL ENGINEER:</b> <b>VECTOR ENGINEERS</b> 1500 S. CLOVERDALE ROAD, SUITE 315 BOISE, ID 83709 208.996.0303 <b>MECHANICAL ENGINEER:</b> <b>DESIGN BUILD</b> <b>ELECTRICAL ENGINEER:</b> <b>DESIGN BUILD</b> <b>CIVIL ENGINEER:</b> <b>BENCHMARK ASSOCIATES PA</b> 1102 BELL DRIVE KETCHUM, ID 83340 208.726.9512 <b>LANDSCAPE ARCHITECT:</b> <b>EGGERS ASSOCIATES, PA</b> 560 NORTH 2ND AVE KETCHUM, ID 83340 208.726.0988 <b>GENERAL CONTRACTOR:</b> <b>MAGLEBY CONSTRUCTION SUN VALLEY</b> 511 EAST AVENUE NORTH SUITE 201 KETCHUM, IDAHO 83340 208.726.3923 <b>OWNER:</b> <b>VP PROPERTIES</b> 240 LEADVILLE KETCHUM, IDAHO 83340 208.726.1875		<b>BUILDING CODE:</b> 2018 INTERNATIONAL RESIDENTIAL CODE (I.R.C.) WITH IDAHO STATE AMENDMENTS <b>PLUMBING CODE:</b> 2017 IDAHO STATE PLUMBING CODE (I.S.P.C.) <b>ELECTRICAL CODE:</b> 2017 IDAHO ELECTRICAL CODE (I.E.C.) <b>ACCESSIBILITY:</b> 2009 ANSI 117.1 & 2018 I.B.C. <b>OCCUPANCY GROUP:</b> R2 <b>FIRE SPRINKLER:</b> YES <b>MONITORED SYSTEM:</b> YES <b>BUILDING TYPE:</b> TYPE V-8 <b>FIRE SPRINKLER TYPE:</b> NFPA 72 <b>FIRE DETECTION SYSTEM PER KETCHUM ORDINANCE #1217:</b> <b>BUILDING TYPE:</b> TYPE V-8 <b>ADDRESSABLE FIRE ALARMS:</b> YES <b>RISK CATEGORY (I.C. 104.5):</b> II <b>SITE EXPOSURE:</b> B <b>BASIC WIND SPEED:</b> 90 MPH <b>ULTIMATE WIND SPEED:</b> 115 MPH <b>MATERIALS:</b> CONCRETE FOUNDATIONS, WOOD FRAME W/ BRICK MASONRY & FIBER CEMENT PANELS, & KEEL MEMBRANE ROOFING.	<table border="0"> <tr><td>#</td><td>NUMBER</td><td>HDW.</td><td>HARDWARE</td></tr> <tr><td>A.</td><td>ANCHOR BOLT</td><td>H.M.</td><td>HOLLOW METAL</td></tr> <tr><td>ADJ.</td><td>ADJUSTABLE</td><td>HOBZ.</td><td>HORIZONTAL</td></tr> <tr><td>A.F.F.</td><td>ABOVE FINISHED FLOOR</td><td>HT.</td><td>HEIGHT</td></tr> <tr><td>ALUM.</td><td>ALUMINUM</td><td>HVAC</td><td>HEATING/VENTILATION/AIR CONDITIONING</td></tr> <tr><td>BD</td><td>BOARD</td><td>HYD</td><td>HYDRANT</td></tr> <tr><td>BDO.</td><td>BUILDING</td><td>ID.</td><td>INSIDE DIAMETER</td></tr> <tr><td>B.M.</td><td>BENCHMARK</td><td>INFL.</td><td>INSULATION</td></tr> <tr><td>B.O.</td><td>BOTTOM OF</td><td>INVL.</td><td>LAVATORY</td></tr> <tr><td>BOF.</td><td>BOTTOM</td><td>LT.</td><td>LIGHT</td></tr> <tr><td>B.P.</td><td>BASE PLATE</td><td>LT WF</td><td>LIGHT WEIGHT</td></tr> <tr><td>BRG.</td><td>BEARING</td><td>MANIT.</td><td>MAINTENANCE</td></tr> <tr><td>BTWN.</td><td>BETWEEN</td><td>MANUF.</td><td>MANUFACTURER</td></tr> <tr><td>C.I.</td><td>CONSTRUCTION JOINT</td><td>MAX.</td><td>MAXIMUM</td></tr> <tr><td>CLG.</td><td>CEILING</td><td>MAT</td><td>MATERIAL</td></tr> <tr><td>CLR.</td><td>CLEAR</td><td>M.C.J.</td><td>MASONRY CONTROL JOINT</td></tr> <tr><td>CMU</td><td>CONCRETE MASONRY UNIT</td><td>MECH.</td><td>MECHANICAL</td></tr> <tr><td>COL.</td><td>COLUMN</td><td>MIN.</td><td>MINIMUM</td></tr> <tr><td>CONC.</td><td>CONCRETE</td><td>MISC.</td><td>MISCELLANEOUS</td></tr> <tr><td>CONT.</td><td>CONTINUOUS</td><td>M.O.</td><td>MASONRY OPENING</td></tr> <tr><td>CONSL.</td><td>CONSTRUCTION CONTRACTION JOINT</td><td>MTL.</td><td>METAL</td></tr> <tr><td>C.T.J.</td><td>CONSTRUCTION JOINT</td><td>N.I.C.</td><td>NOT IN CONTRACT</td></tr> <tr><td>DBL.</td><td>DOUBLE</td><td>N.I.S.</td><td>NOT TO SCALE</td></tr> <tr><td>DFT./DTL.</td><td>DETAIL</td><td>O.C.</td><td>ON CENTER</td></tr> <tr><td>DIA.</td><td>DIAMETER</td><td>O.D.</td><td>OUTSIDE DIAMETER</td></tr> <tr><td>DTL.</td><td>DETAIL</td><td>O.F.</td><td>OUTSIDE FACE</td></tr> <tr><td>DWCS</td><td>DRAWINGS</td><td>PERP.</td><td>PERPENDICULAR</td></tr> <tr><td>E.F.</td><td>EACH FACE</td><td>PL</td><td>PLATE</td></tr> <tr><td>E.J.</td><td>EXPANSION JOINT</td><td>PTD.</td><td>PAINTED</td></tr> <tr><td>EL/ELEV.</td><td>ELEVATION</td><td>QTY.</td><td>QUANTITY</td></tr> <tr><td>EQ.</td><td>EQUAL</td><td>R.D.</td><td>ROOF DRAIN</td></tr> <tr><td>ES.</td><td>EACH SIDE</td><td>RAD.</td><td>RADIUS</td></tr> <tr><td>E.W.</td><td>EACH WAY</td><td>REN.</td><td>REINFORCED</td></tr> <tr><td>EXIST.</td><td>EXISTING</td><td>REQD.</td><td>REQUIRED</td></tr> <tr><td>EXPAN.</td><td>EXPANSION</td><td>RM</td><td>ROOM</td></tr> <tr><td>EXT.</td><td>EXTERIOR</td><td>R.O.</td><td>ROUGH OPENING</td></tr> <tr><td>F.D.</td><td>FLOOR DRAIN</td><td>SCHED.</td><td>SCHEDULE</td></tr> <tr><td>FDN./FDIN</td><td>FOUNDATION</td><td>SHT.</td><td>SHEET</td></tr> <tr><td>F.F.</td><td>FIRE EXTINGUISHER</td><td>SIM</td><td>SHIM</td></tr> <tr><td>F.F.C.</td><td>FIRE EXTINGUISHER CABINET</td><td>SPEC.</td><td>SPECIFICATION</td></tr> <tr><td>FIN.</td><td>FINISH</td><td>STC</td><td>SOUND TRANSMISSION COEFFICIENT</td></tr> <tr><td>FIN.</td><td>FINISH</td><td>STRUC.T.</td><td>STRUCTURAL</td></tr> <tr><td>FIN.</td><td>FINISH</td><td>SUP.</td><td>SUPPLIED</td></tr> <tr><td>FT</td><td>FEET</td><td>T.O.</td><td>TOP OF</td></tr> <tr><td>FIG.</td><td>FOOTING</td><td>T.O.C.</td><td>TOP OF CURB</td></tr> <tr><td>GA.</td><td>GAGE/GAUGE</td><td>T.O.F.</td><td>TOP OF FOOTING</td></tr> <tr><td>GALL.</td><td>GALLONS</td><td>T.O.S.</td><td>TOP OF SLAB OR SIDEWALK</td></tr> <tr><td>GPM</td><td>GALLONS PER MINUTE</td><td>T.O.W.</td><td>TOP OF WALL</td></tr> <tr><td>GND</td><td>GROUND</td><td>TYP.</td><td>TYPICAL</td></tr> <tr><td>G.O.V.T.</td><td>GOVERNMENT</td><td>U.N.O.</td><td>UNLESS NOTED OTHERWISE</td></tr> <tr><td>GYP. 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<b>SPECIAL INSPECTIONS REQUIREMENTS</b> SPECIAL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH IBC 2015 CHAPTER 17, SECTION 1704.		<b>BUILDING AREAS</b> SEE SHEET G003 FOR AREA PLANS		<b>OWNER &amp; MUNICIPAL DRAWING APPROVALS</b> OWNER: _____ DATE: _____ CITY ENGINEER: _____ DATE: _____ CITY PLANNING & ZONING DEPARTMENT: _____ DATE: _____ CITY FIRE DEPARTMENT: _____ DATE: _____ CITY BUILDING DEPARTMENT: _____ DATE: _____ CITY POLICE DEPARTMENT: _____ DATE: _____																																																																																																																																																																																																																																																																																																					
<b>DEFERRED SUBMITTAL REQUIREMENTS</b> DEFERRED SUBMITTALS ARE THOSE PORTIONS OF DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION AND HAVE RECEIVED PRIOR APPROVAL FROM THE BUILDING OFFICIAL TO BE DEFERRED. THE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND GENERAL CONTRACTOR WITHIN SIX WEEKS TO COMMENCEMENT OF CONSTRUCTION TO THIS PORTION OF WORK.		<b>DEFERRED SUBMITTAL PROCES:</b> 1. THE DEFERRED SUBMITTAL SHALL FIRST BE REVIEWED BY THE GENERAL CONTRACTOR FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. THE SUBMITTAL MUST BE REVIEWED, APPROVED, STAMPED AND SIGNED BY THE GENERAL CONTRACTOR BEFORE BEING SUBMITTED TO THE ARCHITECT. 2. THE GENERAL CONTRACTOR SHALL DIGITALLY SUBMIT DEFERRED SUBMITTALS TO THE ARCHITECT. 3. THE DEFERRED SUBMITTAL ITEMS WILL BE REVIEWED BY THE ENGINEER OR ARCHITECT IN RESPONSIBLE CHARGE. THE ENGINEER OR ARCHITECT WILL ATTACH A LETTER TO THE SUBMITTAL STATING THAT THE DEFERRED ITEM IS IN CONFORMANCE WITH THE DESIGN OF THE STRUCTURE. 4. THE APPROVED SUBMITTALS WILL BE RETURNED TO THE GENERAL CONTRACTOR. TWO SETS OF THE DEFERRED SUBMITTAL ARE THEN SUBMITTED TO THE CITY FOR REVIEW. 5. THE GENERAL CONTRACTOR SHALL MAINTAIN ONE SET OF THE APPROVED SUBMITTAL ON SITE FOR REFERENCE BY THE CITY INSPECTOR. 6. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. 7. SEE STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS FOR STRUCTURAL DEFERRED SUBMITTALS.		<b>DEFERRED SUBMITTAL ITEMS</b> 1. EXTERIOR FRAMING, DESIGN, AND INSTALLATION DETAILS PER STRUCTURAL. 2. FIRE SPRINKLING DRAWINGS, INCLUDING DESIGN DRAWINGS AND CALCULATIONS. 3. FIRE ALARM DRAWINGS AND SPECIFICATIONS. 4. JACOZZI DRAWINGS AND SPECIFICATIONS. 5. CCTV SECURITY CAMERAS AND SECURITY SYSTEM. 6. PROJECT TRIPLE PLAY - (PHONE, DATA, TV) SHALL BE PROVIDED BY DEFERRED SUBMITTAL. 7. CAST IN PLACE STORM WATER DETENTION SYSTEM.																																																																																																																																																																																																																																																																																																					
<b>SPECIAL INSPECTIONS REQUIREMENTS</b> SPECIAL INSPECTIONS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONALS IN RESPONSIBLE CHARGE. (2015 IBC SECTION 1704.2.4). SEE PROJECT MANUAL, SPECIFICATIONS, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL GENERAL NOTES FOR ADDITIONAL SPECIAL INSPECTION REQUIREMENTS.		<b>BUILDING AREAS</b> SEE SHEET G003 FOR AREA PLANS		<b>OWNER &amp; MUNICIPAL DRAWING APPROVALS</b> OWNER: _____ DATE: _____ CITY ENGINEER: _____ DATE: _____ CITY PLANNING & ZONING DEPARTMENT: _____ DATE: _____ CITY FIRE DEPARTMENT: _____ DATE: _____ CITY BUILDING DEPARTMENT: _____ DATE: _____ CITY POLICE DEPARTMENT: _____ DATE: _____																																																																																																																																																																																																																																																																																																					

PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
COVER SHEET

SHEET NUMBER:  
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**PROJECT GENERAL NOTES**

- 1. DEFINITIONS**
- a. PROVIDE: MEANS TO PROVIDE, FURNISH AND INSTALL, A COMPLETE SYSTEM AND READY FOR OPERATIONS AND USE FOR PURPOSE INTENDED INCLUDING THOSE ITEMS SPECIFIED WITHIN THE DRAWINGS AND SPECIFICATIONS AS WELL AS THOSE ITEMS THAT ARE REQUIRED TO PROVIDE A COMPLETE SYSTEM. THE CONTRACTOR AND SUB CONTRACTORS ARE REQUIRED TO PROVIDE THE FULL AND COMPLETE SYSTEM.
- b. FURNISH: MEANS TO SUPPLY, PURCHASE, PROCURE AND DELIVER COMPLETE WITH RELATED ACCESSORIES, READY FOR ASSEMBLY, APPLICATION, INSTALLATION, AND SIMILAR OPERATIONS AS APPLICABLE IN EACH INSTANCE.
- c. INSTALL: MEANS TO CONSTRUCT, ASSEMBLE, ERECT, MOUNT, ANCHOR, PLACE, CONNECT, APPLY AND SIMILAR OPERATIONS, COMPLETE WITH RELATED ACCESSORIES, AS APPLICABLE IN EACH INSTANCE.
- d. EQUIVALENT: MEANS EQUIVALENT AS ACCEPTED BY THE ARCHITECT WITH RESPECT TO PRODUCTS, EQUIVALENT MEANS A LINE DEGREE OF FEATURES, ATTRIBUTES, PERFORMANCE, OR QUALITIES DEEMED ESSENTIAL TO THE DESIGN. INSTEAD, THE TERM INTENDED TO MEAN ARCHITECT WILL CONSIDER SUBSTITUTION PROPOSALS FOR THE PRODUCT, DO NOT ASSUME THAT SUBSTITUTE PRODUCTS ARE ACCEPTABLE. SUBSTITUTIONS MADE BY THE CONTRACTOR WITHOUT FULL AND FINAL APPROVAL MAY REQUIRE TO BE REMOVED IF NOT DEEMED ACCEPTABLE BY THE ARCHITECT. ALL COSTS ASSOCIATED TO REMOVAL OF SUBSTITUTION NOT APPROVED, AND INSTALLATION OF ACCEPTED PRODUCTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- GENERAL NOTES**
- G1. INTENT OF THE SPECIFICATIONS: DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE BASIS FOR THE PROPER COMPLETION OF THE PROJECT. SUITABLE FOR THE INTENDED USE OF THE OWNER, ITEMS NOT EXPRESSLY SET FORTH WITHIN THE DRAWINGS AND SPECS, BUT WHICH ARE REASONABLY IMPLIED FOR COMPLETION OF A COMPLETE SYSTEM, OR NECESSARY, FOR THE PROPER PERFORMANCE OF THE WORK SHALL BE INCLUDED.
- G2. DRAWINGS AND SPECIFICATIONS: SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY AND SUPPLEMENTAL TO THE DRAWINGS, NO RELATIVE IMPORTANCE OF DRAWINGS VERSUS SPECIFICATIONS HAS BEEN ESTABLISHED AND NONE SHOULD BE ASSUMED. THE MOST STRINGENT CONDITIONS SHOULD BE ASSUMED FOR ALL BIDDING AND CONSTRUCTION REQUIREMENTS. IN THE EVENT OF DISCREPANCIES OR CONFLICTS, THE ARCHITECT SHALL BE CONSULTED IN ORDER TO RENDER AN INTERPRETATION.
- G3. BIDDING, PRICING OR CONSTRUCTION DONE PRIOR TO RECEIVING FINAL BUILDING DEPARTMENT PERMITS IS AT THE CONTRACTORS OWN RISK. CHANGES TO THE DRAWINGS MAY BE REQUIRED AS PART OF THE PLAN CHECK AND/OR OWNER REVIEW PROCESS. THINK ARCHITECTURE, INC. AND ITS CONSULTING ENGINEERS WILL NOT BE HELD LIABLE FOR, NOR COMPENSATE FOR, CHANGES TO THESE DRAWINGS BEFORE FINAL JURISDICTION AND OWNER APPROVAL IS OBTAINED.
- G4. WORK NOT INCLUDED: ANY ITEM INDICATED ON THE DRAWINGS AS "N.I.C." (NOT IN CONTRACT), OR OTHERWISE DESIGNATED TO BE DONE BY OTHERS IS NOT A PART OF THE CONTRACT. INSTALLATION AND/OR BACKLOGGING MAY BE REQUIRED FOR SOME EQUIPMENT FURNISHED BY OWNER OR OWNER'S SUBCONTRACTOR. REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS.
- G5. CONTRACT DOCUMENTS AT SITE: THE CONTRACTOR SHALL MAINTAIN CURRENT PERMITS, SHOP DRAWINGS, REVISED DRAWINGS, AND CLARIFICATION DRAWINGS, ADDENDA, CHANGE ORDERS, SUBLETTERS, INSPECTIONS, TEST CERTIFICATIONS AND RECORDS, PROJECT SUBMITTAL DATA AND SAMPLES, RECORDS SHALL CONTAIN A CURRENT COPY OF ALL GOVERNING BUILDING CODES. MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR ARCHITECT'S REVIEW. ALL DRAWINGS MUST BE CLEARLY MARKED AS TO THE FINAL APPROVED DRAWINGS.
- G6. RECORD DRAWINGS: THE MAINTAIN ACCURATELY DIMENSIONED RECORDS OF ALL UNDERGROUND LINES, SERVICES, AND UTILITIES, AS WELL AS ANY DISCREPANCIES OR REQUIRED CHANGES TO THE CONTRACT DOCUMENTS, AT THE CLOSE OF THE PROJECT. FORWARD TO ARCHITECT FOR FUTURE RECORDS, ONE (1) CD OF COMPLETE RECORD DRAWINGS TO OWNER IN PDF FORMAT AFTER COMPLETING FINAL PUNCH LIST.
- G7. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZES. DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS, THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONTINUING WITH WORK.
- G8. FIELD CONFIRMATION OF DISCREPANCIES SHALL BE RECORDED ON REPRODUCIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO ARCHITECT FOR PROJECT RECORD, COORDINATION, AND NECESSARY RESOLUTION PRIOR TO CONTINUING WITH WORK.
- G9. FIELD MEASUREMENTS: VERIFY FIELD MEASUREMENTS BEFORE ORDERING MATERIALS AND PREFABRICATED ITEMS, ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS SHALL BE MADE IN CONSULTATION WITH THE ARCHITECT.
- G10. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES.
- REFERENCE STANDARDS:** COMPLY WITH ASSOCIATION, TRADE, FEDERAL, COMMERCIAL, ASTM, AND OTHER SIMILAR STANDARDS REFERENCED WITHIN INDIVIDUAL SECTIONS, EXCEPT WHERE MORE EXPLICIT OR STRONGER REQUIREMENTS ARE INDICATED, OR REQUIRED BY APPLICABLE CODES, REFERENCE STANDARDS HAVE SAME FORCE AND EFFECT AS IF FOUND INTO CONTRACT DOCUMENTS. SHOULD SPECIFIC REFERENCE STANDARDS CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING.

- CONTRACTOR**
- C1. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING SITE CONDITIONS, UTILITIES, CONNECTIONS, LOCATIONS, ETC. AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- C2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED OR OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.
- C3. CONTRACTOR SHALL, PRIOR TO COMMENCEMENT OF WORK, FIELD VERIFY ALL EXISTING PROJECT CONDITIONS, INCLUDING DIMENSIONS, UTILITY LOCATIONS, AND UTILITY SIZES.
- C4. THE CONTRACTOR SHALL BE REQUIRED TO MEET ALL NATIONAL, STATE AND LOCAL, AND RELATED CODES FOR STANDARD CONSTRUCTION PRACTICES.
- C5. INSTALLATION STANDARDS: ALL MANUFACTURED MATERIALS AND PRODUCTS SHALL BE APPLIED, INSTALLED, CONNECTED, CLEANED AND CONDITIONED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. ALL REFERENCES TO STANDARDS OR TO MANUFACTURER'S SPECIFICATIONS SHALL BE TO THE LATEST EDITIONS OR LATEST AMENDMENTS.
- C6. HOURS OF WORK: ALL DEMOLITION, GRADING, AND CONSTRUCTION WORK SHALL BE LIMITED TO THE FOLLOWING HOURS: MONDAY THROUGH SATURDAY 7:00 AM TO 7:00 PM, OR AS REQUIRED BY THE RWMA AND SUMMIT COUNTY PLANNING AND ZONING. NO ACTIVITIES ON SUNDAY. AFTER HOURS WORK WILL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE PERSONS/AGENCIES THAT HAVE JURISDICTION.
- C7. TESTING AGENCIES: THE CONTRACTOR SHALL PROVIDE AND PAY FOR INSPECTIONS, TESTS, AND OTHER SERVICES SPECIFIED. REFER TO INDIVIDUAL SECTIONS FOR ADDITIONAL REQUIREMENTS. EMPLOYMENT OF TESTING LABORATORY SHALL IN NO WAY RELIEVE CONTRACTOR OF OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.
- C8. PROJECT LOG: MAINTAIN DAILY LOG CONTAINING ALL INFORMATION REGARDING CONSTRUCTION OPERATIONS AND OTHER OCCURRENCES PERTAINING TO THE PROJECT. MAKE LOG AVAILABLE FOR ARCHITECT'S REVIEW.
- C9. WORK PROGRESS SCHEDULE: MAINTAIN AN UPDATED WORK PROGRESS SCHEDULE POSTED IN A VISIBLE PLACE LOCATED IN FIELD OFFICE. UPDATE SCHEDULE DAILY TO REFLECT WORK PROGRESS.
- C10. THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY RESPONSIBLE.
- C11. CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.
- C12. ADDITIONAL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES.
- C13. ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION OF FILE WITH THE APPROPRIATE AGENCIES.
- C14. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES.
- C15. CONTRACTOR'S FIELD OFFICE: PROVIDE AND MAINTAIN A FIELD OFFICE ON THE PREMISES WHERE DIRECTED. OFFICE SHALL BE OF HEAT, SUBSTANTIAL CONSTRUCTION, PROVIDE HANGING PLAN FILES AND MAINTAIN WITH ALL CURRENT DRAWINGS.
- a. STORAGE STRUCTURE: PROVIDE AND MAINTAIN, WHERE DIRECTED, A WATERPROOF STORAGE STRUCTURE FOR ALL MATERIALS WHICH MIGHT BE DAMAGED BY WEATHER, INCLUDING STORAGE FACILITIES FOR CONCRETE TEST SAMPLES, OR OTHER MATERIAL SAMPLES REQUIRED FOR WORK.
- b. COSTS: PAY COSTS FOR A LOCAL BUSINESS TELEPHONE FOR WORK BY CONTRACTOR, OWNER AND ARCHITECT THROUGHOUT PROJECT PERIOD.
- c. COMMUNICATION EQUIPMENT: PROVIDE A TELEPHONE ON SITE, ASSIGN A RESPONSIBLE PERSON TO ANSWER ALL TELEPHONE CALLS IN EVENT THE SUPERINTENDENT IS ABSENT FROM THE PREMISES, PROVIDE APPROVED MEANS TO ESTABLISH URGENT COMMUNICATIONS (CELLULAR TELEPHONE OR PAGER).
- C16. TEMPORARY FACILITIES: PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES, PROVIDE SUITABLE WASTE DISPOSAL UNITS AND EMPTY REGULARLY, DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS, PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.
- C17. STORAGE AND PROTECTION: STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERIGHT, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

- C18. FIELD QUALITY CONTROL: EMPLOY ONLY EXPERIENCED INSTALLERS AND FURNISH EVIDENCE OF EXPERIENCE IF REQUESTED. USE OF ANY SUBCONTRACTOR OR INSTALLER IS SUBJECT TO OWNER'S APPROVAL. EMPLOY FULL-TIME COMPETENT SUPERINTENDENT AS WELL AS NECESSARY ASSISTANTS. SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR AND ALL COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO THE CONTRACTOR.
- C19. PRODUCT HANDLING: TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DELIVER PRODUCTS IN UNDAMAGED CONDITION. IN MANUFACTURER'S ORIGINAL UNOPENED CONTAINER'S OR PACKAGING, WITH IDENTIFYING LABELS INTACT AND LEGIBLE. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS OF CONTRACT DOCUMENTS, QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.
- C20. COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS: HANDLE, INSTALL, ERECT, CONNECT, CONDITION, USE, ADJUST, AND CLEAN PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTION AND IN CONFORMITY WITH SPECIFIED REQUIREMENTS, INCLUDING EACH STEP IN SEQUENCE, DO NOT OMIT PREPARATORY STEPS OR INSTALLATION PROCEDURES UNLESS SPECIFICALLY MODIFIED OR EXEMPTED BY CONTRACT DOCUMENTS. SHOULD JOB CONDITIONS OR SPECIFIED REQUIREMENTS CONFLICT WITH MANUFACTURER'S INSTRUCTIONS, REQUEST CLARIFICATION IN WRITING FROM ARCHITECT BEFORE PROCEEDING. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH PROPER APPEARANCE.
- C21. MANUFACTURER'S FIELD SERVICES: WHEN SPECIFIED IN INDIVIDUAL SECTIONS, REQUIRE MATERIAL OR PRODUCT SUPPLIERS OR MANUFACTURERS TO PROVIDE QUALIFIED STAFF PERSONNEL TO OBSERVE SITE CONDITIONS, CONDITIONS OF SURFACES, QUALITY OF WORKMANSHIP, AND CONDITIONS OF INSTALLATION AS APPLICABLE AND TO INITIATE ADDITIONAL INSTRUCTIONS WHEN NECESSARY.
- C22. CONTRACTOR SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL WORK AND MATERIALS - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.
- C23. NON-CONFORMING WORK: REMOVE AND REPLACE WORK THAT DOES NOT CONFORM TO THE CONTRACT DOCUMENTS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- C24. PRODUCT IDENTIFICATION: NAMEPLATES, TRADEMARKS, LOGOS, AND OTHER IDENTIFYING MARKS ON PRODUCTS ARE NOT PERMITTED ON PRODUCTS EXPOSED TO VIEW OR PUBLIC AREAS. INTERIOR OR EXTERIOR PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT NOT EXPOSED TO PUBLIC VIEW ARE EXEMPTED FROM FOREGOING LIMITATION. REQUIRED UL OR FM LABELS ARE ALSO EXCLUDED.
- C25. PROTECTION OF ADJACENT WORK: PROVIDE TEMPORARY PROTECTION FOR ADJACENT AREAS TO PREVENT DAMAGE BY INSTALLATION OF NEW WORK OR DEMOLITION OF EXISTING CONSTRUCTION. PROMPTLY REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNER. PROTECT ADJACENT AREAS FROM CONTAMINATION BY CONSTRUCTION DUST AND DEBRIS. PROVIDE TEMPORARY BARRICADES AS NECESSARY TO ENSURE PROTECTION OF THE PUBLIC, MAINTAIN EGRESS WITHIN AND AROUND CONSTRUCTION AREAS.
- C26. DAMAGED PRODUCTS: DO NOT USE PRODUCTS IN WORK, WHICH HAVE DETERIORATED, BECOME DAMAGED, OR ARE OTHERWISE UNFIT FOR USE. RESTORE UNITS DAMAGED DURING INSTALLATION, REPLACE UNITS, WHICH CANNOT BE RESTORED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- C27. SECURITY: PROVIDE FACILITIES TO PROTECT WORK FROM UNAUTHORIZED ENTRY, VANDALISM, AND THEFT. CONDUCT OPERATIONS IN MANNER TO AVOID RISK OF LOSS, THEFT, OR DAMAGE BY VANDALISM.
- C28. TEMPORARY CONTROLS: a. HEAT: PRIOR TO ENCLOSURE, PROVIDE HEATING AS NECESSARY TO PROTECT MATERIALS, PRODUCTS, AND FINISHES FROM DAMAGE DUE TO TEMPERATURE OR HUMIDITY. ENCLOSURE INCLUDING AS STATE OF CONSTRUCTION WHEN EXTERIOR WALLS ARE ERECTED, DOORS AND WINDOWS ARE INSTALLED AND GLAZED, ROOF DECK AND ROOFING ARE COMPLETE, AND WHEN OTHER OPENINGS IN EXTERIOR ENVELOPE ARE EQUIPPED WITH TEMPORARY CLOSURES EXCEPT WHERE INDICATED OTHERWISE IN INDIVIDUAL SPECIFICATION SECTIONS. MAINTAIN MINIMUM AMBIENT TEMPERATURE OF 50 DEGREES F IN AREAS WHERE CONSTRUCTION IS IN PROGRESS.

- b. VENTILATION: VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPATE HUMIDITY, AND TO PREVENT ACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.
- c. BARRIERS AND CLOSURES: PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATIONS.
- d. FIRE PROTECTION: COMPLY WITH LOCAL FIRE PROTECTION CODE AND GOVERNING AUTHORITIES. PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION INCLUDING, WITHOUT LIMITATION, FIRE EXTINGUISHERS AND OTHER APPROPRIATE EQUIPMENT FOR FIRE EXTINGUISHING READY FOR IMMEDIATE USE. MAINTAIN ANY REQUIRED FIRE ALARM SYSTEMS IN OPERATION DURING CONSTRUCTION. DISTRIBUTE EQUIPMENT AROUND SITE AND PARTICULARLY IN IMMEDIATE VICINITY OF PERFORMANCE OF WELDING OR SIMILAR HAZARDOUS WORK.
- C29. INTERRUPTION OF SERVICES: INTERRUPTIONS TO ANY SERVICE FOR THE PURPOSE OF MAKING OR BREAKING A CONNECTION SHALL BE MADE ONLY AFTER CONSULTATION WITH THE OWNER AND SHALL BE AT SUCH TIME AND OF SUCH DURATION AS MAY BE DIRECTED.
- C30. EXCAVATIONS OR TRENCHING: KEEP THE INTERIORS BETWEEN EXCAVATION OR TRENCHING, INSTALLATION OF CONDUIT OR PIPING, AND BACK FILLING OPERATIONS TO AN ABSOLUTE MINIMUM. PROVIDE SUITABLE TEMPORARY COVERS FOR EXCAVATIONS OR TRENCHING CROSSING ROADWAYS, WALKS, OR OTHER TRAFFIC WAYS AS REQUIRED BY GOVERNING AGENCIES.
- C31. CUTTING AND PATCHING: DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED, DECREASE FIRE PERFORMANCE, DECREASE ACOUSTICAL PERFORMANCE, DECREASE ENERGY PERFORMANCE, DECREASE OPERATIONAL LIFE, OR DECREASE SAFETY FACTORS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT. CUT WITH TOOLS APPROPRIATE TO THE MATERIALS TO BE CUT. PATCH WITH MATERIALS AND METHODS TO PRODUCE PATCH THAT IS NOT VISIBLE FROM A DISTANCE OF THREE FEET.
- C32. COORDINATION AND CLEARANCES: VERIFY AND COORDINATE CLEARANCES, DIMENSIONS, AND INSTALLATION OF ADJOINING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, CONDUITS, OR OTHER MECHANICAL OR ELECTRICAL ITEMS OR APPARATUS. VERIFY DIMENSIONS FOR PRODUCTS TO BE FITTED INTO WORK.
- e. ATTACHMENTS AND CONNECTIONS: PROVIDE ATTACHMENT AND CONNECTION DEVICES METHODS FOR SECURING AND ANCHORING WORK. SECURE IN PLACE WITH DEVICES DESIGNATED AND SIZED TO WITHSTAND STRESSES, VIBRATION, PHYSICAL DISTORTION, OR DISBURGEMENT.
- f. EXPANSION AND MOVEMENT: ALLOW FOR EXPANSION OF MATERIALS AND BUILDING MOVEMENT.
- g. ISOLATION OF DISMISLAR ITEMS: ISOLATE EACH UNIT OF WORK FROM INCOMPATIBLE WORK AS NECESSARY TO PREVENT DETERIORATION AND ELECTROLYTIC ACTION.
- h. MAINTENANCE: CLEAN AND PERFORM MAINTENANCE ON INSTALLED WORK AS FREQUENTLY AS NECESSARY THROUGH REMAINDER OF CONSTRUCTION PERIOD. LUBRICATE OPERABLE COMPONENTS TO ENSURE OPERABILITY WITHOUT DAMAGING EFFECTS.
- i. ADJUSTMENTS: ADJUST OPERATING PRODUCTS AND EQUIPMENT TO ENSURE SMOOTH AND UNHINDERED OPERATION.
- C33. EXAMINATION OF CONDITIONS: EXAMINE SUBSTRATE AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT COMMENCE WORK OVER UNSATISFACTORY CONDITIONS DETERMINED TO PROPER AND TIMELY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OR INSTALLATION CONSTITUTES ACCEPTANCE OF CONDITIONS AND COSTS OF ANY CORRECTIVE MEASURES ARE RESPONSIBILITY OF CONTRACTOR.
- C34. CONTRACTOR SHALL PROVIDE BACKING SUPPORT OF ALL WALL, CEILING, AND PARTITION MOUNTED ITEMS SUCH AS TABLE BRACKETS, LIGHT FIXTURES, ARTIFACTS, SHELVING, EQUIPMENT, AND TELEVISIONS. COORDINATE LOCATIONS AND REQUIREMENTS WITH THE PLUMBING, MECHANICAL, ELECTRICAL DRAWINGS.
- C35. EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND ORDINANCES.
- C36. GLASS AND GLAZING FOR ALL WINDOWS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES. IN ADDITION ALL WINDOWS MUST MEET THE "AAA" WINDOW STANDARDS FOR INSTALLATION. THE CONTRACTOR SHALL OBTAIN, AND SHALL FOLLOW ALL REQUIREMENTS OF THE "AAA" STANDARDS IN ADDITION TO THE MANUFACTURER SPECIFICATIONS AND ARCHITECTURAL DETAILS INCLUDED WITHIN THE DRAWINGS.
- C37. ROOFING WORK SHALL BE PERFORMED AND ALL PENETRATIONS THROUGH THE ROOFING MEMBRANE SHALL BE PATCHED OR FLASHED AS PER THE MANUFACTURER'S STANDARDS.
- C38. ROOF OBSTRUCTIONS SUCH AS TELEVISION ANTENNAE, SOLAR PANELS, AND GUY WIRES SHALL NOT BE LOCATED OR INSTALLED IN SUCH A WAY AS TO PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.

- C39. INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.
- C40. GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.
- C41. PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBRANE THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY ALLOWED. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES.
- C42. VERIFY FIRE EXTINGUISHER REQUIREMENTS AND LOCATIONS WITH FIRE MARSHAL AND OWNER'S REPRESENTATIVE.
- C43. CONTRACTOR SHALL SEAL ALL GAPS, HOLES, AND CRACKS IN BUILDING CONSTRUCTION AS REQUIRED TO CONTROL INFILTRATION OF INSECTS.
- C44. DISPOSAL OF TRASH AND EXCESS EXCAVATION: DISPOSE OF TRASH AND DEBRIS AT DESIGNATED AREAS OFF THE PREMISES AT NO ADDITIONAL COST TO THE OWNER. BURNING OF TRASH AND DEBRIS ON THE PREMISES IS PROHIBITED. COORDINATE TRASH REMOVAL WITH LANDFILL WHERE APPLICABLE.
- C45. ELECTRICAL, MECHANICAL, AND PLUMBING SYSTEM ARE SCHEMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL WORK TO AVOID CONFLICTS BETWEEN TRADES. THE CONTRACTOR SHALL PERFORM ALL WORK TO PROVIDE COMPLETE FUNCTIONING SYSTEMS IN ACCORDANCE WITH THE INTENT INDICATED AND CODES AND REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION.
- C46. CLEANING MATERIALS AND EQUIPMENT: PROVIDE ALL REQUIRED PERSONNEL, EQUIPMENT, AND MATERIALS NEEDED TO MAINTAIN THE SPECIFIED STANDARD OF CLEANLINESS. USE ONLY THE CLEANING MATERIALS AND EQUIPMENT WHICH ARE COMPATIBLE WITH THE SURFACE BEING CLEANED, AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIAL.

**SUBMITTALS/SUBSTITUTIONS**

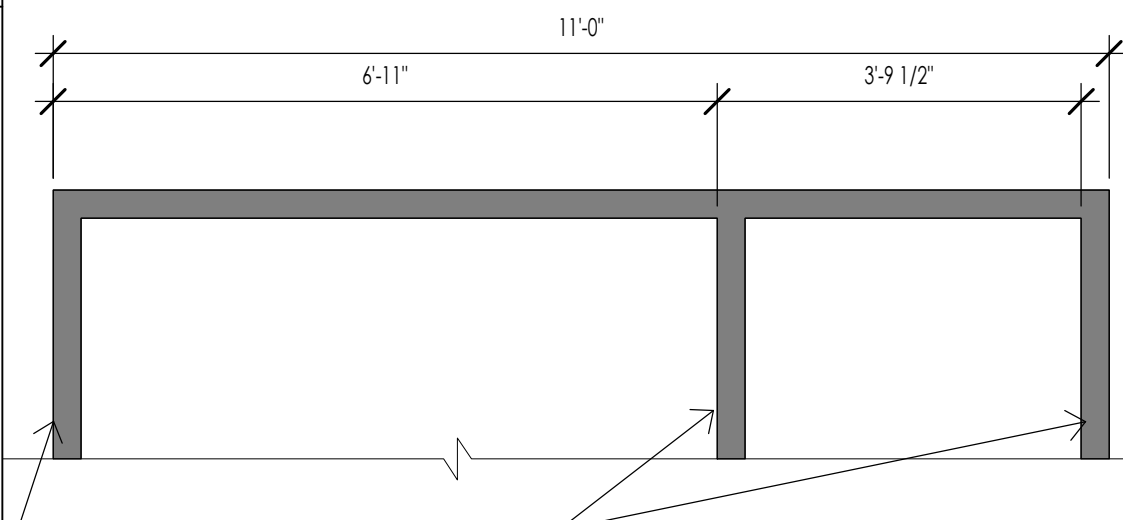
- S1. CONTRACTOR SHALL PROVIDE COMPLETE LIST OF SUBMITTALS TO ARCHITECT/OWNER WITHIN 1 WEEK OF OBTAINING BUILDING PERMIT.
- S2. ALL SUBMITTALS SHALL BE COMPLETE AND SUBMITTED WITHIN FIRST 90 DAYS OF WORK.
- S3. ALL ITEMS NOTED AS DESIGNATED "BY MANUFACTURER" IS A DEFERRED DESIGN AND SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH MANUFACTURER FOR FINAL DESIGN AND SUBMIT FINAL DESIGN FOR APPROVAL. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL FIELD DIMENSIONS.
- S4. SOURCE QUALITY CONTROL: PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS, UNLESS MORE STRINGENT CRITERIA ARE SPECIFIED IN INDIVIDUAL SECTIONS. USE OF ANY SUPPLIER IS SUBJECT TO OWNER'S APPROVAL.
- S5. SUBSTITUTIONS: PROPOSALS FOR SUBSTITUTION OF MATERIALS, EQUIPMENT, AND METHODS WILL ONLY BE CONSIDERED WHEN ACCOMPANIED BY FULL AND COMPLETE TECHNICAL DATA AS WELL AS ANY OTHER INFORMATION REQUIRED TO EVALUATE THE PROPOSED SUBSTITUTION. SUBSTITUTIONS ARE UNACCEPTABLE UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. IN THE EVENT OF SUBSTITUTION PROPOSALS AFTER THE CONTRACT HAS BEEN AWARDED, ALL SUCH PROPOSALS SHALL BE ACCOMPANIED BY SUBSTANTIAL COST SAVINGS FOR THE OWNER.
- S6. AVAILABILITY OF PRODUCTS: VERIFY PRIOR TO CONSTRUCTION START THAT ALL SPECIFIED ITEMS WILL BE AVAILABLE IN TIME FOR INSTALLATION DURING OBSERVY AND TIMELY PROGRESS OF THE WORK. IN THE EVENT SPECIFIED ITEM OR ITEMS WILL NOT BE SO AVAILABLE, NOTIFY THE ARCHITECT PRIOR TO START OF CONSTRUCTION, COST OF DELAYS BECAUSE OF NON-AVAILABILITY OF SPECIFIED ITEMS OR SUBSTITUTED ITEMS, WHICH THE CONTRACTOR COULD HAVE AVOIDED SUCH DELAYS, WILL BE BORNE BY THE CONTRACTOR.
- S7. PRODUCTS AND MATERIALS: PROVIDE PRODUCTS AND MATERIALS SPECIFIED. REQUEST ARCHITECTS SELECTION OF COLORS AND ACCESSORIES IN SUFFICIENT TIME TO AVOID DELAYING PROGRESS OF THE WORK.

**TOLERANCES**

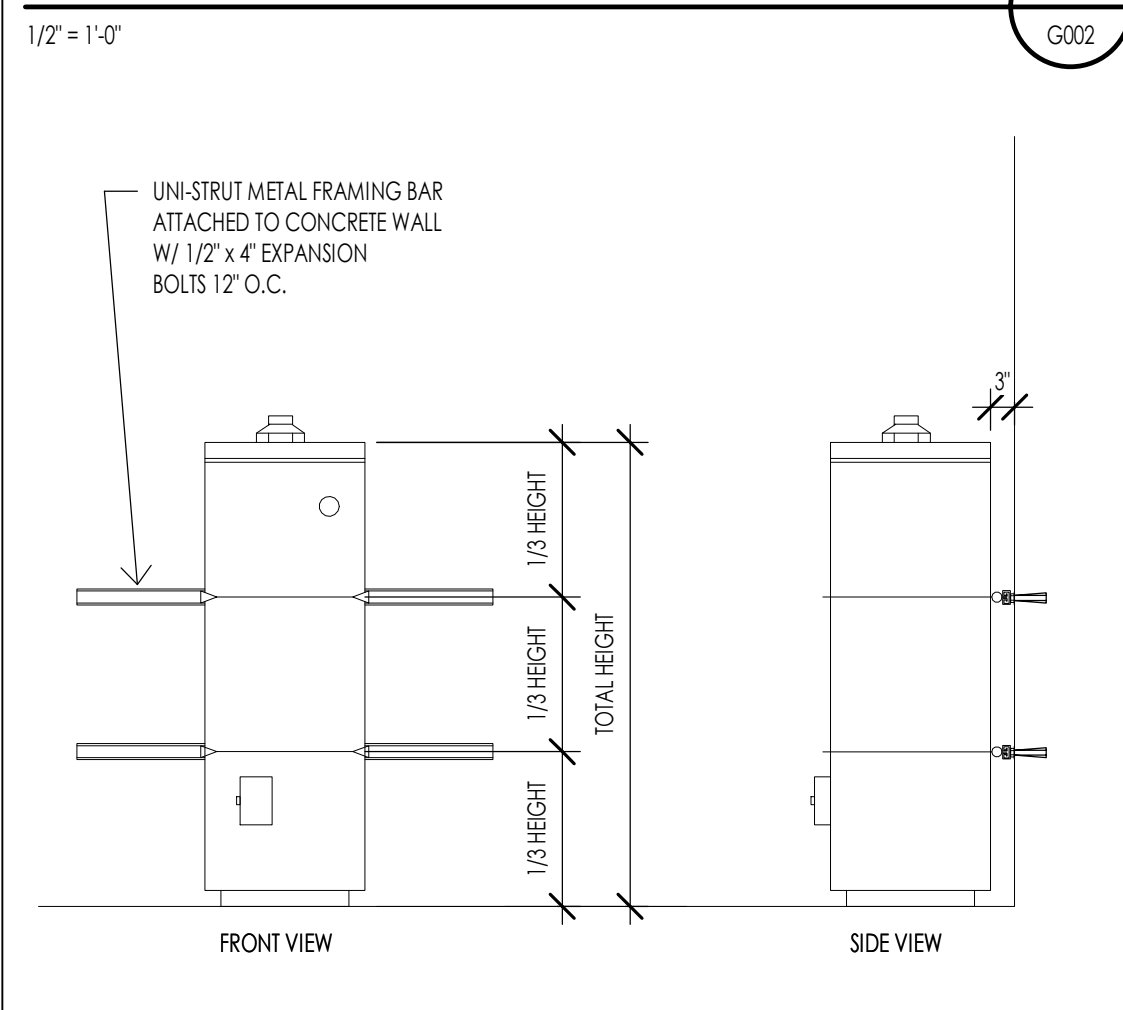
- T1. TOLERANCES: INSTALL WORK TRUE TO LINE, PLUMB, AND LEVEL, EXCEPT WHERE SPECIFIED OTHERWISE. WORK EXECUTED WITHIN THE FOLLOWING TOLERANCE WILL BE ACCEPTABLE.
- a. TRUE TO LINE: ALLOWED DEVIATION FROM AN ABSOLUTELY STRAIGHT LINE OF SIGHT WITHIN PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 3/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
- b. PLUMB: ALLOWED DEVIATIONS FROM AN ABSOLUTELY VERTICAL PLANE OF PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 3/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
- c. LEVEL: ALLOWED DEVIATIONS FROM AN ABSOLUTELY HORIZONTAL PLANE OF PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 3/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
- d. ALLOWED DEVIATIONS FROM AN ABSOLUTELY FLAT IF WITHIN PLUS OR MINUS 1/16 INCH IN ONE SQUARE FOOT, WITHIN PLUS OR MINUS 1/8 INCH IN AN AREA 10 FEET BY 10 FEET, AND WITHIN PLUS OR MINUS 3/4 INCH FOR ENTIRE AREA OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.
- T2. REFER TO SPECIFICATIONS FOR ADDITIONAL TOLERANCE REQUIREMENTS.

**PERMIT CONTRACT CLOSURE:**

- a. SUBSTANTIAL COMPLETION: AT SUBSTANTIAL COMPLETION OF THE PROJECT, SCHEDULE AND ATTEND A PUNCH LIST WALK THROUGH OF REMAINING WORK FOR REVIEW WITH THE ARCHITECT AND OWNER. COMPLETE ALL DEFECTS AND OMISSIONS NOTED IN THE FINAL PUNCH LIST PROMPTLY, IN THE TIME PERIOD AGREED UPON WITH THE OWNER, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- b. CERTIFICATE OF OCCUPANCY: PROVIDE THE FINAL CERTIFICATE OF OCCUPANCY FROM THE BUILDING DEPARTMENT.
- c. PERMITS/INSPECTION CARDS: FURNISH COPIES OF PERMITS AND SIGNED INSPECTION CARDS FOR EACH OF THE FOLLOWING AGENCIES: BUILDING DEPARTMENT; PLUMBING/MECHANICAL DEPARTMENT; ELECTRICAL DEPARTMENT; FIRE DEPARTMENT; HEALTH DEPARTMENT; OTHERS AS REQUIRED.
- d. FURNISH COPIES OF PERMITS AND SIGNED INSPECTION CARDS FOR EACH OF THE FOLLOWING AGENCIES: BUILDING DEPARTMENT; PLUMBING/MECHANICAL DEPARTMENT; ELECTRICAL DEPARTMENT; FIRE DEPARTMENT; HEALTH DEPARTMENT; OTHERS AS REQUIRED.
- e. MAINTENANCE MANUALS AND WARRANTIES: FURNISH (2) COPIES FOR EACH UNIT OF ALL MANUALS, MAINTENANCE INSTRUCTIONS, CONTRACTORS AND MANUFACTURER'S PRINTED WARRANTIES, AND INSTRUCTIONS FOR OPERATION OF ALL EQUIPMENT SPECIFIED HEREIN OR SHOWN ON DRAWINGS, TRAIN OWNER'S PERSONNEL IN USE OF BUILDING SYSTEMS.
- f. TOUCH UP MATERIAL: FURNISH OWNER WITH ONE GALLON OF EACH PAINT AND STAIN USED PER UNIT. PROVIDE AN ADDITIONAL 2 PERCENT OF QUANTITY INSTALLED OF ALL FINISH MATERIAL INCLUDING CEILING PANELS, TILE, AND SHEET GOODS.
- g. SUBCONTRACTORS: PROVIDE THE OWNER THE NAMES, ADDRESSES, AND PHONE NUMBERS OF ALL SUBCONTRACTORS, FINAL UNCONDITIONAL LIES RELEASES, AND WARRANTIES FROM EACH.
- h. FINAL CLEANING AND REPAIRS: REMOVE TEMPORARY FACILITIES AND PROVIDE FINAL CLEANING AND TOUCH-UP. RESTORE PORTIONS OF BUILDING, SITE IMPROVEMENTS, LANDSCAPING AND OTHER ITEMS DAMAGED BY CONSTRUCTION OPERATIONS TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL EXPENSE TO THE OWNER.
- i. CLOSEOUT DOCUMENTS: PROVIDE THE OWNER WITH A COMPACT DISK OF ALL RECORD DRAWINGS IN PDF FORMAT. COPY OF ALL SHOP DRAWINGS AND PRODUCT SUBMITTALS, SERVICE CONTRACTS, HVAC AIR BALANCE REPORT, AND WASTELINE VIDEO INSPECTION REPORT.



**TYPICAL DIMENSION METHOD**



**WATER HEATER SEISMIC STRAPPING**

**INSULATION SCHEDULE**

**ENERGY STRATEGY:**

**PRESCRIPTIVE PER IBC**  **RESCHECK - 2015 IECC**

LOCATION	TYPE	THICKNESS	"R" VALUE	REMARKS
1. FOUNDATION WALLS AND SLAB ON GRADE	CONTINUOUS RIGID	2" TOTAL THICKNESS - 2 BELOW GRADE CONTINUOUS BELOW SLAB	R-14	OWNER COORDINATE FORMULAR CHWIS C/W/S PLUS INSULATION GLUED TO INSIDE OF FOUNDATION WALL OR CAST IN PLACE BELOW SLAB
2. WALL INSULATION EXTERIOR - WOOD FRAMED WALLS	BLOW-IN	5 1/2" TOTAL THICKNESS	R-21	JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
3. WALL INSULATION EXTERIOR - CONCRETE WALLS FURRED OUT WITH WOOD FRAMED WALLS	BLOW-IN	5 1/2" TOTAL THICKNESS 3 1/2" TOTAL THICKNESS	R-21 R-14.7	JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
4. FLOORS (JOISTS/FRAMING)	BLOW-IN	10"	R-42	JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
5. ROOFING: VENT BAFFLES	BLOW DECK	1" - TOTAL THICKNESS		FLAME RETARDANT PVC. EXTEND A MINIMUM OF 48" ABOVE EAVES
6. ROOFING: AT EAVES	FOAM-IN-PLACE	1" - TOTAL THICKNESS	R-6.8	JOHNS MANVILLE COBONDO MCS CLOSED-CELL SPRAY FOAM INSULATION
7. ROOFING: AT TRUSSES	BLOW-IN	DEPTH REQUIRED TO MEET R-VALUE	R-50	JOHNS MANVILLE CLIMATE PROB FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
9. RESTROOMS, BATHROOMS AND COMMON SPACES	BLOW-IN (FOR SOUND)	FILL CAVITIES		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
10. AT STUD CAVITIES WITH ROOF DRAINS OR PLUMBING STACKS, UNITS AND INTERIOR WALLS, UNITS SPACES AND COMMON SPACES	SOUND BATS	FILL VOIDS		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
11. MECHANICAL TYPE ROOM WALLS AND CEILINGS WHERE APPLICABLE	SOUND BATS	FILL CAVITY		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
12. INTERIOR FLOORS - SOUND RATING REQUIRED	SOUND BATS	FILL CAVITY		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
13. DUCTWORK/PLUMBING LINES	DBL. FACED 1/2" VINYL FACED			SEE MECHANICAL AND PLUMBING - FOR ALL INSULATION REQUIREMENTS
14. GLAZING - NFRC THERMAL RATINGS	DOUBLE PANE	LOW-E	MAX U-FACTOR: 0.32 MAX SHGC: 0.16	ALUMINUM CLAD WOOD

- INSULATION NOTES:**
- COORDINATE WITH PROJECT SPECIFICATION SECTIONS FOR INSULATION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
  - ALL INSULATION SHALL BE TIGHT, AND NO GAPS SHALL BE LEFT.
  - ALL INSULATION AT PIPES SHALL BE INSTALLED AT WARM SIDE ONLY.

**PROVIDE SEALING OF THE BUILDING THERMAL ENVELOPE FOR LEAKAGE BY THE REQUIREMENTS BELOW:**

(A) BLOWER DOOR TEST FOR BUILDING ENVELOPE AT FINAL WITH A MAXIMUM AIR LEAKAGE OF 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE OWNER ORIGINAL.

1. AIR BARRIER TO BE PERFORMED WITH "AEROBARRIER" ENVELOPE SEALING TECHNOLOGY.

2. TO BE PERFORMED AFTER DRYWALL INSTALLATION AND MUDD AND TAPE.

3. CONTRACTOR TO VERIFY NO WALL OPENINGS GREATER THAN 1/2" PRIOR TO INSTALLATION OF ENVELOPE SEALING.

**RESCHECK/ ENERGY COM CHECK**

**REScheck Software Version 4.7.2 Compliance Certificate**

Project: Warm Springs #32

Energy Code: 2015 IECC  
Location: Ketchum, Idaho  
Construction Type: Single-Family  
Project Type: New Construction  
Conditioned Floor Area: 2,889 sq ft  
Glazing Area: 27%  
Climate Zone: 6 (8280 Hudson)  
Permit Date: [blank]  
Permit Number: [blank]

Construction Site: East Mountain Road #32 Ketchum, ID 83340 208751876  
Owner/Agent: VP Companies 914 West Main Street Ketchum, ID 83340 208751876  
Designer/Contractor: John Hickey 7927 High Point Hwy Suite 200 Sandy, UT 84094 8013090900 johnhickey@bnaac.com

Compliance: Passes using UA Trade-off  
Compliance: 8.8% Better Than Code Minimum UA: 588 Year UA: 569  
This report and the associated energy audit were prepared in compliance with the requirements of REScheck. Each sub-area assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

Envelope Assemblies

Assembly	Gross Area of Perimeter	Cavity R-Value	Cost R-Value	Prog. R-Factor	Req. R-Factor	Prog. U-Factor	Req. U-Factor
Slab on grade: Slab-On-Grade Uninsulated	183	34.0	0.058	0.033	0	0	0
Floor over Garage: All Wood joist/Traus Over Uninsulated depth: 4.0'	260	30.0	0.0	0.033	0.033	9	9
Basement Walls: Solid Concrete or Masonry	3,058	33.0	34.0	0.028	0.050	28	50
Depth below grade: 0.5' Insulation depth: 10.5'							
South Elevation: Wood Frame, 18" o.c.	3,660	23.1	7.0	0.038	0.045	25	30
Windows: Metal Frame/Double Pane with Low-E	444			0.300	0.320	139	148
Door & Glass	286			0.320	0.320	92	92
Door Garage Solid	180			0.300	0.320	90	98
West Elevation: Wood Frame, 18" o.c.	170	23.1	7.0	0.038	0.045	25	28
Windows: Metal Frame/Double Pane with Low-E	62			0.300	0.320	25	26
North Elevation: Wood Frame, 18" o.c.	594	23.1	7.0	0.038	0.045	19	23

Project Title: Warm Springs #32 Report date: 06/06/22  
Data filename: C:\Users\jccarens\THINKAE\Desktop\Rescheck Temp\Warm Springs Residence #32.rck Page 1 of 10

Assembly	Gross Area of Perimeter	Cavity R-Value	Cost R-Value	Prog. R-Factor	Req. R-Factor	Prog. U-Factor	Req. U-Factor
Windows: Wood Frame/Double Pane with Low-E	65			0.300	0.320	20	21
Door exterior: Glass	24			0.450	0.320	13	8
East Elevation: Wood Frame, 18" o.c.	758	23.1	7.0	0.038	0.045	26	31
Windows: Wood Frame/Double Pane with Low-E	175			0.300	0.320	23	24
Roof - Level 1: Flat Ceiling or Scissor Truss	2,872	50.0	10.0	0.020	0.028	37	49

Compliance Statement: The proposed building design described here is consistent with the building codes, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2015 IECC requirements in full compliance with the mandatory requirements listed on the REScheck Inspection Checklist.  
Name: Title Signature Date: 06/06/2022

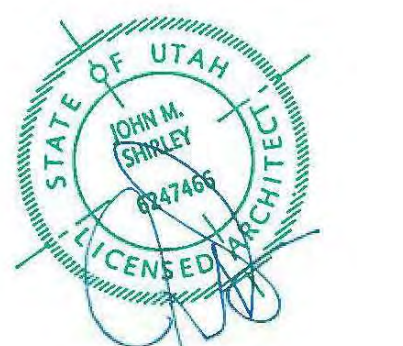


Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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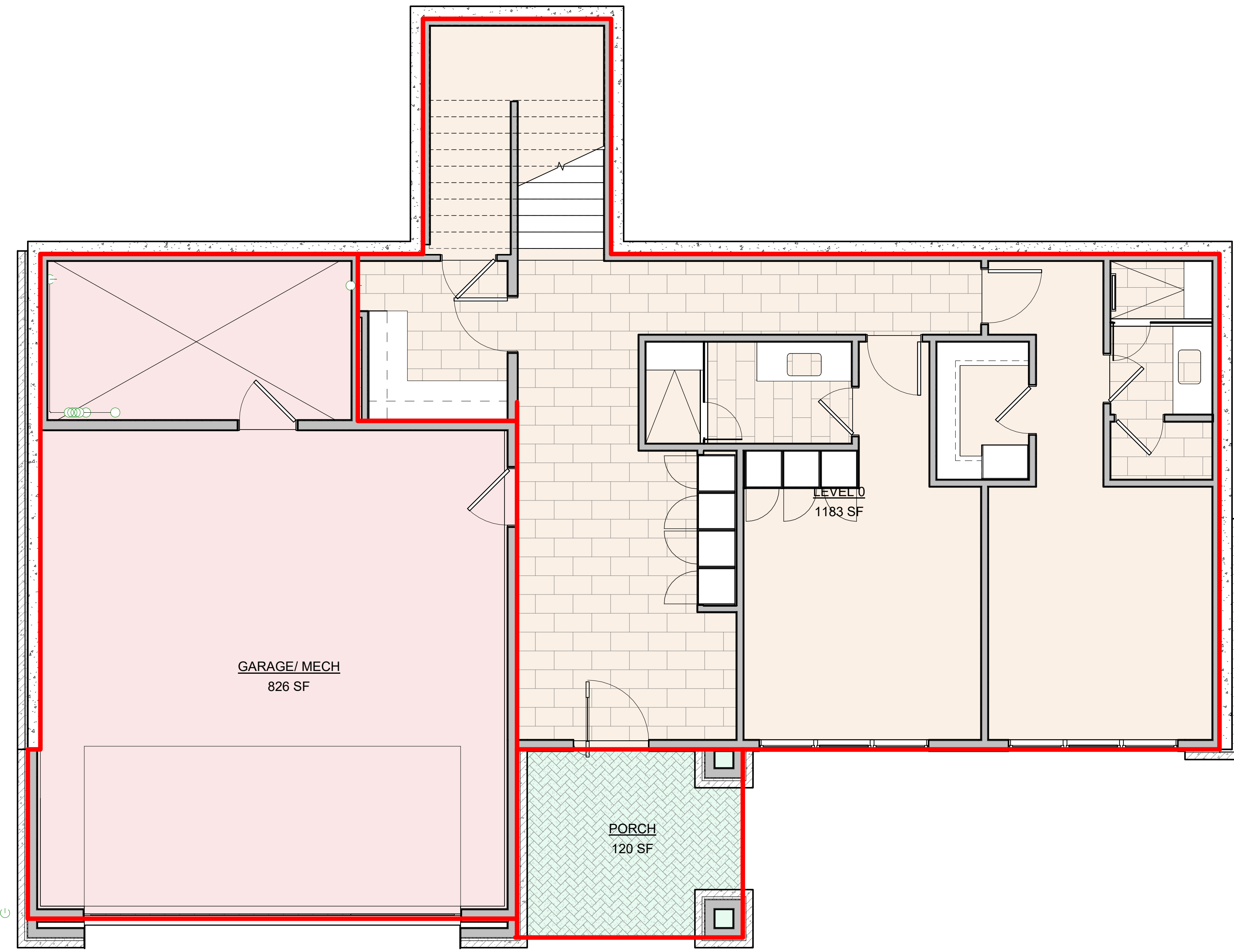
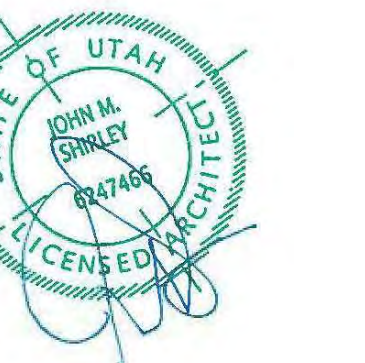
These drawings are available for limited review and evaluation by clients, consultants, contractors, governmental agencies, vendors, and office personnel only in accordance with this notice.



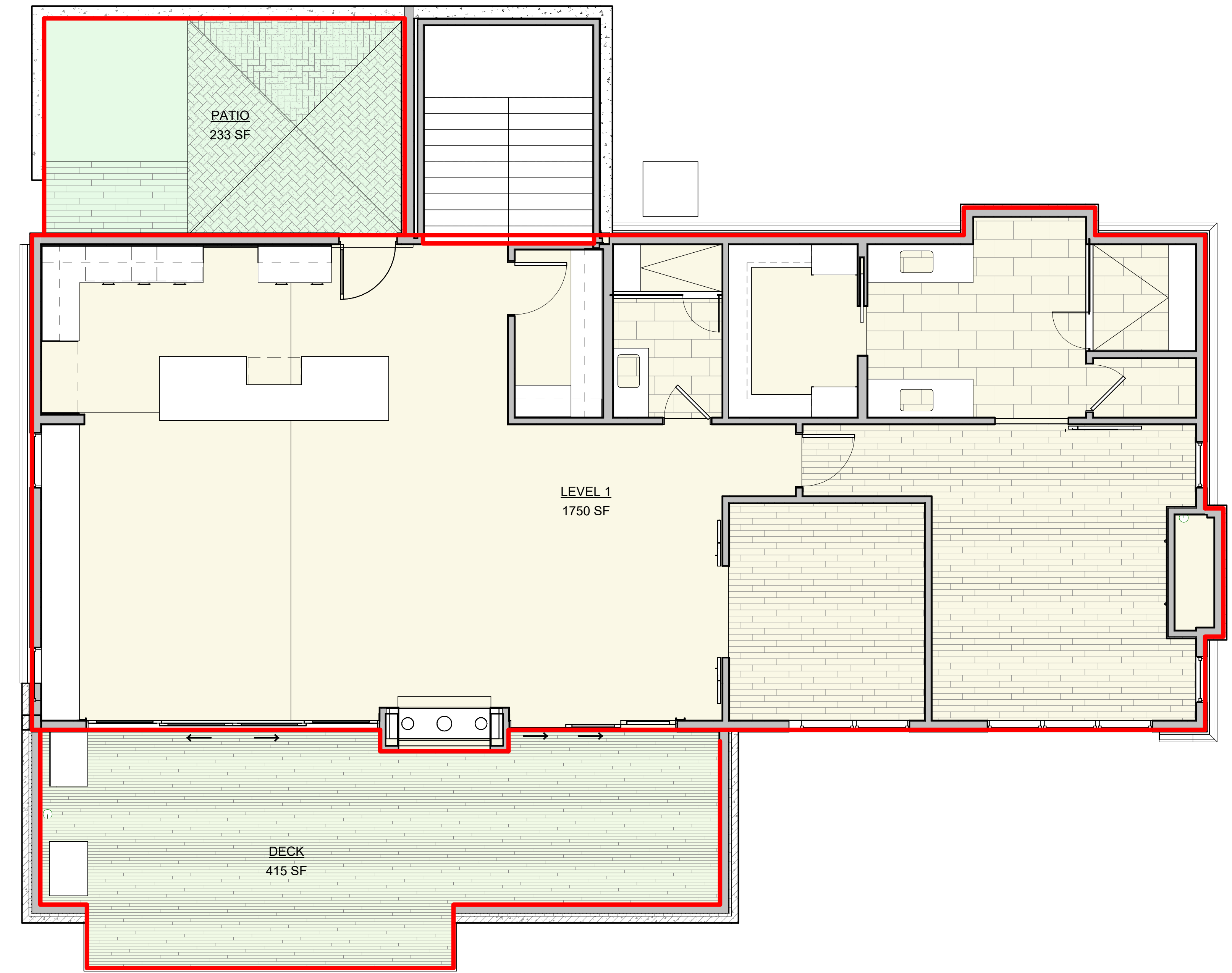
WARM SPRINGS RESIDENCE #32  
160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25  
REVISIONS:

SHEET TITLE:  
GENERAL NOTES



AREA PLAN LEVEL 1  
1/4" = 1'-0" 3  
G003



AREA PLAN LEVEL 2  
1/4" = 1'-0" 2  
G003

BUILDING AREA - FINISHED	
AREA	FINISHED
LEVEL 0	1183 SF
LEVEL 1	1750 SF
	2933 SF
BUILDING AREA - UNFINISHED	
AREA	UNFINISHED
GARAGE/MECH	826 SF
	826 SF
BUILDING AREA - TOTAL	
TOTAL	3759 SF
EXTERIOR AREA	
AREA	EXTERIOR
DECK	415 SF
PATIO	233 SF
PORCH	120 SF
	768 SF

WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:

SHEET TITLE:  
BUILDING AREA  
ANALYSIS

SHEET NUMBER:  
G003

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## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 1-GENERAL REQUIREMENTS

#### 01-01 SUMMARY

##### PROJECT INFORMATION:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL RESIDENTIAL CODE (I.R.C.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL SUB CONTRACTORS TO MEET THESE REQUIREMENTS.

IRC 104.4 ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS, AND ANY CHANGES MADE DURING CONSTRUCTION THAT ARE NOT IN COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE RESUBMITTED FOR APPROVAL AS AN AMENDED SET OF CONSTRUCTION DOCUMENTS. THE CONTRACTOR/OWNER SHALL BE RESPONSIBLE TO SUBMIT THE CHANGES TO THE BUILDING DEPARTMENT, OR WORK WITH THE ARCHITECT TO RE-SUBMIT THE PLANS TO THE BUILDING DEPARTMENT FOR APPROVAL.

THE CONSTRUCTION DOCUMENTS INCORPORATE BOTH THE PLANS AND SPECIFICATIONS FOR THE PROJECT. THE INCLUDED DRAWINGS AND SPECIFICATIONS ARE TO BE CONSIDERED A WHOLE SET OF DRAWINGS. ALL ITEMS REQUIRED FOR CONSTRUCTION MAY BE SHOWN EITHER IN DRAWINGS AND/OR SPECIFICATIONS. REQUIRED ITEMS MAY APPEAR IN WORKING DRAWINGS AND SPECIFICATIONS WHETHER GRAPHIC OR WRITTEN FORM, SO LONG AS THEY DO APPEAR SOMEWHERE AND ARE NOT CONTRADICTORY WITH OTHER PORTIONS OF THE DRAWINGS AND SPECIFICATIONS. NO FRAGMENT OF THE PLANS AND SPECIES TAKE PRECEDENCE OVER OTHER FRAGMENTS. THE DOCUMENTS MUST BE CONSIDERED AS A WHOLE. IF A CONFLICT OR CONTRADICTION DOES OCCUR, THE MOST STRINGENT APPLICATION OR SPECIFICATION APPLIES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING CONDITIONS, UTILITIES, MEASUREMENTS, CONNECTIONS, ETC.

THE CONTRACTOR SHALL COMPLY WITH ALL NATIONAL, STATE, LOCAL, AND RELATED CODES AND STANDARD CONSTRUCTION PRACTICES.

CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH GENERAL ENERGY NOTES AND/OR MODEL ENERGY CODE.

CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN THE PLANS TO THE ARCHITECT PRIOR TO COMMENCING RELATED WORK.

AN APPROVE NUMBER OR ADDRESS SHALL BE PROVIDED FOR ALL NEW BUILDINGS IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. SEE I.R.C. SECTION R319.

##### PROJECT IDENTIFICATION

NAME: THUNDER SPRING RESIDENCES, UNITS 1 A & 2  
ADDRESS: 126 SADDLE ROAD, KETCHUM, IDAHO, 83840  
OWNER: VFF COMPANIES

THE PROJECT SHALL INCLUDE THE CONSTRUCTION OF NINE SINGLE FAMILY HOMES AND TWO-FAMILY DWELLINGS. THE CONSTRUCTION SHALL BE OF CONCRETE FOUNDATION WITH WOOD AND STEEL CONSTRUCTION.

##### PHASE CONSTRUCTION:

YES

ACCESS TO SITE:  
NEW CONSTRUCTION: CONTRACTOR SHALL HAVE USE OF PROJECT SITE FOR CONSTRUCTION OPERATIONS DURING CONSTRUCTION PERIOD. ALL STORAGE MUST BE MAINTAINED ON SITE, AND SHALL NOT DISTURB PROPERTY OUTSIDE OF PROPERTY LINES, UNLESS APPROVED BY THE CITY AND OWNER.

### 01-02 ALLOWANCES

#### LUMP-SUM ALLOWANCES:

CONTRACTOR SHALL PROVIDE LUMP SUM ALLOWANCES FOR THOSE ITEMS INDICATED ON PLANS, SCHEDULES OR ITEMS REQUIRING ADDITIONAL DETAIL OR SELECTION. LUMP SUM SHALL BE INCLUDED WITHIN SCHEDULE OF VALUES.

#### CONTINGENCY ALLOWANCES:

USE OF THE CONTINGENCY ALLOWANCE SHALL ONLY BE AS DIRECTED BY ARCHITECT FOR OWNER'S PURPOSES AND ONLY IN THE EVENT OF CHANGE ORDERS THAT INDICATE ADDITIONS TO THE ALLOWANCE.

CONTRACTOR'S OVERHEAD, PROFIT, AND RELATED COSTS FOR PRODUCTS AND EQUIPMENT ORDERED BY OWNER UNDER THE CONTINGENCY ALLOWANCE ARE INCLUDED IN THE ALLOWANCE AND ARE NOT PART OF THE ALLOWANCE.

CHANGE ORDERS AUTHORIZING USE OF FUNDS FROM THE CONTINGENCY ALLOWANCE WILL INCLUDE CONTRACTOR'S RELATED COSTS, FOR WORK SPECIFIED WITHIN THE CHANGE ORDER. PROFIT AND OVERHEAD OF THE CONTRACTOR SHALL EQUAL PROJECT PROFIT AND OVERHEAD FOR PROJECT.

AT PROJECT CLOSEOUT, CREDIT ALL UNUSED AMOUNTS REMAINING IN THE CONTINGENCY ALLOWANCE TO OWNER BY CHANGE ORDER.

#### SCHEDULE OF ALLOWANCES:

CONTRACTOR SHALL PROVIDE SCHEDULE OF ALL ALLOWANCES AS A PART OF BIDDING FOR OWNER AND ARCHITECT REVIEW.

### 01-03 ALTERNATES

#### GENERAL SUMMARY:

ALTERNATES MAY BE INCLUDED ON THE DRAWINGS, AND SHOULD BE SEPARATED DURING THE BIDDING PROCESS. THE CONTRACTOR MAY ALSO SUBMIT REQUESTS FOR ALTERNATES DURING BIDDING. ALL ALTERNATES MAY BE ACCEPTED AFTER REVIEW OF ALTERNATE WITH THE OWNER. AND THE CONTRACTOR WILL BE NOTIFIED IF AN ALTERNATE IS TO BE ACCEPTED OR NOT. THE CONTRACTOR SHALL NOT ASSUME THAT ALTERNATES ARE ACCEPTED, UNLESS NOTIFIED BY THE ARCHITECT THROUGH ADDENDUM, AS, OR PROPOSAL, REQUEST OF ACCEPTANCE OF THE ALTERNATE. ALL ALTERNATE WORK MAY BE ADDED TO OR DEDUCTED FROM THE BASE BID BY CHANGE ORDER IN THE AMOUNT OF THE ADDITIONAL COSTS OR SAVINGS, IF OWNER DECIDES TO ACCEPT THE ALTERNATE BID.

- ALTERNATES DESCRIBED IN THIS SECTION ARE PART OF THE WORK ONLY IF ENUMERATED IN THE AGREEMENT.
- THE COST OR CREDIT FOR EACH ALTERNATE IS THE NET ADDITION TO OR DEDUCTION FROM THE CONTRACT SUM TO INCORPORATE ALTERNATE INTO THE WORK. NO OTHER ADJUSTMENTS ARE MADE TO THE CONTRACT SUM.
- ALTERNATES PROPOSED BY THE CONTRACTOR DURING BIDDING, MUST NOT BE SHOWN AS THE BASE BID FOR THE PROJECT. ALL BASE BIDS MUST BE THOSE ITEMS SPECIFIED ON THE DRAWINGS, AND ALL ALTERNATES PROPOSED BY THE CONTRACTOR MUST BE OUTSIDE OF THE REQUIRED NUMBER OF BASE BIDS FOR EACH DISCIPLINE. THE ALTERNATE MAY BE THEN PRESENTED.

### 01-04 SUBSTITUTION PROCEDURES

#### GENERAL SUMMARY:

ALL CHANGES IN PRODUCTS, MATERIALS, EQUIPMENT, AND METHODS OF CONSTRUCTION FROM THOSE REQUIRED BY THE CONTRACT DOCUMENTS AND PROPOSED BY CONTRACTOR, SHALL BE APPROVED BY THE ARCHITECT, ENGINEER AND BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK.

SUBMITTALS  
SUBMIT THREE COPIES OF EACH REQUEST FOR CONSIDERATION BY ARCHITECT AND OWNER. IDENTIFY PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED.

SHOW COMPLIANCE WITH REQUIREMENTS FOR SUBSTITUTIONS INCLUDING THE FOLLOWING:

- STATEMENT INDICATING WHY SPECIFIED PRODUCT OR FABRICATION OR INSTALLATION CANNOT BE PROVIDED, IF APPLICABLE.
- PRODUCT DATA, INCLUDING DRAWINGS AND DESCRIPTIONS OF PRODUCTS AND FABRICATION AND INSTALLATION PROCEDURES.
- SAMPLES, WHERE APPLICABLE OR REQUESTED.
- DETAILED COMPARISON OF CONTRACTOR'S CONSTRUCTION SCHEDULE USING PROPOSED SUBSTITUTION WITH PRODUCTS SPECIFIED FOR THE WORK.
- COST INFORMATION, INCLUDING A PROPOSAL OF CHANGE, IF ANY, IN THE CONTRACT SUM.

ARCHITECT WILL REQUEST ADDITIONAL INFORMATION IF NEEDED TO QUALIFY DOCUMENTATION FOR EVALUATION. ARCHITECT WILL NOTIFY CONTRACTOR OF ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTION IN WRITING. THE CONTRACTOR SHALL NOT INCLUDE PROPOSED SUBSTITUTIONS IN BIDS OR COSTS UNTIL ACCEPTANCE OF SUBSTITUTION BY ARCHITECT AND OWNER.

### 01-05 PAYMENT PROCEDURES

#### SUBMITTALS

SUBMIT THE SCHEDULE OF VALUES WITH UPDATED CONSTRUCTION SCHEDULE TO ARCHITECT AT EARLIEST POSSIBLE DATE BUT NO LATER THAN SEVEN DAYS BEFORE THE DATE SCHEDULED FOR PAYMENT APPLICATION.

INCLUDE THE FOLLOWING IDENTIFICATION ON THE SCHEDULE OF VALUES:

PROJECT NAME AND LOCATION.  
NAME OF ARCHITECT.  
CONTRACTOR'S NAME AND ADDRESS.  
DATE OF SUBMITTAL.

ARRANGE SCHEDULE OF VALUES CONSISTENT WITH FORMAT OF AIA DOCUMENT G703. PROVIDE A SEPARATE LINE ITEM IN THE SCHEDULE OF VALUES FOR EACH PART OF THE WORK WHERE APPLICATIONS FOR PAYMENT MAY INCLUDE MATERIALS OR EQUIPMENT PURCHASED OR FABRICATED AND STORED, BUT NOT YET INSTALLED.  
UPDATE AND RESUBMIT THE SCHEDULE OF VALUES BEFORE THE NEXT APPLICATIONS FOR PAYMENT WHEN CHANGE ORDERS OR CONSTRUCTION CHANGE DIRECTIVES RESULT IN A CHANGE IN THE CONTRACT SUM.

EACH APPLICATION FOR PAYMENT SHALL BE CONSISTENT WITH PREVIOUS APPLICATIONS AND PAYMENTS AS CERTIFIED BY ARCHITECT AND PAID FOR BY OWNER.

EACH APPLICATION FOR PAYMENT, SUBMIT WAIVERS OF MECHANIC'S LIEN FROM ENTITIES LAWFULLY ENTITLED TO FILE A MECHANIC'S LIEN ARISING OUT OF THE CONTRACT AND RELATED TO THE WORK COVERED BY THE PAYMENT. SUBMIT PARTIAL WAIVERS ON EACH ITEM FOR AMOUNT REQUESTED IN PREVIOUS APPLICATION. ON EACH ITEM, WHEN AN APPLICATION SHOWS COMPLETION OF AN ITEM, SUBMIT CONDITIONAL FINAL OR FULL WAIVERS. WAIVER FORMS, SUBMIT WAIVERS OF LIEN ON FORMS, EXECUTED IN A MANNER ACCEPTABLE TO OWNER.

### 01-06 TEMPORARY TREE AND PLANT PROTECTION

#### GENERAL

CONTRACTOR SHALL REVIEW PLANS WITH SITE AND MARK ALL TREES IDENTIFIED ON THE DRAWINGS TO BE PROTECTED AND REMAIN DURING CONSTRUCTION.

THE CONTRACTOR AND ARCHITECT SHALL REVIEW THE MITIGATION WITH THE CITY PRIOR TO COMMENCING CONSTRUCTION, AND SHALL RECEIVE APPROVAL FROM THE CITY.

#### SUBMITTALS

CONTRACTOR, ARCHITECT AND OWNER SHALL REVIEW ON SITE AFTER TREES HAVE BEEN MARKED AND PRIOR TO STAKING.

#### EXCLUSION

PROVIDE 6" HIGH FENCING AROUND TREE. FENCING SHALL BE INSTALLED TO PROVIDE PROTECTION TO TREE AND SHALL BE INSTALLED AT DIAMETER TO MATCH DRIP LINE OF TREE.

### 01-07 OPERATION AND MAINTENANCE DATA

#### GENERAL

THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ALL OPERATION MANUALS, WARRANTY INFORMATION, ETC. FOR ALL EQUIPMENT, APPLIANCES, ETC. AT THE COMPLETION OF THE PROJECT.

ALL INFORMATION SHALL BE COLLECTED AND PLACED IN BINDER AND/OR DIGITAL DATA FOR THE OWNER TO REVIEW. CONTRACTOR SHALL PROVIDE START UP AND MAINTENANCE REVIEW WITH OWNER PRIOR TO FINAL PAYMENT.

THE CONTRACTOR SHALL SCHEDULE A TIME TO REVIEW AND TRAIN THE OWNER AND/OR OWNERS REPRESENTATIVES ON ALL ITEMS RELATED TO OPERATION OF ALL EQUIPMENT.

### 01-08 WARRANTY

#### SUBMITTALS

THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A WRITTEN WARRANTY COVERING WORKMANSHIP, MATERIAL, ETC. ON THE PROJECT FOR A PERIOD OF (1) YEAR FROM COMPLETION. A WRITTEN WARRANTY SHALL BE PROVIDED FROM VENDORS ON ALL MATERIALS THAT HAVE EXTENDED WARRANTY PERIODS ABOVE THOSE STATED ABOVE. SUCH AS FLOORING MATERIALS WHICH SHALL PROVIDE A WARRANTY FOR MATERIALS FOR A MINIMUM OF 20 YEARS.

### 01-09 SUBMITTALS

#### GENERAL

REQUIREMENTS FOR THE SUBMITTAL PROCEDURAL REQUIREMENTS FOR SUBMITTING SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER SUBMITTALS REQUIRED BY SPECIFICATIONS FOR ARCHITECT/OWNER REVIEW AND APPROVAL PRIOR TO INSTALLATION WITHIN PROJECT.

ELECTRONIC DIGITAL DATA FILES OF THE CONTRACT DRAWINGS WILL NOT BE PROVIDED BY ARCHITECT FOR CONTRACTOR'S USE IN PREPARING SUBMITTALS.

"CONTRACTOR (EACH SUBCONTRACTOR) SHALL BE SOLELY RESPONSIBLE AND ASSUMES FULL LIABILITY FOR ENSURING THAT SUBMITTALS ARE TIMELY PROVIDED TO THE ARCHITECT, AND THE CONTENT THEREOF COMPLIES IN FULL, AND IS PROVIDED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS FOR THE PROJECT. THE CONTRACTOR (SUBCONTRACTOR) HEREBY AGREES TO HOLD HARMLESS THE ARCHITECT, ITS OFFICERS, EMPLOYEES, AGENTS AND CONSULTANTS FROM FAILURE TO COMPLY WITH THIS PROVISION. CONTRACTOR FURTHER AGREES TO DEFEND AND INDEMNIFY ARCHITECT, ITS OFFICERS, EMPLOYEES, AGENTS AND CONSULTANTS FOR ANY AND ALL INJURIES, DAMAGES AND LIABILITY RESULTING FROM A BREACH HEREOF."

COORDINATE EACH SUBMITTAL WITH FABRICATION, PURCHASING, TESTING, DELIVERY. OTHER SUBMITTALS, AND RELATED ACTIVITIES THAT REQUIRE SEQUENTIAL ACTIVITY. SUBMITTALS THAT REQUIRE CONCURRENT REVIEW SHOULD BE SO INDICATED IN THOSE SECTIONS. ARCHITECT RESERVES THE RIGHT TO WITHHOLD ACTION ON A SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.

ALLOW TIME FOR SUBMITTAL REVIEW, INCLUDING TIME FOR RESUBMITTALS. TIME FOR REVIEW SHALL COMMENCE ON ARCHITECT'S RECEIPT OF SUBMITTAL. NO EXTENSION OF THE CONTRACT TIME WILL BE AUTHORIZED BECAUSE OF FAILURE TO TRANSMIT SUBMITTALS ENOUGH IN ADVANCE OF THE WORK TO PERMIT PROCESSING, INCLUDING RESUBMITTALS.

INITIAL REVIEW: ALLOW 14 DAYS FOR INITIAL REVIEW OF EACH SUBMITTAL.

RESUBMITTAL REVIEW: ALLOW 14 DAYS FOR REVIEW OF EACH RESUBMITTAL.

SEQUENTIAL REVIEW: WHERE SEQUENTIAL REVIEW OF SUBMITTALS BY ARCHITECTS CONSULTANTS, OWNER, OR OTHER PARTIES IS REQUIRED.

ALLOW 14 DAYS FOR INITIAL REVIEW OF EACH SUBMITTAL.

PROVIDE: RIGID INSULATION AT INSIDE FACE OF FOUNDATION BELOW FLOOR SLAB WHERE EXPOSED TO EXTERIOR. COORDINATE WITH ARCHITECTURAL DETAILS AND INSULATION SPECIFICATIONS FOR THICKNESS REQUIRED PER ENERGY CALCULATIONS.

PROVIDE WATERPROOFING AT EXTERIOR OF FOUNDATION WALLS BELOW FINISH GRADE AT ALL HABITABLE SPACES. SEE DIVISION 7 OF SPECIFICATIONS.

PROVIDE PERIMETER FOUNDATION DRAIN - SEE DIVISION 7 OF SPECIFICATIONS.

CONSTRUCT FORM WORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED PLACE AND SECURE ANCHORAGE DEVICES AND OTHER EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK THAT IS ATTACHED TO OR SUPPORTED BY CAST-IN-PLACE CONCRETE. USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDDED.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

FINISH: PROVIDE RUBBED SURFACES ON ALL EXPOSED SURFACES OF ALL EXPOSED CONCRETE FOUNDATION WALLS NO LATER THAN ONE DAY AFTER FORM REMOVAL.

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. DEFECTIVE CONCRETE: REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

ARCHITECT WILL RETURN AN ANNOTATED FILE AND RETAIN ONE COPY OF FILE AS AN ELECTRONIC PROJECT RECORD DOCUMENT FILE.

- ACTION SUBMITTALS:  
SUBMIT TWO PAPER COPIES OF EACH SUBMITTAL UNLESS OTHERWISE INDICATED. ARCHITECT WILL RETURN TWO COPIES.
- INFORMATIONAL SUBMITTALS:  
SUBMIT TWO PAPER COPIES) OF EACH SUBMITTAL UNLESS OTHERWISE INDICATED.
- CERTIFICATES AND CERTIFICATIONS SUBMITTALS:  
PROVIDE A STATEMENT THAT INCLUDES SIGNATURE OF ENTITY RESPONSIBLE FOR PREPARING CERTIFICATION. CERTIFICATES AND CERTIFICATIONS SHALL BE SIGNED BY AN OFFICER OR OTHER INDIVIDUAL AUTHORIZED TO SIGN DOCUMENTS ON BEHALF OF THAT ENTITY.
- SHOP DRAWINGS:  
PREPARE PROJECT SPECIFIC INFORMATION, DRAWN ACCORDING TO SCALE. DO NOT BASE SHOP DRAWINGS ON REPRODUCTIONS OF THE CONTRACT DOCUMENTS OR STANDARD PRINTED DATA, UNLESS SUBMITTAL BASED ON ARCHITECT'S DIGITAL DATA DRAWING FILES IS OTHERWISE PERMITTED.

SUBMIT SHOP DRAWINGS IN THE FOLLOWING FORMAT:  
PDF ELECTRONIC FILE (OR)  
TWO OPAQUE (BOND) COPIES OF EACH SUBMITTAL. ARCHITECT WILL RETURN ONE COPY.

6. SAMPLES:  
SUBMIT SAMPLES FOR REVIEW OF KIND, COLOR, PATTERN, AND TEXTURE FOR A CHECK OF THESE CHARACTERISTICS WITH OTHER ELEMENTS AND FOR A COMPARISON OF THESE CHARACTERISTICS BETWEEN SUBMITTAL AND ACTUAL COMPONENT AS DELIVERED AND INSTALLED.

MAINTAIN SETS OF APPROVED SAMPLES AT PROJECT SITE. AVAILABLE FOR QUALITY CONTROL COMPARISONS THROUGHOUT THE COURSE OF CONSTRUCTION ACTIVITY. SAMPLE SETS MAY BE USED TO DETERMINE FINAL ACCEPTANCE OF CONSTRUCTION ASSOCIATED WITH EACH SET.

CONTRACTOR'S REVIEW:  
THE CONTRACTOR SHALL REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS; NOTE CORRECTIONS AND FIELD DIMENSIONS THAT VARY FROM CONSTRUCTION DOCUMENTS, AND MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO ARCHITECT. SUBMITTALS NOT STAMPED APPROVED BY THE CONTRACTOR WILL NOT BE REVIEWED, AND RETURNED TO CONTRACTOR FOR APPROVAL BEFORE ARCHITECTURE/OWNER REVIEW.

ARCHITECT'S ACTION:  
ARCHITECT WILL REVIEW EACH SUBMITTAL, MAKE MARKS TO INDICATE CORRECTIONS OR REVISIONS REQUIRED, AND RETURN IT. ARCHITECT WILL STAMP EACH SUBMITTAL WITH AN ACTION STAMP AND WILL MARK STAMP APPROPRIATELY TO INDICATE ACTION. THE ARCHITECT WILL RETAIN ONE COPY FOR FILE RECORD DOCUMENTS, AND WILL RETURN ALL REMAINING COPIES TO CONTRACTOR.

INCOMPLETE SUBMITTALS ARE UNACCEPTABLE, WILL BE CONSIDERED NONRESPONSIVE AND WILL BE RETURNED FOR RESUBMITTAL WITHOUT REVIEW.

SUBMITTALS NOT REQUIRED BY THE CONTRACT DOCUMENTS MAY BE RETURNED BY THE ARCHITECT WITHOUT ACTION.

ALL JOINTS SHALL BE CUT.

SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF ALL CONTROL AND EXPANSION JOINTS AT CONCRETE SLABS.

### 03-09 EXTERIOR CAST IN PLACE CONCRETE SLABS

#### GENERAL PRODUCTS

EXTERIOR CONCRETE SLABS TO BE 4000 PSI, AND SHALL HAVE NORMAL WEIGHT 3/4" AGGREGATE.

REINFORCING SHALL BE PER STRUCTURAL DRAWINGS. PROVIDE #3 @ 24" O.C. EACH WAY OR 6" X 6" -W1 X W1 4 W.W.M. IF NOT SPECIFIED ON DRAWINGS. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MINIMUM SPECIFICATION FOR ALL REINFORCEMENT.

#### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

#### EXCLUSION

ALL SLABS SHALL BE PLACED ON 4" MINIMUM COMPACTED SUB BASE.

SLAB SHALL SLOPE 1/8" PER FOOT TO DRAIN AWAY FROM BUILDING.

PROVIDE TURNED DOWN GRADE BEAM AT EDGES. DOWEL SLAB INTO FOUNDATION WALLS WITH #4 BARS AT 24" O.C.

CONTRACTION JOINTS IN SLABS ON-GRADE AS INDICATED SHALL BE AT LEAST ONE-FOURTH OF CONCRETE THICKNESS AS SHOWN ON DRAWINGS.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORM WORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

TROWEL FINISH: AS SPECIFIED ON LANDSCAPE DRAWINGS

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF ALL CONTROL AND EXPANSION JOINTS AT CONCRETE SLABS.

RADIANT HEATING TUBES ARE TO BE LOCATED IN SEVERAL CONCRETE PATIOS AT THE EXTERIOR AS NOTED ON THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD MECHANICAL CONTRACTOR FOR EXTENT OF TUBING LOCATIONS AND DESIGN OF TUBING LAYOUT. CONTRACTOR TO COORDINATE PLACEMENT OF TUBES IN TOP HALF OF CONCRETE SLAB.

ALL SLABS AT EXTERIOR FOR RADIANT HEATING SHALL 2" CLOSED-CELL SPRAY-FOAM INSULATION UNDER THE SLAB.

### DIVISION 3-CONCRETE

### 03-05 CAST IN PLACE FOOTINGS

#### GENERAL PRODUCTS

CONCRETE FOOTINGS TO BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH UNLESS SPECIFIED OTHERWISE ON STRUCTURAL DRAWINGS. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE, UNLESS NOT SPECIFIED. ALL FOOTINGS SHALL HAVE NORMAL WEIGHT 1" AGGREGATE.

REINFORCING SHALL BE AS PER THE FOOTING SCHEDULE -SEE STRUCTURAL DRAWINGS.

#### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

#### EXCLUSION

ALL FOOTINGS TO BEAR ON UNDISTURBED SOIL OR ENGINEERED COMPACTED FILL. (CERTIFIED 95% COMPACTION). ANY QUESTIONABLE SOIL SHALL BE REVIEWED BY SOIL ENGINEER PRIOR TO PLACEMENT OF FOOTING. THE CONTRACTOR SHALL COORDINATE AND REQUEST A SITE OBSERVATION REPORT FROM GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOOTINGS

ALL TYPICAL FOOTINGS TO BE MINIMUM OF 48" FROM FINISH GRADE TO BOTTOM OF FOOTING.

FOOTING SIZE AND REINFORCEMENT MUST MEET REQUIREMENTS OF 2012 IRC R403. FOOTING SIZE ARE SPECIFIED ON STRUCTURAL DRAWINGS WHICH TAKE PRECEDENCE UNLESS SPECIFIED.

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION AND ACI 301 FOR HOT-WEATHER PROTECTION DURING CURING.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

CONSTRUCTION JOINTS: INSTALL SO STRENGTH AND APPEARANCE OF CONCRETE ARE NOT IMPAIRED

### 03-06 CAST IN PLACE FOUNDATION WALLS

#### GENERAL PRODUCTS

CONCRETE FOUNDATION TO BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH, AND SHALL HAVE NORMAL WEIGHT 1" AGGREGATE.

REINFORCING SHALL BE AS PER THE FOUNDATION WALL SCHEDULE -SEE STRUCTURAL DRAWINGS.

#### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

#### EXCLUSION

TYPICAL WALLS SHALL BE A MINIMUM OF 8" THICK U.N.O. ON PLANS. REFER TO BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR THICKNESS OF WALLS. REFER TO TOP OF WALL DETAILS ON ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SPECIFIED DETAILS AND REQUIREMENTS.

COORDINATE WITH ARCHITECTURAL FOUNDATION PLANS FOR ALL TOP OF WALL ELEVATIONS. TOP OF FOUNDATION WALL TO BE A MINIMUM OF 6" ABOVE FINISH GRADE.

PROVIDE WATERPROOFING AT EXTERIOR OF FOUNDATION WALLS BELOW FINISH GRADE AT ALL HABITABLE SPACES. SEE DIVISION 7 OF SPECIFICATIONS.

PROVIDE PERIMETER FOUNDATION DRAIN - SEE DIVISION 7 OF SPECIFICATIONS.

PROVIDE RIGID INSULATION AT INSIDE FACE OF FOUNDATION BELOW FLOOR SLAB WHERE EXPOSED TO EXTERIOR. COORDINATE WITH ARCHITECTURAL DETAILS AND INSULATION SPECIFICATIONS FOR THICKNESS REQUIRED PER ENERGY CALCULATIONS.

CONSTRUCT FORM WORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED PLACE AND SECURE ANCHORAGE DEVICES AND OTHER EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK THAT IS ATTACHED TO OR SUPPORTED BY CAST-IN-PLACE CONCRETE. USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDDED.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

FINISH: PROVIDE RUBBED SURFACES ON ALL EXPOSED SURFACES OF ALL EXPOSED CONCRETE FOUNDATION WALLS NO LATER THAN ONE DAY AFTER FORM REMOVAL.

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. DEFECTIVE CONCRETE: REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

### 03-08 CAST IN PLACE INTERIOR CONCRETE SLABS

#### GENERAL PRODUCTS

INTERIOR CONCRETE SLABS TO BE 4000 PSI, AND SHALL HAVE NORMAL WEIGHT 3/4" AGGREGATE.

REINFORCING SHALL BE PER STRUCTURAL DRAWINGS. PROVIDE #3 @ 24" O.C. EACH WAY OR 6" X 6" -W1 X W1 4 W.W.M. IF NOT SPECIFIED ON DRAWINGS. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MINIMUM SPECIFICATION FOR ALL REINFORCEMENT.

#### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

#### EXCLUSION

ALL SLABS SHALL BE PLACED ON 2" RIGID INSULATION BOARD OVER 1/4" POLYETHYLENE (OR APPROVED EQUAL) VAPOR BARRIER WITH JOINTS LAPPED NOT MORE THAN 6" OVER 4" MINIMUM COMPACTED SUB BASE.

CONTRACTOR TO VERIFY THAT INSTALLATION OF FORM WORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

COORDINATE WITH HV AC CONTRACTOR FOR IN FLOOR RADIANT HEATING SYSTEM OR BELOW GRADE DUCTWORK AS PER PLANS. PROVIDE WITH DESIGN BUILD CONTRACTOR COORDINATED BY THE GENERAL CONTRACTOR. THE RADIANT TUBING MUST BE WITHIN THE TOP HALF OF THE SLAB.

TROWEL FINISH: SMOOTH

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

ALL JOINTS SHALL BE CUT.

SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF ALL CONTROL AND EXPANSION JOINTS AT CONCRETE SLABS.

CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD MECHANICAL CONTRACTOR FOR EXTENT OF TUBING LOCATIONS AND DESIGN OF TUBING LAYOUT. CONTRACTOR TO COORDINATE PLACEMENT OF TUBES IN TOP HALF OF CONCRETE SLAB.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP HALF OF CONCRETE SLAB. PROVIDE 1 1/2" RIGID INSULATION UNDER ALL SLABS WITH RADIANT HEATING. COORDINATE WITH DETAILS ON PLANS.

CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD CONTRACTOR FOR EXTENT OF RADIANT HEATING TUBES IN CONCRETE SLAB. CONTRACTOR SHALL COORDINATE PLACEMENT, AND ASSURE THAT ALL TUBES ARE IN TOP



## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 5 METALS

#### 05-01 STRUCTURAL STEEL WIDE BEAMS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL BEAMS (ASTM A 572/A 572M, GRADE 50)

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS, INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, BOLTS, NUTS, AND WASHERS. ASTM A325, HEAVY HEX STEEL STRUCTURAL BOLTS; ASTM A563 HEAVY HEX CARBON STEEL NUTS; AND ASTM F436 HARDENED CARBON-STEEL WASHERS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED SSPC-Paint 25, TYPE 1, COLOR OF EXPOSED STEEL TO BE: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY'.

PROVIDE BEAMS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

CONTRACTOR WILL ENGAGE AN INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM SHOP TESTS AND INSPECTIONS AND PREPARE TEST REPORTS. VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. CAMBER STRUCTURAL STEEL MEMBERS WHERE INDICATED. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES. REMOVE BLEMISHES BY FILLING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-02, 05-03, 05-04 STRUCTURAL STEEL COLUMNS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL COLUMNS: TUBE, PIPE, WIDE FLANGE, AS NOTED ON STRUCTURAL DRAWINGS.

ARCHITECTURALLY EXPOSED STRUCTURAL STEEL

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, DISTINGUISHING BETWEEN SHOP AND FIELD BOLTS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND INSPECTIONS AND PREPARE TEST REPORTS.

VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, THEN PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

ALL STEEL COLUMNS IN WALLS SHALL RECEIVE 1/2" DIAMETER THREADED BOLTS WELDED TO THE COLUMN AT 2'-0" O.C. VERTICAL. STUD WALLS SHALL START AND STOP AT COLUMN AND BOLT TO COLUMN. BOLTS SHALL EXTEND THROUGH TWO STUDS MINIMUM AT ALL LOCATIONS EXCEPT AT WINDOWS AT EXTERIOR WALL. BOLTS MAY EXTEND THROUGH ONE STUD.

#### 05-06 STRUCTURAL STEEL CHANNELS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL CHANNELS (ASTM A 572/A 572M, GRADE 50)

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, BOLTS, NUTS, AND WASHERS. ASTM A 325, HEAVY HEX STEEL STRUCTURAL BOLTS; ASTM A 563 HEAVY HEX CARBON-STEEL NUTS; AND ASTM F 436 HARDENED CARBON-STEEL WASHERS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

1. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, 866-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, 8-73-620 Series, at 3.0 to 10 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, 865-720 Series, at 2.0 to 4.0 mils dry, per coat.

B. COLOR: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY'.

PROVIDE CHANNELS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES.

REMOVE BLEMISHES BY FILLING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-08 STRUCTURAL STEEL ANGLE LINTELS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL LINTELS

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS, INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL LINTELS TO BE HOT-DIPPED GALVANIZED. WHEN PART OF THE LEG IS EXPOSED TO VIEW DUPLEX COAT LINTEL AND OVER THE GALVANIZING-PRIME LINTEL. PRIOR TO DELIVERY TO SITE, EXPOSED STEEL SHALL BE FINISHED SSPC-Paint 25, TYPE 1, COLOR OF EXPOSED STEEL TO BE: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY' OR AS SELECTED BY ARCHITECT.

PROVIDE LINTELS OF SIZES AND SHAPES INDICATED.

VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES. REMOVE BLEMISHES BY FILLING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-10 ANCHOR BOLTS

**GENERAL PRODUCTS**  
ANCHOR BOLTS AS SHOWN ON STRUCTURAL DRAWINGS.

**EXECUTION**  
ANCHOR BOLTS SHALL BE PLACED FOR 5" MINIMUM EMBEDMENT COVERAGE OR AS PER STRUCTURAL DRAWINGS (MOST STRINGENT CONDITIONS APPLY).

ANCHORS BOLTS SHALL BE MINIMUM OF 3/4" DIA. A307 TYPE BOLTS.

#### 05-11 EXPANSION ANCHORS

**GENERAL PRODUCTS**  
EXPANSION AS SHOWN ON STRUCTURAL DRAWINGS.

**EXECUTION**  
EXPANSION ANCHORS SHALL BE PLACED FOR 5" MINIMUM EMBEDMENT COVERAGE OR AS PER STRUCTURAL DRAWINGS (MOST STRINGENT CONDITIONS APPLY).

ANCHORS BOLTS SHALL BE MINIMUM OF 3/4" DIA. A307 TYPE BOLTS.

#### 05-18 STEEL GUARDRAILS & HAND RAILINGS

**GENERAL PRODUCTS**  
STEEL AND ORNAMENTAL RAILINGS AS SHOWN ON DRAWINGS AND DETAILS.

STEEL AND ORNAMENTAL RAILINGS FINISH SHALL BE:

- A. Epoxy-Modified Latex System:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, 866-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy-modified latex, interior, glass matching topcoat.
  - 3) Topcoat: Epoxy-modified latex, exterior, eggshell, (Gloss Level 3), MPI #254MPI #254K-Greens: S-W Pro Industrial Waterbased Catalyzed Epoxy Eggshell, 875-300 Series, at 2.0 to 4.0 mils dry, per coat.
- B. COLOR: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY' OR AS SELECTED BY INTERIOR DESIGNER.

BRACKETS, FLANGES, AND ANCHORS: SAME METAL AND FINISH AS SUPPORTED RAILS UNLESS OTHERWISE INDICATED.

TOP CAP TO BE INTERIOR: CONTINUOUS WOOD RAIL CAP WITH WOOD TO MATCH THAT OF WOOD FLOOR, FINISHED AS SELECTED BY INTERIOR DESIGNER.  
EXTERIOR: CONTINUOUS COMPOSITE 'TRUGRAIN' RAIL CAP. SEE DETAIL FOR SIZE. FINISHED AS SELECTED BY ARCHITECT.

HANDRAILS AND GUARDRAILS SHALL MEET FOLLOWING DESIGN LOADS:  
UNIFORM LOAD OF 50 LBF/ FT. APPLIED IN ANY DIRECTION.  
CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

TOP RAILS OF GUARDS:  
UNIFORM LOAD OF 50 LBF/ FT. APPLIED IN ANY DIRECTION.  
CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

INFILL OF GUARDS:  
CONCENTRATED LOAD OF 50 LBS APPLIED HORIZ. ON AN AREA OF 1 SQ. FT.  
UNIFORM LOAD OF 25 LBF/SQ. FT. APPLIED HORIZONTALLY.

**SUBMITTALS**  
FOR RAILINGS ASSEMBLED FROM STANDARD COMPONENTS, GROUT, ANCHORING CEMENT, AND PAINT PRODUCTS.

SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

SAMPLES: FOR EACH EXPOSED FINISH REQUIRED.

**EXECUTION**  
HANDRAILS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R317.1.7:

A. HANDRAILS SHALL BE MOUNTED A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE THE NOSING OF THE TREAD AND SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS WITH FOUR OR MORE RISERS. A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEVEL POSTS, VOLUTES, TURNOUT OR STARTING FINISHING SHALL BE ALLOWED OVER THE LOWEST TREAD.

B. ALL REQUIRED HANDRAILS SHALL BE ONE OF THE FOLLOWING TYPES OR PROVIDE EQUIVALENT GRASPABILITY:

1. TYPE I. HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4 INCHES (32 MM) AND NOT GREATER THAN 2 INCHES (51 MM). IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4 INCHES (102 MM) AND NOT GREATER THAN 6 1/4 INCHES (160 MM) WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 2 INCHES (51 MM). EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

2. TYPE II. HANDRAILS WITH A PERIMETER GREATER THAN 6 1/4 INCHES (160 MM) SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4 INCH (19 MM) MEASURED VERTICALLY FROM THE PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 5/16 INCH (8 MM) WITH 7/8 INCH (22 MM) BELOW THE WIDEST PORTION OF THE PROFILE. THE REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/8 INCH (10 MM) TO A LEVEL THAT IS NOT LESS THAN 1/4 INCHES (6.5 MM) BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1 1/4 INCHES (32 MM) TO A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

C. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.

#### 05-37 MISC. METAL FABRICATIONS

**GENERAL PRODUCTS**  
STEEL FABRICATIONS AS NOTED IN THE DRAWINGS AND AS FOLLOWS:

1. CHIMNEY COVER CHASE. FINISH AS NOTE #1 BELOW.
2. STEEL STAIR ELEMENTS. FINISH AS NOTE #1 BELOW.

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STEEL FABRICATIONS.

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
FINISH: NOTE #1: PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

- A. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, 866-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, 8-73-620 Series, at 3.0 to 10 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, 865-720 Series, at 2.0 to 4.0 mils dry, per coat.
- B. COLOR: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY'.

NOTE#2: PROVIDE DUPLEX COATING OF HOT-DIPPED GALVANIZED AND COAT THE EXTERIOR SURFACE EXPOSED TO VIEW AS FOLLOWS:

- A. Water-based Light Industrial Coating System:
  - 1) Prime Coat: Primer, water-based, anti-corrosive for metal, MPI # 107; S-W Pro Industrial Pro-Cyl Universal Primer, 866-310 Series, 5.0 to 10.0 mils wet, 2.0 to 4.0 mils dry.
  - 2) Prime Coat: Shop primer specified in section where substrate is specified.
  - 3) Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
  - 4) Topcoat: Light industrial coating, exterior, water based, semi-gloss, (Gloss Level 5), MPI # 163-S-W Pro Industrial Acrylic Semi-Gloss Coating, 866-650 Series, at 2.5 to 4.0 mils dry, per coat.
- B. COLOR: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY'.

PROVIDE FABRICATIONS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES.

REMOVE BLEMISHES BY FILLING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP HOLD WOOD FRAMING AWAY FROM CONCRETE FOUNDATION WALL 1/2 INCH.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPPDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-55 CUSTOM STEEL STAIRS

**GENERAL PRODUCTS**  
STAIR COMPONENTS AS FOLLOWS:

- STRINGERS: EXPOSED STEEL PLATE STRINGERS AS PER DETAILS.
- TREADS: 3" O.S.D. WOOD TREADS AS PER DETAILS.
- RISERS: OPEN RISER THAT DOES NOT EXCEED 4".

**SUBMITTALS**  
SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

**EXECUTION**  
PROVIDE COMPLETE STAIR ASSEMBLIES, INCLUDING METAL FRAMING, HANGERS, STRUTS, RAILINGS, CLIPS, BRACKETS, BEARING PLATES, AND OTHER COMPONENTS NECESSARY TO JOIN AND ANCHOR STAIRS AND FINISHES ON SUPPORTING STRUCTURE. BOLTS SHALL BE FABRICATED AND 5/16" DIA BOLTS ARE NOT EXPOSED ON EXPOSED SURFACES.

METAL SURFACES: GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES WITHOUT BLEMISHES.

FINISH: FACTORY PRIMED FOR A HIGH-PERFORMANCE COATING WITH COLOR AS SELECTED BY ARCHITECT.

PROVIDE METAL STAIRS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED: UNIFORM LOAD: 100 LBF/SQ. FT. CONCENTRATED LOAD: 300 LBF APPLIED ON AN AREA OF 4 SQ. IN.

LIMIT DEFLECTION OF TREADS, PLATFORMS, AND FRAMING MEMBERS 1/8 INCH.

STRUCTURAL PERFORMANCE OF RAILINGS: PROVIDE RAILINGS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED.

PROVIDE A MINIMUM OF 7'-6" HEAD CLEARANCE AT ALL POINTS.

#### DIVISION 6-WOOD, PLASTICS & COMPOSITES

##### 06-01, 06-02, 06-03, 06-04, 06-05, 06-06 STUD WALL ROUGH FRAMING

**GENERAL PRODUCTS**  
TIMBER BEAMS/COLUMNS/TRUSSES/ROOF PURLINS/JAUNCHES AS SHOWN ON ARCHITECTURAL/STRUCTURAL DRAWINGS AND DETAILS.

TIMBER BEAMS TO BE #1 OR BETTER, KILN DRIED 15% MOISTURE OR LESS.  
TIMBER TO BE: DOUG FIR  
TIMBER TO BE: S4S  
COLOR: STAINED WITH SHERMA WILLIAMS SEMI-TRANSPARENT 'HAWTHORNE'

**SUBMITTALS**  
SHOP DRAWINGS: ALL TIMBER JOISTS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.

**EXECUTION**  
TIMBER CONTRACTOR/GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS PRIOR TO FABRICATION OF TIMBERS. COORDINATE WITH ARCHITECTURAL/STRUCTURAL DRAWINGS FOR CONNECTIONS AT EACH TIMBER.  
ALL JOINTS SHALL BE TRUE AND SQUARE WITH TOLERANCES OF LESS THAN 1/8" WITHIN JOINT.

**06-32 WOOD DECKING**  
**GENERAL PRODUCTS**  
WOOD DECKING AT ALL EXTERIOR DECKS/WALKWAYS  
WOOD DECKING SHALL BE: 'GOLD DECKING' BY TRUGRAIN REYSITA  
COLOR: AS SELECTED BY ARCHITECT

**SUBMITTALS**  
SAMPLE OF ACTUAL SAMPLE WITH STAIN SAMPLE SELECTED FOR ARCHITECT APPROVAL.

**EXECUTION**  
ATTACH WOOD DECKING TO FRAMING (SEE STRUCTURAL PLANS FOR SIZE) WITH HIDDEN FASTENER SYSTEM AS RECOMMENDED BY MANUFACTURER.

##### 06-38 PLYWOOD/ OSB WALL SHEATHING

**GENERAL PRODUCTS**  
WALL SHEATHING TO BE: 1/2" EXTERIOR GRADE A.P.A. RATED SHEATHING OR AS PER STRUCTURAL DRAWINGS.  
EXTENT OF WALL SHEATHING AS SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. SHEATHING MAY BE FIRE-TREATED AS PER FIRE-RATED WALL REQUIREMENTS.

**EXECUTION**  
NAILING OF SHEATHING SHALL BE PER STRUCTURAL DRAWINGS. COORDINATE WITH STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS.  
PROVIDE BLOCKING AT ALL PANEL EDGES.

##### 06-41 PLYWOOD/ OSB ROOF SHEATHING

**GENERAL PRODUCTS**  
ROOF SHEATHING TO BE: 5/8" EXTERIOR GRADE A.P.A. RATED SHEATHING OR AS PER STRUCTURAL DRAWINGS.

EXTENT OF ROOF SHEATHING AS SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. SHEATHING MAY BE FIRE-TREATED AS PER FIRE-RATED WALL REQUIREMENTS.

**EXECUTION**  
NAILING OF SHEATHING SHALL BE PER STRUCTURAL DRAWINGS, AND SHEATHING SHALL BE INSTALLED PERPENDICULAR TO ROOF JOISTS/TRUSSES.

PROVIDE BLOCKING AT ALL PANEL EDGES

COORDINATE WITH STRUCTURAL DRAWINGS FOR ALL HOLD DOWNS, HURRICANE TIES.

1. ALL WALLS SHALL BE STRAIGHT, AND SHALL NOT HAVE GREATER THAN 1/4" ANY BOW, DEFLECTION, IN 10'-0" LENGTH OF WALL.
2. ALL WALLS SHALL BE VERTICAL PLUMB, AND SHALL NOT EXCEED 1/4" FOR EACH 10'-0" VERTICAL SECTION OR STORY OF WALL.
3. ALL HORIZONTAL SLOPE, WINDOW HEAD SHALL BE LEVEL, AND SHALL NOT EXCEED 1/8" VARIATION WITHIN 10'-0" LENGTH.

#### 06-07, 06-08, 06-09 WOOD BLOCKING/FIREBLOCKING

**GENERAL PRODUCTS**  
FIRE BLOCKING SHALL BE CONSTRUCTED OF 2" NOMINAL LUMBER OR (2) THICKNESS OF 1" NOMINAL LUMBER WITH BROKEN LAP JOINTS (R302.1.1) OR OTHER MATERIALS APPROVED OR TESTED, INSTALLED PER R302.1.1. FIRE BLOCKING SHALL BE PROVIDED AT LOCATIONS AS PER I.R.C.

**EXECUTION**  
FIRE BLOCKING SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS, CONTRACTOR SHALL COORDINATE THESE LOCATIONS:

A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 16'FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL. (I.R.C. 302.1.1 (1))

B. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS. (I.R.C. 302.1.1 (2))

C. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS, ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED. (I.R.C. 302.1.1 (3) AND I.R.C. 302.7)

D. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, PREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NON COMBUSTIBLE MATERIALS. (I.R.C. 302.1.1 (4))

E. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS. (I.R.C. 302.1 (5))

F. WHERE WOOD SLEEPERS ARE USED FOR LAYING WOOD FLOORING ON MASONRY OR CONCRETE FIRE-RESISTIVE FLOORS. THE SPACE BETWEEN THE FLOOR S48 AND THE UNDERSIDE OF THE WOOD FLOORING SHALL BE FILLED WITH NON COMBUSTIBLE MATERIAL OR FIRE BLOCKED IN SUCH A MANNER THAT THERE WILL BE NO OPEN SPACES UNDER THE FLOORING WHICH WILL EXCEED 1000 SQUARE FEET IN AREA AND SUCH SPACE SHALL BE FURRED SOLIDLY UNDER ALL PERMANENT PARTITIONS SO THAT THERE IS NO COMMUNICATION UNDER THE FLOORING BETWEEN ADJOINING ROOMS. (I.R.C. 302.1 (2))

G. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND TRANSMISSION CONTROL SHALL HAVE FIRE BLOCKS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIAL. (I.R.C.302.1 (11)).

H. FIRE BLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE LINE OF THE DWELING UNIT SEPARATION. (I.R.C. 302.1 (6))

#### 06-15 WOOD FRAMING

**GENERAL PRODUCTS**  
2X4 AND 2 X 6 DOUGLAS FIR, HEM FIR #2 OR BETTER WOOD STUDS AS SHOWN ON DRAWINGS.

**EXECUTION**  
PROVIDE 2X WOOD STUDS AT 16" O.C. U.N.O.

PROVIDE 2X SOLID WOOD FIRE BLOCKING AT EVERY 10'-0", AND PROVIDE SOLID BLOCKING AT MID SPAN FOR ANY STUD EXCEEDING 10'-0" IN HEIGHT.

FOUNDATION PLATES OR SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB, WHICH IS IN DIRECT CONTACT WITH EARTH, AND OTHER EMBEDMENTS REST ON CONCRETE OR MASONRY FOUNDATIONS, SHALL BE TREATED WOOD OR FOUNDATION REDWOOD, ALL MARKED OR BRANDED BY AN APPROVED AGENCY, WHERE NOT SUBJECT TO WATER SPLASH OR TO INTERIOR MOISTURE AND LOCATED ON CONCRETE HAVING A MINIMUM THICKNESS OF 3 INCHES WITH AN IMPERVIOUS MEMBRANE INSTALLED BETWEEN CONCRETE AND EARTH, THE WOOD MAY BE UNTREATED AND OF ANY SPECIES.

PROVIDE FIRE BLOCKING AT MID SPAN AT ALL BEARING WALLS, AND PROVIDE FIRE BLOCKING AT ALL SPACES 8' 10'-0" O.C.

WOOD FLOORING OR FRAMING ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED BARRIER IS INSTALLED BETWEEN THE WALL AND THE WOOD, SHALL BE TREATED OR RESISTANT TO DECAY. (I.R.C. R317.1 (7)).

PROVIDE SOLID BLOCKING AT MID SPAN FOR ANY STUD EXCEEDING 10'-0" IN HEIGHT.

BRACE ALL EXTERIOR WALLS AND CROSS STUD PARTITIONS AS PER IRC R602 AND STRUCTURAL ENGINE

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 7-THERMAL AND MOISTURE PROTECTION

#### 07-45, 07-46, 07-47, 07-49, 07-50, 07-51, 07-52, 07-53, 07-54 THERMAL INSULATION

**GENERAL PRODUCTS**  
SEE INSULATION SCHEDULE BELOW FOR LOCATION AND INSULATION REQUIREMENT

A PERMANENT CERTIFICATE SHALL BE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL LISTING THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON THE CEILING/ROOF, WALLS, FOUNDATION SLAB, BASEMENT WALLS, CRAWL SPACE WALLS AND/OR FLOOR, AND THE DUCTS OUTSIDE THE CONDITIONED SPACE. U-FACTORS OF THE WINDOWS, THE TYPE OF HEATING AND EFFICIENCY OF HEATING AND WATER HEATING EQUIPMENT SHALL ALSO BE LISTED. (I.R.C. N1101.8)

LOCATION	TYPE	THICKNESS	R-VALUE
<b>SLAB ON GRADE</b>	FORM-IN-PLACE	2"	R-10

INSTALL UNDER HEATED SLAB ON GRADE LOCATIONS. OWENS CORNING FORMULA 250

PERIMETER OF FOUNDATION	RIGID	F'	R-10
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INSTALL ON INSIDE FACE OF EXTERIOR FOUNDATION FROM TOP OF FOOTING TO BOTTOM OF CONCRETE SLAB AT LIVING SPACE- BURIED -OWENS CORNING FORMULA 250

FLOOR INSULATION	UNFACED BATS	VERIFY	R-30
FLOOR OVER UNHEATED BASEMENT	BLOWN IN		8-38

FLOOR UNDER RADIANT HEAT	BLOWN IN	12"	R-38
FLOOR OVER OUTSIDE OR UNHEATED AIR	BLOWN IN	12"	R-38

WALL INSULATION AT EXTERIOR FRAMED WALLS	BLOWN IN	5 1/2"	R-22.5
2X WOOD EXTERIOR WALLS (BLOWN TO BE CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)			
2 X 4 WOOD FURRED-EXTERIOR WALLS CLOSED-CELL FOAM (CERTAINEED Certastoplay with 22 pcf and R-value of 4.5 per inch)		3 1/2"	R-22.75

ROOF INSULATION	VERIFY	R-49
ROOF AT SHALL OWER JOISTS: MULTILAYERS OF CONTINUOUS RIGID INSULATION WITH TOP LAYER OF NAILABLE RIGID INSULATION (HUNTER H-SHIELD PANELS) PLUS FULL FULL DEPTH OF JOIST CAVITY (CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)		R-24.5 R-8.0 R-49.0

ROOF AT DEEPER JOISTS: MULTILAYERS OF CONTINUOUS RIGID INSULATION WITH TOP LAYER OF NAILABLE RIGID INSULATION (HUNTER H-SHIELD PANELS) PLUS FULL FULL DEPTH OF JOIST CAVITY (CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)	VERIFY	R-49
		R-24.5 R-8.0 R-60.3

INTERIOR AND SPECIALTY REQUIRED INSULATION	VERIFY	R-11
INTERIOR WALLS		
SOUND	BATS	3-1/2"

MECHANICAL TYPE ROOMS WALLS AND CEILING(S) WHERE APPLICABLE	VERIFY	R19
SOUND	BATS	5"

BATHROOMS	VERIFY	R-11 -R19
SOUND BATS		
INSULATION BATS	BATS	5 1/2" OR 3 1/2"

INTERIOR FLOORS/CEILING SOUND RATING R10'S	VERIFY	R-11
SOUND	BATS	3 1/2"

DUCTWORK PLUMBING LINES	VERIFY	R-13/R-19
MECHANICAL AND PLUMBING STUD CAVITY WITH PLUMBING DRAN LINES	SOUND BATS/INSULATION BATS	5 1/2" OR 3 1/2"

PLUMBING DRAIN LINE SHALL BE INSULATED IN ADDITION TO THE CAVITY OF THE STUD WALL IS LOCATED WITHIN.

SUBSTITUTIONS  
PROVIDE MANUFACTURERS DATA AND INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS FOR REVIEW PRIOR TO INSTALLATION.

RECALL ALL VOIDS AS REQUIRED.

REVIEW REQUIREMENTS FOR SEQUENCING OF INSTALLATION OF WEATHER BARRIER ASSEMBLY WITH INSTALLATION OF WINDOWS, DOORS, LOUVERS AND FLASHINGS TO PROVIDE A WEATHER-TIGHT BARRIER ASSEMBLY.

PROVIDE R-25 MINIMUM CLOSED CELL INSULATION ABOVE ANY CEILING PENETRATIONS AT UNVENTED ROOF ASSEMBLIES.

STANDARD TOTAL SYSTEM WARRANTY SHALL BE ISSUED UPON ACCEPTANCE OF THE ROOFING SYSTEM INSTALLATION, TWENTY (20) YEAR PERIOD THAT COVERS WIND DAMAGE UP TO 70 MPH.

ACCEPTABLE MANUFACTURER: FIBERGLASS ROOFING SYSTEMS, CARLITE ROOFING, OR APPROVED EQUAL REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SUBSTITUTION MATERIALS.

ROOFING MEMBRANE SHALL BE MANUFACTURED WITH THE FOLLOWING PROPERTIES:  
A. MEMBRANE TYPE, KEE  
B. MEMBRANE THICKNESS: 30 MIL  
C. OIL RESISTANT EPDM OR GREY  
D. FLASHINGS MEMBRANE SHALL BE 1/20MM THICK REINFORCED MEMBRANE FOR WALLS AND CURBS REGARDLESS OF ROOF COVER SHEET THICKNESS. SHALL BE .060 INCH (1.52 MM) THICK UNSUPPORTED MEMBRANE FOR FIELD. FABRICATED DETAILS USED FOR MAKING FLED FLASHINGS THAT REQUIRE HIGHER EXTENSIBILITY THAN IS ALLOWED WITH SCRIM-REINFORCED MEMBRANE.  
E. COVER BOARD: DENSEDECK ROOF BOARD; G-P GYPSUM CORPORATION 1/2 INCH (12 MM) DENSEDECK ROOF BOARD. GLASS MAT FACED GYPSUM WITH SPECIALLY TREATED GYPSUM CORE THAT RESISTS MOISTURE AND MOLD GROWTH.

SUBSTITUTIONS  
PRODUCT DATA, INCLUDING MANUFACTURERS DATA SHEETS ON EACH PRODUCT TO BE USED; PREPARATION INSTRUCTIONS AND RECOMMENDATIONS; STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS; AND INSTALLATION METHODS.

SAMPLES FOR VERIFICATION FOR THE FOLLOWING PRODUCTS INCLUDING: MANUFACTURERS STANDARD SAMPLE SIZE OF SHEET ROOFING OF COLOR SPECIFIED; MANUFACTURERS STANDARD SAMPLE SIZE OF ROOF INSULATION; MANUFACTURERS STANDARD SAMPLE SIZE OF WALKWAY PADS OR ROLLS.

SHOP DRAWINGS INCLUDING OUTLINE AND SIZE OF THE ROOF, LOCATION AND TYPE OF PENETRATIONS, PERIMETER AND PENETRATION FLASHING DETAIL REFERENCES TO MANUFACTURERS STANDARD, DETAILS WHICH DO NOT CONFORM TO ROOFING MANUFACTURERS STANDARDS SHALL BE IDENTIFIED WITH SEPARATE APPROVAL FROM ROOFING MANUFACTURER. DETAILS TO BE EMPLOYED ON THE PROJECT SHALL BE APPROVED BY ROOFING MANUFACTURER.

SUBMIT WARRANTY CERTIFICATION FROM MANUFACTURER OF APPROVAL OF PROJECT DESIGN AND INTENT TO ISSUE WARRANTY, AND FASTENER PULL TESTS FROM AN INDEPENDENT TESTING AGENCY SHALL BE APPROVED BY THE ROOFING MANUFACTURER.

EXECUTION  
DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. HAULERS AND BLOCKING SHALL BE INSTALLED LEVEL, TRUE TO LINE AND ELEVATION, SECURED TO ROOF STRUCTURE TO RESIST ROOF INSTALLATION AND SERVICE LOADS. THE SUBSTRATE PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING. SURFACES TO BE BONDED SHALL BE DRY, CLEAN AND FREE OF DEBRIS. SUITABLE SURFACES ARE USUALLY CONSIDERED TO BE SMOOTH, SOLID MASONRY, WOOD AND METAL. PLUS INSULATION BOARDS FASTENED PER THE SPECIFIC MANUFACTURERS RECOMMENDATIONS FOR RECEIVING ADHERED ROOFING MEMBRANES.

ALL FASTENERS SHOULD BE INSTALLED WITH A DEPTH-SENSING SCREW GUN TO PREVENT OVER DRIVING OR UNDER DRIVING. BLOCK OFF OR SHUT DOWN POSITIVE PRESSURE BUILDING VENTILATION SYSTEMS DURING APPLICATION TO PREVENT SHEET FROM BLOWING DURING APPLICATION.

VERIFY ALL ROOFING MECHANICAL UNITS ARE TO HAVE THEIR CONDENSATION LINES PIPED TO DRAINS, OR OFF THE ROOF WITH RAINWATER.

PLYWOOD MUST BE EXTERIOR GRADE WITH AN A OR B FINISH SIDE UP AND WITH NO JOINTS GAPPED GREATER THAN 1/4 INCH, AND PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.

PROVIDE TYPICAL BALLAST IN PARTIALLY COMPLETED SECTIONS TO CONTROL WIND EFFECTS DURING CONSTRUCTION.

REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT

PROVIDE CAULKING AT INTERIOR AND EXTERIOR AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS WITH A CONTINUOUS BEAD OF CAULK.

SILICONE SEALANT SHOULD NOT BE USED ON EXTERIOR JOINTS - ONLY POLYURETHANE OR POLYSULFIDE SEALANTS. BUTYL SEALANTS SHOULD BE USED BETWEEN METAL LAPS WHERE MOVEMENT IS ANTICIPATED.

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#### 07-133 WOOD SIDING

**GENERAL PRODUCTS**  
HORIZONTAL SIDING: 1/8 SHIP-LAP JOINTED (WITH 1/4" REVEAL) HORIZONTAL SIDING. TO BE CLEAR CEDAR STAINED SEMI-TRANSPARENT WITH SHERMAN WILLIAMS OR EQUAL. COLOR- CEDAR BARK.

VERTICAL SIDING: 1/8 SHIP-LAP JOINTED (WITH 1/8" REVEAL) VERTICAL SIDING. TO BE CLEAR CEDAR STAINED SEMI-TRANSPARENT WITH SHERMAN WILLIAMS OR EQUAL. COLOR- "CROSSGRAID"

SUBSTITUTIONS  
PROVIDE 12" X 1/2" X 1/2" SAMPLE OF EACH SIDING SPECIFIED WITH COLOR SPECIFIED.

EXECUTION  
FOLLOW INSTALLATION INSTRUCTIONS SPECIFIED BY THE PRODUCT MANUFACTURER.

EXAMINE SUBSTRATES FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF SIDING AND RELATED ACCESSORIES, AND PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. AS FOR THE VERTICAL SIDING PROVIDE HORIZONTAL BLOCKING AT ALL LOCATION AS REQUIRED BY MNFR. RECOMMENDATIONS.

INSTALL EXTERIOR SIDING FINISH OVER EXTERIOR WALL VENTILATION MATRIX OVER BUILDING WEATHER BARRIER AS PER MANUFACTURE SPECIFICATIONS AND INDUSTRY STANDARDS. SEE STRUCTURAL NOTES FOR DIAPHRAGM NAILING, HURRICANE Tie HOLD-DOWNS.

CLEAN FINISHED SURFACES ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS AND MAINTAIN IN A CLEAN CONDITION DURING CONSTRUCTION.

COORDINATE WORK WITH RELATED TRADES, SCRIBE AND COPE SIDING BOARDS FOR ACCURATE FIT. ALLOW INSTALLATION OF RELATED WORK TO AVOID CUTTING AND PATCHING.

SELECT SIDING BOARDS OF LONGEST POSSIBLE LENGTHS. DISCARD BOARDS THAT ARE WARPED, TWISTED, BOWED, CROOKED OR OTHERWISE DEFECTIVE.

INSTALLATION MUST COMPLY WITH LOCAL BUILDING CODES AND REGULATIONS.

FINISH MATERIALS ON ALL SIDES AND ENDS. APPLY TOUCH-UP COATING ON NEW CUTS. FACTORY PRIMED OR FINISHING IS PREFERRED.

EXPLAIN PROPER MAINTENANCE PROCEDURES TO OWNER OR OWNERS REPRESENTATIVE AT PROJECT CLOSEOUT.

THE USE OF PRESSURE WASHERS IS NOT RECOMMENDED.

WHERE DISSIMILAR METALS WILL CONTACT EACH OTHER OR CORROSIVE SUBSTRATES, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH BITUMINOUS COATING OR BY OTHER PERMANENT SEPARATION AS RECOMMENDED BY SMA/CA.

PROVIDE FOR THERMAL EXPANSION OF EXPOSED FLASHING AND TRIM.

SEAL JOINTS AS SHOWN AND AS REQUIRED FOR WEATHERIGHT CONSTRUCTION. RETAIN FIRST PARAGRAPH BELOW FOR METALLIC-COATED STEEL AND COPPER ROOFING, UNLESS THE METAL IS PAINTED OR COATED.

CLEAN EXPOSED METAL SURFACES OF SUBSTANCES THAT INTERFERE WITH UNIFORM OXIDATION AND WEATHERING. UPLIFT FORCES AS CALCULATED USING THE CURRENT VERSION OF ASCE 7.

ROOF SYSTEM WILL ACHIEVE A UL FIRE RATING WITHIN IN ACCORDANCE WITH UL-790 AS REQUIRED BY LOCAL BUILDING CODE. MINIMUM RATINGS SHALL BE A UL CLASS B RATINGS.

PROVIDE A ROOF SYSTEM WITH POSITIVE DRAINAGE WHERE ALL STANDING WATER DISSIPATES AFTER PRECIPITATION ENDS.

BUILDING CODES: ROOF SYSTEM WILL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODE BOODS HAVING JURISDICTION.

MANUFACTURER WITH A MINIMUM OF TEN YEARS EXPERIENCE IN THE MANUFACTURING OF SINGLE-PLY HEAT WELDABLE MEMBRANES.

ROOFING CONTRACTOR SHALL BE AUTHORIZED BY ROOFING SYSTEM MANUFACTURER TO INSTALL ASSEMBLY. PROVIDE LETTER ON MANUFACTURERS LETTERHEAD OF AUTHORIZED STATUS OF CONTRACTOR.

PROVIDE ROOFING SYSTEM THAT IS LISTED ON THE DOE'S ENERGY STAR ROOF PRODUCTS QUALIFIED PRODUCT LIST FOR LOW-SLOPE ROOF APPLICATIONS.

ACCEPTABLE MANUFACTURER: FIBERGLASS ROOFING SYSTEMS, CARLITE ROOFING, OR APPROVED EQUAL REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SUBSTITUTION MATERIALS.

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PRODUCT DATA, INCLUDING MANUFACTURERS DATA SHEETS ON EACH PRODUCT TO BE USED; PREPARATION INSTRUCTIONS AND RECOMMENDATIONS; STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS; AND INSTALLATION METHODS.

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SUBMIT WARRANTY CERTIFICATION FROM MANUFACTURER OF APPROVAL OF PROJECT DESIGN AND INTENT TO ISSUE WARRANTY, AND FASTENER PULL TESTS FROM AN INDEPENDENT TESTING AGENCY SHALL BE APPROVED BY THE ROOFING MANUFACTURER.

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SILICONE SEALANT SHOULD NOT BE USED ON EXTERIOR JOINTS - ONLY POLYURETHANE OR POLYSULFIDE SEALANTS. BUTYL SEALANTS SHOULD BE USED BETWEEN METAL LAPS WHERE MOVEMENT IS ANTICIPATED.

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#### 07-170, 171, 172, 173, 174, 175, 176, SHEET METAL FLASHING AND TRIM

**GENERAL PRODUCTS**  
APPROVED CORROSION RESISTANT FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS.

VALLEY FLASHING  
DRAIN METAL  
WINDWOOD HEAD FLASHING  
DOOR HEAD FLASHING  
TRANSITIONAL FLASHING

SUBSTITUTIONS  
SHOW INSTALLATION LAYOUTS OF SHEET METAL FLASHING AND TRIM, INCLUDING PLANS, ELEVATIONS, EXPANSION-JOINT LOCATIONS, AND KEYED DETAILS. DISTINGUISH BETWEEN SHOP- AND FIELD-ASSEMBLED WORK.

INCLUDE DETAILS FOR FORMING, JOINING, SUPPORTING, AND SECURING SHEET METAL FLASHING AND TRIM, INCLUDING PATTERN OF SEAMS, TERMINATION POINTS, FIXED POINTS, EXPANSION JOINTS, EXPANSION-JOINT COVERS, EDGE CONDITIONS, SPECIAL CONDITIONS, AND CONNECTIONS TO ADJOINING WORK.

EXECUTION  
SELF-ADHERING, HIGH-TEMPERATURE SHEET; MINIMUM 30 TO 40 MILS THICK, CONSISTING OF SLIP-RESISTING POLYETHYLENE-FILM TOP SURFACE LAMINATED TO LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE, WITH RELEASE-PAPER BACKING; COLD APPLIED.

SLIP SHEET: BUILDING PAPER, 3-1/8"/100 SQ. FT. MINIMUM, ROSIN SIZED.

ANCHOR SHEET METAL FLASHING AND TRIM AND OTHER COMPONENTS OF THE WORK SECURELY IN PLACE, WITH PROVISIONS FOR THERMAL AND STRUCTURAL MOVEMENT SO THAT COMPLETED SHEET METAL FLASHING AND TRIM SHALL NOT RATTLE, LEAK, OR LOCKEN, AND SHALL REMAIN WATERIGHT. USE FASTENERS, SOLDER, WELDING RODS, PROTECTIVE COATINGS, SEPARATORS, SEALANTS, AND OTHER MISCELLANEOUS ITEMS AS REQUIRED TO COMPLETE SHEET METAL FLASHING AND TRIM SYSTEM.

INSTALL SHEET METAL FLASHING AND TRIM TRUE TO LINE AND LEVELS INDICATED. PROVIDE UNIFORM, HEAT SEAMS WITH MINIMUM EXPOSURE OF FOLDER, WELDS, AND SEALANT.

SEAL JOINTS AS SHOWN AND AS REQUIRED FOR WEATHERIGHT CONSTRUCTION. RETAIN FIRST PARAGRAPH BELOW FOR METALLIC-COATED STEEL AND COPPER ROOFING, UNLESS THE METAL IS PAINTED OR COATED.

CLEAN EXPOSED METAL SURFACES OF SUBSTANCES THAT INTERFERE WITH UNIFORM OXIDATION AND WEATHERING. UPLIFT FORCES AS CALCULATED USING THE CURRENT VERSION OF ASCE 7.

ROOF SYSTEM WILL ACHIEVE A UL FIRE RATING WITHIN IN ACCORDANCE WITH UL-790 AS REQUIRED BY LOCAL BUILDING CODE. MINIMUM RATINGS SHALL BE A UL CLASS B RATINGS.

PROVIDE A ROOF SYSTEM WITH POSITIVE DRAINAGE WHERE ALL STANDING WATER DISSIPATES AFTER PRECIPITATION ENDS.

BUILDING CODES: ROOF SYSTEM WILL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODE BOODS HAVING JURISDICTION.

MANUFACTURER WITH A MINIMUM OF TEN YEARS EXPERIENCE IN THE MANUFACTURING OF SINGLE-PLY HEAT WELDABLE MEMBRANES.

ROOFING CONTRACTOR SHALL BE AUTHORIZED BY ROOFING SYSTEM MANUFACTURER TO INSTALL ASSEMBLY. PROVIDE LETTER ON MANUFACTURERS LETTERHEAD OF AUTHORIZED STATUS OF CONTRACTOR.

PROVIDE ROOFING SYSTEM THAT IS LISTED ON THE DOE'S ENERGY STAR ROOF PRODUCTS QUALIFIED PRODUCT LIST FOR LOW-SLOPE ROOF APPLICATIONS.

ACCEPTABLE MANUFACTURER: FIBERGLASS ROOFING SYSTEMS, CARLITE ROOFING, OR APPROVED EQUAL REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SUBSTITUTION MATERIALS.

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SUBMIT WARRANTY CERTIFICATION FROM MANUFACTURER OF APPROVAL OF PROJECT DESIGN AND INTENT TO ISSUE WARRANTY, AND FASTENER PULL TESTS FROM AN INDEPENDENT TESTING AGENCY SHALL BE APPROVED BY THE ROOFING MANUFACTURER.

EXECUTION  
DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. HAULERS AND BLOCKING SHALL BE INSTALLED LEVEL, TRUE TO LINE AND ELEVATION, SECURED TO ROOF STRUCTURE TO RESIST ROOF INSTALLATION AND SERVICE LOADS. THE SUBSTRATE PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING. SURFACES TO BE BONDED SHALL BE DRY, CLEAN AND FREE OF DEBRIS. SUITABLE SURFACES ARE USUALLY CONSIDERED TO BE SMOOTH, SOLID MASONRY, WOOD AND METAL. PLUS INSULATION BOARDS FASTENED PER THE SPECIFIC MANUFACTURERS RECOMMENDATIONS FOR RECEIVING ADHERED ROOFING MEMBRANES.

ALL FASTENERS SHOULD BE INSTALLED WITH A DEPTH-SENSING SCREW GUN TO PREVENT OVER DRIVING OR UNDER DRIVING. BLOCK OFF OR SHUT DOWN POSITIVE PRESSURE BUILDING VENTILATION SYSTEMS DURING APPLICATION TO PREVENT SHEET FROM BLOWING DURING APPLICATION.

VERIFY ALL ROOFING MECHANICAL UNITS ARE TO HAVE THEIR CONDENSATION LINES PIPED TO DRAINS, OR OFF THE ROOF WITH RAINWATER.

PLYWOOD MUST BE EXTERIOR GRADE WITH AN A OR B FINISH SIDE UP AND WITH NO JOINTS GAPPED GREATER THAN 1/4 INCH, AND PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.

PROVIDE TYPICAL BALLAST IN PARTIALLY COMPLETED SECTIONS TO CONTROL WIND EFFECTS DURING CONSTRUCTION.

REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT

PROVIDE CAULKING AT INTERIOR AND EXTERIOR AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS WITH A CONTINUOUS BEAD OF CAULK.

SILICONE SEALANT SHOULD NOT BE USED ON EXTERIOR JOINTS - ONLY POLYURETHANE OR POLYSULFIDE SEALANTS. BUTYL SEALANTS SHOULD BE USED BETWEEN METAL LAPS WHERE MOVEMENT IS ANTICIPATED.

REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT

PROVIDE TYPICAL BALLAST IN PARTIALLY COMPLETED SECTIONS TO CONTROL WIND EFFECTS DURING CONSTRUCTION.

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REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 10- SPECIALTIES

#### 10-99 BATH HARDWARE

**GENERAL PRODUCTS**  
EXTENT OF BATHROOM HARDWARE INDICATED ON INTERIOR DESIGN DRAWINGS NOT INCLUDED WITHIN ARCHITECTURAL DRAWINGS.  
OWNER/CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH INTERIOR DESIGNER FOR ALL FINISH ITEMS.  
COMPLETE INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE INTERIOR DESIGNER AND TO REVIEW ALL MATERIAL AND SUBMITTALS FOR CODE COMPLIANCE AND APPROVAL.

**SUBMITTALS**  
PROVIDE HARDWARE SPECIFICATION CUT SHEETS FOR APPROVAL BY ARCHITECT/INTERIOR DESIGNER AND OWNER PRIOR TO ORDERING.  
**EXECUTION**  
INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

### DIVISION 11- EQUIPMENT

#### 11-32 FIREPLACES

**GENERAL PRODUCTS**  
GAME ROOM FIREPLACE TO BE: MONITGO "P-SERIES" SEALED GAS - SEE ID DRAWINGS (TOP VENT TO EXTERIOR WALL)  
GREAT ROOM FIREPLACE TO BE: MONITGO "P-SERIES" SEALED GAS - SEE ID DRAWINGS (TOP VENT TO CHIMNEY CHASE)  
MASTER BEDROOM FIREPLACE TO BE: MONITGO "PANORAMA" 3-SIDED GLASS CUSTOM SEALED GAS - SEE ID DRAWINGS (REAR-VENT TO EXTERIOR WALL)

**SUBMITTALS**  
SUBMIT CUT SHEETS FOR EACH APPLIANCE SPECIFIED.

**EXECUTION**  
BEDROOM APPLICATIONS: PROVIDE SEALED GLASS DOORS.

ALL WOOD BURNING FIREPLACES (EXCEPT IN BEDROOM APPLICATIONS); TO BE PROVIDED WITH GAS STARTERS

GAS LOG FIREPLACES SHALL BE PROVIDED WITH A SHUT OFF VALVE LOCATED OUTSIDE OF THE FIREBOX AND WITHIN 6" OF THE APPLIANCE, UNLESS APPROVED BY THE FIREPLACE MANUFACTURER.

GAS LIGHTERS ARE USED. FLUES MUST BE PERMANENTLY HELD OPEN.

ALL GAS LOGS, LIGHTERS OR FIREPLACES REQUIRE OUTSIDE COMBUSTION AIR.

ALL FLUES MUST EQUAL 1 SQUARE INCH PER 1000 BTUS.

ALL ROOMS WHERE GAS LOGS, LIGHTERS, OR FIREPLACES ARE INSTALLED MUST EQUAL 50 CUBIC FEET OF VOLUME PER 1000 BTU'S IN ADDITION TO THE REQUIREMENT FOR OUTSIDE AIR.

PROVIDE FLUES, COMBUSTION AIR SPARK ARRESTOR, CLEARANCES, AND ETC. AS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE CHIMNEY CAP FLASHING AND SURROUND. (SEE SECTION 07-34) THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR INSTALLATION OF FIREPLACE EQUIPMENT, INCLUDING FINISH MATERIALS SUCH AS HEARHS, MANTLES, AND OTHER COMBUSTIBLE PROJECTIONS, ETC., AND PROVIDE PROPER SETBACKS, CLEARANCES, AND PROTECTION.

THE CHIMNEY TERMINATION MUST EXTEND AT LEAST 2 FEET HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10 FEET, AT WOOD BURNING FIREPLACES, AS REQUIRED BY I.R.C. G242.5.3.

#### 11-34 RESIDENTIAL APPLIANCES

**GENERAL PRODUCTS**  
RESIDENTIAL APPLIANCES AS SELECTED BY INTERIOR DESIGNER.

**SUBMITTALS**  
PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.  
APPLIANCE SCHEDULE: USE SAME DESIGNATIONS INDICATED ON DRAWINGS

GAS-BURNING APPLIANCES: COMPLY WITH ANS Z21 SERIES STANDARDS.

RESIDENTIAL APPLIANCES: COMPLY WITH NAECA STANDARDS.

**EXECUTION**  
INSTALLER QUALIFICATIONS: AN EMPLOYER OF WORKERS TRAINED AND APPROVED BY MANUFACTURER FOR INSTALLATION AND MAINTENANCE OF UNITS REQUIRED FOR THIS PROJECT

PROVIDE CLEARANCE FROM APPLIANCES TO COMBUSTIBLE MATERIALS AS PER MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE MINIMUM CLEARANCE OF 30" ABOVE COOKING TOP TO COMBUSTIBLE MATERIALS. (I.R.C. M1306 & M1901)

INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

BUILT-IN EQUIPMENT: SECURELY ANCHOR UNITS TO SUPPORTING CABINETS OR COUNTERTOPS WITH CONCEALED FASTENERS. VERIFY THAT CLEARANCES ARE ADEQUATE FOR PROPER FUNCTIONING AND ROUGH OPENINGS ARE COMPLETELY CONCEALED.

FREESTANDING EQUIPMENT: PLACE UNITS IN FINAL LOCATIONS AFTER FINISHES HAVE BEEN COMPLETED IN EACH AREA. VERIFY THAT CLEARANCES ARE ADEQUATE TO PROPERLY OPERATE EQUIPMENT.

#### 11-42 PROJECTION SCREENS

**GENERAL PRODUCTS**  
EXTENT OF PROJECTION SCREENS ARE INDICATED ON INTERIOR DESIGN DRAWINGS NOT INCLUDED WITHIN ARCHITECTURAL DRAWINGS

OWNER/CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH INTERIOR DESIGNER FOR ALL FINISH ITEMS.

COMPLETE INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE INTERIOR DESIGNER AND TO REVIEW ALL MATERIAL AND SUBMITTALS FOR CODE COMPLIANCE AND APPROVAL.

### DIVISION 12- FURNISHINGS

#### 12-27 WOOD KITCHEN CABINETS

**GENERAL PRODUCTS**  
EXTENT OF CABINERY AS SHOWN ON INTERIOR FINISH PLANS AND DRAWINGS.

SEE INTERIOR ELEVATIONS FOR DESIGN OF CABINETS

COORDINATE WITH CABINET FINISH SCHEDULE FOR FINISH OF ALL CABINETS.

**SUBMITTALS**  
CABINET SUPPLIER SHALL PROVIDE SHOP DRAWINGS FOR EACH CABINET FOR APPROVAL BY ARCHITECT/INTERIOR DESIGNER/OWNER PRIOR TO FABRICATION OF CABINET.

PROVIDE 12 X 12 SAMPLE OF EACH CABINET FINISH SPECIFIED FOR APPROVAL.

PROVIDE 1 DOOR SAMPLE FOR EACH DOOR TYPE SPECIFIED FOR APPROVAL.

#### 12-40 STONE COUNTERTOPS

**GENERAL PRODUCTS**  
EXTENT OF STONE COUNTERTOPS AS SHOWN ON INTERIOR FINISH PLANS AND DRAWINGS.

**SUBMITTALS**  
SAMPLES FOR EACH STONE TYPE INDICATED. IN SETS OF SAMPLES NOT LESS THAN 12 INCHES SQUARE. INCLUDE TWO OR MORE SAMPLES IN EACH SET AND SHOW THE FULL RANGE OF VARIATIONS IN APPEARANCE CHARACTERISTICS EXPECTED IN COMPLETED WORK.

**EXECUTION**  
USE ONLY ADHESIVES FORMULATED FOR STONE AND CERAMIC TILE AND RECOMMENDED BY THEIR MANUFACTURER FOR THE APPLICATION INDICATED. EXAMINE SUBSTRATES INDICATED TO RECEIVE STONE COUNTERTOPS AND CONDITIONS UNDER WHICH STONE COUNTERTOPS WILL BE INSTALLED, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE.

INSTALL COUNTERTOPS OVER 1/4" WOOD SUBTOPS WITH FULL SPREAD OF WATER-CLEANABLE EPOXY ADHESIVE.

SET STONE TO COMPLY WITH REQUIREMENTS INDICATED ON DRAWINGS AND SHOP DRAWINGS. SHIM AND ADJUST STONE TO LOCATIONS INDICATED, WITH UNIFORM JOINTS OF WIDTHS INDICATED AND WITH EDGES AND FACES ALIGNED ACCORDING TO ESTABLISHED RELATIONSHIPS AND INDICATED TOLERANCES

REMOVE AND REPLACE STONE COUNTERTOPS OF THE FOLLOWING DESCRIPTION: BROKEN, CHIPPED, STAINED, OR OTHERWISE DAMAGED STONE, DEFECTIVE COUNTERTOPS, DEFECTIVE JOINTS, INCLUDING MISALIGNED JOINTS, INTERIOR STONE COUNTERTOPS AND JOINTS NOT MATCHING APPROVED SAMPLES AND MOCKUPS.

CLEAN STONE COUNTERTOPS NOT LESS THAN TWO DAYS AFTER COMPLETION OF INSTALLATION, USING CLEAN WATER AND SOFT BRUSH. APPLY STONE SEALER TO COMPLY WITH STONE PRODUCERS AND SEALER MANUFACTURER'S WRITTEN INSTRUCTIONS.

### DIVISION 21 - FIRE SUPPRESSION

#### 21-01 FIRE SPRINKLERS

**GENERAL PRODUCTS**  
DESCRIPTION  
THE PROJECT SHALL HAVE FULL NFPA 13D SPRINKLER SYSTEM INSTALLED THROUGH OUT AS REQUIRED.

CPVC FIRE SPRINKLER PIPE AND FITTINGS ARE EXTRUDED/MOLDED FROM CPVC COMPOUNDS MANUFACTURED BY ULTRON. ADVANCED MATERIALS OR EQUAL. THE PIPE AND FITTING COMPOUNDS SHALL MEET CELL CLASS 23547 AND 24447 RESPECTIVELY, AS DEFINED BY ASTM D1784, AND SHALL BE CERTIFIED BY NSF INTERNATIONAL FOR USE WITH POTABLE WATER. BOTH PIPE AND FITTING COMPOUNDS SHALL BE PRESSURE RATED BY PLASTICS PIPE INSTITUTE (PPI).

PIPE AND FITTINGS

PIPE SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F442 IN STANDARD DIMENSION RATIO (SDR) 13.5.

FITTINGS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F437 (SCHEDULE 80 THREADED), ASTM F438 (SCHEDULE 40 SOCKET) AND ASTM F439 (SCHEDULE 80 SOCKET).

BOTH PIPE AND FITTINGS SHALL BE LISTED BY UNDERWRITERS LABORATORIES FOR USE IN WET AUTOMATIC FIRE SPRINKLER SYSTEMS AND SHALL

BEAR THE LOGO OF THE LISTING AGENCY. SEE UL FIRE PROTECTION EQUIPMENT DIRECTORY, CATEGORIES V1MT AND HPH.

ANCILLARY PRODUCTS COMING INTO CONTACT WITH PIPE AND FITTINGS MUST BE CHEMICALLY COMPATIBLE AS DETERMINED BY CPVC PIPE AND FITTINGS MANUFACTURER OR COMPOUND MANUFACTURER, AND LISTED ON PIPE, FITTINGS OR COMPOUND MANUFACTURER'S CHEMICAL COMPATIBILITY PROGRAM (I.E. FGG/8M/CTM) SYSTEM COMPATIBLE PROGRAM).

SOLVENT CEMENT

ALL SOCKET TYPE JOINTS SHALL BE MADE UP EMPLOYING SOLVENT CEMENTS THAT MEET OR EXCEED THE REQUIREMENTS OF ASTM F493. THE STANDARD PRACTICE FOR SAFE HANDLING OF SOLVENT CEMENTS SHALL BE IN ACCORDANCE WITH ASTM F492. SOLVENT CEMENT SHALL BE LISTED BY NSF INTERNATIONAL FOR USE WITH POTABLE WATER, AND APPROVED BY THE MANUFACTURER. THE SOLVENT CEMENTS SHALL BE COMPATIBLE WITH THEIR CPVC PIPE AND FITTINGS.

FOLLOW MANUFACTURER'S INSTRUCTIONS FOR SET AND CURE TIMES FOR SOLVENT CEMENT JOINTS. AVOID SIGNIFICANT STRESSES DURING SET AND CURE TIMES. DO NOT APPLY ANY STRESS THAT WILL DISTURB AN UNCURED JOINT. SPRINKLER FITTINGS SHALL BE ALLOWED TO CURE IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND THE CONTRACTOR SHALL ASSURE THE OUTLETS ARE CLEAR OF ANY EXCESS CEMENT PRIOR TO INSTALLING SPRINKLERS.

BASIC USE

CPVC PIPE AND FITTINGS SHALL BE LISTED BY UL AND ALSO EITHER UL-C OR UL-F FOR USE IN:

ONE AND TWO FAMILY DWELLINGS AND MANUFACTURED HOMES AS DEFINED BY NFPA 13D.

AIR HANDLING (PLENUM) SPACES AS DEFINED BY NFPA 90A.

UNDERGROUND WATER PRESSURE SERVICE AS DEFINED BY NFPA 24.

MAXIMUM DESIGN TEMPERATURE/PRESSURE RATINGS SHALL NOT BE LESS THAN 175 PSI AT 150°F. REFER TO CPVC PIPE AND FITTING MANUFACTURER'S INSTALLATION INSTRUCTIONS.

QUALITY ASSURANCE  
CONTRACTOR INSTALLING THE PRODUCT MUST HAVE A MINIMUM OF 2 YEARS OF INSTALLATION OF SYSTEM.

MANUFACTURERS  
TYCO FIRE SUPPRESSION & BUILDING PRODUCTS 451 N. CANNON AVENUE LANSDALE, PA 19446 (215) 362-0700 FAX (215) 362-5385

**SUBMITTALS**  
COMPLETE FIRE SPRINKLER SHOP DRAWINGS, INCLUDING PIPING LAYOUT, HEAD LAYOUT, HEAD OPTIONS FOR SELECTION, AND PRODUCT LITERATURE. FIRE SPRINKLER DRAWINGS WILL BE CONSIDERED DEFERRED SUBMITTAL AND MUST FOLLOW DEFERRED SUBMITTAL PROCEDURES.

**EXECUTION**  
SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE FOR FIRE SPRINKLER SYSTEMS AND THE MANUFACTURER'S INSTRUCTIONS. THE DESIGN SHALL TAKE INTO CONSIDERATION SUCH FACTORS AS PRESSURE AND FLOW REQUIREMENTS, FRICTION LOSS, OPERATING

TEMPERATURES, SUPPORT SPACING, JOINING METHODS, AND THERMAL EXPANSION AND CONTRACTION.

THE FIRE SPRINKLER PIPING SYSTEM SHALL BE HYDRAULICALLY CALCULATED USING A HAZEN-WILLIAMS C FACTOR OF 150, AND DESIGNED IN ACCORDANCE WITH THE STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, NFPA 13.

THE MAXIMUM DESIGN TEMPERATURE/PRESSURE RATING SHALL NOT EXCEED 175 PSI AT 150°F.

INSTALLATION PROCEDURES:  
INSTALLATION PRACTICES SUCH AS PIPE SUPPORT SPACING, BRACING, ALLOWANCE FOR THERMAL EXPANSION/CONTRACTION, SOLVENT CEMENTING AND HANDLING AND STORAGE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE UL LISTING WHICH INCLUDES INSTALLATION LIMITATIONS.

CPVC PIPE AND FITTINGS ARE INTENDED FOR USE AT A MAXIMUM WORKING PRESSURE OF 175 PSI AT 150°F IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPROPRIATE LISTED AGENCIES.

ALL APPLICABLE CODES AS PER THE NFPA SHALL BE IDENTIFIED.  
AFTER THE SYSTEM IS INSTALLED AND ANY SOLVENT CEMENT IS CURED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE SYSTEMS SHALL BE HYDROSTATICALLY TESTED PER THE REQUIREMENTS OF THE APPLICABLE NFPA STANDARD (NFPA 13D).

MAINTENANCE SHALL BE IN ACCORDANCE WITH THE STANDARD FOR INSPECTION, TESTING AND MAINTENANCE OF WATER BASED EXTINGUISHING SYSTEMS AS DEFINED BY NFPA 25.

### DIVISION 22- PLUMBING

#### 22-00 GENERAL PLUMBING

THE PLUMBING SYSTEM SHALL COMPLY WITH THE 2012 I.R.C. AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS RELATED TO THE PROJECT AS PER INDUSTRY STANDARDS.

THE PLUMBING CONTRACTOR TO BE RESPONSIBLE FOR THE COMPLETE PLUMBING INSTALLATION AND PROVIDE A (1) YEAR WARRANTY AFTER OWNER'S ACCEPTANCE.

VISIT THE JOB SITE PRIOR TO BIDDING THE PROJECT TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND ANY INTERFERENCE.

NO PLUMBING SHALL RUN ON AN OUTSIDE WALL.

ALL VENTS SHALL BE GANGED TO THE FEWEST NUMBER POSSIBLE TO PENETRATE ROOF AND SHOULD BE A MINIMUM OF 10' TO FROM EAVES. ALL VENTS TO BE SIZED AS PER I.R.C. REQUIREMENTS AND / OR NOT LESS THAN 3" DIAMETER PIPE. PROVIDE FLASHING AS REQUIRED.

SHOWER HEADS SHALL HAVE A FLOW RATE OF 2.5 GPM AT 80 PSI OR LESS.

LAVATORY AND SINK FAUCETS SHALL HAVE A FLOW RATE OF 2.2 GPM AT 60 PSI.

WATER CLOSET TO HAVE ECONO-PUSH TANK 1.6 GAL. MAX. FLUSHING CYCLE.

ALL HOSE BIBS SHALL BE NON FREEZE TYPE WITH BACK FLOW PREVENTER.

WATER STORAGE TANKS TO HAVE SEMI-STRAPPING TIE DOWNS. SIZE OF WATER HEATER / WATER STORAGE TANK AS PER CODE. (I.R.C. M3017.2 & G2404.8)

PROVIDE FLOOR DRAIN AND / OR DRIP PAN UNDER WATER HEATER, SPA, HOT TUB, WASHING MACHINE, STEAM SHOWER EQUIPMENT, ETC. IF LOCATED ON WOOD FLOOR STRUCTURE. (I.R.C. P2801)

THE CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S ROUGHED IN INSTRUCTIONS. TAKE CARE DURING BUILDING CONSTRUCTION TO SEE THAT PROVISIONS ARE MADE FOR PROPER FIXTURE SUPPORT AND THAT VENGE IN PIPING IS ALLOWED AND PROTECTED FROM MOVEMENT OR DAMAGE.

THE CONTRACTOR SHALL TEST ALL PIPING INCLUDING DRAINAGE WASTE LINES, WATER PIPING, NATURAL GAS PIPING, ETC. TEST IN ACCORDANCE WITH UNIFORM PLUMBING CODE AND LOCAL CODES AND AUTHORITIES. WATER LINES TO BE DISINFECTED IN ACCORDANCE WITH LOCAL HEALTH DEPARTMENT REGULATIONS.

CAULK AROUND ALL PLUMBING FIXTURES AT FLOORS AND WALLS WITH FLEXIBLE CAULKING COMPOUND. COLOR TO MATCH FIXTURE.

AFTER FIXTURES HAVE BEEN SET THE CONTRACTOR SHALL CAREFULLY PROTECT THEM FROM DAMAGE UNTIL THE BUILDING IS OCCUPIED BY THE OWNER. JUST PRIOR TO ACCEPTANCE OF THE JOB BY THE OWNER, THE CONTRACTOR SHALL CLEAN ALL PLUMBING FIXTURES AND REMOVE LABELS.

PROVIDE ANTI-SCALD LIMITING DEVICES SET AT 120 DEGREES FOR BATHUBS AND SHOWERS.

ALL SUPPLY, WASTE, & GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. ALL WATER LINES TO BE TYPE 1" HARD DRAWN COPPER OR POLYETHYLENE CROSS-LINK PIPING FOR ABOVE GROUND APPLICATIONS OR APPROVED EQUAL. PROVIDE TYPE "X" COPPER OR POLYETHYLENE CROSS-LINK PIPING FOR UNDERGROUND. PROVIDE CONTINUOUS LINE WITH NO JOINTS FOR UNDERGROUND APPLICATIONS, UNLESS APPROVED. ALL FITTINGS TO BE COPPER WITH SWEAT SOLDER JOINTS FOR COPPER PIPING OR BRASS FITTINGS WITH COMPRESSION FITTINGS FOR POLY PIPE. ALL WASTE LINES TO BE PVC OR ABS PLASTIC PIPE.

WASTE LINES SHALL BE PROVIDED WITH A CLEAN OUT AS REQUIRED. EXTEND CLEAN OUTS TO ACCESSIBLE SURFACE. DO NOT PLACE CLEAN OUTS IN FLOOR UNLESS APPROVED.

PLUMBING CONTRACTOR SHALL PROVIDE A TURN OFF VALVE AND DRAIN AT THE LOWEST LEVEL OF THE FACILITY. ALL FIXTURES SHALL BE ABLE TO DRAIN AT THIS POINT. PROVIDE FLOOR DRAIN AT LOCATION OF PLUMBING SYSTEM DRAIN.

PROVIDE CULINARY WASTE WATER PRESSURE AND ENSURE ADEQUATE PRESSURE IS AVAILABLE. FOR MULTIPLE FIXTURE USE SIMULTANEOUSLY WITH OUT PRESSURE DECREASE OR TEMPERATURE FLUCTUATION.

PROVIDE CULINARY WASTE WATER PRESSURE THROUGH OUT RESIDENCE AS REQUIRED. SYSTEM TO BE INTERMOUNTAIN WATER INC.'S MODEL "PABROT" SYSTEM. INSTALLATION AS PER MANUFACTURE. O.A.E.

PROVIDE FIRE SPRINKLER SYSTEM AS REQUIRED BY BUILDING DEPARTMENT. SYSTEM TO BE BUILT TO NFPA 13D ACOFFED. PROVIDE ENGINEERING, LAYOUT, SPECIFICATIONS, ETC. FOR APPROVAL PRIOR TO INSTALLATION. PROVIDE CONCEALED HEADS.

STEAM SHOWER UNITS TO BE "COLD" STEAM GENERATOR K-1734 OR EQUAL. INSTALL AS PER MANUFACTURE REQUIREMENTS. MEETS OR EXCEEDS UL-499/CSA C22.2 NO. 88.

BATHUBS AND SHOWER FLOORS AND WALLS ABOVE BATHUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH A NON-ABRASIVE SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 72" INCHES ABOVE THE FLOOR. SHOWER PAN LINERS AND SITE BUILT PAN LINERS SHALL EXTEND A MINIMUM OF 3" ABOVE SHOWER DOOR THRESHOLD. PROVIDE SOLID BLOCKING BEHIND LINER. ALL SHOWER PAN LINERS SHALL BE INSTALLED ON SLOPED BUILT UP FLOOR AND MUST BE INSPECTED.

#### 22-01 PLUMBING FIXTURES

**GENERAL PRODUCT**  
SEE PLUMBING FIXTURE SCHEDULE AND PLANS FOR LOCATIONS AND SELECTION OF SPECIFIED FIXTURES.

**SUBMITTALS**  
SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, COLORS AND MANUFACTURER SPECIFICATIONS FOR EACH FIXTURE SPECIFIED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

**EXECUTION**  
INSTALL FIXTURES LEVEL AND PLUMB ACCORDING TO ROUGHING-IN DRAWINGS.

INSTALL WATER SUPPLY PIPING WITH STOP ON EACH SUPPLY TO EACH FIXTURE TO BE CONNECTED TO WATER DISTRIBUTION PIPING. SEAL JOINTS BETWEEN FIXTURES AND WALLS, FLOORS, AND COUNTERTOPS USING SANITARY-TYPE, ONE-PART, MILDEW-RESISTANT SILICONE SEALANT.

CONNECT FIXTURES WITH WATER SUPPLIES, STOPS, AND RISERS, AND WITH TRAPS, SOIL, WASTE AND VENT PIPING. USE SIZE FITTINGS REQUIRED TO MATCH FIXTURES.

CHECK THAT PLUMBING FIXTURES ARE COMPLETE WITH TRIM, FAUCETS, FITTINGS, AND OTHER SPECIED COMPONENTS.

INSPECT INSTALLED PLUMBING FIXTURES FOR DAMAGE. REPLACE DAMAGED FIXTURES AND COMPONENTS.

TEST INSTALLED FIXTURES AFTER WATER SYSTEMS ARE PRESSURIZED FOR PROPER OPERATION. REPLACE MALFUNCTIONING FIXTURES AND COMPONENTS, THEN RETEST. REPEAT PROCEDURE UNTIL UNITS OPERATE PROPERLY.

EACH WATER CLOSET SHALL BE LOCATED IN A CLEAR SPACE NOT LESS THAN 30" IN WIDTH (15" MINIMUM FROM CENTER TO ANY OBSTRUCTION) AND HAVE A CLEAR SPACE IN FRONT OF NOT LESS THAN 21" CLEAR. (I.R.C. K307)

#### 22-02 TANK TYPE WATER HEATER

**GENERAL PRODUCTS**  
COORDINATE WITH PLANS FOR LOCATION OF WATER HEATER.  
WATER HEATERS TO BE: A.G. SMITH OR EQUAL.  
CAPACITY SHALL BE: 50 GALLONS

**SUBMITTALS**  
SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, MANUFACTURER SPECIFICATIONS FOR EACH WATER HEATER FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

**EXECUTION**  
CONNECT FIXTURES WITH WATER SUPPLIES, STOPS, AND RISERS, AND WITH TRAPS, SOIL, WASTE AND VENT PIPING. PROVIDE EXPANSION TANK AS REQUIRED BY LOCAL BUILDING CODE.

PROVIDE VENTING AS REQUIRED BY WATER HEATER MANUFACTURER SPECIFICATIONS.

FOR HOT WATER SUPPLIED TO BATHUBS AND WHIRLPOOL TUBS SHALL BE LIMITED TO 120 DEGREES MAX BY A WATER TEMPERATURE LIMITING DEVICE (ASTE 1070) OR BY AN APPROVED COMBINATION TUB/SHOWER VALVE.

#### 22-04 WATER SOFTENER

**GENERAL PRODUCTS**  
COORDINATE WITH PLANS FOR LOCATION OF WATER HEATER.  
WATER SOFTENER TO BE:

**SUBMITTALS**  
SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, MANUFACTURER SPECIFICATIONS FOR EACH WATER HEATER FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

**EXECUTION**  
CONNECT PER MANUFACTURER SPECIFICATIONS.

### 22-04 WATER SOFTENER

**GENERAL PRODUCTS**  
THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND COMPLY WITH ALL APPLICABLE BUILDING CODES, ASTM STANDARDS, TECHNICAL REPORTS FOR THE INSTALLATION OF PLUMBING COMPONENTS.

PROVIDE A PEX TUBING HOT AND COLD POTABLE WATER DISTRIBUTION SYSTEM, WHICH IS MANUFACTURED, FABRICATED AND INSTALLED TO COMPLY WITH REGULATORY AGENCIES AND TO MAINTAIN PERFORMANCE CRITERIA STATED BY THE PEX TUBING MANUFACTURER WITHOUT DEFECTS, DAMAGE OR FAILURE

UTILIZE AN INSTALLER HAVING DEMONSTRATED EXPERIENCE ON PROJECTS OF SIMILAR SIZE AND COMPLEXITY AND POSSESSES THE SKILLS AND KNOWLEDGE TO INSTALL A PEX POTABLE WATER DISTRIBUTION SYSTEM

DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS INTACT UNTIL READY FOR INSTALLATION

STORE MATERIALS PROTECTED FROM EXPOSURE TO HARMFUL ENVIRONMENTAL CONDITIONS AND AT TEMPERATURE AND HUMIDITY CONDITIONS RECOMMENDED BY THE MANUFACTURER AND STORE PEX TUBING INDOORS, IN CARTONS OR UNDER COVER TO AVOID DIRT OR FOREIGN MATERIAL FROM ENTERING THE TUBING

DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN SIX MONTHS, IF CONSTRUCTION DELAYS ARE ENCOUNTERED. COVER THE TUBING THAT IS EXPOSED TO DIRECT SUNLIGHT

**WARRANTY**  
MANUFACTURER'S WARRANTY SHALL COVER THE REPAIR OR REPLACEMENT OF PROPERLY INSTALLED TUBING AND FITTINGS PROVEN DEFECTIVE AS WELL AS INCIDENTAL DAMAGE TO A WARRANTY FIXTURED FOR THE TUBING AND SUBSEQUENT SYSTEM SHALL BE 25 YEAR NON-PORATED WARRANTY AGAINST FAILURE DUE TO DEFECT IN MATERIAL OR WORKMANSHIP, BEGINNING WITH THE DATE OF INSTALLATION

SPECIFICATION FOR HOT AND COLD POTABLE WATER DISTRIBUTION SYSTEM HAS BEEN WRITTEN AROUND PRODUCTS AND SYSTEM DESIGNS AS MANUFACTURED AND RECOMMENDED BY ZURN PEX, INC. AND ALL PRODUCTS, COMPONENTS, ETC. SPECIFIED HEREIN ARE MANUFACTURED BY AND/OR ARE AVAILABLE FROM ZURN PEX, INC. TUBING MANUFACTURER. THE CONTRACTOR SHALL NOT MIX SYSTEM COMPONENTS.

CROSS-LINKED POLYETHYLENE (PEX) MANUFACTURED BY THE SLANE METHOD, NON-BARRIER TYPE AND SHALL HAVE A PRESSURE AND TEMPERATURE RATING OF 160 PSI AT 180°F AND 90 PSI AT 200°F

TUBING SHALL HAVE A MINIMUM OF 6 MONTHS UV PROTECTION, AND BE MANUFACTURED IN ACCORDANCE WITH ASTM F818 AND ASTM F877 AND TESTED FOR COMPLIANCE BY AN INDEPENDENT THIRD-PARTY AGENCY

FITTINGS

FITTINGS SHALL BE MANUFACTURED BY SAME PEX MANUFACTURER AS TUBING AND SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM F8107 OR ASTM F2159 AND/OR COMPLY WITH ASTM F877 SYSTEM STANDARD AS IDENTIFIED ON THE FITTING

CRIMP SYSTEMS  
ALL QUICKCLAMP, COPPER CRIMP RING SHALL PROVIDED BY TUBING AND PIPING MANUFACTURER. INSTALLATION OF QUICKCLAMP AND COPPER CRIMP RING SHALL BE INSTALLED WITH MANUFACTURER TOOLS AND MUST FOLLOW ALL ASTM TESTING REQUIREMENTS AS LISTED WITHIN MANUFACTURER STANDARD SPECIFICATIONS AND INSTALLATION GUIDELINES.

MANIFOLDS  
MANIFOLDS SHALL BE SELECTED FROM FOLLOWING: QUICKPORT PREASSEMBLED MANIFOLD; COPPER MANIFOLD SYSTEM; OR MANIFOLD: MULTI-PORT FITTINGS; COPPER MANIFOLD HEADER

VALVES  
SHALL BE OF THE PLASTIC OR METAL TYPE, MEETING THE REQUIREMENTS OF ASTM F877, IDENTIFIED AS SUCH WITH THE APPROPRIATE MARK ON THE PRODUCT

**SUBMITTALS**  
SUBMIT MANUFACTURER'S PRODUCT SUBMITTAL DATA AND INSTALLATION INSTRUCTIONS

SUBMIT MANUFACTURER'S PROFESSIONAL INSTALLATION WARRANTY FOR PRODUCTS AND LABOR.

SUBMIT MANUFACTURER'S WARRANTY FOR PRODUCTS.

**EXECUTION**  
COMPLY WITH MANUFACTURER'S PRODUCT DATA, INCLUDING PRODUCT TECHNICAL BULLETINS, TECHNICAL MEMOS, INSTALLATION INSTRUCTIONS AND DESIGN DRAWINGS, INCLUDING: ZURN OR EQUAL, PEX PLUMBING INSTALLATION GUIDE

VERIFY THAT SITE CONDITIONS ARE ACCEPTABLE FOR THE INSTALLATION OF THE PEX POTABLE WATER SYSTEM. DO NOT PROCEED WITH INSTALLATIONS OF THE PEX POTABLE WATER SYSTEM UNTIL UNACCEPTABLE CONDITIONS ARE CORRECTED

DO NOT INSTALL PEX TUBING WITHIN 6 INCHES OF GAS APPLIANCE VENTS OR WITHIN 12 INCHES OF ANY RECESSED LIGHT FIXTURES

DO NOT SOLDER WITHIN 18 INCHES OF PEX TUBING IN THE SAME WATERLINE. MAKE SWEAT CONNECTIONS PRIOR TO MAKING PEX CONNECTIONS

ENSURE NO GLUES, SOLVENTS, SEALANTS OR CHEMICALS COME IN CONTACT WITH THE TUBING WITHOUT PRIOR PERMISSION FROM THE TUBING MANUFACTURER

DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN 6 MONTHS

USE GROMMETS OR SLEEVES AT THE PENETRATION FOR PEX TUBING PASSING THROUGH METAL STUDS

USE A PEX MANUFACTURER RECOMMENDED FIRE STOP SEALANT MANUFACTURER

PROTECT PEX TUBING WITH SLEEVES WHERE ABRASION MAY OCCUR

USE HALL PLATES WHERE PEX TUBING PENETRATES WALL STUD OR JOISTS AND HAS THE POTENTIAL FOR BEING STRUCK WITH A SCREW OR NAIL

ALLOW SLACK OF APPROXIMATELY 1/8 INCH PER FOOT OF TUBE LENGTH TO COMPENSATE FOR EXPANSION AND CONTRACTION

PRESSURIZE ZURN OR EQUAL PEX TUBING IN ACCORDANCE WITH APPLICABLE CODES OR IN THE ABSENCE OF APPLICABLE CODES, TEST PRESSURE SHALL BE AT LEAST EQUAL TO NORMAL SYSTEM WORKING PRESSURE, BUT NOT LESS THAN 40 PSI WATER OR AIR AND NOT GREATER THAN 225 PSI WATER, 125 PSI AIR

TO ENSURE SYSTEM INTEGRITY, PRESSURE TEST THE SYSTEM BEFORE COVERING TUBING IN CONCRETE AND AFTER OTHER TRADES HAVE WORKED IN THE VICINITY OF THE TUBING. REPAIR AND REPLACE ANY PRODUCT THAT HAS BEEN DAMAGED ACCORDING TO MANUFACTURER'S RECOMMENDATION

### 22-06 PLUMBING WASTE COMPONENT/PIPING

**GENERAL PRODUCTS**  
THIS SPECIFICATION COVERS ABS CELLULAR CORE (FOAM CORE) PIPE AND ABS DWV FITTINGS USED IN SANITARY DRAIN, WASTE, AND VENT (DWV), SEWER, AND STORM DRAINAGE APPLICATIONS. THIS SYSTEM IS INTENDED FOR USE IN NON-PRESSURE APPLICATIONS WHERE THE OPERATING TEMPERATURE WILL NOT EXCEED 160°F.

ALL WASTE PIPING SHALL BE THE FOLLOWING:

ABS CELLULAR CORE (FOAM CORE) PIPE AND ABS DWV FITTINGS

PIPE SHALL BE MANUFACTURED FROM VIRGIN RIGID ABS (ACRYLONITRILE-BUTADIENE-STYRENE) COMPOUNDS WITH A CELL CLASS OF 42222 AS IDENTIFIED IN ASTM D 3965. FITTINGS SHALL BE MANUFACTURED FROM VIRGIN RIGID ABS COMPOUNDS WITH A CELL CLASS OF 32222 AS IDENTIFIED IN ASTM D 3965.

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 23- HEATING AND COOLING

#### 23-00 GENERAL MECHANICAL NOTES

THE MECHANICAL SYSTEM SHALL COMPLY WITH 2012 I.R.C. AND IFGC AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS RELATED TO THE PROJECT, AS PER INDUSTRY STANDARDS.

THE MECHANICAL CONTRACTOR TO BE RESPONSIBLE FOR THE COMPLETE MECHANICAL INSTALLATION AND PROVIDE A 1 YEAR WARRANTY AFTER OWNERS ACCEPTANCE. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH OPERATION AND MAINTENANCE MANUALS.

VISIT THE JOB SITE PRIOR TO BIDDING THE PROJECT TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND ANY INTERFERENCE.

DRYER EXHAUST DUCT TO BE VENTED TO EXTERIOR. DUCTS TO BE RIGID ALUMINUM WITH SMOOTH INTERIOR SURFACES. NO HEAT SCREENS OR FASTENERS SHALL PENETRATE INTO THE DUCT. DOWNDRAFT IN DIRECTION OF AIR FLOW. MAXIMUM LENGTH SHALL NOT EXCEED 35'-0" EXCLUDING FLEXIBLE TRANSITION DUCT. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED BY 2.5 FEET FOR EACH 45 DEGREE BEND AND 5 FEET FOR EACH 90 DEGREE BEND. TRANSITION DUCTS SHALL NOT BE CONCEALED WITH CONSTRUCTION. (I.R.C. M1302)

BATHROOM EXHAUST DUCT TO BE ALUMINUM, GALVANIZED STEEL, OR APPROVED FIBERGLASS. KITCHEN HOOD EXHAUST DUCTS TO BE GALVANIZED STEEL, STAINLESS STEEL OR COPPER. DUCTS TO BE AIR TIGHT AND EQUIPPED WITH A BACK DRAFT DAMPER. ALL DUCTS TO TERMINATE AT OUTSIDE. BATHROOM VENTILATION SYSTEM SHALL BE RATED AT 50 CFM (INTERMEDIATE VENTILATION) (I.R.C. CHAPTER 15 AND R303)

LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING IS BY THE MECHANICAL CONTRACTOR. COORDINATE WITH THE ELECTRICAL CONTRACTOR.

SUBMIT SPECIFICATION SHEETS ON ALL EQUIPMENT TO BE REVIEWED BY ARCHITECT.

MECHANICAL HEATING SYSTEM TO BE 90% EFFICIENT FORCED AIR FURNACE SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE 1" MINIMUM CLEARANCE AROUND EQUIPMENT AND REAR OF THE APPLIANCE AND 6" MINIMUM CLEARANCE BETWEEN TRIM RING AND APPLIANCE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTU'S FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTU'S (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

MECHANICAL HEATING SYSTEM TO BE 80% EFFICIENT BOILER WITH RADIANT IN FLOOR HYDRONIC HEATING SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE 1" MINIMUM CLEARANCE AROUND EQUIPMENT AT SIDES AND REAR OF THE APPLIANCE AND 6" MINIMUM CLEARANCE IN FRONT OF THE APPLIANCE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTU'S FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTU'S (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

ALL HABITABLE ROOMS SHALL HAVE NATURAL VENTILATION EQUATING 4% OF THE FLOOR AREA. THIS SHALL BE PROVIDED THROUGH WINDOWS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOORS UNLESS AN APPROVED MECHANICAL VENTILATION SYSTEM IS PROVIDED CAPABLE OF PRODUCING 0.35 AIR CHANGES PER HOUR IN THE ROOM OR A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS INSTALLED.

EXHAUST FANS SHALL BE SIZED FOR A MINIMAL RATE OF 50 CFM. ALL FANS TO BE DUCTED TO OUTSIDE. ALL EXHAUST DUCTS TO HAVE APPROVED TERMINATIONS WITH SCREENS. TERMINATIONS SHALL BE INSTALLED AS NOT TO BE BLOCKED BY SNOW AND ICE. FANS TO BE DIRECTLY CONNECTED TO A LOW SPEED MOTOR. PROVIDE ACOUSTICAL INSULATION, GRILLS, CAPS, ETC. AS REQUIRED. (I.R.C. R303.3 AND M1507)

THE CONTRACTOR SHALL LAYOUT AND REFERENCE ALL MECHANICAL DRAWINGS. CONTRACTOR SHALL PROVIDE ALL ENGINEERING REQUIRED TO SIZE DUCTS, GRILLS, REGISTERS, ETC. REVIEW ALL LOCATIONS AND PLACEMENT FOR GRILLS, ETC. WITH OWNER PRIOR TO PLACEMENT. THE ASSOCIATED ARCHITECTURAL MECHANICAL LAYOUTS AND DRAWINGS SHALL BE FOR THE PURPOSE TO SHOW INTENT.

PROJECTS THAT REQUIRE MECHANICAL DUCT WORK SHALL CONFORM TO THE FOLLOWING. ALL DUCT WORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET STEEL TO CONFORM WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND I.R.C. CHAPTER 16. FABRICATE SHEET METAL DUCTS WITH CROSS-BREAK OR KINK FLAT SURFACES TO PREVENT VIBRATION AND PULSATION. HANG DUCTS WITH STRAPS OF 18 GAUGE GALVANIZED STEEL OF 1" WIDE. ANCHOR DUCTS SECURELY TO STRUCTURE WITH SCREWS, IN SUCH A MANNER AS TO PREVENT TRANSMISSION WITH VIBRATION. UNDERGROUND ROUND DUCT SHALL BE SCHEDULE 40 P.V.C. PIPE OR P.V.S. PIPE AS REQUIRED BY LOCAL JURISDICTION WITH FUSION WELDED JOINTS AND CONNECTIONS. RUN OUTS TO FLOOR GRILLES SHALL BE FABRICATED FROM SHEET P.V.C. OR P.V.S. OF SAME THICKNESS AS PIPE WITH ALL JOINTS AND CONNECTIONS FUSION WELDED.

REMOVE DEBRIS AND TRASH FROM DUCT WORK AND VACUUM CLEAN DUCTS. RUN SUPPLY AND EXHAUST FANS THROUGH GRILLES AND REGISTERS ARTS INSTALLED AND BEFORE CEILINGS AND WALLS ARE FINISHED. THE ADJUSTMENT OF THE AIR SYSTEMS SHALL BE DONE BY THE MECHANICAL CONTRACTOR SYSTEMS SHALL BE ADJUSTED TO WITHIN PLUS OR MINUS 5% OF THE AIR CAPACITY.

INSULATE ALL HEATING TRUNK AND BRANCH SUPPLY DUCTS IN UNFINISHED AREAS, CRAWLS SPACES, ATTICS AND GARAGES.

ALL GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. NATURAL GAS SERVICE LINES SHALL BE LESS THAN 1/2" INCH IN DIAMETER. ALL NATURAL GAS LINES TO BE SCHEDULE 40 BLACK STEEL OR FLEX PLASTIC PIPE AS APPROVED BY GAS COMPANY. (I.R.C. CHAPTER 24, R516-567-70 (3) AND STATE AMENDMENT TO IFGC)

ALL GAS APPLIANCES SHALL BE PROVIDED WITH A SHUT OFF VALVE. SHUT OFF VALVES SHALL BE LOCATED IN A PLACE SO AS TO PROVIDE ACCESS FOR OPERATION AND SHALL BE INSTALLED SO AS TO BE PROTECTED FROM DAMAGE.

#### 23-01 RADIANT HEAT

MECHANICAL HEATING SYSTEM TO BE 80% EFFICIENT BOILER WITH RADIANT IN FLOOR HYDRONIC HEATING SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE CLEARANCES AS PER MANUFACTURE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTU'S FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTU'S (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

#### 23-02 MECHANICAL HEATING AND COOLING

MECHANICAL HEATING SYSTEM TO BE 90% EFFICIENT FORCED AIR FURNACE SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE CLEARANCES AS PER MANUFACTURE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTU'S FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTU'S (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-05 METAL DUCTWORK

PROJECTS THAT REQUIRE MECHANICAL DUCT WORK SHALL CONFORM TO THE FOLLOWING. ALL DUCT WORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET STEEL TO CONFORM WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND I.R.C. CHAPTER 16. FABRICATE SHEET METAL DUCTS WITH CROSS-BREAK OR KINK FLAT SURFACES TO PREVENT VIBRATION AND PULSATION. HANG DUCTS WITH STRAPS OF 18 GAUGE GALVANIZED STEEL OF 1" WIDE. ANCHOR DUCTS SECURELY TO STRUCTURE WITH SCREWS, IN SUCH A MANNER AS TO PREVENT TRANSMISSION WITH VIBRATION. UNDERGROUND ROUND DUCT SHALL BE SCHEDULE 40 P.V.C. PIPE OR P.V.S. PIPE AS REQUIRED BY LOCAL JURISDICTION WITH FUSION WELDED JOINTS AND CONNECTIONS. RUN OUTS TO FLOOR GRILLES SHALL BE FABRICATED FROM SHEET P.V.C. OR P.V.S. OF SAME THICKNESS AS PIPE WITH ALL JOINTS AND CONNECTIONS FUSION WELDED.

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-06 AIR CONDITIONING CONDENSER

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-07 EXHAUST FAN

GENERAL PRODUCTS  
PROVIDE EXHAUST FANS IN ALL BATHROOMS.

FANS SHALL BE DIRECTLY VENTED TO THE EXTERIOR.

FANS MUST BE CAPABLE OF TO MAINTAIN 50 CFM WITHIN ROOM LOCATED.

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-08 RECESSED DRYER VENT BOX

GENERAL PRODUCTS  
DBX PRODUCTS

DBX 1000 PLASTIC DRYER VENT BOX  
MADE OF HIGH IMPACT POLYSTYRENE, AND IS AVAILABLE IN 4" OR 6" SIZE. THE DRYER VENT BOX CAN BE USED BOTH FOR UP AND DOWN VENT. A SNAP ON TRIM RING FOR FINISH TRIM AT EDGE.  
THE DBX 1000M METAL DRYER VENT BOX WITH SNAP ON TRIM RING  
THE DBX 1000M IS 9 7/8" X 13 7/8" AND 3 1/2" DEEP. IT IS A 22 GAUGE METAL DRYER VENT BOX WITH A 22 GAUGE "SNAP ON TRIM RING". IT CAN BE INSTALLED IN 16" OR 24" O.C. FRAMING. THE DBX 1000M DRYER VENT BOXING IS POWDER COATED. FOR OPTIMUM RESULTS INSTALL THE DBX 1000M UP/DOWN VENTING IN 24" OR 24"X 24" FRAMED WALLS FOLLOWING:  
CONTRACTOR MAY SUBMIT A EQUAL SUBSTITUTE

FOLLOW MANUFACTURER RECOMMENDED INSTALLATION INSTRUCTIONS.

DBX 1000 - PLASTIC INSTALLATION  
1. ORBIT BOX TO MATCH DESIRED VENTING DIRECTION. SCORE & REMOVE APPROXIMATE 2" OR REAR INCH AVOID VENT PENNECK-OUT. ALLOW MINIMUM OF 4 INCHES OF VENT PIPE TO EXTEND INSIDE THE BOX  
2. IF GAS LINE IS TO BE INSTALLED, LOCATE 1/8" STRAW CLAMP ON TOP OF BOX. CUT THE WEBB BETWEEN THE RING WITH UTILITY KNIFE. PUSH THE GAS LINE THROUGH THE STRAW CLAMP. THE RING WILL FLEX FORWARD HOLDING THE PIPE.  
3. SLIDE BOX INTO POSITION TAKING CARE TO CORRECTLY ALIGN VENT PIPE AND GAS PIPE (IF PRESENT).  
4. SPACING TABS WILL AUTOMATICALLY POSITION BOX SO THAT BOTTOM, INSIDE EDGE OF 2 1/4 TO 2 1/2 INCHES ABOVE FINISHED FLOOR TO ALLOW CLEARANCE BETWEEN TRIM RING AND FINISH FLOOR. COVERING TABS MAY BE REMOVED IF UNDESIRABLE SPACING IS DESIRED.  
5. ATTACH BOX DIRECTLY TO BOTH RIGHT AND LEFT STUDS USING THE SIX FLANGE SCREW HEADS. SCREWS ARE RECOMMENDED FOR MOUNTING.

TRIM INSTRUCTIONS:  
1. SNAP OUT LEFT OR RIGHT TRIM RING "CUT OUT" (SEE DETAIL BELOW).  
2. LEAVE 1/8" INCHES BETWEEN INSIDE EDGE OF BOX AND END OF BASEBOARD TO ALLOW FOR TRIM RING CLEARANCE.  
3. SNAP TRIM RING INTO OPENING, NO CAULKING REQUIRED.  
4. LEAVE UNFINISHED OR PAINT WITH DESIRED COLOR.

THE DBX 1000M - METAL BOX INSTALLATION

1. ORBIT BOX TO MATCH DESIRED VENTING DIRECTION. ALLOW A MINIMUM OF 4" OF VENT PIPE TO EXTEND INTO THE BOX.  
2. IF GAS LINE IS TO BE INSTALLED, INSERT INTO KNOCKOUT PROVIDED.  
3. SLIDE BOX INTO POSITION TAKING CARE TO CORRECTLY ALIGN VENT PIPE AND GAS PIPE (IF PRESENT).  
4. SET BOX SO THAT THE BOTTOM IS 1/8" ABOVE THE FLOOR TO ALLOW CLEARANCE FOR THE TRIM RING.  
5. ATTACH BOX DIRECTLY TO EITHER FRAMING MEMBER AND USE STRAPS TO SECURE THE OTHER SIDE TO THE OPPOSITE FRAMING MEMBER.  
6. SCREWS OR NAILS (1 1/4") IN LENGTH TO ATTACH THE DBX1000M BOX TO FRAMING.

TRIM INSTALLATION INSTRUCTIONS:  
1. TRIM CARPENTER TO LEAVE 1/8" BETWEEN INSIDE EDGE OF BOX AND END OF BASEBOARD TO ALLOW TRIM RING CLEARANCE.  
2. SNAP TRIM RING INTO OPENING, NO CAULKING REQUIRED.  
3. TRIM RING IS POWDER COATED, NO FINISHING REQUIRED.  
4. TRIM RING ACCOMMODATES 9/8" OR 3/8" DRYWALL.

### DIVISION 26- ELECTRICAL

#### 26-00 GENERAL ELECTRICAL

ALL DRAWINGS INDICATE LOCATIONS OF ELECTRICAL ITEMS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER.

CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PLANS FOR ALL DESIRED LOCATIONS FOR ELECTRICAL SWITCHES, OUTLETS, SCHEMATIC WIRING, EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH ELECTRICAL FIXTURE SCHEDULES AS RELATED BY ARCHITECT OR OWNER. COORDINATE WITH ELECTRICAL KEY NOTES, INTERNATIONAL BUILDING CODE AND SELECTED CODES FOR INSTALLATION REQUIREMENTS, AND ADDITIONAL INFORMATION.

ELECTRICAL CONTRACTOR SHALL INSTALL ALL BOXES FOR OUTLETS, SWITCHES, LIGHTS, DATA, COMMUNICATIONS AND ALL SPECIALTY ITEMS AND SHALL REVIEW AND RECEIVE APPROVAL FROM OWNER/ARCHITECT/DESIGNER PRIOR TO INSTALLATION OF WIRING. RELOCATION OF BOXES AFTER WIRING AS DIRECTED BY OWNER/ARCHITECT/DESIGNER WITHOUT APPROVAL OF LOCATION SHALL BE COMPLETED WITH NOT COST TO THE OWNER.

THE ELECTRICAL SYSTEM SHALL COMPLY WITH 2012 I.R.C. AND 2005 N.E.C. AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE, AND NATIONAL CODES. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMITY WITH THESE REGULATIONS WHETHER OR NOT SUCH WORK IS SPECIFICALLY SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL FEEDERS, PANEL BOARDS, RELAY BRANCH CIRCUIT WIRING, CONDUITS, WIRE, METER BASES, COMPLETE WIRING FOR MOTORS, EXHAUST FANS, LINE VOLTAGE CONNECTIONS FOR HVAC EQUIPMENT, SPECIALTY LIGHTING FIXTURES, OUTLET BOXES, COVER PLATES, WALL SWITCHES, FIXTURES, RECEPTACLES, ETC.

ALL DRAWINGS INDICATE LOCATIONS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL POWER REQUIREMENTS. (I.R.C. E3801)

PROVIDE A 1/8" GROUND. AN ELECTRODE ENCASED BY AT LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2" INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E3805.1.2 AND N.E.C. 250.50)

ELECTRICAL SERVICE CAPACITY AND SIZE SHALL BE COMPLETED BY METHOD INDICATED IN THE I.R.C. AND NATIONAL ELECTRICAL CODE. PANELS OR CABINETS ENCLOSING FUSES, CIRCUIT BREAKERS, SWITCHES OR OTHER ELECTRICAL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCES TO BE A MINIMUM 30" WIDTH, 36" DEPTH AND 6" FROM FLOOR TOP. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER. (I.R.C. E3805)

ALL RECEPTACLES LOCATED WITH THE FOLLOWING CONDITIONS TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN BATHROOMS, OUTSIDE AT GRADE LEVEL, UNFINISHED BASEMENTS, CRAWL SPACES, AND IN GARAGES. GARAGE RECEPTACLES TO BE 1' ABOVE FINISHED FLOOR. (I.R.C. E3802)

ALL SWITCHES, RECEPTACLES, TELEPHONE JACKS AND CATV JACKS TO BE "LEVITON" 5601 ROCKER SERIES IN WHITE. (O.A.E.) DIMMER SWITCHES TO BE "LITRON" DIVA ROCKER SERIES IN WHITE. (O.A.E.) HEIGHT OF LIGHT SWITCHES FROM FINISHED FLOOR TO TOP OF SWITCH TO BE 48" UNLESS NOTED OTHERWISE. THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 18" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE 12" TO CENTER ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WORKING.

UNLESS NOTED OTHERWISE, LOCATE AND INSTALL ONE (1) GFCI WEATHER PROTECTED RECEPTACLE AT GRADE LEVEL AND OUTSIDE AT SLOTT AT EACH EXTERIOR DOOR.

ALL FIXTURES SHALL HAVE A U.L. LABEL LISTING. IF NOT U.L. LISTED LIGHTS SHALL NOT BE USED. ALL RECESS DOWN LIGHTS TO BE INSTALLED WITH GROUNDING AND GROUNDING SHALL BE INSTALLED WITH GROUNDING. ALL CATV IN PLACE FIXTURES TO BE INCLUDED IN BASE BID. ALL RECESSED DOWN LIGHTS TO BE INCLUDED IN BASE BID WITH TRIM RINGS AS SELECTED BY DESIGNER OR OWNER. ALL LIGHTS IN CLOSETS SHALL MEET I.R.C. E3903.11 REQUIREMENTS. ALL LIGHTS LOCATED IN WET OR DAMP LOCATIONS SHALL MEET I.R.C. E3903.6 - E3903.10 REQUIREMENTS.

SMOKE DETECTORS TO BE HARD WIRED TO BUILDING CIRCUIT AND INTERCONNECTED WITH BATTERY BACK UP. PROVIDE SMOKE DETECTORS AT ALL BUILDING LEVELS, IN ALL BEDROOMS, ACCESS TO ALL BEDROOMS, ETC. (I.R.C. R313)

ALL BRANCH CIRCUITS THAT SUPPLY RECEPTACLE OUTLETS IN BEDROOMS NEED TO BE PROVIDED WITH ARC-FAULT PROTECTION. (N.E.C. 210.12) (IRC E3802.12)

ALL STRUCTURED WIRING (IE. FIBER SMART CABLE, CAT5E, ETC.) TO HAVE A MINIMUM SEPARATION OF 12" BETWEEN HIGH VOLTAGE WIRING.  
CARBON MONOXIDE DETECTOR TO BE INSTALLED ON EACH HABITABLE LEVEL OF A DWELLING UNIT EQUIPPED WITH FUEL BURNING APPLIANCE. DETECTOR TO BE HARD WIRED WITHIN CIRCUMFERENCE OF BATTERY BACK UP. (I.R.C. 312.2 AND STATE AMENDMENT)

TOPSOIL STRIPPING  
REMOVE SOIL AND GRASS BEFORE STRIPPING TOPSOIL.  
STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMIXING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.  
STOCKPILE TOPSOIL MATERIALS AWAY FROM THE EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.

SITE IMPROVEMENTS  
REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.

DISPOSAL  
REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTION, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNERS PROPERTY.

SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NON-RECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

ALL DRAWINGS INDICATE LOCATIONS OF ELECTRICAL ITEMS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER.

ELECTRICAL SERVICE CAPACITY AND SIZE SHALL BE COMPLETED BY THE METHOD IRC CHAPTER 36.

UNLESS INDICATED IN THE 2012 I.R.C. AND NATIONAL ELECTRICAL CODE, PANELS OR CABINETS ENCLOSING FUSES, CIRCUIT BREAKERS, SWITCHES, OR OTHER ELECTRICAL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCES TO BE A MINIMUM 30" WIDTH, 36" DEPTH AND 6'-4" FROM FINISHED FLOOR. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER.

#### 26-02 ELECTRICAL LIGHT FIXTURES

GENERAL PRODUCTS  
LIGHTING CONTROLS AND MOTORIZED SHADES BY LITRON. MANUFACTURER TO PROVIDE SHOP DRAWINGS AND SPECIFICATIONS TO BE REVIEWED BY ARCHITECT.

ELECTRICAL  
LIGHT SWITCHES SHALL BE INSTALLED AT A HEIGHT OF 48" FROM FINISHED FLOOR TO TOP OF SWITCH, UNLESS NOTED OTHERWISE. THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 18" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE A MAXIMUM OF 12" FROM THE CENTER LINE OF THE OUTLET ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WIRING.

#### 26-03 ELECTRICAL OUTLETS

GENERAL PRODUCTS  
LEVITON 5601 ROCKER SERIES IN WHITE  
DIMMER SWITCHES - LITRON "DIVA" ROCKER SERIES IN WHITE

ALL RECEPTACLES LOCATED WITH THE FOLLOWING LOCATIONS ARE TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN ALL BATHROOMS, OUTSIDE AT GRADE LEVEL, UNFINISHED BASEMENTS, AND IN GARAGES. GARAGE RECEPTACLES TO BE 18" ABOVE FINISHED FLOOR. (IRC E3902)

#### 26-06 TELEPHONE EQUIPMENT

THE TELEPHONE SYSTEM SHALL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER/CONTRACTOR TO COORDINATE AND PROVIDE DIRECTION FOR INSTALLATION AND LOCATION OF OUTLETS.

#### 26-07 STRUCTURED WIRING

GENERAL PRODUCTS  
ALL STRUCTURED WIRING SHALL BE A MINIMUM OF CAT 6  
ALL LOCATIONS OF STRUCTURED WIRING SHALL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER/ CONTRACTOR TO COORDINATE AND PROVIDE DIRECTION FOR INSTALLATION AND LOCATION OF OUTLETS

### DIVISION 31- EARTHWORK

#### 31-01 SITE CLEARING

GENERAL PRODUCTS  
PROTECTING EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS TO REMAIN.

REMOVING EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS.

CLEARING AND GRUBBING.

STRIPPING AND STOCKPILING TOPSOIL.

REMOVING ABOVE- AND BELOW-GRADE SITE IMPROVEMENTS.

DISSECTION AND CAPPING OR SEALING SITE UTILITIES.

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.

EFFECTIVE IMPROVEMENTS: CAREFULLY REMOVE ITEMS IDENTIFIED TO BE SALVAGED AND STORE ON OWNERS PREMISES WHERE INDICATED.

UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED.

DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.

OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE WHEN SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE.

PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.

LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.

PROTECT EXISTENT SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.

TEMPORARY EROSION AND SEDIMENTATION CONTROL  
FURNISH, INSTALL, MONITOR, AND MAINTAIN EXCAVATION SUPPORT AND PROTECTION SYSTEM CAPABLE OF SUPPORTING EXCAVATION SIDEWALLS AND OF RESISTING SOIL AND HYDROSTATIC PRESSURE AND SUPERIMPOSED AND CONSTRUCTION LOADS. DESIGN EXCAVATION SUPPORT AND PROTECTION SYSTEM, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA AS INDICATED.

TEMPORARY EROSION AND SEDIMENTATION CONTROL  
FURNISH, INSTALL, MONITOR, AND MAINTAIN EXCAVATION SUPPORT AND PROTECTION SYSTEMS CAPABLE OF SUPPORTING EXCAVATION SIDEWALLS AND OF RESISTING SOIL AND HYDROSTATIC PRESSURE AND SUPERIMPOSED AND CONSTRUCTION LOADS. DESIGN EXCAVATION SUPPORT AND PROTECTION SYSTEM, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA AS INDICATED.

INSPECT, REPAIR, AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.

REMOVE EROSION AND SEDIMENTATION CONTROLS AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.

TREE PROTECTION  
FURNISH, INSTALL, MONITOR, AND MAINTAIN EXCAVATION SUPPORT AND PROTECTION SYSTEM CAPABLE OF SUPPORTING EXCAVATION SIDEWALLS AND OF RESISTING SOIL AND HYDROSTATIC PRESSURE AND SUPERIMPOSED AND CONSTRUCTION LOADS. DESIGN EXCAVATION SUPPORT AND PROTECTION SYSTEM, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA AS INDICATED.

DO NOT EXCAVATE WITHIN TREE PROTECTION ZONES, UNLESS OTHERWISE INDICATED.

REPAIR OR REPLACE TREES AND VEGETATION IDENTIFIED TO REMAIN THAT ARE DAMAGED BY CONSTRUCTION OPERATIONS, IN A MANNER APPROVED BY ARCHITECT.

UTILITIES  
LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED. ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.

1. NOTIFY ARCHITECT NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITH ARCHITECT'S PERMISSION.

CLEARING AND GRUBBING  
FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

MATERIALS  
GENERAL: PROVIDE MATERIALS THAT ARE EITHER NEW OR IN SERVICEABLE CONDITION.

STEEL SHEET PILING: ASTM A 328/A 328M, ASTM A 572/A 572M, OR ASTM A 690/A 690M; WITH CONTINUOUS INTERLOCKS.

WOOD LAGGING: LUMBER, MIXED HARDWOOD, NOMINAL ROUGH THICKNESS OR [SIZE AND STRENGTH REQUIRED FOR APPLICATION].

REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 40), DEFORMED.

EFFECTIVE INSTALLATION  
SOLDER PILES: INSTALL STEEL SOLDER PILES BEFORE STARTING EXCAVATION. EXTEND SOLDER PILES BELOW EXCAVATION GRADE LEVEL TO DEPTHS ADEQUATE TO PREVENT LATERAL MOVEMENT. SPACE SOLDER PILES AT REGULAR INTERVALS NOT TO EXCEED ALLOWABLE FLEXURAL STRENGTH OF WOOD. ACCURATELY ALIGN EXPOSED FACES OF PILES TO VARY NOT MORE THAN 2 INCHES (50 MM) FROM A HORIZONTAL LINE AND NOT MORE THAN 1/32" OUT OF VERTICAL ALIGNMENT.

INSTALL WOOD LAGGING WITHIN FLANGES OF SOLDER PILES AS EXCAVATION PROCEEDS. TRIM EXCAVATION AS REQUIRED TO INSTALL LAGGING. FILL VOIDED BRACING WITH SOIL AND COMPACT. 2. INSTALL WALES HORIZONTALLY AT LOCATIONS INDICATED ON DRAWINGS AND SECURE TO SOLDER PILES.

SHEET PILING: BEFORE STARTING EXCAVATION, INSTALL ONE-PIECE SHEET PILING LENGTHS AND TIGHT INTERLOCK TO FORM A CONTINUOUS BARRIER. ACCURATELY PLACE THE PILING USING TEMPLATES AND GUIDE FRAMES UNLESS OTHERWISE RECOMMENDED IN WRITING BY THE SHEET PILING MANUFACTURER. LIMIT VERTICAL OFFSET OF ADJACENT SHEET PILING TO 60 INCHES (1500 MM). ACCURATELY ALIGN EXPOSED FACES OF SHEET PILING TO VARY NOT MORE THAN 2 INCHES (50 MM) FROM A HORIZONTAL LINE AND NOT MORE THAN 1/32" OUT OF VERTICAL ALIGNMENT.

BRACING: LOCATE BRACING TO CLEAR COLUMNS, FLOOR FRAMING CONSTRUCTION, AND OTHER PERMANENT WORK, IF NECESSARY TO MOVE BRACE. INSTALL NEW BRACINGS BEFORE REMOVING ORIGINAL BRACE. 1. DO NOT PLACE BRACING WHERE IT WILL BE CAST INTO OR INCLUDED IN PERMANENT CONCRETE WORK UNLESS OTHERWISE APPROVED BY ARCHITECT.

2. INSTALL INTERNAL BRACING, IF REQUIRED, TO PREVENT SPREADING OR DISTORTION OF BRACED FRAMES.

MAINTAIN BRACING UNTIL STRUCTURAL ELEMENTS ARE SUPPORTED BY OTHER BR

**BUILDING KEYNOTES AND SPECIFICATIONS**  
**DIVISION 32- EXTERIOR IMPROVEMENTS/LANDSCAPING**  
**32-04 UNIT PAVERS/ RETAINING WALLS/ STAIRS**

GENERAL PRODUCTS  
PAVERS SHALL BE THE FOLLOWING: AS PER LANDSCAPE DRAWINGS  
PAVERS SHALL BE INSTALLED IN FOLLOWING PATTERN: AS PER LANDSCAPE DRAWINGS  
PAVER COLOR SHALL BE SELECTED BY ARCHITECT. AS PER LANDSCAPE DRAWINGS

SUBMITTALS  
SAMPLES FOR UNIT PAVERS, JOINT MATERIALS, AND EDGE RESTRAINTS

EXECUTION  
DO NOT USE FROZEN MATERIALS OR BUILD ON FROZEN SUBGRADE OR SETTING BEDS. PROTECT UNIT PAVEMENT WORK AGAINST FREEZING FOR 24 HOURS AFTER INSTALLATION.

MIX PAVERS FROM SEVERAL PALLETS OR CUBES, AS THEY ARE PLACED, TO PRODUCE UNIFORM BLEND OF COLORS AND TEXTURES.

CUT UNIT PAVERS WITH MOTOR-DRIVEN MASONRY SAW EQUIPMENT TO PROVIDE PATTERN INDICATED AND TO FIT ADJOINING WORK NEATLY. USE FULL UNITS WITHOUT CUTTING WHERE POSSIBLE. INSTALL EDGE RESTRAINTS BEFORE PLACING UNIT PAVERS.

TOLERANCES: DO NOT EXCEED 1/16-INCH UNIT-TO-UNIT OFFSET FROM FLUSH (UPPAGE) NOR 1/8 INCH IN 24 INCHES AND 1/4 INCH IN 10 FEET FROM LEVEL OR INDICATED SLOPE, FOR FINISHED SURFACE OF PAVING.

COMPACT SOIL SUBGRADE UNIFORMLY AND PLACE AGGREGATE BASE. COMPACT BY TAMPING WITH PLATE VIBRATOR, AND SCREED TO DEPTH AS INDICATED.

PLACE LEVELING COURSE AND SCREED TO A THICKNESS OF 1 TO 1-1/2 INCHES, TAKING CARE THAT MOISTURE CONTENT REMAINS CONSTANT AND DENSITY IS LOOSE AND CONSTANT UNTIL PAVERS ARE SET AND COMPACTED. TREAT LEVELING COURSE WITH HERBICIDE TO INHIBIT GROWTH OF GRASS AND WEEDS.

SET PAVERS WITH A MINIMUM JOINT WIDTH OF 1/16-INCH AND A MAXIMUM OF 1/8 INCH. BEING CAREFUL NOT TO DISTURB LEVELING BASE. IF PAVERS HAVE SPACER BARS, PLACE PAVERS HAND TIGHT AGAINST SPACER BARS.

VIBRATE PAVERS INTO LEVELING COURSE AND SPREAD DRY SAND AND FILL JOINTS IMMEDIATELY AFTER VIBRATING PAVERS INTO LEVELING COURSE. VIBRATE PAVERS AND ADD SAND UNTIL JOINTS ARE COMPLETELY FILLED, THEN REMOVE EXCESS SAND. LEAVE A SLIGHT SURPLUS OF SAND ON THE SURFACE FOR JOINT FILLING.

32-10 IRRIGATION SYSTEMS  
GENERAL PRODUCTS  
SEE LANDSCAPE DRAWINGS

ALL IRRIGATION SHALL MEET ALL CITY LANDSCAPE REQUIREMENTS.

32-11 PLANTING  
GENERAL PRODUCTS  
SEE LANDSCAPE DRAWINGS.

ALL PLANTING SHALL MEET ALL CITY LANDSCAPE REQUIREMENTS.



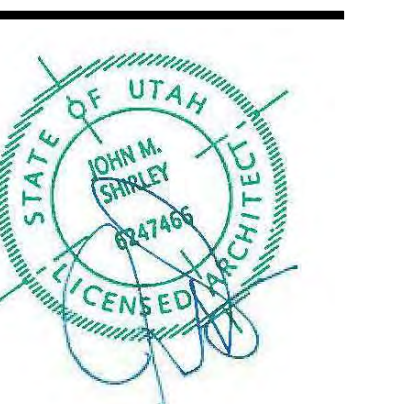
**Architecture**

Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:

SHEET TITLE:  
SPECIFICATIONS

SHEET NUMBER:  
G009

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PERMIT SET

NO.	REVISIONS	DESCRIPTION	DATE	BY
1				

**BENCHMARK ASSOCIATES**

PREPARED BY:  
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**GRADING & DRAINAGE PLAN**

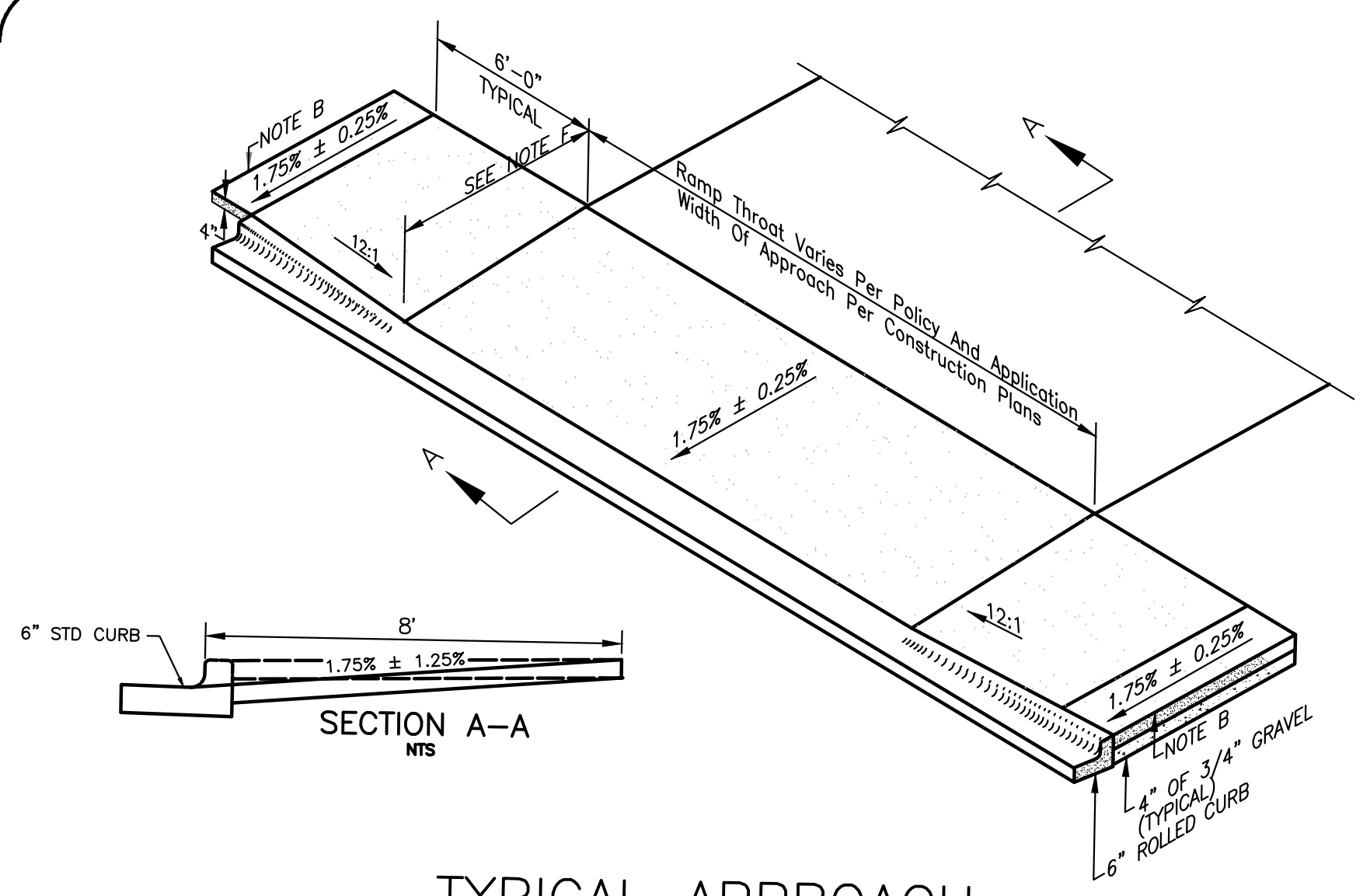
**WARM SPRINGS RANCH LOT 32**

T4N, R17E, SEC 12, B.M., BLAINE COUNTY, IDAHO

**PREPARED FOR: MAGLEBY CONSTRUCTION**

DRAWN BY: SLS  
 DESIGNED BY: SLS  
 CHECKED BY: PLJ  
 DATE: 03/13/2023  
 PROJECT NO.: 22073

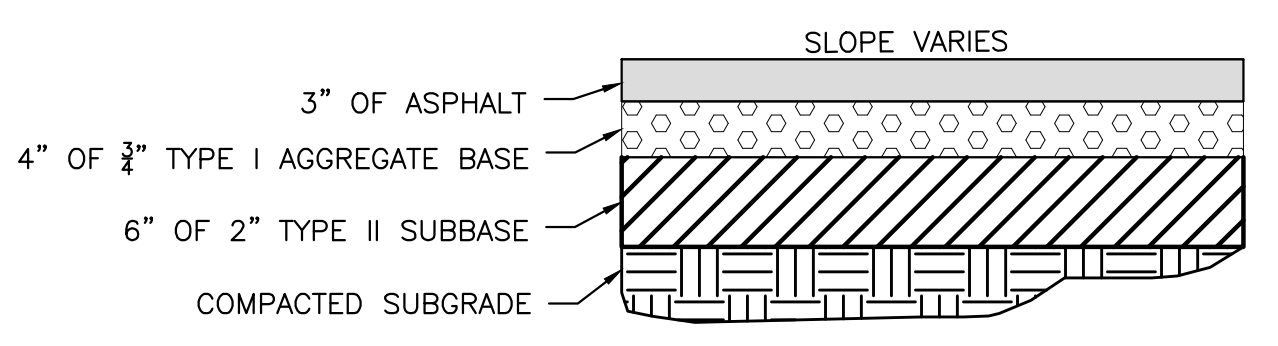
DRAWING NO. **C-1**



**TYPICAL APPROACH**

- NOTES:**
- APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.
  - INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS WHERE SIDEWALK CHANGES THICKNESS.
  - BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION-802.
  - APPROACH THROAT WIDTHS SET BY POLICY AND APPLICATION. ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPARATE FROM CURB THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.
  - ALL CONCRETE SHALL BE CLASS 3000 PER SECTION-703. SEE GENERAL NOTES 7 & 8.
  - SIDEWALK WIDTH IS 8 FEET.

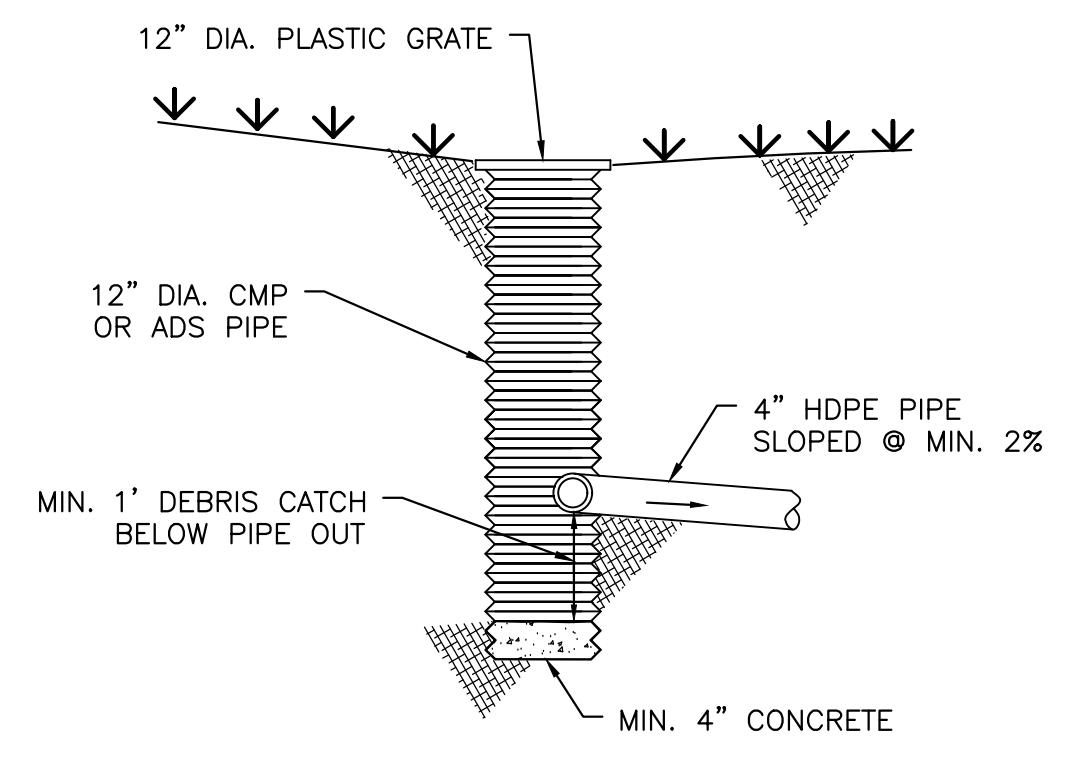
**1 CONCRETE DRIVEWAY WITH RAMPED SIDEWALK**  
 SCALE: NONE



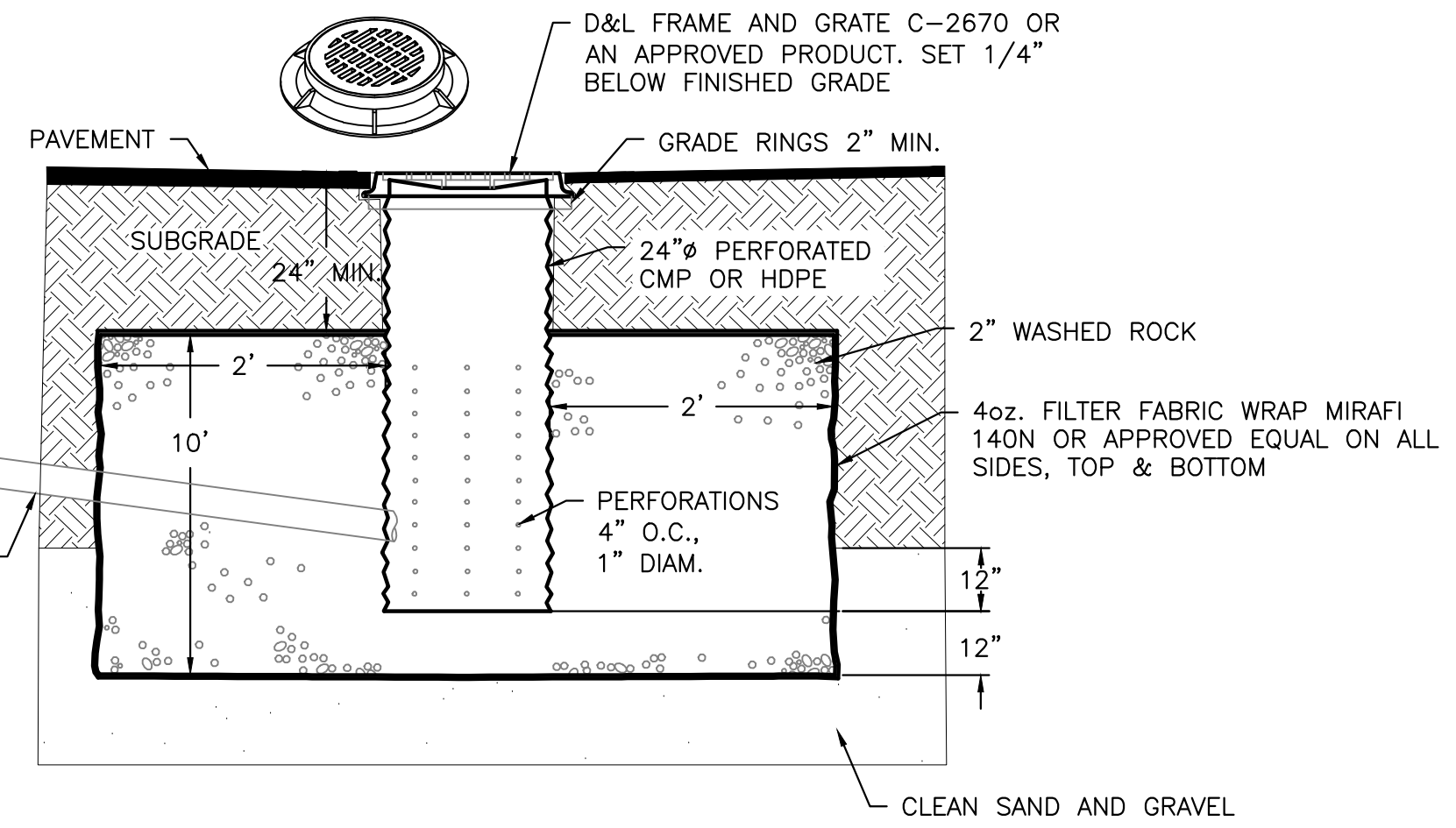
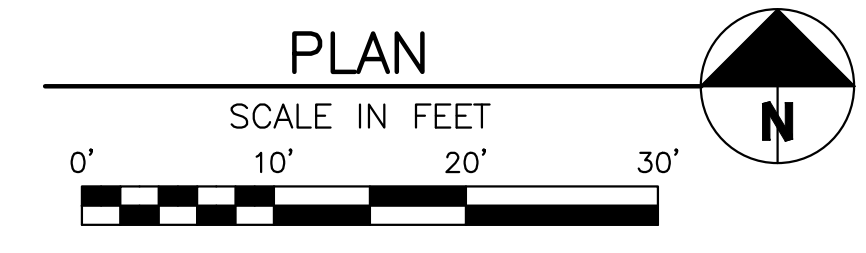
**2 TYPICAL STREET ASPHALT SECTION**  
 SCALE: NONE

**LEGEND**

PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
EASEMENT	---
FENCE	X
EDGE OF PAVEMENT	---
SEWER	S
SEWER MANHOLE (MH)	⊙
WATER	W
WATER GATE VALVE	⊙
HYDRANT	⊙
CURB STOP	⊙
TELEPHONE	T
UTILITY TRENCH	UT
ELEVATION CONTOUR	-5775-
PROPOSED ELEV CONTOUR	-59-
SAWCUT LINE	---
CURB TRANSITION	---
FLOW LINE	---
FOOTING DRAIN	FD
STORM DRAIN PIPE	---
DOWN SPOUT	---
CATCH BASIN-CITY	⊙
CATCH BASIN	⊙
DRYWELL	⊙
LANDSCAPE DRYWELL	⊙
ASPHALT PAVEMENT	---
ASPHALT PAVEMENT (SNOW MELTED)	---
PAVERS	---
CONCRETE	---
FG	---
EG	---
GB	---
ME	---
FINISHED GRADE	---
EXISTING GROUND	---
GRADE BREAK	---
MATCH EXISTING	---

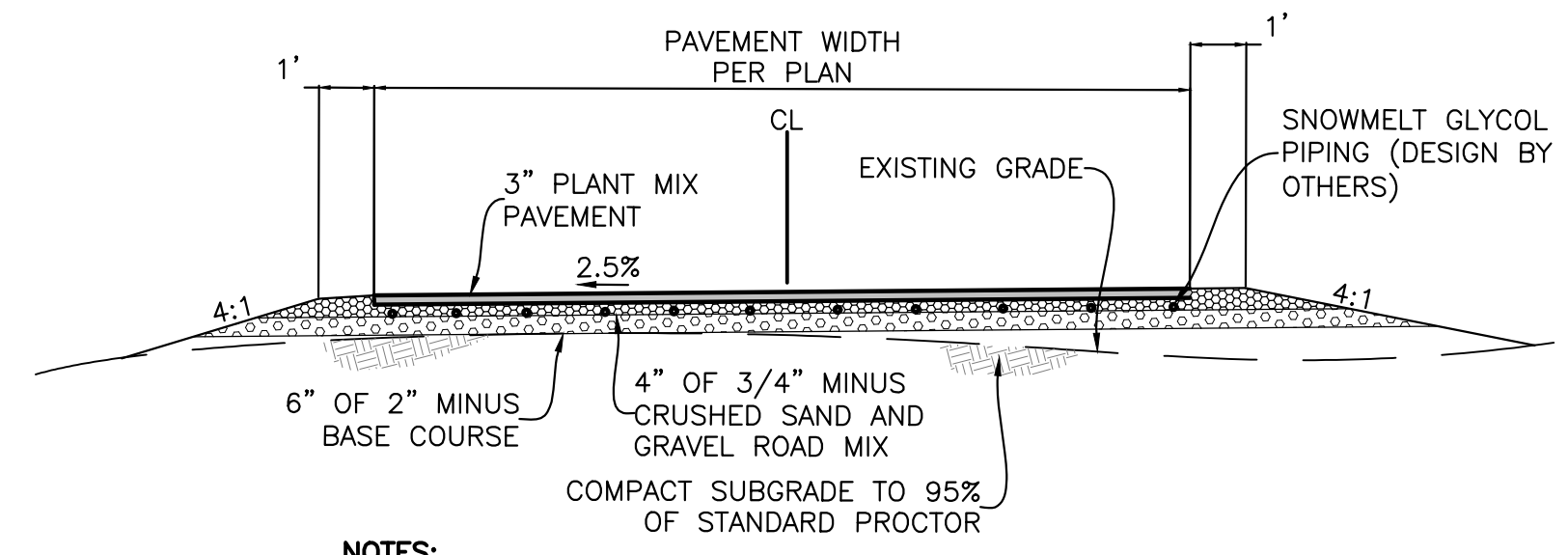


**3 12" CATCH BASIN PROFILE**  
 NOT TO SCALE



- NOTES:**
- THE BED SHALL BE EXCAVATED A MINIMUM OF 24" INTO CLEAN SAND AND GRAVEL.
  - MAXIMUM DEPTH SHALL NOT EXCEED 12 FEET.
  - IF CLEAN SAND AND GRAVEL IS NOT ENCOUNTERED WITHIN 12 FEET, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER.
  - GRATE OR SOLID LID AS APPROVED BY CITY OF KETCHUM.

**4 TYPICAL DRYWELL DETAIL**  
 SCALE: NONE



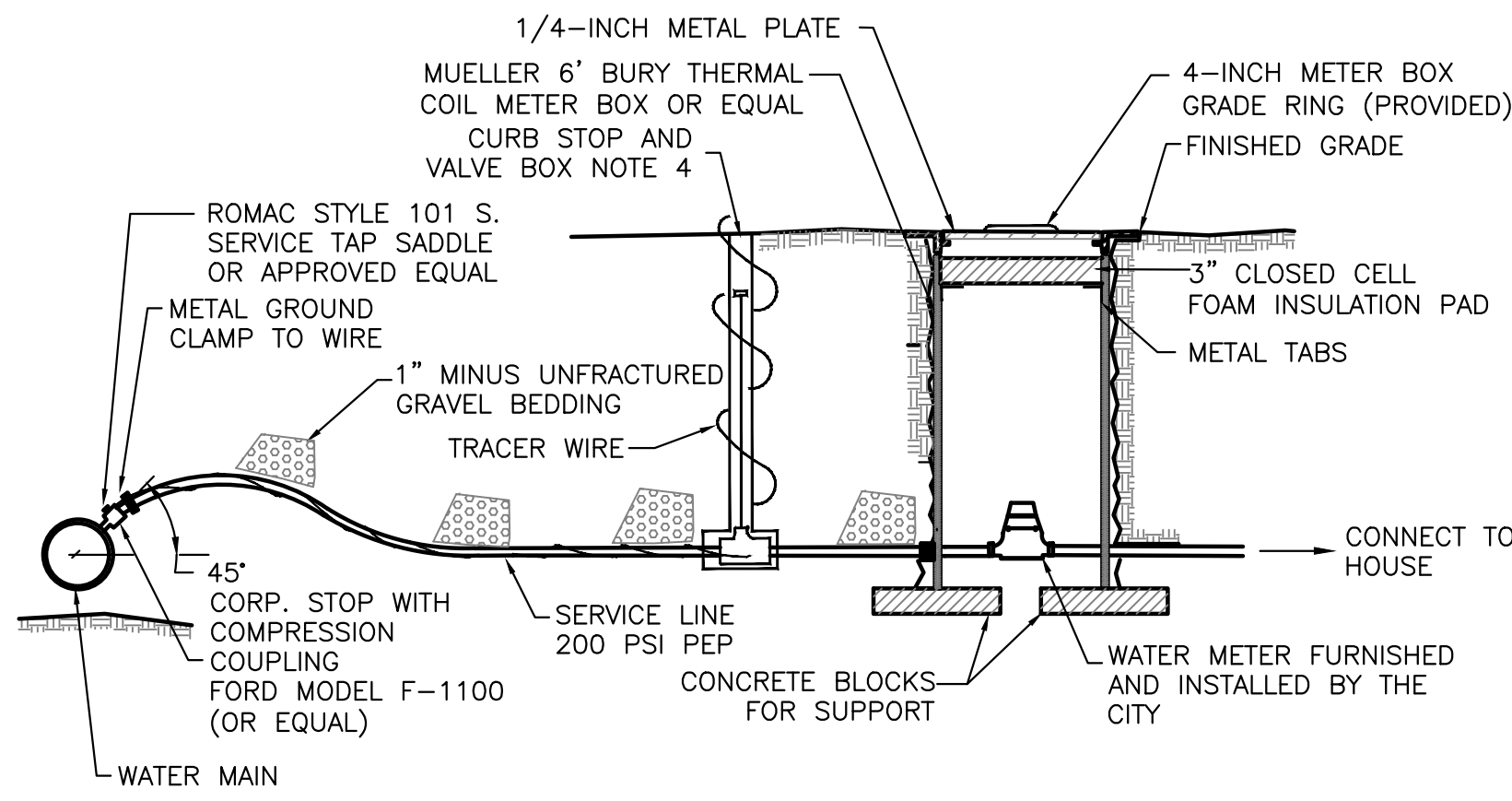
- NOTES:**
- COMPACT DRIVEWAY SUBGRADE AND ALL STRUCTURAL FILL MATERIAL TO AT LEAST 95% OF THE MAXIMUM DENSITY OF EACH MATERIAL ACCORDING TO STANDARD PROCTOR ASTM D-698.

**A DRIVEWAY SECTION WITH SNOW-MELTED PAVEMENT**  
 SCALE: NTS

- GENERAL NOTES**
- CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING CONSTRUCTION. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
  - CONTRACTOR SHALL NOTIFY DIGLINE (1-800-342-1585) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE CONSTRUCTION OF ALL ITEMS HEREON. DUST CONTROL SHALL BE CONTINUOUS DURING CONSTRUCTION, 24 HOURS PER DAY 7 DAYS PER WEEK.
  - CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE HOUSE.
  - TRENCH DRAIN SHALL BE A 6" WIDE HDPE CHANNEL WITH A 0.75 BUILT IN CHANNEL SLOPE (ZURN FLO-THRU MODEL Z886 OR EQUIVALENT). GRATE SHALL BE DUCTILE IRON WITH A SLOTTED PATTERN. CATCH BASIN SHALL BE 6" WIDE X 20" LONG X 20" DEEP AND SHALL BE MADE OF HDPE. OUTLET PIPE SHALL BE 4" DIAMETER. (FLO-THRU MODEL Z887 OR EQUIVALENT). ALL COMPONENTS SHALL BE RATED FOR H2O LOADING.
  - ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL CONFORM TO CITY OF KETCHUM STANDARDS.
  - CONCRETE WITHIN CITY RIGHT-OF-WAY SHALL BE TITAN MIX OR EQUAL. ALTERNATE COLD WEATHER MIX WILL NEED TO BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT.
  - CONCRETE SHALL BE SEALED WITH AN OPAQUE SEALER.
  - 6" ROLLED CURB & GUTTER SHALL BE PER CITY OF KETCHUM STANDARD DETAIL #4.
  - CONCRETE SIDEWALK SHALL BE PER CITY OF KETCHUM STANDARD DETAIL #7.

**UTILITY LEGEND**

- SEWER PROPOSED
- SEWER CLEANOUT
- WATER PROPOSED
- WATER METER PROPOSED



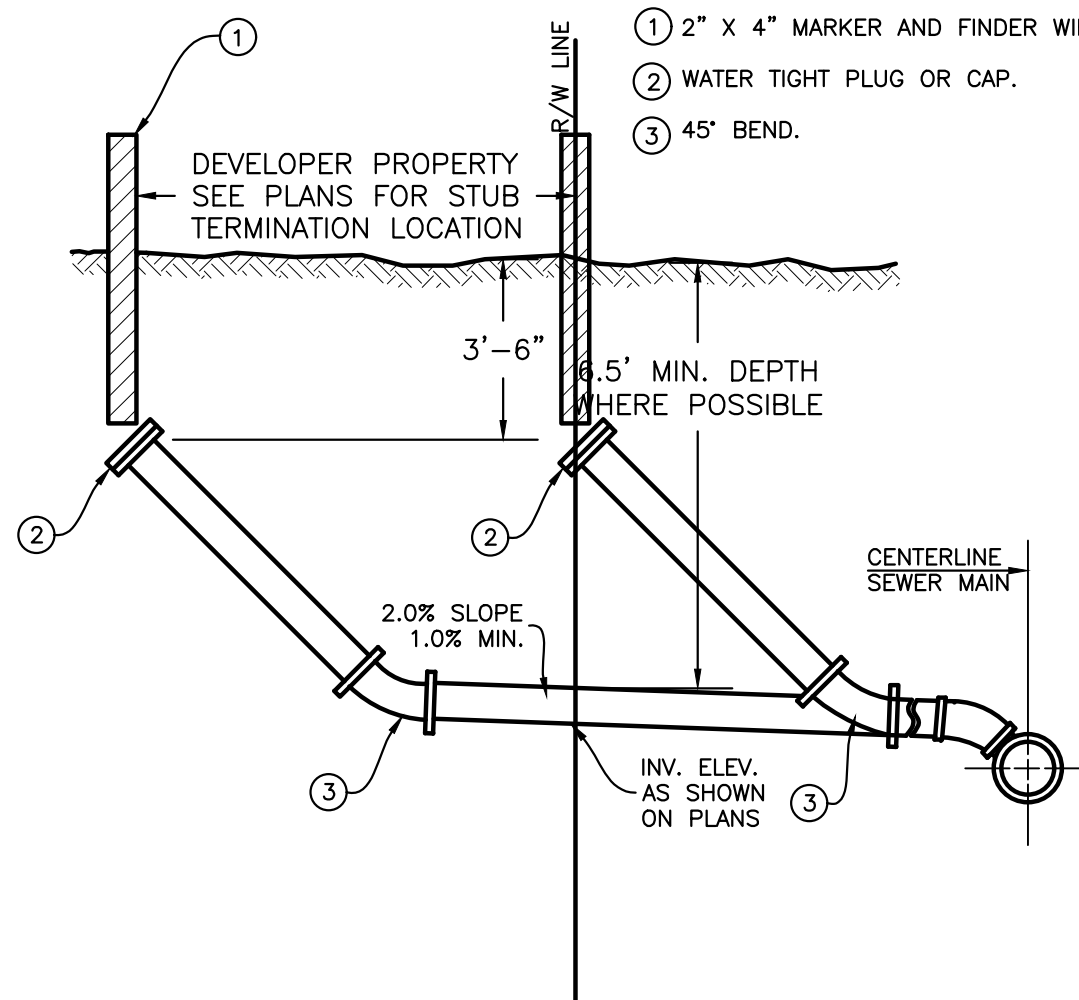
**NOTES**

1. WATER SERVICE LINE SHALL HAVE A 6" MIN. BURY DEPTH
2. SERVICE LINE SHALL BE 1" DIAMETER POLYETHYLENE PIPE UNLESS OTHERWISE SPECIFIED.
3. WATER SERVICE LINES SHALL BE BEDDED WITH 1" MINUS UNFRACTURED GRAVEL. BEDDING SHALL BE INSTALLED 4" UNDER THE PIPE AND 6" OVER THE PIPE.
4. FORD MODEL B-111 RESILIENT SEAT, CURB BALL VALVE (OR EQUAL), FORD EXTENSION CURB BOX WITH ARCHED BASE, 1-INCH UPPER SECTION, AND 2 HOLE "ERIE" PATTERN LID.

**1 WATER SERVICE AND METER CONNECTION**  
SCALE: N.T.S.

**LEGEND**

- ① 2" X 4" MARKER AND FINDER WIRE PER SD-512.
- ② WATER TIGHT PLUG OR CAP.
- ③ 45° BEND.

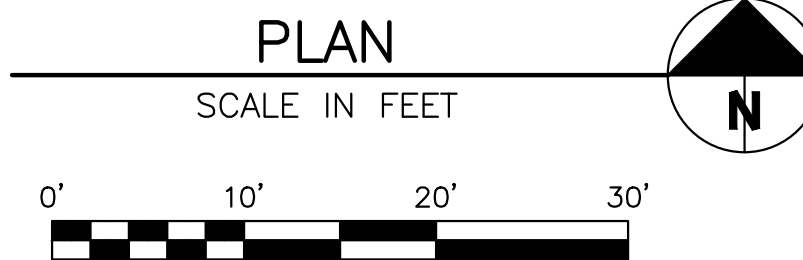
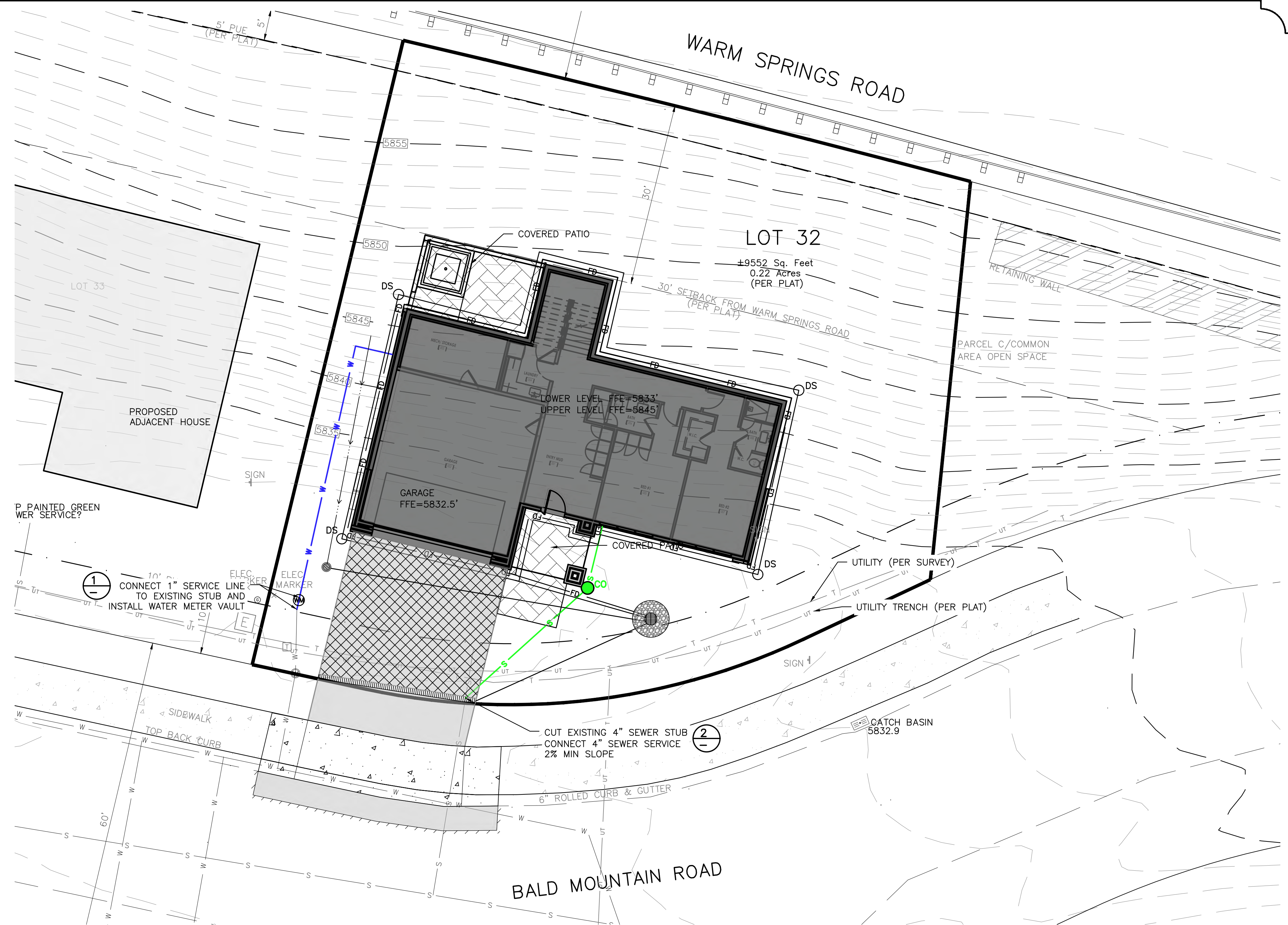


**PROFILE**

**NOTES**

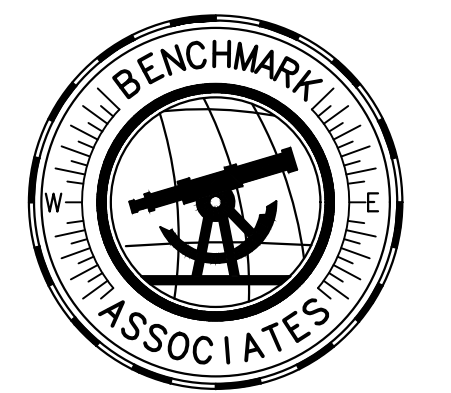
1. INSULATION REQUIRED WHERE SEWER LINE BURY DEPTH IS LESS THAN 5'.

**2 STANDARD SEWER SERVICE CONNECTION DETAIL**  
SCALE: NONE



PROFESSIONAL ENGINEER  
LICENSED  
STATE OF IDAHO  
PROBIE JOHANNESSEN  
17661  
3/13/2023

NO.	REVISIONS	DESCRIPTION	DATE	BY
1				



PREPARED BY:  
BENCHMARK ASSOCIATES, P.A.  
P.O. BOX 733 100 BELL DRIVE  
KETCHUM, IDAHO 83340  
(208) 726-9512  
FAX: 726-9514  
WEB: WWW.BMA5B.COM  
MAIL: WWW.BMA5B.COM

**UTILITY PLAN**  
WARM SPINGS RANCH LOT 32  
T4N, R17E, SEC 12, B.M., BLAINE COUNTY, IDAHO  
PREPARED FOR: MAGLEBY CONSTRUCTION

DRAWN BY: SLS  
DESIGNED BY: SLS  
CHECKED BY: PLW  
DATE: 03/13/2023  
PROJECT NO.: 22073

DRAWING NO.

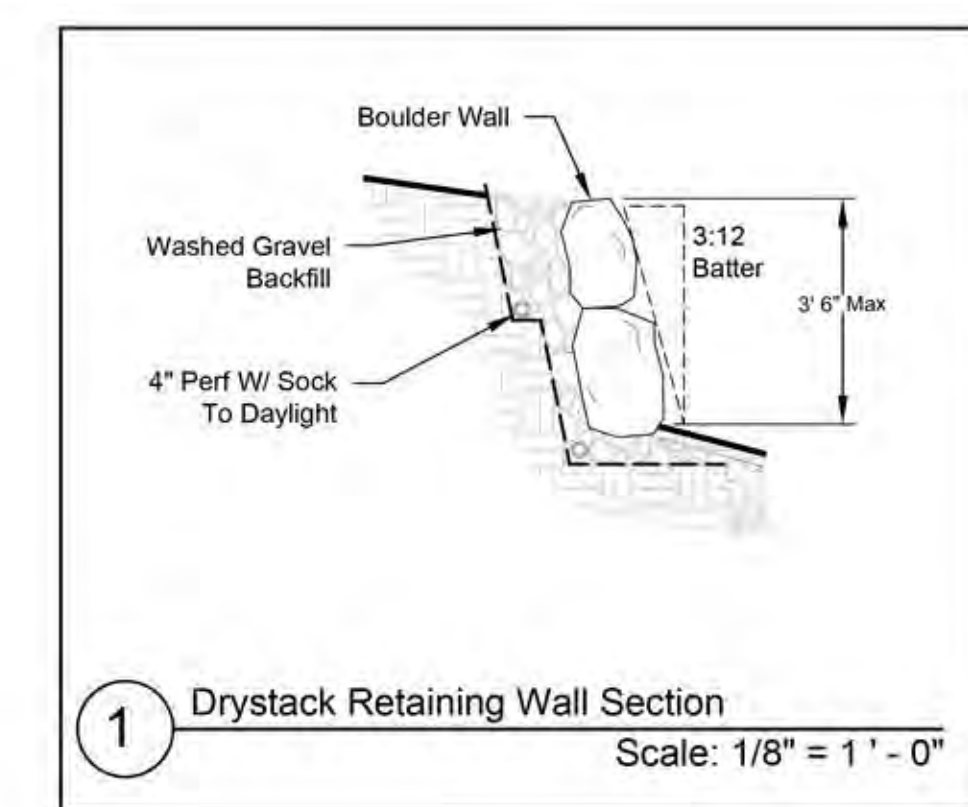
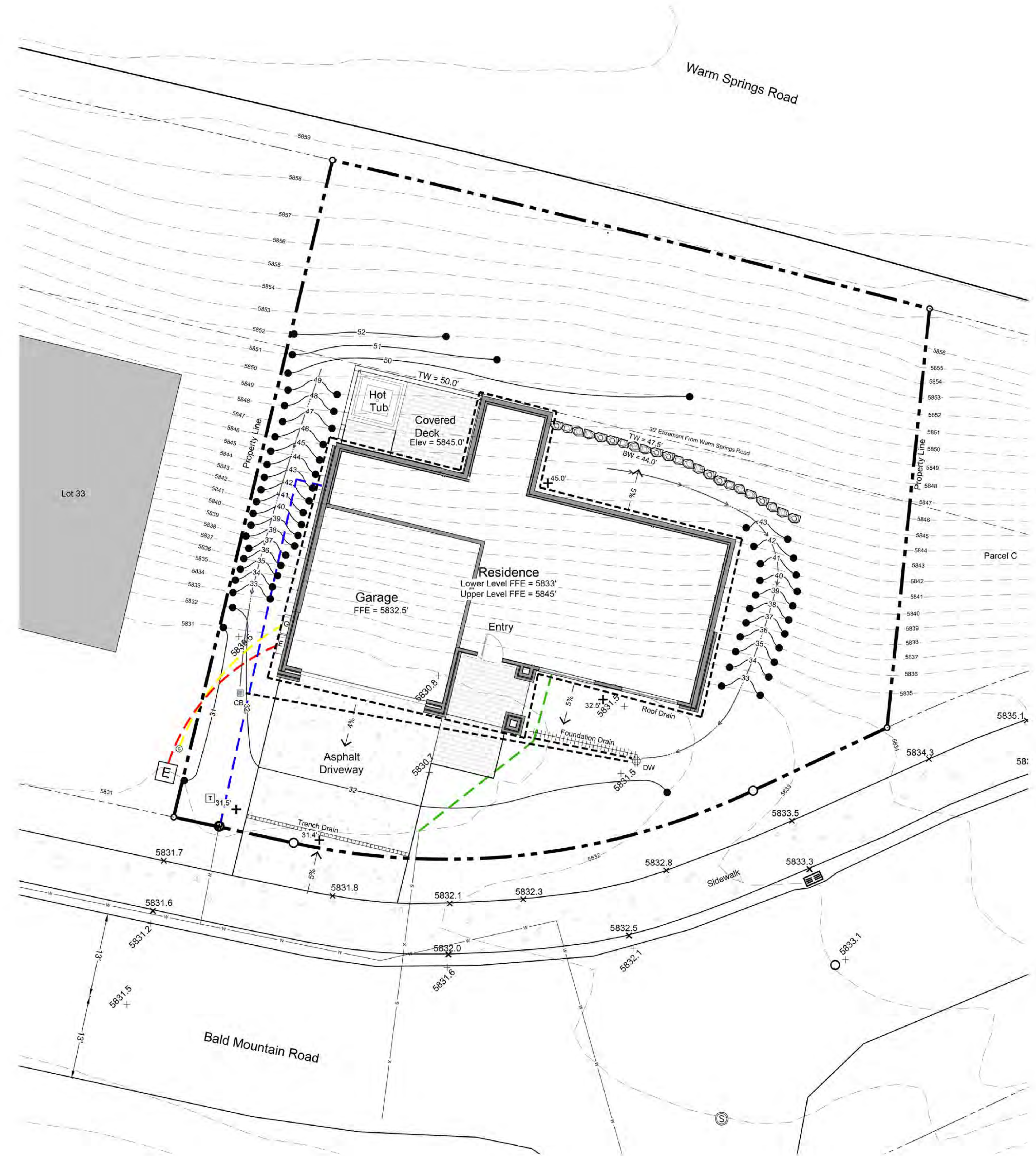
**C-2**





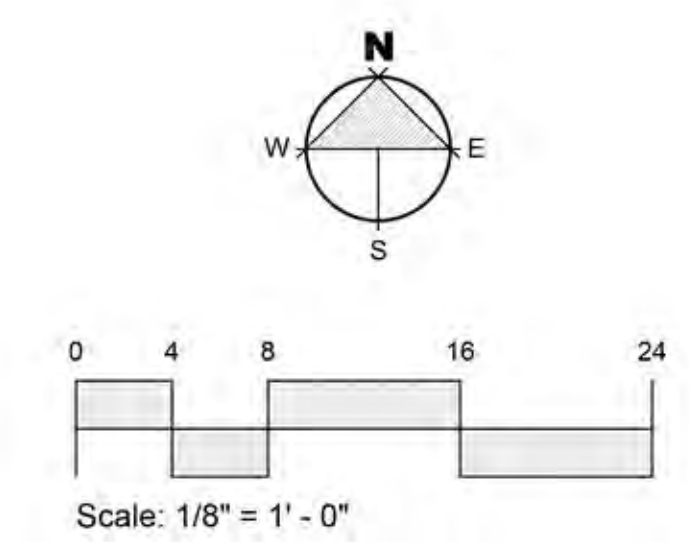
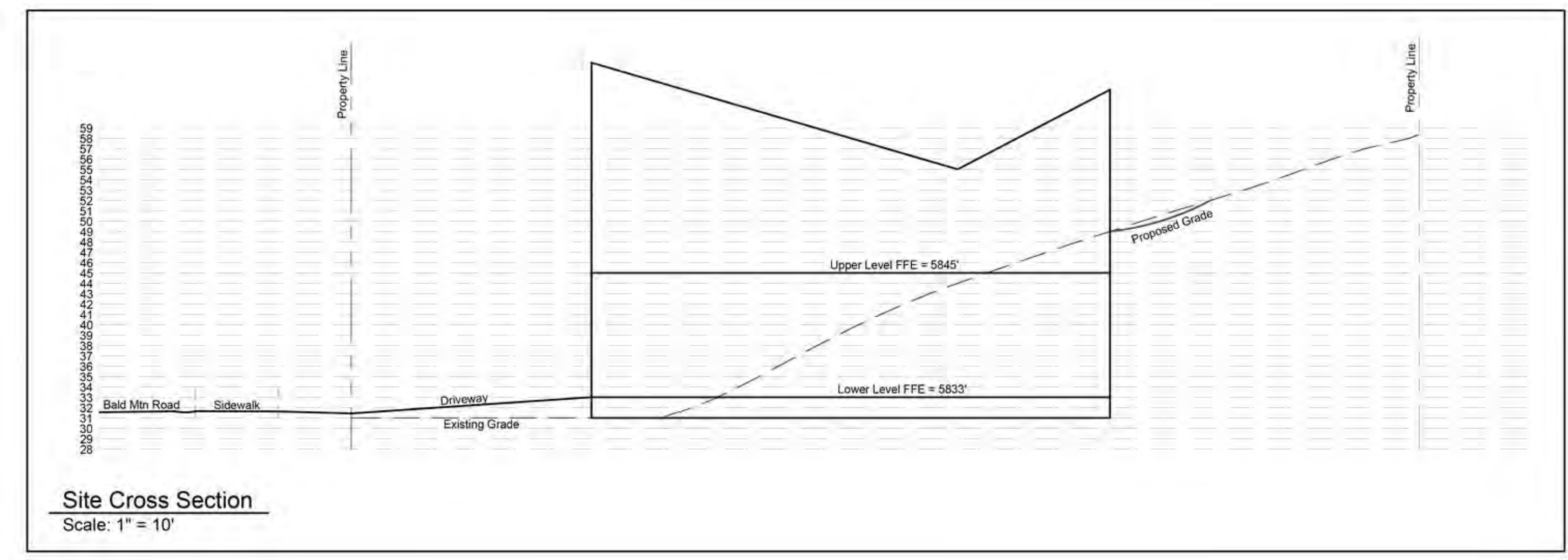
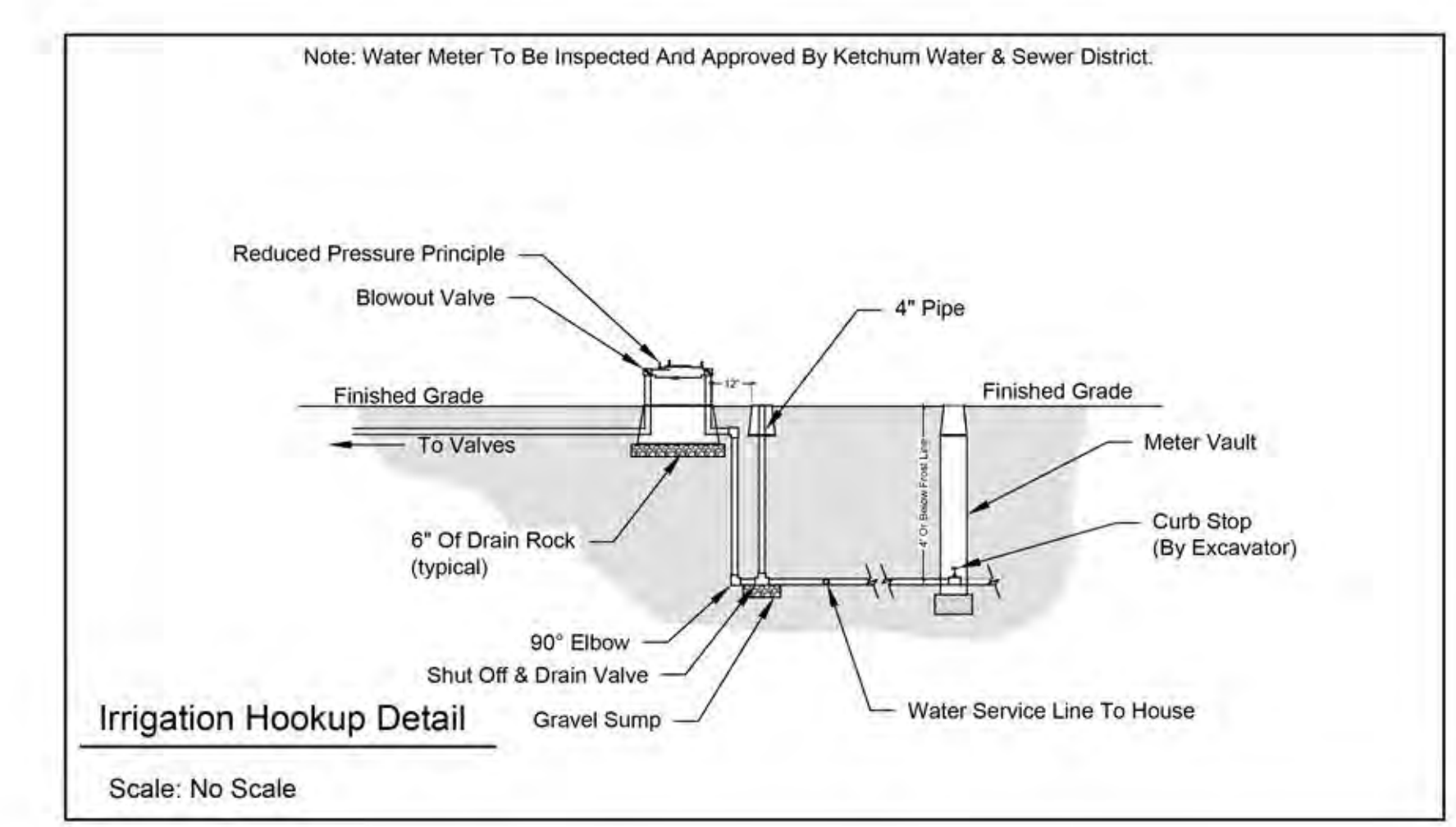
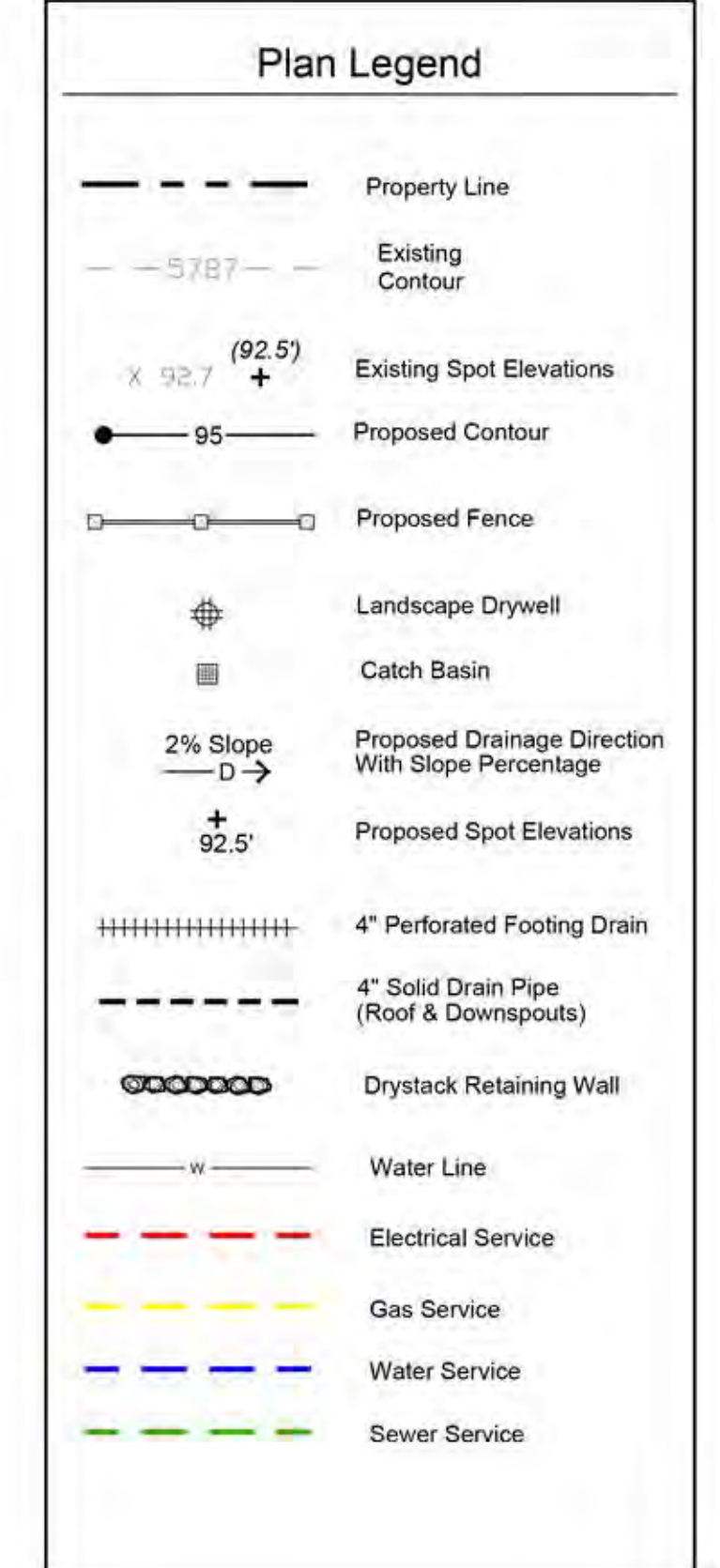
**\* See Civil Plan For Site Grading And Drainage**

- General Notes**
1. Base map information taken from survey by Benchmark Associates dated 11/24/21 and from on-site information. Architectural information provided by Think Architecture dated 02/22/22. Contractor shall verify conditions in the field prior to construction.
  2. Landscape architect is not responsible for any deviation from these plans, unless such changes are authorized by the landscape architect in writing.
  3. All existing utilities are underground. All new utilities shall be underground.
  4. Site serviced by City of Ketchum.

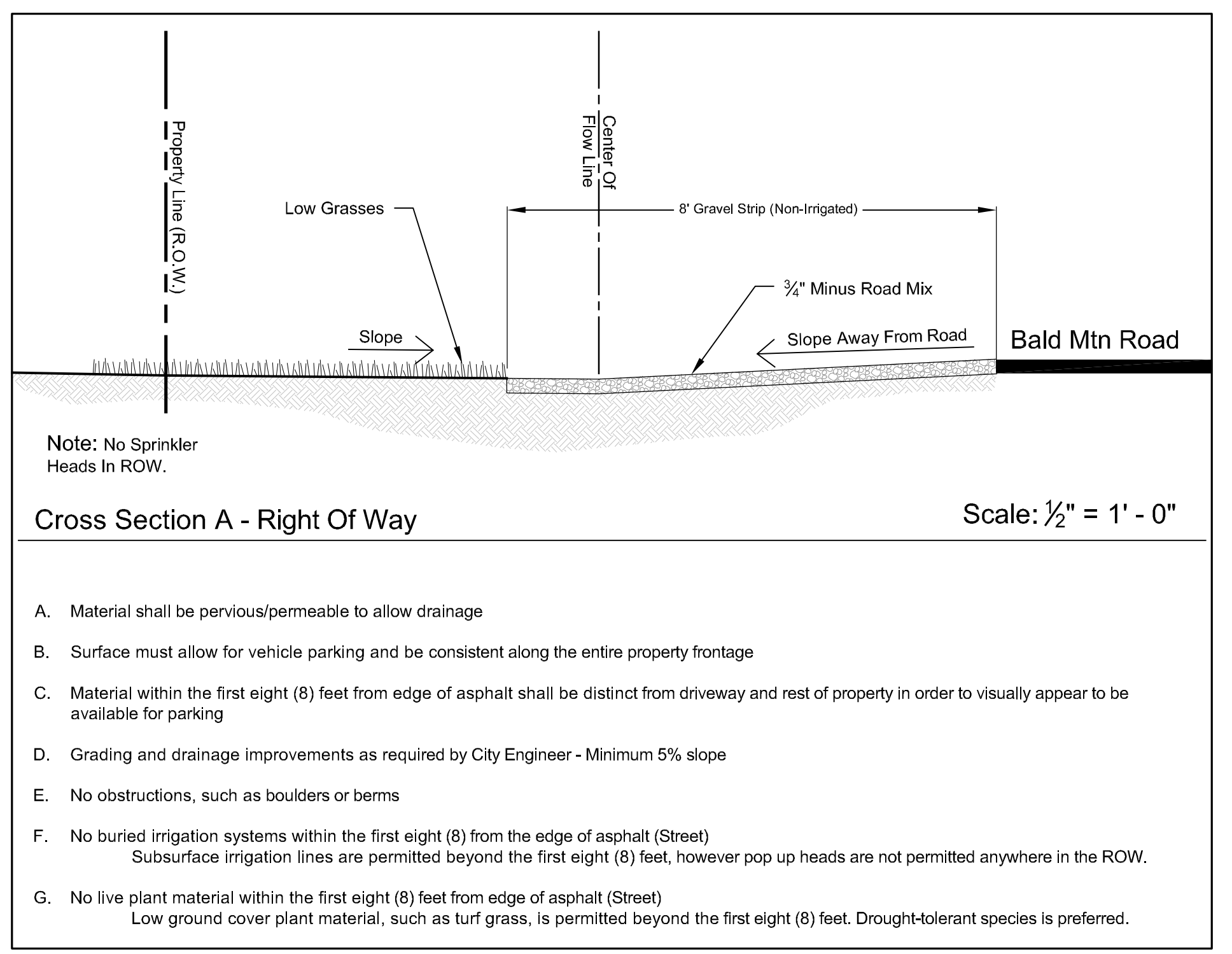
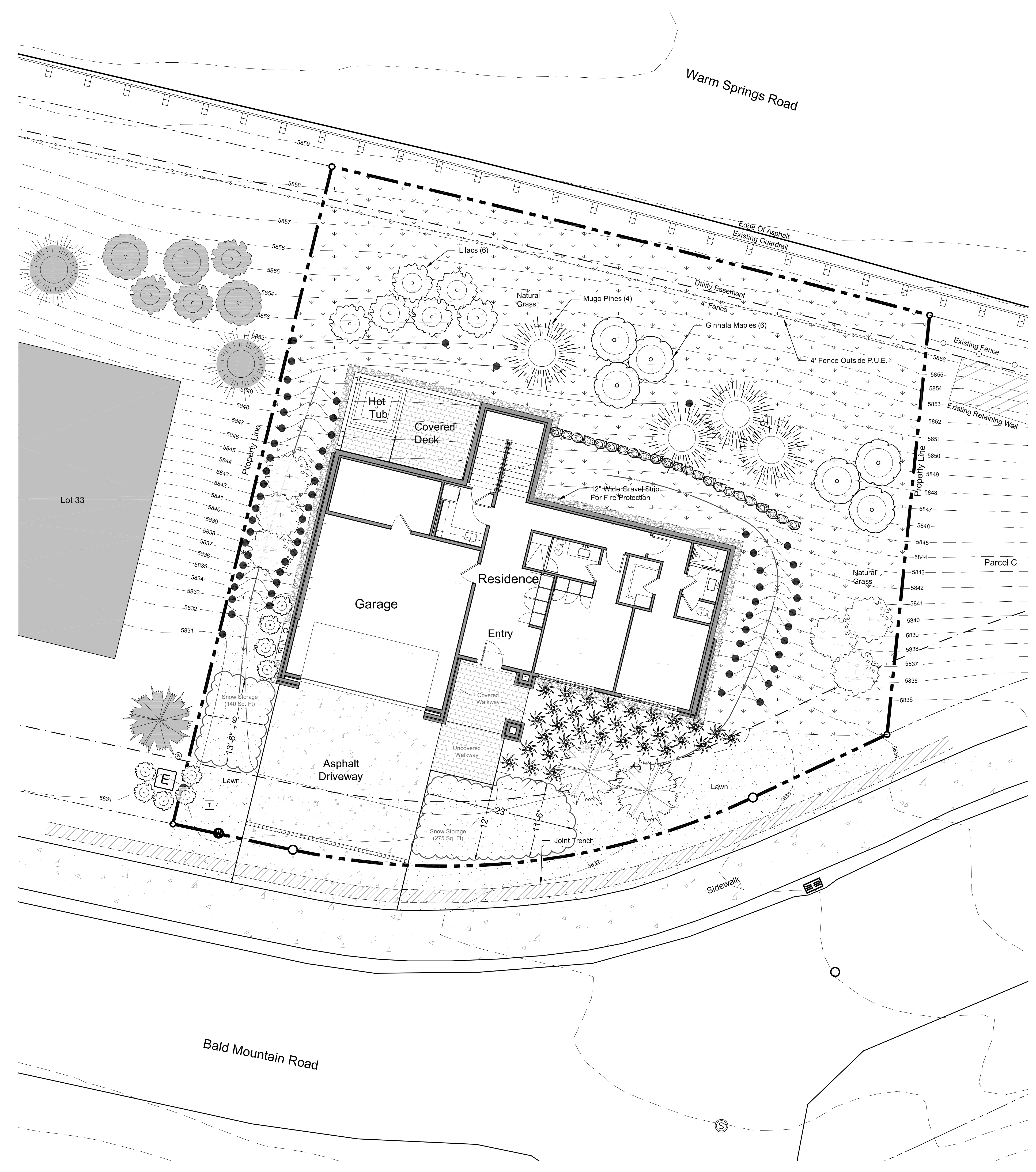


**Cut & Fill**

<b>Excavation:</b>	
Building/Garage:	750 Cu/Yds
Site:	30 Cu/Yds
<b>Total Cut:</b>	<b>780 Cu/Yds</b>
<b>Fill:</b>	
Site Landscape Fill:	30 Cu/Yds
Driveway:	50 Cu/Yds
<b>Total Fill:</b>	<b>80 Cu/Yds</b>
<b>Total Export:</b>	<b>700 Cu/Yds</b>



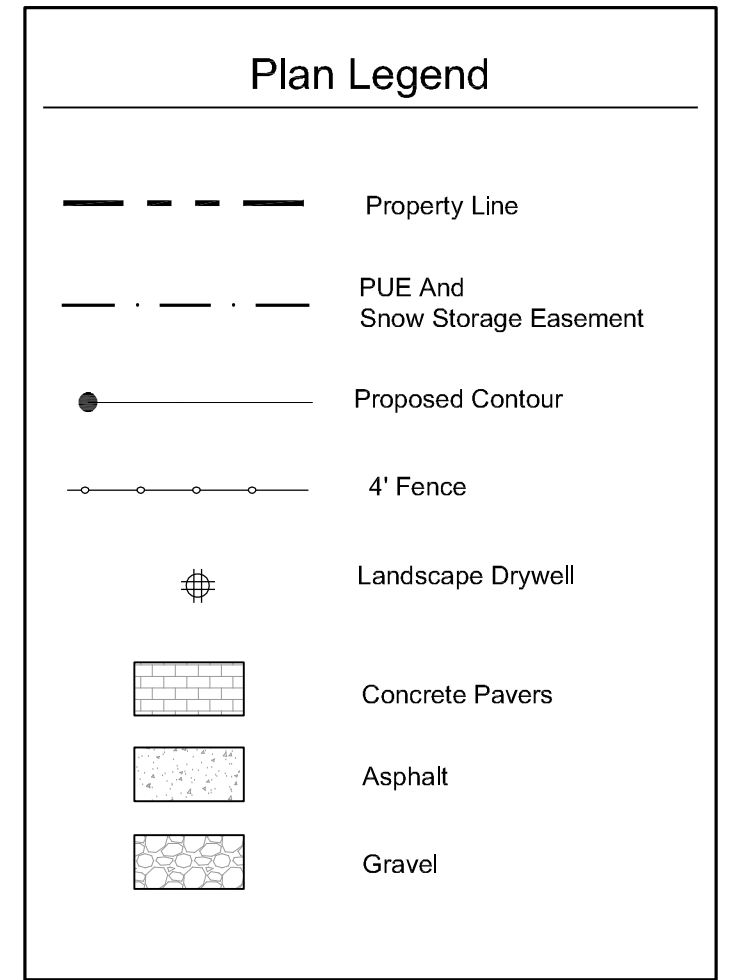
\*See Civil Plan For Site Grading And Drainage



- A. Material shall be pervious/permeable to allow drainage
- B. Surface must allow for vehicle parking and be consistent along the entire property frontage
- C. Material within the first eight (8) feet from edge of asphalt shall be distinct from driveway and rest of property in order to visually appear to be available for parking
- D. Grading and drainage improvements as required by City Engineer - Minimum 5% slope
- E. No obstructions, such as boulders or berms
- F. No buried irrigation systems within the first eight (8) feet from the edge of asphalt (Street). Subsurface irrigation lines are permitted beyond the first eight (8) feet, however pop up heads are not permitted anywhere in the ROW.
- G. No live plant material within the first eight (8) feet from edge of asphalt (Street). Low ground cover plant material, such as turf grass, is permitted beyond the first eight (8) feet. Drought-tolerant species is preferred.

**General Notes**

1. Base map information taken from survey by Benchmark Associates dated 11/24/21 and from on-site information. Architectural information provided by Think Architecture dated 02/22/22. Contractor shall verify conditions in the field prior to construction.
2. Landscape architect is not responsible for any deviation from these plans, unless such changes are authorized by the landscape architect in writing.
3. All existing utilities are underground. All new utilities shall be underground.
4. Site serviced by City of Ketchum.



**Irrigation Calculation**  
(Lot = ± .22 Acres)

Description	Square Footage
Lawn	4,480 sq.ft.
Planter Beds	50 sq.ft.
<b>Total Irrigated Area</b>	<b>4,530 sq.ft.</b>
	+/- .11 Acres

**Snow Storage**

Driveway Area:	1000 sq ft
Uncovered Walkway Area:	80 sq ft
	x .30%
<b>Required Area:</b>	<b>324 sq ft</b>
Snow Storage Provided:	415 sq ft

- Per Development Agreement:**
- 1) Landscaping Shall Be Drought Tolerant
  - 2) Irrigation System Shall Be Equipped With Shut Off Valve Not Impacting Water Service To Residence
  - 3) Irrigation System Shall Be Water Efficient In Ground Components, Controller With Rain/Freeze Sensor.
  - 4) Isolate Zones Per Plant Type And Exposure.

- Landscape Notes:**
- 1) The Area 12" Horizontal From The Base Of A Wall Shall Be Finished In A Way To Prevent Any Vegetation Growing, And For Vegetative Debris To Be Easily Removed.
  - 2) Any Trees With Crowns Closer Than 30 Feet To Any Structure Shall Be Limbed Up A Minimum Of 6' From Ground Level.
  - 3) Any Tree Crowns Shall Be Pruned To Have A Minimum 10' Horizontal Clearance From Any Structure.

**Plant Legend**

Qty.	Common Name	Botanical Name	Size
<b>Conifer Trees</b>			
4	Mugo Pine	<i>Pinus mugo</i>	12'-16'
2	Subalpine Fir	<i>Abies lasiocarpa</i>	12'-14'
<b>Deciduous Trees</b>			
6	Aspen	<i>Populus tremuloides</i>	12'-14'
6	Ginnala Maple	<i>Acer spp.</i>	20 gal. (6')
<b>Deciduous Shrubs</b>			
16			5-20 gal.
	Lilac	<i>Syringa spp.</i>	
	Alpine Currant	<i>Ribes alpinum</i>	
	Burning Bush	<i>Euconymus alatus</i>	
	Cotoneaster	<i>Cotoneaster spp.</i>	
	Dogwood	<i>Cornus spp.</i>	
	Mockorange	<i>Philadelphus spp.</i>	
	Ninebark	<i>Physocarpus spp.</i>	
	Snowberry	<i>Symphoricarpos spp.</i>	
	Spiraea	<i>Spiraea spp.</i>	
<b>Ornamental Grasses</b>			
30			Flats
	Blue Fescue	<i>Festuca ovina glauca</i>	
	Ribbon Grass	<i>Phalaris arundinacea 'Picata'</i>	
	Karl Foerster Feather Reed	<i>C. arundinacea 'Karl Foerster'</i>	
<b>Grasses &amp; Wildflowers</b>			
3,380 Sq.Ft.			Sod or Seed
(20%)	Hard Fescue	<i>Festuca trachyphylla</i>	
(20%)	Chewing Fescue	<i>Festuca rubra var. commutata</i>	
(20%)	Sheep Fescue	<i>Festuca ovina</i>	
(20%)	Creeping Red Fescue	<i>Festuca rubra</i>	
(20%)	Wildflowers	Various	
<b>Grasses - Lawn Mix</b>			
1,500 Sq.Ft.			Sod or Seed
(33%)	Tall Fescue	<i>Festuca arundinacea</i>	
(33%)	Hard Fescue	<i>Festuca trachyphylla</i>	
(33%)	Chewing Fescue	<i>Festuca rubra var. commutata</i>	

WSR Residences Lot 32

EGGERS ASSOCIATES, P.A.  
landscape architecture

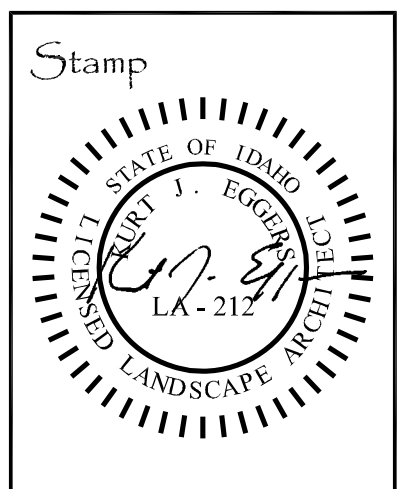
T (208) 725-0988  
F (208) 725-0972  
P.O. Box 975  
Ketchum, ID 83340

Warm Springs Ranch Residences  
Block 1, Lot 32  
Ketchum, Idaho

Job No: 22.25  
Scale: 1/8" = 1'-0"

Issue/Revisions: Date:  
Design/Review 05/17/23  
DR RVSD 05/01/23  
DR RVSD 06/23/23  
DR RVSD 10/03/23

All information appearing herein shall not be disclosed, distributed or otherwise used without the written consent of Eggers Associates, P.A.

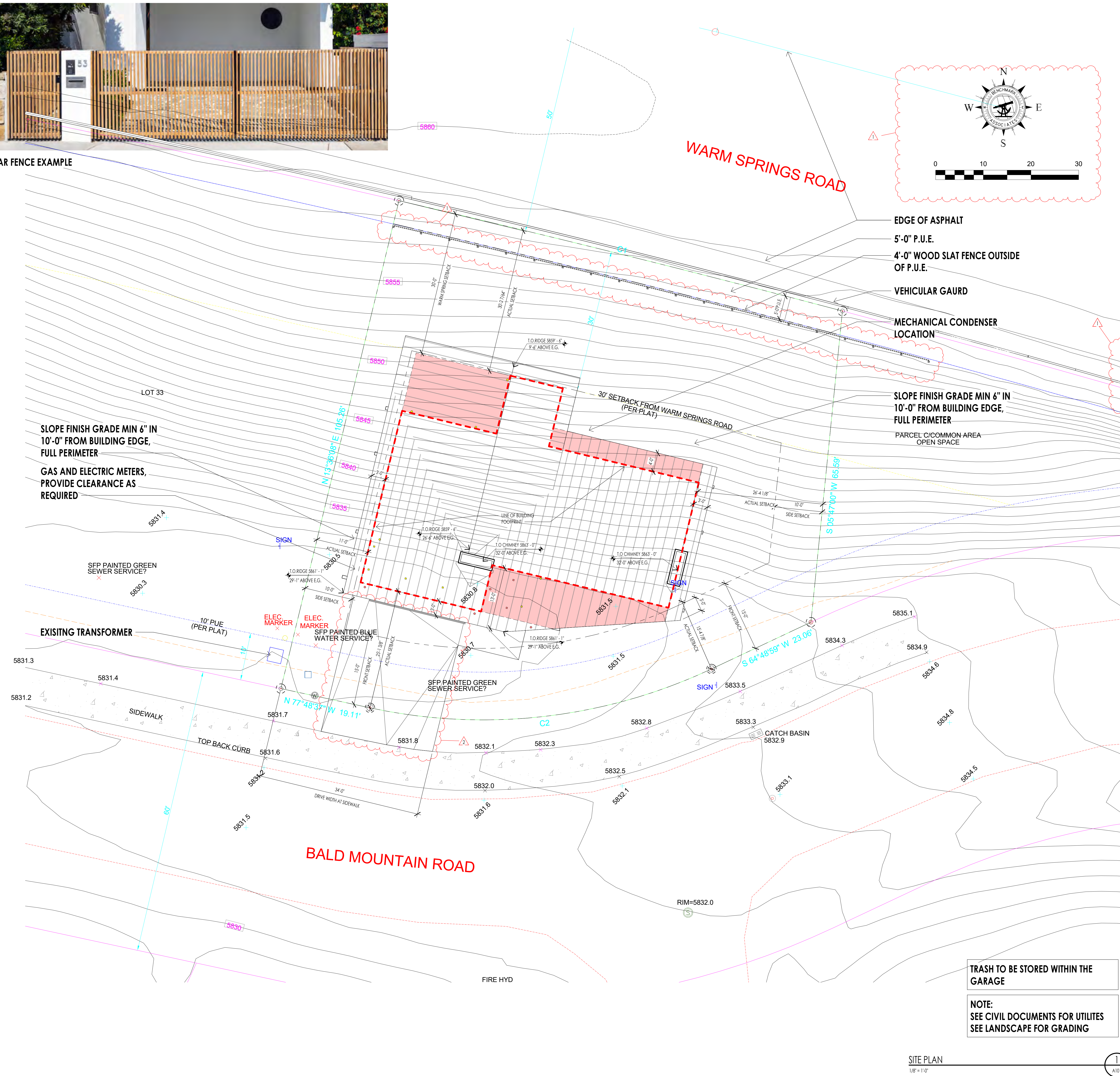


Sheet Title:  
Landscape Plan

Sheet No:  
L3



REAR FENCE EXAMPLE



**SITE PLAN GENERAL NOTES**

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND LOCATIONS. PROTECT AS REQUIRED.
2. CONTRACTOR TO PROTECT EXISTING TREES TO BE PRESERVED.
3. UTILITY TRENCHING TO BE CONDUCTED IN A WAY TO NOT DISTURB EXISTING TREES.
4. ANY TREES LOCATED WITHIN 10'-0" HORIZONTAL OF THE STRUCTURE MUST BE MIN. 10'-0" HIGHER THAN THE ADJACENT STRUCTURE OR WILL NEED TO BE REMOVED IN ACCORDANCE TO THE FIRE CODE AS DEFENSIBLE SPACE.
5. ALL DEAD WOOD AND COMBUSTIBLE MATERIALS WITHIN 30'-0" OF THE STRUCTURE TO BE REMOVED BY CONTRACTOR AS PER THE FIRE CODE DEFENSIBLE SPACES.
6. INSTALL EROSION CONTROL MAT ON ALL SLOPES 3:1 AND GREATER.

**DATUM:**

LEVEL 1 100'-0" = 5,833.00 USGS  
 LEVEL 2 112'-0" = 5,845.00 USGS

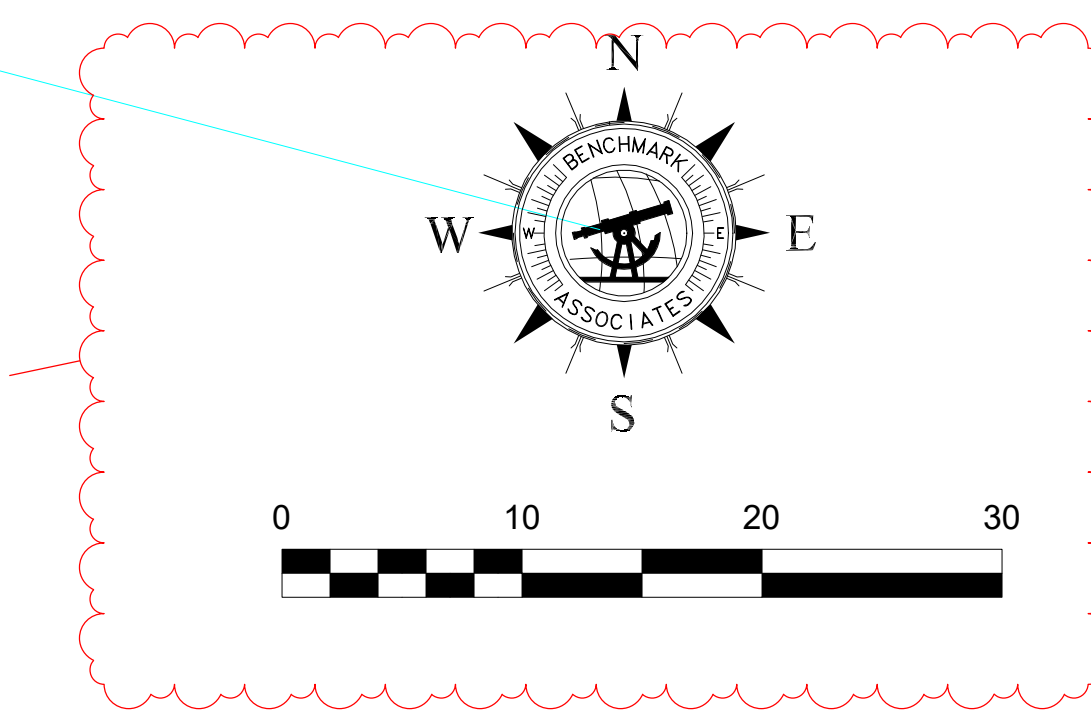
VERIFY FINISHED FLOOR HEIGHT WITH FINAL CIVIL ENGINEER'S DRAWINGS.

**SITE PLAN KEY NOTES**

**LOT SIZE:**  
 AREA = .22 ACRES OR 9,552.41 SQ. FT.  
 ZONE: GR-1  
 HEIGHT LIMIT: 35' MAX

**BUILDING PAD:**  
 AREA = 4,074 SQ. FT.

**PROPOSED BUILDING FOOTPRINT:**  
 AREA = 2,813.67 SQ. FT. - EQUALS 29.45 %  
 LOT COVERAGE ALLOWED: 35%, 3,343 SQ. FT.



- EDGE OF ASPHALT
- 5'-0" P.U.E.
- 4'-0" WOOD SLAT FENCE OUTSIDE OF P.U.E.
- VEHICULAR GAURD
- MECHANICAL CONDENSER LOCATION

SLOPE FINISH GRADE MIN 6" IN 10'-0" FROM BUILDING EDGE, FULL PERIMETER  
 PARCEL C/COMMON AREA OPEN SPACE

SLOPE FINISH GRADE MIN 6" IN 10'-0" FROM BUILDING EDGE, FULL PERIMETER  
 GAS AND ELECTRIC METERS, PROVIDE CLEARANCE AS REQUIRED

TRASH TO BE STORED WITHIN THE GARAGE

NOTE:  
 SEE CIVIL DOCUMENTS FOR UTILITIES  
 SEE LANDSCAPE FOR GRADING

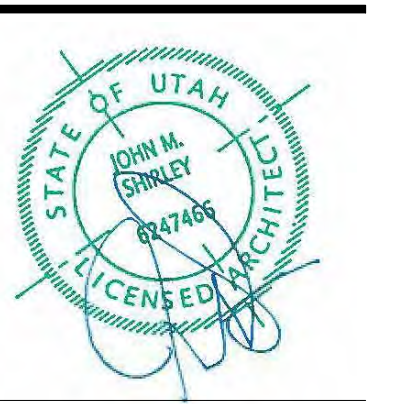


Architecture  
 Interior Design  
 Landscape Architecture  
 Land Planning  
 Construction Management

7927 So. Highpoint Parkway, Suite 300  
 Sandy, Utah 84094  
 ph. 801.269.0555  
 fax 801.269.1425  
 www.thinkaec.com

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WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

PROJECT NC22023.32  
 DATE: 2023.09.25

- REVISIONS:
- 1 04-27-2023 PER CITY COMMENTS
  - 2 06-14-2023 PER CITY COMMENTS

**LEGAL DESCRIPTION:**

LOT 32 BALD MOUNTAIN ROAD

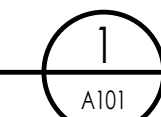
**SITE NOTES:**

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO TOWN STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO VERIFY PROPER DRAINAGE AWAY FROM HOUSE.
4. PROVIDE DRAINAGE SWALE FROM HIGH TO LOW SIDE OF HOUSE.
5. ZONING: GR-1
6. CONTRACTOR TO VERIFY EXISTING GRADES/TOPOGRAPHY PRIOR TO EXCAVATION AND/OR CONSTRUCTION. VERIFY DRIVEWAY DOES NOT EXCEED 10% GRADE.
7. EXISTING TOPOGRAPHY SHOWN IS BASED ON ROAD DESIGN GRADES & SITE OBSERVATIONS. CONTRACTORS/OWNER TO VERIFY.
8. HEIGHT LIMIT OF 35'-0" OVER EXISTING GRADE. 5'-0" ALLOWANCE FOR CHIMNEYS AND MECHANICAL.

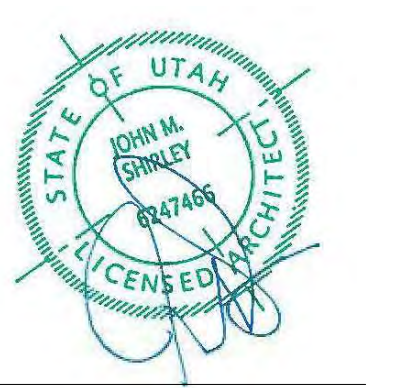
SHEET TITLE:  
 SITE PLAN

SHEET NUMBER:  
 A101

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PERMIT SET

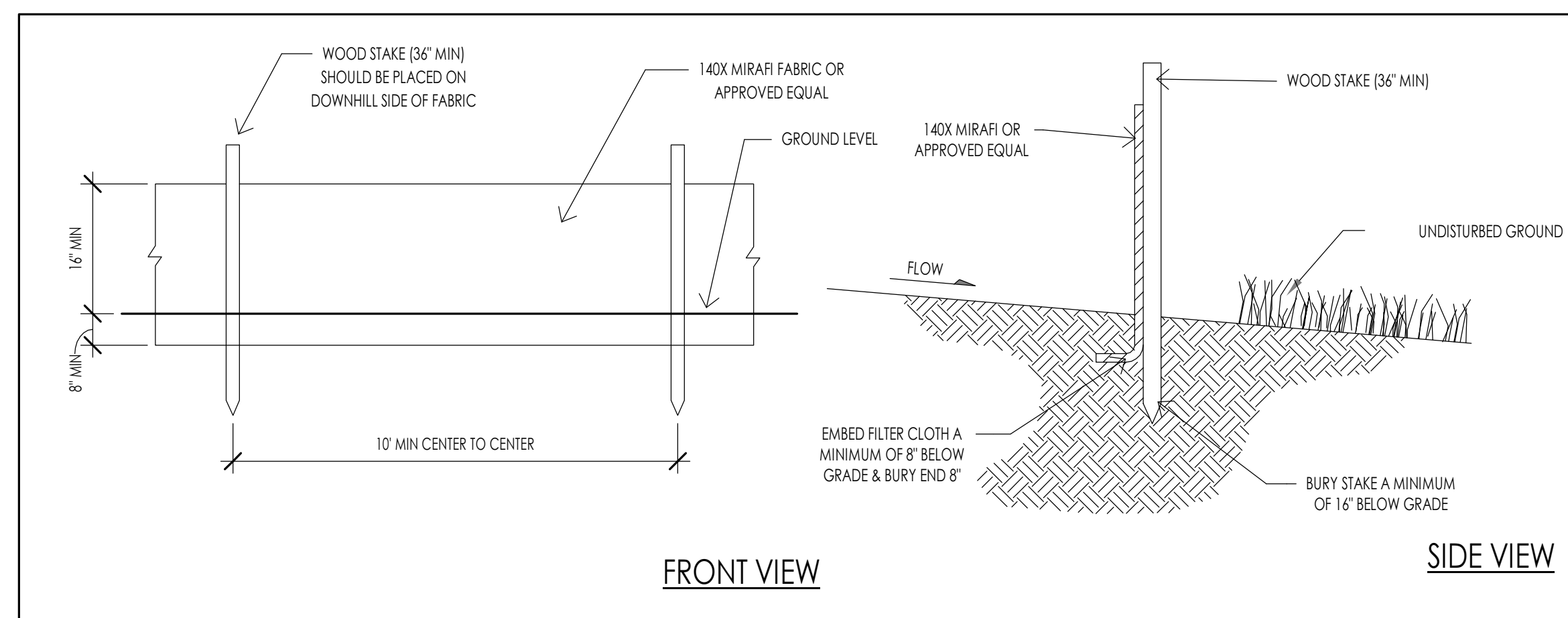


**EROSION CONTROL NOTES**

- EROSION CONTROL - SPDES PLAN SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR TO THE STATE OUTLINING HOW EROSION AND SILTATION WILL BE CONTROLLED. A COPY OF THE PLAN MUST BE ON SITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE PLAN AND INSTALLING AND MAINTAINING EROSION CONTROL FACILITIES WITH EACH PHASE OF WORK. SHOULD SILT LEAVE THE SITE OR EROSION OCCUR, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE CORRECTIVE ACTION AND REPAIR ANY DAMAGE CAUSED BY THE SILT OR EROSION IMMEDIATELY.
- ALL COSTS ASSOCIATED WITH THE PREPARATION, MODIFICATION AND APPROVAL OF THE PLAN WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTROLLING SEDIMENT TRANSPORT AND PREVENTING AND/OR CORRECTING PROBLEMS ASSOCIATED WITH EROSION AND RUNOFF PROCESSES WHICH COULD OCCUR BOTH DURING AND AFTER PROJECT CONSTRUCTION WILL BE CLOSELY MONITORED. PERIODIC MAINTENANCE AND INSPECTION OF SEDIMENT CONTROL DEVICES WILL BE SCHEDULED THROUGH THE SCHEDULED COMPLETION OF WORK.
- PARTICULAR ATTENTION SHALL BE GIVEN TO EXISTING DRAINAGE PATTERNS WHICH RUN THROUGH DISTURBED AREAS AND OVER EXTREME SLOPES. THESE PATTERNS WILL BE IDENTIFIED TO ISOLATE PROBLEM AREAS WHERE WATER WILL CONCENTRATE. PROVISIONS SHALL BE MADE TO CHANNEL RUNOFF AWAY FROM NEW OR EXISTING IMPROVEMENTS TO PREVENT UNDERMINING AND GENERAL SITE EROSION. THESE PROVISIONS SHALL BE STABILIZED AND SHALL REMAIN IN PLACE UNTIL THE PERMANENT STORM DRAINAGE FACILITIES ARE INSTALLED AND FUNCTIONAL.
- EXCAVATION AND EMBANKMENT OPERATIONS SHALL PROCEED IN SUCH A MANNER SO THAT FINISHING OF SLOPES, INCLUDING REVEGETATION, SHALL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER ROUGH GRADING. ALL SLOPES 2:1 OR FLATTER SHALL BE SCARIFIED WITH HEAVY EQUIPMENT, LEAVING TRACKS PERPENDICULAR TO THE SLOPE.
- CUT AND FILL SLOPES SHALL BE 2:1 MAXIMUM UNLESS ROCK IS ENCOUNTERED. CUT SLOPES IN ROCK MAY BE STEEPER, DEPENDING UPON GEOTECHNICAL CONSIDERATIONS. THE TOPS OF ALL CUT SLOPES IN SOIL SHALL BE ROUNDED FOR A HORIZONTAL DISTANCE OF THREE FEET BEYOND THE CATCH POINT. SLOPE ROUNDED SHALL OCCUR AS THE SLOPE IS BEING BROUGHT DOWN.
- THE OVERALL SHAPE, HEIGHT AND GRADE OF ANY CUT AND/OR FILL SLOPE SHALL BE DEVELOPED IN CONCERT WITH THE EXISTING NATURAL CONTOURS, SCALE AND VEGETATION OF NATURAL TERRAIN.
- DISTURBED AREAS, BOTH ON AND OFF-SITE SHALL BE REVEGETATED. THESE AREAS SHALL INCLUDE, BUT NOT BE LIMITED TO ALL UNSURFACED AREAS WITHIN THE FLAGGED LIMITS OF DISTURBANCE STAGING AND STORAGE AREAS, MATERIAL WASTE AREAS, UNDERGROUND UTILITY CONSTRUCTION AREAS, BENCHED AREAS INCLUDING RETAINING WALL BENCHES, AND TEMPORARY OR EXISTING ACCESS ROADS USED FOR CONSTRUCTION ACTIVITIES. ROCK CUTS STEEPER THAN 1:1 WILL NOT BE REVEGETATED.
- CONTROLLED OUTLETS SHALL DIRECT COLLECTED RUNOFF THROUGH SILT FENCES OR STRAW BALES.
- SEED SHALL BE APPLIED AT A RATE SO THAT GERMINATION AND SUBSEQUENT COVERAGE REACHES 80 PERCENT IN A REPRESENTATIVE 10X10' AREA. IF COVERAGE DOES NOT REACH 80 PERCENT, RESEEDING MUST OCCUR BEFORE REVEGETATION.
- ALL DITCHES AND SWALES BETWEEN 8PERCENT AND 18PERCENT SHALL BE ARMORED WITH A STRAW TYPE EROSION CONTROL/REVEGETATION STABILIZATION MAT TO PROMOTED REVEGETATION.
- RIP RAP OF APPROPRIATE SIZE WILL BE CONSTRUCTED INTO ROADSIDE RUNOFF SWALES EXCEEDING 8 PERCENT.
- RIP RAP SHALL BE LOCATED FOR WATER DISPERSAL AT CULVERT OUTLETS.
- THE TIMING FOR STABILIZATION PRACTICES MUST READ PER SECTION 38(4) OF APPENDIX A OF ORDINANCE 391. IDEALS WITH TEMPORARY SEEDING, MULCHING, PERMANENT SEEDING, ETC. WITHIN 5 DAYS OF OPERATIONS TEMPORARILY OR PERMANENTLY CEASING OPERATIONS ON ANY AREA OF THE PROJECT.
- SLOPES OVER 3:1 REQUIRE THE PLACEMENT OF EROSION CONTROL/REVEGETATION MATTING. SLOPES LESS THAN 3:1 MAY BE SPRAYED WITH TACKIFIER.
- PROVIDE PERMANENT RE-SEEDING OF NON-IRRIGATED AREAS ON OR AFTER OCTOBER 15, BUT BEFORE SNOW ACCUMULATES WHEN THE PROBABILITY OF PREMATURE GERMINATION IS MINIMAL.
- STABILIZED CONSTRUCTION ENTRANCES MUST BE UTILIZED IF THE EXISTING PAVEMENT IS REMOVED DURING THE SITE GRADING WHERE CONSTRUCTION TRAFFIC ACCESSES PUBLIC AND PRIVATE ROADWAYS.
- PROTECT ALL EXISTING STORM DRAIN BOX INLETS.
- SEED MIX AND RATE OF APPLICATION SHALL BE AS FOLLOWS:

SEED TYPES	PERCENT OF MIX
PERENNIAL RYEGRASS (LOLIUM PERENNIE)	20PERCENT
SLENDER WHEATGRASS (AGROPERON TRACHYCALLUM)	15PERCENT
20 PERCENT BLUEBUNCH WHEATGRASS (AGROPERON SPICATUM)	15PERCENT
WESTERN WHEATGRASS (AGROPERON SMITHII)	10PERCENT
SHEEP FESCUE (FESTUCA OVINA)	8PERCENT
BLUE FLAX (LINUM LEWISSI)	7PERCENT
CALIFORNIA POPPY (ESCHSCHOLZIA CALIFORNICA)	10PERCENT

21 SEEDING RATE TO BE 35 POUNDS PER ACRE OF THE ABOVE LISTED SEED MIX.



**SILT FENCE DETAIL**

**MATERIALS**

- STRAW BALES BOUND WITH WIRE OR TWINE.
- WOOD OR STEEL STAKES 4' LONG MIN. SIDE OF THE BARRIER. 2 STAKES PER BALE.

4. WEDGE LOOSE STRAW BETWEEN BALES. BACK FILL AND COMPACT THE EXCAVATED SOIL AGAINST THE UPHILL SIDE OF THE BARRIER.

1. DIG A 6X2' TRENCH. ALIGN TRENCH ALONG CONTOUR BUT CURVED SLIGHTLY UPHILL SO RUNOFF CANNOT ESCAPE AROUND THE END BALES. (SEE (2) BELOW)

2. PLACE BALES IN TRENCH WITH ENDS TIGHTLY ADJUTED.

3. ANCHOR EACH BALE WITH 2 STAKES HAMMERED 1 1/2" TO 2" INTO GROUND. ANGLE THE FIRST STAKE IN EACH BALE TOWARDS THE END BALES. (SEE (2) BELOW)

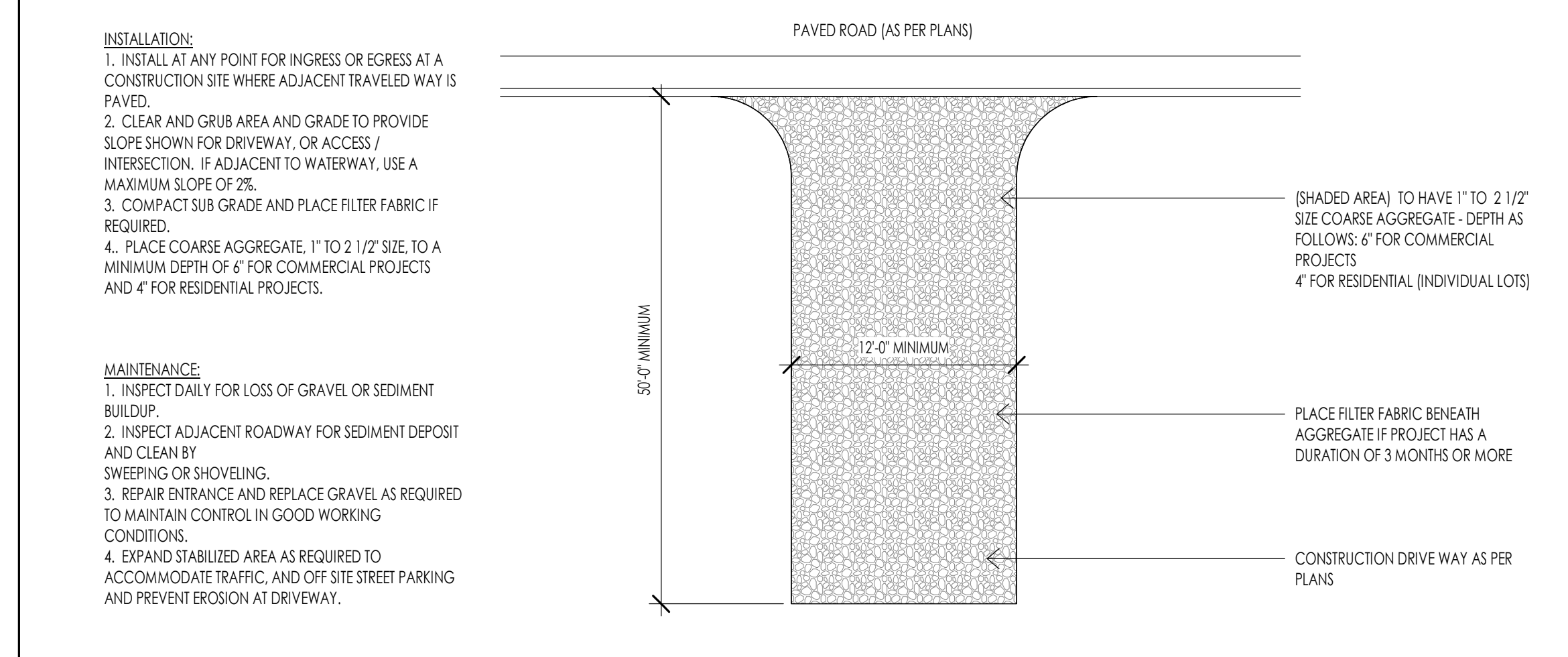
4. INSPECT PERIODICALLY AND AFTER EACH STORM. REPLACE DAMAGED BALES; RE-ANCHOR DISPLACED ONES.

5. CLEAN OUT SEDIMENT BEFORE IT REACHES THE TOP OF THE BALES.

6. DEPOSIT THE REMOVED SEDIMENT WHERE IT WILL NOT ENTER A DRAINAGE WAY.

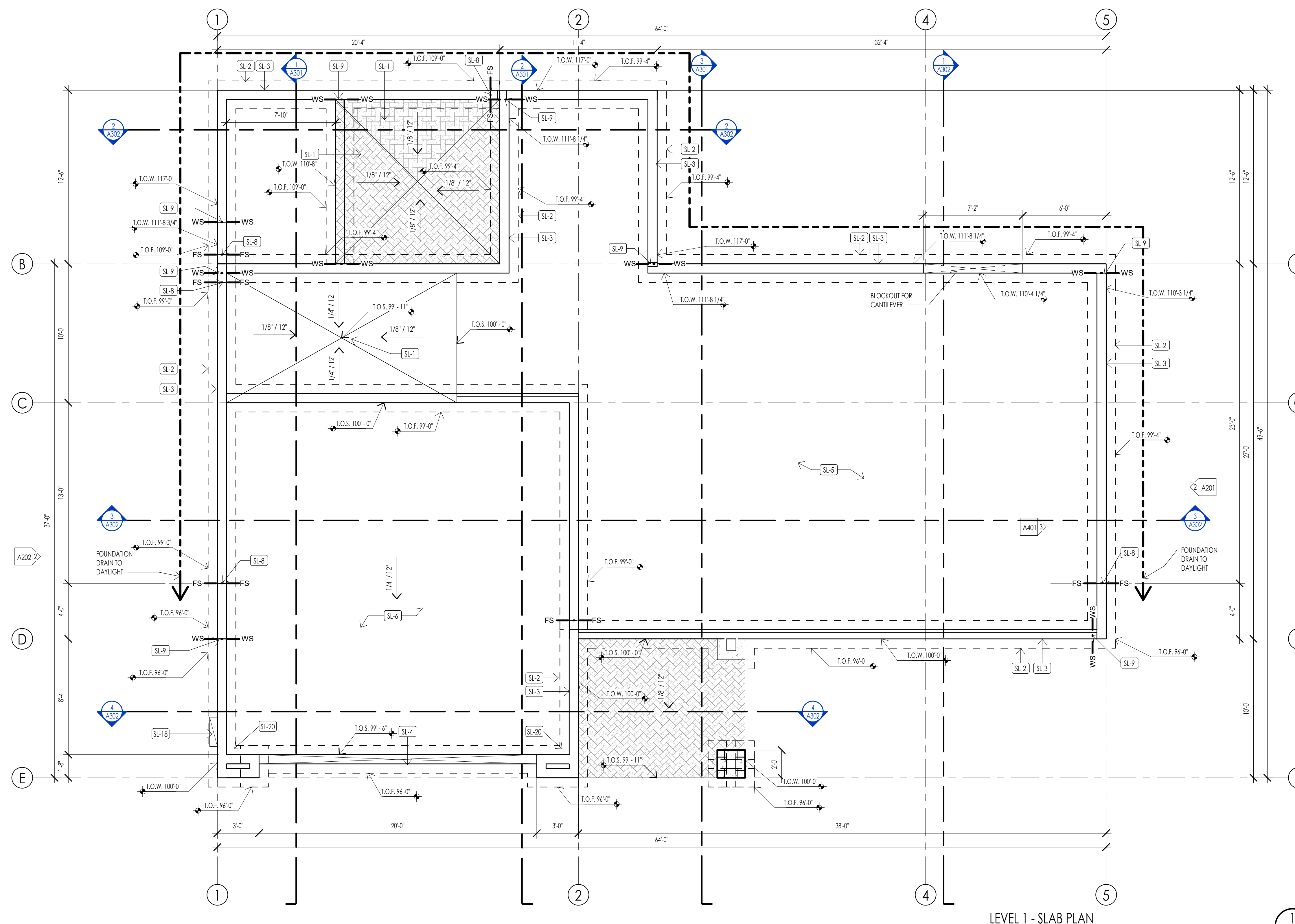
WHEN INSTALLING BALES ON PAVEMENT, PILE GRAVEL OR ROCK BEHIND THE BALES TO HOLD THE IN PLACE.

**STRAW BALE EROSION CONTROL**



**CONSTRUCTION ENTRANCE**

- INSTALLATION:**
- INSTALL AT ANY POINT FOR INGRESS OR EGRESS AT A CONSTRUCTION SITE WHERE ADJACENT TRAVELED WAY IS PAVED.
  - CLEAR AND GRUB AREA AND GRADE TO PROVIDE SLOPE SHOWN FOR DRIVEWAY OR ACCESS / INTERSECTION. IF ADJACENT TO WATERWAY, USE A MAXIMUM SLOPE OF 2%.
  - COMPACT SUB GRADE AND PLACE FILTER FABRIC IF REQUIRED.
  - PLACE COARSE AGGREGATE, 1" TO 2 1/2" SIZE, TO A MINIMUM DEPTH OF 8" FOR COMMERCIAL PROJECTS AND 4" FOR RESIDENTIAL PROJECTS.
- MAINTENANCE:**
- INSPECT DAILY FOR LOSS OF GRAVEL OR SEDIMENT BUILDUP.
  - INSPECT ADJACENT ROADWAY FOR SEDIMENT DEPOSIT AND CLEAN BY SWEEPING OR SHOVELING.
  - REPAIR ENTRANCE AND REPLACE GRAVEL AS REQUIRED TO MAINTAIN CONTROL IN GOOD WORKING CONDITIONS.
  - EXPAND STABILIZED AREA AS REQUIRED TO ACCOMMODATE TRAFFIC, AND OFF SITE STREET PARKING AND PREVENT EROSION AT DRIVEWAY.



### FOUNDATION PLAN LEGEND

HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	POURED IN PLACE CONCRETE
[Hatch Pattern]	2" RIGID FOAM INSULATION TO EXTEND FROM BOTTOM OF SLAB DOWN TO FOOTING AND HORIZONTALLY UNDER SLAB 4" MIN. AT PERIMETER OF FOUNDATION.

### FOUNDATION PLAN SYMBOLS LEGEND

SYMBOL	DESCRIPTION
FS	FOOTING STEP
WS	WALL STEP
T.O.F.	TOP OF FOOTING ELEVATION
T.O.W.	TOP OF WALL ELEVATION
T.O.S.	TOP OF SLAB ELEVATION
T.O.P.	TOP OF PIER ELEVATION

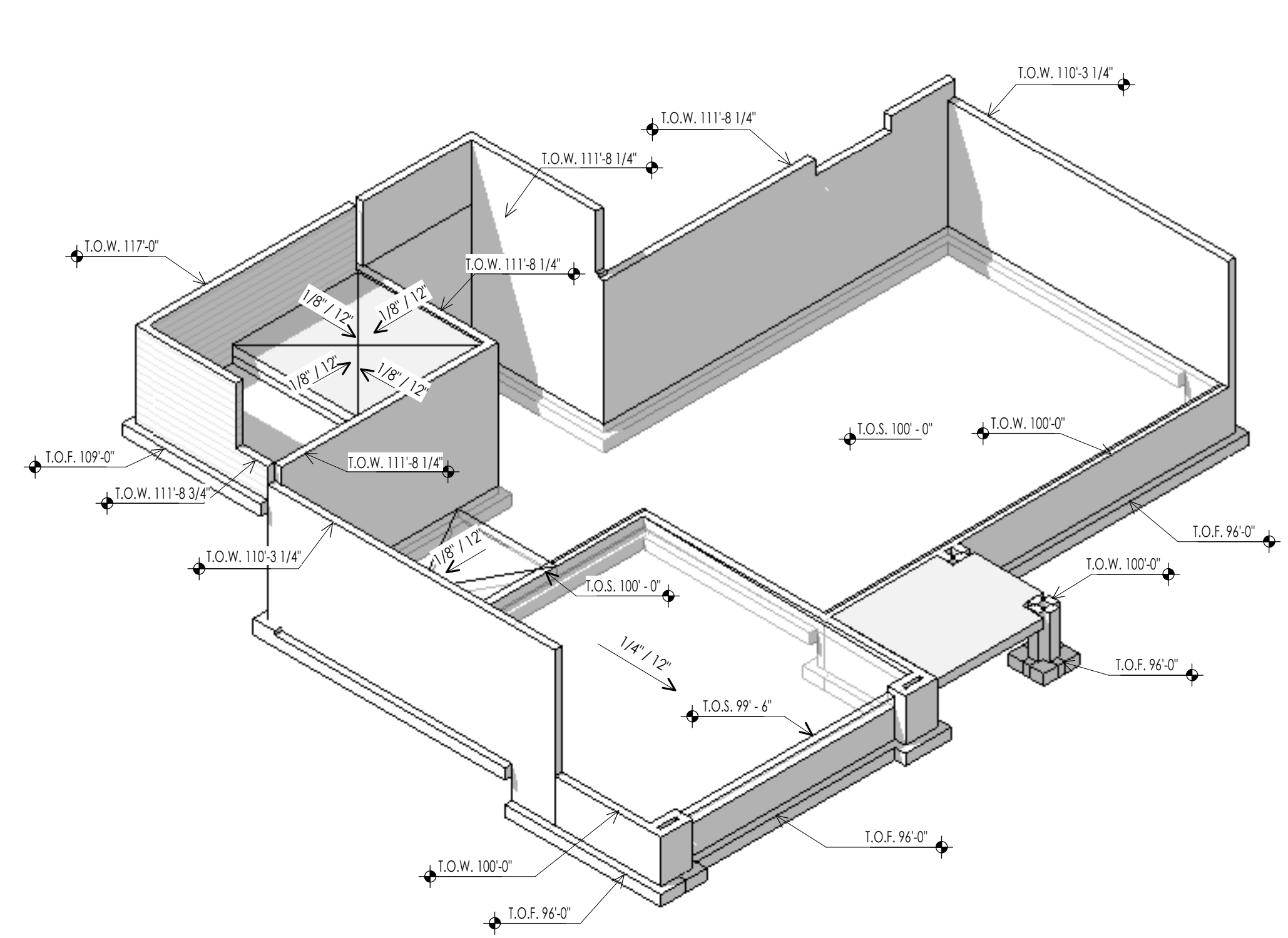
- ### FOUNDATION GENERAL NOTES
- COORDINATE ARCHITECTURAL FOUNDATION PLAN WITH STRUCTURAL FOUNDATION PLAN. CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN THE PLANS TO THE ARCHITECT PRIOR TO COMMENCING RELATED WORK.
  - COORDINATE MECHANICAL, ELECTRICAL, & PLUMBING PRIOR TO CONSTRUCTION OF FOOTINGS & FOUNDATION.
  - VERIFY ELEVATIONS OF FOUNDATION WALLS & FOOTINGS. COORDINATE WITH SITE PLAN & PROPOSED CONTOURS.
  - CONCRETE FLOOR SLABS, EXCEPT THOSE IN UNHEATED ACCESSORY STRUCTURES, SHALL HAVE A VAPOR RETARDER CONSISTING OF 6 MIL POLYETHYLENE (OR APPROVED EQUAL) VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB & THE BASE COURSE OF THE PREPARED SUB-GRADE WHERE NO BASE COURSE EXISTS.
  - FOUNDATION REBAR INSPECTIONS ARE REQUIRED FOR FOUNDATION WALLS OVER 8 FEET HIGH. FORMS ARE NOT TO BE INSTALLED ON ONE SIDE UNTIL AFTER THE REBAR HAS BEEN INSPECTED.

### DATUM ELEVATIONS

ARCHITECTURE	CIVIL	LEVEL
87' - 6"	-	LEVEL 00 - TOP OF SLAB
88' - 6"	-	LEVEL 0 - TOP OF SLAB
99' - 0"	-	TOP OF SLAB AT FRONT OF GARAGE
100' - 0"	-	LEVEL 1 - TOP OF PLYWOOD

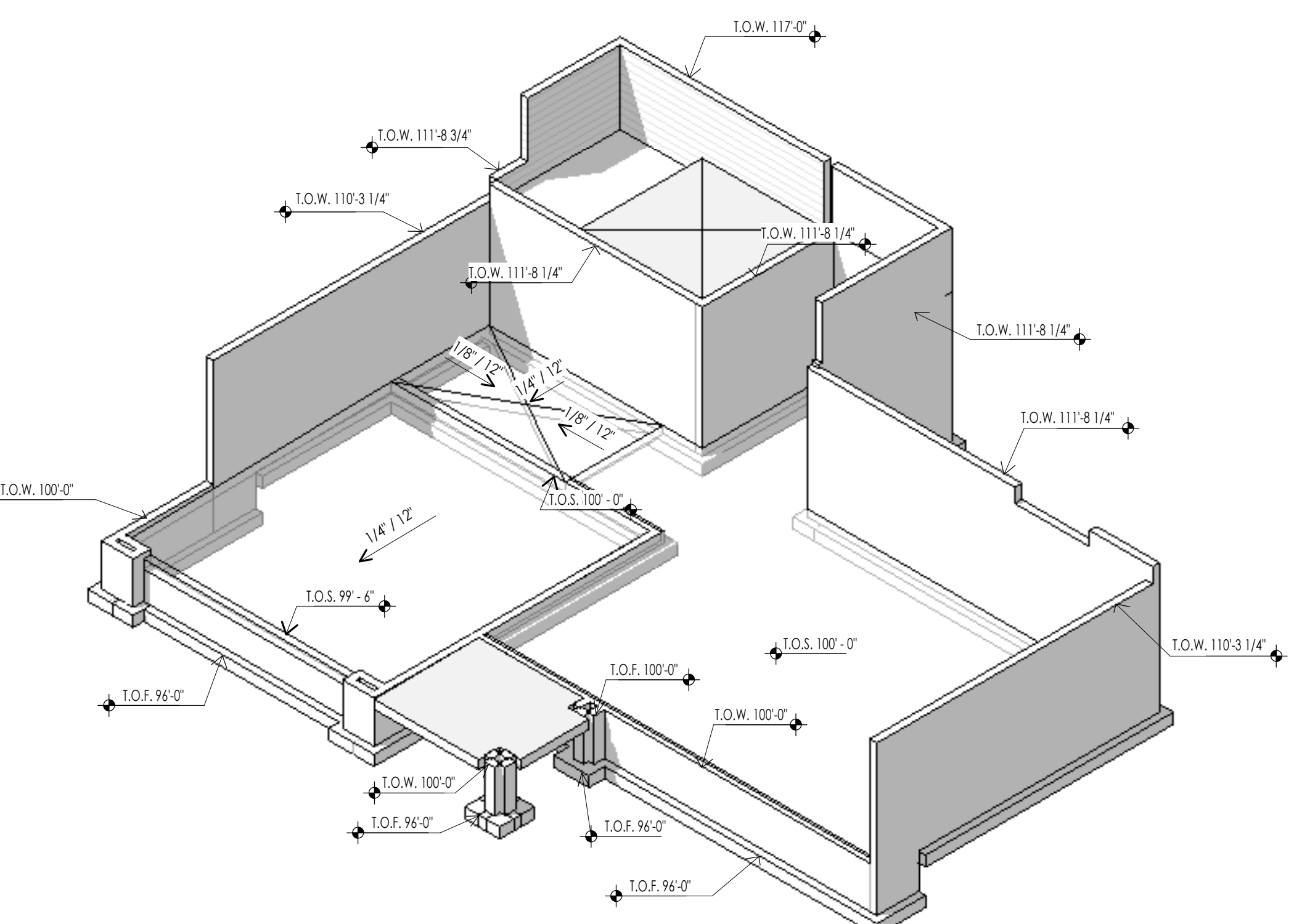
### FOUNDATION PLAN KEYNOTES

KEYNOTES	
SL-1	CONTRACTOR TO COORDINATE LOCATION OF FLOOR DRAIN - SLOPE SLAB TOWARDS DRAIN AS REQUIRED
SL-2	CAST IN PLACE FOOTINGS TO BEAR ON UNDISTURBED SOIL OR ENG COMPACTED FILL - SEE STRUCTURAL GENERAL NOTES & PROJECT MANUAL
SL-3	CAST IN PLACE FOUNDATION WALLS WITH WATER PROOFING AS NOTED - SEE STRUCTURAL NOTES AND DETAILS
SL-4	PROVIDE BLOCKOUT AT FOUNDATION WALL AT DOOR OPENINGS AND POUR SLAB OVER TOP OF WALL - SEE DETAILS
SL-5	CAST IN PLACE INTERIOR CONCRETE SLABS TO BE 4" CONCRETE SLAB REINFORCED WITH FIBER MESH OVER 4" GRAVEL BASE - SEE STRUCTURAL NOTES
SL-6	CAST IN PLACE GARAGE CONCRETE SLABS TO BE 5" CONCRETE SLAB OVER 4" GRAVEL BASE AND FINISH AS NOTED - SEE STRUCTURAL NOTES
SL-8	CONTRACTOR TO COORDINATE FOOTING STEPS TO ASSURE REQUIRED FROST PROTECTION AT EACH FOOTING - NOTIFY ARCHITECT IF FOOTING ELEVATIONS NEED TO CHANGE
SL-9	CONTRACTOR TO COORDINATE FOUNDATION WALL STEPS WITH FINAL GRADING SPECIFIED AND NOTIFY ARCHITECT OF CHANGES PRIOR TO POURING CONCRETE FOUNDATION
SL-18	PROVIDE A LAYER GROUND. AN ELECTRODE ENCASED BY AT LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2 INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. 2505.1.2 AND N.E.C. 250.50)
SL-20	WARP SLAB AT GARAGE DOORS TO PROVIDE DRAINAGE TOWARD THE DOOR OPENING



FOUNDATION ISOMETRIC A

2  
A103



FOUNDATION ISOMETRIC B

3  
A103

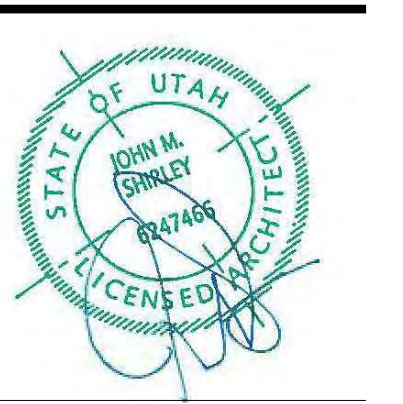


Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

7927 So. Highpoint Parkway, Suite 300  
Sandwich, Utah 84094  
ph. 801.269.0555  
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WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

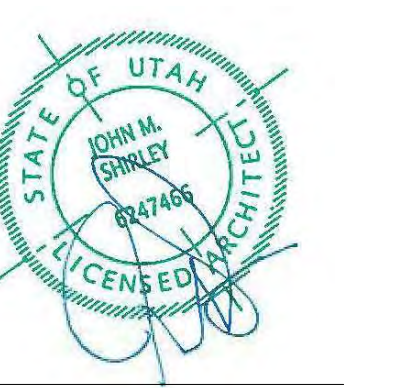
PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:

SHEET TITLE:  
FOUNDATION PLAN

SHEET NUMBER:  
A103

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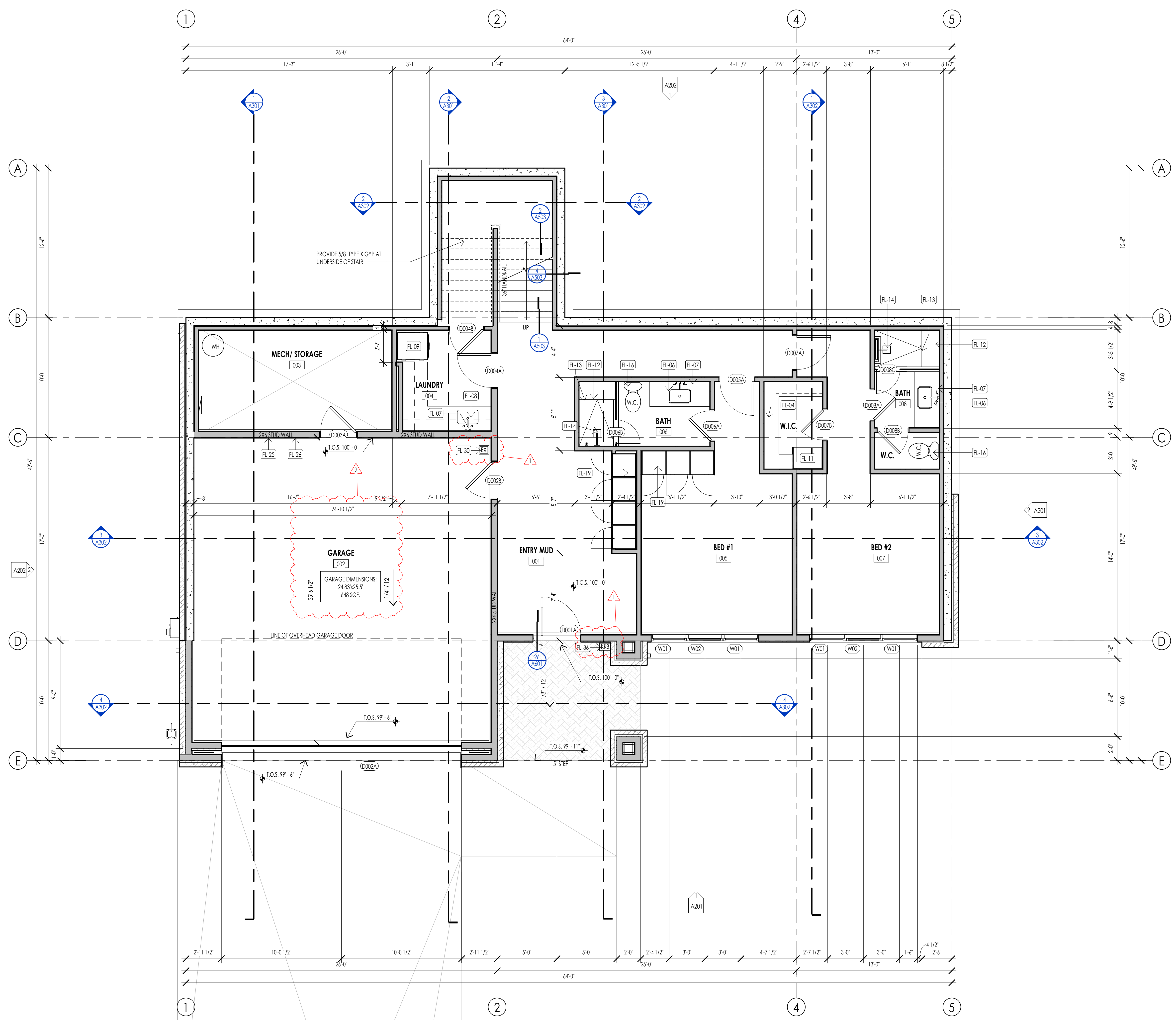
FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
	POURED IN PLACE CONCRETE WALL		CARPET FINISH
	CMU BLOCK WALL		TILE FINISH
	STONE VENEER		EXTERIOR CONCRETE SLABS
	METAL STUD WALL		
	WOOD STUD WALL		

- ### FLOOR PLAN GENERAL NOTES
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS.
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECK/PATIO.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES.
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X6 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

- ### STAIR PLAN GENERAL NOTES
- STAIR CONSTRUCTION SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R311.5.
    - THE MINIMUM STAIRWAY WIDTH SHALL NOT BE LESS THAN 36 INCHES CLEAR WIDTH. HANDRAILS MAY PROJECT INTO THE REQUIRED WIDTH A DISTANCE OF 4 1/2 INCHES FROM EACH SIDE OF A STAIRWAY. I.R.C. 111.7.1 FOR ADDITIONAL WIDTH REQUIREMENTS OR FOR SPIRAL, CIRCULAR, WINDING STAIRS, ETC. REQUIREMENTS SEE I.R.C. SECTION R311.7.10.1
    - THE MAXIMUM STAIR RISER HEIGHT SHALL NOT EXCEED 7.3/4 INCHES AND THE MINIMUM STAIR TREAD DEPTH SHALL BE 10 INCHES. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS. THE GREATEST RISER HEIGHT OR TREAD DEPTH SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH. (UTAH STATE AMENDMENT REPLACES R311.7.5 AND ALLOWS FOR 8" MAX RISERS AND 9" MIN TREADS)
    - LANDINGS: EVERY LANDING SHALL HAVE A WIDTH DIMENSION OF NOT LESS THAN THE STAIRWAY SERVED. EVERY LANDING SHALL HAVE A MINIMUM DEPTH DIMENSION OF 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. FOR LANDINGS WITH ADJOINING DOORS SEE I.R.C. SECTION R311.7.6 FOR SOME EXCEPTIONS/OPTIONS.
    - ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH GYPSUM BOARD. (I.R.C. R302.7)
    - HEADROOM: EVERY STAIRWAY SHALL HAVE A MINIMUM HEADROOM CLEARANCE IN ALL PARTS OF THE STAIR OF NOT LESS THAN 6 FEET 8 INCHES. SUCH CLEARANCES SHALL BE MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING. (I.R.C. R311.7.2)
  - HEADROOM: EVERY STAIRWAY SHALL HAVE A MINIMUM HEADROOM CLEARANCE IN ALL PARTS OF THE STAIR OF NOT LESS THAN 6 FEET 8 INCHES. SUCH CLEARANCES SHALL BE MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING. (I.R.C. R311.7.2)
    - HANDRAILS SHALL BE MOUNTED A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE THE NOSING OF THE TREAD AND SHALL BE PROVIDED ON A LEAST ONE SIDE OF STAIRWAYS. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS WITH FOUR OR MORE RISERS FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWER RISER. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS. VOLUTES, TURNOUT OR STARTING EASING SHALL BE ALLOWED OVER THE LOWEST TREAD.
    - THE HAND GRIP PORTION OF HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1 1/4 INCHES MINIMUM TO 2 5/8 INCHES MAXIMUM. OTHER HANDRAIL SHAPES THAT HAVE AN EQUIVALENT GRASPING SURFACE ARE PERMISSIBLE. SEE BUILDING CODE. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH. R311.7.8.3.
    - HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.
  - GUARD RAILS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R312.
    - GUARDRAILS ARE REQUIRED AT ALL PORCHES, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AND SHALL BE NOT LESS THAN 36 INCHES IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 34 INCHES IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREAD.
    - REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREAS, BALCONIES, ETC. SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
    - THE TRIANGLE OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH A SIZE THAT A SPHERE 6 INCHES IN DIAMETER CANNOT PASS THROUGH.
    - THE GUARDS AT SIDES OF STAIRS SHALL HAVE GUARD SUCH THAT A 4-3/8" SPHERE CANNOT PASS THROUGH.

### FLOOR PLAN KEYNOTES

KEYNOTES	
FL-04	CLOSET SHELVING/ ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-07	MIRROR SINK AS PER INTERIOR DESIGNER
FL-08	LAUNDRY SINK/ FAUCET PER INTERIOR DESIGNER
FL-09	STACKED WASHER AND DRYER. CONTRACTOR TO COORDINATE WITH MECHANICAL AND ELECTRICAL
FL-11	CABINET SYSTEMS/SHELVING PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGNER
FL-13	PROVIDE 'SCHEER' BRUSH LINE LINEAR TRENCH DRAIN AGAINST BENCH. INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD PER INTERIOR DESIGNER
FL-16	W.C. TO BE 'XOHLER' PERIGUARD CURV COMFORT
FL-19	BUILT IN MUD/GEAR CABINETS AS PER INTERIOR DESIGNER
FL-25	PROVIDE HOT/COLD HOOR UP
FL-26	PROVIDE 50 AMP EV CONNECTION POINT
FL-30	FIRE EXTINGUISHERS SHALL BE INSTALLED AND MAINTAINED PER 2018 IFC SECTION 904 BOTH DURING CONSTRUCTION AND UPON OCCUPANCY OF THE BUILDING. DURING CONSTRUCTION FIRE EXTINGUISHERS SHALL BE PLACED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION THAT IS LESS THAN 75' TRAVEL DISTANCE TO ANY COMBUSTIBLES ON SITE. 30' TO ANY HOT WORK. EXTINGUISHERS SHALL BE MOUNTED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION. UPON COMPLETION OF PROJECT EVERY SINGLE-FAMILY RESIDENCE SHALL HAVE A MINIMUM OF ONE EXTINGUISHER PER GARAGE AND ONE EXTINGUISHER PER KITCHEN AREA.
FL-36	AN APPROVED KEY BOX SHALL BE INSTALLED, WITH THE APPROPRIATE KEYS FOR EMERGENCY FIRE DEPARTMENT ACCESS IN A LOCATION APPROVED BY THE FIRE DEPARTMENT. THE KEY BOX SHALL BE A THICK BOX BRAND AND SEED TO ACCOMMODATE KEYS TO EVERY DOOR OF THE PROJECT LOCATION NO MORE THAN 3FT HOR. FROM MAIN DOOR AND NO MORE THAN 5.5FT VERTICAL. VERIFY LOCAL CODE.



LEVEL 1 - FLOOR PLAN  
1/8" = 1'-0"

WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

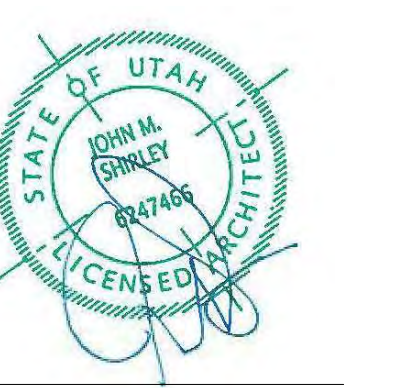
PROJECT NC22023.32  
DATE: 2023.09.25

- REVISIONS:
- 04-27-2023 PER CITY COMMENTS
  - 06-14-2023 PER CITY COMMENTS

SHEET TITLE:  
LEVEL 1 FLOOR PLAN

SHEET NUMBER:  
A104

PERMIT SET



WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
LEVEL 2 FLOOR PLAN

SHEET NUMBER:  
A105

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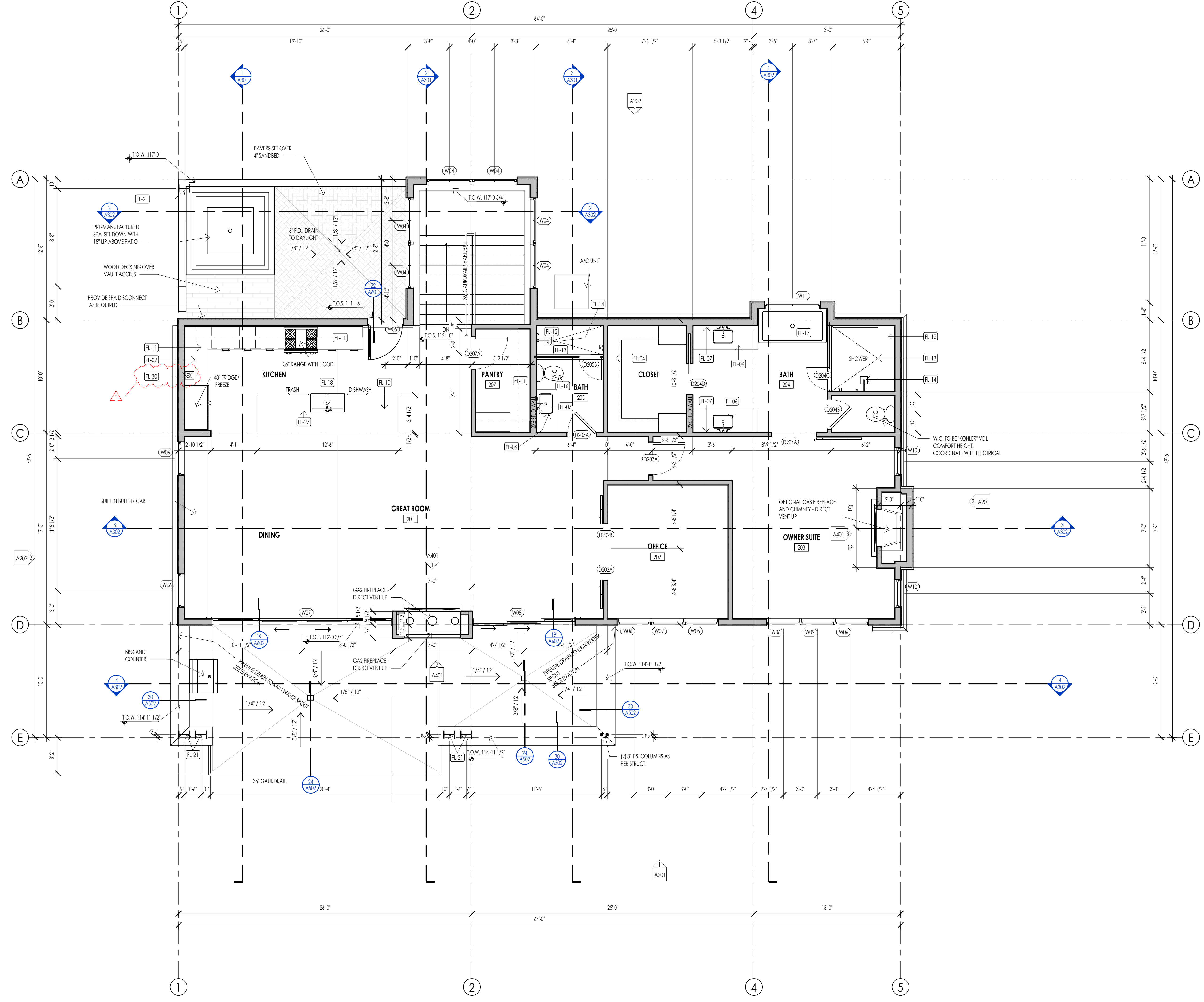
FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
	POURED IN PLACE CONCRETE WALL		CARPET FINISH
	CMU BLOCK WALL		TILE FINISH
	STONE VENEER		EXTERIOR CONCRETE SLABS
	METAL STUD WALL		
	WOOD STUD WALL		

- ### FLOOR PLAN GENERAL NOTES
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS.
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECK/PATIO.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES.
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X6 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
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  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

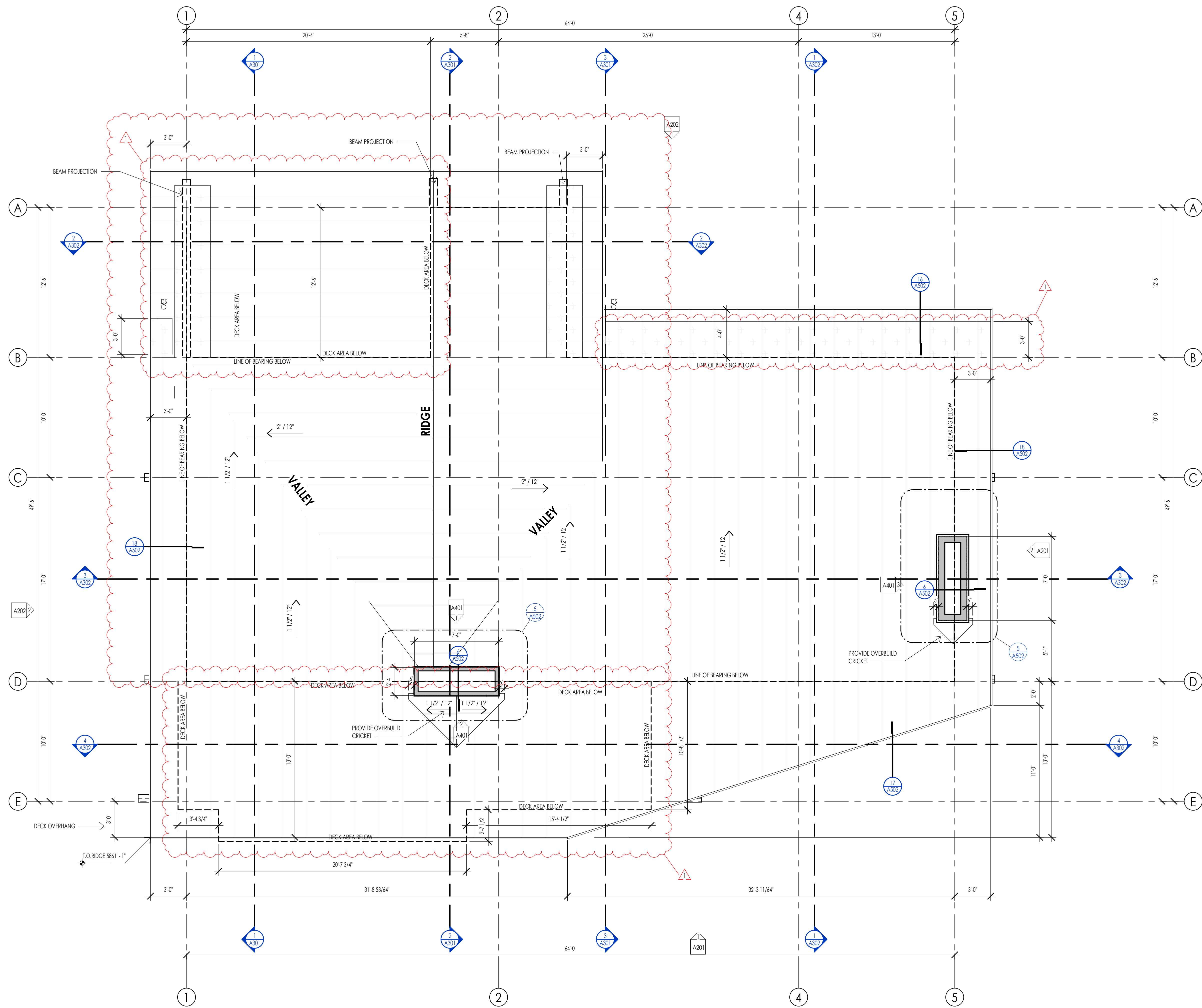
- ### STAIR PLAN GENERAL NOTES
- STAIR CONSTRUCTION SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R311.5.
    - THE MINIMUM STAIRWAY WIDTH SHALL NOT BE LESS THAN 36 INCHES CLEAR WIDTH. HANDRAILS MAY PROJECT INTO THE REQUIRED WIDTH A DISTANCE OF 4 1/2 INCHES FROM EACH SIDE OF A STAIRWAY. IRC 311.7.1 FOR ADDITIONAL WIDTH REQUIREMENTS OR FOR SPIRAL, CIRCULAR, WINDING STAIRS, ETC. REQUIREMENTS SEE I.R.C. SECTION R311.7.10.1
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    - ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SPOFFS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH GYPSUM BOARD. (I.R.C. R302.7)
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    - THE HAND GRIP PORTION OF HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1 1/4 INCHES MINIMUM TO 2 5/8 INCHES MAXIMUM. OTHER HANDRAIL SHAPES THAT HAVE AN EQUIVALENT GRASPING SURFACE ARE PERMISSIBLE. SEE BUILDING CODE. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH. R311.7.8.3.
    - HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.
  - GUARD RAILS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R312.
    - GUARDRAILS ARE REQUIRED AT ALL PORCHES, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AND SHALL BE NOT LESS THAN 36 INCHES IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 34 INCHES IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREAD.
    - REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREAS, BALCONIES, ETC. SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
    - THE TRIANGLE OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH A SIZE THAT A SPHERE 6 INCHES IN DIAMETER CANNOT PASS THROUGH.
    - THE GUARDS AT SIDES OF STAIRS SHALL HAVE GUARD SUCH THAT A 4-3/8" SPHERE CANNOT PASS THROUGH.

### FLOOR PLAN KEYNOTES

KEYNOTES	
FL-02	OVERHEAD CABINETS PROJECTION
FL-04	CLOSET SHELVING/ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-07	MIRROR SINK AS PER INTERIOR DESIGNER
FL-10	36" COUNTERTOP PER INTERIOR DESIGNER
FL-11	CABINET SYSTEM SHELVING PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGNER
FL-13	PROVIDE "SCHLITZ" KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH. INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD PER INTERIOR DESIGNER
FL-16	W.C. TO BE "KOHLER" PERIPLAC CURBY COMFORT
FL-17	TUB/ SOAKER TUB AS PER INTERIOR DESIGNER
FL-18	KITCHEN SINK W/DISPOSAL - COUNTERTOP - CABINETS PER INTERIOR DESIGNER
FL-21	WIDE FLANGE COLUMNS AS PER STRUCTURAL
FL-27	PROVIDE COUNTER BUTTON SWITCH FOR DISPOSAL UNIT
FL-30	FIRE EXTINGUISHERS SHALL BE INSTALLED AND MAINTAINED PER 2018 IBC SECTION 904 BOTH DURING CONSTRUCTION AND UPON OCCUPANCY OF THE BUILDING. DURING CONSTRUCTION FIRE EXTINGUISHERS SHALL BE PLACED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION THAT IS LESS THAN 75' TRAVEL DISTANCE TO ANY COMBUSTIBLE ON SITE. 30' TO ANY HOI WORK. EXTINGUISHERS SHALL BE INSTALLED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION. UPON COMPLETION OF PROJECT EVERY SINGLE-FAMILY RESIDENCE SHALL HAVE A MINIMUM OF ONE EXTINGUISHER PER GARAGE AND ONE EXTINGUISHER PER KITCHEN AREA.



LEVEL 2 - FLOOR PLAN  
1/4" = 1'-0"



ROOF PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
	KEEP RIB ROOFING MEMBRANE		LOCATION OF SNOW RETENTION SYSTEM - TO BE DESIGNED AND ENGINEERED BY OTHERS - SEE DETAILS BELOW
	RAIN GUTTER WITH DOWN SPOUT		

**TRA SNOW & SUN**  
SNOW RETENTION SYSTEMS

07 72 53  
1657 South 550 East  
American Fork, UT 84003  
801-606-6980 | www.traandsun.com

### SNOW DIAMOND CLAMP-ON - 1 RAIL

**DESCRIPTION**

- Designed for standing seam metal roofs
- Available for rib types including: Double Lock, Single Lock, Snap Lock, Skyline, etc.
- Designed for diamond square tubes (see square clamp-on tube product data sheet)
- Allows for full installation without penetration of the roof surface
- Powder coated to match roofing material color
- Overall dimensions: 2.67" L x 1.64" W x 1.64" H
- Height (HT) of clamp varies based on rib type and height
- Carriage bolt (2) 3/8" Dia X 1-3/4" or 2"

**MATERIALS**

- Zinc Coated Steel: 3/16" (ASTM A336)
- Stainless Steel: 16G (ASTM A666-C3)

**COLORS/FINISHES**

- Zinc Primer Steel
- Hot Dipped Galvanized Steel
- Mil Finish Stainless Steel
- Powder coating available in many colors visit <http://www.traandsun.com/color-chart>

**NOTE:** Due to specific job conditions, TRA Snow and Sun will only warranty a snow retention system layout that has been designed by TRA Snow and Sun.

**1 RAIL CLAMP-ON SNOW FENCE SYSTEM**

USED ON: STANDING SEAM METAL

**DIMENSIONS**

**SNOW RETENTION SYSTEMS**

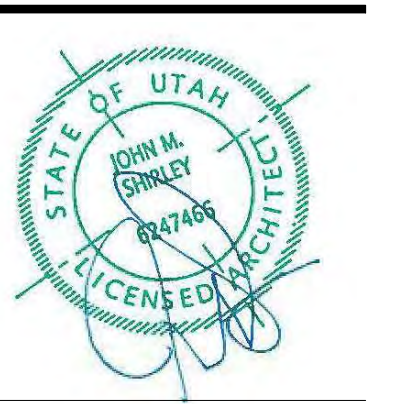
TRA Snow and Sun, Inc. 2022

- #### ROOF PLAN GENERAL NOTES
- SEE SHEET G002 FOR PROJECT GENERAL NOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - FLASH ALL ROOF PENETRATIONS WHETHER SHOWN OR NOT.
  - COORDINATE WITH MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL ROOF PENETRATIONS.
  - PROVIDE HEAT TRACE IN ALL RAIN GUTTERS, DOWN SPOUTS AND RAIN CHAINS.
  - ROOFING CONTRACTOR SHALL REVIEW ALL SUBSTRATES PRIOR TO BEGINNING WORK.
  - ALL ROOFING SHALL BE REVIEWED PRIOR TO INSTALLATION.
  - CONTRACTOR IS RESPONSIBLE TO ASSUME THAT NO ROOF SLOPES CREATE DEAD SPOTS OR LOW SPOTS THAT WILL PREVENT DRAINAGE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESPECIS).
  - DIMENSIONS SHOWN ON THE ROOF PLAN ARE FROM THE EXTERIOR SIDE OF THE STUD FRAMING BELOW.

- #### ROOF PLAN KEYNOTES
- 

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WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

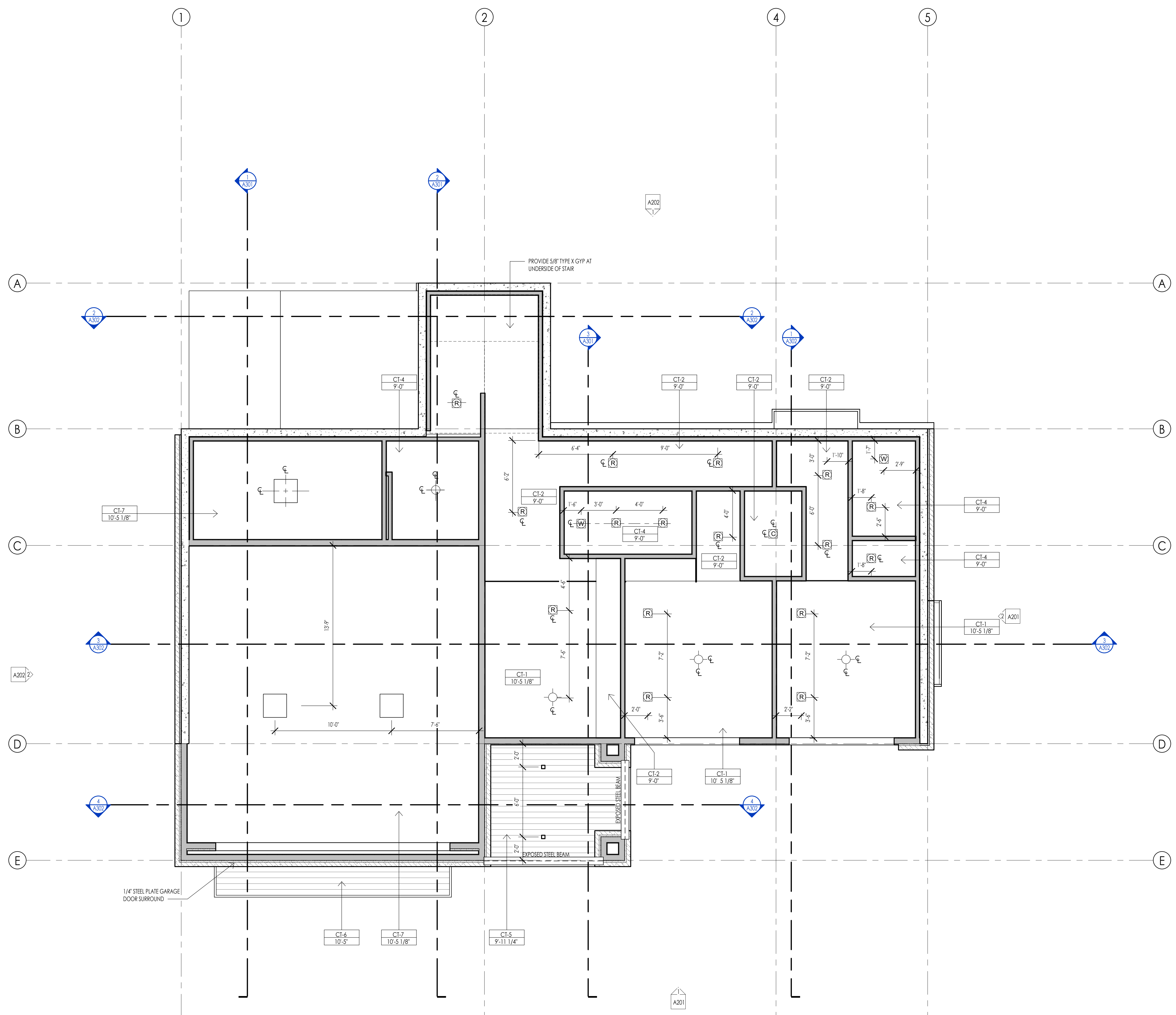
PROJECT NC22023.32  
DATE: 2023.09.25  
REVISIONS:  
1 04-27-2023 PER CITY COMMENTS  
3 09-13-2023 PER COUNCIL COMMENTS

SHEET TITLE:  
ROOF PLAN

SHEET NUMBER:  
**A106**

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REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
[Hatch Pattern]	CT-1	5/8" GYPSUM BOARD AT FLOOR FRAMING	[Hatch Pattern]	CT-7	5/8" GYPSUM BOARD TYPE X FIRE RESISTANT
[Hatch Pattern]	CT-2	5/8" GYPSUM BOARD 2x4			
[Hatch Pattern]	CT-3	5/8" WATER RESISTANT GYPSUM BOARD AT ROOF FRAMING			
[Hatch Pattern]	CT-4	5/8" WATER RESISTANT GYPSUM BOARD 2x4			
[Hatch Pattern]	CT-5	3/4" - 2x4 T+G			
[Hatch Pattern]	CT-6	3/4" - 1-G ROOF SOFFIT			

- REFLECTED CEILING PLAN GENERAL NOTES**
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECKS.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - SEE SHEET G002 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.

CEILING TAG SYMBOL	DESCRIPTION
CT	CEILING TYPE
1'-0"	HEIGHT

**REFLECTED CEILING PLAN KEYNOTES**

KEYNOTES

PROJECT NC22023.32  
 DATE: 2023.09.25  
 REVISIONS:

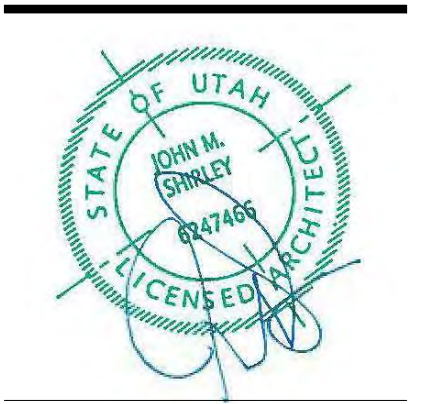
SHEET TITLE:  
 LEVEL 1 CEILING PLAN

SHEET NUMBER:  
 A110



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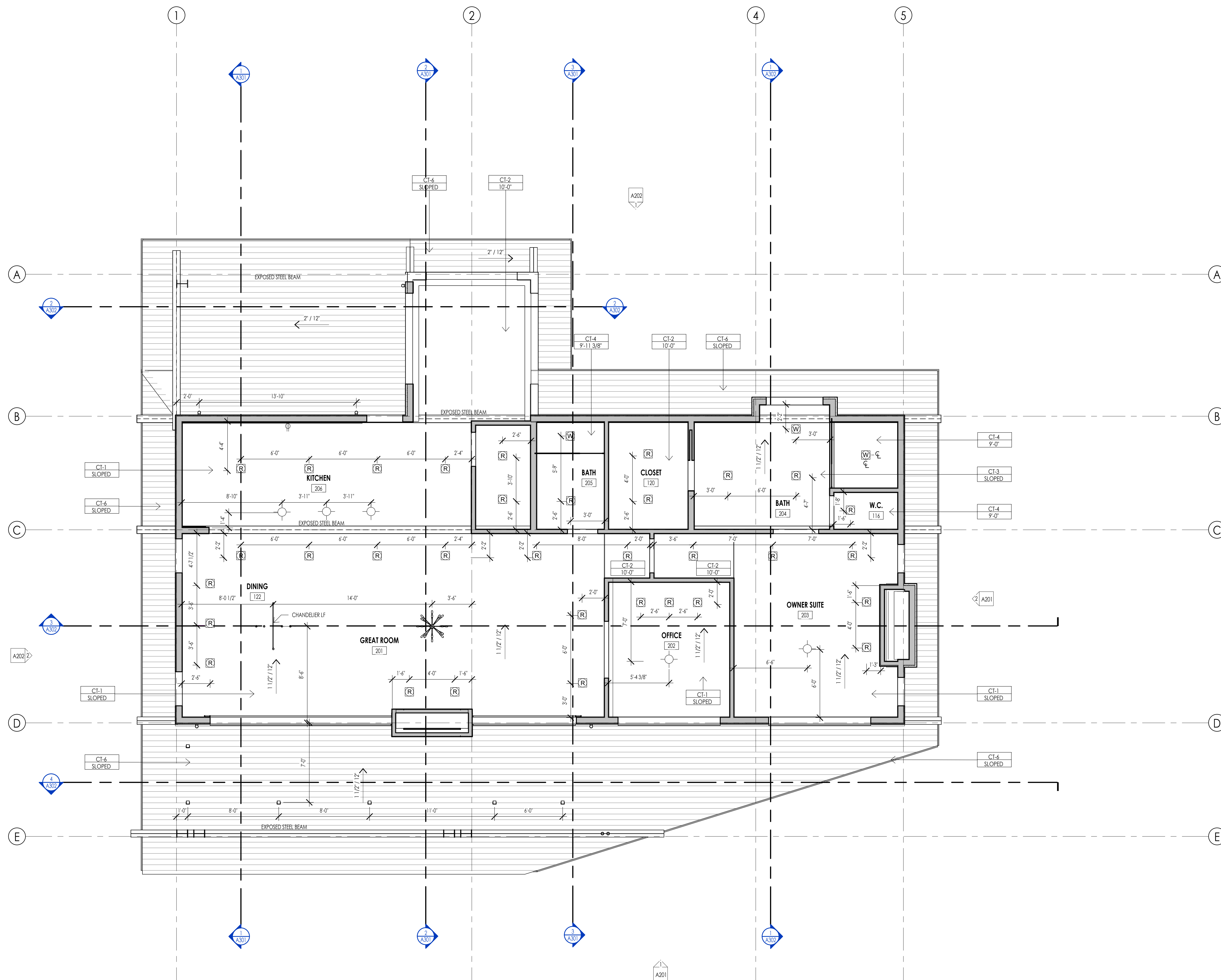
WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

LEVEL 1 - REFLECTED CEILING PLAN  
 1/4" = 1'-0"

1  
 A110

PERMIT SET



REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
[Hatch]	CT-1	5/8" GYPSUM BOARD AT FLOOR FRAMING.	[Hatch]	CT-7	5/8" GYPSUM BOARD TYPE X FIRE RESISTANT
[Hatch]	CT-2	5/8" GYPSUM BOARD 2x4			
[Hatch]	CT-3	5/8" WATER RESISTANT GYPSUM BOARD AT ROOF FRAMING			
[Hatch]	CT-4	5/8" WATER RESISTANT GYPSUM BOARD 2x4			
[Hatch]	CT-5	3/4" - 2x4 T+G			
[Hatch]	CT-6	3/4" - 1+G ROOF SOFFIT			

- REFLECTED CEILING PLAN GENERAL NOTES**
1. ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  2. ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.
  3. REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  4. REFER TO ENLARGED PLANS FOR ALL DECKS.
  5. COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  6. SEE SHEET G002 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  7. COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  8. ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.
- | CEILING TAG SYMBOL | DESCRIPTION  |
|--------------------|--------------|
| CT-1               | CEILING TYPE |
| 1'-0"              | HEIGHT       |

**REFLECTED CEILING PLAN KEYNOTES**

PROJECT NC22023.32  
 DATE: 2023.09.25  
 REVISIONS:

SHEET NUMBER:  
**A111**

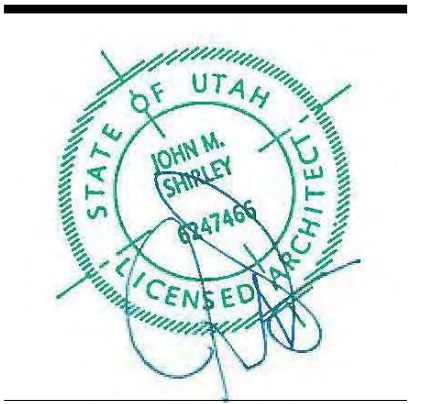


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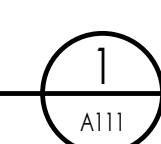
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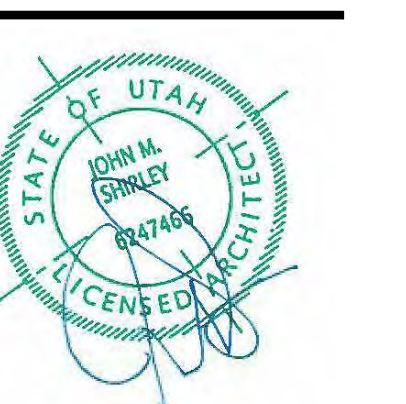
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**WARM SPRINGS RESIDENCE #32**  
 160 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

LEVEL 2 - REFLECTED CEILING PLAN  
 1/8" = 1'-0"

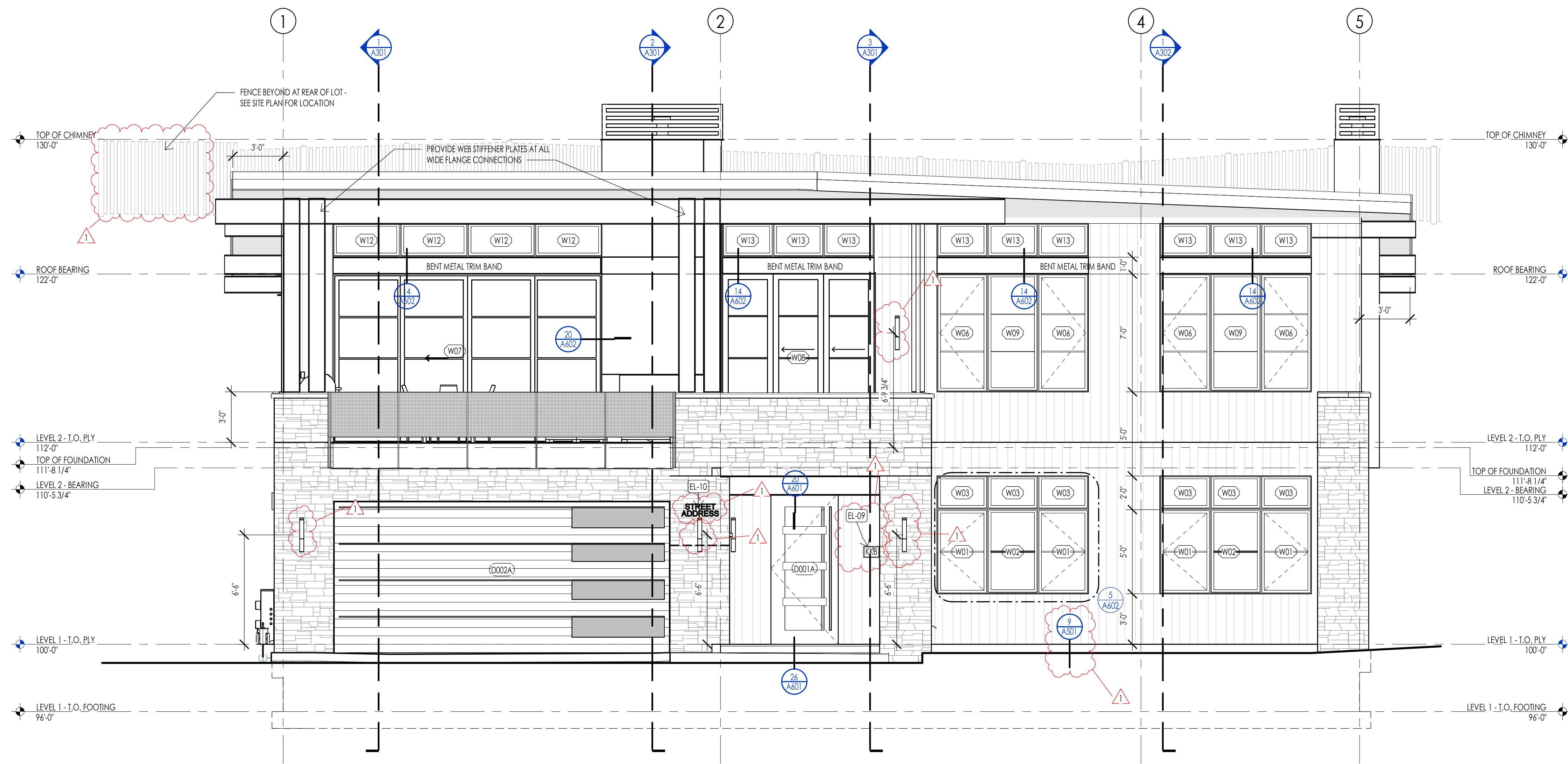




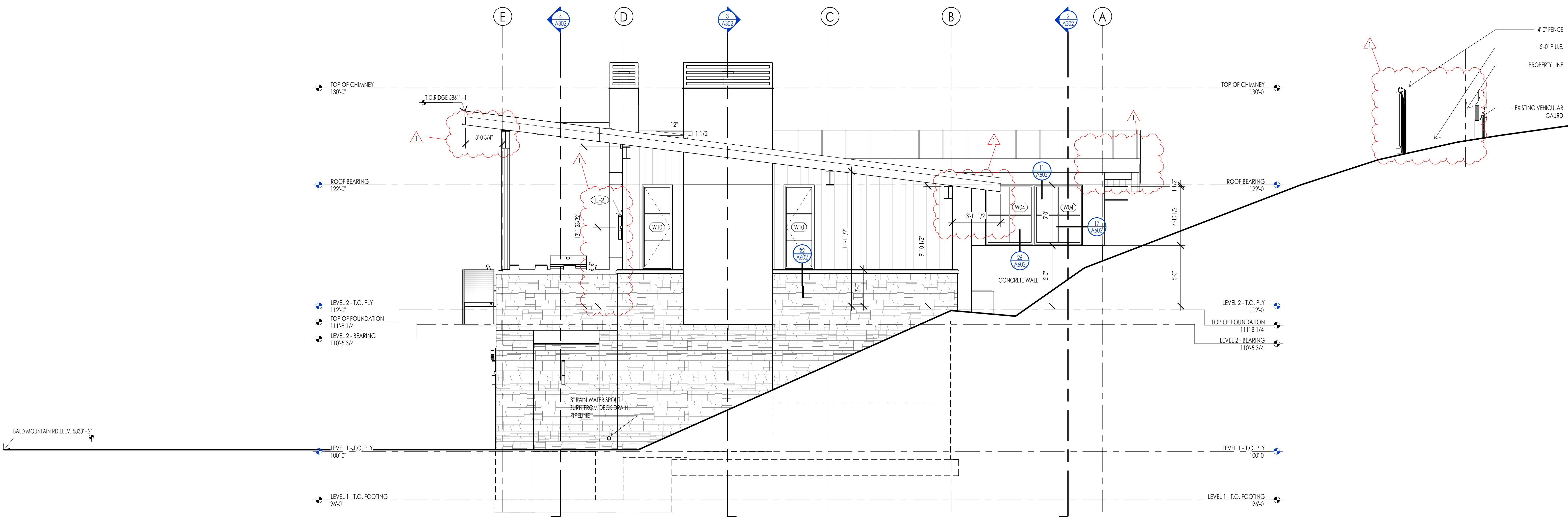
HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	1X4, 1X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES, RANDOM WIDTHS
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL

KEYNOTES	
EL-09	AN APPROVED KEY BOX SHALL BE INSTALLED, WITH THE APPROPRIATE KEYS FOR EMERGENCY FIRE DEPARTMENT ACCESS IN A LOCATION APPROVED BY THE FIRE DEPARTMENT. THE KEY BOX SHALL BE A KNOX BOX BRAND AND SIZED TO ACCOMMODATE KEYS TO EVERY DOOR OF THE PROJECT. LOCATION NO MORE THAN 3FT HOR. FROM MAIN DOOR AND NO MORE THAN 5.5FT VERTICAL. VERIFY LOCAL CODE.
EL-10	APPROVED ADDRESS NUMBERS SHALL BE PLACED IN SUCH A POSITION TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE ROAD FRONTING THE PROPERTY. NUMBERS AND LETTERS SHALL BE A MINIMUM OF FOUR (4) INCHES TALL, HAVE A MINIMUM 1/8" BRUSH STROKE, CONTRAST WITH THEIR BACKGROUND, AND BE POSITIONED A MINIMUM OF FORTY-EIGHT (48) INCHES ABOVE FINAL GRADE.



**SOUTH ELEVATION**  
1/4" = 1'-0" 1



**EAST ELEVATION**  
1/4" = 1'-0" 2

WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

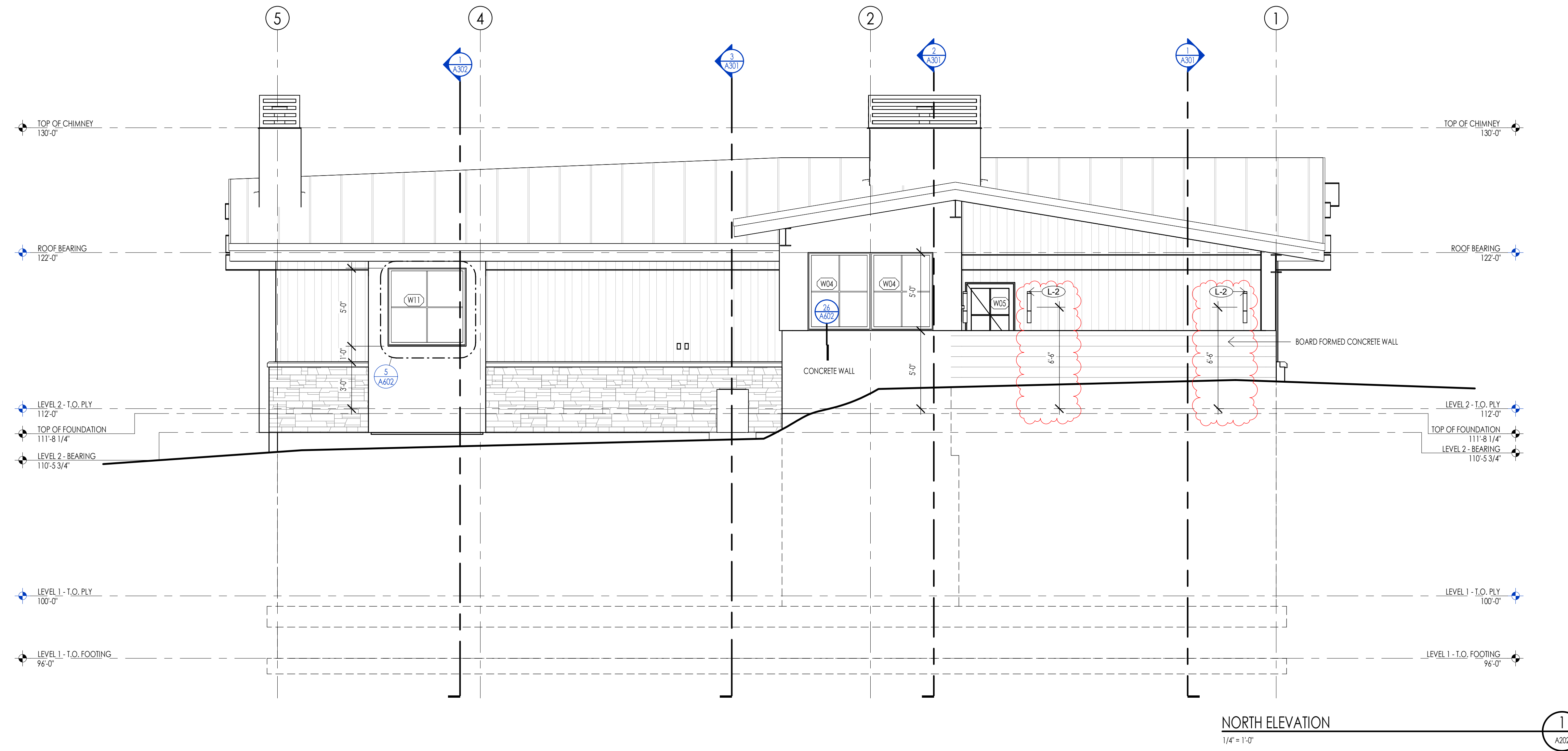
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DATE: 2023.09.25  
REVISIONS:

1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
EXTERIOR ELEVATIONS

SHEET NUMBER:  
A201

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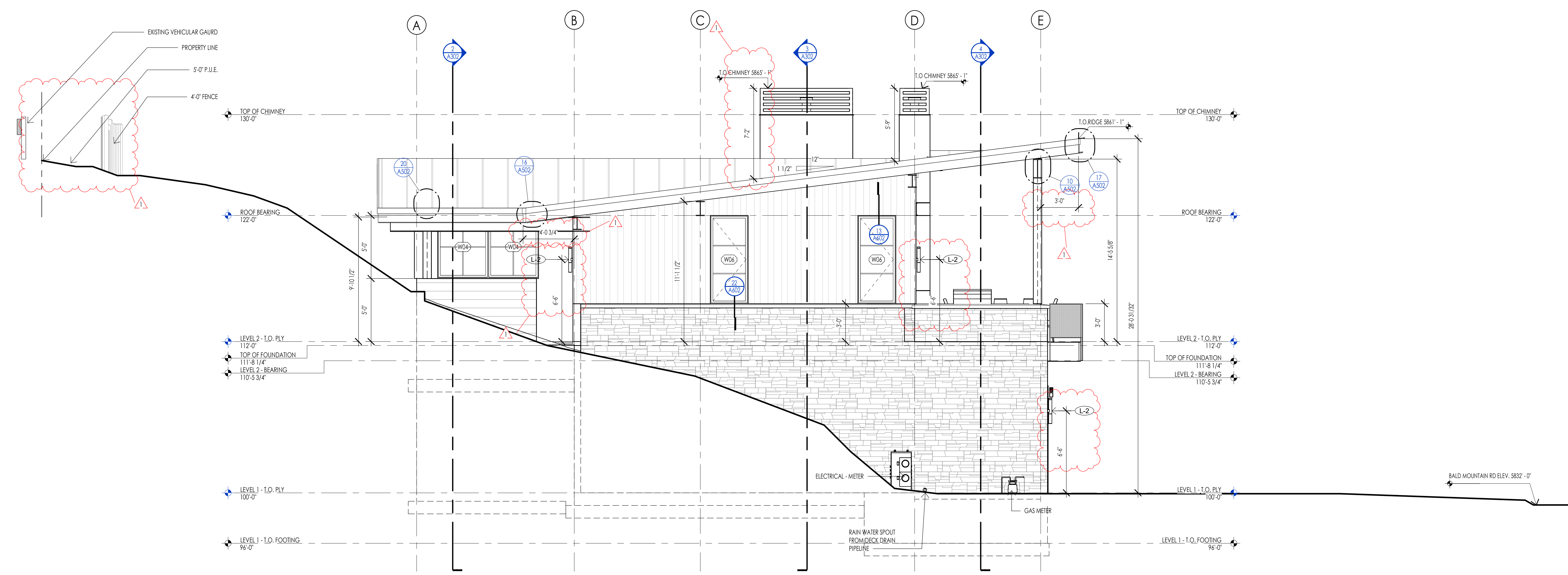


NORTH ELEVATION  
1/4" = 1'-0"

HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	1X4, 1X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES, RANDOM WIDTHS
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL

KEYNOTES

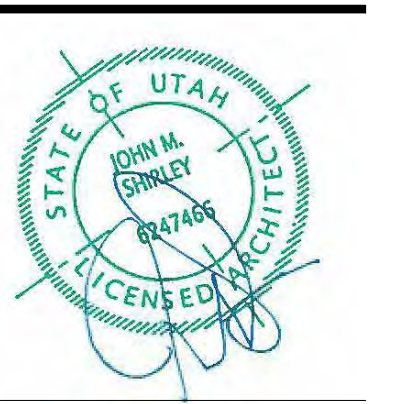


WEST ELEVATION  
1/4" = 1'-0"



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WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25  
REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
EXTERIOR ELEVATIONS

SHEET NUMBER:  
A202

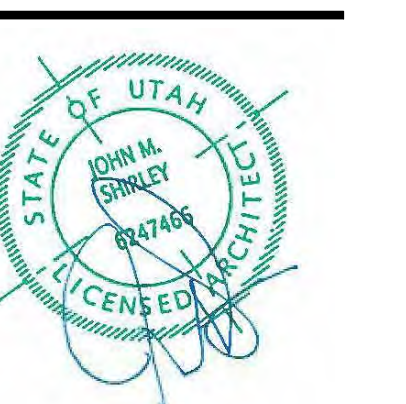
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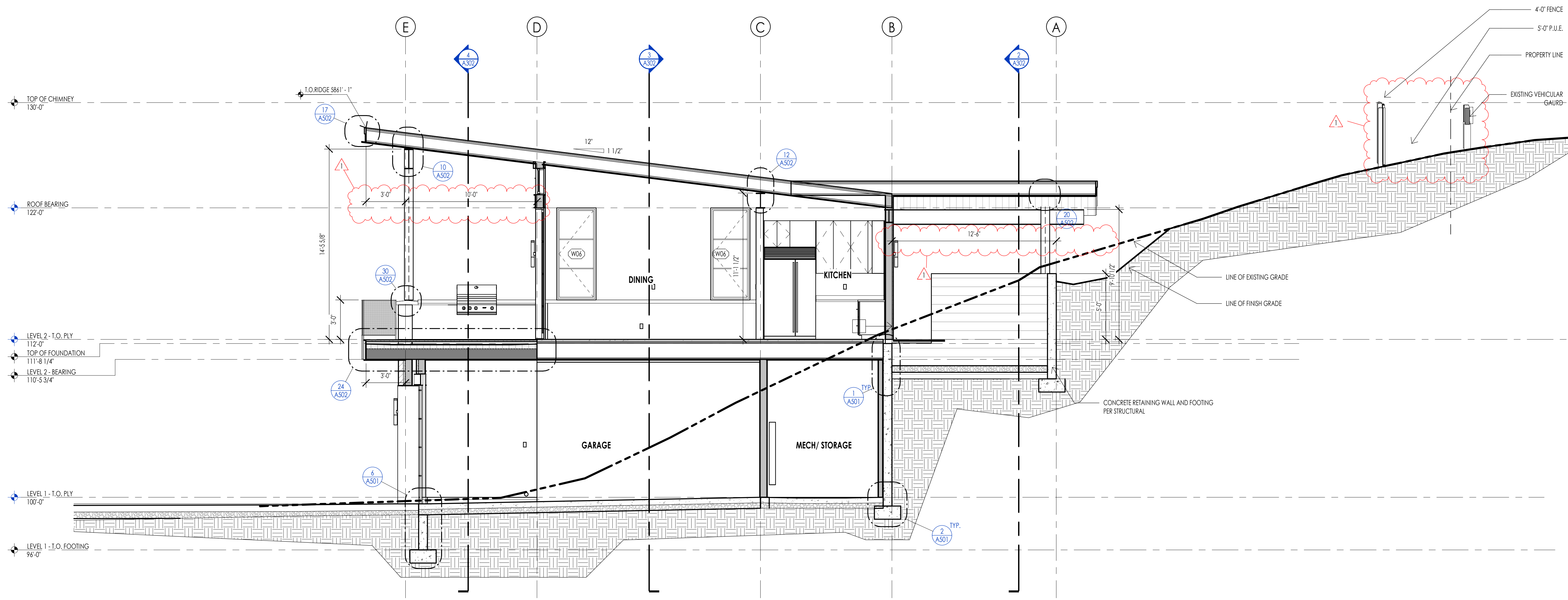
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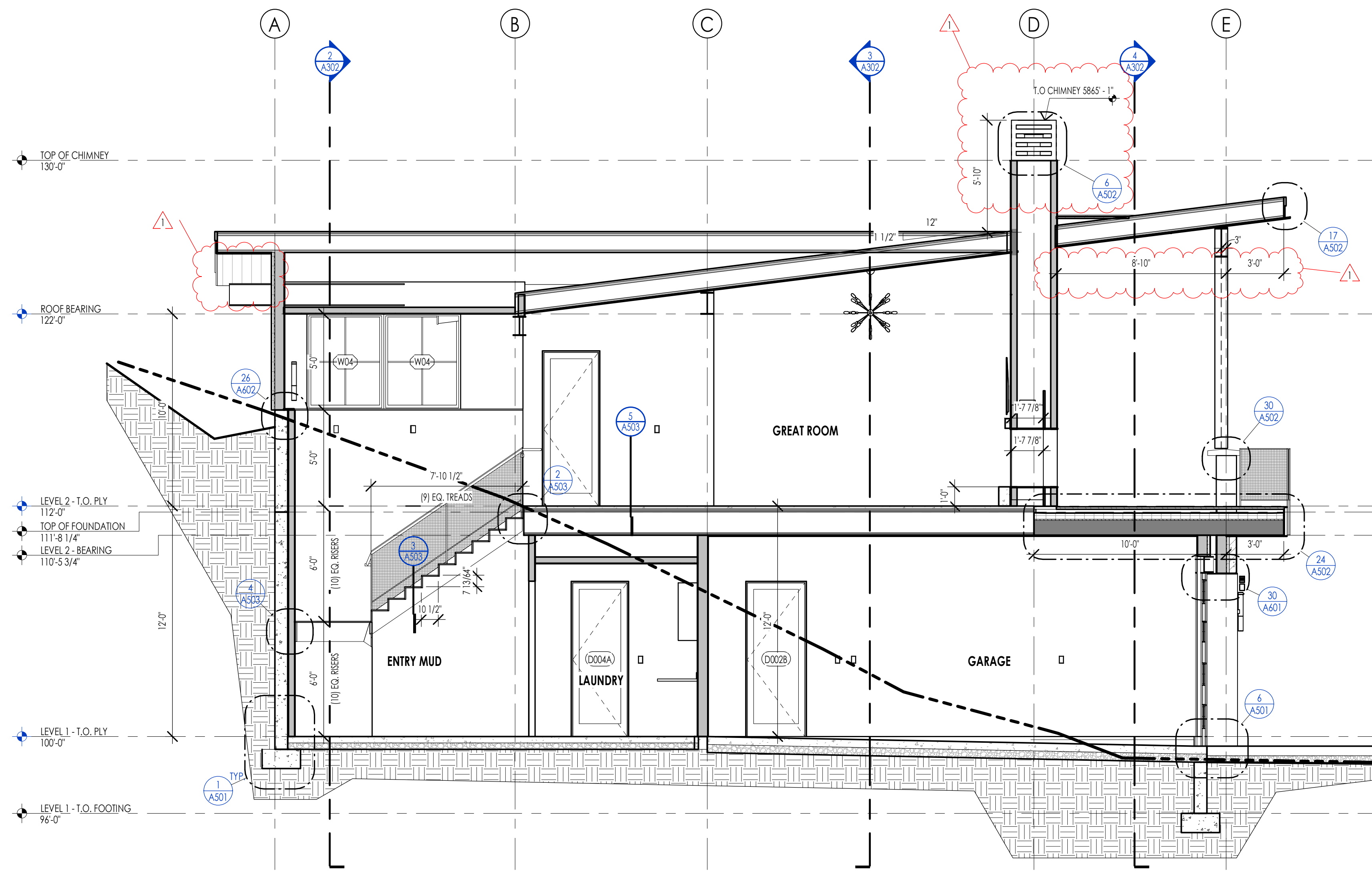


HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	1x4 1/8 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES, RANDOM WIDTHS
	EXTERIOR STONE VENEER

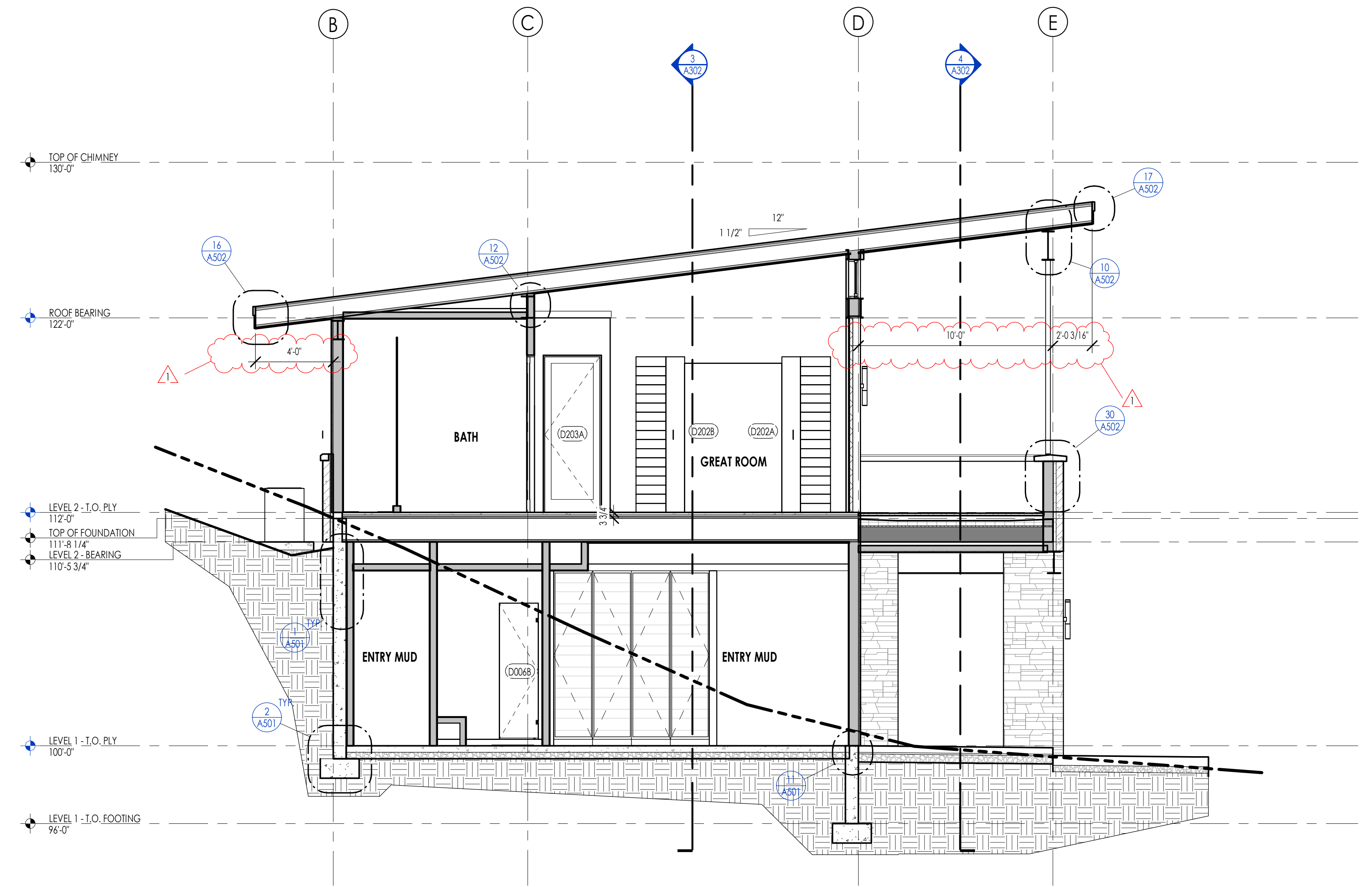
NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL



SECTION 01  
1/4" = 1'-0" (1/4" = 1'-0")



SECTION 02  
1/4" = 1'-0" (1/4" = 1'-0")



SECTION 03  
1/4" = 1'-0" (1/4" = 1'-0")

WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

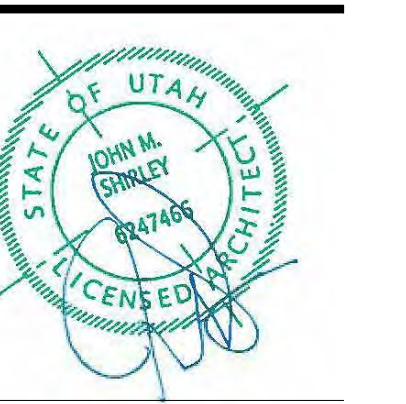
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BUILDING SECTIONS

SHEET NUMBER:  
A301

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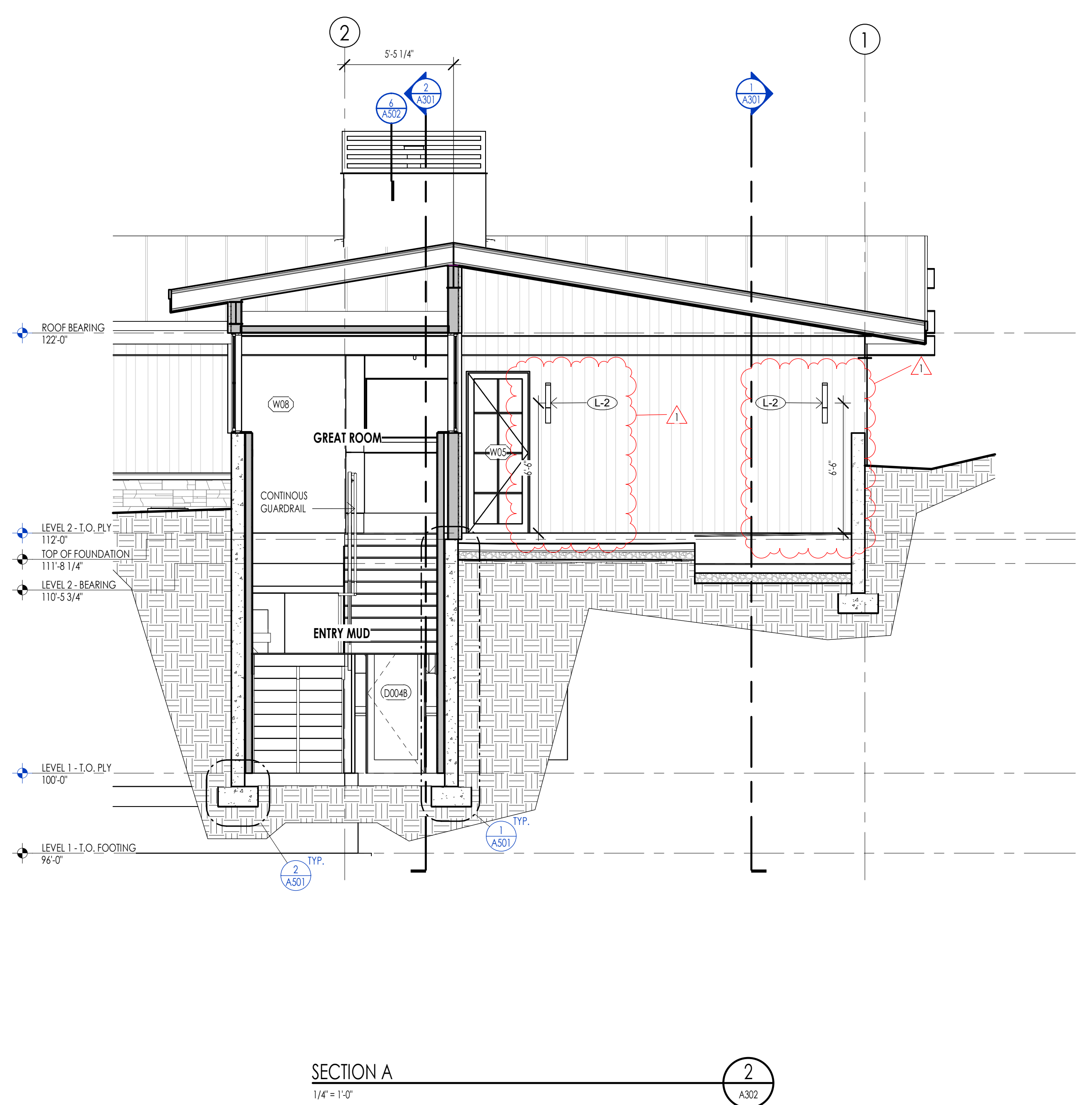
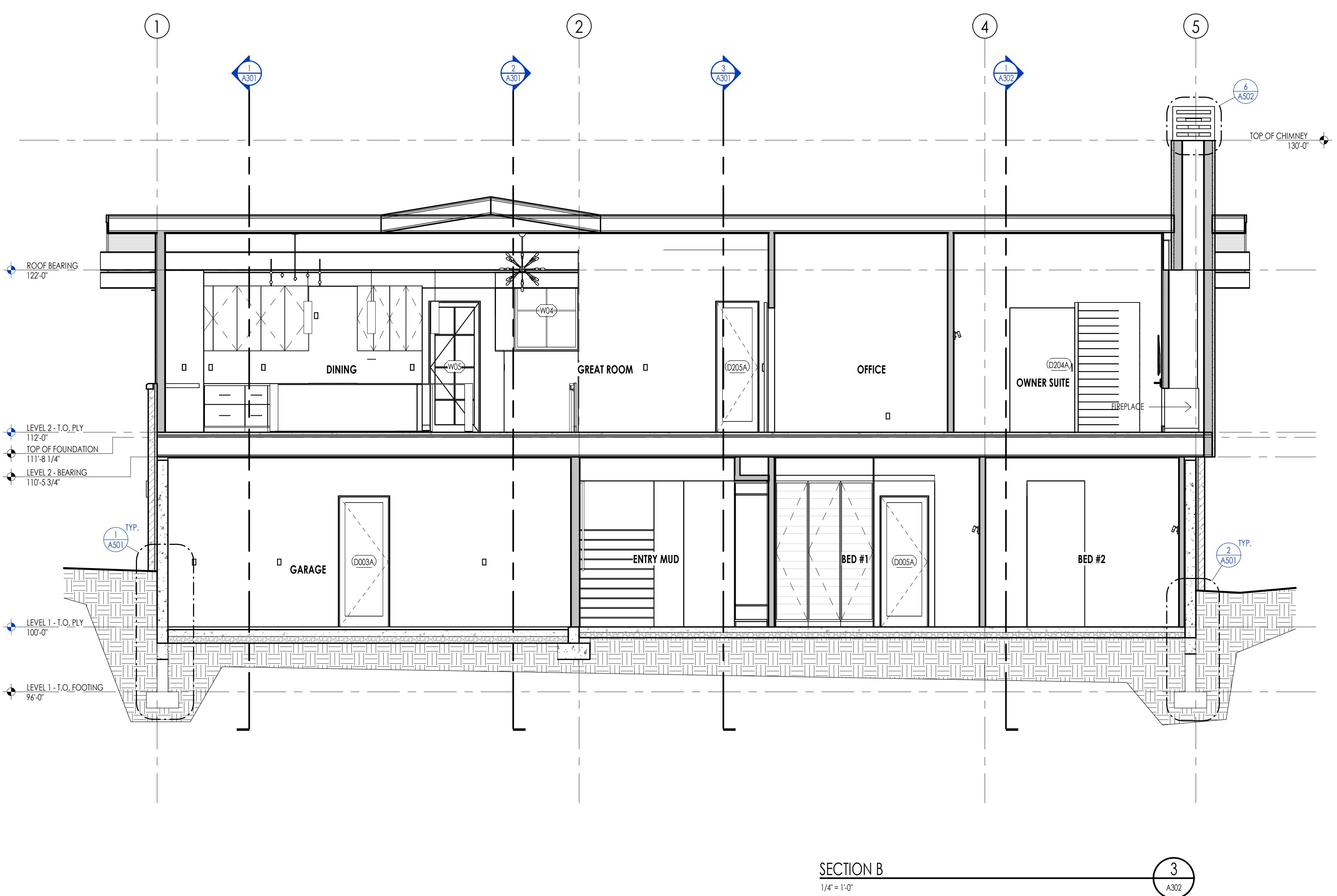
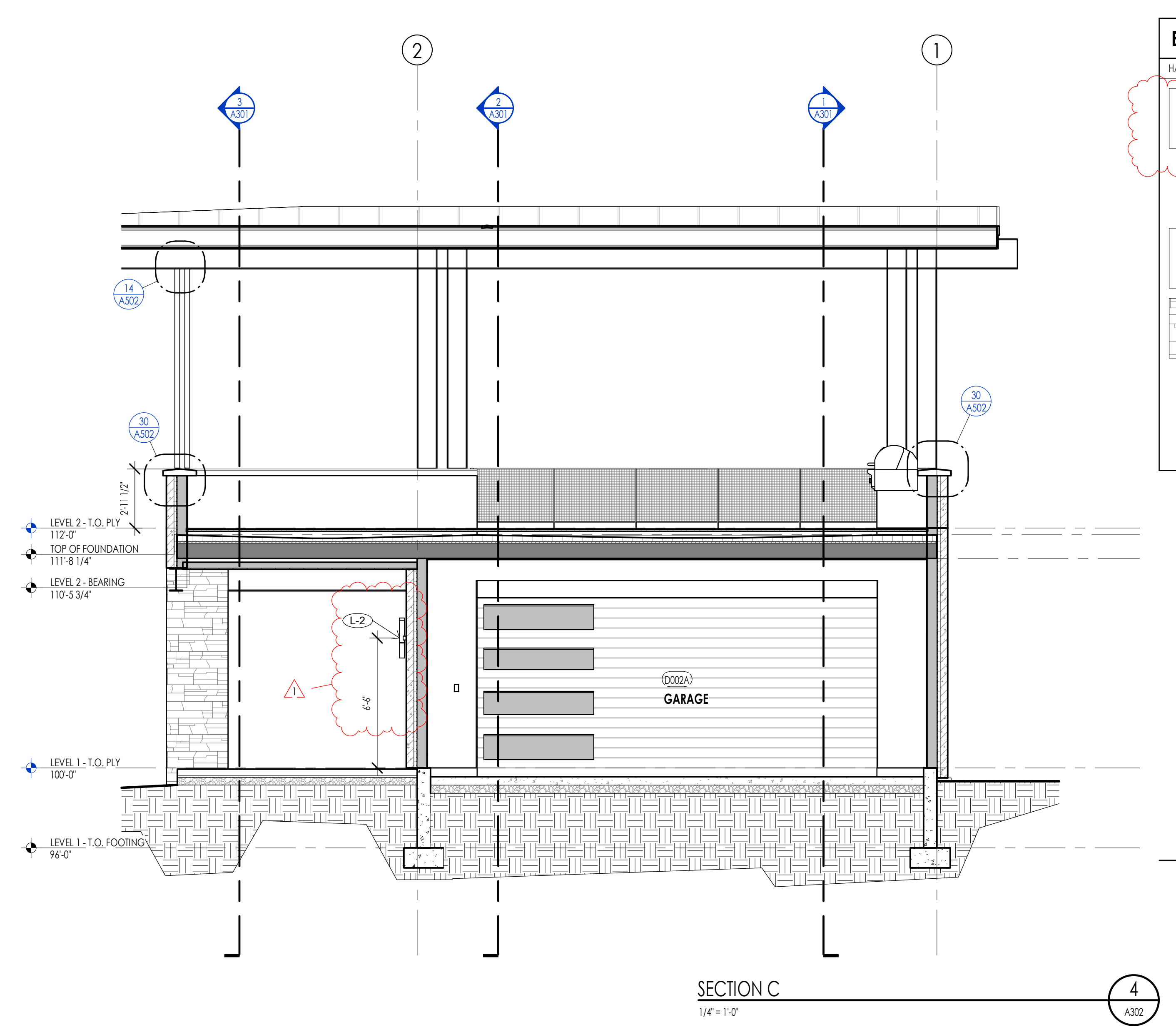
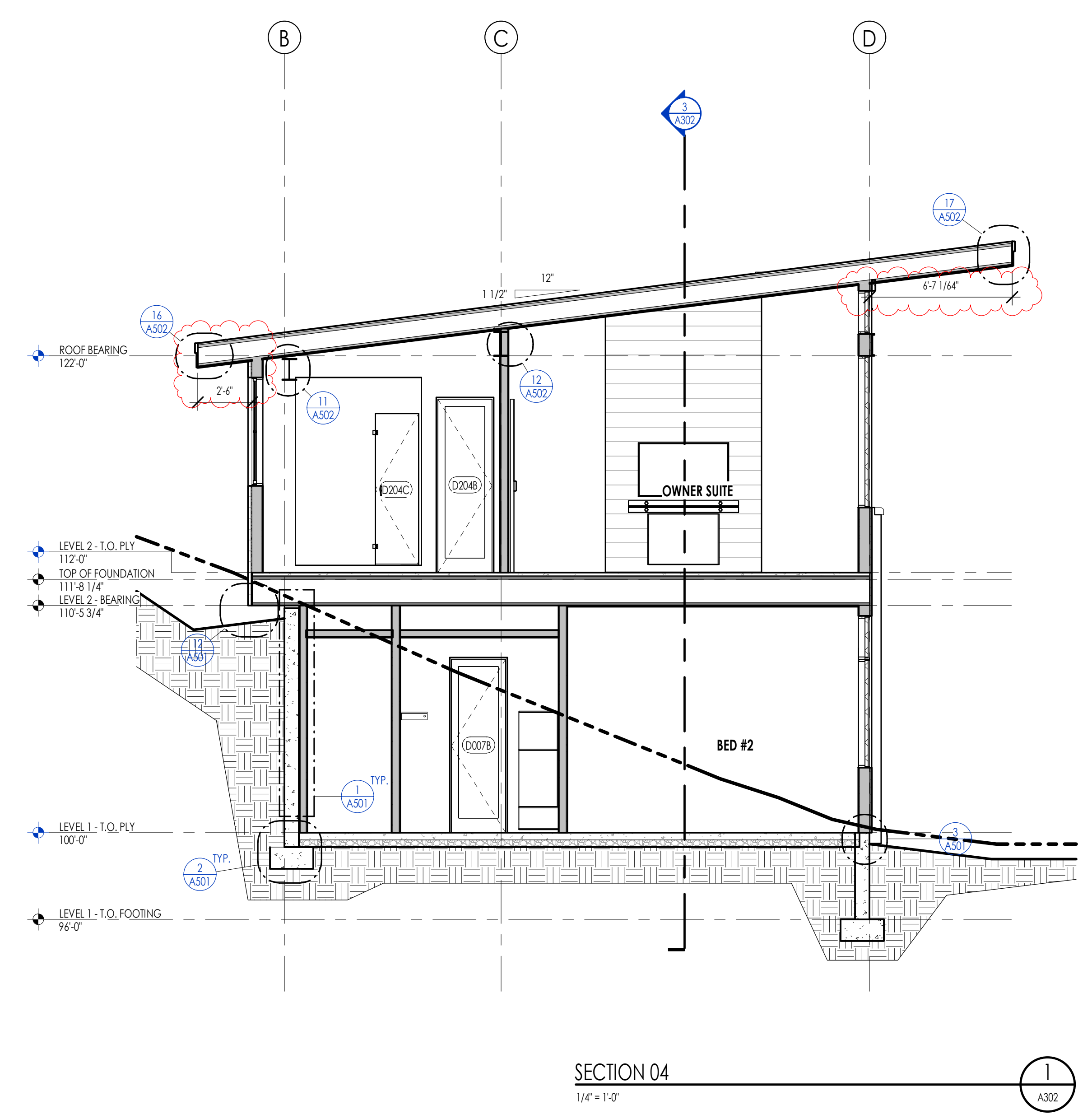
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PERMIT SET



HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	1X4, 1X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES, RANDOM WIDTHS
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL



WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25

REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

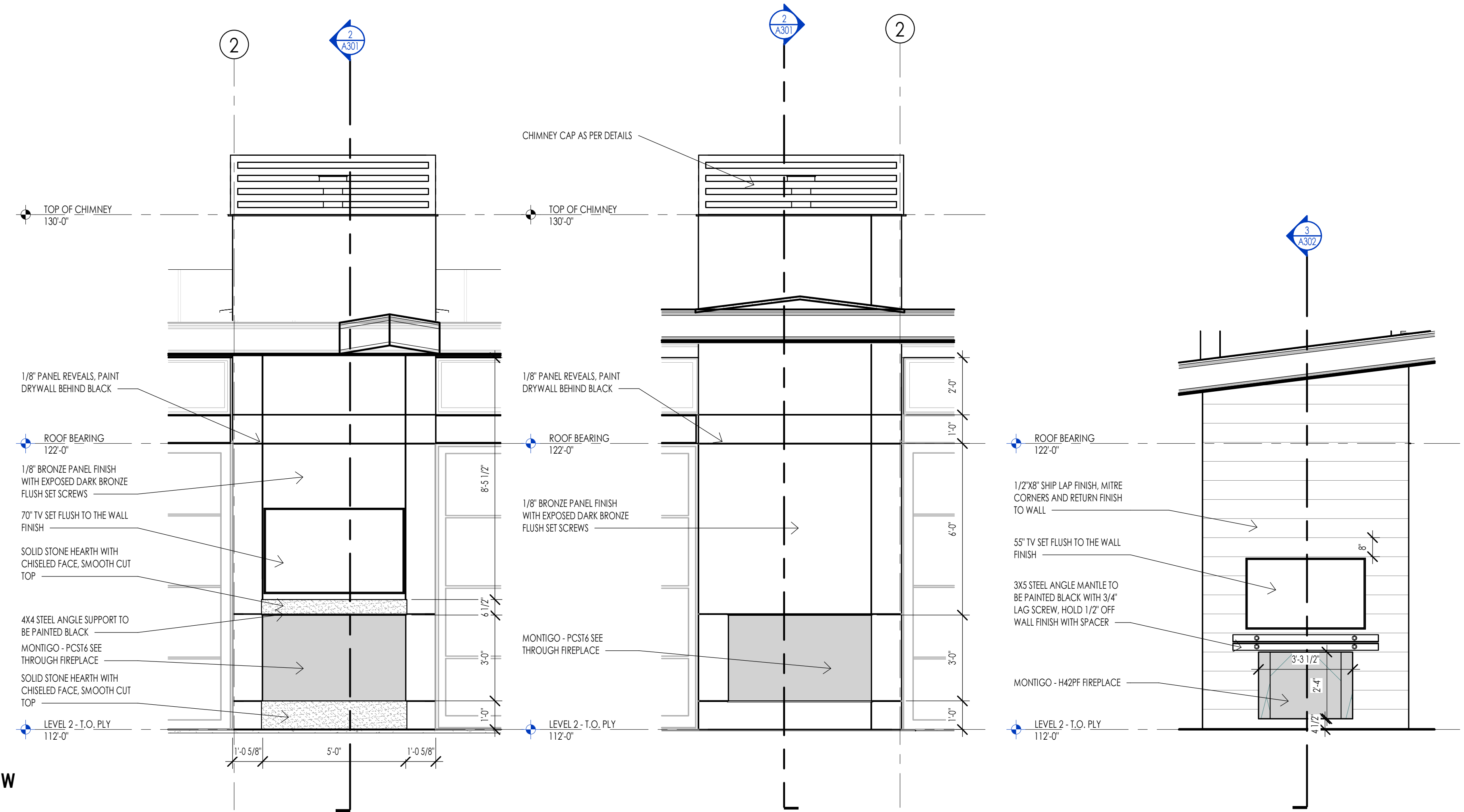
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BUILDING SECTIONS

SHEET NUMBER:  
A302

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GREAT ROOM INTERIOR VIEW

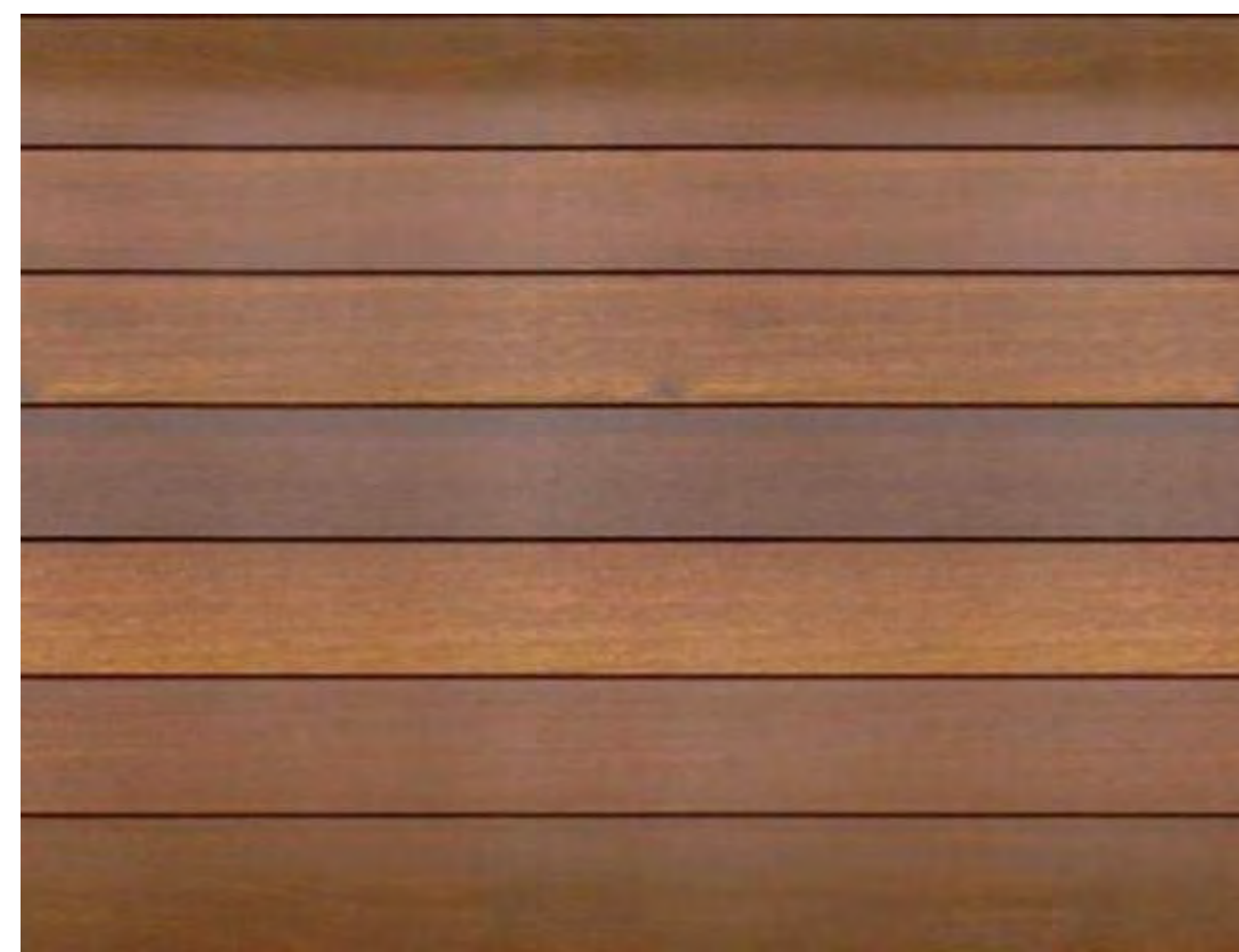


GREAT ROOM FIREPLACE ELEVATION  
3/8" = 1'-0"

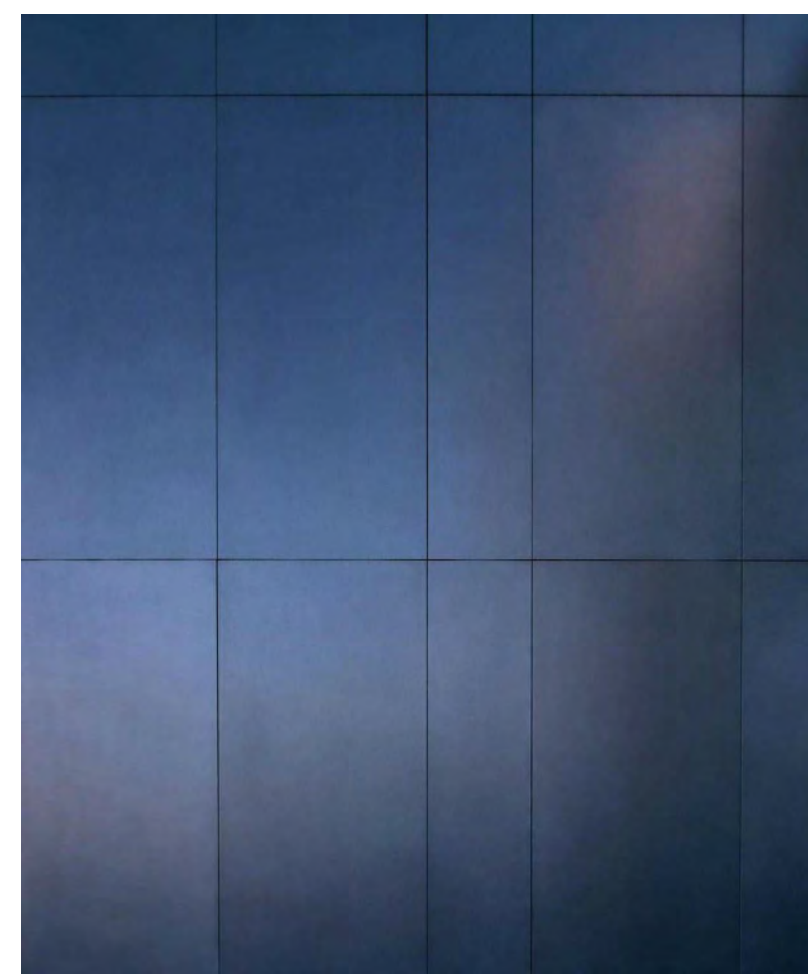
1 DECK FIREPLACE ELEVATION  
A401 3/8" = 1'-0"

2 OWNER SUITE FIREPLACE ELEVATION  
A401 3/8" = 1'-0"

3



INTERIOR WOOD SLAT FINISH



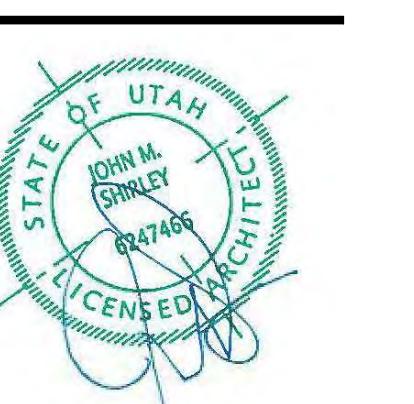
STEEL FIREPLACE SURROUND

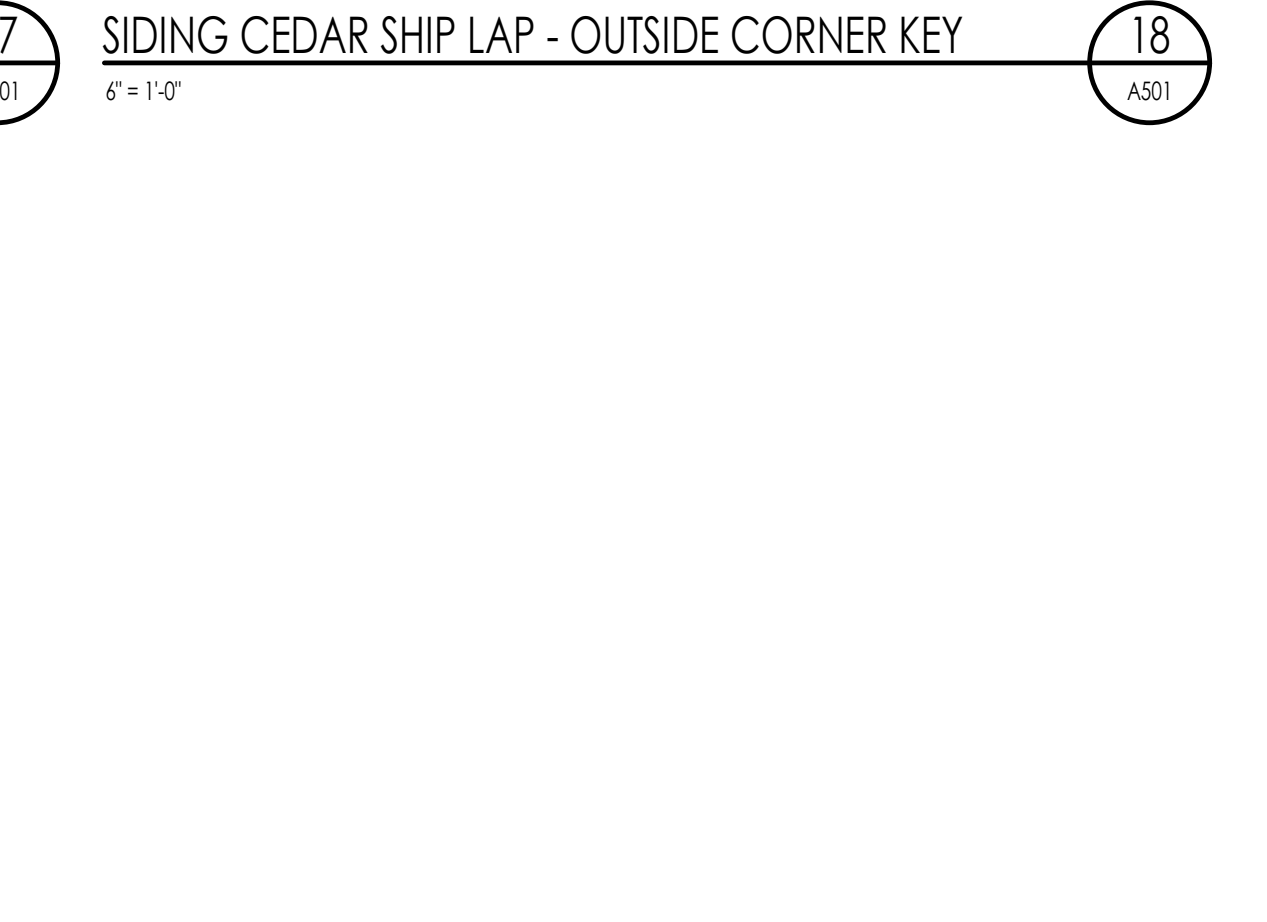
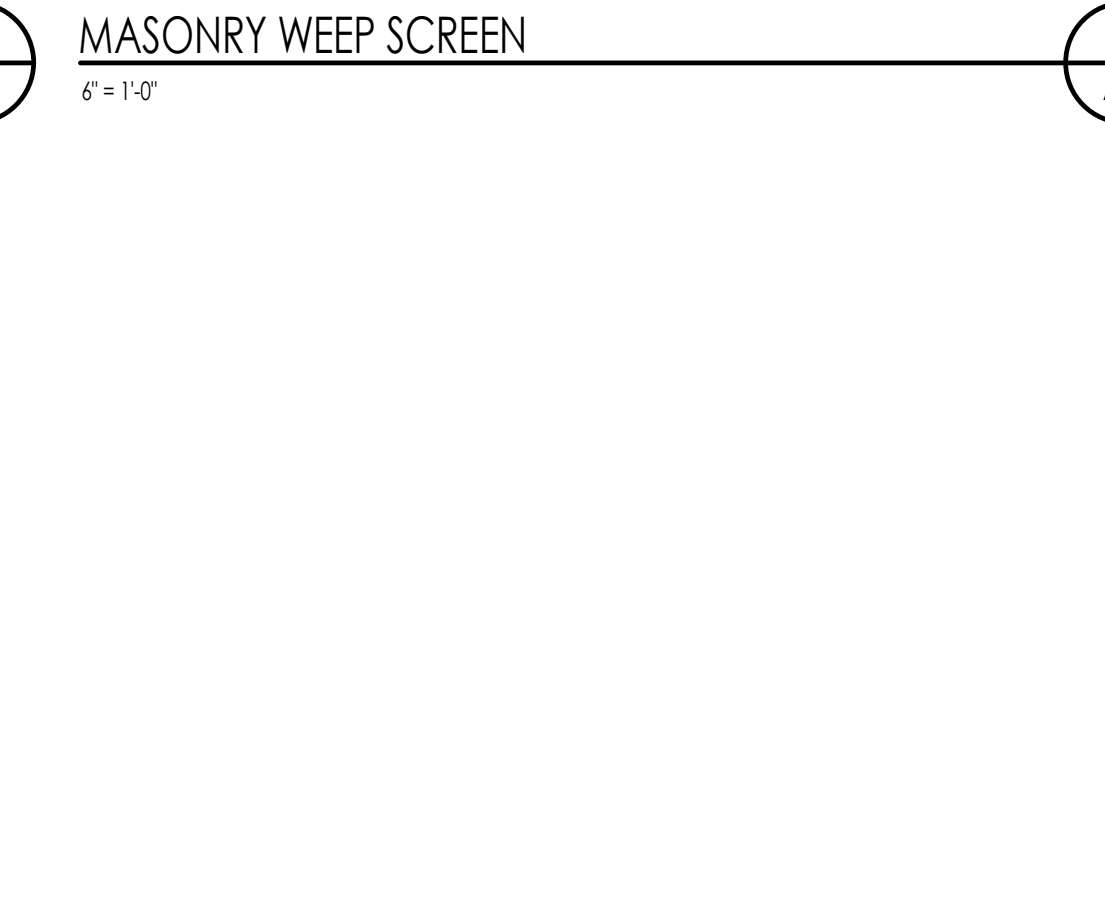
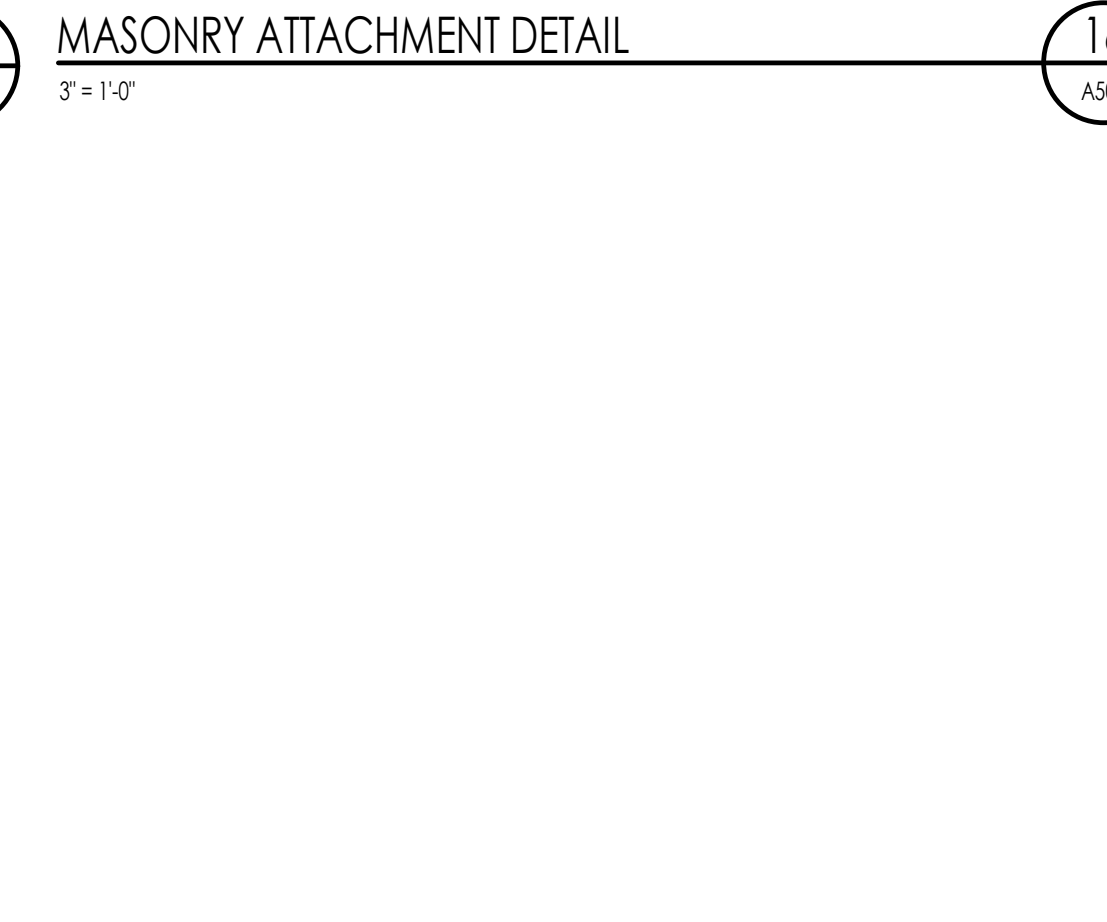
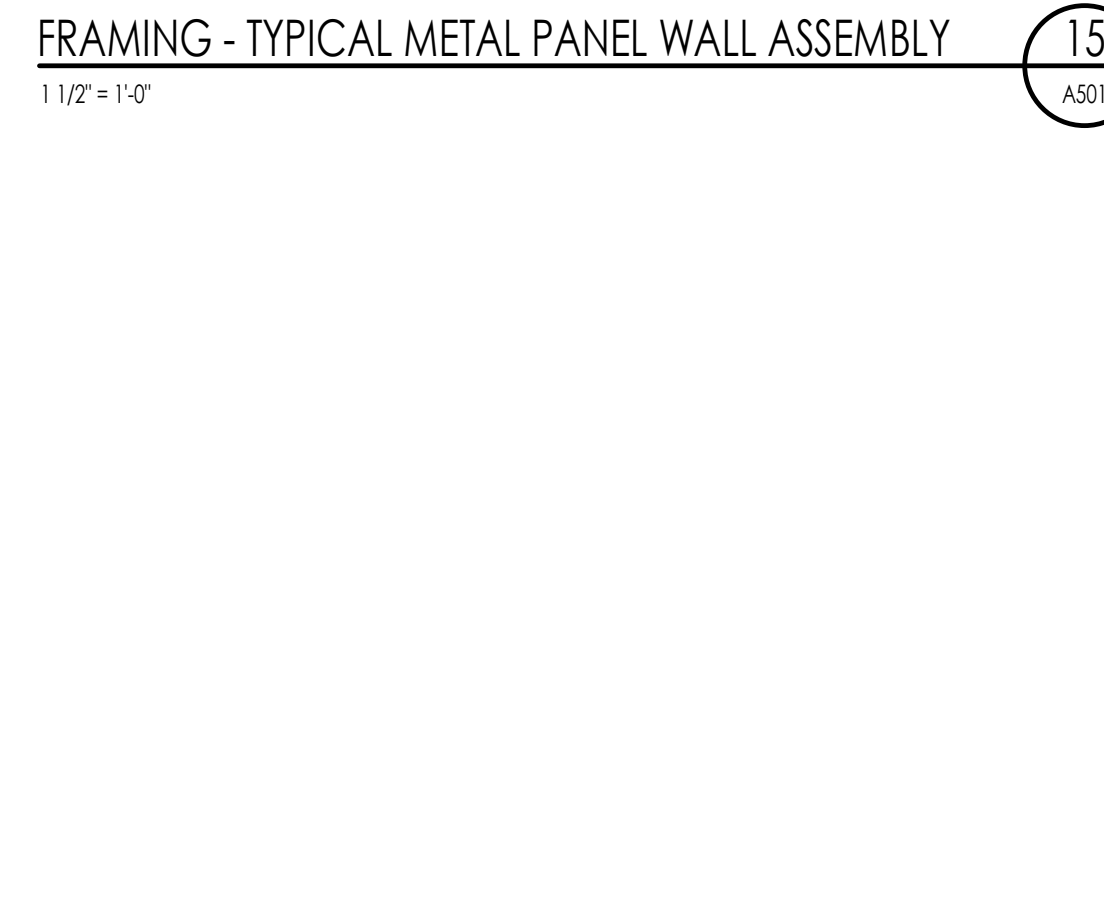
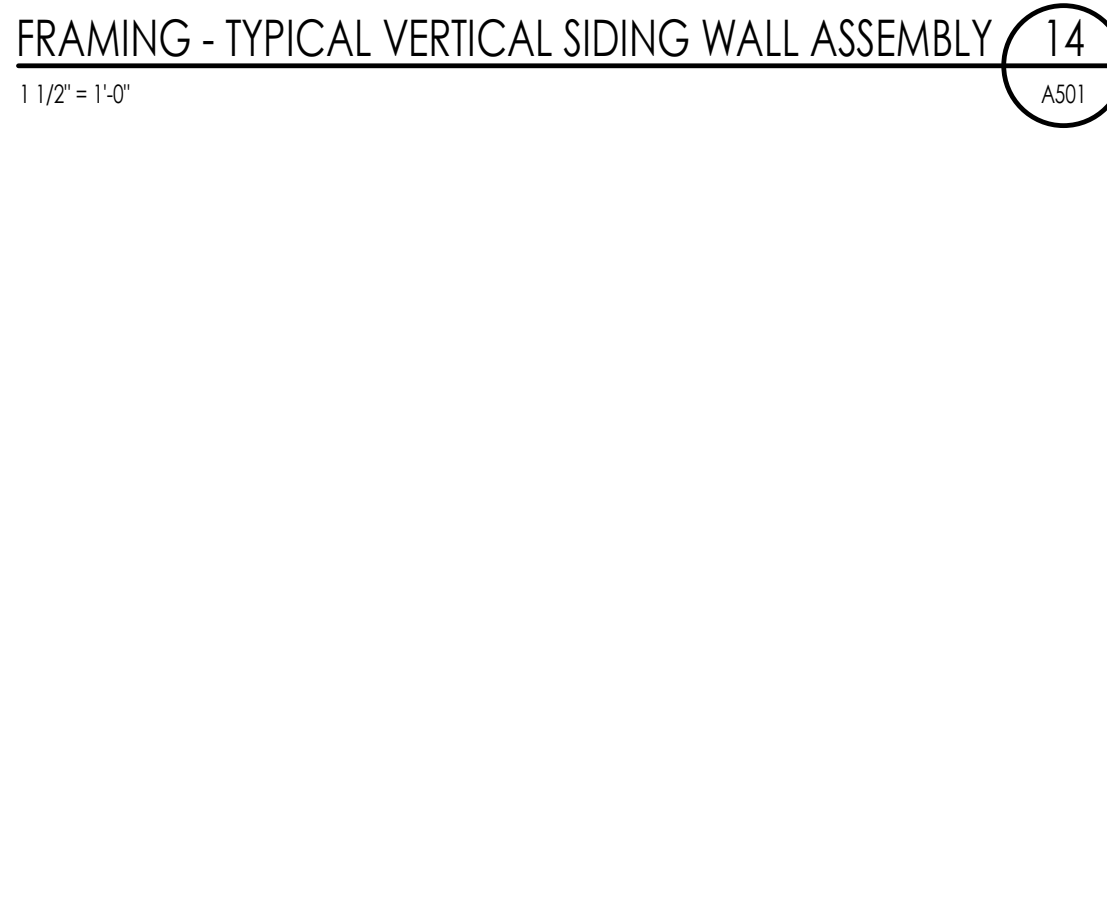
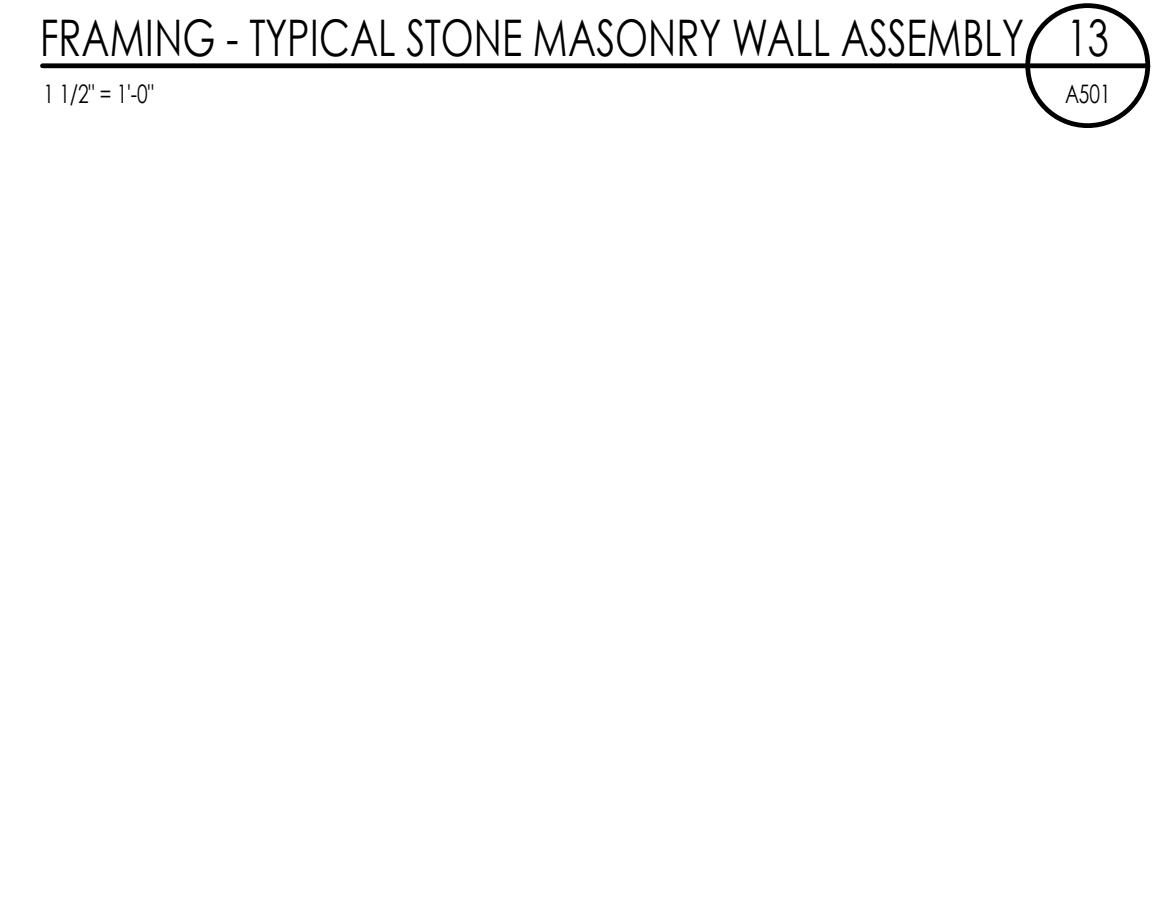
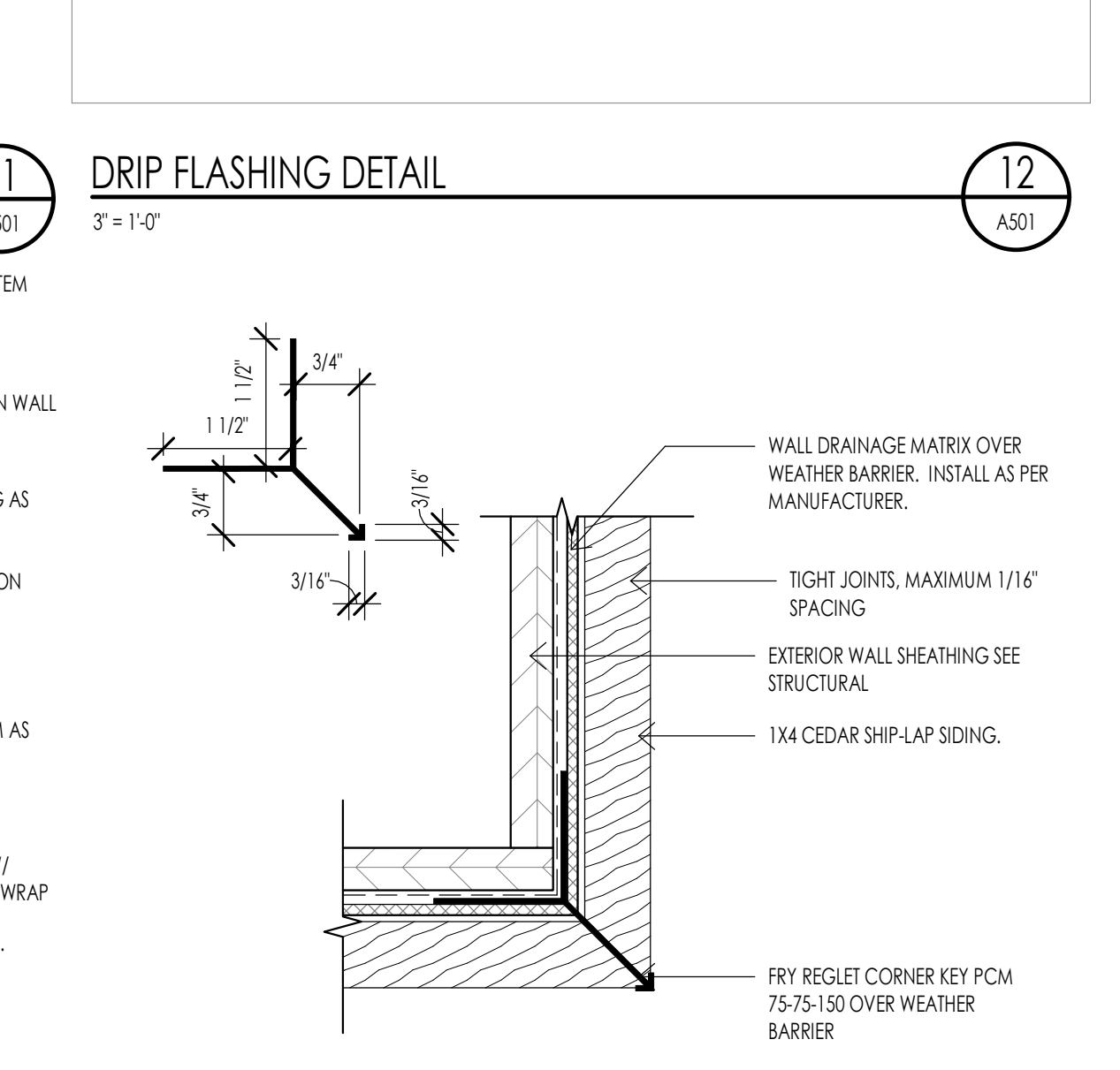
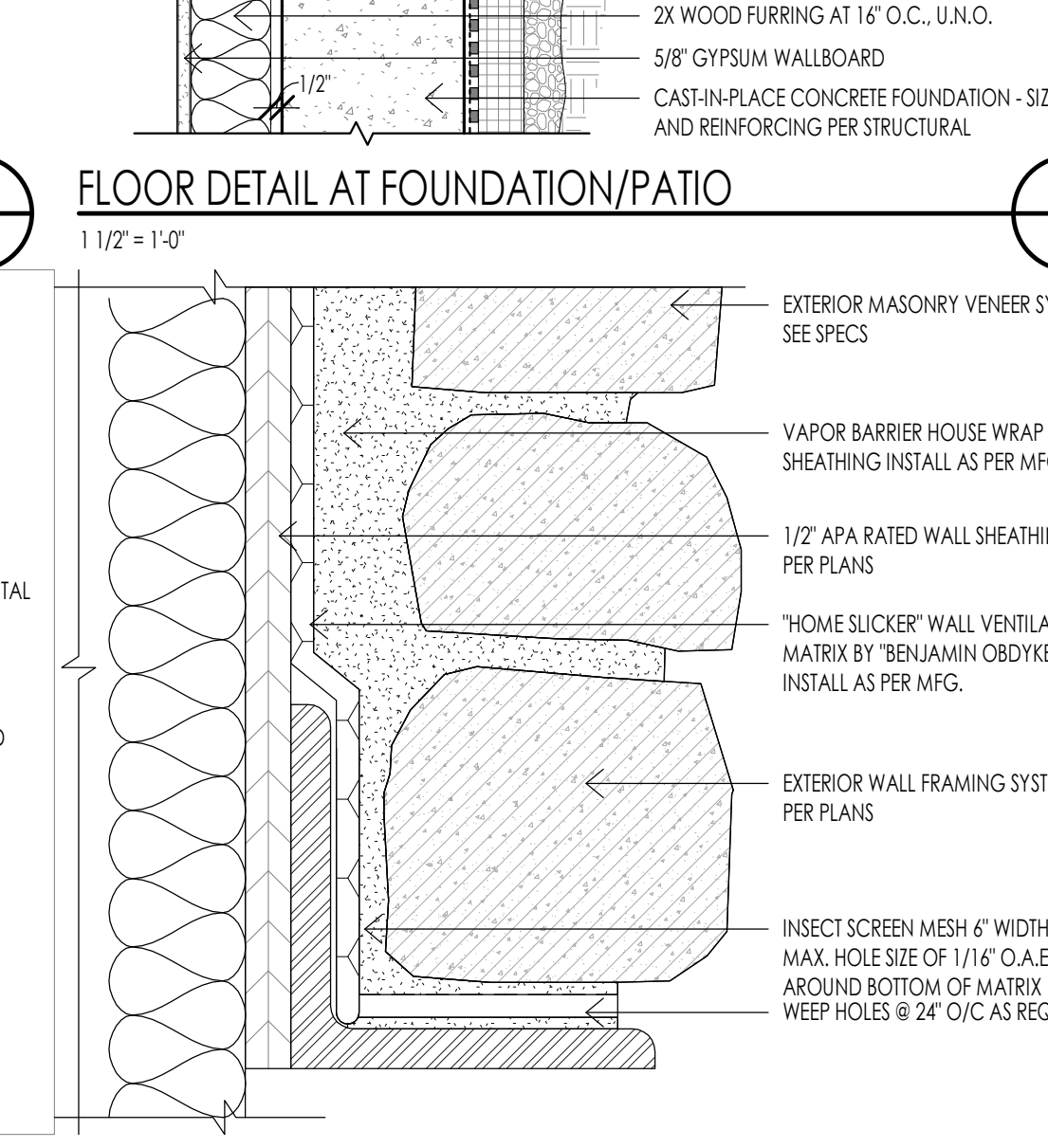
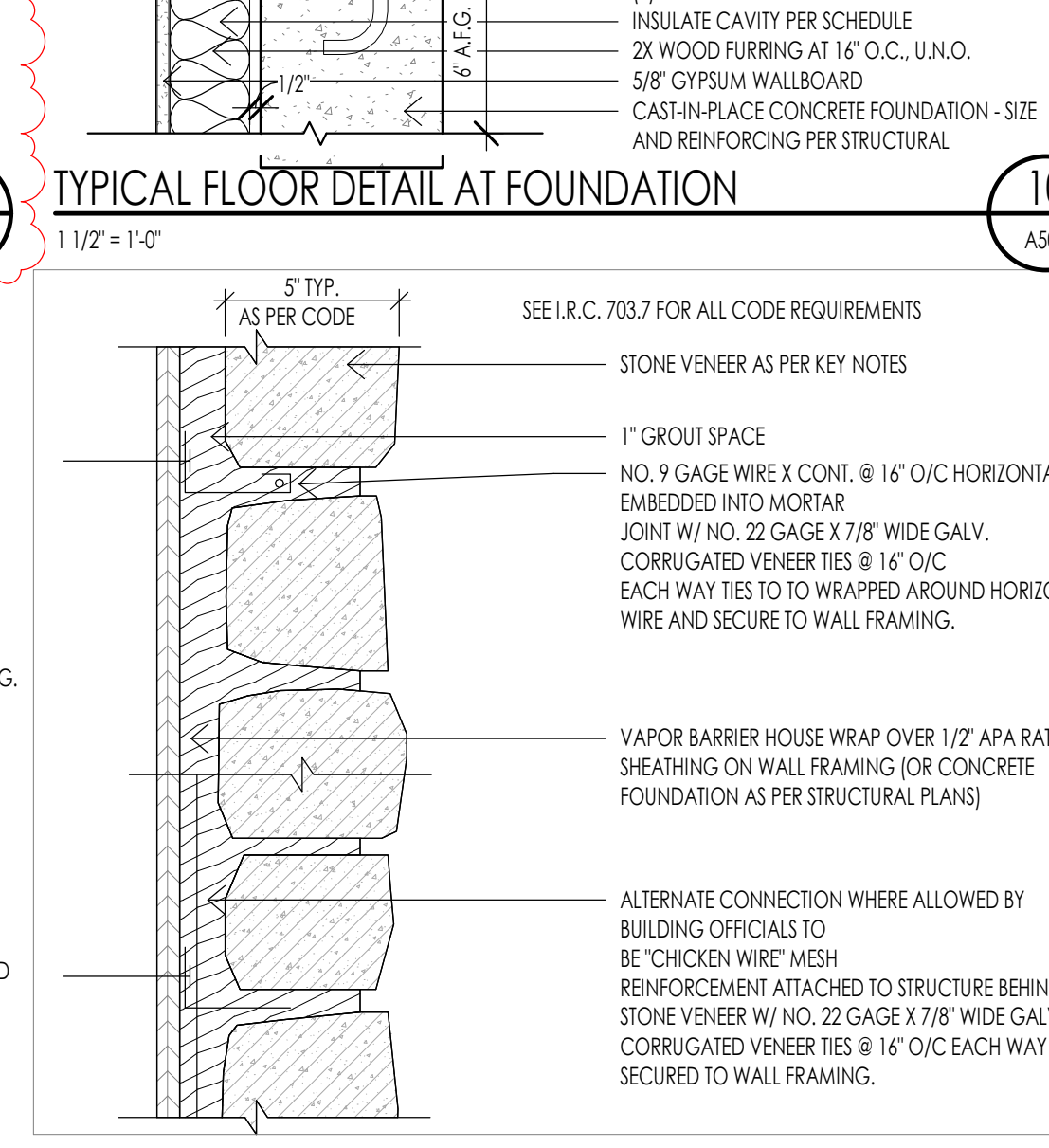
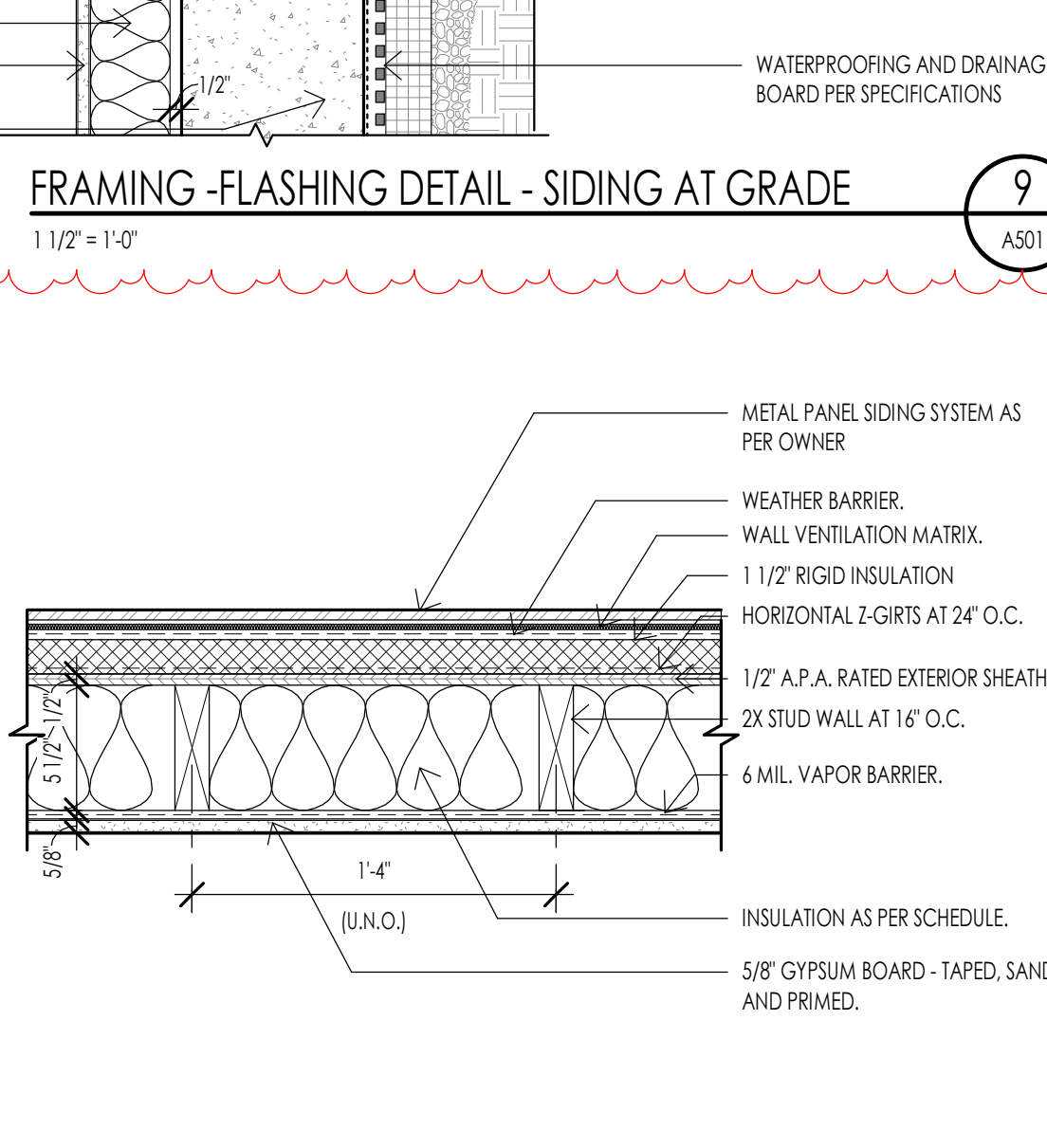
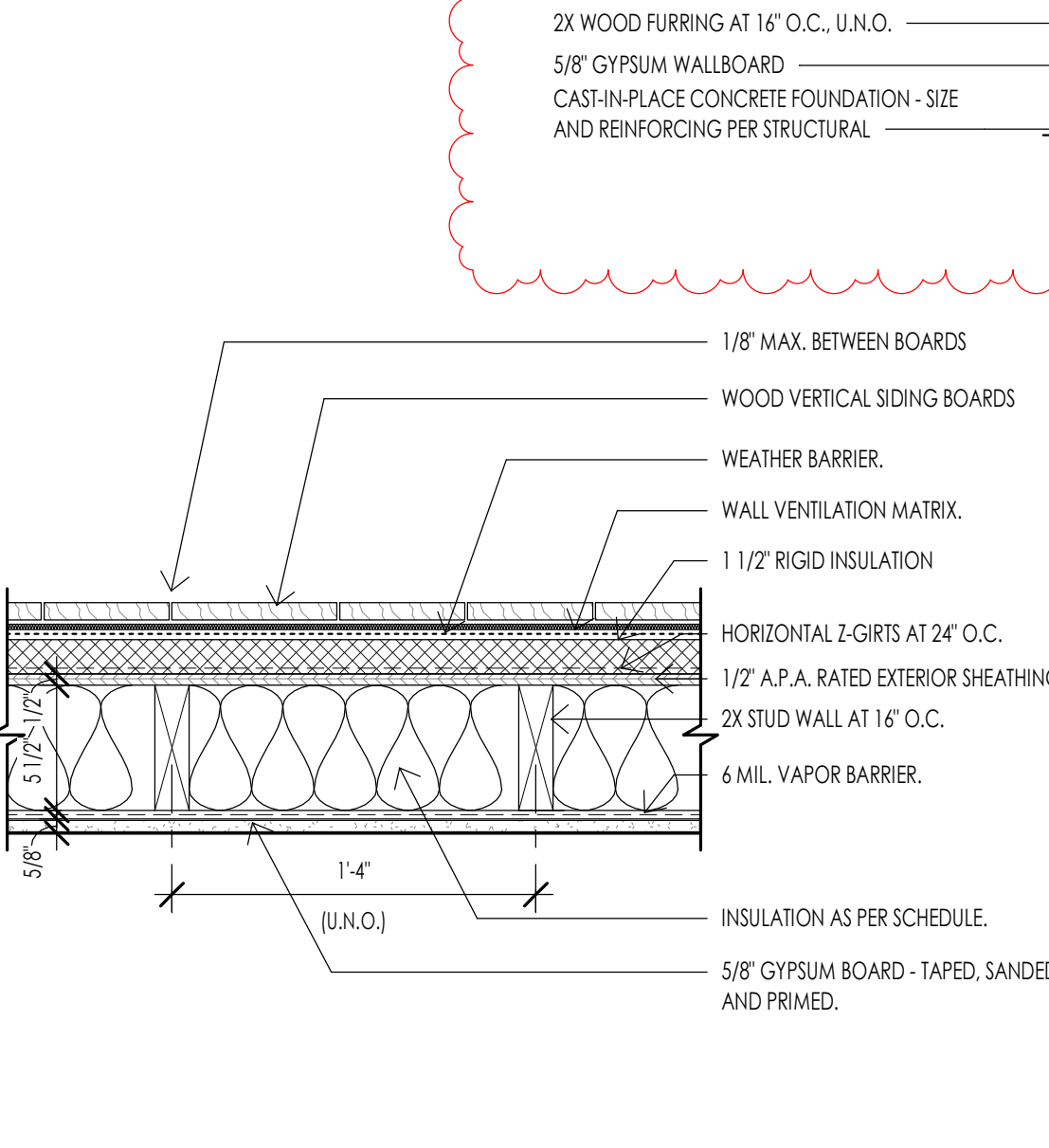
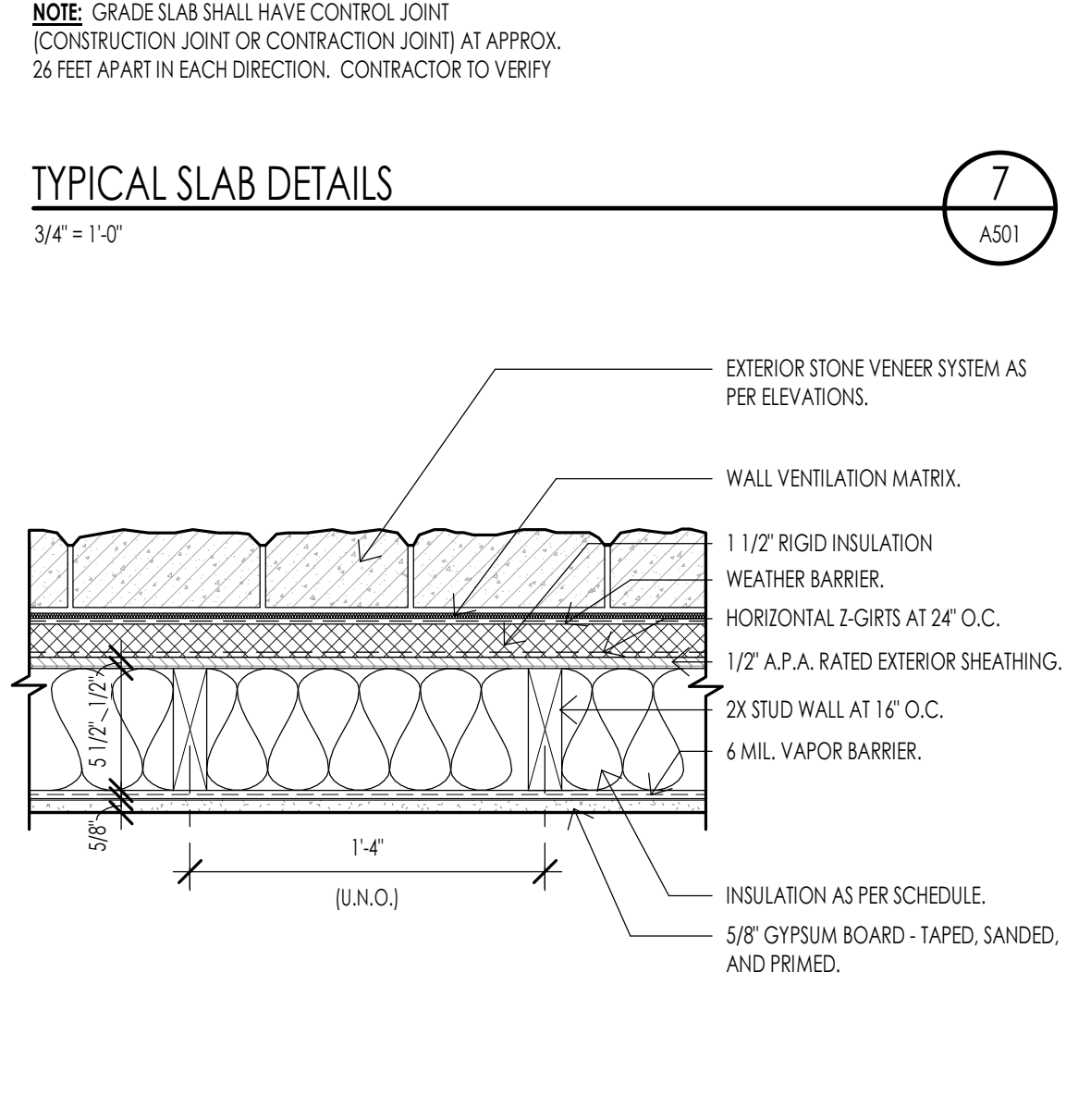
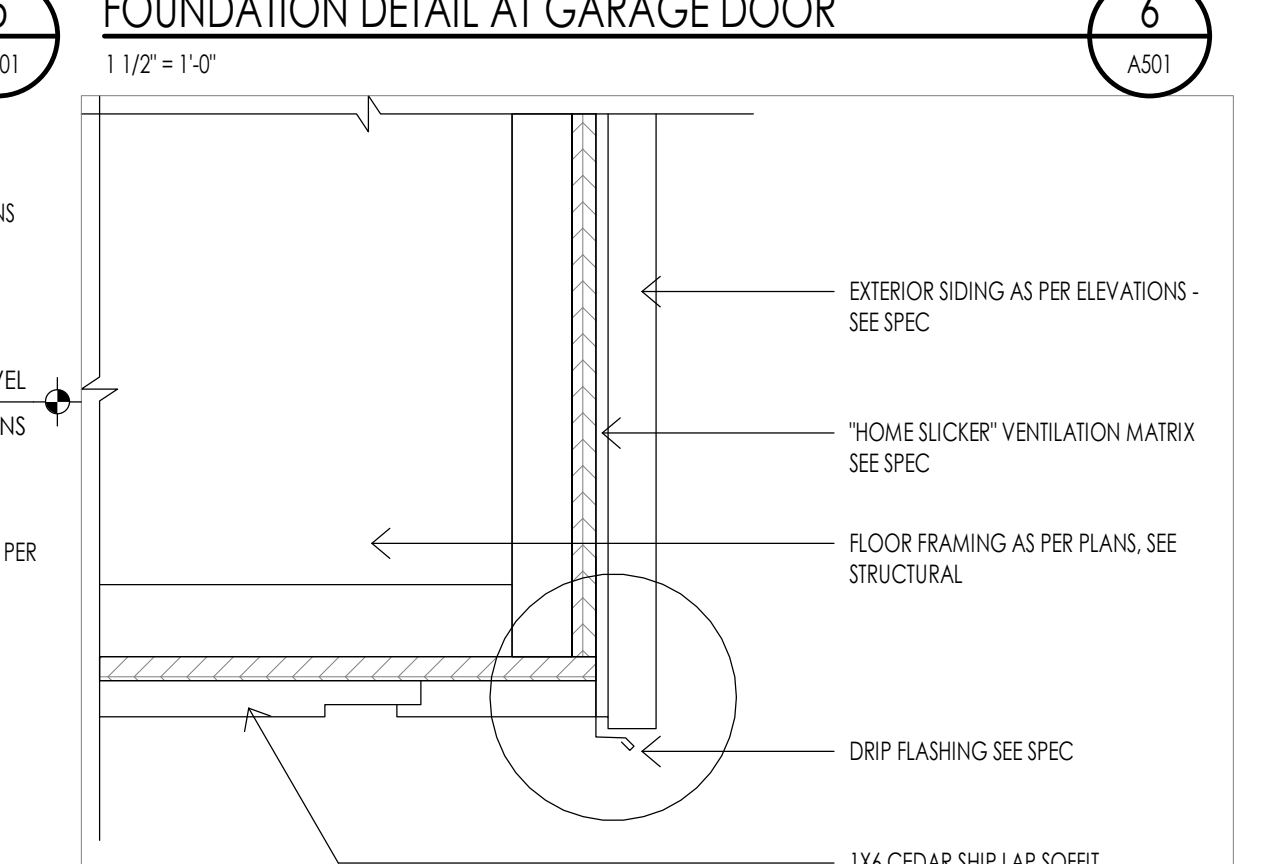
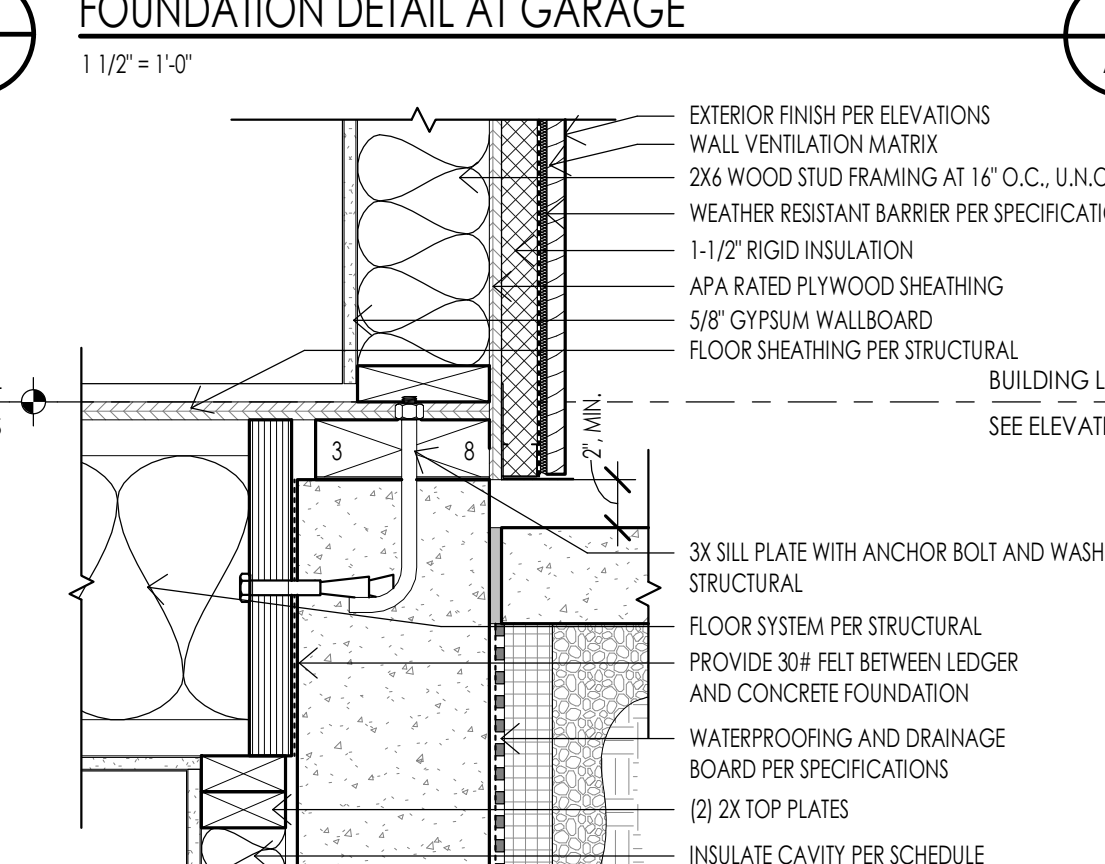
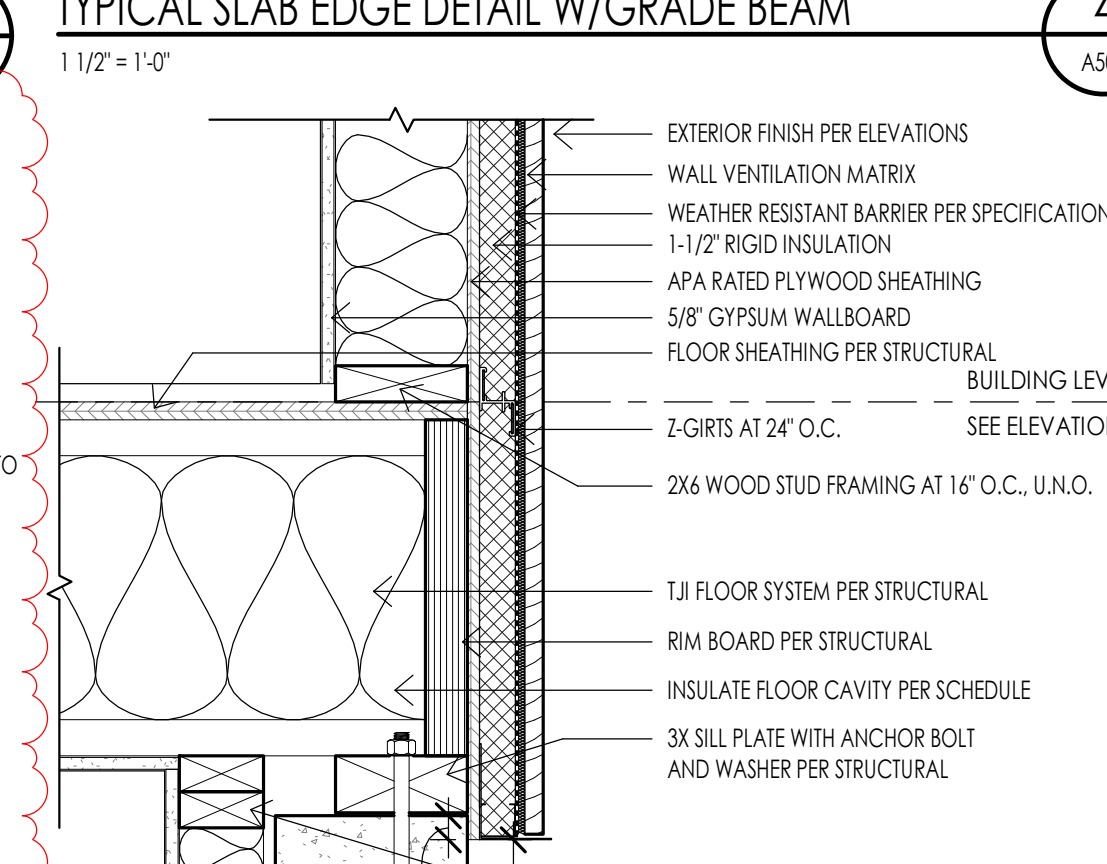
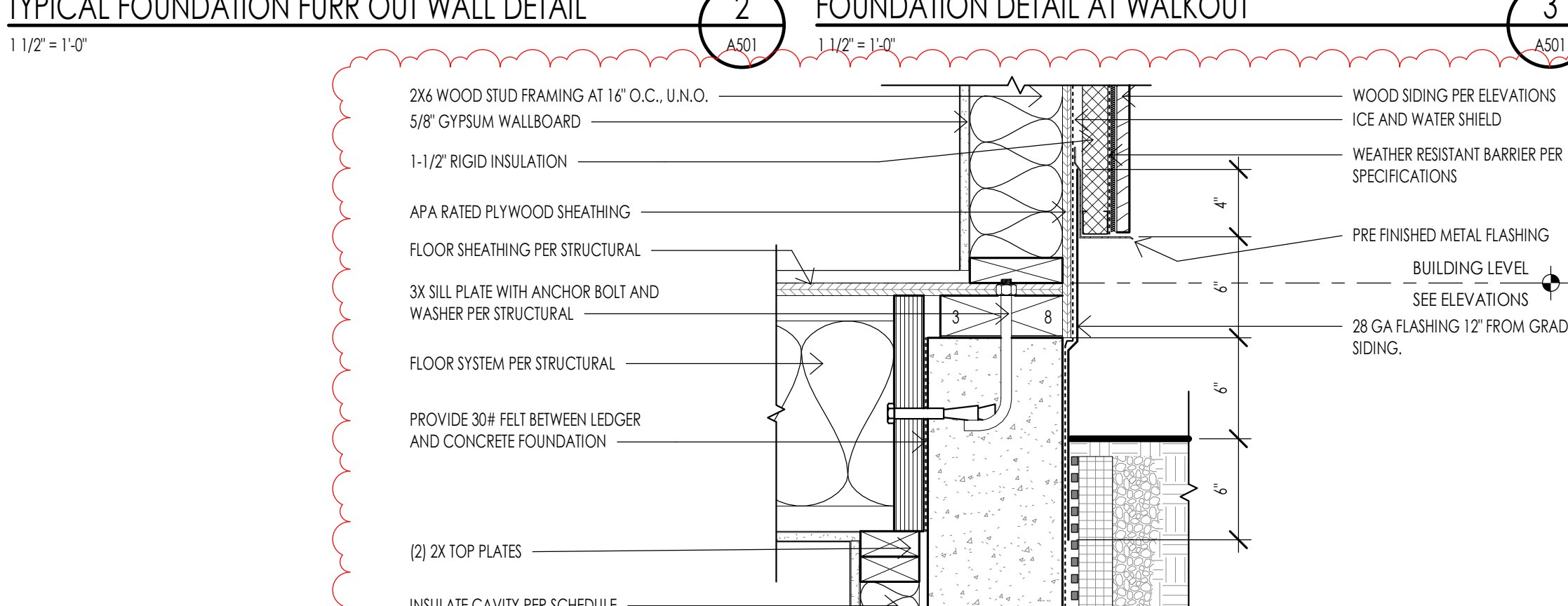
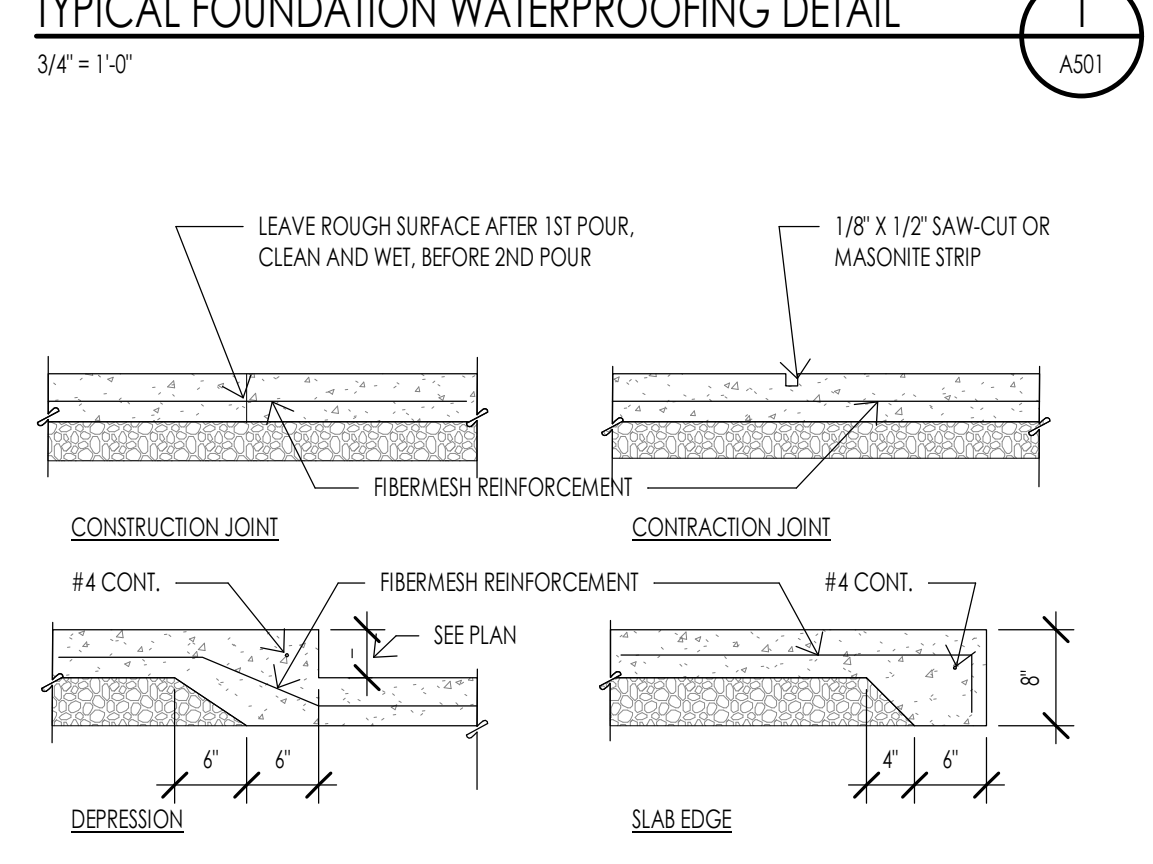
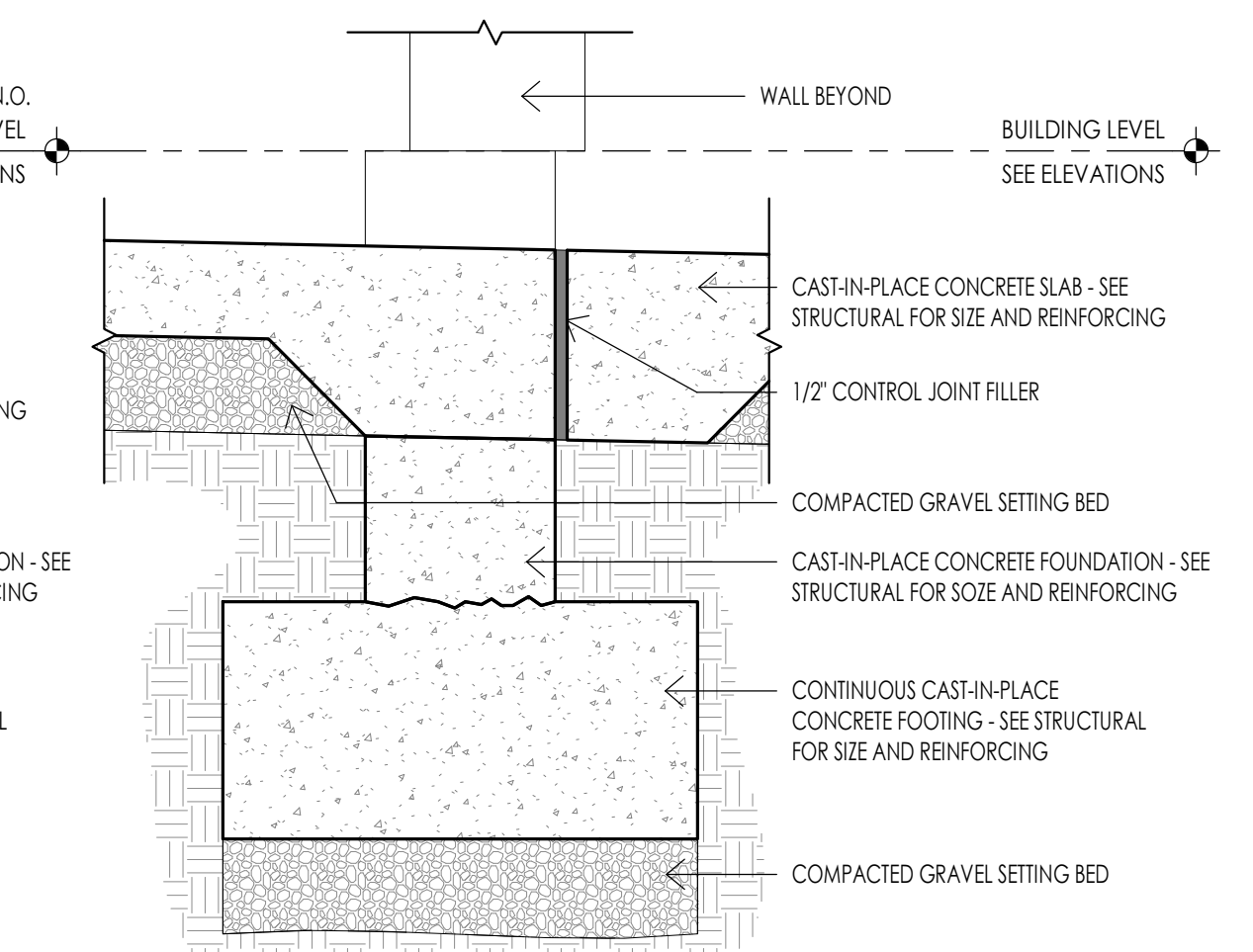
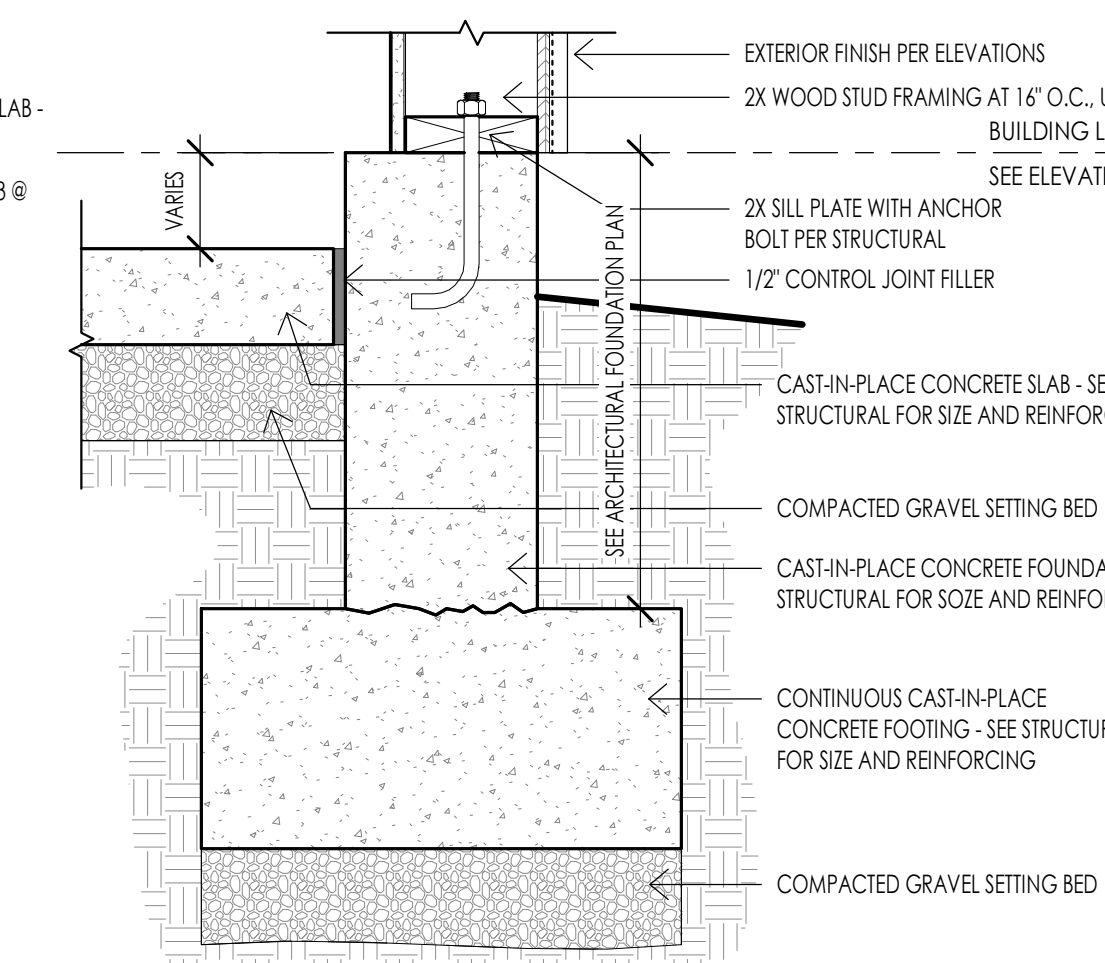
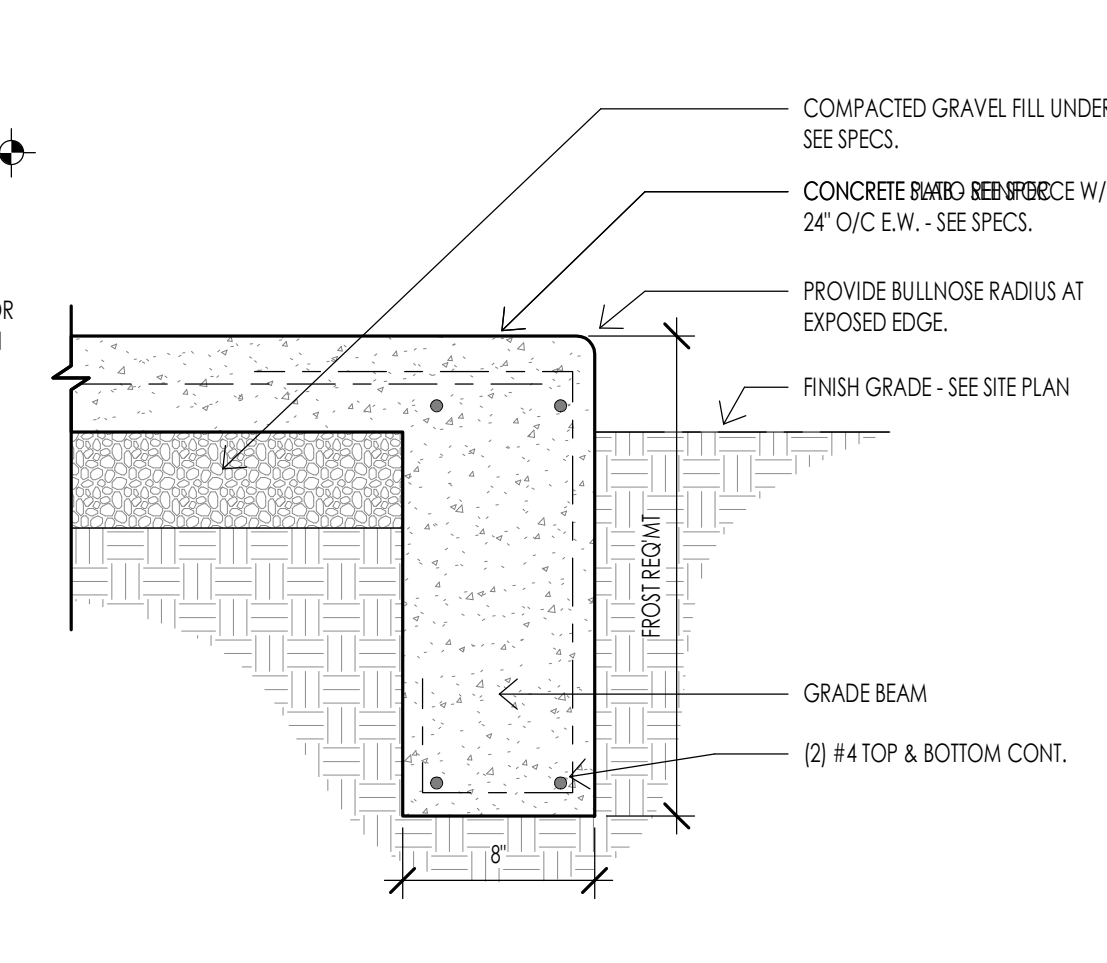
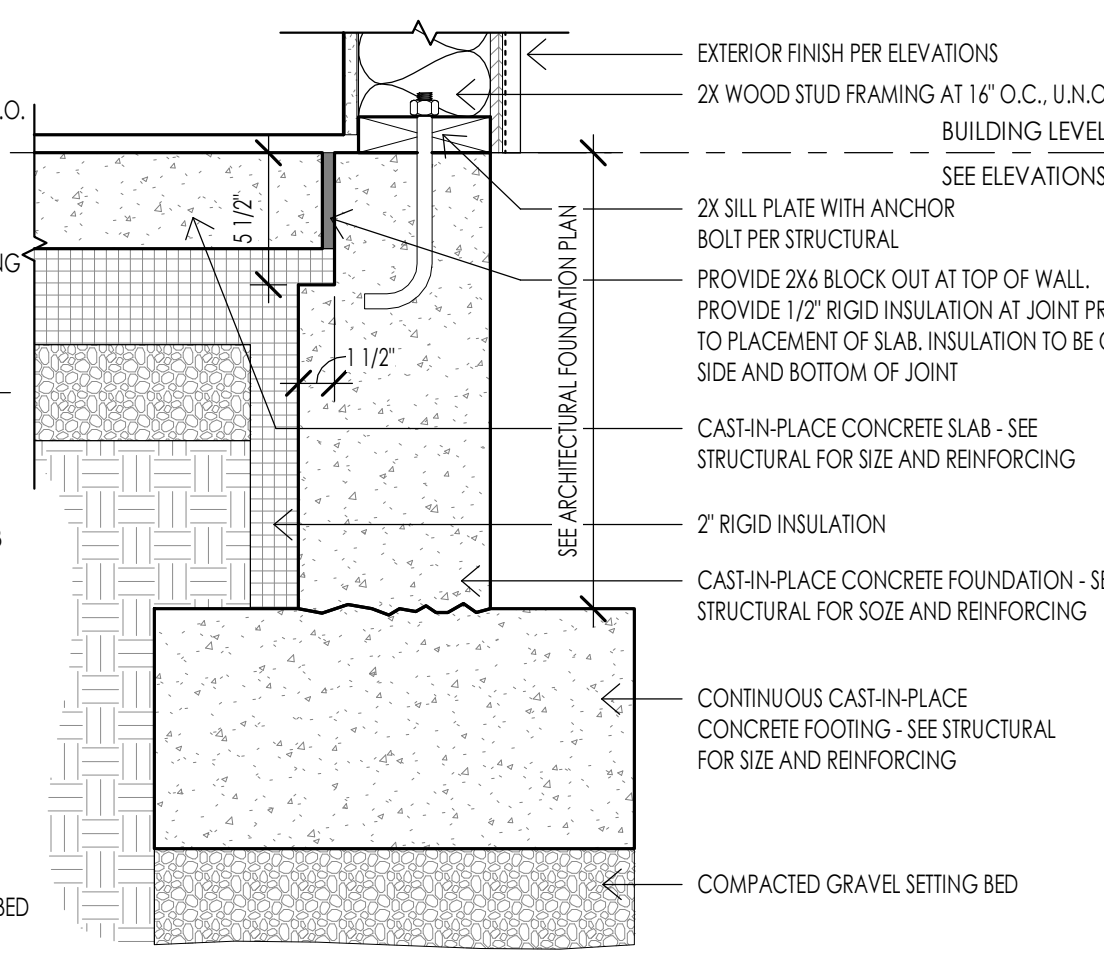
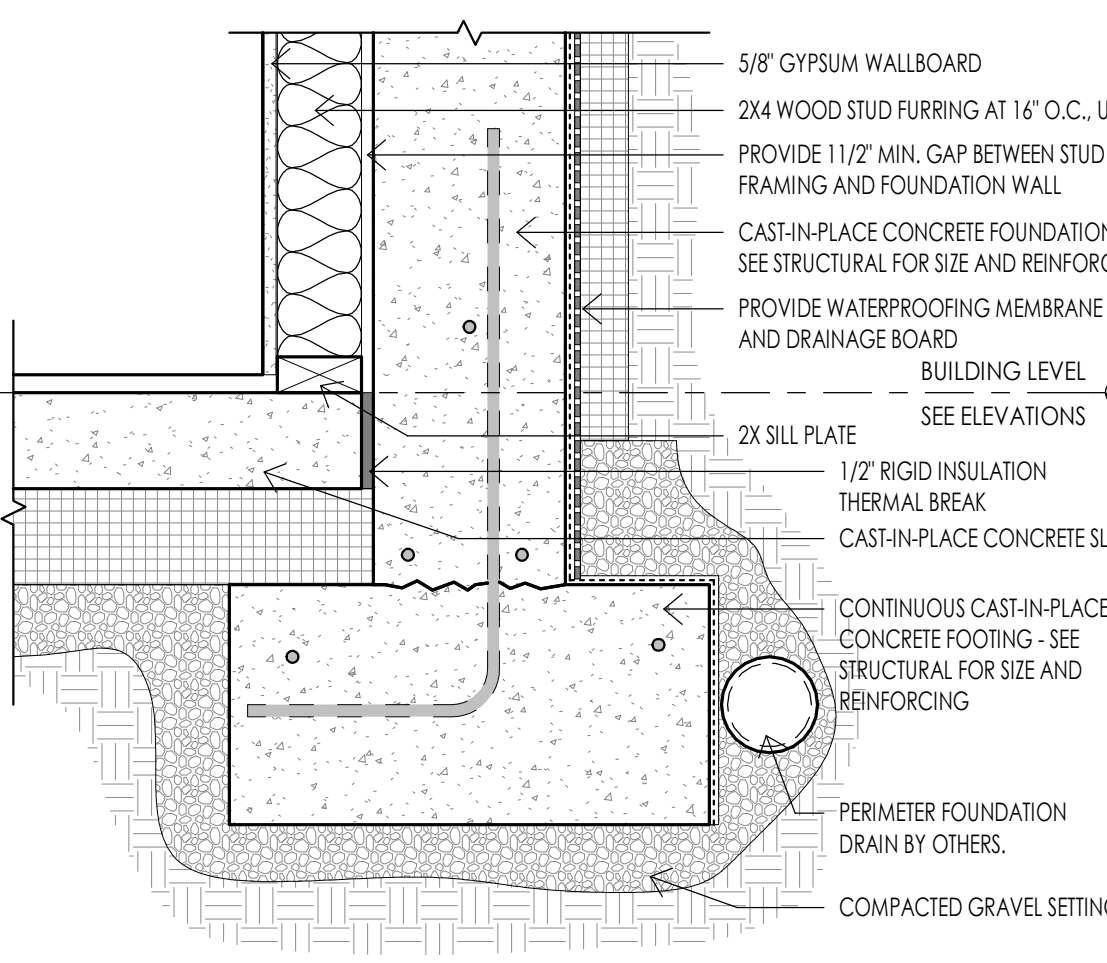
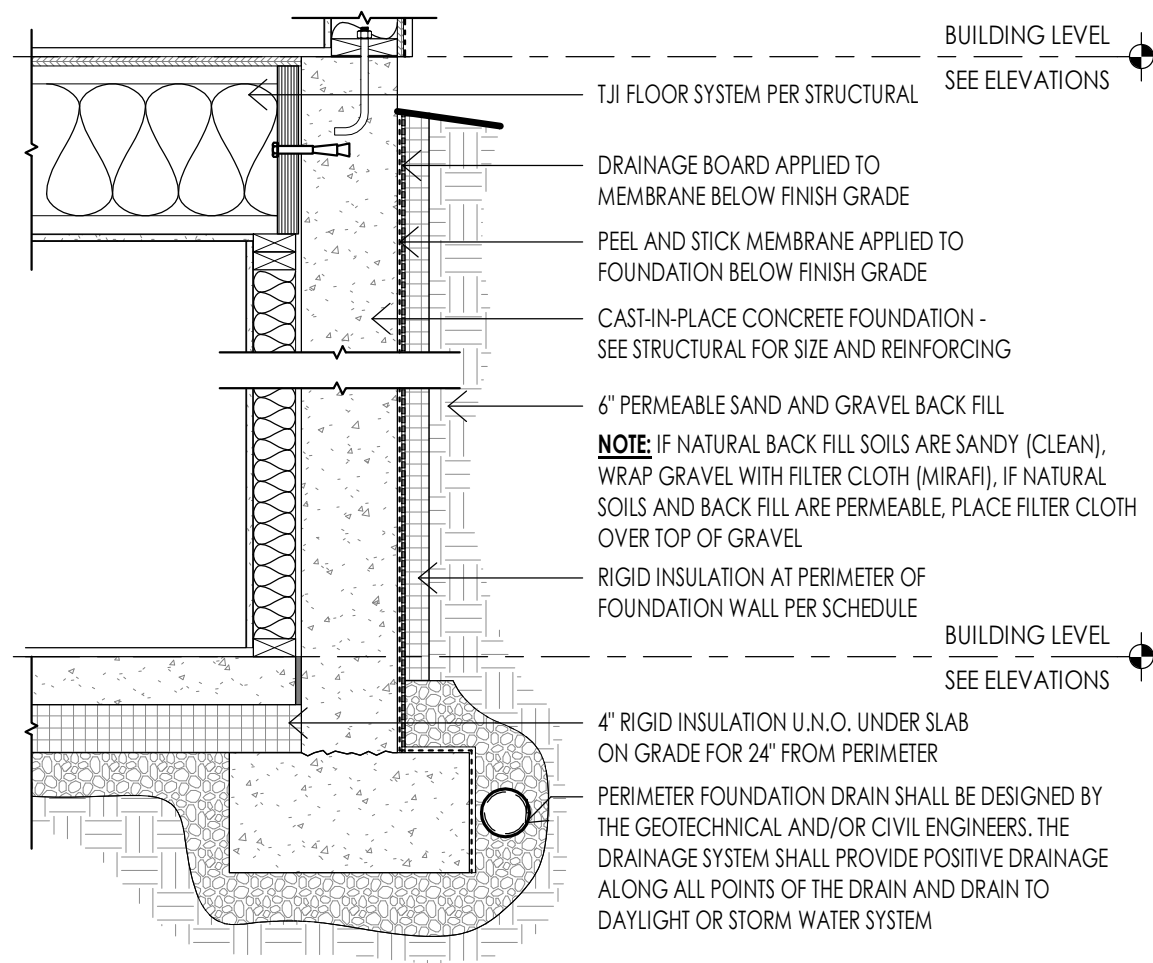
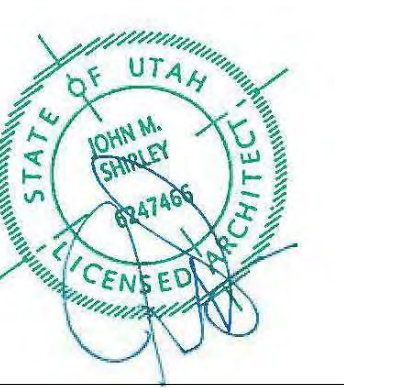


OUTDOOR LIVING VIEW

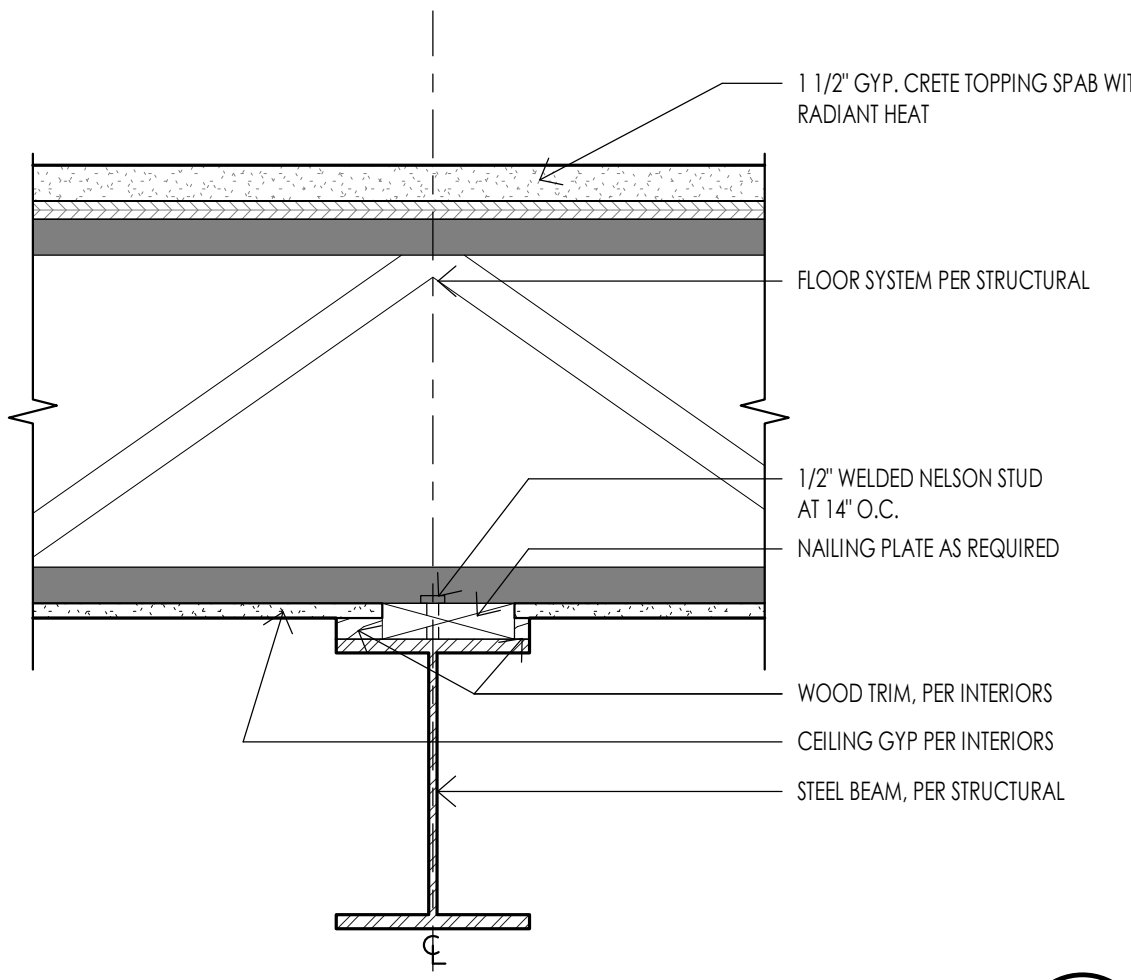
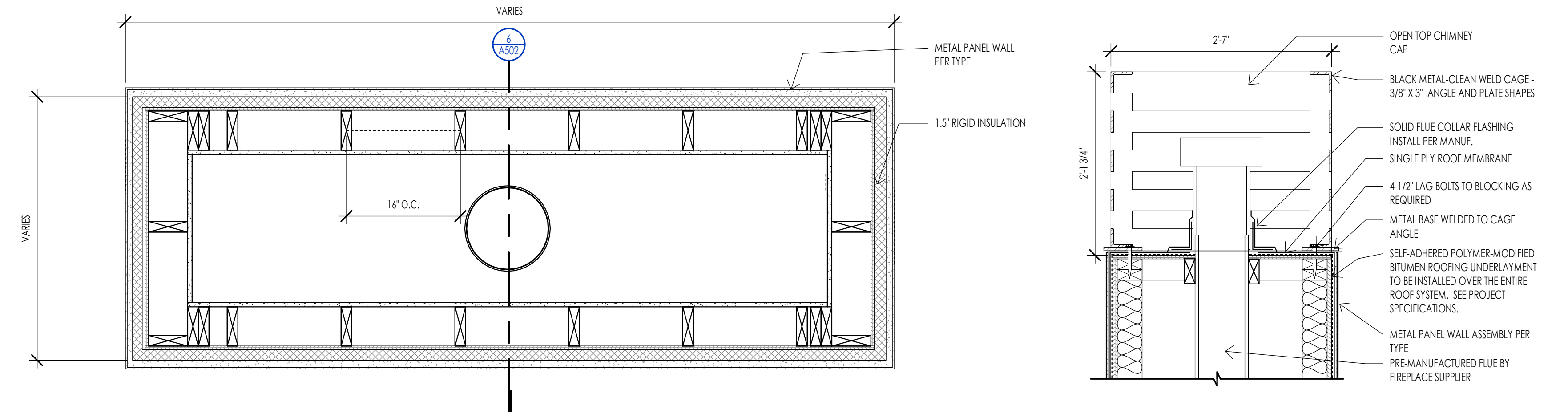
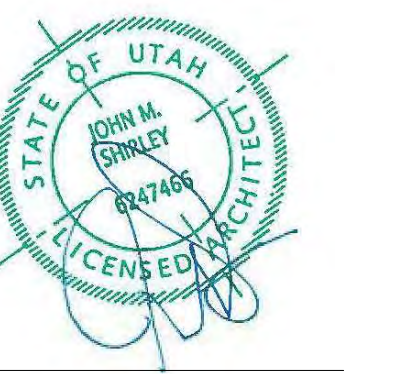


OWNER SUITE INTERIOR VIEW

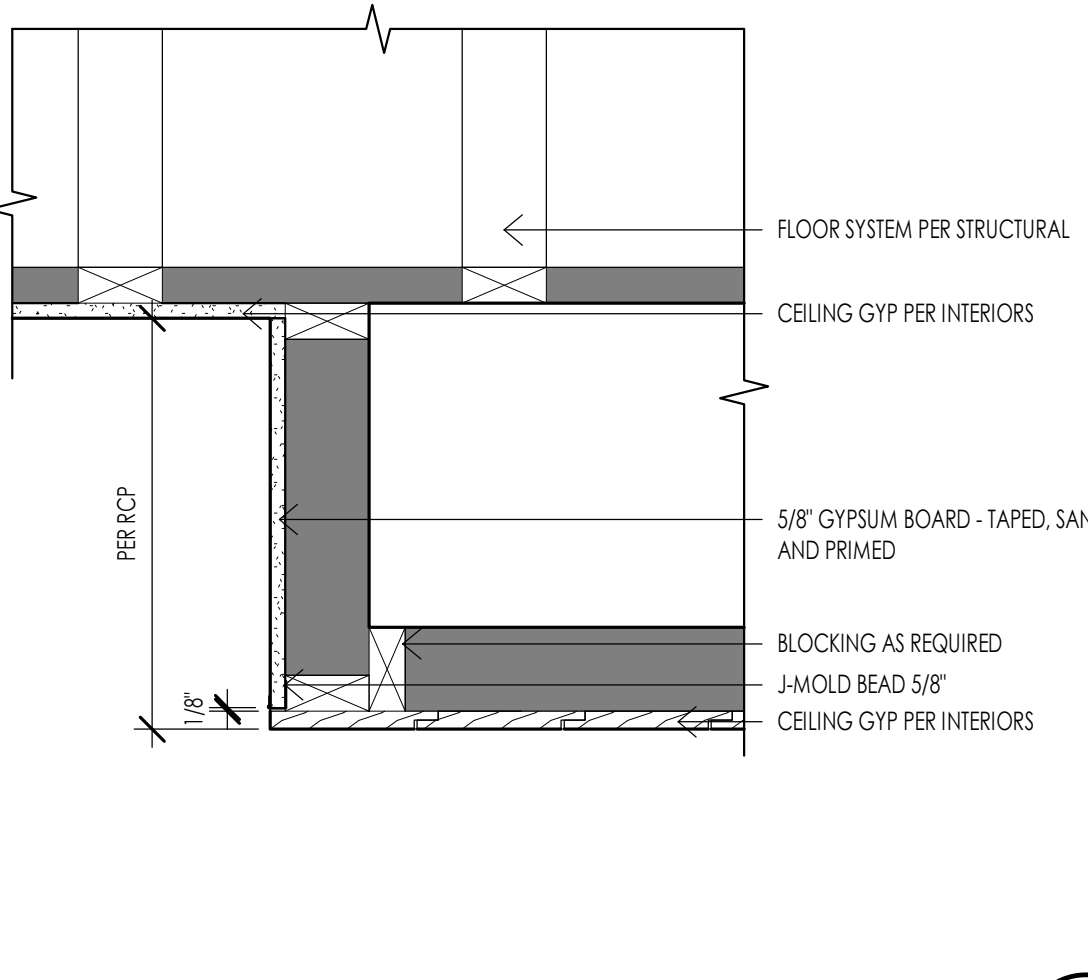




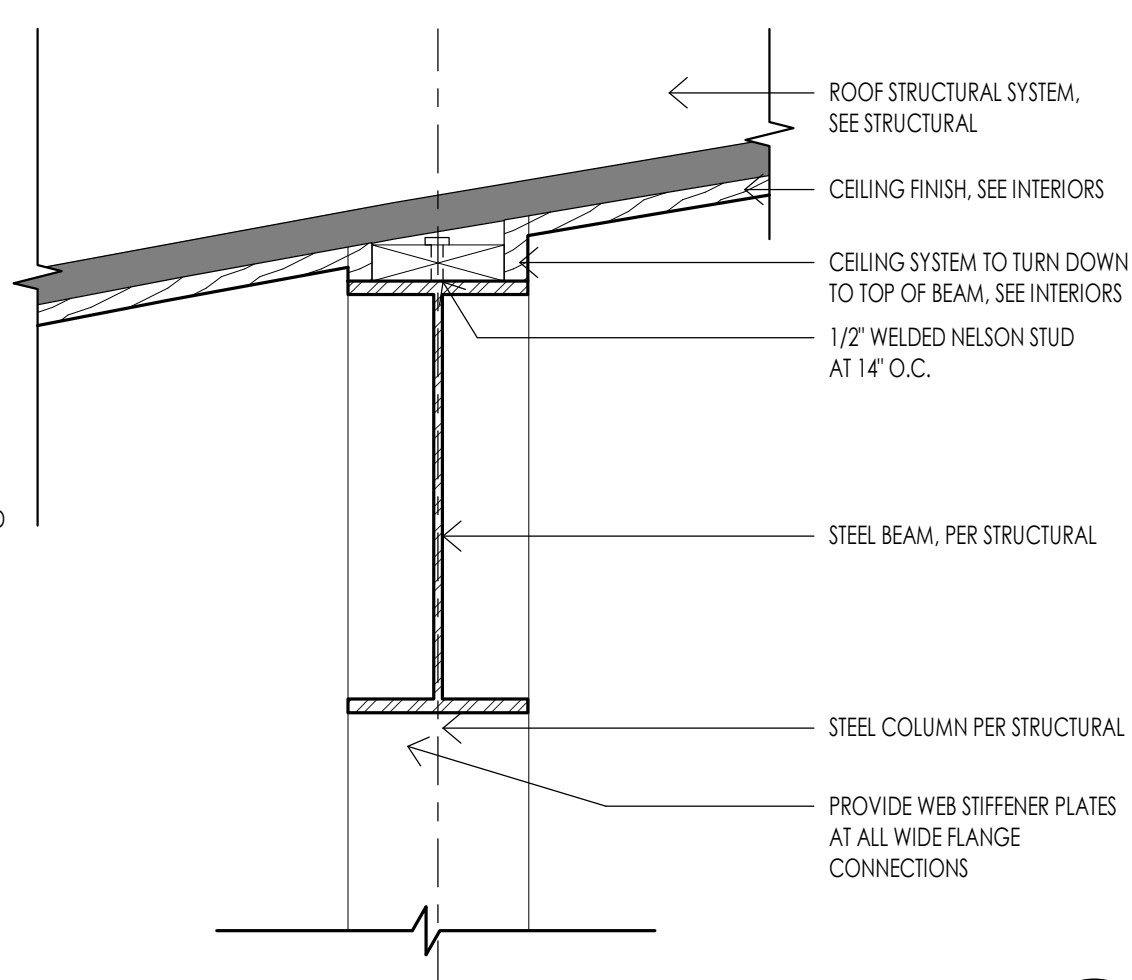




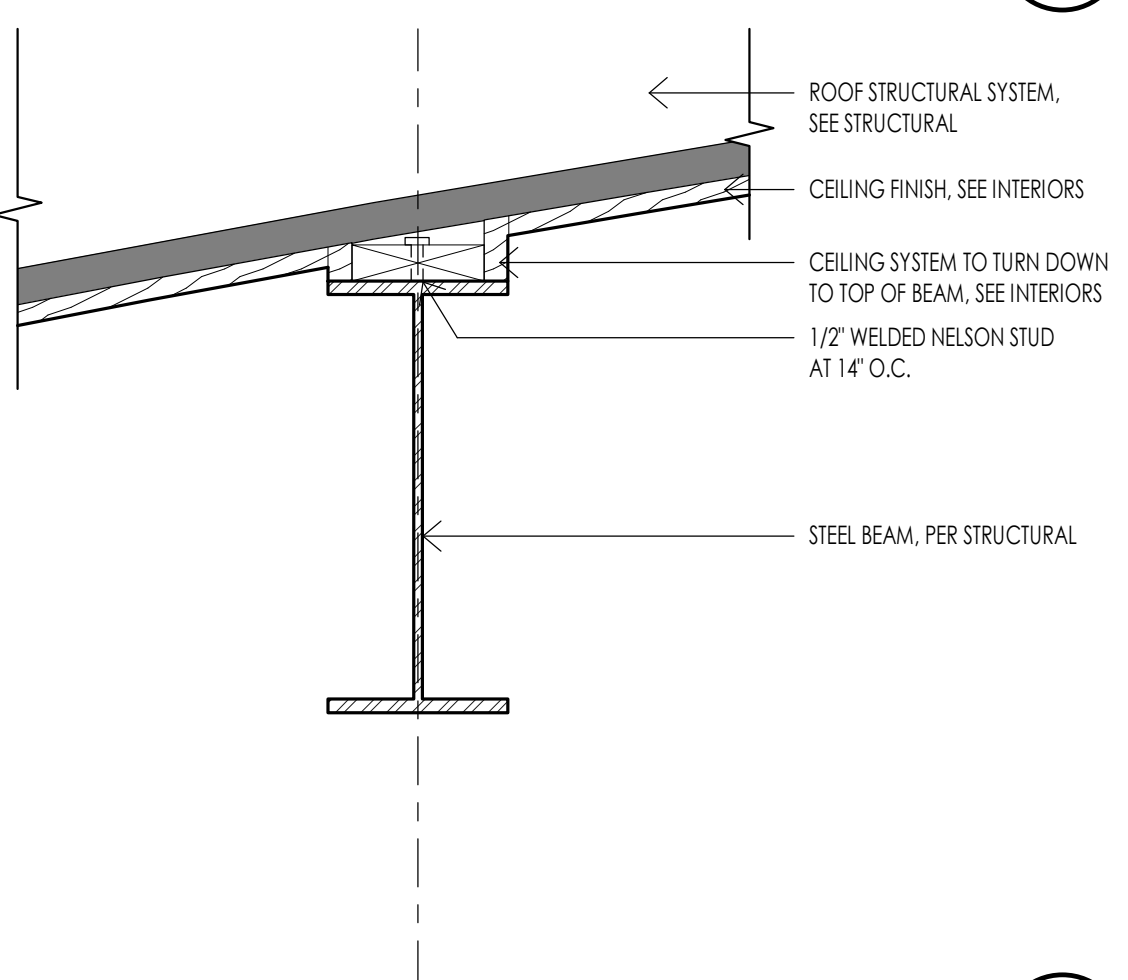
CEILING - EXPOSED INTERIOR BEAM  
1 1/2" = 1'-0"



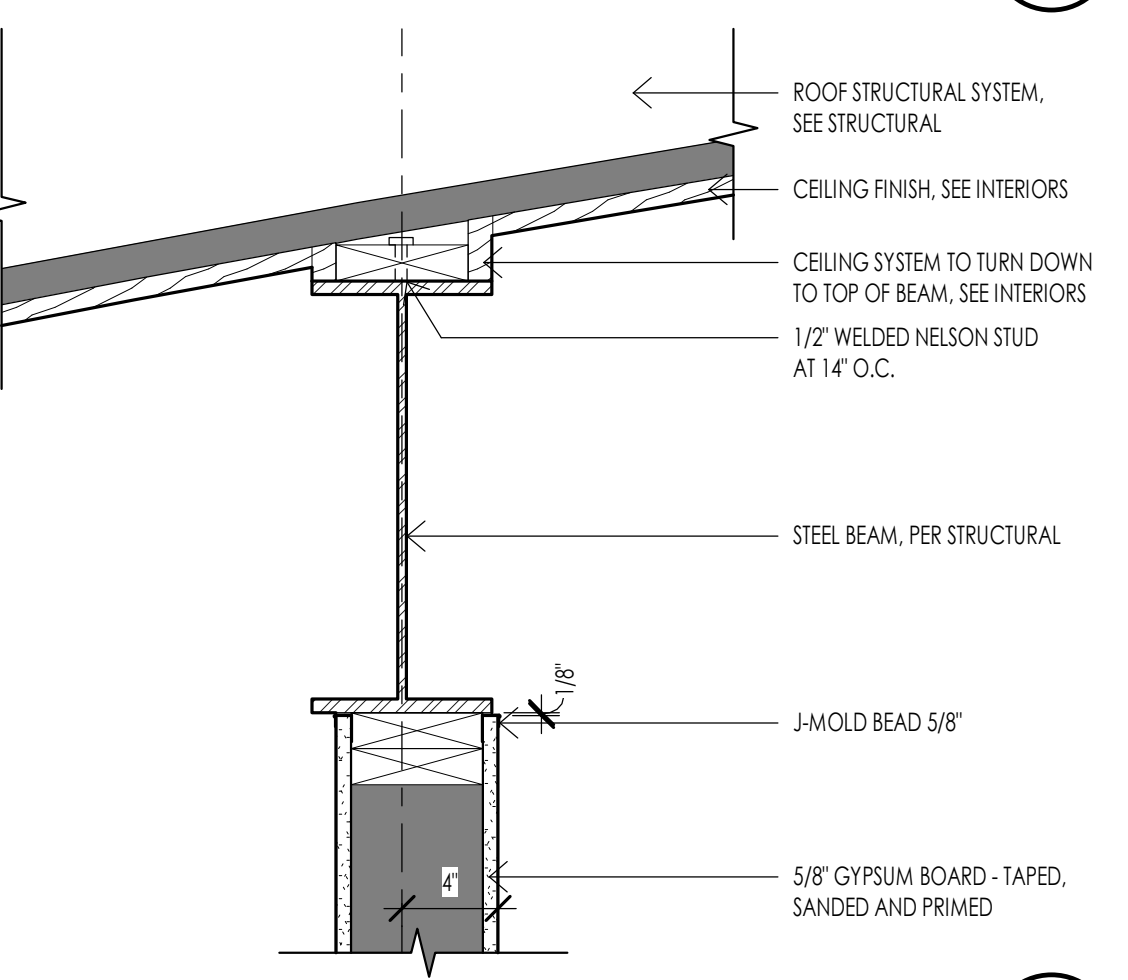
CEILING - DROP SOFFIT  
1 1/2" = 1'-0"



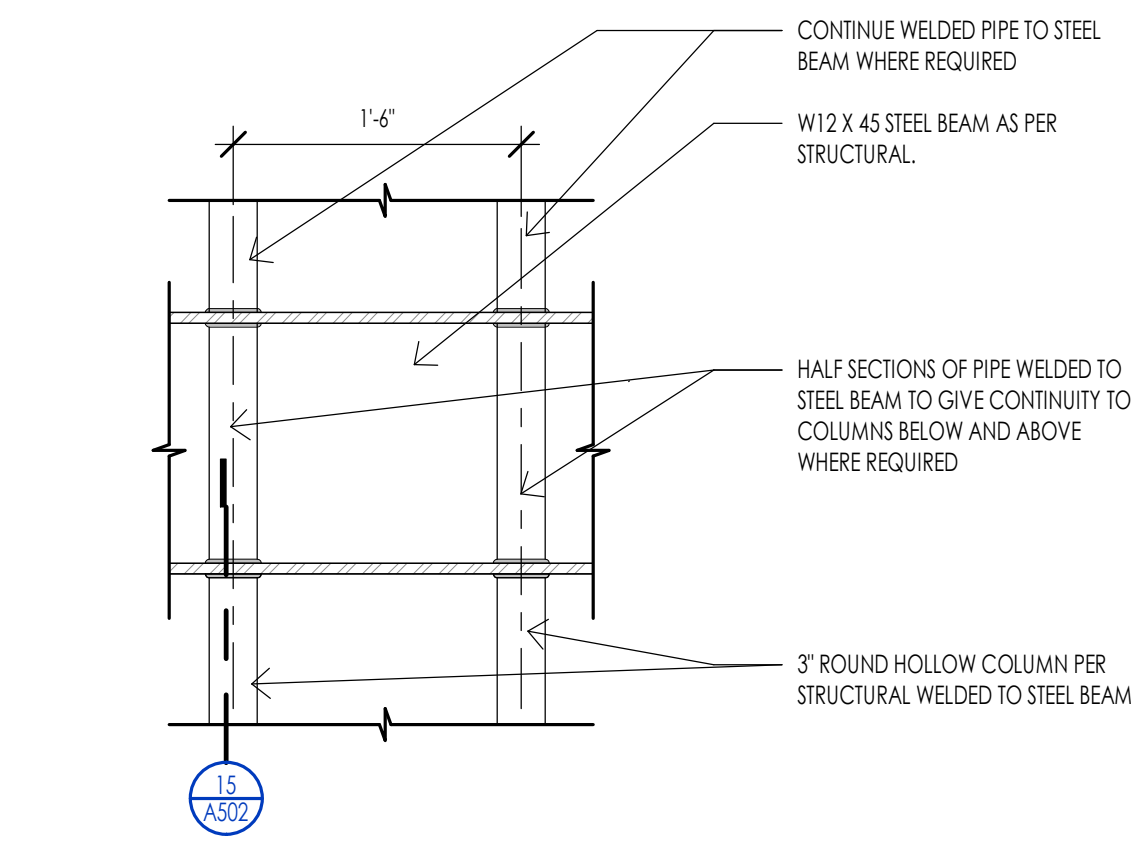
SOFFIT - EXTERIOR BEAM @ CURVED SOFFIT  
1 1/2" = 1'-0"



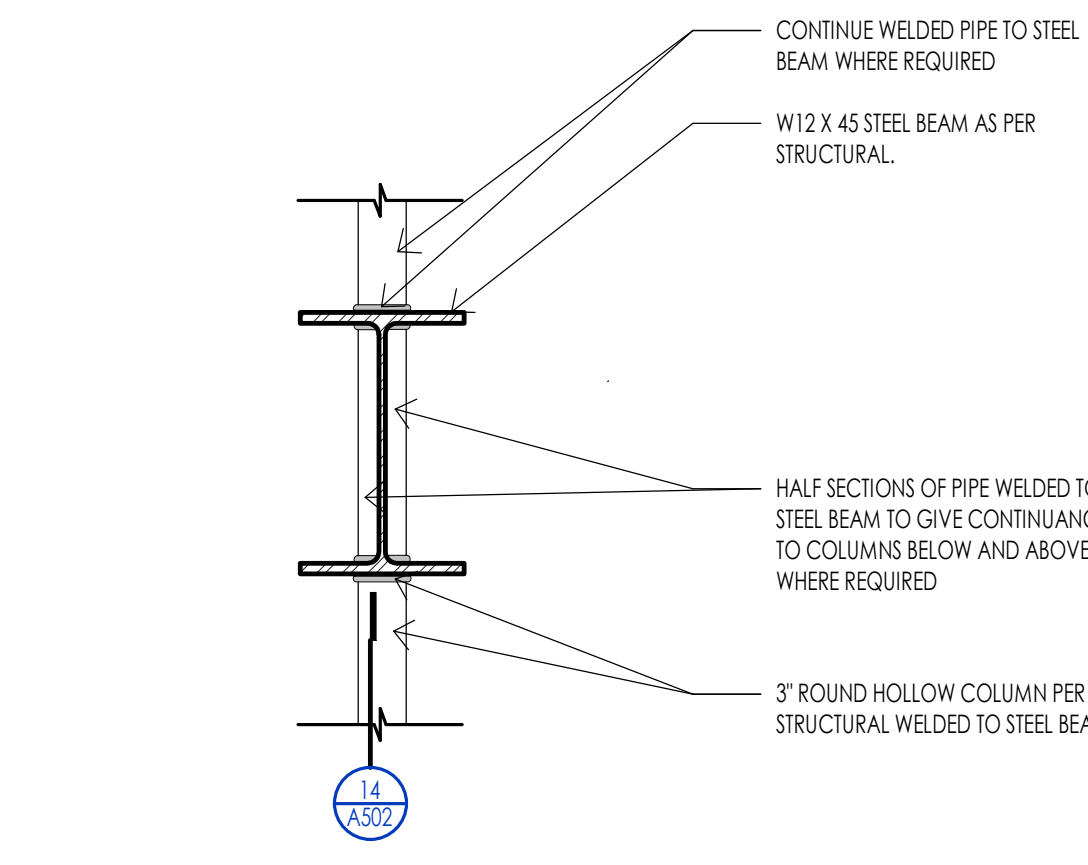
CEILING - INTERIOR BEAM @ CURVED CEILING  
1 1/2" = 1'-0"



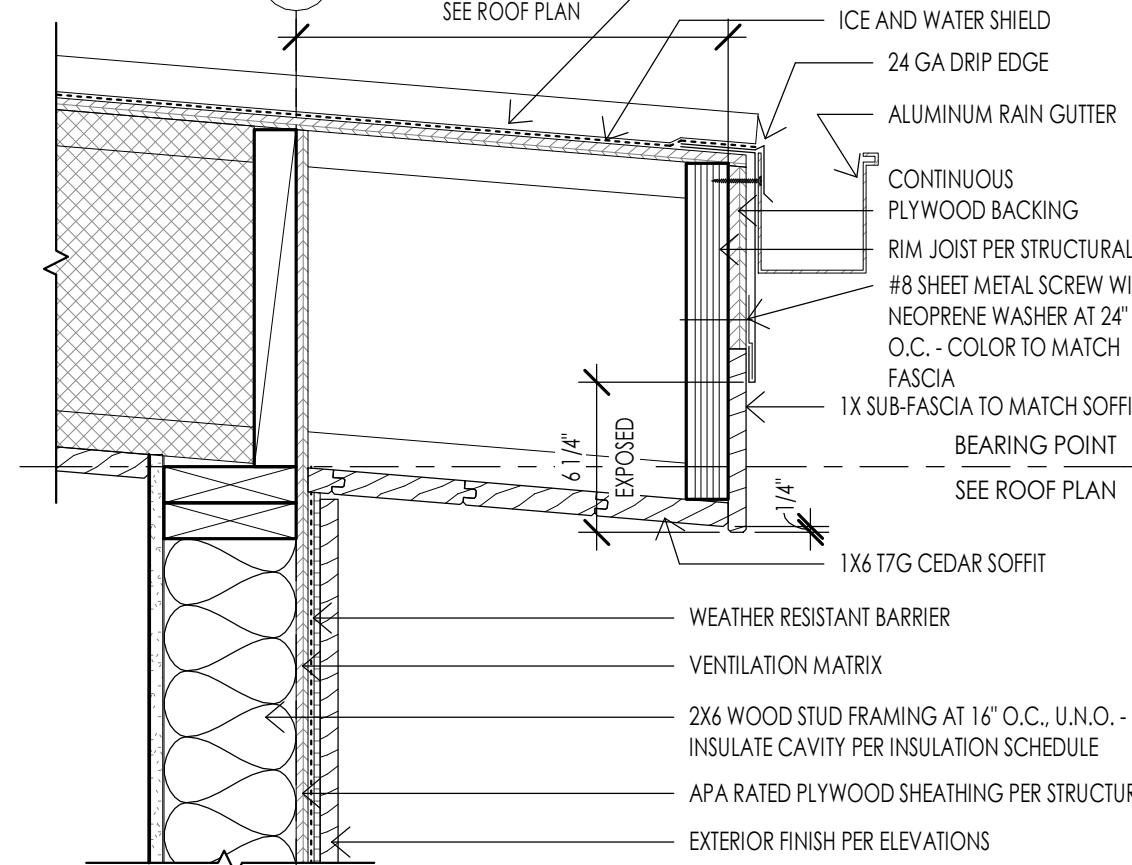
CEILING - INTERIOR BEAM @ CURVED CEILING W/ WALL  
1 1/2" = 1'-0"



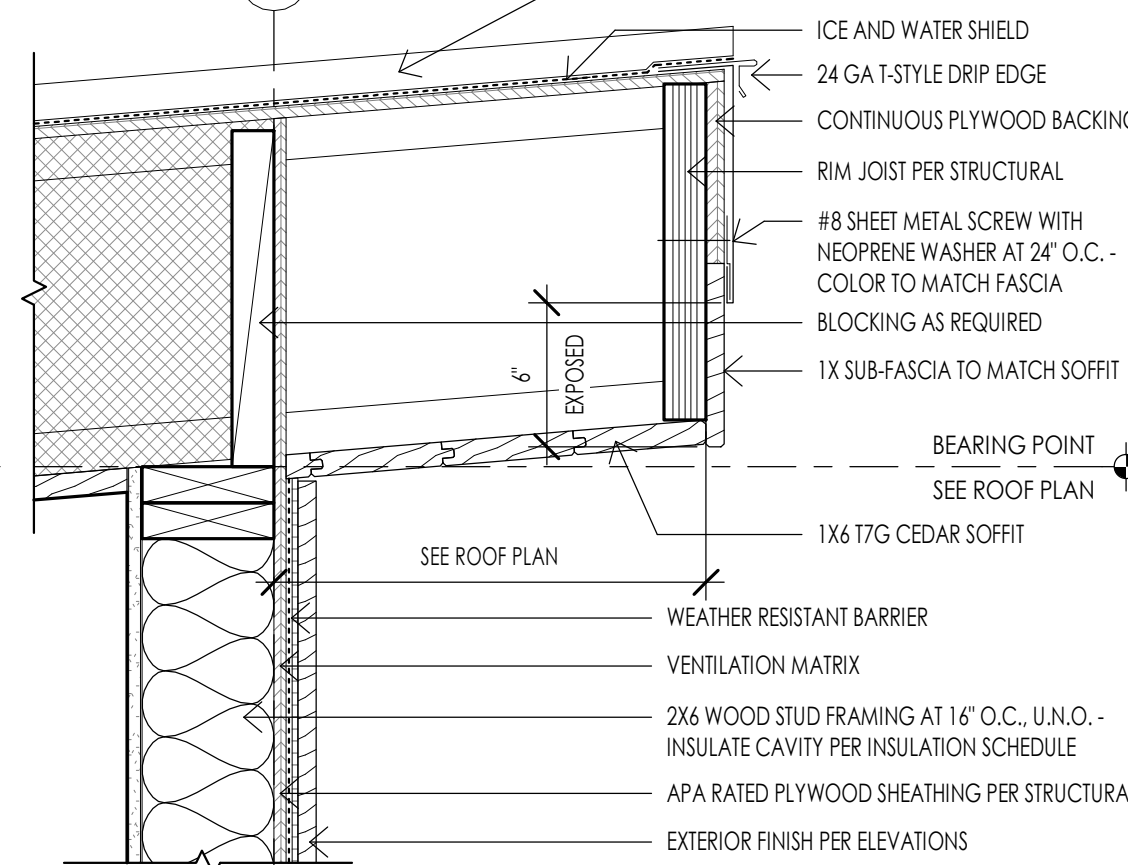
DECK - PIPE COLUMN TO STEEL BEAM DETAIL  
1" = 1'-0"



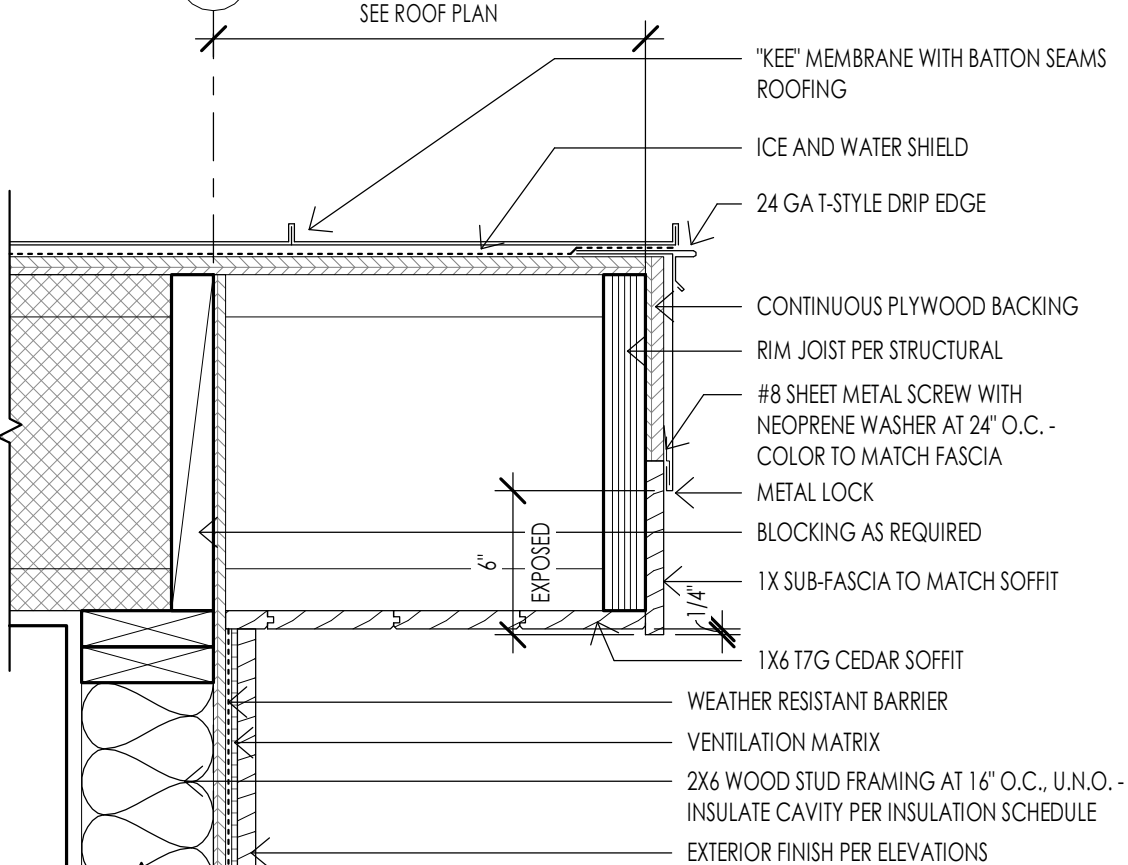
DECK - PIPE COLUMN TO STEEL BEAM SECTION  
1" = 1'-0"



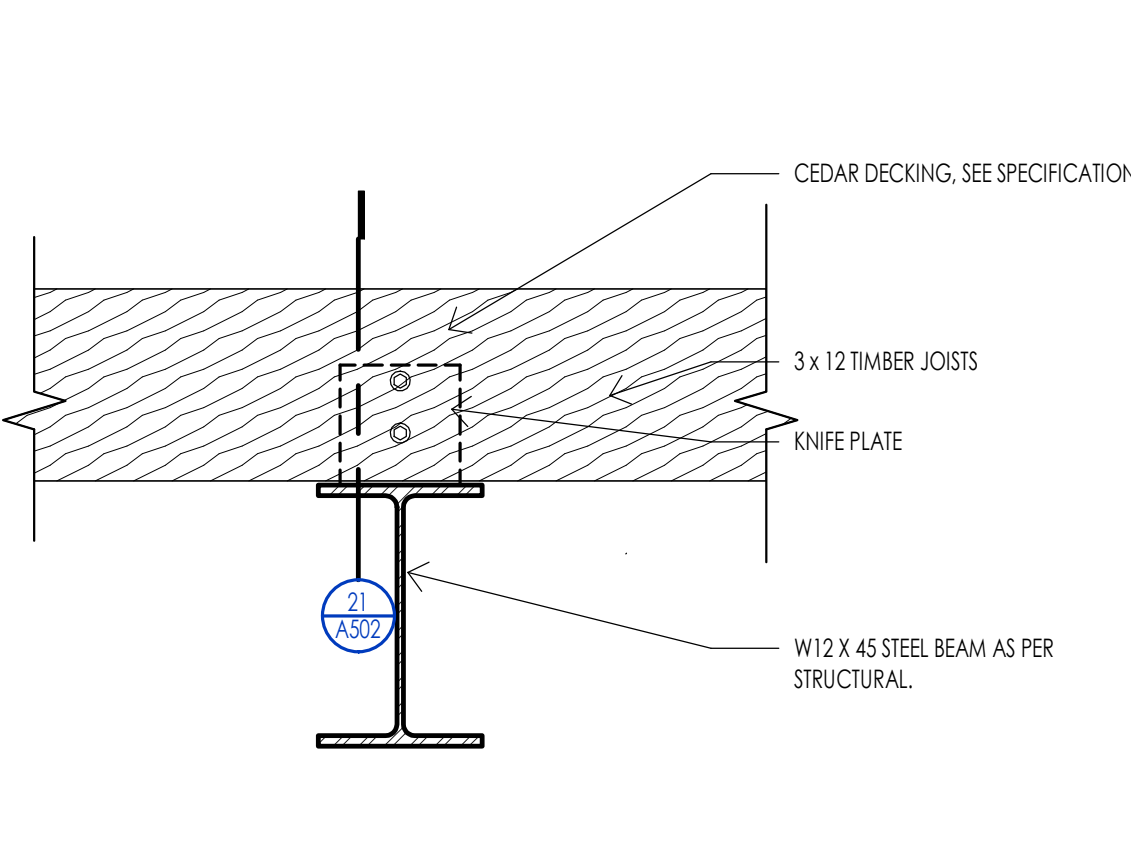
PITCHED EAVE DETAIL AT LOW SIDE  
1 1/2" = 1'-0"



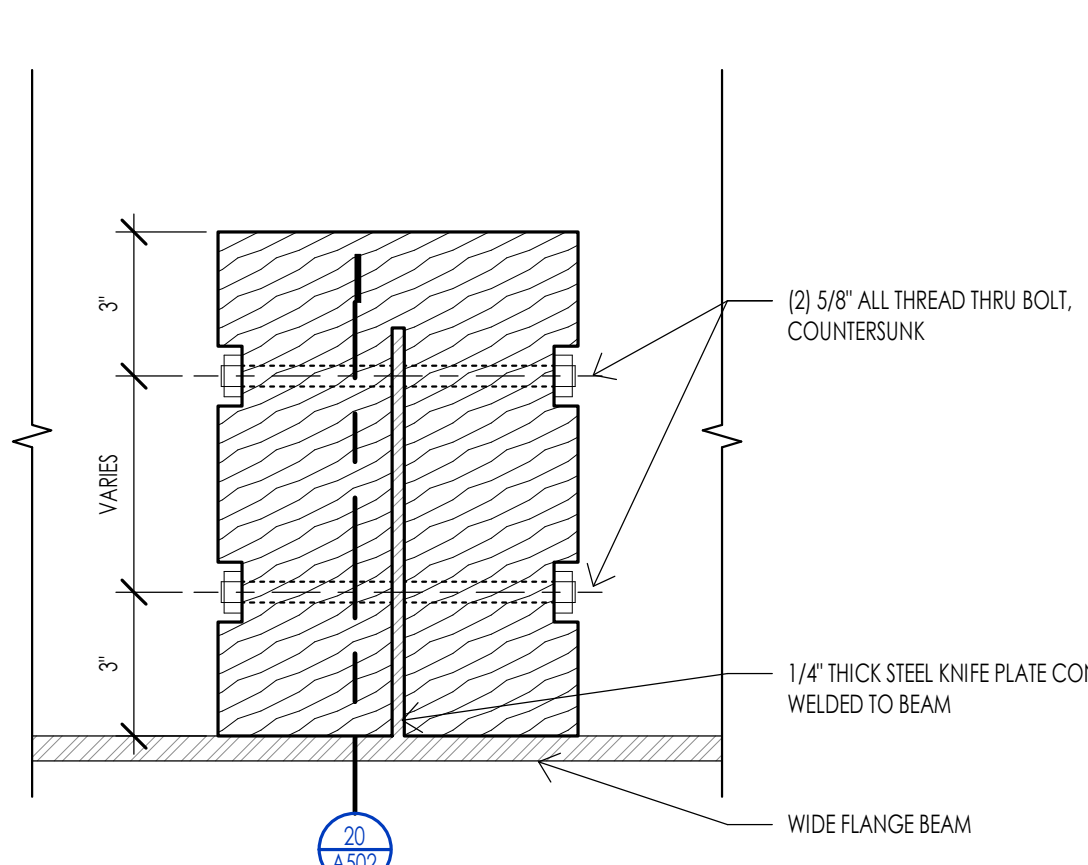
PITCHED EAVE DETAIL AT HIGH SIDE  
1 1/2" = 1'-0"



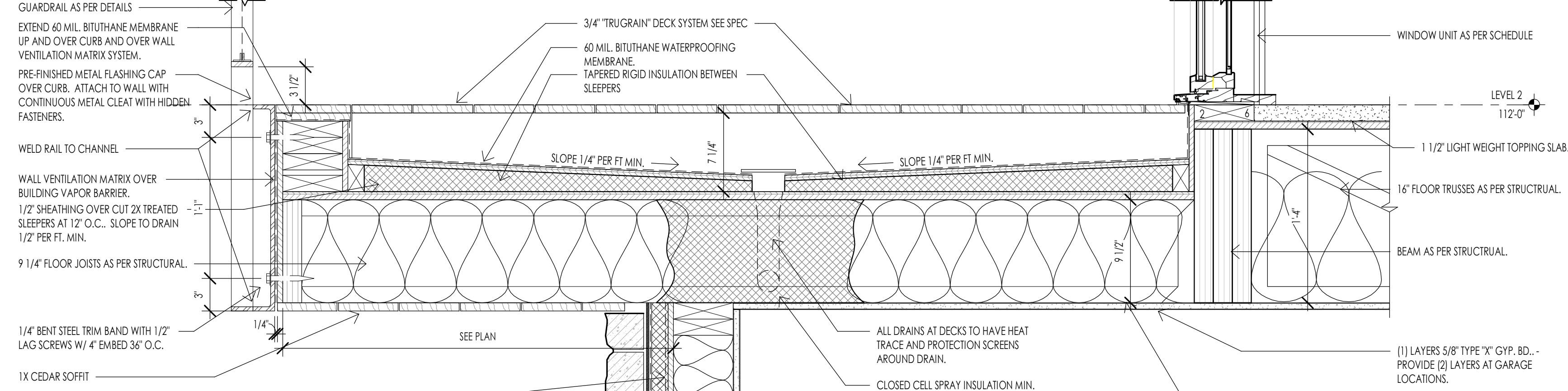
TYPICAL RAKE DETAIL  
1 1/2" = 1'-0"



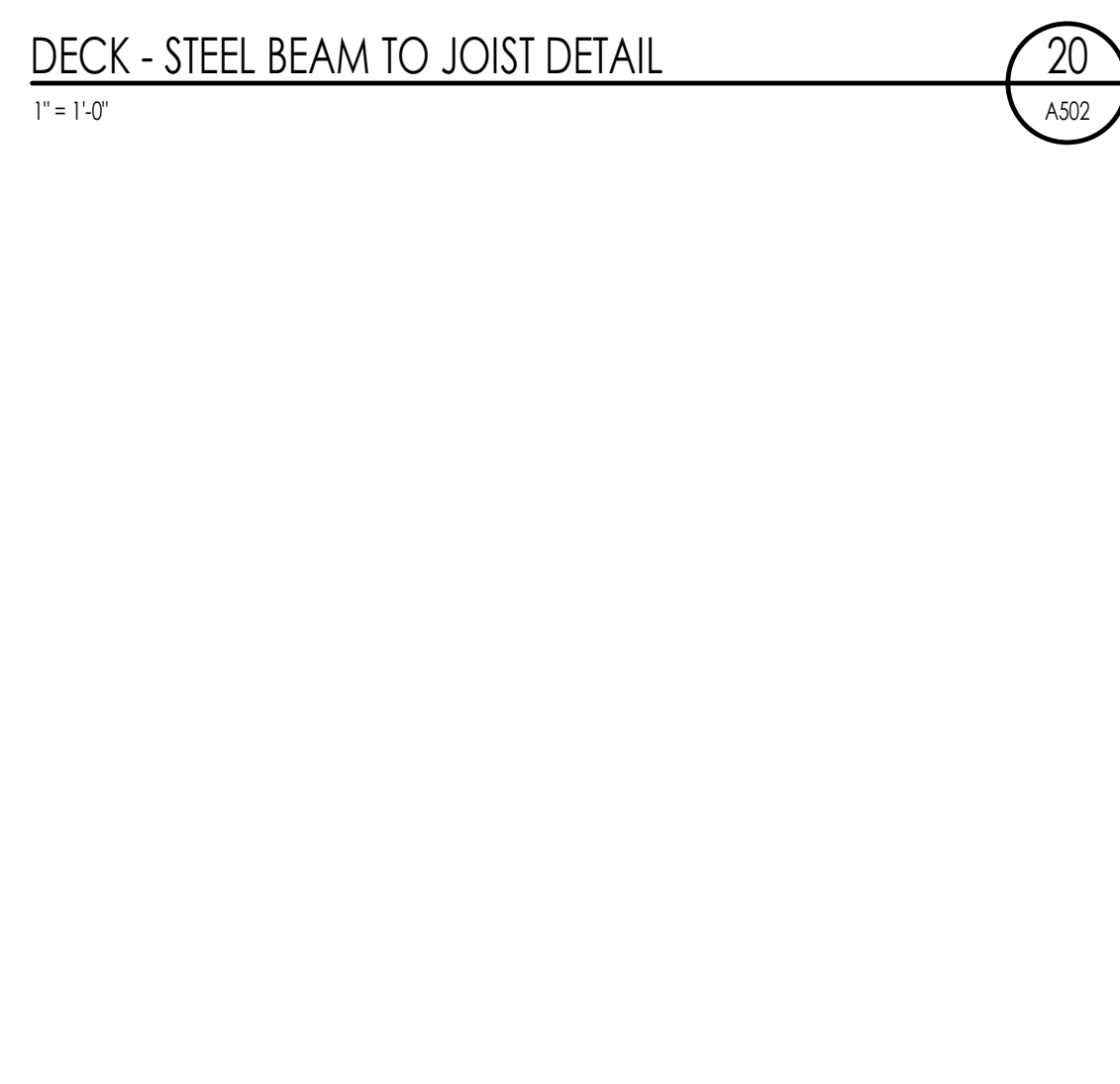
DECK - STEEL BEAM TO JOIST DETAIL  
1" = 1'-0"



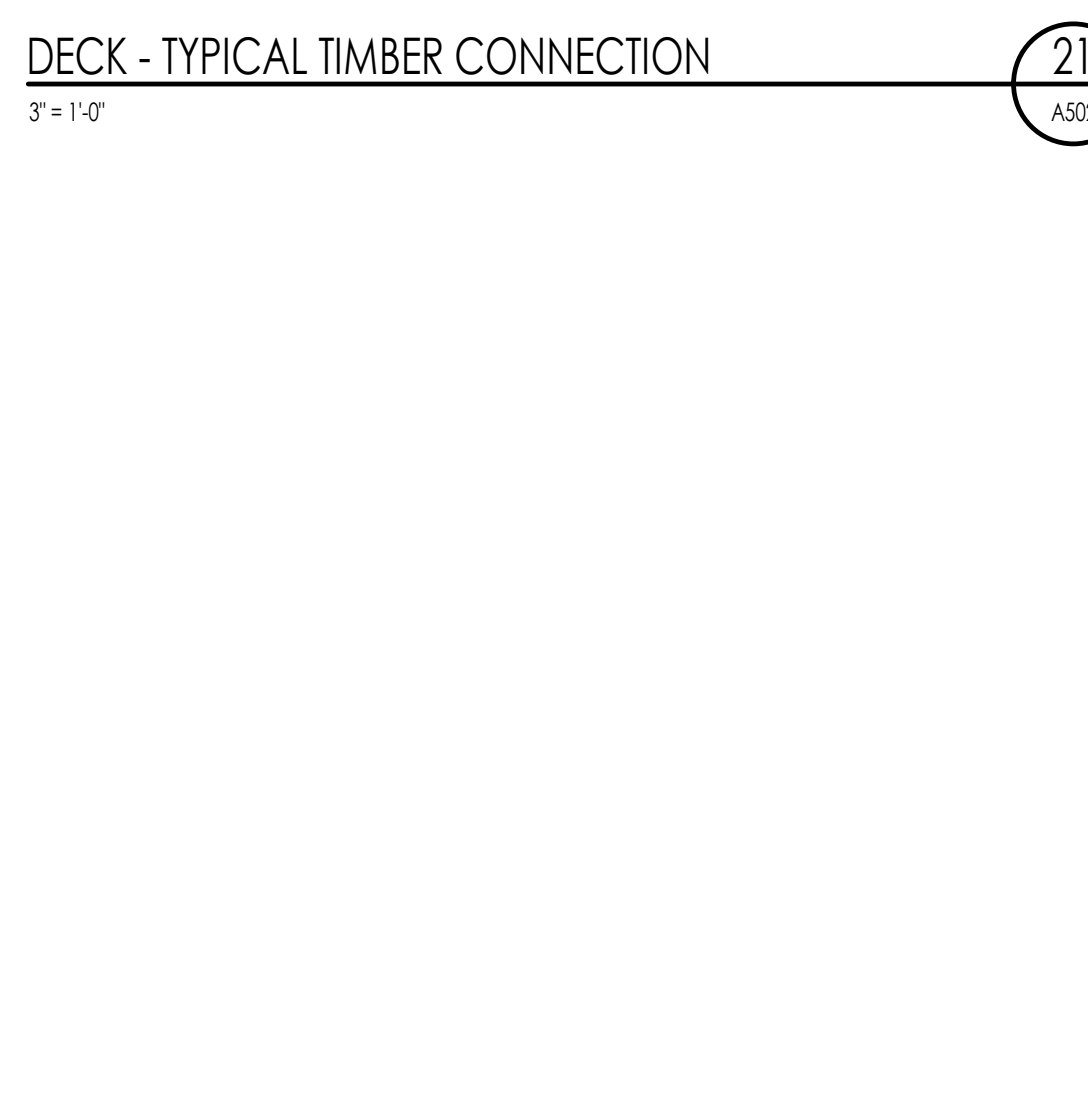
DECK - TYPICAL TIMBER CONNECTION  
3" = 1'-0"



DECK - DRAINAGE DETAIL  
1 1/2" = 1'-0"



DECK - EXTERIOR DECK WALL STONE CAP  
1 1/2" = 1'-0"



DECK - EXTERIOR DECK WALL STONE CAP  
1 1/2" = 1'-0"

WARM SPRINGS RESIDENCE #32

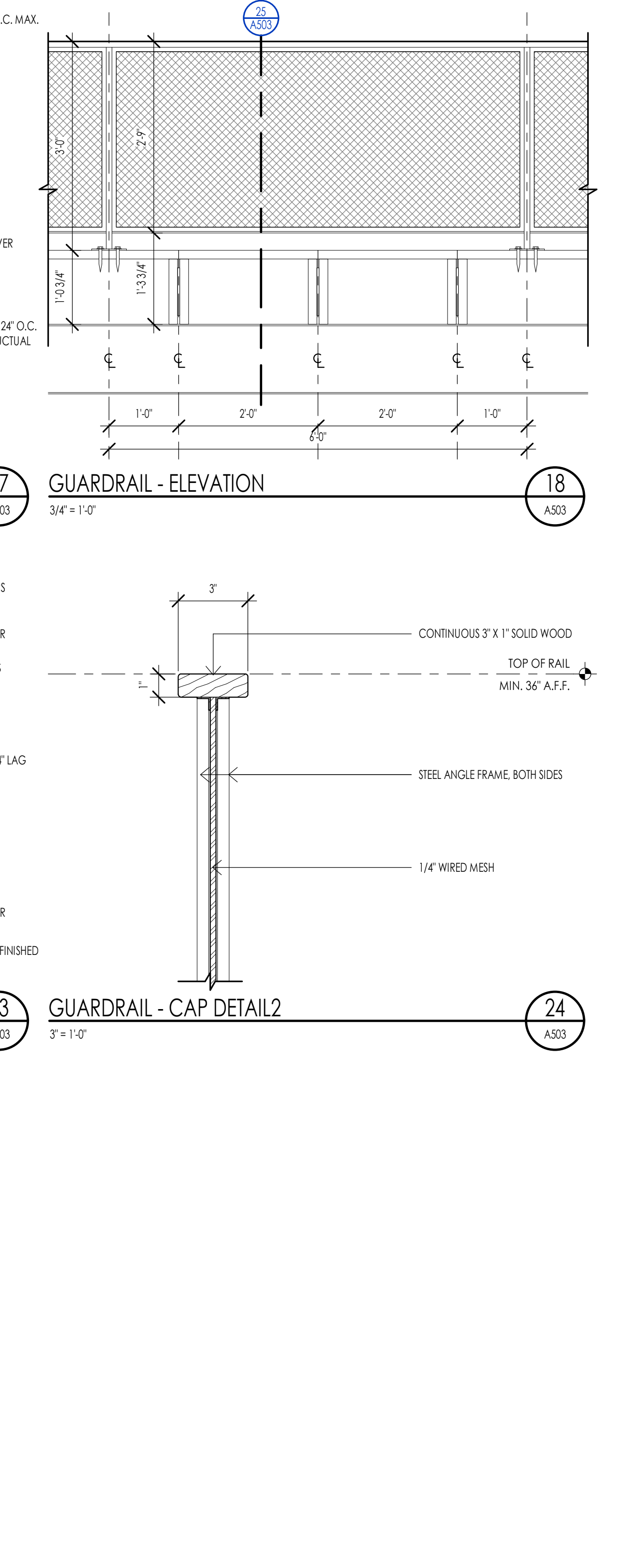
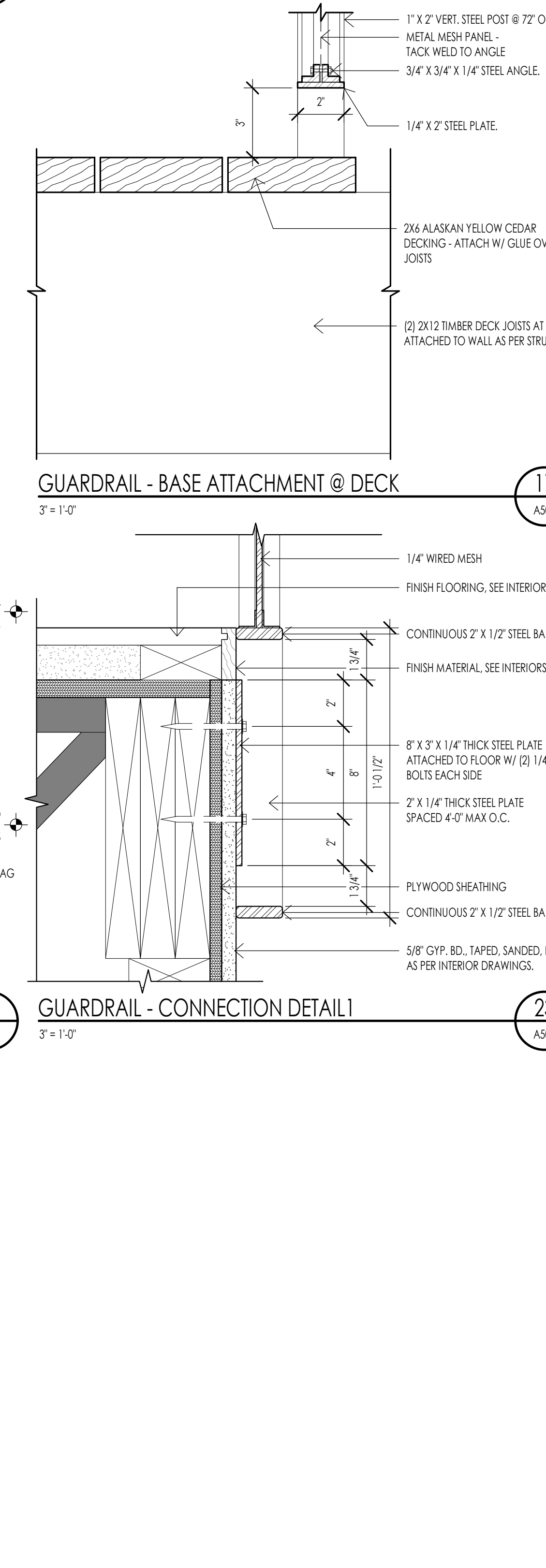
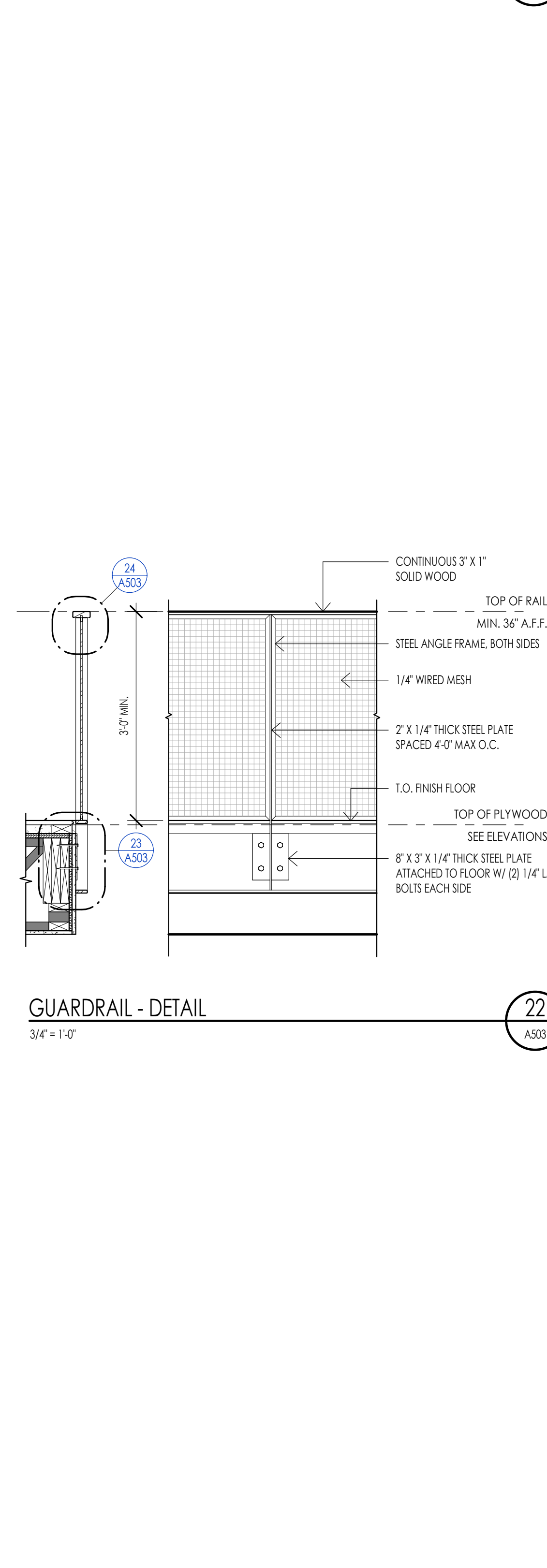
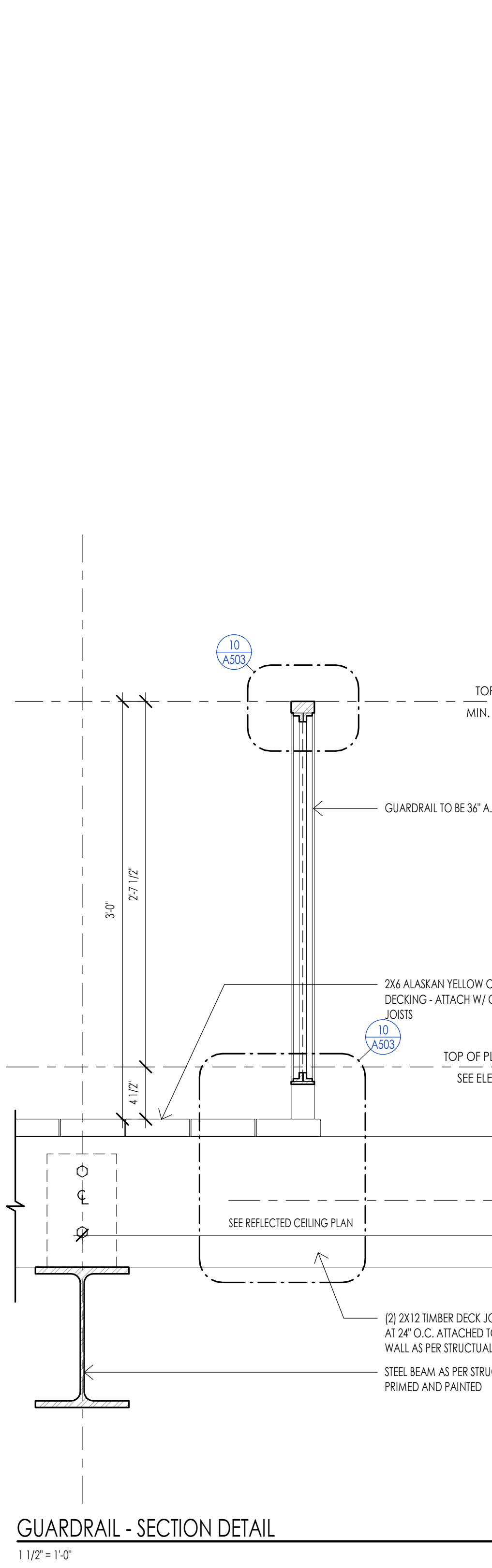
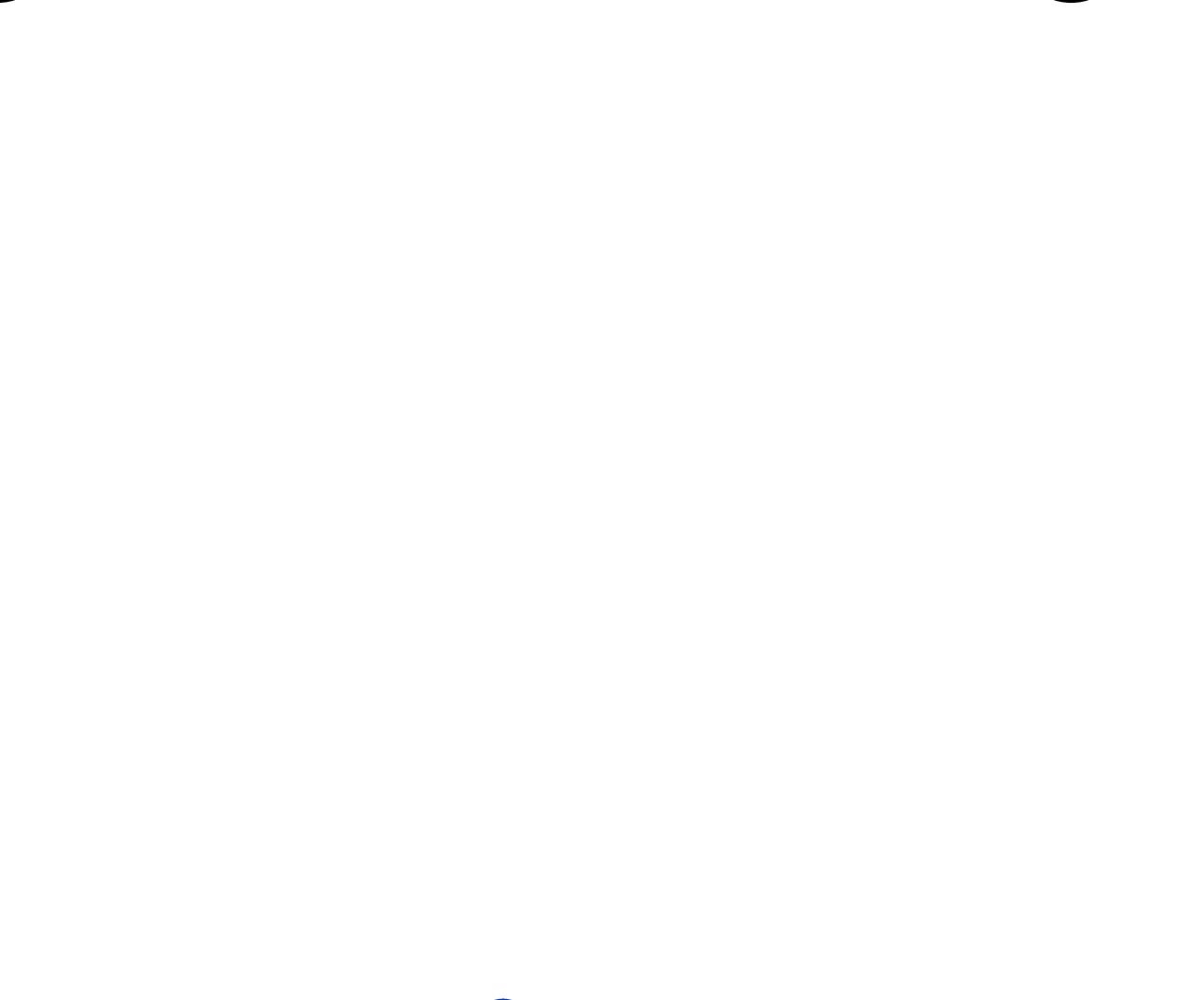
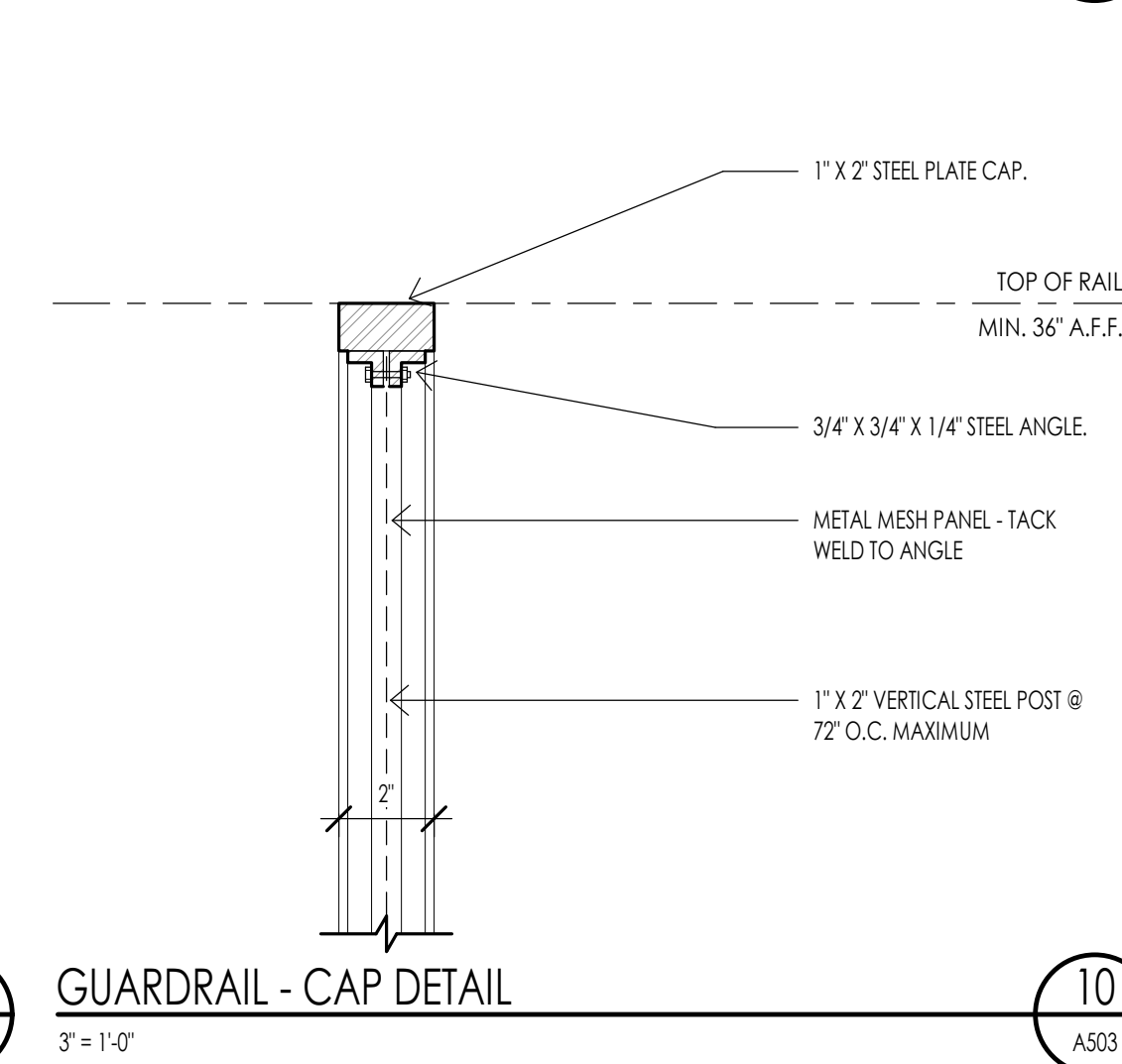
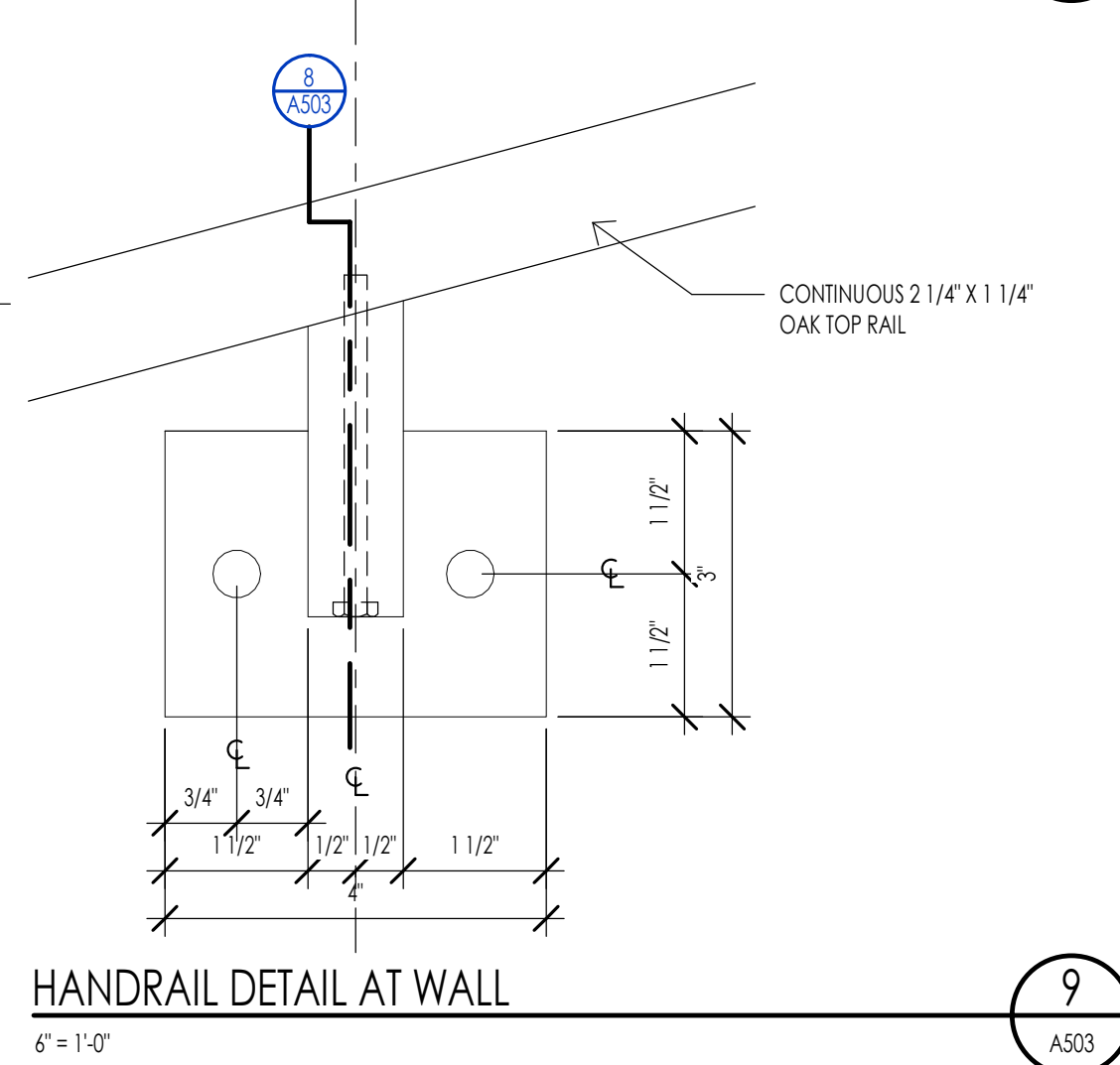
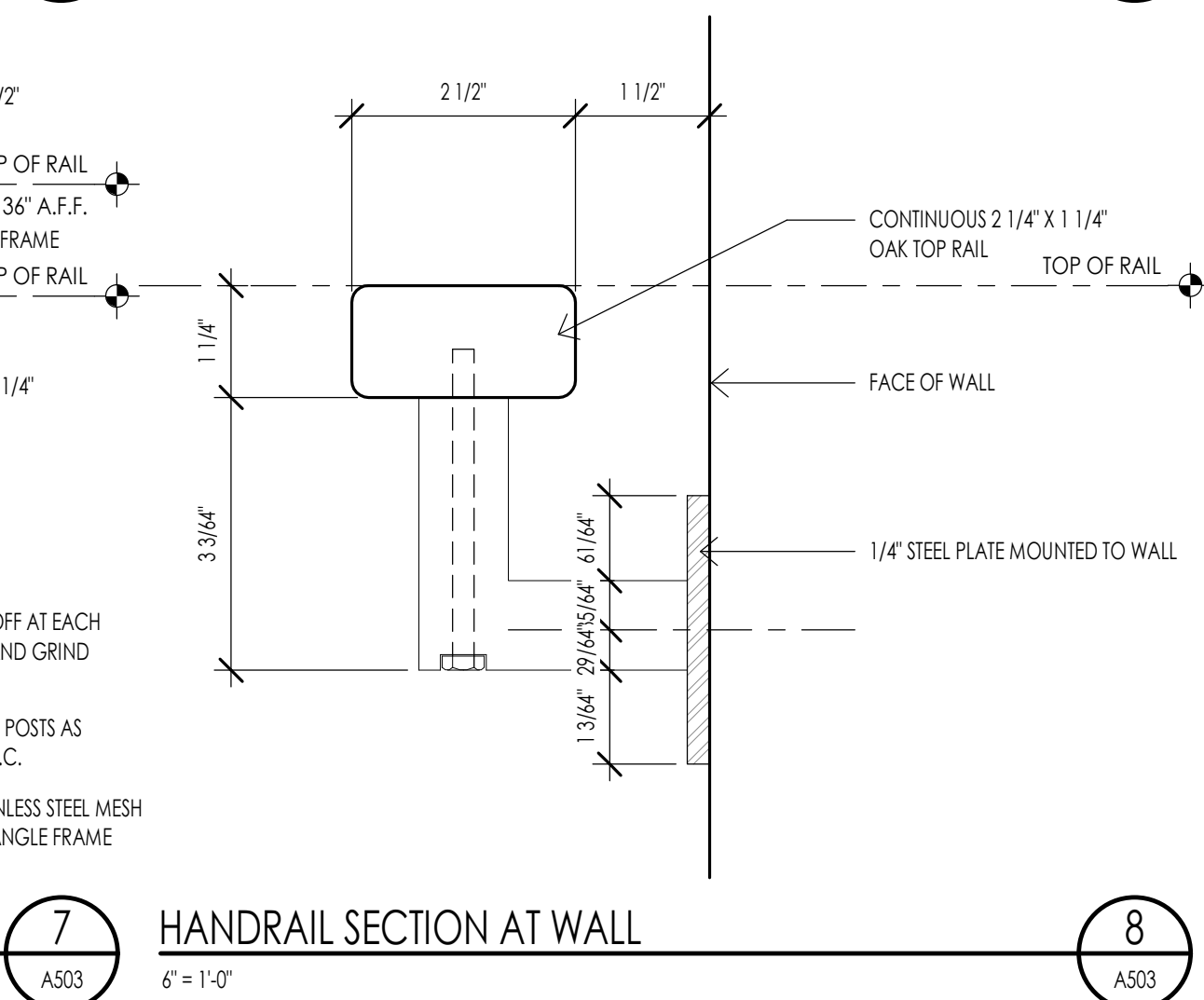
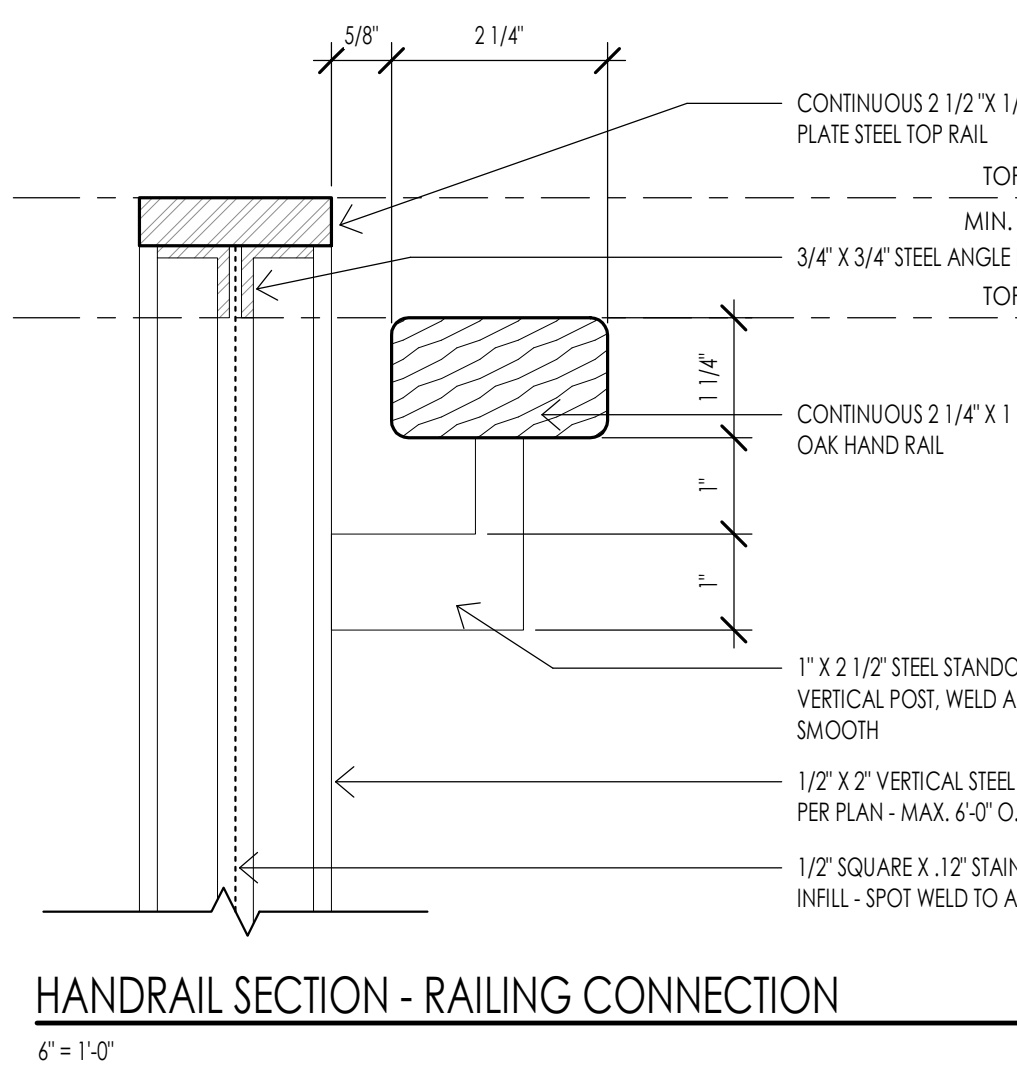
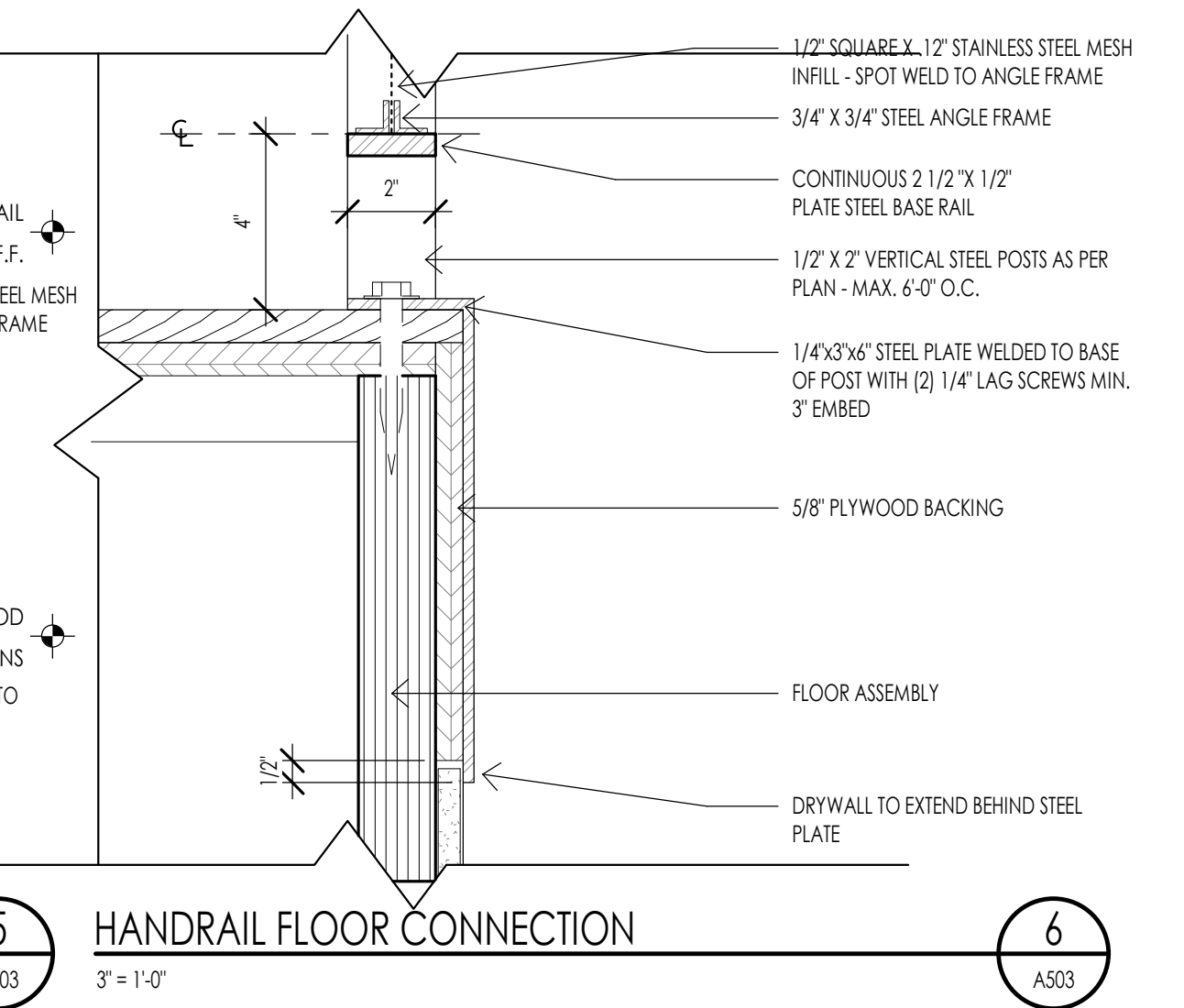
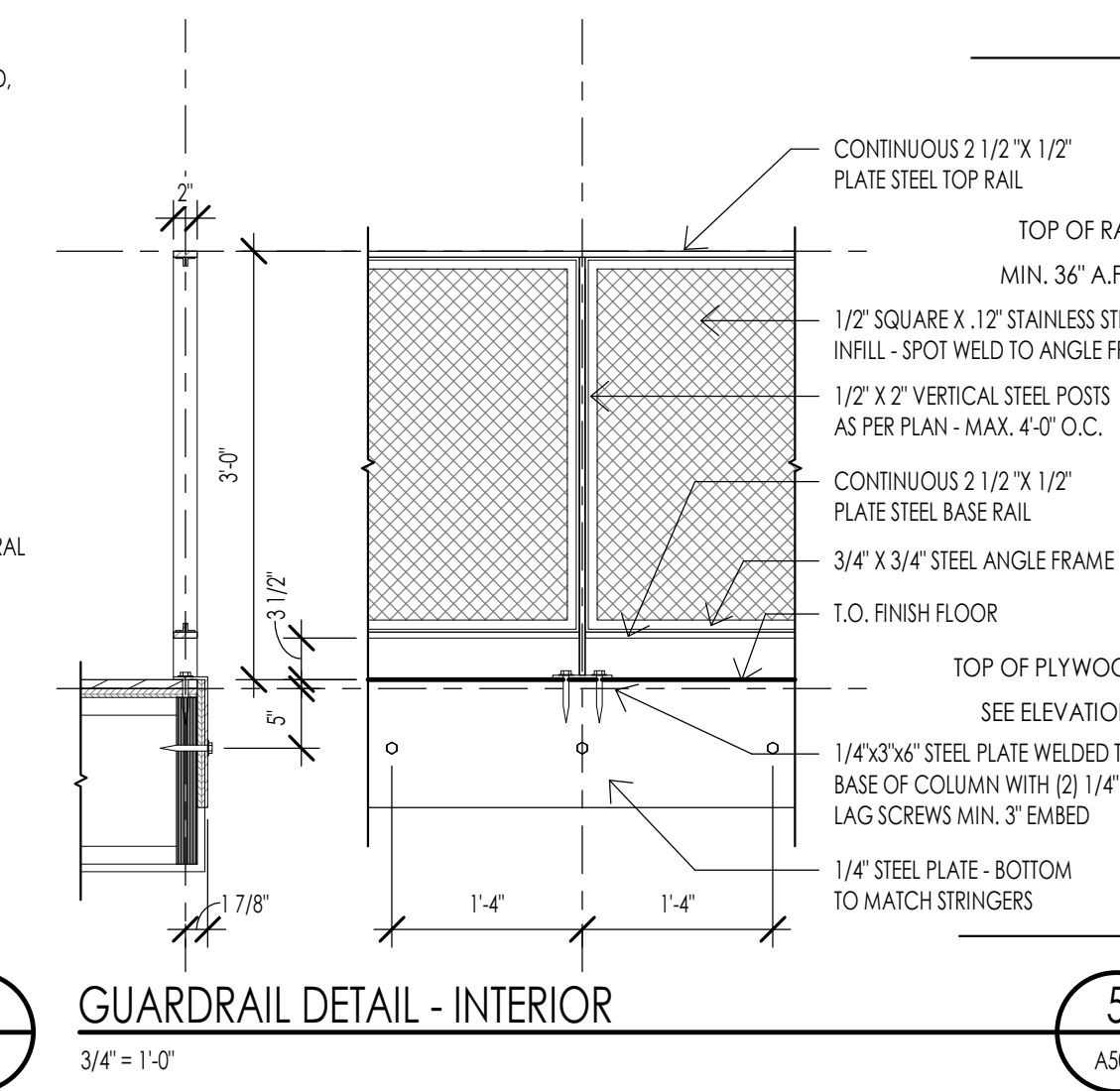
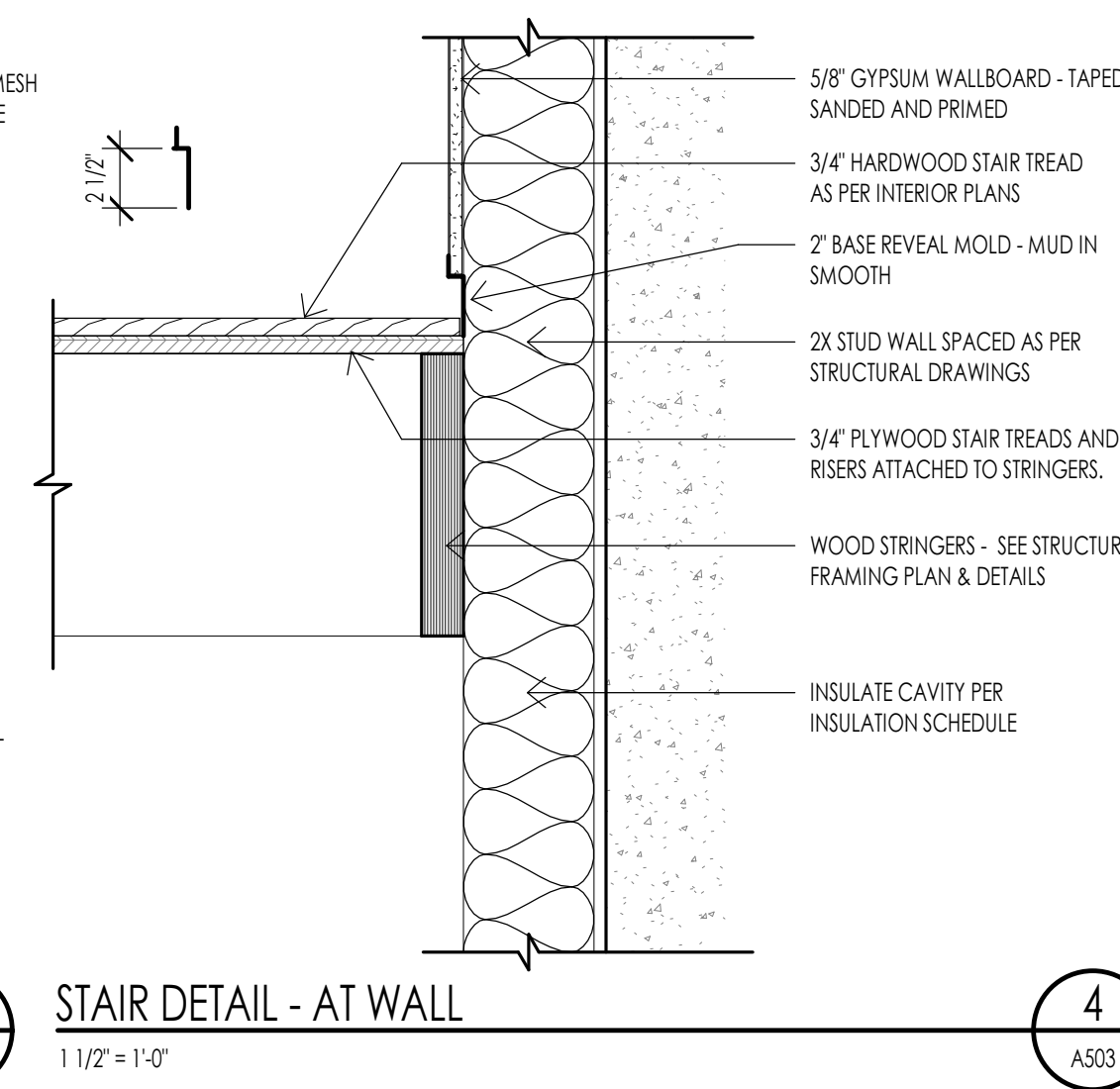
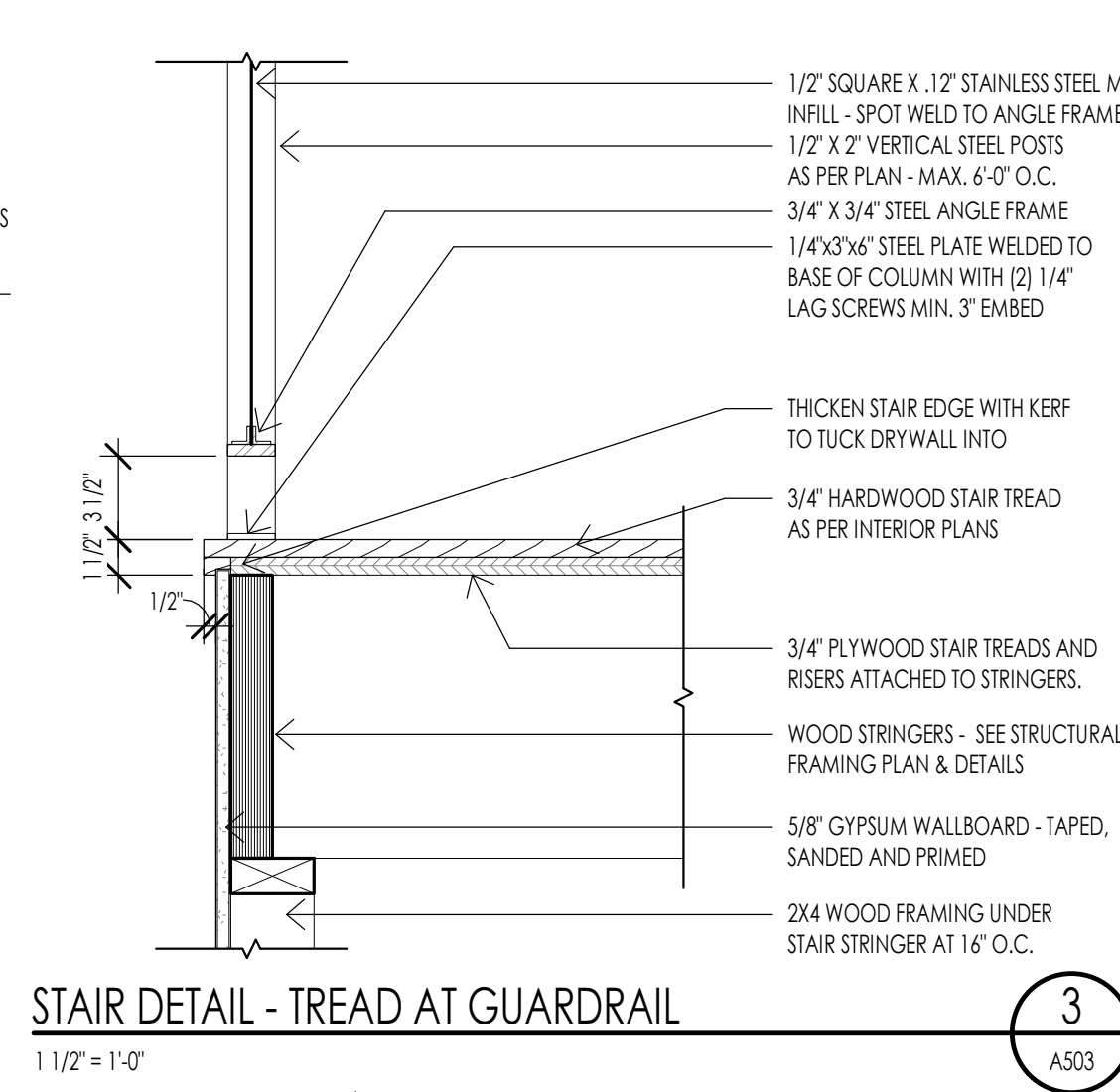
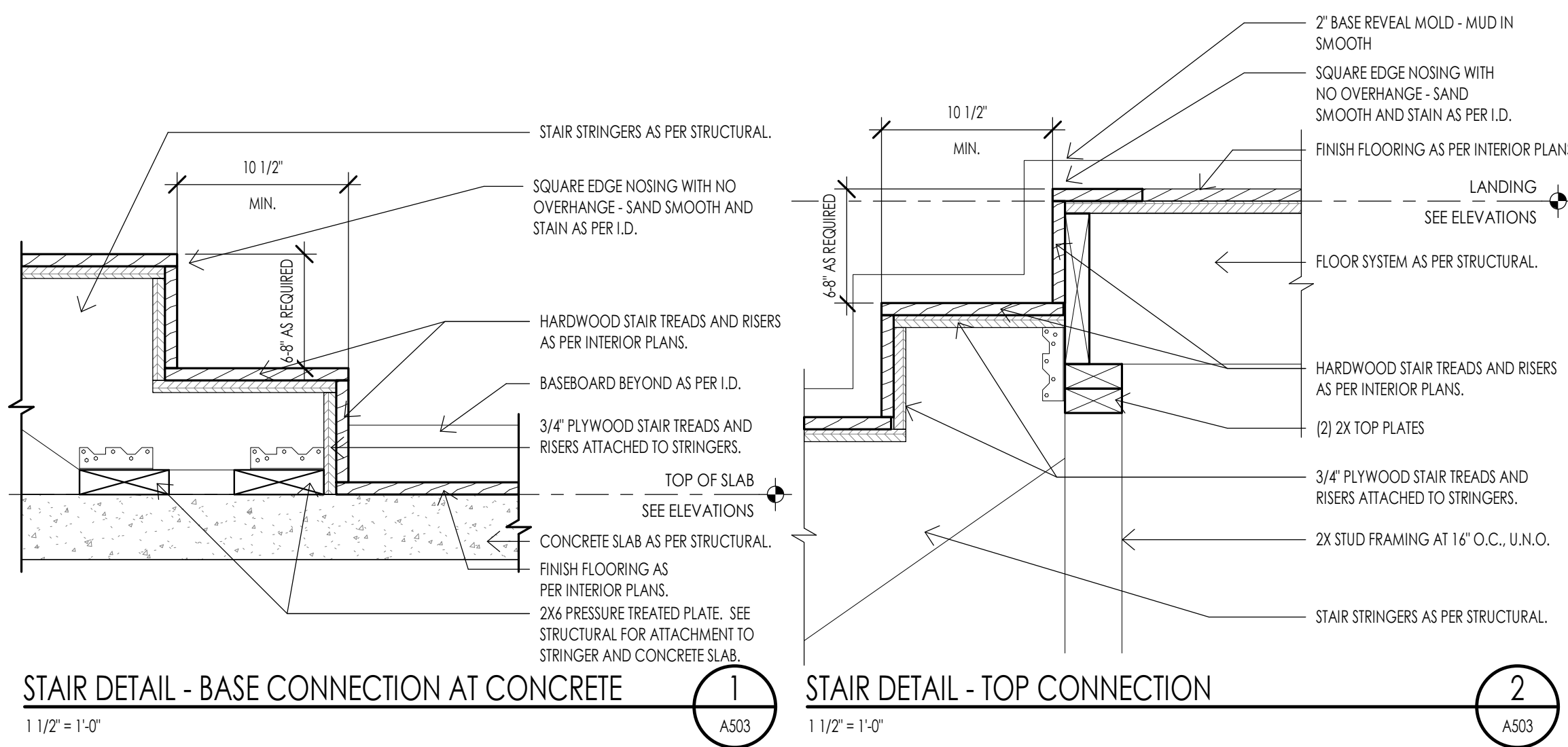
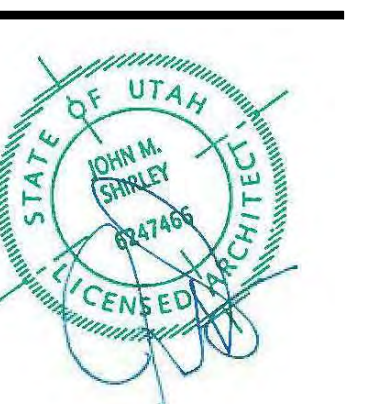
160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25  
REVISIONS:

SHEET TITLE:  
ARCHITECTURAL  
DETAILS

SHEET NUMBER:  
A502

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**DOOR SCHEDULE**

MARK	DOOR					FRAME					FIRE RATING	HARDWARE	REMARKS			
	WIDTH	HEIGHT	THICKNESS	MATERIAL	TYPE	FINISH	DETAILS			MATERIAL				TYPE	FINISH	
							HEAD	JAMB	SILL							
D001A	4'-0"	9'-0"	2"	METAL-GLASS	D7		20/A601									PIVOT DOOR - METAL - GLASS - WOOD
D002A	2'-0"	9'-0"	2"	WOOD	D8		30/A601	30/A601	26/A601							GARAGE DOOR - METAL - GLASS - WOOD
D002B	3'-0"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F3	PER I.D.				NON-RATED
D003A	3'-0"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D004A	2'-10"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D004B	2'-10"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D005A	2'-10"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D005A	2'-4"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D006B	2'-0"	7'-0"	1/4"	GLASS	D6											
D007A	2'-10"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D007B	2'-4"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D008A	2'-4"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D008B	2'-4"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D009C	2'-0"	7'-0"	1/4"	GLASS	D6											
D022A	2'-4"	8'-0"	1 3/4"	WOOD	D2					WOOD	FRAMELESS	PER I.D.				BARN DOOR WOOD PANEL
D022B	2'-4"	8'-0"	1 3/4"	WOOD	D2					WOOD	FRAMELESS	PER I.D.				BARN DOOR WOOD PANEL
D023A	2'-10"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D024A	4'-0"	8'-0"	1 3/4"	WOOD	D2					WOOD	FRAMELESS	PER I.D.				NON-RATED
D024B	2'-4"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D024C	2'-0"	7'-0"	1/4"	GLASS	D6											
D024D	2'-8"	8'-0"	1 1/2"	WOOD	D5	PER I.D.				WOOD	FRAMELESS	PER I.D.				NON-RATED
D025A	2'-4"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED
D025B	2'-0"	7'-0"	1/4"	GLASS	D6											
D027A	2'-10"	8'-0"	2"	WOOD	D4	PER I.D.	26/A601	27/A601	27/A601	WOOD	F1	PER I.D.				NON-RATED

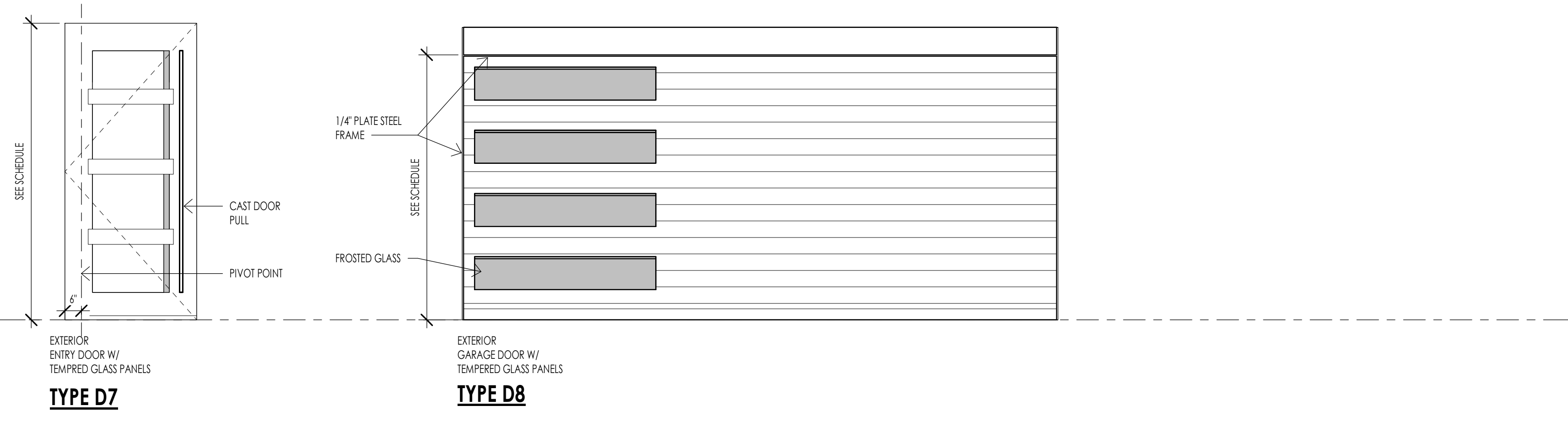
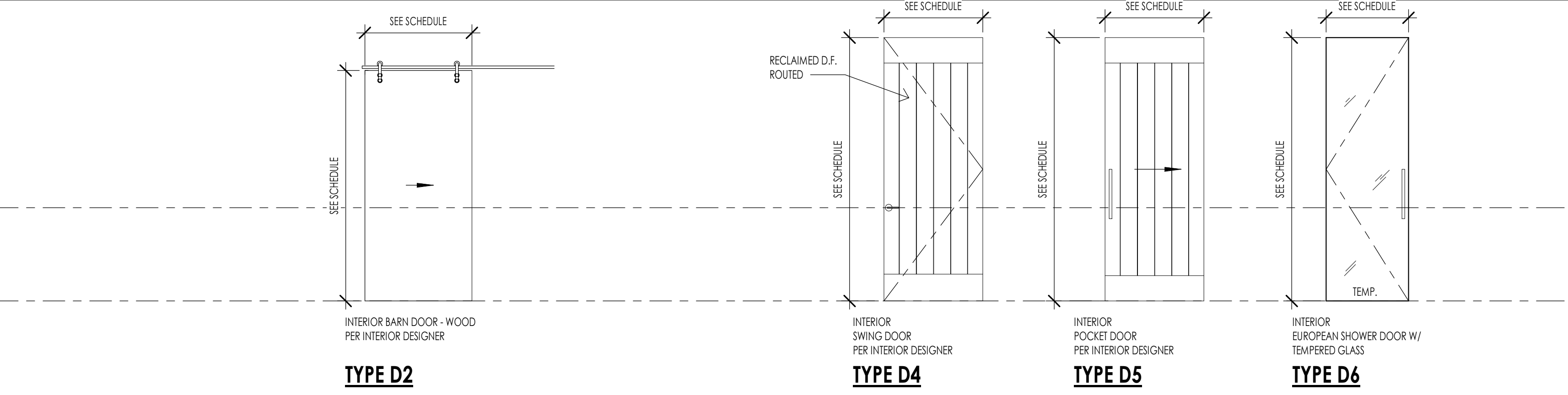
**DOOR SCHEDULE GENERAL NOTES**

- SEE SHEET A601 FOR DOOR AND FRAME TYPES.
- CONTRACTOR SHALL FIELD VERIFY ALL DOOR OPENINGS PRIOR TO ORDERING ALL DOORS.
- CONTRACTOR SHALL SUBMIT COMPLETE DOOR AND HARDWARE SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL FOR EACH BUILDING PRIOR TO ORDERING AND TAKING RECEIPT OF DOOR ORDER. ARCHITECT SHALL REVIEW ALL DOORS FOR COMPLIANCE SPECIFICATIONS AND BUILDING CODE.
- ALL DOORS REQUIRED TO BE RATED SHALL HAVE APPROPRIATE U.L. RATING AS INDICATED IN DOOR SCHEDULE AND SPECIFICATION. ALL DOORS SHALL HAVE LABEL ON DOOR AND FRAME FOR INSPECTION ON SITE, AND SHALL NOT BE REMOVED.
- ALL DOORS SHALL BE INSTALLED SO AS NOT TO HAVE MORE THAN 1/2" THRESHOLD AT EACH DOOR.
- REFER TO INTERIOR DESIGNER FOR CORRECT DOOR STYLES, SPECIES, AND FINISHES.
- OPENINGS BETWEEN GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8" INCHES THICK, SOLID HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8" INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE I.R.C. SECTION R202.3.1.

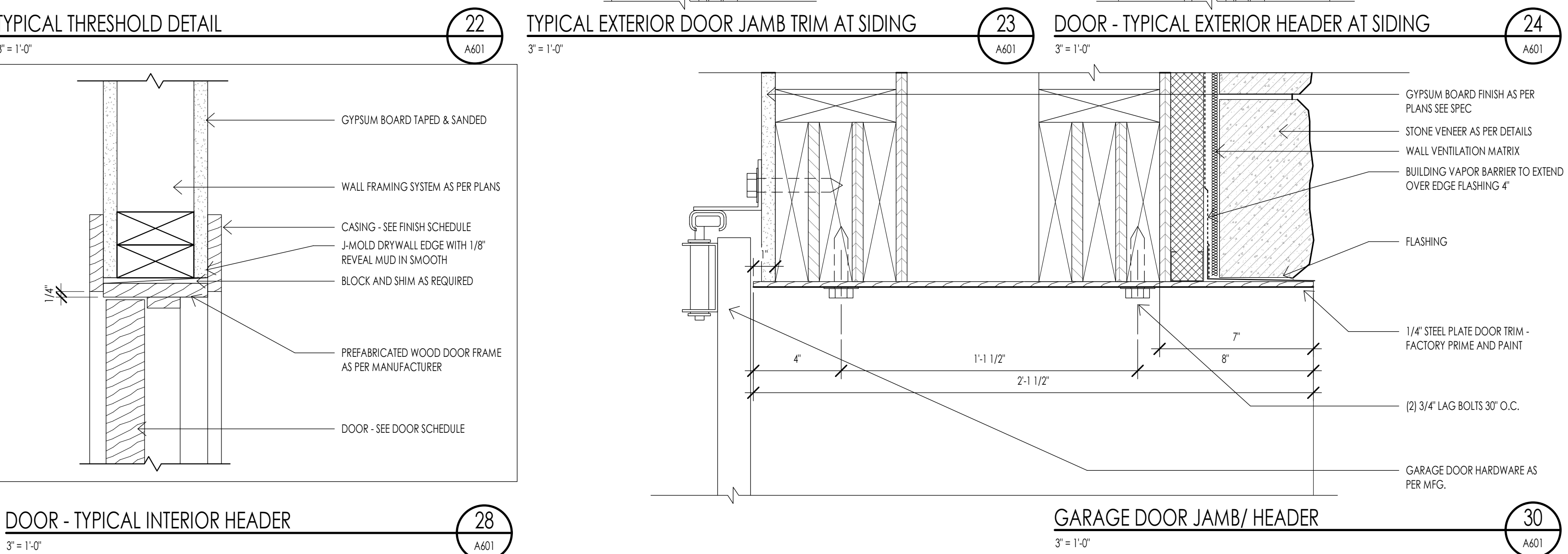
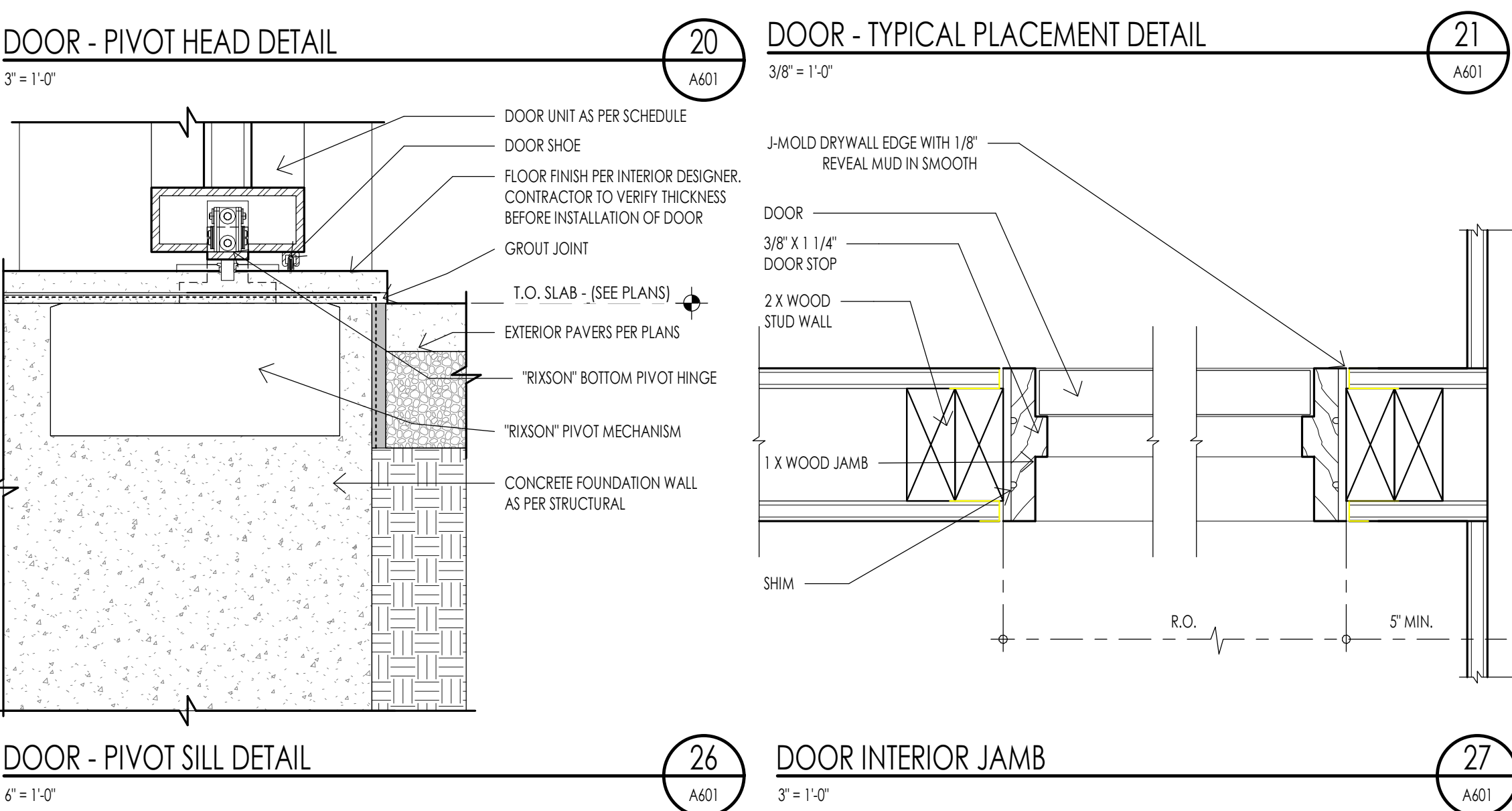
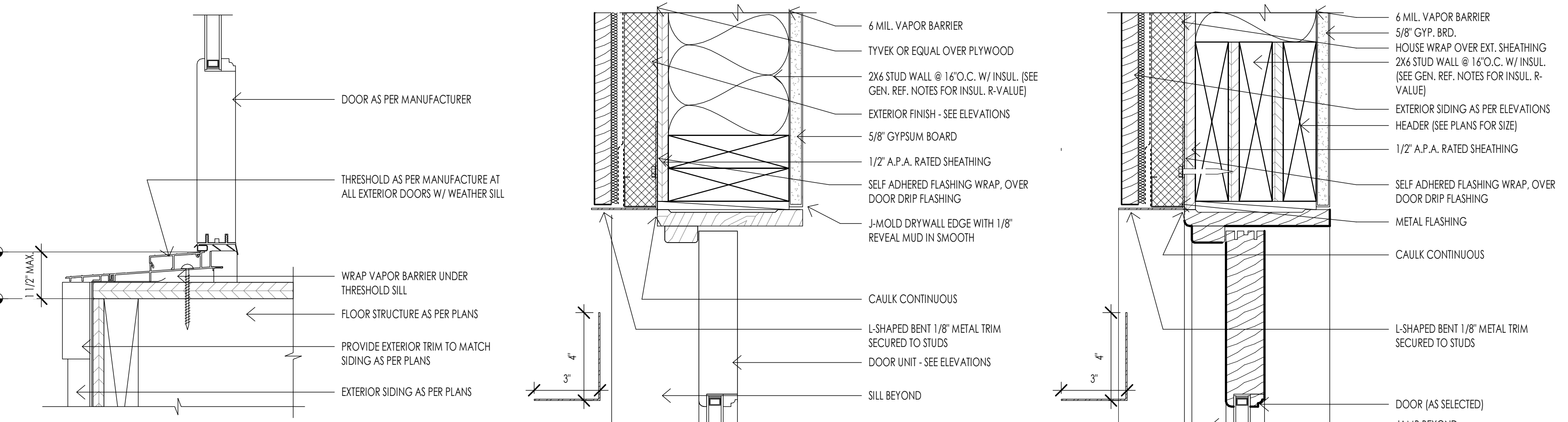
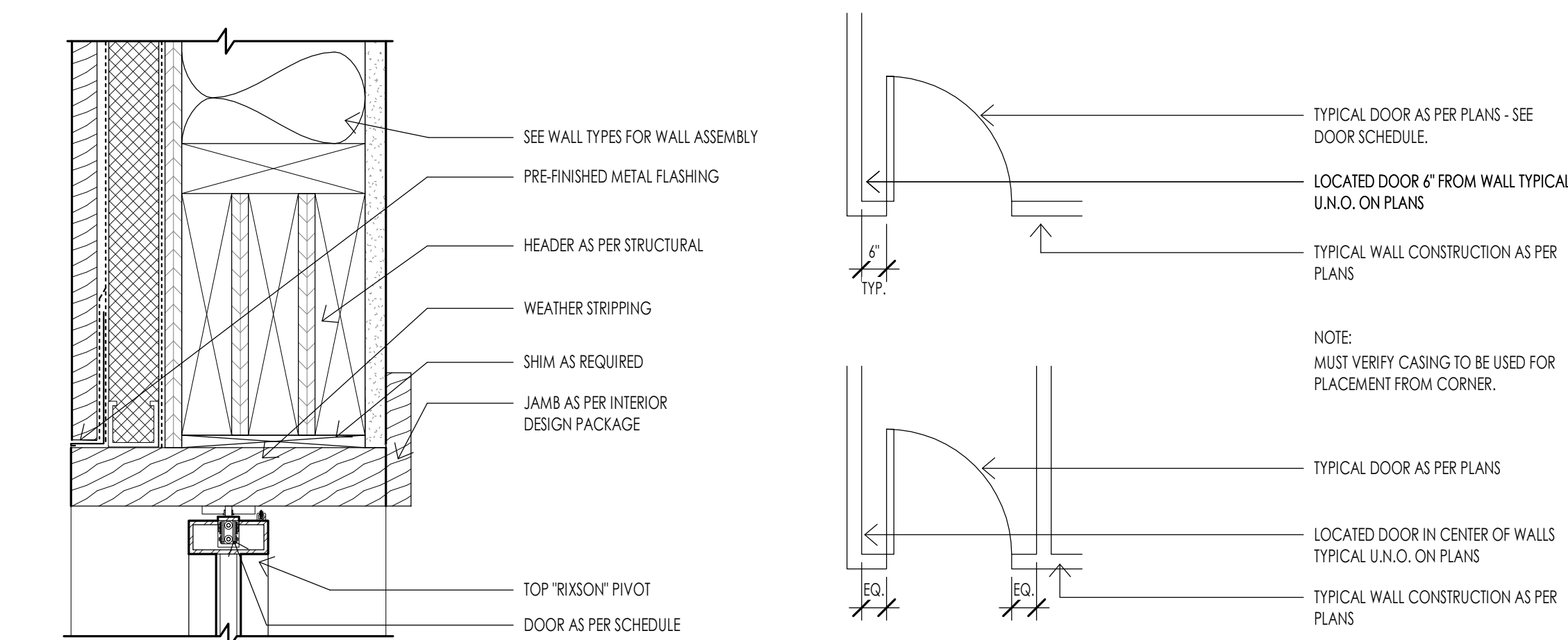
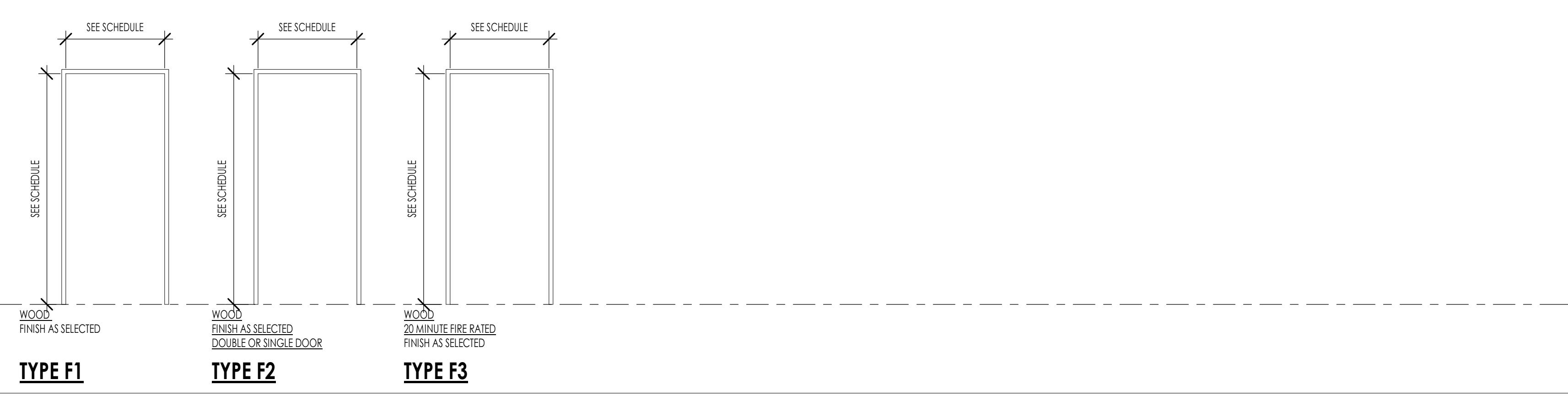
**HARDWARE GROUPS**

- H1 MECHANICAL ROOM**
  - 2 FAIR SPRING HINGES
  - SMOKE SEAL
  - 1 PASSAGE SET
- H2 OVERHEAD GARAGE DOORS**
  - GARAGE ENTRY PROVIDED BY OVERHEAD DOOR MANUFACTURER
- H3 SECONDARY ENTRY DOOR**
  - 3 FAIR SPRING HINGES
  - 1 SMOKE SEAL
  - 1 LOCKSET
  - 1 DEADBOLT
  - 1 THRESHOLD
- H4 GARAGE HOUSE**
  - 3 FAIR HINGES
  - 1 WEATHER STRIP
  - 1 LOCKSET
  - 1 DEADBOLT
- H5 INTERIOR DOOR**
  - 3 FAIR HINGES
  - 1 PASSAGE SET
- H6 INTERIOR BARN DOOR**
- H7 INTERIOR DOUBLE BARN DOOR**
- H8 INTERIOR DOOR**
  - 3 FAIR HINGES
  - 1 PRIVACY SET
- H9 INTERIOR DOUBLE DOOR**
  - 4 FAIR HINGES
  - 2 KNOBS (SINGLE SIDE ONLY)
- H10 ENTRY DOOR**
  - WEATHER STRIP
  - 1 THRESHOLD
  - 1 LOCKSET
  - 1 DEADBOLT
  - 1 PIVOT HINGE (TOP AND BOTTOM)
- H11 INTERIOR DOUBLE DOOR**
  - 4 FAIR HINGES
  - 2 PASSAGE SET
- H12 POCKET DOOR**

**DOOR TYPES**



**FRAME TYPES**



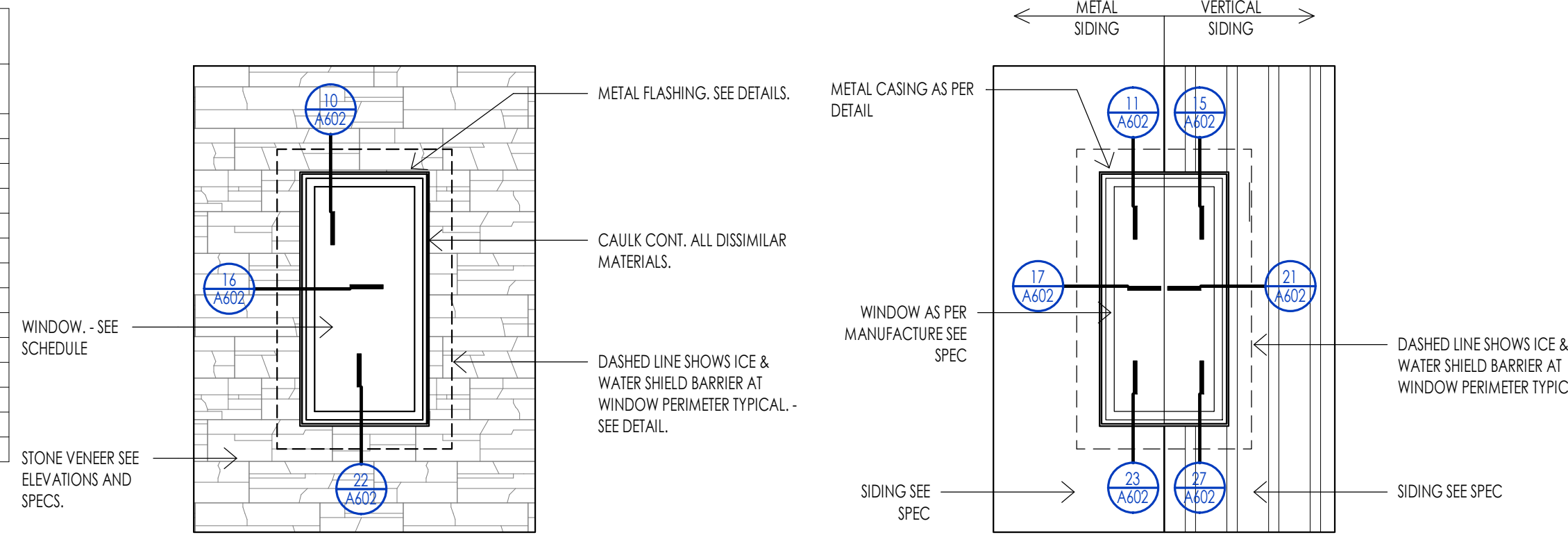
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WINDOW SCHEDULE

MARK	UNIT SIZE			OPERATION	MATERIAL	FINISH	HEAD	SILL	GLAZING		COMMENTS
	WIDTH	HEIGHT	HEAD HEIGHT						THICKNESS	TYPE	
W01	3'-0"	5'-0"	8'-0"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	21/A602	27/A602			
W02	3'-0"	3'-0"	8'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	VARIES	27/A602			
W03	3'-0"	2'-0"	10'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	15/A602	21/A602	VARIES		
W04	4'-0"	5'-0"	10'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	11/A602	17/A602	24/A602		
W05	3'-0"	8'-0"	8'-0"	EXTERIOR PATIO SINGLE DOOR	ALUMINUM CLAD	AS PER I.D.	15/A602	VARIES	PER MANUF.		
W06	3'-0"	7'-0"	10'-0"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	15/A602	22/A602			
W07	14'-0"	10'-0"	10'-0"	DOOR SLIDER GLAZED OPEN TO SIDE	ALUMINUM CLAD	AS PER I.D.	14/A602	VARIES	19/A602		
W08	9'-0"	10'-0"	10'-0"	DOOR SLIDER TRIPLE	ALUMINUM CLAD	AS PER I.D.	14/A602	VARIES	19/A602		
W09	3'-0"	7'-0"	10'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	21/A602	27/A602			
W10	2'-6"	7'-0"	10'-0"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	15/A602	22/A602			
W11	5'-0"	5'-0"	9'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	11/A602	17/A602	23/A602		
W12	4'-0"	2'-0"	3'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	13/A602	VARIES	14/A602		
W13	3'-0"	2'-0"	3'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	13/A602	VARIES	14/A602		

NOTE: COORDINATE WITH DETAILS FOR ADDITIONAL INSTALLATION REQUIREMENT.



WINDOW LEGEND	
SYMBOL	DESCRIPTION
(T)	TEMPERED GLAZING LOCATIONS.
→	DIRECTION OF OPERABLE WINDOW/DOOR.
(E)	WINDOW IS REQUIRED TO MEET EMERGENCY EGRESS.

WINDOW SPECIFICATIONS	
APPROVED MANUFACTURERS:	MINIMUM U-VALUE: _____
	SCREENS REQUIRED: _____
BASIS OF DESIGN:	SCREEN COLOR: _____
WINDOW TYPE:	TYPICAL JAMB WIDTH: _____
WINDOW COLOR:	SDL WIDTH: _____
WINDOW GLAZING:	SDL TYPE: _____

WINDOW GENERAL NOTES

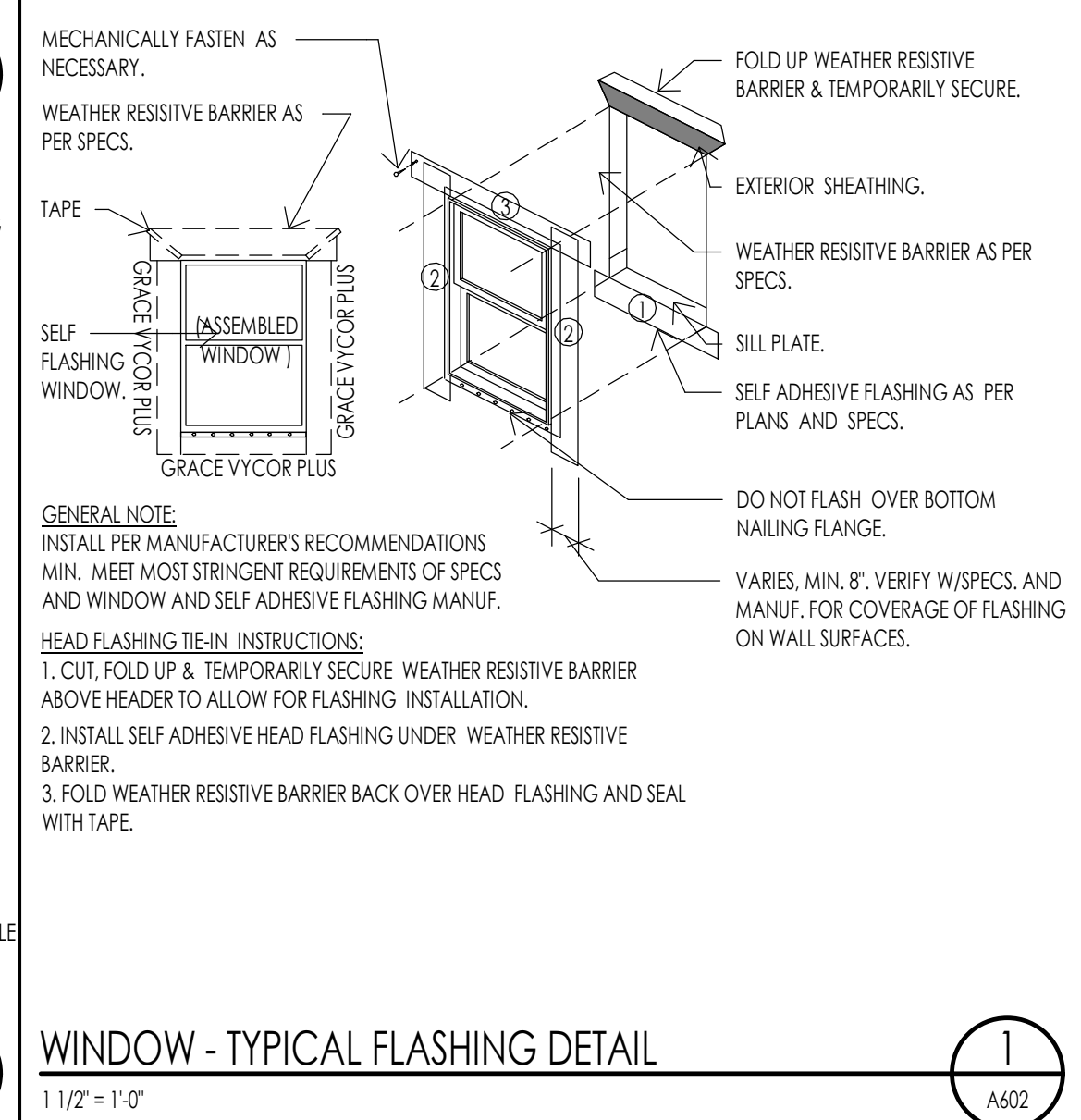
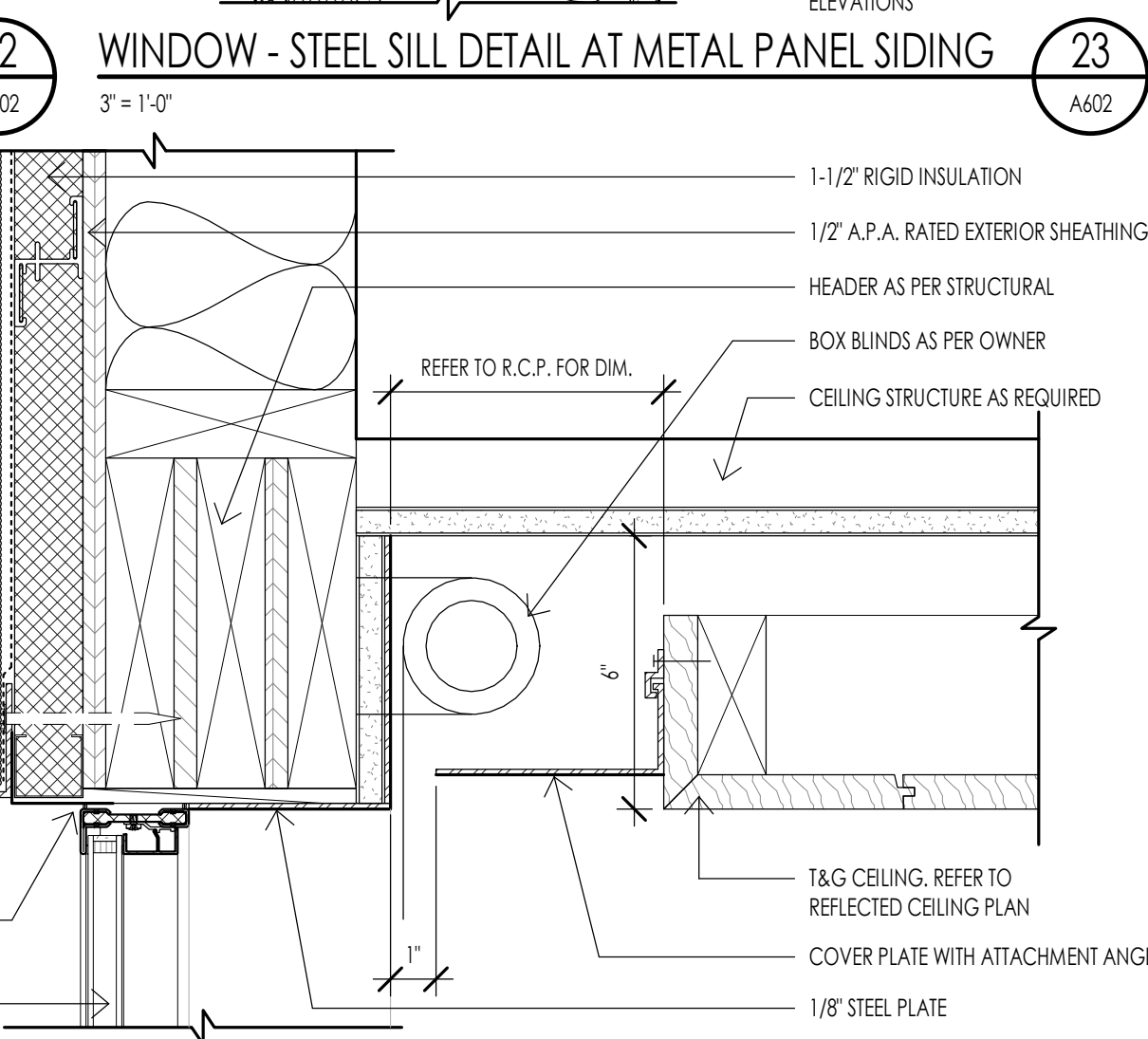
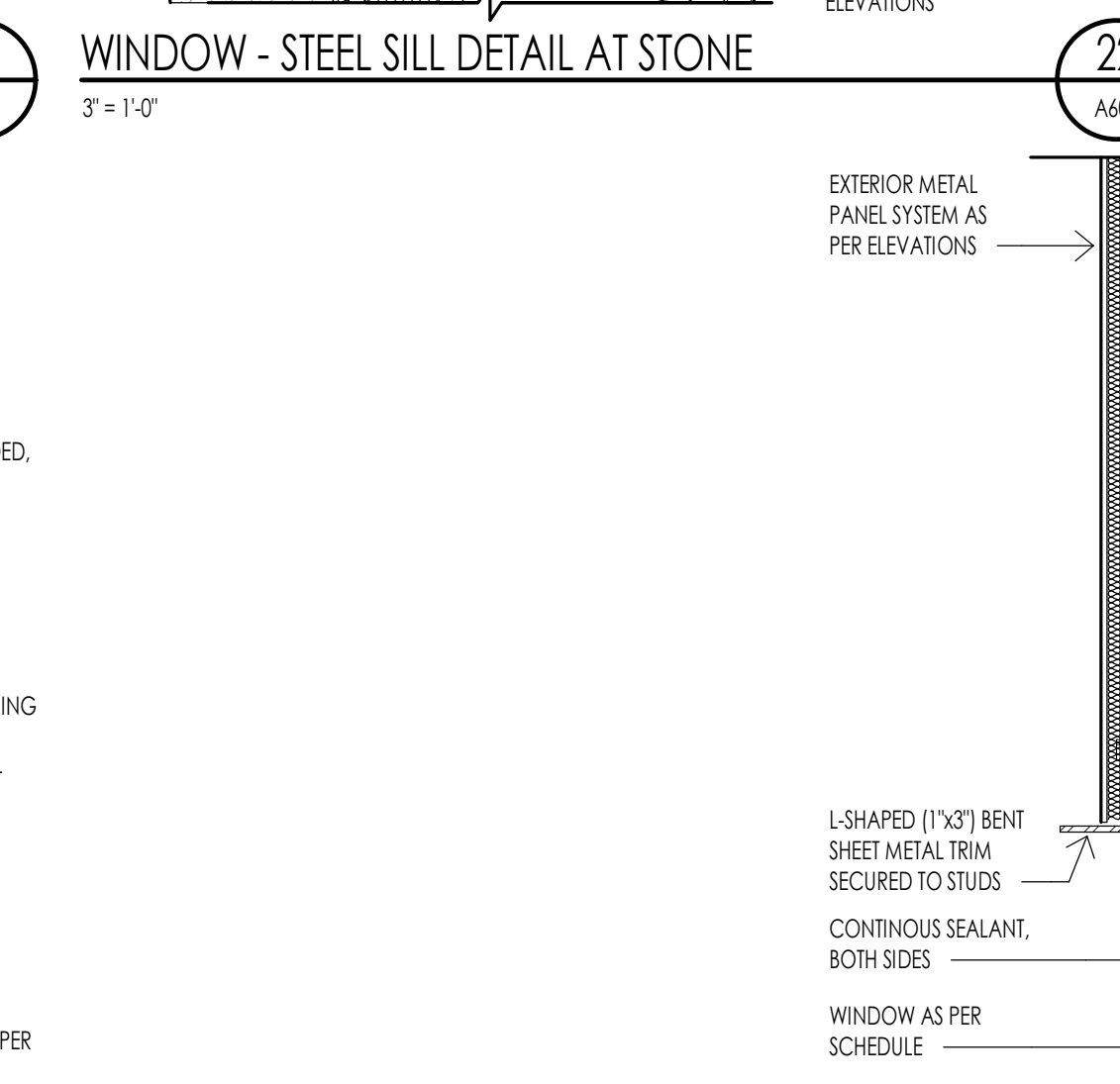
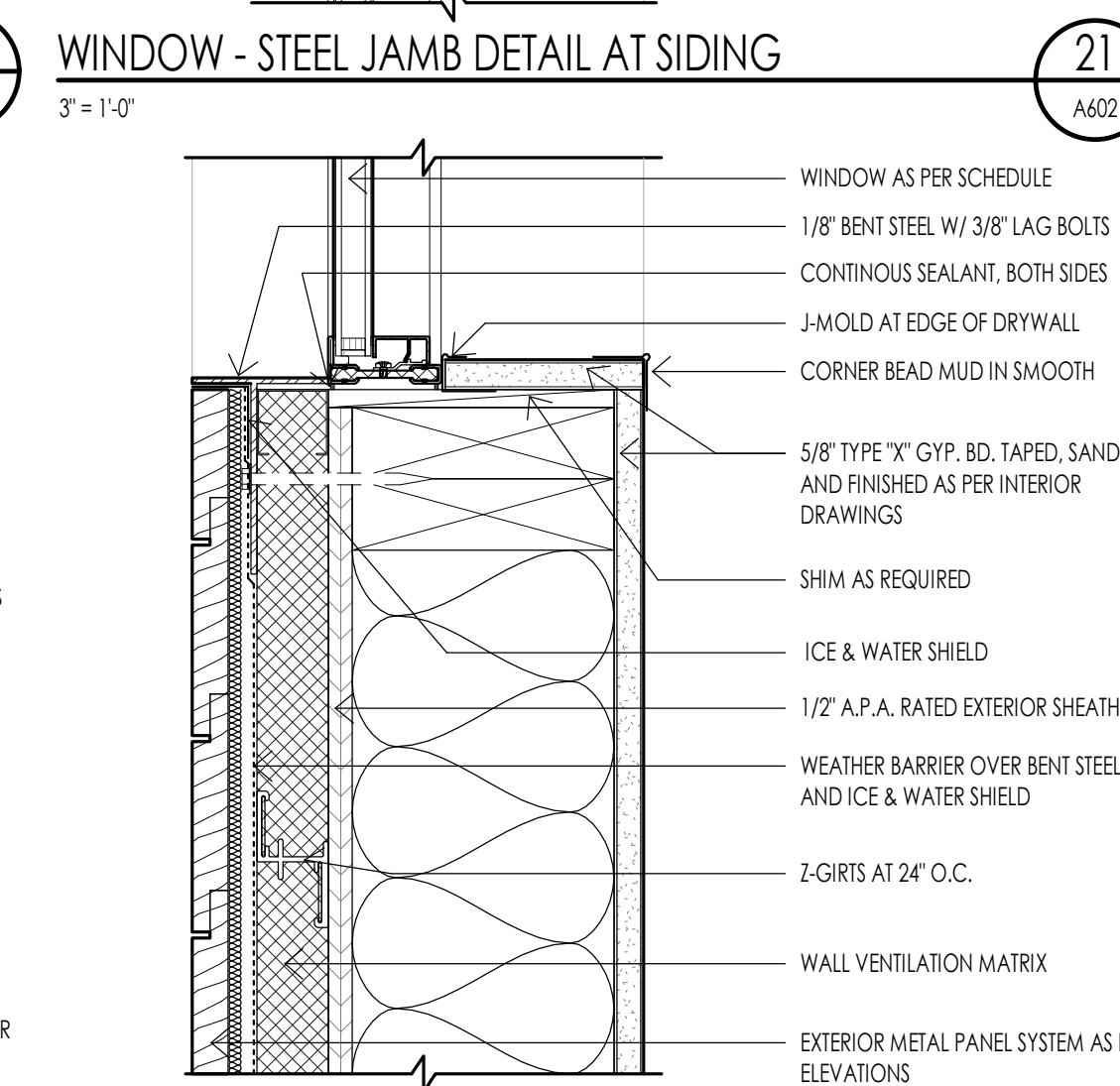
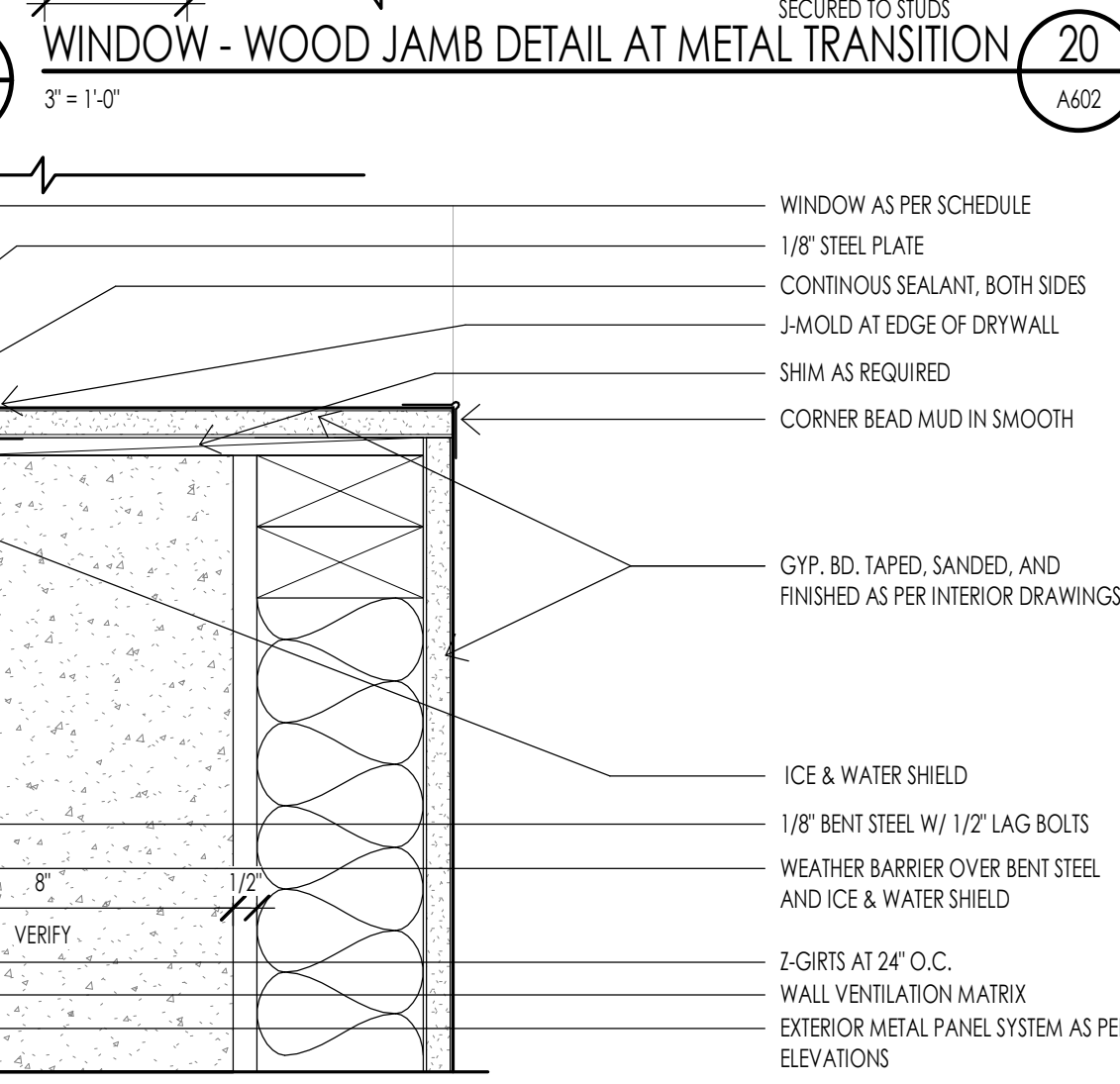
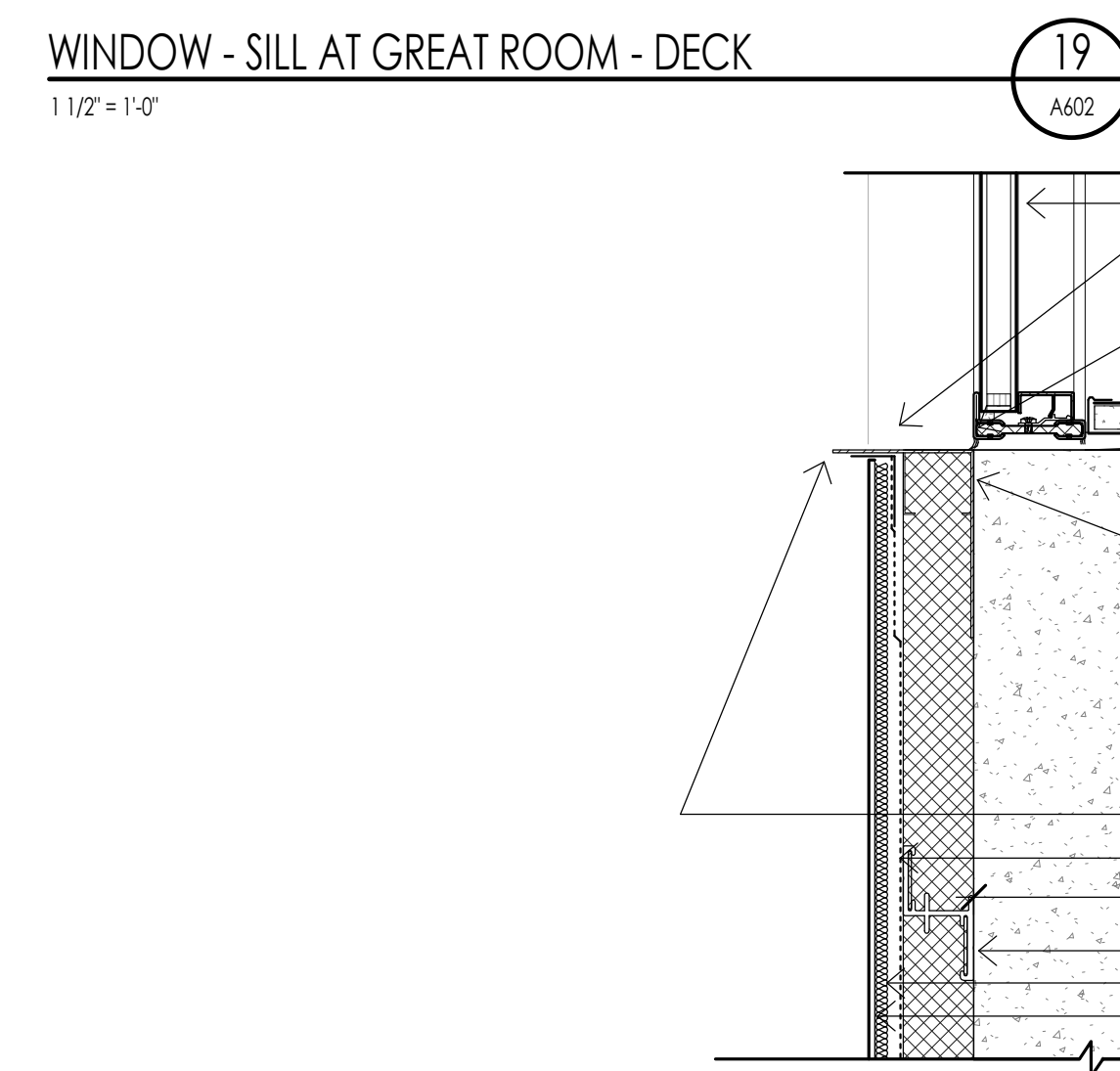
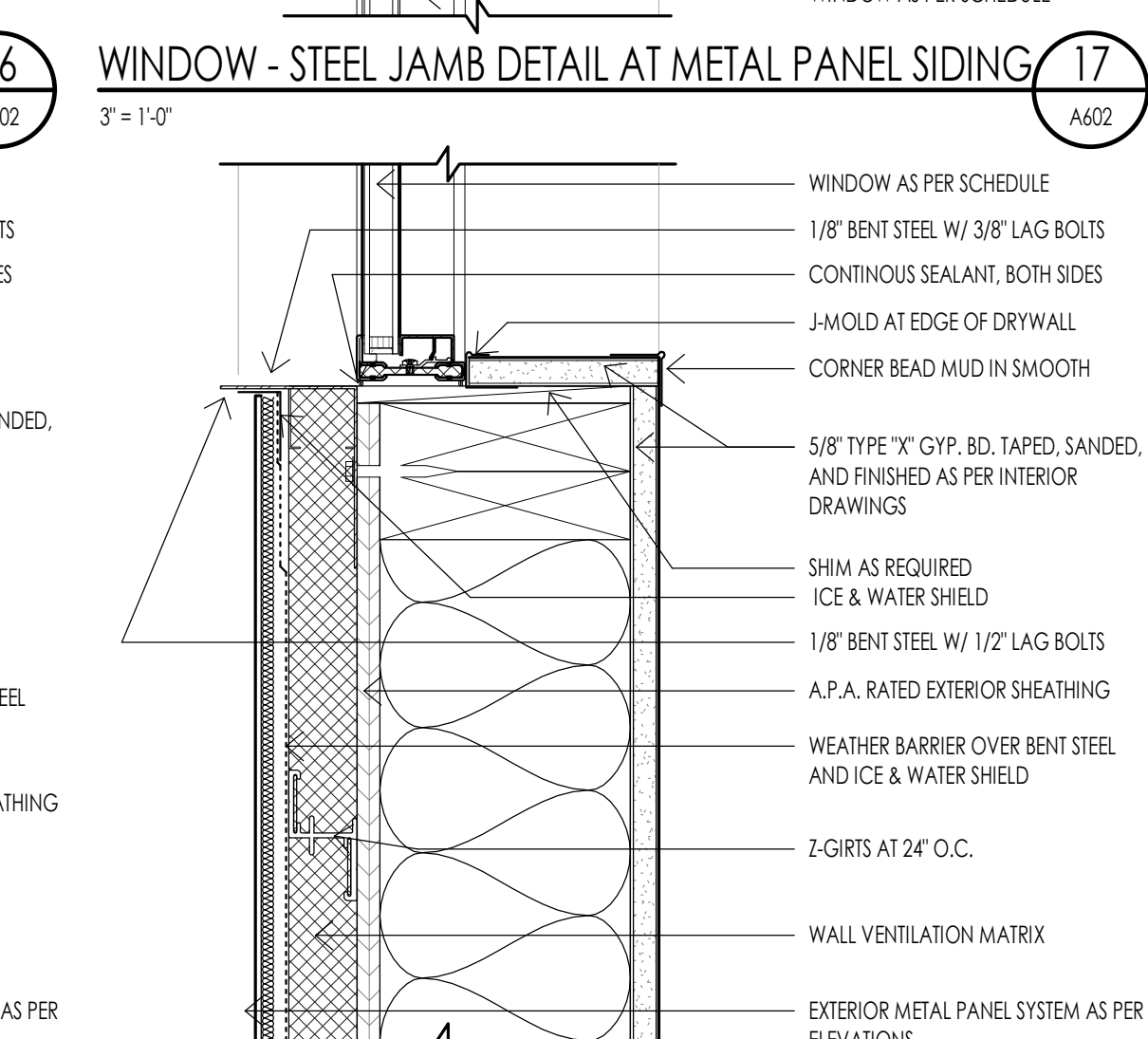
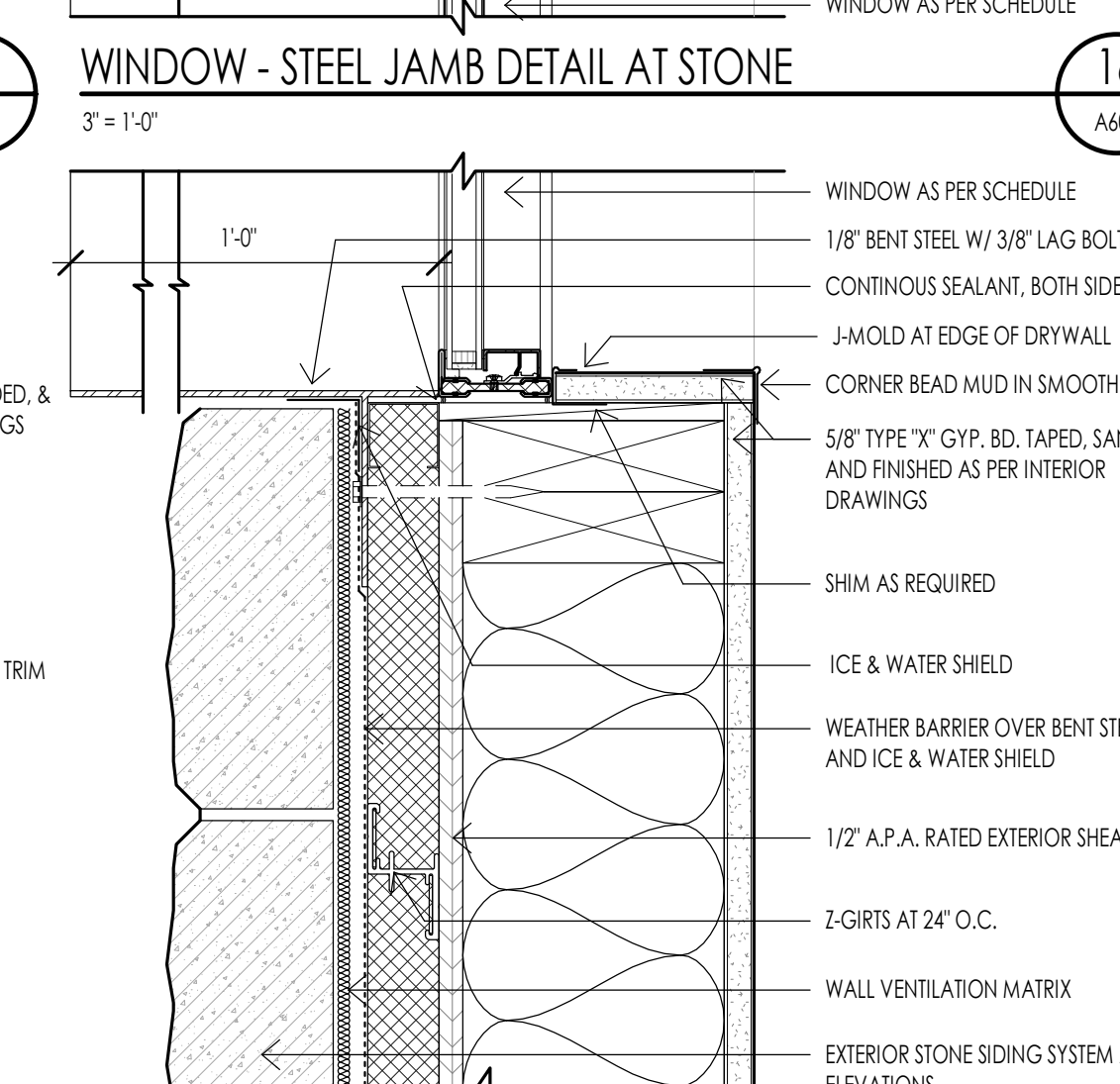
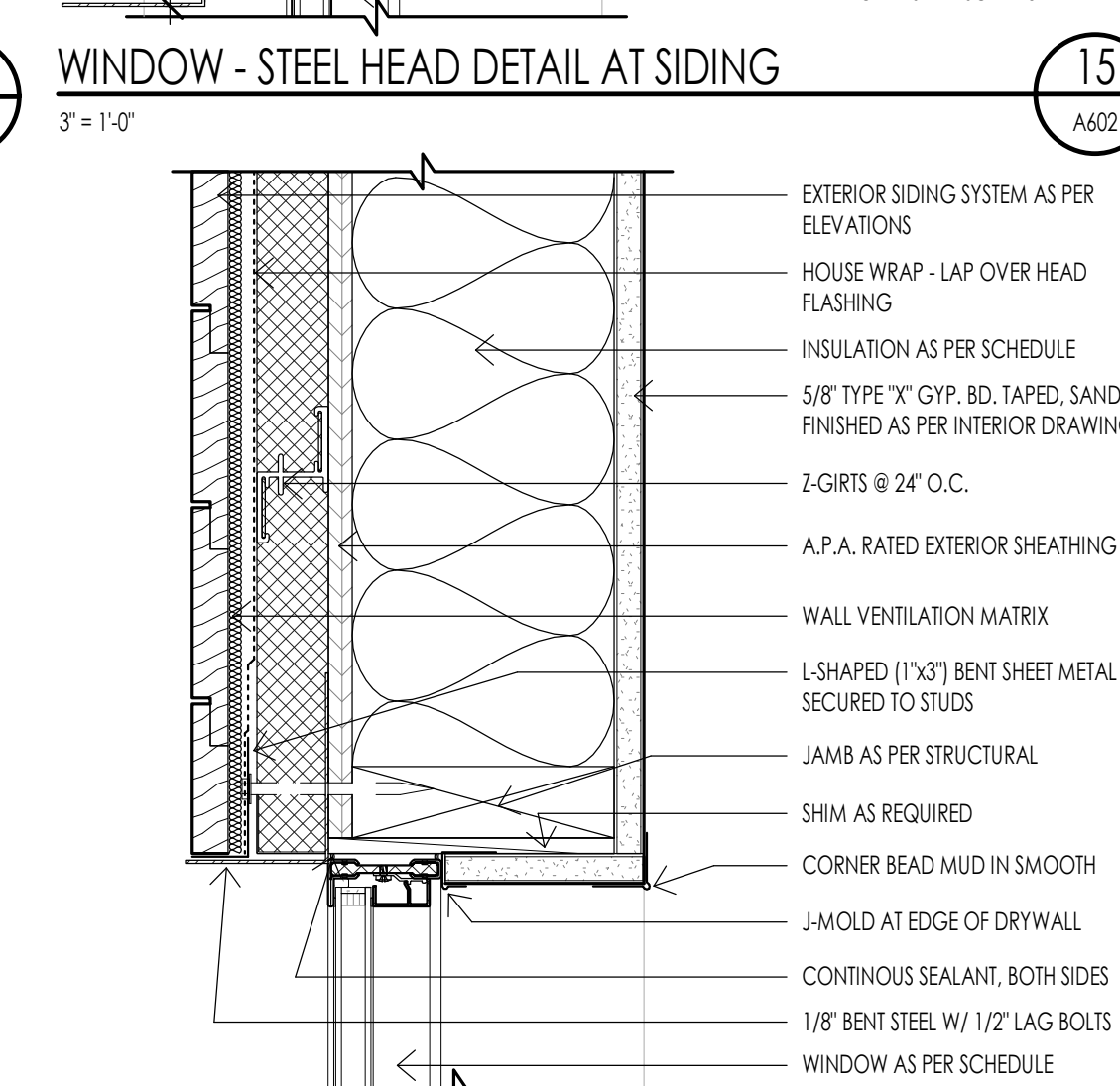
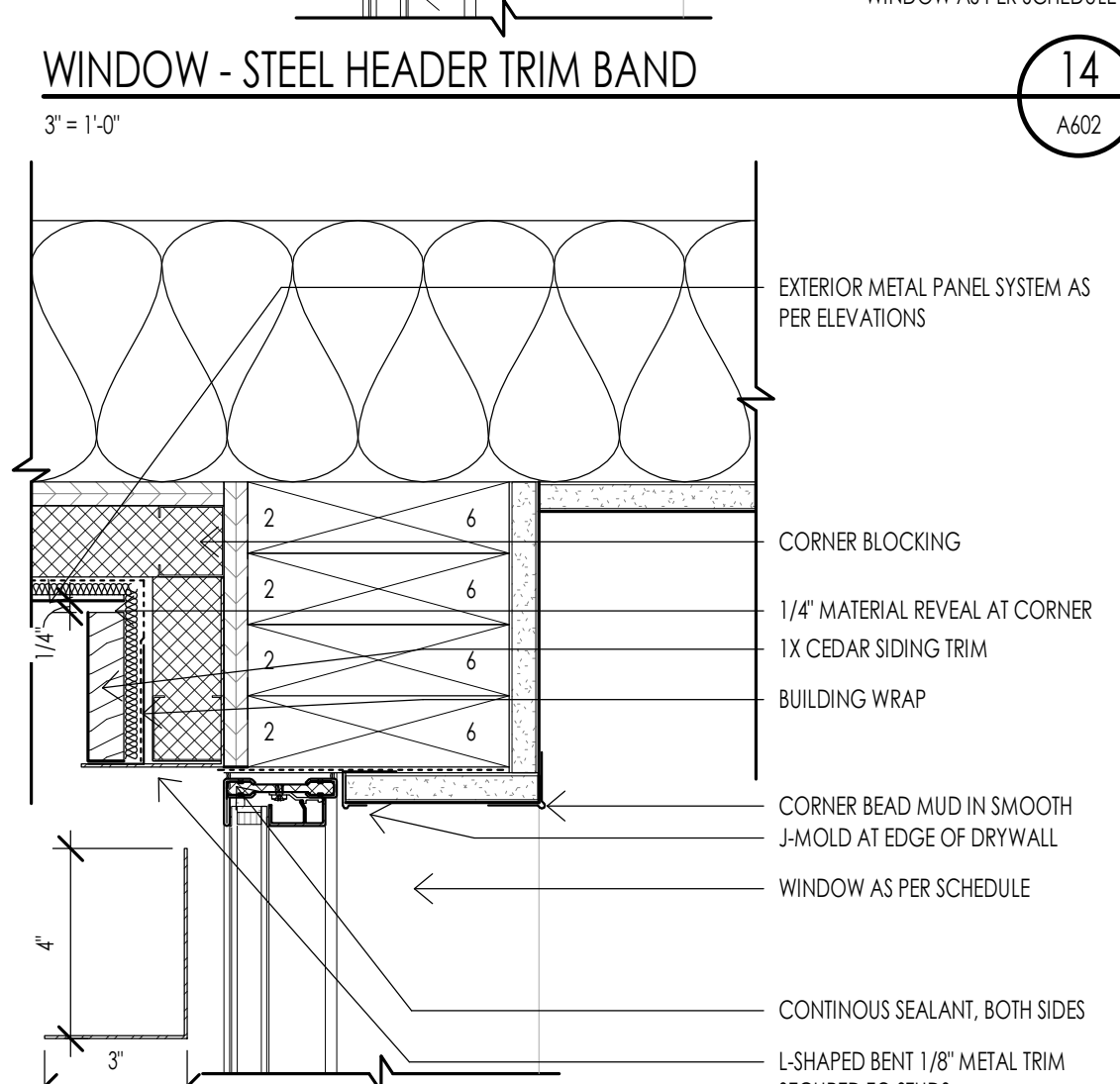
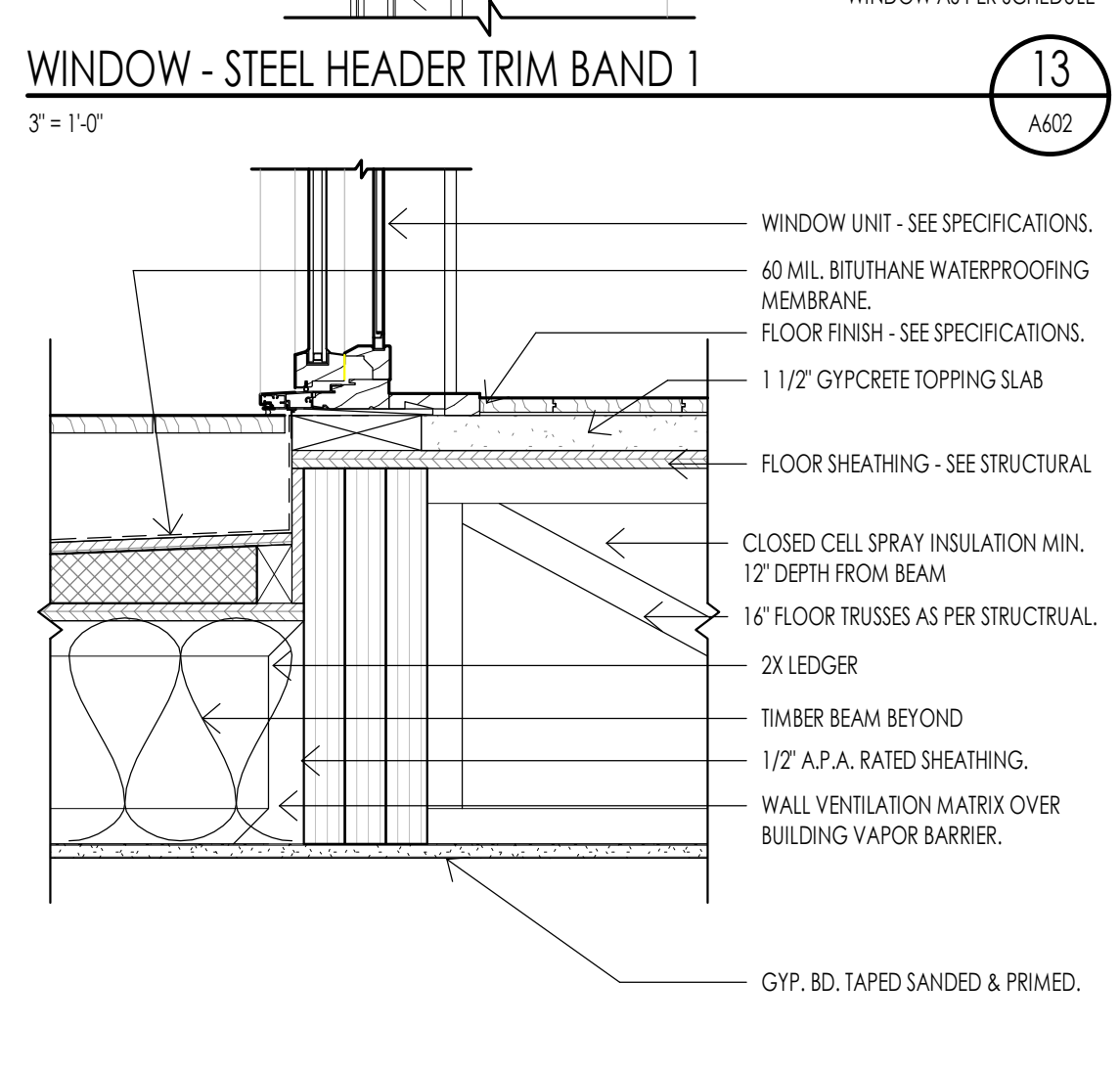
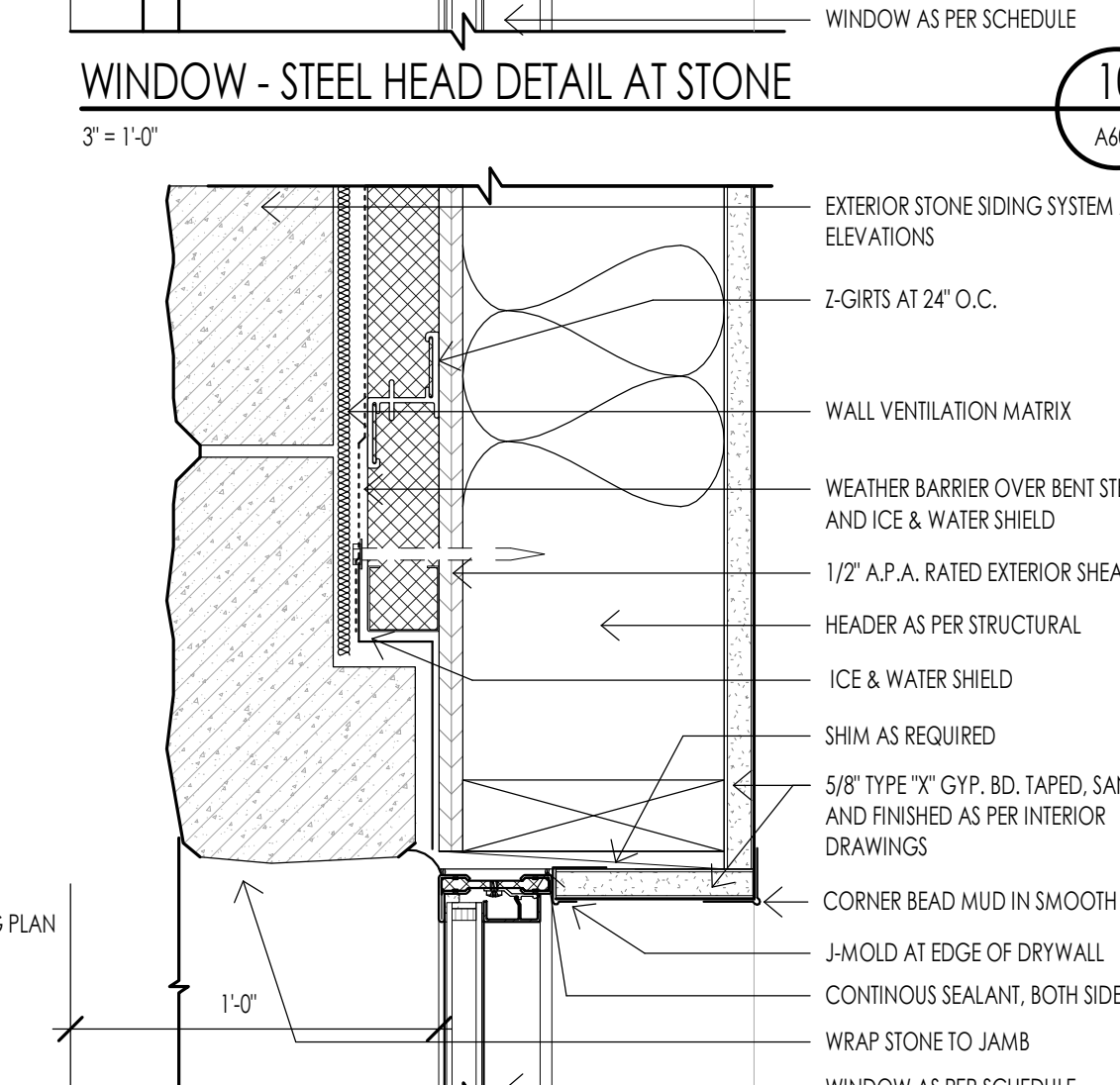
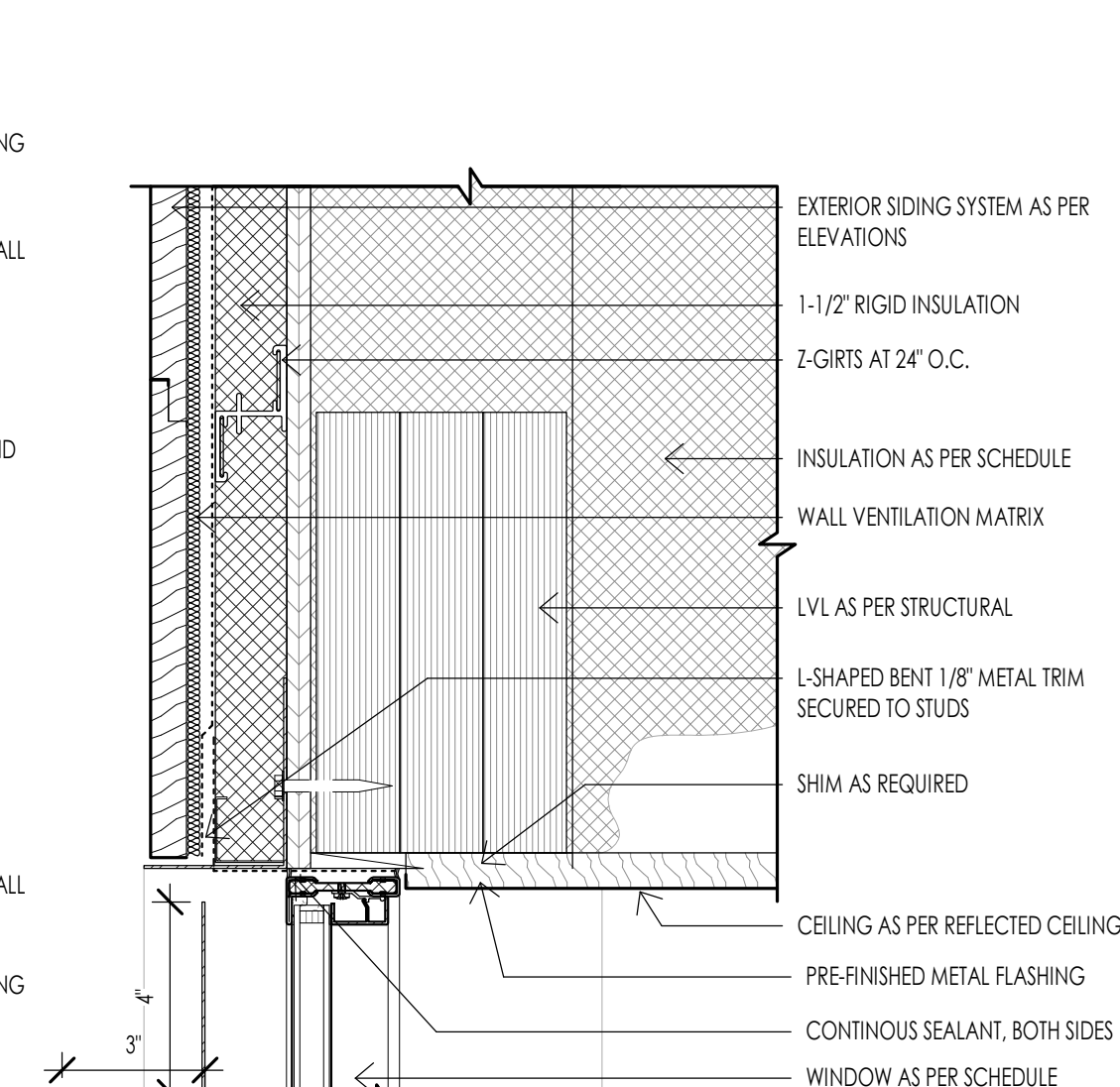
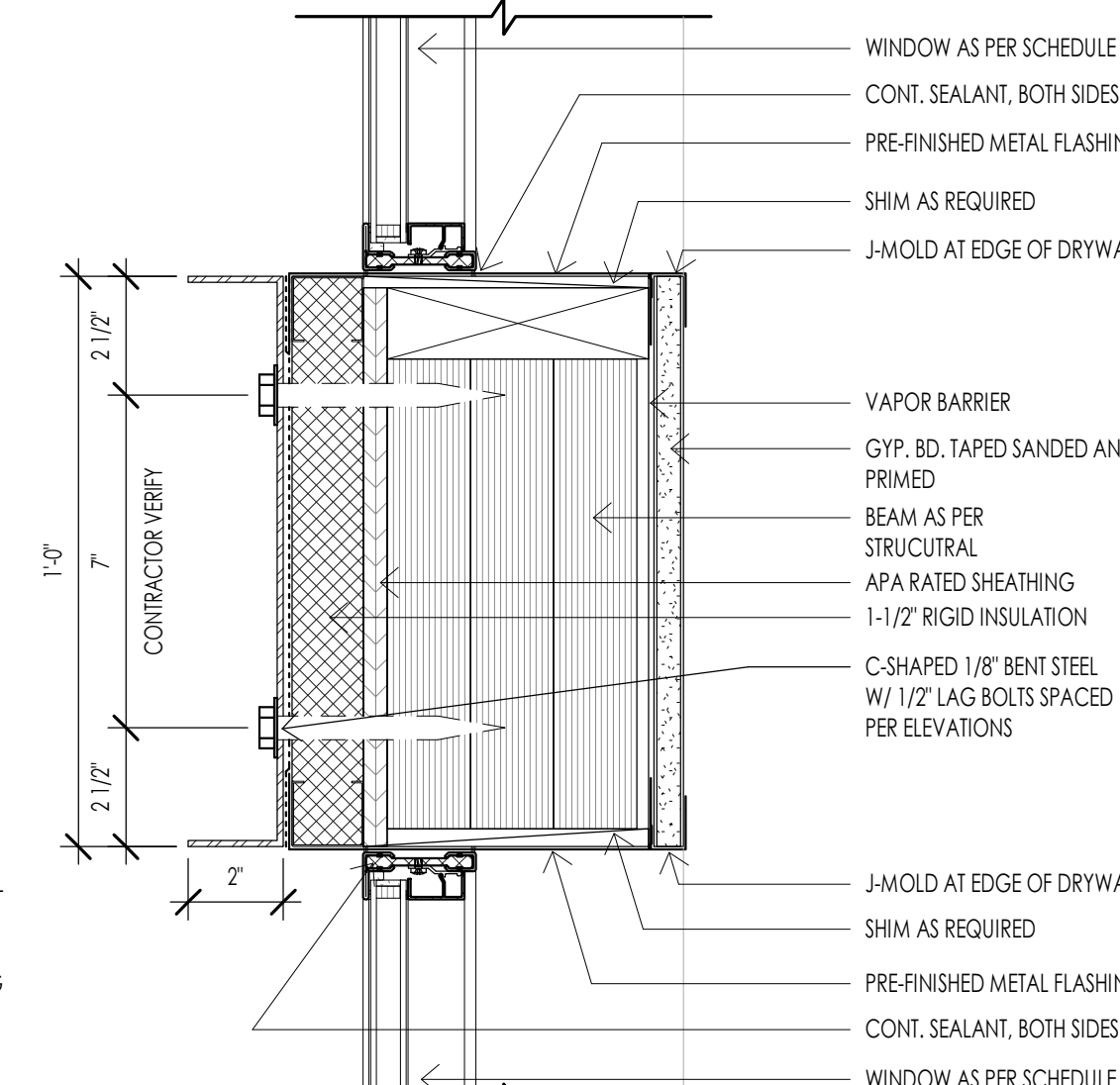
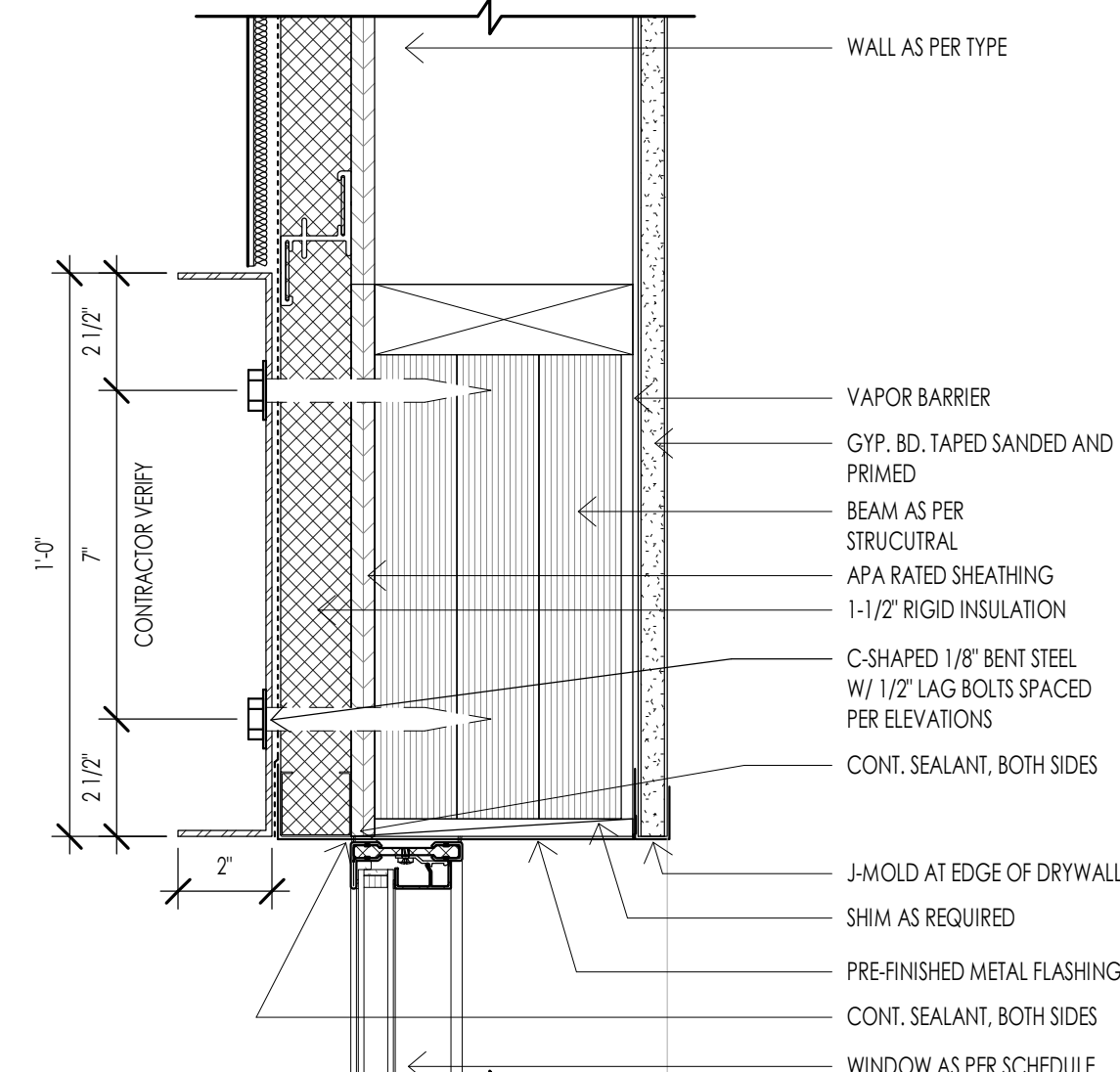
- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R310.
  - BASEMENTS WITH HABITABLE SPACES SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR DOOR OR ACCESS TO AN ADJOINING BEREOOM WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW.
  - ALL EMERGENCY OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING AREA OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 20 INCHES. THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES. EMERGENCY OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS OR TOOLS. EXCEPT GROUND FLOOR, NET CLEAR AREA OF 5.0 SQUARE FEET. R310.1.1 TO R310.1.4.
  - WINDOW SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 40 INCHES ABOVE THE FLOOR. OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL. R310.2.2
  - WINDOW WELLS REQUIRED FOR ESCAPE OR RESCUE SHALL HAVE HORIZONTAL DIMENSIONS THAT ALLOW THE DOOR OR WINDOW TO BE FULLY OPENED. THE HORIZONTAL DIMENSION FOR THE WINDOW WELL SHALL PROVIDE A MINIMUM NET CLEAR AREA OF 9 SQUARE FEET WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES. R310.2.3
  - WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 40 INCHES BELOW THE ADJACENT GROUND LEVEL SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE WINDOW IN THE FULLY OPENED POSITION. LADDERS OR RUNGS SHALL HAVE AN INSIDE WIDTH OF AT LEAST 12 INCHES. SHALL PROJECT AT LEAST 3 INCHES FROM THE WALL AND SHALL BE SPACED NOT MORE THAN 18 INCHES ON CENTER VERTICALLY FOR THE FULL HEIGHT OF THE WINDOW WELL. R310.2.3.1
  - BARS, GRILLS, COVERS, SCREENS, ETC. SHALL BE PERMITTED TO BE PLACED OVER THE EMERGENCY EGRESS OPENING WINDOW WELL PROVIDED THE NET CLEAR OPENING SIZE IS NOT COMPROMISED AND THAT SUCH DEVICES SHALL BE RELEASED OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, OR FORCE GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION. R310.4
- SAFETY GLAZING SHALL BE INSTALLED IN HAZARDOUS LOCATIONS AND SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R308. FOR EXCEPTIONS SEE I.R.C. R308.4.
  - EACH PANE OF GLASS INSTALLED IN HAZARDOUS LOCATIONS SHALL BE PERMANENTLY IDENTIFIED BY MANUFACTURER DESIGNATING THE TYPE, THICKNESS, AND SAFETY GLAZING STANDARD. THE LABEL SHALL BE ACID ETCHED, SANDBLASTED, CERAMIC FRIED OR SHOSSED ON GLASS AND BE VISIBLE WHEN THE UNIT IS GLAZED. FOR EXCEPTIONS SEE I.R.C. R308.1.
  - PROVIDE SAFETY GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND BIFOLDING DOORS (R308.4.1). SAFETY GLAZING SHALL BE PROVIDED WHEN GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE AND IS WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION OR WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE HINGE SIDE OF AN IN SWINGING DOOR. (I.R.C. R308.4.2)
  - PROVIDE SAFETY GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS. (I.R.C. R308.4.6)
  - PROVIDE SAFETY GLAZING IN DOORS AND ENCL. COURSES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCL. THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A STANDING OR WALKING SURFACE. (I.R.C. R308.4.5)
  - PROVIDE SAFETY GLAZING IN RAILINGS REGARDLESS OF AN AREA OR HEIGHT. (I.R.C. R308.4.4)
  - PROVIDE SAFETY GLAZING IN WALLS AND FENCES ENCL. SWIMMING POOLS OR HOT TUBS WHERE THE BOTTOM EDGE OF THE POOL, OR SPA GLASS IS LESS THAN 60 INCHES ABOVE THE WALKING SURFACE. (I.R.C. R308.4.5)
  - PROVIDE SAFETY GLAZING IN FIXED OR OPERABLE PANELS THAT MEET ALL OF THE FOLLOWING CONDITIONS: AREAS GREATER THAN 9 SQUARE FEET, BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR, TOP EDGE GREATER THAN 36 INCHES ABOVE FLOOR, AND WITHIN 36 INCHES OF WALKING SURFACE. (I.R.C. R308.4.3)
- THE GENERAL CONTRACTOR AND WINDOW SUPPLIER ARE RESPONSIBLE TO FIELD MEASURE ALL WINDOW OPENINGS AND PROVIDE SHOP DRAWINGS BEFORE MANUFACTURING. SHOP DRAWINGS SHALL BE PROVIDED FOR EACH BUILDING INDIVIDUALLY AND SHALL NOT BE COMBINED WITH ANY OTHER BUILDING. THE WINDOW SUPPLIER SHALL BE RESPONSIBLE TO VERIFY ALL EMERGENCY EGRESS, LIGHT AND VENTILATION, AND TEMPERED GLASS LOCATION REQUIREMENTS PRIOR TO EACH SUBMITAL.
- THE GENERAL CONTRACTOR AND WINDOW SUPPLIER ARE RESPONSIBLE TO VERIFY THAT EACH OF THE ABOVE LISTED REQUIREMENTS HAVE BEEN MET AND NOTE ANY DISCREPANCIES ON SUBMITAL.
- REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.



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WARM SPRINGS RESIDENCE #32  
160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

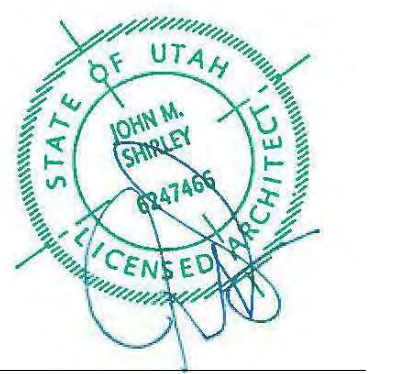
PROJECT NC22023.32  
DATE: 2023.09.25  
REVISIONS:

SHEET TITLE:  
WINDOW SCHEDULE & DETAILS

SHEET NUMBER:  
A602

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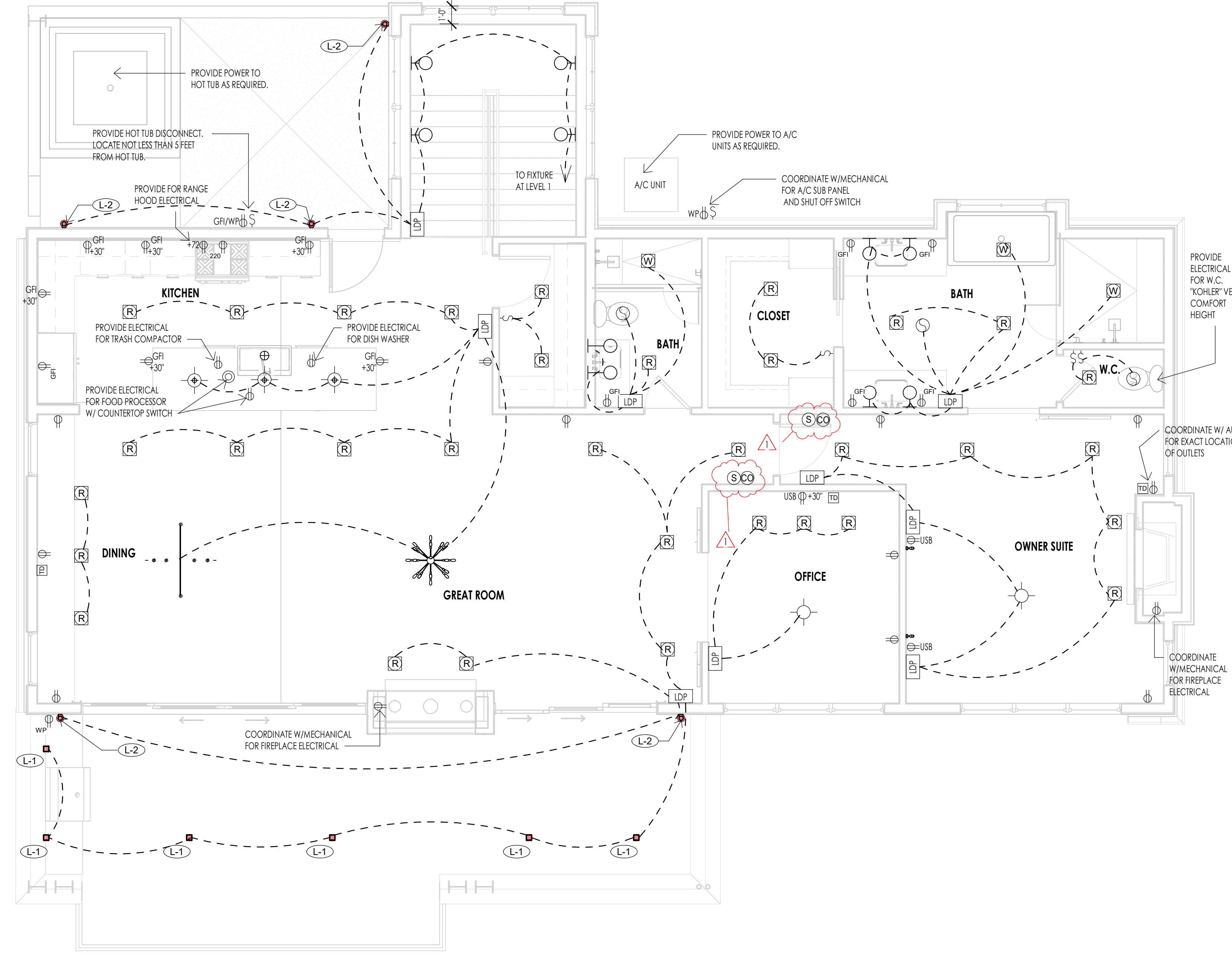
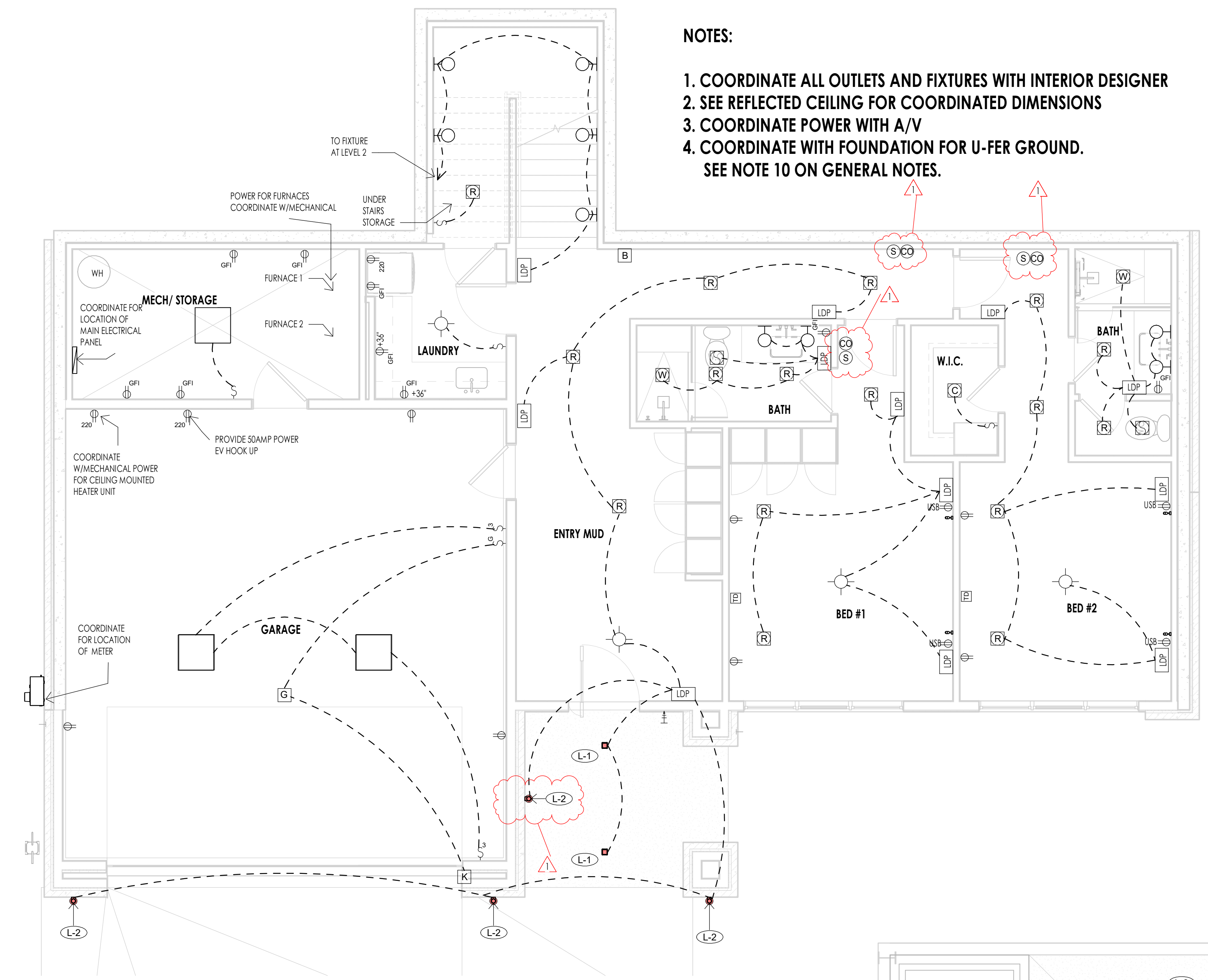




ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
S	SINGLE POLE TOGGLE SWITCH
S <sup>3</sup>	THREE WAY TOGGLE SWITCH
S <sup>4</sup>	FOUR WAY TOGGLE SWITCH
S <sup>G</sup>	GARAGE DOOR OPENER
S <sup>D</sup>	DIMMER TOGGLE SWITCH
Ⓛ	110 V DUPLEX OUTLET ON AN (AFP) ARC FAULT PROTECTED CIRCUIT
Ⓛ <sup>GFI</sup>	110 V GROUND FAULT INTERRUPTER
Ⓛ <sup>WFP</sup>	110 V WATERPROOF GFI OUTLET
Ⓛ <sup>220</sup>	220 V OUTLET
Ⓛ <sup>Q</sup>	QUADRUPLUX OUTLET
Ⓛ <sup>F</sup>	110 V FLOOR DUPLEX OUTLET
Ⓛ <sup>S</sup>	110 V SMOKE DETECTOR W/BATT BACK-UP
Ⓛ <sup>CD</sup>	CARBON MONOXIDE DETECTOR
Ⓛ <sup>E</sup>	EXHAUST FAN
Ⓛ <sup>EL</sup>	EXHAUST FAN WITH LIGHT FIXTURE
Ⓛ <sup>R</sup>	4" LED RECESSED CAN (FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>C</sup>	4" LED RECESSED CAN (CLOSED FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>W</sup>	RECESSED CAN (WET LOCATION-FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>CM</sup>	CEILING MOUNT FIXTURE
Ⓛ <sup>TL</sup>	TRACK LIGHTING
Ⓛ <sup>WM</sup>	WALL MOUNT FIXTURE
Ⓛ <sup>2X2</sup>	2X2 OR 2X4 FLUORESCENT CEILING FIXTURE
Ⓛ <sup>FL</sup>	FLUORESCENT STRIP LIGHT
Ⓛ <sup>UL</sup>	LED UNDERCOUNTER LIGHTING
Ⓛ <sup>G</sup>	GARAGE DOOR OPENER
Ⓛ <sup>K</sup>	KEYLESS ENTRY
Ⓛ <sup>B</sup>	DOORBELL
Ⓛ <sup>T</sup>	TELEPHONE (CAT SE WIRING)
Ⓛ <sup>SL</sup>	SINGLE LINE UNLESS NOTED (NUMBER) DESIGNATES PORT OUTLETS REQUIRED
Ⓛ <sup>MN</sup>	MULTI-MEDIA NETWORK OUTLET (CAT SE WIRE) W/4 PORT OUTLET
Ⓛ <sup>SW</sup>	STRUCTURED WIRING (FUTURE SMART WIRING) (E) (2) RG6 QUAD SHIELD, (3) CAT 6E WIRE - FOR CABLE TV, VIDEO, SATELLITE, ETC. (4) PORT OUTLET
Ⓛ <sup>GD</sup>	GARBAGE DISPOSAL
Ⓛ <sup>LVC</sup>	LOW VOLTAGE RECESSED CAN
Ⓛ <sup>L1</sup>	RECESSED EXTERIOR SOFFIT LIGHT - SEE SPECS ON SHEET E101
Ⓛ <sup>L2</sup>	DECORATIVE EXTERIOR WALL SCONCE - SEE SPECS ON SHEET E101
Ⓛ <sup>L3</sup>	MOTOR COURT EXTERIOR LIGHTING - SEE SPECS ON SHEET E101
Ⓛ <sup>LDP</sup>	LIGHTING DIGITAL PAD
Ⓛ <sup>BS</sup>	DOOR BELL SWITCH
Ⓛ <sup>WBL</sup>	WALL MOUNTED BED LIGHT

- ELECTRICAL GENERAL NOTES**
- SEE SPECS FOR ELECTRICAL INFORMATION.
  - ELECTRICAL LAYOUTS ARE SHOWN IN SCHEMATIC. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LAYOUT AND INSTALLATION OF ALL RELATED ITEMS WITH EXISTING CONDITIONS AND RELATED TRADES.
  - COORDINATE WITH OWNER, INTERIOR DESIGNER AND/OR PLANS FOR FIXTURE SCHEDULES, STYLES, FINISHES, ETC.
  - ALL WORK TO COMPLY WITH 2014 N.E.C. CODES AND 2015 I.R.C. CODES.
  - CENTER OF ALL OUTLETS TO BE 18" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. CENTER OF OUTLETS OVER CABINETS, VANITIES, ETC. TO BE 12" ABOVE FINISH COUNTER HEIGHT UNLESS NOTED OTHERWISE.
  - CONTRACTOR TO FIELD VERIFY LOCATION OF ALL ELECTRICAL FIXTURES, SWITCHES, ETC. WITH OWNER AND DESIGNER PRIOR TO WIRING.
  - PROVIDE SLOPED RECESSED CANS FOR SLOPED CEILING APPLICATIONS & THERMAL PROTECTION CANS WHERE IN CONTACT WITH INSULATION AS REQUIRED.
  - ALL BRANCH CIRCUITS BE PROTECTED BY AN ARCH-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.
  - PROVIDE A U-FER GROUND. AN ELECTRODE ENCASED BY A LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM. AND SHALL BE IN DIRECT CONTACT WITH THE EARTH. CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2 INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E358B.1.2 AND N.E.C. 250.30)
  - THE CONTRACTOR SHALL VERIFY OUTLET LOCATIONS AND VOLTAGE REQUIREMENTS AS PER APPLIANCE SPECIFICATIONS.
  - STRUCTURED WIRE MEDIA PANEL TO BE "TELETON" (O.A.E.) AND INCLUDE: A/C POWER MODULE, CAT 5 VOICE AND DATA MODULES, 10/100/1000 Mbps SATA HUB, CATV BOOSTER AND AUDIO / VIDEO CONTROL MODULES.
  - SMOKE AND/OR CARBON MONOXIDE DETECTORS ARE TO BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACKUP AS PER CODE REQUIREMENTS. COMBINATION UNITS ARE PERMITTED AS APPROVED.
  - ALL EXTERIOR ELECTRICAL OUTLETS TO HAVE WEATHERPROOF COVERS.
  - ALL 125V 15 AND 20 AMP RECEPTACLES WITHIN DWELLING UNITS MUST BE TAMPER PROOF.

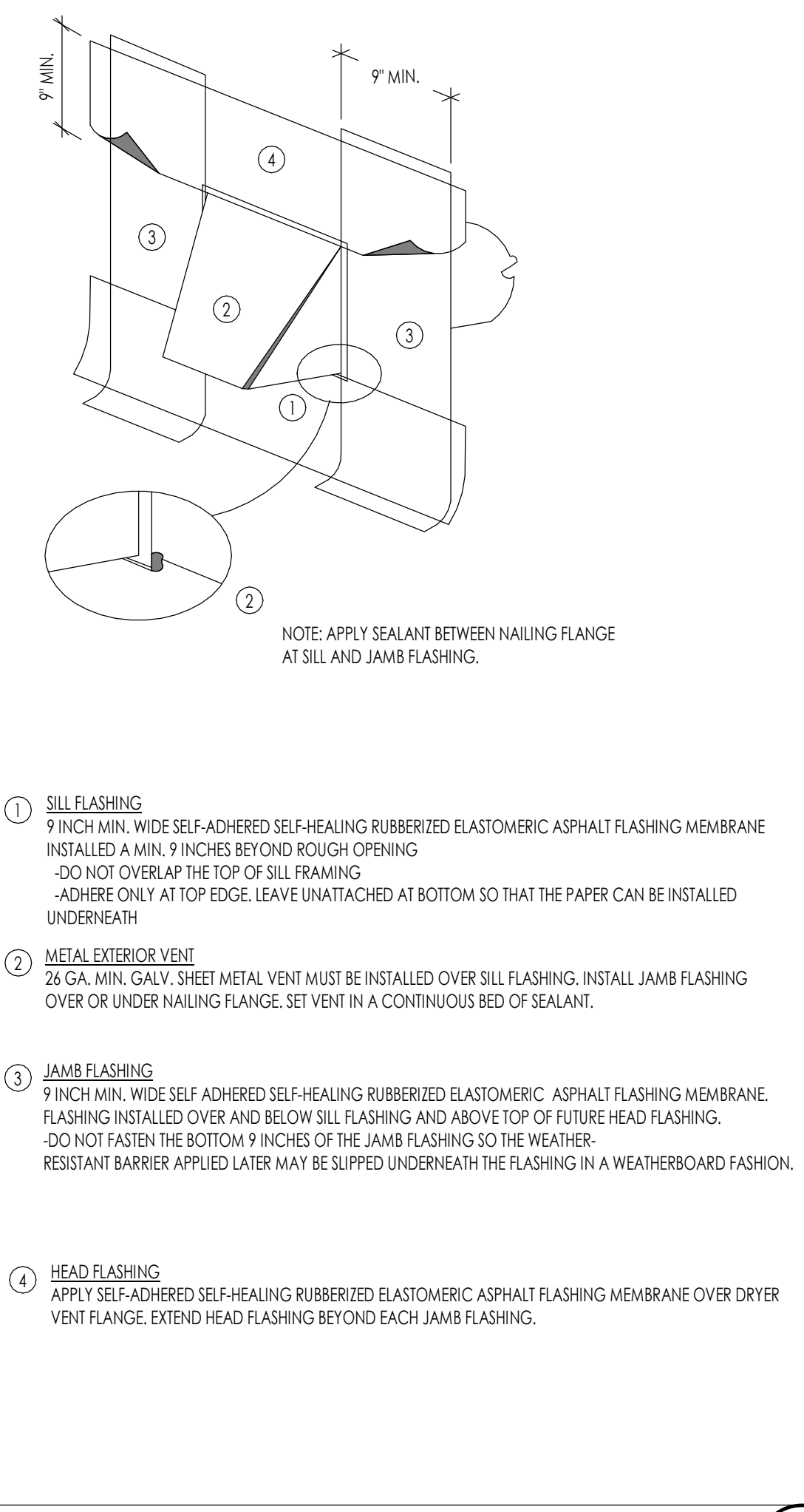
- NOTES:**
- COORDINATE ALL OUTLETS AND FIXTURES WITH INTERIOR DESIGNER
  - SEE REFLECTED CEILING FOR COORDINATED DIMENSIONS
  - COORDINATE POWER WITH A/V
  - COORDINATE WITH FOUNDATION FOR U-FER GROUND. SEE NOTE 10 ON GENERAL NOTES.



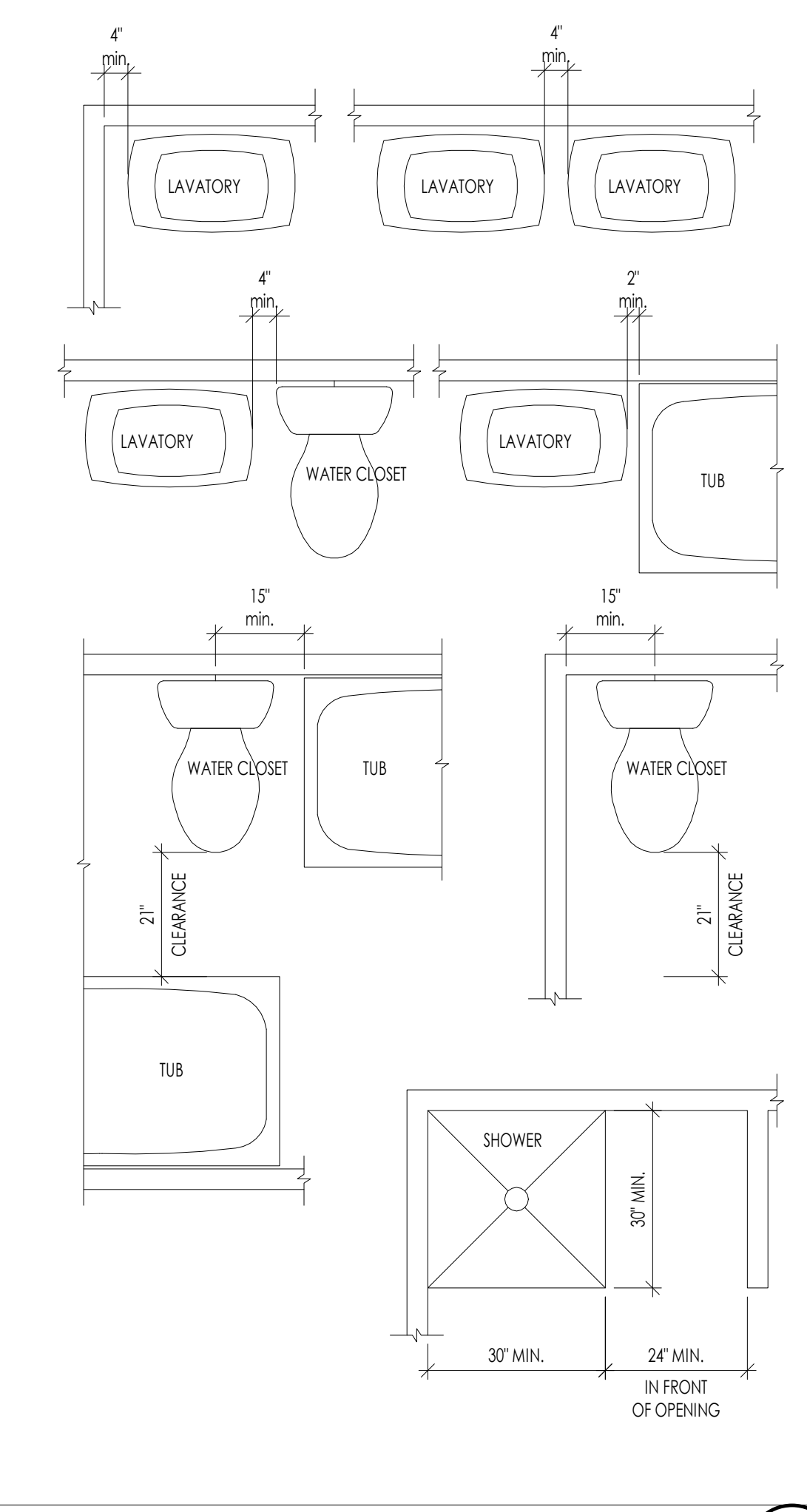
**MECHANICAL GENERAL NOTES**

- PLUMBING GENERAL NOTES**
- THE PLUMBING SYSTEM SHALL BE DESIGNED BY A LICENSED MECHANICAL CONTRACTOR/ DESIGNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IRC, IPC AND IECC.
  - THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE PLUMBING SYSTEM INSTALLATION AND SHALL PROVIDE A (1) ONE YEAR WARRANTY BEGINNING FROM THE TIME OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER COMPLETE OPERATION AND MAINTENANCE MANUALS. THE CONTRACTOR SHALL ALSO SET UP A TIME TO PROVIDE COMPLETE TRAINING OF THE SYSTEM TO THE OWNER.
  - THE PLUMBING CONTRACTOR SHALL REVIEW AND SHALL GANG ALL ROOF VENTS INTO SINGLE ROOF VENTS WHERE POSSIBLE AND SHALL RUN THE VENTS OUT OF THE ROOF AT THE HIGHEST POINT POSSIBLE. ALL VENTS SHALL HAVE BLOCKING ON EACH SIDE OF THE VENT IN THE ROOF STRUCTURE TO ENSURE THE VENTS WILL NOT BE MOVED DUE TO SNOW ON THE ROOF. ALL VENTS SHALL BE SIZED PER THE BUILDING CODE, BUT SHALL NOT BE LESS THAN 3 INCH PIPES. THE PLUMBING CONTRACTOR SHALL COORDINATE THAT THE PROPER FLASHING HAS BEEN INSTALLED FOR EACH VENT.
  - THE ROOF VENTS SHALL EXTEND ABOVE THE ROOF AS REQUIRED BY THE LOCAL JURISDICTION AND BUILDING CODES. THE PLUMBING CONTRACTOR SHALL COORDINATE THIS INSTALLATION.
  - ALL PLUMBING FIXTURES ARE SPECIFIED ON THE MECHANICAL DRAWINGS, AND ON THE INTERIOR DRAWINGS. THE PLUMBING CONTRACTOR SHALL PROVIDE FULL AND COMPLETE SHOP DRAWINGS SUBMITTAL ON ALL PLUMBING FIXTURE ITEMS FOR APPROVAL BY OWNER AND DESIGN TEAM.
  - THE PLUMBING FIXTURES SHALL HAVE THE FOLLOWING REQUIREMENTS:
    - SHOWER HEADS SHALL HAVE A FLOW RATE OF 2.5 GPM OR LESS
    - WATER CLOSETS SHALL HAVE ECONO-FLUSH TANK 1.6 GAL. MAX. FLUSH
    - ALL NOSE BIBS SHALL BE NON-FREEZE TYPE WITH BACK FLOW PREVENTERS
  - THE PLUMBING CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. TAKE CARE DURING BUILDING CONSTRUCTION TO SEE THAT PROVISIONS ARE MADE FOR PROPER FUTURE SUPPORT AND THAT PROVISIONS ARE MADE FOR PROPER FUTURE SUPPORT. ROUGH IN PIPING IS ACCURATELY SET AND PROTECTED FROM MOVEMENT OF DAMAGE DURING CONSTRUCTION.
  - THE PLUMBING CONTRACTOR SHALL MAKE SURE THAT NO PLUMBING WILL BE INSTALLED WITHIN THE EXTERIOR WALL.
  - PLUMBING CONTRACTOR SHALL ASSESS WATER PRESSURE AND ENSURE ADEQUATE PRESSURE IS AVAILABLE FOR MULTIPLE FUTURE USE SIMULTANEOUSLY WITH OUT PRESSURE DECREASE OR TEMPERATURE FLUCTUATION.
  - PLUMBING CONTRACTOR SHALL PROVIDE A TURN OFF VALVE AND DRAIN AT THE LOWEST LEVEL OF THE FACILITY. ALL FIXTURES SHALL BE ABLE TO DRAIN TO THIS POINT. PROVIDE A FLOOR DRAIN AT THE LOCATIONS OF PLUMBING SYSTEM DRAIN.
  - ALL SUPPLY WASTE AND GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. ALL WATER SUPPLY LINES IN THE BUILDING SHALL BE TYPE "1" COPPER. TO INCLUDE PIPING TO MANFOLDS. EQUIPMENT SHALL BE COPPER WITHIN THE BUILDING. ALL SUPPLY TO FIXTURES MAY BE POLYETHYLENE CROSS LINE PIPING FOR ABOVE GROUND AND BUILDING APPLICATIONS. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. ALL CONNECTIONS FOR POLYETHYLENE PIPING SHALL BE BRASS. FITTINGS WITH COMPRESSION BAND FITTINGS.
  - ALL WATER LINES UNDERGROUND SHALL BE TYPE "1" COPPER. ALL FITTINGS AND JOINTS SHALL BE SWEAT SOLDER JOINTS TOGETHER.
  - WASTE LINES SHALL BE PROVIDED WITH CLEAN OUT AS REQUIRED. EXTEND CLEAN OUT TO ACCESSIBLE SURFACE. DO NOT PLACE CLEAN OUTS IN FLOORS UNLESS PREVIOUSLY APPROVED BY THE DESIGN TEAM AND OWNER.
  - GAS PIPING SHALL BE INSTALLED AS PER THE LATEST CODE REQUIREMENTS FOR THIS TYPE OF PROJECT. ALL GAS PIPING SHALL BE FULLY TESTED AND INSPECTED FOR ANY LEAKS PRIOR TO FINAL COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL INSTALL SHUT OFF VALVES AT EACH GAS APPLIANCE AND SHALL LOCATE THE VALVE TO HAVE ACCESS TO THE VALVE.
  - PLUMBING CONTRACTOR SHALL TEST ALL PIPING INCLUDING DRAINAGE WASTE LINES, WATER PIPING, NATURAL GAS PIPING AND FITTINGS. ALL TEST SHALL BE PERFORMED TO MEET THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.
  - ALL WATER LINES SHALL FULLY DISINFECTED UPON THE FINAL COMPLETION OF THE PROJECT, AND BEFORE CERTIFICATE OF OCCUPANCY AND TURN OVER TO THE OWNER.
  - ALL DRAINS SHALL HAVE A TRAP PRIMER OR EQUIVALENT NECESSARY TO KEEP THE INTEGRITY OF THE PLUMBING TRAP.

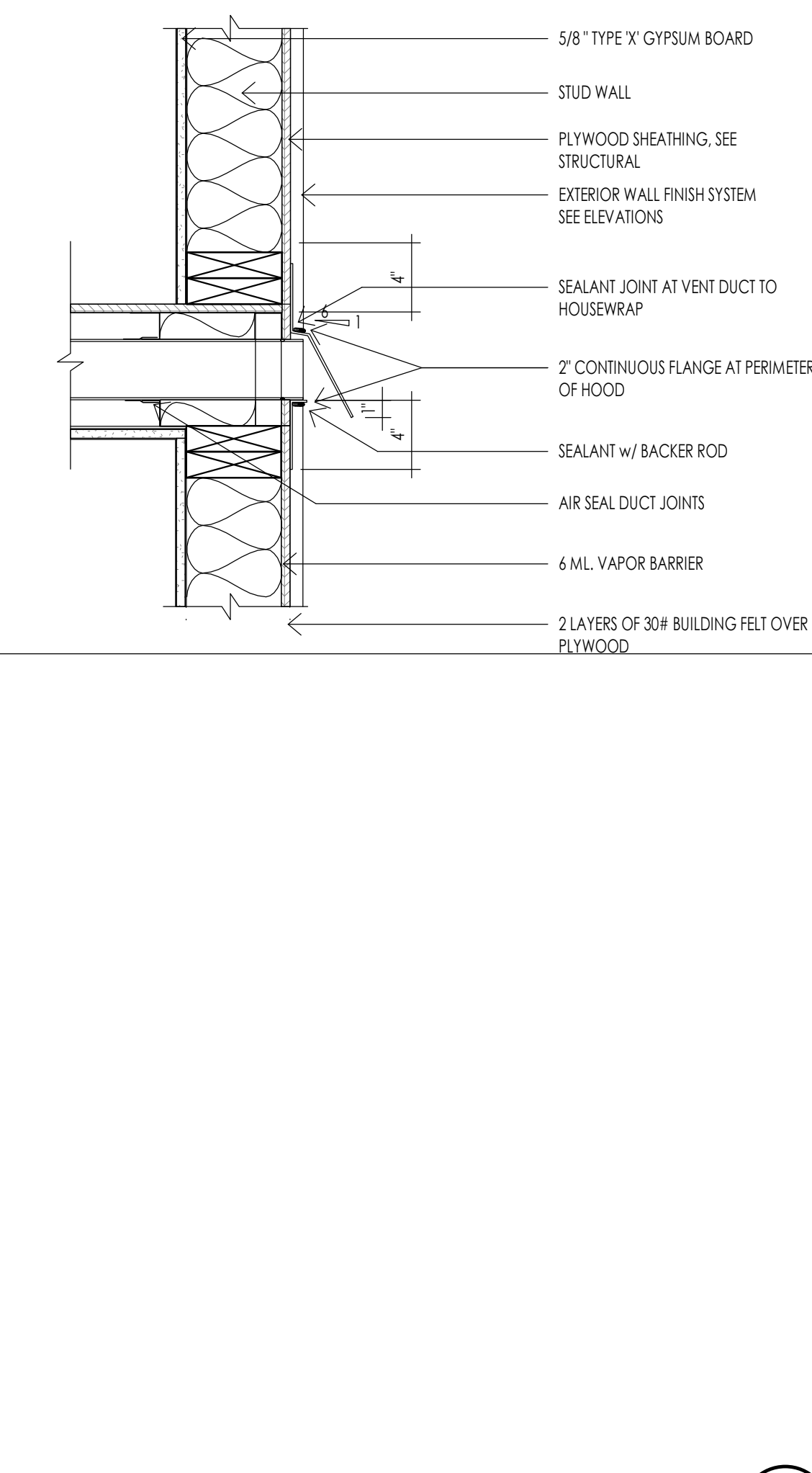
- MECHANICAL GENERAL NOTES**
- THE MECHANICAL SYSTEM SHALL BE DESIGNED BY A LICENSED MECHANICAL CONTRACTOR/ DESIGNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IRC, IMC AND IECC. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE MECHANICAL SYSTEM INSTALLATION AND SHALL PROVIDE A (1) ONE YEAR WARRANTY BEGINNING FROM THE TIME OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER COMPLETE OPERATION AND MAINTENANCE MANUALS. THE CONTRACTOR SHALL ALSO SET UP A TIME TO PROVIDE COMPLETE TRAINING OF THE SYSTEM TO THE OWNER.
  - THE CONTRACTOR IS RESPONSIBLE TO VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK. THE MECHANICAL CONTRACTOR MUST ALSO PROVIDE NOTIFICATION TO THE ARCHITECT AND CONTRACTOR OF CONDITIONS THAT MAY BE DIFFERENT THAN EXPECTED DURING BIDDING.
  - ALL LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING SHALL BE RAN, INSTALLED AND CONNECTED BY THE MECHANICAL CONTRACTOR OR THE MECHANICAL CONTRACTOR SHALL CONTRACT THE SCOPE OF WORK.
  - ALL EQUIPMENT SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW. THE CONTRACTOR MUST PROVIDE THE DOCUMENTATION THAT IT MEETS THE REQUIREMENTS OF THE ENERGY LEVELS BEING ACHIEVED WITHIN THIS BUILDING.
  - THE MECHANICAL CONTRACTOR SHALL REVIEW AND COORDINATE WITH THE DRAWINGS FOR LOCATIONS OF ALL MECHANICAL ZONES.
  - EXHAUST FANS WHERE SHOWN ON EITHER THE MECHANICAL OR ELECTRICAL PLANS SHALL BE SIZED FOR A MINIMAL RATE OF 50 CFM. ALL FANS SHALL BE HARD DUCTED WITH RIGID DUCT (NO FLEX DUCT SHALL BE ALLOWED), AND DIRECTED DIRECTLY TO THE EXTERIOR OF THE BUILDING IN A SOFFIT OR SIDE WALL. THE TERMINATION OF ALL EXHAUST FANS SHALL BE A MINIMUM OF 10'-0" AWAY FROM ANY OPERABLE WINDOW. TERMINATIONS SHALL BE INSTALLED AS NOT TO BE BLOCKED BY SNOW AND ICE. FANS SHALL BE A DIRECT DRIVE CENTRIFUGAL UNIT WITH SLOW SPEED MOTOR. PROVIDE AN ACOUSTICAL INSULATION, GRIPS, CAPS, ETC AS REQUIRED.
  - ALL GRILLS AND REGISTERS MUST BLEND TO THE ADJACENT FINISH, AND SHALL BE PROVIDED TO MEET THE REQUIREMENTS FOR THE FLOW RATE AS PER THE CFM REQUIREMENTS. ALL GRILLS SHALL BE EITHER PAINTED FOR METAL FINISH SELECTED.
  - WATER HEATERS
    - THE REQUIRED NUMBER OF WATER HEATERS ARE SHOWN ON THE MECHANICAL PLANS. ALL WATER HEATERS SHALL BE 90% OR BETTER HIGH EFFICIENCY WATER HEATERS WITH RAPID RECOVERY. ALL WATER HEATERS SHALL BE INSTALLED WITH SEISMIC ANCHORING, AS PER DETAILS.
    - ALL WATER HEATERS SHALL BE VENTED TO THE EXTERIOR.
    - THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN WHETHER SHOWN OR NOT AT THE BASE OF ALL WATER HEATERS. THE FLOOR DRAIN MUST BE LOCATED, AND THE FLOOR MUST SLOPE TOWARD THE DRAIN IN A POSITIVE FLOW.
  - GAS FIRED FURNACES
    - THE REQUIRED NUMBER OF GAS FIRED FURNACES SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER. THE LOCATION IS SHOWN ON THE MECHANICAL DRAWINGS WHERE THE LOCATIONS ARE PROVIDED FOR THE GAS FIRED FURNACES.
    - THE GAS FIRED FURNACES SHALL BE A MINIMUM OF 90% OR BETTER HIGH EFFICIENCY FURNACE. THE EXACT SIZE OF EACH OF THESE UNITS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER.
    - THE VENTING OF EACH GAS FIRED FURNACE SHALL BE PVC PIPE AND SHALL BE LOCATED AWAY FROM THE MAIN ENTRIES OF THE BUILDING, AND WINDOW LOCATIONS. COORDINATE THE EXACT LOCATION WITH THE OWNER AND ARCHITECT.
    - THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN BY THE GAS FIRED FURNACES FOR THE UNIT CONDENSATE LINES.
  - GAS FIRED BOILERS
    - THE REQUIRED NUMBER OF GAS FIRED BOILERS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER. THE LOCATION IS SHOWN ON THE MECHANICAL DRAWINGS WHERE THE LOCATIONS ARE PROVIDED FOR THE GAS FIRED BOILERS.
    - THE GAS FIRED BOILER SHALL BE A MINIMUM OF 90% OR BETTER HIGH EFFICIENCY FURNACE. THE EXACT SIZE OF EACH OF THESE UNITS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER.
    - THE VENTING OF EACH GAS FIRED BOILER SHALL BE PVC PIPE AND SHALL BE LOCATED AWAY FROM THE MAIN ENTRIES OF THE BUILDING, AND WINDOW LOCATIONS. COORDINATE THE EXACT LOCATION WITH THE OWNER AND ARCHITECT.
    - THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN BY THE GAS FIRED BOILER FOR THE UNIT CONDENSATE LINES.
  - DUCTWORK
    - ALL DUCTWORK SHALL BE 24 GA. MINIMUM RIGID DUCT AND SHALL BE FULL SEALED AT EACH JOINT LOCATION. NO FLEXIBLE DUCT IS ALLOWED WITHIN THE INSTALLATION.
    - ALL DUCTWORK IN CEILINGS OF UNHEATED ROOM OR UNDER SLAB SHALL BE INSULATED DUCTWORK. ALL DUCTWORK WITHIN THE HEATING ENVELOPE OF THE STRUCTURE DOES NOT REQUIRE TO BE INSULATED, UNLESS SPECIFICALLY NOTED.
    - ALL DUCTWORK SHALL BE IN THE SPACE ALLOCATED, AND SHALL NOT BE DROPPED BELOW FLOOR JOISTS, UNLESS NOTED ON DRAWINGS, OR PREVIOUSLY APPROVED BY THE ARCHITECT AND OWNER.



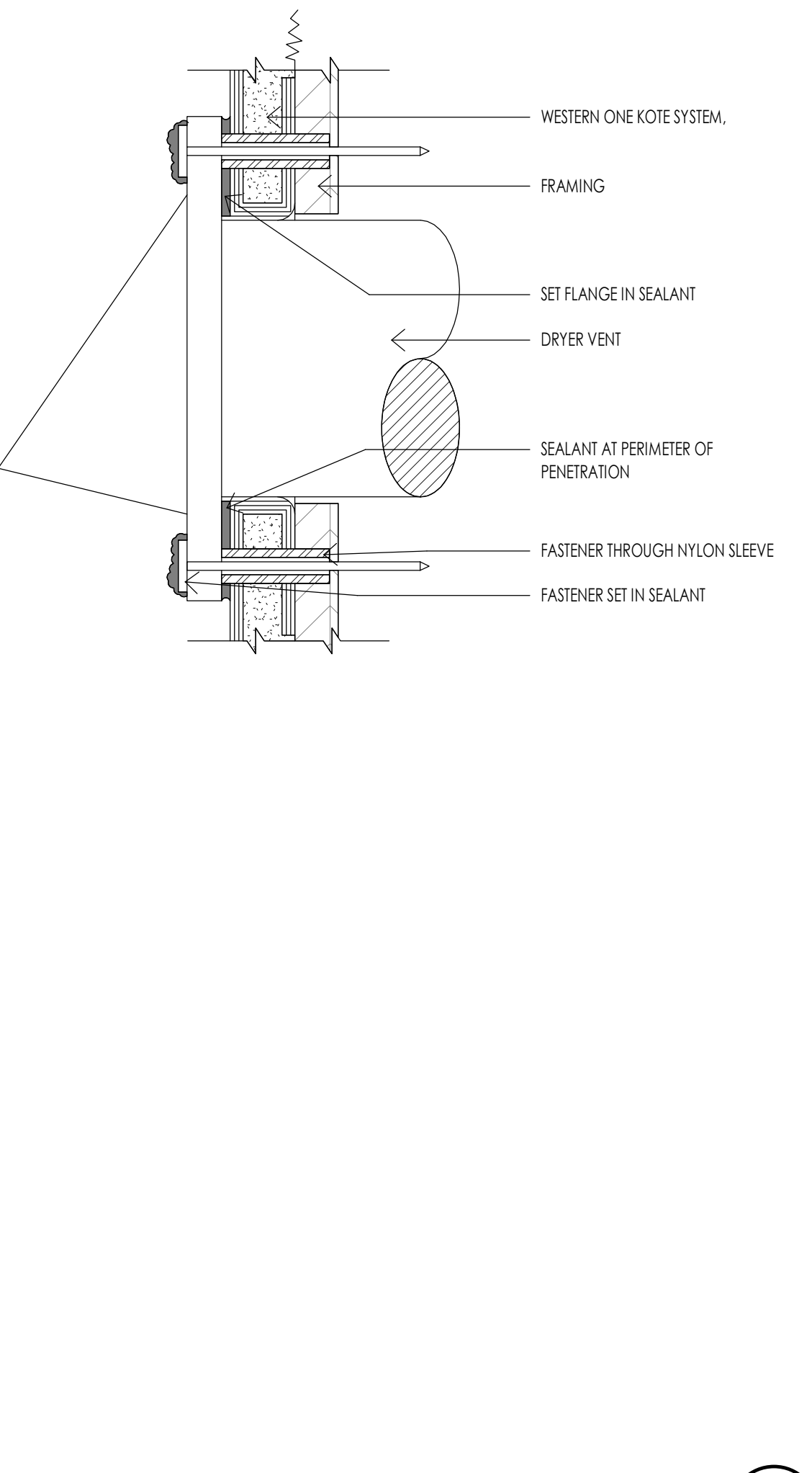
**EXHAUST VENT DETAIL**  
1/1/2" = 1'-0"



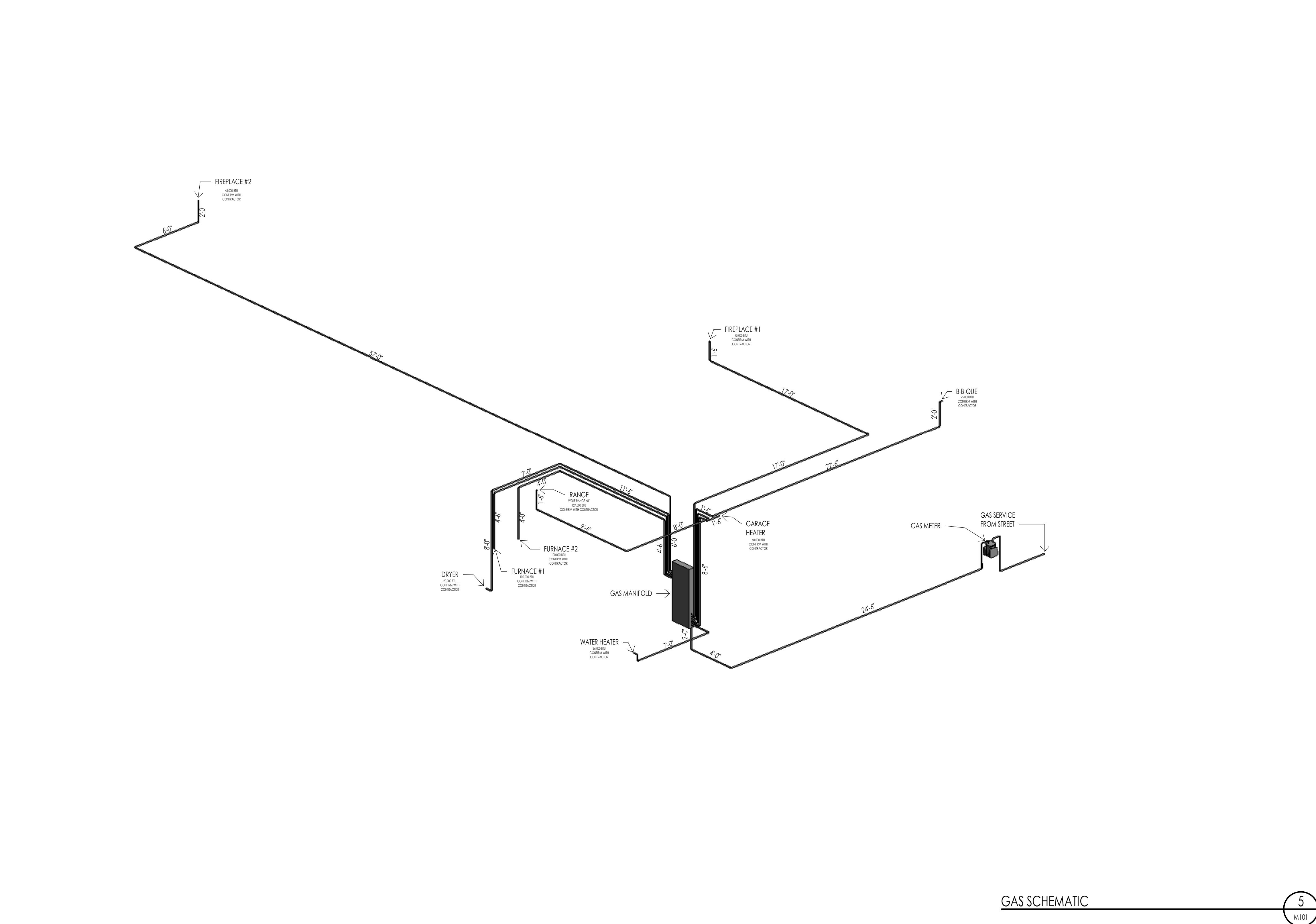
**MINIMUM PLUMBING FIXTURE CLEARANCES**  
1/8" = 1'-0"



**WALL EXHAUST VENT**  
1/1/2" = 1'-0"



**TYPICAL DRYER VENT (SHOWN WITH STUCCO)**  
6" = 1'-0"



**GAS SCHEMATIC**



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160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.32  
DATE: 2023.09.25  
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SHEET TITLE:  
**MECHANICAL GENERAL NOTES**

SHEET NUMBER:  
**M101**

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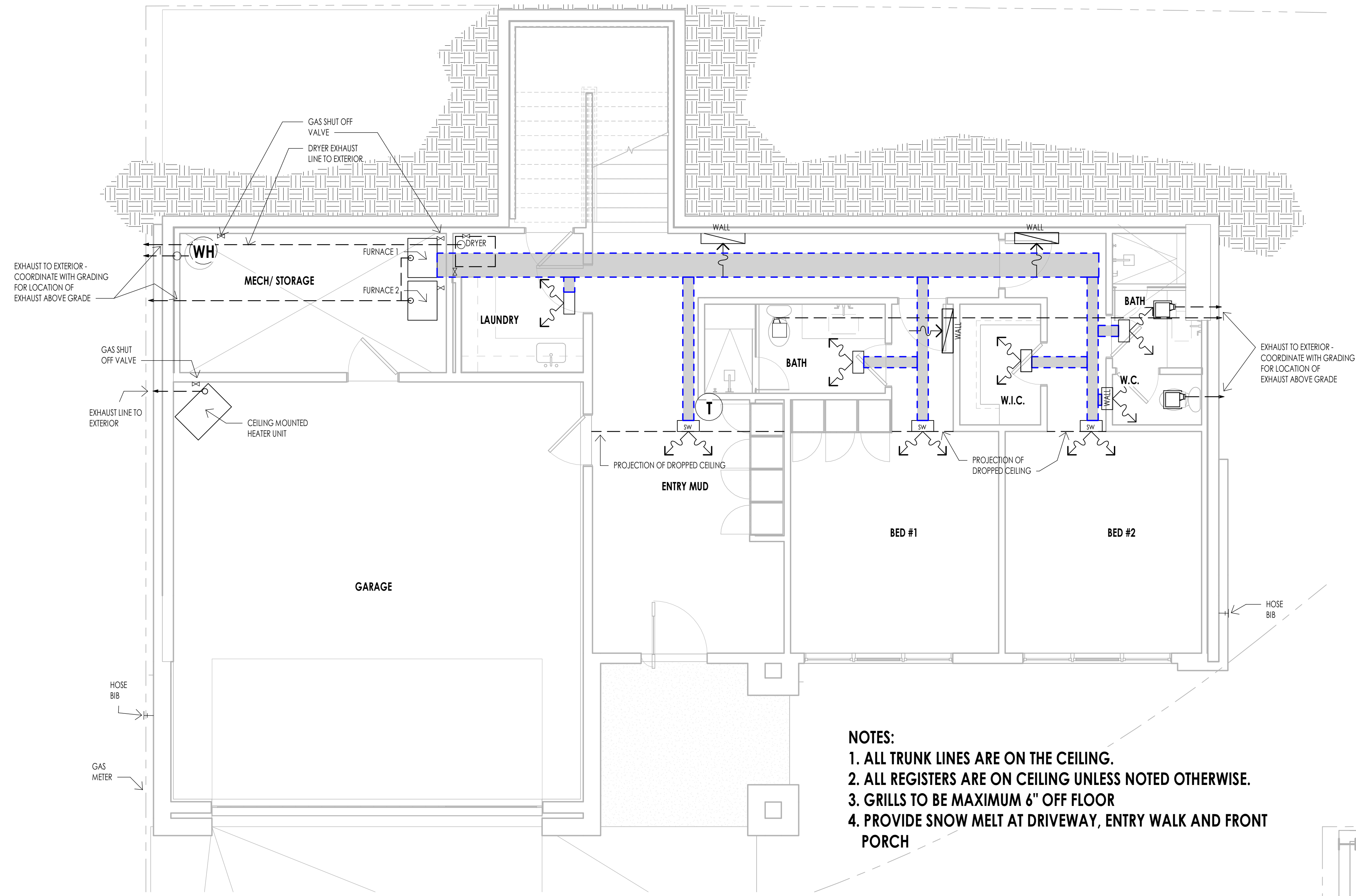
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MECHANICAL LEGEND	
SYMBOL	TYPE
	FLOOR OR CEILING MOUNTED HVAC REGISTER
	SW = SIDE WALL T.K. = TOE KICK
	HVAC RETURN AIR REGISTER
	HOSE BIB
	GAS SHUT OFF VALVE
	EXHAUST FAN
	THERMOSTAT
	WATER HEATER

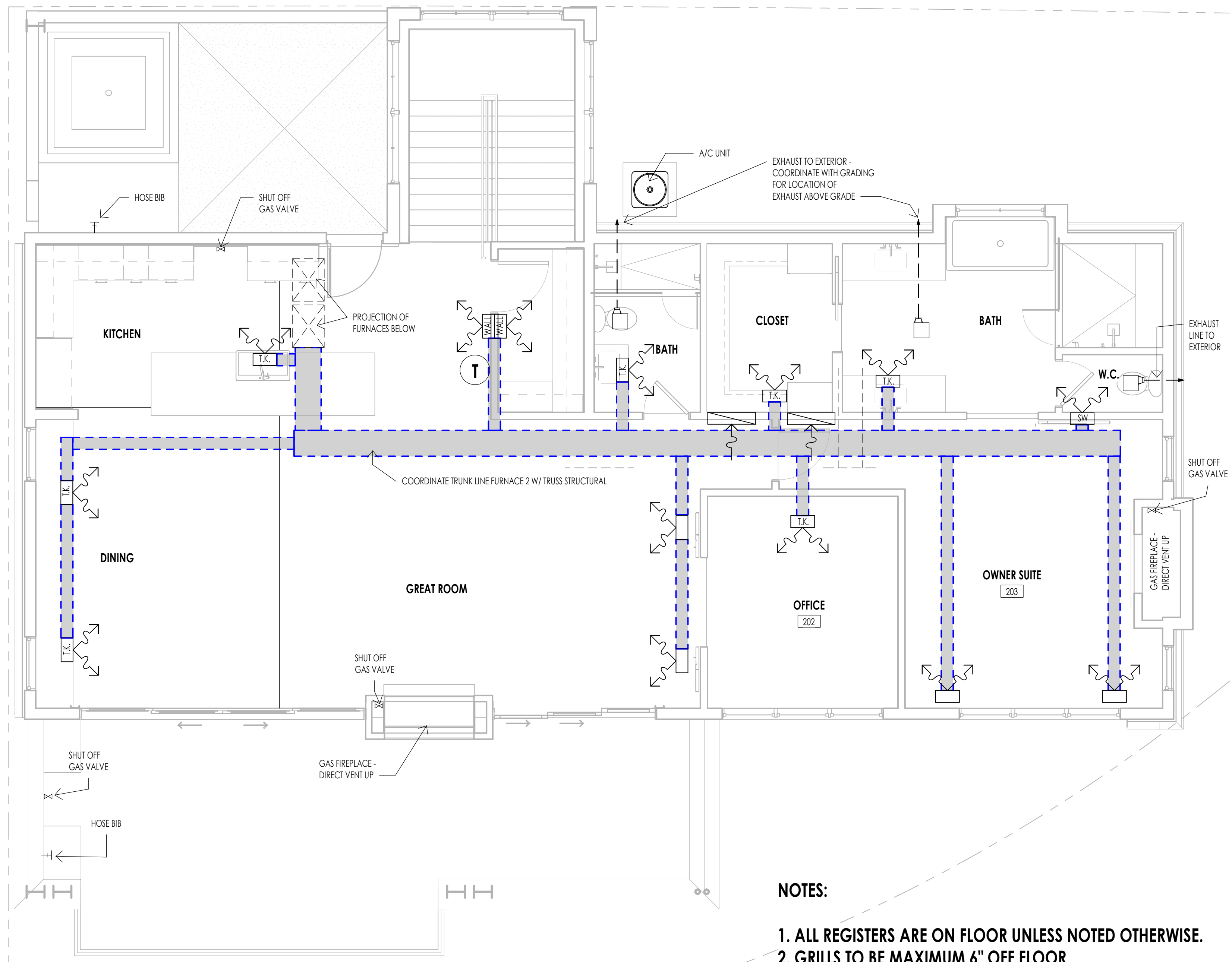
  

MECHANICAL GENERAL NOTES	
1.	SEE SHEETS AD.3 FOR MECHANICAL AND PLUMBING PROJECT KEY NOTES AND MECHANICAL/PLUMBING INFORMATION.
2.	MECHANICAL AND PLUMBING LAYOUTS ARE SHOWN IN SCHEMATIC. THE PLUMBING AND MECHANICAL CONTRACTORS ARE RESPONSIBLE TO DESIGN AND SIZE EQUIPMENT CAPACITY, PIPE AND DUCT LINES, PLUMBING LINES AND ALL OTHER EQUIPMENT AS PER NATIONAL, STATE AND LOCAL CODES AND AS PER THE GENERAL NOTE REQUIREMENTS.
3.	THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LAYOUT AND INSTALLATION OF ALL RELATED ITEMS WITH EXISTING CONDITIONS AND ALL OTHER TRADES.
4.	COORDINATE WITH OWNER, INTERIOR DESIGNER AND/OR PLANS FOR FIXTURE SCHEDULES, STYLES, FINISHES, ETC.
5.	ALL REGISTERS AT LOWER LEVEL TO BE CEILING MOUNT UNLESS OTHERWISE NOTED.
6.	COORDINATE BETWEEN MECH. SUB AND ELECTRICAL SUB AT PRECONSTRUCTION MEETING FOR DUCT LOCATIONS AND RECESSED CAN LOCATIONS.
7.	ALL PLUMBING FIXTURE/MECHANICAL EQUIPMENT SELECTIONS TO BE APPROVED BY OWNER/DEVELOPER.
8.	PROVIDE REQUIRED COMBUSTION AIR VENT DUCTS AT CEILING FOR WATER HEATER AND FURNACE AS REQUIRED BY BLDG. CODES AND MANUFACTURER.
9.	MECHANICAL DESIGN SHOULD BE IN ACCORDANCE WITH 2006 INTERNATIONAL RESIDENTIAL CODE.
10.	DUCT PENETRATIONS IN GARAGES SHALL BE 26 GAUGE SHEET METAL MIN. AND SHALL HAVE NO OPENINGS INTO THE GARAGE.
11.	FLUES SHALL NOT PENETRATE THE ROOF WITHIN 4'-0" OF PARTY WALLS.
12.	RADON: THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE RADON TESTING AND APPLY AN APPROPRIATE MITIGATION SYSTEM.



- NOTES:**
1. ALL TRUNK LINES ARE ON THE CEILING.
  2. ALL REGISTERS ARE ON CEILING UNLESS NOTED OTHERWISE.
  3. GRILLS TO BE MAXIMUM 6" OFF FLOOR
  4. PROVIDE SNOW MELT AT DRIVEWAY, ENTRY WALK AND FRONT PORCH

LEVEL 1 - MECHANICAL  
1/4" = 1'-0" 1 M102



- NOTES:**
1. ALL REGISTERS ARE ON FLOOR UNLESS NOTED OTHERWISE.
  2. GRILLS TO BE MAXIMUM 6" OFF FLOOR

LEVEL 2 - MECHANICAL  
1/4" = 1'-0" 2 M102

WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

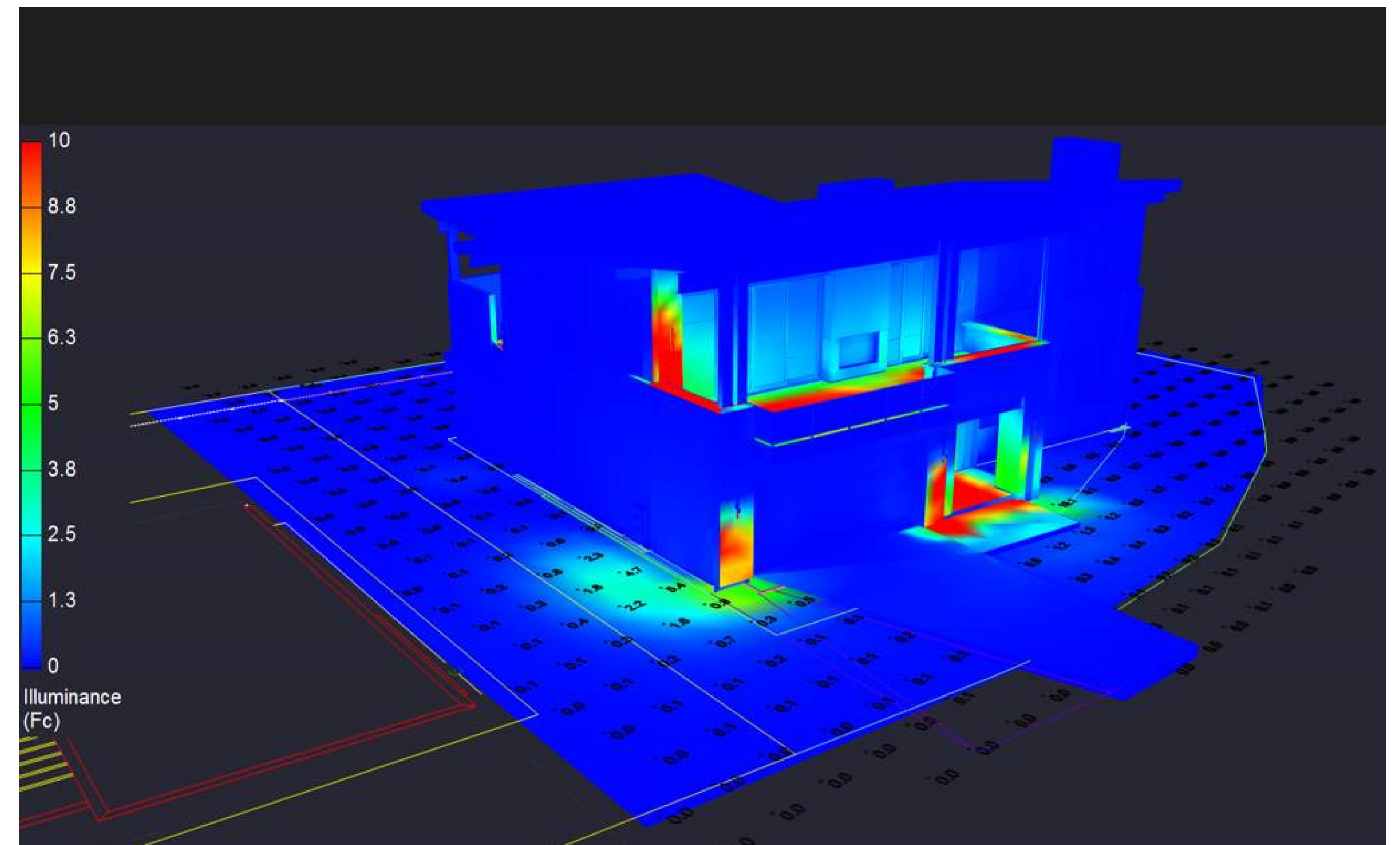
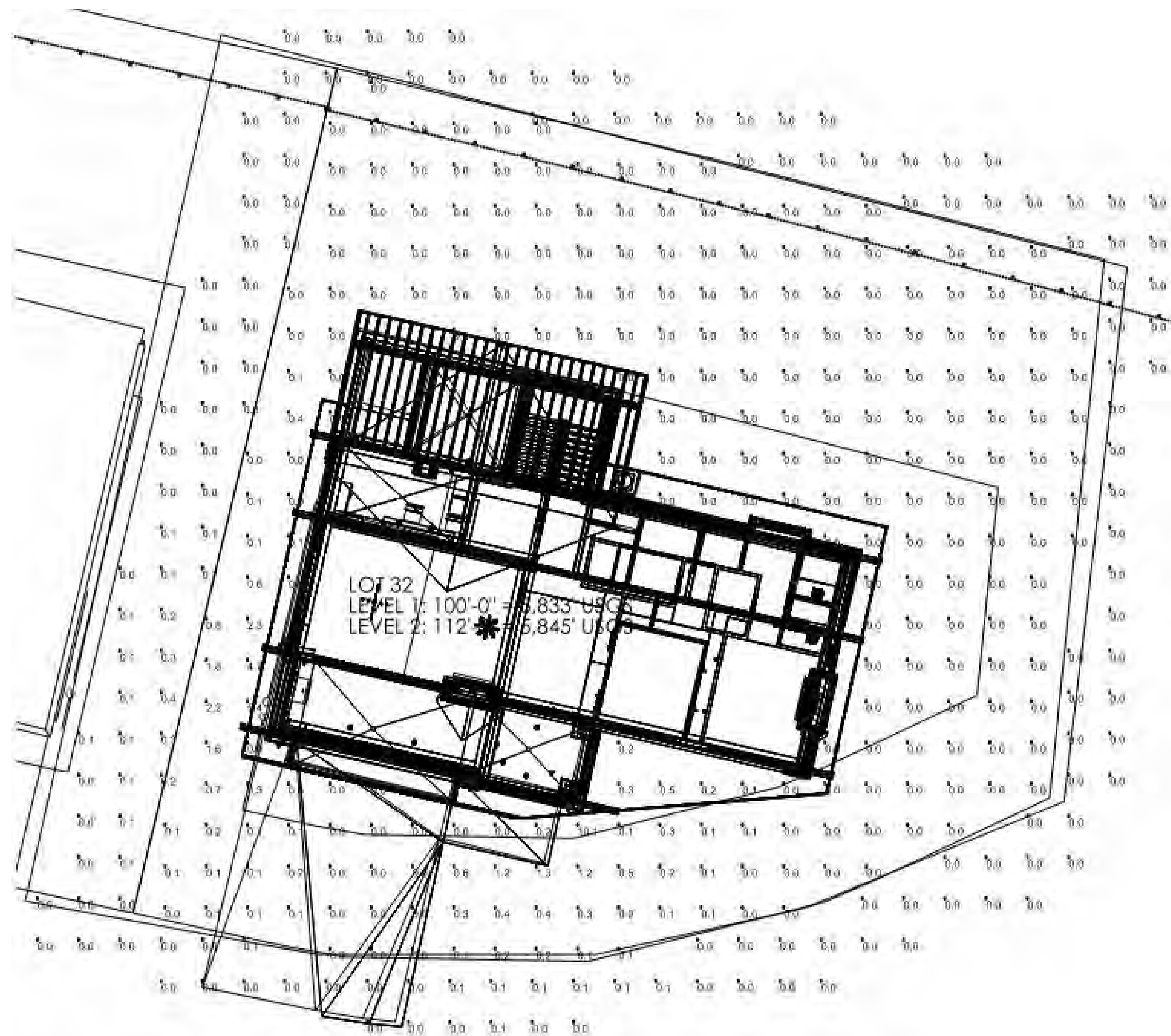
PROJECT NC22023.32  
DATE: 2023.09.25  
REVISIONS:

SHEET TITLE:  
MECHANICAL PLAN

SHEET NUMBER:  
M102

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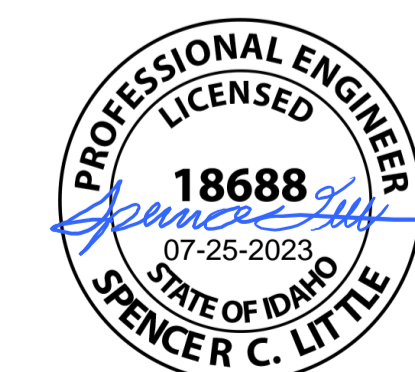


PSEUDO RENDERING WITH ILLUMINANCE SCALE

Luminaire Schedule					
Tag	Qty	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
L1	8	0.810	1255	14.2	113.6
L2	9	0.810	590	9.8	88.2

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY	Illuminance	Fc	0.17	10.1	0.0	N.A.	N.A.
TRESPASS	Illuminance	Fc	0.02	0.4	0.0	N.A.	N.A.

POINT-BY-POINT CALCULATION AND SUMMARIES  
(5 FOOT GRID)



WARM SPRING RESIDENCES  
KETCHUM, ID

---

LOT 32 CALCULATIONS AND  
RENDERINGS

**SPECTRUM**  
ENGINEERS



METAL SCREEN CHIMNEY CAPS

METAL FASCIA

METAL "C-CHANNEL" TRIM BAND

STEEL FRAMED DECKING

WOOD GARAGE DOOR

METAL SIDING

CUSTOM ENTRY PIVOT DOOR

WOOD SIDING

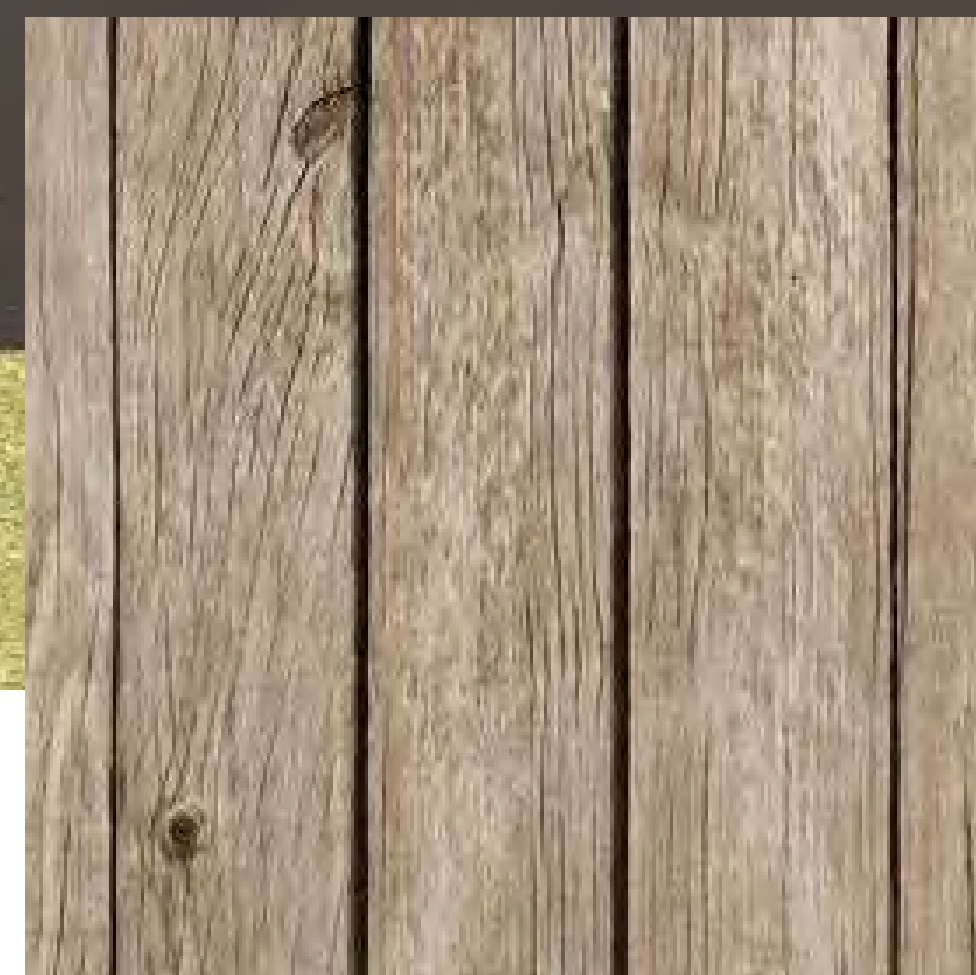
STONE VENEER



**THINSET MASONRY:**  
 EL DORADO STONE  
 TIGHT DRY STACKED STONE  
 BLACK RIVER



**VERTICAL SHIP LAP CEDAR SIDING:**  
 PRESTAINED CEDAR SIDING



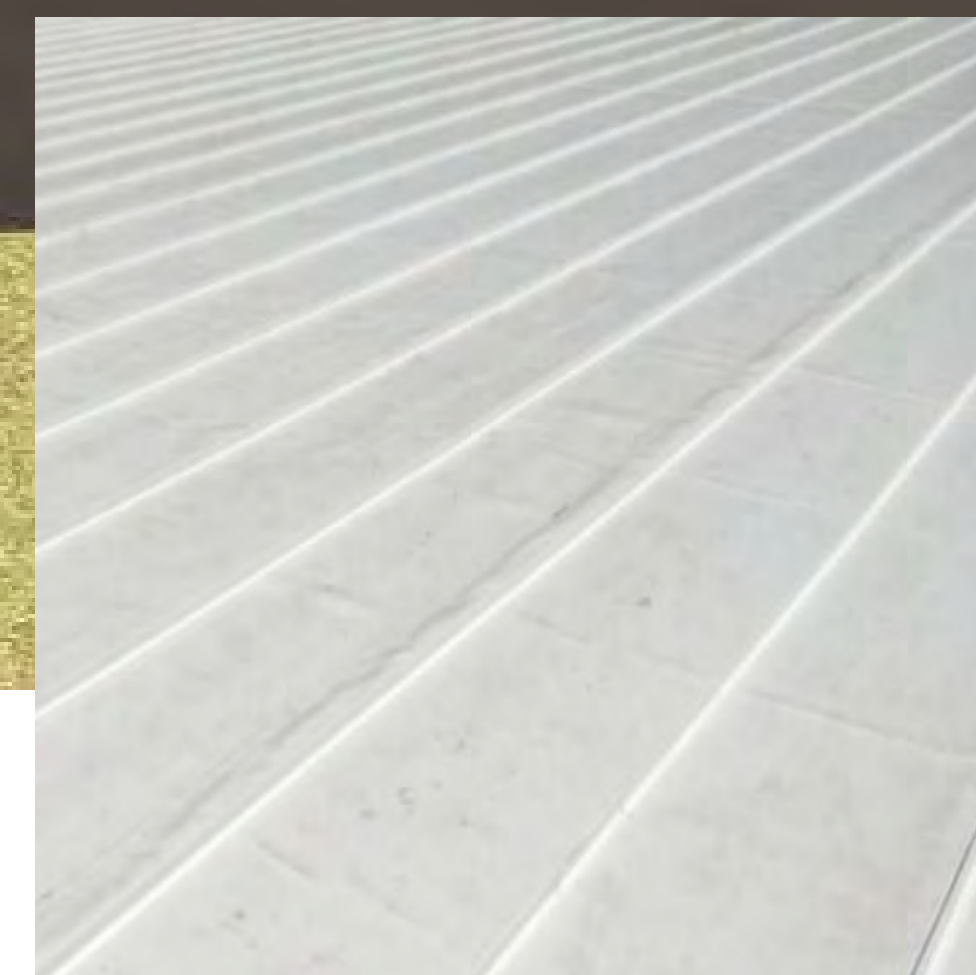
**GARAGE DOOR FINISH:**  
 RECLAIMED DOUGLAS FIR



**METAL SIDING AND TRIM:**  
 STEEL TRIM  
 COLOR: AGED STEEL LIGHT RUST FINISH



**WINDOWS:**  
 ALUMINUM CLAD WOOD WINDOWS  
 COLOR: DARK BRONZE



**ROOFING:**  
 KEE RIB ROOFING MEMBRANE



VIEW FROM BALD MOUNTAIN ROAD LOOKING WEST

## WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



VIEW FROM BALD MOUNTAIN ROAD LOOKING WEST



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## WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D301

2023.09.25



VIEW FROM BALD MOUNTAIN ROAD LOOKING NORTH WEST

## WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

LOT 32



VIEW FROM WARM SPRINGS ROAD LOOKING WEST AT START OF THE BUS STOP PULL OFF



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## WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

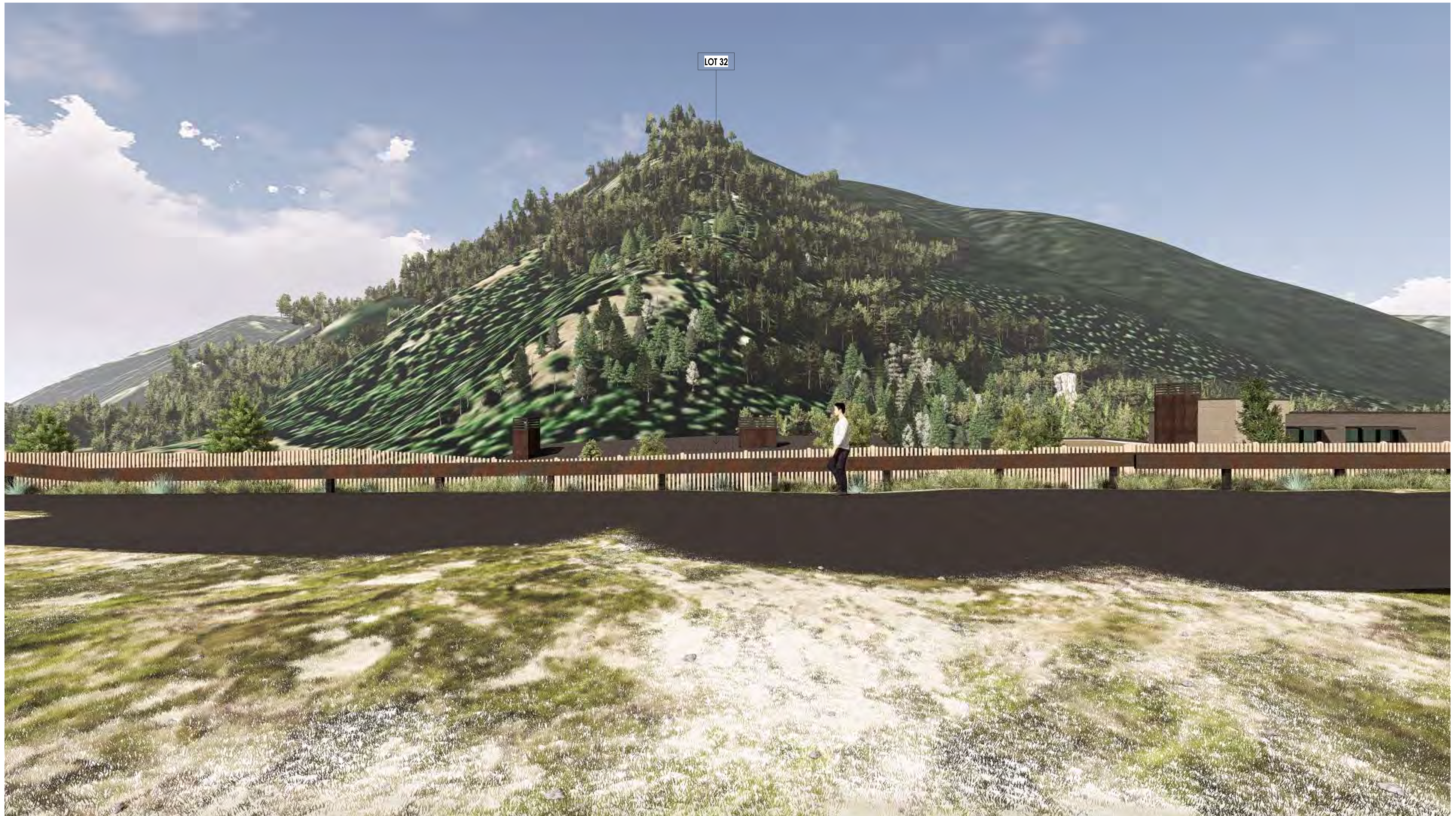
EXTERIOR VIEWS

D303

2023.09.25



VIEW FROM WARM SPRINGS ROAD LOOKING SOUTH EAST



VIEW FROM WARM SPRINGS ROAD BUS STOP LOOKING SOUTH





VIEW FROM WARM SPRINGS LOOKING NORTH



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# WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

## D306

2023.09.25



AERIAL VIEW FROM SOUTH LOOKING NORTH

## WARM SPRINGS RESIDENCE #32

160 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



City of Ketchum

# Attachment C: Lot 33 Plan Set



# WARM SPRINGS #33

PROJECT ADDRESS  
170 BALD MOUNTAIN ROAD KETCHUM, ID 83340  
PROPERTY I.D. NUMBER:

## DRAWING INDEX

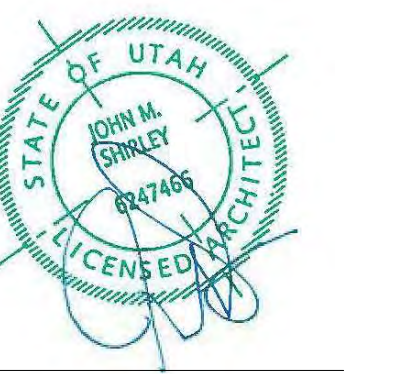
GENERAL				STRUCTURAL			
SHEET #	SHEET NAME	#	DATE	SHEET #	SHEET NAME	#	DATE
COVER	COVER SHEET	1	04-24-2023	S101	Structural		
G002	GENERAL NOTES			<b>MECHANICAL</b>			
G003	BUILDING AREA ANALYSIS			SHEET #	SHEET NAME	#	DATE
G005	SPECIFICATIONS			M101	MECHANICAL GENERAL NOTES		
G006	SPECIFICATIONS			M102	MECHANICAL PLAN		
G007	SPECIFICATIONS	1	04-24-2023	<b>ELECTRICAL</b>			
G008	SPECIFICATIONS			SHEET #	SHEET NAME	#	DATE
G009	SPECIFICATIONS			E101	ELECTRICAL GENERAL NOTES	1	04-24-2023
G010	SPECIFICATIONS			E102	ELECTRICAL PLANS	1	04-24-2023
<b>CIVIL</b>							
SHEET #	SHEET NAME	#	DATE				
C101	Civil						
<b>LANDSCAPE</b>							
SHEET #	SHEET NAME	#	DATE				
L101	Landscape						
<b>ARCHITECTURAL</b>							
SHEET #	SHEET NAME	#	DATE				
A101	SITE PLAN	2	06-14-2023				
A104	LEVEL 1 FLOOR PLAN	2	06-14-2023				
A105	LEVEL 2 FLOOR PLAN						
A106	LEVEL 3 FLOOR PLAN						
A107	ROOF PLAN	1	04-24-2023				
A109	LEVEL 1 CEILING PLAN						
A110	LEVEL 2 CEILING PLAN						
A111	LEVEL 3 CEILING PLAN						
A201	EXTERIOR ELEVATIONS	1	04-24-2023				
A202	EXTERIOR ELEVATIONS	2	06-14-2023				
A301	BUILDING SECTIONS	1	04-24-2023				
A302	BUILDING SECTIONS	1	04-24-2023				
A401	FIREPLACE ELEVATIONS						
A501	ARCHITECTURAL DETAILS						
A502	ARCHITECTURAL DETAILS	1	04-24-2023				
A503	STAIR/ RAIL DETAILS						
A601	DOOR SCHEDULE & ELEVATIONS						
A602	WINDOW SCHEDULE & ELEVATIONS						
A603	WINDOW DETAILS						



Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT TEAM	SEAL	GOVERNING BUILDING CODES & INFORMATION	ABBREVIATIONS	GRAPHIC SYMBOLS/ MATERIAL LEGENDS	VICINITY MAP	
<b>ARCHITECT:</b> <b>THINK ARCHITECTURE:</b> 7927 SOUTH HIGHPOINT WAY, SUITE 300 SANDY, UT 84094 801.269.0055		<b>BUILDING CODE:</b> 2018 INTERNATIONAL RESIDENTIAL CODE (I.R.C.) WITH IDAHO STATE AMENDMENTS <b>PLUMBING CODE:</b> 2017 IDAHO STATE PLUMBING CODE (I.S.P.C.) <b>ELECTRICAL CODE:</b> 2017 IDAHO ELECTRICAL CODE (INFA 70) <b>ACCESSIBILITY:</b> 2009 ANSI 117.1 & 2018 I.B.C.	<b>#</b> NUMBER <b>A.B.</b> ANCHOR BOLT <b>ABV.</b> ABOVE <b>ADJ.</b> ADJUSTABLE <b>A.F.F.</b> ABOVE FINISHED FLOOR <b>ALUM.</b> ALUMINUM <b>BD.</b> BUILDING <b>B.M.</b> BENCHMARK <b>B.O.</b> BOTTOM OF <b>BOT.</b> BOTTOM <b>B.P.</b> BASE PLATE <b>BRG.</b> BEARING <b>BTRNK.</b> BETWEEN <b>C.J.</b> CONSTRUCTION JOINT <b>C.L.G.</b> CEILING <b>CLR.</b> CLEAR <b>CMU.</b> CONCRETE MASONRY UNIT <b>COL.</b> COLUMN <b>CONC.</b> CONCRETE <b>CONT.</b> CONTINUOUS <b>CONSTR.</b> CONSTRUCTION <b>C.T.J.</b> CONTRACTION JOINT <b>DBL.</b> DOUBLE <b>DPI/DITL.</b> DETAIL <b>DIA.</b> DIAMETER <b>DIL.</b> DETAIL <b>DWSG.</b> DRAWINGS <b>E.F.</b> EACH FACE <b>E.F.</b> EACH SIDE <b>E.W.</b> EACH WAY <b>EXIS.</b> EXISTING <b>EXPAN.</b> EXPANSION <b>EXT.</b> EXTERIOR <b>EXT. CL.</b> EXTERIOR WATER COOLER <b>F.D.</b> FLOOR DRAIN <b>FON./FOTN.</b> FOUNDATION <b>F.F.C.</b> FIRE EXTINGUISHER <b>F.F.</b> FINISH FLOOR <b>F.F.E.</b> FIRE EXTINGUISHER CABINET <b>FR.</b> FINISH FLOOR <b>FT.</b> FEET <b>FIG.</b> FOOTING <b>GA.</b> GAGE/GAUGE <b>GA/LV.</b> GALLONS PER MINUTE <b>GPM.</b> GALLONS PER MINUTE <b>GND.</b> GROUND <b>GOVT.</b> GOVERNMENT <b>GYP. BD.</b> GYPSUM WALL BOARD <b>HC.</b> HANDICAPPED	<b>HDW.</b> HARDWARE <b>HOLLOW METAL</b> <b>HORIZ.</b> HORIZONTAL <b>HT.</b> HEIGHT <b>HVAC</b> HEATING/VENTILATION/AIR CONDITIONING <b>HYD.</b> HYDRANT <b>ID.</b> INSIDE DIAMETER <b>INFO.</b> INFORMATION <b>INSUL.</b> INSULATION <b>LAV.</b> LAVATORY <b>LT.</b> LIGHT <b>LT WT.</b> LIGHT WEIGHT <b>MAINT.</b> MAINTENANCE <b>MANUF.</b> MANUFACTURER <b>MAX.</b> MAXIMUM <b>MAT.</b> MATERIAL <b>M.C.J.</b> MASONRY CONTROL JOINT <b>MECH.</b> MECHANICAL <b>MIN.</b> MINIMUM <b>MISC.</b> MISCELLANEOUS <b>M.O.</b> MASONRY OPENING <b>MTL.</b> METAL <b>NOT IN CONTR.</b> NOT IN CONTRACT <b>N.T.S.</b> NOT TO SCALE <b>O.C.</b> ON CENTER <b>O.D.</b> OUTSIDE DIAMETER <b>O.F.</b> OUTSIDE FACE <b>PERP.</b> PERPENDICULAR <b>PL.</b> PLATE <b>PTD.</b> PAINTED <b>QTY.</b> QUANTITY <b>R.D.</b> ROOF DRAIN <b>RAD.</b> RADIUS <b>REIN.</b> REINFORCED <b>REQD.</b> REQUIRED <b>RM.</b> ROOM <b>R.O.</b> ROUGH OPENING <b>SCHED.</b> SCHEDULE <b>SHT.</b> SHEET <b>SM.</b> SIMILAR <b>SPEC.</b> SPECIFICATION <b>STC.</b> SOUND TRANSMISSION COEFFICIENT <b>STRUCT.</b> STRUCTURAL <b>SUSP.</b> SUSPENDED <b>T.O.</b> TOP OF <b>T.O.C.</b> TOP OF CURB <b>T.O.F.</b> TOP OF FOOTING <b>T.O.S.</b> TOP OF SLAB OR SIDEWALK <b>T.O.W.</b> TOP OF WALL <b>TYP.</b> TYPICAL <b>UNL.</b> UNLESS NOTED OTHERWISE <b>VERT.</b> VERTICAL <b>W.</b> WITH <b>WEL.</b> WOOD <b>W.W.F.</b> WELDED WIRE FABRIC	<b>FLOOR OR POINT ELEVATION</b> <b>KEY NOTE</b> <b>SPECIFICATION KEY NOTE</b> <b>WALL TYPE</b> <b>DOOR NUMBER</b> <b>WINDOW NUMBER</b> <b>FIXTURE TAG</b> <b>REVISION TAG</b> <b>DETAIL</b> <b>INTERIOR ELEVATION</b> <b>BUILDING ELEVATION</b> <b>ROOM NAME &amp; NUMBER</b> <b>BUILDING SECTION</b> <b>WALL SECTION</b> <b>CENTER LINE</b>	<b>MASTER GRID LINES</b> <b>PARKING GRID LINES</b> <b>BUILDING GRID LINES</b> <b>EL.F.S.</b> <b>CONCRETE MASONRY UNIT</b> <b>BRICK VENEER</b> <b>STONE VENEER</b> <b>CONCRETE</b> <b>GYPSUM BOARD OR GROUT</b> <b>MORTAR</b> <b>BATT INSULATION</b> <b>RIGID INSULATION</b> <b>PLYWOOD</b> <b>ROUGH WOOD-CONTINUOUS</b> <b>ROUGH WOOD-BLOCKING</b> <b>WOOD TRIM</b> <b>STEEL</b> <b>GRAVEL</b> <b>EARTH</b>
<b>STRUCTURAL ENGINEER:</b> <b>VECTOR ENGINEERS</b> 1550 S. CLOVERDALE ROAD, SUITE 315 BOISE, ID 83709 208.994.0303		<b>MATERIALS:</b> CONCRETE FOUNDATIONS, WOOD FRAME W/ BRICK MASONRY & FIBER CEMENT PANELS, FEE MEMBRANE & METAL ROOFING				
<b>MECHANICAL ENGINEER:</b> <b>DESIGN BUILD</b>		<b>DEFERRED SUBMITTAL REQUIREMENTS</b> DEFERRED SUBMITTALS ARE THOSE PORTIONS OF DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION AND HAVE RECEIVED PRIOR APPROVAL FROM THE BUILDING OFFICIAL TO BE DEFERRED. THE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND GENERAL CONTRACTOR WITHIN SIX WEEKS TO COMMENCEMENT OF CONSTRUCTION TO THIS PORTION OF WORK.			<b>CITY APPROVAL STAMP</b>	
<b>ELECTRICAL ENGINEER:</b> <b>DESIGN BUILD</b>		<b>DEFERRED SUBMITTAL PROCESS:</b> 1. THE DEFERRED SUBMITTAL SHALL FIRST BE REVIEWED BY THE GENERAL CONTRACTOR FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. THE SUBMITTAL MUST BE REVIEWED, APPROVED, STAMPED AND SIGNED BY THE GENERAL CONTRACTOR BEFORE BEING SUBMITTED TO THE ARCHITECT. 2. THE GENERAL CONTRACTOR SHALL DIGITALLY SUBMIT DEFERRED SUBMITTALS TO THE ARCHITECT. 3. THE DEFERRED SUBMITTAL ITEMS WILL BE REVIEWED BY THE ENGINEER OR ARCHITECT IN RESPONSIBLE CHARGE. THE ENGINEER OR ARCHITECT WILL ATTACH A LETTER TO THE SUBMITTAL STATING THAT THE DEFERRED ITEM IS IN CONFORMANCE WITH THE DESIGN OF THE STRUCTURE. 4. THE APPROVED SUBMITTALS WILL BE RETURNED TO THE GENERAL CONTRACTOR. TWO SETS OF THE DEFERRED SUBMITTAL ARE THEN SUBMITTED TO THE CITY FOR REVIEW. 5. THE GENERAL CONTRACTOR SHALL MAINTAIN ONE SET OF THE APPROVED SUBMITTAL ON SITE FOR REFERENCE BY THE CITY INSPECTOR. 6. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. 7. SEE STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS FOR STRUCTURAL DEFERRED SUBMITTALS.				
<b>CIVIL ENGINEER:</b> <b>BENCHMARK ASSOCIATES PA</b> 100 BELL DRIVE KETCHUM, ID 83340 208.726.9512		<b>DEFERRED SUBMITTAL ITEMS</b> 1. EXTERIOR FRAMING, DESIGN, AND INSTALLATION DETAILS PER STRUCTURAL. 2. FIRE SPRINKLING DRAWINGS, INCLUDING DESIGN DRAWINGS AND CALCULATIONS. 3. FIRE ALARM DRAWINGS AND SPECIFICATIONS. 4. JACOZZI DRAWINGS AND SPECIFICATIONS. 5. CITY SECURITY CAMERAS AND SECURITY SYSTEM. 6. PROJECT TRIPLE PLAY - (PHONE, DATA, TV.) SHALL BE PROVIDED BY DEFERRED SUBMITTAL. 7. CAST IN PLACE STORM WATER DETENTION SYSTEM				
<b>EGGERS ASSOCIATES, PA</b> 560 NORTH 2ND AVE KETCHUM, ID 83340 208.726.0988						
<b>MAGLEBY CONSTRUCTION SUN VALLEY</b> 511 EAST AVENUE NORTH SUITE 201 KETCHUM, IDAHO 83340 208.726.3923						
<b>OWNER:</b> <b>VP PROPERTIES</b> 240 LEADVILLE KETCHUM, IDAHO 83340 208.726.1875		<b>SPECIAL INSPECTIONS REQUIREMENTS</b> SPECIAL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH IBC 2015 CHAPTER 17, SECTION 1704. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS, THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONALS IN RESPONSIBLE CHARGE, (2015 IBC SECTION 1704.2.4). SEE PROJECT MANUAL / SPECIFICATIONS, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL GENERAL NOTES FOR ADDITIONAL SPECIAL INSPECTION REQUIREMENTS.	<b>BUILDING AREAS</b> SEE SHEET G003 FOR AREA PLANS	<b>OWNER &amp; MUNICIPAL DRAWING APPROVALS</b> OWNER: _____ DATE: _____ CITY ENGINEER: _____ DATE: _____ CITY PLANNING & ZONING DEPARTMENT: _____ DATE: _____ CITY FIRE DEPARTMENT: _____ DATE: _____ CITY BUILDING DEPARTMENT: _____ DATE: _____ CITY POLICE DEPARTMENT: _____ DATE: _____		

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

SHEET TITLE:  
COVER SHEET  
SHEET NUMBER:  
COVER  
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PROJ-26 9/25/2023 11:32:55 AM

**PROJECT GENERAL NOTES**

- 1. DEFINITIONS**
  - a. PROVIDE: MEANS TO PROVIDE, FURNISH AND INSTALL. A COMPLETE SYSTEM AND READY FOR OPERATIONS AND USE FOR PURPOSE INTENDED. INCLUDES THOSE ITEMS SPECIFIED WITHIN THE DRAWINGS AND SPECIFICATIONS AS WELL AS THOSE ITEMS THAT ARE REQUIRED TO PROVIDE A COMPLETE SYSTEM. THE CONTRACTOR AND SUB CONTRACTORS ARE REQUIRED TO PROVIDE THE FULL AND COMPLETE SYSTEM.
  - b. FURNISH: MEANS TO SUPPLY, PURCHASE, PROCURE AND DELIVER COMPLETE WITH RELATED ACCESSORIES, READY FOR ASSEMBLY, APPLICATION, INSTALLATION, AND SIMILAR OPERATIONS AS APPLICABLE IN EACH INSTANCE.
  - c. INSTALL: MEANS TO CONSTRUCT, ASSEMBLE, ERECT, MOUNT, ANCHOR, PLACE, CONNECT, APPLY AND SIMILAR OPERATIONS, COMPLETE WITH RELATED ACCESSORIES, AS APPLICABLE IN EACH INSTANCE.
  - d. EQUIVALENT: MEANS EQUIVALENT AS ACCEPTED BY THE ARCHITECT WITH RESPECT TO PRODUCTS, EQUIVALENT MEANS A LIKE DEGREE OF FEATURES, ATTRIBUTES, PERFORMANCE, OR QUALITIES DEEMED ESSENTIAL TO THE DESIGN. INSTEAD OF THE ITEM INTENDED TO BE MEANT ARCHITECT WILL CONSIDER SUBSTITUTION PROPOSALS FOR THE PRODUCT. DO NOT ASSUME THAT SUBSTITUTE PRODUCTS ARE ACCEPTABLE. SUBSTITUTIONS MADE BY THE CONTRACTOR WITHOUT FULL AND FINAL APPROVAL MAY REQUIRE TO BE REMOVED IF NOT DEEMED ACCEPTABLE BY THE ARCHITECT. ALL COSTS ASSOCIATED TO REMOVAL OF SUBSTITUTION NOT APPROVED, AND INSTALLATION OF ACCEPTED PRODUCTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

**GENERAL NOTES**

G1. INTENT OF THE SPECIFICATIONS: DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE BASIS FOR THE PROPER COMPLETION OF THE PROJECT. SUITABLE FOR THE INTENDED USE OF THE OWNER. ITEMS NOT EXPRESSLY SET FORTH WITHIN THE DRAWINGS AND SPECS, BUT WHICH ARE REASONABLY IMPLIED FOR COMPLETION OF A COMPLETE SYSTEM, OR NECESSARY FOR THE PROPER PERFORMANCE OF THE WORK SHALL BE INCLUDED.

G2. DRAWINGS AND SPECIFICATIONS: SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY AND SUPPLEMENTAL TO THE DRAWINGS. NO RELATIVE IMPORTANCE OF DRAWINGS VERSUS SPECIFICATIONS HAS BEEN ESTABLISHED AND NONE SHOULD BE ASSUMED, BUT THE MOST STRINGENT CONDITIONS SHOULD BE ASSUMED FOR ALL BIDDING AND CONSTRUCTION REQUIREMENTS. IN THE EVENT OF DISCREPANCIES OR CONFLICTS, THE ARCHITECT SHALL BE CONSULTED IN ORDER TO RENDER AN INTERPRETATION.

G3. BIDDING, PRIOR TO CONSTRUCTION DONE PRIOR TO RECEIVING FINAL BUILDING DEPARTMENT PERMITS IS AT THE CONTRACTORS OWN RISK. CHANGES TO THE DRAWINGS MAY BE REQUIRED AS PART OF THE PLAN CHECK AND/OR OWNER REVIEW PROCESS. THINK ARCHITECTURE INC. AND ITS CONSULTING ENGINEERS WILL NOT BE HELD LIABLE FOR, NOR COMPENSATE FOR, CHANGES TO THESE DRAWINGS BEFORE FINAL JURISDICTION AND OWNER APPROVAL IS OBTAINED.

G4. WORK NOT INCLUDED: ANY ITEM INDICATED ON THE DRAWINGS AS "N.I.C." (NOT IN CONTRACT), OR OTHERWISE DESIGNATED TO BE DONE BY OTHERS IS NOT A PART OF THE CONTRACT. INSTALLATION AND/OR BACKLOGS ARE NOT REQUIRED FOR SOME EQUIPMENT FURNISHED BY OWNER OR OWNER'S SUBCONTRACTOR. REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS.

G5. CONTRACT DOCUMENTS AT SITE: THE CONTRACTOR SHALL MAINTAIN CURRENT PERMITS, SHOP DRAWINGS, REVISED DRAWINGS, AND CLARIFICATION DRAWINGS, ADDENDA, CHANGE ORDERS, SUBLETTERS, INSPECTIONS, TEST CERTIFICATIONS AND RECORDS. PROJECT SUBMITTAL DATA AND SAMPLES. FIELD OFFICE SHALL CONTAIN A CURRENT COPY OF ALL GOVERNING BUILDING CODES. MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR ARCHITECT'S REVIEW. ALL DRAWINGS MUST BE CLEARLY MARKED AS TO THE FINAL APPROVED DRAWINGS.

G6. RECORD DRAWINGS: THE MAINTAIN ACCURATELY DIMENSIONED RECORDS OF ALL UNDERGROUND LINES, SERVICES, AND UTILITIES, AS WELL AS ANY DISCREPANCIES OR REQUIRED CHANGES TO THE CONTRACT DOCUMENTS, AT THE CLOSE OF THE PROJECT. FORWARD TO ARCHITECT FOR FUTURE RECORDS. ONE (1) CD OF COMPLETE RECORD DRAWINGS TO OWNER IN PDF FORMAT AFTER COMPLETING FINAL PUNCH LIST.

G7. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZE, DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS, THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONTINUING WITH WORK.

G8. FIELD CONFIRMATION OF DISCREPANCIES SHALL BE RECORDED ON RESPONSIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO ARCHITECT FOR PROJECT RECORD, COORDINATION, AND NECESSARY RESOLUTION PRIOR TO CONTINUING WITH WORK.

G9. FIELD MEASUREMENTS: VERIFY FIELD MEASUREMENTS BEFORE ORDERING MATERIALS AND PREFABRICATED ITEMS. ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS SHALL BE MADE IN CONSULTATION WITH THE ARCHITECT.

G10. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES.

**CONTRACTOR**

C1. THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING SITE CONDITIONS, UTILITIES, CONNECTIONS, LOCATIONS, ETC. AND NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

C2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES, WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE FOR THE REPAIR OR REPLACEMENT OF UTILITIES AND ALL OTHER PROPERTY DAMAGED OR OPERATIONS IN CONJUNCTION WITH EXECUTION OF WORK.

C3. CONTRACTOR SHALL, PRIOR TO COMMENCEMENT OF WORK, FIELD VERIFY ALL EXISTING PROJECT CONDITIONS, INCLUDING DIMENSIONS, UTILITY LOCATIONS, AND UTILITY STATES.

C4. THE CONTRACTOR SHALL BE REQUIRED TO MEET ALL NATIONAL, STATE AND LOCAL AND RELATED CODES FOR STANDARD CONSTRUCTION PRACTICES.

C5. INSTALLATION STANDARDS: ALL MANUFACTURED MATERIALS AND PRODUCTS SHALL BE APPLIED, INSTALLED, CONNECTED, CLEANED AND CONDITIONED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. ALL REFERENCES TO STANDARDS OR TO MANUFACTURER'S SPECIFICATIONS SHALL BE TO THE LATEST EDITIONS OR LATEST AMENDMENTS.

C6. HOURS OF WORK: ALL DEMOLITION, GRADING, AND CONSTRUCTION WORK SHALL BE LIMITED TO THE FOLLOWING HOURS: MONDAY THROUGH SATURDAY 7:00 AM TO 7:00 PM, OR AS REQUIRED BY THE RVMA AND SUMMIT COUNTY PLANNING AND ZONING. NO ACTIVITIES ON SUNDAY. AFTER HOURS WORK WILL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE PERSONS/AGENCIES THAT HAVE JURISDICTION.

C7. TESTING AGENCIES: THE CONTRACTOR SHALL PROVIDE AND PAY FOR INSPECTIONS, TESTS, AND OTHER SERVICES SPECIFIED. REFER TO INDIVIDUAL SECTIONS FOR ADDITIONAL REQUIREMENTS. EMPLOYMENT OF TESTING LABORATORY SHALL IN NO WAY RELIEVE CONTRACTOR OF OBLIGATION TO PERFORM WORK IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS.

C8. PROJECT LOG: MAINTAIN DAILY LOG CONTAINING ALL INFORMATION REGARDING CONSTRUCTION OPERATIONS AND OTHER OCCURRENCES PERTAINING TO THE PROJECT. MAKE LOG AVAILABLE FOR ARCHITECT'S REVIEW.

C9. WORK PROGRESS SCHEDULE: MAINTAIN AN UPDATED WORK PROGRESS SCHEDULE POSTED IN A VISIBLE PLACE LOCATED IN FIELD OFFICE. UPDATE SCHEDULE DAILY TO REFLECT WORK PROGRESS.

C10. THE GENERAL BUILDING PERMITS SHALL BE PAID FOR BY THE OWNER AND SECURED BY THE GENERAL CONTRACTOR. ALL OTHER REQUIRED PERMITS SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR OR SUBCONTRACTOR DIRECTLY RESPONSIBLE.

C11. CONTRACTOR SHALL ASSIST OWNER IN OBTAINING FINAL APPROVAL OF LOCAL HEALTH DEPARTMENT AND THE TEMPORARY AND FINAL CERTIFICATES OF OCCUPANCY.

C12. ADDITIONAL REQUIRED CITY AND COUNTY LICENSES SHALL BE ACQUIRED AND PAID FOR BY THE INDIVIDUAL TRADES.

C13. ALL CONTRACTORS SHALL HAVE VALID CERTIFICATES OF WORKMAN'S COMPENSATION OF FILE WITH THE APPROPRIATE AGENCIES.

C14. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AT ALL TIMES.

C15. CONTRACTOR'S FIELD OFFICE: PROVIDE AND MAINTAIN A FIELD OFFICE ON THE PREMISES WHERE DIRECTED. OFFICE SHALL BE OF HEAT, SUBSTANTIAL CONSTRUCTION, PROVIDE HANGING PLAN FILES AND MAINTAIN WITH ALL CURRENT DRAWINGS.

a. STORAGE STRUCTURE: PROVIDE AND MAINTAIN, WHERE DIRECTED, A WATERPROOF STORAGE STRUCTURE FOR ALL MATERIALS WHICH MIGHT BE DAMAGED BY WEATHER, INCLUDING STORAGE FACILITIES FOR CONCRETE TEST SAMPLES, OR OTHER MATERIAL SAMPLES REQUIRED FOR WORK.

b. COSTS: PAY COSTS FOR A LOCAL BUSINESS TELEPHONE FOR USE BY CONTRACTOR, OWNER AND ARCHITECT THROUGHOUT CONTRACT PERIOD.

c. COMMUNICATION EQUIPMENT: PROVIDE A TELEPHONE ON SITE, ASSIGN A RESPONSIBLE PERSON TO ANSWER ALL TELEPHONE CALLS IN EVENT THE SUPERINTENDENT IS ABSENT FROM THE PREMISES, PROVIDE APPROVED MEANS TO ESTABLISH URGENT COMMUNICATIONS (CELLULAR TELEPHONE OR PAGER).

C16. TEMPORARY FACILITIES: PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES. PROVIDE SUITABLE WASTE DISPOSAL UNITS AND EMPTY REGULARLY. DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS. PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.

C17. STORAGE AND PROTECTION: STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERPROOF, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

C18. FIELD QUALITY CONTROL: EMPLOY ONLY EXPERIENCED INSTALLERS AND FURNISH EVIDENCE OF EXPERIENCE IF REQUESTED. USE OF ANY SUBCONTRACTOR OR INSTALLER IS SUBJECT TO OWNER'S APPROVAL. EMPLOY FULL-TIME COMPETENT SUPERINTENDENT AS WELL AS NECESSARY ASSISTANTS. SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR AND ALL COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO THE CONTRACTOR.

C19. PRODUCT HANDLING: TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DELIVER PRODUCTS IN UNDAMAGED CONDITION. IN MANUFACTURER'S ORIGINAL UNOPENED CONTAINER'S OR PACKAGING, WITH IDENTIFYING LABELS INTACT AND LEGIBLE. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS OF CONTRACT DOCUMENTS, QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.

C20. COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS: HANDLE, INSTALL, ERECT, CONNECT, CONDITION, USE, ADJUST, AND CLEAN PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTION AND IN CONFORMITY WITH SPECIFIED REQUIREMENTS, INCLUDING EACH STEP IN SEQUENCE. DO NOT OMIT PREPARATORY STEPS OR INSTALLATION PROCEDURES UNLESS SPECIFICALLY MODIFIED OR EXEMPTED BY CONTRACT DOCUMENTS. SHOULD JOB CONDITIONS OR SPECIFIED REQUIREMENTS CONFLICT WITH MANUFACTURER'S INSTRUCTIONS, REQUEST CLARIFICATION IN WRITING FROM ARCHITECT BEFORE PROCEEDING. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH PROPER APPEARANCE.

C21. MANUFACTURER'S FIELD SERVICES: WHEN SPECIFIED IN INDIVIDUAL SECTIONS, REQUIRE MATERIAL OR PRODUCT SUPPLIERS OR MANUFACTURERS TO PROVIDE QUALIFIED STAFF PERSONNEL TO OBSERVE SITE CONDITIONS, CONDITIONS OF SURFACES, QUALITY OF WORKMANSHIP, AND CONDITIONS OF INSTALLATION AS APPLICABLE AND TO INITIATE ADDITIONAL INSTRUCTIONS WHEN NECESSARY.

C22. CONTRACTOR SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL WORK AND MATERIALS - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.

C23. NON-CONFORMING WORK: REMOVE AND REPLACE WORK THAT DOES NOT CONFORM TO THE CONTRACT DOCUMENTS AT NO ADDITIONAL EXPENSE TO THE OWNER.

C24. PRODUCT IDENTIFICATION: NAMEPLATES, TRADEMARKS, LOGOS, AND OTHER IDENTIFYING MARKS ON PRODUCTS ARE NOT PERMITTED ON SURFACES EXPOSED TO VIEW OR PUBLIC AREAS. INTERIOR OR EXTERIOR PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT NOT EXPOSED TO PUBLIC VIEW ARE EXEMPTED FROM FOREGOING LIMITATION. REQUIRED UL OR FM LABELS ARE ALSO EXCLUDED.

C25. PROTECTION OF ADJACENT WORK: PROVIDE TEMPORARY PROTECTION FOR ADJACENT AREAS TO PREVENT DAMAGE BY INSTALLATION OF NEW WORK OR DEMOLITION OF EXISTING CONSTRUCTION. PROMPTLY REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNER. PROTECT ADJACENT AREAS FROM CONTAMINATION BY CONSTRUCTION DUST AND PROVIDE TEMPORARY BARRICADES AS NECESSARY TO ENSURE PROTECTION OF THE PUBLIC. MAINTAIN EGRESS WITHIN AND AROUND CONSTRUCTION AREAS.

C26. DAMAGED PRODUCTS: DO NOT USE PRODUCTS IN WORK, WHICH HAVE DEGRADATED, BECOME DAMAGED, OR ARE OTHERWISE UNFIT FOR USE. RESTORE UNITS DAMAGED DURING INSTALLATION, REPLACE UNITS, WHICH CANNOT BE RESTORED AT NO ADDITIONAL EXPENSE TO THE OWNER.

C27. SECURITY: PROVIDE FACILITIES TO PROTECT WORK FROM UNAUTHORIZED ENTRY, VANDALISM, AND THEFT. CONDUCT OPERATIONS IN MANNER TO AVOID RISK OF LOSS, THEFT, OR DAMAGE BY VANDALISM.

C28. TEMPORARY CONTROLS:
 

- o. HEAT: PRIOR TO ENCLOSURE, PROVIDE HEATING AS NECESSARY TO PROTECT MATERIALS, PRODUCTS, AND FINISHES FROM DAMAGE DUE TO TEMPERATURE OR HUMIDITY. ENCLOSURE IS REQUIRED AS STATE OF CONSTRUCTION WHEN EXTERIOR WALLS ARE ERECTED, DOORS AND WINDOWS ARE INSTALLED AND GLAZED, ROOF DECK AND ROOFING ARE COMPLETE, AND WHEN OTHER OPENINGS IN EXTERIOR ENVELOPE ARE EQUIPPED WITH TEMPORARY CLOSURES EXCEPT WHERE INDICATED OTHERWISE IN INDIVIDUAL SPECIFICATION SECTIONS. MAINTAIN MINIMUM AMBIENT TEMPERATURE OF 50 DEGREES F IN AREAS WHERE CONSTRUCTION IS IN PROGRESS.

b. VENTILATION: VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPATE HUMIDITY, AND TO PREVENT ACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.

c. BARRIERS AND CLOSURES: PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATIONS.

d. FIRE PROTECTION: COMPLY WITH LOCAL FIRE PROTECTION CODE AND GOVERNING AUTHORITIES. PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION INCLUDING, WITHOUT LIMITATION, FIRE EXTINGUISHERS AND OTHER APPROPRIATE EQUIPMENT FOR FIRE EXTINGUISHING READY FOR IMMEDIATE USE. MAINTAIN ANY REQUIRED FIRE ALARM SYSTEMS IN OPERATION DURING CONSTRUCTION. DISTRIBUTE EQUIPMENT AROUND SITE AND PARTICULARLY IN IMMEDIATE VICINITY OF PERFORMANCE OF WELDING OR SIMILAR HAZARDOUS WORK.

C29. INTERRUPTION OF SERVICES: INTERRUPTIONS TO ANY SERVICE FOR THE PURPOSE OF MAKING OR BREAKING A CONNECTION SHALL BE MADE ONLY AFTER CONSULTATION WITH THE OWNER AND SHALL BE AT SUCH TIME AND OF SUCH DURATION AS MAY BE DIRECTED.

C30. EXCAVATIONS OR TRENCHING: KEEP THE INTERVALS BETWEEN EXCAVATION OR TRENCHING, INSTALLATION OF CONDUIT OR PIPING, AND BACK FILLING OPERATIONS TO AN ABSOLUTE MINIMUM. PROVIDE SUITABLE TEMPORARY COVERS FOR EXCAVATIONS OR TRENCHING CROSSING ROADWAYS, WALKS, OR OTHER TRAFFIC WAYS AS REQUIRED BY GOVERNING AGENCIES.

C31. CUTTING AND PATCHING: DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED. DECREASE FIRE PERFORMANCE, DECREASE ACUSTICAL PERFORMANCE, DECREASE ENERGY PERFORMANCE, DECREASE OPERATIONAL LIFE, OR DECREASE SAFETY FACTORS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT. CUT WITH TOOLS APPROPRIATE TO THE MATERIALS TO BE CUT. PATCH WITH MATERIALS AND METHODS TO PRODUCE PATCH THAT IS NOT VISIBLE FROM A DISTANCE OF THREE FEET.

C32. COORDINATION AND CLEARANCES: VERIFY AND COORDINATE CLEARANCES, DIMENSIONS, AND INSTALLATION OF ADJOINING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, CONDUITS, OR OTHER MECHANICAL OR ELECTRICAL ITEMS OR APPARATUS. VERIFY DIMENSIONS FOR PRODUCTS TO BE FITTED INTO WORK.

e. ATTACHMENTS AND CONNECTIONS: PROVIDE ATTACHMENT AND CONNECTION DEVICES METHODS FOR SECURING AND ANCHORING WORK. SECURE IN PLACE WITH DEVICES DESIGNATED AND SIZED TO WITHSTAND STRESSES, VIBRATION, PHYSICAL DISTORTION, OR DISBURSEMENT.

f. EXPANSION AND MOVEMENT: ALLOW FOR EXPANSION OF MATERIALS AND BUILDING MOVEMENT.

g. ISOLATION OF DISMISAL ITEMS: ISOLATE EACH UNIT OF WORK FROM INCOMPATIBLE WORK AS NECESSARY TO PREVENT DEGRADATION AND ELECTROLYTIC ACTION.

h. MAINTENANCE: CLEAN AND PERFORM MAINTENANCE ON INSTALLED WORK AS FREQUENTLY AS NECESSARY THROUGH REMAINDER OF CONSTRUCTION PERIOD. LUBRICATE OPERABLE COMPONENTS TO ENSURE OPERABILITY WITHOUT DAMAGING EFFECTS.

i. ADJUSTMENTS: ADJUST OPERATING PRODUCTS AND EQUIPMENT TO ENSURE SMOOTH AND UNHINDERED OPERATION.

C33. EXAMINATION OF CONDITIONS: EXAMINE SUBSTRATE AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT COMMENCE WORK OVER UNSATISFACTORY CONDITIONS DETERMINAL TO PROPER AND TIMELY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OR INSTALLATION CONSTITUTES ACCEPTANCE OF CONDITIONS AND COSTS OF ANY CORRECTIVE MEASURES ARE RESPONSIBILITY OF CONTRACTOR.

C34. CONTRACTOR SHALL PROVIDE BACKING SUPPORT OF ALL WALL, CEILING, AND PARTITION MOUNTED ITEMS SUCH AS TABLE BRACKETS, LIGHT FIXTURES, ARTIFACTS, SHELVING, EQUIPMENT, AND TELEVISIONS. COORDINATE LOCATIONS AND REQUIREMENTS WITH THE PLUMBING, MECHANICAL, ELECTRICAL DRAWINGS.

C35. EXTERIOR OPENINGS SHALL COMPLY WITH ALL SECURITY REQUIREMENTS AS OUTLINED IN ALL LOCAL BUILDING CODES AND ORDINANCES.

C36. GLASS AND GLAZING FOR ALL WINDOWS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES. IN ADDITION ALL WINDOWS MUST MEET THE "AAA" WINDOW STANDARDS FOR INSTALLATION. THE CONTRACTOR SHALL OBTAIN, AND SHALL FOLLOW ALL REQUIREMENTS OF THE "AAA" STANDARDS IN ADDITION TO THE MANUFACTURER SPECIFICATIONS AND ARCHITECTURAL DETAILS INCLUDED WITHIN THE DRAWINGS.

C37. ROOFING WORK SHALL BE PERFORMED AND ALL PENETRATIONS THROUGH THE ROOFING MEMBRANE SHALL BE PATCHED OR FLASHED AS PER THE MANUFACTURER'S STANDARDS.

C38. ROOF OBSTRUCTIONS SUCH AS TELEVISION ANTENNAE, SOLAR PANELS, AND GUY WIRES SHALL NOT BE LOCATED OR INSTALLED IN SUCH A WAY AS TO PREVENT FIRE DEPARTMENT ACCESS OR EGRESS IN THE EVENT OF A FIRE.

C39. INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.

C40. GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.

C41. PIPES, CONDUITS, OR DUCTS EXCEEDING ONE THIRD OF THE SLAB OR MEMBRANE THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY PERMITTED. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND STRUCTURAL DRAWINGS FOR LOCATION OF SLEEVES AND OTHER ACCESSORIES.

C42. VERIFY FIRE EXTINGUISHER REQUIREMENTS AND LOCATIONS WITH FIRE MARSHAL AND OWNER'S REPRESENTATIVE.

C43. CONTRACTOR SHALL SEAL ALL GAPS, HOLES, AND CRACKS IN BUILDING CONSTRUCTION AS REQUIRED TO CONTROL INFILTRATION OF INSECTS.

C44. DISPOSAL OF TRASH AND EXCESS EXCAVATION: DISPOSE OF TRASH AND DEBRIS AT DESIGNATED AREAS. OFF OF THE PREMISES AT NO ADDITIONAL COST TO THE OWNER. BURNING OF TRASH AND DEBRIS ON THE PREMISES IS PROHIBITED. COORDINATE TRASH REMOVAL WITH LANDFORD WHERE APPLICABLE.

C45. ELECTRICAL, MECHANICAL, AND PLUMBING SYSTEM ARE SCHEMATIC ONLY. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL WORK TO AVOID CONFLICTS BETWEEN TRADES. THE CONTRACTOR SHALL PERFORM ALL WORK TO PROVIDE COMPLETE FUNCTIONING SYSTEMS IN ACCORDANCE WITH THE INTENT INDICATED AND CODES AND REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION.

C46. CLEANING MATERIALS AND EQUIPMENT: PROVIDE ALL REQUIRED PERSONNEL, EQUIPMENT, AND MATERIALS NEEDED TO MAINTAIN THE SPECIFIED STANDARD OF CLEANLINESS. USE ONLY THE CLEANING MATERIALS AND EQUIPMENT WHICH ARE COMPATIBLE WITH THE SURFACE BEING CLEANED, AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIAL.

**SUBMITTALS/SUBSTITUTIONS**

S1. CONTRACTOR SHALL PROVIDE COMPLETE LIST OF SUBMITTALS TO ARCHITECT/OWNER WITHIN 1 WEEK OF OBTAINING BUILDING PERMIT.

S2. ALL SUBMITTALS SHALL BE COMPLETE AND SUBMITTED WITHIN FIRST 90 DAYS OF WORK.

S3. ALL ITEMS NOTED AS DESIGNATED "BY MANUFACTURER" IS A DEFERRED DESIGN AND SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH MANUFACTURER FOR FINAL DESIGN AND SUBMIT FINAL DESIGN FOR APPROVAL. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL FIELD DIMENSIONS.

S4. SOURCE QUALITY CONTROL: PROVIDE PRODUCTS OF ACCEPTABLE MANUFACTURERS, WHICH HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR THREE YEARS. LISTENERS MOST STRINGENT CRITERIA ARE SPECIFIED IN INDIVIDUAL SECTIONS. USE OF ANY SUPPLIER IS SUBJECT TO OWNER'S APPROVAL.

S5. SUBSTITUTIONS: PROPOSALS FOR SUBSTITUTION OF MATERIALS, EQUIPMENT, AND METHODS WILL ONLY BE CONSIDERED WHEN ACCOMPANIED BY FULL AND COMPLETE TECHNICAL DATA AS WELL AS ANY OTHER INFORMATION REQUIRED TO EVALUATE THE PROPOSED SUBSTITUTION. SUBSTITUTIONS ARE UNACCEPTABLE UNLESS SPECIFICALLY APPROVED BY THE ARCHITECT. IN THE EVENT OF SUBSTITUTION PROPOSALS AFTER THE CONTRACT HAS BEEN AWARDED, ALL SUCH PROPOSALS SHALL BE ACCOMPANIED BY SUBSTANTIAL COST SAVINGS FOR THE OWNER.

S6. AVAILABILITY OF PRODUCTS: VERIFY PRIOR TO CONSTRUCTION START THAT ALL SPECIFIED ITEMS WILL BE AVAILABLE IN TIME FOR INSTALLATION DURING OBSERVY AND TIMELY PROGRESS OF THE WORK. IN THE EVENT SPECIFIED ITEM OR ITEMS WILL NOT BE SO AVAILABLE, NOTIFY THE ARCHITECT PRIOR TO START OF CONSTRUCTION. COST OF DELAYS BECAUSE OF NON-AVAILABILITY OF SPECIFIED ITEMS OR SUBSTITUTED ITEMS, WHEN THE CONTRACTOR COULD HAVE AVOIDED SUCH DELAYS, WILL BE BORNE BY THE CONTRACTOR.

S7. PRODUCTS AND MATERIALS: PROVIDE PRODUCTS AND MATERIALS SPECIFIED. REQUEST ARCHITECT'S SELECTION OF COLORS AND ACCESSORIES IN SUFFICIENT TIME TO AVOID DELAYING PROGRESS OF THE WORK.

**TOLERANCES**

T1. TOLERANCES: INSTALL WORK TRUE TO LINE, PLUMB, AND LEVEL, EXCEPT WHERE SPECIFIED OTHERWISE. WORK EXECUTED WITHIN THE FOLLOWING TOLERANCE WILL BE ACCEPTABLE.

a. TRUE TO LINE: ALLOWED DEVIATION FROM AN ABSOLUTELY STRAIGHT LINE OF SIGHT WITHIN PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.

b. PLUMB: ALLOWED DEVIATIONS FROM AN ABSOLUTELY VERTICAL PLANE OF PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.

c. LEVEL: ALLOWED DEVIATIONS FROM AN ABSOLUTELY HORIZONTAL PLANE OF PLUS OR MINUS 1/8 INCH IN 10 FT. AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE LENGTH OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.

d. ALLOWED DEVIATIONS FROM AN ABSOLUTELY FLAT IF WITHIN PLUS OR MINUS 1/16 INCH IN ONE SQUARE FOOT, WITHIN PLUS OR MINUS 1/8 INCH IN AN AREA 10 FEET BY 10 FEET, AND WITHIN PLUS OR MINUS 1/4 INCH FOR ENTIRE AREA OF A PARTICULAR ELEMENT OF CONSTRUCTION OVER 20'-0" IN LENGTH.

T2. REFER TO SPECIFICATIONS FOR ADDITIONAL TOLERANCE REQUIREMENTS.

**PROJECT CONTRACT CLOSURE:**

a. SUBSTANTIAL COMPLETION: AT SUBSTANTIAL COMPLETION OF THE PROJECT, SCHEDULE AND ATTEND A PUNCH LIST WALK THROUGH OF REMAINING WORK FOR REVIEW WITH THE ARCHITECT AND OWNER. COMPLETE ALL DEFECTS AND OMISSIONS NOTED IN THE FINAL PUNCH LIST PROMPTLY, IN THE TIME PERIOD AGREED UPON WITH THE OWNER, AT NO ADDITIONAL EXPENSE TO THE OWNER.

b. CERTIFICATE OF OCCUPANCY: PROVIDE THE FINAL CERTIFICATE OF OCCUPANCY FROM THE BUILDING DEPARTMENT.

c. PERMITS/INSPECTION CARDS: FURNISH COPIES OF PERMITS AND SIGNED INSPECTION CARDS FOR EACH OF THE FOLLOWING AGENCIES: BUILDING DEPARTMENT; PLUMBING/MECHANICAL DEPARTMENT; ELECTRICAL DEPARTMENT; FIRE DEPARTMENT; HEALTH DEPARTMENT; OTHERS AS REQUIRED.

d. FURNISH COPIES OF PERMITS AND SIGNED INSPECTION CARDS FOR EACH OF THE FOLLOWING AGENCIES: BUILDING DEPARTMENT; PLUMBING/MECHANICAL DEPARTMENT; ELECTRICAL DEPARTMENT; FIRE DEPARTMENT; HEALTH DEPARTMENT; OTHERS AS REQUIRED.

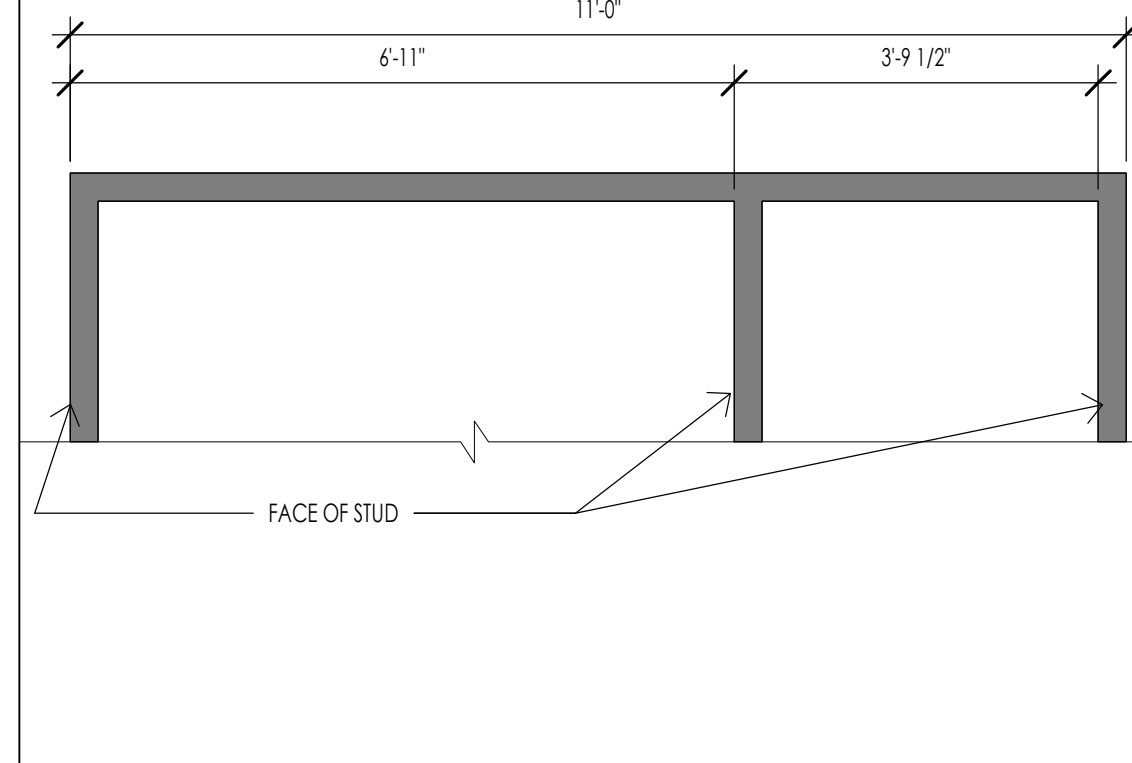
e. MAINTENANCE MANUALS AND WARRANTIES: FURNISH (2) COPIES FOR EACH UNIT OF ALL MANUALS, MAINTENANCE INSTRUCTIONS, CONTRACTORS AND MANUFACTURER'S PRINTED WARRANTIES, AND INSTRUCTIONS FOR OPERATION OF ALL EQUIPMENT SPECIFIED HEREIN OR SHOWN ON DRAWINGS, TRAIN OWNER'S PERSONNEL IN USE OF BUILDING SYSTEMS.

f. TOUCH UP MATERIAL: FURNISH OWNER WITH ONE GALLON OF EACH PAINT AND STAIN USED PER UNIT. PROVIDE AN ADDITIONAL 2 PERCENT OF QUANTITY INSTALLED OF ALL FINISH MATERIAL INCLUDING CEILING PANELS, TILE, AND SHEET GOODS.

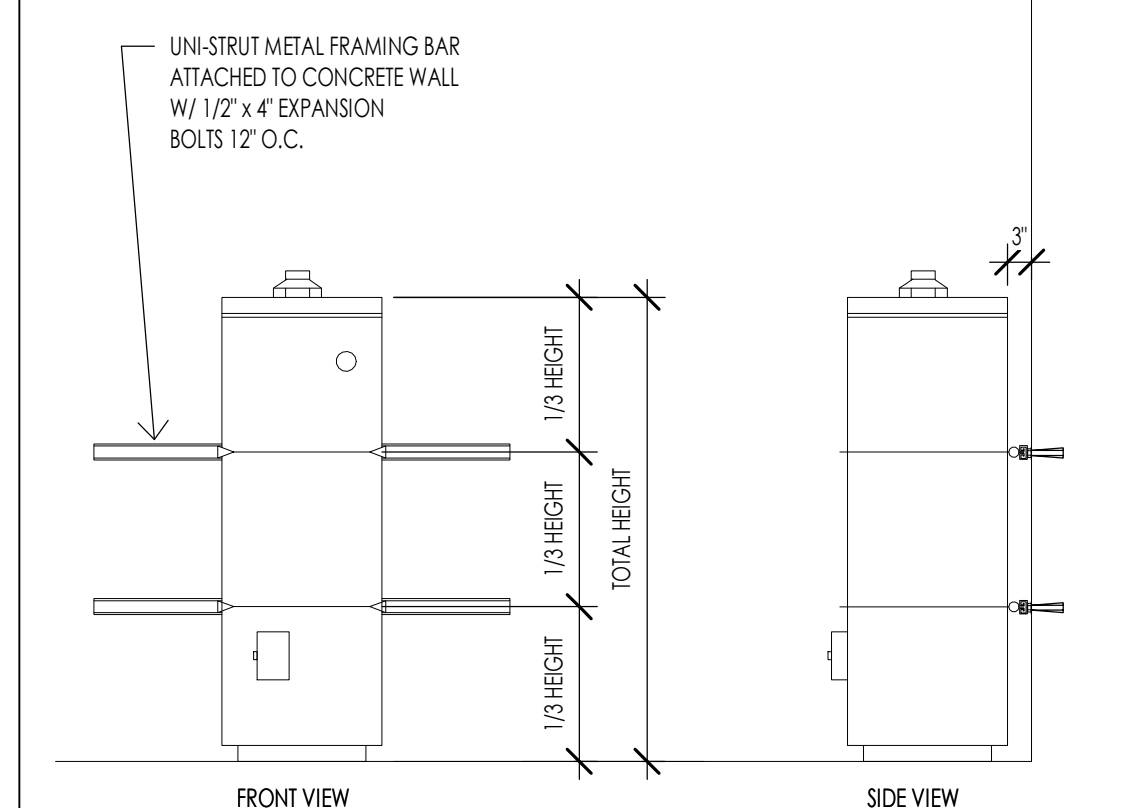
g. SUBCONTRACTORS: PROVIDE THE OWNER THE NAMES, ADDRESSES, AND PHONE NUMBERS OF ALL SUBCONTRACTORS, FINAL UNCONDITIONAL LETS, RELEASES, AND WARRANTIES FROM EACH.

h. FINAL CLEANING AND REPAIRS: REMOVE TEMPORARY FACILITIES AND PROVIDE FINAL CLEANING AND TOUCH UP. RESTORE PORTIONS OF BUILDING, SITE IMPROVEMENTS, LANDSCAPING AND OTHER ITEMS DAMAGED BY CONSTRUCTION OPERATIONS TO THE SATISFACTION OF THE ARCHITECT. AT NO ADDITIONAL EXPENSE TO THE OWNER.

i. CLOSEOUT DOCUMENTS: PROVIDE THE OWNER WITH A COMPACT DISK OF ALL RECORD DRAWINGS IN PDF FORMAT. COPY OF ALL SHOP DRAWINGS AND PRODUCT SUBMITTALS, SERVICE CONTRACTS, HVAC AIR BALANCE REPORT, AND WASTELINE VIDEO INSPECTION REPORT.



**TYPICAL DIMENSION METHOD**  
1/2" = 1'-0" G002



**WATER HEATER SEISMIC STRAPPING**  
1/2" = 1'-0" G002

**INSULATION SCHEDULE**

**ENERGY STRATEGY:**  
**PRESCRIPTIVE PER IBC**  **RESCHECK - 2015 IECC**

LOCATION	TYPE	THICKNESS	"R" VALUE	REMARKS
1. FOUNDATION WALLS AND SLAB ON GRADE	CONTINUOUS RIGID	2" TOTAL THICKNESS - 2 BELOW GRADE CONTINUOUS BELOW SLAB	R-14	OWNER REQUEST: FORMALRUB CW15 CW16 PLUS INSULATION GLUED TO INSIDE OF FOUNDATION WALL OR CAST IN PLACE BELOW SLAB
2. WALL INSULATION EXTERIOR - WOOD FRAMED WALLS	BLOW-IN	5 1/2" TOTAL THICKNESS	R-23.1	JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
3. WALL INSULATION EXTERIOR - CONCRETE WALLS FURRED OUT WITH WOOD FRAMED WALLS	BLOW-IN	5 1/2" TOTAL THICKNESS 3 1/2" TOTAL THICKNESS	R-23.1 R-14.7	JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
4. FLOORS (JOISTS/FRAMING)	BLOW-IN	10"	R-42	JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
5. ROOFING: VENT BAFFLES	BLOW DECK	1" - TOTAL THICKNESS		FLAME RETARDANT PVC. EXTEND A MINIMUM OF 48" ABOVE EAVES
6. ROOFING: AT EAVES	FOAM-IN-PLACE	1" - TOTAL THICKNESS	R-6.8	JOHNS MANVILLE CORBOND® MCS CLOSED-CELL SPRAY FOAM INSULATION
7. ROOFING: AT TRUSSES	BLOW-IN	DEPTH REQUIRED TO MEET R-VALUE	R-50	JOHNS MANVILLE CLIMATE PROB FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
9. RESTROOMS, BATHROOMS AND COMMON SPACES	BLOW-IN (FOR SOUND)	FILL CAVITIES		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
10. AT STUD CAVITIES WITH ROOF DRAINS OR PLUMBING STACKS, UNITS AT INTERIOR WALLS, UNITS SPACES AND COMMON SPACES	SOUND BATS	FILL VOIDS		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
11. MECHANICAL TYPE ROOM WALLS AND CEILINGS WHERE APPLICABLE	SOUND BATS	FILL CAVITY		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
12. INTERIOR FLOORS - SOUND RATING REQUIRED	SOUND BATS	FILL CAVITY		JOHNS MANVILLE SPIDERB PLUS FORMALDEHYDE-FREE™ BLOW-IN FIBERGLASS INSULATION
13. DUCTWORK/PLUMBING LINES	DBL FACED 1/2" VINYL FACED			SEE MECHANICAL AND PLUMBING - FOR ALL INSULATION REQUIREMENTS
14. GLAZING - NFRC THERMAL RATINGS	DOUBLE PANE	LOW-E	MAX U-FACTOR: 0.32 MAX SHGC: 0.16	ALUMINUM CLAD WOOD

**INSULATION NOTES:**

- COORDINATE WITH PROJECT SPECIFICATION SECTIONS FOR INSULATION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- ALL INSULATION SHALL BE TIGHT, AND NO GAPS SHALL BE LEFT.
- ALL INSULATION AT PIPES SHALL BE INSTALLED AT WARM SIDE ONLY.

**PROVIDE SEALING OF THE BUILDING THERMAL ENVELOPE FOR LEAKAGE BY THE REQUIREMENTS BELOW:**

- BLOWER DOOR TEST FOR BUILDING ENVELOPE Airtightness shall be performed in accordance with the requirements of ASHRAE 91.2-2019. Airtightness shall be measured in units of ACH50. The test shall be conducted by the party conducting the test and provided to the code official. Airtightness shall be performed with "AEROBARRIER" ENVELOPE SEALING TECHNOLOGY.
- TO BE PERFORMED AFTER DRYWALL INSTALLATION AND MUDD AND TAPE.
- CONTRACTOR TO VERIFY NO WALL OPENINGS GREATER THAN 1/2" PRIOR TO INSTALLATION OF ENVELOPE SEALING.

**RESCHECK/ ENERGY COM CHECK**

**Envelope Assemblies**

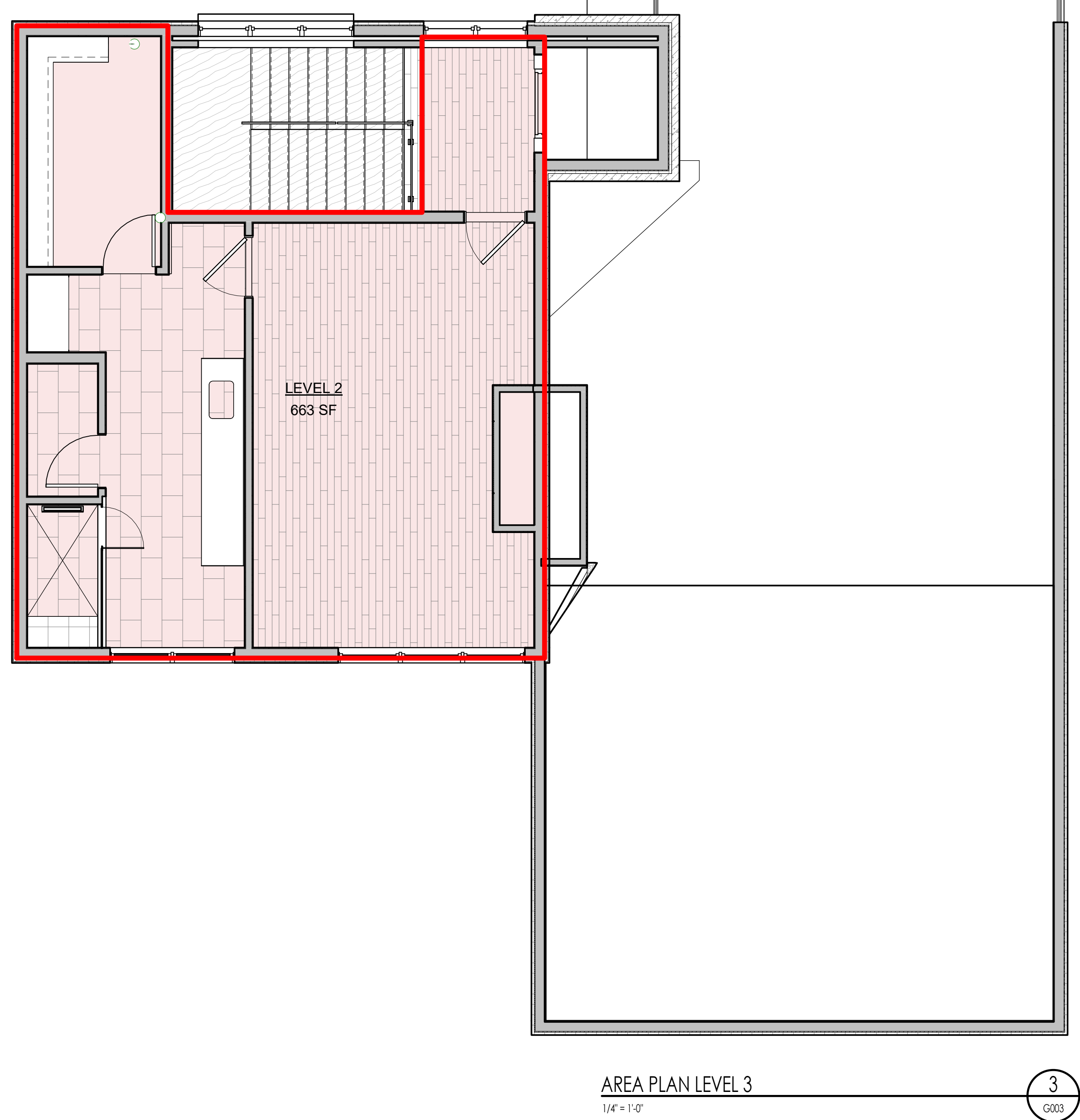
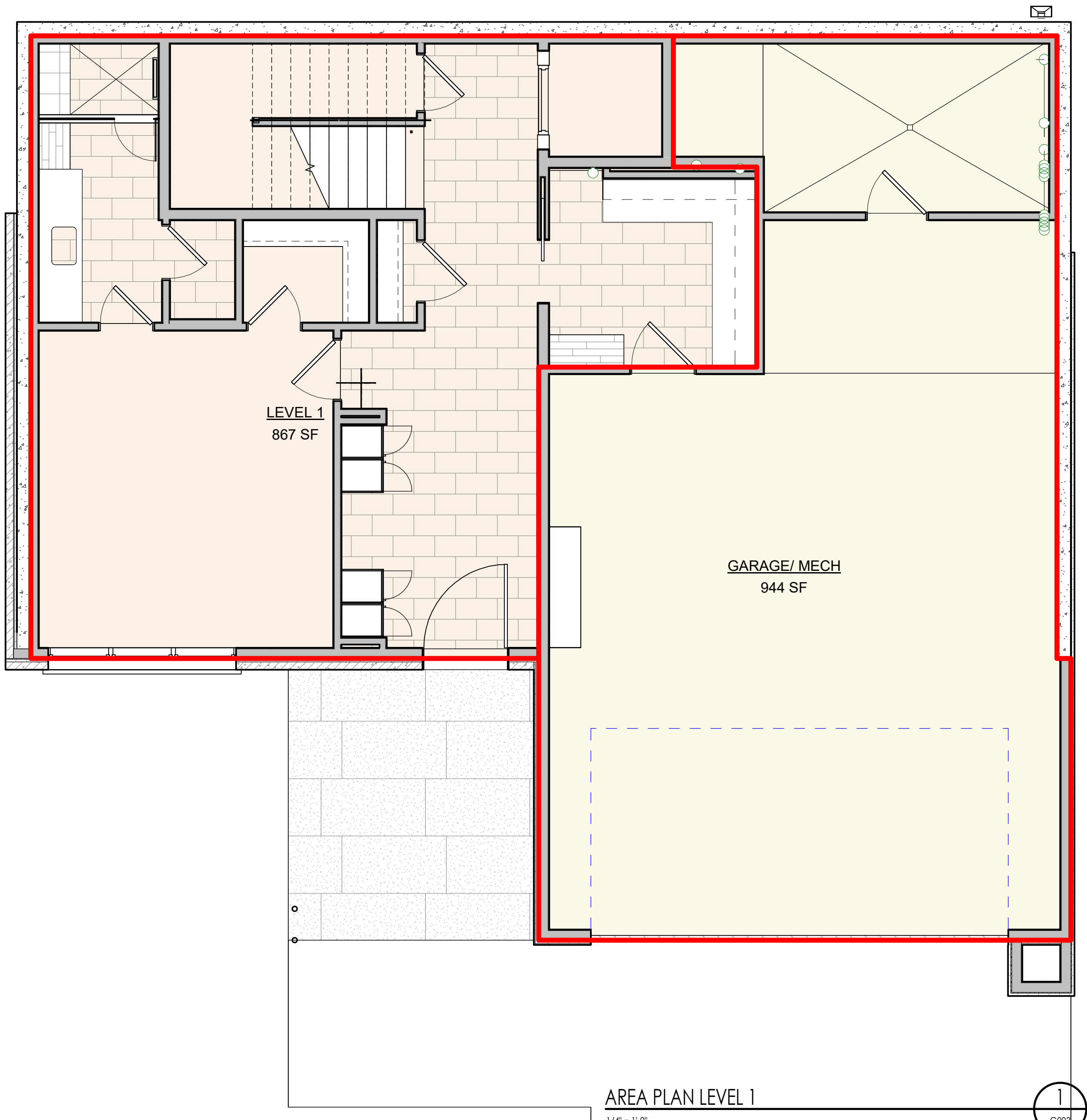
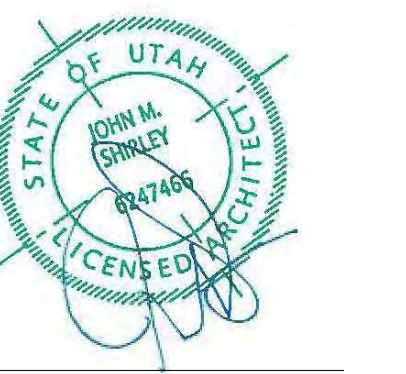
Assembly	Green Area Perimeter	Cavity R-Value	Cont. R-Value	Prop. U-Factor	Req. U-Factor	Prop. UA	Req. UA
Slab on grade: Slab-On-Grade/Insulated (Insulation depth: 4.0")	189	14.0	0.858	0.033	0.1	0	0
Floor over Garage: 18" Wood joist/Floor/Insulation (Insulation depth: 15.0")	638	30.					



Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
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BUILDING AREA - FINISHED	
AREA	FINISHED
LEVEL 1	867 SF
LEVEL 2	1514 SF
LEVEL 2	663 SF
	3043 SF
BUILDING AREA - UNFINISHED	
AREA	UNFINISHED
GARAGE/MECH	944 SF
	944 SF
BUILDING AREA - TOTAL	
TOTAL	3988 SF

WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

SHEET TITLE:  
BUILDING AREA  
ANALYSIS

SHEET NUMBER:  
G003

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PERMIT SET



## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 5 METALS

#### 05-01 STRUCTURAL STEEL WIDE BEAMS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL BEAMS (ASTM A 572/A 572M, GRADE 50)

##### SUBMITTALS

SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS, INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, BOLTS, NUTS, AND WASHERS. ASTM A325, HEAVY HEX STEEL STRUCTURAL BOLTS; ASTM A563 HEAVY HEX CARBON STEEL NUTS; AND ASTM F436 HARDENED CARBON-STEEL WASHERS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

##### EXECUTION

ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED SSPC-Paint 25, TYPE 1, COLOR OF EXPOSED STEEL TO BE: BENJAMIN MOORE-SATIN HC-167, "AMHERST GRAY".

PROVIDE BEAMS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

CONTRACTOR WILL ENGAGE AN INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM SHOP TESTS AND INSPECTIONS AND PREPARE TEST REPORTS. VERIFY ELEVATIONS OF CONCRETE, AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. CAMBER STRUCTURAL STEEL MEMBERS WHERE INDICATED. ALL MEMBERS SHALL BE LEVEL, AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESS. REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-02, 05-03, 05-04 STRUCTURAL STEEL COLUMNS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL COLUMNS: TUBE, PIPE, WIDE FLANGE, AS NOTED ON STRUCTURAL DRAWINGS.

ARCHITECTURALLY EXPOSED STRUCTURAL STEEL

##### SUBMITTALS

SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, DISTINGUISHING BETWEEN SHOP AND FIELD BOLTS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

##### EXECUTION

ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

1. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, B-73-620 Series, at 3.0 to 10.0 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.  
B. COLOR: BENJAMIN MOORE-SATIN HC-167, "AMHERST GRAY".

PROVIDE COLUMNS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

CONTRACTOR WILL ENGAGE AN INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM SHOP TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

VERIFY ELEVATIONS OF CONCRETE, AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, THEN PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL, AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

ALL STEEL COLUMNS IN WALLS SHALL RECEIVE 1/2" DIAMETER THREADED BOLTS WELDED TO THE COLUMN AT 2'-0" O.C. VERTICAL. STUD WALLS SHALL START AND STOP AT COLUMN AND BOLT TO COLUMN. BOLTS SHALL EXTEND THROUGH TWO STUDS MINIMUM AT ALL LOCATIONS EXCEPT AT WINDOWS AT EXTERIOR WALL. BOLTS MAY EXTEND THROUGH ONE STUD.

#### 05-06 STRUCTURAL STEEL CHANNELS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL CHANNELS (ASTM A 572/A 572M, GRADE 50)

##### SUBMITTALS

SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

##### EXECUTION

ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

1. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, B-73-620 Series, at 3.0 to 10.0 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.  
B. COLOR: BENJAMIN MOORE-SATIN HC-167, "AMHERST GRAY".

PROVIDE CHANNELS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

VERIFY ELEVATIONS OF CONCRETE, AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL, AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESS.

REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-08 STRUCTURAL STEEL ANGLE LITTELS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL LITTELS

##### SUBMITTALS

SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS, INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

##### EXECUTION

ALL STEEL LITTELS TO BE HOT-DIPPED GALVANIZED. WHEN PART OF THE LEG IS EXPOSED TO VIEW DUPLEX COAT LINEAL OVER THE GALVANIZING-PRIME LITTEL. PRIOR TO DELIVERY TO SITE, EXPOSED STEEL SHALL BE FINISHED SSPC-Paint 25, TYPE 1, COLOR OF EXPOSED STEEL TO BE: BENJAMIN MOORE-SATIN HC-167, "AMHERST GRAY" OR AS SELECTED BY ARCHITECT.

PROVIDE LITTELS OF SIZES AND SHAPES INDICATED.

VERIFY ELEVATIONS OF CONCRETE, AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL, AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESS. REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-10 ANCHOR BOLTS

**GENERAL PRODUCTS**  
ANCHOR BOLTS AS SHOWN ON STRUCTURAL DRAWINGS.

##### EXECUTION

ANCHOR BOLTS SHALL BE PLACED FOR 5" MINIMUM EMBEDMENT COVERAGE OR AS PER STRUCTURAL DRAWINGS (MOST STRINGENT CONDITIONS APPLY).

ANCHOR BOLTS SHALL BE MINIMUM OF 3/4" DIA. A307 TYPE BOLTS.

#### 05-11 EXPANSION ANCHORS

**GENERAL PRODUCTS**  
EXPANSION AS SHOWN ON STRUCTURAL DRAWINGS.

##### EXECUTION

EXPANSION ANCHORS SHALL BE PLACED FOR 5" MINIMUM EMBEDMENT COVERAGE OR AS PER STRUCTURAL DRAWINGS (MOST STRINGENT CONDITIONS APPLY).

ANCHOR BOLTS SHALL BE MINIMUM OF 3/4" DIA. A307 TYPE BOLTS.

#### 05-18 STEEL GUARDRAILS & HAND RAILINGS

**GENERAL PRODUCTS**  
STEEL AND ORNAMENTAL RAILINGS AS SHOWN ON DRAWINGS AND DETAILS.

STEEL AND ORNAMENTAL RAILINGS FINISH SHALL BE:

- A. Epoxy-Modified Latex System:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy-modified latex, interior, glass matching topcoat.
  - 3) Topcoat: Epoxy-modified latex, exterior, eggshell, (Gloss Level 3), MPI #254MPI #254-Green; S Pro Industrial Waterbased Catalyzed Epoxy Eggshell, B75-300 Series, at 2.0 to 4.0 mils dry, per coat.
- B. COLOR: BENJAMIN MOORE-SATIN HC-167, "AMHERST GRAY" OR AS SELECTED BY INTERIOR DESIGNER.

BRACKETS, FLANGES, AND ANCHORS: SAME METAL AND FINISH AS SUPPORTED RAILS UNLESS OTHERWISE INDICATED.

TOP CAP TO BE INTERIOR: CONTINUOUS WOOD RAIL CAP WITH WOOD TO MATCH THAT OF WOOD FLOOR, FINISHED AS SELECTED BY INTERIOR DESIGNER.  
EXTERIOR: CONTINUOUS COMPOSITE "TRUGRAIN" RAIL CAP. SEE DETAIL FOR SIZE. FINISHED AS SELECTED BY ARCHITECT.

HANDRAILS AND GUARDRAILS SHALL MEET FOLLOWING DESIGN LOADS:  
UNIFORM LOAD OF 50 LBF/ FT. APPLIED IN ANY DIRECTION.  
CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

TOP RAILS OF GUARDS:  
UNIFORM LOAD OF 50 LBF/ FT. APPLIED IN ANY DIRECTION.  
CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

INFILL OF GUARDS:  
CONCENTRATED LOAD OF 50 LBS APPLIED HORIZ. ON AN AREA OF 1 SQ. FT.  
UNIFORM LOAD OF 25 LBF/SQ. FT. APPLIED HORIZONTALLY.

##### SUBMITTALS

FOR RAILINGS ASSEMBLED FROM STANDARD COMPONENTS, GROUT, ANCHORING CEMENT, AND PAINT PRODUCTS.

SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

SAMPLES: FOR EACH EXPOSED FINISH REQUIRED.

##### EXECUTION

HANDRAILS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R317.1.7:

A. HANDRAILS SHALL BE MOUNTED A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE THE NOSING OF THE TREAD AND SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS WITH FOUR OR MORE RISERS FROM DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEVEL POSTS, VOLUTES, TURNOUT OR STARTING FINISHING SHALL BE ALLOWED OVER THE LOWEST TREAD.

B. ALL REQUIRED HANDRAILS SHALL BE ONE OF THE FOLLOWING TYPES OF PROVIDE EQUIVALENT GRASPABILITY:

1. TYPE I. HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/4 INCHES (32 MM) AND NOT GREATER THAN 2 INCHES (51 MM). IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 4 INCHES (102 MM) AND NOT GREATER THAN 6 1/4 INCHES (160 MM) WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 2 INCHES (51 MM). EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

2. TYPE II. HANDRAILS WITH A PERIMETER GREATER THAN 6 1/4 INCHES (160 MM) SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4 INCH (19 MM) MEASURED VERTICALLY FROM THE PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 5/16 INCH (8 MM) WITH 7/8 INCH (22 MM) BELOW THE WIDEST PORTION OF THE PROFILE. THE REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/8 INCH (10 MM) TO A LEVEL THAT IS NOT LESS THAN 1/4 INCHES (6.5 MM) BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1 1/4 INCHES (32 MM) TO A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

C. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.

#### 05-37 MISC. METAL FABRICATIONS

**GENERAL PRODUCTS**  
STEEL FABRICATIONS AS NOTED IN THE DRAWINGS AND AS FOLLOWS:

1. CHIMNEY COVER CHASE. FINISH AS NOTE #1 BELOW.
2. STEEL STAIR ELEMENTS. FINISH AS NOTE #1 BELOW.

##### SUBMITTALS

SHOP DRAWINGS: SHOW FABRICATION OF STEEL FABRICATIONS.

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, BOLTS, NUTS, AND WASHERS. ASTM A 325, HEAVY HEX STEEL STRUCTURAL BOLTS; ASTM A 563 HEAVY HEX CARBON-STEEL NUTS; AND ASTM F 436 HARDENED CARBON-STEEL WASHERS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

##### EXECUTION

FINISH: NOTE #1: PRIMED. PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

- A. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, B-73-620 Series, at 3.0 to 10.0 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.  
B. COLOR: BENJAMIN MOORE-SATIN HC-167, "AMHERST GRAY".

NOTE#2: PROVIDE DUPLEX COATING OF HOT-DIPPED GALVANIZED AND COAT THE EXTERIOR SURFACE EXPOSED TO VIEW AS FOLLOWS:

- A. Water-based Light Industrial Coating System:
  - 1) Prime Coat: Primer, water-based, anti-corrosive for metal, MPI # 107; S-W Pro Industrial Pro-Cyl Universal Primer, B66-310 Series, 5.0 to 10.0 mils wet, 2.0 to 4.0 mils dry.
  - 2) Prime Coat: Shop primer specified in section where substrate is specified.
  - 3) Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
  - 4) Topcoat: Light industrial coating, exterior, water based, semi-gloss, (Gloss Level 5), MPI # 163-S/W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series, at 2.5 to 4.0 mils dry, per coat.

PROVIDE FABRICATIONS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

VERIFY ELEVATIONS OF CONCRETE, AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL, AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESS.

REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPPDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-55 CUSTOM STEEL STAIRS

**GENERAL PRODUCTS**  
STAIR COMPONENTS AS FOLLOWS:

- STRINGERS 3" X 3" WOOD TREADS AS PER DETAILS.
- TREADS OPEN RISER THAT DOES NOT EXCEED 4".

##### SUBMITTALS

SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

##### EXECUTION

PROVIDE COMPLETE STAIR ASSEMBLIES, INCLUDING METAL FRAMING, HANGERS, STRUTS, RAILINGS, CLIPS, BRACKETS, BEARING PLATES, AND OTHER COMPONENTS NECESSARY TO JOIN AND ANCHOR STAIRS AND FINISHES ON SUPPORTING STRUCTURE. BOLTS SHALL BE FABRICATED AND 5/16" DIA BOLTS ARE NOT EXPOSED ON EXPOSED SURFACES.

METAL SURFACES: GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES WITHOUT BLEMISHES.

FINISH: FACTORY PRIMED FOR A HIGH-PERFORMANCE COATING WITH COLOR AS SELECTED BY ARCHITECT.

PROVIDE METAL STAIRS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED: UNIFORM LOAD: 100 LBF/SQ. FT. CONCENTRATED LOAD: 300 LBF APPLIED ON AN AREA OF 4 SQ. IN.

LIMIT DEFLECTION OF TREADS, PLATFORMS, AND FRAMING MEMBERS 1/8 INCH.

STRUCTURAL PERFORMANCE OF RAILINGS: PROVIDE RAILINGS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED.

PROVIDE A MINIMUM OF 7'-6" HEAD CLEARANCE AT ALL POINTS.

#### DIVISION 6-WOOD, PLASTICS & COMPOSITES

#### 06-01, 06-02, 06-03, 06-04, 06-05, 06-06 STUD WALL ROUGH FRAMING

**GENERAL PRODUCTS**  
TIMBER BEAMS/COLUMNS/TRUSSES/ROOF PURLINS/JAUNCHES AS SHOWN ON ARCHITECTURAL/STRUCTURAL DRAWINGS AND DETAILS.

COLOR: STAINED WITH SHERMA WILLIAMS SEMI-TRANSPARENT "HAWTHORNE"

SHOP DRAWINGS: ALL TIMBER JOISTS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.

##### EXECUTION

CONTRACTOR/GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS PRIOR TO FABRICATION OF TIMBERS. COORDINATE WITH ARCHITECTURAL/STRUCTURAL DRAWINGS FOR CONNECTIONS AT EACH MEMBER.

ALL JOINTS SHALL BE TRUE AND SQUARE WITH TOLERANCES OF LESS THAN 1/8" WITHIN JOINT.

WOOD USED IN CONSTRUCTION OF PERMANENT STRUCTURES AND LOCATED NEARER THAN 6 INCHES TO EARTH SHALL BE TREATED WOOD OR WOOD OF NATURAL RESISTANCE TO DECAY. AS DEFINED IN I.R.C., WHERE LOCATED ON CONCRETE SLABS PLACED ON EARTH, WOOD SHALL BE TREATED WOOD OR WOOD OF NATURAL RESISTANCE TO DECAY. (I.R.C. R319.1.1)

FOUNDATION PLATES OR SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB, WHICH IS IN DIRECT CONTACT WITH EARTH, AND SILLS WHICH REST ON CONCRETE OR MASONRY FOUNDATIONS, SHALL BE TREATED WOOD OR FOUNDATION REDWOOD, ALL MARKED OR BRANDED BY AN APPROVED AGENCY. (I.R.C. R323.1 [2 & 3]) WHERE NOT SUBJECT TO WATER SPASH OR TO EXTERIOR MOISTURE AND LOCATED ON CONCRETE HAVING A MINIMUM THICKNESS OF 3 INCHES WITH AN IMPERVIOUS MEMBRANE INSTALLED BETWEEN CONCRETE AND WOOD, THE WOOD MAY BE UNTREATED AND OF ANY SPECIES.

UNTREATED AND OF ANY SPECIES OR EXTERIOR MOISTURE AND LOCATED ON CONCRETE FOUNDATION WALLS AND SLABS.

PROVIDE FIRE BLOCKING AT MID SPAN AT ALL BEARING WALLS, AND PROVIDE FIRE BLOCKING AT ALL SPACES @ 10'-0" O.C.

HOLD WOOD FRAMING AWAY FROM CONCRETE FOUNDATION WALL 1/2 INCH.

PROVIDE SOLID BLOCKING AT MID SPAN FOR ANY STUD EXCEEDING 10'-0" IN HEIGHT.

BRACE ALL EXTERIOR WALLS AND CROSS STUD PARTITIONS AS PER IRC R602 AND STRUCTURAL ENGINEERING AT EACH END OF THE BUILDING AND AT LEAST EVERY 25'-0" OF LENGTH BY ONE OF THE FOLLOWING.

A. APPROVED STRUCTURAL SHEATHING OF A MINIMUM THICKNESS OF 7/16". COORDINATE WITH SHEAR WALL SCHEDULE.

B. FOR ADDITIONAL BRACED WALL PANEL CONSTRUCTION OPTIONS, EXCEPTIONS AND RESTRICTIONS SEE I.R.C SECTION R602.10. COORDINATE W/ STRUCTURAL FOR SEISMIC AND ANY SPECIAL REQUIREMENTS.

C. BRACED WALL LINE SILLS SHALL HAVE PLATE WASHERS A MINIMUM OF 3/16" BY 3" X 3" (IRC R602)

TOLERANCE CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL FRAMING OF WALLS WITH THE FOLLOWING TOLERANCES. CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ALL FRAMING THAT DO NOT MEET THE REQUIRED TOLERANCES SPECIFIED BELOW:

1. ALL WALLS SHALL BE STRAIGHT, AND SHALL NOT HAVE GREATER THAN 1/4" ANY BOW, DEFLECTION, IN 10'-0" LENGTH OF WALL.

2. ALL WALLS SHALL BE VERTICAL PLUMB, AND SHALL NOT EXCEED 1/4" FOR EACH 10'-0" VERTICAL SECTION OR STORY OF WALL.

3. ALL HORIZONTAL SLOPE, WINDOW HEAD SHALL BE LEVEL, AND SHALL NOT EXCEED 1/8" VARIATION WITHIN 10'-0" LENGTH.

#### 06-07, 06-08, 06-09 WOOD BLOCKING/FIREBLOCKING

**GENERAL PRODUCTS**  
FIRE BLOCKING SHALL BE CONSTRUCTED OF 2" NOMINAL LUMBER OR (2) THICKNESS OF 1" NOMINAL LUMBER WITH BROKEN LAP JOINTS (R302.1.1) OR OTHER MATERIALS APPROVED OR TESTED, INSTALLED PER R302.1.1. FIRE BLOCKING SHALL BE PROVIDED AT LOCATIONS AS PER IRC.

##### EXECUTION

FIRE BLOCKING SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS, CONTRACTOR SHALL COORDINATE THESE LOCATIONS:

A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FINISHED SPACE, AT THE CEILING AND FLOOR LEVELS AND AT 16'FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL. (IRC 302.11 [1])

B. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS AND COVE CEILINGS. (IRC 302.11 [2])

C. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS, ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED. (IRC 302.11 [3] AND IRC 302.7)

D. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, PREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NON COMBUSTIBLE MATERIALS. (IRC 302.11 [4])

E. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS. (IRC 302.11 [5])

F. WHERE WOOD SLEEPERS ARE USED FOR LAYING WOOD FLOORING ON MASONRY OR CONCRETE FIRE-RESISTIVE FLOORS, THE SPACE BETWEEN THE FLOOR S&B AND THE UNDERSIDE OF THE WOOD FLOORING SHALL



## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 7-THERMAL AND MOISTURE PROTECTION

#### 07-45, 07-46, 07-47, 07-49, 07-50, 07-51, 07-52, 07-53, 07-54 THERMAL INSULATION

**GENERAL PRODUCTS**  
SEE INSULATION SCHEDULE BELOW FOR LOCATION AND INSULATION REQUIREMENT

A PERMANENT CERTIFICATE SHALL BE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL LISTING THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON THE CEILING/ROOF, WALLS, FOUNDATION SLAB, BASEMENT WALLS, CRAWL SPACE WALLS AND/OR FLOOR, AND THE DUCTS OUTSIDE THE CONDITIONED SPACE. U-FACTORS OF THE WINDOWS, THE TYPE OF HEATING AND EFFICIENCY OF HEATING AND WATER HEATING EQUIPMENT SHALL ALSO BE LISTED. (I.R.C. N1101.8)

LOCATION	TYPE	THICKNESS	R-VALUE
SLAB ON GRADE	FOAM-IN-PLACE	2"	R-10

INSTALL UNDER HEATED SLAB ON GRADE LOCATIONS. OWENS CORNING FORMULA 250

PERIMETER OF FOUNDATION	RIGID	F'	R-10
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INSTALL ON INSIDE FACE OF EXTERIOR FOUNDATION FROM TOP OF FOOTING TO BOTTOM OF CONCRETE SLAB AT LIVING SPACE. BURIED - OWENS CORNING FORMULA 250

FLOOR INSULATION	UNFACED BATS	VERIFY	R-30
FLOOR OVER UNHEATED BASEMENT	BLOWN-IN		R-30

FLOOR UNDER RADIANT HEAT	BLOWN-IN	12"	R-38
FLOOR OVER OUTSIDE OR UNHEATED AIR	BLOWN-IN	12"	R-38

WALL INSULATION AT EXTERIOR FRAMED WALLS	BLOWN-IN	5 1/2"	R-22.5
2X WOOD EXTERIOR WALLS (BLOWN TO BE CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)			
2 X 4 WOOD FURRED-EXTERIOR WALLS CLOSED-CELL FOAM (CERTAINEED Certastoplay with 22 pcf and R-value of 4.5 per inch)		3 1/2"	R-22.75

ROOF INSULATION	ROOF AT SHALL OWER JOISTS	VERIFY	R-24.5
MULTI-LAYERS OF CONTINUOUS RIGID INSULATION WITH TOP LAYER OF NAILABLE RIGID INSULATION (HUNTER H-SHIELD PANELS) PLUS FULL FULL DEPTH OF JOIST CAVITY (CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)			R-30.0
		TOTAL=	R-49.0

ROOF AT DEEPER JOISTS	MULTI-LAYERS OF CONTINUOUS RIGID INSULATION WITH TOP LAYER OF NAILABLE RIGID INSULATION (HUNTER H-SHIELD PANELS) PLUS FULL FULL DEPTH OF JOIST CAVITY (CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)	VERIFY	R-24.5
			R-50.0
		TOTAL=	R-60.0

#### INTERIOR AND SPECIALTY REQUIRED INSULATION

INTERIOR WALLS	SOUND	BATS	3-1/2"	R11
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MECHANICAL TYPE ROOMS WALLS AND CEILING(S) WHERE APPLICABLE	SOUND	BATS	5"	R19
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BATHROOMS SOUND BATS	INSULATION BATS	BATS	5 1/2" OR 3 1/2"	R-11 - R19
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INTERIOR FLOORS/CEILING SOUND RATING REDUCTION	BATS	FACED	3 1/2"	R-11
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DUCTWORK PLUMBING LINES	DBL. FACED	1/2" VINYL FACED	1"	R-13/R-19
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MECHANICAL AND PLUMBING STUD CAVITY WITH PLUMBING BRAN LINES	SOUND BATS/INSULATION BATS	5 1/2" OR 3 1/2"	R-13/R-19
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PLUMBING DRAIN LINE SHALL BE INSULATED IN ADDITION TO THE CAVITY OF THE STUD WALL IS LOCATED WITHIN.

**SUBMITTALS**  
PROVIDE MANUFACTURER DATA AND INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS FOR REVIEW PRIOR TO INSTALLATION.

**EXECUTION**  
FILL ALL VOIDS AS REQUIRED.

**VERIFY**  
FILL PER MANUFACTURERS STANDARD INSTALLATION REQUIREMENTS.

PROVIDE R-25 MINIMUM CLOSED CELL INSULATION ABOVE ANY CEILING PENETRATIONS AT UNVENTED ROOF ASSEMBLIES.

#### 07-55 ATTIC ACCESS

**EXECUTION**  
ATTIC ACCESS TO MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R807.

ATTIC ACCESS OPENING SHALL BE PROVIDED TO ATTICS OF BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION THAT EXCEEDS 50 SQUARE FEET AND HAVE A VERTICAL HEIGHT OF 30 INCHES OR GREATER. THE OPENING SHALL BE LOCATED IN A CORRIDOR, HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. THE ROUGH FRAME OPENING SHALL NOT BE LESS THAN 22 INCHES X 30 INCHES. A 30 INCH MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE PROVIDED ABOVE THE OPENING. SEE I.R.C. SECTION R807. FOR ACCESS REQUIREMENTS WHEN MECHANICAL EQUIPMENT IS LOCATED IN ATTICS SEE I.R.C. SECTION M1305.13.

#### 07-66 BUILDING WEATHER AND VAPOR BARRIER

GENERAL PRODUCTS	WEATHER BARRIER MEMBRANE: DUPONT -TYVEK- HOMEWRAP OR EQUAL
	SEAM TAPE: DUPONT- TYVEK TAPE OR EQUAL
	FLASHING: DUPONT- FLEXWRAP OR EQUAL

**EXECUTION**  
COORDINATE WITH MANUFACTURERS STANDARDS FOR INSTALLATION. REVIEW REQUIREMENTS FOR SEQUENCING OF INSTALLATION OF WEATHER BARRIER ASSEMBLY WITH INSTALLATION OF WINDOWS, DOORS, LOUVERS AND FLASHINGS TO PROVIDE A WEATHER-TIGHT BARRIER ASSEMBLY.

VERIFY SUBSTRATE AND SURFACE CONDITIONS ARE IN ACCORDANCE WITH WEATHER BARRIER MANUFACTURER RECOMMENDED TOLERANCES PRIOR TO INSTALLATION OF WEATHER BARRIER AND ACCESSORIES.

INSTALL WEATHER BARRIER OVERLAP AT BUILDING CORNER, LEAVING 4-12 INCHES OF WEATHER BARRIER EXTENDED BEYOND CORNER TO OVERLAP.

INSTALL WEATHER BARRIER IN A HORIZONTAL MANNER STARTING AT THE LOWER PORTION OF THE WALL SURFACE. MAINTAIN WEATHER BARRIER PLUMB AND LEVEL.

EXTEND BOTTOM ROLL EDGE OVER SILL PLATE INTERFACE 2" TO 3" MINIMUM. SEAL WEATHER BARRIER WITH SEALANT OR TAPE. SINGLE WEATHER BARRIER OVER BACK EDGE OF THRU-WALL FLASHINGS AND SEAL WEATHER BARRIER WITH SEALANT OR TAPE ENDSURE WEEPS ARE NOT BLOCKED.

SUBSEQUENT LAYERS SHALL OVERLAP LOWER LAYERS A MINIMUM OF 4 INCHES HORIZONTALLY IN A SHINGLING MANNER.

WINDOW AND DOOR OPENINGS: EXTEND WEATHER BARRIER COMPLETELY OVER OPENINGS.

ATTACH WEATHER BARRIER TO STUDS THROUGH EXTERIOR SHEATHING. SECURE USING WEATHER BARRIER MANUFACTURER RECOMMENDED FASTENERS SPACED 12-18 INCHES VERTICALLY ON CENTER ALONG STUD LINE AND 24 INCH ON CENTER, MAXIMUM HORIZONTALLY.

ATTACH WEATHER BARRIER TO MASONRY. SECURE USING WEATHER BARRIER MANUFACTURER RECOMMENDED FASTENERS SPACED 12-18 INCHES VERTICALLY ON CENTER AND 24 INCHES MAXIMUM HORIZONTALLY. WEATHER BARRIER MAY BE TEMPORARILY ATTACHED TO MASONRY USING RECOMMENDED ADHESIVE. PLACED IN VERTICAL STRIPS SPACED 24 INCHES ON CENTER, WHEN COORDINATED ON THE PROJECT SITE. USE CLADDING FASTENERS AS PERMANENT MEANS OF ATTACHMENT.

SEAL SEAMS OF WEATHER BARRIER WITH SEAM TAPE AT ALL VERTICAL AND HORIZONTAL OVERLAPPING SEAMS.

#### 07-133 WOOD SIDING

**GENERAL PRODUCTS**  
HORIZONTAL SIDING: 1/8 SHIP-LAP JOINTED WITH 1/4" REVEAL HORIZONTAL SIDING. TO BE CLEAR CEDAR STAINED SEMI-TRANSPARENT WITH SHERMAN WILLIAMS OR EQUAL. COLOR- CEDAR BARK.

VERTICAL SIDING: 1/8 SHIP-LAP JOINTED WITH 1/8" REVEAL VERTICAL SIDING. TO BE CLEAR CEDAR STAINED SEMI-TRANSPARENT WITH SHERMAN WILLIAMS OR EQUAL. COLOR- "CROSSBROADS"

SUBMITTALS	PROVIDE 12" X 12" SAMPLE OF EACH SIDING SPECIFIED WITH COLOR SPECIFIED.
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**EXECUTION**  
FOLLOW INSTALLATION INSTRUCTIONS SPECIFIED BY THE PRODUCT MANUFACTURER.

EXAMINE SUBSTRATES FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF SIDING AND RELATED ACCESSORIES, AND PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. AS FOR THE VERTICAL SIDING PROVIDE HORIZONTAL BLOCKING AT ALL LOCATION AS REQUIRED BY MNFR. RECOMMENDATIONS.

INSTALL EXTERIOR SIDING FINISH OVER EXTERIOR WALL VENTILATION MATRIX OVER BUILDING WEATHER BARRIER AS PER MANUFACTURE SPECIFICATIONS AND INDUSTRY STANDARDS.

SEE STRUCTURAL NOTES FOR DIAPHRAGM NAILING, HURRICANE Tie HOLD-DOWNS.

CLEAN FINISHED SURFACES ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS AND MAINTAIN IN A CLEAN CONDITION DURING CONSTRUCTION.

COORDINATE WORK WITH RELATED TRADES, SCRIBE AND COPE SIDING BOARDS FOR ACCURATE FIT. ALLOW INSTALLATION OF RELATED WORK TO AVOID CUTTING AND PATCHING.

SELECT SIDING BOARDS OF LONGEST POSSIBLE LENGTHS. DISCARD BOARDS THAT ARE WARPED, TWISTED, BOWED, CROOKED OR OTHERWISE DEFECTIVE.

INSTALLATION MUST COMPLY WITH LOCAL BUILDING CODES AND REGULATIONS.

FINISH MATERIALS ON ALL SIDES AND ENDS. APPLY TOUCH-UP COATING ON NEW CUTS. FACTORY PRIME D OR FINISHING IS PREFERRED.

EXPLAIN PROPER MAINTENANCE PROCEDURES TO OWNER OR OWNER'S REPRESENTATIVE AT PROJECT CLOSEOUT.

THE USE OF PRESSURE WASHERS IS NOT RECOMMENDED.

#### 07-155 SINGLE-PLY TPO DECK MEMBRANE

**GENERAL PRODUCTS**  
PROVIDE INSTALLED ROOFING MEMBRANE AND FLASHINGS THAT REMAIN WATERIGHT. DO NOT PERMIT THE PASSAGE OF WATER, AND RESIST SPECIFIED UPSET PRESSURES. THERMALLY INDUCED MOVEMENT AND EXPOSURE TO WEATHER WITHOUT FAILURE.

PROVIDE ROOFING MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER UNDER SERVICE AND APPLICATION REQUIREMENTS, AS DEMONSTRATED BY ROOFING MEMBRANE MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.

ROOF SYSTEM DESIGN AND SUCCESSFULLY TESTED BY A QUALIFIED TESTING AND INSPECTING AGENCY TO WITHSTAND UPLIFT FORCES AS CALCULATED USING THE CURRENT VERSION OF ASCE 7.

ROOF SYSTEM WILL ACHIEVE A UL FIRE RATING WITHIN IN ACCORDANCE WITH UL-790 AS REQUIRED BY LOCAL BUILDING CODE. MINIMUM RATINGS SHALL BE A UL CLASS B RATING.

PROVIDE A ROOF SYSTEM WITH POSITIVE DRAINAGE WHERE ALL STANDING WATER DISSIPATES AFTER PRECIPITATION ENDS.

BUILDING CODES: ROOF SYSTEM WILL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODE BOODS HAVING JURISDICTION.

MANUFACTURER WITH A MINIMUM OF TEN YEARS EXPERIENCE IN THE MANUFACTURING OF SINGLE-PLY HEAT WELDABLE MEMBRANES.

ROOFING CONTRACTOR SHALL BE AUTHORIZED BY ROOFING SYSTEM MANUFACTURER TO INSTALL ASSEMBLY. PROVIDE LETTER ON MANUFACTURERS LETTERHEAD OF AUTHORIZED STATUS OF CONTRACTOR.

PROVIDE ROOFING SYSTEM THAT IS LISTED ON THE DOE'S ENERGY STAR ROOF PRODUCTS QUALIFIED PRODUCT LIST FOR LOW-SLOPE ROOF APPLICATIONS.

A MANUFACTURERS REPRESENTATIVE SHALL INSPECT THE INSTALLATION FOR COMPLIANCE WITH MANUFACTURERS STANDARDS UPON COMPLETION OF THE ROOFING SYSTEM. DEVIATIONS OR CHANGES FROM THE CONTRACT SPECIFICATION SHALL HAVE WRITTEN APPROVAL FROM THE ROOFING MANUFACTURER. FOR PRESENTATION TO ARCHITECT AT COMPLETION OF ROOFING SYSTEM.

STANDARD TOTAL SYSTEM WARRANTY SHALL BE ISSUED UPON ACCEPTANCE OF THE ROOFING SYSTEM INSTALLATION. TWENTY (20) YEAR PERIOD THAT COVERS WIND DAMAGE UP TO 70 MPH.

ACCEPTABLE MANUFACTURER: FIBERGLASS DOWN ROOFING SYSTEMS, CARLITE ROOFING, OR APPROVED EQUAL. REQUEST FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SUBSTITUTION MATERIALS.

**ROOFING MEMBRANE SHALL BE MANUFACTURED WITH THE FOLLOWING PROPERTIES:**  
A. MEMBRANE TYPE, KEE  
B. MEMBRANE THICKNESS: 30 MIL  
C. COLOR: BIRKENBY OR VENTURE GREY  
D. FLASHINGS MEMBRANE SHALL 0.660 INCH (1.22MM) THICK REINFORCED MEMBRANE FOR WALLS AND CURBS REGARDLESS OF ROOF COVER SHEET THICKNESS. SHALL BE .660 INCH (1.52 MM) THICK UNSUPPORTED MEMBRANE FOR UNID-FABRICATED DETAILS USED FOR WALKING SURFACES THAT REQUIRE HIGHER EXHIBITIVITY THAT IS ALLOWED WITH SCRIM-REINFORCED MEMBRANE.  
E. COVER BOARD: DENSEDECK ROOF BOARD; G-P GYPSUM CORPORATION 1/2 INCH (12 MM) DENSEDECK ROOF BOARD. GLASS MAT FACED GYPSUM WITH SPECIALLY TREATED GYPSUM CORE THAT RESISTS MOISTURE AND MOLD GROWTH.

**SUBMITTALS**  
PRODUCT DATA, INCLUDING MANUFACTURERS DATA SHEETS ON EACH PRODUCT TO BE USED; PREPARATION INSTRUCTIONS AND RECOMMENDATIONS; STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS; AND INSTALLATION METHODS.

SAMPLES FOR VERIFICATION FOR THE FOLLOWING PRODUCTS INCLUDING: MANUFACTURERS STANDARD SAMPLE SIZE OF SHEET ROOFING OF COLOR SPECIFIED; MANUFACTURERS STANDARD SAMPLE SIZE OF ROOF INSULATION; MANUFACTURERS STANDARD SAMPLE SIZE OF WALKWAY PADS OR ROLLS.

SHOP DRAWINGS INCLUDING OUTLINE AND SIZE OF THE ROOF, LOCATION AND TYPE OF PENETRATIONS, PERIMETER AND PENETRATION FLASHING DETAIL REFERENCES TO MANUFACTURERS STANDARD, DETAILS WHICH DO NOT CONFORM TO ROOFING MANUFACTURERS STANDARDS SHALL BE IDENTIFIED WITH SEPARATE APPROVAL FROM ROOFING MANUFACTURER. DETAILS TO BE EMPLOYED ON THE PROJECT SHALL BE APPROVED BY ROOFING MANUFACTURER.

SUBMIT WARRANTY CERTIFICATION FROM MANUFACTURER OF APPROVAL OF PROJECT DESIGN AND INTENT TO ISSUE WARRANTY, AND FASTENER PULL TESTS FROM AN INDEPENDENT TESTING AGENCY SHALL BE APPROVED BY THE ROOFING MANUFACTURER.

**EXECUTION**  
DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. HAULERS AND BLOCKING SHALL BE INSTALLED LEVEL, TRUE TO LINE AND ELEVATION. SECURED TO ROOF STRUCTURE TO RESIST ROOF INSTALLATION AND SERVICE LEVEL. TIES TO BE INSTALLED. IF SUBSTRATE PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING. SURFACES TO BE BONDED SHALL BE DRY, CLEAN AND FREE OF DEBRIS. SUITABLE SURFACES ARE USUALLY CONSIDERED TO BE SMOOTH, SOLID MASONRY, WOOD AND METAL. PLUS INSULATION BOARDS FASTENED PER THE SPECIFIC MANUFACTURERS RECOMMENDATIONS FOR RECEIVING ADHERED ROOFING MEMBRANES.

ALL FASTENERS SHOULD BE INSTALLED WITH A DEPTH-SENSING SCREW GUN TO PREVENT OVER DRIVING OR UNDER DRIVING. BLOCK OFF OR SHUT DOWN POSITIVE PRESSURE BUILDING VENTILATION SYSTEMS DURING APPLICATION TO PREVENT SHEET FROM BLOWING DURING APPLICATION.

VERIFY ALL ROOFING MECHANICAL UNITS ARE TO HAVE THEIR CONDENSATION LINES PIPED TO DRAINS, OR OFF THE ROOF.

PLYWOOD MUST BE EXTERIOR GRADE WITH AN A OR B FINISH SIDE UP AND WITH NO JOINTS GAPPED GREATER THAN 1/4 INCH, AND PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.

PROVIDE TEMPORARY BALLAST IN PARTIALLY COMPLETED SECTIONS TO CONTROL WIND EFFECTS DURING CONSTRUCTION.

**07-164 METAL SHEET BATTEN-SEAM ROOFING**  
**07-164 METAL SHEET BATTEN-SEAM ROOFING**  
**GENERAL PRODUCTS**  
ARCHITECTURAL METAL ROOFING: BONDERIZED METAL  
MFG- MANUFACTURE  
COLOR TO MATCH BERLIMMUN MOORE HC-167 "AMHERST GRAY".  
DETAILS- CRAFTSMAN SERIES S8

SECONDARY ROOFING MEMBRANE -	GRACE ICE & WATER SHIELD HD
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**SUBMITTALS**  
SAMPLES FOR VERIFICATION OF SHINGLES SIZE AND COLOR  
WARRANTIES: SAMPLE OF SPECIAL WARRANTIES.

**EXECUTION**  
ROOFING AND RELATED ITEMS TO BE INSTALLED AS PER MANUFACTURER

ROOFING TO BE INSTALLED OVER SECONDARY ROOFING MEMBRANE (ENTIRE ROOFING SURFACE)

ROOFING SYSTEM TO BE INSTALLED OVER EXTERIOR GRADE A P.A. RATED SHEATHING (RUN PERPENDICULA BATTERS) OVER ROOF FRAMING AS PER STRUCTURAL PLANS.

SEE STRUCTURAL NOTES FOR DIAPHRAGM NAILING, HURRICANE Tie HOLD-DOWNS.

#### 07-170, 171, 172, 173, 174, 175, 176, SHEET METAL FLASHING AND TRIM

**GENERAL PRODUCTS**  
APPROVED CORROSION RESISTANT FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS.

VALLEY FLASHING	DRIP METAL
WHICHWOOD HEAD FLASHING	DOOR HEAD FLASHING
TRANSITIONAL FLASHING	

**SUBMITTALS**  
SHOW INSTALLATION LAYOUTS OF SHEET METAL FLASHING AND TRIM, INCLUDING PLANS, ELEVATIONS, EXPANSION-JOINT LOCATIONS, AND KEYED DETAILS. DISTINGUISH BETWEEN SHOP- AND FIELD-ASSEMBLED WORK.

INCLUDE DETAILS FOR FORMING, JOINING, SUPPORTING, AND SECURING SHEET METAL FLASHING AND TRIM, INCLUDING PATTERN OF SEAMS, TERMINATION POINTS, FIXED POINTS, EXPANSION JOINTS, EXPANSION-JOINT COVERS, EDGE CONDITIONS, SPECIAL CONDITIONS, AND CONNECTIONS TO ADJOINING WORK.

**EXECUTION**  
SELF-ADHERING, HIGH-TEMPERATURE SHEET; MINIMUM 30 TO 40 MILS THICK, CONSISTING OF SLIP-RESISTING POLYETHYLENE-FILM TOP SURFACE LAMINATED TO LAYER OF BUTYL OR SBS-MODIFIED ASPHALT ADHESIVE, WITH RELEASE-PAPER BACKING; COLD APPLIED.

SLIP SHEET: BUILDING PAPER, 3-1/8"/100 SQ. FT. MINIMUM, ROSIN SIZED.

ANCHOR SHEET METAL FLASHING AND TRIM AND OTHER COMPONENTS OF THE WORK SECURELY IN PLACE, WITH PROVISIONS FOR THERMAL AND STRUCTURAL MOVEMENT SO THAT COMPLETED SHEET METAL FLASHING AND TRIM SHALL NOT RATTLE, LEAK, OR LOOSEN, AND SHALL REMAIN WATERIGHT. USE FASTENERS, SOLDER, WELDING RODS, PROTECTIVE COATINGS, SEPARATORS, SEALANTS, AND OTHER MISCELLANEOUS ITEMS AS REQUIRED TO COMPLETE SHEET METAL FLASHING AND TRIM SYSTEM.

INSTALL SHEET METAL FLASHING AND TRIM TRUE TO LINE AND LEVELS INDICATED. PROVIDE UNIFORM, HEAT SEAMS WITH MINIMUM EXPOSURE OF FOLDER, WELDS, AND SEALANT.

SPACE CLEATS NOT MORE THAN 12 INCHES APART. ANCHOR EACH CLEAT WITH TWO FASTENERS. BEND TABS OVER FASTENERS.

INSTALL EXPOSED SHEET METAL FLASHING AND TRIM WITHOUT EXCESSIVE OIL, CANNING, BUCKLING, AND TOOL MARKS.

WHERE DISSIMILAR METALS WILL CONTACT EACH OTHER OR CORROSIVE SUBSTRATES, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH BITUMINOUS COATING OR BY OTHER PERMANENT SEPARATION AS RECOMMENDED BY SMA/CA.

PROVIDE FOR THERMAL EXPANSION OF EXPOSED FLASHING AND TRIM.

SEAL JOINTS AS SHOWN AND AS REQUIRED FOR WEATHERIGHT CONSTRUCTION. RETAIN FIRST PARAGRAPH BELOW FOR METALLIC-COATED STEEL AND COPPER ROOFING, UNLESS THE METAL IS PAINTED OR COATED.

CLEAN EXPOSED METAL SURFACES OF SUBSTANCES THAT INTERFERE WITH UNIFORM OXIDATION AND WEATHERING.

APPROVED FLASHING SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS BUT NOT LIMITED TO: SEE I.R.C. SECTION R703.8.

AT THE TOP OF ALL EXTERIOR WINDOW AND DOOR OPENINGS IN SUCH A MANNER AS TO BE LEAK PROOF. AN EXCEPTION FOR SELF-FLASHING WINDOWS HAVING A CONTINUOUS LAP OF NOT LESS THAN 1 1/8 INCH OVER THE SHEATHING MATERIAL AROUND THE PERIMETER OF THE OPENING, INCLUDING CORNERS.

AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES OVER STUCCO COPINGS.

AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES OF MASONRY.

UNDER AND AT THE ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.

CONTINUOUSLY ABOVE ALL PROJECTING TOOL METALS.

WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD FRAME CONSTRUCTION, AND AT WALL AND ROOF INTERSECTIONS AND AT BUILD-UP JOINTS.

#### 07-183 METAL GUTTERS/DOWNSPOUTS

GENERAL PRODUCTS	GUTTERS SHALL BE: DOWNSPOUTS SHALL BE:	SQUARE AS PER DETAILS	ROUND DOWNSPOUTS.
	METAL FINISH	PRE-FINISHED ALUM. COLOR TO MATCH METAL ROOFING.	

**SUBMITTALS**  
PROVIDE 12" LONG SAMPLE OF EACH DOWNSPOUT AND GUTTER IN MATERIAL SPECIFIED.

**EXECUTION**  
INSTALL AT LOCATIONS SHOWN ON PLANS.

ALL GUTTERS SHALL SLOPE A MINIMUM OF 1/8" PER FOOT FOR DRAINAGE TO DOWNSPOUTS

FABRICATE HANGING GUTTER TO CROSS SECTION INDICATED, COMPLETE WITH END PIECES, OUTLET TUBES, AND OTHER ACCESSORIES AS REQUIRED. FABRICATE IN CONTINUOUS SECTIONS BETWEEN CORNERS. FABRICATE EXPANSION JOINTS, EXPANSION-JOINT COVERS AND GUTTER ACCESSORIES FROM SAME METAL AS GUTTERS.

JOIN SECTIONS WITH RIVETED AND SOLDERED JOINTS OR WITH LAPPED JOINTS SEALED WITH SEALANT. PROVIDE FOR THERMAL EXPANSION. ATTACH GUTTERS AT EAVE OR FASCIA TO FIRMLY ANCHORED GUTTER BRACKETS SPACED NOT MORE THAN 56 INCHES APART. PROVIDE END CLOSURES AND SEAL WATERIGHT WITH SEALANT. SLOPE TO DOWNSPOUTS.

FABRICATE RECTANGULAR DOWNSPOUTS COMPLETE WITH MITERED ELBOWS. FINISH WITH METAL HANGERS, FROM SAME MATERIAL AS DOWNSPOUTS, AND ANCHORS

JOIN DOWNSPOUT SECTIONS WITH 1-1/2-INCH TELESCOPING JOINTS. PROVIDE HANGERS WITH FASTENERS DESIGNED TO HOLD DOWNSPOUTS SECURELY TO WALLS. LOCATE HANGERS AT TOP AND BOTTOM AND AT APPROXIMATELY 40 INCHES O.C. IN BETWEEN.

#### 07-211, 07-212, 07-213, 07-214, 07-215, 07-216, 07-217 CAULKING

**GENERAL PRODUCTS**  
PROVIDE ELASTOMERIC JOINT SEALANTS THAT ESTABLISH AND MAINTAIN WATERIGHT AND AIRTIGHT CONTINUOUS JOINT SEALS WITHOUT STAINING OR DETERIORATING JOINT SUBSTRATES.

PROVIDE JOINT SEALANTS FOR INTERIOR APPLICATIONS THAT ESTABLISH AND MAINTAIN AIRTIGHT AND WATER-RESISTANT CONTINUOUS JOINT SEALS WITHOUT STAINING OR DETERIORATING JOINT SUBSTRATES.

PROVIDE JOINT SEALANTS, BACKINGS, AND OTHER RELATED MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER CONDITIONS OF SERVICE AND APPLICATION, AS DEMONSTRATED BY SEALANT MANUFACTURER, BASED ON TESTING AND FIELD EXPERIENCE.

**EXECUTION**  
CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS.

REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT

PROVIDE CAULKING AT INTERIOR AND EXTERIOR AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS WITH A CONTINUOUS BEAD OF CAULK.

SILICONE SEALANT SHOULD NOT BE USED ON EXTERIOR JOINTS. ONLY POLYURETHANE OR POLYSULFIDE SEALANTS. BUTYL SEALANTS SHOULD BE USED BETWEEN METAL LAPS WHERE MOVEMENT IS ANTICIPATED.

### DIVISION 8-OPENINGS

#### 08-25 EXTERIOR WOOD DOOR

**GENERAL PRODUCTS**  
SEE DOOR SCHEDULE FOR ALL SIZES, STYLES, AND OPERATION.  
MANUF- CUSTOM ENTRY DOOR BY MILL SELECTED  
SPECIES- DOUGLIFR  
COLOR- SHERWIN WILLIAMS SEMI-TRANSPARENT, "CROSSBROADS"

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

**EXECUTION**  
ALL DOORS SHALL BE INSTALLED PER MANUFACTURES STANDARD INSTALLATION REQUIREMENTS.

ALL DOORS SHALL BE INSTALLED TRUE AND PLUMB AND SHALL OPERATE. ADJUST ALL DOORS FOR OPERATIONS AS APPROVED BY ARCHITECT/OWNER.

OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCH IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE IRC 302.5.

#### 08-26 INTERIOR WOOD DOOR

**GENERAL PRODUCTS**  
SEE DOOR SCHEDULE FOR ALL SIZES, STYLES, AND OPERATION.  
MANUF. AS SELECTED BY BIDDING  
SPECIES- SEE INTERIOR DESIGN DRAWINGS  
COLOR- CUSTOM STAIN BY INTERIOR DESIGNER

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

**EXECUTION**  
ALL DOORS SHALL BE INSTALLED PER MANUFACTURES STANDARD INSTALLATION REQUIREMENTS.

ALL DOORS SHALL BE INSTALLED TRUE AND PLUMB AND SHALL OPERATE. ADJUST ALL DOORS FOR OPERATIONS AS APPROVED BY ARCHITECT/OWNER.

OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCH IN THICKNESS, SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE IRC 302.5.

#### 08-39 EXTRUDED ALUMINUM WOOD SLIDING DOORS

**GENERAL PRODUCTS**  
SEE WINDOW SCHEDULE FOR ALL SIZES AND OPERATIONS.

WINDOW MANUFACTURER- LOEWEN, WINDSOR, JELD-WEN, KOUBE, MARVIN.  
WINDOW STYLE SHALL BE: AS SHOWN ON DRAWINGS

PROVIDE SCREENS AND HARDWARE FOR ALL OPERABLE UNITS.

WOOD WINDOWS WITH EXTRUDED ALUMINUM CLAD EXTERIOR BOTH FRAME AND SASH- NO EXCEPTIONS. EXTERIOR CLAD PAINT FINISH TO MEET AAMA 2655 SPECIFICATIONS (FOR KYNAR)

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 10- SPECIALTIES

#### 10-99 BATH HARDWARE

##### GENERAL PRODUCTS

EXTENT OF BATHROOM HARDWARE INDICATED ON INTERIOR DESIGN DRAWINGS NOT INCLUDED WITHIN ARCHITECTURAL DRAWINGS.  
OWNER/CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH INTERIOR DESIGNER FOR ALL FINISH ITEMS.  
COMPLETE INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE INTERIOR DESIGNER AND TO REVIEW ALL MATERIAL AND SUBMITTALS FOR CODE COMPLIANCE AND APPROVAL.

##### SUBMITTALS

PROVIDE HARDWARE SPECIFICATION CUT SHEETS FOR APPROVAL BY ARCHITECT/INTERIOR DESIGNER AND OWNER PRIOR TO ORDERING.

##### EXECUTION

INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

### DIVISION 11- EQUIPMENT

#### 11-32 FIREPLACES

##### GENERAL PRODUCTS

GAME ROOM FIREPLACE TO BE: MONITGO 9-SERIES SEALED GAS - SEE ID DRAWINGS (TOP VENT TO EXTERIOR WALL)  
GREAT ROOM FIREPLACE TO BE: MONITGO 9-SERIES SEALED GAS - SEE ID DRAWINGS (TOP VENT TO CHIMNEY CHASE)  
MASTER BEDROOM FIREPLACE TO BE: MONITGO PANORAMA 3-SIDED GLASS CUSTOM SEALED GAS - SEE ID DRAWINGS (REAR VENT TO EXTERIOR WALL)

##### SUBMITTALS

BEDROOM APPLICATIONS: PROVIDE SEALED GLASS DOORS.

##### EXECUTION

ALL WOOD BURNING FIREPLACES (EXCEPT IN BEDROOM APPLICATIONS); TO BE PROVIDED WITH GAS STARTERS

GAS LOG FIREPLACES SHALL BE PROVIDED WITH A SHUT OFF VALVE LOCATED OUTSIDE OF THE FIREBOX AND WITHIN 6" OF THE APPLIANCE, UNLESS APPROVED BY THE FIREPLACE MANUFACTURER.

GAS LIGHTERS ARE USED. FLUES MUST BE PERMANENTLY HELD OPEN.

ALL GAS LOGS, LIGHTERS OR FIREPLACES REQUIRE OUTSIDE COMBUSTION AIR.

ALL FLUES MUST EQUAL 1 SQUARE INCH PER 1000 BTUS.

ALL ROOMS WHERE GAS LOGS, LIGHTERS, OR FIREPLACES ARE INSTALLED MUST EQUAL 50 CUBIC FEET OF VOLUME PER 1000 BTU'S IN ADDITION TO THE REQUIREMENT FOR OUTSIDE AIR.

PROVIDE FLUES, COMBUSTION AIR SPARK ARRESTOR, CLEARANCES, AND ETC. AS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE CHIMNEY CAP FLASHING AND SURROUND. (SEE SECTION 07-34) THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR INSTALLATION OF FIREPLACE EQUIPMENT, INCLUDING FINISH MATERIALS SUCH AS HEARHS, MANTLES, AND OTHER COMBUSTIBLE PROJECTIONS, ETC., AND PROVIDE PROPER SETBACKS, CLEARANCES, AND PROTECTION.

THE CHIMNEY TERMINATION MUST EXTEND AT LEAST 2 FEET HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10 FEET, AT WOOD BURNING FIREPLACES, AS REQUIRED BY I.R.C. G242.5.3.

11-34 RESIDENTIAL APPLIANCES

##### GENERAL PRODUCTS

RESIDENTIAL APPLIANCES AS SELECTED BY INTERIOR DESIGNER.

SUBMITTALS

PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.  
APPLIANCE SCHEDULE: USE SAME DESIGNATIONS INDICATED ON DRAWINGS

GAS-BURNING APPLIANCES: COMPLY WITH ANS Z21 SERIES STANDARDS.

RESIDENTIAL APPLIANCES: COMPLY WITH NAECA STANDARDS.

EXECUTION

INSTALLER QUALIFICATIONS: AN EMPLOYER OF WORKERS TRAINED AND APPROVED BY MANUFACTURER FOR INSTALLATION AND MAINTENANCE OF UNITS REQUIRED FOR THIS PROJECT

PROVIDE CLEARANCE FROM APPLIANCES TO COMBUSTIBLE MATERIALS AS PER MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE MINIMUM CLEARANCE OF 30" ABOVE COOKING TOP TO COMBUSTIBLE MATERIALS. (I.R.C. M1306 & M1901)

INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

BUILT-IN EQUIPMENT: SECURELY ANCHOR UNITS TO SUPPORTING CABINETS OR COUNTERTOPS WITH CONCEALED FASTENERS. VERIFY THAT CLEARANCES ARE ADEQUATE FOR PROPER FUNCTIONING AND ROUGH OPENINGS ARE COMPLETELY CONCEALED.

FREESTANDING EQUIPMENT: PLACE UNITS IN FINAL LOCATIONS AFTER FINISHES HAVE BEEN COMPLETED IN EACH AREA. VERIFY THAT CLEARANCES ARE ADEQUATE TO PROPERLY OPERATE EQUIPMENT.

11-42 PROJECTION SCREENS

##### GENERAL PRODUCTS

EXTENT OF PROJECTION SCREENS ARE INDICATED ON INTERIOR DESIGN DRAWINGS NOT INCLUDED WITHIN ARCHITECTURAL DRAWINGS

OWNER/CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH INTERIOR DESIGNER FOR ALL FINISH ITEMS.

COMPLETE INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE INTERIOR DESIGNER AND TO REVIEW ALL MATERIAL AND SUBMITTALS FOR CODE COMPLIANCE AND APPROVAL.

### DIVISION 12- FURNISHINGS

#### 12-27 WOOD KITCHEN CABINETS

##### GENERAL PRODUCTS

EXTENT OF CABINETS AS SHOWN ON INTERIOR FINISH PLANS AND DRAWINGS.

SEE INTERIOR ELEVATIONS FOR DESIGN OF CABINETS

COORDINATE WITH CABINET FINISH SCHEDULE FOR FINISH OF ALL CABINETS.

##### SUBMITTALS

CABINET SUPPLIER SHALL PROVIDE SHOP DRAWINGS FOR EACH CABINET FOR APPROVAL BY ARCHITECT/INTERIOR DESIGNER/OWNER PRIOR TO FABRICATION OF CABINET.

PROVIDE 12 X 12 SAMPLE OF EACH CABINET FINISH SPECIFIED FOR APPROVAL.

PROVIDE 1 DOOR SAMPLE FOR EACH DOOR TYPE SPECIFIED FOR APPROVAL.

#### 12-40 STONE COUNTERTOPS

##### GENERAL PRODUCTS

EXTENT OF STONE COUNTERTOPS AS SHOWN ON INTERIOR FINISH PLANS AND DRAWINGS.

##### SUBMITTALS

SAMPLES FOR EACH STONE TYPE INDICATED. IN SETS OF SAMPLES NOT LESS THAN 12 INCHES SQUARE. INCLUDE TWO OR MORE SAMPLES IN EACH SET AND SHOW THE FULL RANGE OF VARIATIONS IN APPEARANCE CHARACTERISTICS EXPECTED IN COMPLETED WORK.

##### EXECUTION

USE ONLY ADHESIVES FORMULATED FOR STONE AND CERAMIC TILE AND RECOMMENDED BY THEIR MANUFACTURER FOR THE APPLICATION INDICATED. EXAMINE SUBSTRATES INDICATED TO RECEIVE STONE COUNTERTOPS AND CONDITIONS UNDER WHICH STONE COUNTERTOPS WILL BE INSTALLED, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE.

SET STONE TO COMPLY WITH REQUIREMENTS INDICATED ON DRAWINGS AND SHOP DRAWINGS. SHIM AND ADJUST STONE TO LOCATIONS INDICATED, WITH UNIFORM JOINTS OF WIDTHS INDICATED AND WITH EDGES AND FACES ALIGNED ACCORDING TO ESTABLISHED RELATIONSHIPS AND INDICATED TOLERANCES

REMOVE AND REPLACE STONE COUNTERTOPS OF THE FOLLOWING DESCRIPTION: BROKEN, CHIPPED, STAINED, OR OTHERWISE DAMAGED STONE, DEFECTIVE COUNTERTOPS, DEFECTIVE JOINTS, INCLUDING MISALIGNED JOINTS, INTERIOR STONE COUNTERTOPS AND JOINTS NOT MATCHING APPROVED SAMPLES AND MOCKUPS.

CLEAN STONE COUNTERTOPS NOT LESS THAN TWO DAYS AFTER COMPLETION OF INSTALLATION, USING CLEAN WATER AND SOFT RAGS. APPLY STONE SEALER TO COMPLY WITH STONE PRODUCERS AND SEALER MANUFACTURER'S WRITTEN INSTRUCTIONS.

UNDERGROUND WATER PRESSURE SERVICE AS DEFINED BY NFPA 24.

MAXIMUM DESIGN TEMPERATURE/PRESSURE RATINGS SHALL NOT BE LESS THAN 175 PSI AT 150°F. REFER TO CPVC PIPE AND FITTING MANUFACTURER'S INSTALLATION INSTRUCTIONS.

QUALITY ASSURANCE

CONTRACTOR INSTALLING THE PRODUCE MUST HAVE A MINIMUM OF 2 YEARS OF INSTALLATION OF SYSTEM.

MANUFACTURERS

TYCO FIRE SUPPRESSION & BUILDING PRODUCTS 451 N. CANNON AVENUE LANSDALE, PA 19446 (215) 362-0700 FAX (215) 362-5385

SUBMITTALS

COMPLETE FIRE SPRINKLER SHOP DRAWINGS, INCLUDING PIPING LAYOUT, HEAD LAYOUT, HEAD OPTIONS FOR SELECTION, AND PRODUCT LITERATURE. FIRE SPRINKLER DRAWINGS WILL BE CONSIDERED DEFERRED SUBMITTAL AND MUST FOLLOW DEFERRED SUBMITTAL PROCEDURES.

EXECUTION

SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE FOR FIRE SPRINKLER SYSTEMS AND THE MANUFACTURER'S INSTRUCTIONS. THE DESIGN SHALL TAKE INTO CONSIDERATION SUCH FACTORS AS PRESSURE AND FLOW REQUIREMENTS, FRICTION LOSS, OPERATING

TEMPERATURES, SUPPORT SPACING, JOINING METHODS, AND THERMAL EXPANSION AND CONTRACTION.

THE FIRE SPRINKLER PIPING SYSTEM SHALL BE HYDRAULICALLY CALCULATED USING A HAZEN-WILLIAMS C FACTOR OF 150, AND DESIGNED IN ACCORDANCE WITH THE STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, NFPA 13.

THE MAXIMUM DESIGN TEMPERATURE/PRESSURE RATING SHALL NOT EXCEED 175 PSI AT 150°F.

INSTALLATION PROCEDURES.

INSTALLATION PRACTICES SUCH AS PIPE SUPPORT SPACING, BRACING, ALLOWANCE FOR THERMAL EXPANSION/CONTRACTION, SOLVENT CEMENTING AND HANDLING AND STORAGE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE UL LISTING WHICH INCLUDES INSTALLATION LIMITATIONS.

CPVC PIPE AND FITTINGS ARE INTENDED FOR USE AT A MAXIMUM WORKING PRESSURE OF 175 PSI AT 150°F IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPROPRIATE LISTED AGENCIES.

ALL APPLICABLE CODES AS PER THE NFPA SHALL BE IDENTIFIED.

AFTER THE SYSTEM IS INSTALLED AND ANY SOLVENT CEMENT IS CURED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE SYSTEMS SHALL BE HYDROSTATICALLY TESTED PER THE REQUIREMENTS OF THE APPLICABLE NFPA STANDARD (NFPA 13D).

MAINTENANCE SHALL BE IN ACCORDANCE WITH THE STANDARD FOR INSPECTION, TESTING AND MAINTENANCE OF WATER BASED EXTINGUISHING SYSTEMS AS DEFINED BY NFPA 25.

### DIVISION 21 - FIRE SUPPRESSION

#### 21-01 FIRE SPRINKLERS

##### GENERAL PRODUCTS

DESCRIPTION

THE PROJECT SHALL HAVE FULL NFPA 13D SPRINKLER SYSTEM INSTALLED THROUGH OUT AS REQUIRED.

CPVC FIRE SPRINKLER PIPE AND FITTINGS ARE EXTRUDED/MOLDED FROM CPVC COMPOUNDS MANUFACTURED BY ULTRON. ADVANCED MATERIALS OR EQUAL. THE PIPE AND FITTING COMPOUNDS SHALL MEET CELL CLASS 23547 AND 24447 RESPECTIVELY, AS DEFINED BY ASTM D1784, AND SHALL BE CERTIFIED BY NSF INTERNATIONAL FOR USE WITH POTABLE WATER. BOTH PIPE AND FITTING COMPOUNDS SHALL BE PRESSURE RATED BY PLASTICS PIPE INSTITUTE (PPI).

PIPE AND FITTINGS

PIPE SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F442 IN STANDARD DIMENSION RATIO (SDR) 13.5.

FITTINGS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F437 (SCHEDULE 80 THREADED), ASTM F438 (SCHEDULE 40 SOCKET) AND ASTM F439 (SCHEDULE 80 SOCKET).

BOTH PIPE AND FITTINGS SHALL BE LISTED BY UNDERWRITERS LABORATORIES FOR USE IN WET AUTOMATIC FIRE SPRINKLER SYSTEMS AND SHALL

BEAR THE LOGO OF THE LISTING AGENCY. SEE UL FIRE PROTECTION EQUIPMENT DIRECTORY, CATEGORIES V1M7 AND HPH.

ANCILLARY PRODUCTS COMING INTO CONTACT WITH PIPE AND FITTINGS MUST BE CHEMICALLY COMPATIBLE AS DETERMINED BY CPVC PIPE AND FITTINGS MANUFACTURER OR COMPOUND MANUFACTURER, AND LISTED ON PIPE, FITTING OR COMPOUND MANUFACTURER'S CHEMICAL COMPATIBILITY PROGRAM (I.E. FGG/8M/CTM) SYSTEM COMPATIBLE PROGRAM).

SOLVENT CEMENT

ALL SOCKET TYPE JOINTS SHALL BE MADE UP EMPLOYING SOLVENT CEMENTS THAT MEET OR EXCEED THE REQUIREMENTS OF ASTM F493. THE STANDARD PRACTICE FOR SAFE HANDLING OF SOLVENT CEMENTS SHALL BE IN ACCORDANCE WITH ASTM F492. SOLVENT CEMENT SHALL BE LISTED BY NSF INTERNATIONAL FOR USE WITH POTABLE WATER, AND APPROVED BY THE MANUFACTURERS. THE SOLVENT CEMENTS SHALL BE COMPATIBLE WITH THEIR CPVC PIPE AND FITTINGS.

FOLLOW MANUFACTURER'S INSTRUCTIONS FOR SET AND CURE TIMES FOR SOLVENT CEMENT JOINTS. AVOID SIGNIFICANT STRESSES DURING SET AND CURE TIMES. DO NOT APPLY ANY STRESS THAT WILL DISTURB AN UNCURED JOINT. SPRINKLER FITTINGS SHALL BE ALLOWED TO CURE IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND THE CONTRACTOR SHALL ASSURE THE OUTLETS ARE CLEAR OF ANY EXCESS CEMENT PRIOR TO INSTALLING SPRINKLERS.

BASIC USE

CPVC PIPE AND FITTINGS SHALL BE LISTED BY UL AND ALSO EITHER UL C OR UL FOR USE IN:

ONE AND TWO FAMILY DWELLINGS AND MANUFACTURED HOMES AS DEFINED BY NFPA 13D.

AIR HANDLING (PLENUM) SPACES AS DEFINED BY NFPA 90A.

UNDERGROUND WATER PRESSURE SERVICE AS DEFINED BY NFPA 24.

MAXIMUM DESIGN TEMPERATURE/PRESSURE RATINGS SHALL NOT BE LESS THAN 175 PSI AT 150°F. REFER TO CPVC PIPE AND FITTING MANUFACTURER'S INSTALLATION INSTRUCTIONS.

QUALITY ASSURANCE

CONTRACTOR INSTALLING THE PRODUCE MUST HAVE A MINIMUM OF 2 YEARS OF INSTALLATION OF SYSTEM.

MANUFACTURERS

TYCO FIRE SUPPRESSION & BUILDING PRODUCTS 451 N. CANNON AVENUE LANSDALE, PA 19446 (215) 362-0700 FAX (215) 362-5385

SUBMITTALS

COMPLETE FIRE SPRINKLER SHOP DRAWINGS, INCLUDING PIPING LAYOUT, HEAD LAYOUT, HEAD OPTIONS FOR SELECTION, AND PRODUCT LITERATURE. FIRE SPRINKLER DRAWINGS WILL BE CONSIDERED DEFERRED SUBMITTAL AND MUST FOLLOW DEFERRED SUBMITTAL PROCEDURES.

EXECUTION

SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE FOR FIRE SPRINKLER SYSTEMS AND THE MANUFACTURER'S INSTRUCTIONS. THE DESIGN SHALL TAKE INTO CONSIDERATION SUCH FACTORS AS PRESSURE AND FLOW REQUIREMENTS, FRICTION LOSS, OPERATING

TEMPERATURES, SUPPORT SPACING, JOINING METHODS, AND THERMAL EXPANSION AND CONTRACTION.

THE FIRE SPRINKLER PIPING SYSTEM SHALL BE HYDRAULICALLY CALCULATED USING A HAZEN-WILLIAMS C FACTOR OF 150, AND DESIGNED IN ACCORDANCE WITH THE STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, NFPA 13.

THE MAXIMUM DESIGN TEMPERATURE/PRESSURE RATING SHALL NOT EXCEED 175 PSI AT 150°F.

INSTALLATION PROCEDURES.

INSTALLATION PRACTICES SUCH AS PIPE SUPPORT SPACING, BRACING, ALLOWANCE FOR THERMAL EXPANSION/CONTRACTION, SOLVENT CEMENTING AND HANDLING AND STORAGE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE UL LISTING WHICH INCLUDES INSTALLATION LIMITATIONS.

CPVC PIPE AND FITTINGS ARE INTENDED FOR USE AT A MAXIMUM WORKING PRESSURE OF 175 PSI AT 150°F IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPROPRIATE LISTED AGENCIES.

ALL APPLICABLE CODES AS PER THE NFPA SHALL BE IDENTIFIED.

AFTER THE SYSTEM IS INSTALLED AND ANY SOLVENT CEMENT IS CURED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE SYSTEMS SHALL BE HYDROSTATICALLY TESTED PER THE REQUIREMENTS OF THE APPLICABLE NFPA STANDARD (NFPA 13D).

MAINTENANCE SHALL BE IN ACCORDANCE WITH THE STANDARD FOR INSPECTION, TESTING AND MAINTENANCE OF WATER BASED EXTINGUISHING SYSTEMS AS DEFINED BY NFPA 25.

### DIVISION 22- PLUMBING

#### 22-00 GENERAL PLUMBING

##### GENERAL PRODUCTS

DESCRIPTION

THE PLUMBING SYSTEM SHALL COMPLY WITH THE 2012 I.R.C. AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS RELATED TO THE PROJECT AS PER INDUSTRY STANDARDS.

THE PLUMBING CONTRACTOR TO BE RESPONSIBLE FOR THE COMPLETE PLUMBING INSTALLATION AND PROVIDE A (1) YEAR WARRANTY AFTER OWNER'S ACCEPTANCE.

VISIT THE JOB SITE PRIOR TO BIDDING THE PROJECT TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND ANY INTERFERENCE.

NO PLUMBING SHALL RUN ON AN OUTSIDE WALL.

ALL VENTS SHALL BE GANGED TO THE FEWEST NUMBER POSSIBLE TO PENETRATE ROOF AND SHOULD BE A MINIMUM OF 10' TO FROM EAVES. ALL VENTS TO BE SIZED AS PER I.R.C. REQUIREMENTS AND / OR NOT LESS THAN 3" DIAMETER PIPE. PROVIDE FLASHING AS REQUIRED.

SHOWER HEADS SHALL HAVE A FLOW RATE OF 2.5 GPM AT 80 PSI OR LESS.

LAVATORY AND SINK FAUCETS SHALL HAVE A FLOW RATE OF 2.2 GPM AT 60 PSI.

WATER CLOSET TO HAVE ECONO-PUSH TANK 1.6 GAL. MAX. FLUSHING CYCLE.

ALL HOSE BIBS SHALL BE NON FREEZE TYPE WITH BACK FLOW PREVENTER.

WATER STORAGE TANKS TO HAVE SENSING STRAPPING TIE DOWNS. SIZE OF WATER HEATER / WATER STORAGE TANK AS PER CODE. (I.R.C. M13017.2 & G2404.8)

PROVIDE FLOOR DRAIN AND / OR DRIP PAN UNDER WATER HEATER, SPA, HOT TUB, WASHING MACHINE, STEAM SHOWER EQUIPMENT, ETC. IF LOCATED ON WOOD FLOOR STRUCTURE. (I.R.C. P2801)

THE CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S ROUGHED IN INSTRUCTIONS. TAKE CARE DURING BUILDING CONSTRUCTION TO SEE THAT PROVISIONS ARE MADE FOR PROPER FIXTURE SUPPORT AND THAT VENUE IN PIPING IS ALLOWED AND PROTECTED FROM MOVEMENT OR DAMAGE.

THE CONTRACTOR SHALL TEST ALL PIPING INCLUDING DRAINAGE WASTE LINES, WATER PIPING, NATURAL GAS PIPING, ETC. TEST IN ACCORDANCE WITH INSURE PLUMBING CODE AND LOCAL CODES AND AUTHORITIES. WATER LINES TO BE DISINFECTED IN ACCORDANCE WITH LOCAL HEALTH DEPARTMENT REGULATIONS.

CAULK AROUND ALL PLUMBING FIXTURES AT FLOORS AND WALLS WITH FLEXIBLE CAULKING COMPOUND. COLOR TO MATCH FIXTURE.

AFTER FIXTURES HAVE BEEN SET THE CONTRACTOR SHALL CAREFULLY PROTECT THEM FROM DAMAGE UNTIL THE BUILDING IS OCCUPIED BY THE OWNER. JUST PRIOR TO ACCEPTANCE OF THE JOB BY THE OWNER, THE CONTRACTOR SHALL CLEAN ALL PLUMBING FIXTURES AND REMOVE LABELS.

PROVIDE ANTI-SCALD LIMITING DEVICES SET AT 120 DEGREES FOR BATHUBS AND SHOWERS.

ALL SUPPLY, WASTE, & GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. ALL WATER LINES TO BE TYPE 1" HARD DRAWN COPPER OR POLYETHYLENE CROSS-LINK PIPING FOR ABOVE GROUND APPLICATIONS OR APPROVED EQUAL. PROVIDE TYPE "X" COPPER OR POLYETHYLENE CROSS-LINK PIPING FOR UNDERGROUND. PROVIDE CONTINUOUS LINE WITH NO JOINTS FOR UNDERGROUND APPLICATIONS, UNLESS APPROVED. ALL FITTINGS TO BE COPPER WITH SWEAT SOLDER JOINTS FOR COPPER PIPING OR BRASS FITTINGS WITH COMPRESSION FITTINGS FOR POLY PIPE. ALL WASTE LINES TO BE PVC OR ABS PLASTIC PIPE.

WASTE LINES SHALL BE PROVIDED WITH A CLEAN OUT AS REQUIRED. EXTEND CLEAN OUTS TO ACCESSIBLE SURFACE. DO NOT PLACE CLEAN OUTS IN FLOOR UNLESS APPROVED.

PLUMBING CONTRACTOR SHALL PROVIDE A TURN OFF VALVE AND DRAIN AT THE LOWEST LEVEL OF THE FACILITY. ALL FIXTURES SHALL BE ABLE TO DRAIN AT THIS POINT. PROVIDE FLOOR DRAIN AT LOCATION OF PLUMBING SYSTEM DRAIN.

PROVIDE CULINARY WATER SOFTENERS SYSTEM THROUGH OUT RESIDENCE AS REQUIRED. SYSTEM TO BE INTERMOUNTAIN WATER INC. "MODEL" TAPBROT SYSTEM. INSTALLATION AS PER MANUFACTURE. O.A.E.

PROVIDE FIRE SPRINKLER SYSTEM AS REQUIRED BY BUILDING DEPARTMENT. SYSTEM TO BE BUILT TO NFPA 13D ACOFFED. PROVIDE ENGINEERING, LAYOUT, SPECIFICATIONS, ETC. FOR APPROVAL PRIOR TO INSTALLATION. PROVIDE CONCEALED HEADS.

STEAM SHOWER UNITS TO BE "WOLFE" STEAM GENERATOR K-1734 OR EQUAL. INSTALL AS PER MANUFACTURE REQUIREMENTS. MEETS OR EXCEEDS UL-499/CSA C22.2 NO. 88.

BATHUBS AND SHOWER FLOORS AND WALLS ABOVE BATHUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH A NON-ABRASIVE SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 72" INCHES ABOVE THE FLOOR. SHOWER PAN LINERS AND SITE BUILT PAN LINERS SHALL EXTEND A MINIMUM OF 3" ABOVE SHOWER DOOR THRESHOLD. PROVIDE SOLID BLOCKING BEHIND LINER. ALL SHOWER PAN LINERS SHALL BE INSTALLED ON SLOPED BUILT UP FLOOR AND MUST BE INSPECTED.

22-01 PLUMBING FIXTURES

##### GENERAL PRODUCT

SEE PLUMBING FIXTURE SCHEDULE AND PLANS FOR LOCATIONS AND SELECTION OF SPECIFIED FIXTURES.

##### SUBMITTALS

SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, COLORS AND MANUFACTURER SPECIFICATIONS FOR EACH FIXTURE SPECIFIED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

##### EXECUTION

INSTALL FIXTURES LEVEL AND PLUMB ACCORDING TO ROUGHING-IN DRAWINGS.

INSTALL WATER SUPPLY PIPING WITH STOP ON EACH SUPPLY TO EACH FIXTURE TO BE CONNECTED TO WATER DISTRIBUTION PIPING. SEAL JOINTS BETWEEN FIXTURES AND WALLS, FLOORS, AND COUNTERTOPS USING SANITARY-TYPE, ONE-PART, MILDEW-RESISTANT SILICONE SEALANT.

CONNECT FIXTURES WITH WATER SUPPLIES, STOPS, AND RISERS, AND WITH TRAPS, SOIL, WASTE AND VENT PIPING. USE SIZE FITTINGS REQUIRED TO MATCH FIXTURES.

CHECK THAT PLUMBING FIXTURES ARE COMPLETE WITH TRIM, FAUCETS, FITTINGS, AND OTHER SPECIED COMPONENTS.

INSPECT INSTALLED PLUMBING FIXTURES FOR DAMAGE. REPLACE DAMAGED FIXTURES AND COMPONENTS.

TEST INSTALLED FIXTURES AFTER WATER SYSTEMS ARE PRESSURIZED FOR PROPER OPERATION. REPLACE MALFUNCTIONING FIXTURES AND COMPONENTS, THEN RETEST. REPEAT PROCEDURE UNTIL UNITS OPERATE PROPERLY.

EACH WATER CLOSET SHALL BE LOCATED IN A CLEAR SPACE NOT LESS THAN 30" IN WIDTH (15" MINIMUM FROM CENTER TO ANY OBSTRUCTION) AND HAVE A CLEAR SPACE IN FRONT OF NOT LESS THAN 21" CLEAR. (I.R.C. K307)

22-02 TANK TYPE WATER HEATER

##### GENERAL PRODUCTS

COORDINATE WITH PLANS FOR LOCATION OF WATER HEATERS.

WATER HEATERS TO BE: A.O. SMITH OR EQUAL.

CAPACITY SHALL BE: 50 GALLONS

##### SUBMITTALS

SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, MANUFACTURER SPECIFICATIONS FOR EACH WATER HEATER FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

##### EXECUTION

CONNECT FIXTURES WITH WATER SUPPLIES, STOPS, AND RISERS, AND WITH TRAPS, SOIL, WASTE AND VENT PIPING. PROVIDE EXPANSION TANK AS REQUIRED BY LOCAL BUILDING CODE.

PROVIDE VENTING AS REQUIRED BY WATER HEATER MANUFACTURER SPECIFICATIONS.

FOR HOT WATER SUPPLIED TO BATHUBS AND WHIRPOOL TUBS SHALL BE LIMITED TO 120 DEGREES MAX BY A WATER TEMPERATURE LIMITING DEVICE (ASSE 1070) OR BY AN APPROVED COMBINATION TUB SHOWER VALVE.

22-04 WATER SOFTENER

##### GENERAL PRODUCTS

COORDINATE WITH PLANS FOR LOCATION OF WATER HEATERS.

WATER SOFTENER TO BE:

##### SUBMITTALS

SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, MANUFACTURER SPECIFICATIONS FOR EACH WATER HEATER FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

##### EXECUTION

CONNECT PER MANUFACTURER SPECIFICATIONS.

### 22-04 WATER SOFTENER

##### GENERAL PRODUCTS

DESCRIPTION

THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND COMPLY WITH ALL APPLICABLE BUILDING CODES, ASTM STANDARDS, TECHNICAL REPORTS FOR THE INSTALLATION OF PLUMBING COMPONENTS.

PROVIDE A PEX TUBING HOT AND COLD POTABLE WATER DISTRIBUTION SYSTEM, WHICH IS MANUFACTURED, FABRICATED AND INSTALLED TO COMPLY WITH REGULATORY AGENCIES AND TO MAINTAIN PERFORMANCE CRITERIA STATED BY THE PEX TUBING MANUFACTURER WITHOUT DEFECTS, DAMAGE OR FAILURE

UTILIZE AN INSTALLER HAVING DEMONSTRATED EXPERIENCE ON PROJECTS OF SIMILAR SIZE AND COMPLEXITY AND POSSESSES THE SKILLS AND KNOWLEDGE TO INSTALL A PEX POTABLE WATER DISTRIBUTION SYSTEM

DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS INTACT UNTIL READY FOR INSTALLATION

STORE MATERIALS PROTECTED FROM EXPOSURE TO HARMFUL ENVIRONMENTAL CONDITIONS AND AT TEMPERATURE AND HUMIDITY CONDITIONS RECOMMENDED BY THE MANUFACTURER AND STORE PEX TUBING INDOORS, IN CARTONS OR UNDER COVER TO AVOID DIRT OR FOREIGN MATERIAL FROM ENTERING THE TUBING

DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN SIX MONTHS, IF CONSTRUCTION DELAYS ARE ENCOUNTERED. COVER THE TUBING THAT IS EXPOSED TO DIRECT SUNLIGHT

WARRANTY

MANUFACTURER'S WARRANTY SHALL COVER THE REPAIR OR REPLACEMENT OF PROPERLY INSTALLED TUBING AND FITTINGS PROVEN DEFECTIVE AS WELL AS INCIDENTAL DAMAGE TO A WARRANTY FIXTURES FOR TUBING AND

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 23- HEATING AND COOLING

#### 23-00 GENERAL MECHANICAL NOTES

THE MECHANICAL SYSTEM SHALL COMPLY WITH 2012 I.R.C. AND IFGC AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS RELATED TO THE PROJECT, AS PER INDUSTRY STANDARDS.

THE MECHANICAL CONTRACTOR TO BE RESPONSIBLE FOR THE COMPLETE MECHANICAL INSTALLATION AND PROVIDE A 1 YEAR WARRANTY AFTER OWNERS ACCEPTANCE. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH OPERATION AND MAINTENANCE MANUALS.

VISIT THE JOB SITE PRIOR TO BIDDING THE PROJECT TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND ANY INTERFERENCE.

DRYER EXHAUST DUCT TO BE VENTED TO EXTERIOR. DUCTS TO BE RIGID ALUMINUM WITH SMOOTH INTERIOR SURFACES. NO HEAT SCREENS OR FASTENERS SHALL PENETRATE INTO THE DUCT. DOWN DRAIN IN DIRECTION OF AIR FLOW. MAXIMUM LENGTH SHALL NOT EXCEED 35'-0" EXCLUDING FLEXIBLE TRANSITION DUCT. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED BY 2.5 FEET FOR EACH 45 DEGREE BEND AND 5 FEET FOR EACH 90 DEGREE BEND. TRANSITION DUCTS SHALL NOT BE CONCEALED WITH CONSTRUCTION. (I.R.C. M1302)

BATHROOM EXHAUST DUCT WORK TO BE ALUMINUM, GALVANIZED STEEL, OR APPROVED BRASS GLASS. KITCHEN HOOD EXHAUST DUCTS TO BE GALVANIZED STEEL, STAINLESS STEEL OR COPPER. DUCTS TO BE AIR TIGHT AND EQUIPPED WITH A BACK DRAFT DAMPER. ALL DUCTS TO TERMINATE AT OUTSIDE. BATHROOM VENTILATION SYSTEM SHALL BE RATED AT 50 CFM (INTERMEDIATE VENTILATION) (I.R.C. CHAPTER 15 AND R303)

LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING IS BY THE MECHANICAL CONTRACTOR. COORDINATE WITH THE ELECTRICAL CONTRACTOR.

SUBMIT SPECIFICATION SHEETS ON ALL EQUIPMENT TO BE REVIEWED BY ARCHITECT.

MECHANICAL HEATING SYSTEM TO BE 90% EFFICIENT FORCED AIR FURNACE SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 20 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE 1" MINIMUM CLEARANCE AROUND EQUIPMENT AT SIDES AND REAR OF THE APPLIANCE AND 6" MINIMUM CLEARANCE IN FRONT OF THE APPLIANCE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, AS PER MANUFACTURES SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

MECHANICAL HEATING SYSTEM TO BE 80% EFFICIENT BOILER WITH RADIANT IN FLOOR HYDRONIC HEATING SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 20 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE 1" MINIMUM CLEARANCE AROUND EQUIPMENT AT SIDES AND REAR OF THE APPLIANCE AND 6" MINIMUM CLEARANCE IN FRONT OF THE APPLIANCE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURES SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

ALL HABITABLE ROOMS SHALL HAVE NATURAL VENTILATION EQUATING 4% OF THE FLOOR AREA. THIS SHALL BE PROVIDED THROUGH WINDOWS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOORS UNLESS AN APPROVED MECHANICAL VENTILATION SYSTEM IS PROVIDED CAPABLE OF PRODUCING 0.35 AIR CHANGES PER HOUR IN THE ROOM OR A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS INSTALLED.

EXHAUST FANS SHALL BE SIZED FOR A MINIMAL RATE OF 50 CFM. ALL FANS TO BE DUCTED TO OUTSIDE. ALL EXHAUST DUCTS TO HAVE APPROVED TERMINATIONS WITH SCREENS. TERMINATIONS SHALL BE INSTALLED AS NOT TO BE BLOCKED BY SNOW AND ICE. FANS MUST BE LISTED TO UL AND HAVE A LOW SPEED MOTOR. PROVIDE ACOUSTICAL INSULATION, GRILLS, CAPS, ETC. AS REQUIRED. (I.R.C. R303.3 AND M1507)

THE CONTRACTOR SHALL LAYOUT AND REFERENCE ALL MECHANICAL DRAWINGS. CONTRACTOR SHALL PROVIDE ALL ENGINEERING REQUIRED TO SIZE DUCTS, GRILLS, REGISTERS, ETC. REVIEW ALL LOCATIONS AND PLACEMENT FOR GRILLS, ETC. WITH OWNER PRIOR TO PLACEMENT. THE ASSOCIATED ARCHITECTURAL MECHANICAL LAYOUTS AND DRAWINGS SHALL BE FOR THE PURPOSE TO SHOW INTENT.

PROJECTS THAT REQUIRE MECHANICAL DUCT WORK SHALL CONFORM TO THE FOLLOWING. ALL DUCT WORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET STEEL TO CONFORM WITH "30A/CN" LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND I.R.C. CHAPTER 16. FABRICATE SHEET METAL DUCTS WITH CROSS-BREAK OR KINK FLAT SURFACES TO PREVENT VIBRATION AND PULSATION. HANG DUCTS WITH STRAPS OF 18 GAUGE GALVANIZED STEEL OF 1" WIDE. ANCHOR DUCTS SECURELY TO STRUCTURE WITH SCREWS, IN SUCH A MANNER AS TO PREVENT TRANSMISSION WITH VIBRATION. UNDERGROUND ROUND DUCT SHALL BE SCHEDULE 40 P.V.C. PIPE OR P.V.S. PIPE AS REQUIRED BY LOCAL JURISDICTION WITH FUSION WELDED JOINTS AND CONNECTIONS. RUN OUTS TO FLOOR GRILLES SHALL BE FABRICATED FROM SHEET P.V.C. OR P.V.S. OF SAME THICKNESS AS PIPE WITH ALL JOINTS AND CONNECTIONS FUSION WELDED.

REMOVE DEBRIS AND TRASH FROM DUCT WORK AND VACUUM CLEAN DUCTS. RUN SUPPLY AND EXHAUST FANS THROUGH GRILLES AND REGISTERS AS INSTALLED AND BEFORE CEILINGS AND WALLS ARE FINISHED. THE ADJUSTMENT OF AIR SYSTEMS SHALL BE DONE BY THE MECHANICAL CONTRACTOR SYSTEMS SHALL BE ADJUSTED TO WITHIN PLUS OR MINUS 5% OF THE AIR CAPACITY.

INSULATE ALL HEATING TRUNK AND BRANCH SUPPLY DUCTS IN UNFINISHED AREAS, CRAWLS SPACES, ATTICS AND GARAGES.

ALL GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. NATURAL GAS SERVICE LINES SHALL BE LESS THAN 1/2" INCH IN DIAMETER. ALL NATURAL GAS LINES TO BE SCHEDULE 40 BLACK STEEL OR FLEX PLASTIC PIPE AS APPROVED BY GAS COMPANY. (I.R.C. CHAPTER 24, R516-567-70 (B) AND STATE AMENDMENT TO IFGC)

ALL GAS APPLIANCES SHALL BE PROVIDED WITH A SHUT OFF VALVE. SHUT OFF VALVES SHALL BE LOCATED IN A PLACE SO AS TO PROVIDE ACCESS FOR OPERATION AND SHALL BE INSTALLED SO AS TO BE PROTECTED FROM DAMAGE.

#### 23-01 RADIANT HEAT

MECHANICAL HEATING SYSTEM TO BE 80% EFFICIENT BOILER WITH RADIANT IN FLOOR HYDRONIC HEATING SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 20 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE CLEARANCES AS PER MANUFACTURE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURES SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

#### 23-02 MECHANICAL HEATING AND COOLING

MECHANICAL HEATING SYSTEM TO BE 90% EFFICIENT FORCED AIR FURNACE SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 20 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE CLEARANCES AS PER MANUFACTURE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURES SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

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COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-05 METAL DUCTWORK

PROJECTS THAT REQUIRE MECHANICAL DUCT WORK SHALL CONFORM TO THE FOLLOWING. ALL DUCT WORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET STEEL TO CONFORM WITH "30A/CN" LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND I.R.C. CHAPTER 16. FABRICATE SHEET METAL DUCTS WITH CROSS-BREAK OR KINK FLAT SURFACES TO PREVENT VIBRATION AND PULSATION. HANG DUCTS WITH STRAPS OF 18 GAUGE GALVANIZED STEEL OF 1" WIDE. ANCHOR DUCTS SECURELY TO STRUCTURE WITH SCREWS, IN SUCH A MANNER AS TO PREVENT TRANSMISSION WITH VIBRATION. UNDERGROUND ROUND DUCT SHALL BE SCHEDULE 40 P.V.C. PIPE OR P.V.S. PIPE AS REQUIRED BY LOCAL JURISDICTION WITH FUSION WELDED JOINTS AND CONNECTIONS. RUN OUTS TO FLOOR GRILLES SHALL BE FABRICATED FROM SHEET P.V.C. OR P.V.S. OF SAME THICKNESS AS PIPE WITH ALL JOINTS AND CONNECTIONS FUSION WELDED.

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-06 AIR CONDITIONING CONDENSER

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-07 EXHAUST FAN

GENERAL PRODUCTS

PROVIDE EXHAUST FANS IN ALL BATHROOMS.

FANS SHALL BE DIRECTLY VENTED TO THE EXTERIOR.

FANS MUST BE CAPABLE OF TO MAINTAIN 50 CFM WITHIN ROOM LOCATED.

PRECISION

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-08 RECESSED DRYER VENT BOX

GENERAL PRODUCTS

DBX PRODUCTS

DBX 1000 PLASTIC DRYER VENT BOX

MADE OF HIGH IMPACT POLYSTYRENE, AND IS AVAILABLE IN 4" OR 6" SIZE. THE DRYER VENT BOX CAN BE USED BOTH FOR UP AND DOWN VENT. A SNAP ON TRIM RING FOR FINISH TRIM AT EDGE.

THE DBX 1000M IS 7 1/2" X 13 7/8" AND 3 1/2" DEEP. IT IS A 22 GAUGE METAL DRYER VENT BOX WITH A 22 GAUGE "SNAP ON TRIM RING". IT CAN BE INSTALLED IN 16" OR 24" O.C. FRAMING. THE DBX 1000M DRYER VENT BOXING IS POWDER COATED. FOR OPTIMUM RESULTS INSTALL THE DBX 1000M UP/DOWN VENTING IN 24" OR 24"X36" FRAMED WALLS AS FOLLOWS:

PRECISION

FOLLOW MANUFACTURER RECOMMENDED INSTALLATION INSTRUCTIONS.

1. CREDIT BOX TO MATCH DESIRED VENTING DIRECTION. SCORE & REMOVE APPROXIMATE 2' OR REAR 4 INCH AVOID VENT PENNECK-OUT. ALLOW MINIMUM OF 4 INCHES OF VENT PIPE TO EXTEND INSIDE THE BOX
2. IF GAS LINE IS TO BE INSTALLED, LOCATE 1/8" STRAW CLAMP ON TOP OF BOX. CUT THE WEBB BETWEEN THE 8 RINS WITH UTILITY KNIFE. PUSH THE GAS LINE THROUGH THE STRAW CLAMP. THE RINS WILL FLEX FORWARD HOLDING THE PIPE.
3. SLIDE BOX INTO POSITION TAKING CARE TO CORRECTLY ALIGN VENT PIPE AND GAS PIPE (IF PRESENT).
4. SPACING TABS WILL AUTOMATICALLY POSITION BOX SO THAT BOTTOM, INSIDE EDGE OF 2 1/4 TO 2 1/2 INCHES ABOVE FINISHED FLOOR TO ALLOW CLEARANCE BETWEEN TRIM RING AND FLOOR. COVERING TABS MAY ALSO BE USED TO ADJUST SPACING IS DESIRED.
5. ATTACH BOX DIRECTLY TO BOTH RIGHT AND LEFT STUDS USING THE SIX FLANGE SCREW HEADS. SCREWS ARE RECOMMENDED FOR MOUNTING.

TRIM INSTRUCTIONS:

1. SNAP OUT LEFT OR RIGHT TRIM RING "CUT OUT" (SEE DETAIL BELOW).
2. LEAVE 1/8" INCHES BETWEEN INSIDE EDGE OF BOX AND END OF BASEBOARD TO ALLOW FOR TRIM RING CLEARANCE.
3. SNAP TRIM RING INTO OPENING, NO CAULKING REQUIRED.
4. LEAVE UNFINISHED OR PAINT WITH DESIRED COLOR.

THE DBX 1000M METAL BOX INSTALLATION

1. CREDIT BOX TO MATCH DESIRED VENTING DIRECTION. ALLOW A MINIMUM OF 4" OF VENT PIPE TO EXTEND INTO THE BOX.
2. IF GAS LINE IS TO BE INSTALLED, INSERT INTO KNOCKOUT PROVIDED.
3. SLIDE BOX INTO POSITION TAKING CARE TO CORRECTLY ALIGN VENT PIPE AND GAS PIPE (IF PRESENT).
4. SET BOX SO THAT THE BOTTOM IS 1/8" ABOVE THE FLOOR TO ALLOW CLEARANCE FOR THE TRIM RINGS. FIXTURES TO BE INCLUDED IN BASE BID. ALL RECESSED DOWN LIGHTS TO BE INCLUDED IN BASE BID WITH TRIM RINGS AS SELECTED BY DESIGNER OR OWNER. ALL LIGHTS IN CLOSETS SHALL MEET I.R.C. E2903.11 REQUIREMENTS. ALL LIGHTS LOCATED IN WED OR DAMP LOCATIONS SHALL MEET I.R.C. E2903.8 - E2903.10 REQUIREMENTS.
6. SCREWS OR NAILS (1 1/4") IN LENGTH TO ATTACH THE DBX1000M BOX TO FRAMING.

TRIM INSTALLATION INSTRUCTIONS:

1. TRIM CARPENTER TO LEAVE 1/8" BETWEEN INSIDE EDGE OF BOX AND END OF BASEBOARD TO ALLOW TRIM RING CLEARANCE.
2. SNAP TRIM RING INTO OPENING, NO CAULKING REQUIRED.
3. TRIM RING IS POWDER COATED, NO FINISHING REQUIRED.
4. TRIM RING ACCOMMODATES 1/2" OR 3/8" DRYPAIL.

#### DIVISION 26- ELECTRICAL

#### 26-00 GENERAL ELECTRICAL

ALL DRAWINGS INDICATE LOCATIONS OF ELECTRICAL ITEMS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER.

CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PLANS FOR ALL DESIRED LOCATIONS FOR ELECTRICAL SWITCHES, OUTLETS, SCHEMATIC WIRING, EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH ELECTRICAL FIXTURE SCHEDULES AS RELATED BY ARCHITECT OR OWNER. COORDINATE WITH ELECTRICAL KEY NOTES, INTERNATIONAL BUILDING CODE AND SELECTED CODES FOR INSTALLATION REQUIREMENTS, AND ADDITIONAL INFORMATION.

ELECTRICAL CONTRACTOR SHALL INSTALL ALL BOXES FOR OUTLETS, SWITCHES, LIGHTS, DATA, COMMUNICATIONS AND ALL SPECIALTY ITEMS AND SHALL REVIEW AND RECEIVE APPROVAL FROM OWNER/ARCHITECT/DESIGNER PRIOR TO INSTALLATION OF WIRING. RELOCATION OF BOXES AFTER WIRING AS DIRECTED BY OWNER/ARCHITECT/DESIGNER WITHOUT APPROVAL OF LOCATION SHALL BE COMPLETED WITH NOT COST TO THE OWNER.

THE ELECTRICAL SYSTEM SHALL COMPLY WITH 2012 I.R.C. AND 2005 N.E.C. AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE, AND NATIONAL CODES. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMITY WITH THESE REGULATIONS WHETHER OR NOT SUCH WORK IS SPECIFICALLY SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL FEEDERS, PANELS, BOARDS, RELAY BRANCH CIRCUIT WIRING, CONDUITS, WIRE, METER BASES, COMPLETE WIRING FOR MOTORS, EXHAUST FANS, LINE VOLTAGE CONNECTIONS FOR HVAC EQUIPMENT, SPECIALTY LIGHTING FIXTURES, OUTLET BOXES, COVER PLATES, WALL SWITCHES, FIXTURES, RECEPTACLES, ETC.

ALL DRAWINGS INDICATE LOCATIONS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL POWER REQUIREMENTS. (I.R.C. E3801)

PROVIDE A 1/2" GROUND. AN ELECTRODE ENCASED BY AT LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2" INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E2503.1.2 AND N.E.C. 250.50)

ELECTRICAL SERVICE CAPACITY AND SIZE SHALL BE COMPLETED BY METHOD INDICATED IN THE I.R.C. AND NATIONAL ELECTRICAL CODE. PANELS OR CABINETS ENCLOSING FUSES, CIRCUIT BREAKERS, SWITCHES OR ELECTRICAL PANEL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCES TO BE A MINIMUM 30" WIDTH, 36" DEPTH AND 6" FROM FLOOR TOP. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER. (I.R.C. E3303)

ALL RECEPTACLES LOCATED WITH THE FOLLOWING CONDITIONS TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN BATHROOMS, OUTSIDE AT GRADE LEVEL, UNFINISHED BASEMENTS, CRAWL SPACES, AND IN GARAGES. GARAGE RECEPTACLES TO BE 1' ABOVE FINISHED FLOOR. (I.R.C. E3303)

ALL SWITCHES, RECEPTACLES, TELEPHONE JACKS AND CATV JACKS TO BE "LEVITON" 5601 ROCKER SERIES IN WHITE. (O.A.E.) DIMMER SWITCHES TO BE "LITRON" 51VA ROCKER SERIES IN WHITE. (O.A.E.) HEIGHT OF LIGHT SWITCHES FROM FINISHED FLOOR TO TOP OF SWITCH TO BE 48" TYPICAL UNLESS NOTED OTHERWISE. THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 18" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE 12" TO CENTER ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WORKING.

UNLESS NOTED OTHERWISE, LOCATE AND INSTALL ONE (1) GFCI WEATHER PROTECTED RECEPTACLE AT GRADE LEVEL AND OUTSIDE AT SLOTT AT EACH EXTERIOR DOOR.

ALL FIXTURES SHALL HAVE A U.L. LABEL LISTING. IF NOT U.L. LISTED LIGHTS SHALL NOT BE USED. ALL RECESS DOWN LIGHTS TO BE INSTALLED WITH CEILING JOINTS. BASE AND ALL RECESSED DOWN LIGHTS TO BE INSTALLED IN BASE BID. ALL RECESSED DOWN LIGHTS TO BE INCLUDED IN BASE BID WITH TRIM RINGS AS SELECTED BY DESIGNER OR OWNER. ALL LIGHTS IN CLOSETS SHALL MEET I.R.C. E2903.11 REQUIREMENTS. ALL LIGHTS LOCATED IN WED OR DAMP LOCATIONS SHALL MEET I.R.C. E2903.8 - E2903.10 REQUIREMENTS.

SMOKE DETECTORS TO BE HARD WIRED TO BUILDING CIRCUIT AND INTERCONNECTED WITH BATTERY BACK UP. PROVIDE SMOKE DETECTORS AT ALL BUILDING LEVELS. IN ALL BEDROOMS, ACCESS TO ALL BEDROOMS, ETC. (I.R.C. R313)

ALL BRANCH CIRCUITS THAT SUPPLY RECEPTACLES IN BEDROOMS NEED TO BE PROVIDED WITH ARC-FAULT PROTECTION. (N.E.C. 210.12) (I.R.C. E3802.12)

ALL STRUCTURED WIRING (IE. FIBER SMART CABLE, CAT5E, ETC.) TO HAVE A MINIMUM SEPARATION OF 12" BETWEEN HIGH VOLTAGE WIRING. CARBON MONOXIDE DETECTOR TO BE INSTALLED ON EACH HABITABLE LEVEL OF A DWELLING UNIT EQUIPPED WITH FUEL BURNING APPLIANCE. DETECTOR TO BE HARD WIRED WITH A BATTERY BACK UP. (I.R.C. 312.2 AND STATE AMENDMENT)

TOPSOIL STRIPPING REMOVE SOIL AND GRASS BEFORE STRIPPING TOPSOIL. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMIXING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.

STOCKPILE TOPSOIL MATERIALS AWAY FROM THE EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.

WOOD LAGGING: LUMBER, MIXED HARDWOOD, NOMINAL ROUGH THICKNESS OR [SIZE AND STRENGTH REQUIRED FOR APPLICATION]

REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 40), DEFORMED.

STEEL SHEET PILING: ASTM A 328/A 328M, ASTM A 572/A 572M, OR ASTM A 690/A 690M; WITH CONTINUOUS INTERLOCKS.

WOOD LAGGING: LUMBER, MIXED HARDWOOD, NOMINAL ROUGH THICKNESS OR [SIZE AND STRENGTH REQUIRED FOR APPLICATION]

REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 40), DEFORMED.

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WOOD LAGGING: LUMBER, MIXED HARDWOOD, NOMINAL ROUGH THICKNESS OR [SIZE AND STRENGTH REQUIRED FOR APPLICATION]

REINFORCING BARS: ASTM A 615/A 615M, GRADE 60 (GRADE 40), DEFORMED.

#### DIVISION 31- EARTHWORK

#### 31-01 SITE CLEARING

GENERAL PRODUCTS

PROTECT EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS TO REMAIN.

REMOVING EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS.

CLEARING AND GRUBBING.

STRIPPING AND STOCKPILING TOPSOIL.

REMOVING ABOVE- AND BELOW-GRADE SITE IMPROVEMENTS.

DISSECTION AND CAPPING OR SEALING SITE UTILITIES.

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.

PRECISION

SAVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS IDENTIFIED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.

UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED.

DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.

OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE WHEN SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE.

PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.

LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.

PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PREMISES AND WALKWAYS.

INSPECT, REPAIR, AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.

REMOVE EROSION AND SEDIMENTATION CONTROLS AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.

TRIM PRECISION

DRECT AND MAINTAIN TEMPORARY FENCING AROUND TREE PROTECTION ZONES BEFORE STARTING SITE CLEARING. REMOVE FENCING WHEN CONSTRUCTION IS COMPLETE.

**BUILDING KEYNOTES AND SPECIFICATIONS**

**DIVISION 32- EXTERIOR IMPROVEMENTS/LANDSCAPING**

**32-04 UNIT PAVERS/ RETAINING WALLS/ STAIRS**

GENERAL PRODUCTS  
PAVERS SHALL BE THE FOLLOWING: AS PER LANDSCAPE DRAWINGS  
PAVERS SHALL BE INSTALLED IN FOLLOWING PATTERN: AS PER LANDSCAPE DRAWINGS  
PAVER COLOR SHALL BE SELECTED BY ARCHITECT. AS PER LANDSCAPE DRAWINGS

SUBMITTALS  
SAMPLES FOR UNIT PAVERS, JOINT MATERIALS, AND EDGE RESTRAINTS

EXECUTION  
DO NOT USE FROZEN MATERIALS OR BUILD ON FROZEN SUBGRADE OR SETTING BEDS. PROTECT UNIT PAVES WORK AGAINST FREEZING FOR 24 HOURS AFTER INSTALLATION.

MIX PAVERS FROM SEVERAL PALLETS OR CUBES, AS THEY ARE PLACED, TO PRODUCE UNIFORM BLEND OF COLORS AND TEXTURES.

CUT UNIT PAVERS WITH MOTOR-DRIVEN MASONRY SAW EQUIPMENT TO PROVIDE PATTERN INDICATED AND TO FIT ADJOINING WORK NEATLY. USE FULL UNITS WITHOUT CUTTING WHERE POSSIBLE. INSTALL EDGE RESTRAINTS BEFORE PLACING UNIT PAVERS.

TOLERANCES: DO NOT EXCEED 1/16-INCH UNIT-TO-UNIT OFFSET FROM FLUSH (UPPAGE) NOR 1/8 INCH IN 24 INCHES AND 1/4 INCH IN 10 FEET FROM LEVEL OR INDICATED SLOPE, FOR FINISHED SURFACE OF PAVING.

COMPACT SOIL SUBGRADE UNIFORMLY AND PLACE AGGREGATE BASE. COMPACT BY TAMPING WITH PLATE VIBRATOR, AND SCREED TO DEPTH AS INDICATED

PLACE LEVELING COURSE AND SCREED TO A THICKNESS OF 1 TO 1-1/2 INCHES, TAKING CARE THAT MOISTURE CONTENT REMAINS CONSTANT AND DENSITY IS LOOSE AND CONSTANT UNTIL PAVERS ARE SET AND COMPACTED. TREAT LEVELING COURSE WITH HERBICIDE TO INHIBIT GROWTH OF GRASS AND WEEDS.

SET PAVERS WITH A MINIMUM JOINT WIDTH OF 1/16-INCH AND A MAXIMUM OF 1/8 INCH. BEING CAREFUL NOT TO DISTURB LEVELING BASE. IF PAVERS HAVE SPACER BARS, PLACE PAVERS HAND TIGHT AGAINST SPACER BARS.

VIBRATE PAVERS INTO LEVELING COURSE AND SPREAD DRY SAND AND FILL JOINTS IMMEDIATELY AFTER VIBRATING PAVERS INTO LEVELING COURSE. VIBRATE PAVERS AND ADD SAND UNTIL JOINTS ARE COMPLETELY FILLED, THEN REMOVE EXCESS SAND. LEAVE A SLIGHT SURPLUS OF SAND ON THE SURFACE FOR JOINT FILLING.

32-10 IRRIGATION SYSTEMS  
GENERAL PRODUCTS  
SEE LANDSCAPE DRAWINGS

ALL IRRIGATION SHALL MEET ALL CITY LANDSCAPE REQUIREMENTS.

32-11 PLANTING  
GENERAL PRODUCTS  
SEE LANDSCAPE DRAWINGS.

ALL PLANTING SHALL MEET ALL CITY LANDSCAPE REQUIREMENTS.



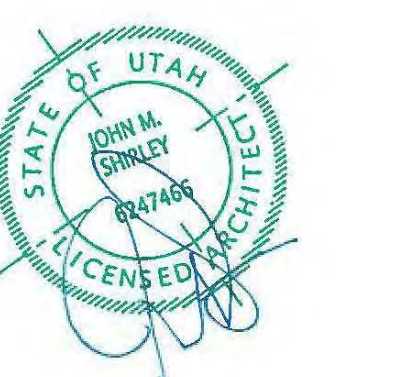
**Architecture**

Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:

SHEET TITLE:  
SPECIFICATIONS

SHEET NUMBER:  
G010

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PERMIT SET

NO.	DESCRIPTION	DATE	BY

**BENCHMARK ASSOCIATES**

PREPARED BY:  
 BENCHMARK ASSOCIATES, P.A.  
 P.O. BOX 733 100 BELL DRIVE  
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 WEB: WWW.BMA5B.COM  
 MAIL: WWW.BMA5B.COM

**GRADING & DRAINAGE PLAN**

WARM SPRINGS RANCH LOT 33  
 T4N, R17E, SEC 12, B.M., BLAINE COUNTY, IDAHO

PREPARED FOR: MAGLEBY CONSTRUCTION

DRAWN BY:	SLS
DESIGNED BY:	SLS
CHECKED BY:	PLJ
DATE:	03/13/2023
PROJECT NO.:	22074

DRAWING NO.  
**C-1**

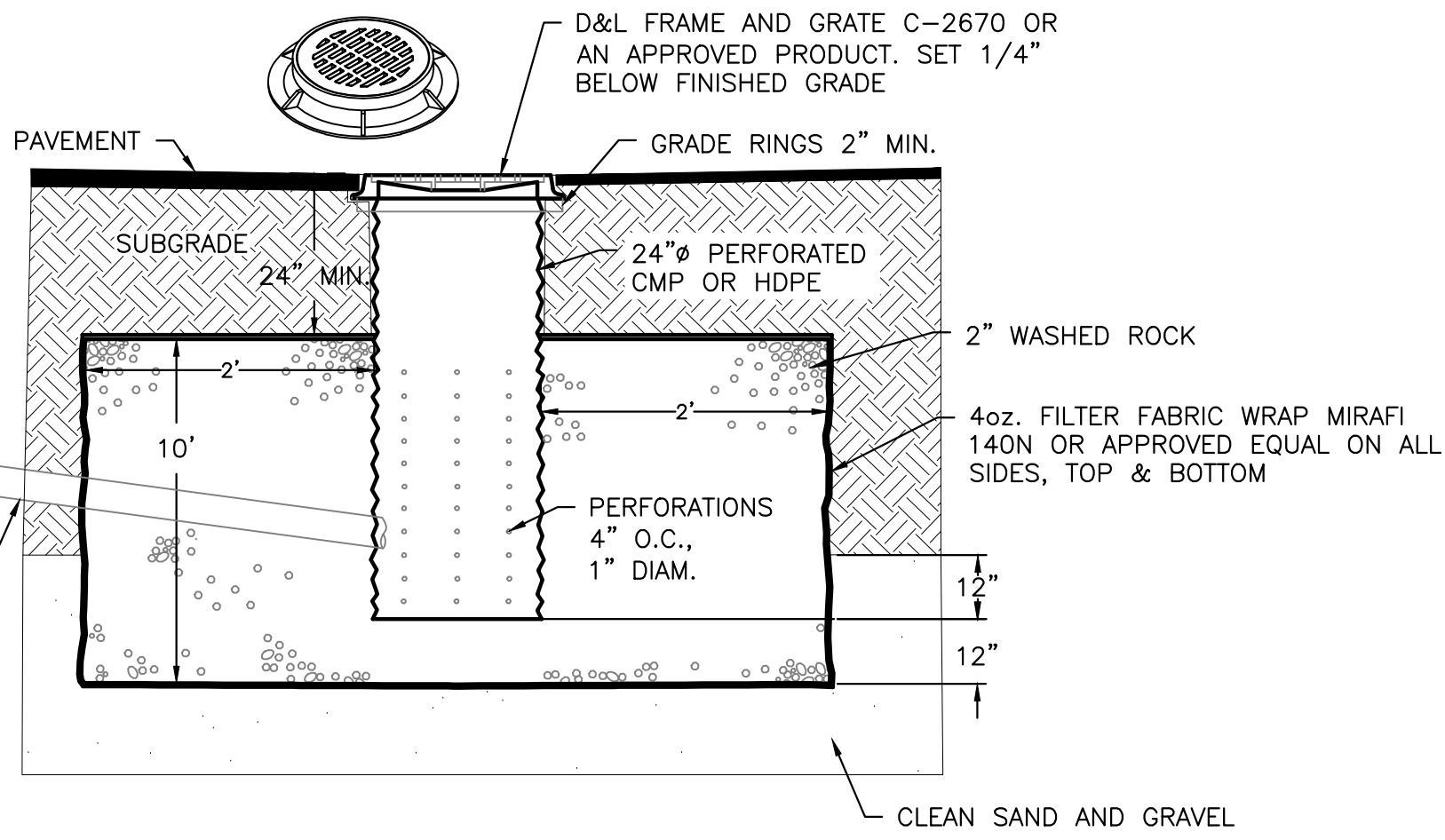
**LEGEND**

PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
EASEMENT	X
FENCE	-X-
EDGE OF PAVEMENT	S
SEWER	W
SEWER MANHOLE (MH)	⊙
WATER	W
WATER GATE VALVE	⊕
HYDRANT	⊙
CURB STOP	⊙
TELEPHONE	T
UTILITY TRENCH	UT
ELEVATION CONTOUR	-5775-
PROPOSED ELEV CONTOUR	59
SAWCUT LINE	
CURB TRANSITION	---
FLOW LINE	---
FOOTING DRAIN	FD
STORM DRAIN PIPE	DS
DOWN SPOUT	DS
CATCH BASIN-CITY	⊙
CATCH BASIN	⊙
DRYWELL	⊙
LANDSCAPE DRYWELL	⊙
ASPHALT PAVEMENT	▨
ASPHALT PAVEMENT (SNOW MELTED)	▨
PAVERS	▨
CONCRETE	▨
FG	---
EG	---
CB	---
ME	---
FINISHED GRADE	---
EXISTING GROUND	---
GRADE BREAK	---
MATCH EXISTING	---



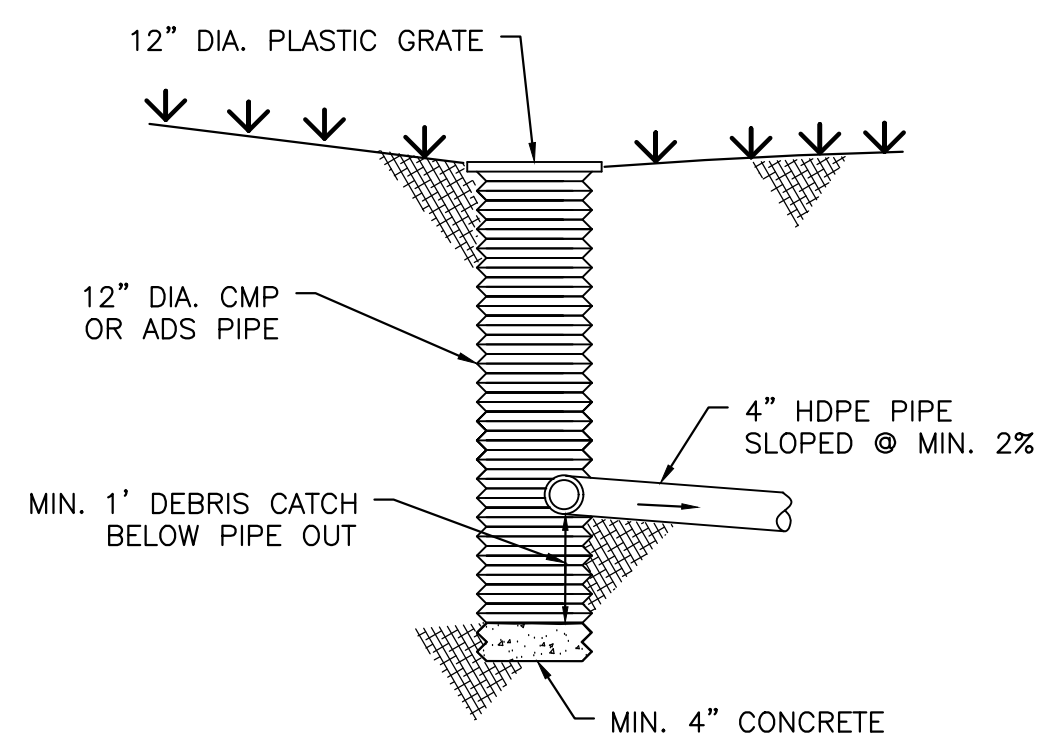
- GENERAL NOTES**
- CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING CONSTRUCTION. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
  - CONTRACTOR SHALL NOTIFY DIGLINE (1-800-342-1585) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE CONSTRUCTION OF ALL ITEMS HEREON. DUST CONTROL SHALL BE CONTINUOUS DURING CONSTRUCTION, 24 HOURS PER DAY 7 DAYS PER WEEK.
  - CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE HOUSE.
  - TRENCH DRAIN SHALL BE A 6" WIDE HDPE CHANNEL WITH A 0.75 BUILT IN CHANNEL SLOPE (ZURN FLO-THRU MODEL Z886 OR EQUIVALENT). GRATE SHALL BE DUCTILE IRON WITH A SLOTTED PATTERN. CATCH BASIN SHALL BE 6" WIDE X 20" LONG X 20" DEEP AND SHALL BE MADE OF HDPE. OUTLET PIPE SHALL BE 4" DIAMETER. (FLO-THRU MODEL Z887 OR EQUIVALENT). ALL COMPONENTS SHALL BE RATED FOR H20 LOADING.
  - ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL CONFORM TO CITY OF KETCHUM STANDARDS.
  - CONCRETE WITHIN CITY RIGHT-OF-WAY SHALL BE TITAN MIX OR EQUAL. ALTERNATE COLD WEATHER MIX WILL NEED TO BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT.
  - CONCRETE SHALL BE SEALED WITH AN OPAQUE SEALER.
  - 6" ROLLED CURB & GUTTER SHALL BE PER CITY OF KETCHUM STANDARD DETAIL #4.
  - CONCRETE SIDEWALK SHALL BE PER CITY OF KETCHUM STANDARD DETAIL #7.

**1 CONCRETE DRIVEWAY WITH RAMPED SIDEWALK**  
 SCALE: NONE

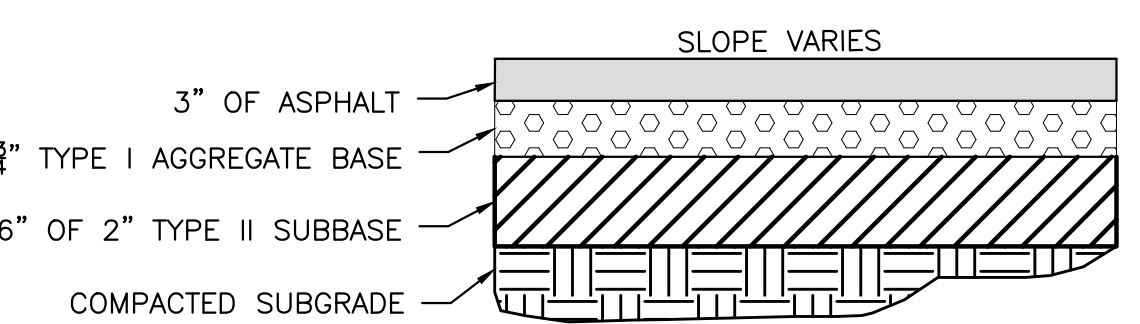


- NOTES:**
- THE BED SHALL BE EXCAVATED A MINIMUM OF 24" INTO CLEAN SAND AND GRAVEL.
  - MAXIMUM DEPTH SHALL NOT EXCEED 12 FEET.
  - IF CLEAN SAND AND GRAVEL IS NOT ENCOUNTERED WITHIN 12 FEET, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER.
  - GRATE OR SOLID LID AS APPROVED BY CITY OF KETCHUM.

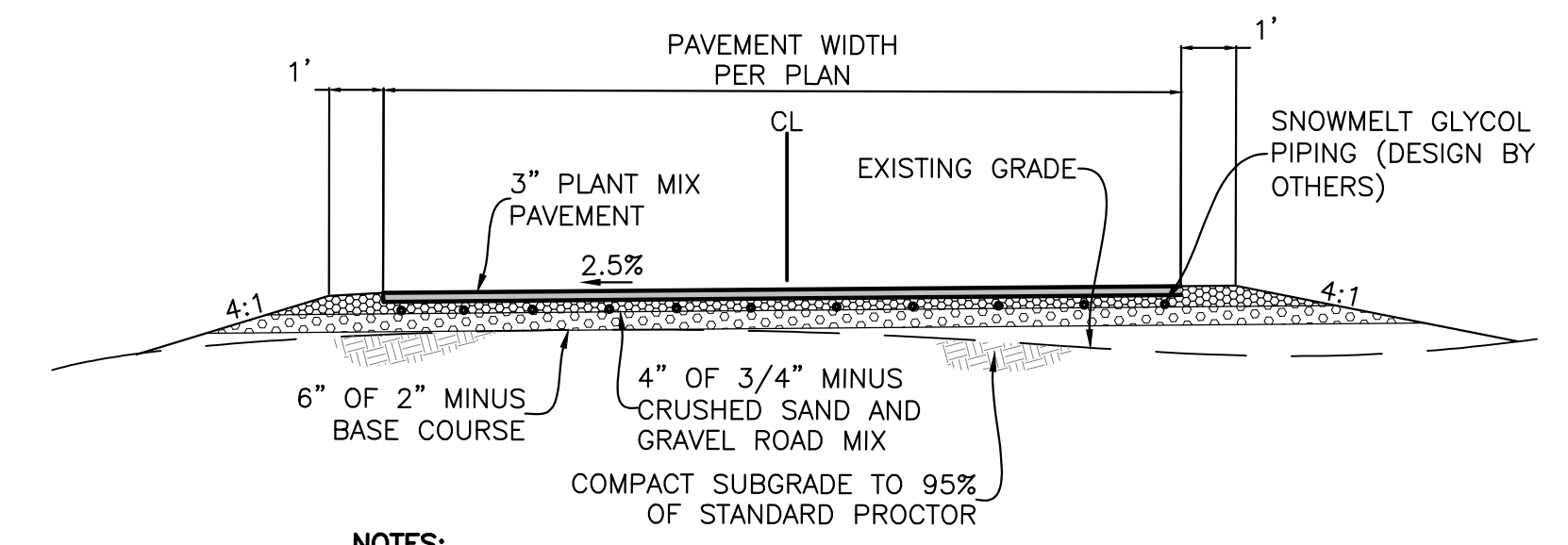
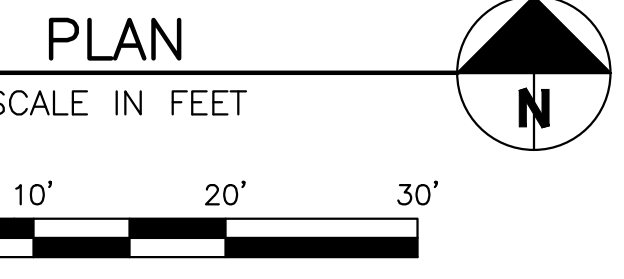
**2 TYPICAL DRYWELL DETAIL**  
 SCALE: NONE



**3 12" CATCH BASIN PROFILE**  
 NOT TO SCALE

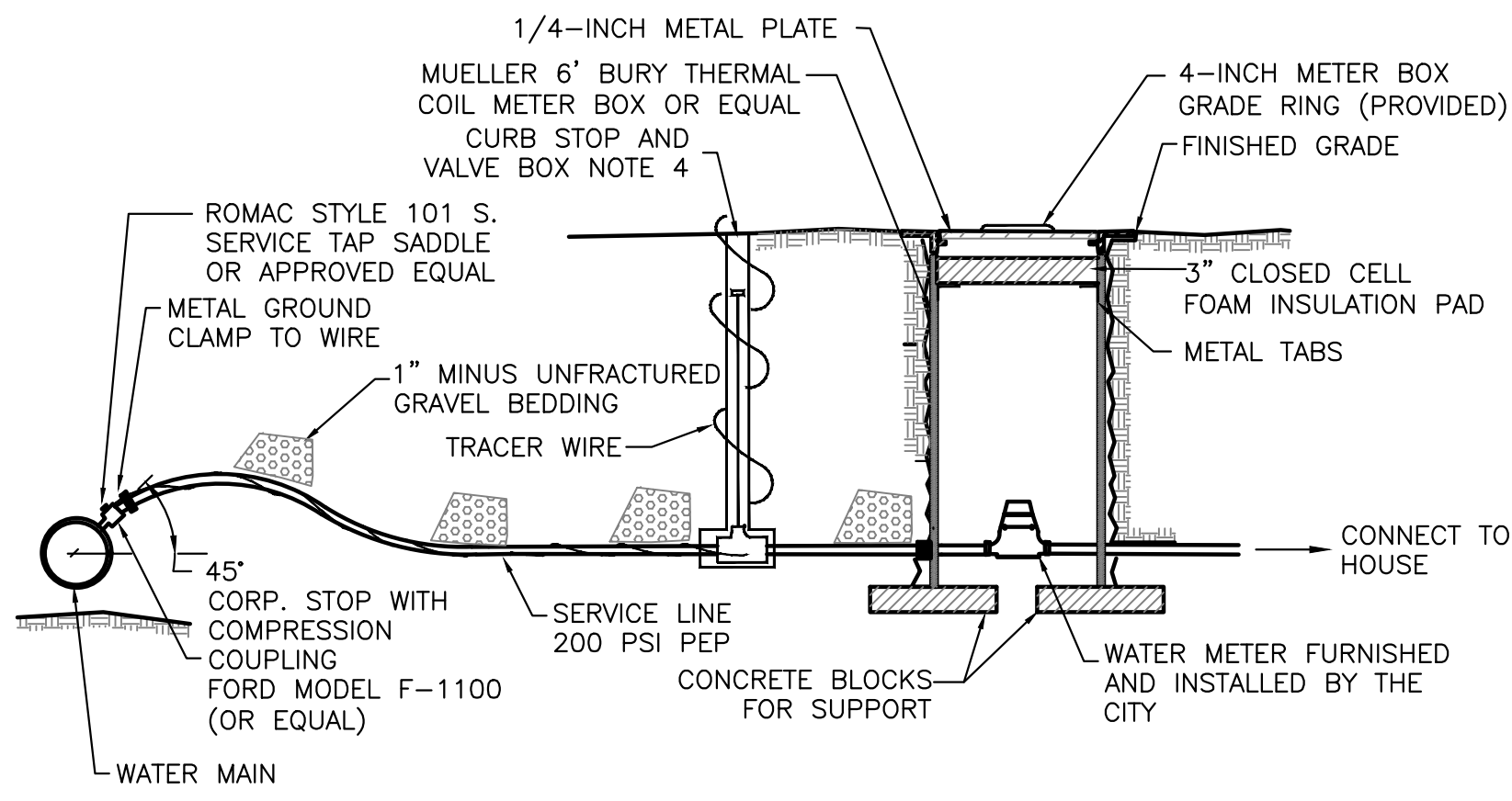


**4 TYPICAL STREET ASPHALT SECTION**  
 SCALE: NONE



- NOTES:**
- COMPACT DRIVEWAY SUBGRADE AND ALL STRUCTURAL FILL MATERIAL TO AT LEAST 95% OF THE MAXIMUM DENSITY OF EACH MATERIAL ACCORDING TO STANDARD PROCTOR ASTM D-698.

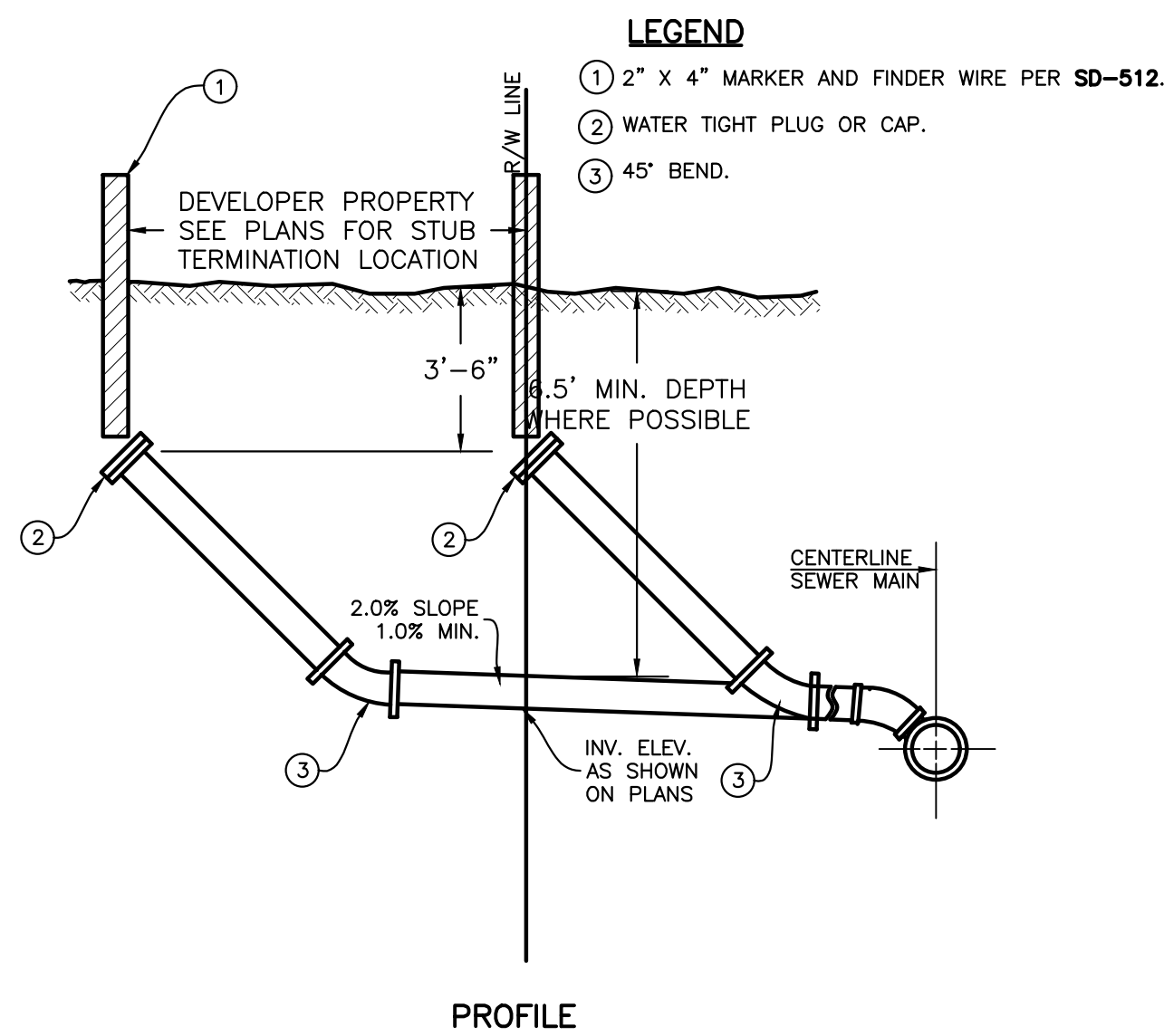
**A DRIVEWAY SECTION WITH SNOW-MELTED PAVEMENT**  
 SCALE: NTS



**NOTES**

1. WATER SERVICE LINE SHALL HAVE A 6" MIN. BURY DEPTH
2. SERVICE LINE SHALL BE 1" DIAMETER POLYETHYLENE PIPE UNLESS OTHERWISE SPECIFIED.
3. WATER SERVICE LINES SHALL BE BEDDED WITH 1" MINUS UNFRACTURED GRAVEL. BEDDING SHALL BE INSTALLED 4" UNDER THE PIPE AND 6" OVER THE PIPE.
4. FORD MODEL B-111 RESILIENT SEAT, CURB BALL VALVE (OR EQUAL). FORD EXTENSION CURB BOX WITH ARCHED BASE, 1-INCH UPPER SECTION, AND 2 HOLE "ERIE" PATTERN LID.

**1 WATER SERVICE AND METER CONNECTION**  
SCALE: N.T.S.



**LEGEND**

- 1 2" x 4" MARKER AND FINDER WIRE PER SD-512.
- 2 WATER TIGHT PLUG OR CAP.
- 3 45° BEND.

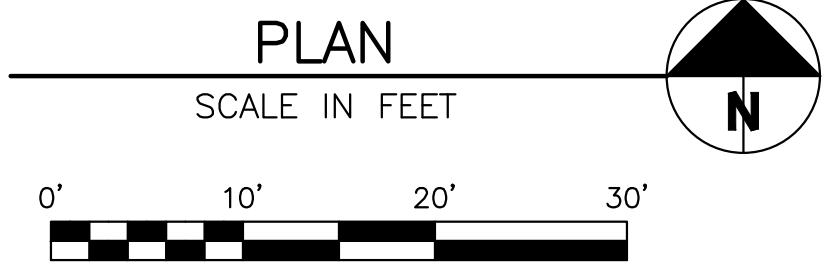
**NOTES**

1. INSULATION REQUIRED WHERE SEWER LINE BURY DEPTH IS LESS THAN 5'.

**2 STANDARD SEWER SERVICE CONNECTION DETAIL**  
SCALE: NONE

**UTILITY LEGEND**

- SEWER PROPOSED — S —
- SEWER CLEANOUT ● CO ●
- WATER PROPOSED — W —
- WATER METER PROPOSED ●



PROFESSIONAL ENGINEER  
JAMES B. JOHANNESSEN  
STATE OF IDAHO  
17661  
3/13/23

REVISIONS	NO.	DESCRIPTION	DATE	BY
	1			

**BENCHMARK ASSOCIATES**  
PREPARED BY:  
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**UTILITY PLAN**  
WARM SPRINGS RANCH LOT 33  
T4N, R17E, SEC 12, B.M., BLAINE COUNTY, IDAHO  
PREPARED FOR: MAGLEBY CONSTRUCTION

DRAWN BY: SLS  
DESIGNED BY: SLS  
CHECKED BY: PLJ  
DATE: 03/13/2023  
PROJECT NO.: 22074

DRAWING NO.  
**C-2**

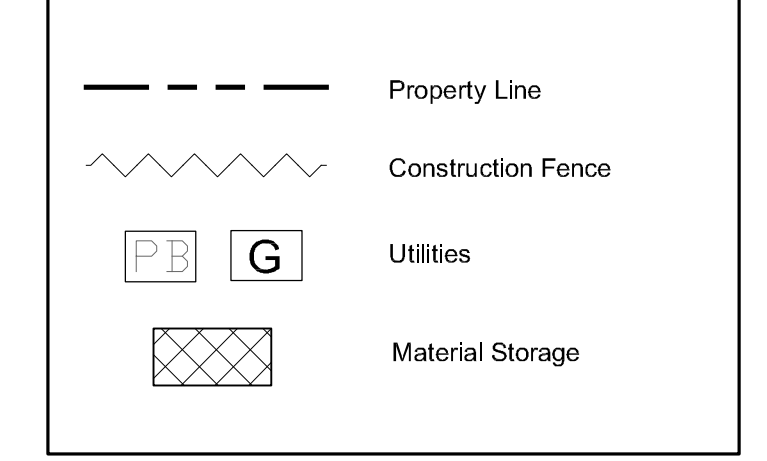
General Notes

1. Base map information taken from survey by Benchmark Associates dated 11/24/21 and from on-site information. Architectural information provided by Think Architecture dated 02/22/22. Contractor shall verify conditions in the field prior to construction.
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3. All existing utilities are underground. All new utilities shall be underground.
4. Site serviced by City of Ketchum.

Cut And Fill:

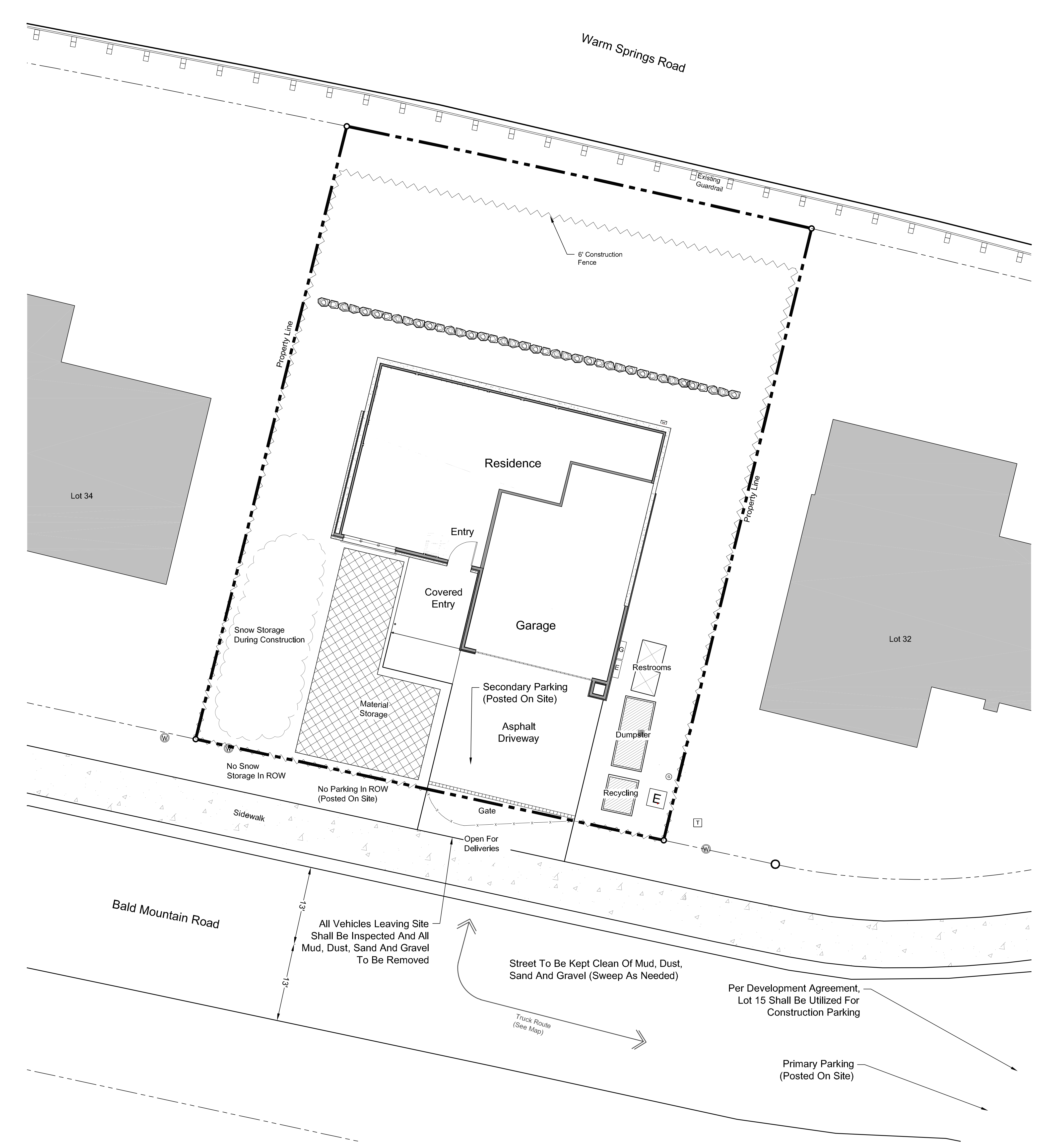
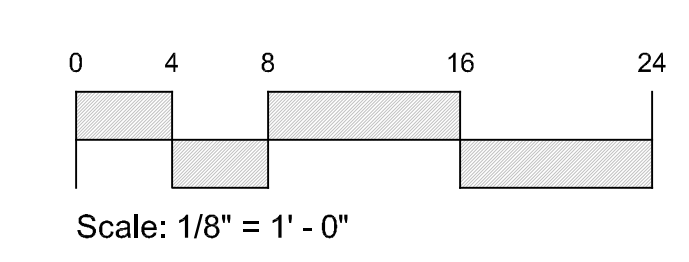
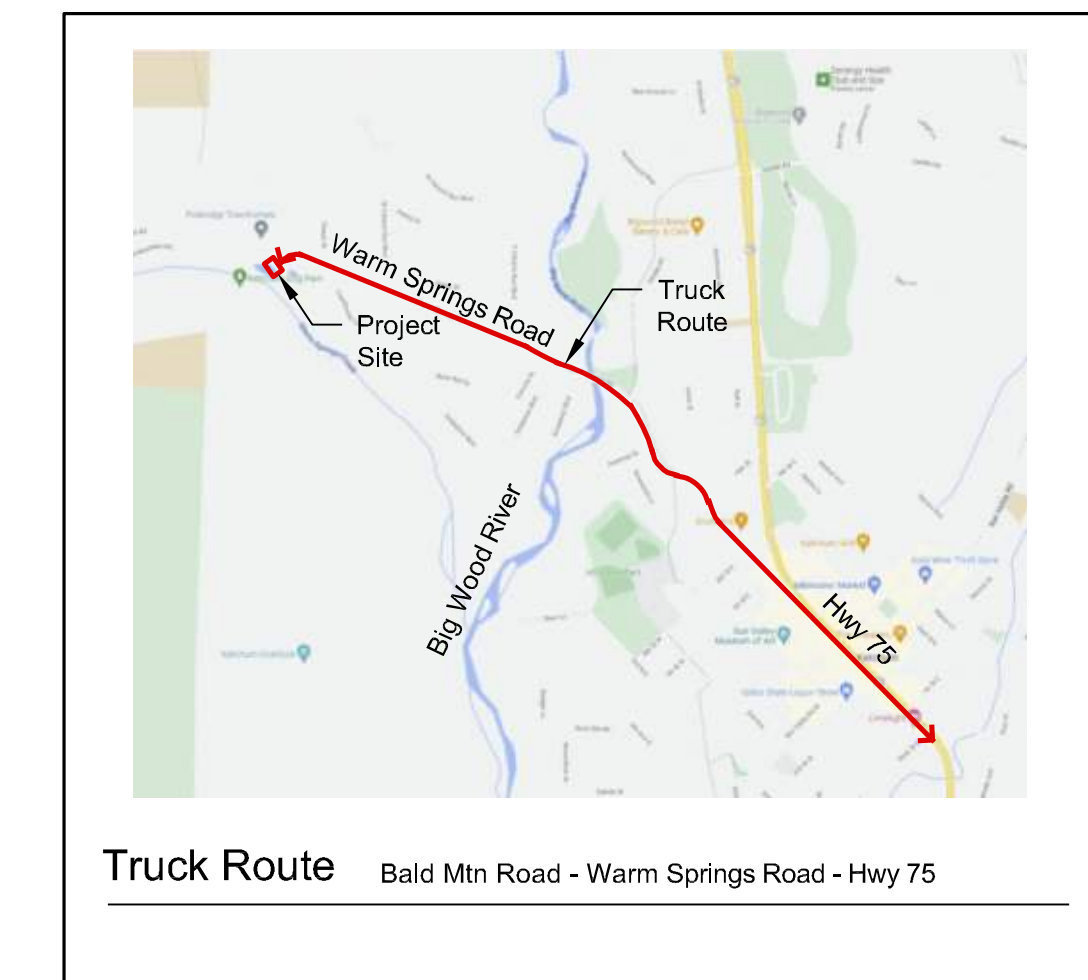
Total Cut = 700 Cubic Yards  
Total Fill = 0 Cubic Yards  
Total Export = 700 Cubic Yards

Plan Legend



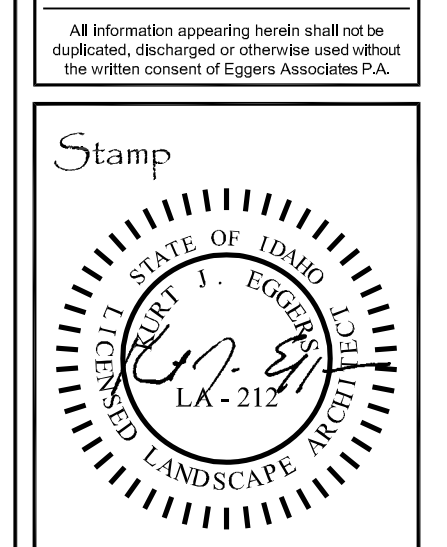
NOTES:

- (1) See Civil Plans for All Work in Right of Way.
- CONSTRUCTION ACTIVITY NOTES:**
- (1) Dust Control Using Water Truck as Needed.
  - (2) All Construction Traffic Shall Have Tires Inspected for Mud, Sand, and Gravel Prior to Leaving Site. Any Material Shall be Removed Prior to Entering City Streets.
  - (3) Contractor is Responsible for Snow Removal of Site and Construction Parking.
  - (4) Any Temporary Use Of The Public Right-Of-Way Will Require A Temporary Use Right-Of-Way (TURP) Permit From The City.
  - (5) All Neighbors In The Project Vicinity Shall Be Provided Notice Of The Project, Schedule And The General Contractor's Contact Information In Advance Of Construction.
  - (6) The Job Site Shall Be Kept In A Clean And Orderly Condition, Trash Shall Be Picked Up On The Site And Surrounding Areas On A Daily Basis, And Materials Shall Be Stored In Neat, Tidy Piles.
  - (7) The Condition Of The Right-Of-Way Shall Be Documented With Photographs And A Site Visit With Street Department Personnel. Repair Of Damage To The Right-Of-Way Shall Be The Responsibility Of The General Contractor.
  - (8) Manholes May Not Be Obstructed At Any Time. In Addition, Minimum Three Feet Clear Shall Be Maintained On Back And Sides Of Fire Hydrants, And Minimum 15 Feet Clear Shall Be Maintained On The Front, Street Side Of Fire Hydrants.
  - (9) Speed Limits For Construction Vehicles Shall Be Limited To 15 MPH Within One Block Of The Construction Site, Unless Otherwise Determined Be The Ketchum Police Department.



Warm Springs Ranch Residences  
Block 1, Lot 33  
Ketchum, Idaho

Job No: 22.26  
Scale: 1/8" = 1'-0"  
Issue/Revisions Date:  
Design Review 05/17/23  
RVSD 05/08/23



Sheet Title:  
Construction Management

Sheet No:  
L1

**General Notes**

1. Base map information taken from survey by Benchmark Associates dated 11/24/21 and from on-site information. Architectural information provided by Think Architecture dated 02/22/22. Contractor shall verify conditions in the field prior to construction.
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4. Site serviced by City of Ketchum.

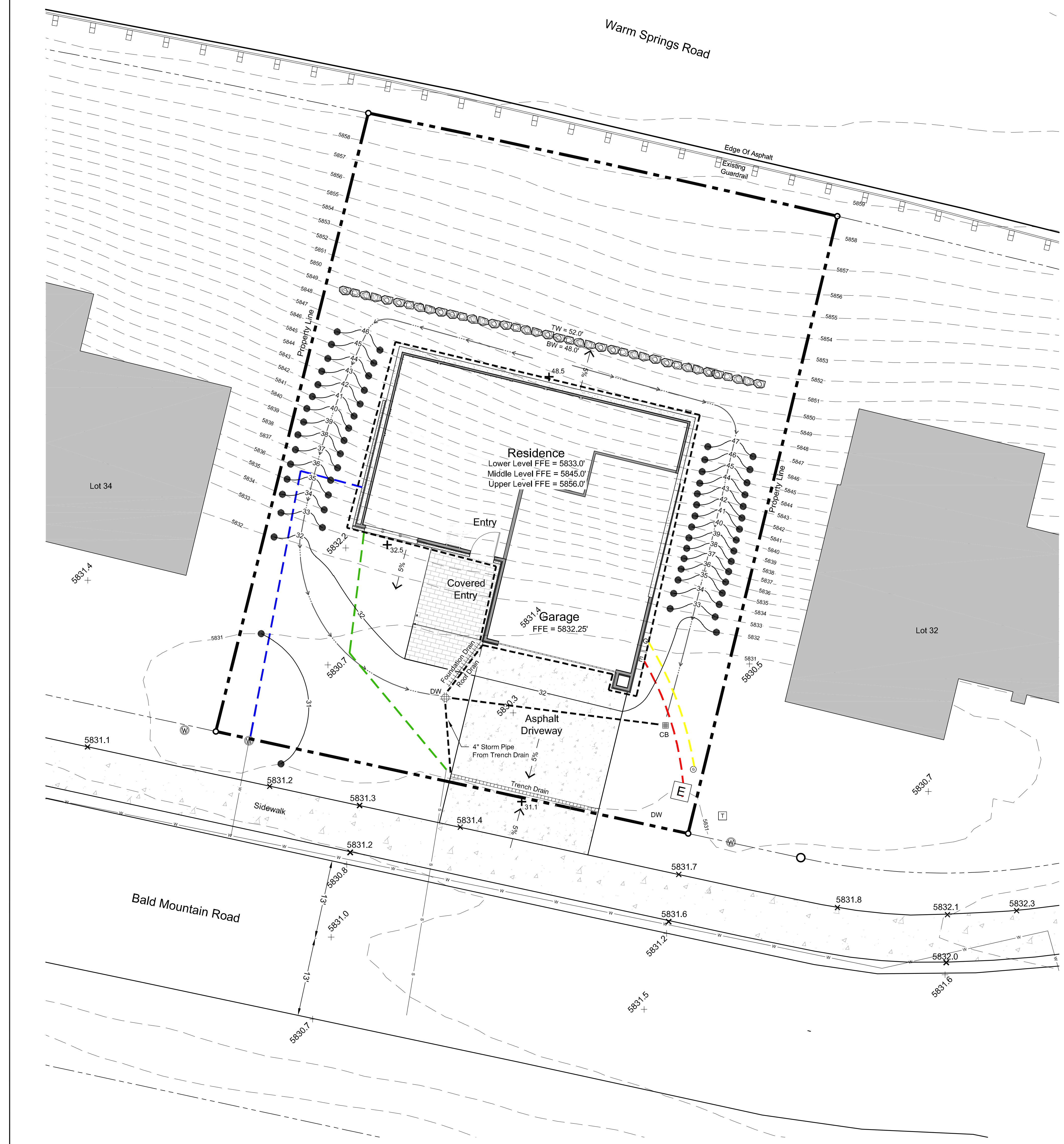
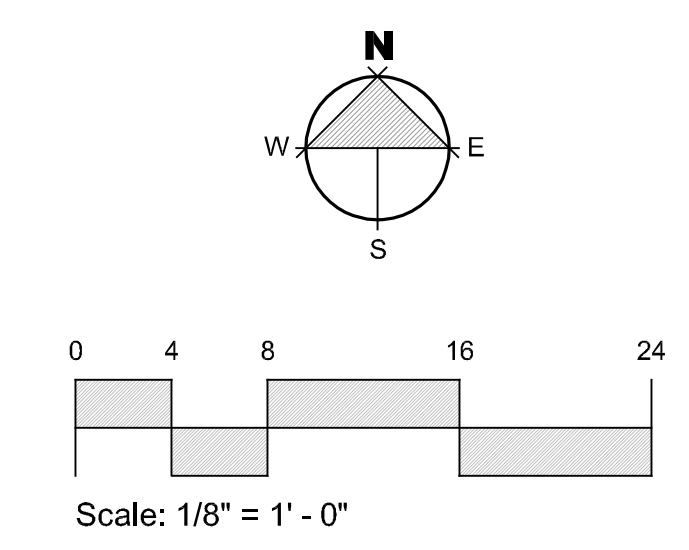
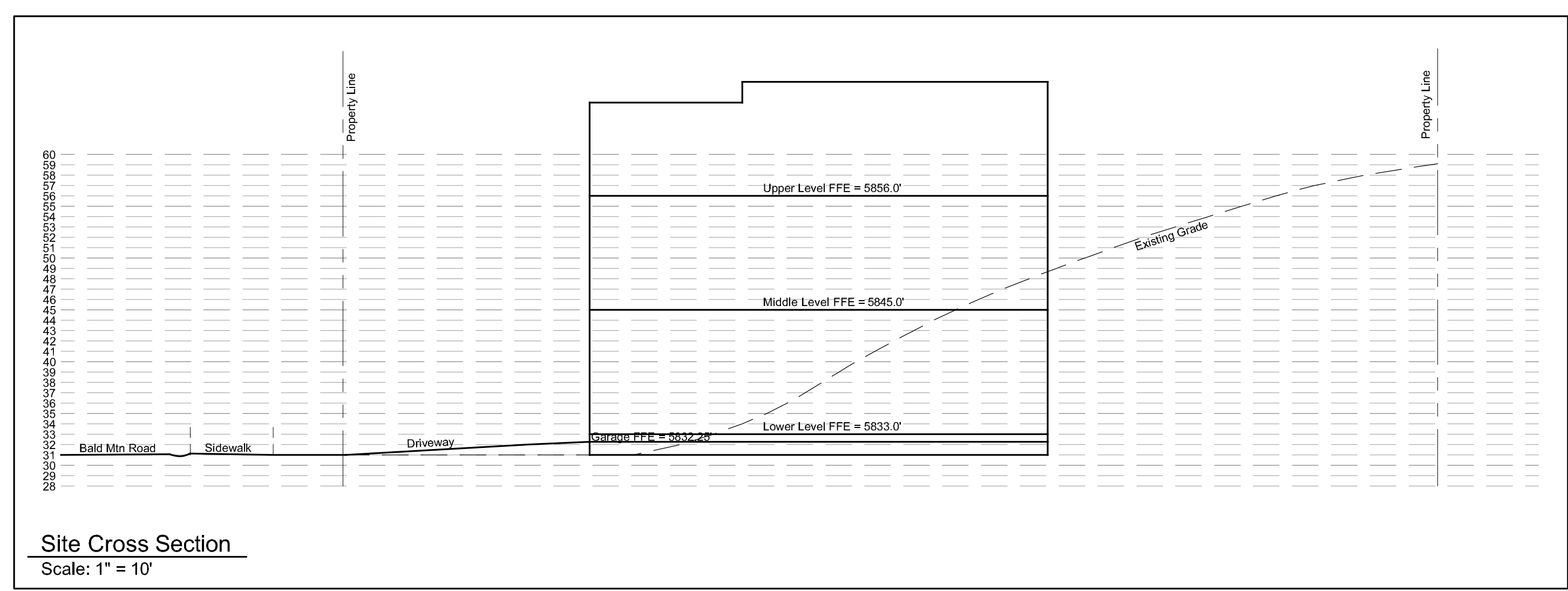
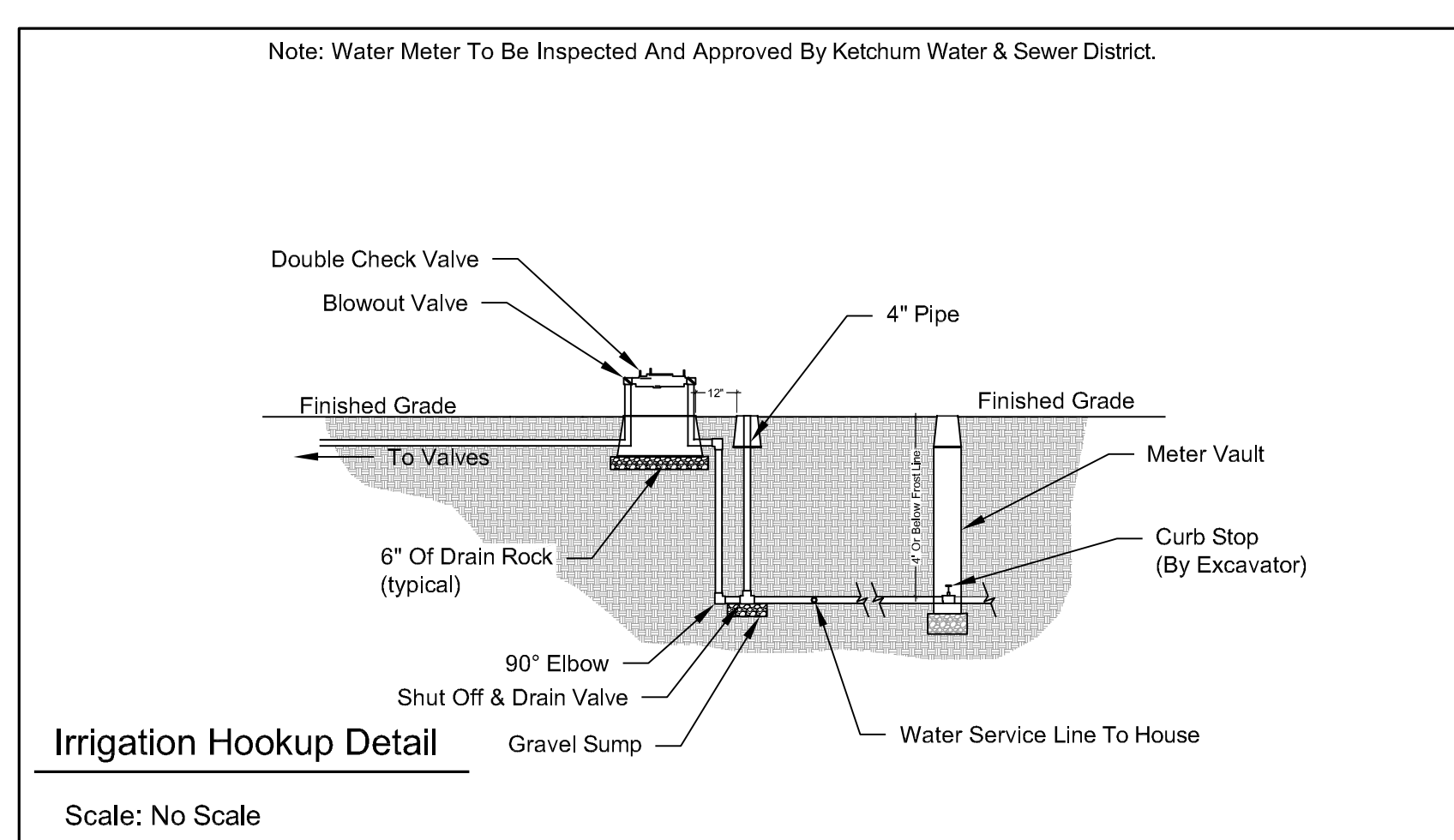
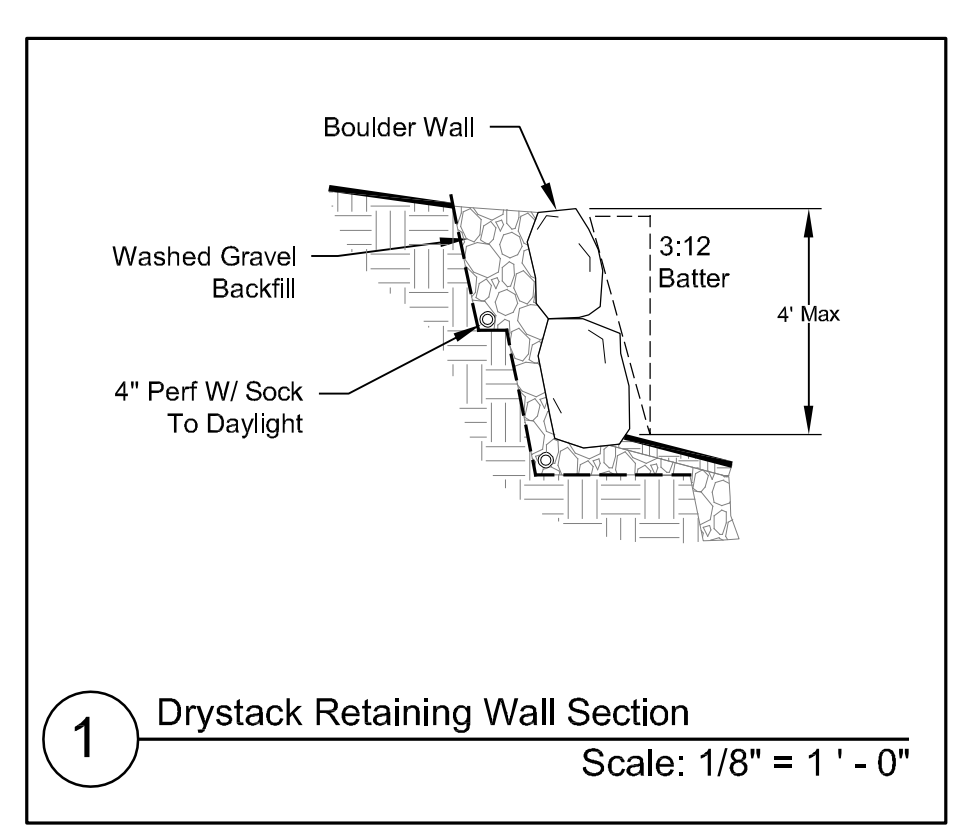
**\*See Civil Plan (C1) For Site Grading And Drainage**

**Cut & Fill**

Excavation:	
Building/Garage Site:	700 Cu/Yds
	0 Cu/Yds
<b>Total Cut:</b>	<b>700 Cu/Yds</b>
Fill:	
Site Landscape Fill:	0 Cu/Yds
Driveway:	0 Cu/Yds
<b>Total Fill:</b>	<b>0 Cu/Yds</b>
<b>Total Export:</b>	<b>700 Cu/Yds</b>

**Plan Legend**

--- Property Line	--- Existing Contour
x 92.7 (92.5)	Existing Spot Elevations
● 95	Proposed Contour
⊕	Landscape Drywell
⊞	Catch Basin
2% Slope	Proposed Drainage Direction With Slope Percentage
+ 92.5	Proposed Spot Elevations
	4" Perforated Footing Drain
---	4" Solid Drain Pipe (Roof & Downspouts)
⊖	Drystack Retaining Wall
— w —	Water Line
— e —	Electrical Service
— g —	Gas Service
— w —	Water Service
— s —	Sewer Service





General Notes

1. Base map information taken from survey by Benchmark Associates dated 11/24/21 and from on-site information. Architectural information provided by Think Architecture dated 02/22/22. Contractor shall verify conditions in the field prior to construction.
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3. All existing utilities are underground. All new utilities shall be underground.
4. Site serviced by City of Ketchum.

Plan Legend

- Property Line
- - - PUE And Snow Storage Easement
- Proposed Contour
- 4' Fence
- ⊕ Landscape Drywell
- ▨ Concrete Pavers
- ▩ Asphalt
- ▧ Gravel

Irrigation Calculation

(Lot = ± .22 Acres)

Description	Square Footage
Natural Grass	5,300 sq.ft.
Planter Beds	100 sq.ft.
<b>Total Irrigated Area</b>	<b>5,400 sq.ft.</b>
	+/- .12 Acres

Snow Storage

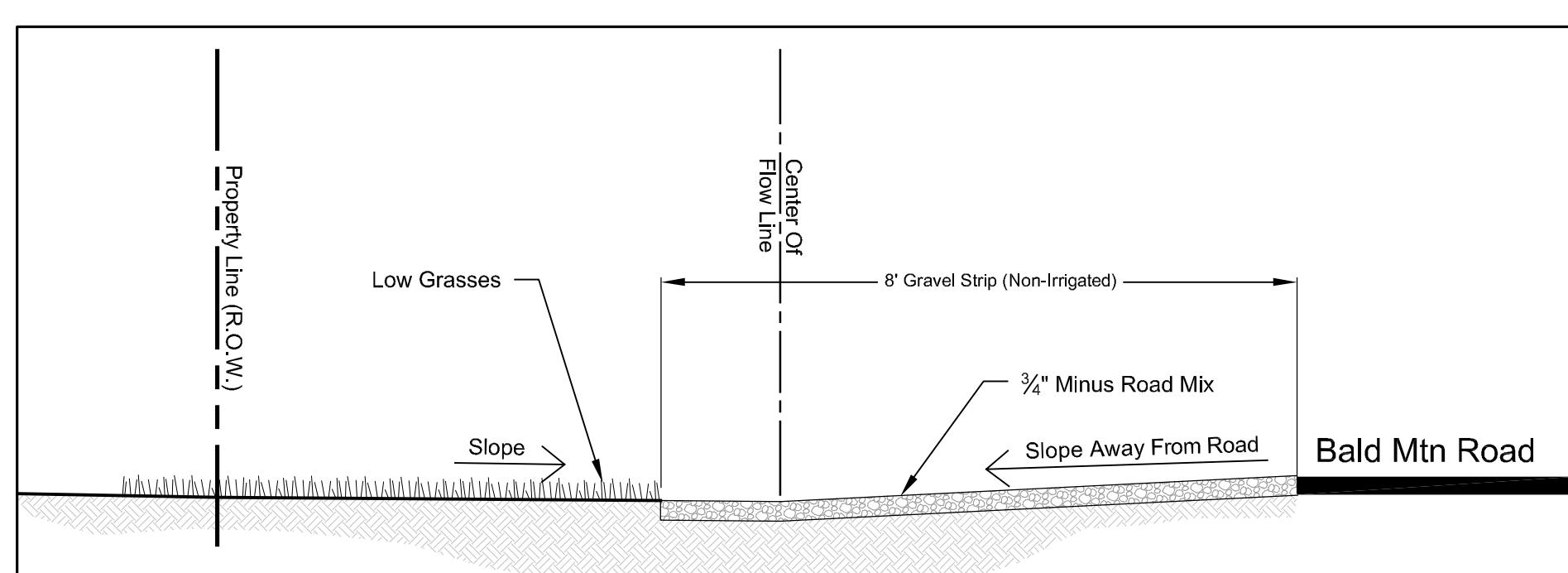
Driveway Area:	765 sq ft
Walkway Area:	72 sq ft x .30%
<b>Required Area:</b>	<b>251 sq ft</b>
<b>Snow Storage Provided:</b>	<b>275 sq ft</b>

Per Development Agreement:

- 1) Landscaping Shall Be Drought Tolerant
- 2) Irrigation System Shall Be Equipped With Shut Off Valve Not Impacting Water Service To Residence
- 3) Irrigation System Shall Be Water Efficient In Ground Components. Controller With Rain/Freeze Sensor.
- 4) Isolate Zones Per Plant Type And Exposure.

Landscape Notes:

- 1) The Area 12" Horizontal From The Base Of A Wall Shall Be Finished In A Way To Prevent Any Vegetation Growing, And For Vegetative Debris To Be Easily Removed.
- 2) Any Trees With Crowns Closer Than 30 Feet To Any Structure Shall Be Limbed Up A Minimum Of 6' From Ground Level.
- 3) Any Tree Crowns Shall Be Pruned To Have A Minimum 10' Horizontal Clearance From Any Structure.

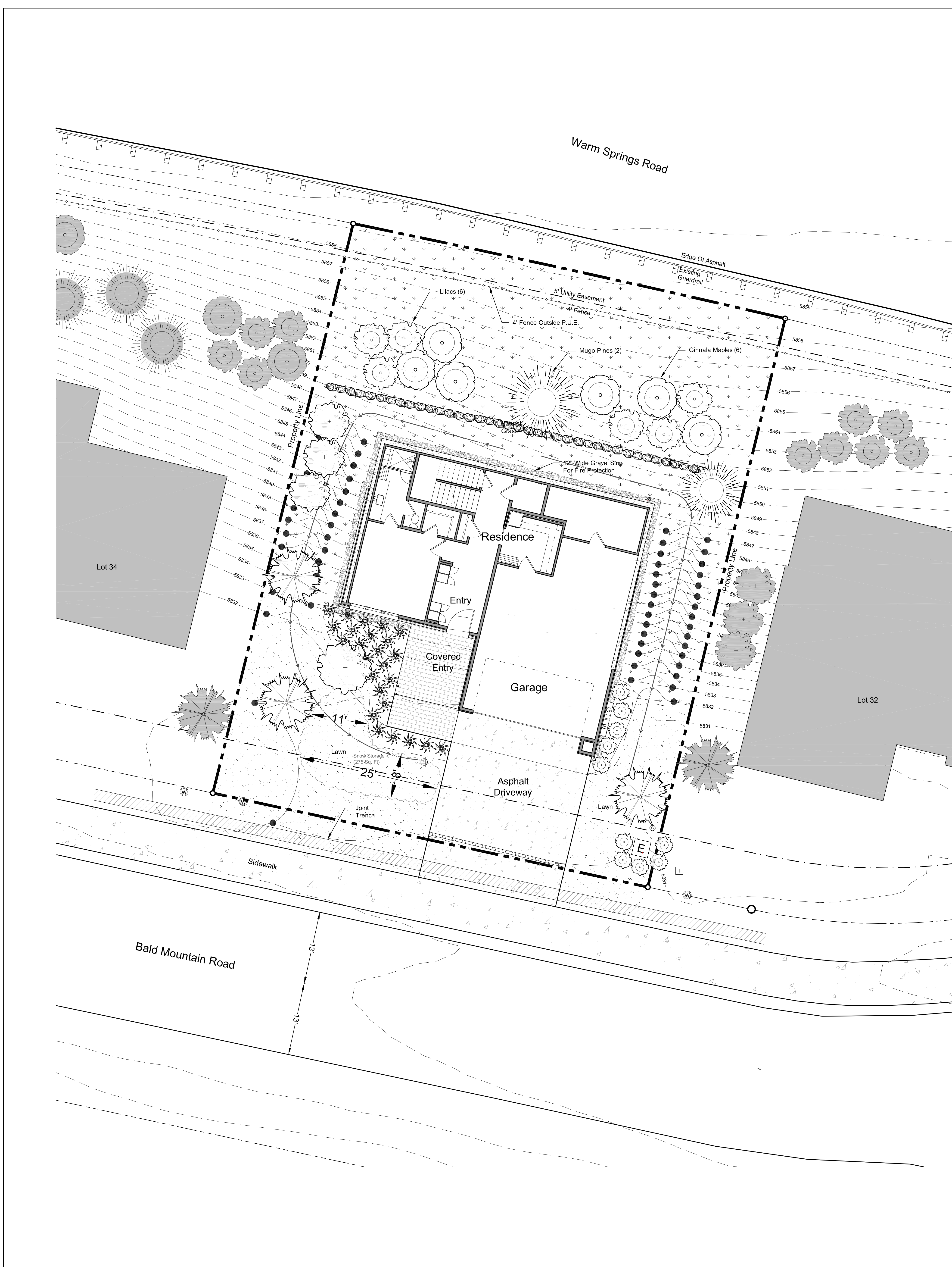
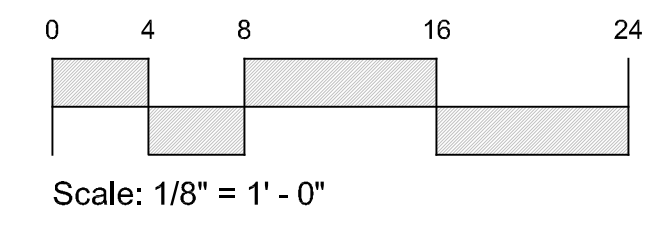
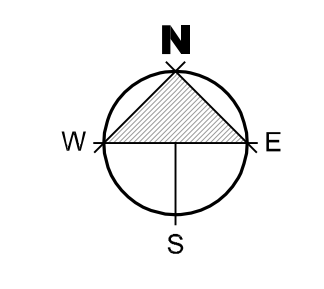


Note: No Sprinkler Heads In ROW.  
Cross Section A - Right Of Way  
Scale: 1/2" = 1' - 0"

- A. Material shall be pervious/permeable to allow drainage
- B. Surface must allow for vehicle parking and be consistent along the entire property frontage
- C. Material within the first eight (8) feet from edge of asphalt shall be distinct from driveway and rest of property in order to visually appear to be available for parking
- D. Grading and drainage improvements as required by City Engineer - Minimum 5% slope
- E. No obstructions, such as boulders or berms
- F. No buried irrigation systems within the first eight (8) feet from the edge of asphalt (Street). Subsurface irrigation lines are permitted beyond the first eight (8) feet, however pop up heads are not permitted anywhere in the ROW.
- G. No live plant material within the first eight (8) feet from edge of asphalt (Street). Low ground cover plant material, such as turf grass, is permitted beyond the first eight (8) feet. Drought-tolerant species is preferred.
- H. No snow-melt system.

Plant Legend

Qty.	Common Name	Botanical Name	Size
<b>Conifer Trees</b>			
2	Mugo Pine	<i>Pinus mugo</i>	12'-16'
3	Subalpine Fir	<i>Abies lasiocarpa</i>	12'-14'
<b>Deciduous Trees</b>			
4	Aspen	<i>Populus tremuloides</i>	12'-14'
6	Ginnala Maple	<i>Acer spp.</i>	20 gal. (6')
16	Deciduous Shrubs		5-20 gal.
<b>Lilac</b>			
<i>Syringa spp.</i>			
<i>Ribes alpinum</i>			
<i>Euonymus alatus</i>			
<i>Cotoneaster spp.</i>			
<i>Dogwood</i>			
<i>Philadelphus spp.</i>			
<i>Physocarpus spp.</i>			
<i>Symphoricarpos spp.</i>			
<i>Spiraea spp.</i>			
<b>Ornamental Grasses</b>			
30	Blue Fescue	<i>Festuca ovina glauca</i>	Flats
	Ribbon Grass	<i>Phalaris arundinacea 'Picata'</i>	
	Karl Foerster Feather Reed	<i>C. arundinacea 'Karl Foerster'</i>	
<b>Grasses &amp; Wildflowers</b>			
3,700 Sq.Ft.	Hard Fescue	<i>Festuca trachyphylla</i>	Sod or Seed
(20%)	Cheering Fescue	<i>Festuca rubra var. commutata</i>	
(20%)	Sheep Fescue	<i>Festuca ovina</i>	
(20%)	Creeping Red Fescue	<i>Festuca rubra</i>	
(20%)	Wildflowers	<i>Various</i>	
<b>Grasses - Lawn Mix</b>			
1,600 Sq.Ft.	Tall Fescue	<i>Festuca arundinacea</i>	Sod or Seed
(33%)	Hard Fescue	<i>Festuca trachyphylla</i>	
(33%)	Cheering Fescue	<i>Festuca rubra var. commutata</i>	



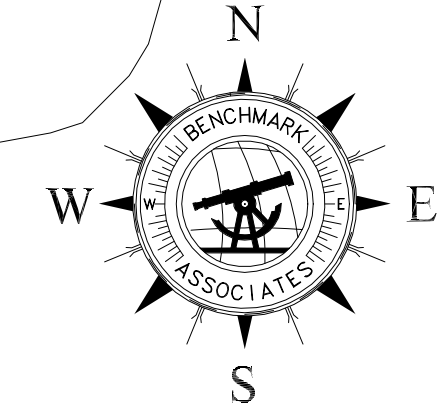


REAR FENCE EXAMPLE

WARM SPRINGS ROAD

SLOPE FINISH GRADE MIN 6" IN 10'-0" FROM BUILDING EDGE, FULL PERIMETER

EXISTING VEHICULAR GAUDDRAIL  
PROPERTY LINE  
5'-0" P.U.E.  
4'-0" WOOD SLAT FENCE OUTSIDE OF P.U.E.



MECHANICAL CONDENSER LOCATION

SLOPE FINISH GRADE MIN 6" IN 10'-0" FROM BUILDING EDGE, FULL PERIMETER

TRASH TO BE STORED WITHIN THE GARAGE

GAS AND ELECTRIC METERS, PROVIDE CLEARANCE AS REQUIRED

EXISTING TRANSFORMER TO BE LANDSCAPE SCREENED

20'-0" WIDE DRIVE AT SIDEWALK

TRASH TO BE STORED WITHIN THE GARAGE

NOTE:  
SEE CIVIL DOCUMENTS FOR UTILITIES  
SEE LANDSCAPE FOR GRADING

**SITE PLAN GENERAL NOTES**

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND LOCATIONS. PROTECT AS REQUIRED.
2. CONTRACTOR TO PROTECT EXISTING TREES TO BE PRESERVED.
3. UTILITY TRENCHING TO BE CONDUCTED IN A WAY TO NOT DISTURB EXISTING TREES.
4. ANY TREES LOCATED WITHIN 10'-0" HORIZONTAL OF THE STRUCTURE MUST BE MIN. 10'-0" HIGHER THAN THE ADJACENT STRUCTURE OR WILL NEED TO BE REMOVED IN ACCORDANCE TO THE FIRE CODE AS DEFENSIBLE SPACE.
5. ALL DEAD WOOD AND COMBUSTIBLE MATERIALS WITHIN 30'-0" OF THE STRUCTURE TO BE REMOVED BY CONTRACTOR AS PER THE FIRE CODE DEFENSIBLE SPACES.
6. INSTALL EROSION CONTROL MAT ON ALL SLOPES 3:1 AND GREATER.

**DATUM:**

LEVEL 1 100'-0" = 5,833.00 USGS  
LEVEL 2 112'-0" = 5,845.00 USGS  
LEVEL 3 124'-0" = 5,856.00 USGS

VERIFY FINISHED FLOOR HEIGHT WITH FINAL CIVIL ENGINEER'S DRAWINGS.

**SITE PLAN KEY NOTES**

**LOT SIZE:**  
AREA = .19 ACRES OR 8,429 SQ. FT.  
ZONE: GR-1  
HEIGHT LIMIT: 35' MAX

**BUILDING PAD:**  
AREA = 3,384 SQ. FT.

**PROPOSED BUILDING FOOTPRINT:**  
AREA = 2,189 SQ. FT. - EQUALS 26%  
LOT COVERAGE ALLOWED: 35%, 2,950 SQ. FT.

- RECESSED LIGHT LOCATION
- WALL SCONCE LOCATION

**LEGAL DESCRIPTION:**  
LOT 33 BALD MOUNTAIN ROAD

**SITE NOTES:**

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO TOWN STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO VERIFY PROPER DRAINAGE AWAY FROM HOUSE.
4. PROVIDE DRAINAGE SWALE FROM HIGH TO LOW SIDE OF HOUSE.
5. ZONING: GR-1
6. CONTRACTOR TO VERIFY EXISTING GRADES/TOPOGRAPHY PRIOR TO EXCAVATION AND/OR CONSTRUCTION. VERIFY DRIVEWAY DOES NOT EXCEED 10% GRADE.
7. EXISTING TOPOGRAPHY SHOWN IS BASED ON ROAD DESIGN GRADES & SITE OBSERVATIONS. CONTRACTORS/OWNER TO VERIFY.
8. HEIGHT LIMIT OF 35'-0" OVER EXISTING GRADE. 5'-0" ALLOWANCE FOR CHIMNEYS AND MECHANICAL.
9. SITE SETBACKS TO BE BASED ON 1/3 OF THE BUILDING HEIGHT

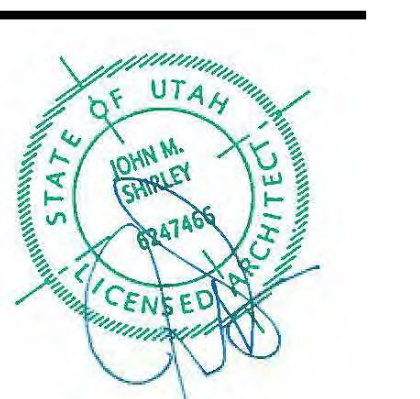


Architecture  
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Landscape Architecture  
Land Planning  
Construction Management

7927 So. Highpoint Parkway, Suite 300  
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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

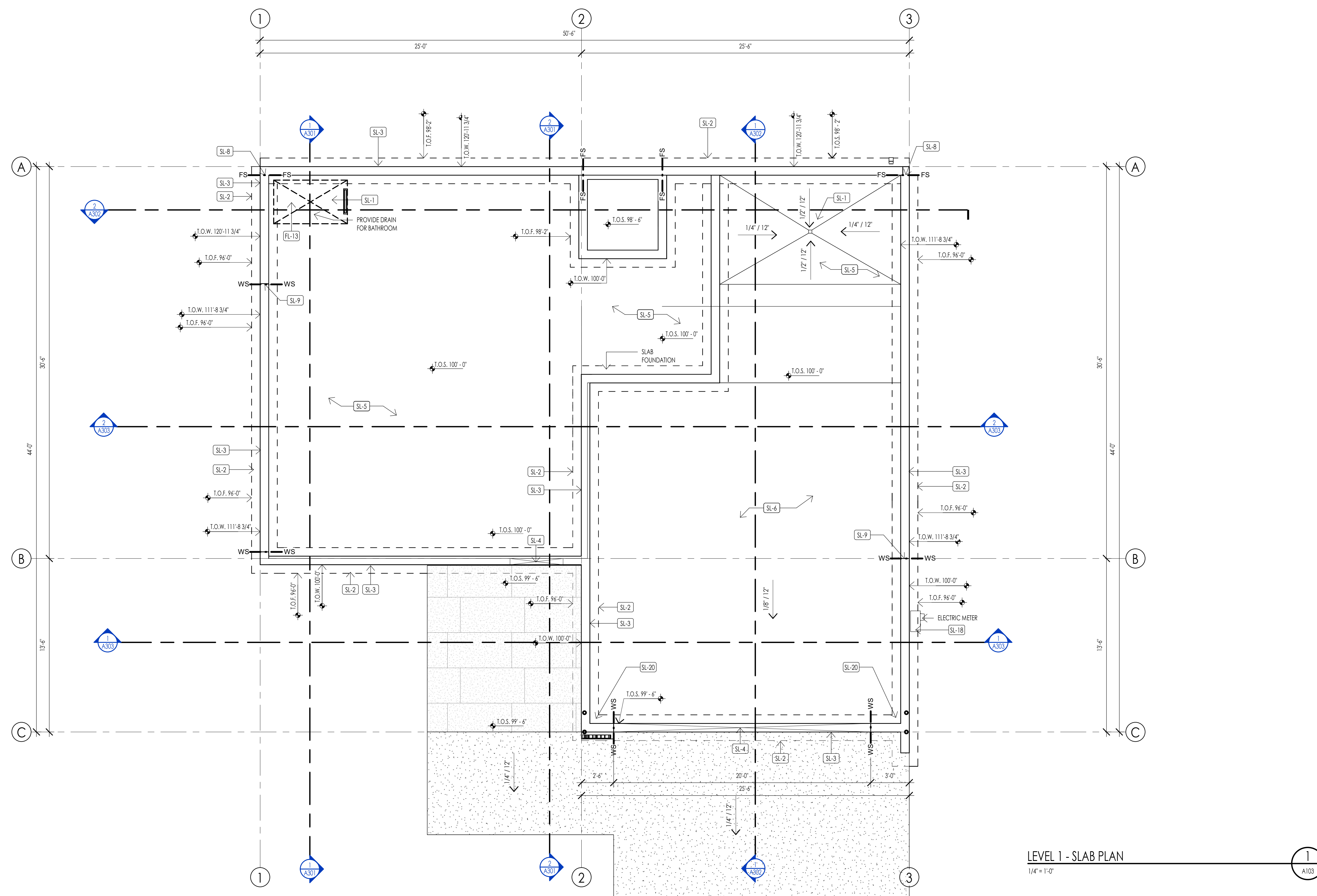
PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:  
2 06-14-2023 PER CITY COMMENTS

SHEET TITLE:  
SITE PLAN

SHEET NUMBER:  
A101

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FOUNDATION PLAN LEGEND	
HATCH PATTERN	DESCRIPTION
[Stippled Hatch]	POURED IN PLACE CONCRETE
[Cross-hatched Hatch]	2" RIGID FOAM INSULATION TO EXTEND FROM BOTTOM OF SLAB DOWN TO FOOTING AND HORIZONTALLY UNDER SLAB 4'-0" MIN. AT PERIMETER OF FOUNDATION.

FOUNDATION PLAN SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
FS	FOOTING STEP
WS	WALL STEP
T.O.F.	TOP OF FOOTING ELEVATION
T.O.W.	TOP OF WALL ELEVATION
T.O.S.	TOP OF SLAB ELEVATION
T.O. PIER	TOP OF PIER ELEVATION

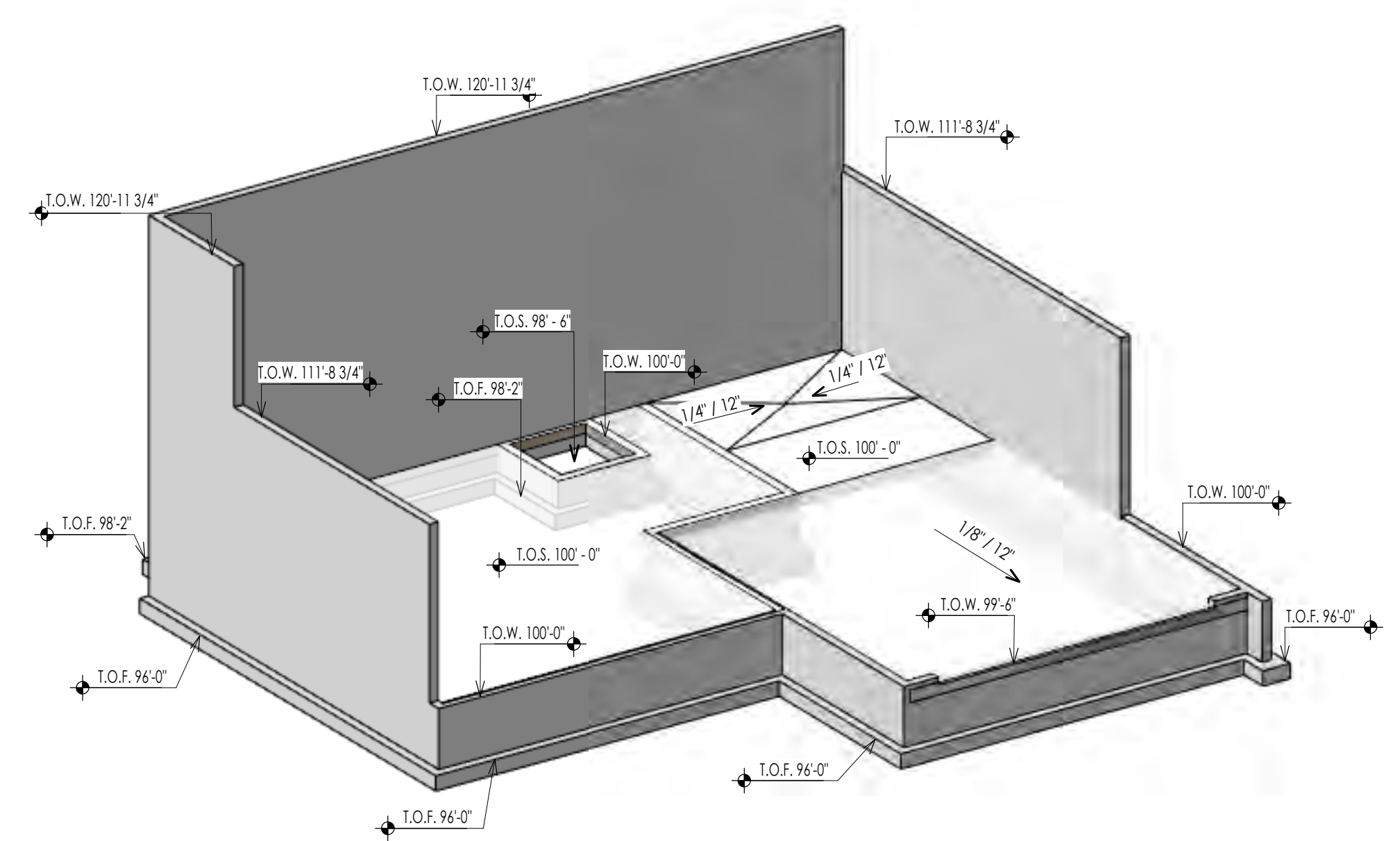
- ### FOUNDATION GENERAL NOTES
- COORDINATE ARCHITECTURAL FOUNDATION PLAN WITH STRUCTURAL FOUNDATION PLAN. CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN THE PLANS TO THE ARCHITECT PRIOR TO COMMENCING RELATED WORK.
  - COORDINATE MECHANICAL, ELECTRICAL, & PLUMBING PRIOR TO CONSTRUCTION OF FOOTINGS & FOUNDATION.
  - VERIFY ELEVATIONS OF FOUNDATION WALLS & FOOTINGS. COORDINATE WITH SITE PLAN & PROPOSED CONTOURS.
  - CONCRETE FLOOR SLABS, EXCEPT THOSE IN UNHEATED ACCESSORY STRUCTURES, SHALL HAVE A VAPOR RETARDER CONSISTING OF 6 MIL POLYETHYLENE (OR APPROVED EQUAL) VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB & THE BASE COURSE OF THE PREPARED SUB-GRADE WHERE NO BASE COURSE EXISTS.
  - FOUNDATION REBAR INSPECTIONS ARE REQUIRED FOR FOUNDATION WALLS OVER 8 FEET HIGH. FORMS ARE NOT TO BE INSTALLED ON ONE SIDE UNTIL AFTER THE REBAR HAS BEEN INSPECTED.

### DATUM ELEVATIONS

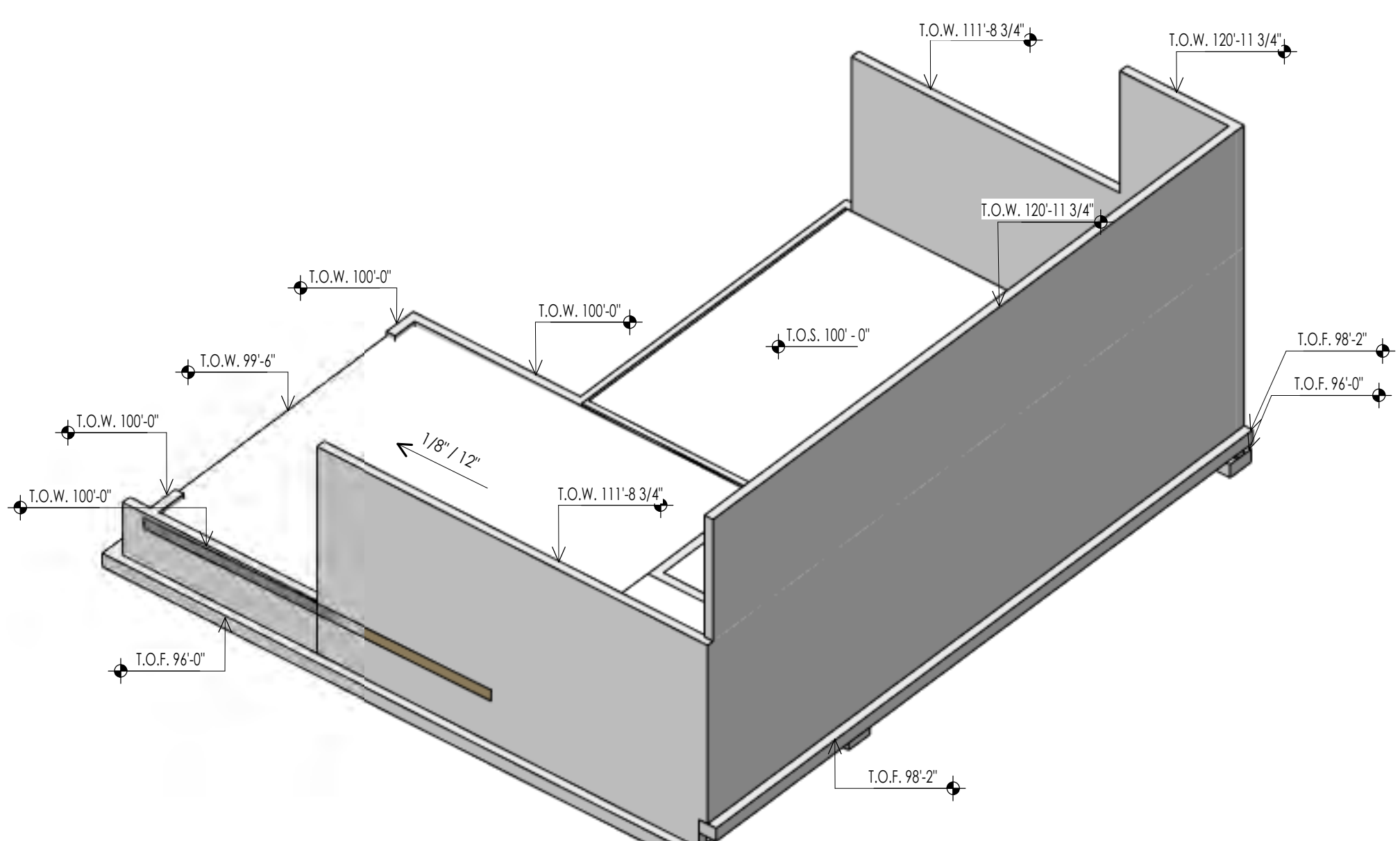
ARCHITECTURE	CIVIL	LEVEL
87'-6"	-	LEVEL 00 - TOP OF SLAB
88'-6"	-	LEVEL 0 - TOP OF SLAB
99'-0"	-	TOP OF SLAB AT FRONT OF GARAGE
100'-0"	-	LEVEL 1 - TOP OF PLYWOOD

### FOUNDATION PLAN KEYNOTES

KEYNOTES	
FL-13	PROVIDE "CHLITER" KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH. INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
SL-1	CONTRACTOR TO COORDINATE LOCATION OF FLOOR DRAIN - SLOPE SLAB TOWARDS DRAIN AS REQUIRED
SL-2	CAST IN PLACE FOOTINGS TO BEAR ON UNDISTURBED SOIL OR ENG. COMPACTED FILL - SEE STRUCTURAL GENERAL NOTES & PROJECT MANUAL
SL-3	CAST IN PLACE FOUNDATION WALLS WITH WATER PROOFING AS NOTED - SEE STRUCTURAL NOTES AND DETAILS
SL-4	PROVIDE BLOCKOUT AT FOUNDATION WALL AT DOOR OPENINGS AND POUR SLAB OVER TOP OF WALL - SEE DETAILS
SL-5	CAST IN PLACE INTERIOR CONCRETE SLABS TO BE 4" CONCRETE SLAB REINFORCED WITH FIBER MESH OVER 4" GRAVEL BASE - SEE STRUCTURAL NOTES
SL-6	CAST IN PLACE GARAGE CONCRETE SLABS TO BE 5" CONCRETE SLAB OVER 4" GRAVEL BASE AND FINISH AS NOTED - SEE STRUCTURAL NOTES
SL-8	CONTRACTOR TO COORDINATE FOOTING STEPS TO ASSURE REQUIRED FROST PROTECTION AT EACH FOOTING - NOTIFY ARCHITECT IF FOOTING ELEVATIONS NEED TO CHANGE
SL-9	CONTRACTOR TO COORDINATE FOUNDATION WALL STEPS WITH FINAL GRADING SPECIFIED AND NOTIFY ARCHITECT OF CHANGES PRIOR TO POURING CONCRETE FOUNDATION
SL-18	PROVIDE A LIFER GROUND. AN ELECTRODE INDICATED BY A LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2 INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E3508.1.2 AND N.E.C. 250.50)
SL-20	WARP SLAB AT GARAGE DOORS TO PROVIDE DRAINAGE TOWARD THE DOOR OPENING



FOUNDATION ISOMETRIC A  
A103



FOUNDATION ISOMETRIC B  
A103

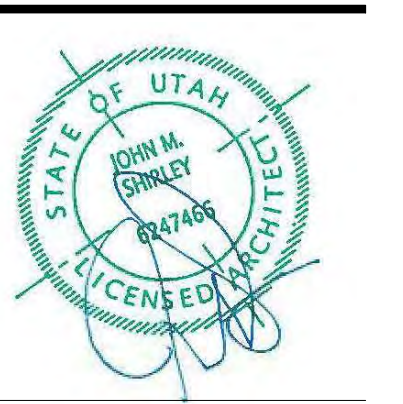


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WARM SPRINGS RESIDENCE #33

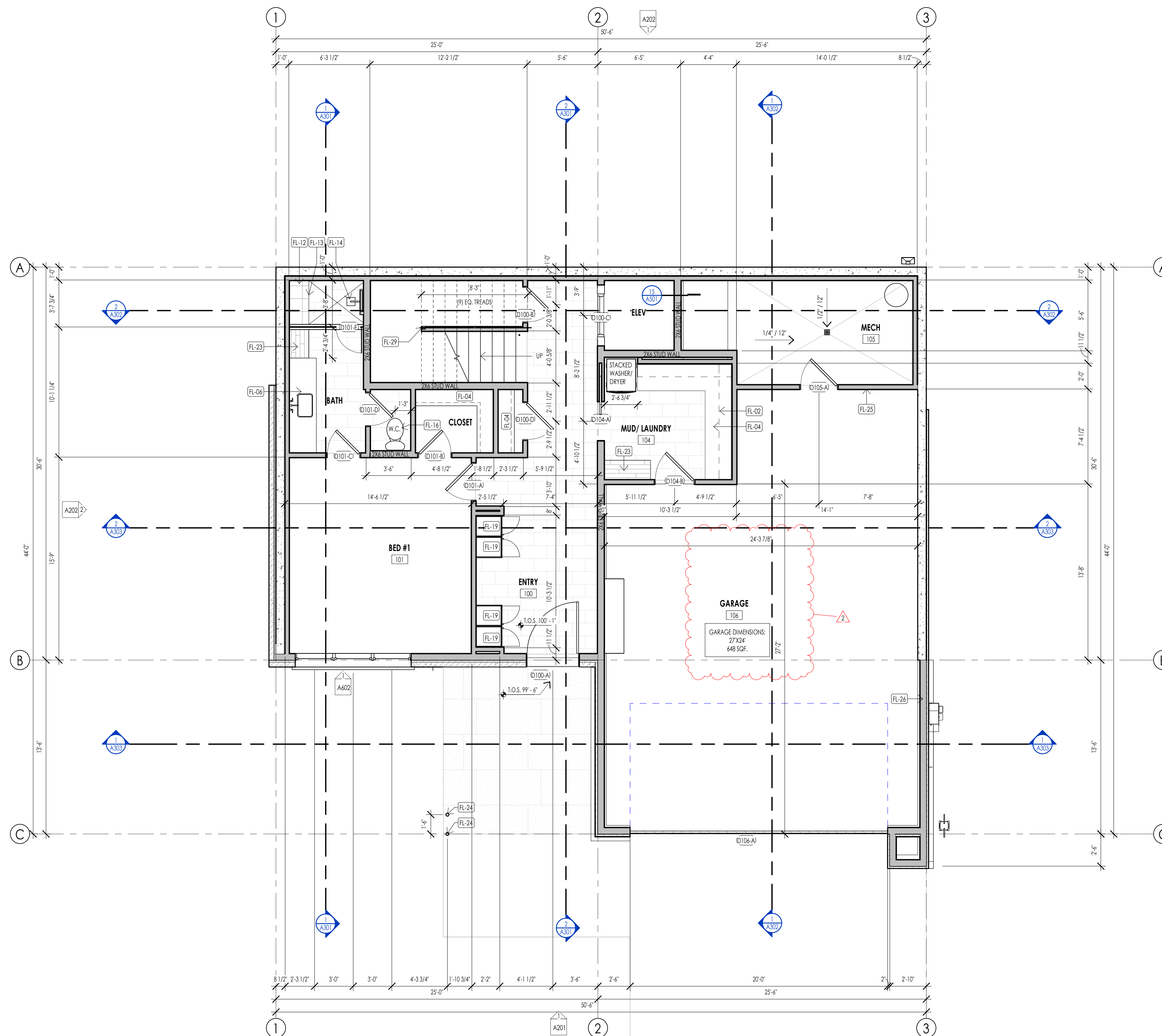
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

SHEET TITLE:  
FOUNDATION PLAN

SHEET NUMBER:  
A103

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LEVEL 1 - FLOOR PLAN  
1/4" = 1'-0"

FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	POURED IN PLACE CONCRETE WALL	[Hatch Pattern]	CARPET FINISH
[Hatch Pattern]	CMU BLOCK WALL	[Hatch Pattern]	TILE FINISH
[Hatch Pattern]	STONE VENEER	[Hatch Pattern]	EXTERIOR CONCRETE SLABS
[Hatch Pattern]	METAL STUD WALL		
[Hatch Pattern]	WOOD STUD WALL		

- FLOOR PLAN GENERAL NOTES**
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECKS/PATIOS.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

**FLOOR PLAN KEYNOTES**

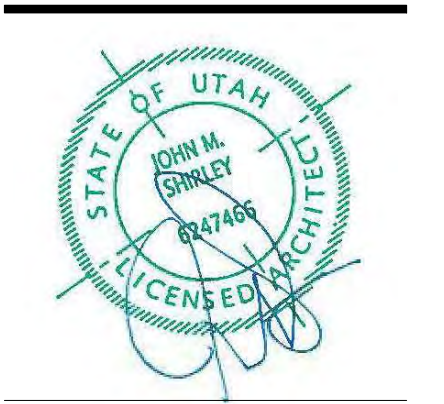
KEYNOTES	
FL-02	OVERHEAD CABINETS PROJECTION
FL-04	CLOSET SHELVING/ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGN
FL-13	PROVIDE 'SCHLTER' KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH. INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD FOR INTERIOR DESIGN
FL-16	W.C. TO BE 'XCHLER' PERSUADE CURRY COMFORT
FL-19	BUILT IN MUD/GEAR CABINETS AS PER INTERIOR DESIGNER
FL-23	PROVIDE BENCH AS PER OWNER/ INTERIOR DESIGN
FL-24	STRUCTURAL HOLLOW COLUMNS AS PER STRUCT.
FL-25	PROVIDE HO/COLD HOOK UP
FL-26	PROVIDE 50 AMP BY CONNECTION POINT
FL-29	36" HANDRAIL SEE STAIR/ RAIL DETAILS SHEET



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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

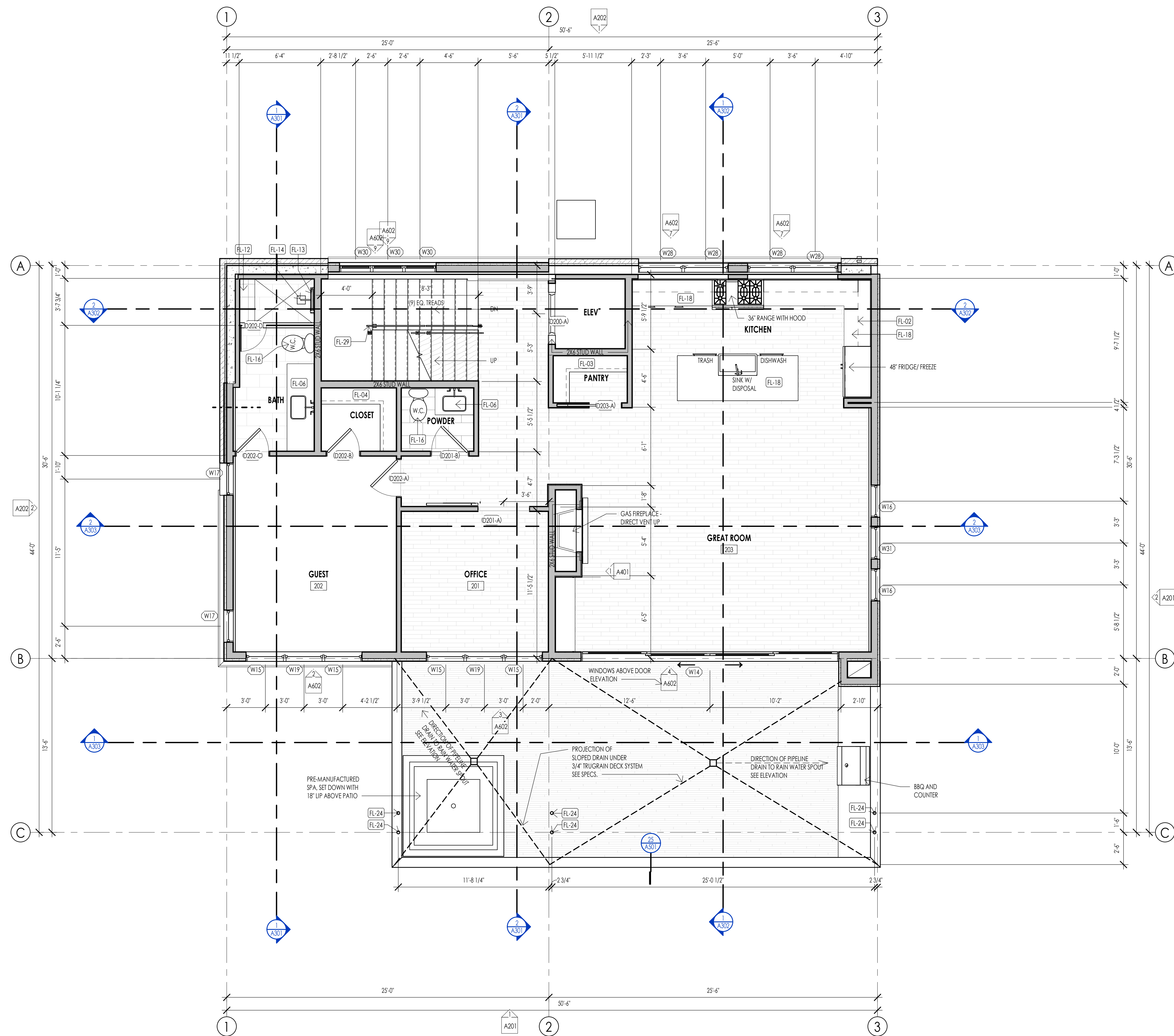
PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:  
2 06-14-2023 PER CITY COMMENTS

SHEET TITLE:  
LEVEL 1 FLOOR PLAN

SHEET NUMBER:  
A104

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PERMIT SET



LEVEL 2 - FLOOR PLAN  
1/4" = 1'-0"

FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	POURED IN PLACE CONCRETE WALL	[Hatch Pattern]	CARPET FINISH
[Hatch Pattern]	CMU BLOCK WALL	[Hatch Pattern]	TILE FINISH
[Hatch Pattern]	STONE VENEER	[Hatch Pattern]	EXTERIOR CONCRETE SLABS
[Hatch Pattern]	METAL STUD WALL		
[Hatch Pattern]	WOOD STUD WALL		

- ### FLOOR PLAN GENERAL NOTES
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECK/PATIOS.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

### FLOOR PLAN KEYNOTES

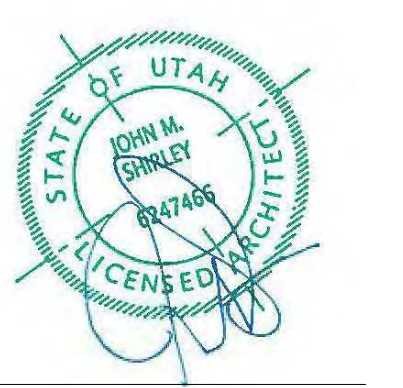
KEYNOTES	
FL-02	OVERHEAD CABINETS PROJECTION
FL-03	PANTRY SHELVING TO HAVE 5 EQUAL SHELVES - SHELVES TO BE MELAMINE WITH WOOD EDGING
FL-04	CLOSET SHELVING/ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGNER
FL-13	PROVIDE "SCHLICKER" KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH, INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD PER INTERIOR DESIGNER
FL-16	W.C. TO BE "KOHLER" PERSUADE CLURY COMFORT
FL-18	KITCHEN SINK W/DISPOSAL - COUNTERTOP - CABINETS PER INTERIOR DESIGNER
FL-24	STRUCTURAL HOLLOW COLUMNS AS PER STRUCT.
FL-29	36" HANDRAIL. SEE STAIR/ RAIL DETAILS SHEET



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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

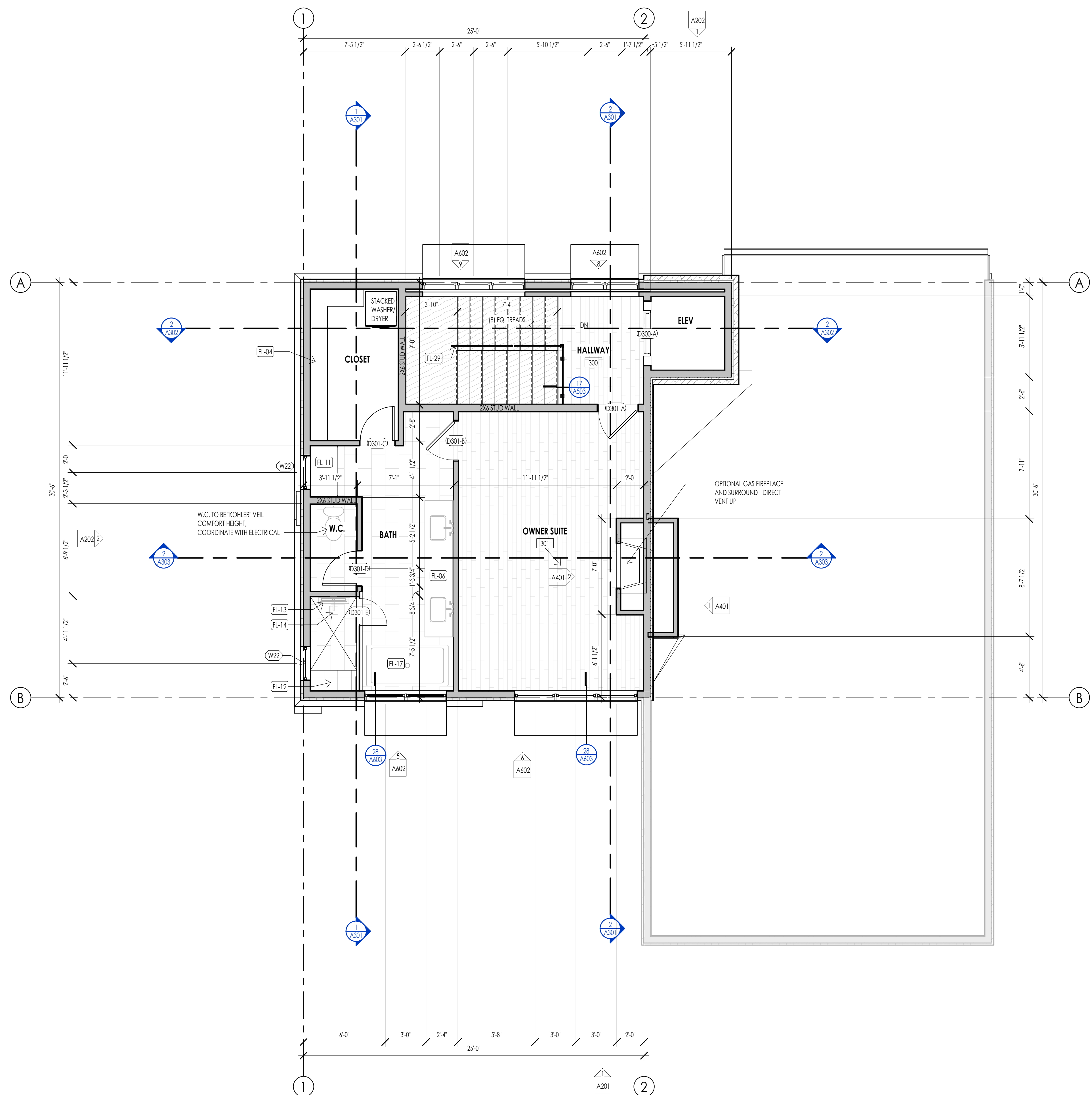
PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

SHEET TITLE:  
LEVEL 2 FLOOR PLAN

SHEET NUMBER:  
A105

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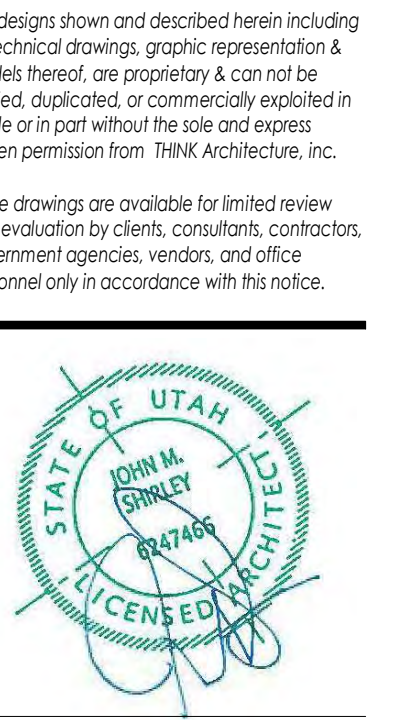


FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	POURED IN PLACE CONCRETE WALL	[Hatch Pattern]	CARPET FINISH
[Hatch Pattern]	CMU BLOCK WALL	[Hatch Pattern]	TILE FINISH
[Hatch Pattern]	STONE VENEER	[Hatch Pattern]	EXTERIOR CONCRETE SLABS
[Hatch Pattern]	METAL STUD WALL		
[Hatch Pattern]	WOOD STUD WALL		

- FLOOR PLAN GENERAL NOTES**
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS.
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECK/PATIO'S.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES.
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

**FLOOR PLAN KEYNOTES**

KEYNOTES	
FL-04	CLOSET SHELVING/ ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-11	CABINET SYSTEM/SHELVING PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGNER
FL-13	PROVIDE "SCHLERT" KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH, INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD PER INTERIOR DESIGNER
FL-17	1/8" SOAKER TUB AS PER INTERIOR DESIGNER
FL-29	36" HANDRAIL, SEE STAIR/ RAIL DETAILS SHEET



**WARM SPRINGS RESIDENCE #33**  
 170 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

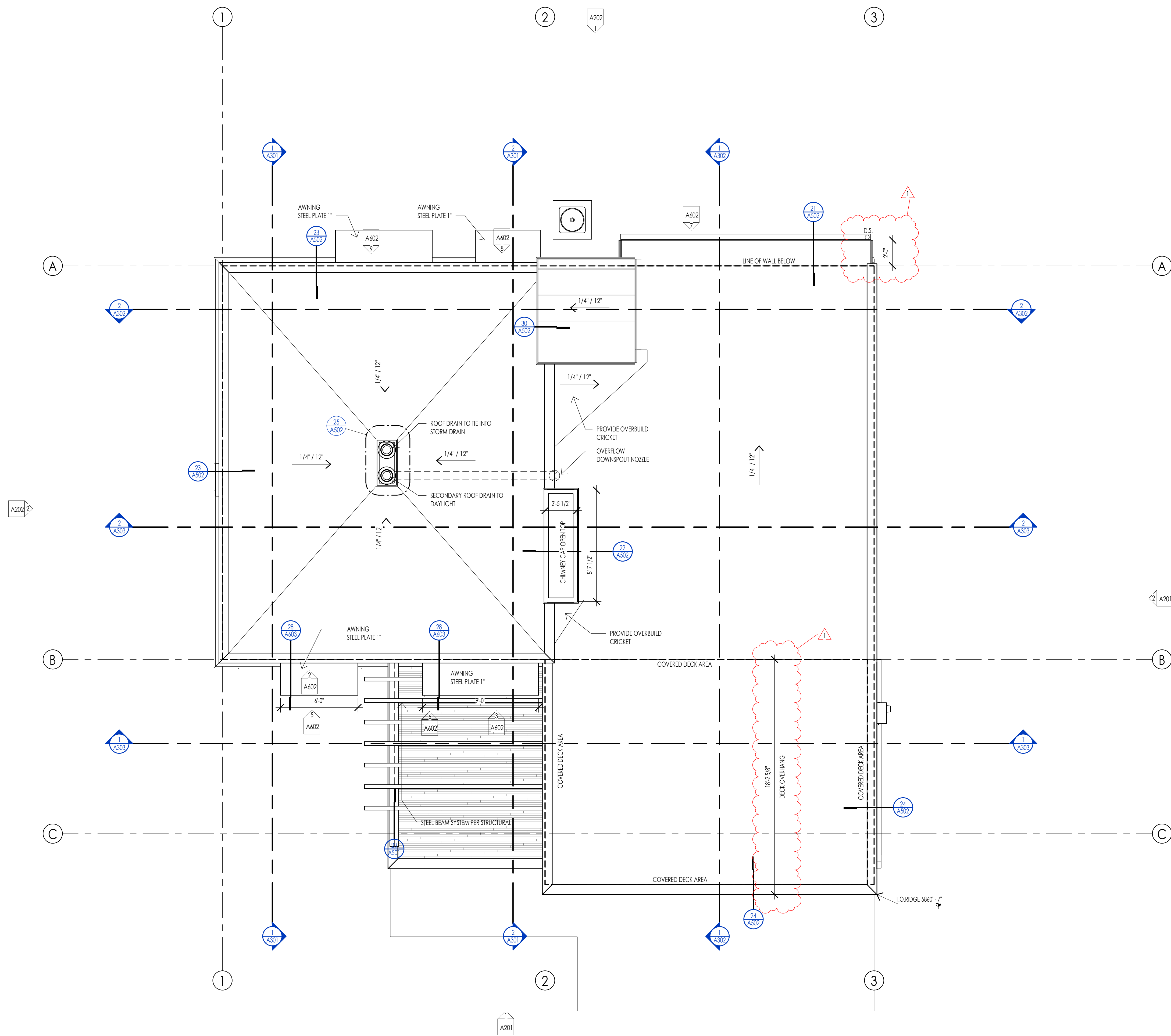
PROJECT NC22023.33  
 DATE: 2023.09.21  
 REVISIONS:

SHEET TITLE:  
**LEVEL 3 FLOOR PLAN**

SHEET NUMBER:  
**A106**

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**LEVEL 3 - FLOOR PLAN**  
 1/4" = 1'-0"



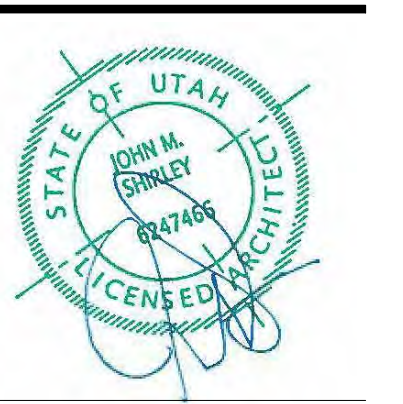
ROOF PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	SINGLE PLY ROOFING MEMBRANE WITH GRAVEL BALLAST	[Hatch Pattern]	
[Hatch Pattern]	STANDING SEAM METAL ROOFING SYSTEM	[Hatch Pattern]	
[Hatch Pattern]	RAIN GUTTER WITH DOWN SPOUT	[Hatch Pattern]	

- ROOF PLAN GENERAL NOTES**
- SEE SHEET G002 FOR PROJECT GENERAL NOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - FLASH ALL ROOF PENETRATIONS WHETHER SHOWN OR NOT.
  - COORDINATE WITH MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL ROOF PENETRATIONS.
  - PROVIDE HEAT TRACE IN ALL RAIN GUTTERS, DOWN SPOUTS AND RAIN CHAINS.
  - ROOFING CONTRACTOR SHALL REVIEW ALL SUBSTRATES PRIOR TO BEGINNING WORK.
  - ALL ROOFING SHALL BE REVIEWED PRIOR TO INSTALLATION.
  - CONTRACTOR IS RESPONSIBLE TO ASSUME THAT NO ROOF SLOPES CREATE DEAD SPOTS OR LOW SPOTS THAT WILL PREVENT DRAINAGE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).
  - DIMENSIONS SHOWN ON THE ROOF PLAN ARE FROM THE EXTERIOR SIDE OF THE STUD FRAMING BELOW.

ROOF PLAN KEYNOTES	
KEYNOTES	



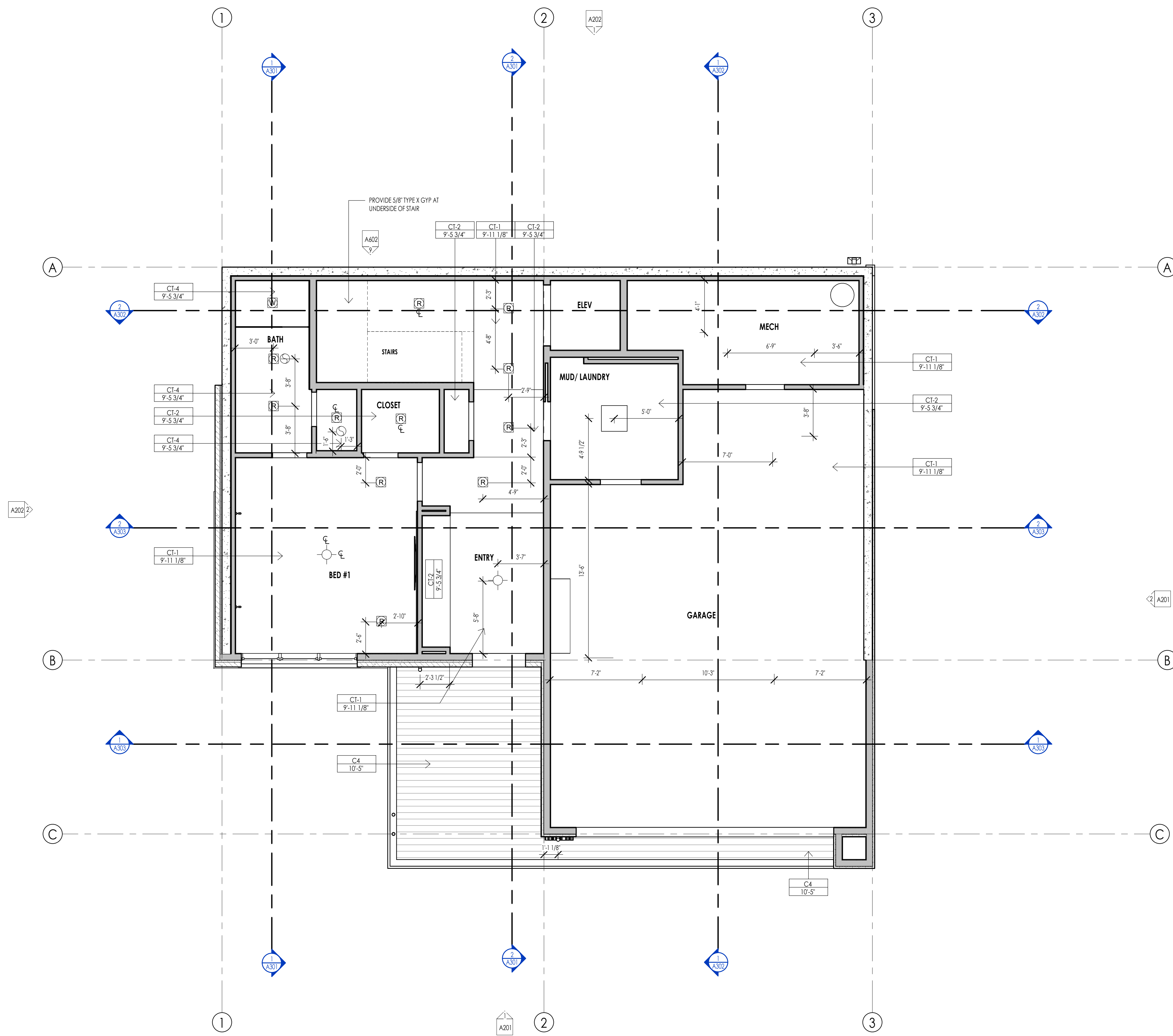
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 fax 801.269.1425  
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**WARM SPRINGS RESIDENCE #33**  
 170 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

PROJECT NC22023.33  
 DATE: 2023.09.21  
 REVISIONS:  
 1 04-24-2023 PER CITY COMMENTS

SHEET TITLE:  
**ROOF PLAN**  
 SHEET NUMBER:  
**A107**  
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REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
[Hatch Pattern]	CT-1	5/8" GYPSUM BOARD AT FLOOR FRAMING	[Hatch Pattern]		
[Hatch Pattern]	CT-2	5/8" GYPSUM BOARD 2x4	[Hatch Pattern]		
[Hatch Pattern]	CT-3	5/8" WATER RESISTANT GYPSUM BOARD AT ROOF FRAMING	[Hatch Pattern]		
[Hatch Pattern]	CT-4	5/8" WATER RESISTANT GYPSUM BOARD 2x4	[Hatch Pattern]		
[Hatch Pattern]	CT-5	3/4" 1-G SOFFIT	[Hatch Pattern]		
[Hatch Pattern]	CT-6	EXPOSED STRUCTURE	[Hatch Pattern]		

- REFLECTED CEILING PLAN GENERAL NOTES**
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECKS.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - SEE SHEET G002 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.

CEILING TAG SYMBOL	DESCRIPTION
CT-1	CEILING TYPE
1'-0"	HEIGHT

**REFLECTED CEILING PLAN KEYNOTES**

KEYNOTES

PROJECT NC22023.33  
 DATE: 2023.09.21  
 REVISIONS:

SHEET TITLE:  
 LEVEL 1 CEILING PLAN

SHEET NUMBER:  
 A109

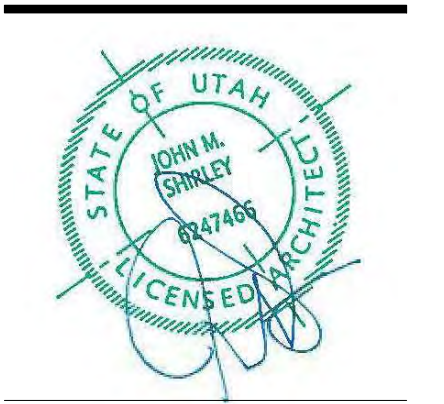


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WARM SPRINGS RESIDENCE #33  
 170 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

LEVEL 1 - REFLECTED CEILING PLAN  
 1/4" = 1'-0"

1  
 A109

PERMIT SET



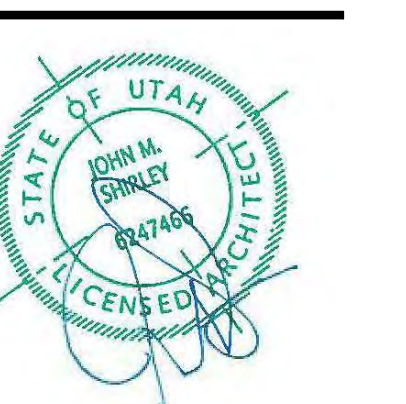


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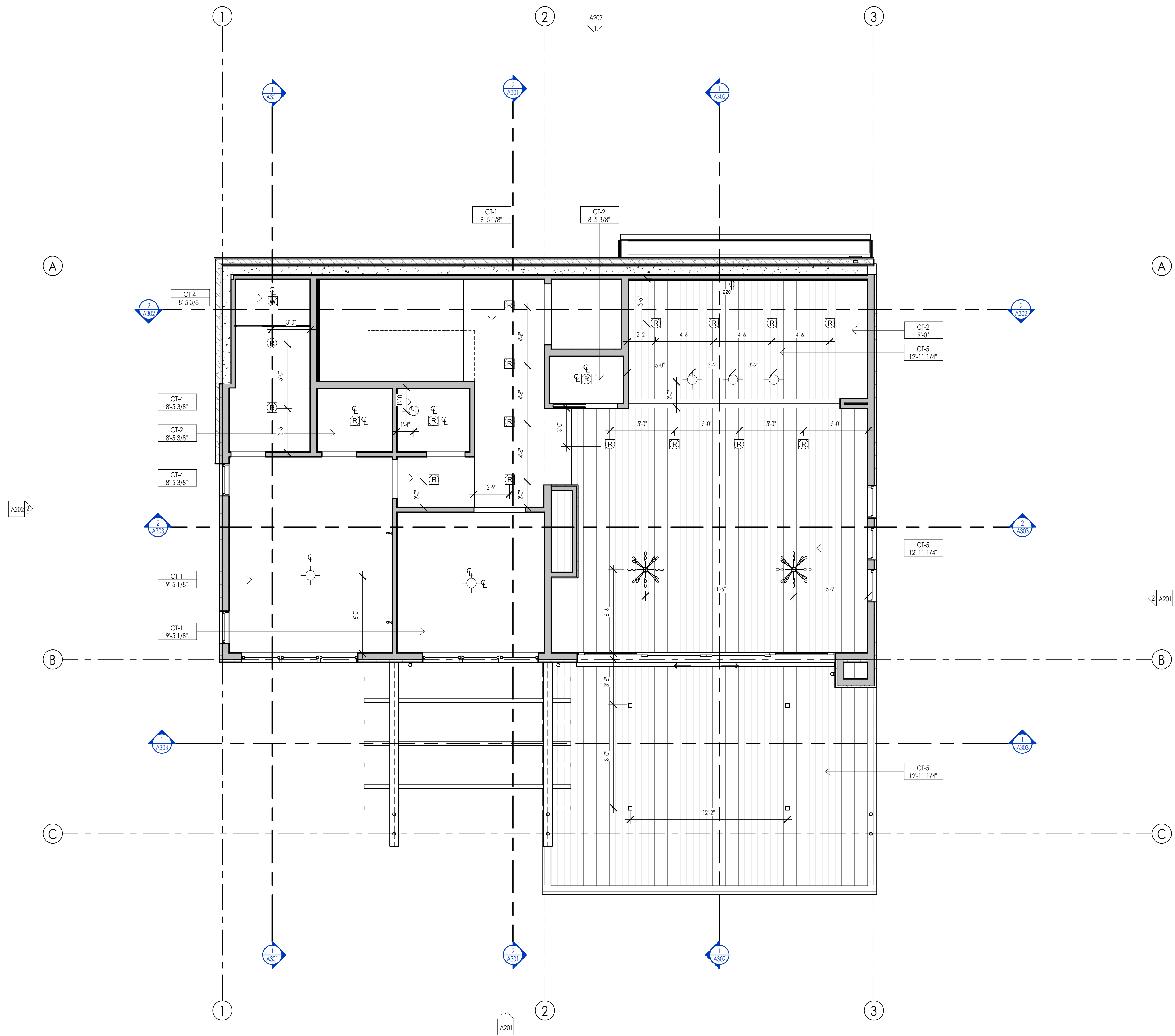
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REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
	CT-1	5/8" GYPSUM BOARD AT FLOOR FRAMING			
	CT-2	5/8" GYPSUM BOARD 2x4			
	CT-3	5/8" WATER RESISTANT GYPSUM BOARD AT ROOF FRAMING			
	CT-4	5/8" WATER RESISTANT GYPSUM BOARD 2x4			
	CT-5	3/4" 1-G SOFFIT			
	CT-6	EXPOSED STRUCTURE			

REFLECTED CEILING PLAN GENERAL NOTES	
<ol style="list-style-type: none"> <li>ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.</li> <li>ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.</li> <li>REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.</li> <li>REFER TO ENLARGED PLANS FOR ALL DECKS.</li> <li>COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.</li> <li>SEE SHEET 0202 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.</li> <li>COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.</li> <li>ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.</li> </ol>	
CEILING TAG SYMBOL	DESCRIPTION
	CEILING TYPE
	HEIGHT

REFLECTED CEILING PLAN KEYNOTES	



LEVEL 2 - REFLECTED CEILING PLAN  
1/4" = 1'-0"

1  
A110

WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

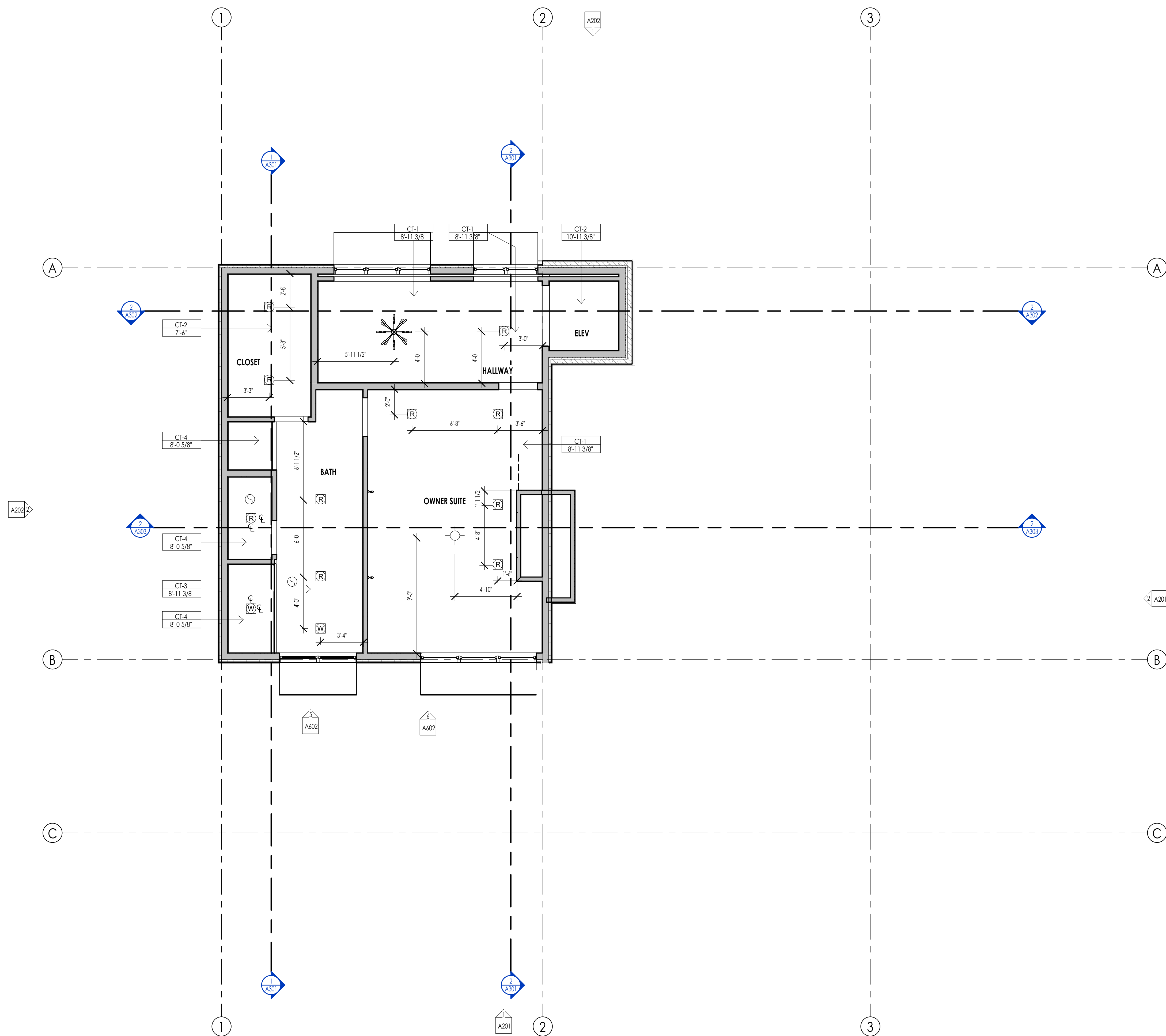
PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

SHEET TITLE:  
LEVEL 2 CEILING PLAN

SHEET NUMBER:  
A110

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PERMIT SET



REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
[Hatch Pattern]	CT-1	5/8" GYPSUM BOARD AT FLOOR FRAMING			
[Hatch Pattern]	CT-2	5/8" GYPSUM BOARD 2x4			
[Hatch Pattern]	CT-3	5/8" WATER RESISTANT GYPSUM BOARD AT ROOF FRAMING			
[Hatch Pattern]	CT-4	5/8" WATER RESISTANT GYPSUM BOARD 2x4			
[Hatch Pattern]	CT-5	3/4" T-G SOFFIT			
[Hatch Pattern]	CT-6	EXPOSED STRUCTURE			

- ### REFLECTED CEILING PLAN GENERAL NOTES
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECKS.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - SEE SHEET 002 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.

CEILING TAG SYMBOL	DESCRIPTION
CT	CEILING TYPE
1'-0"	HEIGHT

### REFLECTED CEILING PLAN KEYNOTES

PROJECT NC22023.33  
 DATE: 2023.09.21  
 REVISIONS:

SHEET TITLE:  
**LEVEL 3 CEILING PLAN**

SHEET NUMBER:  
**A111**

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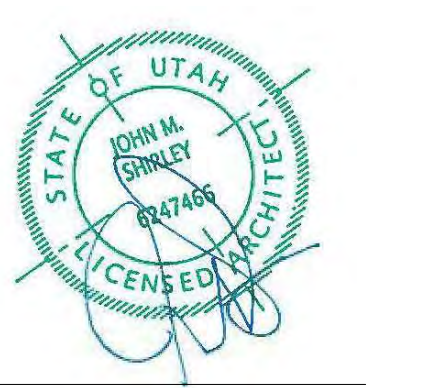


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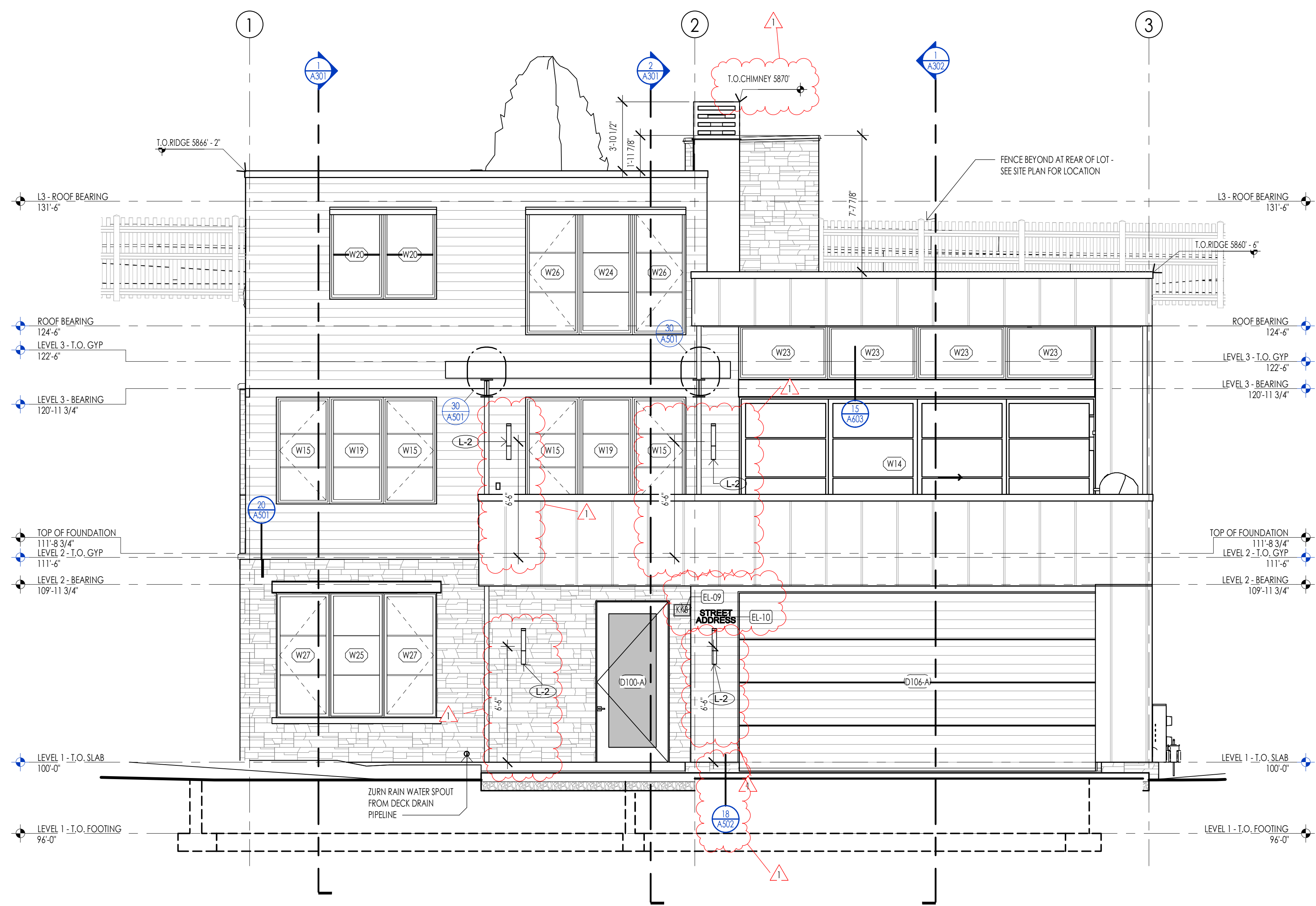
**WARM SPRINGS RESIDENCE #33**

170 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

PERMIT SET

LEVEL 3 - REFLECTED CEILING PLAN  
 1/4" = 1'-0"

A111

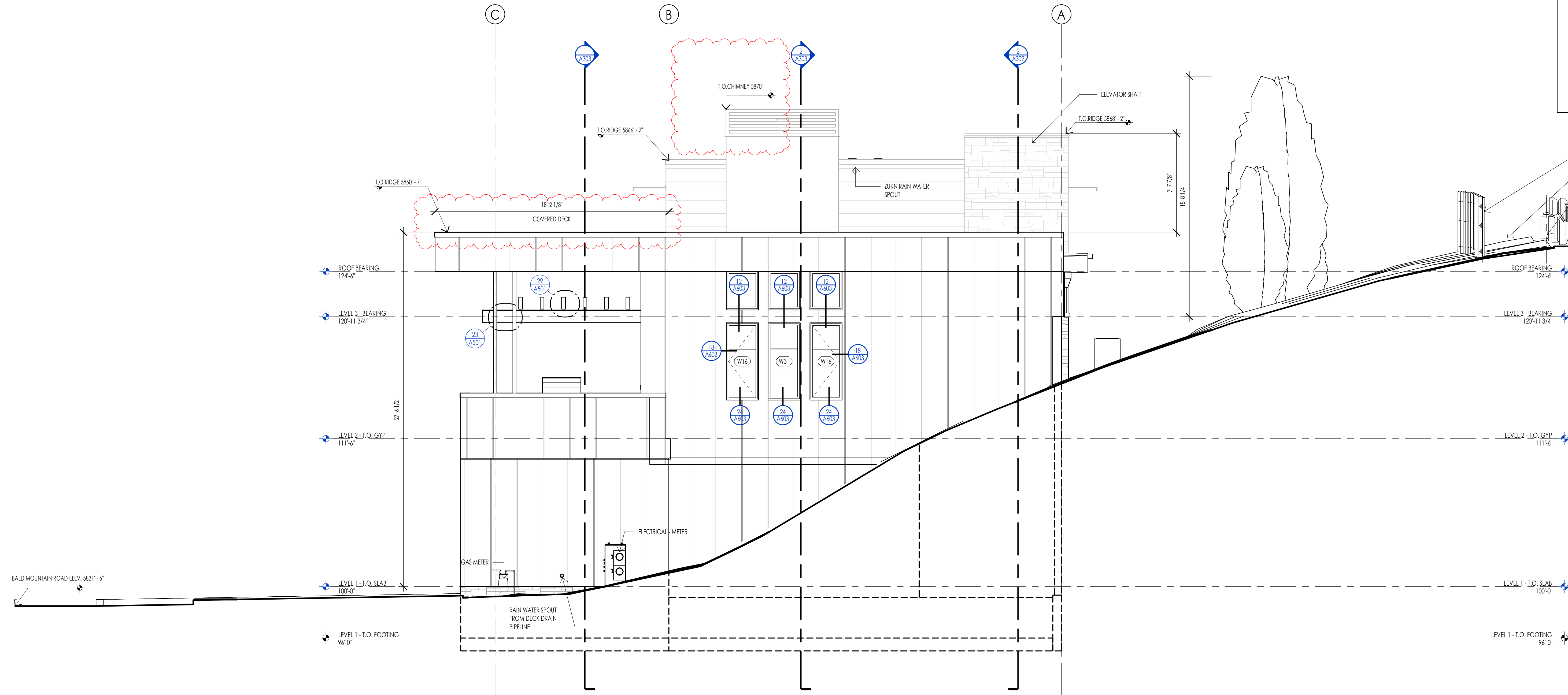


SOUTH ELEVATION  
1/4" = 1'-0"

ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	SINGLE PLY ROOFING MEMBRANE SYSTEM WITH GRAVEL BALLAST
	2x4 CEDAR CHANNEL LAP HORIZONTAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES	
KEYNOTES	
EL-09	AN APPROVED KEY BOX SHALL BE INSTALLED, WITH THE APPROPRIATE KEYS FOR EMERGENCY FIRE DEPARTMENT ACCESS IN A LOCATION APPROVED BY THE FIRE DEPARTMENT. THE KEY BOX SHALL BE A 1/2" X 1/2" X 1/2" BOX BRAND AND BE TO ACCOMMODATE KEYS TO EVERY DOOR OF THE PROJECT LOCATION. NO MORE THAN 3FT HOR. FROM MAIN DOOR AND NO MORE THAN 5FT VERTICAL. VERIFY LOCAL CODE.
EL-10	APPROVED ADDRESS NUMBERS SHALL BE PLACED IN SUCH A POSITION TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE ROAD FRONTING THE PROPERTY. NUMBERS AND LETTERS SHALL BE A MINIMUM OF FOUR (4) INCHES TALL, HAVE A MINIMUM 1/2" BRUSH STROKE, CONTRAST WITH THEIR BACKGROUND, AND BE POSITIONED A MINIMUM OF FORTY-EIGHT (48) INCHES ABOVE FINAL GRADE.



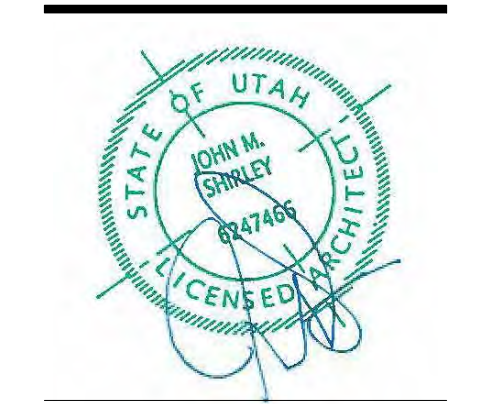
EAST ELEVATION  
1/4" = 1'-0"



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WARM SPRINGS RESIDENCE #33  
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

SHEET TITLE:  
EXTERIOR ELEVATIONS

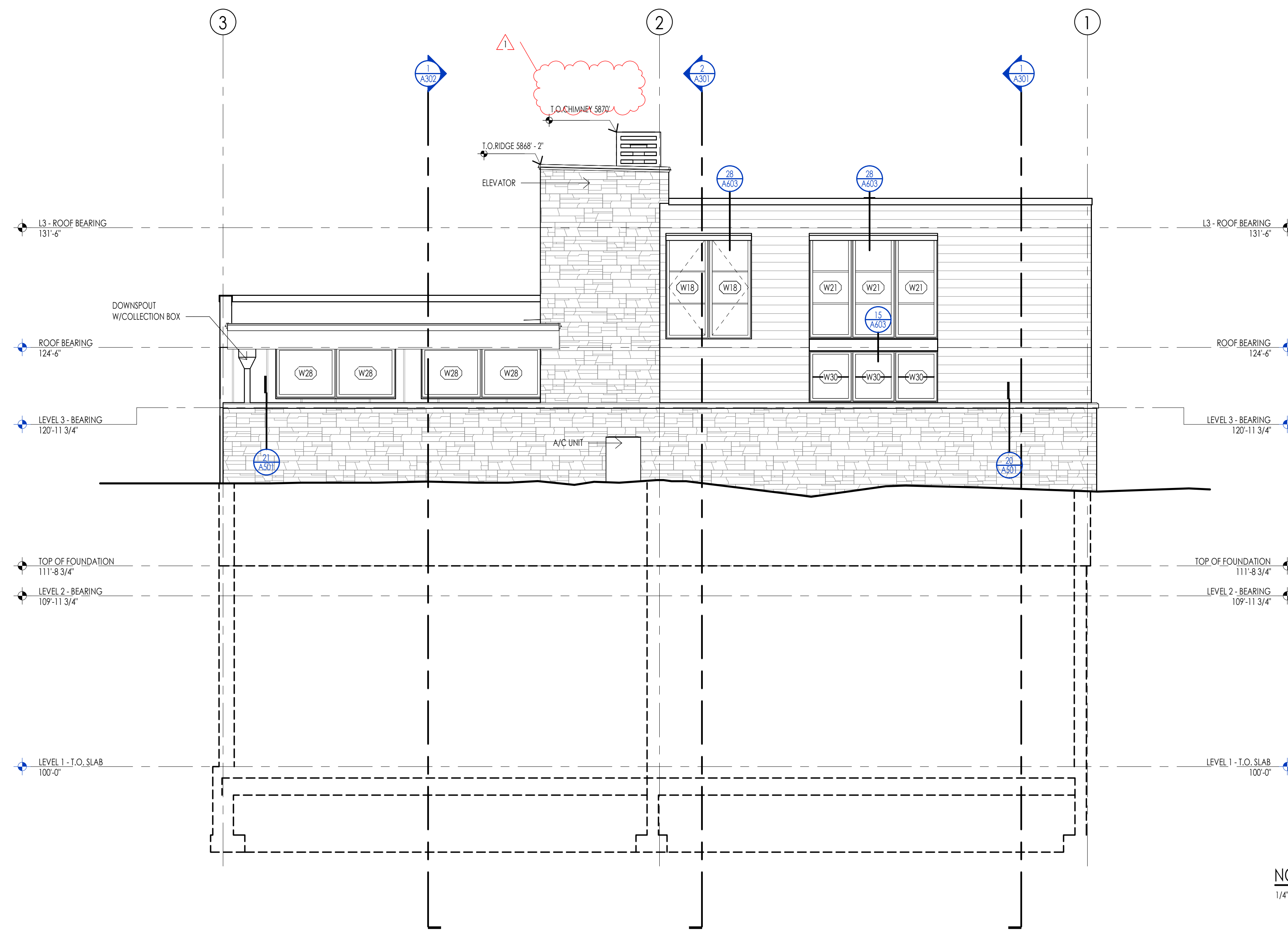
SHEET NUMBER:  
A201  
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ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	SINGLE PLY ROOFING MEMBRANE SYSTEM WITH GRAVEL BALLAST
	2x4 CEDAR CHANNEL LAP HORIZONTAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR STONE VENEER

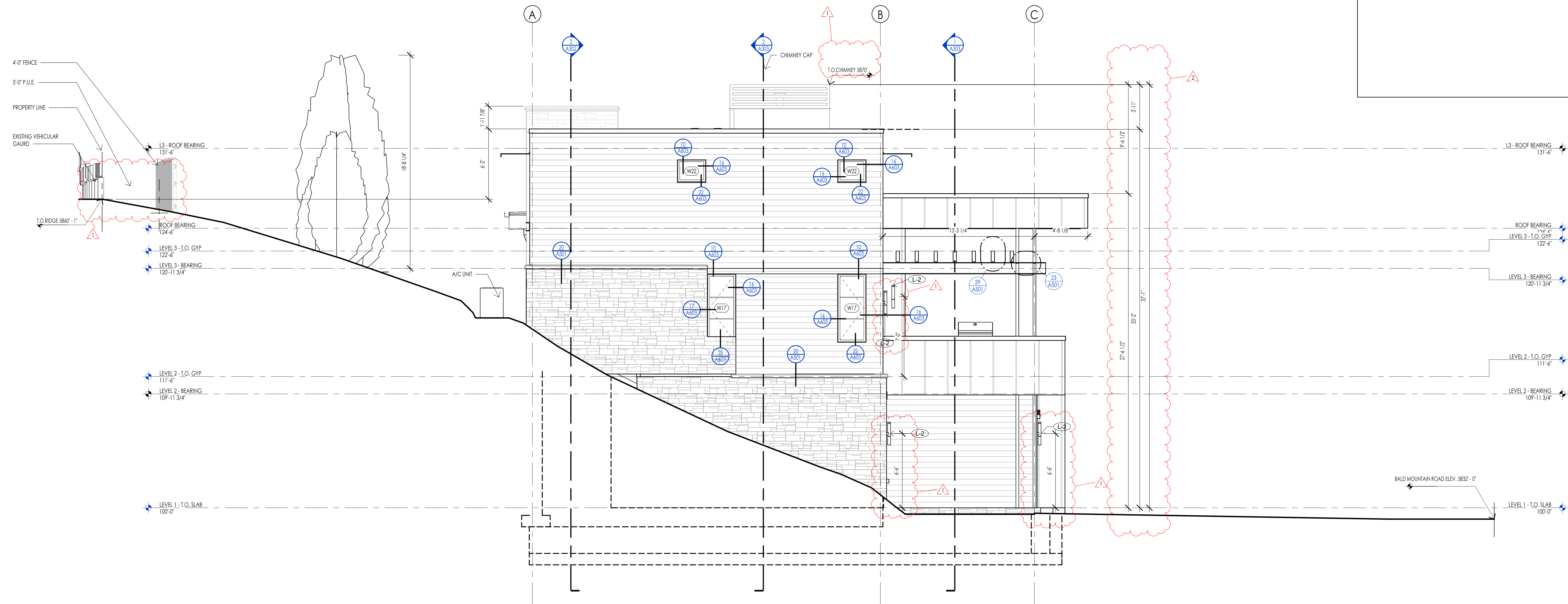
NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES



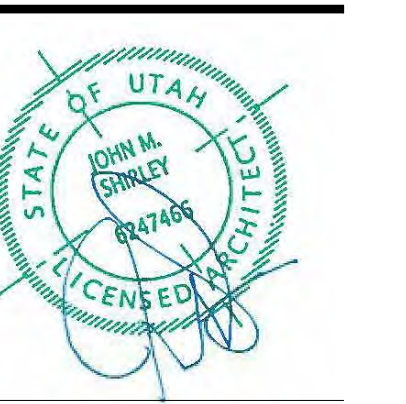
NORTH ELEVATION  
1/4" = 1'-0"

1  
A202



WEST ELEVATION  
1/4" = 1'-0"

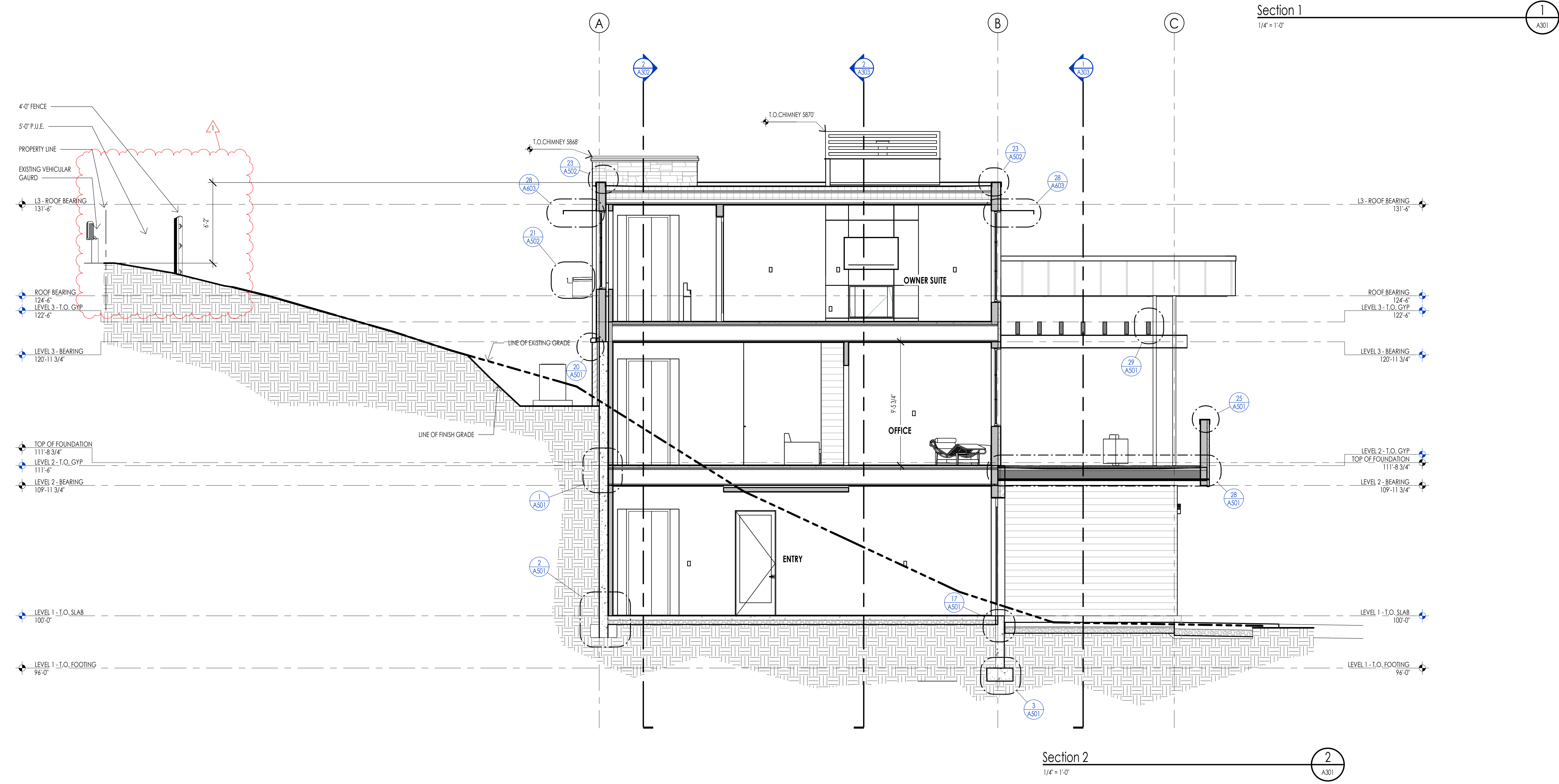
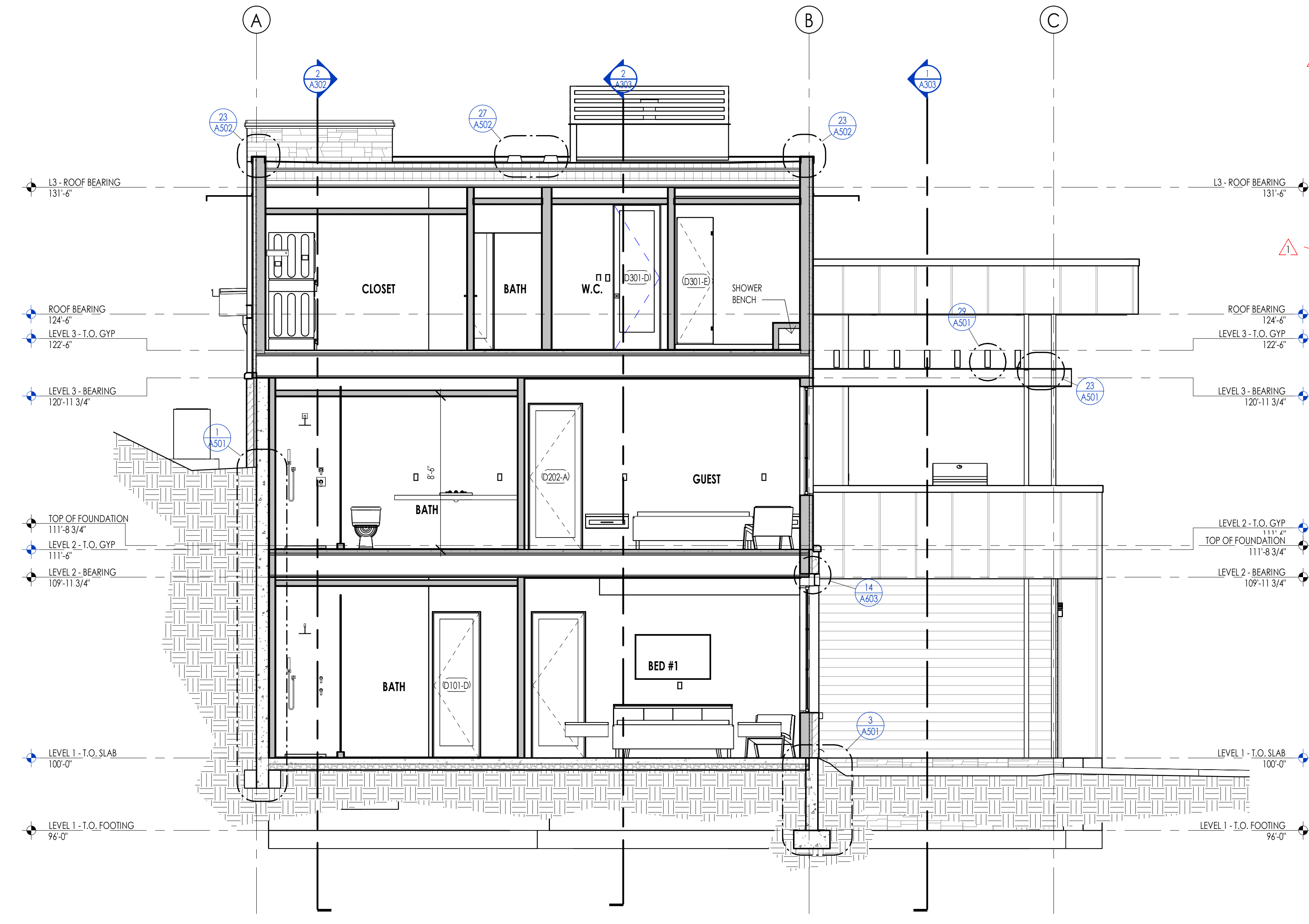
2  
A202



ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	SINGLE PLY ROOFING MEMBRANE SYSTEM WITH GRAVEL BALLAST
	2x4 CEDAR CHANNEL LAP HORIZONTAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

**ELEVATION/ SECTION KEYNOTES**



WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

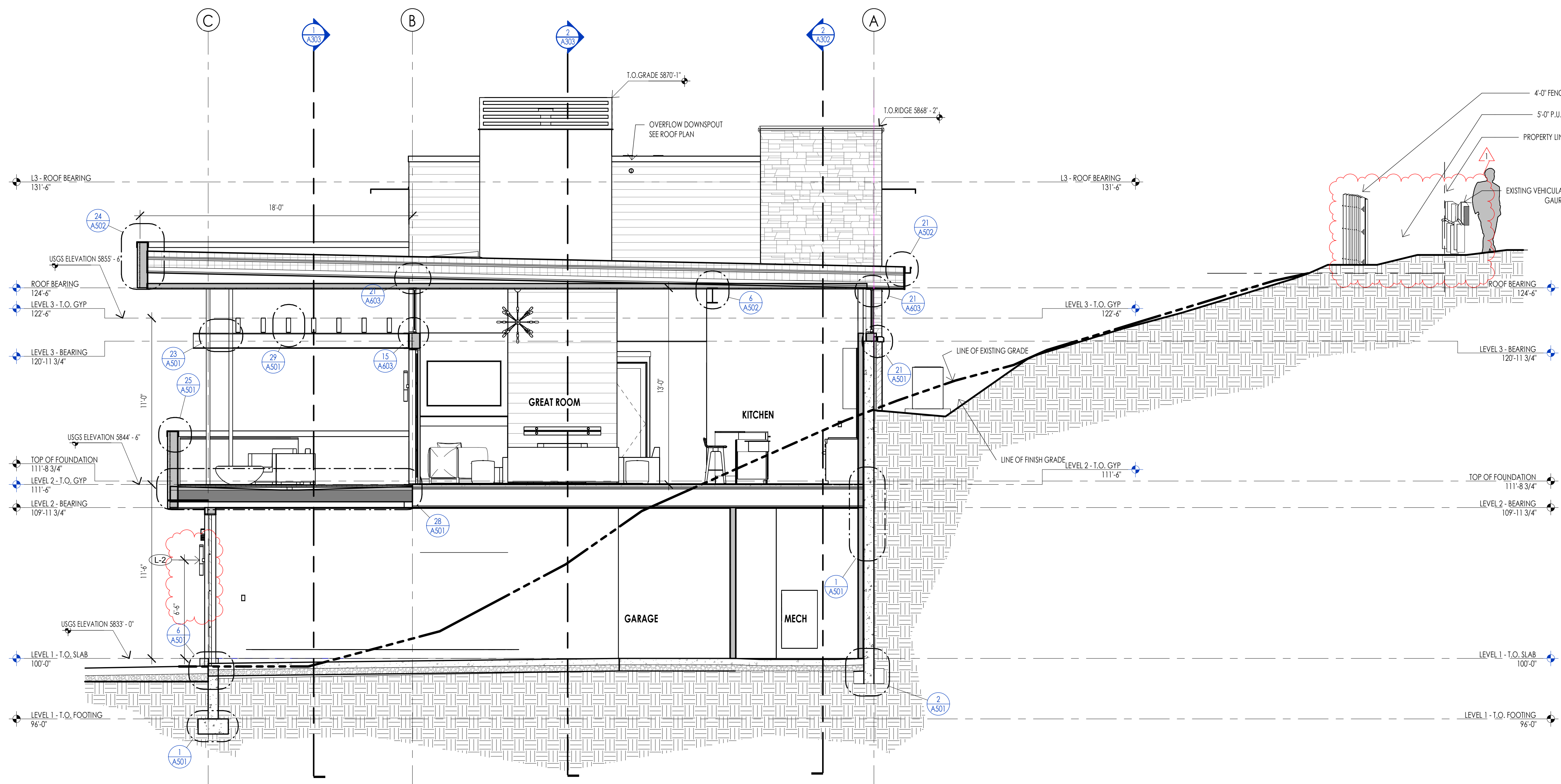
PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

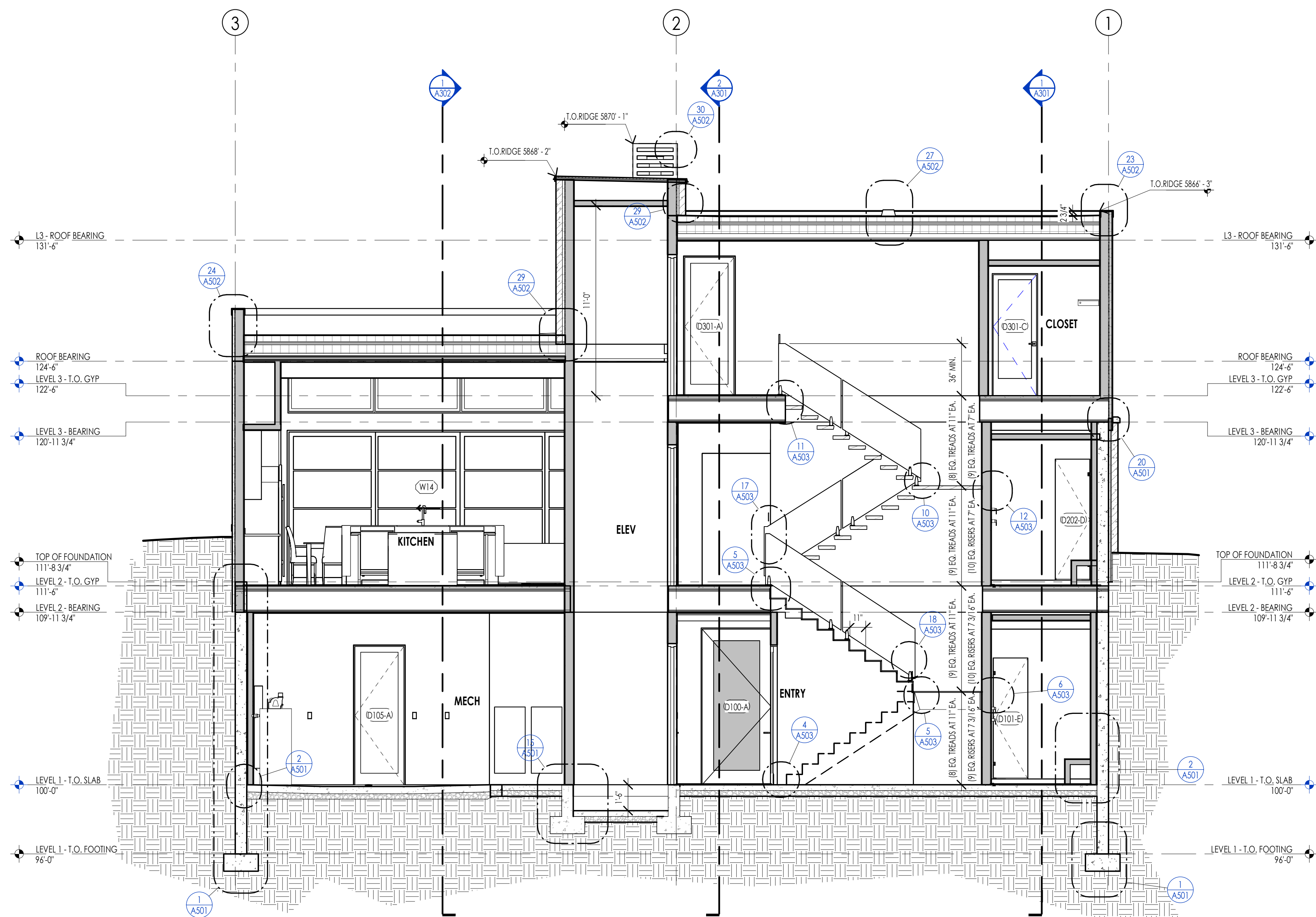
SHEET TITLE:  
BUILDING SECTIONS

SHEET NUMBER:  
A301

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Section 3  
1/4" = 1'-0"



Section 4  
1/4" = 1'-0"

ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	SINGLE PLY ROOFING MEMBRANE SYSTEM WITH GRAVEL BALLAST
	2x4 CEDAR CHANNEL LAP HORIZONTAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES

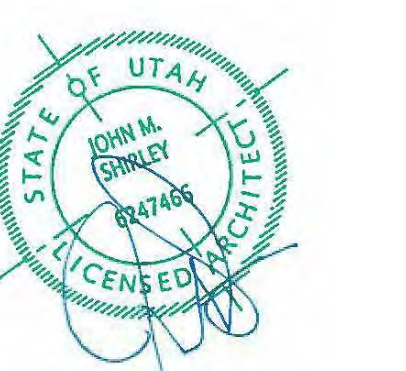


Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

7927 So. Highpoint Parkway, Suite 300  
Scary, Utah 84094  
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fax. 801.269.1425  
www.thinkaec.com

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WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

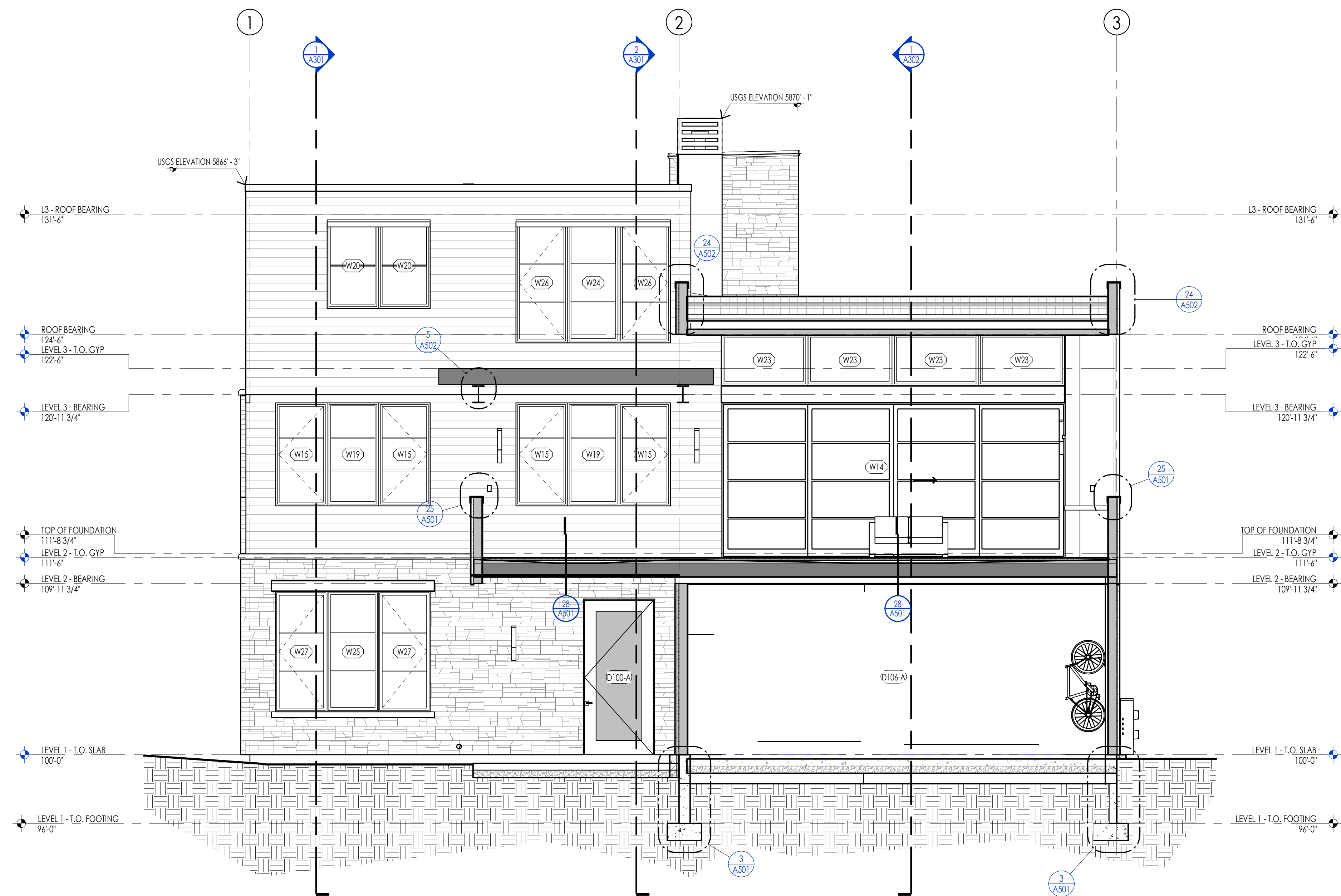
PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

SHEET TITLE:  
BUILDING SECTIONS

SHEET NUMBER:  
A302

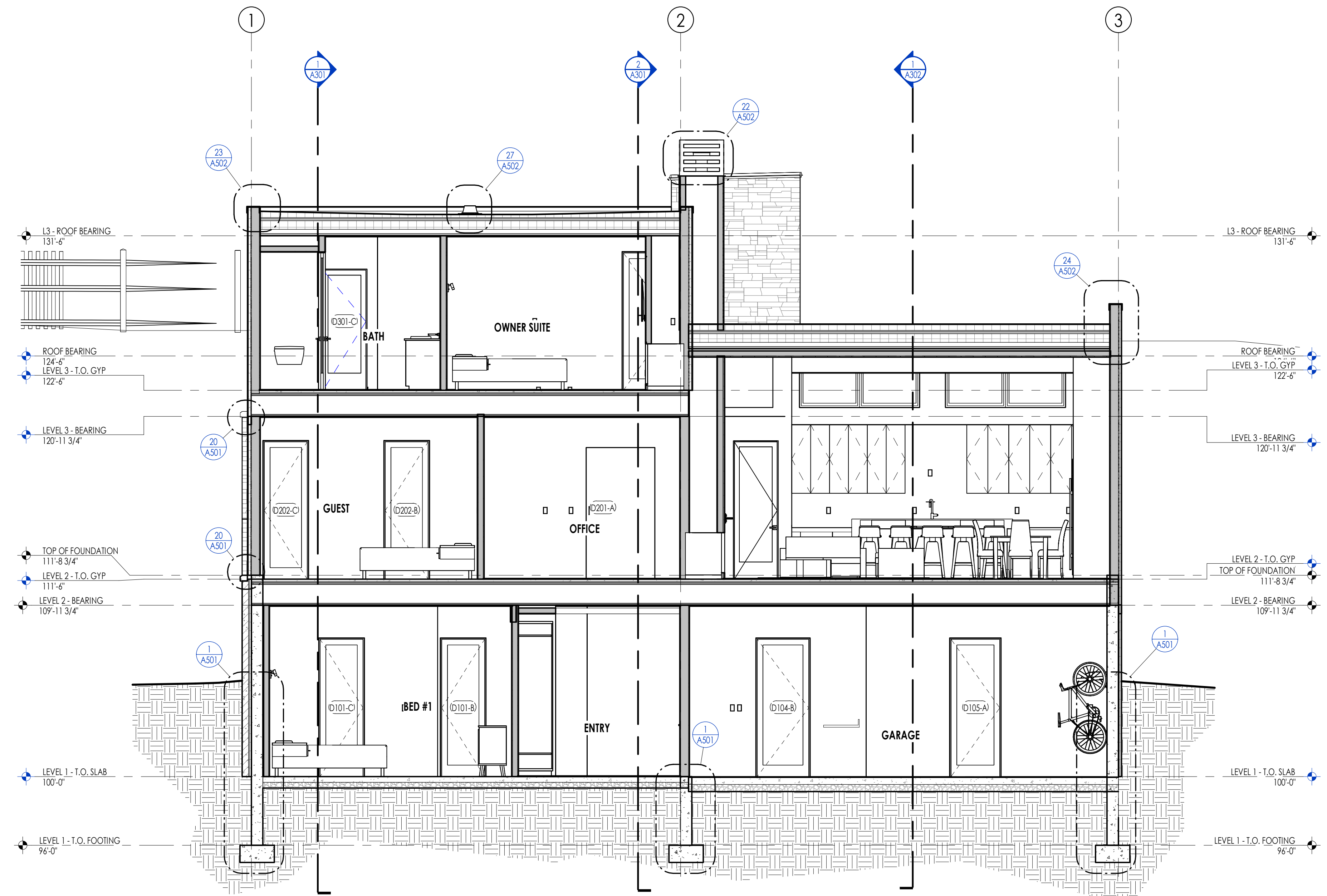
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ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	STANDING SEAM METAL ROOFING SYSTEM
	SINGLE PLY ROOFING MEMBRANE SYSTEM WITH GRAVEL BALLAST
	2x4 CEDAR CHANNEL LAP HORIZONTAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR STONE VENEER

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES



Section 6  
1/4" = 1'-0"

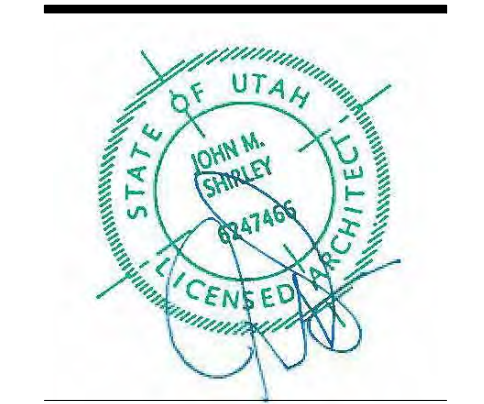
Section 5  
1/4" = 1'-0"



**Think**  
Architecture

Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

7927 So. Highpoint Parkway, Suite 300  
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WARM SPRINGS RESIDENCE #33  
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21

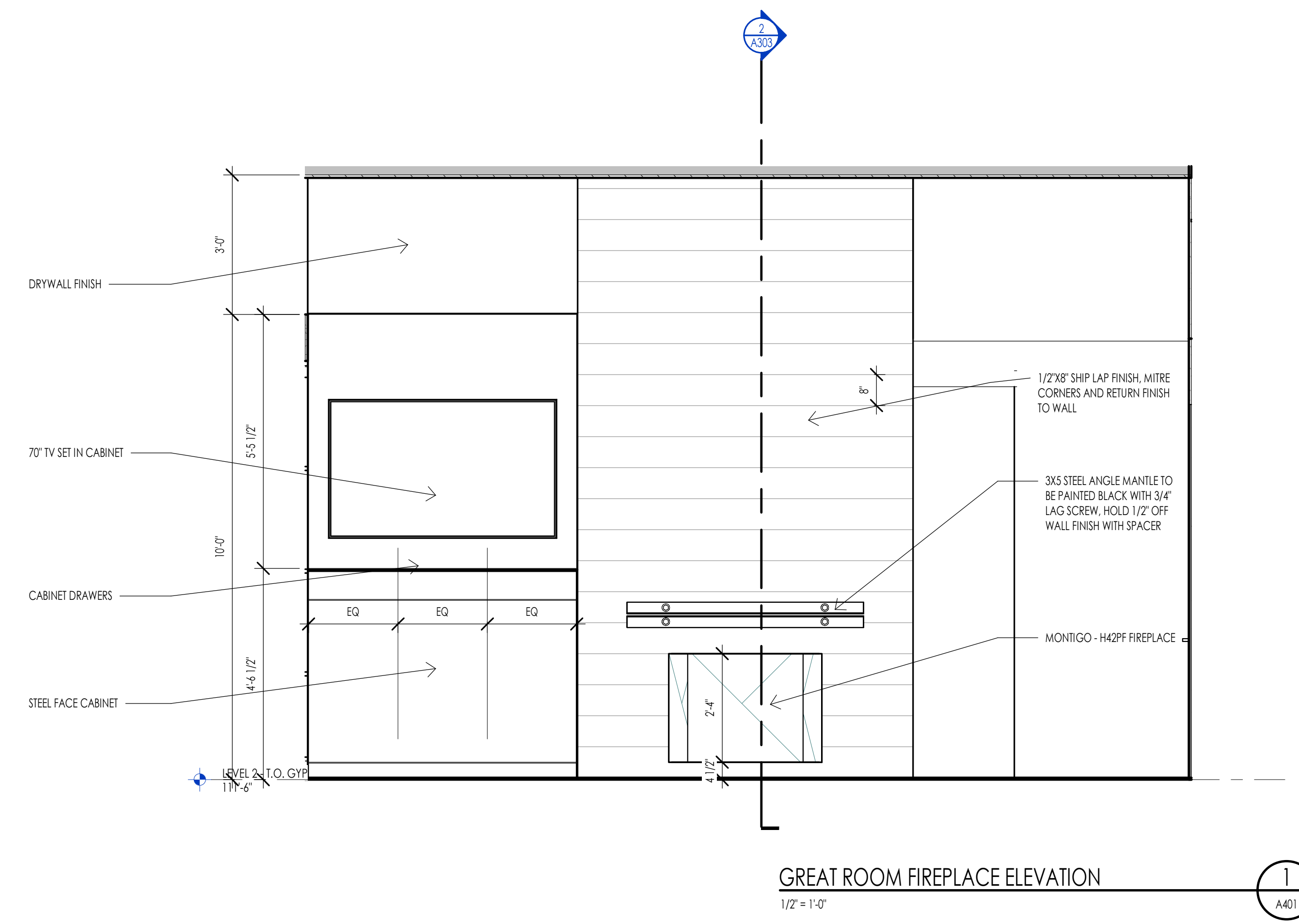
SHEET TITLE:  
BUILDING SECTIONS

SHEET NUMBER:  
A303

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GREAT ROOM INTERIOR VIEW

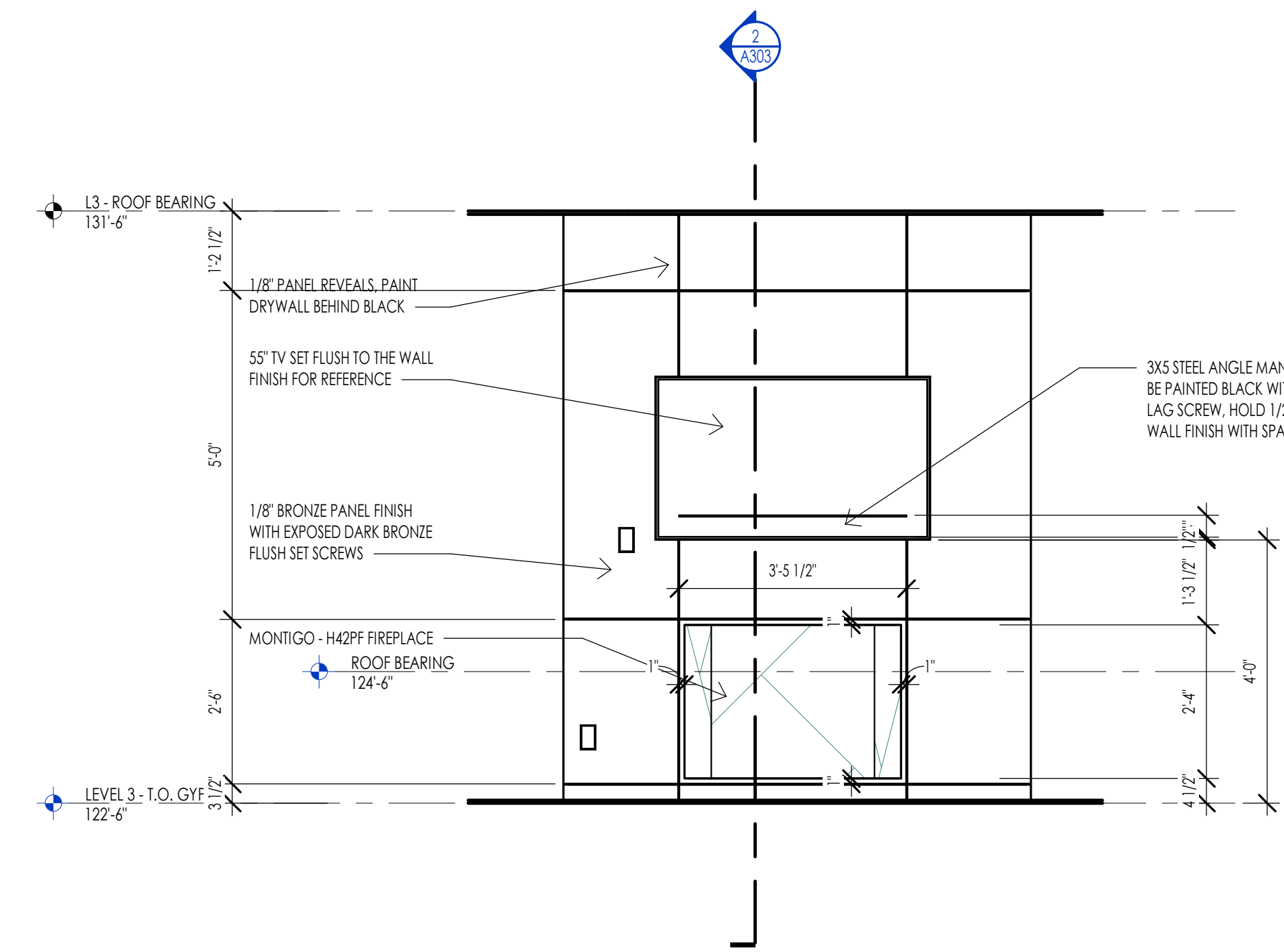


GREAT ROOM FIREPLACE ELEVATION  
1/2" = 1'-0"

1  
A401

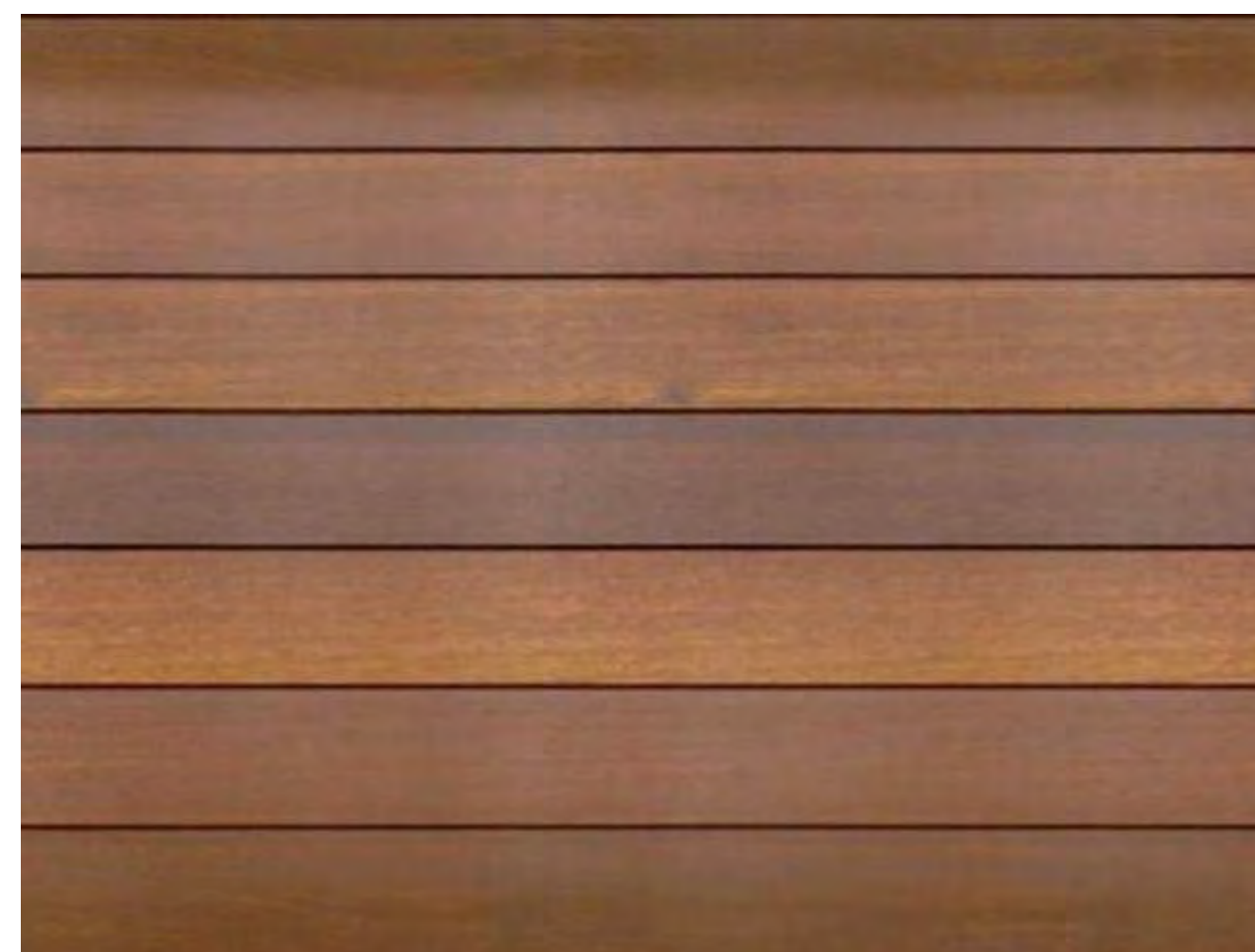


OWNER SUITE INTERIOR VIEW

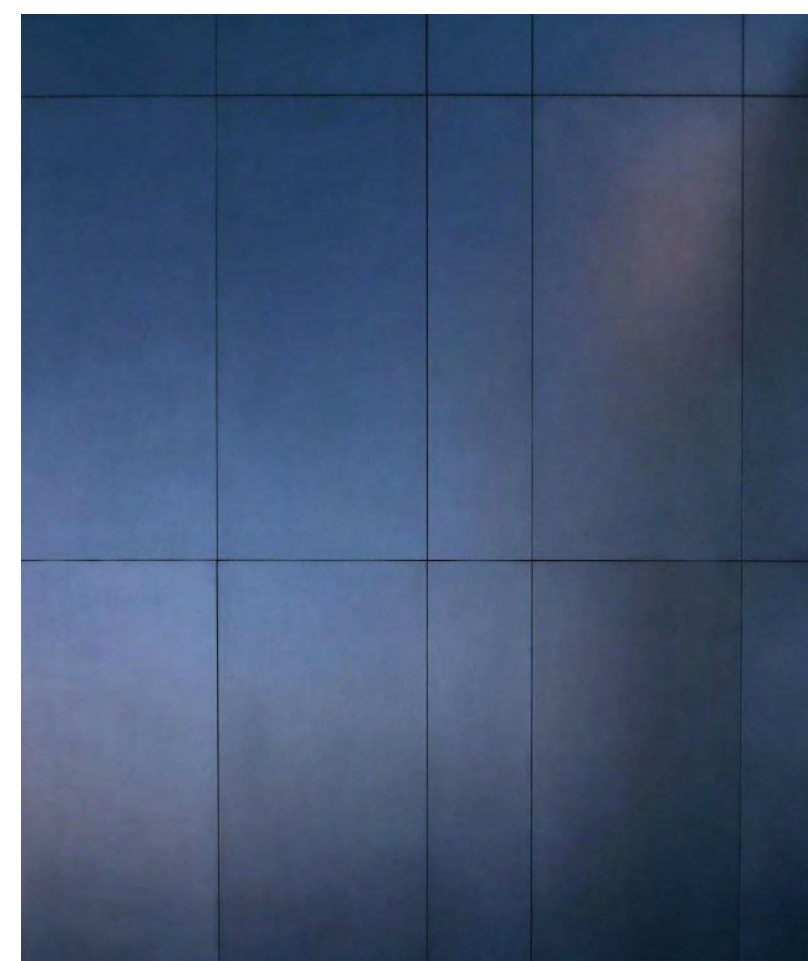


OWNER'S SUITE FIREPLACE ELEVATION  
1/2" = 1'-0"

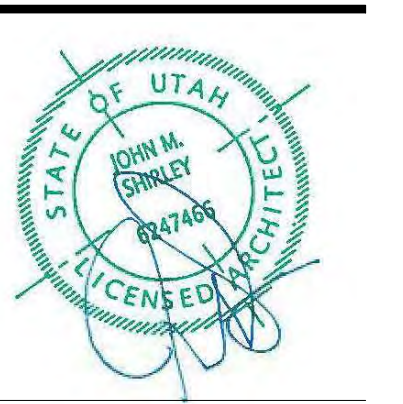
2  
A401



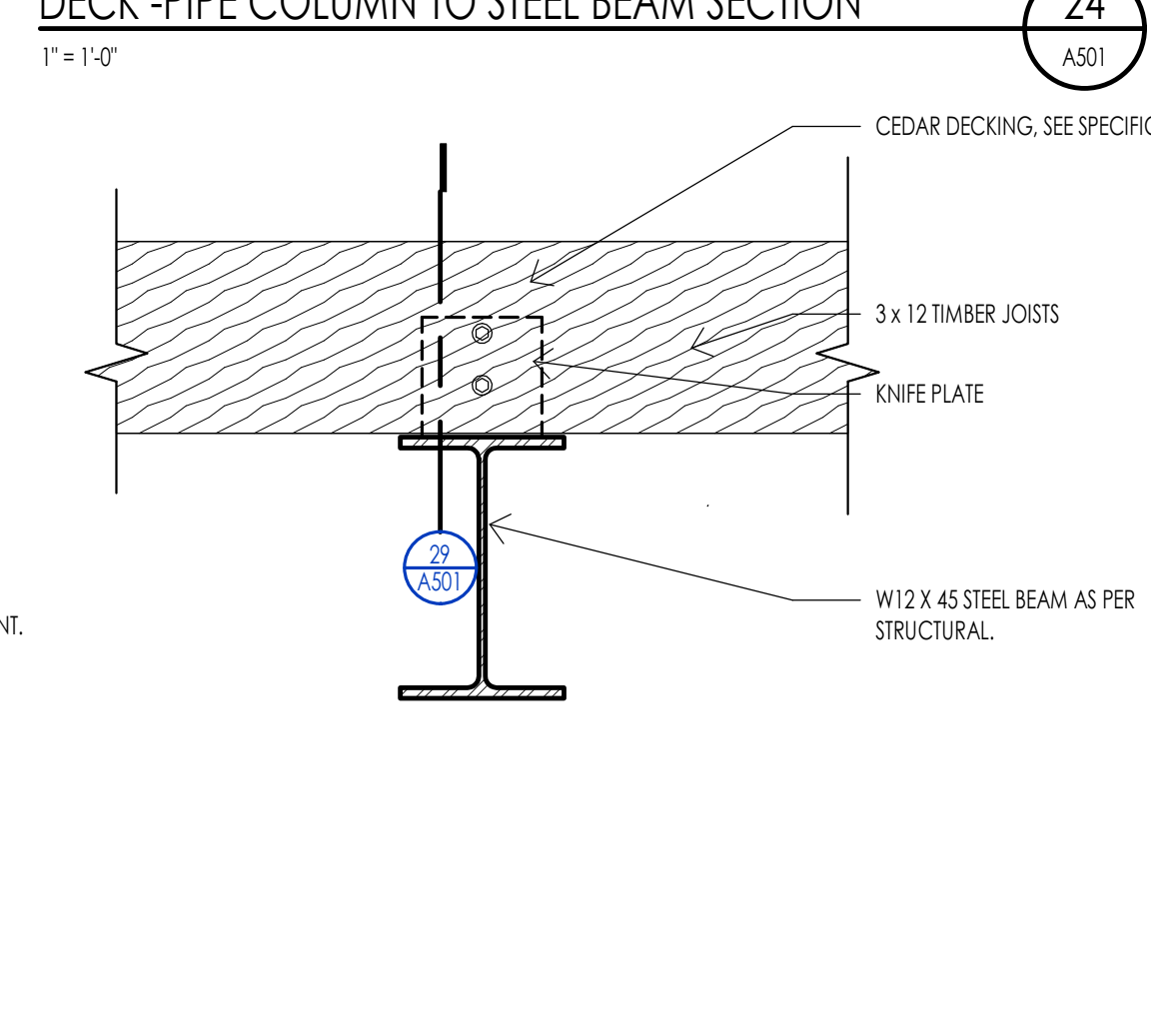
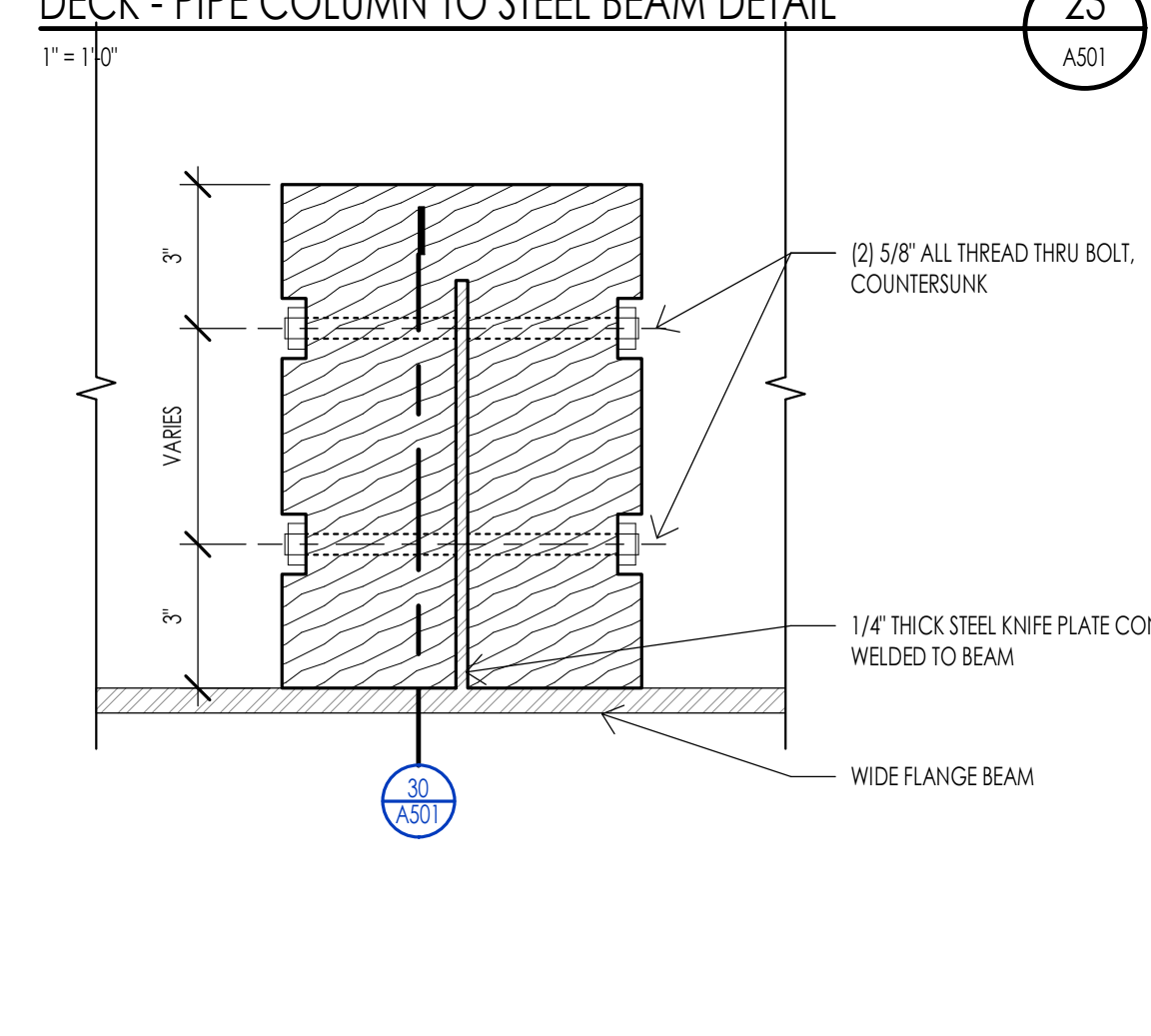
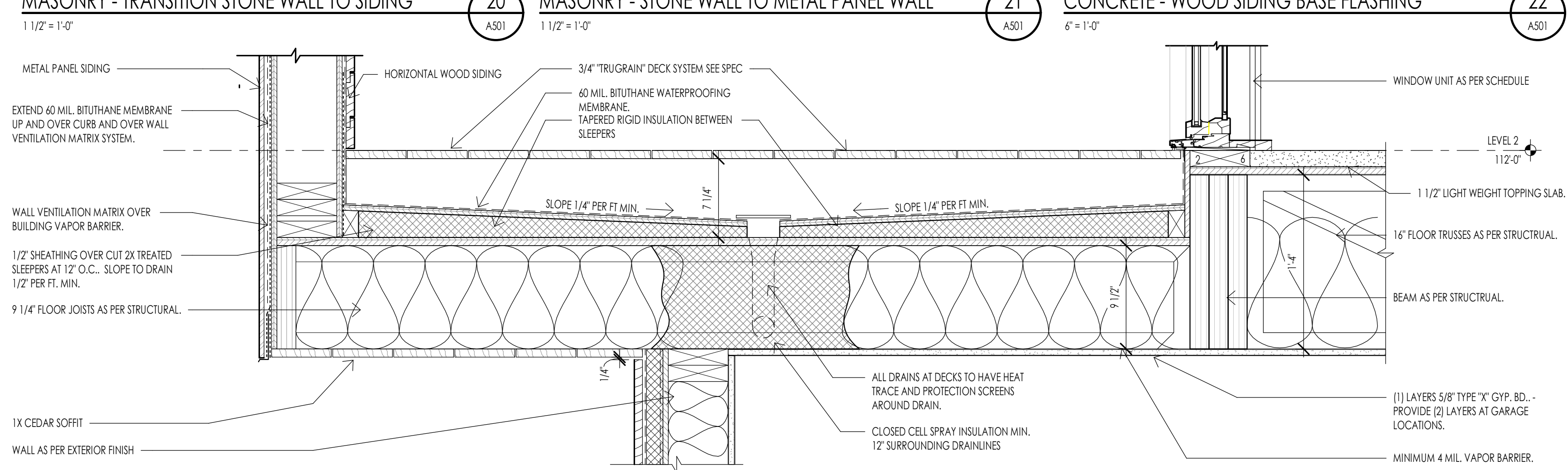
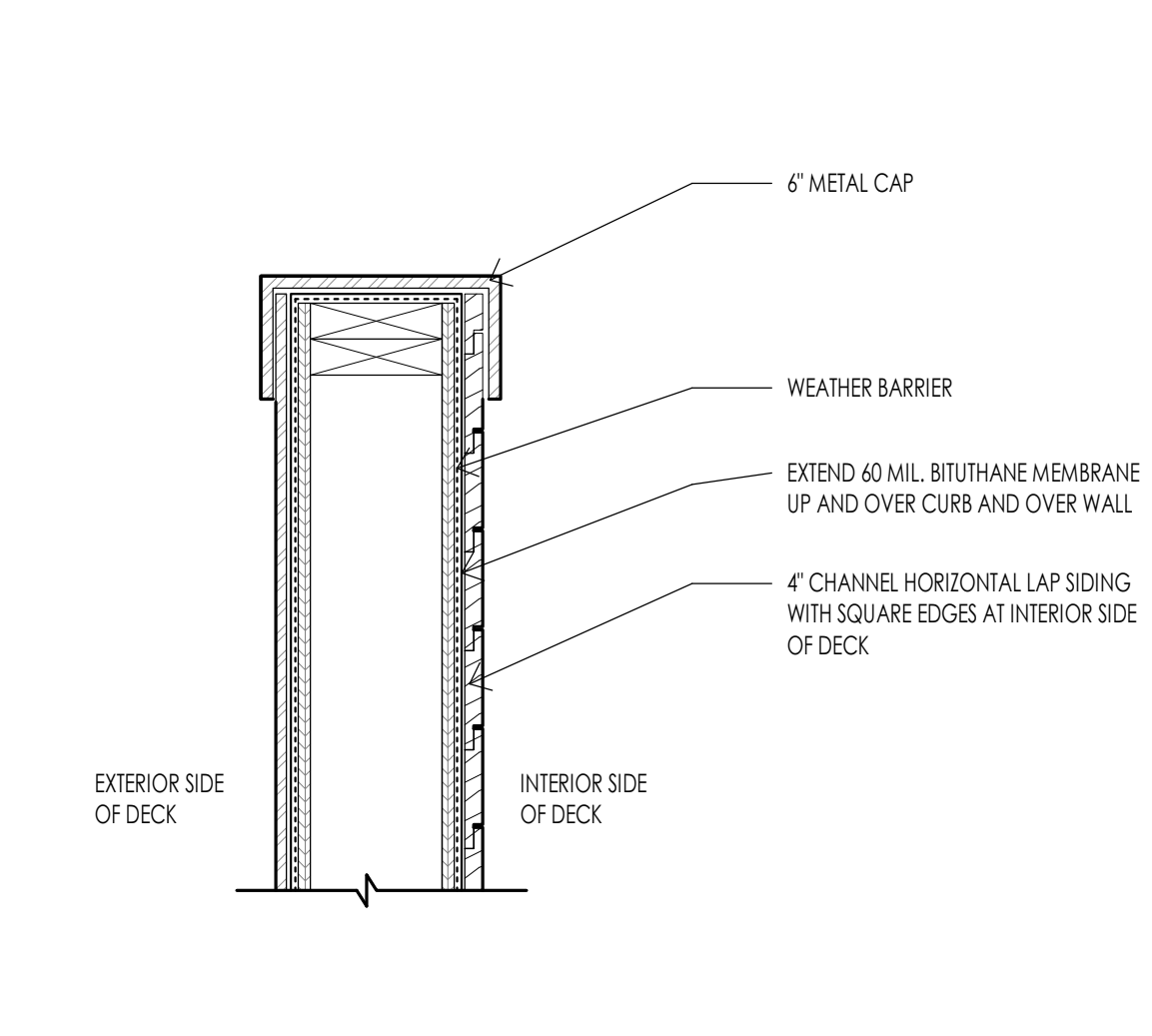
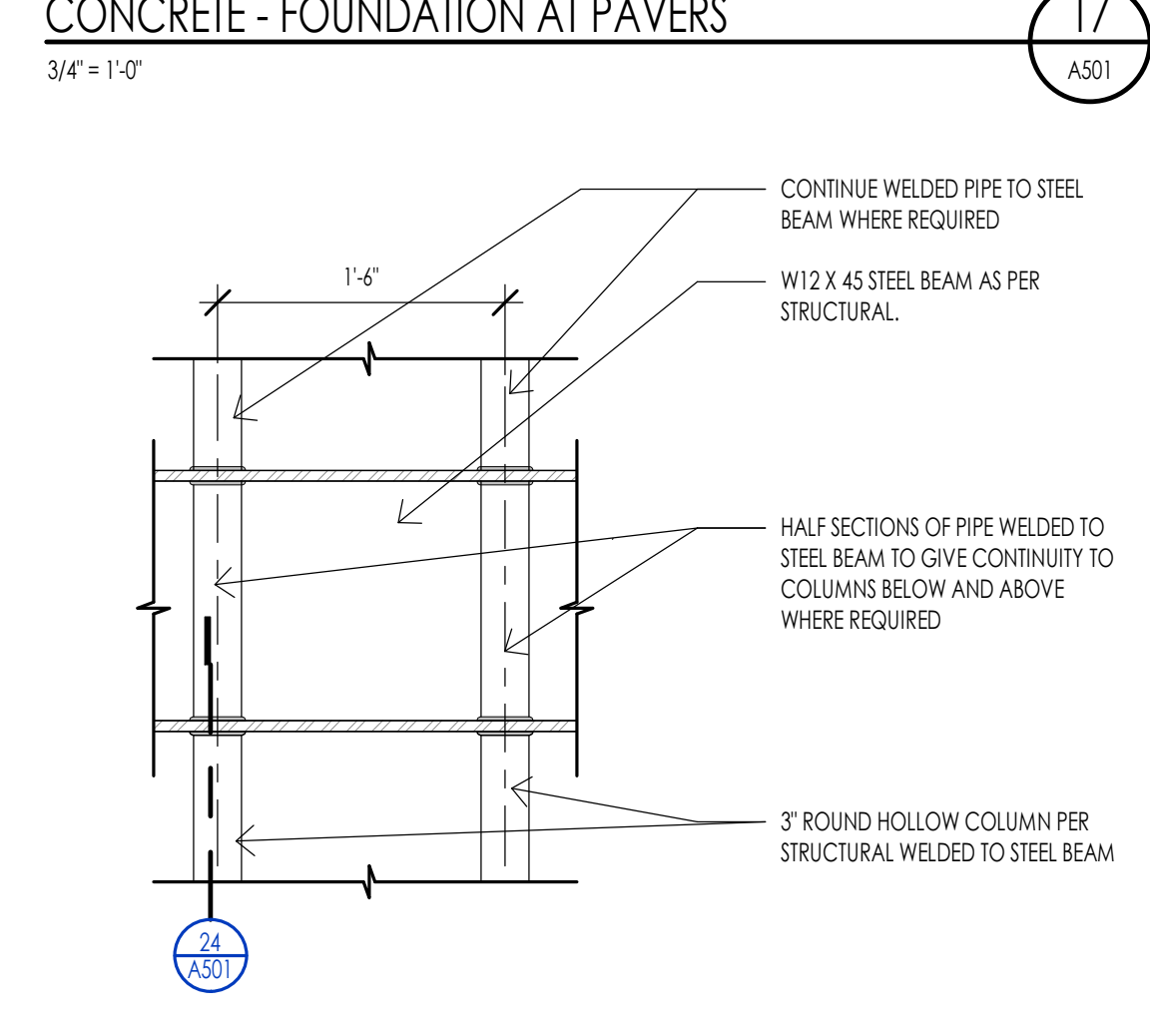
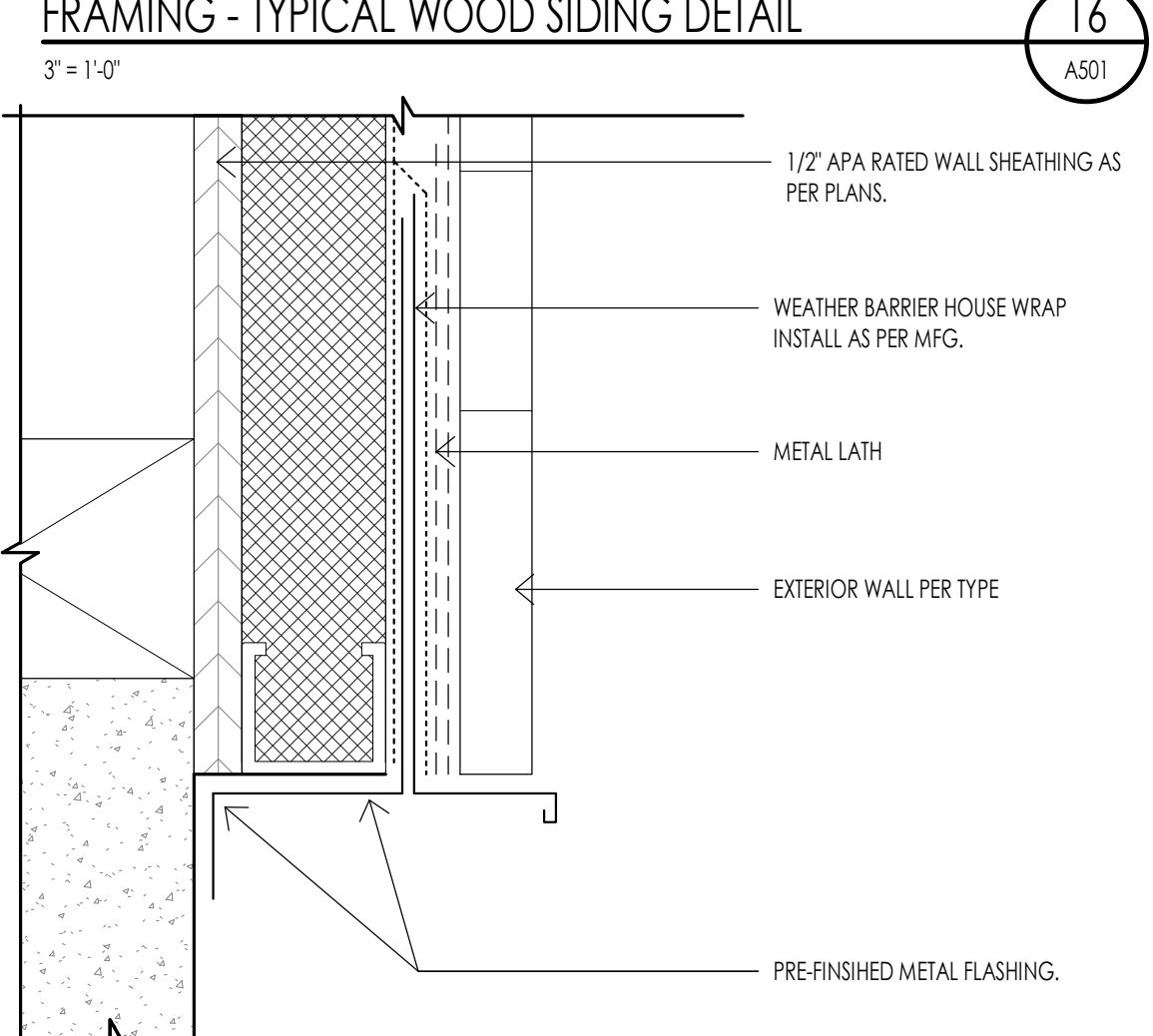
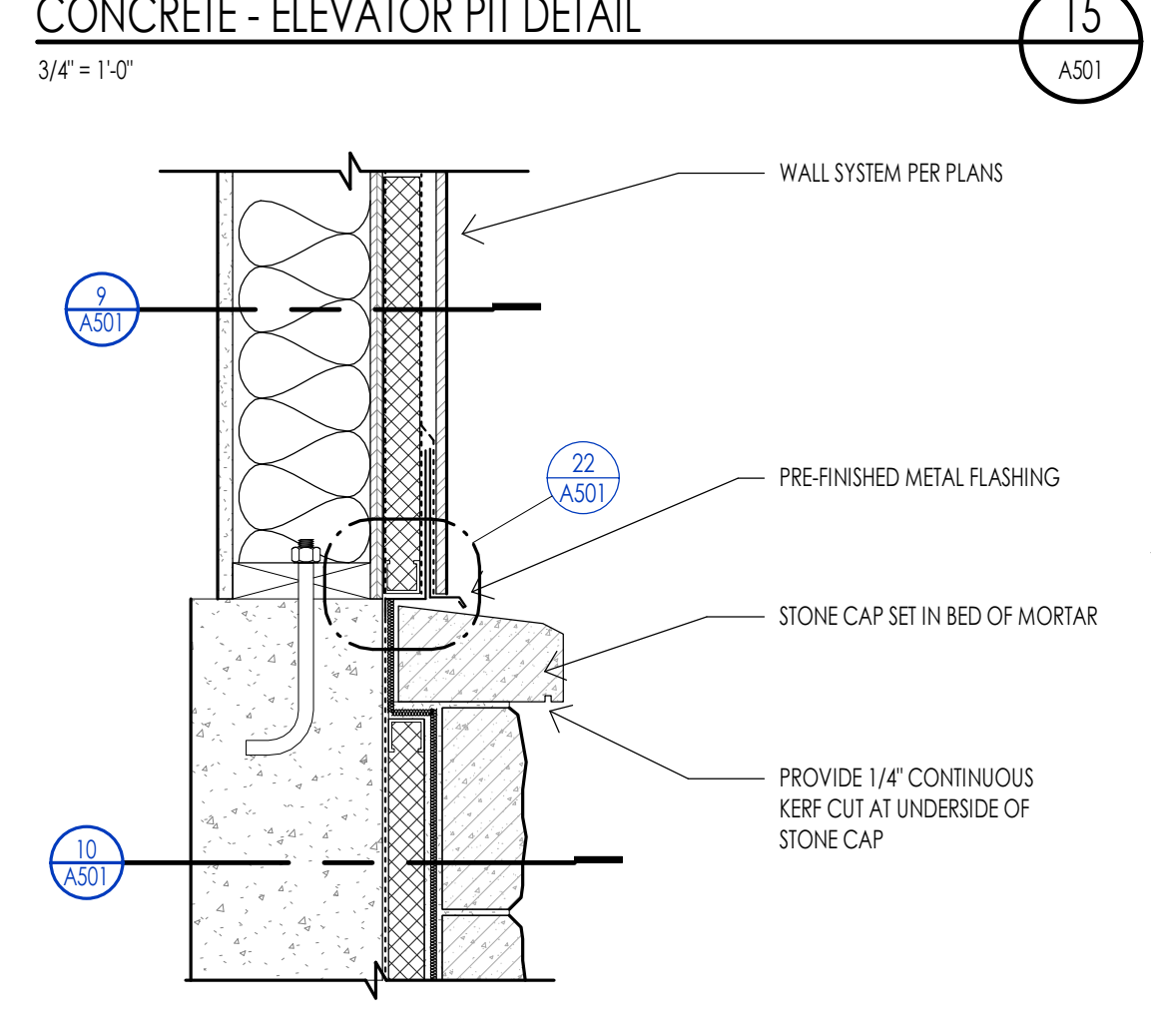
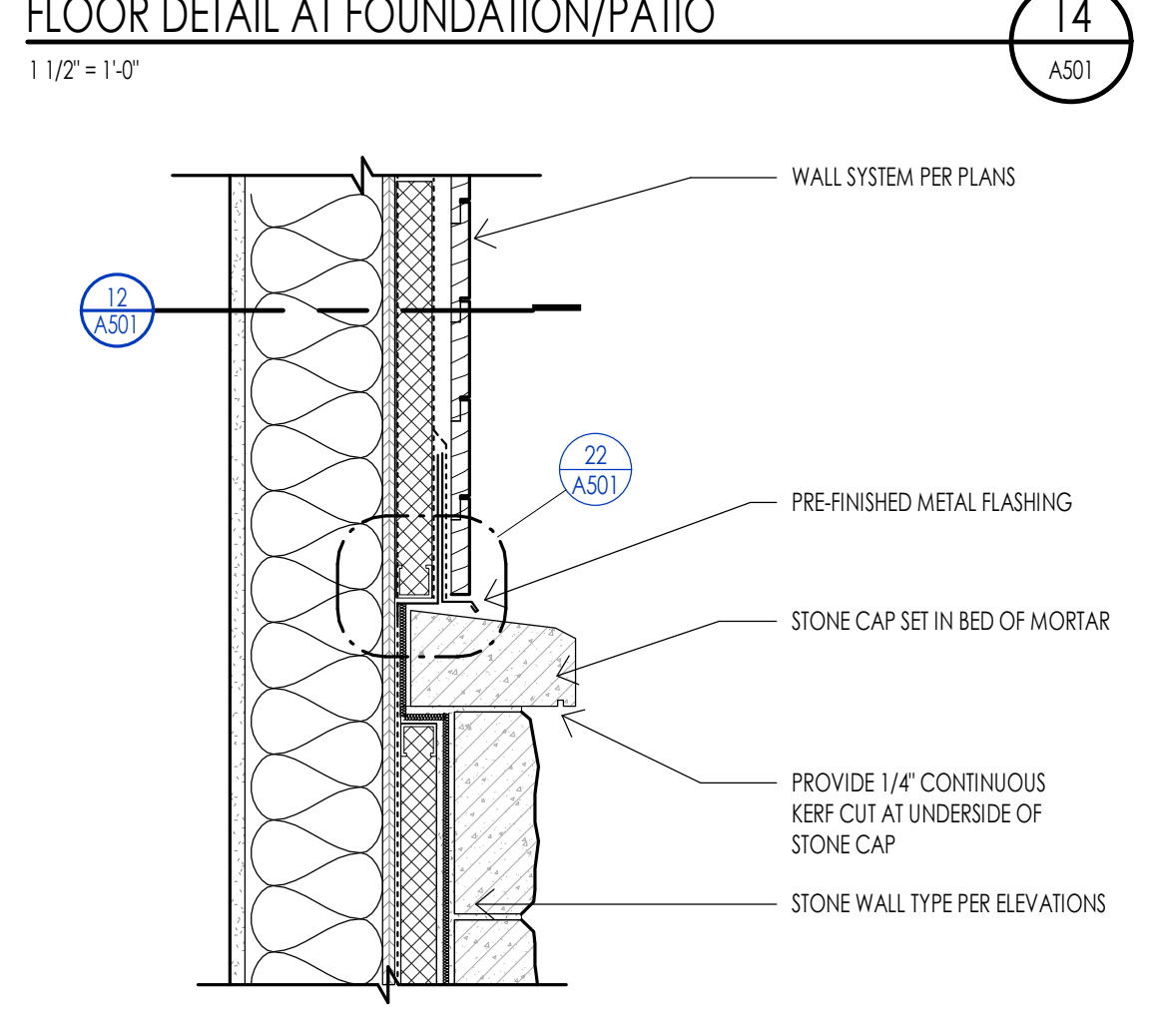
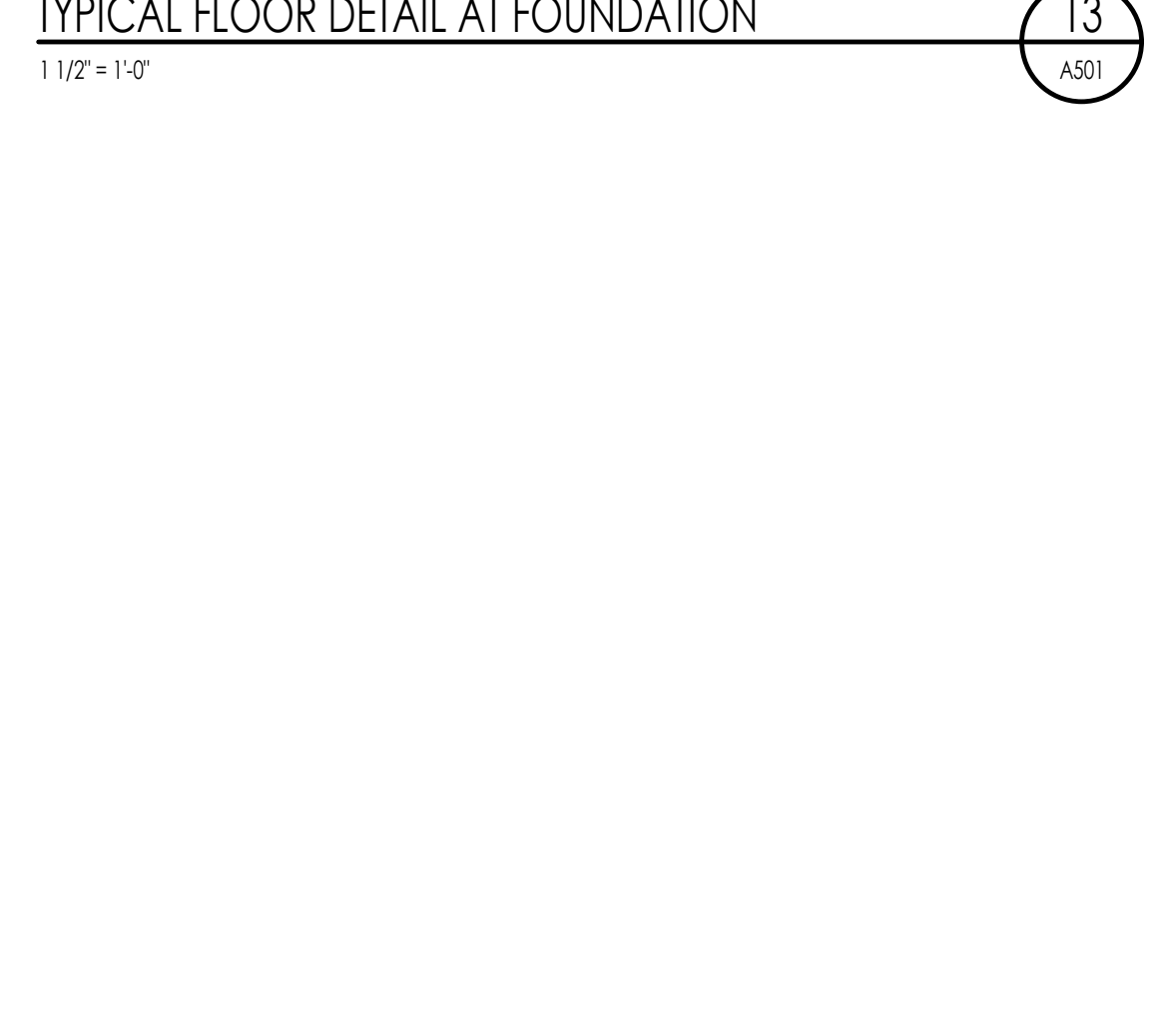
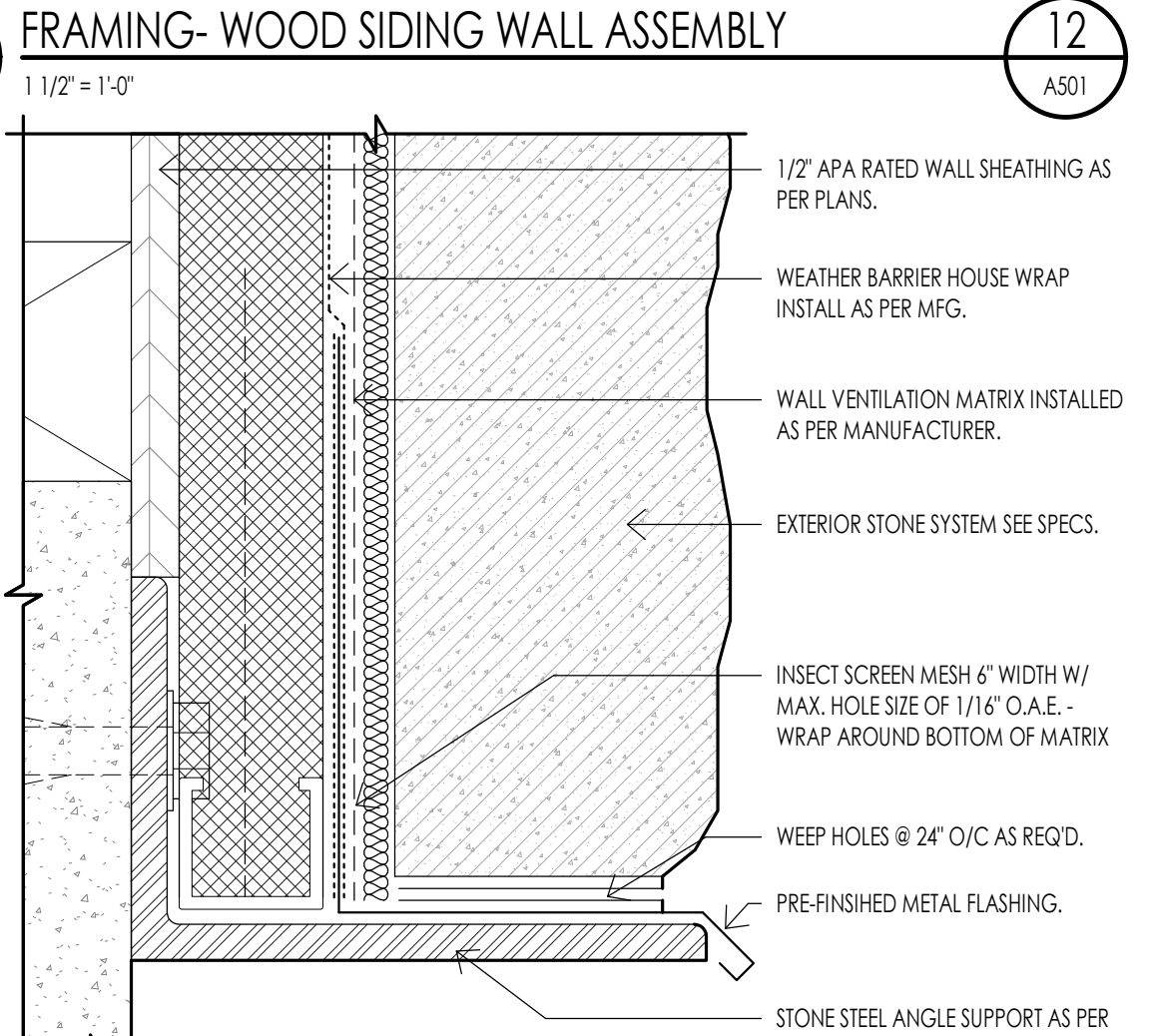
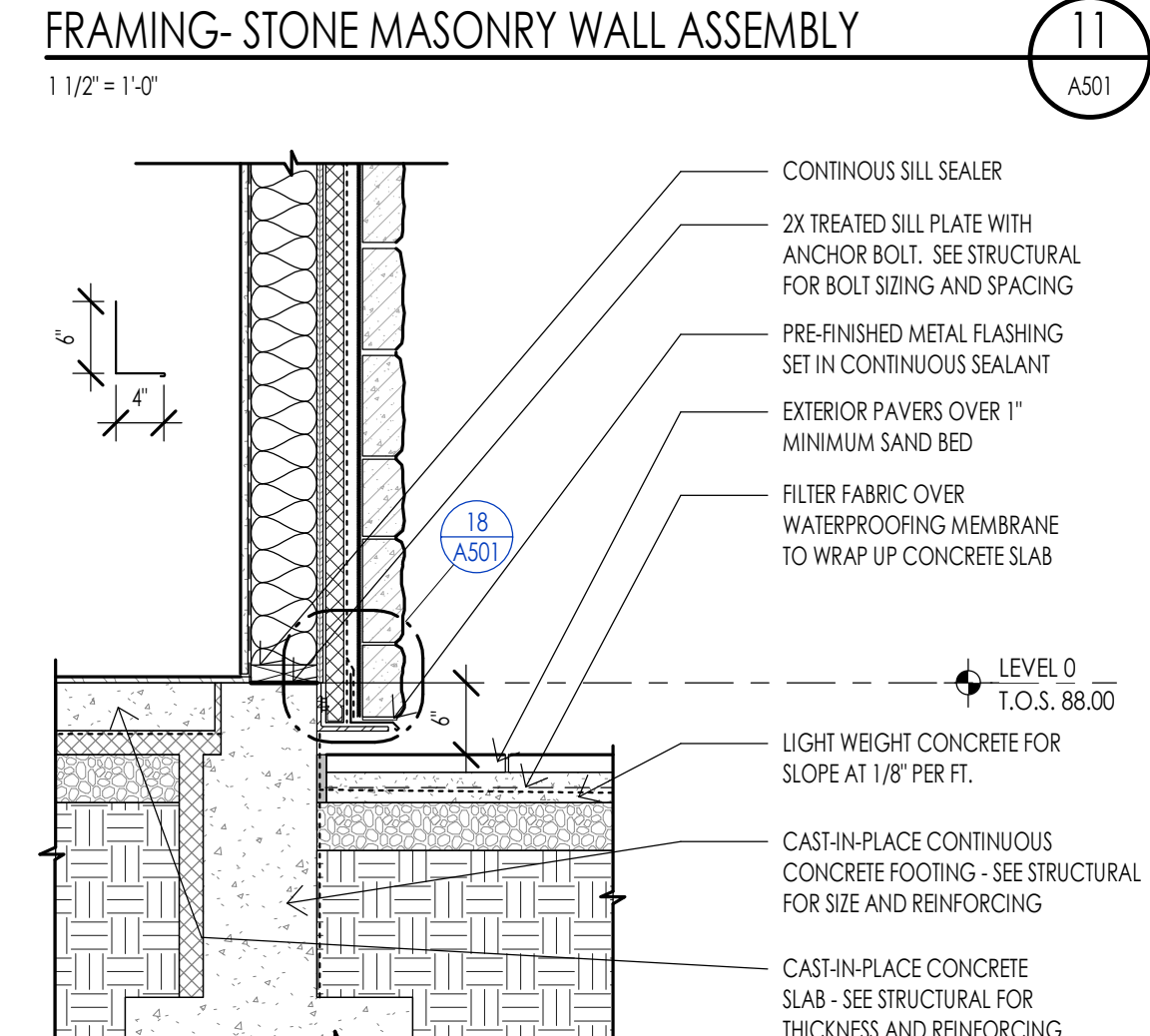
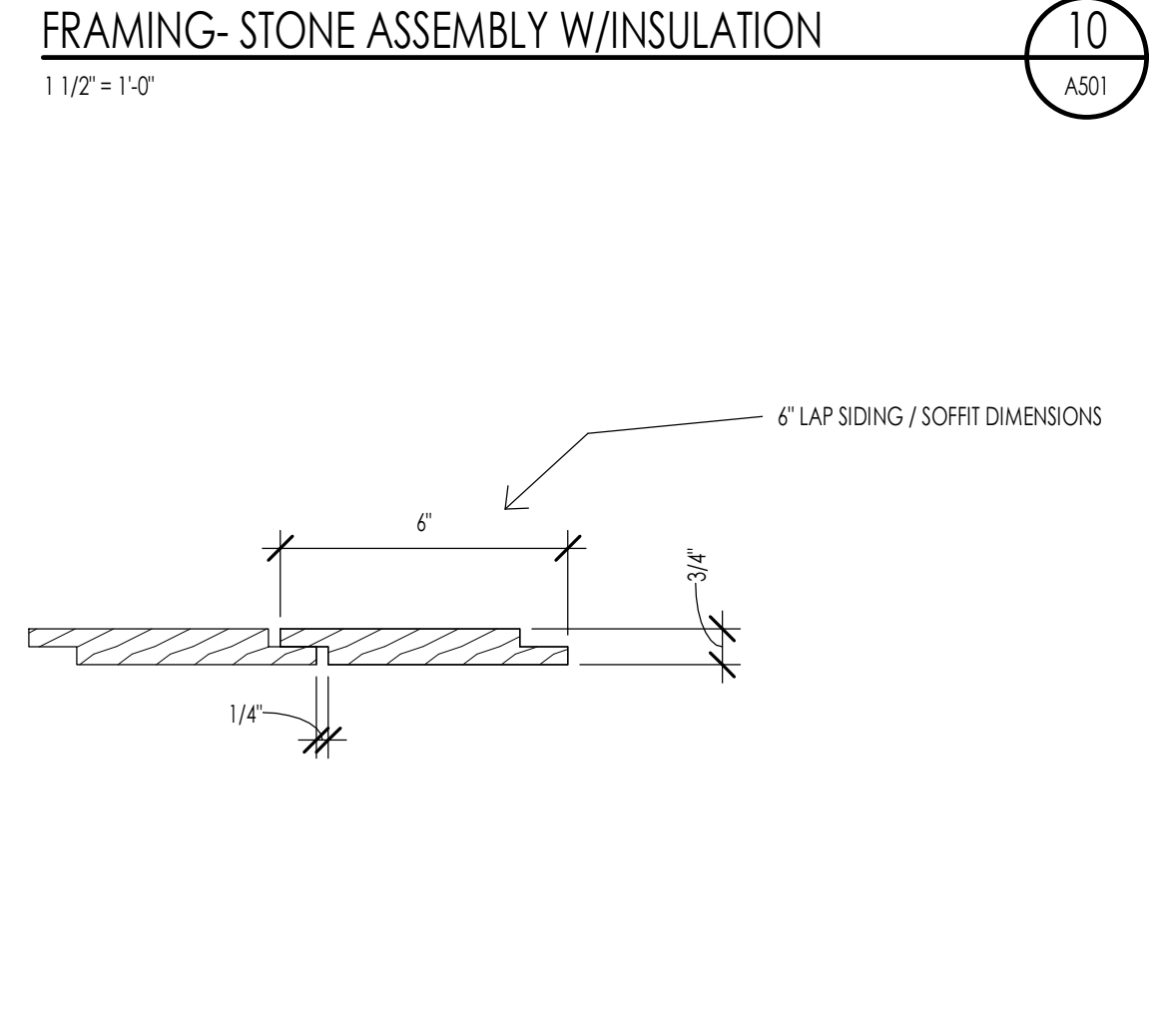
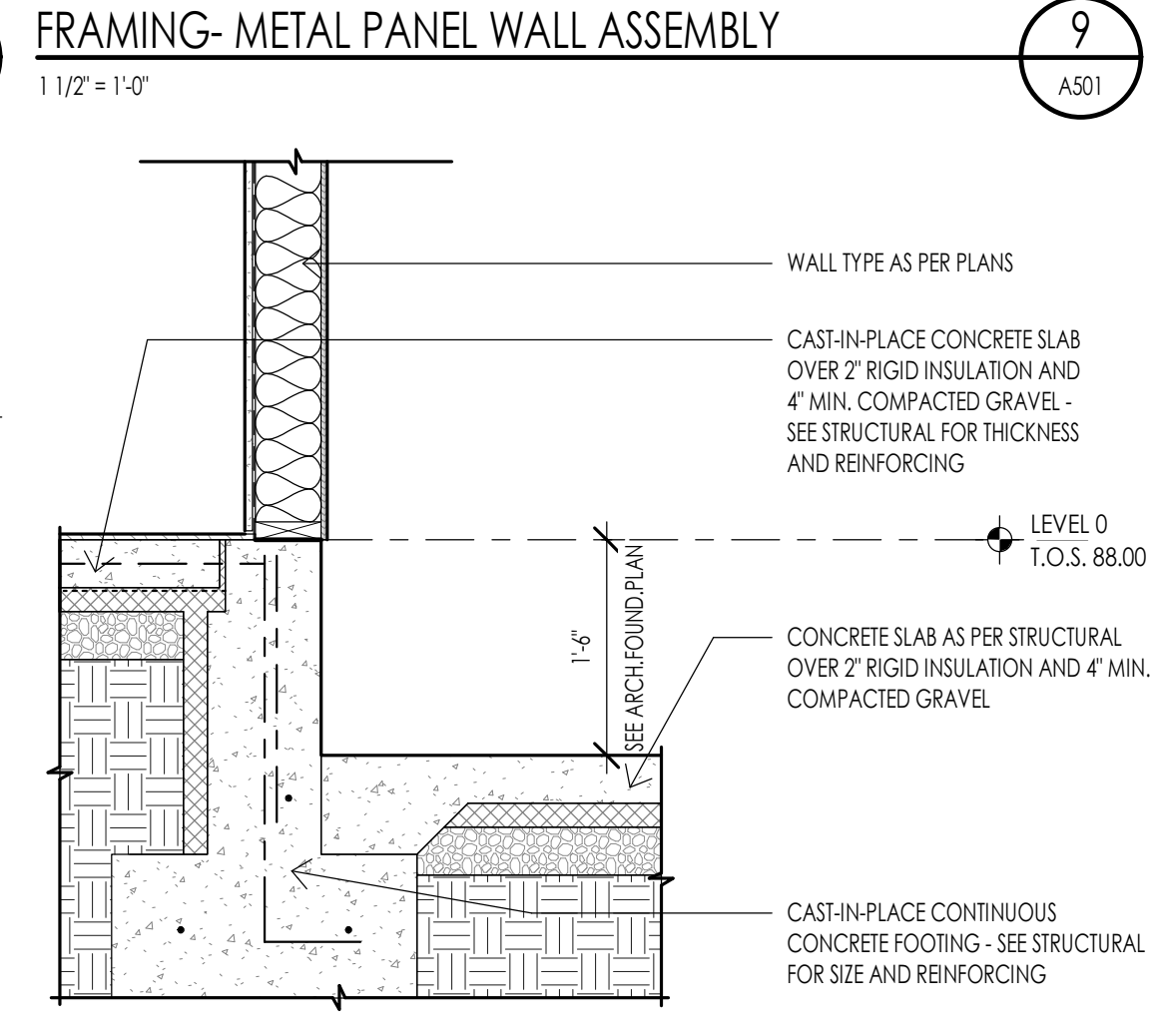
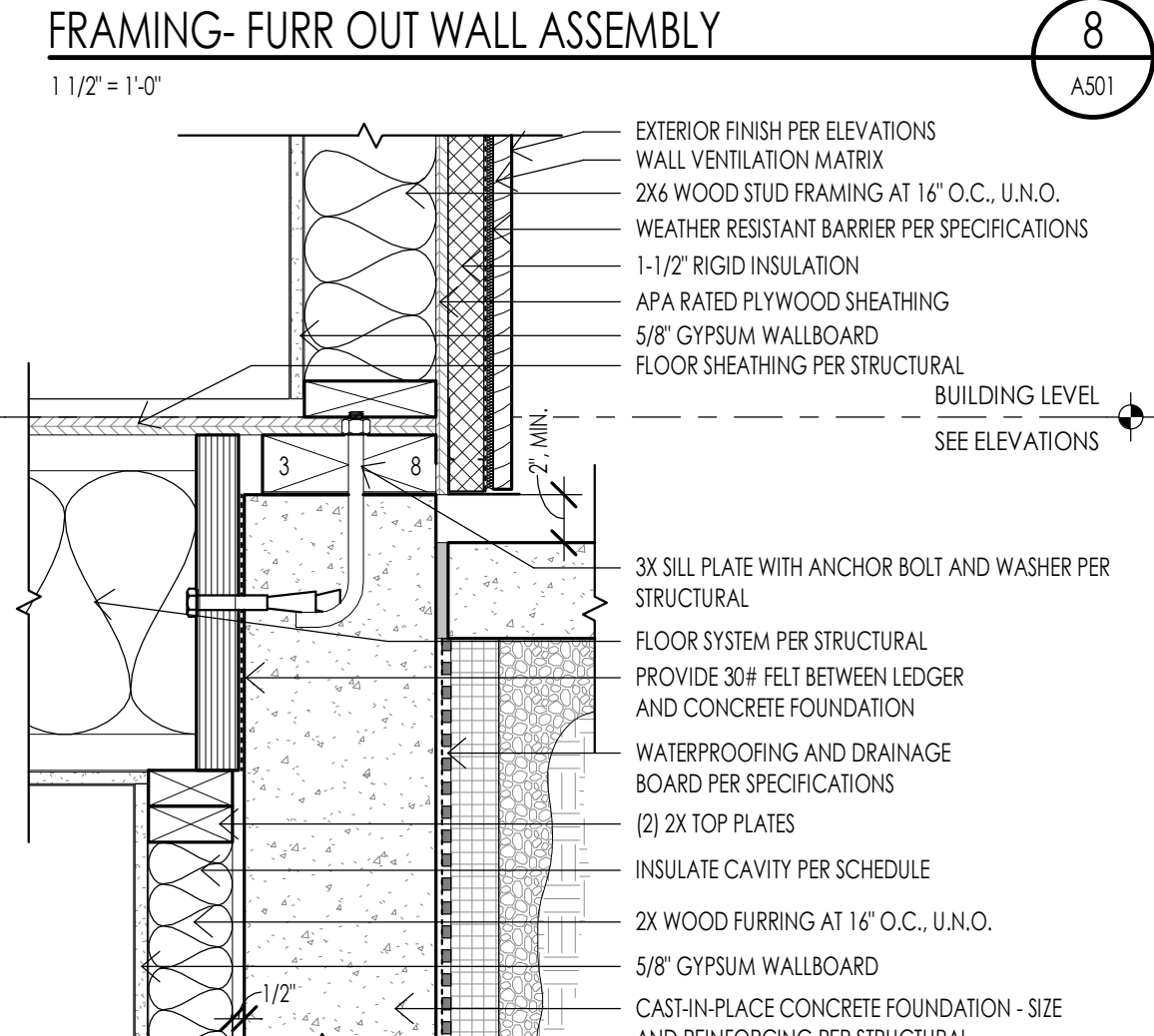
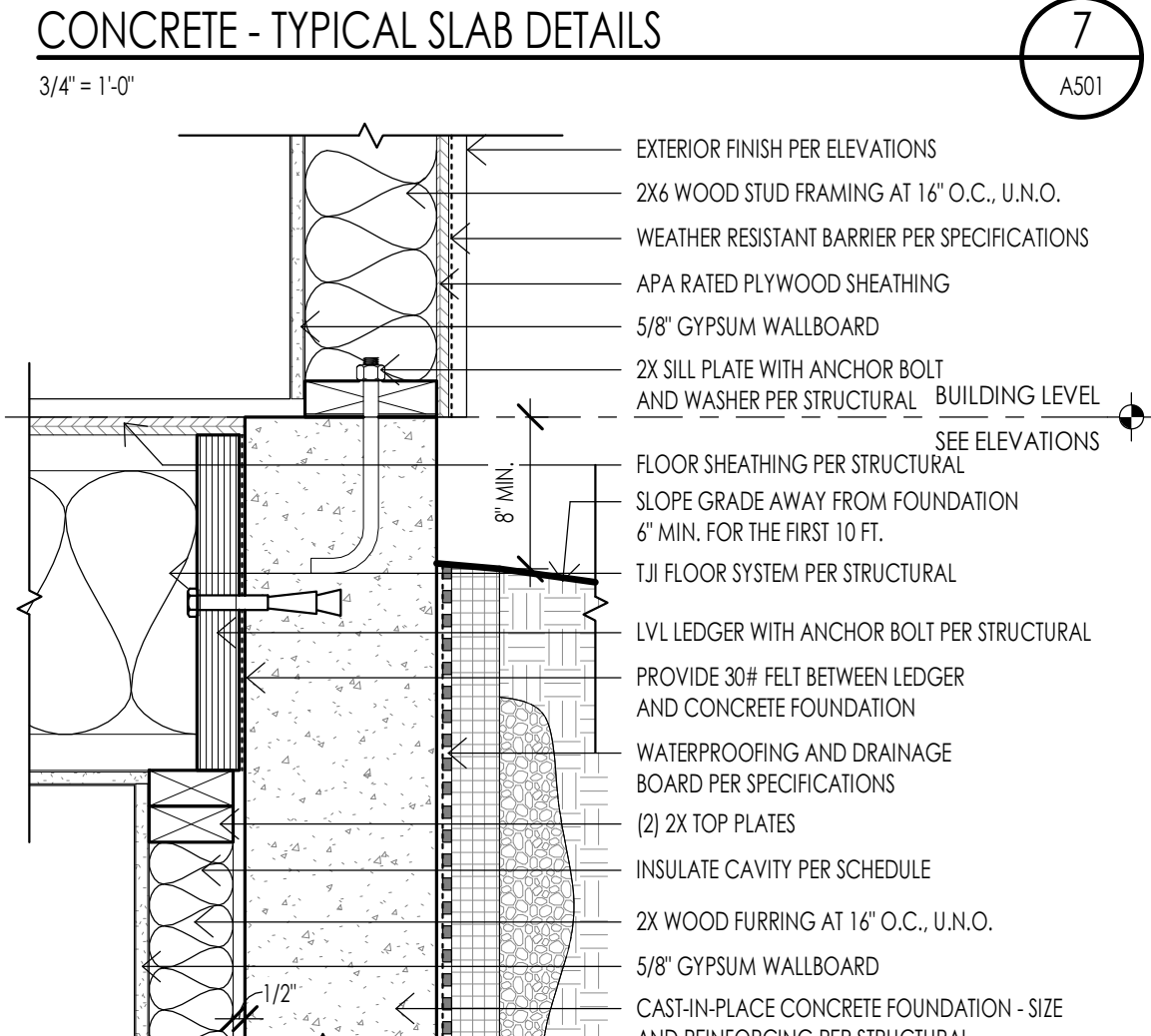
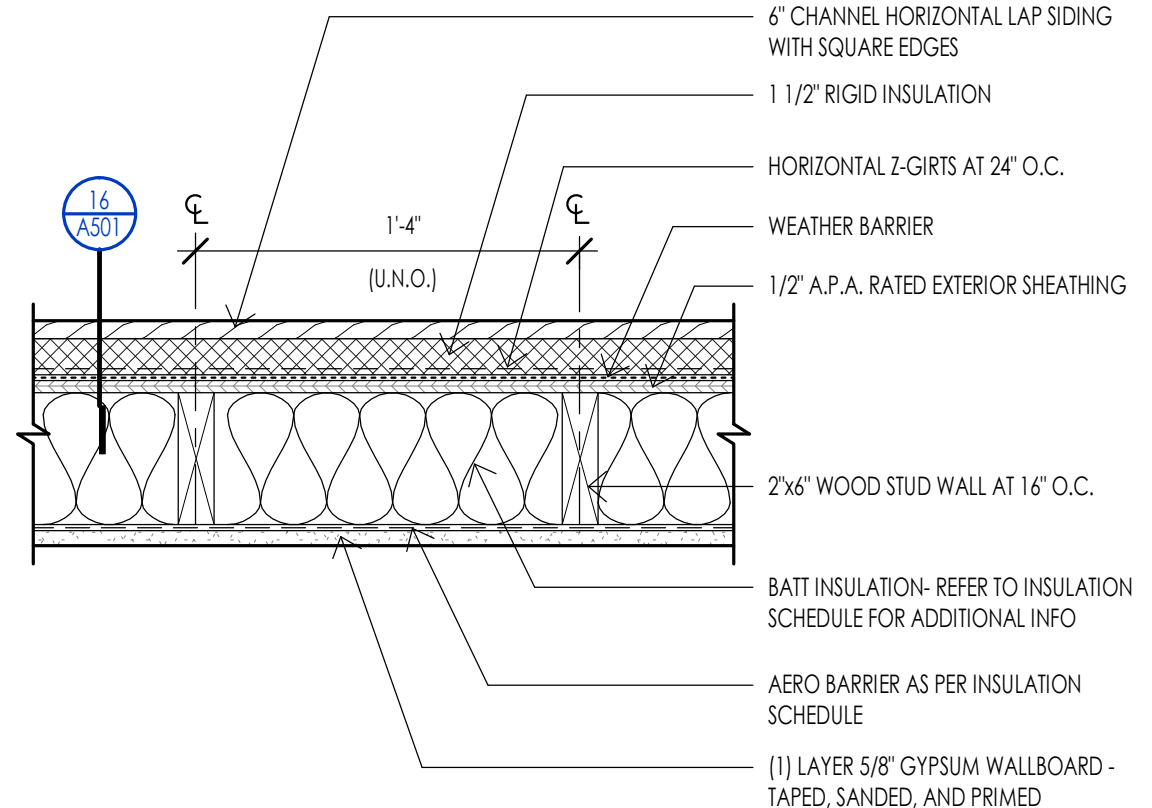
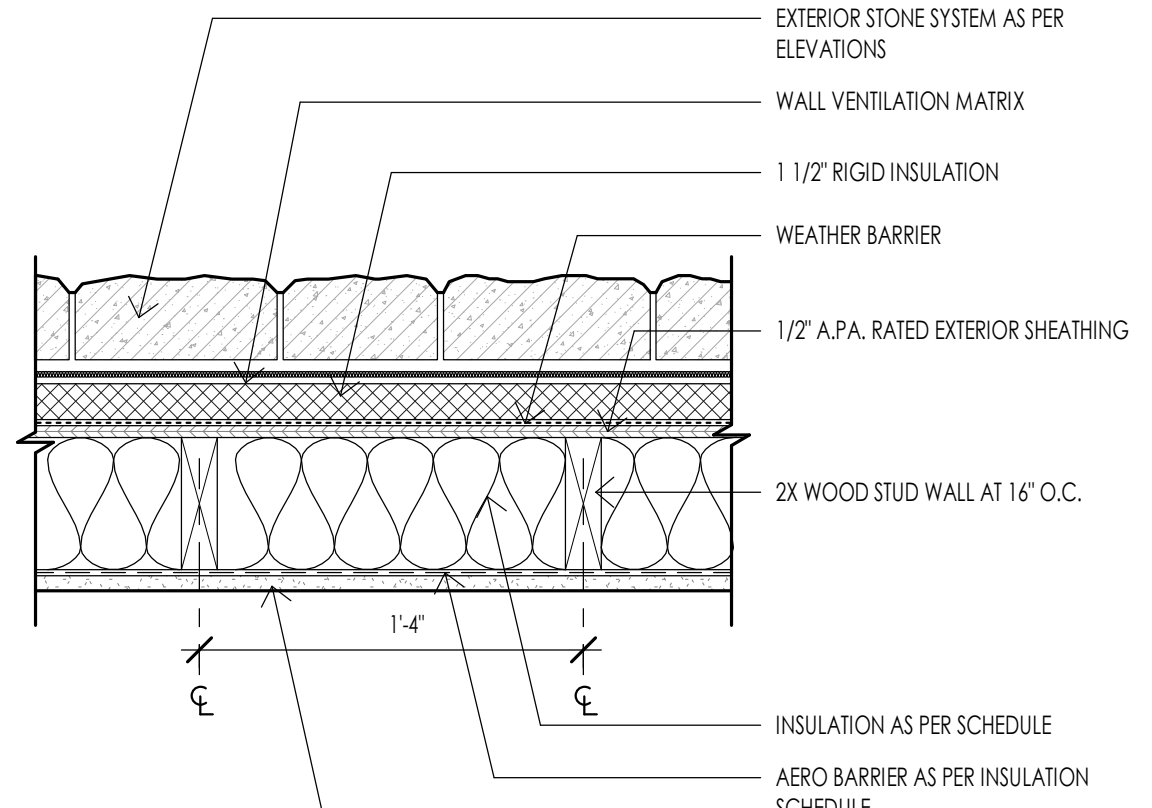
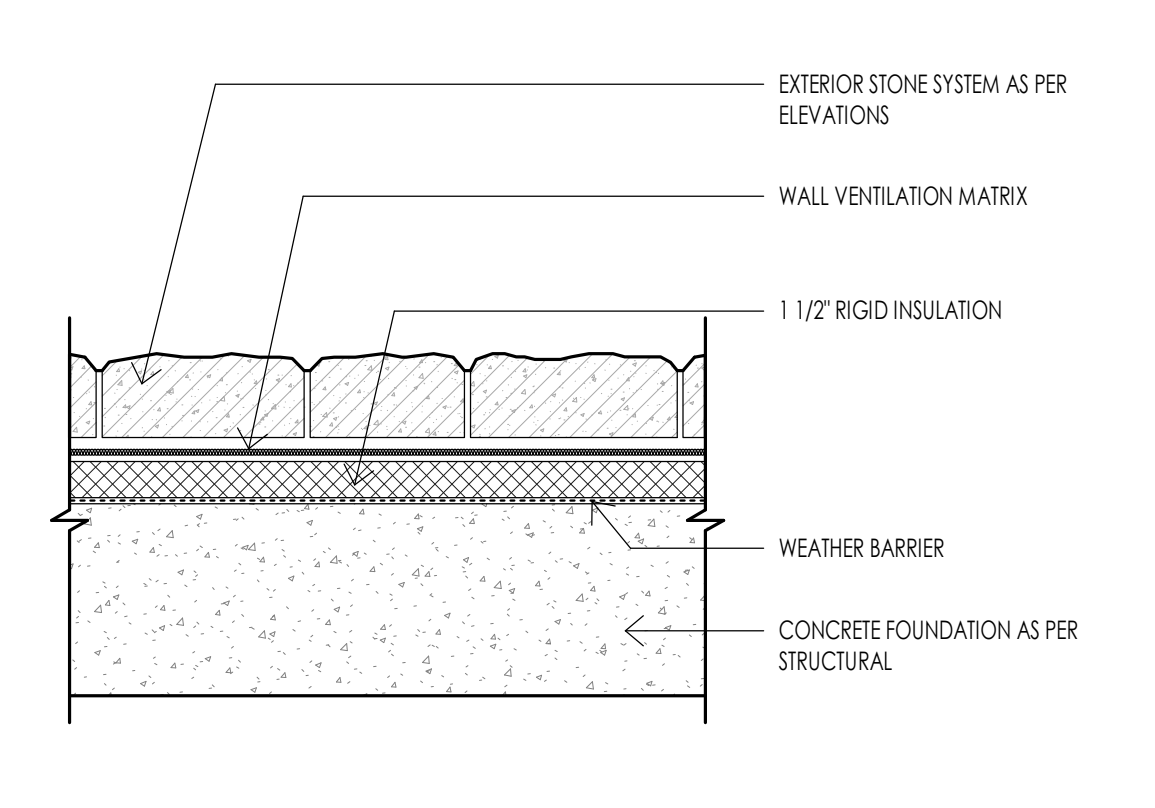
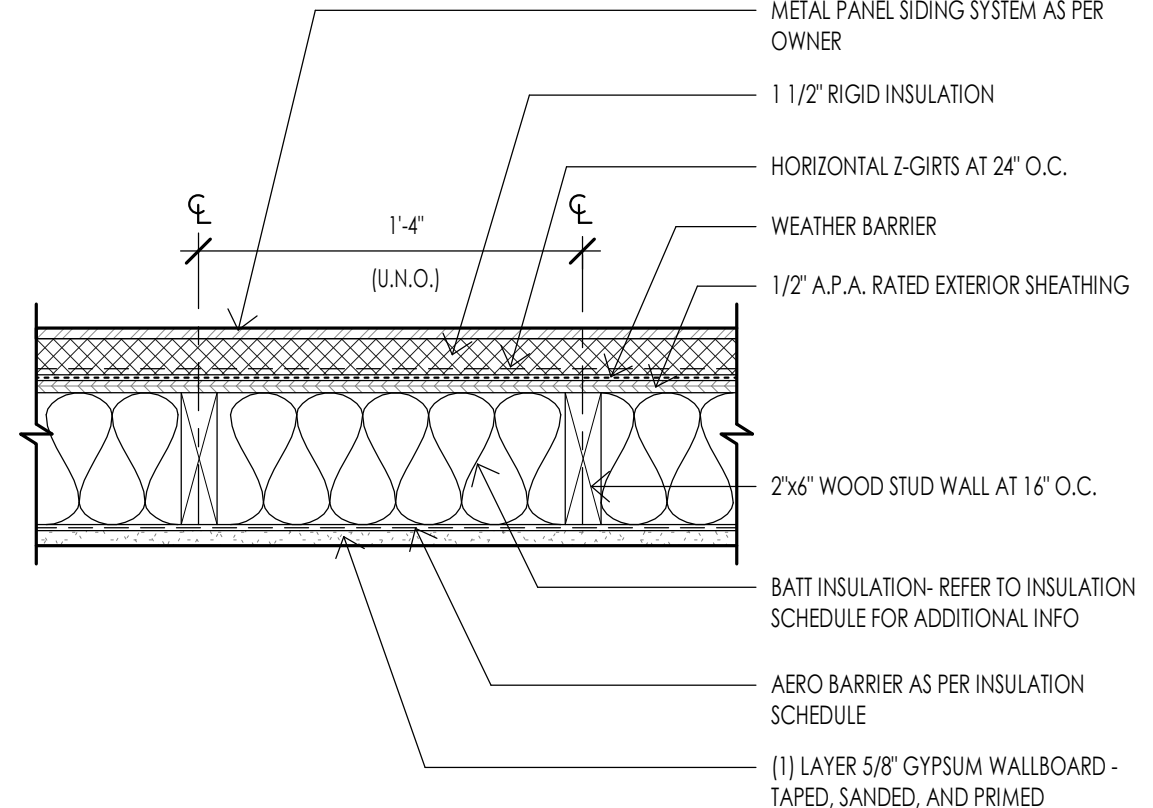
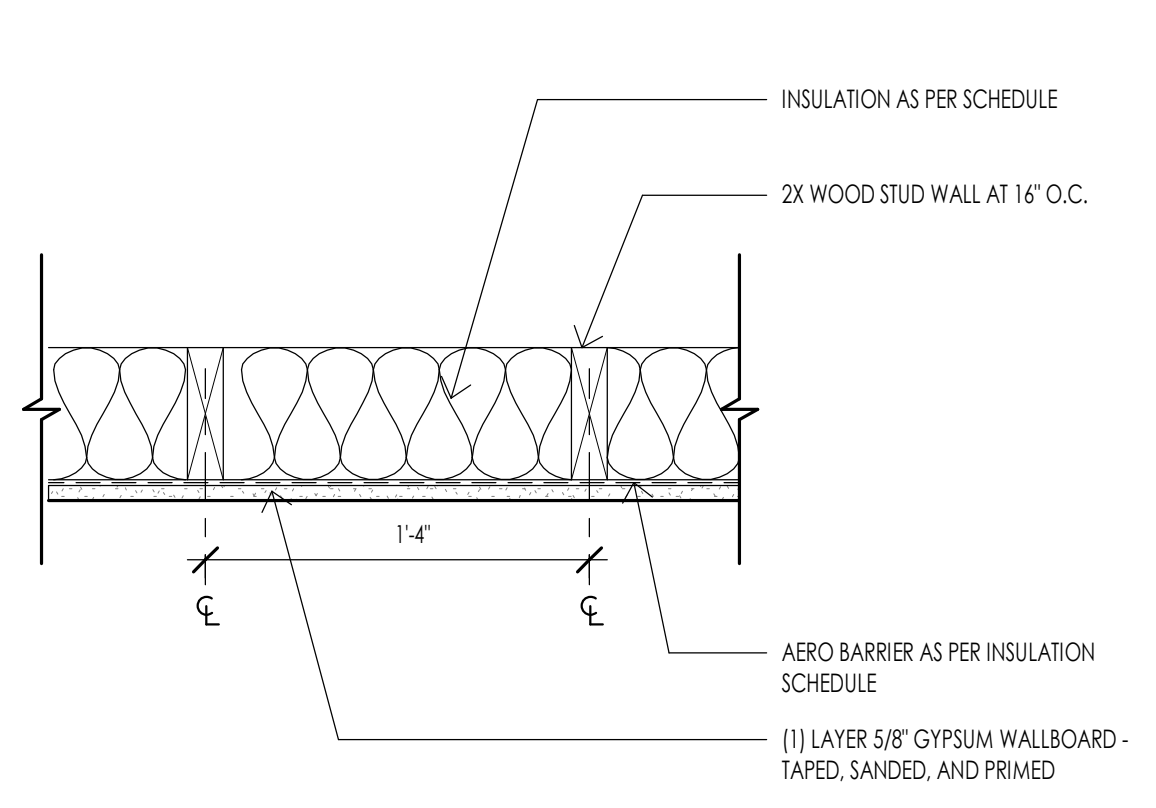
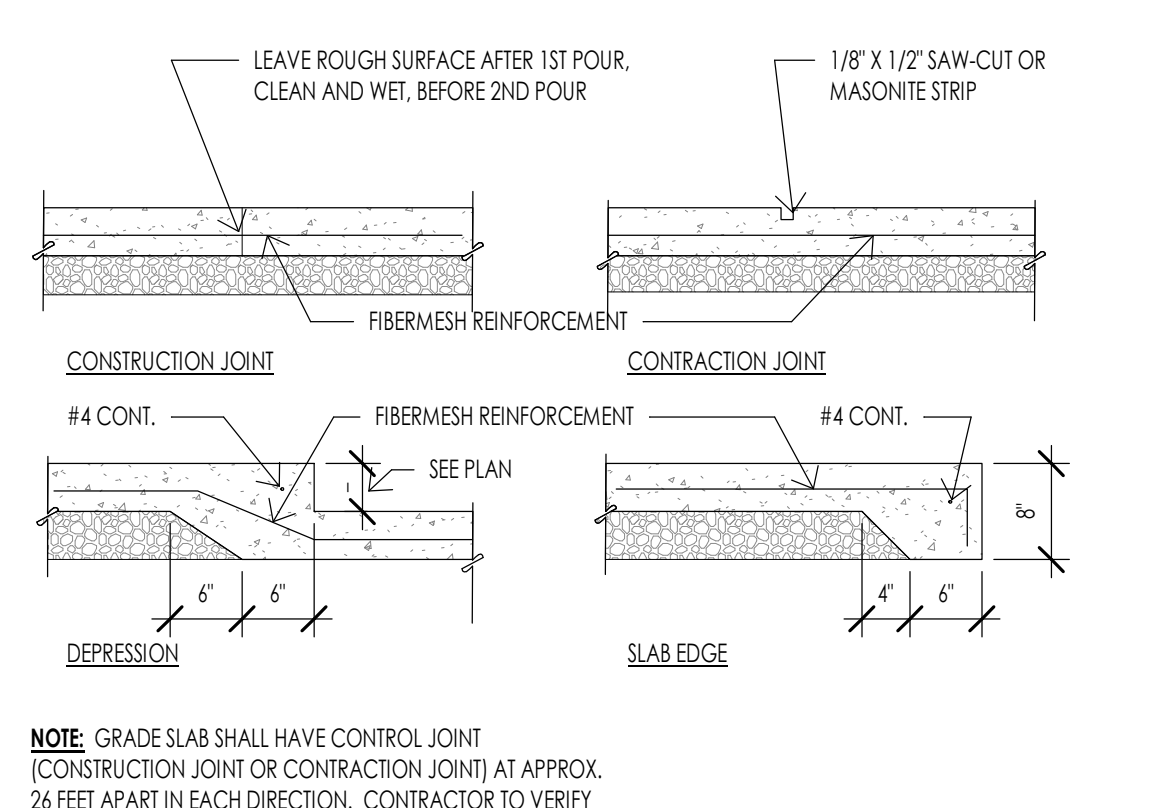
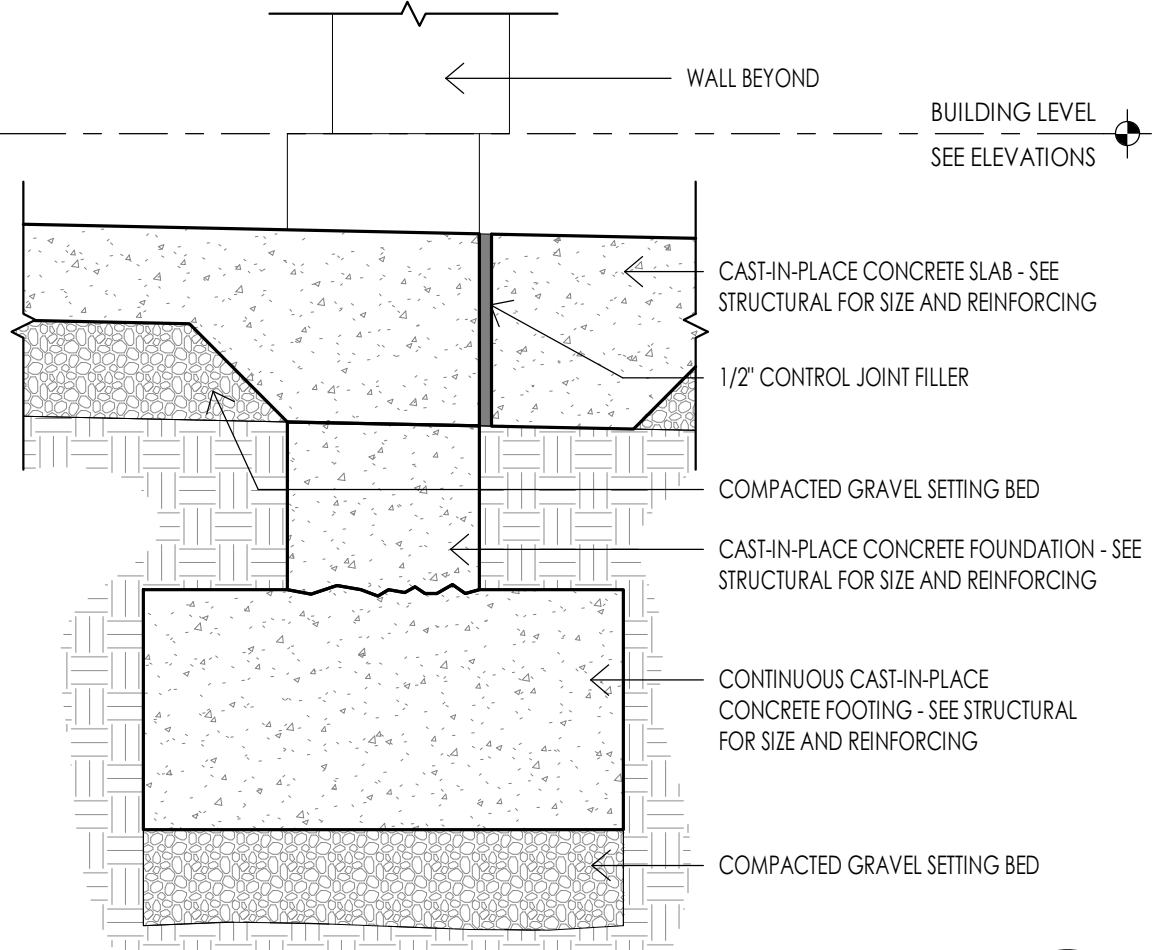
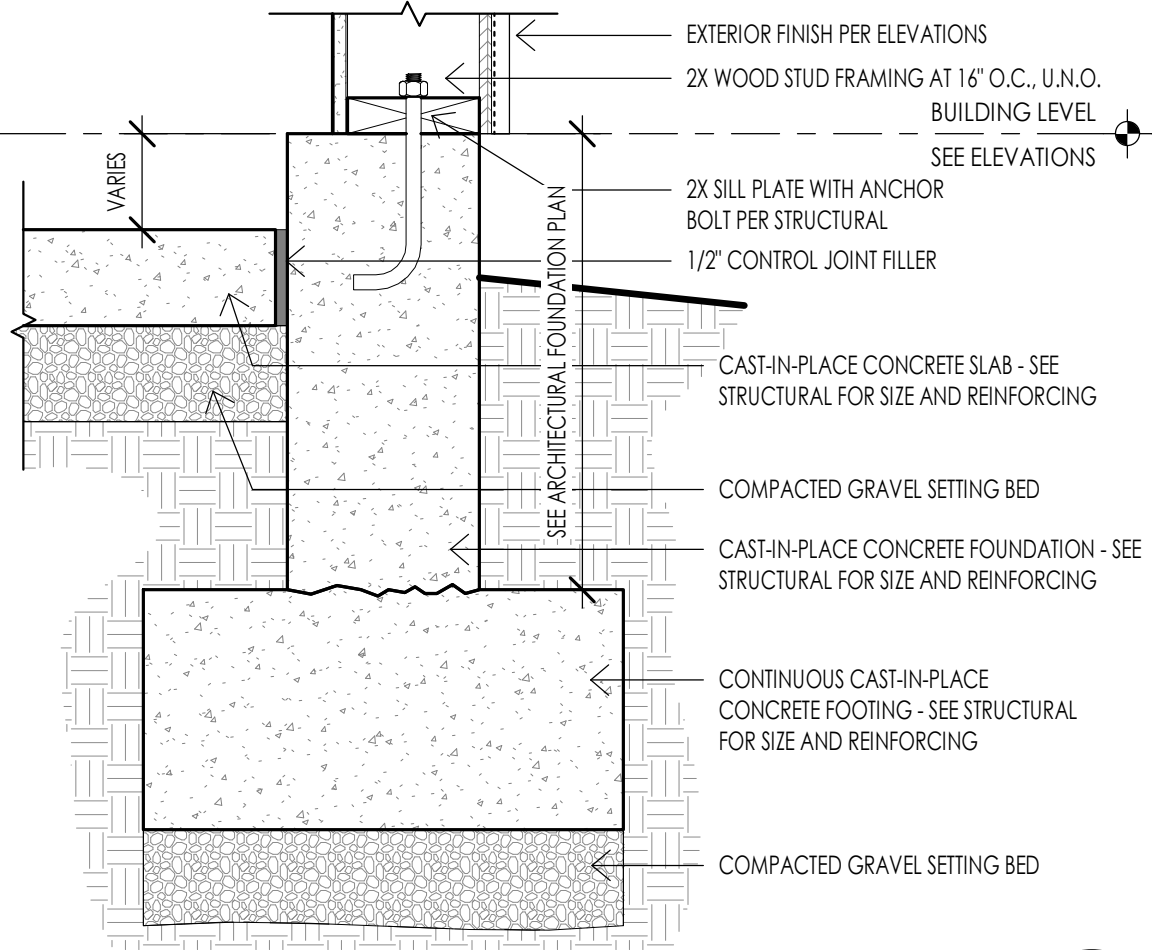
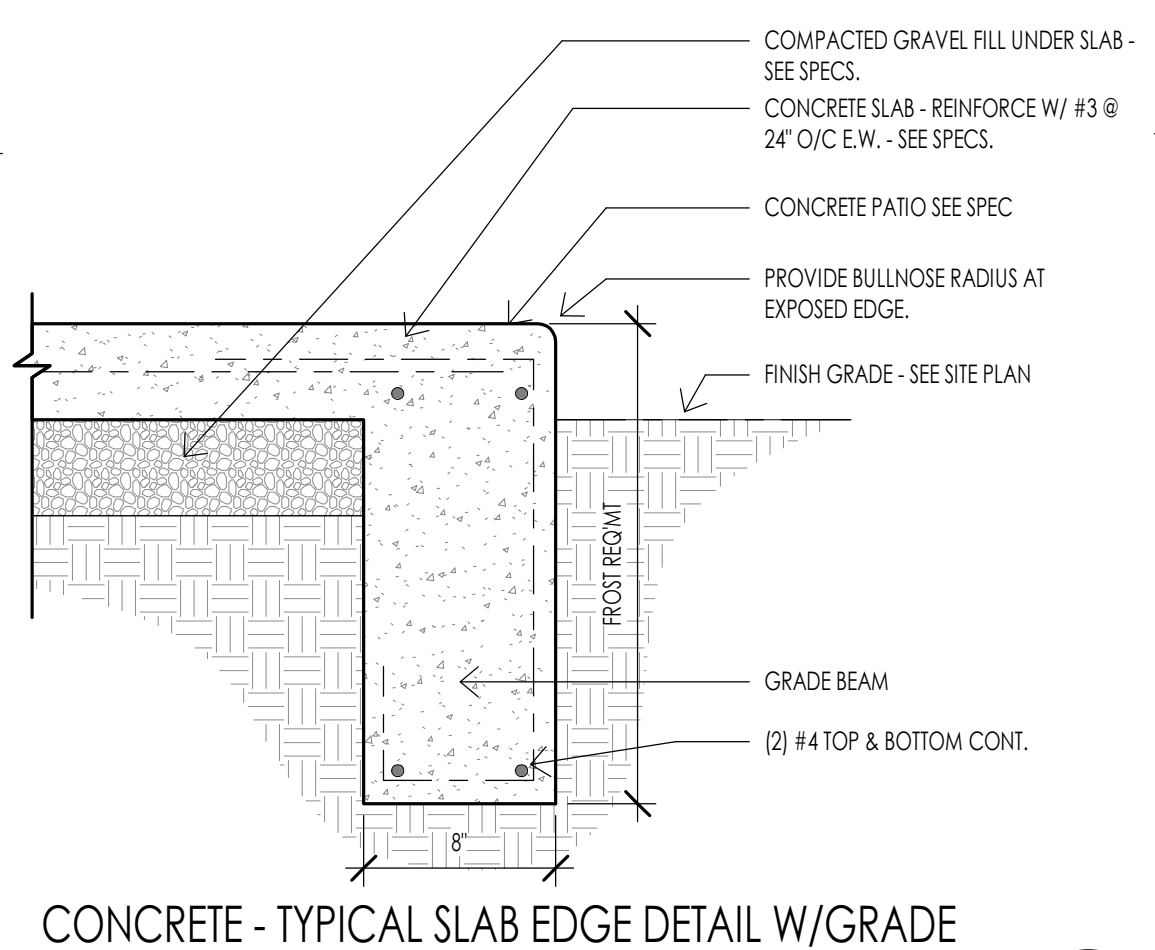
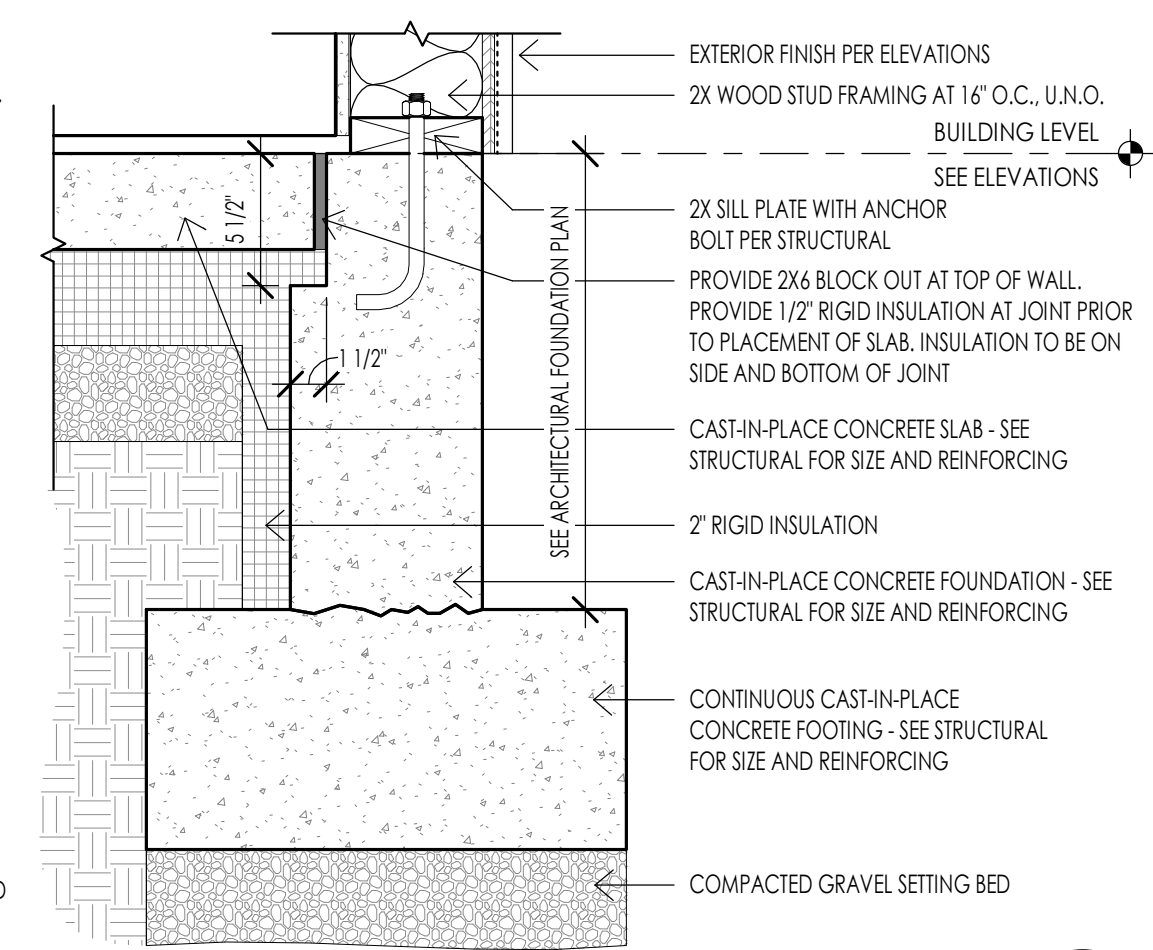
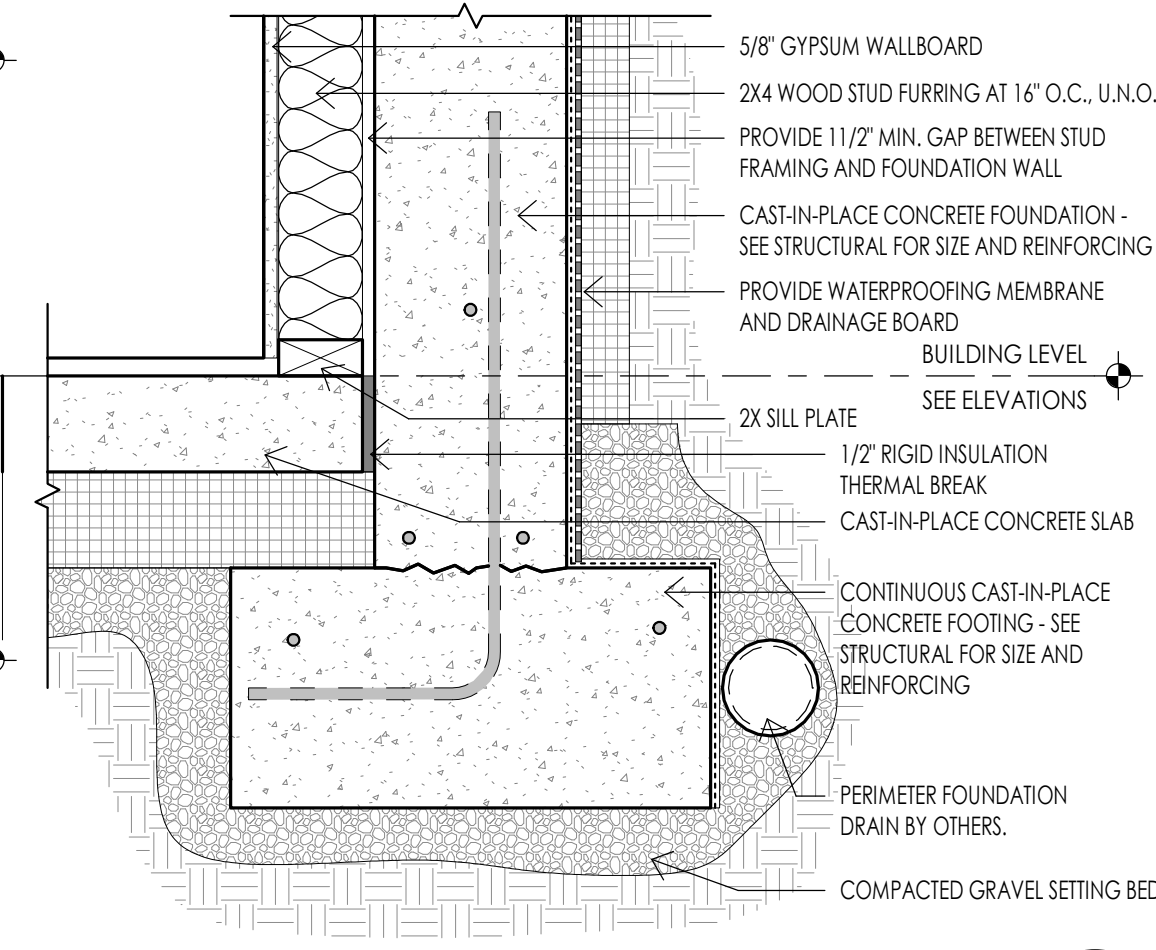
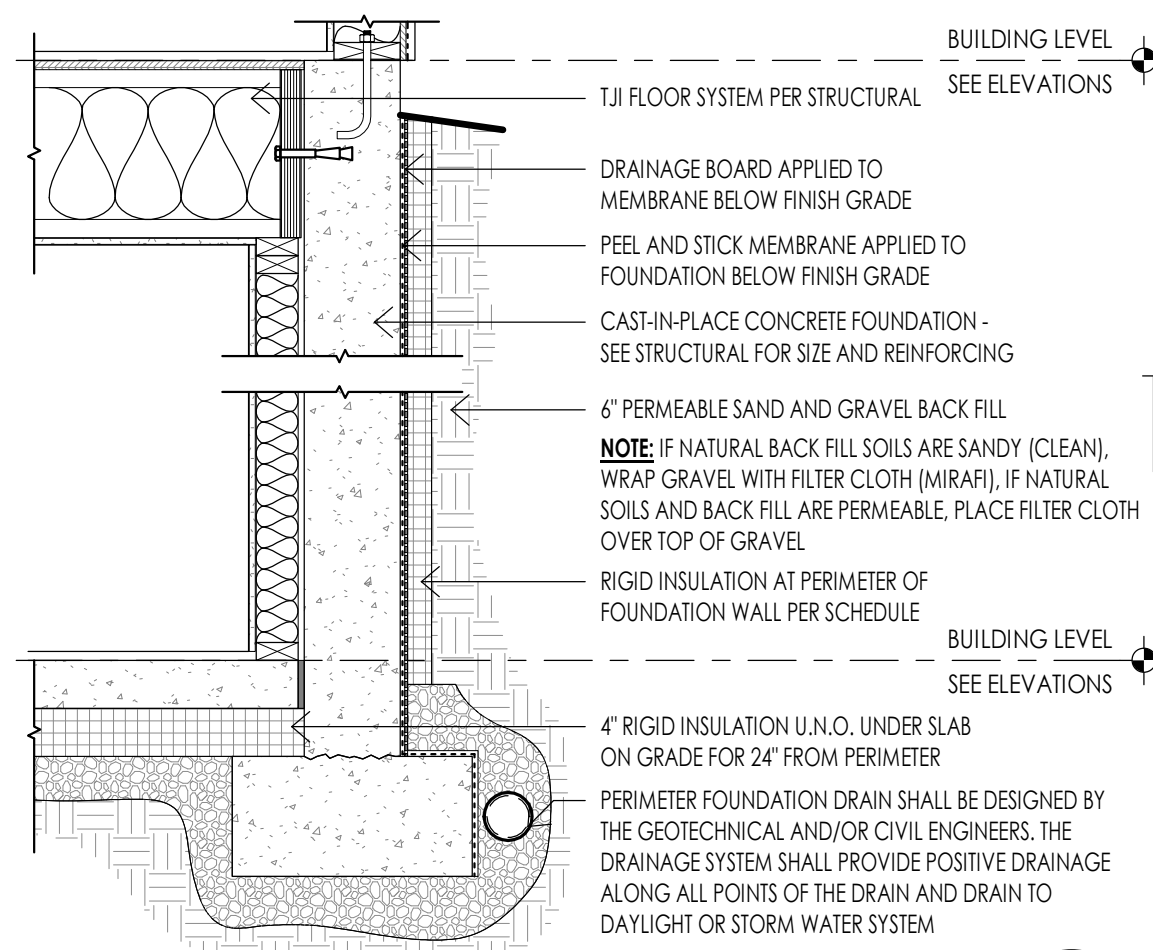
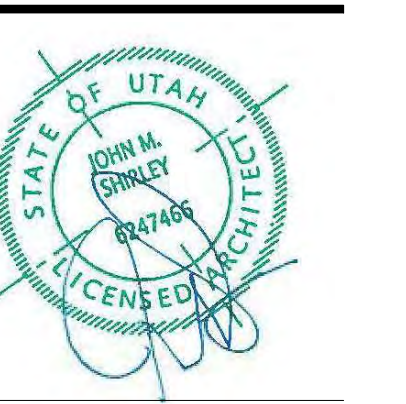
INTERIOR WOOD SLAT FINISH



STEEL FIREPLACE SURROUND





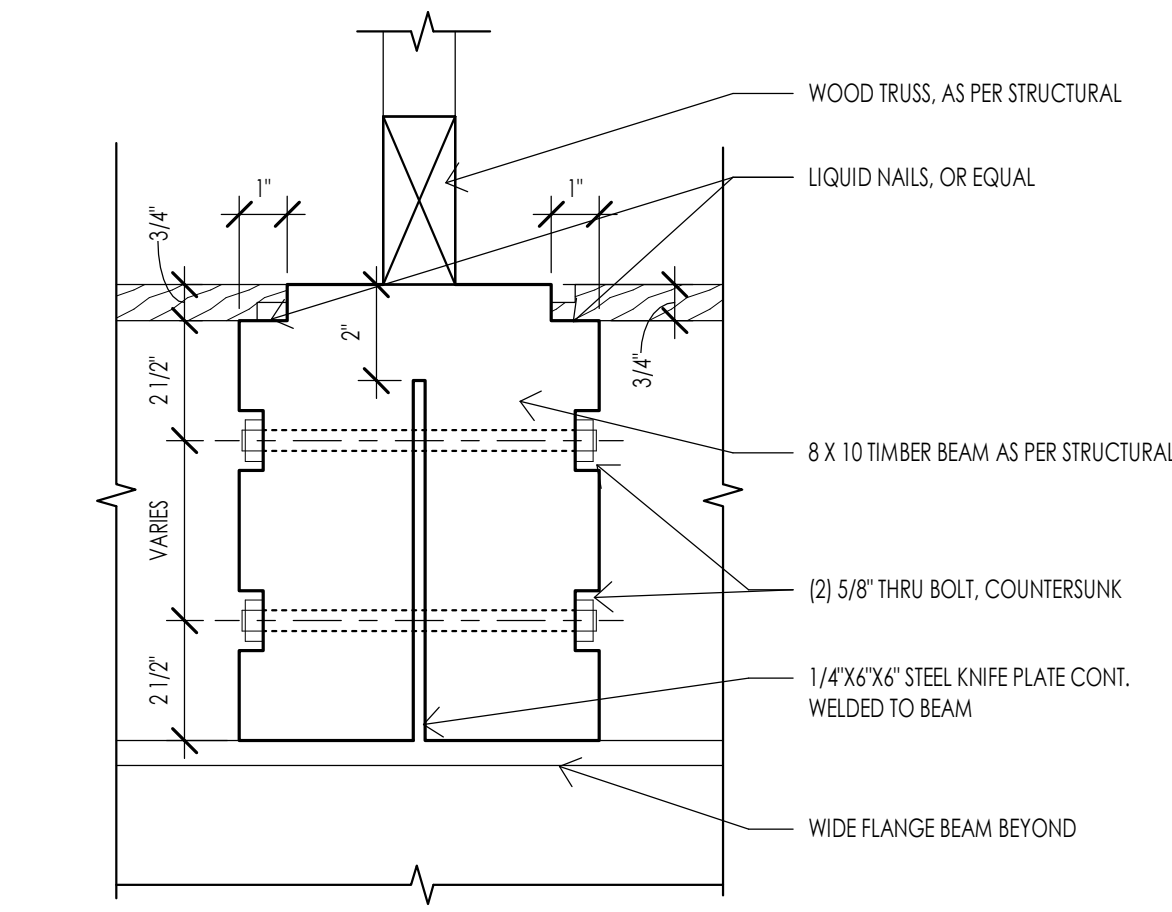
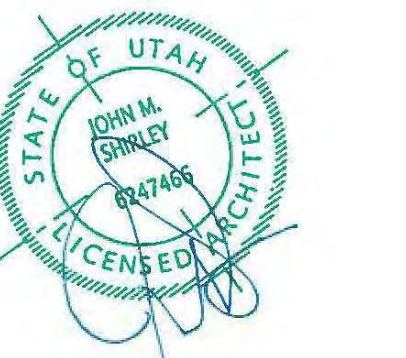


DECK - CAP OVER WALL DETAIL (25) 1 1/2" = 1'-0"

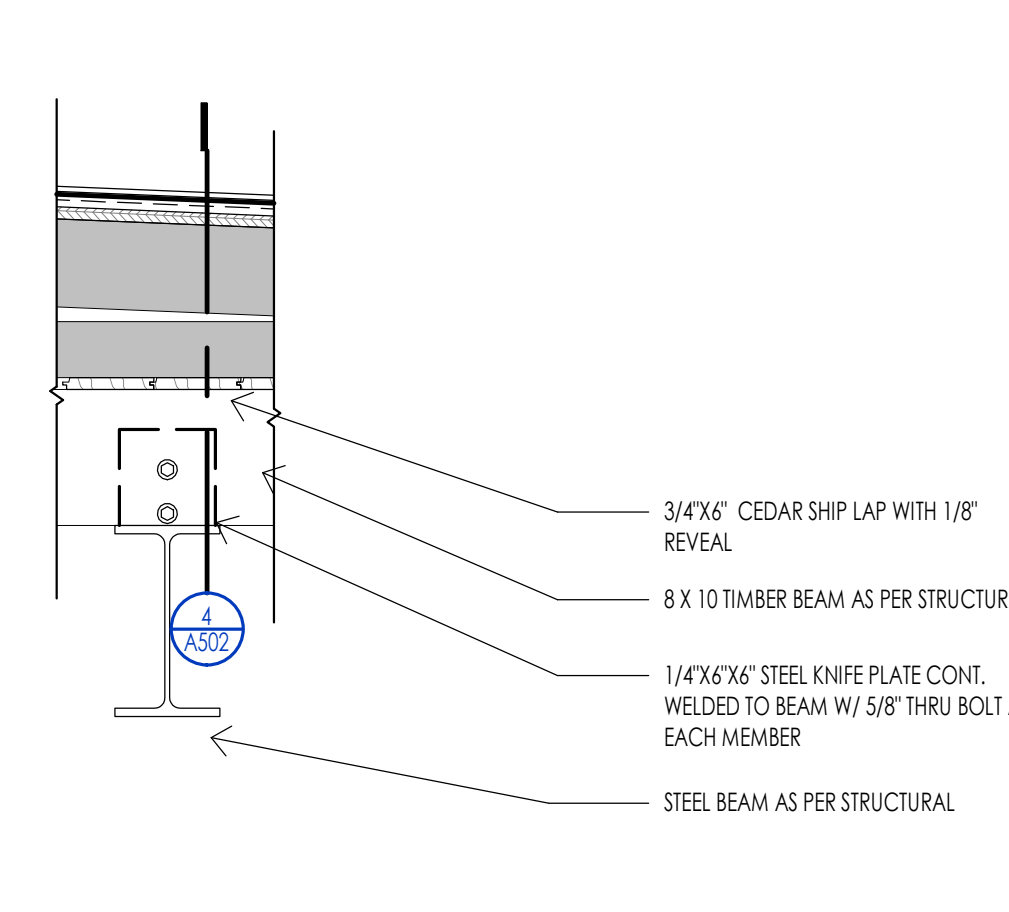
DECK - DRAINAGE DETAIL (28) 1 1/2" = 1'-0"

DECK - TYPICAL TIMBER CONNECTION (29) 8" = 1'-0"

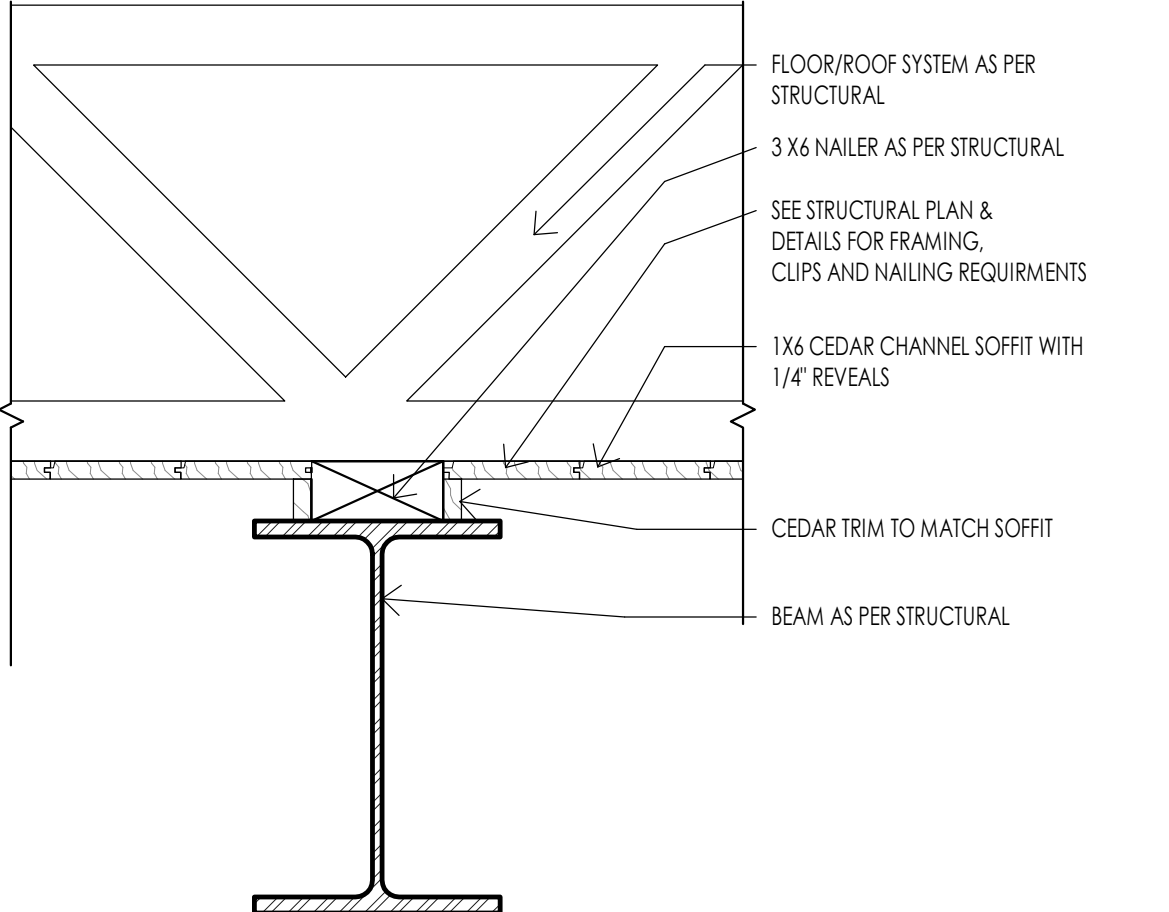
DECK - STEEL BEAM TO JOIST DETAIL (30) 1" = 1'-0"



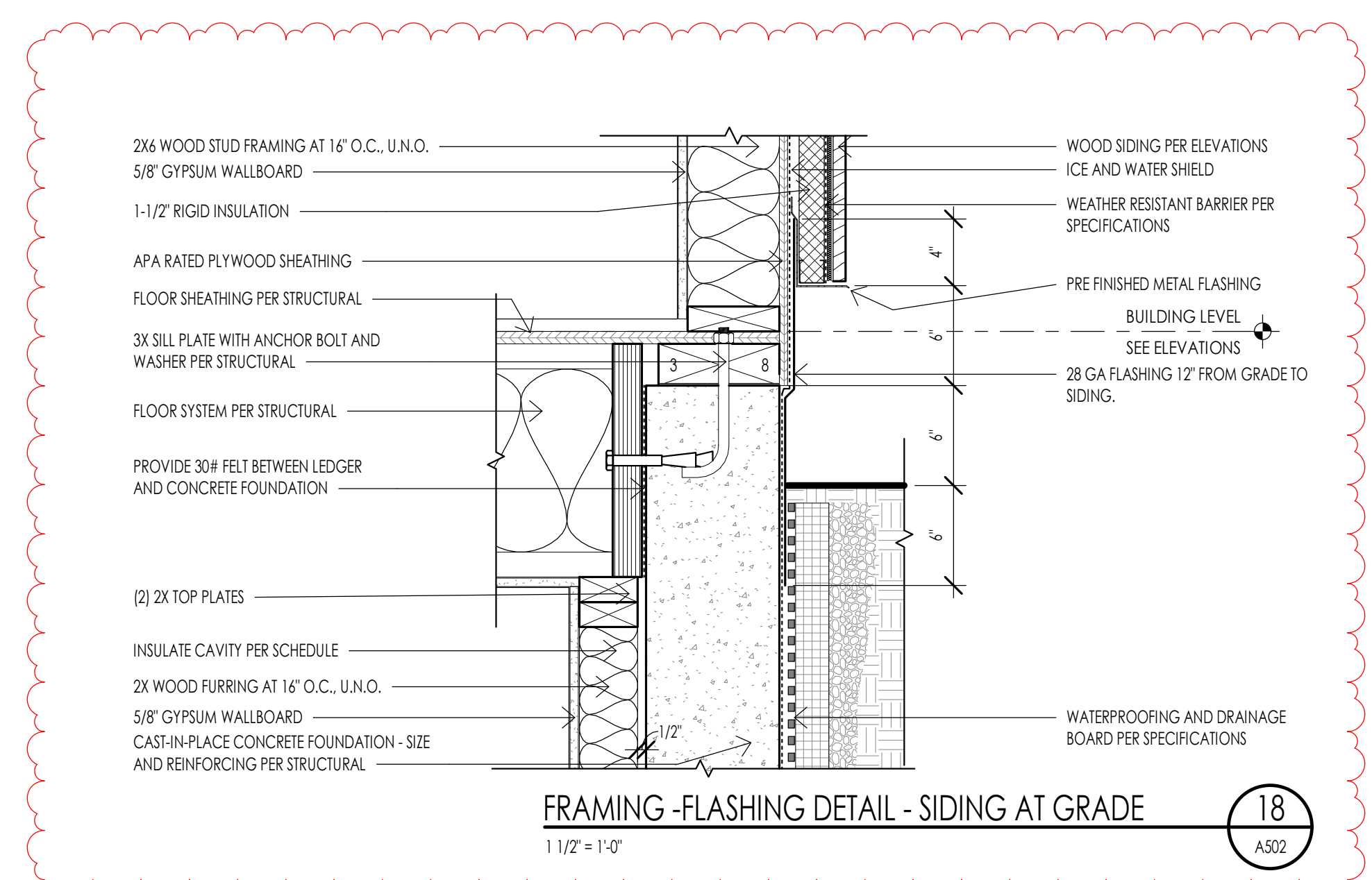
CEILING - TIMBER/BEAM CONNECTION 4  
1" = 1'-0"



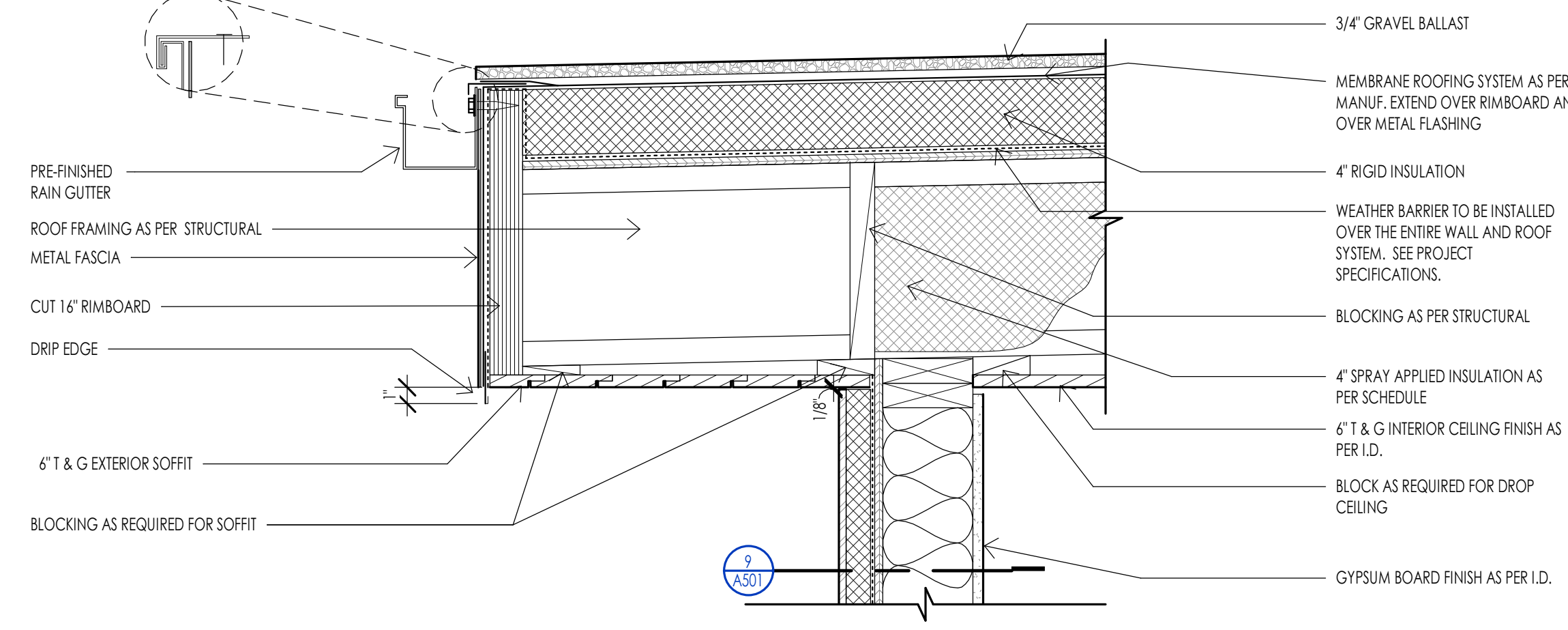
CEILING - STEEL BEAM/TIMBER BEAM CONNECTION 5  
1" = 1'-0"



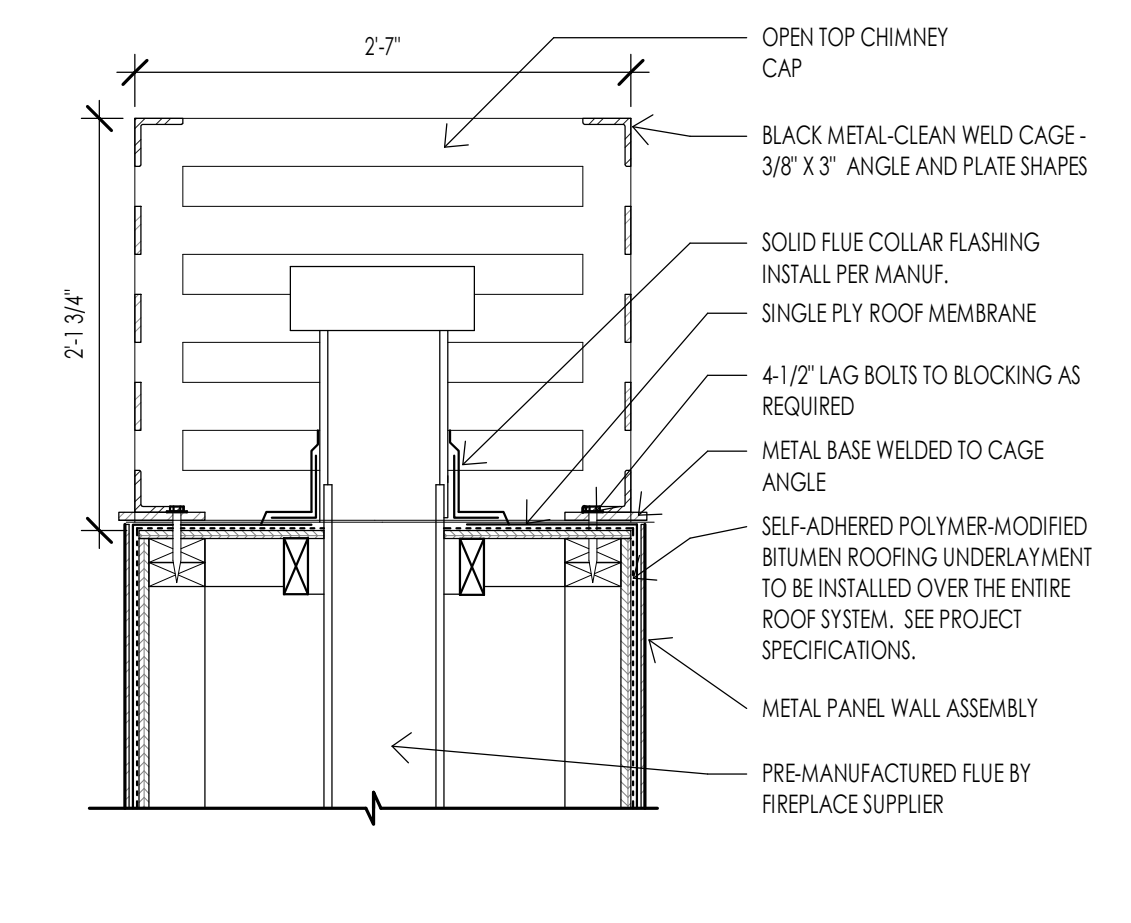
CEILING - BEAM AT T&G CEILING 6  
1 1/2" = 1'-0"



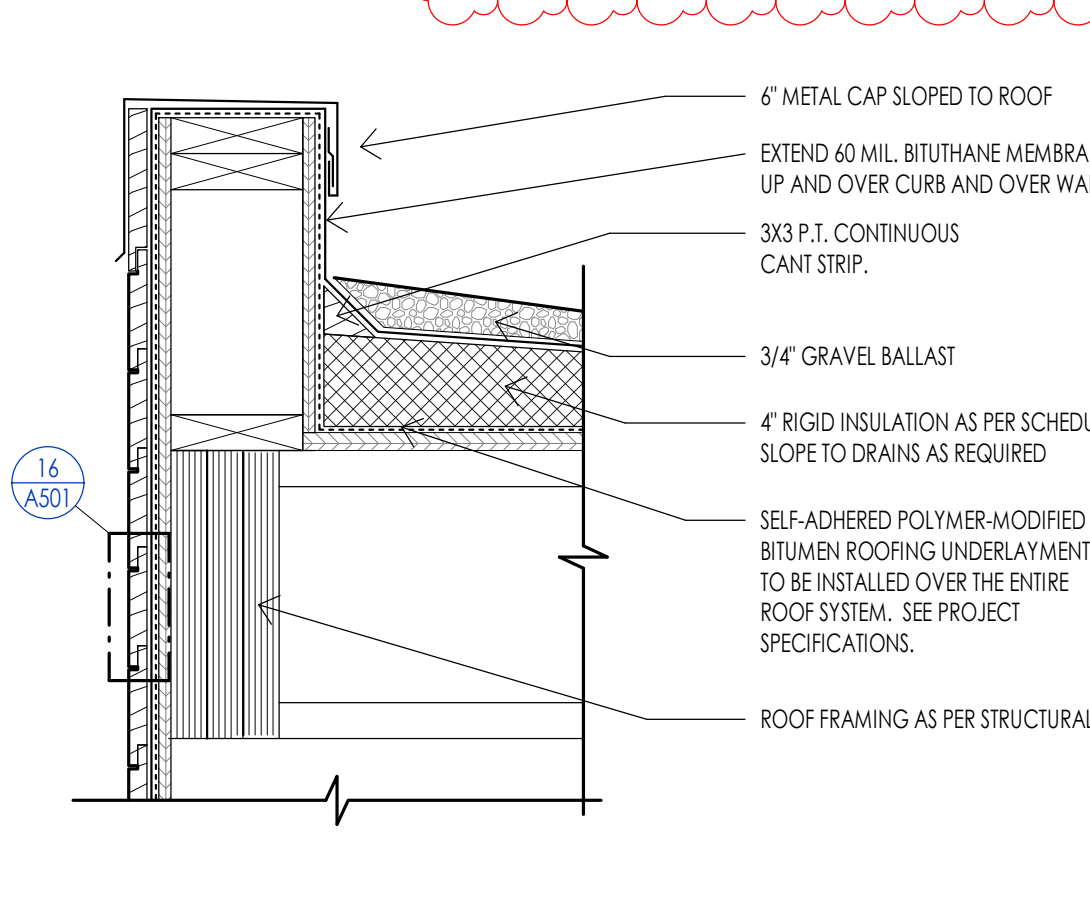
FRAMING - FLASHING DETAIL - SIDING AT GRADE 18  
1 1/2" = 1'-0"



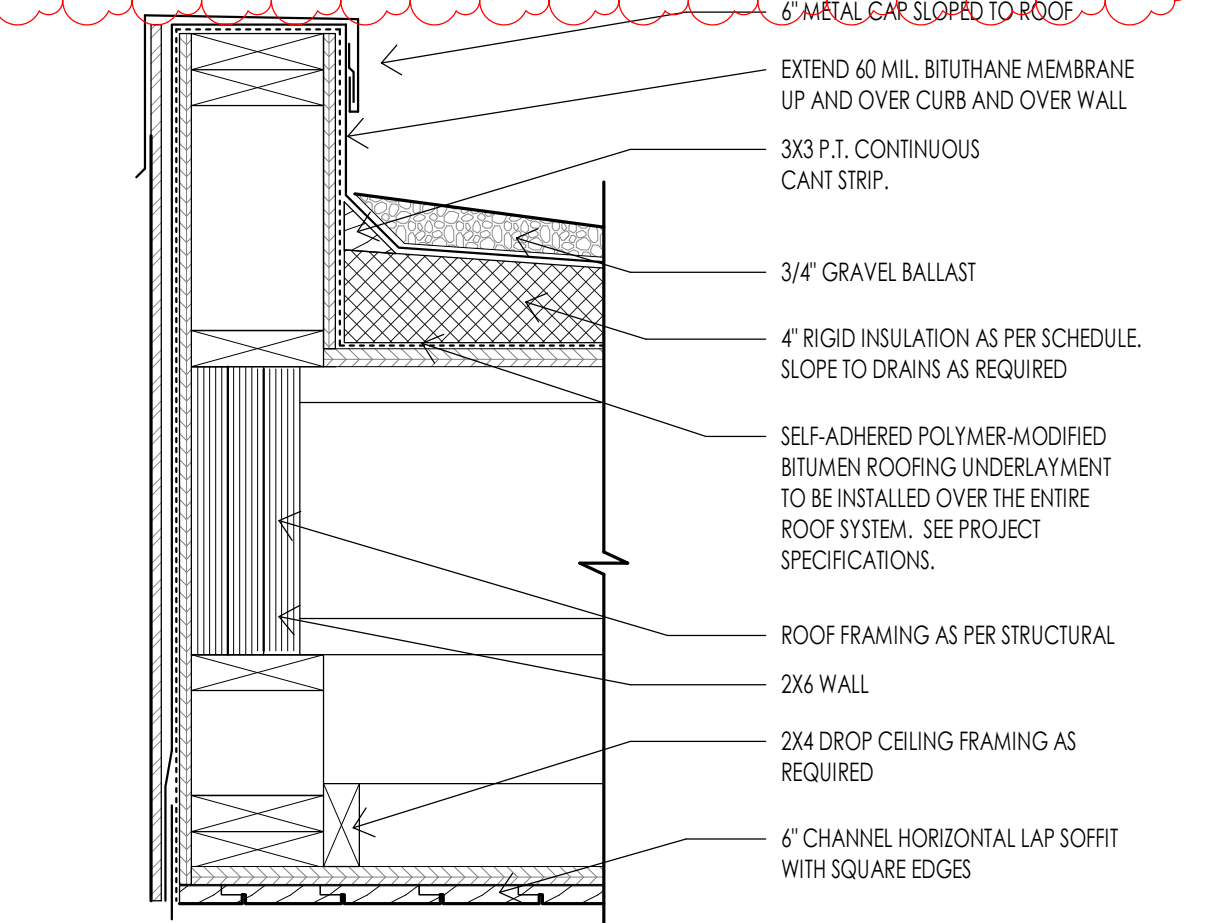
ROOF - EAVE DETAIL 9  
1 1/2" = 1'-0"



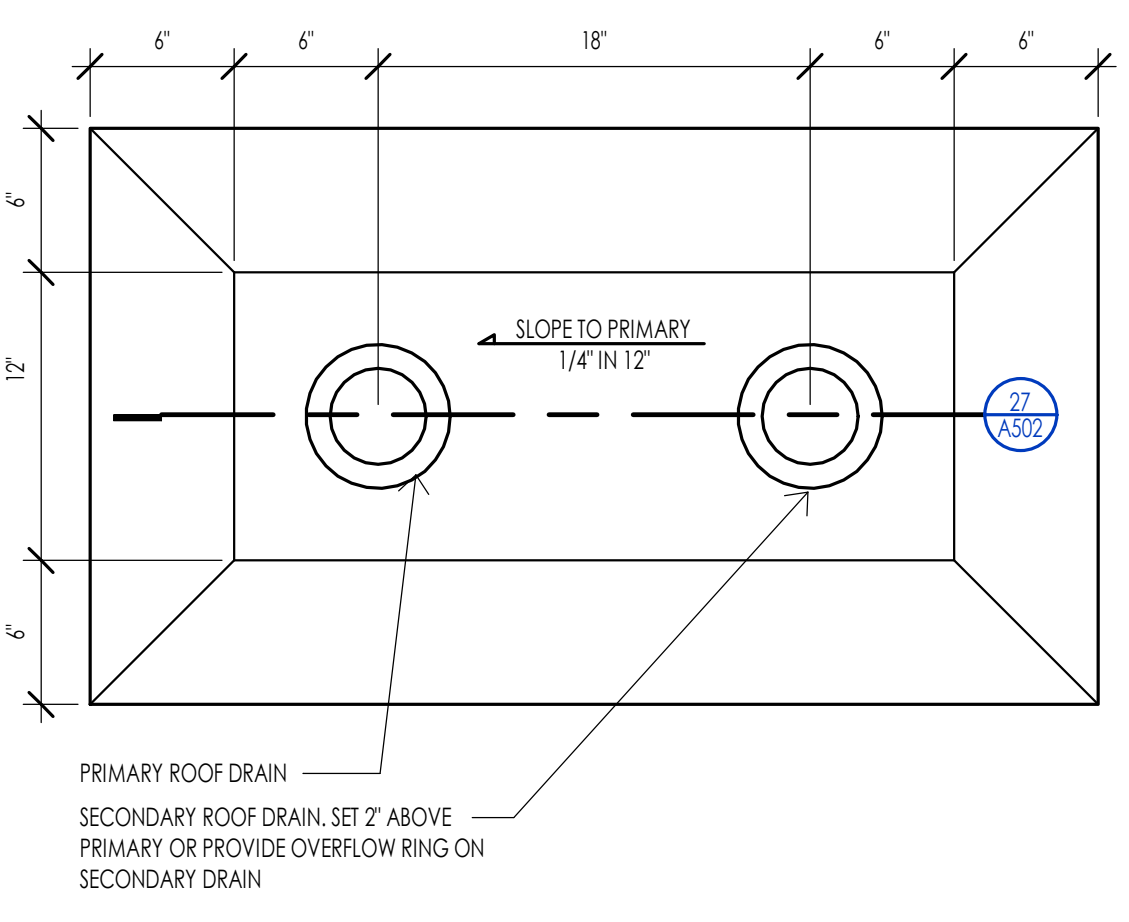
ROOF - OPEN TOP CHIMNEY CAP DETAIL 21  
1" = 1'-0"



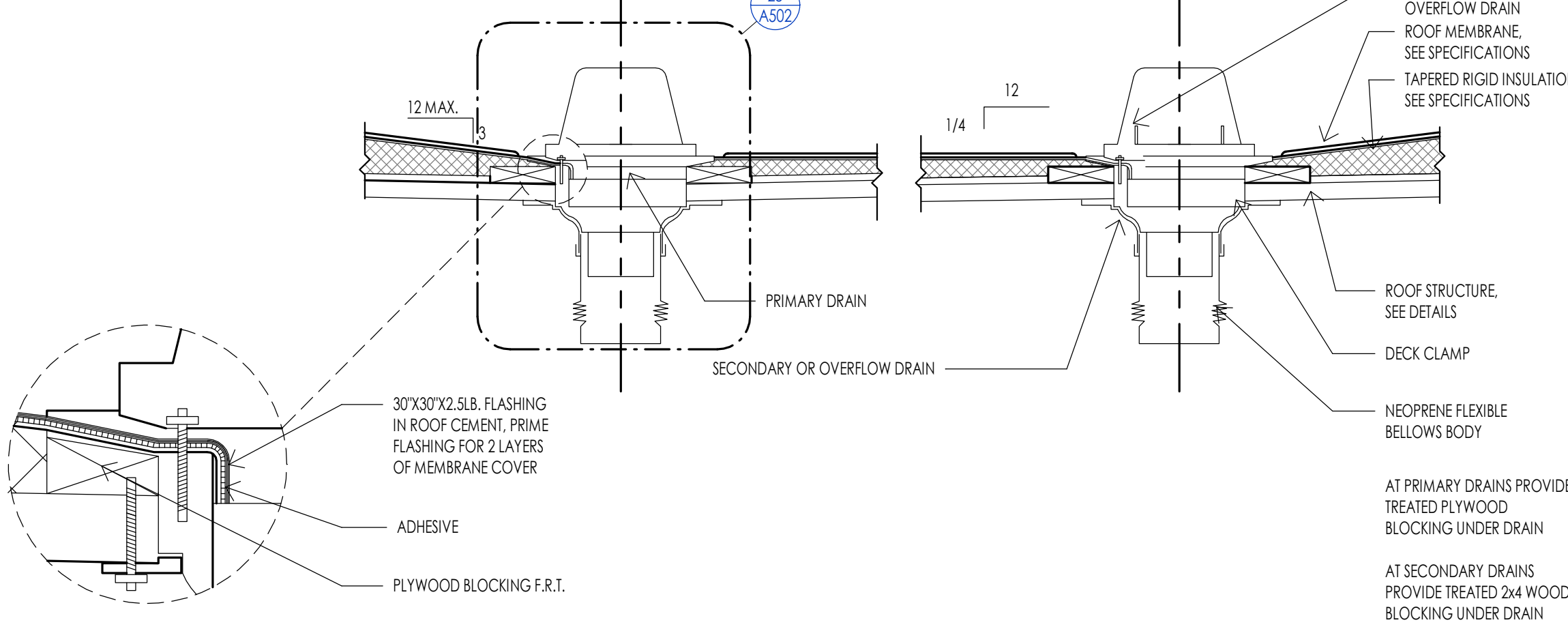
ROOF - WOOD SIDING PARAPET TO ROOF 22  
1 1/2" = 1'-0"



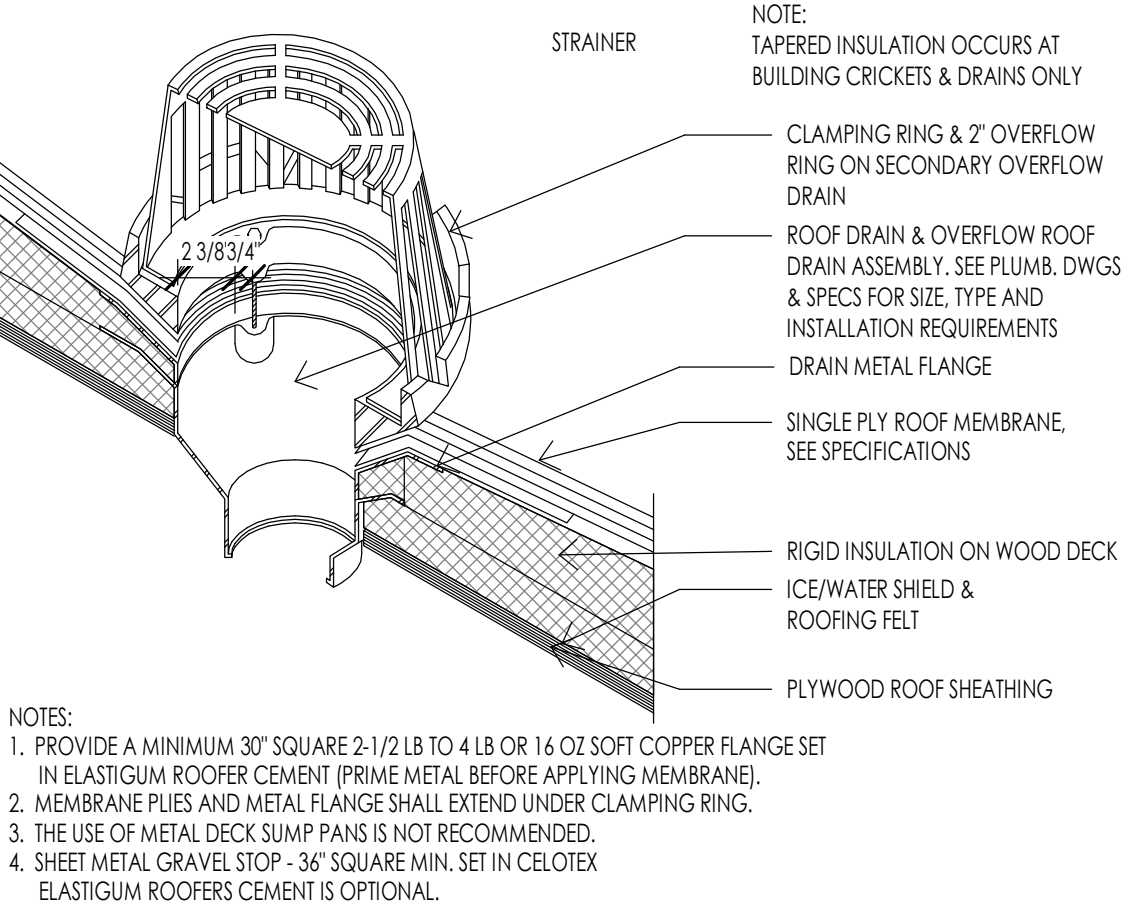
ROOF - PARAPET DETAIL 23  
1 1/2" = 1'-0"



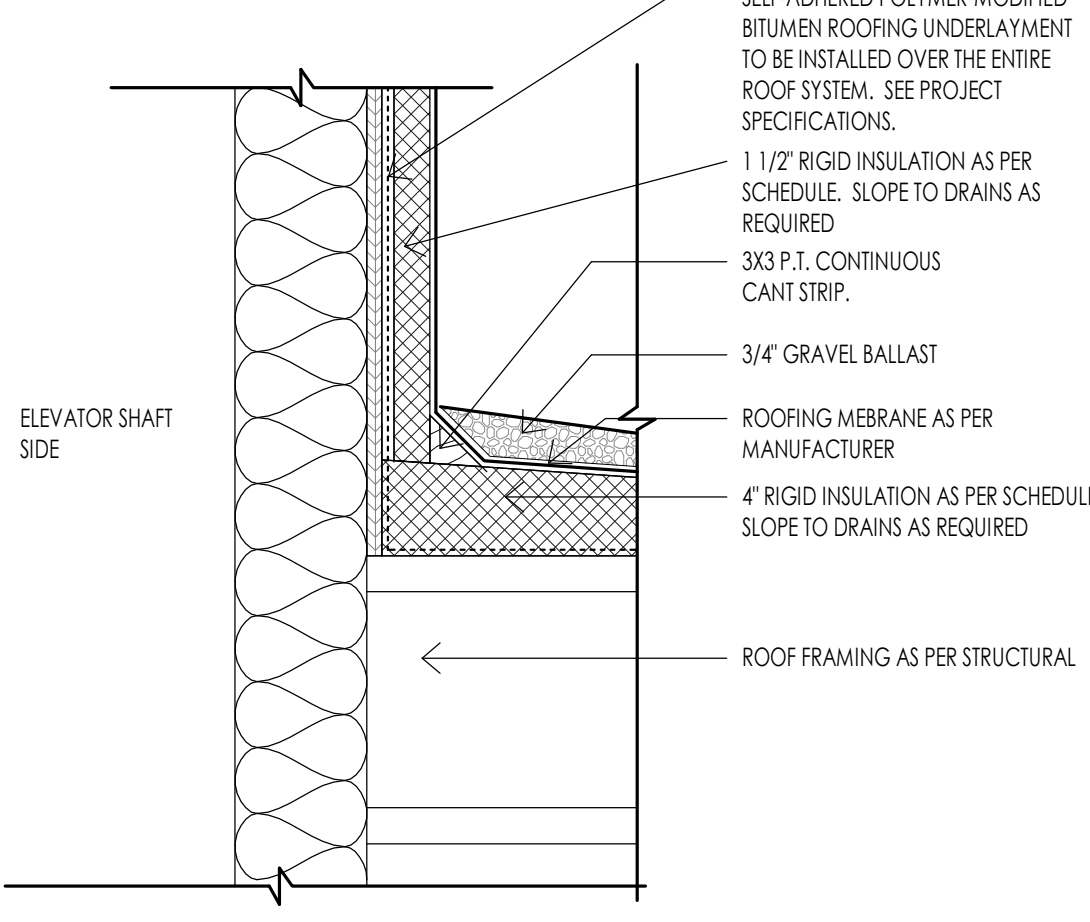
ROOF - ENLARGED DRAIN DETAIL 25  
1 1/2" = 1'-0"



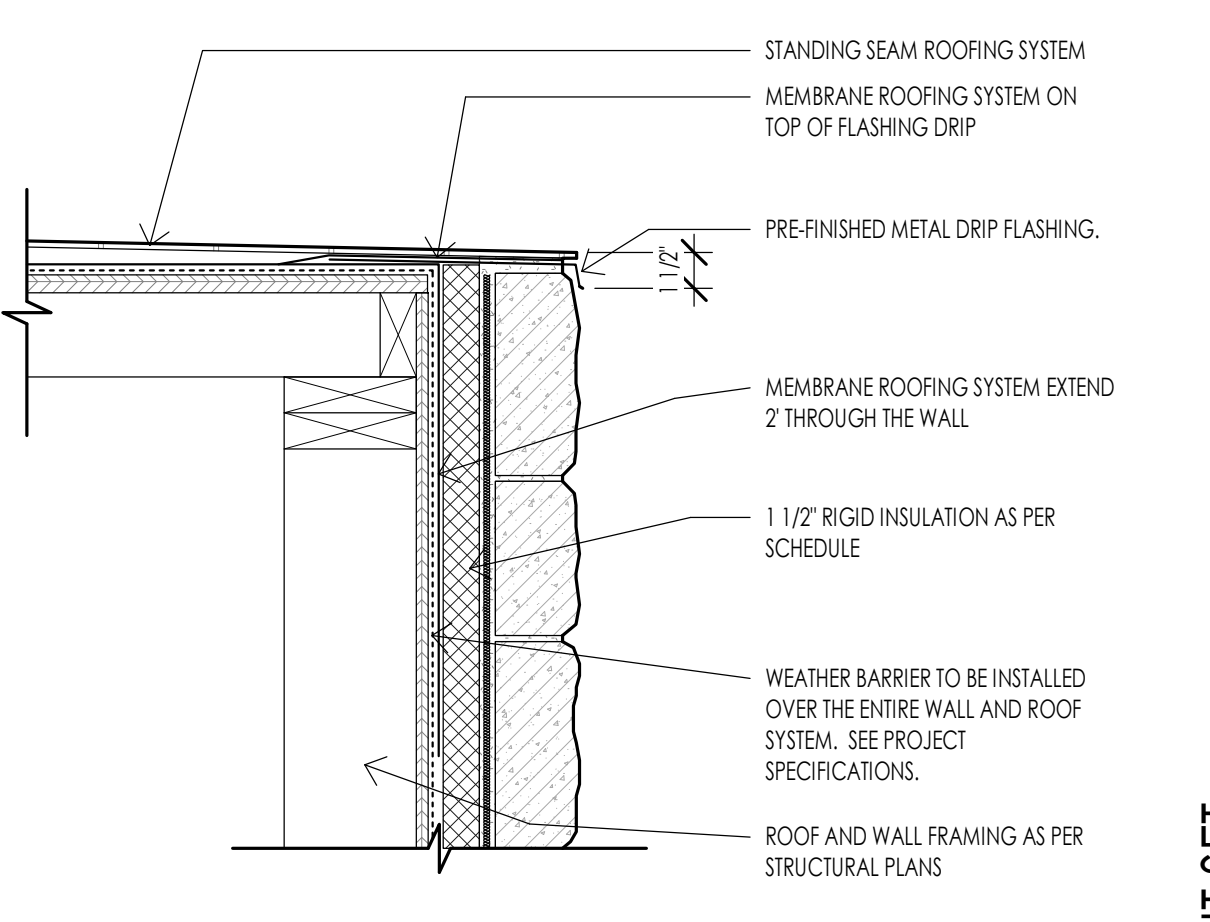
ROOF - DRAIN SECTION 27  
1" = 1'-0"



ROOF - DRAIN DETAIL 28  
1 1/2" = 1'-0"



ROOF - ELEVATOR WALL TO ROOF DETAIL 29  
1 1/2" = 1'-0"



ROOF - METAL ROOF AT ELEVATOR SHAFT 30  
1 1/2" = 1'-0"

WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

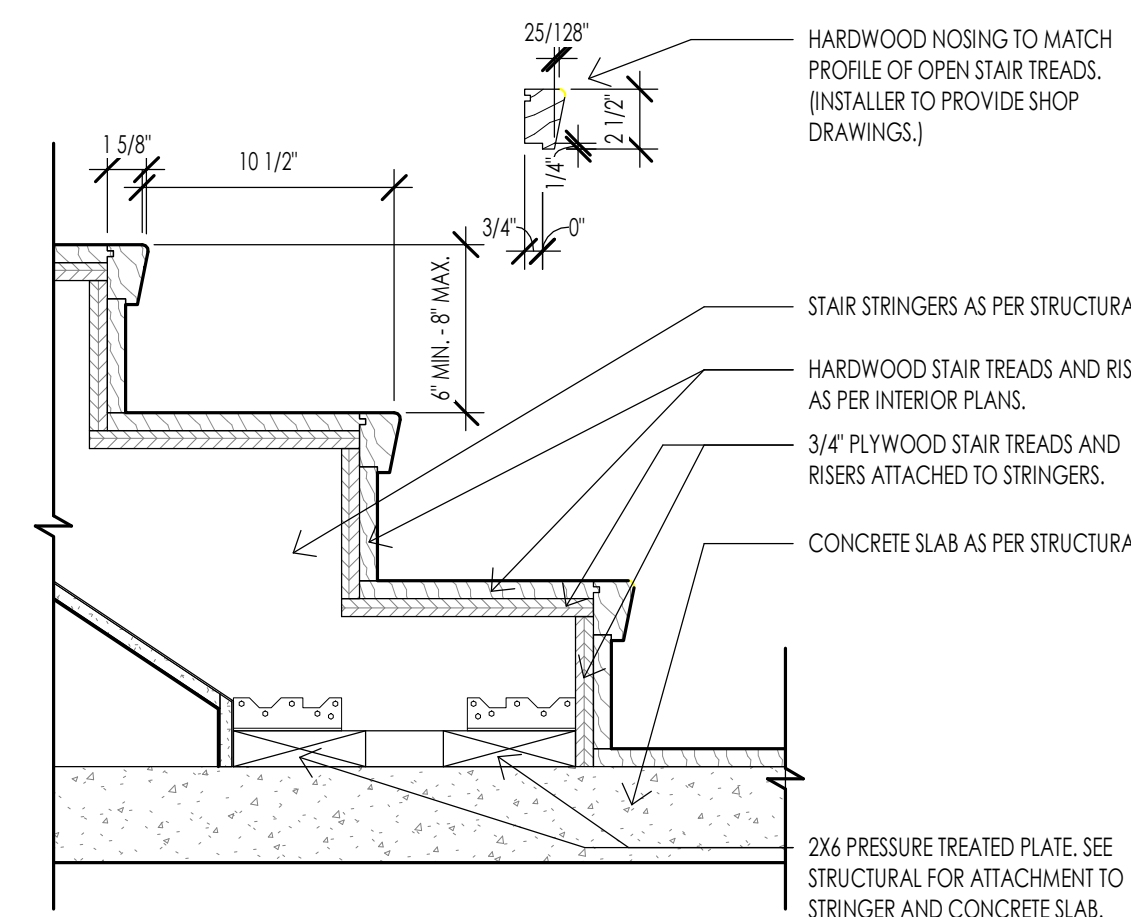
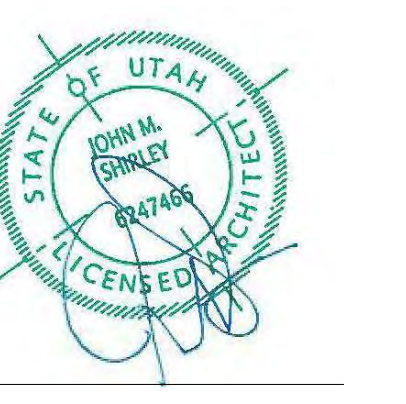
PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

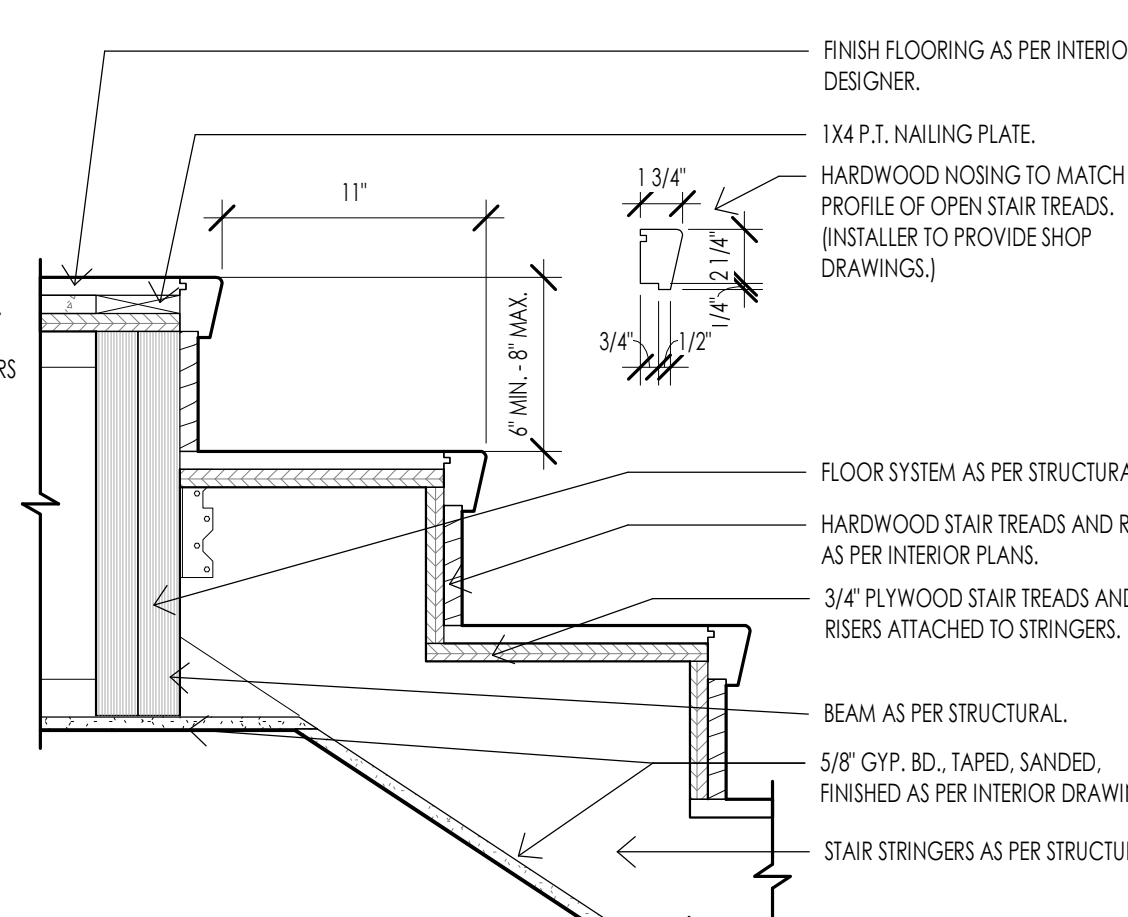
SHEET TITLE:  
ARCHITECTURAL  
DETAILS

SHEET NUMBER:  
A502

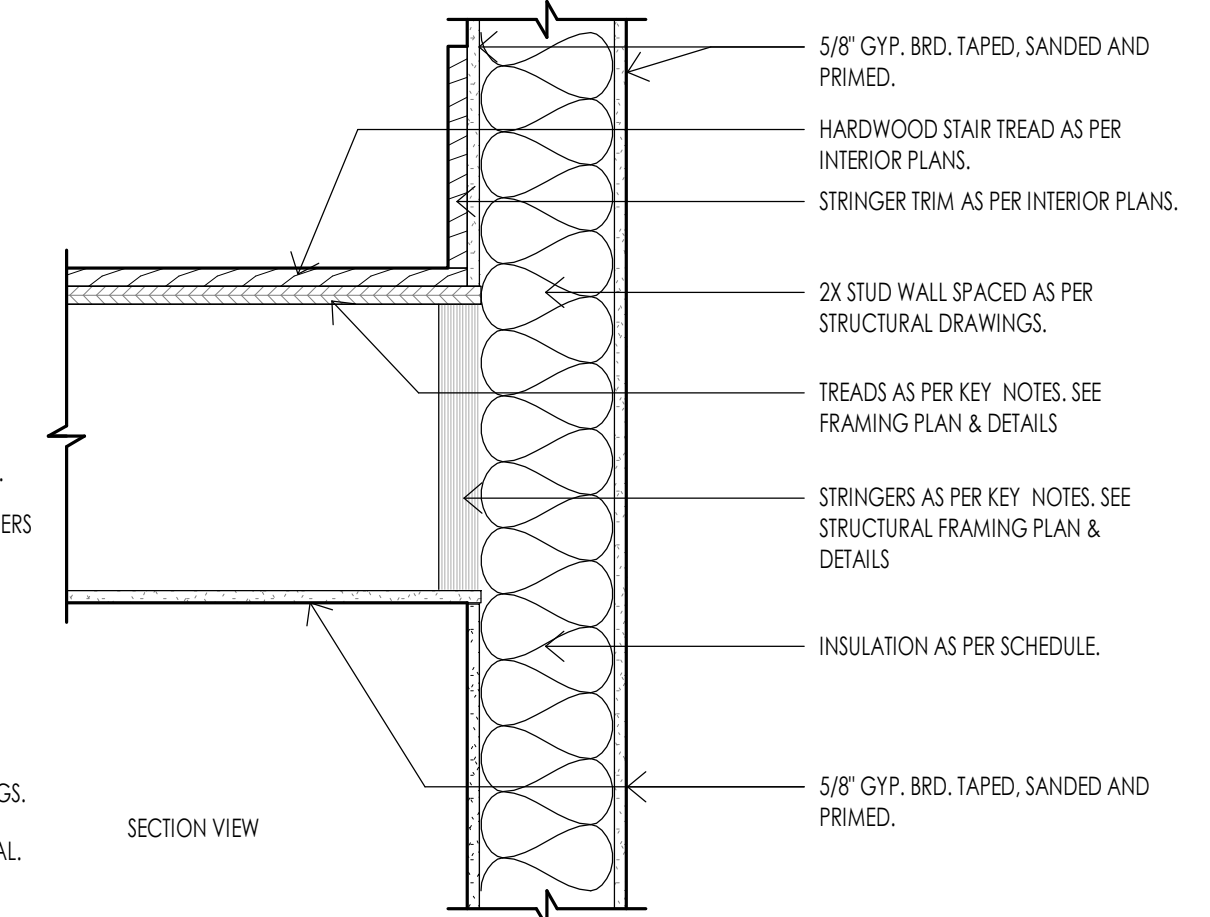
PERMIT SET  
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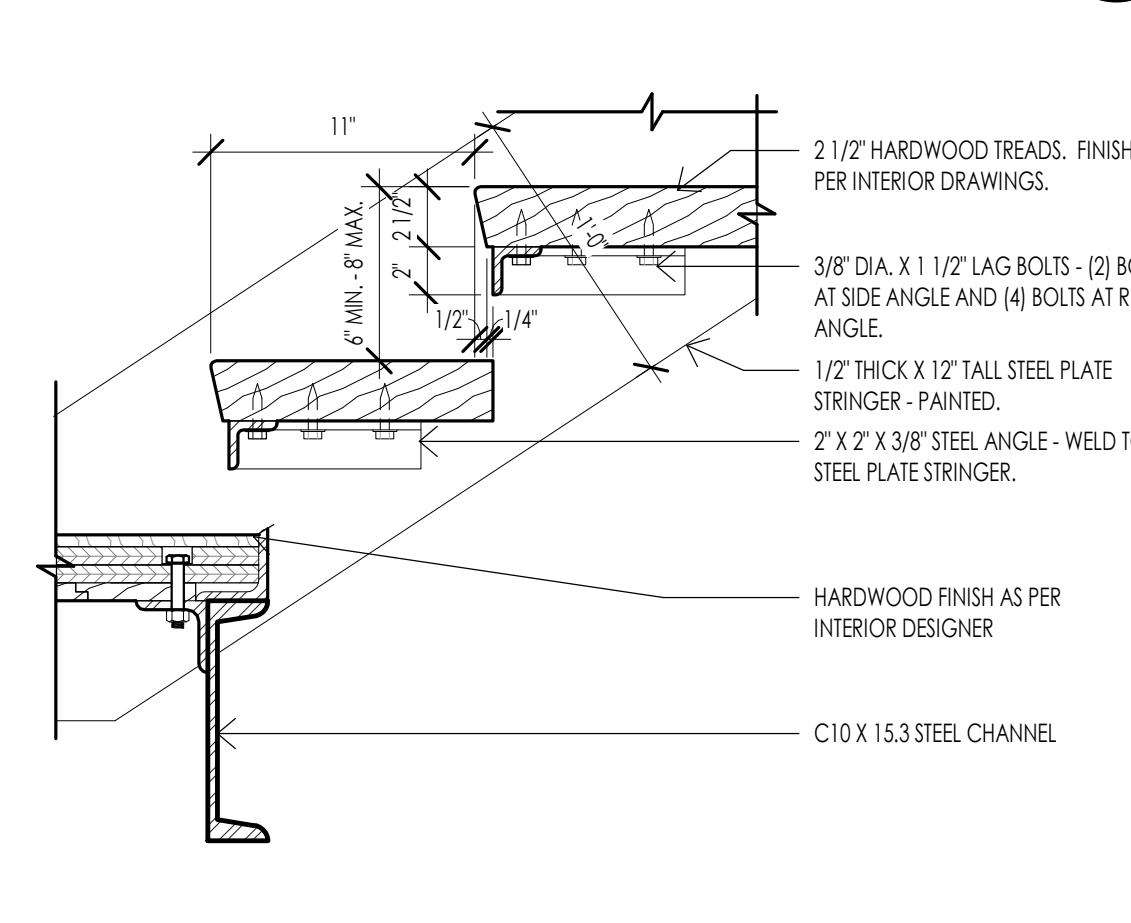
STAIR DETAIL - FRAMED STAIRS TO BASEMENT FLOOR 4  
1 1/2" = 1'-0"



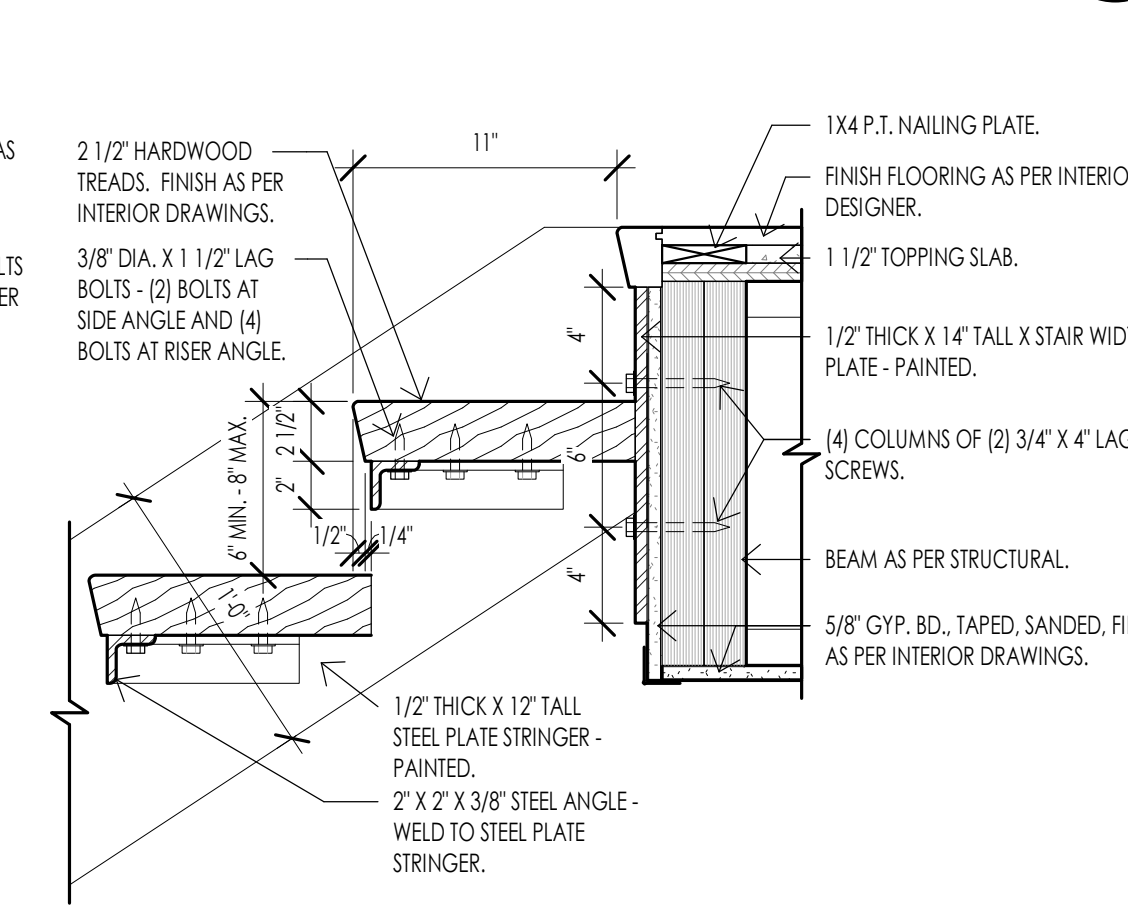
STAIR DETAIL - FRAMED STAIRS TO LANDING 5  
1 1/2" = 1'-0"



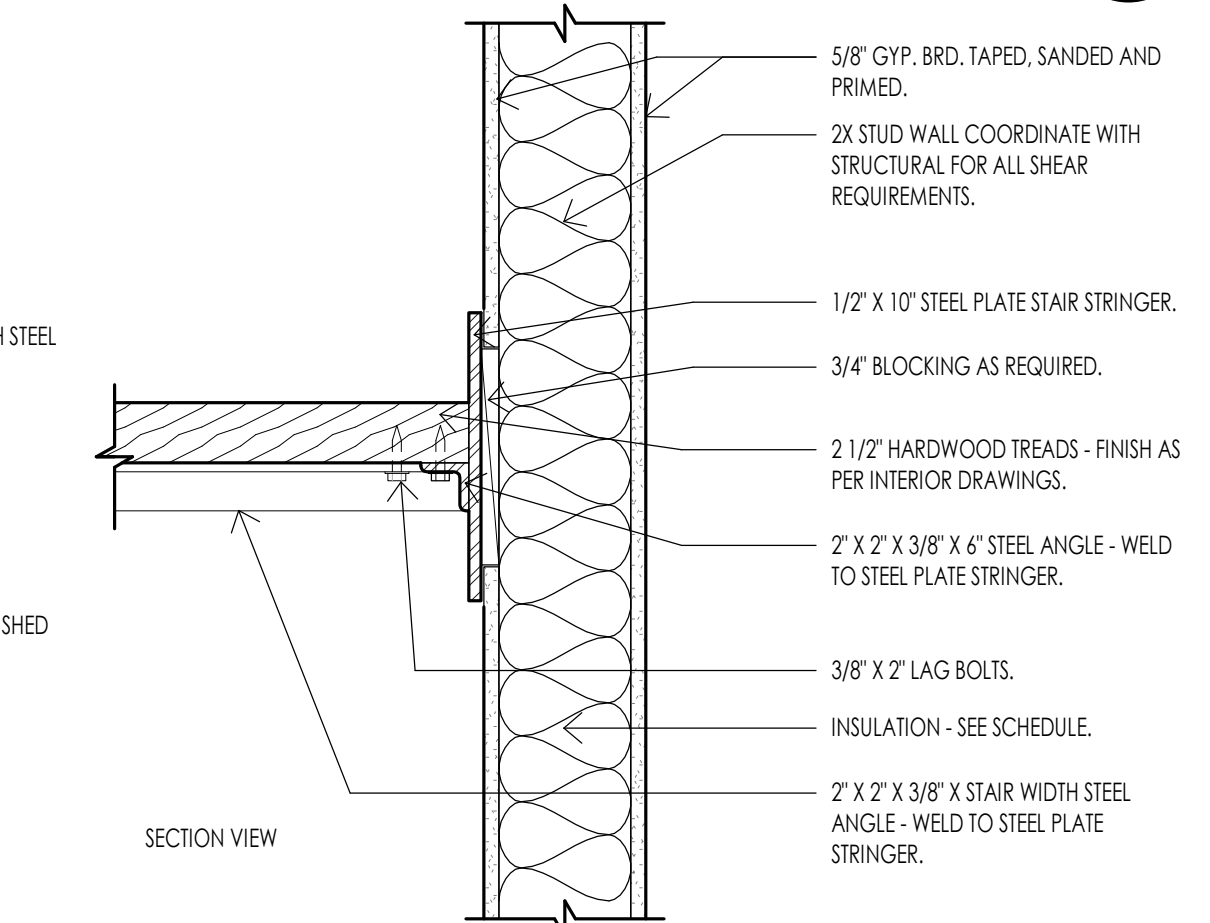
STAIR DETAIL - FRAMED STAIRS TO SIDE WALL 6  
1 1/2" = 1'-0"



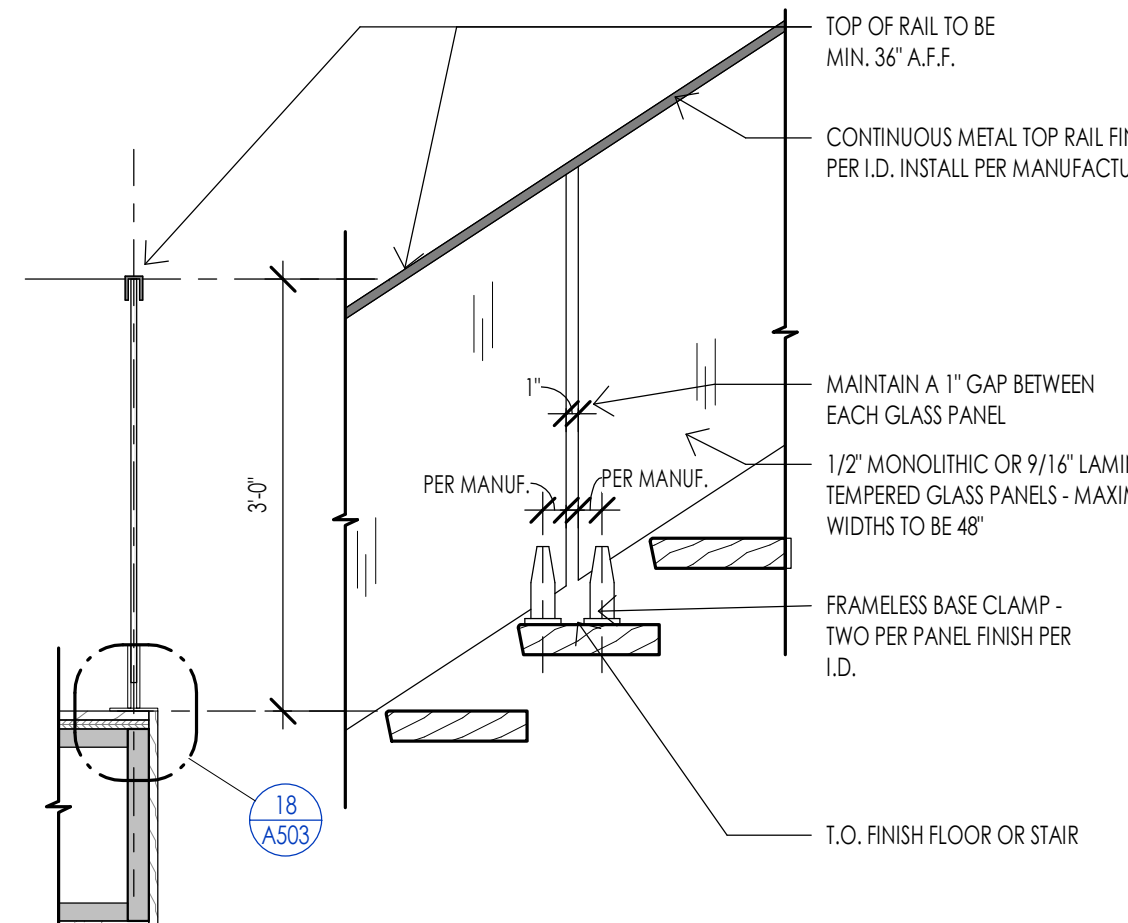
STAIR DETAIL - LANDING UP 10  
1 1/2" = 1'-0"



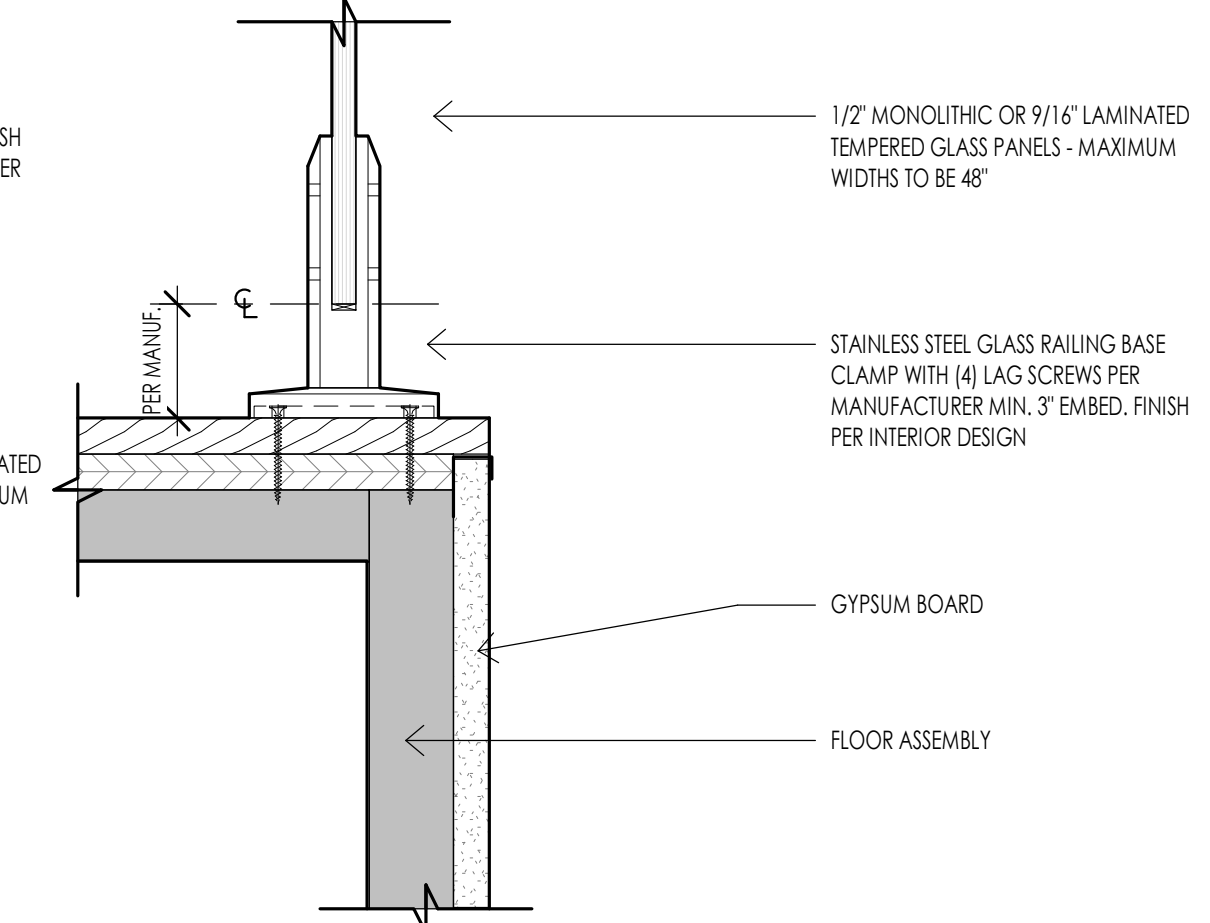
STAIR DETAIL - DOWN AT OPEN FRAMED STAIRS 11  
1 1/2" = 1'-0"



STAIR DETAIL - OPEN STAIRS TO SIDE WALL 12  
1 1/2" = 1'-0"



GLASS GUARDRAIL AT STAIR 17  
3/4" = 1'-0"



GLASS GUARDRAIL - FLOOR CONNECTION 18  
3" = 1'-0"

**DOOR SCHEDULE**

MARK	DOOR					FRAME					FIRE RATING	HARDWARE	REMARKS		
	WIDTH	SEE HEIGHT	THICKNESS	MATERIAL	TYPE	FINISH	DETAILS			MATERIAL				TYPE	FINISH
							HEAD	JAMB	SILL						
D100-A	4'-0"	8'-0"	1 3/4"	WOOD-GLASS	D6		26/A601	27/A601	22/A601	WOOD	F1	PER I.D.			
D100-B	2'-6"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D100-C	3'-0"	8'-0"	1 3/4"	WOOD	D5	PER I.D.	PER MANUF.	PER MANUF.	PER MANUF.	WOOD	F1	PER I.D.	NON-RATED	ELEVATOR DOOR	
D100-D	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D101-A	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D101-B	2'-6"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D101-C	2'-6"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D101-D	2'-6"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D101-E	2'-0"	7'-0"	1 1/4"	GLASS	D4	PER I.D.									
D104-A	3'-0"	8'-0"	1 1/2"	WOOD	D3	PER I.D.							NON-RATED	POCKET DOOR	
D104-B	3'-0"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F3	PER I.D.	20 MIN.	FIRE RATED	
D105-A	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D106-A	20'-0"	10'-0"		PER MANUF.	D7									GARAGE DOOR WOOD PANELS	
D200-A	3'-0"	8'-0"	1 3/4"	WOOD	D5	PER I.D.	PER MANUF.	PER MANUF.	PER MANUF.	WOOD	F1	PER I.D.	NON-RATED	ELEVATOR DOOR	
D201-A	4'-0"	8'-0"	1 3/4"	WOOD	D2	PER I.D.				WOOD	F1	PER I.D.	NON-RATED	BARN DOOR	
D201-B	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D202-A	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D202-B	2'-6"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D202-C	2'-6"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D202-D	2'-0"	7'-0"	1 1/4"	GLASS	D4	PER I.D.									
D203-A	2'-6"	8'-0"	1 1/2"	WOOD	D3	PER I.D.								POCKET DOOR	
D300-A	3'-0"	8'-0"	1 3/4"	WOOD	D5	PER I.D.	PER MANUF.	PER MANUF.	PER MANUF.					ELEVATOR DOOR	
D301-A	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D301-B	2'-10"	8'-0"	2"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D301-C	2'-6"	7'-0"	1 3/4"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D301-D	2'-6"	8'-0"	1 3/4"	WOOD	D1	PER I.D.	26/A601	27/A601		WOOD	F1	PER I.D.	NON-RATED		
D301-E	2'-0"	7'-0"	1 1/4"	GLASS	D4	PER I.D.									

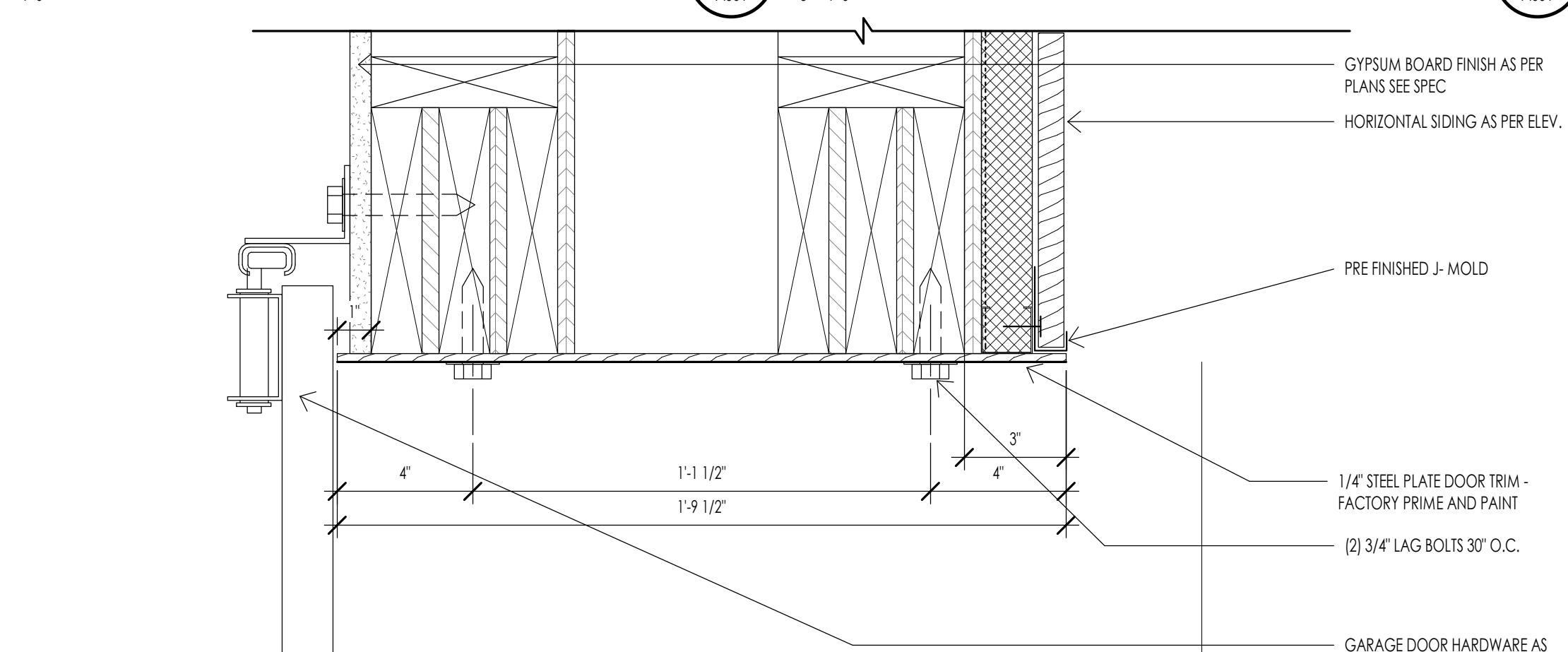
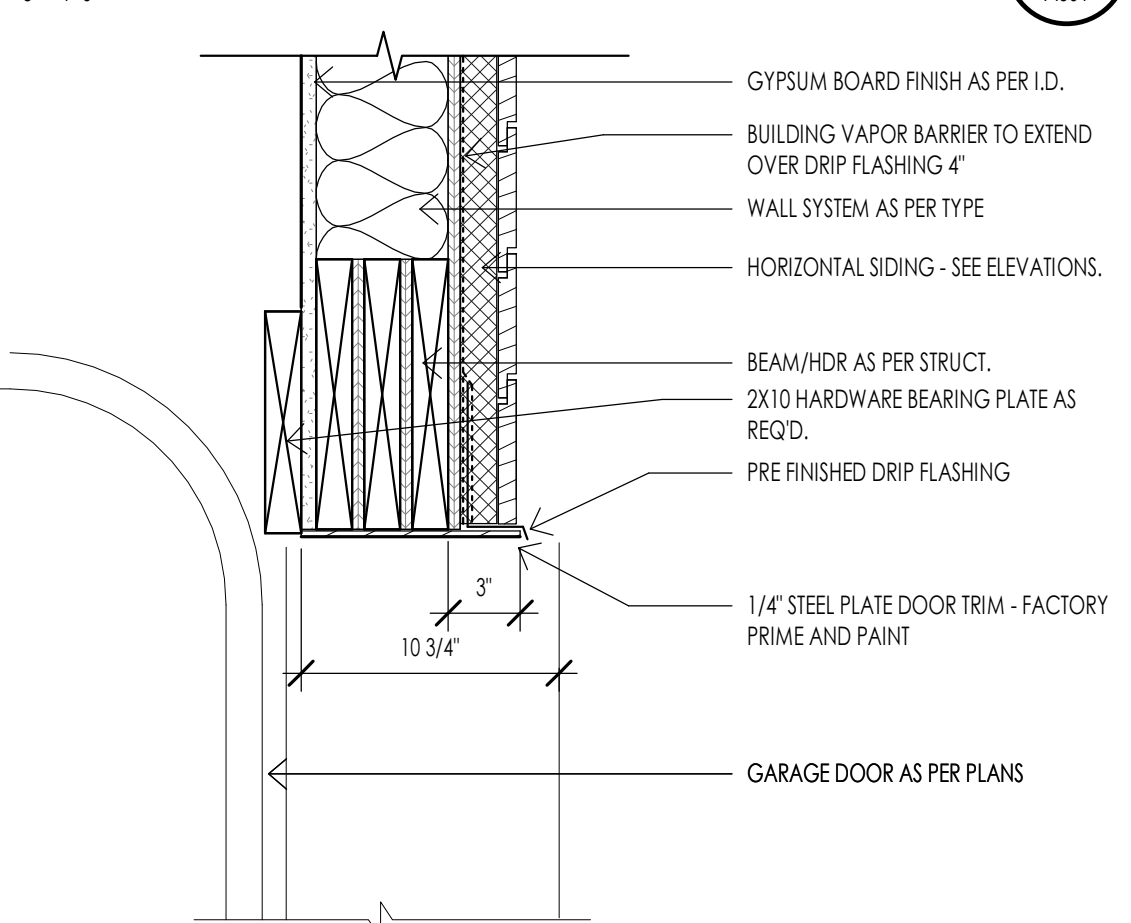
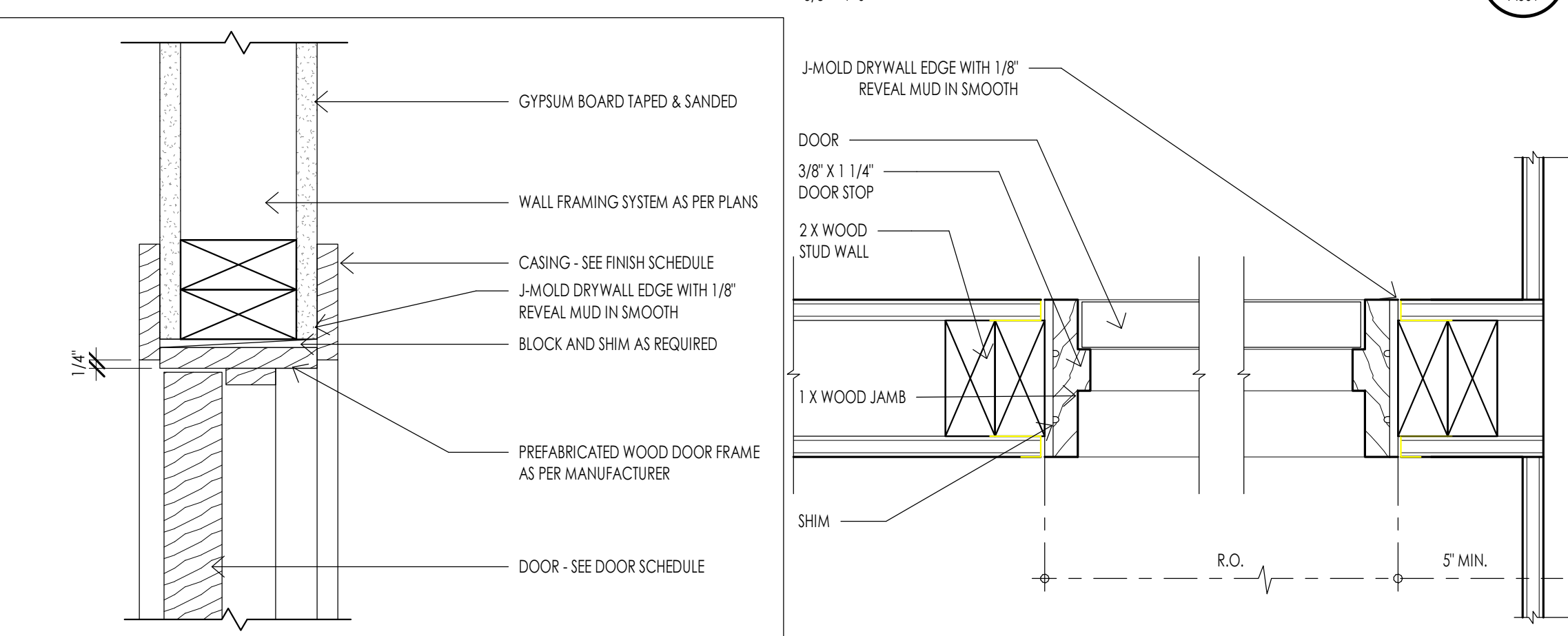
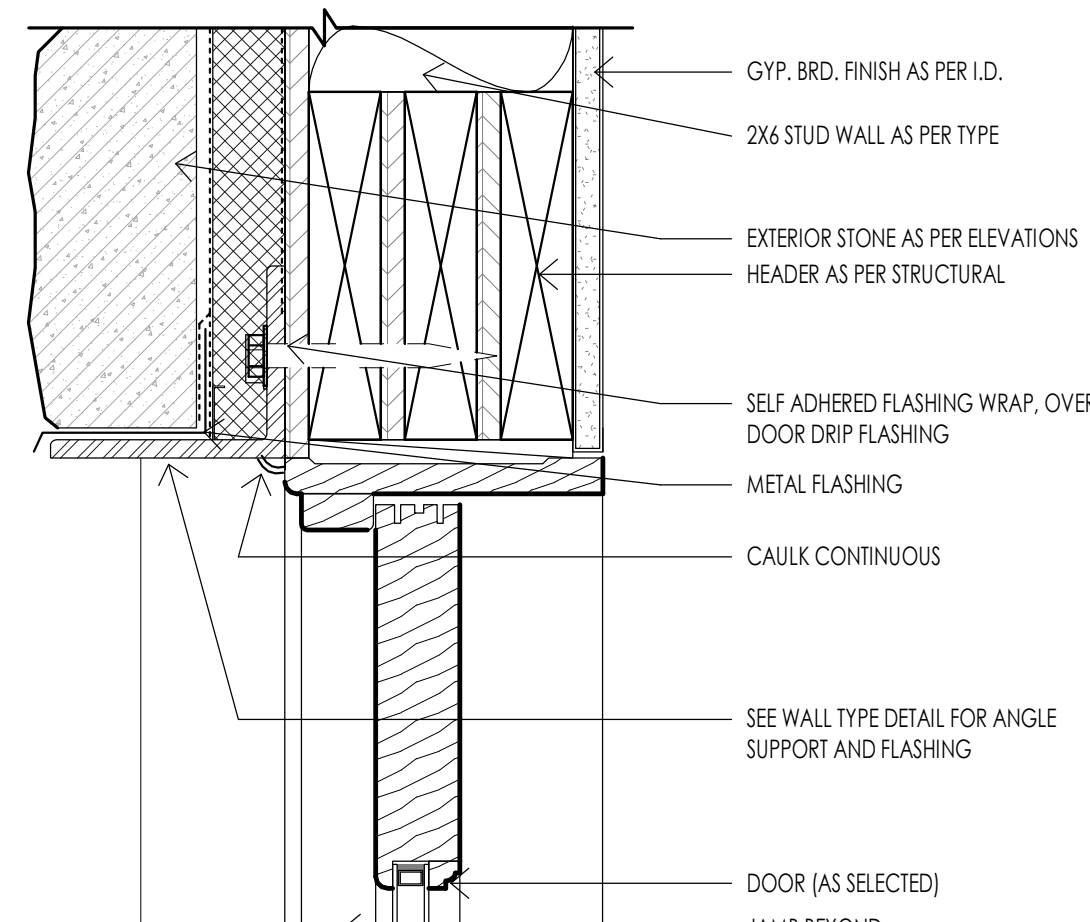
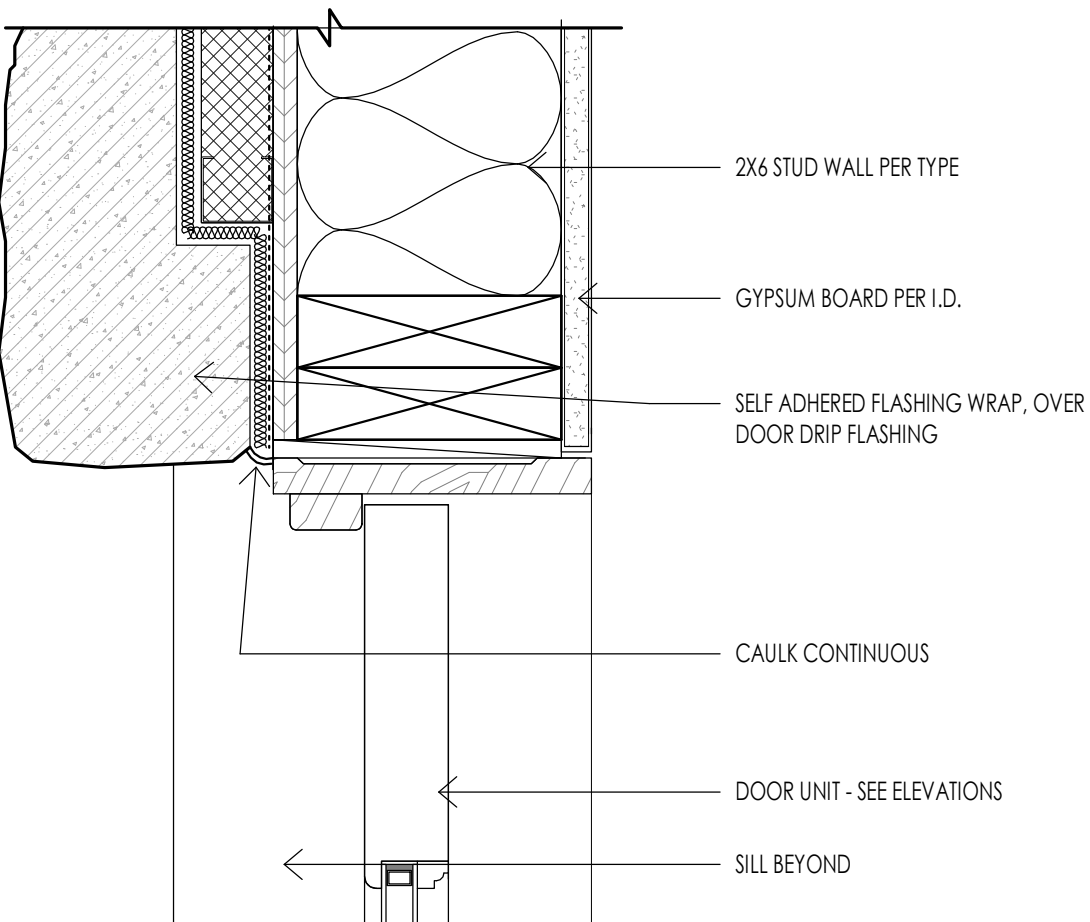
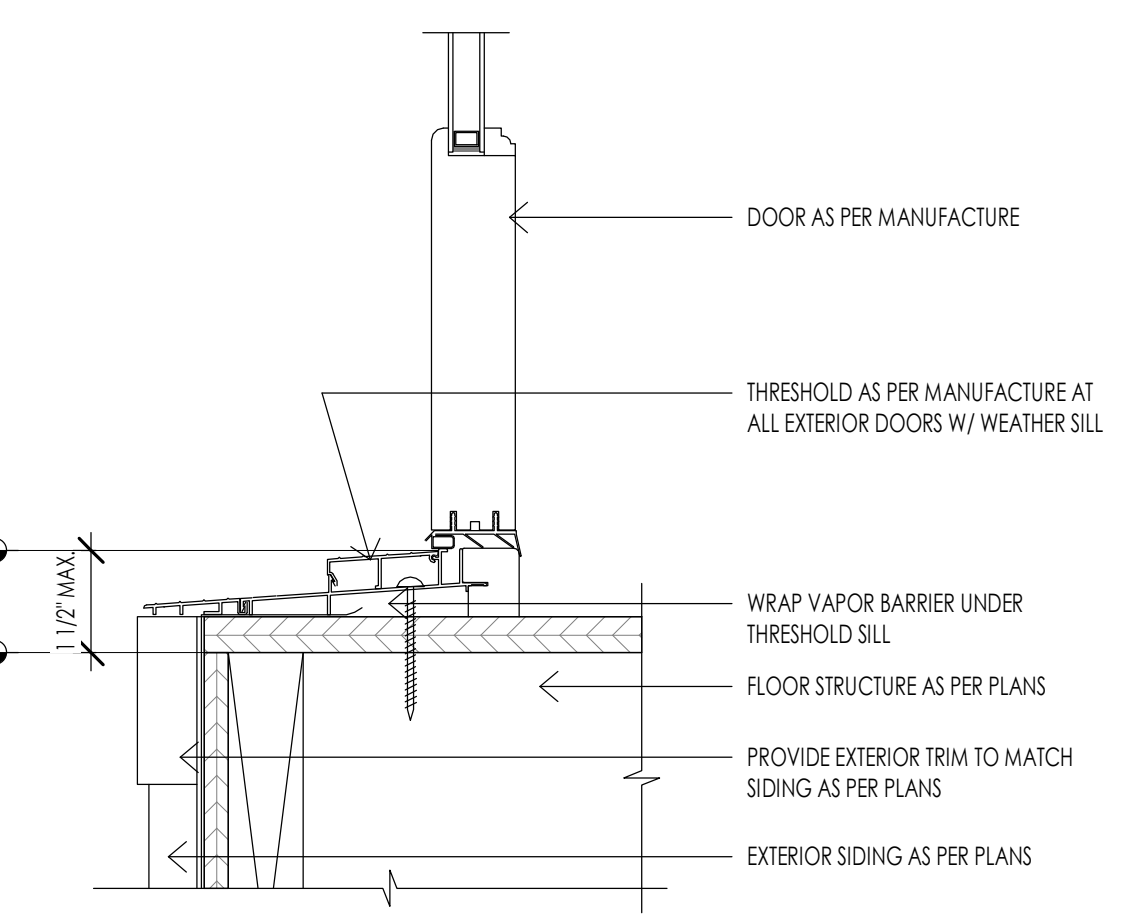
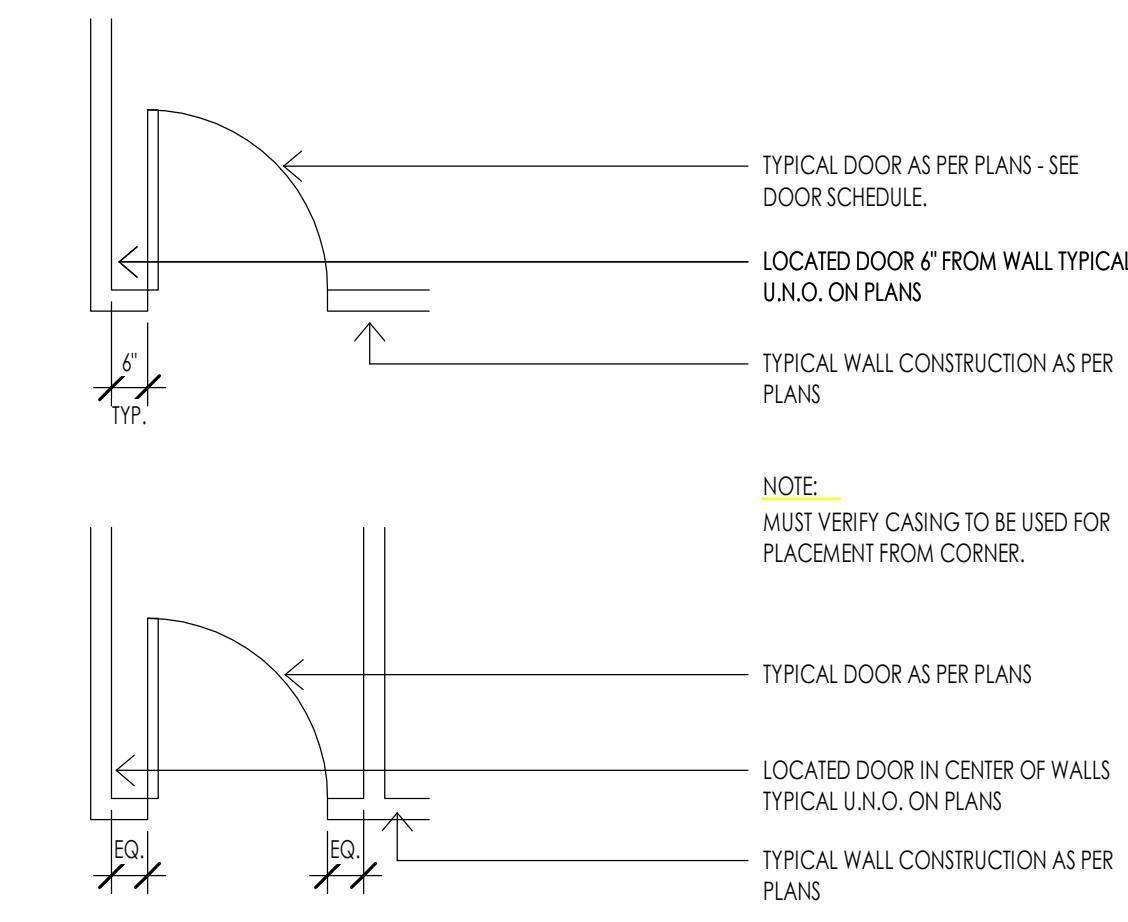
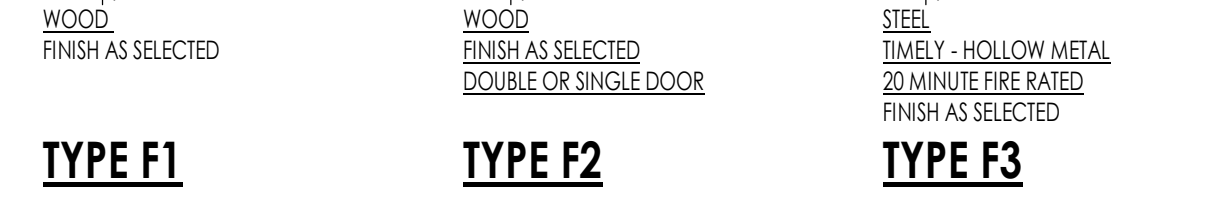
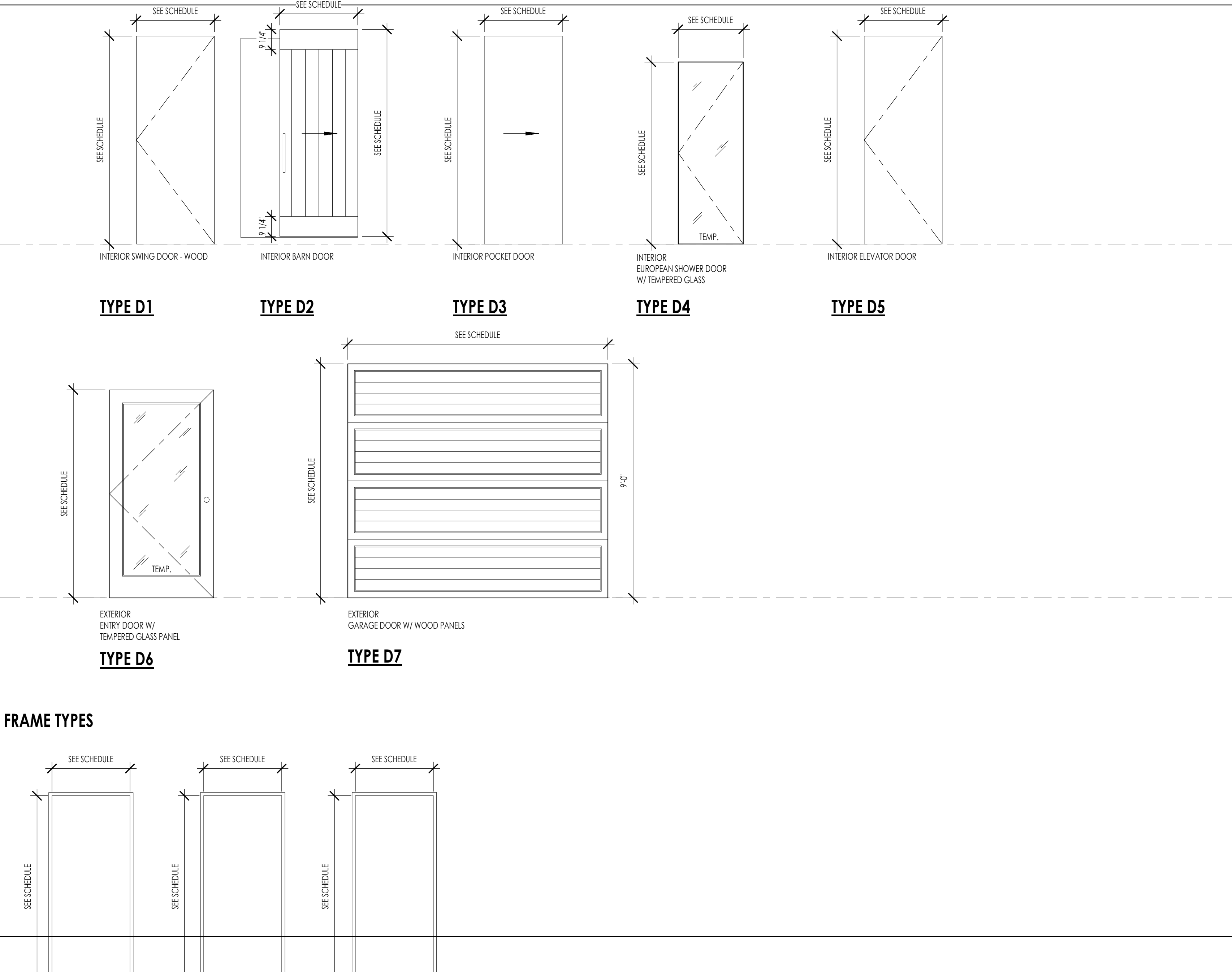
**DOOR SCHEDULE GENERAL NOTES**

- SEE SHEET A601 FOR DOOR AND FRAME TYPES.
- CONTRACTOR SHALL FIELD VERIFY ALL DOOR OPENINGS PRIOR TO ORDERING ALL DOORS.
- CONTRACTOR SHALL SUBMIT COMPLETE DOOR AND HARDWARE SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL FOR EACH BUILDING PRIOR TO ORDERING AND TAKING RECEIPT OF DOOR ORDER. ARCHITECT SHALL REVIEW ALL DOORS FOR COMPLIANCE SPECIFICATIONS AND BUILDING CODE.
- ALL DOORS REQUIRED TO BE RATED SHALL HAVE APPROPRIATE U.L. RATING AS INDICATED IN DOOR SCHEDULE AND SPECIFICATION. ALL DOORS SHALL HAVE LABEL ON DOOR AND FRAME FOR INDICATION ON SITE, AND SHALL NOT BE REMOVED.
- ALL DOORS SHALL BE INSTALLED SO AS NOT TO HAVE MORE THAN 1/2" THRESHOLD AT EACH DOOR.
- REFER TO INTERIOR DESIGNER FOR CORRECT DOOR STYLES, SPECIES, AND FINISHES.
- OPENINGS BETWEEN GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8" INCHES THICK, SOLID HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8" INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE I.R.C. SECTION R302.5.1.

**HARDWARE GROUPS**

- H1 MECHANICAL ROOM**
  - 2 PAIR SPRING HINGES
  - SMOKE SEAL
  - 1 PASSAGE SET
- H2 OVERHEAD GARAGE DOORS**
  - GARAGE ENTRY PROVIDED BY OVERHEAD DOOR MANUFACTURER
- H3 SECONDARY ENTRY DOOR**
  - 3 PAIR SPRING HINGES
  - 1 SMOKE SEAL
  - 1 LOCKSET
  - 1 DEADBOLT
  - 1 THRESHOLD
- H4 GARAGE/HOUSE**
  - 3 PAIR HINGES
  - 1 WEATHER STRIP
  - 1 LOCKSET
  - 1 DEADBOLT
- H5 INTERIOR DOOR**
  - 3 PAIR HINGES
  - 1 PASSAGE SET
- H6 INTERIOR BARN DOOR**
- H7 INTERIOR DOUBLE BARN DOOR**
- H8 INTERIOR DOOR**
  - 3 PAIR HINGES
  - 1 PRIVACY SET
- H9 INTERIOR DOUBLE DOOR**
  - 6 PAIR HINGES
  - 2 KNOBS (SINGLE SIDE ONLY)
- H10 ENTRY DOOR**
  - 1 WEATHER STRIP
  - 1 THRESHOLD
  - 1 LOCKSET
  - 1 DEADBOLT
  - 1 PIVOT HINGE (TOP AND BOTTOM)
- H11 INTERIOR DOUBLE DOOR**
  - 6 PAIR HINGES
  - 2 PASSAGE SET
- H12 POCKET DOOR**

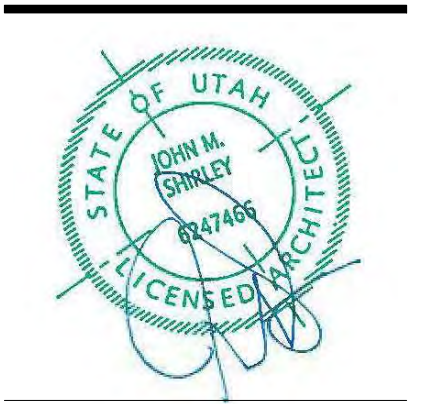
**DOOR TYPES**



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WARM SPRINGS RESIDENCE #33  
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

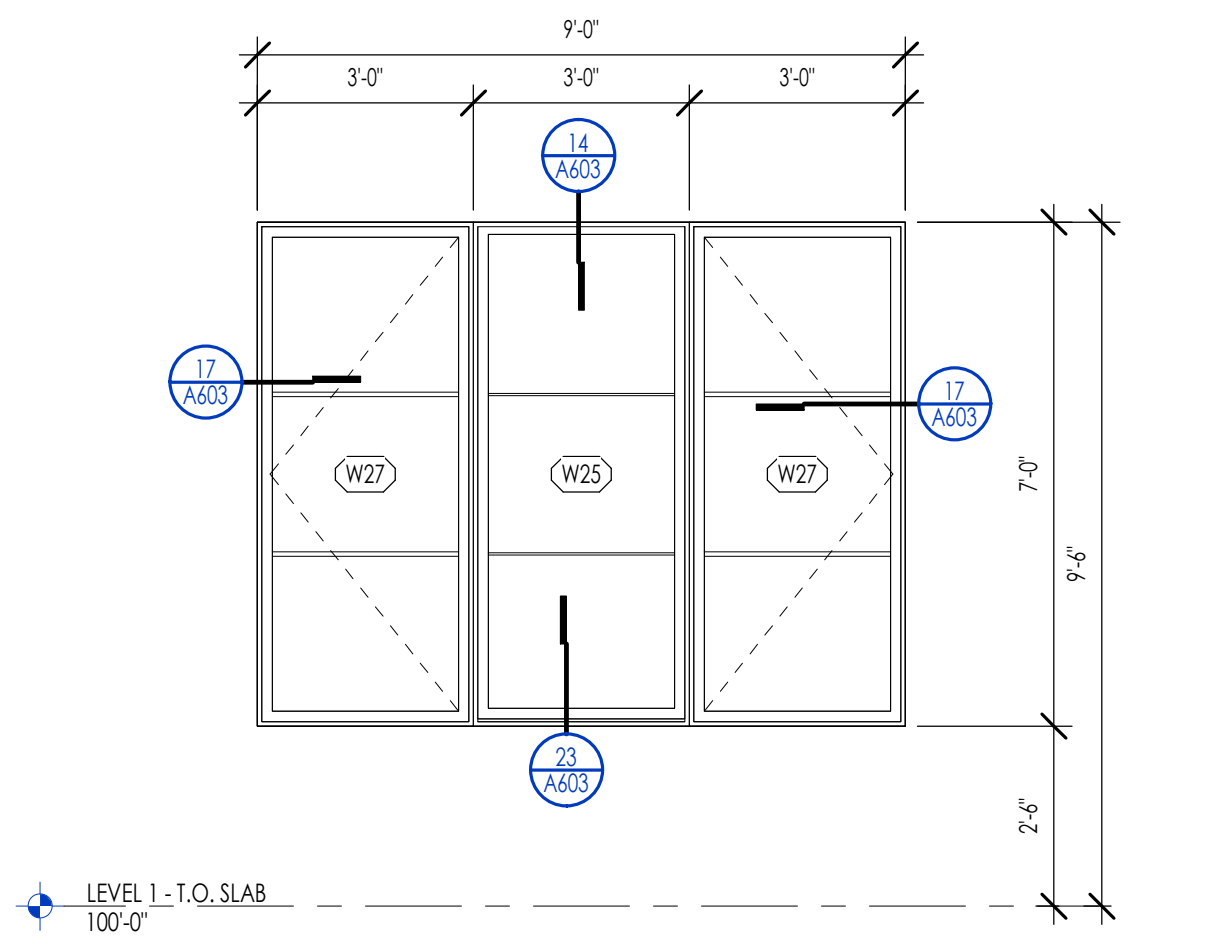
SHEET TITLE:  
DOOR SCHEDULE & ELEVATIONS

SHEET NUMBER:  
A601

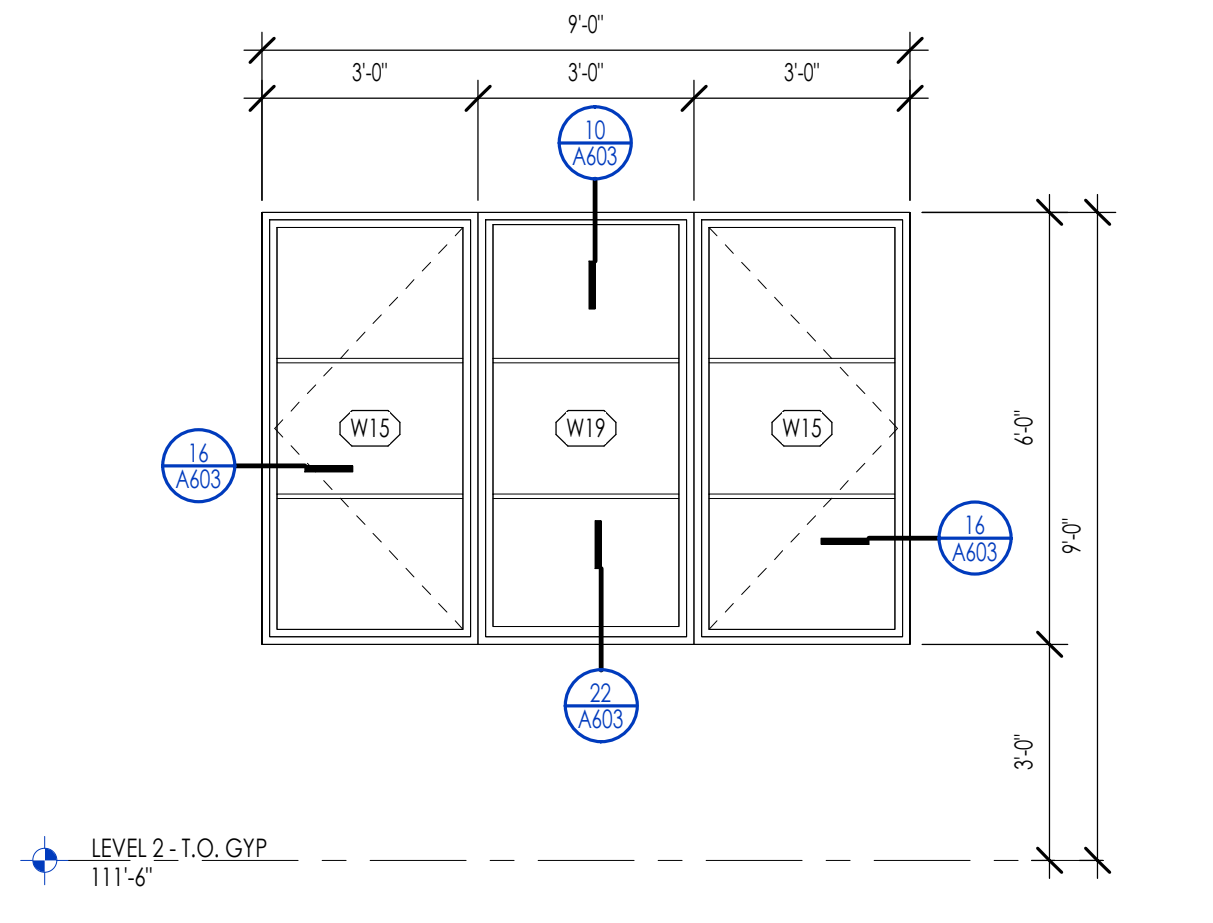
PERMIT SET

**WINDOW SCHEDULE**

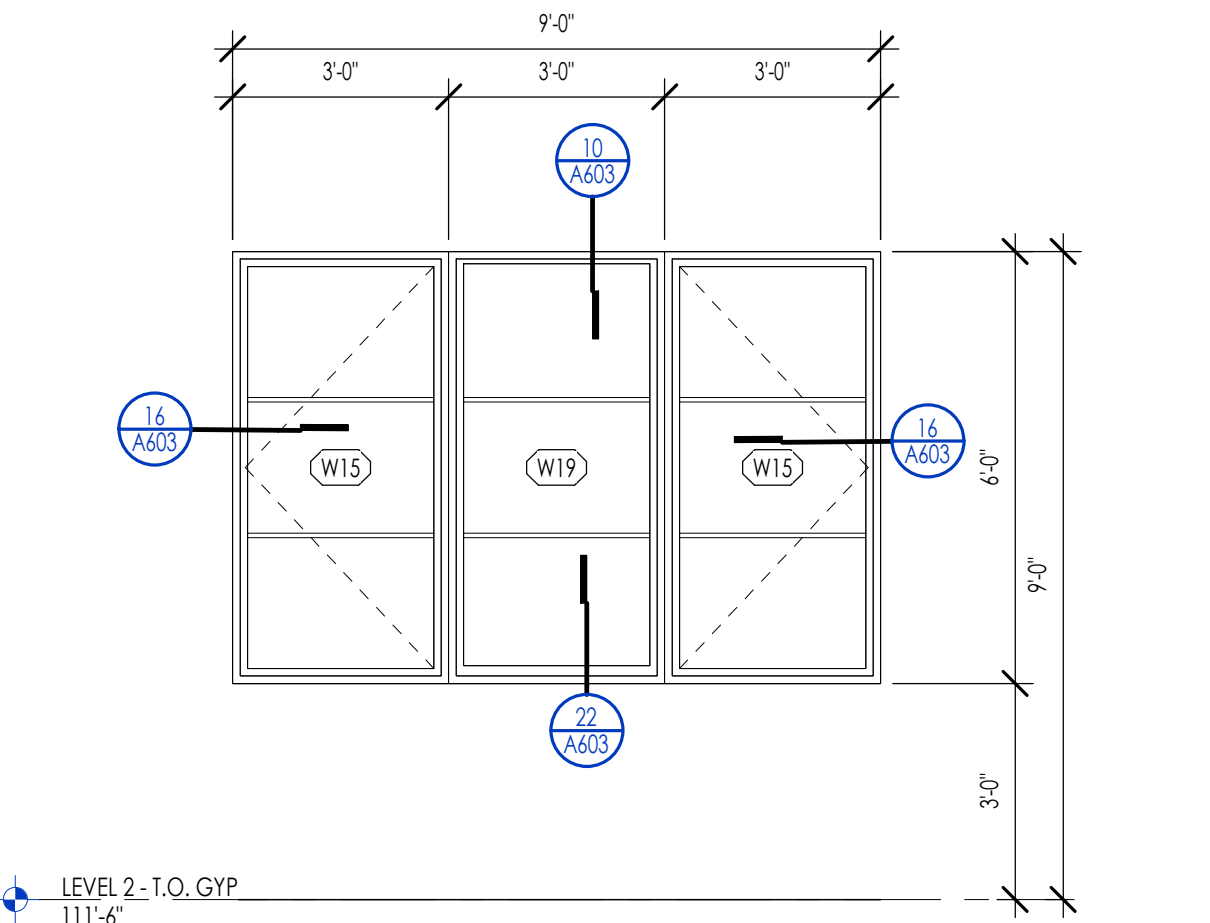
MARK	UNIT SIZE		HEAD HEIGHT	OPERATION	MATERIAL	FINISH	DETAIL			GLAZING		COMMENTS
	WIDTH	HEIGHT					HEAD	JAMB	SILL	THICKNESS	TYPE	
W14	20'-0"	9'-0"	9'-0"	DOOR SLIDER QUAD OPEN TO SIDE	ALUMINUM CLAD	AS PER I.D.	15/A603	VARIES	PER MANUF.			
W15	3'-0"	6'-0"	9'-0"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	10/A603	16/A603	22/A603			
W16	2'-4"	6'-0"	9'-0"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	12/A603	18/A603	24/A603			
W17	2'-4"	6'-0"	9'-0"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	10/A603	VARIES	VARIES			
W18	2'-4"	6'-0"	8'-6"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	10/A603	16/A603	22/A603			
W19	3'-0"	6'-0"	9'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	10/A603	16/A603	22/A603			
W20	3'-0"	5'-0"	8'-6"	FIXED	ALUMINUM CLAD	AS PER I.D.	28/A603	16/A603	22/A603			
W21	2'-4"	6'-0"	8'-6"	FIXED	ALUMINUM CLAD	AS PER I.D.	10/A603	16/A603	15/A603			
W22	2'-4"	2'-0"	8'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	10/A603	16/A603	22/A603			
W23	5'-0"	3'-0"	13'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	21/A603	VARIES	15/A603			
W24	3'-0"	7'-0"	8'-6"	FIXED	ALUMINUM CLAD	AS PER I.D.	28/A603	16/A603	22/A603			
W25	3'-0"	7'-0"	9'-6"	FIXED	ALUMINUM CLAD	AS PER I.D.	14/A603	17/A603	23/A603			
W26	3'-0"	7'-0"	8'-6"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	28/A603	16/A603	22/A603			
W27	3'-0"	7'-0"	7'-4"	CASEMENT	ALUMINUM CLAD	AS PER I.D.	14/A603	17/A603	23/A603			
W28	3'-4"	3'-0"	13'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	21/A603	18/A603	24/A603			
W30	2'-4"	3'-0"	<varies>	FIXED	ALUMINUM CLAD	AS PER I.D.	<varies>	<varies>	<varies>			
W31	2'-4"	6'-0"	9'-0"	FIXED	ALUMINUM CLAD	AS PER I.D.	12/A603	18/A603	24/A603			



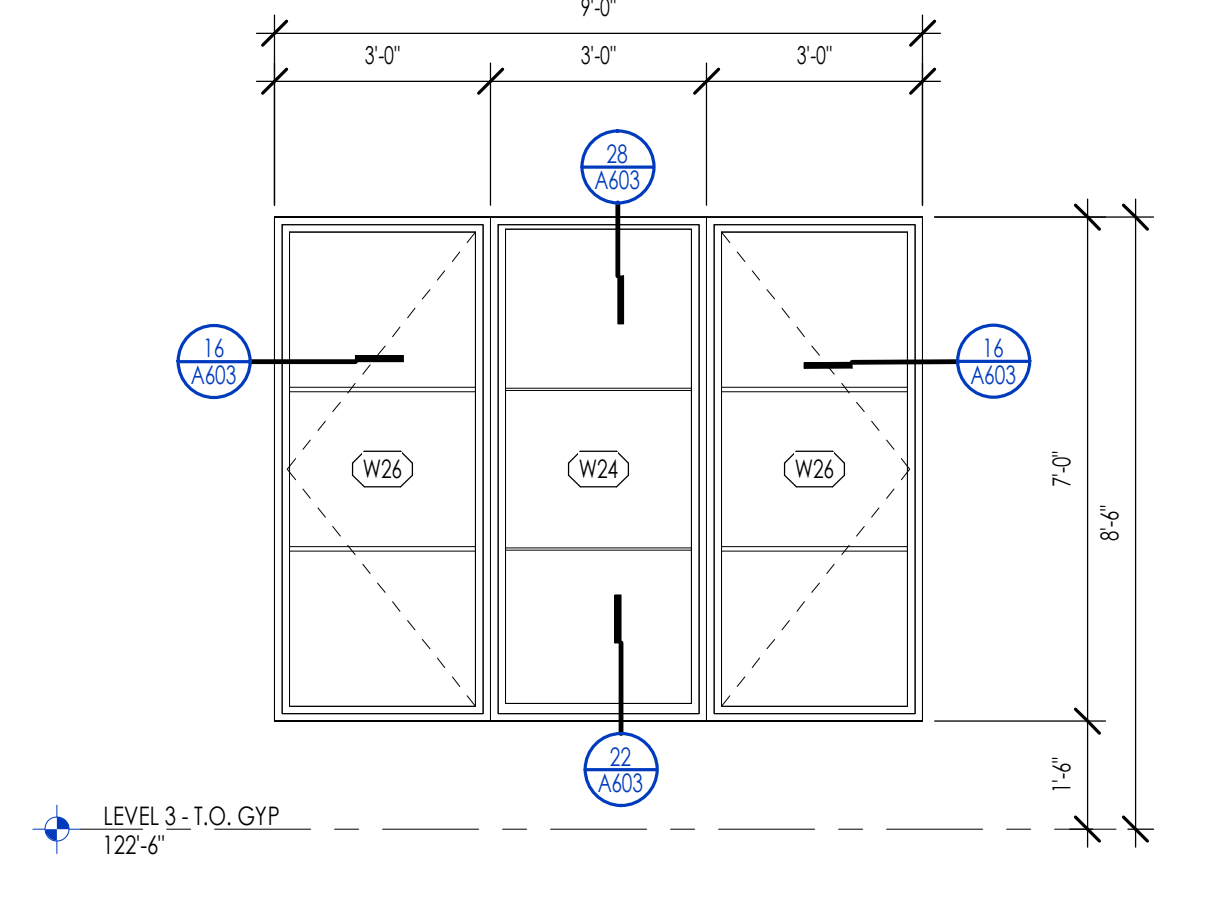
**WINDOW GROUP 01**  
3/8" = 1'-0" A602



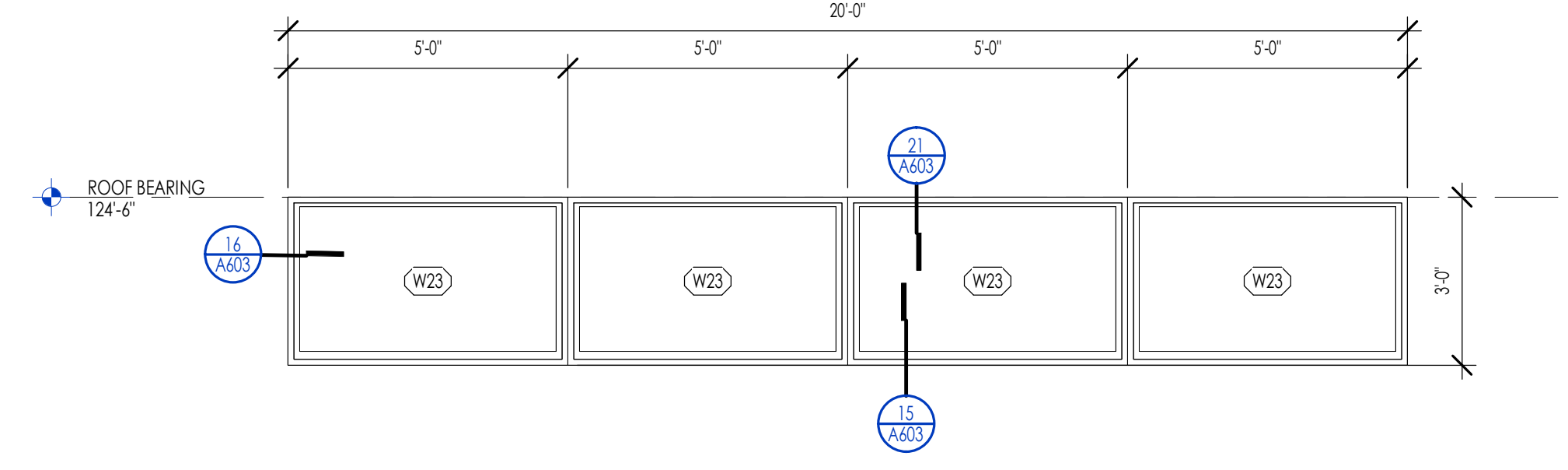
**WINDOW GROUP 02**  
3/8" = 1'-0" A602



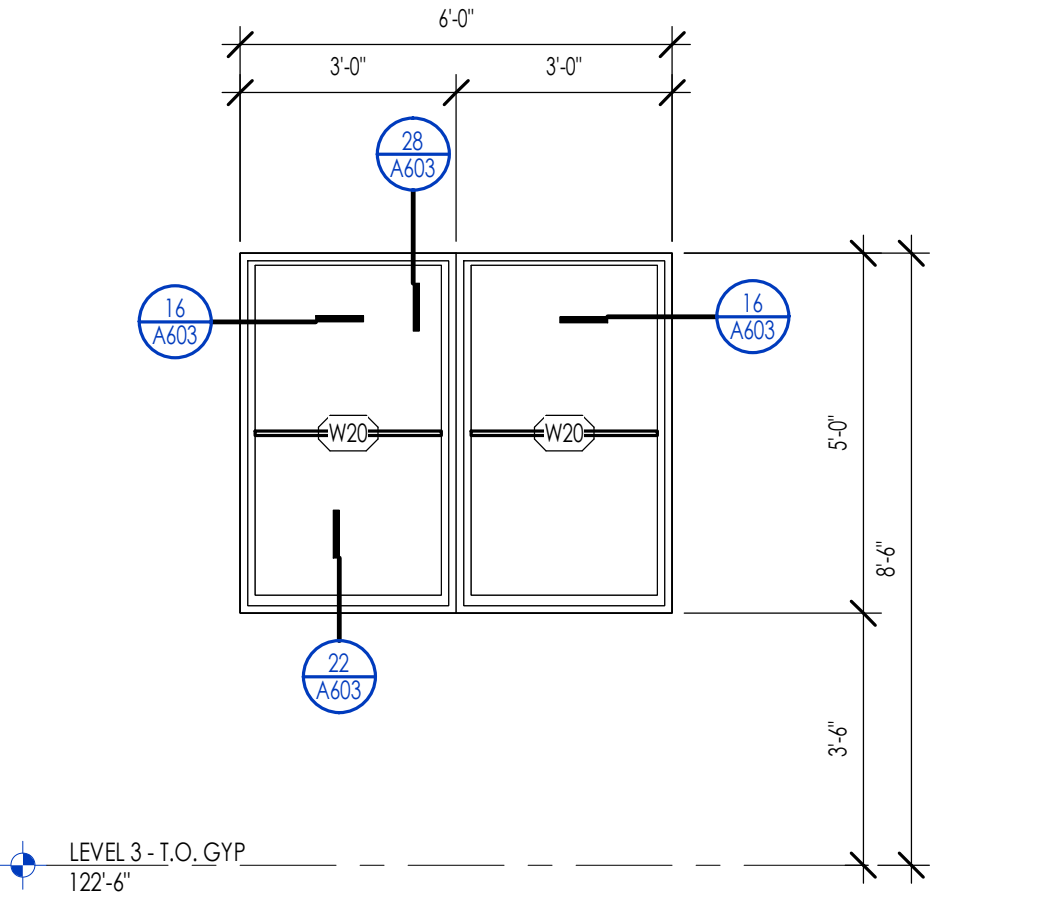
**WINDOW GROUP 03**  
3/8" = 1'-0" A602



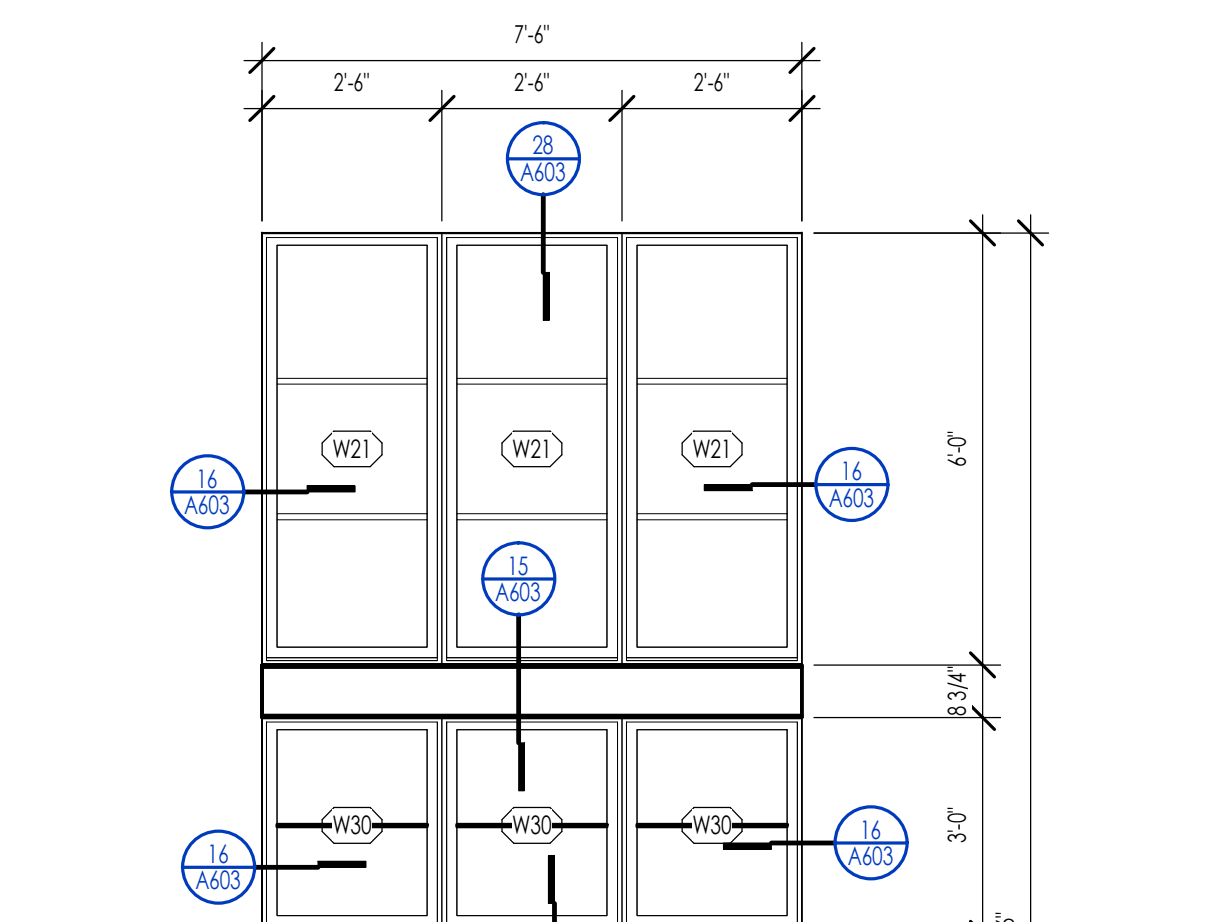
**WINDOW GROUP 04**  
3/8" = 1'-0" A602



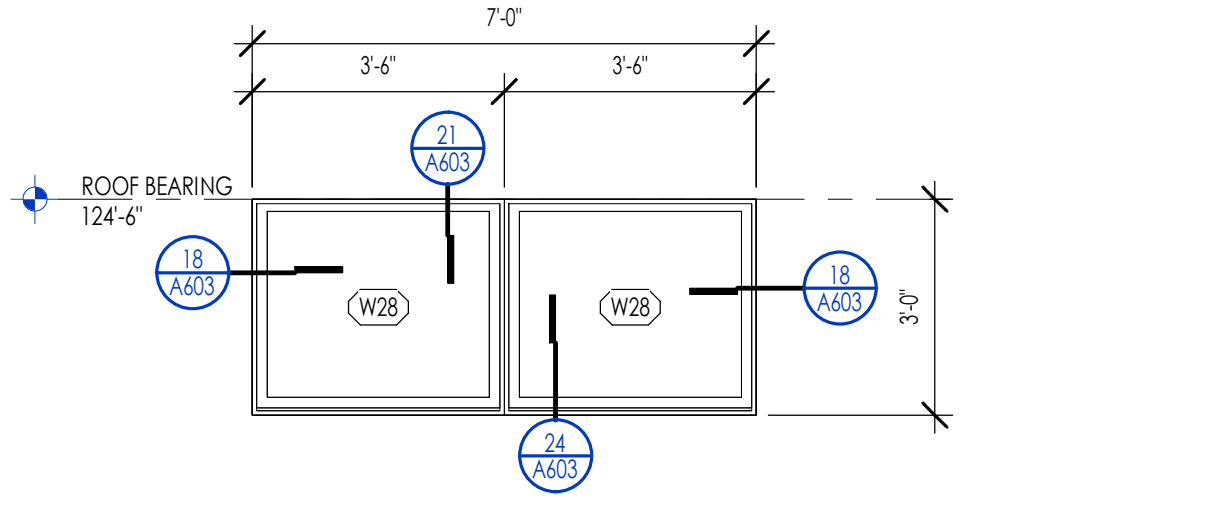
**WINDOW GROUP 05**  
3/8" = 1'-0" A602



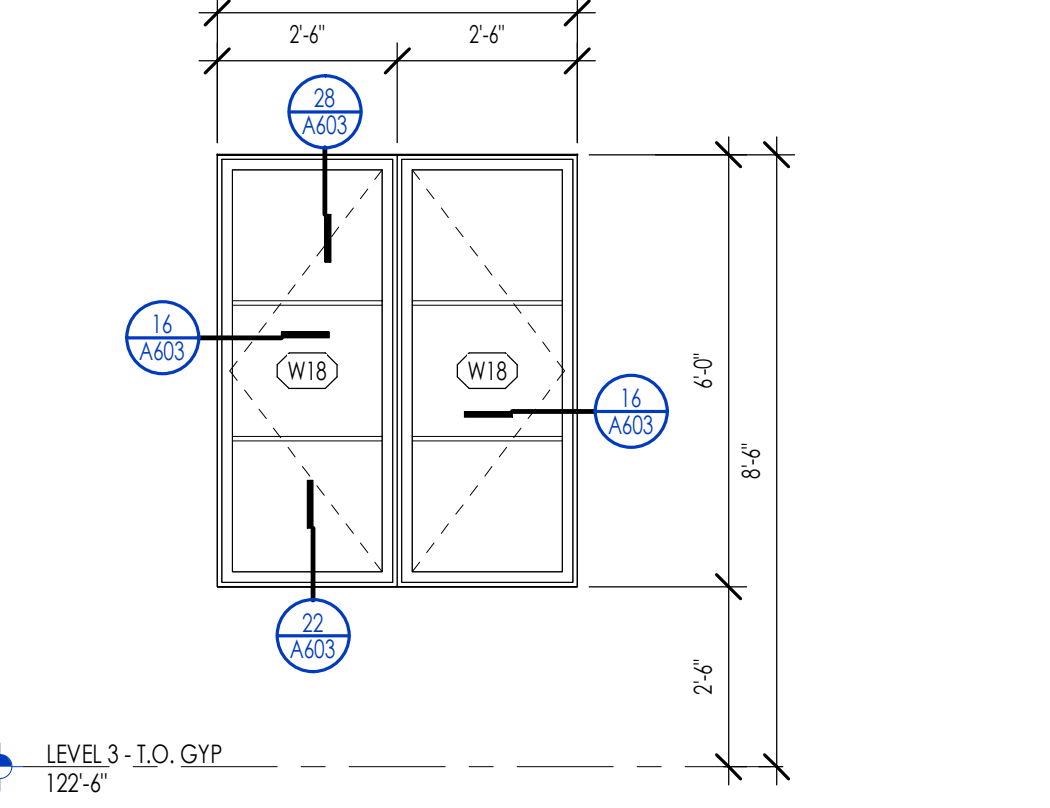
**WINDOW GROUP 06**  
3/8" = 1'-0" A602



**WINDOW GROUP 07**  
3/8" = 1'-0" A602



**WINDOW GROUP 08**  
3/8" = 1'-0" A602



**WINDOW GROUP 09**  
3/8" = 1'-0" A602

**WINDOW LEGEND**

SYMBOL	DESCRIPTION
(T)	TEMPERED GLAZING LOCATIONS.
→	DIRECTION OF OPERABLE WINDOW/DOOR.
(E)	WINDOW IS REQUIRED TO MEET EMERGENCY EGRESS.

**WINDOW SPECIFICATIONS**

APPROVED MANUFACTURERS:	MINIMUM U-VALUE:
BASIS OF DESIGN:	SCREENS REQUIRED:
WINDOW TYPE:	SCREEN COLOR:
WINDOW COLOR:	TYPICAL JAMB WIDTH:
WINDOW GLAZING:	SDL WIDTH:
	SDL TYPE:

**WINDOW GENERAL NOTES**

- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R310.
  - BASINETS WITH HABITABLE SPACES SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR DOOR OR ACCESS TO AN ADJOINING BERGROOM WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW.
  - ALL EMERGENCY OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING AREA OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 20 INCHES. THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES. EMERGENCY OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS OR TOOLS, EXCEPT GROUND FLOOR. NET CLEAR AREA OF 5.0 SQUARE FEET, R310.1.1 TO R310.1.4.
  - WINDOW SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR. OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL. R310.2.2
  - WINDOW WELLS REQUIRED FOR ESCAPE OR RESCUE SHALL HAVE HORIZONTAL DIMENSIONS THAT ALLOW THE DOOR OR WINDOW TO BE FULLY OPENED. THE HORIZONTAL DIMENSION FOR THE WINDOW WELL SHALL PROVIDE A MINIMUM NET CLEAR AREA OF 9 SQUARE FEET WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES. R310.2.3
  - WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES BELOW THE ADJACENT GROUND LEVEL SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE WINDOW IN THE FULLY OPENED POSITION. LADDERS OR RUNGS SHALL HAVE AN INSIDE WIDTH OF AT LEAST 12 INCHES. SHALL PROJECT AT LEAST 3 INCHES FROM THE WALL AND SHALL BE SPACED NOT MORE THAN 18 INCHES ON CENTER VERTICALLY FOR THE FULL HEIGHT OF THE WINDOW WELL. R310.2.3.1
  - BARS, GRILLS, COVERS, SCREENS, ETC. SHALL BE PERMITTED TO BE PLACED OVER THE EMERGENCY EGRESS OPENING WINDOW WELL PROVIDED THE NET CLEAR OPENING SIZE IS NOT COMPROMISED AND THAT SUCH DEVICES SHALL BE RELEASED OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, OR FORCE GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION. R310.4
- SAFETY GLAZING SHALL BE INSTALLED IN HAZARDOUS LOCATIONS AND SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R308. FOR EXCEPTIONS SEE I.R.C. R308.4.
  - EACH PANE OF GLASS INSTALLED IN HAZARDOUS LOCATIONS SHALL BE PERMANENTLY IDENTIFIED BY MANUFACTURER'S DESIGNATING THE TYPE, THICKNESS, AND SAFETY GLAZING STANDARD. THE LABEL SHALL BE ACID ETCHED, SANDBLASTED, CERAMIC FRIED OR EMBOSSED ON GLASS AND BE VISIBLE WHEN THE UNIT IS GLAZED. FOR EXCEPTIONS SEE I.R.C. R308.1.
  - PROVIDE SAFETY GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND FOLDING DOORS (R308.4.1). SAFETY GLAZING SHALL BE PROVIDED WHEN GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES ABOVE THE FLOOR OR WALKING SURFACE AND IS WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION OR WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE HINGE SIDE OF AN IN SWINGING DOOR. (I.R.C. R308.4.2)
  - PROVIDE SAFETY GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS. (I.R.C. R308.4.6)
  - PROVIDE SAFETY GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES ABOVE A STANDING OR WALKING SURFACE. (I.R.C. R308.4.5)
  - PROVIDE SAFETY GLAZING IN RAILINGS REGARDLESS OF AN AREA OR HEIGHT. (I.R.C. R308.4.I)
  - PROVIDE SAFETY GLAZING IN WALLS AND FENCES ENCLOSING SWIMMING POOLS OR HOT TUBS WHERE THE BOTTOM EDGE OF THE POOL OR SPA GLASS IS LESS THAN 40 INCHES ABOVE THE WALKING SURFACE. (I.R.C. R308.4.3)
  - PROVIDE SAFETY GLAZING IN FIXED OR OPERABLE PANELS THAT MEETS ALL OF THE FOLLOWING CONDITIONS: AREAS GREATER THAN 9 SQUARE FEET; BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR; TOP EDGE GREATER THAN 36 INCHES ABOVE FLOOR; AND WITHIN 36 INCHES OF WALKING SURFACE. (I.R.C. R308.4.3)
- THE GENERAL CONTRACTOR AND WINDOW SUPPLIER ARE RESPONSIBLE TO FIELD MEASURE ALL WINDOW OPENINGS AND PROVIDE SHOP DRAWINGS BEFORE MANUFACTURING. SHOP DRAWINGS SHALL BE PROVIDED FOR EACH BUILDING INDIVIDUALLY AND SHALL NOT BE COMBINED WITH ANY OTHER BUILDING. THE WINDOW SUPPLIER SHALL BE RESPONSIBLE TO VERIFY ALL EMERGENCY EGRESS, LIGHT AND VENTILATION, AND TEMPERED GLASS LOCATION REQUIREMENTS PRIOR TO EACH SUBMITTAL.
- THE GENERAL CONTRACTOR AND WINDOW SUPPLIER ARE RESPONSIBLE TO VERIFY THAT EACH OF THE ABOVE LISTED REQUIREMENTS HAVE BEEN MET AND NOTE ANY DISCREPANCIES ON SUBMITTAL.
- REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

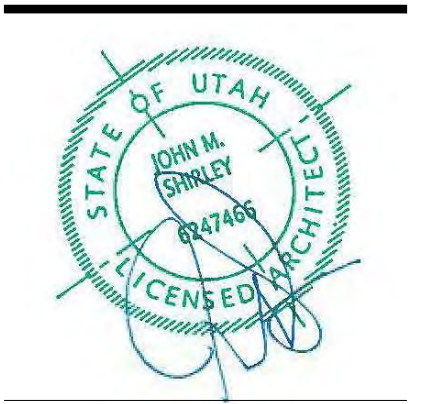


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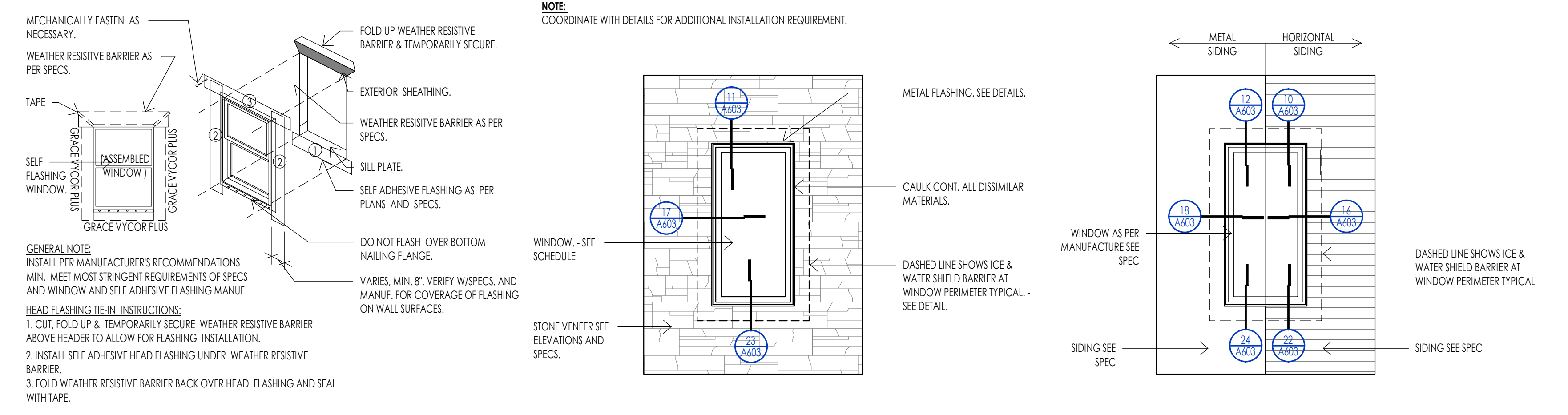
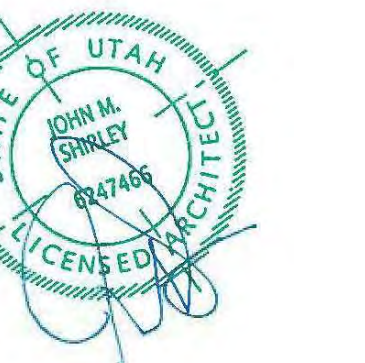
**WARM SPRINGS RESIDENCE #33**  
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

SHEET TITLE:  
**WINDOW SCHEDULE & ELEVATIONS**

SHEET NUMBER:  
**A602**

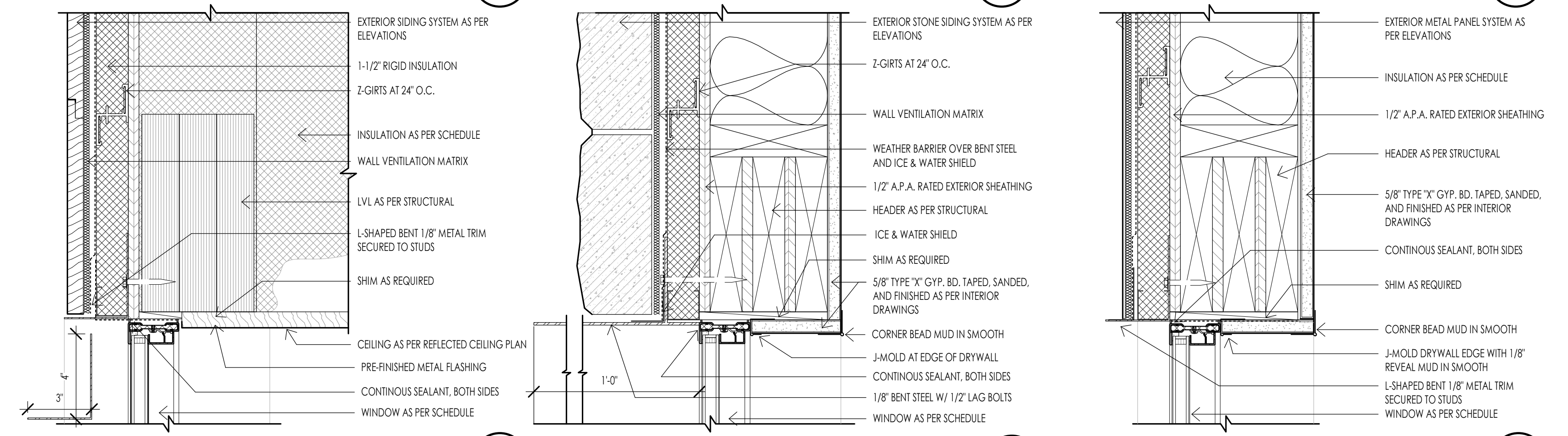
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**WINDOW - TYPICAL FLASHING DETAIL** 4  
1 1/2" = 1'-0"

**WINDOW - ELEVATION STONE AT STEEL** 5  
3/8" = 1'-0"

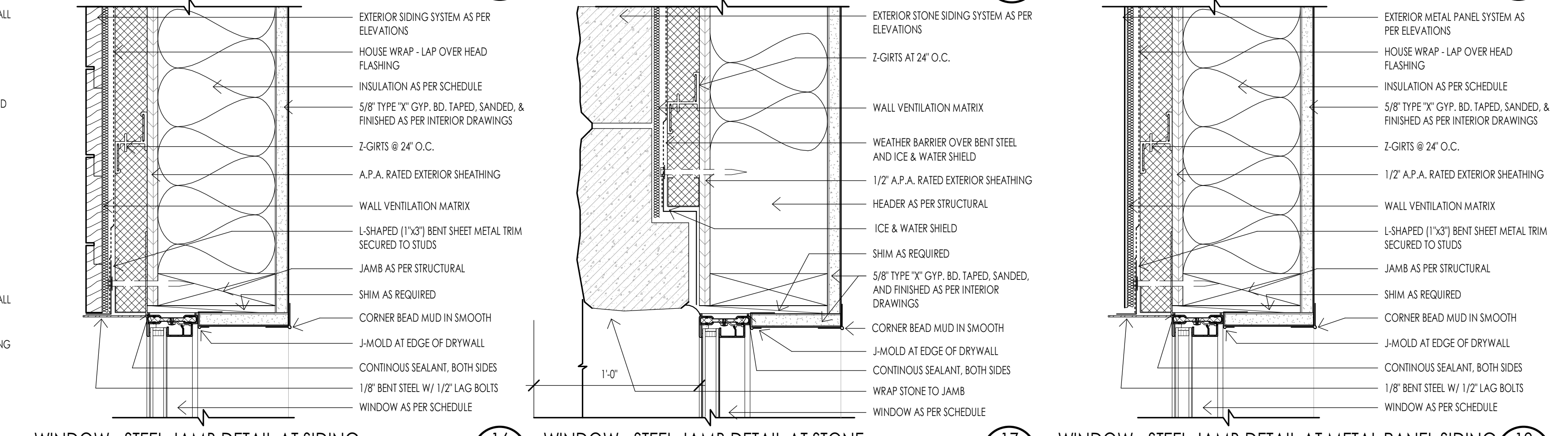
**WINDOW - ELEVATION SIDING AT STEEL** 6  
3/8" = 1'-0"



**WINDOW - STEEL HEAD DETAIL AT SIDING** 10  
3" = 1'-0"

**WINDOW - STEEL HEAD DETAIL AT STONE** 11  
3" = 1'-0"

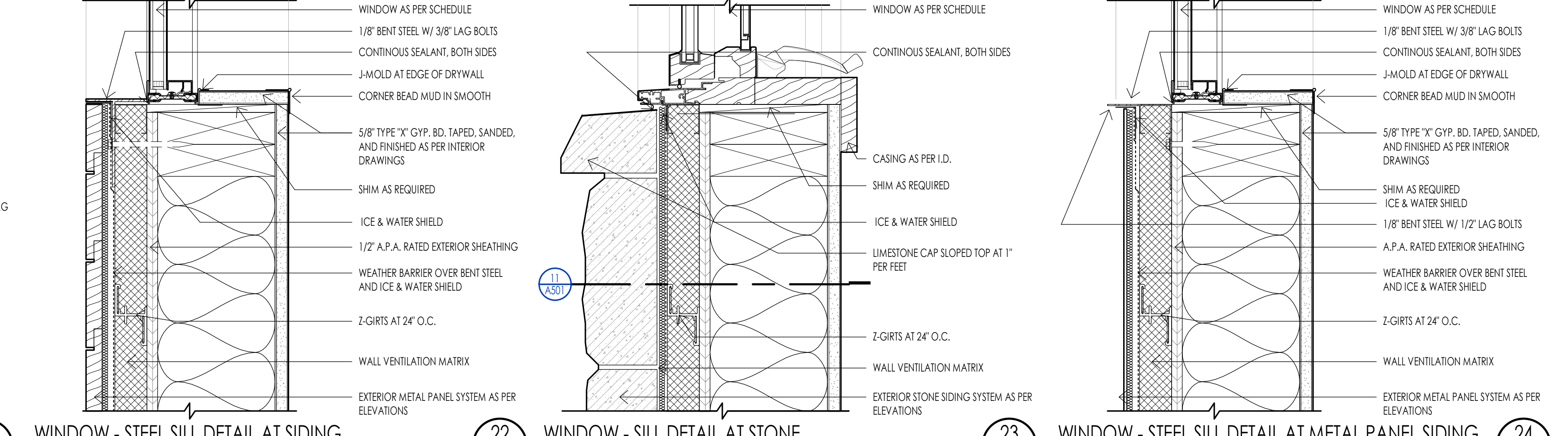
**WINDOW - STEEL HEAD DETAIL AT METAL PANEL SIDING** 12  
3" = 1'-0"



**WINDOW - STEEL JAMB DETAIL AT SIDING** 16  
3" = 1'-0"

**WINDOW - STEEL JAMB DETAIL AT STONE** 17  
3" = 1'-0"

**WINDOW - STEEL JAMB DETAIL AT METAL PANEL SIDING** 18  
3" = 1'-0"

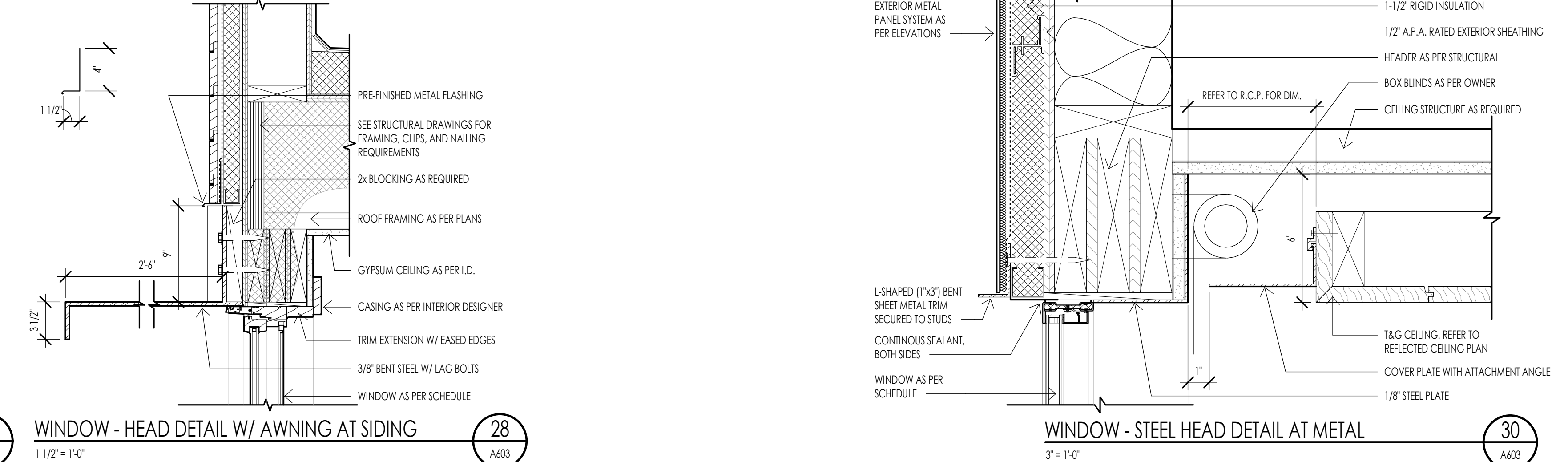


**WINDOW - STEEL HEAD DETAIL AT T&G CEILING** 21  
3" = 1'-0"

**WINDOW - STEEL SILL DETAIL AT SIDING** 22  
3" = 1'-0"

**WINDOW - SILL DETAIL AT STONE** 23  
3" = 1'-0"

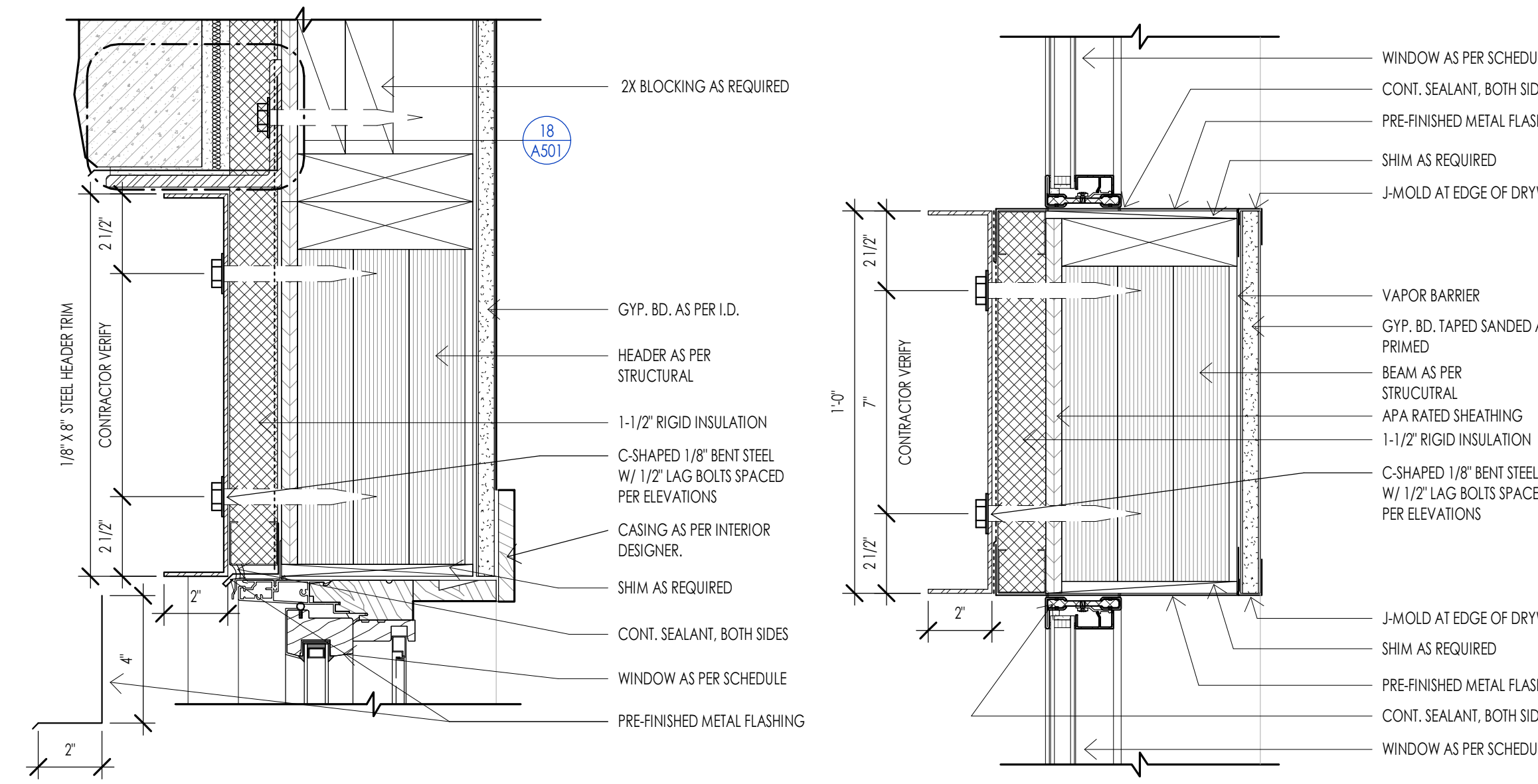
**WINDOW - STEEL SILL DETAIL AT METAL PANEL SIDING** 24  
3" = 1'-0"



**WINDOW - SILL AT GREAT ROOM - DECK** 27  
1 1/2" = 1'-0"

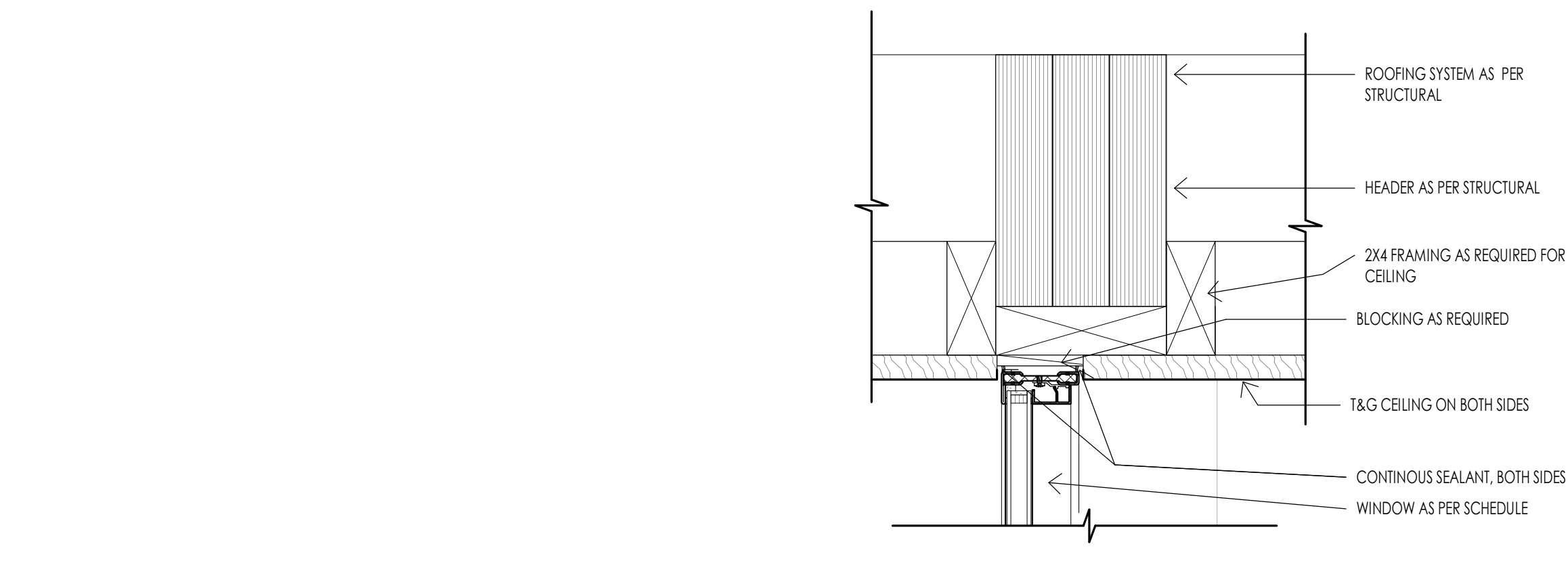
**WINDOW - HEAD DETAIL W/ AWNING AT SIDING** 28  
1 1/2" = 1'-0"

**WINDOW - STEEL HEAD DETAIL AT METAL** 30  
3" = 1'-0"



**WINDOW - STEEL HEADER TRIM BAND/ STONE** 14  
3" = 1'-0"

**WINDOW - STEEL HEADER TRIM BAND** 15  
3" = 1'-0"



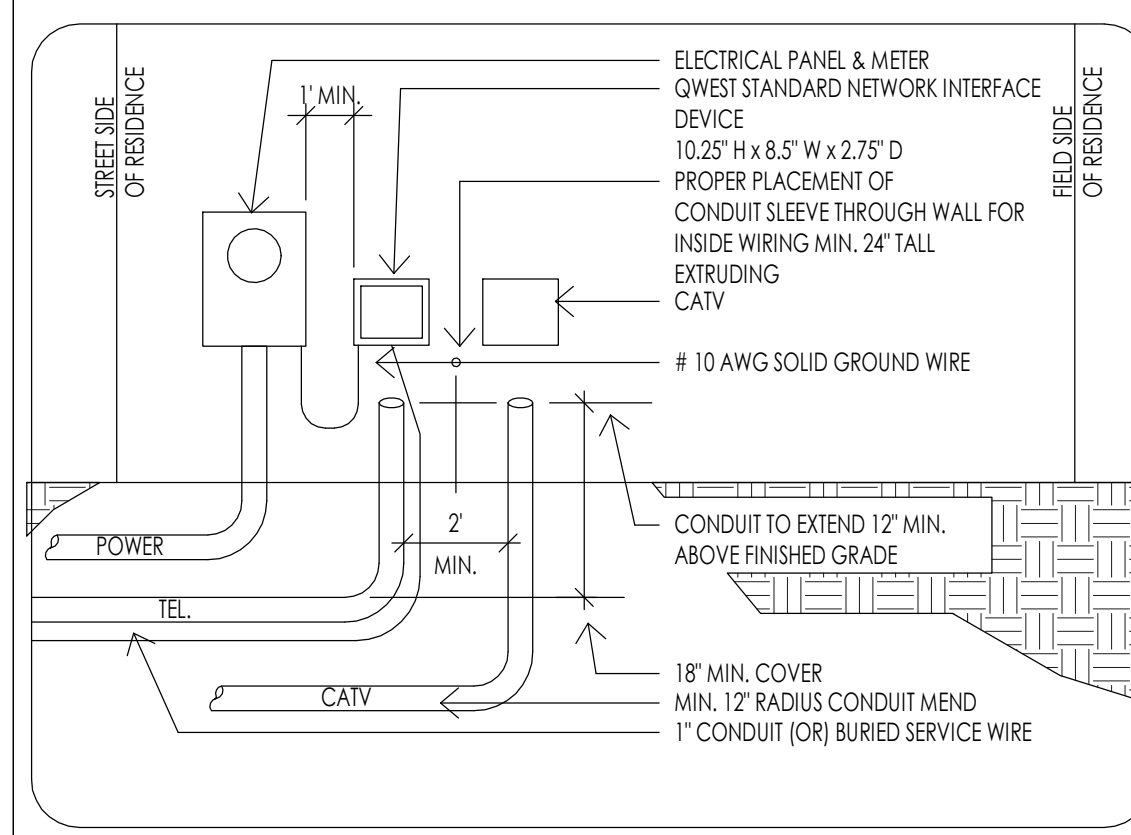
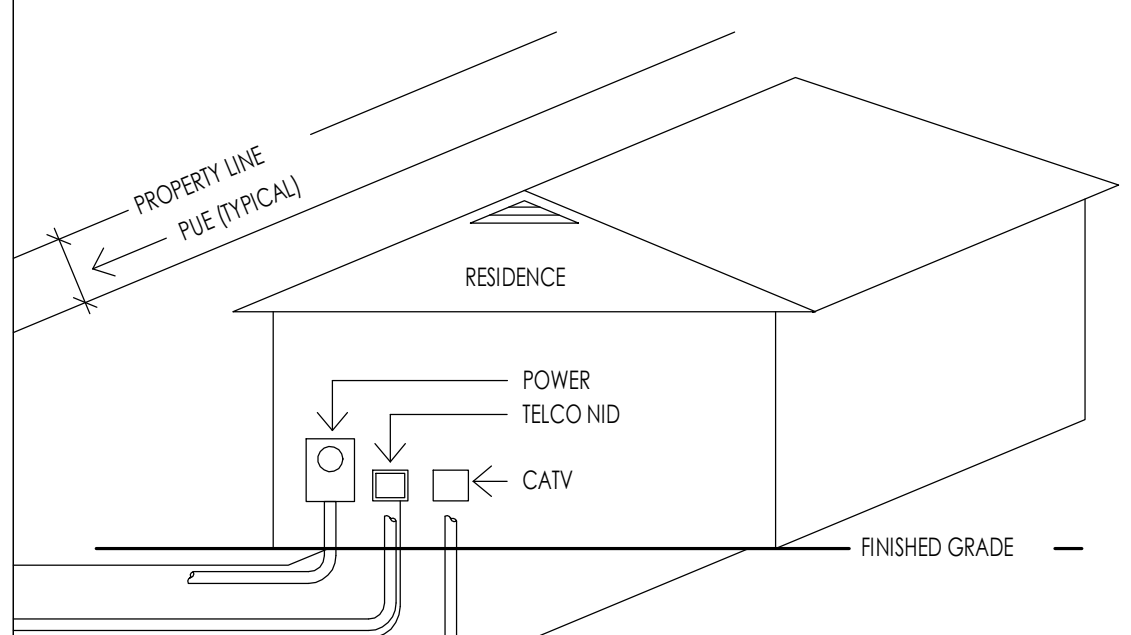
**WINDOW - STEEL HEAD DETAIL AT T&G CEILING** 21  
3" = 1'-0"



**WINDOW - SILL AT GREAT ROOM - DECK** 27  
1 1/2" = 1'-0"

**ELECTRICAL GENERAL NOTES**

- ALL WORK DONE BY ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE CURRENT ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODE REGULATIONS AND AMENDMENTS. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THESE REGULATIONS WHETHER OR NOT SUCH WORK IS SPECIFICALLY SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL FEEDERS, PANELS, BOARDS, RELAY BRANCH CIRCUIT WIRING, CONDUITS, WIRE, METER BASES, COMPLETE WIRING FOR MOTORS, EXHAUST FANS, LINE VOLTAGE CONNECTIONS FOR HVAC EQUIPMENT, SPECIALTY LIGHTING - FIXTURES, OUTLET BOXES, COVER PLATES, WALL SWITCHES, FIXTURES, RECEPTACLES, ETC.
- ALL DRAWINGS INDICATE LOCATIONS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL POWER REQUIREMENTS.  
  
THE CONTRACTOR SHALL SET ALL THE BOXES AND NOTIFY THE ARCHITECT AND OWNER OF PLACEMENT OF BOXES. THE ARCHITECT, OWNER AND INTERIOR DESIGNER SHALL WALK THE HOUSE WITH THE ELECTRICAL CONTRACTOR AND SHALL VERIFY ALL THE LOCATIONS. THIS SHALL BE DONE PRIOR TO ANY WIRE BEING PULLED.  
  
IF WIRE IS PULLED, AND BOXES ARE REQUIRED TO BE MOVED, ALL COSTS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND NOT THE OWNER'S DESIGN TEAM.
- ELECTRICAL SERVICE CAPACITY AND SIZE SHALL BE COMPUTED BY METHOD INDICATED IN THE NATIONAL ELECTRICAL CODE. PANELS OR CABINETS INCLUDING FUSES, CIRCUIT BREAKERS, SWITCHES OR OTHER ELECTRICAL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS, ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCE TO BE MINIMUM 30" WIDTH AND 6' 0" HEAD ROOM. ELECTRICAL TO COMPLY WITH N.E.C. 110.16. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER.
- ALL RECEPTACLES LOCATED WITH THE FOLLOWING CONDITIONS TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN BATHROOMS, OUTSIDE AT GRADE LEVEL, UNFINISHED BASEMENTS, AND IN GARAGES. GARAGE RECEPTACLES TO BE 18" ABOVE FINISHED FLOOR.
- ALL SWITCHES, RECEPTACLES, TELEPHONE JACKS AND CATV JACKS TO BE "LEVITON" 5601 ROCKER SERIES IN WHITE. DIMMER SWITCHES TO BE "LUTRON" DIVA ROCKER SERIES IN WHITE. HEIGHT OF LIGHT SWITCHES FROM FINISHED FLOOR TO TOP OF SWITCH TO BE 48" TYPICAL UNLESS NOTED. OTHERWISE, THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 12" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE 10" TO CENTERLINE ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WIRING.
- UNLESS NOTED OTHERWISE LOCATE AND INSTALL ONE (1) GFCI WEATHER PROTECTED RECEPTACLE AT GRADE LEVEL AND OUTSIDE AT SOFFIT AT EACH EXTERIOR DOOR WHETHER INDICATED ON DRAWINGS OR NOT. PLEASE REFER TO THE ELECTRICAL DRAWINGS FOR ADDITIONAL OUTLETS AT SOFFITS.
- ALL FIXTURES SHALL HAVE A U.L. LABEL LISTING. IF NOT U.L. LISTED FIXTURE SHALL NOT BE USED. ALL RECESS DOWN LIGHTS TO BE THERMAL RATED, AND ALL CAST IN PLACE FIXTURES TO BE INCLUDED IN BASE BID. ALL RECESS DOWN LIGHTS TO BE INCLUDED IN BASE BID WITH TRIM RINGS AS SELECTED BY DESIGNER OR OWNER. ALL LIGHTS IN CLOSETS SHALL MEET N.E.C. 410.8 REQUIREMENTS. ALL LIGHTS LOCATED IN WET OR DAMP LOCATIONS SHALL MEET N.E.C. 410.4 REQUIREMENTS.
- SMOKE DETECTORS TO BE HARD WIRED TO BUILDING CIRCUIT WITH BATTERY BACK UP. PROVIDE SMOKE DETECTORS AT ALL BUILDING LEVELS, IN ALL BEDROOMS, ACCESS TO ALL BEDROOMS, ETC. (UBC 310.9)
- ELECTRICAL PANEL (PANELBOARD/SWITCHBOARD) MAY NOT BE LOCATED BEHIND A DOOR OR IN A ROOM THAT MAY BE LOCKED AND MUST HAVE PROPER WORKING CLEARANCES. PLEASE REFER TO THE ELECTRICAL DRAWINGS FOR THE LOCATIONS FOR ALL ELECTRICAL PANELS. IF THE PANEL BOARD NEEDS TO BE RELOCATED, PLEASE CONSULT THE OWNER AND OR ARCHITECT PRIOR TO MOVING.
- SMALL WALL SECTIONS 2' OR WIDER (INCLUDES BETWEEN DOORS) REQUIRE AN OUTLET.
- GFCI PROTECTION MUST BE PROVIDED FOR ANY RECEPTACLE OUTLET IN THE FOLLOWING: A BATHROOM, ANY COUNTERTOP KITCHEN/LAUNDRY, GARAGE OUTLETS MINIMUM 18" ABOVE FINISHED FLOOR HEIGHT, OUTSIDE FRONT AND REAR OUTLETS MUST HAVE WATERPROOF COVERPLATE.
- A RECEPTACLE OUTLET MUST BE PROVIDED AT EACH SECTION OF KITCHEN COUNTERTOP 12" OR WIDER. THERE MUST ALSO BE A MINIMUM OF TWO (2) DEDICATED COUNTERTOP CIRCUITS.
- A SWITCH CONTROLLED LIGHT MUST BE PROVIDED AT HALLWAYS, STAIRWAYS, EXITS, AND EACH ROOM.
- A HARD-WIRED WITH BATTERY BACKUP SMOKE DETECTOR MUST BE INSTALLED IN ALL BEDROOMS (NEW AND EXISTING) IN THE ACCESS AREA TO ALL BEDROOMS, AND AT LEAST ONE PER FLOOR. TWO (2) FOOT CHANGES IN CEILING HEIGHT ALSO REQUIRE AN ADDITIONAL SMOKE DETECTOR. ALARM SOUND MUST BE AUDIBLE IN ALL AREAS OF HOME.
- WHEN BEDROOMS OCCUR ON 2ND STORES, THE DETECTOR SHOULD BE LOCATED AT THE TOP OF THE STAIRWAY.
- KITCHEN OUTLETS REQUIRED TO BE GFCI PROTECTED, NOT MORE THAN 4'-0" APART.
- CLOSET LIGHT FIXTURES MIN. 12" CLEARANCE TO SHELF (LATERAL MEASURED)



**TYPICAL DRY UTILITY LOCATION DETAIL**  
1/2" = 1'-0"

**HL36SA**



**Ordering Information**

**SAMPLE ORDER NUMBERS:** HL36SA20R27D01CAT, TR45FL40, TL53R4W

**Series:**  
HL36SA - 6-inch square shallow new construction directional housing

**Wattages:**  
10 + 10W (nominal)  
15 + 15W (nominal)  
20 + 20W (nominal)

**Accessories:**  
[blank] - Purchase optic separately  
SPR - 1" beam  
RFL - 2" beam  
FL - 4" beam  
OPT - 30° beam

**Light Output:**  
127 - 90 CRI, 2700K  
127 - 90 CRI, 3000K  
145 - 90 CRI, 3500K  
145 - 90 CRI, 4000K  
150 - 90 CRI, 3000K CCT, dim to warm\*\*

**Beam Control:**  
LED10 - 10W 120-277V, 50/60Hz leading or trailing edge phase cut, 1% dimming at 120V only and 0WV  
120-277V 50/60Hz 0-10V 1% dimming  
LED15 - 15watt HL Series Forward Phase Dimming, 1% to 100%, 120V only  
LED10 - 0-10V Dimming, 0% to 100%, 120V-277V

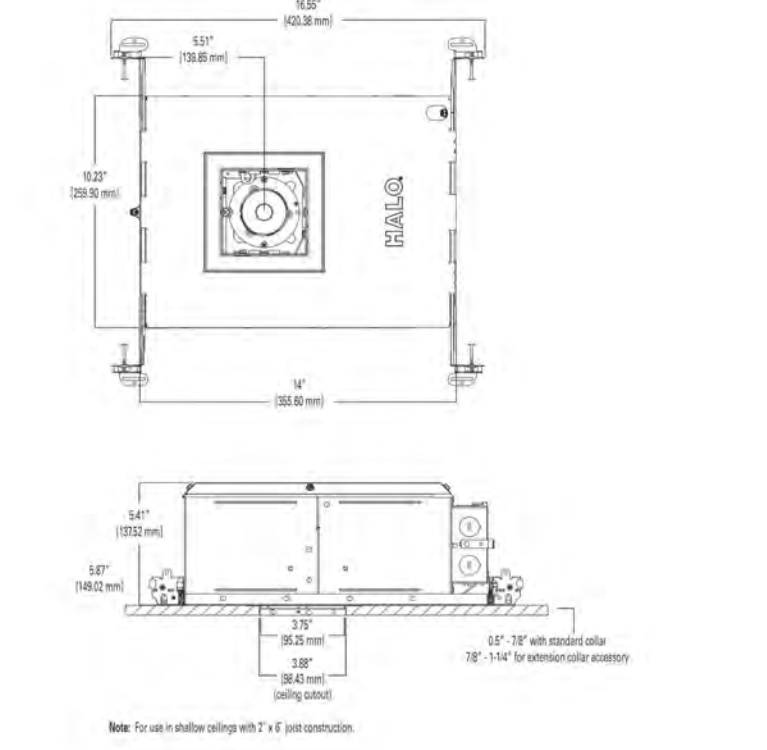
**Housing Type:**  
ICAT - insulation contact and airtight

**Accessories:**  
BASE - recess adapter for HL36A housings and some CEBS - color extender for HL36A housings, adjusts from 7/8" to 1-1/4" thick ceilings

**Optic & Beam:**  
TR45FL40 - 1" beam  
TR45FL15 - 1.5" beam  
TR45FL40 - 4" beam  
TR45FL15 - 1.5" beam  
TR45FL40 - 4" beam  
TR45FL15 - 1.5" beam and filters, see spec sheet

**Overhead Trim Ring:**  
OTL36AW - concealed trim ring for TLR trims

See page 19 for trim information.  
(\*) Only available in 100 and 150



**L-1 RECESSED EXTERIOR SOFFIT LIGHT**



**CHAMPEAUX LINEAR SCONCE**

Starting at \$275. Member \$292. Member

Designer Jonathan Browning's Champeaux collection brings refinement and luxe materials to the classic sconce light, a standard of 1970s utility crafted in solid brass. Browning's thoughtful reinterpretation goes beyond function to reveal the cast as a thing of beauty. The design evokes the clean lines inherent in the concept, but sets the form in a new context.

**SHOP THE ENTIRE COLLECTION**

**FINISH OPTIONS**

Polished Chrome | Lacquered Burnished Brass | Stone

**DETAILS**

**DIMENSIONS**

**INSTALLATION INSTRUCTIONS**

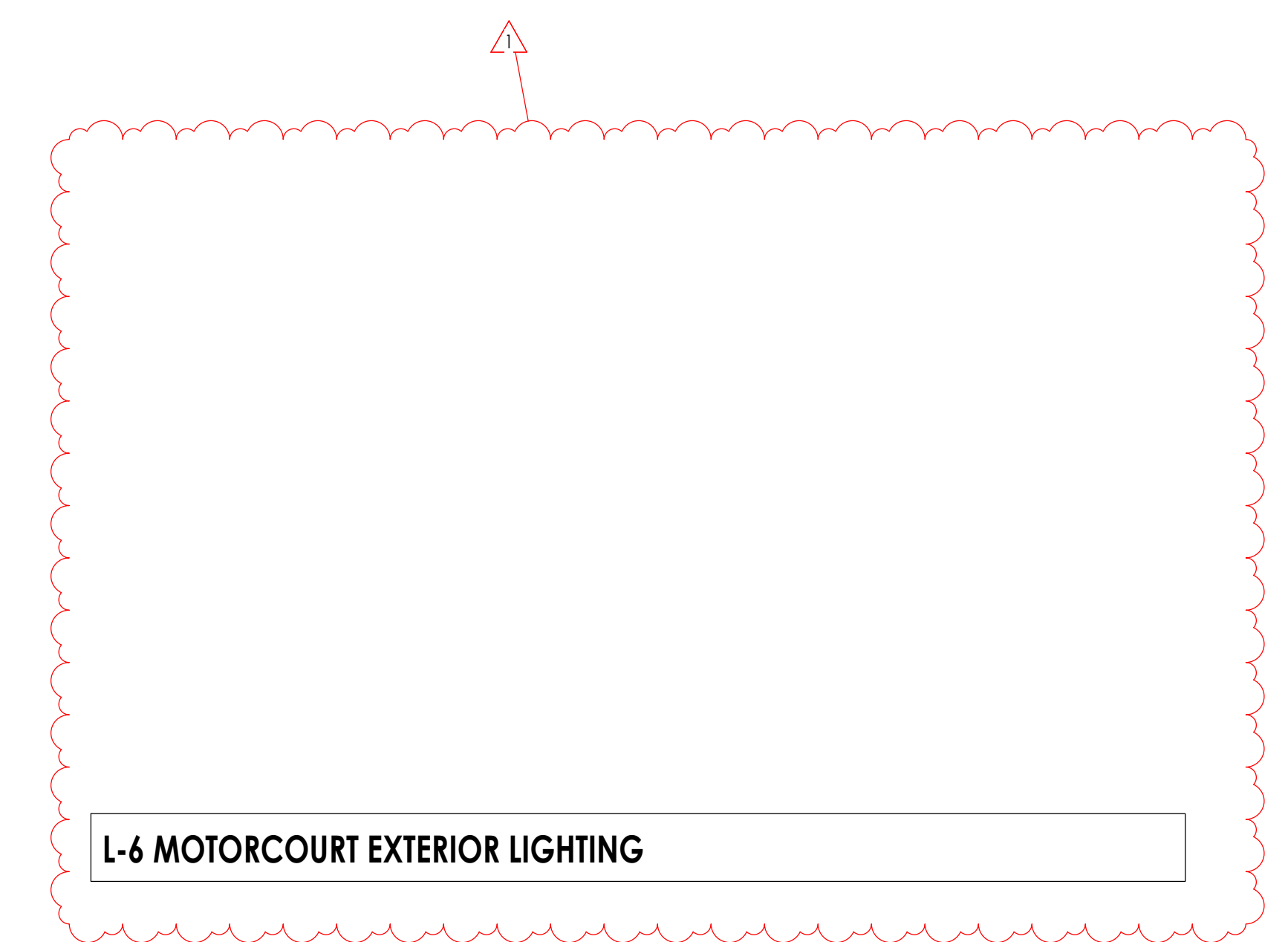
MAXIMUM OF 2.78K COLOR TEMPERATURE  
MAXIMUM OF 700 LUMENS  
CAP TOP DOWNLIGHT ONLY

Shown in Stone.

CHAT WITH A DESIGNER



**L-2 DECORATIVE EXTERIOR WALL SCONCE**



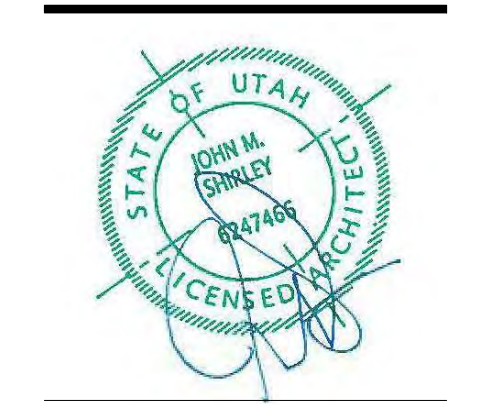
**Architecture**

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Landscape Architecture  
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Scary, Utah 84094  
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**WARM SPRINGS RESIDENCE #33**

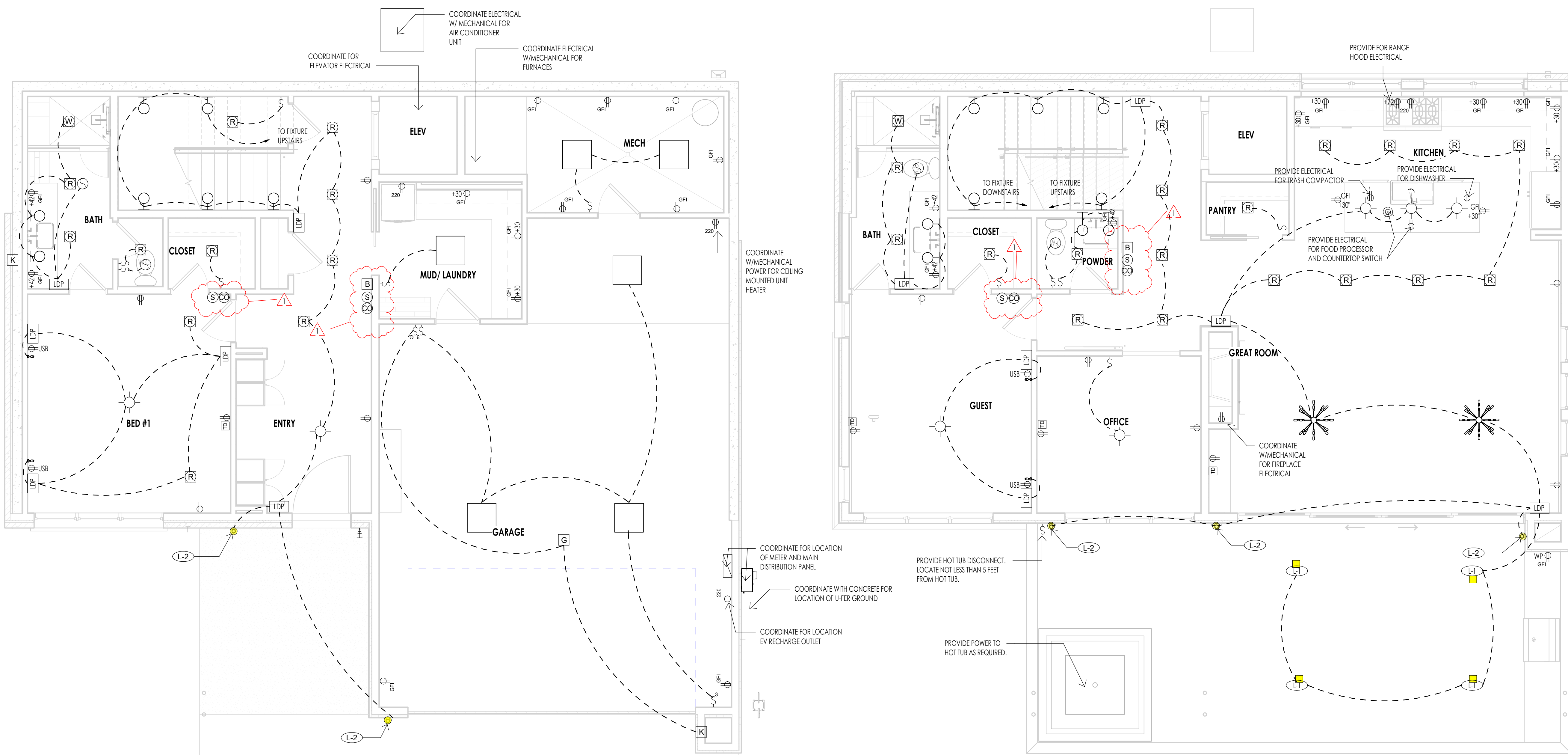
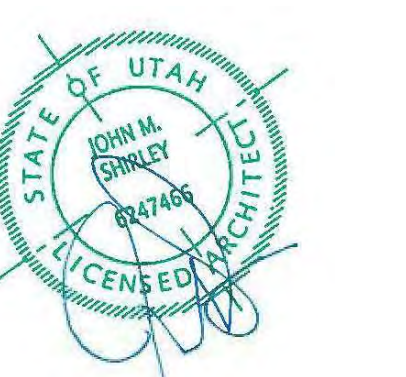
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

SHEET TITLE:  
**ELECTRICAL GENERAL NOTES**

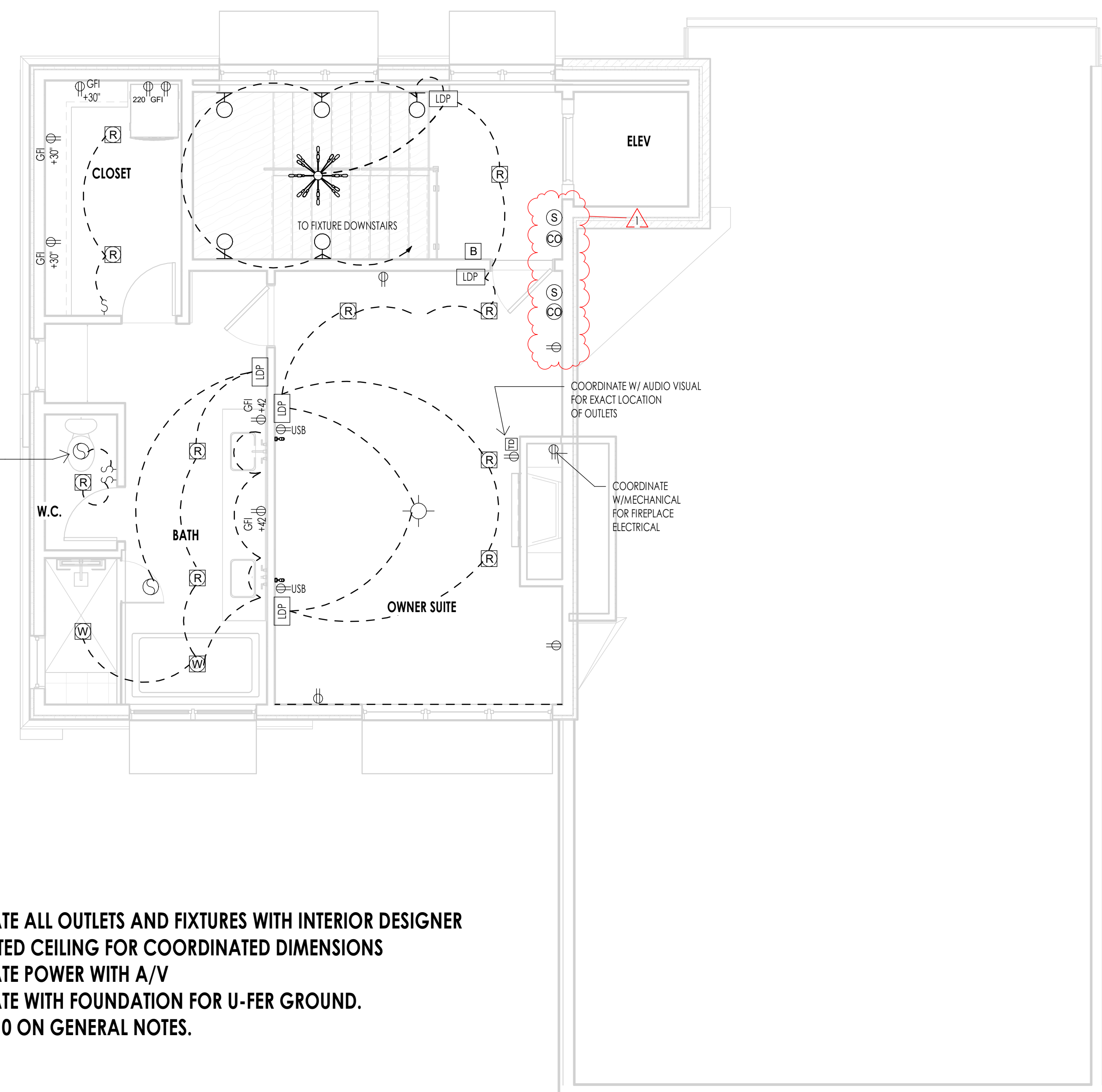
SHEET NUMBER:  
**E101**

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LEVEL 1 - ELECTRICAL  
1/4" = 1'-0"

LEVEL 2 - ELECTRICAL  
1/4" = 1'-0"



LEVEL 3 - ELECTRICAL  
1/4" = 1'-0"

ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
S	SINGLE POLE TOGGLE SWITCH
S <sup>3</sup>	THREE WAY TOGGLE SWITCH
S <sup>4</sup>	FOUR WAY TOGGLE SWITCH
S <sup>G</sup>	GARAGE DOOR OPENER
S <sup>D</sup>	DIMMER TOGGLE SWITCH
Ⓛ	110 V DUPLEX OUTLET ON AN (AFP) ARC FAULT PROTECTED CIRCUIT
Ⓛ <sup>GF1</sup>	110 V GROUND FAULT INTERRUPTER
Ⓛ <sup>WFP</sup>	110 V WATERPROOF GFI OUTLET
Ⓛ <sup>220</sup>	220 V OUTLET
Ⓛ <sup>4</sup>	QUADRUPLUX OUTLET
Ⓛ <sup>110V</sup>	110 V FLOOR DUPLEX OUTLET
Ⓛ <sup>S</sup>	110 V SMOKE DETECTOR W/BATT BACK-UP
Ⓛ <sup>CO</sup>	CARBON MONOXIDE DETECTOR
Ⓛ <sup>EF</sup>	EXHAUST FAN
Ⓛ <sup>EF</sup>	EXHAUST FAN WITH LIGHT FIXTURE
Ⓛ <sup>R</sup>	4" LED RECESSED CAN (FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>C</sup>	4" LED RECESSED CAN (CLOSET FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>W</sup>	RECESSED CAN (WET LOCATION-FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>CM</sup>	CEILING MOUNT FIXTURE
Ⓛ <sup>TL</sup>	TRACK LIGHTING
Ⓛ <sup>WM</sup>	WALL MOUNT FIXTURE
Ⓛ <sup>2X2</sup>	2X2 OR 2X4 FLUORESCENT CEILING FIXTURE
Ⓛ <sup>FLS</sup>	FLUORESCENT STRIP LIGHT
Ⓛ <sup>LED</sup>	LED UNDERCOUNTER LIGHTING
Ⓛ <sup>G</sup>	GARAGE DOOR OPENER
Ⓛ <sup>K</sup>	KEYLESS ENTRY
Ⓛ <sup>B</sup>	DOORBELL
Ⓛ <sup>T</sup>	TELEPHONE (CAT SE WIRING)
Ⓛ <sup>TL</sup>	SINGLE LINE UNLESS NOTED (NUMBER) DESIGNATES PORT OUTLETS REQUIRED
Ⓛ <sup>M</sup>	MULTI-MEDIA NETWORK OUTLET (CAT SE WIRE) W/4 PORT OUTLET
Ⓛ <sup>SW</sup>	STRUCTURED WIRING (FUTURE SMART WIRING) IE (2) RG6 QUAD SHIELD, (3) CAT 6E WIRE - FOR CABLE TV, VIDEO, SATELLITE, ETC. (4) PORT OUTLET
Ⓛ <sup>GD</sup>	GARBAGE DISPOSAL
Ⓛ <sup>LVC</sup>	LOW VOLTAGE RECESSED CAN
Ⓛ <sup>RE</sup>	RECESSED EXTERIOR SOFFIT LIGHT - SEE SPECS ON SHEET E101
Ⓛ <sup>DE</sup>	DECORATIVE EXTERIOR WALL SCONCE - SEE SPECS ON SHEET E101
Ⓛ <sup>MC</sup>	MOTOR COURT EXTERIOR LIGHTING - SEE SPECS ON SHEET E101
Ⓛ <sup>LDP</sup>	LIGHTING DIGITAL PAD
Ⓛ <sup>DB</sup>	DOOR BELL SWITCH
Ⓛ <sup>WBL</sup>	WALL MOUNTED BED LIGHT

- ELECTRICAL GENERAL NOTES**
- SEE SPECS FOR ELECTRICAL INFORMATION.
  - ELECTRICAL LAYOUTS ARE SHOWN IN SCHEMATIC. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LAYOUT AND INSTALLATION OF ALL RELATED ITEMS WITH EXISTING CONDITIONS AND RELATED TRADES.
  - COORDINATE WITH OWNER, INTERIOR DESIGNER AND/OR PLANS FOR FIXTURE SCHEDULES, STYLES, FINISHES, ETC.
  - ALL WORK TO COMPLY WITH 2014 N.E.C. CODES AND 2015 I.R.C. CODES.
  - CENTER OF ALL OUTLETS TO BE 18" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. CENTER OF OUTLETS OVER CABINETS, VANITIES, ETC. TO BE 12" ABOVE FINISH COUNTER HEIGHT UNLESS NOTED OTHERWISE.
  - CONTRACTOR TO FIELD VERIFY LOCATION OF ALL ELECTRICAL FIXTURES, SWITCHES, ETC. WITH OWNER AND DESIGNER PRIOR TO WIRING.
  - PROVIDE SLOPED RECESSED CANS FOR SLOPED CEILING APPLICATIONS & THERMAL PROTECTION CANS WHERE IN CONTACT WITH INSULATION AS REQUIRED.
  - CONTRACTOR TO PROVIDE ELECTRICAL SERVICE TO MECHANICAL EQUIPMENT AS REQUIRED.
  - ALL BRANCH CIRCUITS BE PROTECTED BY AN ARCH-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.
  - PROVIDE A U-FER GROUND. AN ELECTRODE ENCASED BY A LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM. AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2 INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E555B.1.2 AND N.E.C. 250.30)
  - THE CONTRACTOR SHALL VERIFY OUTLET LOCATIONS AND VOLTAGE REQUIREMENTS AS PER APPLIANCE SPECIFICATIONS.
  - STRUCTURED WIRE MEDIA PANEL TO BE "TELETON" (O.A.E.) AND INCLUDE: A/C POWER MODULE, CAT 5 VOICE AND DATA MODULES, 10/100 Mbps SATA HUB, CATV BOOSTER AND AUDIO / VIDEO CONTROL MODULES.
  - SMOKE AND/OR CARBON MONOXIDE DETECTORS ARE TO BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACKUP AS PER CODE REQUIREMENTS. COMBINATION UNITS ARE PERMITTED AS APPROVED.
  - ALL EXTERIOR ELECTRICAL OUTLETS TO HAVE WEATHERPROOF COVERS.
  - ALL 125V 15 AND 20 AMP RECEPTACLES WITHIN DWELLING UNITS MUST BE TAMPER PROOF.

- NOTES:**
- COORDINATE ALL OUTLETS AND FIXTURES WITH INTERIOR DESIGNER
  - SEE REFLECTED CEILING FOR COORDINATED DIMENSIONS
  - COORDINATE POWER WITH A/V
  - COORDINATE WITH FOUNDATION FOR U-FER GROUND. SEE NOTE 10 ON GENERAL NOTES.

WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21

REVISIONS:  
1 04-24-2023 PER CITY COMMENTS

SHEET TITLE:  
ELECTRICAL PLANS

SHEET NUMBER:  
E102

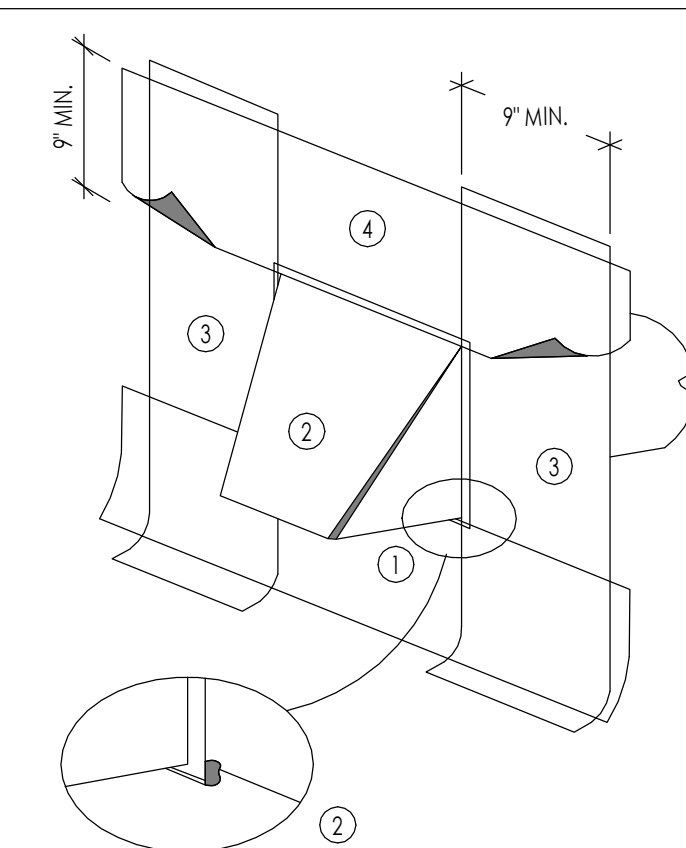
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**MECHANICAL GENERAL NOTES**

- PLUMBING GENERAL NOTES**
- THE PLUMBING SYSTEM SHALL BE DESIGNED BY A LICENSED MECHANICAL CONTRACTOR/ DESIGNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IRC, IPC AND IECC.
  - THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE PLUMBING SYSTEM INSTALLATION AND SHALL PROVIDE A (1) ONE YEAR WARRANTY BEGINNING FROM THE TIME OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER COMPLETE OPERATION AND MAINTENANCE MANUALS. THE CONTRACTOR SHALL ALSO SET UP A TIME TO PROVIDE COMPLETE TRAINING OF THE SYSTEM TO THE OWNER.
  - THE PLUMBING CONTRACTOR SHALL REVIEW AND SHALL GANG ALL ROOF VENTS INTO SINGLE ROOF VENTS WHERE POSSIBLE AND SHALL RUN THE VENTS OUT OF THE ROOF AT THE HIGHEST POINT POSSIBLE. ALL VENTS SHALL HAVE BLOCKING ON EACH SIDE OF THE VENT IN THE ROOF STRUCTURE TO ENSURE THE VENTS WILL NOT BE MOVED DUE TO SNOW ON THE ROOF. ALL VENTS SHALL BE SIZED PER THE BUILDING CODE BUT SHALL NOT BE LESS THAN 3 INCH PIPES. THE PLUMBING CONTRACTOR SHALL COORDINATE THAT THE PROPER FLASHING HAS BEEN INSTALLED FOR EACH VENT.
  - THE ROOF VENTS SHALL EXTEND ABOVE THE ROOF AS REQUIRED BY THE LOCAL JURISDICTION AND BUILDING CODES. THE PLUMBING CONTRACTOR SHALL COORDINATE THIS INSTALLATION.
  - ALL PLUMBING FIXTURES ARE SPECIFIED ON THE MECHANICAL DRAWINGS, AND ON THE INTERIOR DRAWINGS. THE PLUMBING CONTRACTOR SHALL PROVIDE FULL AND COMPLETE SHOP DRAWINGS SUBMITTAL ON ALL PLUMBING FIXTURE ITEMS FOR APPROVAL BY OWNER AND DESIGN TEAM.
  - THE PLUMBING FIXTURES SHALL HAVE THE FOLLOWING REQUIREMENTS:
    - SHOWER HEADS SHALL HAVE A FLOW RATE OF 2.5 GPM OR LESS
    - WATER CLOSETS SHALL HAVE ECONO-FLUSH TANK 1.6 GAL. MAX FLUSH
    - ALL NOSE BIBS SHALL BE NON-FREEZE TYPE WITH BACK FLOW PREVENTERS
  - THE PLUMBING CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. TAKE CARE DURING BUILDING CONSTRUCTION TO SEE THAT PROVISIONS ARE MADE FOR PROPER FUTURE SUPPORT AND THAT PROVISIONS ARE MADE FOR PROPER FUTURE SUPPORT. ROUGH IN PIPING IS ACCURATELY SET AND PROTECTED FROM MOVEMENT OF DAMAGE DURING CONSTRUCTION.
  - THE PLUMBING CONTRACTOR SHALL MAKE SURE THAT NO PLUMBING WILL BE INSTALLED WITHIN THE EXTERIOR WALL.
  - PLUMBING CONTRACTOR SHALL ASSESS WATER PRESSURE AND ENSURE ADEQUATE PRESSURE IS AVAILABLE FOR MULTIPLE FUTURE USE SIMULTANEOUSLY WITH OUT PRESSURE DECREASE OR TEMPERATURE FLUCTUATION.
  - PLUMBING CONTRACTOR SHALL PROVIDE A TURN OFF VALVE AND DRAIN AT THE LOWEST LEVEL OF THE FACILITY. ALL FIXTURES SHALL BE ABLE TO DRAIN TO THIS POINT. PROVIDE A FLOOR DRAIN AT THE LOCATIONS OF PLUMBING SYSTEM DRAIN.
  - ALL SUPPLY WASTE AND GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. ALL WATER SUPPLY LINES IN THE BUILDING SHALL BE TYPE "1" COPPER. TO INCLUDE PIPING TO MANFOLDS. EQUIPMENT SHALL BE COPPER WITHIN THE BUILDING. ALL SUPPLY TO FIXTURES MAY BE POLYETHYLENE CROSS LINE PIPING FOR ABOVE GROUND AND BUILDING APPLICATIONS. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. ALL CONNECTIONS FOR POLYETHYLENE PIPING SHALL BE BRASS. FITTINGS WITH COMPRESSION BAND FITTINGS.
  - ALL WATER LINES UNDERGROUND SHALL BE TYPE "1" COPPER. ALL FITTINGS AND JOINTS SHALL BE SWEAT SOLDER JOINTS TOGETHER.
  - WASTE LINES SHALL BE PROVIDED WITH CLEAN OUT AS REQUIRED. EXTEND CLEAN OUT TO ACCESSIBLE SURFACE. DO NOT PLACE CLEAN OUTS IN FLOORS UNLESS PREVIOUSLY APPROVED BY THE DESIGN TEAM AND OWNER.
  - GAS PIPING SHALL BE INSTALLED AS PER THE LATEST CODE REQUIREMENTS FOR THIS TYPE OF PROJECT. ALL GAS PIPING SHALL BE FULLY TESTED AND INSPECTED FOR ANY LEAKS PRIOR TO FINAL COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL INSTALL SHUT OFF VALVES AT EACH GAS APPLIANCE AND SHALL LOCATE THE VALVE TO HAVE ACCESS TO THE VALVE.
  - PLUMBING CONTRACTOR SHALL TEST ALL PIPING INCLUDING DRAINAGE WASTE LINES, WATER PIPING, NATURAL GAS PIPING AND FITTINGS. ALL TEST SHALL BE PERFORMED TO MEET THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.
  - ALL WATER LINES SHALL FULLY DISINFECTED UPON THE FINAL COMPLETION OF THE PROJECT, AND BEFORE CERTIFICATE OF OCCUPANCY AND TURN OVER TO THE OWNER.
  - ALL DRAINS SHALL HAVE A TRAP PRIMER OR EQUIVALENT AS NECESSARY TO KEEP THE INTEGRITY OF THE PLUMBING TRAP.

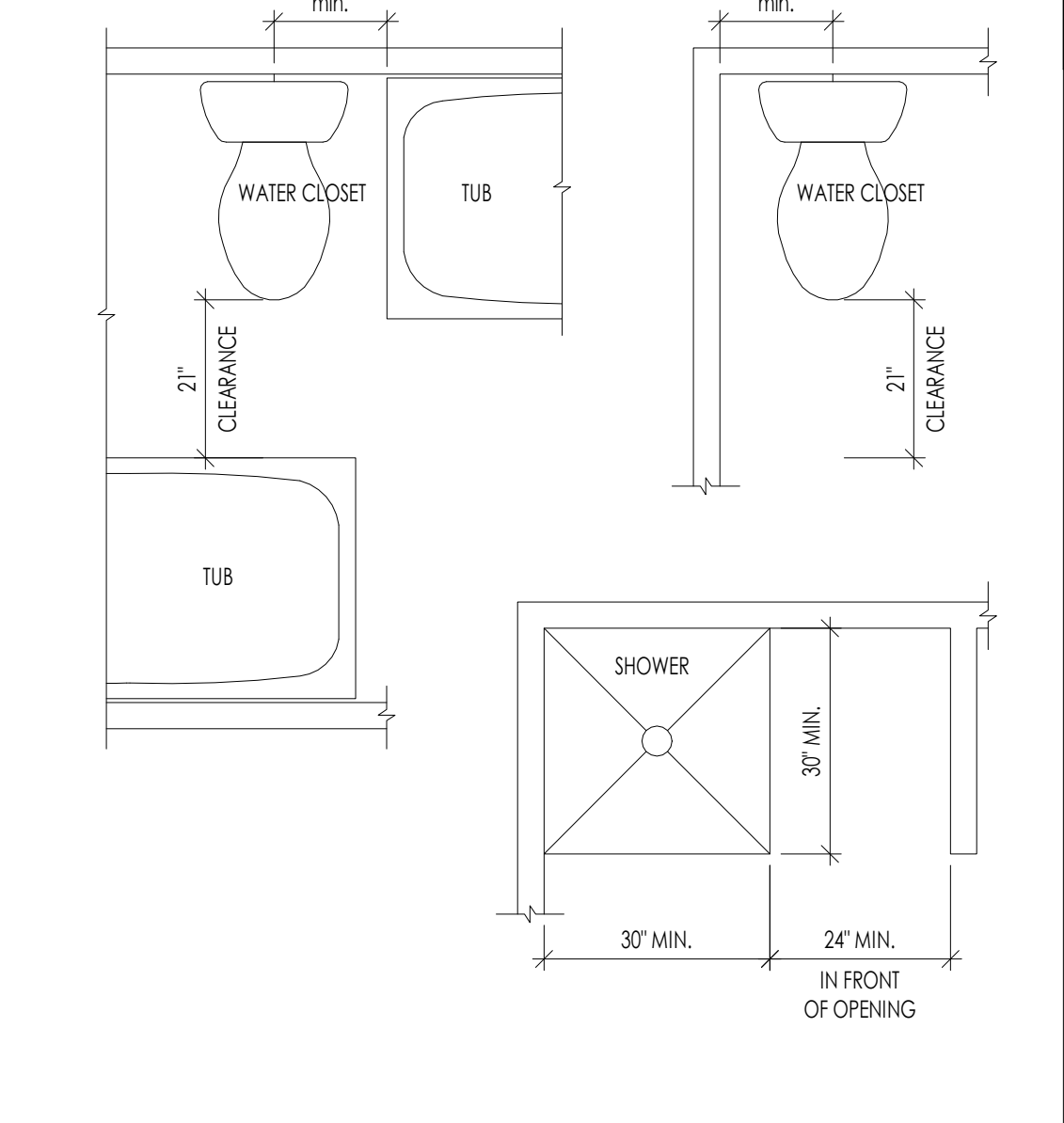
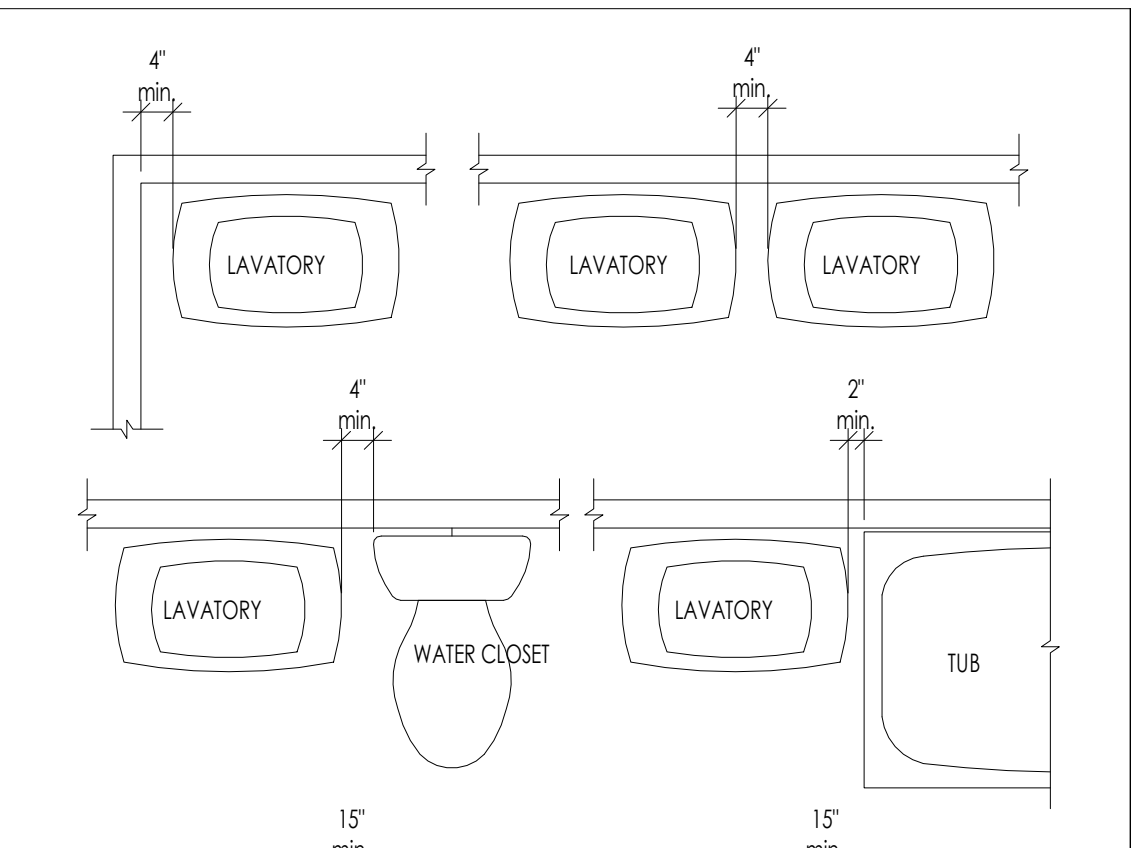
- MECHANICAL GENERAL NOTES**
- THE MECHANICAL SYSTEM SHALL BE DESIGNED BY A LICENSED MECHANICAL CONTRACTOR/ DESIGNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IRC, IMC AND IECC.
  - THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE MECHANICAL SYSTEM INSTALLATION AND SHALL PROVIDE A (1) ONE YEAR WARRANTY BEGINNING FROM THE TIME OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER COMPLETE OPERATION AND MAINTENANCE MANUALS. THE CONTRACTOR SHALL ALSO SET UP A TIME TO PROVIDE COMPLETE TRAINING OF THE SYSTEM TO THE OWNER.
  - THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK. THE MECHANICAL CONTRACTOR MUST ALSO PROVIDE NOTIFICATION TO THE ARCHITECT AND CONTRACTOR OF CONDITIONS THAT MAY BE DIFFERENT THAN EXPECTED DURING BIDDING.
  - ALL LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING SHALL BE RAN, INSTALLED AND CONNECTED BY THE MECHANICAL CONTRACTOR OR THE MECHANICAL CONTRACTOR SHALL CONTRACT THE SCOPE OF WORK.
  - ALL EQUIPMENT SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW. THE CONTRACTOR MUST PROVIDE THE DOCUMENTATION THAT IT MEETS THE REQUIREMENTS OF THE ENERGY LEVELS BEING ACHIEVED WITHIN THIS BUILDING.
  - THE MECHANICAL CONTRACTOR SHALL REVIEW AND COORDINATE WITH THE DRAWINGS FOR LOCATIONS OF ALL MECHANICAL ZONES.
  - EXHAUST FANS WHERE SHOWN ON EITHER THE MECHANICAL OR ELECTRICAL PLANS SHALL BE SIZED FOR A MINIMAL RATE OF 50 CFM. ALL FANS SHALL BE HARD DUCTED WITH RIGID DUCT (NO FLEX DUCT SHALL BE ALLOWED), AND DIRECTED DIRECTLY TO THE EXTERIOR OF THE BUILDING IN A SOFFIT OR SIDE WALL. THE TERMINATION OF ALL EXHAUST FANS SHALL BE A MINIMUM OF 10'-0" AWAY FROM ANY OPERABLE WINDOW. TERMINATIONS SHALL BE INSTALLED AS NOT TO BE BLOCKED BY SNOW AND ICE. FANS SHALL BE A DIRECT DRIVE CENTRIFUGAL UNIT WITH SLOW SPEED MOTOR. PROVIDE AN ACOUSTICAL INSULATION, GRIPS, CAPS, ETC AS REQUIRED.
  - ALL GRILLS AND REGISTERS MUST BLEND TO THE ADJACENT FINISH, AND SHALL BE PROVIDED TO MEET THE REQUIREMENTS FOR THE FLOW RATE AS PER THE CFM REQUIREMENTS. ALL GRILLS SHALL BE EITHER PAINTED FOR METAL FINISH SELECTED.
  - WATER HEATERS
    - THE REQUIRED NUMBER OF WATER HEATERS ARE SHOWN ON THE MECHANICAL PLANS. ALL WATER HEATERS SHALL BE 90% OR BETTER HIGH EFFICIENCY WATER HEATERS WITH RAPID RECOVERY. ALL WATER HEATERS SHALL BE INSTALLED WITH SEISMIC ANCHORING, AS PER DETAILS.
    - ALL WATER HEATERS SHALL BE VENTED TO THE EXTERIOR.
    - THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN WHETHER SHOWN OR NOT AT THE BASE OF ALL WATER HEATERS. THE FLOOR DRAIN MUST BE LOCATED, AND THE FLOOR MUST SLOPE TOWARD THE DRAIN IN A POSITIVE FLOW.
  - GAS FIRED FURNACES
    - THE REQUIRED NUMBER OF GAS FIRED FURNACES SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER. THE LOCATION IS SHOWN ON THE MECHANICAL DRAWINGS WHERE THE LOCATIONS ARE PROVIDED FOR THE GAS FIRED FURNACES.
    - THE GAS FIRED FURNACES SHALL BE A MINIMUM OF 90% OR BETTER HIGH EFFICIENCY FURNACE. THE EXACT SIZE OF EACH OF THESE UNITS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER.
    - THE VENTING OF EACH GAS FIRED FURNACE SHALL BE PVE PIPE AND SHALL BE LOCATED AWAY FROM THE MAIN ENTRIES OF THE BUILDING, AND WINDOW LOCATIONS. COORDINATE THE EXACT LOCATION WITH THE OWNER AND ARCHITECT.
    - THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN BY THE GAS FIRED FURNACES FOR THE UNIT CONDENSATE LINES.
  - GAS FIRED BOILERS
    - THE REQUIRED NUMBER OF GAS FIRED BOILERS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER. THE LOCATION IS SHOWN ON THE MECHANICAL DRAWINGS WHERE THE LOCATIONS ARE PROVIDED FOR THE GAS FIRED BOILERS.
    - THE GAS FIRED BOILER SHALL BE A MINIMUM OF 90% OR BETTER HIGH EFFICIENCY FURNACE. THE EXACT SIZE OF EACH OF THESE UNITS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER.
    - THE VENTING OF EACH GAS FIRED BOILER SHALL BE PVE PIPE AND SHALL BE LOCATED AWAY FROM THE MAIN ENTRIES OF THE BUILDING, AND WINDOW LOCATIONS. COORDINATE THE EXACT LOCATION WITH THE OWNER AND ARCHITECT.
    - THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN BY THE GAS FIRED BOILER FOR THE UNIT CONDENSATE LINES.
  - DUCTWORK
    - ALL DUCTWORK SHALL BE 24 GA. MINIMUM RIGID DUCT AND SHALL BE FULL SEALED AT EACH JOINT LOCATION. NO FLEXIBLE DUCT IS ALLOWED WITHIN THE INSTALLATION.
    - ALL DUCTWORK IN CEILINGS OF UNHEATED ROOM OR UNDER SLAB SHALL BE INSULATED DUCTWORK. ALL DUCTWORK WITHIN THE HEATING ENVELOPE OF THE STRUCTURE DOES NOT REQUIRE TO BE INSULATED, UNLESS SPECIFICALLY NOTED.
    - ALL DUCTWORK SHALL BE IN THE SPACE ALLOCATED, AND SHALL NOT BE DROPPED BELOW FLOOR JOISTS, UNLESS NOTED ON DRAWINGS, OR PREVIOUSLY APPROVED BY THE ARCHITECT AND OWNER.



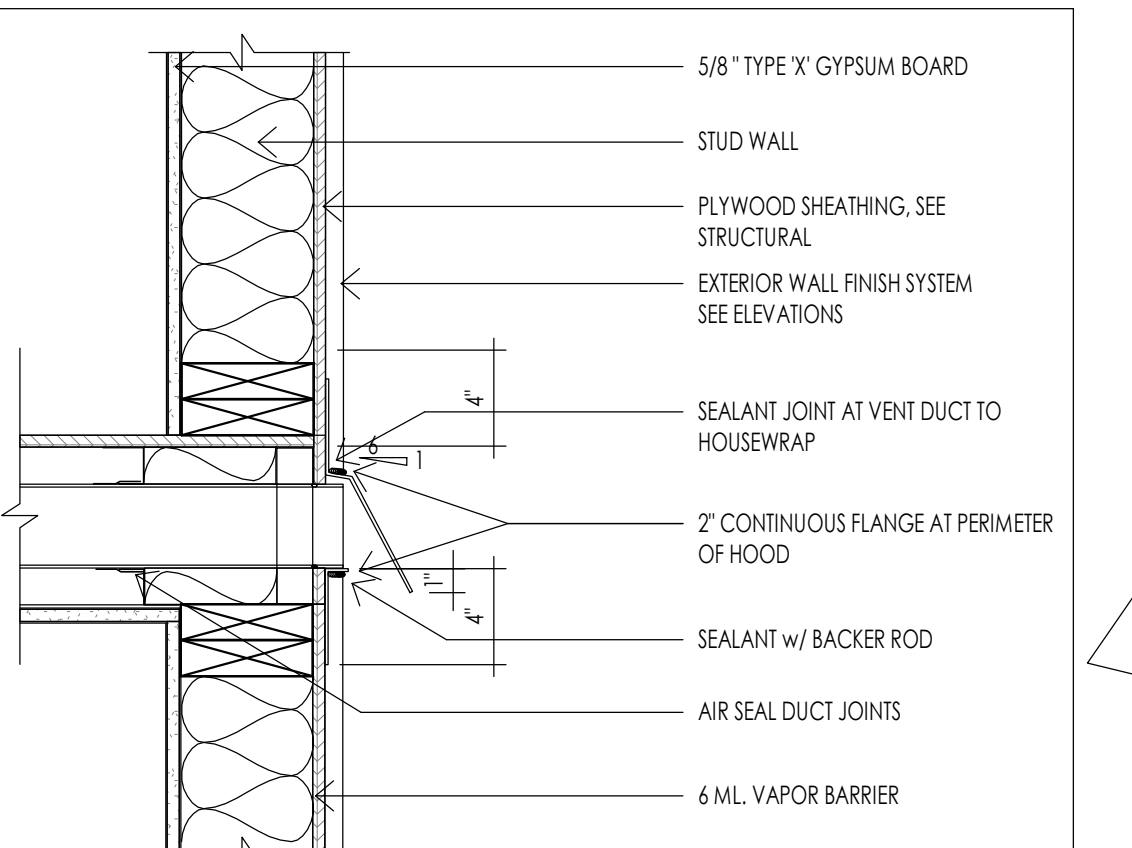
NOTE: APPLY SEALANT BETWEEN NAILING FLANGE AT SILL AND JAMB FLASHING.

- SILL FLASHING**  
9 INCH MIN. WIDE SELF-ADHERED SELF-HEALING RUBBERIZED ELASTOMERIC ASPHALT FLASHING MEMBRANE INSTALLED A MIN. 9 INCHES BEYOND ROUGH OPENING  
-DO NOT OVERLAP THE TOP OF SILL FRAMING  
-ADHERE ONLY AT TOP EDGE, LEAVE UNATTACHED AT BOTTOM SO THAT THE PAPER CAN BE INSTALLED UNDERNEATH
- METAL EXTERIOR VENT**  
24 GA. MIN. GALV. SHEET METAL VENT MUST BE INSTALLED OVER SILL FLASHING. INSTALL JAMB FLASHING OVER OR UNDER NAILING FLANGE. SET VENT IN A CONTINUOUS BED OF SEALANT.  
-DO NOT FASTEN THE BOTTOM 9 INCHES OF THE JAMB FLASHING SO THE WEATHER-RESISTANT BARRIER APPLIED LATER MAY BE SUPPLIED UNDERNEATH THE FLASHING IN A WEATHERBOARD FASHION.
- JAMB FLASHING**  
9 INCH MIN. WIDE SELF-ADHERED SELF-HEALING RUBBERIZED ELASTOMERIC ASPHALT FLASHING MEMBRANE FLASHING INSTALLED OVER AND BELOW SILL FLASHING AND ABOVE TOP OF FUTURE HEAD FLASHING.
- HEAD FLASHING**  
APPLY SELF-ADHERED SELF-HEALING RUBBERIZED ELASTOMERIC ASPHALT FLASHING MEMBRANE OVER DRYER VENT FLANGE. EXTEND HEAD FLASHING BEYOND EACH JAMB FLASHING.

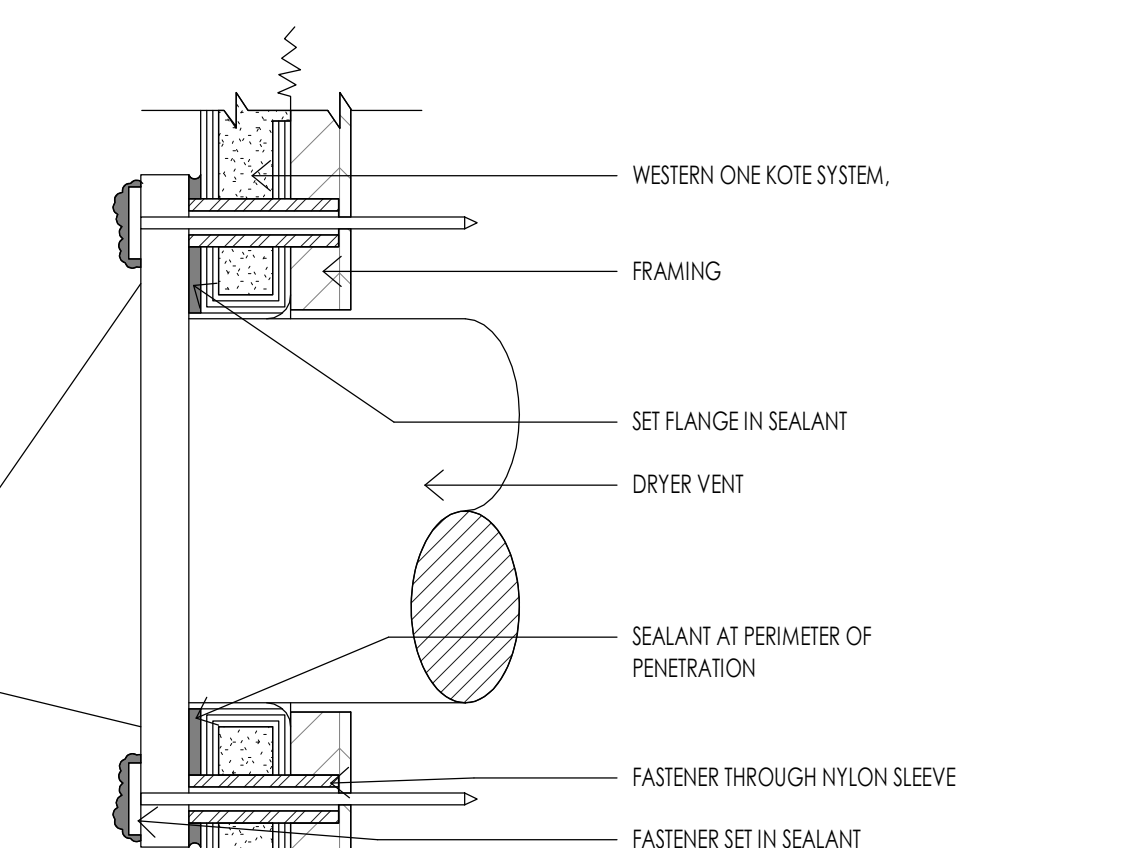
**EXHAUST VENT DETAIL** 1 1/2" = 1'-0"



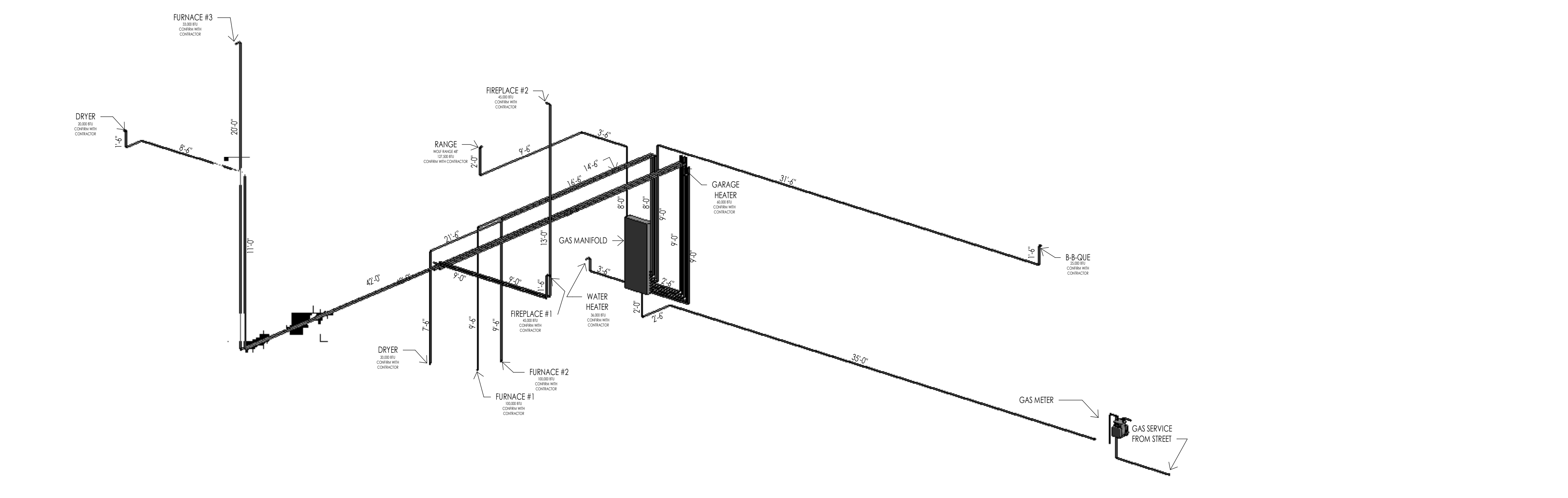
**MINIMUM PLUMBING FIXTURE CLEARANCES** 2 1/8" = 1'-0"



**WALL EXHAUST VENT** 3 1/2" = 1'-0"



**TYPICAL DRYER VENT (SHOWN WITH STUCCO)** 4 6" = 1'-0"



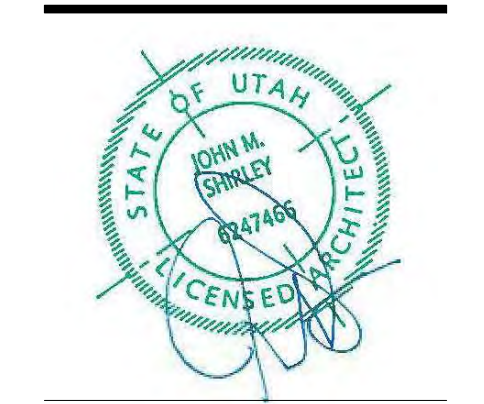
**GAS SCHEMATIC** 5 1/10" = 1'-0"

**Think Architecture**  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

7927 So. Highpoint Parkway, Suite 300  
Sandusky, Utah 84094  
ph. 801.269.0055  
fax 801.269.1425  
www.thinkarc.com

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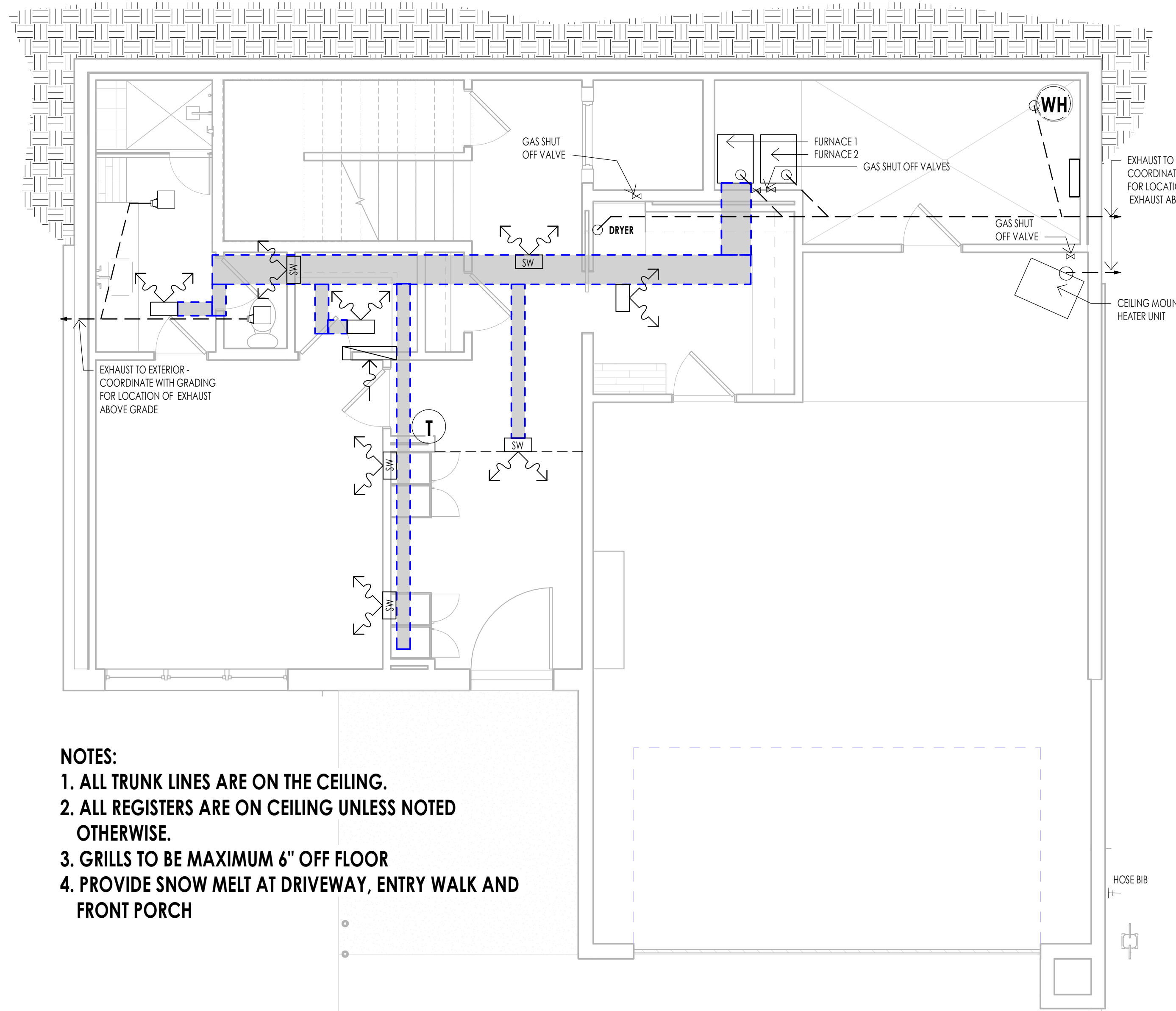
**WARM SPRINGS RESIDENCE #33**  
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

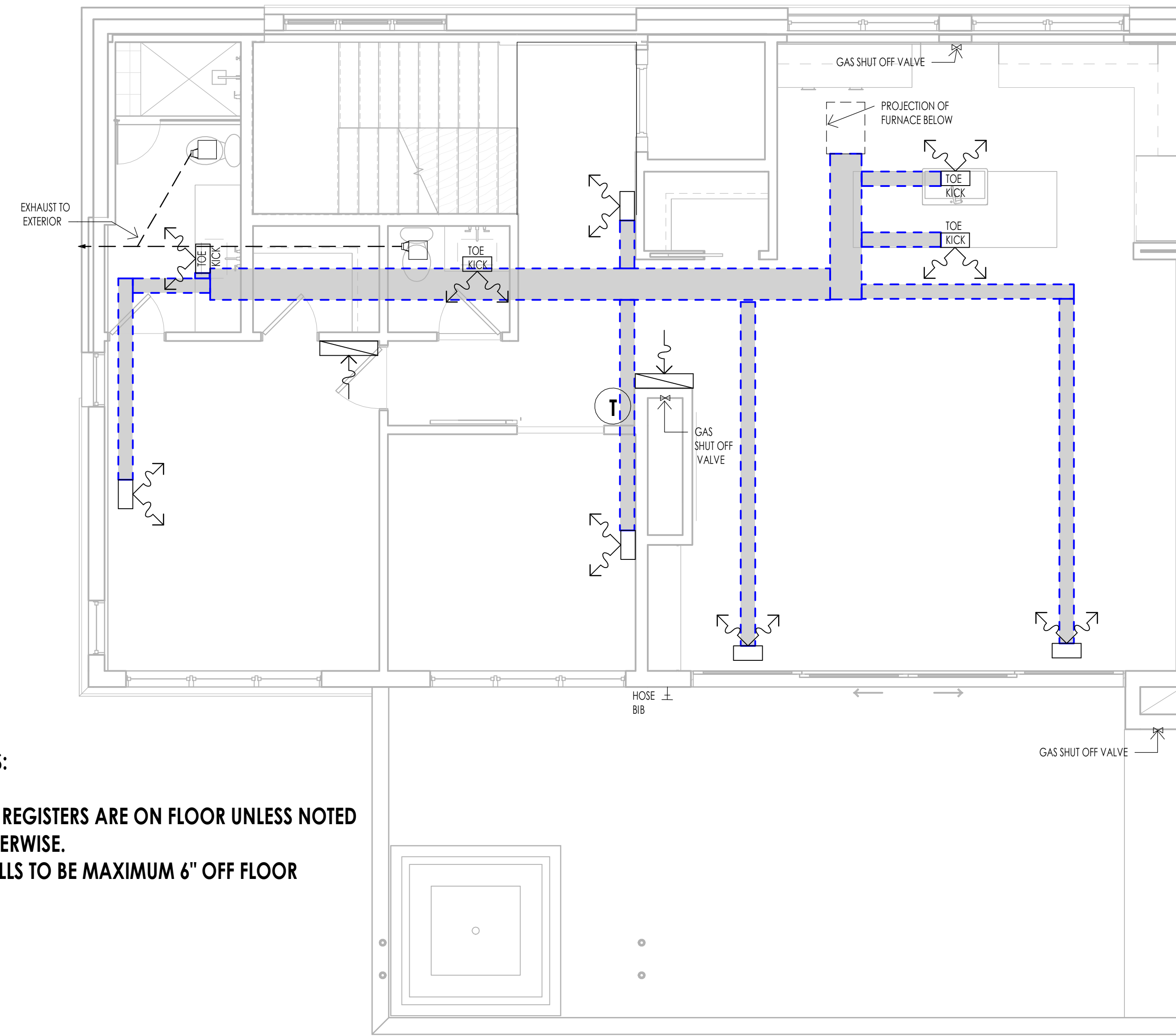
SHEET TITLE:  
**MECHANICAL GENERAL NOTES**

SHEET NUMBER:  
**M101**

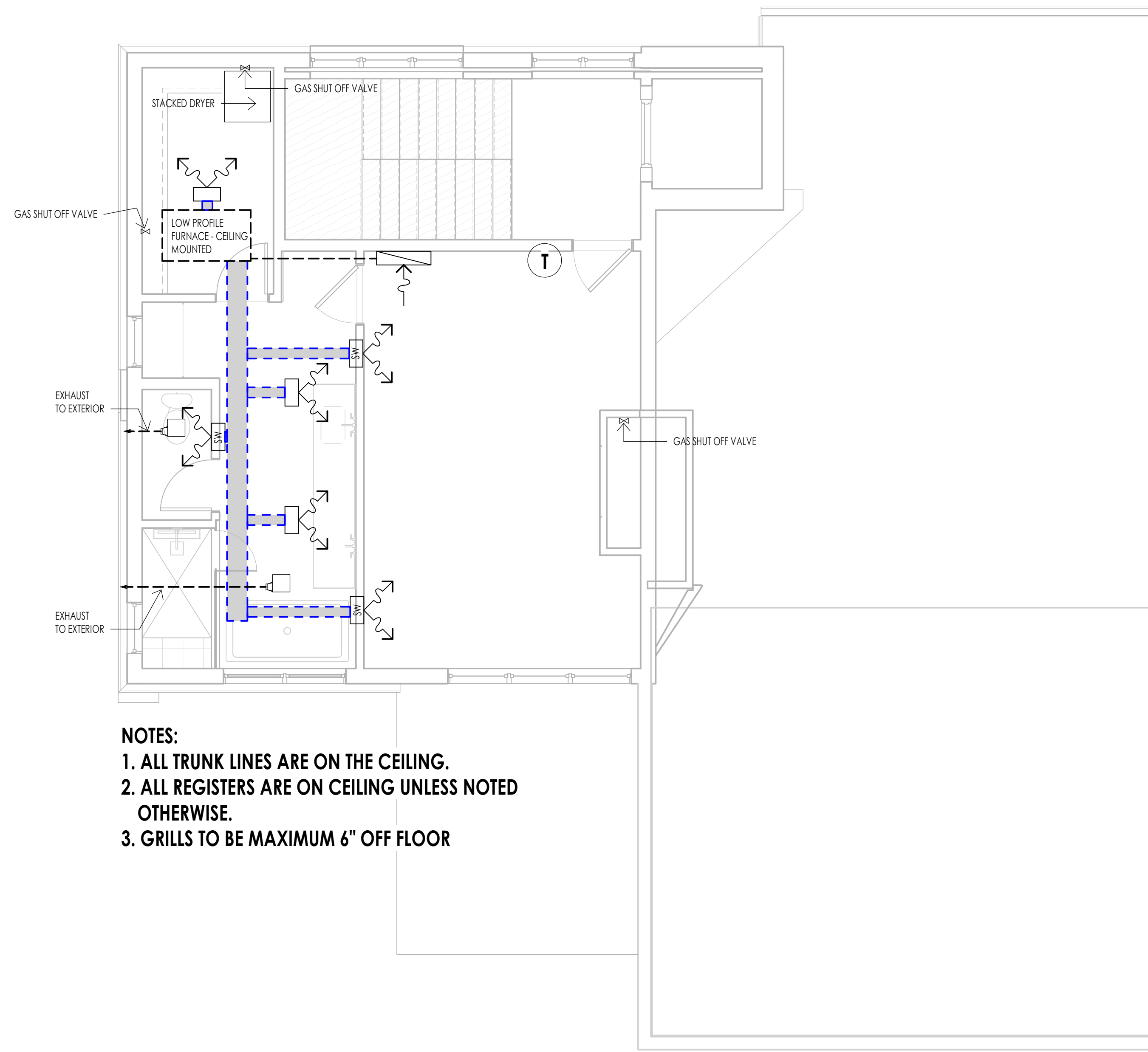
© 2021 THINK ARCHITECTURE INC.



- NOTES:**
1. ALL TRUNK LINES ARE ON THE CEILING.
  2. ALL REGISTERS ARE ON CEILING UNLESS NOTED OTHERWISE.
  3. GRILLS TO BE MAXIMUM 6" OFF FLOOR
  4. PROVIDE SNOW MELT AT DRIVEWAY, ENTRY WALK AND FRONT PORCH



- NOTES:**
1. ALL REGISTERS ARE ON FLOOR UNLESS NOTED OTHERWISE.
  2. GRILLS TO BE MAXIMUM 6" OFF FLOOR



- NOTES:**
1. ALL TRUNK LINES ARE ON THE CEILING.
  2. ALL REGISTERS ARE ON CEILING UNLESS NOTED OTHERWISE.
  3. GRILLS TO BE MAXIMUM 6" OFF FLOOR

MECHANICAL LEGEND	
SYMBOL	TYPE
	FLOOR OR CEILING MOUNTED HVAC REGISTER
	SW = SIDE WALL T.K. = TOE KICK
	HVAC RETURN AIR REGISTER
	HOSE BIB
	GAS SHUT OFF VALVE
	BATHROOM EXHAUST FAN
	THERMOSTAT
	WATER HEATER

**MECHANICAL GENERAL NOTES**

1. SEE SHEETS A0.3 FOR MECHANICAL AND PLUMBING PROJECT KEY NOTES AND MECHANICAL/PLUMBING INFORMATION.
2. MECHANICAL AND PLUMBING LAYOUTS ARE SHOWN IN SCHEMATIC. THE PLUMBING AND MECHANICAL CONTRACTORS ARE RESPONSIBLE TO DESIGN AND SIZE EQUIPMENT CAPACITY, PIPE AND DUCT LINES, PLUMBING LINES AND ALL OTHER EQUIPMENT AS PER NATIONAL, STATE AND LOCAL CODES AND AS PER THE GENERAL NOTE REQUIREMENTS.
3. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LAYOUT AND INSTALLATION OF ALL RELATED ITEMS WITH EXISTING CONDITIONS AND ALL OTHER TRADES.
4. COORDINATE WITH OWNER, INTERIOR DESIGNER AND/OR PLANS FOR FIXTURE SCHEDULES, STYLES, FINISHES, ETC.
5. ALL REGISTERS AT LOWER LEVEL TO BE CEILING MOUNT UNLESS OTHERWISE NOTED.
6. COORDINATE BETWEEN MECH. SUB AND ELECTRICAL SUB AT PRECONSTRUCTION MEETING FOR DUCT LOCATIONS AND RECESSED CAN LOCATIONS.
7. ALL PLUMBING FIXTURE/MECHANICAL EQUIPMENT SELECTIONS TO BE APPROVED BY OWNER/DEVELOPER.
8. PROVIDE REQUIRED COMBUSTION AIR VENT DUCTS AT CEILING FOR WATER HEATER AND FURNACE AS REQUIRED BY BLDG. CODES AND MANUFACTURER.
9. MECHANICAL DESIGN SHOULD BE IN ACCORDANCE WITH 2006 INTERNATIONAL RESIDENTIAL CODE.
10. DUCT PENETRATIONS IN GARAGES SHALL BE 26 GAUGE SHEET METAL MIN. AND SHALL HAVE NO OPENINGS INTO THE GARAGE.
11. FLUES SHALL NOT PENETRATE THE ROOF WITHIN 4'-0" OF PARTY WALLS.
12. RADON: THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE RADON TESTING AND APPLY AN APPROPRIATE MITIGATION SYSTEM.

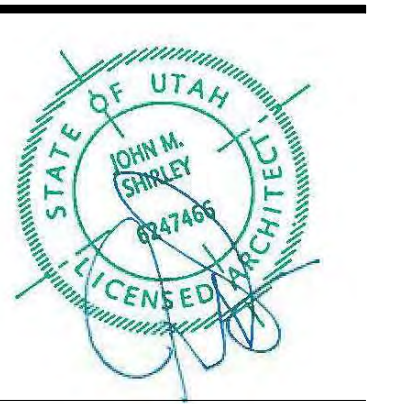


Architecture  
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WARM SPRINGS RESIDENCE #33

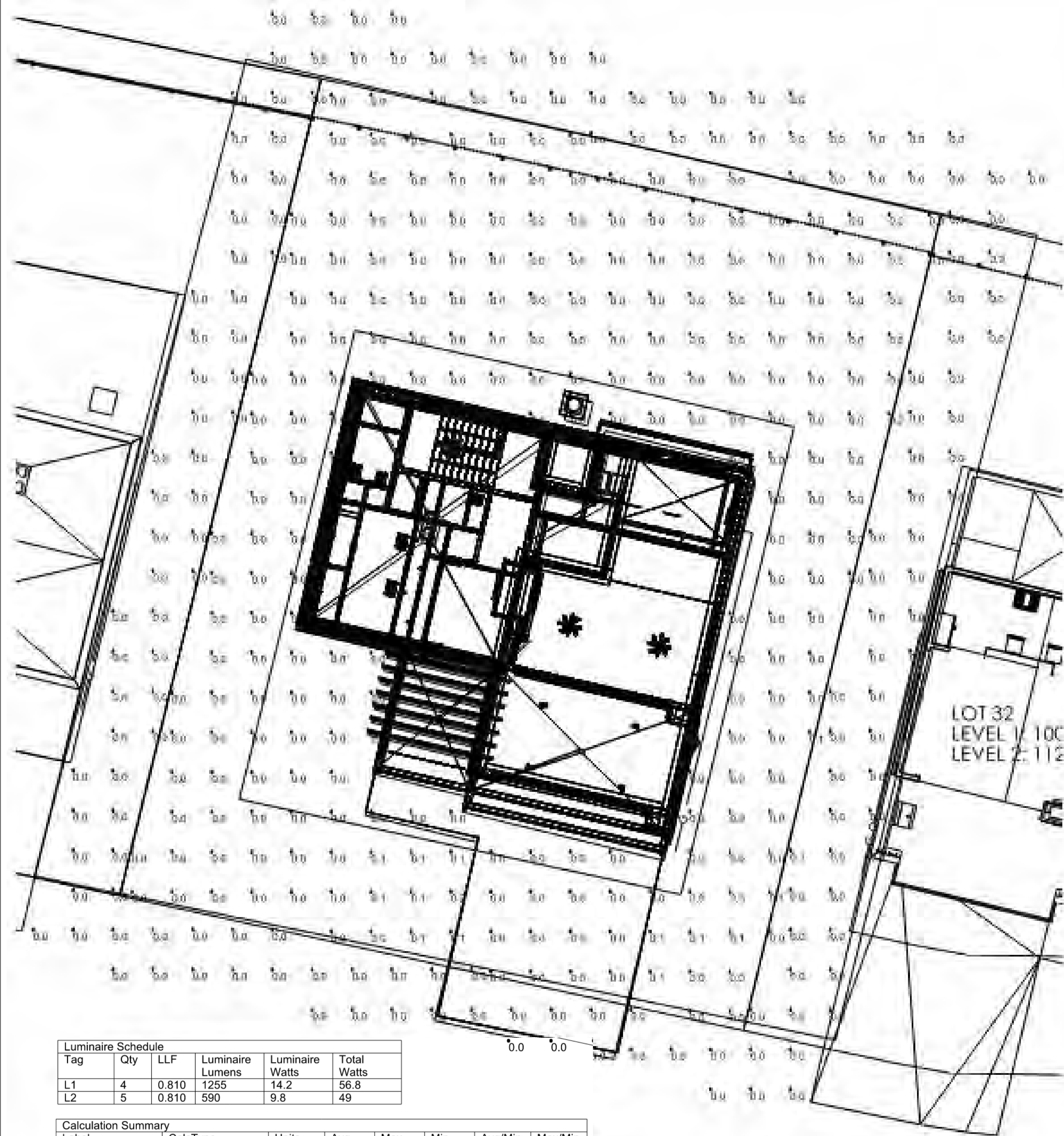
170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.33  
DATE: 2023.09.21  
REVISIONS:

SHEET TITLE:  
MECHANICAL PLAN

SHEET NUMBER:  
M102

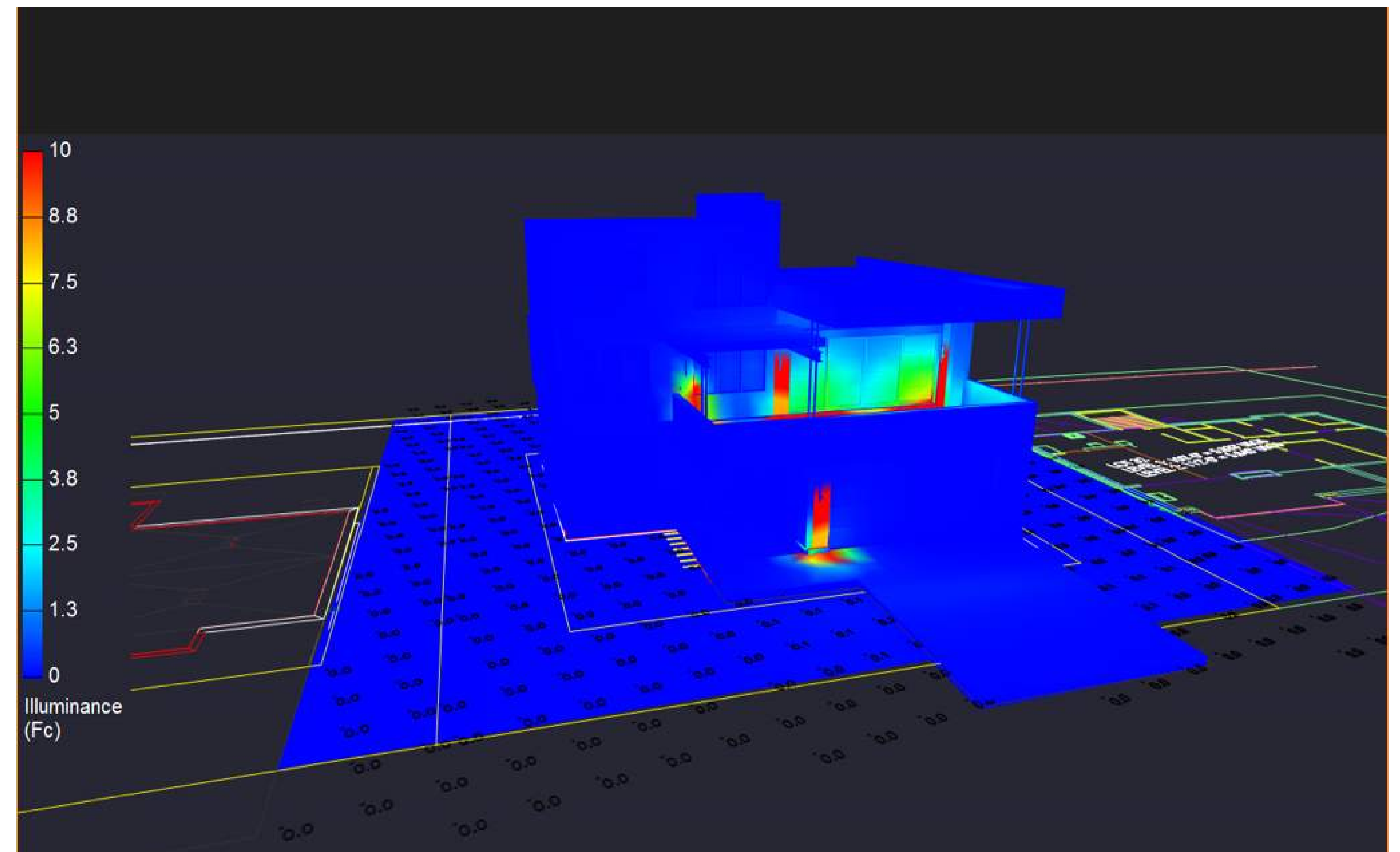
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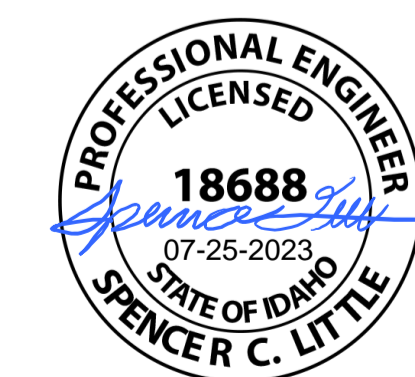
Luminaire Schedule					
Tag	Qty	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
L1	4	0.810	1255	14.2	56.8
L2	5	0.810	590	9.8	49


Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY	Illuminance	Fc	0.01	0.2	0.0	N.A.	N.A.
TRESPASS	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.

POINT-BY-POINT CALCULATION AND SUMMARIES  
(5 FOOT GRID)



PSEUDO RENDERING WITH ILLUMINANCE SCALE




**WARM SPRING RESIDENCES**  
 KETCHUM, ID  


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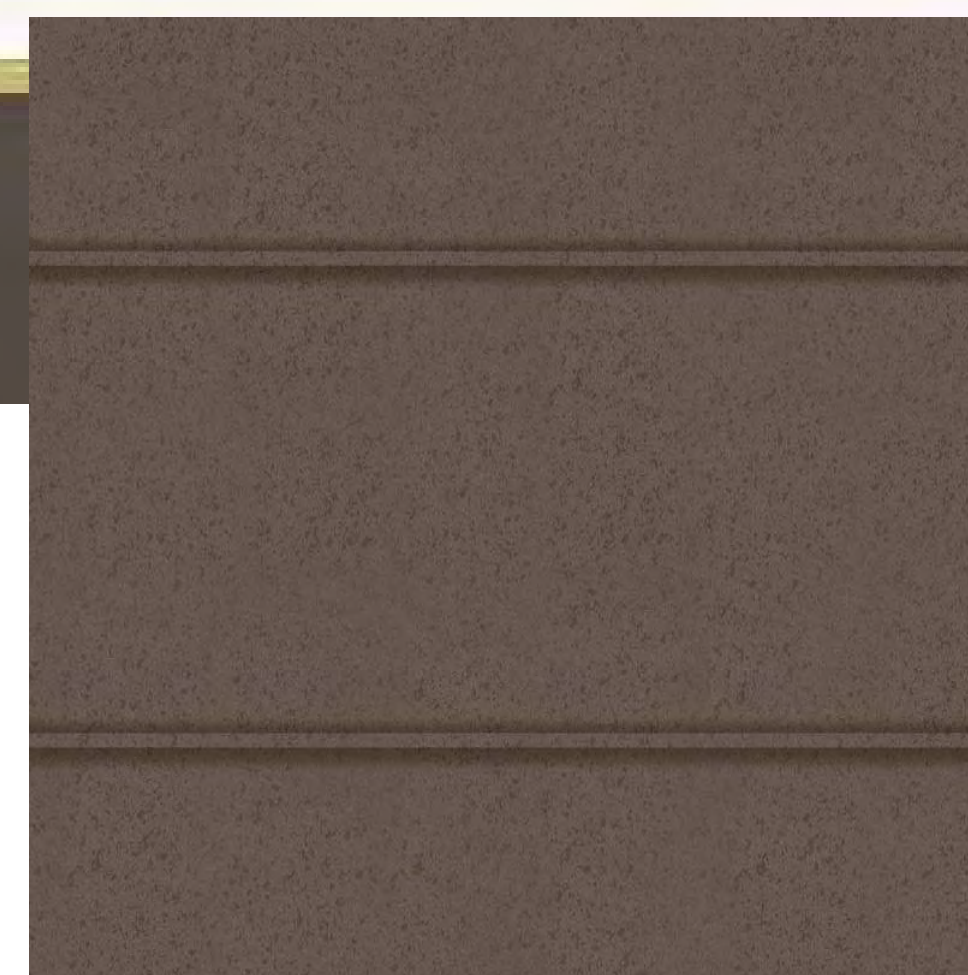
**LOT 33 CALCULATIONS AND**  
 RENDERINGS  
**SPECTRUM**  
 ENGINEERS



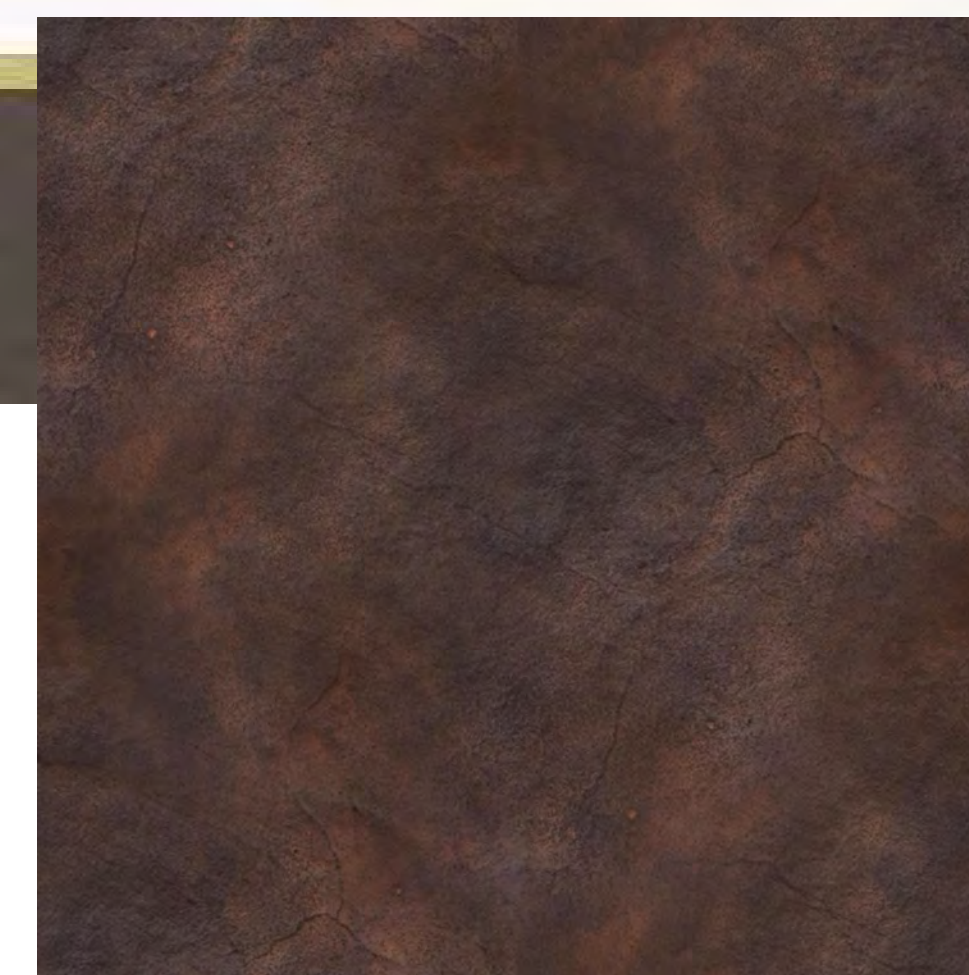
**THINSET MASONRY:**  
 EL DORADO STONE  
 MARQUEE 24 STONE  
 SANDERLING



**HORIZONTAL SHIP LAP CEDAR SIDING:**  
 PRESTAINED CEDAR SIDING



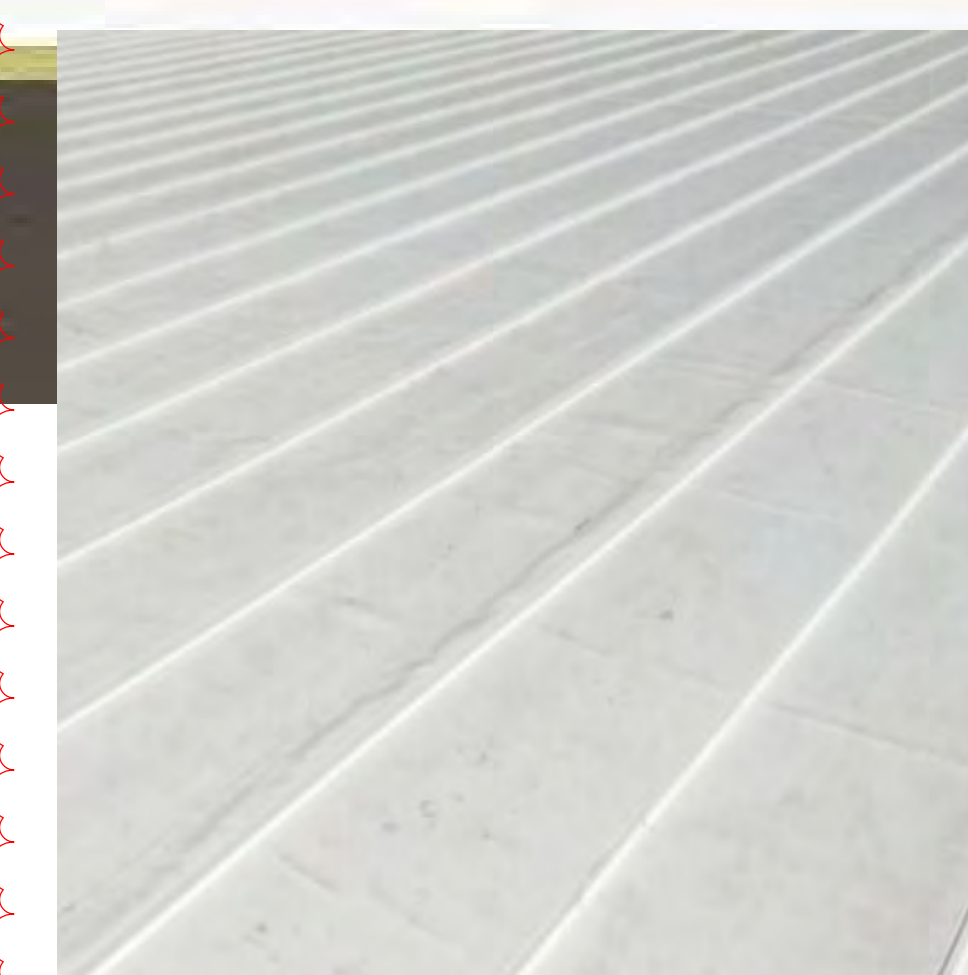
**HORIZONTAL METAL SIDING:**  
 BONDERIZED ZINC



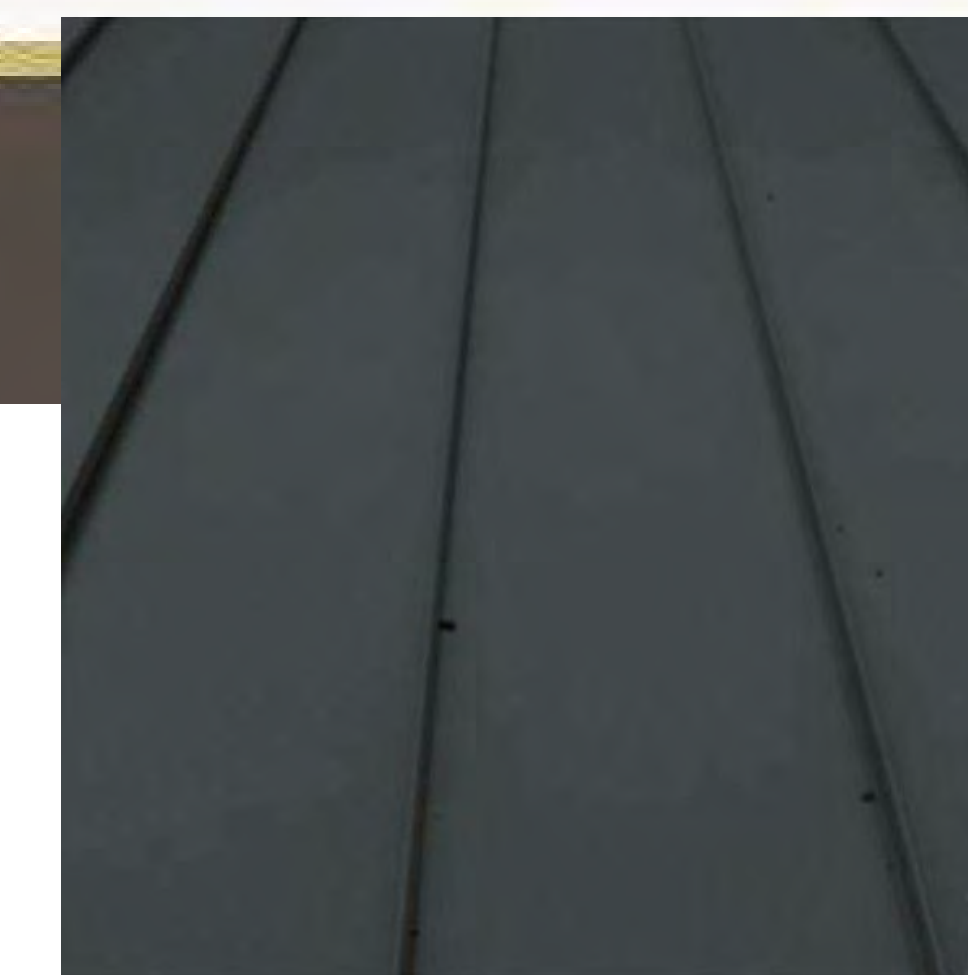
**METAL SIDING AT CHIMNEY:**  
 STEEL TRIM  
 COLOR: AGED STEEL, LIGHT RUST FINISH



**WINDOWS:**  
 ALUMINUM CLAD WOOD WINDOWS  
 COLOR: DARK BRONZE



**TPO WITH GRAVEL BALLAST**  
 ROOFING MEMBRANE



**METAL ROOFING ON ELEVATOR:**  
 STANDING SEAM METAL ROOF  
 BONDERIZED ZINC, NATURAL PATINA



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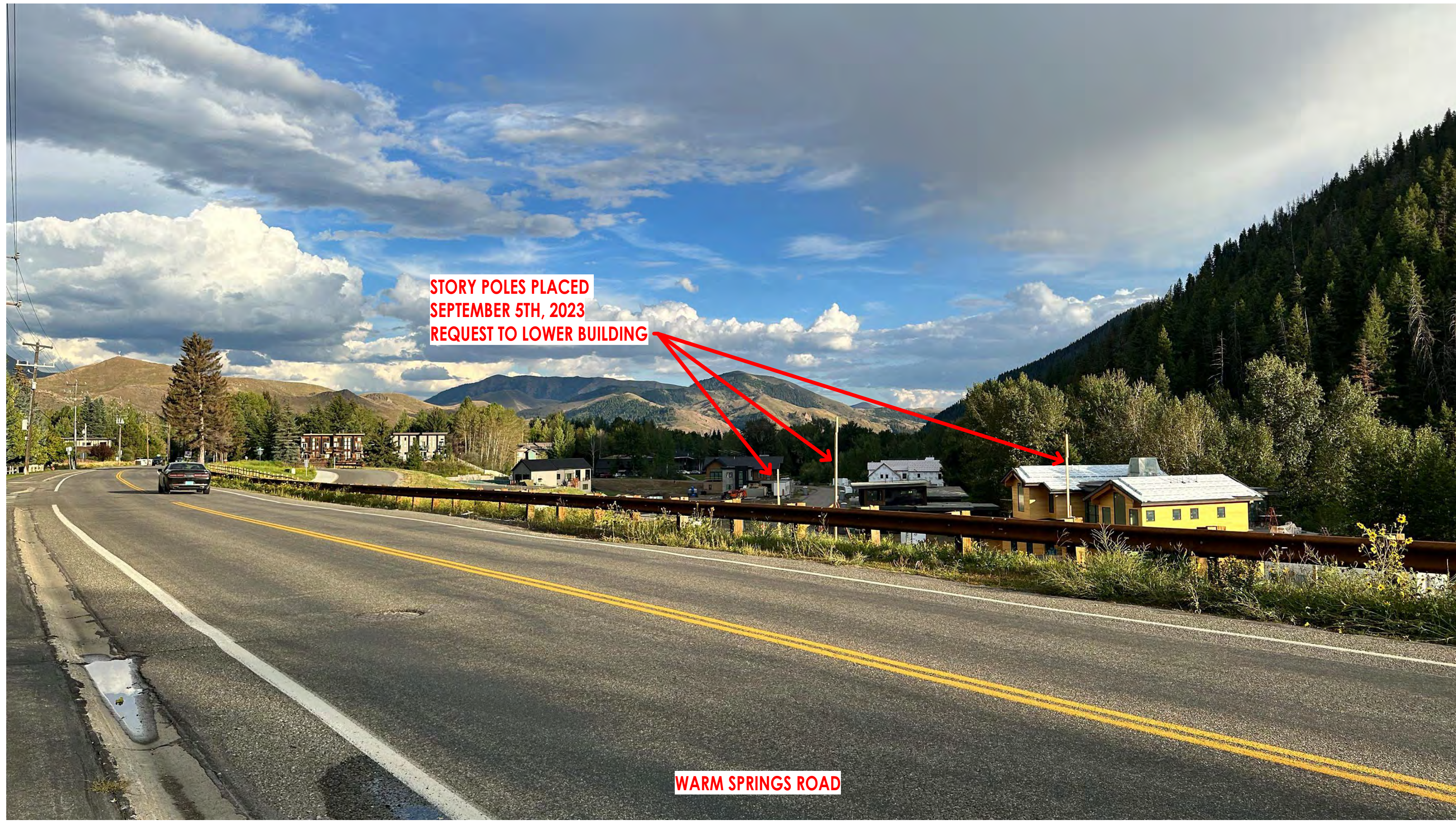
# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

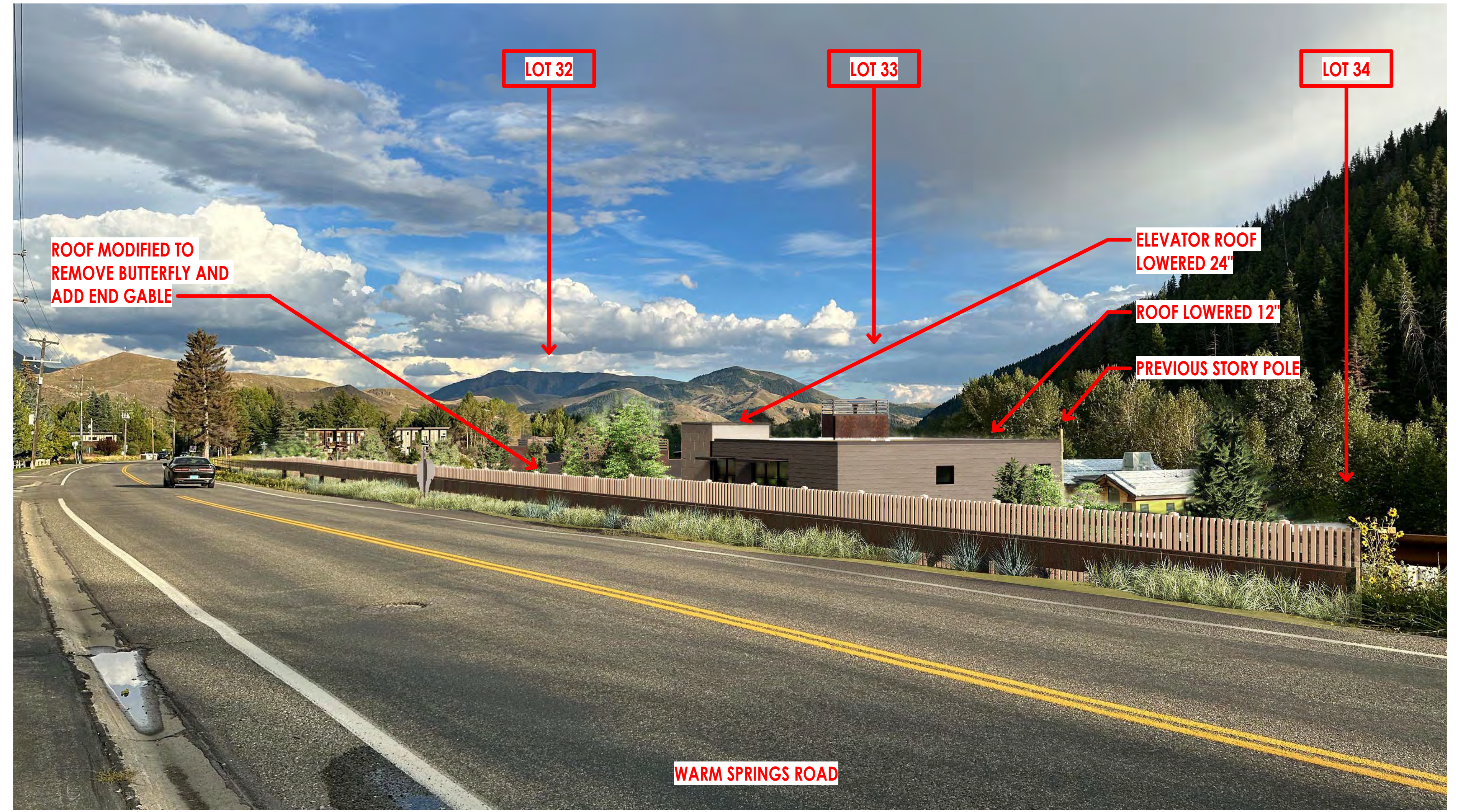
MATERIAL BOARD

D202

2023.09.21



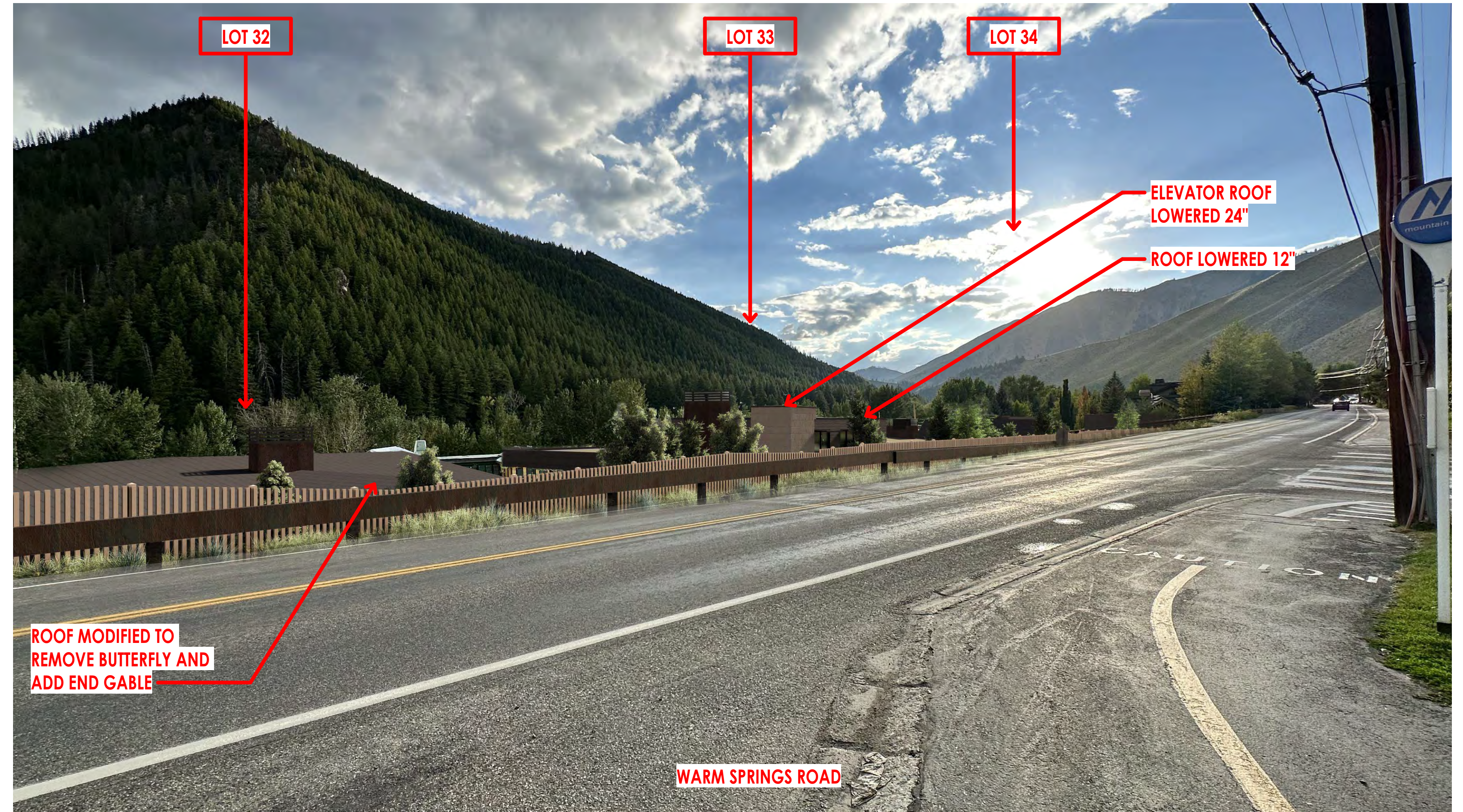
WARM SPRINGS ROAD LOOKING EAST - ORIGINAL



WARM SPRINGS ROAD LOOKING EAST



WARM SPRINGS ROAD LOOKING EAST - ORIGINAL



WARM SPRINGS ROAD LOOKING WEST



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PHOTOMONTAGE

D203

2023.09.21



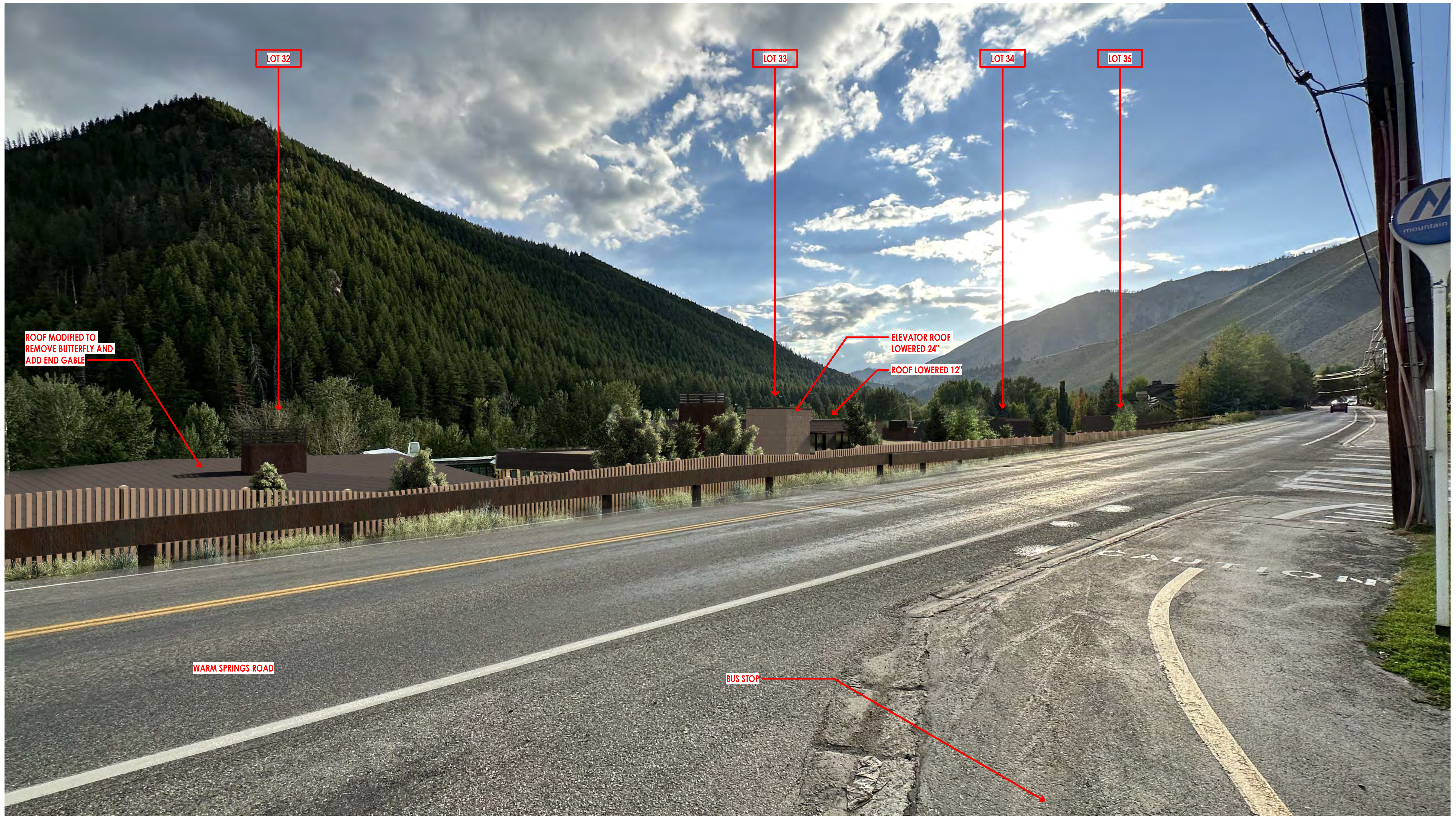
# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340





WARM SPRINGS ROAD LOOKING EAST



WARM SPRINGS ROAD LOOKING WEST





## WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



LOT 33

BALD MOUNTAIN ROAD



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D301

2023.09.21



LOT 33

BALD MOUNTAIN ROAD



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

## D302

2023.09.21



LOT 32

LOT 33

PROPOSED LANDSCAPING TO SCREEN ROAD FROM WINDOWS

PERSON FOR SCALE ALONG EDGE OF WARM SPRINGS ROAD

PROPOSED WOOD SLAT FENCE

EXISTING STEEL GAURDRAIL

WARM SPRINGS ROAD LOOKING SOUTH



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D303

2023.09.21



LOT 33

PERSON FOR SCALE ALONG  
EDGE OF WARM SPRINGS  
ROAD

PROPOSED WOOD SLAT FENCE

PROPOSED LANDSCAPING TO  
SCREEN ROAD TRAFFIC FROM  
WINDOWS

EXISTING STEEL GAURDRAIL

WARM SPRINGS ROAD LOOKING SOUTH



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D304

2023.09.21



WARM SPRINGS ROAD

BUS STOP

GRAVEL BALLAST OVER MEMBRANE

STANDING SEAM METAL ROOF

LOT 34

LOT 33

LOT 32

BIRDS EYE VIEW LOOKING EAST OVER BALD MOUNTAIN ROAD



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D305

2023.09.21



LOT 33

LOT 33

LOT 32

BALD MOUNTAIN ROAD



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D306

2023.09.21



WARM SPRINGS BUS STOP

VIEW FROM SECOND STORY WINDOW ON NORTH SIDE OF WARM SPRINGS ROAD LOOKING WEST





STANDING SEAM METAL ROOF

GRAVEL BALLAST OVER MEMBRANE

STANDING SEAM METAL ROOF

GRAVEL BALLAST OVER MEMBRANE

LOT 32

LOT 33

LOT 34

LOT 35

BIRDS EYE VIEW LOOKING EAST OVER WARM SPRINGS ROAD



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## WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D308

2023.09.21



City of Ketchum

# Attachment D: Lot 34 Plan Set



# WARM SPRINGS #34

PROJECT ADDRESS  
180 BALD MOUNTAIN ROAD KETCHUM, ID 83340  
PROPERTY I.D. NUMBER:

## DRAWING INDEX

GENERAL				STRUCTURAL																																			
SHEET #	SHEET NAME	#	DATE	SHEET #	SHEET NAME	#	DATE																																
COVER	COVER SHEET	1	04-27-2023	S101	STRUCTURAL																																		
G002	GENERAL NOTES			<table border="1"> <thead> <tr> <th colspan="4">MECHANICAL</th> </tr> <tr> <th>SHEET #</th> <th>SHEET NAME</th> <th>#</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>M101</td> <td>MECHANICAL GENERAL NOTES</td> <td></td> <td></td> </tr> <tr> <td>M102</td> <td>MECHANICAL PLAN</td> <td></td> <td></td> </tr> <tr> <th colspan="4">ELECTRICAL</th> </tr> <tr> <th>SHEET #</th> <th>SHEET NAME</th> <th>#</th> <th>DATE</th> </tr> <tr> <td>E101</td> <td>ELECTRICAL GENERAL NOTES</td> <td>1</td> <td>04-27-2023</td> </tr> <tr> <td>E102</td> <td>ELECTRICAL PLAN</td> <td>1</td> <td>04-27-2023</td> </tr> </tbody> </table>				MECHANICAL				SHEET #	SHEET NAME	#	DATE	M101	MECHANICAL GENERAL NOTES			M102	MECHANICAL PLAN			ELECTRICAL				SHEET #	SHEET NAME	#	DATE	E101	ELECTRICAL GENERAL NOTES	1	04-27-2023	E102	ELECTRICAL PLAN	1	04-27-2023
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E101	ELECTRICAL GENERAL NOTES	1	04-27-2023																																				
E102	ELECTRICAL PLAN	1	04-27-2023																																				
G003	BUILDING AREA ANALYSIS																																						
G004	SPECIFICATIONS																																						
G005	SPECIFICATIONS																																						
G006	SPECIFICATIONS	1	04-27-2023																																				
G007	SPECIFICATIONS																																						
G008	SPECIFICATIONS																																						
G009	SPECIFICATIONS																																						
CIVIL				LANDSCAPE																																			
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C101	CIVIL			L101	LANDSCAPE																																		
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A101	SITE PLAN	2	06-14-2023																																				
A103	FOUNDATION PLAN	2	06-14-2023																																				
A104	LEVEL 1 FLOOR PLAN	2	06-14-2023																																				
A105	LEVEL 2 FLOOR PLAN	1	04-27-2023																																				
A107	ROOF PLAN	1	04-27-2023																																				
A109	LEVEL 1 CEILING PLAN																																						
A110	LEVEL 2 CEILING PLAN																																						
A201	EXTERIOR ELEVATIONS	1	04-27-2023																																				
A202	EXTERIOR ELEVATIONS	2	06-14-2023																																				
A301	BUILDING SECTIONS	1	04-27-2023																																				
A302	BUILDING SECTIONS	1	04-27-2023																																				
A303	BUILDING SECTIONS																																						
A401	FIREPLACE ELEVATIONS																																						
A501	ARCHITECTURAL DETAILS	1	04-27-2023																																				
A502	ARCHITECTURAL DETAILS																																						
A503	STAIR RAIL DETAILS																																						
A601	DOOR SCHEDULE & ELEVATIONS																																						
A602	WINDOW SCHEDULE & ELEVATIONS																																						
A603	WINDOW DETAILS																																						



Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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PROJECT TEAM		SEAL
<b>ARCHITECT:</b> <b>THINK ARCHITECTURE:</b> 7927 SOUTH HIGH POINT WAY, SUITE 300 SANDY, UT 84094 801.269.0555		
<b>STRUCTURAL ENGINEER:</b> <b>VECTOR ENGINEERS</b> 1500 S. CLOVERDALE ROAD, SUITE 315 KANSAS CITY, MO 64124 208.996.0003		
<b>MECHANICAL ENGINEER:</b> <b>DESIGN BUILD</b>		
<b>ELECTRICAL ENGINEER:</b> <b>DESIGN BUILD</b>		
<b>CIVIL ENGINEER:</b> <b>BENCHMARK ASSOCIATES PA</b> 1102 BELL DRIVE KETCHUM, ID 83340 208.726.9512		
<b>LANDSCAPE ARCHITECT:</b> <b>EGGERS ASSOCIATES, PA</b> 140 NORTH 2ND AVE KETCHUM, ID 83340 208.726.0988		
<b>GENERAL CONTRACTOR:</b> <b>MAGLEBY CONSTRUCTION SUN VALLEY</b> 511 EAST AVENUE NORTH SUITE 201 KETCHUM, IDAHO 83340 208.726.3923		
<b>OWNER:</b> <b>VP PROPERTIES</b> 240 LEADVILLE KETCHUM, IDAHO 83340 208.726.1875		

GOVERNING BUILDING CODES & INFORMATION			
BUILDING CODE:	2018 INTERNATIONAL RESIDENTIAL CODE (I.R.C.) WITH IDAHO STATE AMENDMENTS	MECHANICAL CODE:	2018 INTERNATIONAL MECHANICAL CODE (I.M.C.) AMENDMENTS
PLUMBING CODE:	2017 IDAHO STATE PLUMBING CODE (I.S.P.C.)	FIRE CODE:	2018 INTERNATIONAL FIRE CODE (I.F.C.) AMENDED.
ELECTRICAL CODE:	2017 IDAHO ELECTRICAL CODE (IDNECA)	ENERGY CONSERVATION:	2018 INTERNATIONAL ENERGY CONSERVATION CODE (I.E.C.C.)
ACCESSIBILITY:	2009 ANSI 117.1 & 2018 I.B.C.		
OCCUPANCY GROUP:	R2	BUILDING TYPE:	TYPE V-8
FIRE SPRINKLER:	YES	FIRE SPRINKLER TYPE:	NFPA 72
MONITORED SYSTEM:	YES	FIRE DETECTION SYSTEM PER KETCHUM ORDINANCE #1217:	
RISK CATEGORY (I.C. 104.5):	II	SITE EXPOSURE:	B
		BASIC WIND SPEED:	90 MPH
		ULTIMATE WIND SPEED:	115 MPH
MATERIALS: CONCRETE FOUNDATIONS, WOOD FRAME W/ BRICK MASONRY & FIBER CEMENT PANELS, KEE MEMBRANE ROOFING.			
DEFERRED SUBMITTAL REQUIREMENTS			
DEFERRED SUBMITTALS ARE THOSE PORTIONS OF DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION AND HAVE RECEIVED PRIOR APPROVAL FROM THE BUILDING OFFICIAL TO BE DEFERRED. THE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND GENERAL CONTRACTOR WITHIN SIX WEEKS TO COMMENCEMENT OF CONSTRUCTION OF THIS PORTION OF WORK.			
DEFERRED SUBMITTAL PROCESSES:			
1. THE DEFERRED SUBMITTAL SHALL FIRST BE REVIEWED BY THE GENERAL CONTRACTOR FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. THE SUBMITTAL MUST BE REVIEWED, APPROVED, STAMPED AND SIGNED BY THE GENERAL CONTRACTOR BEFORE BEING SUBMITTED TO THE ARCHITECT.			
2. THE GENERAL CONTRACTOR SHALL DIGITALLY SUBMIT DEFERRED SUBMITTALS TO THE ARCHITECT.			
3. THE DEFERRED SUBMITTAL ITEMS WILL BE REVIEWED BY THE ENGINEER OR ARCHITECT IN RESPONSIBLE CHARGE. THE ENGINEER OR ARCHITECT WILL ATTACH A LETTER TO THE SUBMITTAL STATING THAT THE DEFERRED ITEM IS IN CONFORMANCE WITH THE DESIGN OF THE STRUCTURE.			
4. THE APPROVED SUBMITTALS WILL BE RETURNED TO THE GENERAL CONTRACTOR. TWO SETS OF THE DEFERRED SUBMITTAL ARE THEN SUBMITTED TO THE CITY FOR REVIEW.			
5. THE GENERAL CONTRACTOR SHALL MAINTAIN ONE SET OF THE APPROVED SUBMITTAL ON SITE FOR REFERENCE BY THE CITY INSPECTOR.			
6. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.			
7. SEE STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS FOR STRUCTURAL DEFERRED SUBMITTALS.			
DEFERRED SUBMITTAL ITEMS			
1. EXTERIOR FRAMING, DESIGN, AND INSTALLATION DETAILS PER STRUCTURAL.			
2. FIRE SPRINKLING DRAWINGS, INCLUDING DESIGN DRAWINGS AND CALCULATIONS.			
3. FIRE ALARM DRAWINGS AND SPECIFICATIONS.			
4. JACOZZI DRAWINGS AND SPECIFICATIONS.			
5. CCTV SECURITY CAMERAS AND SECURITY SYSTEM.			
6. PROJECT TRIPLE PLAY - (PHONE, DATA, TV) SHALL BE PROVIDED BY DEFERRED SUBMITTAL.			
7. CAST IN PLACE STORM WATER DETENTION SYSTEM.			
SPECIAL INSPECTIONS REQUIREMENTS			
SPECIAL INSPECTIONS ARE REQUIRED IN ACCORDANCE WITH IBC 2015 CHAPTER 17, SECTION 1704.			
SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONALS IN RESPONSIBLE CHARGE. (2015 IBC SECTION 1704.2.4).			
SEE PROJECT MANUAL, SPECIFICATIONS, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL GENERAL NOTES FOR ADDITIONAL SPECIAL INSPECTION REQUIREMENTS.			

ABBREVIATIONS	
#	NUMBER
A.B.	ANCHOR BOLT
ADJ.	ADJUSTABLE
A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
BD	BOARD
BUDG.	BUILDING
B.M.	BENCHMARK
B.O.	BOTTOM OF
BOF.	BOTTOM
B.P.	BASE PLATE
BRG.	BEARING
BTWN.	BETWEEN
C.I.	CONSTRUCTION JOINT
CL.G.	CEILING
CL.R.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CONSTR.	CONSTRUCTION
C.I.J.	CONSTRUCTION JOINT
DBL.	DOUBLE
DFT./DTL.	DETAIL
DIA.	DIAMETER
DTL.	DETAIL
DINGS	DRAWINGS
E.F.	EACH FACE
E.J.	EXPANSION JOINT
EL.ELEV.	ELEVATION
EQ.	EQUAL
E.S.	EACH SIDE
E.W.	EACH WAY
EXIST.	EXISTING
EXPAN.	EXPANSION
EXT.	EXTERIOR
F.D.	FLOOR DRAIN
FDN./FDN	FOUNDATION
F.F.	FIRE EXTINGUISHER
F.F.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISH FLOOR
FIN.	FINISH
FLR.	FLOOR
FT	FEET
FIG.	FOOTING
GA.	GAGE/GAUGE
GALL.	GALLONS
GPM	GALLONS PER MINUTE
GND.	GROUND
GVF.	GYPSONUM WALL BOARD
GVF. BD.	GVF. BOARD
HC	HANDICAPPED
H.W.	HARDWARE
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HT.	HEIGHT
HVAC	HEATING/VENTILATION/AIR CONDITIONING
HYD.	HYDRANT
ID.	INSIDE DIAMETER
INFO.	INFORMATION
INSUL.	INSULATION
LAV.	LAVATORY
LT.	LIGHT
LT. WF.	LIGHT WEIGHT
MAINT.	MAINTENANCE
MANUF.	MANUFACTURER
MAX.	MAXIMUM
MAT.	MATERIAL
M.C.J.	MASONRY CONTROL JOINT
MECH.	MECHANICAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MTL.	METAL
NOT IN CONTR.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
PERP.	PERPENDICULAR
PL.	PLATE
PTD.	PAINTED
QTY.	QUANTITY
R.D.	ROOF DRAIN
RAD.	RADIUS
REINFOR.	REINFORCED
REQ.D.	REQUIRED
RM	ROOM
R.O.	ROUGH OPENING
SCHED.	SCHEDULE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION
STC	SOUND TRANSMISSION COEFFICIENT
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
T.O.S.	TOP OF
T.O.C.	TOP OF CURB
T.O.F.	TOP OF FOOTING
T.O.S.S.	TOP OF SLAB OR SIDEWALK
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICLE
W/	WITH
WO.	WOOD
W.W.F.	WELDED WIRE FABRIC.

GRAPHIC SYMBOLS/ MATERIAL LEGENDS	
	FLOOR OR POINT ELEVATION
	KEY NOTE
	SPECIFICATION KEY NOTE
	WALL TYPE
	DOOR NUMBER
	WINDOW NUMBER
	FIXTURE TAG
	REVISION TAG
	DETAIL
	INTERIOR ELEVATION
	BUILDING ELEVATION
	ROOM NAME & NUMBER
	BUILDING SECTION
	WALL SECTION
	CENTER LINE
	MASTER GRID LINES
	PARKING GRID LINES
	BUILDING GRID LINES
	E.I.F.S.
	CONCRETE MASONRY UNIT
	BRICK VENEER
	STONE VENEER
	CONCRETE
	GYPSONUM BOARD OR GROUIT
	MORTAR
	BATT INSULATION
	RIGID INSULATION
	PLYWOOD
	ROUGH WOOD-CONTINUOUS
	ROUGH WOOD-BLOCKING
	WOOD TRIM
	STEEL
	GRAVEL
	EARTH
OWNER & MUNICIPAL DRAWING APPROVALS	
OWNER: _____ DATE: _____	CITY ENGINEER: _____ DATE: _____
CITY PLANNING & ZONING DEPARTMENT: _____ DATE: _____	CITY FIRE DEPARTMENT: _____ DATE: _____
CITY BUILDING DEPARTMENT: _____ DATE: _____	CITY POLICE DEPARTMENT: _____ DATE: _____

**VICINITY MAP**

**PROJECT LOCATION**

**CITY APPROVAL STAMP**

PROJECT NC22023.34  
DATE: 2023.06.30

REVISIONS:

1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
COVER SHEET

SHEET NUMBER:  
COVER

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WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

**PROJECT GENERAL NOTES**

- 1. DEFINITIONS**
- a. PROVIDE: MEANS TO PROVIDE, FURNISH AND INSTALL. A COMPLETE SYSTEM AND READY FOR OPERATIONS AND USE FOR PURPOSE INTENDED INCLUDING THOSE ITEMS SPECIFIED WITHIN THE DRAWINGS AND SPECIFICATIONS AS WELL AS THOSE ITEMS THAT ARE REQUIRED TO PROVIDE A COMPLETE SYSTEM. THE CONTRACTOR AND SUB CONTRACTORS ARE REQUIRED TO PROVIDE THE FULL AND COMPLETE SYSTEM.
  - b. FURNISH: MEANS TO SUPPLY, PURCHASE, PROCURE AND DELIVER COMPLETELY WITH RELATED ACCESSORIES, READY FOR ASSEMBLY, APPLICATION, INSTALLATION, AND SIMILAR OPERATIONS AS APPLICABLE IN EACH INSTANCE.
  - c. INSTALL: MEANS TO CONSTRUCT, ASSEMBLE, ERECT, MOUNT, ANCHOR, PLACE, CONNECT, APPLY AND SIMILAR OPERATIONS, COMPLETE WITH RELATED ACCESSORIES, AS APPLICABLE IN EACH INSTANCE.
  - d. EQUIVALENT: MEANS EQUIVALENT AS ACCEPTED BY THE ARCHITECT WITH RESPECT TO PRODUCTS, EQUIVALENT MEANS A LINE DEGREE OF FEATURES, ATTRIBUTES, PERFORMANCE, OR QUALITIES DEEMED ESSENTIAL TO THE DESIGN. INSTEAD OF THE ITEM INTENDED TO BE MEANT ARCHITECT WILL CONSIDER SUBSTITUTION PROPOSALS FOR THE PRODUCT, DO NOT ASSUME THAT SUBSTITUTE PRODUCTS ARE ACCEPTABLE. SUBSTITUTIONS MADE BY THE CONTRACTOR WITHOUT FULL AND FINAL APPROVAL MAY REQUIRE TO BE REMOVED IF NOT DEEMED ACCEPTABLE BY THE ARCHITECT. ALL COSTS ASSOCIATED TO REMOVAL OF SUBSTITUTION NOT APPROVED, AND INSTALLATION OF ACCEPTED PRODUCTS WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

- GENERAL NOTES**
- G1. INTENT OF THE SPECIFICATIONS: DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PROVIDE THE BASIS FOR THE PROPER COMPLETION OF THE PROJECT, SUITABLE FOR THE INTENDED USE OF THE OWNER. ITEMS NOT EXPRESSLY SET FORTH WITHIN THE DRAWINGS AND SPECS, BUT WHICH ARE REASONABLY IMPLIED FOR COMPLETION OF A COMPLETE SYSTEM, OR NECESSARY, FOR THE PROPER PERFORMANCE OF THE WORK SHALL BE INCLUDED.
  - G2. DRAWINGS AND SPECIFICATIONS: SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY AND SUPPLEMENTAL TO THE DRAWINGS, NO RELATIVE IMPORTANCE OF DRAWINGS VERSUS SPECIFICATIONS HAS BEEN ESTABLISHED AND NONE SHOULD BE ASSUMED, BUT THE MOST STRINGENT CONDITIONS SHOULD BE ASSUMED FOR ALL BIDDING AND CONSTRUCTION REQUIREMENTS. IN THE EVENT OF DISCREPANCIES OR CONFLICTS, THE ARCHITECT SHALL BE CONSULTED IN ORDER TO RENDER AN INTERPRETATION.

- G3. WORK NOT INCLUDED: ANY ITEM INDICATED ON THE DRAWINGS AS "N.I.C." (NOT IN CONTRACT), OR OTHERWISE DESIGNATED TO BE DONE BY OTHERS IS NOT A PART OF THE CONTRACT. INSTALLATION AND/OR BACKLOGS MAY BE REQUIRED FOR SOME EQUIPMENT FURNISHED BY OWNER OR OWNER'S SUBCONTRACTOR. REFER TO DRAWINGS FOR SPECIFIC REQUIREMENTS.
- G4. CONTRACT DOCUMENTS AT SITE: THE CONTRACTOR SHALL MAINTAIN CURRENT PERMITS, SHOP DRAWINGS, REVISED DRAWINGS, AND CLARIFICATION DRAWINGS, ADDENDA, CHANGE ORDERS, SUBSTITUTIONS, INSPECTIONS, TEST CERTIFICATIONS AND RECORDS, PROJECT SUBMITTAL DATA, AND SAMPLES. FIELD OFFICE SHALL CONTAIN A CURRENT COPY OF ALL GOVERNING BUILDING CODES, MAKE DOCUMENTS AVAILABLE AT ALL TIMES FOR ARCHITECT'S REVIEW. ALL DRAWINGS MUST BE CLEARLY MARKED AS TO THE FINAL APPROVED DRAWINGS.
- G5. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN ACCURATELY DIMENSIONED RECORDS OF ALL UNDERGROUND LINES, SERVICES, AND UTILITIES, AS WELL AS ANY DISCREPANCIES OR REQUIRED CHANGES TO THE CONTRACT DOCUMENTS, AT THE CLOSE OF THE PROJECT. FORWARD TO ARCHITECT FOR FUTURE RECORDS, ONE (1) CD OF COMPLETE RECORD DRAWINGS TO OWNER IN PDF FORMAT AFTER COMPLETING FINAL PUNCH LIST.
- G6. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED SIZE, DO NOT SCALE DRAWINGS TO DETERMINE ANY LOCATIONS, THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO CONTINUING WITH WORK.

- G7. FIELD CONFIRMATION OF DISCREPANCIES SHALL BE RECORDED ON RESPONSIBLE DOCUMENT AND IMMEDIATELY TRANSMITTED TO ARCHITECT FOR PROJECT RECORD, COORDINATION, AND NECESSARY RESOLUTION PRIOR TO CONTINUING WITH WORK.
- G8. FIELD MEASUREMENTS: VERIFY FIELD MEASUREMENTS BEFORE ORDERING MATERIALS AND PREFABRICATED ITEMS, ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS SHALL BE MADE IN CONSULTATION WITH THE ARCHITECT.
- G9. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED EDITIONS OF ALL APPLICABLE BUILDING CODES, THE AMERICANS WITH DISABILITIES ACT, AS WELL AS ALL OTHER LOCAL GOVERNING CODES AND ORDINANCES.

- G10. REFERENCE STANDARDS: COMPLY WITH ASSOCIATION, TRADE, FEDERAL, COMMERCIAL, ASTM, AND OTHER SIMILAR STANDARDS REFERENCED WITHIN INDIVIDUAL SECTIONS, EXCEPT WHERE MORE EXPLICIT OR STRINGENT REQUIREMENTS ARE INDICATED, OR REQUIRED BY APPLICABLE CODES, SERVICES, STANDARDS, AND EFFECT AS IF FOUND INTO CONTRACT DOCUMENTS. SHOULD SPECIFIED REFERENCE STANDARDS CONFLICT WITH CONTACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING.

- G11. FIELD MEASUREMENTS: VERIFY FIELD MEASUREMENTS BEFORE ORDERING MATERIALS AND PREFABRICATED ITEMS, ANY NECESSARY ADJUSTMENTS BETWEEN FIELD MEASUREMENTS AND DRAWINGS SHALL BE MADE IN CONSULTATION WITH THE ARCHITECT.
- G12. TEMPORARY FACILITIES: PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES, PROVIDE SUITABLE WASTE DISPOSAL UNITS AND EMPTY REGULARLY, DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS, PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.
- G13. STORAGE AND PROTECTION: STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERIGHT, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

- G14. TEMPORARY FACILITIES: PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES, PROVIDE SUITABLE WASTE DISPOSAL UNITS AND EMPTY REGULARLY, DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS, PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.
- G15. STORAGE AND PROTECTION: STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERIGHT, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

- G16. TEMPORARY FACILITIES: PROVIDE TEMPORARY FACILITIES AND CONNECTIONS AS REQUIRED FOR THE PROPER COMPLETION OF THE PROJECT. PROVIDE AND MAINTAIN TEMPORARY UTILITY SERVICES, PROVIDE SUITABLE WASTE DISPOSAL UNITS AND EMPTY REGULARLY, DO NOT PERMIT ACCUMULATION OF TRASH AND WASTE MATERIALS, PROVIDE TEMPORARY SANITARY FACILITIES AS REQUIRED.
- G17. STORAGE AND PROTECTION: STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS WITH LABELS INTACT AND LEGIBLE. STORE SENSITIVE PRODUCTS IN WEATHERIGHT, CLIMATE CONTROLLED ENCLOSURES. PROVIDE OFFSITE STORAGE AND PROTECTION WHEN SITE DOES NOT PERMIT ON SITE STORAGE.

- G18. FIELD QUALITY CONTROL: EMPLOY ONLY EXPERIENCED INSTALLERS AND FURNISH EVIDENCE OF EXPERIENCE IF REQUESTED. USE OF ANY SUBCONTRACTOR OR INSTALLER IS SUBJECT TO OWNER'S APPROVAL. EMPLOY FULL-TIME COMPETENT SUPERINTENDENTS AS WELL AS NECESSARY ASSISTANTS. SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR AND ALL COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO THE CONTRACTOR.
- C19. PRODUCT HANDLING: TRANSPORT AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DELIVER PRODUCTS IN UNDAMAGED CONDITION. IN MANUFACTURER'S ORIGINAL UNOPENED CONTAINERS OR PACKAGING, WITH IDENTIFYING LABELS INTACT AND LEGIBLE. PROMPTLY INSPECT SHIPMENTS TO ENSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS OF CONTRACT DOCUMENTS, QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.
- C20. COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS: HANDLE, INSTALL, ERECT, CONNECT, CONDITION, USE, ADJUST, AND CLEAN PRODUCTS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTION AND IN CONFORMITY WITH SPECIFIED REQUIREMENTS, INCLUDING EACH STEP IN SEQUENCE. DO NOT OMIT PREPARATORY STEPS OR INSTALLATION PROCEDURES UNLESS SPECIFICALLY MODIFIED OR EXEMPTED BY CONTRACT DOCUMENTS. SHOULD JOB CONDITIONS OR SPECIFIED REQUIREMENTS CONFLICT WITH MANUFACTURER'S INSTRUCTIONS, REQUEST CLARIFICATION IN WRITING FROM ARCHITECT BEFORE PROCEEDING. INSTALL MATERIALS IN PROPER RELATION WITH ADJACENT CONSTRUCTION AND WITH PROPER APPEARANCE.
- C21. MANUFACTURER'S FIELD SERVICES: WHEN SPECIFIED IN INDIVIDUAL SECTIONS, REQUIRE MATERIAL OR PRODUCT SUPPLIERS OR MANUFACTURERS TO PROVIDE QUALIFIED STAFF PERSONNEL TO OBSERVE SITE CONDITIONS, CONDITIONS OF SURFACES, QUALITY OF WORKMANSHIP, AND CONDITIONS OF INSTALLATION AS APPLICABLE AND TO INITIATE ADDITIONAL INSTRUCTIONS WHEN NECESSARY.
- C22. CONTRACTOR SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL WORK AND MATERIALS - INCLUDING THOSE FURNISHED BY SUBCONTRACTORS.
- C23. NON-CONFORMING WORK: REMOVE AND REPLACE WORK THAT DOES NOT CONFORM TO THE CONTRACT DOCUMENTS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- C24. PRODUCT IDENTIFICATION: NAMEPLATES, TRADEMARKS, LOGOS, AND OTHER IDENTIFYING MARKS ON PRODUCTS ARE NOT PERMITTED ON SURFACES EXPOSED TO PUBLIC AREAS, INTERIOR OR EXTERIOR. PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT NOT EXPOSED TO PUBLIC VIEW ARE EXEMPTED FROM FOREGOING LIMITATION, REQUIRED UL OR RA LABELS ARE ALSO EXCLUDED.
- C25. PROTECTION OF ADJACENT WORK: PROVIDE TEMPORARY PROTECTION FOR ADJACENT AREAS TO PREVENT DAMAGE BY INSTALLATION OF NEW WORK OR DEMOLITION OF EXISTING CONSTRUCTION. PROMPTLY REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNER. PROTECT ADJACENT AREAS FROM CONTAMINATION BY CONSTRUCTION DUST AND PROVIDE TEMPORARY BARRICADES AS NECESSARY TO ENSURE PROTECTION OF THE PUBLIC. MAINTAIN EGRESS WITHIN AND AROUND CONSTRUCTION AREAS.
- C26. DAMAGED PRODUCTS: DO NOT USE PRODUCTS IN WORK, WHICH HAVE DETERIORATED, BECOME DAMAGED, OR ARE OTHERWISE UNFIT FOR USE. RESTORE UNITS DAMAGED DURING INSTALLATION, REPLACE UNITS, WHICH CANNOT BE RESTORED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- C27. SECURITY: PROVIDE FACILITIES TO PROTECT WORK FROM UNAUTHORIZED ENTRY, VANDALISM, AND THEFT. CONDUCT OPERATIONS IN MANNER TO AVOID RISK OF LOSS, THEFT, OR DAMAGE BY VANDALISM.
- C28. TEMPORARY CONTROLS:
  - a. HEAT: PRIOR TO ENCLOSURE, PROVIDE HEATING AS NECESSARY TO PROTECT MATERIALS, PRODUCTS, AND FINISHES FROM DAMAGE DUE TO TEMPERATURE OR HUMIDITY. ENCLOSURE INCLUDING AS STATE OF CONSTRUCTION WHEN EXTERIOR WALLS ARE ERECTED, DOORS AND WINDOWS ARE INSTALLED AND GLAZED, ROOF DECK AND ROOFING ARE COMPLETE, AND WHEN OTHER OPENINGS IN EXTERIOR ENVELOPE ARE EQUIPPED WITH TEMPORARY CLOSURES, EXCEPT WHERE INDICATED OTHERWISE IN INDIVIDUAL SPECIFICATION SECTIONS, MAINTAIN MINIMUM AMBIENT TEMPERATURE OF 50 DEGREES F, IN AREAS WHERE CONSTRUCTION IS IN PROGRESS.
  - b. VENTILATION: VENTILATE ENCLOSED AREAS TO ASSIST CURE OF MATERIALS, TO DISSIPATE HUMIDITY, AND TO PREVENT ACCUMULATION OF DUST, FUMES, VAPORS, OR GASES.
  - c. BARRIERS AND CLOSURES: PROVIDE BARRIERS TO PREVENT UNAUTHORIZED ENTRY TO CONSTRUCTION AREAS AND TO PROTECT EXISTING FACILITIES AND ADJACENT PROPERTIES FROM DAMAGE FROM CONSTRUCTION OPERATIONS.
  - d. FIRE PROTECTION: COMPLY WITH LOCAL FIRE PROTECTION CODE AND GOVERNING AUTHORITIES. PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION INCLUDING, WITHOUT LIMITATION, FIRE EXTINGUISHERS AND OTHER APPROPRIATE EQUIPMENT FOR FIRE EXTINGUISHING RISK FOR IMMEDIATE USE. MAINTAIN ANY REQUIRED FIRE ALARM SYSTEMS IN OPERATION DURING CONSTRUCTION. DISTRIBUTE EQUIPMENT AROUND SITE AND PARTICULARLY IN IMMEDIATE VICINITY OF PERFORMANCE OF WELDING OR SIMILAR HAZARDOUS WORK.

- C29. INTERRUPTION OF SERVICES: INTERRUPTIONS TO ANY SERVICE FOR THE PURPOSE OF MAKING OR BREAKING A CONNECTION SHALL BE MADE ONLY AFTER CONSULTATION WITH THE OWNER AND SHALL BE AT SUCH TIME AND OF SUCH DURATION AS MAY BE DIRECTED.
- C30. EXCAVATIONS OR TRENCHING: KEEP THE AREAS BETWEEN EXCAVATION OR TRENCHING, INSTALLATION OF CONDUIT OR PIPING, AND BACK FILLING OPERATIONS TO AN ABSOLUTE MINIMUM. PROVIDE SUITABLE TEMPORARY COVERS FOR EXCAVATIONS OR TRENCHING CROSSING ROADWAYS, WALKS, OR OTHER TRAFFIC WAYS AS REQUIRED BY GOVERNING AGENCIES.
- C31. CUTTING AND PATCHING: DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED, DECREASE FIRE PERFORMANCE, DECREASE ACUSTICAL PERFORMANCE, DECREASE ENERGY PERFORMANCE, DECREASE OPERATIONAL LIFE, OR DECREASE SAFETY FACTORS. DO NOT REMOVE OR ALTER STRUCTURAL COMPONENTS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT. CUT WITH TOOLS APPROPRIATE TO MATERIALS TO BE CUT. PATCH WITH MATERIALS AND METHODS TO PRODUCE PATCH THAT IS NOT VISIBLE FROM A DISTANCE OF THREE FEET.
- C32. COORDINATION AND CLEARANCES: VERIFY AND COORDINATE CLEARANCES, DIMENSIONS, AND INSTALLATION OF ADJOINING CONSTRUCTION, EQUIPMENT, PIPING, DUCTS, CONDUITS, OR OTHER MECHANICAL OR ELECTRICAL ITEMS OR APPARATUS, VERIFY DIMENSIONS FOR PRODUCTS TO BE FITTED INTO WORK.
- C33. ATTACHMENTS AND CONNECTIONS: PROVIDE ATTACHMENT AND CONNECTION DEVICES METHODS FOR SECURING AND ANCHORING WORK. SECURE IN PLACE WITH DEVICES DESIGNATED AND SIZED TO WITHSTAND STRESSES, VIBRATION, PHYSICAL DISTORTION, OR DISBURSEMENT.
- C34. EXPANSION AND MOVEMENT: ALLOW FOR EXPANSION OF MATERIALS AND BUILDING MOVEMENT.
- C35. ISOLATION OF DISMISAL ITEMS: ISOLATE EACH UNIT OF WORK FROM INCOMPATIBLE WORK AS NECESSARY TO PREVENT DETERIORATION AND ELECTROLYTIC ACTION.
- C36. MAINTENANCE: CLEAN AND PERFORM MAINTENANCE ON INSTALLED WORK AS FREQUENTLY AS NECESSARY THROUGH REMAINDER OF CONSTRUCTION PERIOD. LUBRICATE OPERABLE COMPONENTS TO ENSURE OPERABILITY WITHOUT DAMAGING EFFECTS.
- C37. ADJUSTMENTS: ADJUST OPERATING PRODUCTS AND EQUIPMENT TO ENSURE SMOOTH AND UNHINDERED OPERATION.
- C38. EXAMINATION OF CONDITIONS: EXAMINE SUBSTRATE AND CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT COMMENCE WORK OVER UNSATISFACTORY CONDITIONS DETERMINAL TO PROPER AND TIMELY EXECUTION OF WORK. DO NOT PROCEED WITH WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. COMMENCEMENT OR INSTALLATION CONSTITUTES ACCEPTANCE OF CONDITIONS AND COSTS OF ANY CORRECTIVE MEASURES ARE RESPONSIBILITY OF CONTRACTOR.
- C39. INTERIOR WALL AND CEILING FINISHES SHALL NOT EXCEED FLAME SPREAD CLASSIFICATIONS DICTATED BY ALL APPLICABLE BUILDING CODES.
- C40. GYPSUM BOARD AND SUSPENDED CEILING SYSTEMS SHALL CONFORM TO ALL LOCAL GOVERNING BUILDING CODES AND ORDINANCES.
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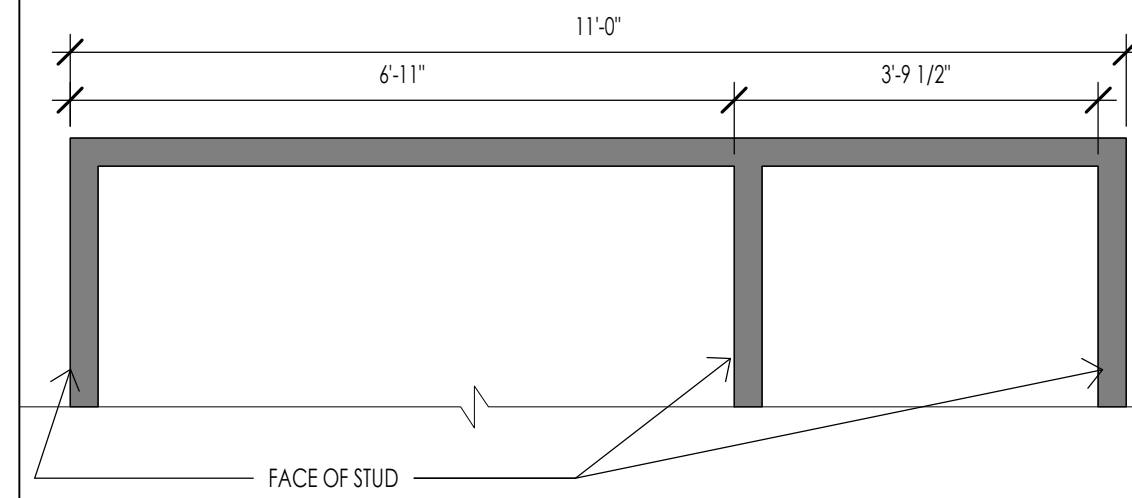
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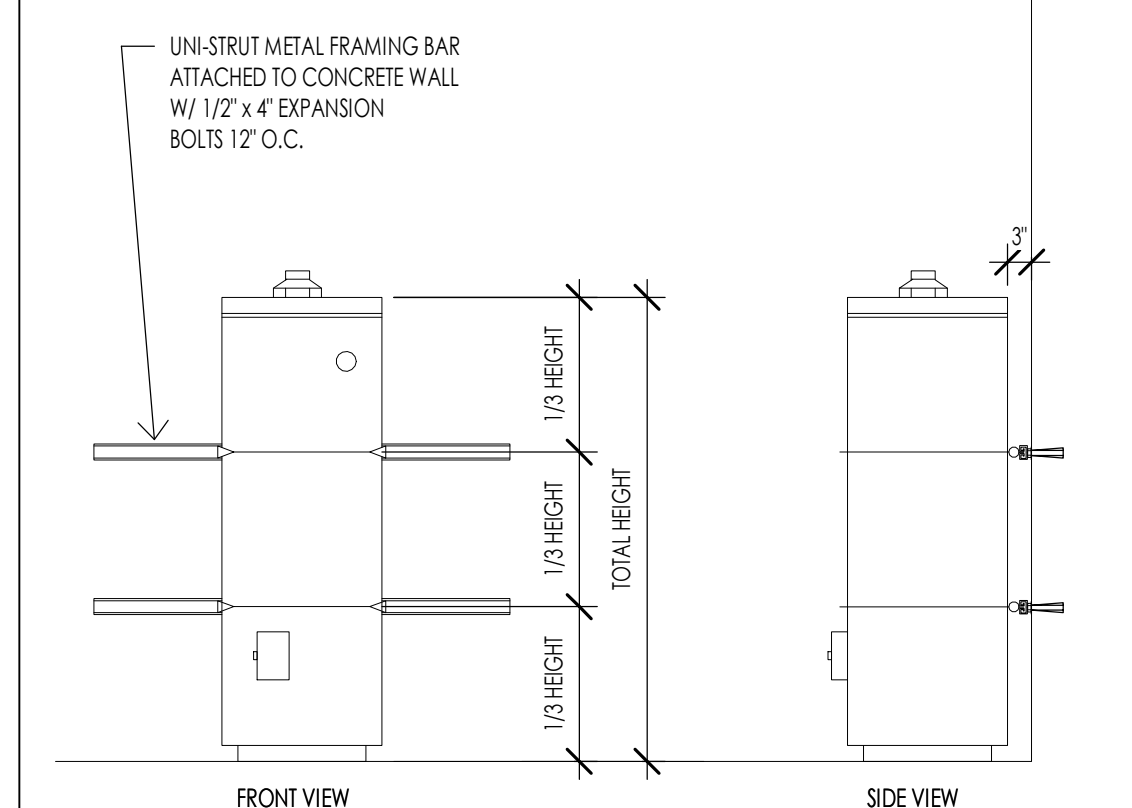
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**TYPICAL DIMENSION METHOD**  
1/2" = 1'-0"



**WATER HEATER SEISMIC STRAPPING**  
1/2" = 1'-0"

**INSULATION SCHEDULE**

**ENERGY STRATEGY:**

**PRESCRIPTIVE PER IBC**  **RESCHECK - 2015 IECC**

LOCATION	TYPE	THICKNESS	"R" VALUE	REMARKS
1. FOUNDATION WALLS AND SLAB ON GRADE	CONTINUOUS RIGID	2" TOTAL THICKNESS - 2 BELOW GRADE CONTINUOUS BELOW SLAB	R-14	OWNER COORDINATE FORMALULAR CIVILS CIVS PLUS INSULATION GLUED TO INSIDE OF FOUNDATION WALL OR CAST IN PLACE BELOW SLAB
2. WALL INSULATION EXTERIOR - WOOD FRAMED WALLS	BLOW-IN	5 1/2" TOTAL THICKNESS	R-23.1	JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
3. WALL INSULATION EXTERIOR - CONCRETE WALLS FURRED OUT WITH WOOD FRAMED WALLS	BLOW-IN	5 1/2" TOTAL THICKNESS 3 1/2" TOTAL THICKNESS	R-23.1 R-14.7	JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
4. FLOORS (JOISTS/FRAMING)	BLOW-IN	10"	R-42	JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
5. ROOFING: VENT BAFFLES	BLOW DECK	1"-TOTAL THICKNESS		FLAME RETARDANT PVC. EXTEND A MINIMUM OF 48" ABOVE EAVES
6. ROOFING: AT EAVES	FOAM-IN-PLACE	1"-TOTAL THICKNESS	R-6.8	JOHNS MANVILLE <b>COBOND® MCS</b> CLOSED-CELL SPRAY FOAM INSULATION
7. ROOFING: AT TRUSSES	BLOW-IN	DEPTH REQUIRED TO MEET R-VALUE	R-50	JOHNS MANVILLE <b>CLIMATE PROB FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
9. RESTROOMS, BATHROOMS AND COMMON SPACES	BLOW-IN (FOR SOUND)	FILL CAVITIES		JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
10. AT STUD CAVITIES WITH ROOF DRAINS OR PLUMBING STACKS, UNITS IN EXTERIOR WALL SPACES AND COMMON SPACES	SOUND BATS	FILL VOIDS		JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
11. MECHANICAL TYPE ROOM WALLS AND CEILINGS WHERE APPLICABLE	SOUND BATS	FILL CAVITY		JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
12. INTERIOR FLOORS - SOUND RATING REQUIRED	SOUND BATS	FILL CAVITY		JOHNS MANVILLE <b>SPIDERB PLUS FORMALDEHYDE-FREE™</b> BLOW-IN FIBERGLASS INSULATION
13. DUCTWORK/PLUMBING LINES	DBL FACED 1/2" VINYL FACED			SEE MECHANICAL AND PLUMBING - FOR ALL INSULATION REQUIREMENTS
14. GLAZING - NFRC THERMAL RATINGS	DOUBLE PANE	LOW-E	MAX U-FACTOR: 0.32 MAX SHGC: 0.16	ALUMINUM CLAD WOOD

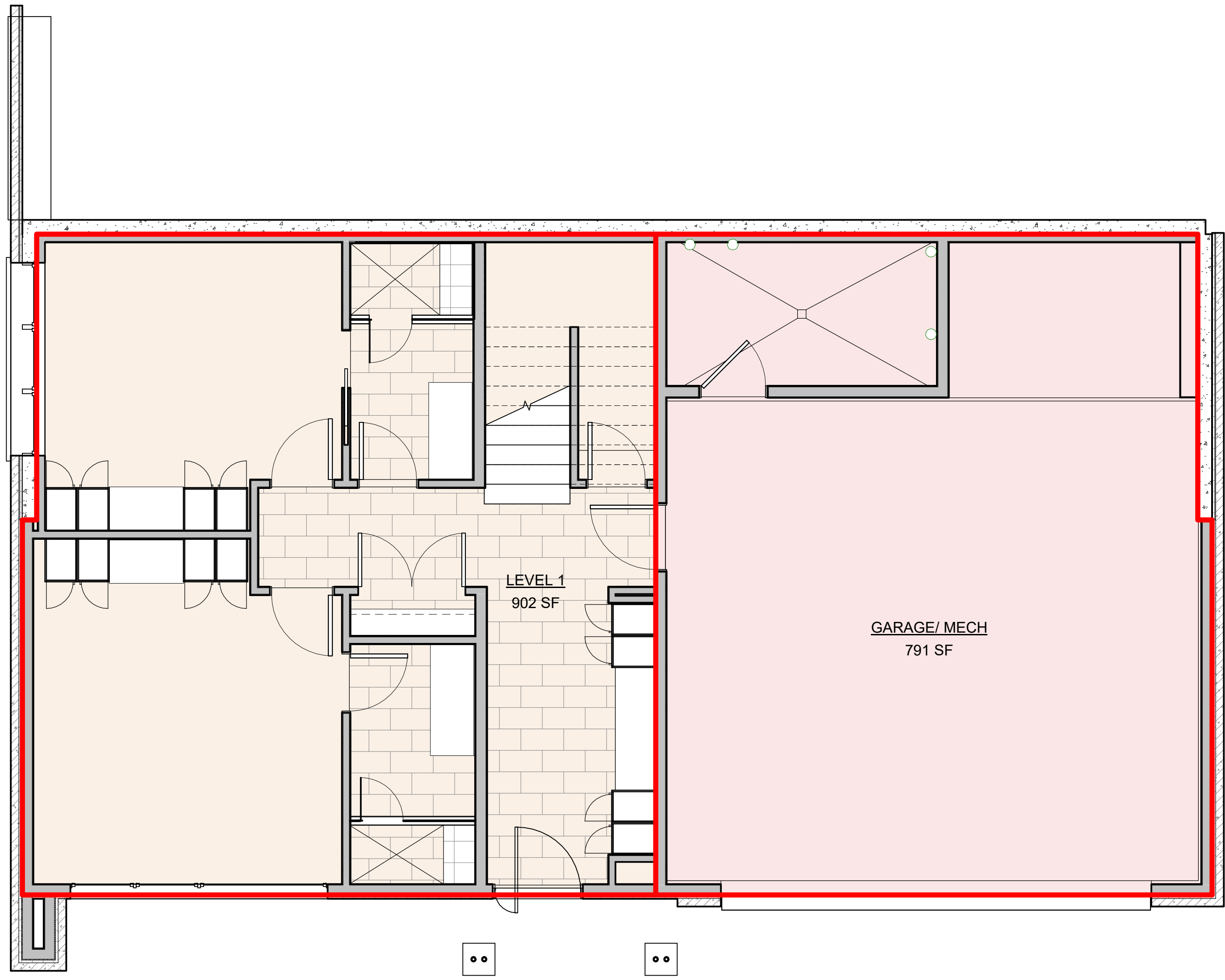
**INSULATION NOTES:**  
1. COORDINATE WITH PROJECT SPECIFICATION SECTIONS FOR INSULATION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.  
2. ALL INSULATION SHALL BE TIGHT, AND NO GAPS SHALL BE LEFT.  
3. ALL INSULATION AT PIPES SHALL BE INSTALLED IN A WARM SIDE ONLY.

**PROVIDE SEALING OF THE BUILDING THERMAL ENVELOPE FOR LEAKAGE BY THE REQUIREMENTS BELOW:**  
[A] BLOWER DOOR TEST FOR BUILDING ENVELOPE A FINAL WITH A MAXIMUM AIR LEAKAGE OF 5 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED BY AN APPROVED THIRD PARTY. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE OWNER.  
[B] AIR BARRIER TO BE PERFORMED WITH "AEROBARRIER" ENVELOPE SEALING TECHNOLOGY.  
2. TO BE PERFORMED AFTER DRYWALL INSTALLATION AND MUDD AND TAPE.  
3. CONTRACTOR TO VERIFY NO WALL OPENINGS GREATER THAN 1/2" PRIOR TO INSTALLATION OF ENVELOPE SEALING.

**RESCHECK/ ENERGY COM CHECK**

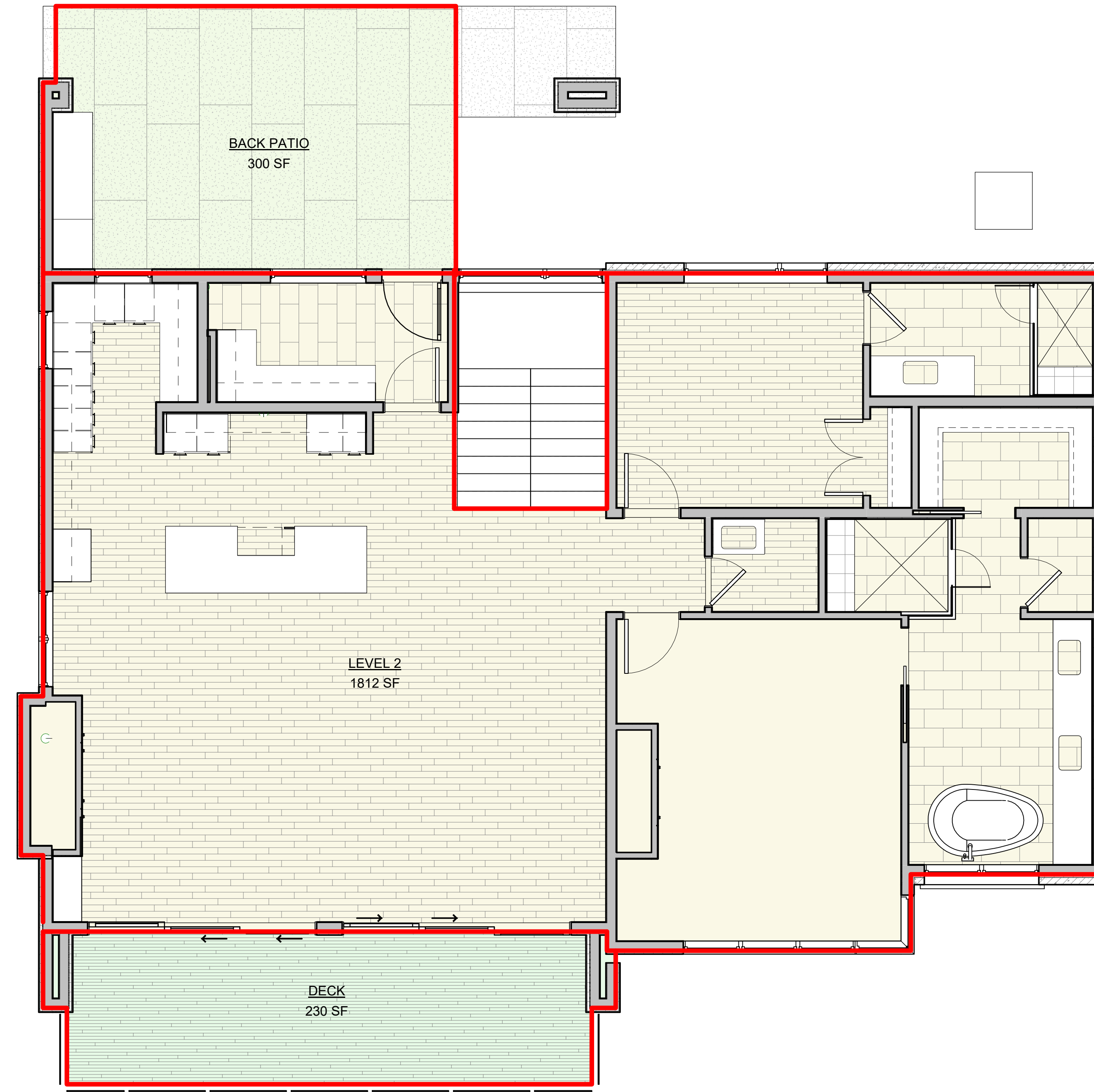
**RESCHECK Software Version 4.7.2 Compliance Certificate**

**Project:** Warm Springs #34  
**Energy Code:** 2015 IECC  
**Location:** Ketchum, Idaho  
**Construction Type:** Single-Family New Construction  
**Conditioned Floor Area:** 2,734 sq ft  
**Glazing Area:** 2.8%  
**Climate Zone:</**



AREA PLAN LEVEL 1  
1/4" = 1'-0"

3  
G003



AREA PLAN LEVEL 2  
1/4" = 1'-0"

2  
G003

BUILDING AREA - FINISHED	
AREA	FINISHED
LEVEL 1	902 SF
LEVEL 2	1812 SF
	2714 SF
BUILDING AREA - UNFINISHED	
AREA	UNFINISHED
GARAGE/ MECH	791 SF
	791 SF
BUILDING AREA - TOTAL	
TOTAL	3505 SF



Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30

REVISIONS:

SHEET TITLE:  
BUILDING AREA  
ANALYSIS

SHEET NUMBER:

G003

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## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 1-GENERAL REQUIREMENTS

#### 01-01 SUMMARY

##### PROJECT INFORMATION:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2012 INTERNATIONAL RESIDENTIAL CODE (I.R.C.). THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL SUB CONTRACTORS TO MEET THESE REQUIREMENTS.

IRC 104.4 ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS, AND ANY CHANGES MADE DURING CONSTRUCTION THAT ARE NOT IN COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE RESUBMITTED FOR APPROVAL AS AN AMENDED SET OF CONSTRUCTION DOCUMENTS. THE CONTRACTOR/OWNER SHALL BE RESPONSIBLE TO SUBMIT THE CHANGES TO THE BUILDING DEPARTMENT, OR WORK WITH THE ARCHITECT TO RE-SUBMIT THE PLANS TO THE BUILDING DEPARTMENT FOR APPROVAL.

THE CONSTRUCTION DOCUMENTS INCORPORATE BOTH THE PLANS AND SPECIFICATIONS FOR THE PROJECT. THE INCLUDED DRAWINGS AND SPECIFICATIONS ARE TO BE CONSIDERED A WHOLE SET OF DRAWINGS. ALL ITEMS REQUIRED FOR CONSTRUCTION MAY BE SHOWN EITHER IN DRAWINGS AND/OR SPECIFICATIONS. REQUIRED ITEMS MAY APPEAR IN WORKING DRAWINGS AND SPECIFICATIONS WHETHER GRAPHIC OR WRITTEN FORM, SO LONG AS THEY DO APPEAR SOMEWHERE AND ARE NOT CONTRADICTORY WITH OTHER PORTIONS OF THE DRAWINGS AND SPECIFICATIONS. NO FRAGMENT OF THE PLANS AND SPECIES TAKE PRECEDENCE OVER OTHER FRAGMENTS. THE DOCUMENTS MUST BE CONSIDERED AS A WHOLE. IF A CONFLICT OR CONTRADICTION DOES OCCUR, THE MOST STRINGENT APPLICATION OR SPECIFICATION APPLIES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY ALL EXISTING CONDITIONS, UTILITIES, MEASUREMENTS, CONNECTIONS, ETC.

THE CONTRACTOR SHALL COMPLY WITH ALL NATIONAL, STATE, LOCAL, AND RELATED CODES AND STANDARD CONSTRUCTION PRACTICES.

CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH GENERAL ENERGY NOTES AND/OR MODEL ENERGY CODE.

CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN THE PLANS TO THE ARCHITECT PRIOR TO COMMENCING RELATED WORK.

AN APPROVE NUMBER OR ADDRESS SHALL BE PROVIDED FOR ALL NEW BUILDINGS IN SUCH A POSITION AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE STREET OR ROAD FRONTING THE PROPERTY. SEE I.R.C. SECTION R319.

##### PROJECT IDENTIFICATION

NAME: THUNDER SPRING RESIDENCES, UNITS 1 A & 2  
ADDRESS: 126 SADDLE ROAD, KETCHUM, IDAHO, 83340  
OWNER: VP COMPANIES

THE PROJECT SHALL INCLUDE THE CONSTRUCTION OF NINE SINGLE FAMILY HOMES AND TWO-FAMILY DWELLINGS. THE CONSTRUCTION SHALL BE OF CONCRETE FOUNDATION WITH WOOD AND STEEL CONSTRUCTION.

##### PHASE CONSTRUCTION:

YES

ACCESS TO SITE:  
NEW CONSTRUCTION: CONTRACTOR SHALL HAVE USE OF PROJECT SITE FOR CONSTRUCTION OPERATIONS DURING CONSTRUCTION PERIOD. ALL STORAGE MUST BE MAINTAINED ON SITE, AND SHALL NOT DISTURB PROPERTY OUTSIDE OF PROPERTY LINES, UNLESS APPROVED BY THE CITY AND OWNER.

### 01-02 ALLOWANCES

#### LUMP-SUM ALLOWANCES:

CONTRACTOR SHALL PROVIDE LUMP SUM ALLOWANCES FOR THOSE ITEMS INDICATED ON PLANS, SCHEDULES OR ITEMS REQUIRING ADDITIONAL DETAIL OR SELECTION. LUMP SUM SHALL BE INCLUDED WITHIN SCHEDULE OF VALUES.

#### CONTINGENCY ALLOWANCES:

USE OF THE CONTINGENCY ALLOWANCE SHALL ONLY BE AS DIRECTED BY ARCHITECT FOR OWNER'S PURPOSES AND ONLY IN CASE OF CHANGE ORDERS THAT INDICATE AMOUNTS TO BE CHARGED TO THE ALLOWANCE.

CONTRACTOR'S OVERHEAD, PROFIT, AND RELATED COSTS FOR PRODUCTS AND EQUIPMENT ORDERED BY OWNER UNDER THE CONTINGENCY ALLOWANCE ARE INCLUDED IN THE ALLOWANCE AND ARE NOT PART OF THE CONTRACT SUM.

CHANGE ORDERS AUTHORIZING USE OF FUNDS FROM THE CONTINGENCY ALLOWANCE WILL INCLUDE CONTRACTOR'S RELATED COSTS, FOR WORK SPECIFIED WITHIN THE CHANGE ORDER. PROFIT AND OVERHEAD OF THE CONTRACTOR SHALL EQUAL PROJECT PROFIT AND OVERHEAD FOR PROJECT.

AT PROJECT CLOSEOUT, CREDIT ALL UNUSED AMOUNTS REMAINING IN THE CONTINGENCY ALLOWANCE TO OWNER BY CHANGE ORDER.

#### SCHEDULE OF ALLOWANCES:

CONTRACTOR SHALL PROVIDE SCHEDULE OF ALL ALLOWANCES AS A PART OF BIDDING FOR OWNER AND ARCHITECT REVIEW.

### 01-03 ALTERNATES

#### GENERAL SUMMARY:

ALTERNATES MAY BE INCLUDED ON THE DRAWINGS, AND SHOULD BE SEPARATED DURING THE BIDDING PROCESS. THE CONTRACTOR MAY ALSO SUBMIT REQUEST FOR ALTERNATES DURING BIDDING. ALL ALTERNATES MAY BE ACCEPTED AFTER REVIEW OF ALTERNATE WITH THE OWNER. AND THE CONTRACTOR WILL BE NOTIFIED IF AN ALTERNATE IS TO BE ACCEPTED OR NOT. THE CONTRACTOR SHALL NOT ASSUME THAT ALTERNATES ARE ACCEPTED, UNLESS NOTIFIED BY THE ARCHITECT THROUGH ADDENDUM, AS, OR PROPOSAL, REQUEST OF ACCEPTANCE OF THE ALTERNATE. ALL ALTERNATE WORK MAY BE ADDED TO OR DEDUCTED FROM THE BASE BID BY CHANGE ORDER IN THE AMOUNT OF THE ADDITIONAL COSTS OR SAVINGS, IF OWNER DECIDES TO ACCEPT THE ALTERNATE BID.

- ALTERNATES DESCRIBED IN THIS SECTION ARE PART OF THE WORK ONLY IF ENUMERATED IN THE AGREEMENT.
- THE COST OR CREDIT FOR EACH ALTERNATE IS THE NET ADDITION TO OR DEDUCTION FROM THE CONTRACT SUM TO INCORPORATE ALTERNATE INTO THE WORK. NO OTHER ADJUSTMENTS ARE MADE TO THE CONTRACT SUM.
- ALTERNATES PROPOSED BY THE CONTRACTOR DURING BIDDING MUST NOT BE SHOWN AS THE BASE BID FOR THE PROJECT. ALL BASE BIDS MUST BE THOSE ITEMS SPECIFIED ON THE DRAWINGS, AND ALL ALTERNATES PROPOSED BY THE CONTRACTOR MUST BE OUTSIDE OF THE REQUIRED NUMBER OF BASE BIDS FOR EACH DISCIPLINE. THE ALTERNATE MAY BE THEN PRESENTED.

#### 01-04 SUBSTITUTION PROCEDURES

##### GENERAL SUMMARY:

ALL CHANGES IN PRODUCTS, MATERIALS, EQUIPMENT, AND METHODS OF CONSTRUCTION FROM THOSE REQUIRED BY THE CONTRACT DOCUMENTS AND PROPOSED BY CONTRACTOR, SHALL BE APPROVED BY THE ARCHITECT, ENGINEER AND BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF WORK.

##### SUBMITTALS

SUBMIT THREE COPIES OF EACH REQUEST FOR CONSIDERATION BY ARCHITECT AND OWNER. IDENTIFY PRODUCT OR FABRICATION OR INSTALLATION METHOD TO BE REPLACED.

SHOW COMPLIANCE WITH REQUIREMENTS FOR SUBSTITUTIONS INCLUDING THE FOLLOWING:

- STATEMENT INDICATING WHY SPECIFIED PRODUCT OR FABRICATION OR INSTALLATION CANNOT BE PROVIDED, IF APPLICABLE.
- PRODUCT DATA, INCLUDING DRAWINGS AND DESCRIPTIONS OF PRODUCTS AND FABRICATION AND INSTALLATION PROCEDURES.
- SAMPLES, WHERE APPLICABLE OR REQUESTED.
- DETAILED COMPARISON OF CONTRACTOR'S CONSTRUCTION SCHEDULE USING PROPOSED SUBSTITUTION WITH PRODUCTS SPECIFIED FOR THE WORK.
- COST INFORMATION, INCLUDING A PROPOSAL OF CHANGE, IF ANY, IN THE CONTRACT SUM.

ARCHITECT WILL REQUEST ADDITIONAL INFORMATION IF NEEDED TO QUALIFY DOCUMENTATION FOR EVALUATION. ARCHITECT WILL NOTIFY CONTRACTOR OF ACCEPTATION OR REJECTION OF PROPOSED SUBSTITUTION IN WRITING. THE CONTRACTOR SHALL NOT INCLUDE PROPOSED SUBSTITUTIONS IN BIDS OR COSTS UNLESS ACCEPTANCE OF SUBSTITUTION BY ARCHITECT AND OWNER.

### 01-05 PAYMENT PROCEDURES

##### SUBMITTALS

SUBMIT THE SCHEDULE OF VALUES WITH UPDATED CONSTRUCTION SCHEDULE TO ARCHITECT AT EARLIEST POSSIBLE DATE BUT NO LATER THAN SEVEN DAYS BEFORE THE DATE SCHEDULED FOR PAYMENT APPLICATION.

INCLUDE THE FOLLOWING IDENTIFICATION ON THE SCHEDULE OF VALUES:  
PROJECT NAME AND LOCATION,  
NAME OF ARCHITECT,  
CONTRACTOR'S NAME AND ADDRESS,  
DATE OF SUBMITTAL.

ARRANGE SCHEDULE OF VALUES CONSISTENT WITH FORMAT OF AIA DOCUMENT G703. PROVIDE A SEPARATE LINE ITEM IN THE SCHEDULE OF VALUES FOR EACH PART OF THE WORK WHERE APPLICATIONS FOR PAYMENT MAY INCLUDE MATERIALS OR EQUIPMENT PURCHASED OR FABRICATED AND STORED, BUT NOT YET INSTALLED.  
UPDATE AND RESUBMIT THE SCHEDULE OF VALUES BEFORE THE NEXT APPLICATIONS FOR PAYMENT WHEN CHANGE ORDERS OR CONSTRUCTION CHANGE DIRECTIVES RESULT IN A CHANGE IN THE CONTRACT SUM.

EACH APPLICATION FOR PAYMENT SHALL BE CONSISTENT WITH PREVIOUS APPLICATIONS AND PAYMENTS AS CERTIFIED BY ARCHITECT AND PAID FOR BY OWNER.

EACH APPLICATION FOR PAYMENT, SUBMIT WAIVERS OF MECHANIC'S LIEN FROM ENTITIES LAWFULLY ENTITLED TO FILE A MECHANIC'S LIEN ARISING OUT OF THE CONTRACT AND RELATED TO THE WORK COVERED BY THE PAYMENT. SUBMIT PARTIAL WAIVERS ON EACH ITEM FOR AMOUNT REQUESTED IN PREVIOUS APPLICATION. ON EACH ITEM, WHEN AN APPLICATION SHOWS COMPLETION OF AN ITEM, SUBMIT CONDITIONAL FINAL OR FULL WAIVERS. WAIVER FORMS, SUBMIT WAIVERS OF LIEN ON FORMS, EXECUTED IN A MANNER ACCEPTABLE TO OWNER.

### 01-06 TEMPORARY TREE AND PLANT PROTECTION

##### GENERAL

CONTRACTOR SHALL REVIEW PLANS WITH SITE AND MARK ALL TREES IDENTIFIED ON THE DRAWINGS TO BE PROTECTED AND REMAIN DURING CONSTRUCTION.

THE CONTRACTOR AND ARCHITECT SHALL REVIEW THE MITIGATION WITH THE CITY PRIOR TO COMMENCING CONSTRUCTION, AND SHALL RECEIVE APPROVAL FROM THE CITY.

##### SUBMITTALS

CONTRACTOR, ARCHITECT AND OWNER SHALL REVIEW ON SITE AFTER TREES HAVE BEEN MARKED AND PRIOR TO STAKING.

##### EXCLUSION

PROVIDE 6'-0" HIGH FENCING AROUND TREE. FENCING SHALL BE INSTALLED TO PROVIDE PROTECTION TO TREE AND SHALL BE INSTALLED AT DIAMETER TO MATCH DRIP LINE OF TREE.

### 01-07 OPERATION AND MAINTENANCE STAFF

##### GENERAL

THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ALL OPERATION MANUALS, WARRANTY INFORMATION, ETC. FOR ALL EQUIPMENT, APPLIANCES, ETC. AT THE COMPLETION OF THE PROJECT.

ALL INFORMATION SHALL BE COLLECTED AND PLACED IN BINDER AND/OR DIGITAL DATA FOR THE OWNER TO REVIEW. CONTRACTOR SHALL PROVIDE START UP AND MAINTENANCE REVIEW WITH OWNER PRIOR TO FINAL PAYMENT.

THE CONTRACTOR SHALL SCHEDULE A TIME TO REVIEW AND TRAIN THE OWNER AND/OR OWNER'S REPRESENTATIVES ON ALL ITEMS RELATED TO OPERATION OF ALL EQUIPMENT.

### 01-08 WARRANTY

##### SUBMITTALS

THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A WRITTEN WARRANTY COVERING WORKMANSHIP, MATERIAL, ETC. ON THE PROJECT FOR A PERIOD OF (1) YEAR FROM COMPLETION. A WRITTEN WARRANTY SHALL BE PROVIDED FROM VENDORS ON ALL MATERIALS THAT HAVE EXTENDED WARRANTY PERIODS ABOVE THOSE STATED ABOVE. SUCH AS FLOORING MATERIALS WHICH SHALL PROVIDE A WARRANTY FOR MATERIALS FOR A MINIMUM OF 20 YEARS.

### 01-09 SUBMITTALS

##### GENERAL

REQUIREMENTS FOR THE SUBMITTAL PROCEDURAL REQUIREMENTS FOR SUBMITTING SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER SUBMITTALS REQUIRED BY SPECIFICATIONS FOR ARCHITECT/OWNER REVIEW AND APPROVAL PRIOR TO INSTALLATION WITHIN PROJECT.

ELECTRONIC DIGITAL DATA FILES OF THE CONTRACT DRAWINGS WILL NOT BE PROVIDED BY ARCHITECT FOR CONTRACTOR'S USE IN PREPARING SUBMITTALS.

"CONTRACTOR (EACH SUBCONTRACTOR) SHALL BE SOLELY RESPONSIBLE AND ASSUMES FULL LIABILITY FOR ENSURING THAT SUBMITTALS ARE TIMELY PROVIDED TO THE ARCHITECT, AND THE CONTENT THEREOF COMPLIES IN FULL, AND IS PROVIDED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS FOR THE PROJECT. THE CONTRACTOR (SUBCONTRACTOR) HEREBY AGREES TO HOLD HARMLESS THE ARCHITECT, ITS OFFICERS, EMPLOYEES, AGENTS AND CONSULTANTS FROM FAILURE TO COMPLY WITH THIS PROVISION. CONTRACTOR FURTHER AGREES TO DEFEND AND INDEMNIFY ARCHITECT, ITS OFFICERS, EMPLOYEES, AGENTS AND CONSULTANTS FOR ANY AND ALL INJURIES, DAMAGES AND LIABILITY RESULTING FROM A BREACH HEREOF."

COORDINATE EACH SUBMITTAL WITH FABRICATION, PURCHASING, TESTING, DELIVERY. OTHER SUBMITTALS, AND RELATED ACTIVITIES THAT REQUIRE SEQUENTIAL ACTIVITY. SUBMITTALS THAT REQUIRE CONCURRENT REVIEW SHOULD BE SO INDICATED IN THOSE SECTIONS. ARCHITECT RESERVES THE RIGHT TO WITHHOLD ACTION ON A SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.

ALLOW TIME FOR SUBMITTAL REVIEW, INCLUDING TIME FOR RESUBMITTALS. TIME FOR REVIEW SHALL COMMENCE ON ARCHITECT'S RECEIPT OF SUBMITTAL. NO EXTENSION OF THE CONTRACT TIME WILL BE AUTHORIZED BECAUSE OF FAILURE TO TRANSMIT SUBMITTALS ENOUGH IN ADVANCE OF THE WORK TO PERMIT PROCESSING, INCLUDING REVISIONS.

INITIAL REVIEW: ALLOW 14 DAYS FOR INITIAL REVIEW OF EACH SUBMITTAL.

RESUBMITTAL REVIEW: ALLOW 14 DAYS FOR REVIEW OF EACH RESUBMITTAL.

SEQUENTIAL REVIEW: WHERE SEQUENTIAL REVIEW OF SUBMITTALS BY ARCHITECTS CONSULTANTS, OWNER, OR OTHER PARTIES IS REQUIRED.

ALLOW 14 DAYS FOR INITIAL REVIEW OF EACH SUBMITTAL.

ELECTRONIC SUBMITTALS WILL BE ACCEPTED, BUT MUST BE COMPLETE AND MUST BE INCLUDED INTO SINGLE DIGITAL (.PDF FORMAT) FILE. THE FILE MUST PROVIDE MEANS FOR INSERTION TO PERMANENTLY RECORD CONTRACTOR'S REVIEW AND APPROVAL MARKINGS AND ACTION TAKEN BY ARCHITECT.

DISTRIBUTION: FURNISH COPIES OF FINAL SUBMITTALS TO MANUFACTURERS, SUBCONTRACTORS, SUPPLIERS, FABRICATORS, INSTALLERS, AUTHORITIES HAVING JURISDICTION, AND OTHERS AS NECESSARY FOR PERFORMANCE OF CONSTRUCTION ACTIVITIES. SHOW DISTRIBUTION ON TRANSMITTAL FORMS.

USE FOR CONSTRUCTION: RETAIN COMPLETE COPIES OF SUBMITTALS ON PROJECT SITE. USE ONLY FINAL ACTION SUBMITTALS THAT ARE MARKED WITH APPROVAL NOTATION FROM ARCHITECTS ACTION STAMP.

GENERAL SUBMITTAL PROCEDURAL REQUIREMENTS: PREPARE AND SUBMIT SUBMITTALS REQUIRED BY INDIVIDUAL SPECIFICATION SECTIONS. TYPES OF SUBMITTALS (PRODUCT, SAMPLE OR SHOP DRAWINGS) ARE INDICATED IN INDIVIDUAL SPECIFICATION SECTIONS. PROVIDE A MINIMUM OF TWO COPIES OF EACH SUBMITTAL. ONE COPY WILL BE RETAINED BY ARCHITECT, AND ONE COPY RETURNED TO CONTRACTOR.

ARCHITECT WILL RETURN AN ANNOTATED FILE AND RETAIN ONE COPY OF FILE AS AN ELECTRONIC PROJECT RECORD DOCUMENT FILE.

A. ACTION SUBMITTALS:  
SUBMIT TWO PAPER COPIES OF EACH SUBMITTAL UNLESS OTHERWISE INDICATED. ARCHITECT WILL RETURN TWO COPIES.

B. INFORMATIONAL SUBMITTALS:  
SUBMIT TWO PAPER COPIES) OF EACH SUBMITTAL UNLESS OTHERWISE INDICATED.

C. CERTIFICATES AND CERTIFICATIONS SUBMITTALS:  
A STATEMENT THAT INCLUDES SIGNATURE OF ENTITY RESPONSIBLE FOR PREPARING CERTIFICATION, CERTIFICATES AND CERTIFICATIONS SHALL BE SIGNED BY AN OFFICER OR OTHER INDIVIDUAL AUTHORIZED TO SIGN DOCUMENTS ON BEHALF OF THAT ENTITY.

D. SHOP DRAWINGS:  
PREPARE PROJECT SPECIFIC INFORMATION, DRAWN ACCORDING TO SCALE. DO NOT BASE SHOP DRAWINGS ON REPRODUCTIONS OF THE CONTRACT DOCUMENTS OR STANDARD PRINTED DATA, UNLESS SUBMITTAL BASED ON ARCHITECT'S DIGITAL DATA DRAWING FILES IS OTHERWISE PERMITTED.

SUBMIT SHOP DRAWINGS IN THE FOLLOWING FORMAT:  
PDF ELECTRONIC FILE (OR)  
TWO OPAQUE (BOND) COPIES OF EACH SUBMITTAL. ARCHITECT WILL RETURN ONE COPY.

6. SAMPLES:  
SUBMIT SAMPLES FOR REVIEW OF KIND, COLOR, PATTERN, AND TEXTURE FOR A CHECK OF THESE CHARACTERISTICS WITH OTHER ELEMENTS AND FOR A COMPARISON OF THESE CHARACTERISTICS BETWEEN SUBMITTAL AND ACTUAL COMPONENT AS DELIVERED AND INSTALLED.

MAINTAIN SETS OF APPROVED SAMPLES AT PROJECT SITE. AVAILABLE FOR QUALITY CONTROL COMPARISONS THROUGHOUT THE COURSE OF CONSTRUCTION ACTIVITY. SAMPLE SETS MAY BE USED TO DETERMINE FINAL ACCEPTANCE OF CONSTRUCTION ASSOCIATED WITH EACH SET.

CONTRACTOR'S REVIEW:

THE CONTRACTOR SHALL REVIEW EACH SUBMITTAL AND CHECK FOR COORDINATION WITH OTHER WORK OF THE CONTRACT AND FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS; NOTE CORRECTIONS AND FIELD DIMENSIONS THAT VARY FROM CONSTRUCTION DOCUMENTS, AND MARK WITH APPROVAL STAMP BEFORE SUBMITTING TO ARCHITECT. SUBMITTALS NOT STAMPED APPROVED BY THE CONTRACTOR WILL NOT BE REVIEWED, AND RETURNED TO CONTRACTOR FOR APPROVAL BEFORE ARCHITECTURE/OWNER REVIEW.

ARCHITECT'S ACTION:

THE ARCHITECT WILL REVIEW EACH SUBMITTAL, MAKE MARKS TO INDICATE CORRECTIONS OR REVISIONS REQUIRED, AND RETURN IT. ARCHITECT WILL STAMP EACH SUBMITTAL WITH AN ACTION STAMP AND WILL MARK STAMP APPROPRIATELY TO INDICATE ACTION. THE ARCHITECT WILL RETURN ONE COPY FOR FILE RECORD DOCUMENTS, AND WILL RETURN ALL REMAINING COPIES TO CONTRACTOR.

INCOMPLETE SUBMITTALS ARE UNACCEPTABLE, WILL BE CONSIDERED NONRESPONSIVE AND WILL BE RETURNED FOR RESUBMITTAL WITHOUT REVIEW.

SUBMITTALS NOT REQUIRED BY THE CONTRACT DOCUMENTS MAY BE RETURNED BY THE ARCHITECT WITHOUT ACTION.

### 01-10 DEFERRED SUBMITTALS

##### GENERAL

DEFERRED SUBMITTALS ARE THOSE PORTIONS OF DESIGN THAT ARE NOT SUBMITTED AT THE TIME OF THE PERMIT APPLICATION AND HAVE RECEIVED PRIOR APPROVAL FROM THE BUILDING OFFICIAL TO BE DEFERRED. THE DEFERRED SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND GENERAL CONTRACTOR WITHIN SIX WEEKS TO COMMENCEMENT OF CONSTRUCTION TO THIS PORTION OF WORK.

SEE DEFERRED SUBMITTAL LEGEND FOR ALL DEFERRED SUBMITTALS BY THE GENERAL CONTRACTOR, AND PROCESS PER IRC FOR REVIEW AND APPROVAL OF ALL DEFERRED SUBMITTALS. CONTRACTOR IS RESPONSIBLE FOR SUBMITTAL OF THESE ITEMS. NO CONSTRUCTION OF ANY ITEM LISTED AS A DEFERRED SUBMITTAL SHALL COMMENCE PRIOR TO APPROVAL BY THE LOCAL BUILDING DEPARTMENT.

##### SUBMITTALS

UNLESS NOTED ON DRAWINGS, THE FOLLOWING ARE REQUIRED FOR THE DEFERRED SUBMITTAL PROCESS.  
1. FIRE SPRINKLER DRAWINGS IF REQUIRED  
2. PRE-FABRICATED ROOF AND FLOOR TRUSSES  
3. HEATING AND COOLING MECHANICAL SYSTEMS  
4. LIGHT FIXTURES  
5. RADIANT HEAT SUBMITTALS, ENGINEERING, LAYOUT, ETC.  
6. FACTORY BUILT FIREPLACES.

##### DEFERRED SUBMITTAL PROCEDURES:

- THE DEFERRED SUBMITTAL SHALL FIRST BE REVIEWED BY THE GENERAL CONTRACTOR FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. THE SUBMITTAL MUST BE REVIEWED, APPROVED, STAMPED AND SIGNED BY THE GENERAL CONTRACTOR BEFORE BEING SUBMITTED TO THE ARCHITECT.
- THE GENERAL CONTRACTOR SHALL SUBMIT FIVE SETS OF THE DEFERRED SUBMITTAL TO THE ARCHITECT.
- THE DEFERRED SUBMITTAL ITEMS WILL BE REVIEWED BY THE ENGINEER OR ARCHITECT IN RESPONSIBLE CHARGE. THE ENGINEER OR ARCHITECT WILL ATTACH A LETTER TO THE SUBMITTAL STATING THAT THE DEFERRED ITEM IS IN CONFORMANCE WITH THE DESIGN INTENT OF THE STRUCTURE.
- THE REVIEWED SUBMITTALS WILL BE RETURNED TO THE GENERAL CONTRACTOR. TWO SETS OF THE DEFERRED SUBMITTAL ARE THEN SUBMITTED TO THE CITY FOR REVIEW.
- THE GENERAL CONTRACTOR SHALL MAINTAIN ONE SET OF THE REVIEWED SUBMITTAL ON SITE FOR REFERENCE BY THE CITY INSPECTOR.
- THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED BY THE BUILDING OFFICIAL.
- SEE STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS FOR STRUCTURAL DEFERRED SUBMITTALS.

### DIVISION 3-CONCRETE

#### 03-05 CAST IN PLACE FOOTINGS

##### GENERAL PRODUCTS

CONCRETE FOOTINGS TO BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH UNLESS SPECIFIED OTHERWISE ON STRUCTURAL DRAWINGS. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE, UNLESS NOT SPECIFIED. ALL FOOTINGS SHALL HAVE NORMAL WEIGHT 1" AGGREGATE.

REINFORCING SHALL BE AS PER THE FOOTING SCHEDULE -SEE STRUCTURAL DRAWINGS.

SUBMITTALS  
DESIGN MIXTURES FOR EACH CONCRETE MIX.

##### EXCLUSION

ALL FOOTINGS TO BEAR ON UNDISTURBED SOIL OR ENGINEERED COMPACTED FILL. (CERTIFIED 95% COMPACTION). ANY QUESTIONABLE SOIL SHALL BE REVIEWED BY SOIL ENGINEER PRIOR TO PLACEMENT OF FOOTING. THE CONTRACTOR SHALL COORDINATE AND REQUEST A SITE OBSERVATION REPORT FROM GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FOOTINGS

ALL TYPICAL FOOTINGS TO BE MINIMUM OF 48" FROM FINISH GRADE TO BOTTOM OF FOOTING.

FOOTING SIZE AND REINFORCEMENT MUST MEET REQUIREMENTS OF 2012 IRC R403. FOOTING SIZE ARE SPECIFIED ON STRUCTURAL DRAWINGS WHICH TAKE PRECEDENCE UNLESS SPECIFIED.

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES, COMPLY WITH ACI 306.1 FOR COLD-WEATHER PROTECTION AND ACI 301 FOR HOT-WEATHER PROTECTION DURING CURING.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

CONSTRUCTION JOINTS: INSTALL SO STRENGTH AND APPEARANCE OF CONCRETE ARE NOT IMPAIRED

#### 03-06 CAST IN PLACE FOUNDATION WALLS

##### GENERAL PRODUCTS

CONCRETE FOUNDATION TO BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH, AND SHALL HAVE NORMAL WEIGHT 1" AGGREGATE.

REINFORCING SHALL BE AS PER THE FOUNDATION WALL SCHEDULE -SEE STRUCTURAL DRAWINGS.

##### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

##### EXCLUSION

TYPICAL WALLS SHALL BE A MINIMUM OF 8" THICK U.S.O. ON PLANS. REFER TO BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR THICKNESS OF WALLS. REFER TO TOP OF WALL DETAILS ON ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR SPECIFIED DETAILS AND REQUIREMENTS.

COORDINATE WITH ARCHITECTURAL FOUNDATION PLANS FOR ALL TOP OF WALL ELEVATIONS. TOP OF FOUNDATION WALL TO BE A MINIMUM OF 4' ABOVE FINISH GRADE.

PROVIDE WATERPROOFING AT EXTERIOR OF FOUNDATION WALLS BELOW FINISH GRADE AT ALL HABITABLE SPACES. SEE DIVISION 7 OF SPECIFICATIONS.

PROVIDE PERIMETER FOUNDATION DRAIN -SEE DIVISION 7 OF SPECIFICATIONS.

PROVIDE RIGID INSULATION AT INSIDE FACE OF FOUNDATION BELOW FLOOR SLAB WHERE EXPOSED TO EXTERIOR. COORDINATE WITH ARCHITECTURAL DETAILS AND INSULATION SPECIFICATIONS FOR THICKNESS REQUIRED PER ENERGY CALCULATIONS.

CONCRETE FOUNDATION WALLS TO MEET THE REQUIREMENTS OF 2012 IRC 404.

CONSTRUCT FORM WORK SO CONCRETE MEMBERS AND STRUCTURES ARE OF SIZE, SHAPE, ALIGNMENT, ELEVATION, AND POSITION INDICATED PLACE AND SECURE ANCHORAGE DEVICES AND OTHER EMBEDDED ITEMS REQUIRED FOR ADJOINING WORK THAT IS ATTACHED TO OR SUPPORTED BY CAST-IN-PLACE CONCRETE. USE SETTING DRAWINGS, TEMPLATES, DIAGRAMS, INSTRUCTIONS, AND DIRECTIONS FURNISHED WITH ITEMS TO BE EMBEDDED.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

FINISH: PROVIDE RUBBED SURFACES ON ALL EXPOSED SURFACES OF ALL EXPOSED CONCRETE FOUNDATION WALLS NO LATER THAN ONE DAY AFTER FORM REMOVAL.

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. DEFECTIVE CONCRETE: REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

#### 03-08 CAST IN PLACE INTERIOR CONCRETE SLABS

##### GENERAL PRODUCTS

INTERIOR CONCRETE SLABS TO BE 4000 PSI. AND SHALL HAVE NORMAL WEIGHT 3/4" AGGREGATE.

REINFORCING SHALL BE PER STRUCTURAL DRAWINGS. PROVIDE #3 @ 24" O.C. EACH WAY OR 6" X 6"-W1 X W1 X W1 M. IF NOT SPECIFIED ON DRAWINGS. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MINIMUM SPECIFICATION FOR ALL REINFORCEMENT.

##### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

##### EXCLUSION

ALL SLABS SHALL BE PLACED ON 2" RIGID INSULATION BOARD OVER 1/4" POLYETHYLENE (OR APPROVED EQUAL) VAPOR BARRIER WITH JOINTS LAPPED NOT LESS THAN 6" OVER 4" MINIMUM COMPACTED SUB BASE.

CONTRACTOR TO VERIFY THAT INSTALLATION OF FORM WORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

COORDINATE WITH HV AC CONTRACTOR FOR FLOOR RADIANT HEATING SYSTEM OR BELOW GRADE DUCTWORK AS PER PLANS. PROVIDE BY DESIGN BUILD CONTRACTOR COORDINATED BY THE GENERAL CONTRACTOR. THE RADIANT TUBING MUST BE WITHIN THE TOP HALF OF THE SLAB.

TROWEL FINISH: SMOOTH

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

ALL JOINTS SHALL BE CUT.

SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF ALL CONTROL AND EXPANSION JOINTS AT CONCRETE SLABS.

#### 03-09 EXTERIOR CAST IN PLACE CONCRETE SLABS

##### GENERAL PRODUCTS

EXTERIOR CONCRETE SLABS TO BE 4000 PSI. AND SHALL HAVE NORMAL WEIGHT 3/4" AGGREGATE.

REINFORCING SHALL BE PER STRUCTURAL DRAWINGS. PROVIDE #3 @ 24" O.C. EACH WAY OR 6" X 6"-W1 X W1 X W1 M. IF NOT SPECIFIED ON DRAWINGS. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MINIMUM SPECIFICATION FOR ALL REINFORCEMENT.

##### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

##### EXCLUSION

ALL SLABS SHALL BE PLACED ON 4" MINIMUM COMPACTED SUB BASE.

SLAB SHALL SLOPE 1/8" PER FOOT TO DRAIN AWAY FROM BUILDING.

PROVIDE TURNED DOWN GRADE BEAM AT EDGES. DOWEL SLAB INTO FOUNDATION WALLS WITH #4 BARS AT 24" O.C.

CONTRACTION JOINTS IN SLABS ON-GRADE AS INDICATED SHALL BE AT LEAST ONE-FOURTH OF CONCRETE THICKNESS AS SHOWN ON DRAWINGS.

BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORM WORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT REQUIRED INSPECTIONS HAVE BEEN PERFORMED.

TROWEL FINISH: AS SPECIFIED ON LANDSCAPE DRAWINGS

PROTECT FRESHLY PLACED CONCRETE FROM PREMATURE DRYING AND EXCESSIVE COLD OR HOT TEMPERATURES. REPAIR AND PATCH DEFECTIVE AREAS WHEN APPROVED BY ARCHITECT. REMOVE AND REPLACE CONCRETE THAT CANNOT BE REPAIRED AND PATCHED TO ARCHITECT'S APPROVAL.

SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATION OF ALL CONTROL AND EXPANSION JOINTS AT CONCRETE SLABS.

RADIANT HEATING TUBES ARE TO BE LOCATED IN SEVERAL CONCRETE PATIOS AT THE EXTERIOR AS NOTED ON THE PLANS. THE CONTRACTOR SHALL COORDINATE WITH DESIGN BUILD MECHANICAL CONTRACTOR FOR EXTENT OF TUBING LOCATIONS AND DESIGN OF TUBING LAYOUT. CONTRACTOR TO COORDINATE PLACEMENT OF TUBES IN TOP HALF OF CONCRETE SLAB.

ALL SLABS AT EXTERIOR FOR RADIANT HEATING SHALL 2" CLOSED-CELL SPRAY-FOAM INSULATION UNDER THE SLAB.

#### 03-12 EXTERIOR CAST IN PLACE CONCRETE STEPS

##### GENERAL PRODUCTS

EXTERIOR CONCRETE STEPS TO BE 4000 PSI. AND SHALL HAVE NORMAL WEIGHT 3/4" AGGREGATE.

REINFORCING SHALL BE PER STRUCTURAL DRAWINGS. PROVIDE #3 @ 24" O.C. PROVIDE #3 AT EACH NOSING OF STAIRS. PROVIDE MINIMUM OF 2" COVERAGE OF CONCRETE TO ALL STEEL. STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MINIMUM SPECIFICATION FOR ALL REINFORCEMENT.

##### SUBMITTALS

DESIGN MIXTURES FOR EACH CONCRETE MIX.

##### EXCLUSION

ALL STEPS SHALL BE PLACED ON 4" MINIMUM COMPACTED SUB BASE OR GRAVEL STEPS SHALL SLOPE 1/8" AT EACH TREAD TO ALLOW DRAINAGE.

PROVIDE TURNED DOWN GRADE BEAM AT EDGES. DOWEL SLAB INTO FOUNDATION WALLS WITH #4 BARS AT 24" O.C.

STEPS TO HAVE RISER MAXIMUM HEIGHT

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 5 METALS

#### 05-01 STRUCTURAL STEEL WIDE BEAMS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL BEAMS (ASTM A 572/A 572M, GRADE 50)

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS, INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, BOLTS, NUTS, AND WASHERS. ASTM A325, HEAVY HEX STEEL STRUCTURAL BOLTS; ASTM A563 HEAVY HEX CARBON STEEL NUTS; AND ASTM F436 HARDENED CARBON STEEL WASHERS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED SSPC-Paint 25, TYPE 1, COLOR OF EXPOSED STEEL TO BE: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY'.

PROVIDE BEAMS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

CONTRACTOR WILL ENGAGE AN INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM SHOP TESTS AND INSPECTIONS AND PREPARE TEST REPORTS. VERIFY ELEVATIONS OF CONCRETE AND MASONRY BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. CAMBER STRUCTURAL STEEL MEMBERS WHERE INDICATED. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES. REMOVE BLEMISHES BY FILING OR GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-02, 05-03, 05-04 STRUCTURAL STEEL COLUMNS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL COLUMNS: TUBE, PIPE, WIDE FLANGE, AS NOTED ON STRUCTURAL DRAWINGS.

ARCHITECTURALLY EXPOSED STRUCTURAL STEEL

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

INDICATE TYPE, SIZE, AND LENGTH OF BOLTS, DISTINGUISHING BETWEEN SHOP AND FIELD BOLTS.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

1. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, B-73-620 Series, at 3.0 to 10.0 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.

PROVIDE COLUMNS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

CONTRACTOR WILL ENGAGE AN INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM SHOP TESTS AND INSPECTIONS AND PREPARE TEST REPORTS.

VERIFY ELEVATIONS OF CONCRETE- AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, THEN PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

ALL STEEL COLUMNS IN WALLS SHALL RECEIVE 1/2" DIAMETER THREADED BOLTS WELDED TO THE COLUMN AT 2'-0" O.C. VERTICAL. STUD WALLS SHALL START AND STOP AT COLUMN AND BOLT TO COLUMN. BOLTS SHALL EXTEND THROUGH TWO STUDS MINIMUM AT ALL LOCATIONS EXCEPT AT WINDOWS AT EXTERIOR WALL. BOLTS MAY EXTEND THROUGH ONE STUD.

#### 05-06 STRUCTURAL STEEL CHANNELS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL CHANNELS (ASTM A 572/A 572M, GRADE 50)

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL MEMBERS SHALL BE PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

1. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, B-73-620 Series, at 3.0 to 10.0 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.

PROVIDE CHANNELS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

VERIFY ELEVATIONS OF CONCRETE- AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES.

REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-08 STRUCTURAL STEEL ANGLE LINTELS

**GENERAL PRODUCTS**  
STRUCTURAL STEEL LINTELS

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STRUCTURAL STEEL COMPONENTS, INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
ALL STEEL LINTELS TO BE HOT-DIPPED GALVANIZED. WHEN PART OF THE LEG IS EXPOSED TO VIEW DUPLEX COAT LINTEL AND OVER THE GALVANIZING-PRIME LINTEL. PRIOR TO DELIVERY TO SITE, EXPOSED STEEL SHALL BE FINISHED SSPC-Paint 25, TYPE 1 COLOR OF EXPOSED STEEL TO BE: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY' OR AS SELECTED BY ARCHITECT.

PROVIDE LINTELS OF SIZES AND SHAPES INDICATED.

VERIFY ELEVATIONS OF CONCRETE- AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES. REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-10 ANCHOR BOLTS

**GENERAL PRODUCTS**  
ANCHOR BOLTS AS SHOWN ON STRUCTURAL DRAWINGS.

**EXECUTION**  
ANCHOR BOLTS SHALL BE PLACED FOR 5" MINIMUM EMBEDMENT COVERAGE OR AS PER STRUCTURAL DRAWINGS (MOST STRINGENT CONDITIONS APPLY). PROVIDE 5" MINIMUM UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS.

ANCHORS BOLTS SHALL BE MINIMUM OF 3/4" DIA. A307 TYPE BOLTS.

#### 05-11 EXPANSION ANCHORS

**GENERAL PRODUCTS**  
EXPANSION AS SHOWN ON STRUCTURAL DRAWINGS.

**EXECUTION**  
EXPANSION ANCHORS SHALL BE PLACED FOR 5" MINIMUM EMBEDMENT COVERAGE OR AS PER STRUCTURAL DRAWINGS (MOST STRINGENT CONDITIONS APPLY).

ANCHORS BOLTS SHALL BE MINIMUM OF 3/4" DIA. A307 TYPE BOLTS.

#### 05-18 STEEL GUARDRAILS & HAND RAILINGS

**GENERAL PRODUCTS**  
STEEL AND ORNAMENTAL RAILINGS AS SHOWN ON DRAWINGS AND DETAILS.

STEEL AND ORNAMENTAL RAILINGS FINISH SHALL BE:

- A. Epoxy-Modified Latex System:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy-modified latex, interior, gloss matching topcoat.
  - 3) Topcoat: Epoxy-modified latex, exterior, eggshell, (Gloss Level 3), MPI #254MFI #254K-Greens; S-W Pro Industrial Waterbased Catalyzed Epoxy Eggshell, 875-300 Series, at 2.0 to 4.0 mils dry, per coat.
- B. COLOR: BENJAMIN MOORE- SATIN HC-167, 'AMHERST GRAY' OR AS SELECTED BY INTERIOR DESIGNER.

BRACKETS, FLANGES, AND ANCHORS: SAME METAL AND FINISH AS SUPPORTED RAILS UNLESS OTHERWISE INDICATED.

TOP CAP TO BE INTERIOR: CONTINUOUS WOOD RAIL CAP WITH WOOD TO MATCH THAT OF WOOD FLOOR, FINISHED AS SELECTED BY INTERIOR DESIGNER.  
EXTERIOR: CONTINUOUS COMPOSITE 'TRUGRAIN' RAIL CAP. SEE DETAIL FOR SIZE. FINISHED AS SELECTED BY ARCHITECT.

HANDRAILS AND GUARDRAILS SHALL MEET FOLLOWING DESIGN LOADS:  
UNIFORM LOAD OF 50 LBF/ FT. APPLIED IN ANY DIRECTION.  
CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

TOP RAILS OF GUARDS:  
UNIFORM LOAD OF 50 LBF/ FT. APPLIED IN ANY DIRECTION,  
CONCENTRATED LOAD OF 200 LBF APPLIED IN ANY DIRECTION.

INFILL OF GUARDS:  
CONCENTRATED LOAD OF 50 LBS APPLIED HORIZ. ON AN AREA OF 1 SQ. FT.  
UNIFORM LOAD OF 25 LBF/SQ. FT. APPLIED HORIZONTALLY.

**SUBMITTALS**  
FOR RAILINGS ASSEMBLED FROM STANDARD COMPONENTS, GROUT, ANCHORING CEMENT, AND PAINT PRODUCTS.

SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

SAMPLES: FOR EACH EXPOSED FINISH REQUIRED.

**EXECUTION**  
HANDRAILS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R317.1.7:

A. HANDRAILS SHALL BE MOUNTED A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE THE NOSING OF THE TREAD AND SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS WITH FOUR OR MORE RISERS. A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER. ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEVEL POSTS, VOLUTES, TURNOUT OR STARTING FINISHING SHALL BE ALLOWED OVER THE LOWEST TREAD.

B. ALL REQUIRED HANDRAILS SHALL BE ONE OF THE FOLLOWING TYPES OF PROVIDE EQUIVANT GRASPABILITY:

1. TYPE I. HANDRAILS WITH A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1 1/2 INCHES (32 MM) AND NOT GREATER THAN 2 INCHES (51 MM). IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER DIMENSION OF AT LEAST 5 1/2 INCHES (142 MM) AND NOT GREATER THAN 6 1/4 INCHES (160 MM) WITH A MAXIMUM CROSS SECTION OF DIMENSION OF 2 1/2 INCHES (57 MM). EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

2. TYPE II. HANDRAILS WITH A PERIMETER GREATER THAN 6 1/4 INCHES (160 MM) SHALL HAVE A GRASPABLE FINGER RECESS AREA ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL BEGIN WITHIN A DISTANCE OF 3/4 INCH (19 MM) MEASURED VERTICALLY FROM THE PORTION OF THE PROFILE AND ACHIEVE A DEPTH OF AT LEAST 5/16 INCH (8 MM) WITH 7/8 INCH (22 MM) BELOW THE WIDEST PORTION OF THE PROFILE. THE REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/8 INCH (10 MM) TO A LEVEL THAT IS NOT LESS THAN 1/4 INCHES (6.5 MM) BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1 1/4 INCHES (32 MM) TO A MINIMUM RADIUS OF 0.01 INCH (0.25 MM).

C. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.

#### 05-37 MISC. METAL FABRICATIONS

**GENERAL PRODUCTS**  
STEEL FABRICATIONS AS NOTED IN THE DRAWINGS AND AS FOLLOWS:

1. CHIMNEY COVER CHASE. FINISH AS NOTE #2 BELOW.
2. STEEL STAIR ELEMENTS. FINISH AS NOTE #1 BELOW.

**SUBMITTALS**  
SHOP DRAWINGS: SHOW FABRICATION OF STEEL FABRICATIONS.

INCLUDE DETAILS OF CUTS, CONNECTIONS, SPICES, CAMBER, HOLES, AND OTHER PERTINENT DATA, WITH EMBEDMENT DRAWINGS.

INDICATE WELDS BY STANDARD AWS SYMBOLS, DISTINGUISHING BETWEEN SHOP AND FIELD WELDS, AND SHOW SIZE, LENGTH, AND TYPE OF EACH WELD.

CONTRACTOR SHALL ASSURE THAT FABRICATOR, ERECTOR ARE CERTIFIED INSTALLERS TO PERFORM THE WORK, AND PROVIDE CERTIFICATION WITH SUBMITTAL.

**EXECUTION**  
FINISH: NOTE #1: PRIMED, PRIOR TO DELIVERY TO SITE. EXPOSED STEEL SHALL BE FINISHED AS FOLLOWS:

- A. Pigmented Polyurethane over Epoxy System with shopcoat primer:
  - 1) Prime Coat: Primer, rust-inhibitive, water based, MPI # 107; S-W Pro-Cyl Universal Primer, B66-310 Series, at 2.0 to 4.0 mils dry, per coat.
  - 2) Intermediate Coat: Epoxy, high-build, low gloss, 1-SW Macropoxy 646-100, B58-600 Series, B-73-620 Series, at 3.0 to 10.0 mils dry, per coat.
  - 3) Topcoat: Polyurethane, two-component, pigmented, gloss, (Gloss Level 4); S-W Waterbased Acrolon 100 Polyurethane, B65-720 Series, at 2.0 to 4.0 mils dry, per coat.

NOTE#2: PROVIDE DUPLEX COATING OF HOT-DIPPED GALVANIZED AND COAT THE EXTERIOR SURFACE EXPOSED TO VIEW AS FOLLOWS:

- A. Water-based Light Industrial Coating System:
  - 1) Prime Coat: Primer, water-based, anti-corrosive for metal, MPI # 107; S-W Pro Industrial Pro-Cyl Universal Primer, B66-310 Series, 5.0 to 10.0 mils wet, 2.0 to 4.0 mils dry.
  - 2) Prime Coat: Shop primer specified in section where substrate is specified.
  - 3) Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
  - 4) Topcoat: Light industrial coating, exterior, water based, semi-gloss, (Gloss Level 5), MPI # 163-S-W Pro Industrial Acrylic Semi-Gloss Coating, B66-650 Series, at 2.5 to 4.0 mils dry, per coat.

PROVIDE FABRICATIONS OF SIZES AND SHAPES INDICATED. FABRICATE CONNECTIONS TO COMPLY WITH DETAILS SHOWN OR AS REQUIRED TO SUIT TYPE OF STRUCTURE INDICATED.

VERIFY ELEVATIONS OF CONCRETE- AND MASONRY-BEARING SURFACES AND LOCATIONS OF ANCHOR RODS, BEARING PLATES, AND OTHER EMBEDMENTS, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. PROVIDE ALL NECESSARY BRACING AND SHORING FOR ERECTION, AND DO NOT REMOVE UNTIL FINAL ERECTION IS COMPLETE. ALL MEMBERS SHALL BE LEVEL AND PLUMB IN ACCORDANCE WITH THE DRAWINGS AND PROJECT CONDITIONS.

FABRICATE WITH EXPOSED SURFACES SMOOTH, SQUARE, AND FREE OF SURFACE BLEMISHES INCLUDING PITTING, RUST, SCALE, SEAM MARKS, ROLLER MARKS, ROLLED TRADE NAMES, AND ROUGHNESSES.

REMOVE BLEMISHES BY FILING OR GRINDING OR BY WELDING AND GRINDING, BEFORE CLEANING, TREATING, AND SHOP PRIMING.

BOLT HOLES: CUT, DRILL, OR PUNCH STANDARD BOLT HOLES PERPENDICULAR TO METAL SURFACES. PROVIDE HOLES REQUIRED FOR SECURING OTHER WORK TO STRUCTURAL STEEL AND FOR PASSAGE OF OTHER WORK THROUGH STEEL FRAMING MEMBERS. DO NOT THERMALLY CUT BOLT HOLES OR ENLARGE HOLES BY BURNING.

#### 05-55 CUSTOM STEEL STAIRS

**GENERAL PRODUCTS**  
STAIR COMPONENTS AS FOLLOWS:

- STRINGERS: EXPOSED STEEL PLATE STRINGERS AS PER DETAILS.
- TREADS: 3" THICK WOOD TREADS AS PER DETAILS.
- RISERS: OPEN RISER THAT DOES NOT EXCEED 4".

**SUBMITTALS**  
SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.

**EXECUTION**  
PROVIDE COMPLETE STAIR ASSEMBLIES, INCLUDING METAL FRAMING, HANGERS, STRUTS, RAILINGS, CLIPS, BRACKETS, BEARING PLATES, AND OTHER COMPONENTS NECESSARY TO JOIN AND ANCHOR STAIRS AND FINISHES ON SUPPORTING STRUCTURE. BOLTS SHALL BE FABRICATED AND 5/16" DIA BOLTS ARE NOT EXPOSED ON EXPOSED SURFACES.

METAL SURFACES: GENERAL: PROVIDE MATERIALS WITH SMOOTH, FLAT SURFACES WITHOUT BLEMISHES.

FINISH: FACTORY PRIMED FOR A HIGH-PERFORMANCE COATING WITH COLOR AS SELECTED BY ARCHITECT.

PROVIDE METAL STAIRS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY LOADS AND THE FOLLOWING LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED: UNIFORM LOAD: 100 LBF/SQ. FT. CONCENTRATED LOAD: 300 LBF APPLIED ON AN AREA OF 4 SQ. IN.

LIMIT DEFLECTION OF TREADS, PLATFORMS, AND FRAMING MEMBERS 1/8 INCH.

STRUCTURAL PERFORMANCE OF RAILINGS: PROVIDE RAILINGS CAPABLE OF WITHSTANDING THE EFFECTS OF GRAVITY LOADS AND STRESSES WITHIN LIMITS AND UNDER CONDITIONS INDICATED.

PROVIDE A MINIMUM OF 7'-6" HEAD CLEARANCE AT ALL POINTS.

#### DIVISION 6-WOOD, PLASTICS & COMPOSITES

##### 06-01, 06-02, 06-03, 06-04, 06-05, 06-06 STUD WALL ROUGH FRAMING

**GENERAL PRODUCTS**  
TIMBER BEAMS/COLUMNS/TRUSSES/ROOF PURLINS/JAUNCHED AS SHOWN ON ARCHITECTURAL/STRUCTURAL DRAWINGS AND DETAILS.

TIMBER BEAMS TO BE #1 OR BETTER, KILN DRIED 15% MOISTURE OR LESS.

TIMBER TO BE: DOUG FIR  
TIMBER TO BE: S4S

COLOR: STAINED WITH SHERMA WILLIAMS SEMI-TRANSPARENT 'HAWTHORNE'

**SUBMITTALS**  
SHOP DRAWINGS: ALL TIMBER JOISTS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.

**EXECUTION**  
TIMBER CONTRACTOR/GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS PRIOR TO FABRICATION OF TIMBERS. COORDINATE WITH ARCHITECTURAL/STRUCTURAL DRAWINGS FOR CONNECTIONS AT EACH TIMBER.

ALL JOISTS SHALL BE TRUE AND SQUARE WITH TOLERANCES OF LESS THAN 1/8" WITHIN JOINT.

**06-32 WOOD DECKING**  
**GENERAL PRODUCTS**  
WOOD DECKING AT ALL EXTERIOR DECKS/WALKWAYS

WOOD DECKING SHALL BE: "GOLF DECKING" BY TRUGRAIN REYSITA

COLOR: AS SELECTED BY ARCHITECT

**SUBMITTALS**  
SAMPLE OF ACTUAL SAMPLE WITH STAIN SAMPLE SELECTED FOR ARCHITECT APPROVAL.

**EXECUTION**  
ATTACH WOOD DECKING TO FRAMING (SEE STRUCTURAL PLANS FOR SIZE) WITH HIDDEN FASTENER SYSTEM AS RECOMMENDED BY MANUFACTURER.

##### 06-38 PLYWOOD/ OSB WALL SHEATHING

**GENERAL PRODUCTS**  
WALL SHEATHING TO BE: 1/2" EXTERIOR GRADE A.P.A. RATED SHEATHING OR AS PER STRUCTURAL DRAWINGS.

EXTENT OF WALL SHEATHING AS SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. SHEATHING MAY BE FIRE-TREATED AS PER FIRE-RATED WALL REQUIREMENTS.

**EXECUTION**  
NAILING OF SHEATHING SHALL BE PER STRUCTURAL DRAWINGS. COORDINATE WITH STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS.

PROVIDE BLOCKING AT ALL PANEL EDGES.

BRACE ALL EXTERIOR WALLS AND CROSS STUD PARTITIONS AS PER IRC R602 AND STRUCTURAL ENGINEERING AT EACH END OF THE BUILDING AND AT LEAST EVERY 25'-0" OF LENGTH BY ONE OF THE FOLLOWING.

A. APPROVED STRUCTURAL SHEATHING OF A MINIMUM THICKNESS OF 7/16". COORDINATE WITH SHEAR WALL SCHEDULE.

B. FOR ADDITIONAL BRACED WALL PANEL CONSTRUCTION OPTIONS, EXCEPTIONS AND RESTRICTIONS SEE I.R.C SECTION R602.10. COORDINATE W/ STRUCTURAL FOR SEISMIC AND ANY SPECIAL REQUIREMENTS.

C. BRACED WALL LINE SILLS SHALL HAVE PLATE WASHERS A MINIMUM OF 3/16" BY 3" X 3" (IRC R602)

TOLERANCE  
CONTRACTOR SHALL BE RESPONSIBLE TO CONSTRUCT ALL FRAMING OF WALLS WITH THE FOLLOWING TOLERANCES. CONTRACTOR SHALL BE RESPONSIBLE TO CORRECT ALL FRAMING THAT DO NOT MEET THE REQUIRED TOLERANCES SPECIFIED BELOW:

1. ALL WALLS SHALL BE STRAIGHT, AND SHALL NOT HAVE GREATER THAN 1/4" ANY BOW, DEFLECTION, IN 10'-0" LENGTH OF WALL.
2. ALL WALLS SHALL BE VERTICAL, PLUMB, AND SHALL NOT EXCEED 1/4" FOR EACH 10'-0" VERTICAL SECTION OR STORY OF WALL.
3. ALL HORIZONTAL SOFFIT, WINDOW HEAD SHALL BE LEVEL, AND SHALL NOT EXCEED 1/8" VARIATION WITHIN 10'-0" LENGTH.

#### 06-07, 06-08, 06-09 WOOD BLOCKING/FIREBLOCKING

**GENERAL PRODUCTS**  
FIRE BLOCKING SHALL BE CONSTRUCTED OF 2" NOMINAL LUMBER OR (2) THICKNESS OF 1" NOMINAL LUMBER WITH BROKEN LAP JOINTS (R302.1.1) OR OTHER MATERIALS APPROVED OR TESTED, INSTALLED PER R302.1.1. FIRE BLOCKING SHALL BE PROVIDED AT LOCATIONS AS PER IRC.

**EXECUTION**  
FIRE BLOCKING SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS, CONTRACTOR SHALL COORDINATE THESE LOCATIONS:

A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES, AT THE CEILING AND FLOOR LEVELS AND AT 16'FOOT INTERVALS BOTH VERTICAL AND HORIZONTAL. (IRC 302.11 (1))

B. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROPPED CEILINGS AND COVE CEILINGS. (IRC 302.11 (2))

C. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS, ALONG AND IN LINE WITH THE RUN OF STAIRS IF THE WALLS UNDER THE STAIRS ARE UNFINISHED. (IRC 302.11 (3) AND IRC 300.2.7)

D. IN OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, PREPLACES AND SIMILAR OPENINGS WHICH AFFORD A PASSAGE FOR FIRE AT CEILING AND FLOOR LEVELS, WITH NON COMBUSTIBLE MATERIALS. (IRC 302.11 (4))

E. AT OPENINGS BETWEEN ATTIC SPACES AND CHIMNEY CHASES FOR FACTORY-BUILT CHIMNEYS. (IRC 302.11 (5))

F. WHERE WOOD SLEEPERS ARE USED FOR LAYING WOOD FLOORING ON MASONRY OR CONCRETE FIRE-RESISTIVE FLOORS. THE SPACE BETWEEN THE FLOOR S4S AND THE UNDERSIDE OF THE WOOD FLOORING SHALL BE FILLED WITH NON COMBUSTIBLE MATERIAL OR FIRE BLOCKED IN SUCH A MANNER THAT THERE WILL BE NO OPEN SPACES UNDER THE FLOORING WHICH WILL EXCEED 1000 SQUARE FEET IN AREA AND SUCH SPACE SHALL BE FURRED SOLIDLY UNDER ALL PERMANENT PARTITIONS SO THAT THERE IS NO COMMUNICATION UNDER THE FLOORING BETWEEN ADJOINING ROOMS. (IRC 302.12)

G. WALLS HAVING PARALLEL OR STAGGERED STUDS FOR SOUND TRANSMISSION CONTROL SHALL HAVE FIRE BLOCKS OF MINERAL OR GLASS FIBER OR OTHER APPROVED NON-RIGID MATERIAL. (IRC 302.11 (1))

H. FIRE BLOCKING OF CORNICES OF A TWO-FAMILY DWELLING IS REQUIRED AT THE END OF THE DWELLING UNIT SEPARATION. (IRC 302.11 (6))

#### 06-15 WOOD FRAMING

**GENERAL PRODUCTS**  
2X4 AND 2 X 6 DOUGLAS FIR, HEM FIR #2 OR BETTER WOOD STUDS AS SHOWN ON DRAWINGS.

**EXECUTION**  
PROVIDE 2X WOOD STUDS AT 16" O.C. U.N.O.

PROVIDE 2X SOLID WOOD FIRE BLOCKING AT EVERY 10'-0", AND PROVIDE SOLID BLOCKING AT MID SPAN FOR ANY STUD EXCEEDING 10'-0" IN HEIGHT.

FOUNDATION

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 7-THERMAL AND MOISTURE PROTECTION

#### 07-45, 07-46, 07-47, 07-49, 07-50, 07-51, 07-52, 07-53, 07-54 THERMAL INSULATION

**GENERAL PRODUCTS**  
SEE INSULATION SCHEDULE BELOW FOR LOCATION AND INSULATION REQUIREMENT

A PERMANENT CERTIFICATE SHALL BE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL LISTING THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON THE CEILING/ROOF, WALLS, FOUNDATION SLAB, BASEMENT WALLS, CRAWL SPACE WALLS AND/OR FLOOR, AND THE DUCTS OUTSIDE THE CONDITIONED SPACE. U-FACTORS OF THE WINDOWS, THE TYPE OF HEATING AND EFFICIENCY OF HEATING AND WATER HEATING EQUIPMENT SHALL ALSO BE LISTED. (I.R.C. N1101.8)

LOCATION	TYPE	THICKNESS	R-VALUE
<b>SLAB ON GRADE</b>	FORM-IN-PLACE	2"	R-10

INSTALL UNDER HEATED SLAB ON GRADE LOCATIONS. OWENS CORNING FORMULA 250

PERIMETER OF FOUNDATION	RIGID	Footing	R-10
INSTALL ON INSIDE FACE OF EXTERIOR FOUNDATION FROM TOP OF FOOTING TO BOTTOM OF CONCRETE SLAB AT LIVING SPACE- BURIED -OWENS CORNING FORMULA 250			

FLOOR INSULATION	VERIFY	R-30
FLOOR OVER UNHEATED BASEMENT	UNFACED BATTS	

FLOOR UNDER RADIANT HEAT	UNFACED	12"	R-38
FLOOR OVER OUTSIDE OR UNHEATED AIR	BLOWN-IN	12"	R-38

WALL INSULATION AT EXTERIOR FRAMED WALLS	BLOWN-IN	5 1/2"	R-22.5
2X WOOD EXTERIOR WALLS (BLOWN TO BE CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)			
2 X 4 WOOD FURRED-EXTERIOR WALLS CLOSED-CELL FOAM (CERTAINEED Certastoplay with 22 pcf and R-value of 4.5 per inch)		3 1/2"	R-22.75

ROOF INSULATION	VERIFY	R-24.5	R-30	R-49.0
ROOF AT SHALL OWER JOISTS: MULTILAYERS OF CONTINUOUS RIGID INSULATION WITH TOP LAYER OF NAILABLE RIGID INSULATION (HUNTER H-SHIELD PANELS) PLUS FULL FULL DEPTH OF JOIST CAVITY (CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)				TOTAL=

ROOF AT DEEPER JOISTS: MULTILAYERS OF CONTINUOUS RIGID INSULATION WITH TOP LAYER OF NAILABLE RIGID INSULATION (HUNTER H-SHIELD PANELS) PLUS FULL FULL DEPTH OF JOIST CAVITY (CERTAINEED OPTIMA BLOWN-IN BB SYSTEM)	TOTAL=	R-24.5	R-50	R-80.5

INTERIOR AND SPECIALTY REQUIRED INSULATION	SOUND	BATTS	3-1/2"	R11
INTERIOR WALLS				

MECHANICAL TYPE ROOMS WALLS AND CEILING(S) WHERE APPLICABLE	SOUND	BATTS	5"	R19
BATHROOMS				

INTERIOR FLOORS/CEILING SOUND RATING REQ'D	BATTS	FACED	3 1/2"	R-11
INSULATION BATTS				R-11 -R19

DUCTWORK PLUMBING LINES	DBL. FACED	1/2" VINYL FACED	1"	R-13
MECHANICAL AND PLUMBING STUD CAVITY WITH PLUMBING DRAIN LINES				SOUND BATTS/INSULATION BATTS

MECHANICAL AND PLUMBING STUD CAVITY WITH PLUMBING DRAIN LINES	INSULATION BATTS	5 1/2" OR 3 1/2"	R-13/R-19

PLUMBING DRAIN LINE SHALL BE INSULATED IN ADDITION TO THE CAVITY OF THE STUD WALL IS LOCATED WITHIN.

**SUBMITTALS**  
PROVIDE MANUFACTURERS DATA AND INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS FOR REVIEW PRIOR TO INSTALLATION.

**EXECUTION**  
FILL PER MANUFACTURERS STANDARD INSTALLATION REQUIREMENTS.

PROVIDE R-25 MINIMUM CLOSED CELL INSULATION ABOVE ANY CEILING PENETRATIONS AT UNVENTED ROOF ASSEMBLIES.

#### 07-55 ATTIC ACCESS

**GENERAL PRODUCTS**  
ATTIC ACCESS TO MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R807.

ATTIC ACCESS OPENING SHALL BE PROVIDED TO ATTICS OF BUILDINGS WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION THAT EXCEEDS 50 SQUARE FEET AND HAVE A VERTICAL HEIGHT OF 30 INCHES OR GREATER. THE OPENING SHALL BE LOCATED IN A CORRIDOR, HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. THE ROUGH FRAME OPENING SHALL NOT BE LESS THAN 22 INCHES X 30 INCHES. A 30 INCH MINIMUM UNOBSTRUCTED HEADROOM IN THE ATTIC SPACE SHALL BE PROVIDED ABOVE THE OPENING. SEE I.R.C. SECTION R807. FOR ACCESS REQUIREMENTS WHEN MECHANICAL EQUIPMENT IS LOCATED IN ATTICS SEE I.R.C. SECTION M1303.13.

#### 07-66 BUILDING WEATHER AND VAPOR BARRIER

**GENERAL PRODUCTS**  
WEATHER BARRIER MEMBRANE: DUPONT- TYVEK- HOMEWRAP OR EQUAL  
SEAM TAPE: DUPONT- TYVEK TAPE OR EQUAL  
FLASHING: DUPONT- FLEXWRAP OR EQUAL

**EXECUTION**  
COORDINATE WITH MANUFACTURERS STANDARDS FOR INSTALLATION.  
REVIEW REQUIREMENTS FOR SEQUENCING OF INSTALLATION OF WEATHER BARRIER ASSEMBLY WITH INSTALLATION OF WINDOWS, DOORS, LOUVERS AND FLASHINGS TO PROVIDE A WEATHER-TIGHT BARRIER ASSEMBLY.

VERIFY SUBSTRATE AND SURFACE CONDITIONS ARE IN ACCORDANCE WITH WEATHER BARRIER MANUFACTURER RECOMMENDED TOLERANCES PRIOR TO INSTALLATION OF WEATHER BARRIER AND ACCESSORIES.

INSTALL WEATHER BARRIER OVER EXTERIOR FACE OF EXTERIOR WALL SUBSTRATE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.

START WEATHER BARRIER INSTALLATION AT A BUILDING CORNER, LEAVING 4-12 INCHES OF WEATHER BARRIER EXTENDED BEYOND CORNER TO OVERLAP.

INSTALL WEATHER BARRIER IN A HORIZONTAL MANNER STARTING AT THE LOWER PORTION OF THE WALL SURFACE. MAINTAIN WEATHER BARRIER PLUMB AND LEVEL.

EXTEND BOTTOM ROLL EDGE OVER SILL PLATE INTERFACE 2" TO 3" MINIMUM. SEAL WEATHER BARRIER WITH SEALANT OR TAPE. SINGLE WEATHER BARRIER OVER BACK EDGE OF THRU-WALL FLASHINGS AND SEAL WEATHER BARRIER WITH SEALANT OR TAPE ENDSURE WEEPS ARE NOT BLOCKED.

SUBSEQUENT LAYERS SHALL OVERLAP LOWER LAYERS A MINIMUM OF 4 INCHES HORIZONTALLY IN A SHINGLING MANNER.

WINDOW AND DOOR OPENINGS: EXTEND WEATHER BARRIER COMPLETELY OVER OPENINGS.

ATTACH WEATHER BARRIER TO STUDS THROUGH EXTERIOR SHEATHING. SECURE USING WEATHER BARRIER MANUFACTURER RECOMMENDED FASTENERS SPACED 12 -18 INCHES VERTICALLY ON CENTER ALONG STUD LINE AND 24 INCH ON CENTER, MAXIMUM HORIZONTALLY.

ATTACH WEATHER BARRIER TO MASONRY. SECURE USING WEATHER BARRIER MANUFACTURER RECOMMENDED FASTENERS SPACED 12 -18 INCHES VERTICALLY ON CENTER AND 24 INCHES MAXIMUM HORIZONTALLY. WEATHER BARRIER MAY BE TEMPORARILY ATTACHED TO MASONRY USING RECOMMENDED ADHESIVE. PLACED IN VERTICAL STRIPS SPACED 24 INCHES ON CENTER, WHEN COORDINATED ON THE PROJECT SITE. USE CLADDING FASTENERS AS PERMANENT MEANS OF ATTACHMENT.

SEAL SEAMS OF WEATHER BARRIER WITH SEAM TAPE AT ALL VERTICAL AND HORIZONTAL OVERLAPPING SEAMS.

#### 07-133 WOOD SIDING

**GENERAL PRODUCTS**  
HORIZONTAL SIDING: 1/8 SHIP-LAP JOINTED (WITH 1/4" REVEAL) HORIZONTAL SIDING. TO BE CLEAR CEDAR STAINED SEMI-TRANSPARENT WITH SHERMAN WILLIAMS OR EQUAL. COLOR- CEDAR BARK.

VERTICAL SIDING: 1/8 SHIP-LAP JOINTED (WITH 1/8" REVEAL) VERTICAL SIDING. TO BE CLEAR CEDAR STAINED SEMI-TRANSPARENT WITH SHERMAN WILLIAMS OR EQUAL. COLOR- "CROSSGRAID".

SUBMITTALS	PROVIDE 12" X 12" SAMPLE OF EACH SIDING SPECIFIED WITH COLOR SPECIFIED.

**EXECUTION**  
FOLLOW INSTALLATION INSTRUCTIONS SPECIFIED BY THE PRODUCT MANUFACTURER.

EXAMINE SUBSTRATES FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF SIDING AND RELATED ACCESSORIES, AND PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. AS FOR THE VERTICAL SIDING PROVIDE HORIZONTAL BLOCKING AT ALL LOCATION AS REQUIRED BY MNFR. RECOMMENDATIONS.

INSTALL EXTERIOR SIDING FINISH OVER EXTERIOR WALL VENTILATION MATRIX OVER BUILDING WEATHER BARRIER AS PER MANUFACTURE SPECIFICATIONS AND INDUSTRY STANDARDS.  
SEE STRUCTURAL NOTES FOR DIAPHRAGM NAILING, HURRICANE Tie HOLD-DOWNS.

CLEAN FINISHED SURFACES ACCORDING TO MANUFACTURERS WRITTEN INSTRUCTIONS AND MAINTAIN IN A CLEAN CONDITION DURING CONSTRUCTION.

COORDINATE WORK WITH RELATED TRADES, SCRIBE AND COPE SIDING BOARDS FOR ACCURATE FIT. ALLOW INSTALLATION OF RELATED WORK TO AVOID CUTTING AND PATCHING.

SELECT SIDING BOARDS OF LONGEST POSSIBLE LENGTHS. DISCARD BOARDS THAT ARE WARPED, TWISTED, BOWED, CROOKED OR OTHERWISE DEFECTIVE.

INSTALLATION MUST COMPLY WITH LOCAL BUILDING CODES AND REGULATIONS.

FINISH MATERIALS ON ALL SIDES AND ENDS. APPLY TOUCH-UP COATING ON NEW CUTS. FACTORY PRIME D OR FINISHING IS PREFERRED.

EXPLAIN PROPER MAINTENANCE PROCEDURES TO OWNER OR OWNER'S REPRESENTATIVE AT PROJECT CLOSOUT.

THE USE OF PRESSURE WASHERS IS NOT RECOMMENDED.

#### 07-155 SINGLE-PLY TPO DECK MEMBRANE

**GENERAL PRODUCTS**  
PROVIDE INSTALLED ROOFING MEMBRANE AND FLASHINGS THAT REMAIN WATERIGHT. DO NOT PERMIT THE PASSAGE OF WATER AND RESIST SPECIFIED UPFIT PRESSURES. THERMALLY INDUCED MOVEMENT AND EXPOSURE TO WEATHER WITHOUT FAILURE.

PROVIDE ROOFING MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER UNDER SERVICE AND APPLICATION REQUIREMENTS AS DEMONSTRATED BY ROOFING MEMBRANE MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.

ROOF SYSTEM DESIGNATED AND SUCCESSFULLY TESTED BY A QUALIFIED TESTING AND INSPECTING AGENCY TO WITHSTAND UPFIT FORCES AS CALCULATED USING THE CURRENT VERSION OF ASCE 7.

ROOF SYSTEM WILL ACHIEVE A UL FIRE RATING WITHIN IN ACCORDANCE WITH UL-790 AS REQUIRED BY LOCAL BUILDING CODE. MINIMUM RATINGS SHALL BE A UL CLASS B RATINGS.

PROVIDE A ROOF SYSTEM WITH POSITIVE DRAINAGE WHERE ALL STANDING WATER DISSIPATES AFTER PRECIPITATION ENDS.

BUILDING CODES: ROOF SYSTEM WILL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL CODE BOODS HAVING JURISDICTION.

MANUFACTURER WITH A MINIMUM OF TEN YEARS EXPERIENCE IN THE MANUFACTURING OF SINGLE-PLY HEAT WELDABLE MEMBRANES.

ROOFING CONTRACTOR SHALL BE AUTHORIZED BY ROOFING SYSTEM MANUFACTURER TO INSTALL ASSEMBLY. PROVIDE LETTER ON MANUFACTURERS LETTERHEAD OF AUTHORIZED STATUS OF CONTRACTOR.

PROVIDE ROOFING SYSTEM THAT IS LISTED ON THE DOE'S ENERGY STAR ROOF PRODUCTS QUALIFIED PRODUCT LIST FOR LOW-SLOPE ROOF APPLICATIONS.

A MANUFACTURERS REPRESENTATIVE SHALL INSPECT THE INSTALLATION FOR COMPLIANCE WITH MANUFACTURERS STANDARDS (UPON COMPLETION OF THE ROOFING SYSTEM, DEVIATIONS OR CHANGES FROM THE CONTRACT SPECIFICATION SHALL HAVE WRITTEN APPROVAL FROM THE ROOFING MANUFACTURER, FOR PRESENTATION TO ARCHITECT AT COMPLETION OF ROOFING SYSTEM.

STANDARD TOTAL SYSTEM WARRANTY SHALL BE ISSUED UPON ACCEPTANCE OF THE ROOFING SYSTEM INSTALLATION. TWENTY (20) YEAR PERIOD THAT COVERS WIND DAMAGE UP TO 70 MPH.

ACCEPTABLE MANUFACTURER: FERITLEDGE ROOFING SYSTEMS, CARLITE ROOFING, OR APPROVED EQUAL. REQUEST FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SUBSTITUTION MATERIALS.

ROOFING MEMBRANE SHALL BE MANUFACTURED WITH THE FOLLOWING PROPERTIES:  
A. MEMBRANE TYPE: TPE  
B. MEMBRANE THICKNESS: 30 MIL  
C. COLOR: ENERGY EFFICIENT GREY  
D. FLASHINGS MEMBRANE SHALL 0.660 INCH (1.22MM) THICK REINFORCED MEMBRANE FOR WALLS AND CURBS  
E. COVER BOARD: DENDECK ROOF BOARD; G-P GYPSUM CORPORATION 1/2 INCH (12 MM) DENDECK ROOF BOARD. GLASS MAT FACED GYPSUM WITH SPECIALLY TREATED GYPSUM CORE THAT RESISTS MOISTURE AND MOLD GROWTH.

**SUBMITTALS**  
PRODUCT DATA, INCLUDING MANUFACTURERS DATA SHEETS ON EACH PRODUCT TO BE USED; PREPARATION INSTRUCTIONS AND RECOMMENDATIONS; STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS; AND INSTALLATION METHODS.

SAMPLES FOR VERIFICATION FOR THE FOLLOWING PRODUCTS INCLUDING MANUFACTURERS STANDARD SAMPLE SIZE OF SHEET ROOFING OF COLOR SPECIFIED; MANUFACTURERS STANDARD SAMPLE SIZE OF ROOF INSULATION; MANUFACTURERS STANDARD SAMPLE SIZE OF WALKWAY PADS OR ROLLS.

SHOP DRAWINGS INCLUDING OUTLINE AND SIZE OF THE ROOF, LOCATION AND TYPE OF PENETRATIONS, PERIMETER AND PENETRATION FLASHING DETAIL, REFERENCES TO MANUFACTURERS STANDARD, DETAILS WHICH DO NOT CONFORM TO ROOFING MANUFACTURERS STANDARDS SHALL BE IDENTIFIED WITH SEPARATE APPROVAL FROM ROOFING MANUFACTURER. DETAILS TO BE EMPLOYED ON THE PROJECT SHALL BE APPROVED BY ROOFING MANUFACTURER.

SUBMIT WARRANTY CERTIFICATION FROM MANUFACTURER OF APPROVAL OF PROJECT DESIGN AND INTENT TO ISSUE WARRANTY, AND FASTENER PULL TESTS FROM AN INDEPENDENT TESTING AGENCY SHALL BE APPROVED BY THE ROOFING MANUFACTURER.

**EXECUTION**  
DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED. NAELERS AND BLOCKING SHALL BE INSTALLED LEVEL, TRUE TO LINE AND ELEVATION. SECURED TO ROOF STRUCTURE TO RESIST ROOF INSTALLATION AND SERVICE CONDITIONS. SUBSTRATE PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER. NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING. SURFACES TO BE BONDED SHALL BE DRY, CLEAN AND FREE OF DEBRIS. SUITABLE SURFACES ARE USUALLY CONSIDERED TO BE SMOOTH, SOLID MASONRY, WOOD AND METAL. PLUS INSULATION BOARDS FASTENED PER THE SPECIFIC MANUFACTURERS RECOMMENDATIONS FOR RECEIVING ADHERED ROOFING MEMBRANES.

ALL FASTENERS SHOULD BE INSTALLED WITH A DEPTH-SENSING SCREW GUN TO PREVENT OVER DRIVING OR UNDER DRIVING. BLOCK OFF OR SHUT DOWN POSITIVE PRESSURE BUILDING VENTILATION SYSTEMS DURING APPLICATION TO PREVENT SHEET FROM BLOWING DURING APPLICATION.

VERIFY ALL ROOFING MECHANICAL UNITS ARE TO HAVE THEIR CONDENSATION LINES PIPED TO DRAINS, OR OFF THE ROOF. FLYWOOD MUST BE EXTERIOR GRADE WITH AN A OR B FINISH SIDE UP AND WITH NO JOINTS GAPPED GREATER THAN 1/4 INCH, AND PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.

PROVIDE TEMPORARY BALLAST IN PARTIALLY COMPLETED SECTIONS TO CONTROL WIND EFFECTS DURING CONSTRUCTION.

REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT

PROVIDE CAULKING AT INTERIOR AND EXTERIOR AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS WITH A CONTINUOUS BEAD OF CAULK.

SILICONE SEALANT SHOULD NOT BE USED ON EXTERIOR JOINTS. ONLY POLYURETHANE OR POLYSULFIDE SEALANTS. BUTYL SEALANTS SHOULD BE USED BETWEEN METAL LAPS WHERE MOVEMENT IS ANTICIPATED.

**EXECUTION**  
CLEAN OUT JOINTS IMMEDIATELY BEFORE INSTALLING JOINT SEALANTS.

REMOVE ALL FOREIGN MATERIAL FROM JOINT SUBSTRATES THAT COULD INTERFERE WITH ADHESION OF JOINT SEALANT

PROVIDE CAULKING AT INTERIOR AND EXTERIOR AT ALL JOINTS BETWEEN DISSIMILAR MATERIALS WITH A CONTINUOUS BEAD OF CAULK.

SILICONE SEALANT SHOULD NOT BE USED ON EXTERIOR JOINTS. ONLY POLYURETHANE OR POLYSULFIDE SEALANTS. BUTYL SEALANTS SHOULD BE USED BETWEEN METAL LAPS WHERE MOVEMENT IS ANTICIPATED.

**SUBMITTALS**  
SAMPLES FOR VERIFICATION OF SHINGLES SIZE AND COLOR  
WARRANTIES: SAMPLE OF SPECIAL WARRANTIES.

**EXECUTION**  
ROOFING AND RELATED ITEMS TO BE INSTALLED AS PER MANUFACTURER

ROOFING TO BE INSTALLED OVER SECONDARY ROOFING MEMBRANE (ENTIRE ROOFING SURFACE)

ROOFING SYSTEM TO BE INSTALLED OVER EXTERIOR GRADE A P.A. RATED SHEATHING (RUN PERPENDICULA BATTERS) OVER ROOF FRAMING AS PER STRUCTURAL PLANS.

SEE STRUCTURAL NOTES FOR DIAPHRAGM NAILING, HURRICANE Tie HOLD-DOWNS.

#### 07-170, 171, 172, 173, 174, 175, 176, SHEET METAL FLASHING AND TRIM

**GENERAL PRODUCTS**  
APPROVED CORROSION RESISTANT FLASHING SHALL BE PROVIDED IN THE EXTERIOR WALL ENVELOPE IN SUCH A MANNER AS TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS.

VALLEY FLASHING  
DRIP METAL  
WINDWOOD HEAD FLASHING  
DOOR HEAD FLASHING  
TRANSITIONAL FLASHING

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

**EXECUTION**  
ALL DOORS SHALL BE INSTALLED PER MANUFACTURES STANDARD INSTALLATION REQUIREMENTS.

ALL DOORS SHALL BE INSTALLED TRUE AND PLUMB AND SHALL OPERATE. ADJUST ALL DOORS FOR OPERATIONS AS APPROVED BY ARCHITECT/OWNER.

OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCH IN THICKNESS. SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE IRC 302.5.

**08-26 INTERIOR WOOD DOOR**  
**GENERAL PRODUCTS**  
SEE DOOR SCHEDULE FOR ALL SIZES, STYLES, AND OPERATION.  
MANUF. AS SELECTED BY BIDDING  
SPECIES: SEE INTERIOR DESIGN DRAWINGS  
COLOR: CUSTOM STAIN BY INTERIOR DESIGNER

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

ALL DOORS SHALL BE INSTALLED PER MANUFACTURES STANDARD INSTALLATION REQUIREMENTS.

ALL DOORS SHALL BE INSTALLED TRUE AND PLUMB AND SHALL OPERATE. ADJUST ALL DOORS FOR OPERATIONS AS APPROVED BY ARCHITECT/OWNER.

OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCH IN THICKNESS. SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE IRC 302.5.

#### 08-39 EXTRUDED ALUMINUM WOOD SLIDING DOORS

**GENERAL PRODUCTS**  
SEE WINDOW SCHEDULE FOR ALL SIZES AND OPERATIONS.  
WINDOW MANUFACTURER: LOEWEN, WINDSOR, JELD-WEN, KOBE, MARVIN.  
WINDOW STYLE SHALL BE: AS SHOWN ON DRAWINGS  
PROVIDE SCREENS AND HARDWARE FOR ALL OPERABLE UNITS.  
COLOR OF DOORNS TO BE: AS DETERMINED BY ARCHITECT.

**EXECUTION**  
INSTALL DRIP FLASHING OVER HEADS OF ALL WINDOWS AT EXTERIOR (IRC R703.8)

PROVIDE SPACER BARS WHERE SLS ARE USED

ALL FIXED GLAZING TO BE SASH SET

WOOD WINDOWS WITH EXTRUDED ALUMINUM CLAD EXTERIOR BOTH FRAME AND SASH- NO EXCEPTIONS. EXTERIOR CLAD PAINT FINISH TO MEET AAMA 2655 SPECIFICATIONS (FOR KYNAR) COLOR AS PER OWNER AND ARCHITECT

BASEMENTS WITH HABITABLE SPACES SHALL HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR DOOR OR ACCESS TO AN ADJOINING BEDROOM WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW BASEMENTS WITH SLEEPING ROOMS SHALL EACH HAVE AT LEAST ONE OPERABLE EMERGENCY ESCAPE AND RESCUE WINDOW OR DOOR. R310.1.

**SUBMITTALS**  
VERIFY ALL WINDOW ROUGH OPENINGS BEFORE ORDERING

VERIFY THAT WINDOWS WILL MEET LIGHT, VENTILATION, AND EGRESS REQUIREMENTS (IRC R303 & R310)

1. MINIMUM OPERING AREA FOR ALL WINDOWS IN BEDROOMS OR EMERGENCY SHALL HAVE A 5.75 SQ. FT OF OPENING.  
2. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 24".  
3. THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20".

4. THE ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE. EXCEPT GROUND FLOOR, NET CLEAR OPENING AREA OF 5.0 SQUARE FEET. R310.1.1 TO R310.1.4.

5. WINDOW SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR. OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL. R310.1.

PROVIDE WARRANTY INFORMATION FOR GLAZING, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH WINDOW FOR VERIFICATION OF SIZE SPECIFIED ON DRAWINGS AND OPERATIONAL REQUIREMENTS.

**EXECUTION**  
INSTALL DRIP FLASHING OVER HEADS OF ALL WINDOWS AT EXTERIOR (IRC R703.8)

INSTALL FOAM INJECTED INSULATION SEALER AT ALL SHIM CAVITIES

PROVIDE MAINTENANCE AND WARRANTY INFORMATION.

DO NOT INSTALL WITHIN 3-FI OF INSIDE FACE OF FIRE-RATED WALLS.

**EXECUTION**  
A SAFETY GLAZING SHALL BE INSTALLED IN HAZARDOUS LOCATIONS AND SHALL MEET THE FOLLOWING REQUIREMENTS.

1. EACH PANE OF GLASS INSTALLED IN HAZARDOUS LOCATIONS SHALL BE PERMANENTLY IDENTIFIED BY MANUFACTURER, DESIGNATING THE TYPE, THICKNESS, AND SAFETY GLAZING STANDARD. THE LABEL SHALL BE ACID ETCHED, SANDBLASTED, CERAMIC FIRED OR EMBOSSED ON GLASS AND BE VISIBLE WHEN THE UNIT IS GLAZED.

C. PROVIDE SAFETY GLAZING IN ALL DOORS INCLUDING SIDE HINGED DOORS, SLIDING DOORS, SLIDING PANELS, BI-FOLD DOORS, STORM DOORS, FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24 INCH ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES ABOVE THE WALKING SURFACE.

D. PROVIDE SAFETY GLAZING IN WALLS ENCLCING STAIRWAY LANDINGS OR WITHIN 36 INCHES OF THE TOP OR BOTTOM OF STAIRWAYS WHERE THE BOTTOM EDGE OF THE GLASS IS LESS THAN 40 INCHES ABOVE THE WALKING SURFACE.

E. PROVIDE SAFETY GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLCING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES ABOVE A STANDING OR WALKING SURFACE.

F. PROVIDE SAFETY GLAZING IN RAILINGS REGARDLESS OF AN AREA OR HEIGHT.

G. PROVIDE SAFETY GLAZING IN WALLS AND FENCES ENCLCING SWIMMING POOLS OR HOT TUBS WHERE THE BOTTOM EDGE OF THE POOL OR SPA GLASS IS LESS THAN 40 INCHES ABOVE THE WALKING SURFACE.

H. PROVIDE SAFETY GLAZING IN FIXED OR OPERABLE PANELS THAT MEETS ALL OF THE FOLLOWING CONDITIONS: AREAS GREATER THAN 9 SQUARE FEET, BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR, TOP EDGE GREATER THAN 36 INCHES ABOVE FLOOR, AND WITHIN 36 INCHES OF WALKING SURFACE.

#### 08-67 OVERHEAD SECTIONAL DOOR

**GENERAL PRODUCTS**  
SEE DOOR SCHEDULE FOR ALL SIZES AND OPERATION.  
DOOR MANUFACTURER:  
DOOR STYLE SHALL BE: AS SHOWN ON DRAWINGS  
COLOR: SHERMAN WILLIAMS SEMI-TRANSPARENT, "CROSSGRAIDS"

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH.

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

**EXECUTION**  
INSTALL PER MANUFACTURER RECOMMENDED INSTALLATION PROCEDURES. CONTRACTOR SHALL COORDINATE ALL SUB CONTRACTORS TO MEET THESE REQUIREMENTS.

### DIVISION 8-OPENINGS

#### 08-25 EXTERIOR WOOD DOOR

**GENERAL PRODUCTS**  
SEE DOOR SCHEDULE FOR ALL SIZES, STYLES, AND OPERATION.  
MANUF. CUSTOM ENTRY DOOR BY MILL SELECTED  
SPECIES: DOUGLIFR  
COLOR: SHERWIN WILLIAMS SEMI-TRANSPARENT, "CROSSGRAIDS"

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

**EXECUTION**  
ALL DOORS SHALL BE INSTALLED PER MANUFACTURES STANDARD INSTALLATION REQUIREMENTS.

ALL DOORS SHALL BE INSTALLED TRUE AND PLUMB AND SHALL OPERATE. ADJUST ALL DOORS FOR OPERATIONS AS APPROVED BY ARCHITECT/OWNER.

OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCH IN THICKNESS. SOLID OR HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE IRC 302.5.

**08-26 INTERIOR WOOD DOOR**  
**GENERAL PRODUCTS**  
SEE DOOR SCHEDULE FOR ALL SIZES, STYLES, AND OPERATION.  
MANUF. AS SELECTED BY BIDDING  
SPECIES: SEE INTERIOR DESIGN DRAWINGS  
COLOR: CUSTOM STAIN BY INTERIOR DESIGNER

**SUBMITTALS**  
VERIFY ALL DOOR ROUGH OPENINGS BEFORE ORDERING

PROVIDE WARRANTY INFORMATION FOR GLAZING, WOOD COMPONENTS, HARDWARE, CLADDING, AND EXTERIOR PAINT FINISH (ADHESION, CHALK, AND FADE)

PROVIDE SHOP DRAWINGS SHOWING EACH DOOR, HARDWARE, OPERATIONS, SPECIFIED ON DRAWINGS

ALL DOORS SHALL BE INSTALLED PER MANUFACTURES STANDARD INSTALLATION REQUIREMENTS.



## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 10- SPECIALTIES

#### 10-99 BATH HARDWARE

**GENERAL PRODUCTS**  
EXTENT OF BATHROOM HARDWARE INDICATED ON INTERIOR DESIGN DRAWINGS NOT INCLUDED WITHIN ARCHITECTURAL DRAWINGS.  
OWNER/CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH INTERIOR DESIGNER FOR ALL FINISH ITEMS.  
COMPLETE INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE INTERIOR DESIGNER AND TO REVIEW ALL MATERIAL AND SUBMITTALS FOR CODE COMPLIANCE AND APPROVAL.

**SUBMITTALS**  
PROVIDE HARDWARE SPECIFICATION CUT SHEETS FOR APPROVAL BY ARCHITECT/INTERIOR DESIGNER AND OWNER PRIOR TO ORDERING.

**EXECUTION**  
INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

### DIVISION 11- EQUIPMENT

#### 11-32 FIREPLACES

**GENERAL PRODUCTS**  
GAME ROOM FIREPLACE TO BE: MONITGO P-SERIES SEALED GAS - SEE ID DRAWINGS (TOP VENT TO EXTERIOR WALL)  
GREAT ROOM FIREPLACE TO BE: MONITGO P-SERIES SEALED GAS - SEE ID DRAWINGS (TOP VENT TO CHIMNEY CHASE)  
MASTER BEDROOM FIREPLACE TO BE: MONITGO PANORAMA 3-SIDED GLASS CUSTOM SEALED GAS - SEE ID DRAWINGS (REAR-VENT TO EXTERIOR WALL)

**SUBMITTALS**  
SUBMIT CUT SHEETS FOR EACH APPLIANCE SPECIFIED.

**EXECUTION**  
BEDROOM APPLICATIONS: PROVIDE SEALED GLASS DOORS.

ALL WOOD BURNING FIREPLACES (EXCEPT IN BEDROOM APPLICATIONS): TO BE PROVIDED WITH GAS STARTERS

GAS LOG FIREPLACES SHALL BE PROVIDED WITH A SHUT OFF VALVE LOCATED OUTSIDE OF THE FIREBOX AND WITHIN 6" OF THE APPLIANCE, UNLESS APPROVED BY THE FIREPLACE MANUFACTURER.

GAS LIGHTERS ARE USED. FLUES MUST BE PERMANENTLY HELD OPEN.

ALL GAS LOGS, LIGHTERS OR FIREPLACES REQUIRE OUTSIDE COMBUSTION AIR.

ALL FLUES MUST EQUAL 1 SQUARE INCH PER 1000 BTUS.

ALL ROOMS WHERE GAS LOGS, LIGHTERS, OR FIREPLACES ARE INSTALLED MUST EQUAL 50 CUBIC FEET OF VOLUME PER 1000 BTU'S IN ADDITION TO THE REQUIREMENT FOR OUTSIDE AIR.

PROVIDE FLUES, COMBUSTION AIR SPARK ARRESTOR, CLEARANCES, AND ETC. AS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE CHIMNEY CAP FLASHING AND SURROUND. (SEE SECTION 07-34) THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR INSTALLATION OF FIREPLACE EQUIPMENT, INCLUDING FINISH MATERIALS SUCH AS HEARHS, MANTLES, AND OTHER COMBUSTIBLE PROJECTIONS, ETC., AND PROVIDE PROPER SETBACKS, CLEARANCES, AND PROTECTION.

THE CHIMNEY TERMINATION MUST EXTEND AT LEAST 2 FEET HIGHER THAN ANY PORTION OF THE BUILDING WITHIN 10 FEET, AT WOOD BURNING FIREPLACES, AS REQUIRED BY I.R.C. G2427.5.3.

#### 11-34 RESIDENTIAL APPLIANCES

**GENERAL PRODUCTS**  
RESIDENTIAL APPLIANCES AS SELECTED BY INTERIOR DESIGNER.

**SUBMITTALS**  
PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED.  
APPLIANCE SCHEDULE: USE SAME DESIGNATIONS INDICATED ON DRAWINGS

GAS-BURNING APPLIANCES: COMPLY WITH ANS Z21 SERIES STANDARDS.

RESIDENTIAL APPLIANCES: COMPLY WITH NAECA STANDARDS.

**EXECUTION**  
INSTALLER QUALIFICATIONS: AN EMPLOYER OF WORKERS TRAINED AND APPROVED BY MANUFACTURER FOR INSTALLATION AND MAINTENANCE OF UNITS REQUIRED FOR THIS PROJECT

PROVIDE CLEARANCE FROM APPLIANCES TO COMBUSTIBLE MATERIALS AS PER MANUFACTURER'S INSTALLATION REQUIREMENTS. PROVIDE MINIMUM CLEARANCE OF 30" ABOVE COOKING TOP TO COMBUSTIBLE MATERIALS. (I.R.C. M1306 & M1901)

INSTALL ACCESSORIES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS, USING FASTENERS APPROPRIATE TO SUBSTRATE INDICATED AND RECOMMENDED BY UNIT MANUFACTURER. INSTALL UNITS LEVEL, PLUMB, AND FIRMLY ANCHORED IN LOCATIONS AND AT HEIGHTS INDICATED.

BUILT-IN EQUIPMENT: SECURELY ANCHOR UNITS TO SUPPORTING CABINETS OR COUNTERTOPS WITH CONCEALED FASTENERS. VERIFY THAT CLEARANCES ARE ADEQUATE FOR PROPER FUNCTIONING AND ROUGH OPENINGS ARE COMPLETELY CONCEALED.

FREESTANDING EQUIPMENT: PLACE UNITS IN FINAL LOCATIONS AFTER FINISHES HAVE BEEN COMPLETED IN EACH AREA. VERIFY THAT CLEARANCES ARE ADEQUATE TO PROPERLY OPERATE EQUIPMENT.

#### 11-42 PROJECTION SCREENS

**GENERAL PRODUCTS**  
EXTENT OF PROJECTION SCREENS ARE INDICATED ON INTERIOR DESIGN DRAWINGS NOT INCLUDED WITHIN ARCHITECTURAL DRAWINGS

OWNER/CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH INTERIOR DESIGNER FOR ALL FINISH ITEMS.

COMPLETE INSTALLATION DETAILS ARE THE RESPONSIBILITY OF THE INTERIOR DESIGNER AND TO REVIEW ALL MATERIAL AND SUBMITTALS FOR CODE COMPLIANCE AND APPROVAL.

### DIVISION 12- FURNISHINGS

#### 12-27 WOOD KITCHEN CABINETS

**GENERAL PRODUCTS**  
EXTENT OF CABINERY AS SHOWN ON INTERIOR FINISH PLANS AND DRAWINGS.

SEE INTERIOR ELEVATIONS FOR DESIGN OF CABINETS

COORDINATE WITH CABINET FINISH SCHEDULE FOR FINISH OF ALL CABINETS.

**SUBMITTALS**  
CABINET SUPPLIER SHALL PROVIDE SHOP DRAWINGS FOR EACH CABINET FOR APPROVAL BY ARCHITECT/INTERIOR DESIGNER/OWNER PRIOR TO FABRICATION OF CABINET.

PROVIDE 12 X 12 SAMPLE OF EACH CABINET FINISH SPECIFIED FOR APPROVAL.

PROVIDE 1 DOOR SAMPLE FOR EACH DOOR TYPE SPECIFIED FOR APPROVAL.

#### 12-40 STONE COUNTERTOPS

**GENERAL PRODUCTS**  
EXTENT OF STONE COUNTERTOPS AS SHOWN ON INTERIOR FINISH PLANS AND DRAWINGS.

**SUBMITTALS**  
SAMPLES FOR EACH STONE TYPE INDICATED. IN SETS OF SAMPLES NOT LESS THAN 12 INCHES SQUARE. INCLUDE TWO OR MORE SAMPLES IN EACH SET AND SHOW THE FULL RANGE OF VARIATIONS IN APPEARANCE CHARACTERISTICS EXPECTED IN COMPLETED WORK.

**EXECUTION**  
USE ONLY ADHESIVES FORMULATED FOR STONE AND CERAMIC TILE AND RECOMMENDED BY THEIR MANUFACTURER FOR THE APPLICATION INDICATED. EXAMINE SUBSTRATES INDICATED TO RECEIVE STONE COUNTERTOPS AND CONDITIONS UNDER WHICH STONE COUNTERTOPS WILL BE INSTALLED, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE.

SET STONE TO COMPLY WITH REQUIREMENTS INDICATED ON DRAWINGS AND SHOP DRAWINGS. SHIM AND ADJUST STONE TO LOCATIONS INDICATED, WITH UNIFORM JOINTS OF WIDTHS INDICATED AND WITH EDGES AND FACES ALIGNED ACCORDING TO ESTABLISHED RELATIONSHIPS AND INDICATED TOLERANCES

INSTALL COUNTERTOPS OVER PL WOOD SUBTOPS WITH FULL SPREAD OF WATER-CLEANABLE EPOXY ADHESIVE.

REMOVE AND REPLACE STONE COUNTERTOPS OF THE FOLLOWING DESCRIPTION: BROKEN, CHIPPED, STAINED, OR OTHERWISE DAMAGED STONE, DEFECTIVE COUNTERTOPS, DEFECTIVE JOINTS, INCLUDING MISALIGNED JOINTS, INTERIOR STONE COUNTERTOPS AND JOINTS NOT MATCHING APPROVED SAMPLES AND MOCKUPS.

CLEAN STONE COUNTERTOPS NOT LESS THAN TWO DAYS AFTER COMPLETION OF INSTALLATION, USING CLEAN WATER AND SOFT BRAS. APPLY STONE SEALER TO COMPLY WITH STONE PRODUCERS AND SEALER MANUFACTURER'S WRITTEN INSTRUCTIONS.

### DIVISION 21 - FIRE SUPPRESSION

#### 21-01 FIRE SPRINKLERS

**GENERAL PRODUCTS**  
DESCRIPTION  
THE PROJECT SHALL HAVE FULL NFPA 13D SPRINKLER SYSTEM INSTALLED THROUGH OUT AS REQUIRED.

CPVC FIRE SPRINKLER PIPE AND FITTINGS ARE EXTRUDED/MOLDED FROM CPVC COMPOUNDS MANUFACTURED BY ULTRON. ADVANCED MATERIALS OR EQUAL. THE PIPE AND FITTING COMPOUNDS SHALL MEET CELL CLASS 23547 AND 24447 RESPECTIVELY, AS DEFINED BY ASTM D1784, AND SHALL BE CERTIFIED BY NSF INTERNATIONAL FOR USE WITH POTABLE WATER. BOTH PIPE AND FITTING COMPOUNDS SHALL BE PRESSURE RATED BY PLASTICS PIPE INSTITUTE (PPI).

PIPE AND FITTINGS

PIPE SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F442 IN STANDARD DIMENSION RATIO (SDR) 13.5.

FITTINGS SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM F437 (SCHEDULE 80 THREADED), ASTM F438 (SCHEDULE 40 SOCKET) AND ASTM F439 (SCHEDULE 160 SOCKET).

BOTH PIPE AND FITTINGS SHALL BE LISTED BY UNDERWRITERS LABORATORIES FOR USE IN WET AUTOMATIC FIRE SPRINKLER SYSTEMS AND SHALL

BEAR THE LOGO OF THE LISTING AGENCY. SEE UL FIRE PROTECTION EQUIPMENT DIRECTORY, CATEGORIES V1M7 AND HPH.

ANCILLARY PRODUCTS COMING INTO CONTACT WITH PIPE AND FITTINGS MUST BE CHEMICALLY COMPATIBLE AS DETERMINED BY CPVC PIPE AND FITTINGS MANUFACTURER OR COMPOUND MANUFACTURER, AND LISTED ON PIPE, FITTINGS OR COMPOUND MANUFACTURER'S CHEMICAL COMPATIBILITY PROGRAM (I.E. FGG/8M/CTM) SYSTEM COMPATIBLE PROGRAM).

SOLVENT CEMENT

ALL SOCKET TYPE JOINTS SHALL BE MADE UP EMPLOYING SOLVENT CEMENTS THAT MEET OR EXCEED THE REQUIREMENTS OF ASTM F493. THE STANDARD PRACTICE FOR SAFE HANDLING OF SOLVENT CEMENTS SHALL BE IN ACCORDANCE WITH ASTM F492. SOLVENT CEMENT SHALL BE LISTED BY NSF INTERNATIONAL FOR USE WITH POTABLE WATER, AND APPROVED BY THE MANUFACTURERS. THE SOLVENT CEMENTS SHALL BE COMPATIBLE WITH THEIR CPVC PIPE AND FITTINGS.

FOLLOW MANUFACTURER'S INSTRUCTIONS FOR SET AND CURE TIMES FOR SOLVENT CEMENT JOINTS. AVOID SIGNIFICANT STRESSES DURING SET AND CURE TIMES. DO NOT APPLY ANY STRESS THAT WILL DISTURB AN UNCURED JOINT. SPRINKLER FITTINGS SHALL BE ALLOWED TO CURE IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND THE CONTRACTOR SHALL ASSURE THE OUTLETS ARE CLEAR OF ANY EXCESS CEMENT PRIOR TO INSTALLING SPRINKLERS.

BASIC USE

CPVC PIPE AND FITTINGS SHALL BE LISTED BY UL AND ALSO EITHER UL C OR UL FOR USE IN:

ONE AND TWO FAMILY DWELLINGS AND MANUFACTURED HOMES AS DEFINED BY NFPA 13D.

AIR HANDLING (PLENUM) SPACES AS DEFINED BY NFPA 90A.

UNDERGROUND WATER PRESSURE SERVICE AS DEFINED BY NFPA 24.

MAXIMUM DESIGN TEMPERATURE/PRESSURE RATINGS SHALL NOT BE LESS THAN 175 PSI AT 150°F. REFER TO CPVC PIPE AND FITTING MANUFACTURER'S INSTALLATION INSTRUCTIONS.

QUALITY ASSURANCE  
CONTRACTOR INSTALLING THE PRODUCT MUST HAVE A MINIMUM OF 2 YEARS OF INSTALLATION OF SYSTEM.

**MANUFACTURERS**  
TYCO FIRE SUPPRESSION & BUILDING PRODUCTS 451 N. CANNON AVENUE LANSDALE, PA 19446 (215) 362-0700 FAX (215) 362-5385

**SUBMITTALS**  
COMPLETE FIRE SPRINKLER SHOP DRAWINGS, INCLUDING PIPING LAYOUT, HEAD LAYOUT, HEAD OPTIONS FOR SELECTION, AND PRODUCT LITERATURE. FIRE SPRINKLER DRAWINGS WILL BE CONSIDERED DEFERRED SUBMITTAL AND MUST FOLLOW DEFERRED SUBMITTAL PROCEDURES.

**EXECUTION**  
SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE FOR FIRE SPRINKLER SYSTEMS AND THE MANUFACTURER'S INSTRUCTIONS. THE DESIGN SHALL TAKE INTO CONSIDERATION SUCH FACTORS AS PRESSURE AND FLOW REQUIREMENTS, FRICTION LOSS, OPERATING

TEMPERATURES, SUPPORT SPACING, JOINING METHODS, AND THERMAL EXPANSION AND CONTRACTION.

THE FIRE SPRINKLER PIPING SYSTEM SHALL BE HYDRAULICALLY CALCULATED USING A HAZEN-WILLIAMS C FACTOR OF 150, AND DESIGNED IN ACCORDANCE WITH THE STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS, NFPA 13.

THE MAXIMUM DESIGN TEMPERATURE/PRESSURE RATING SHALL NOT EXCEED 175 PSI AT 150°F.

INSTALLATION PROCEDURES:  
INSTALLATION PRACTICES SUCH AS PIPE SUPPORT SPACING, BRACING, ALLOWANCE FOR THERMAL EXPANSION/CONTRACTION, SOLVENT CEMENTING AND HANDLING AND STORAGE SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE UL LISTING WHICH INCLUDES INSTALLATION LIMITATIONS.

CPVC PIPE AND FITTINGS ARE INTENDED FOR USE AT A MAXIMUM WORKING PRESSURE OF 175 PSI AT 150°F IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPROPRIATE LISTED AGENCIES.

ALL APPLICABLE CODES AS PER THE NFPA SHALL BE IDENTIFIED.  
AFTER THE SYSTEM IS INSTALLED AND ANY SOLVENT CEMENT IS CURED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS, THE SYSTEMS SHALL BE HYDROSTATICALLY TESTED PER THE REQUIREMENTS OF THE APPLICABLE NFPA STANDARD (NFPA 13D).

MAINTENANCE SHALL BE IN ACCORDANCE WITH THE STANDARD FOR INSPECTION, TESTING AND MAINTENANCE OF WATER BASED EXTINGUISHING SYSTEMS AS DEFINED BY NFPA 25.

### DIVISION 22- PLUMBING

#### 22-00 GENERAL PLUMBING

THE PLUMBING SYSTEM SHALL COMPLY WITH THE 2012 I.R.C. AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS RELATED TO THE PROJECT AS PER INDUSTRY STANDARDS.

THE PLUMBING CONTRACTOR TO BE RESPONSIBLE FOR THE COMPLETE PLUMBING INSTALLATION AND PROVIDE A (1) YEAR WARRANTY AFTER OWNER'S ACCEPTANCE.

VISIT THE JOB SITE PRIOR TO BIDDING THE PROJECT TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND ANY INTERFERENCE.

NO PLUMBING SHALL RUN ON AN OUTSIDE WALL.

ALL VENTS SHALL BE GANGED TO THE FEWEST NUMBER POSSIBLE TO PENETRATE ROOF AND SHOULD BE A MINIMUM OF 10' TO FROM EAVES. ALL VENTS TO BE SIZED AS PER I.R.C. REQUIREMENTS AND / OR NOT LESS THAN 3" DIAMETER PIPE. SHOWER FLASHING AS REQUIRED.

SHOWER HEADS SHALL HAVE A FLOW RATE OF 2.5 GPM AT 80 PSI OR LESS.

LAVATORY AND SINK FAUCETS SHALL HAVE A FLOW RATE OF 2.2 GPM AT 60 PSI.

WATER CLOSET TO HAVE ECONO-PUSH TANK 1.6 GAL. MAX. FLUSHING CYCLE.

ALL HOSE BIBBS SHALL BE NON FREEZE TYPE WITH BACK FLOW PREVENTER.

WATER STORAGE TANKS TO HAVE SEMI-STRAPPING TIE DOWNS. SIZE OF WATER HEATER / WATER STORAGE TANK AS PER CODE. (I.R.C. M3017.2 & G2404.8)

PROVIDE FLOOR DRAIN AND / OR DRIP PAN UNDER WATER HEATER, SPA, HOT TUB, WASHING MACHINE, STEAM SHOWER EQUIPMENT, ETC. IF LOCATED ON WOOD FLOOR STRUCTURE. (I.R.C. P2801)

THE CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S ROUGHED IN INSTRUCTIONS. TAKE CARE DURING BUILDING CONSTRUCTION TO SEE THAT PROVISIONS ARE MADE FOR PROPER FIXTURE SUPPORT AND THAT VENGE IN PIPING IS CORRECT AND PROTECTED FROM MOVEMENT OR DAMAGE.

THE CONTRACTOR SHALL TEST ALL PIPING INCLUDING DRAINAGE WASTE LINES, WATER PIPING, NATURAL GAS PIPING, ETC. TEST IN ACCORDANCE WITH UNIFORM PLUMBING CODE AND LOCAL CODES AND AUTHORITIES. WATER LINES TO BE DISINFECTED IN ACCORDANCE WITH LOCAL HEALTH DEPARTMENT REGULATIONS.

CAULK AROUND ALL PLUMBING FIXTURES AT FLOORS AND WALLS WITH FLEXIBLE CAULKING COMPOUND. COLOR TO MATCH FIXTURE.

AFTER FIXTURES HAVE BEEN SET THE CONTRACTOR SHALL CAREFULLY PROTECT THEM FROM DAMAGE UNTIL THE BUILDING IS OCCUPIED BY THE OWNER. JUST PRIOR TO ACCEPTANCE OF THE JOB BY THE OWNER, THE CONTRACTOR SHALL CLEAN ALL PLUMBING FIXTURES AND REMOVE LABELS.

PROVIDE ANTI-SCALD LIMITING DEVICES SET AT 120 DEGREES FOR BATHUBS AND SHOWERS.

ALL SUPPLY, WASTE, & GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. ALL WATER LINES TO BE TYPE 1/2" HARD DRAWN COPPER OR POLYETHYLENE CROSS-LINK PIPING FOR ABOVE GROUND APPLICATIONS OR APPROVED EQUAL. PROVIDE TYPE "X" COPPER OR POLYETHYLENE CROSS-LINK PIPING FOR UNDERGROUND. PROVIDE CONTINUOUS LINE WITH NO JOINTS FOR UNDERGROUND APPLICATIONS, UNLESS APPROVED. ALL FITTINGS TO BE COPPER WITH SWEAT SOLDER JOINTS FOR COPPER PIPING OR BRASS FITTINGS WITH COMPRESSION BUSHINGS FOR POLY PIPE. ALL WASTE LINES TO BE PVC OR ABS PLASTIC PIPE.

WASTE LINES SHALL BE PROVIDED WITH A CLEAN OUT AS REQUIRED. EXTEND CLEAN OUTS TO ACCESSIBLE SURFACE. DO NOT PLACE CLEAN OUTS IN FLOOR UNLESS APPROVED.

PLUMBING CONTRACTOR SHALL PROVIDE A TURN OFF VALVE AND DRAIN AT THE LOWEST LEVEL OF THE FACILITY. ALL FIXTURES SHALL BE ABLE TO DRAIN AT THIS POINT. PROVIDE FLOOR DRAIN AT LOCATION OF PLUMBING SYSTEM DRAIN.

PLUMBING CONTRACTOR TO ASSESS WATER PRESSURE AND ENSURE ADEQUATE PRESSURE IS AVAILABLE. FOR MULTIPLE FIXTURE USE SIMULTANEOUSLY WITH OUT PRESSURE DECREASE OR TEMPERATURE FLUCTUATION.

PROVIDE FIRE SPRINKLER SYSTEM AS REQUIRED BY BUILDING DEPARTMENT. SYSTEM TO BE BUILT TO NFPA 13D ACOFFED. PROVIDE ENGINEERING, LAYOUT, SPECIFICATIONS, ETC. FOR APPROVAL PRIOR TO INSTALLATION. PROVIDE CONCEALED HEADS.

STEAM SHOWER UNITS TO BE "WHEEL" STEAM GENERATOR K-1734 OR EQUAL. INSTALL AS PER MANUFACTURE REQUIREMENTS. MEETS OR EXCEEDS UL-499/CSA C22.2 NO. 88.

BATHUBS AND SHOWER FLOORS AND WALLS ABOVE BATHUBS WITH INSTALLED SHOWER HEADS SHALL BE FINISHED WITH A NON-ABRASIVE SURFACE. SUCH WALL SURFACES SHALL EXTEND TO A HEIGHT OF NOT LESS THAN 72" INCHES ABOVE THE FLOOR. SHOWER PAN LINERS AND SITE BUILT PAN LINERS SHALL EXTEND A MINIMUM OF 3" ABOVE SHOWER DOOR THRESHOLD. PROVIDE SOLID BLOCKING BEHIND LINER. ALL SHOWER PAN LINERS SHALL BE INSTALLED ON SLOPED BUILT UP FLOOR AND MUST BE INSPECTED.

#### 22-01 PLUMBING FIXTURES

**GENERAL PRODUCT**  
SEE PLUMBING FIXTURE SCHEDULE AND PLANS FOR LOCATIONS AND SELECTION OF SPECIFIED FIXTURES.

**SUBMITTALS**  
SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, COLORS AND MANUFACTURER SPECIFICATIONS FOR EACH FIXTURE SPECIFIED FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

**EXECUTION**  
INSTALL FIXTURES LEVEL AND PLUMB ACCORDING TO ROUGHING-IN DRAWINGS.

INSTALL WATER SUPPLY PIPING WITH STOP ON EACH SUPPLY TO EACH FIXTURE TO BE CONNECTED TO WATER DISTRIBUTION PIPING. SEAL JOINTS BETWEEN FIXTURES AND WALLS, FLOORS, AND COUNTERTOPS USING SANITARY-TYPE, ONE-PART, MILDEW-RESISTANT SILICONE SEALANT.

CONNECT FIXTURES WITH WATER SUPPLIES, STOPS, AND RISERS, AND WITH TRAPS, SOIL, WASTE AND VENT PIPING. USE SIZE FITTINGS REQUIRED TO MATCH FIXTURES.

CHECK THAT PLUMBING FIXTURES ARE COMPLETE WITH TRIM, FAUCETS, FITTINGS, AND OTHER SPECIED COMPONENTS.

INSPECT INSTALLED PLUMBING FIXTURES FOR DAMAGE. REPLACE DAMAGED FIXTURES AND COMPONENTS.

TEST INSTALLED FIXTURES AFTER WATER SYSTEMS ARE PRESSURIZED FOR PROPER OPERATION. REPLACE MALFUNCTIONING FIXTURES AND COMPONENTS, THEN RETEST. REPEAT PROCEDURE UNTIL UNITS OPERATE PROPERLY.

EACH WATER CLOSET SHALL BE LOCATED IN A CLEAR SPACE NOT LESS THAN 30" IN WIDTH (15" MINIMUM FROM CENTER TO ANY OBSTRUCTION) AND HAVE A CLEAR SPACE IN FRONT OF NOT LESS THAN 21" CLEAR. (I.R.C. K307)

#### 22-02 TANK TYPE WATER HEATER

**GENERAL PRODUCTS**  
COORDINATE WITH PLANS FOR LOCATION OF WATER HEATERS.  
WATER HEATERS TO BE: A.G. SMITH OR EQUAL.  
CAPACITY SHALL BE: 50 GALLONS

**SUBMITTALS**  
SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, MANUFACTURER SPECIFICATIONS FOR EACH WATER HEATER FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

**EXECUTION**  
CONNECT FIXTURES WITH WATER SUPPLIES, STOPS, AND RISERS, AND WITH TRAPS, SOIL, WASTE AND VENT PIPING. PROVIDE EXPANSION TANK AS REQUIRED BY LOCAL BUILDING CODE.

PROVIDE VENTING AS REQUIRED BY WATER HEATER MANUFACTURER SPECIFICATIONS.

FOR HOT WATER SUPPLIED TO BATHUBS AND WHIRLPOOL TUBS SHALL BE LIMITED TO 120 DEGREES MAX BY A WATER TEMPERATURE LIMITING DEVICE (ASSE 1070) OR BY AN APPROVED COMBINATION TUB/SHOWER VALVE.

#### 22-04 WATER SOFTENER

**GENERAL PRODUCTS**  
COORDINATE WITH PLANS FOR LOCATION OF WATER HEATERS.  
WATER SOFTENER TO BE:

**SUBMITTALS**  
SUBMIT CUT SHEET WITH PICTURES, MODEL NUMBERS, MANUFACTURER SPECIFICATIONS FOR EACH WATER HEATER FOR APPROVAL BY OWNER AND ARCHITECT PRIOR TO ORDERING.

**EXECUTION**  
CONNECT PER MANUFACTURER SPECIFICATIONS.

#### 22-04 WATER SOFTENER

**GENERAL PRODUCTS**  
THE CONTRACTOR IS RESPONSIBLE TO REVIEW AND COMPLY WITH ALL APPLICABLE BUILDING CODES, ASTM STANDARDS, TECHNICAL REPORTS FOR THE INSTALLATION OF PLUMBING COMPONENTS.

PROVIDE A PEX TUBING HOT AND COLD POTABLE WATER DISTRIBUTION SYSTEM, WHICH IS MANUFACTURED, FABRICATED AND INSTALLED TO COMPLY WITH REGULATORY AGENCIES AND TO MAINTAIN PERFORMANCE CRITERIA STATED BY THE PEX TUBING MANUFACTURER WITHOUT DEFECTS, DAMAGE OR FAILURE

UTILIZE AN INSTALLER HAVING DEMONSTRATED EXPERIENCE ON PROJECTS OF SIMILAR SIZE AND COMPLEXITY AND POSSESSES THE SKILLS AND KNOWLEDGE TO INSTALL A PEX POTABLE WATER DISTRIBUTION SYSTEM

DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS INTACT UNTIL READY FOR INSTALLATION

STORE MATERIALS PROTECTED FROM EXPOSURE TO HARMFUL ENVIRONMENTAL CONDITIONS AND AT TEMPERATURE AND HUMIDITY CONDITIONS RECOMMENDED BY THE MANUFACTURER AND STORE PEX TUBING INDOORS, IN CARTONS OR UNDER COVER TO AVOID DIRT OR FOREIGN MATERIAL FROM ENTERING THE TUBING

DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN SIX MONTHS, IF CONSTRUCTION DELAYS ARE ENCOUNTERED. COVER THE TUBING THAT IS EXPOSED TO DIRECT SUNLIGHT

**WARRANTY**  
MANUFACTURER'S WARRANTY SHALL COVER THE REPAIR OR REPLACEMENT OF PROPERLY INSTALLED TUBING AND FITTINGS PROVEN DEFECTIVE AS WELL AS INCIDENTAL DAMAGES BY A WARRANTY FIBROD FOR THE TUBING AND SUBSEQUENT SYSTEM SHALL BE 25 YEAR NON-PORATED WARRANTY AGAINST FAILURE DUE TO DEFECT IN MATERIAL OR WORKMANSHIP, BEGINNING WITH THE DATE OF INSTALLATION

SPECIFICATION FOR HOT AND COLD POTABLE WATER DISTRIBUTION SYSTEM HAS BEEN WRITTEN AROUND PRODUCTS AND SYSTEM DESIGNS AS MANUFACTURED AND RECOMMENDED BY ZURN PEX, INC. AND ALL PRODUCTS, COMPONENTS, ETC. SPECIFIED HEREIN ARE MANUFACTURED BY AND/OR ARE AVAILABLE FROM ZURN PEX, INC. TUBING MANUFACTURER. THE CONTRACTOR SHALL NOT MIX SYSTEM COMPONENTS.

TUBING  
CROSS-LINKED POLYETHYLENE (PEX) MANUFACTURED BY THE SLANE METHOD, NON-BARRIER TYPE AND SHALL HAVE A PRESSURE AND TEMPERATURE RATING OF 160 PSI AT 180°F, 100 PSI AT 180°F AND 80 PSI AT 200°F

TUBING SHALL HAVE A MINIMUM OF 6 MONTHS UV PROTECTION, AND BE MANUFACTURED IN ACCORDANCE WITH ASTM F818 AND ASTM F877 AND TESTED FOR COMPLIANCE BY AN INDEPENDENT THIRD-PARTY AGENCY

FITTINGS

FITTINGS SHALL BE MANUFACTURED BY SAME PEX MANUFACTURER AS TUBING AND SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM F8107 OR ASTM F2159 AND/OR COMPLY WITH ASTM F877 SYSTEM STANDARD AS IDENTIFIED ON THE FITTING

CRIMP SYSTEMS  
ALL QUICKCLAMP, COPPER CRIMP RING SHALL PROVIDED BY TUBING AND PIPING MANUFACTURER. INSTALLATION OF QUICKCLAMP AND COPPER CRIMP RING SHALL BE INSTALLED WITH MANUFACTURER TOOLS AND MUST FOLLOW ALL ASTM TESTING REQUIREMENTS AS LISTED WITHIN MANUFACTURER STANDARD SPECIFICATIONS AND INSTALLATION GUIDELINES.

MANIFOLDS  
MANIFOLDS SHALL BE SELECTED FROM FOLLOWING: QUICKPORT PREASSEMBLED MANIFOLD; COPPER MANIFOLD SYSTEM; OR MANIFOLD: MULTI-PORT FITTINGS; COPPER MANIFOLD HEADER

VALVES  
SHALL BE OF THE PLASTIC OR METAL TYPE, MEETING THE REQUIREMENTS OF ASTM F877, IDENTIFIED AS SUCH WITH THE APPROPRIATE MARK ON THE PRODUCT

**SUBMITTALS**  
SUBMIT MANUFACTURER'S PRODUCT SUBMITTAL DATA AND INSTALLATION INSTRUCTIONS

SUBMIT MANUFACTURER'S PROFESSIONAL INSTALLATION WARRANTY FOR PRODUCTS AND LABOR.

SUBMIT MANUFACTURER'S WARRANTY FOR PRODUCTS.

**EXECUTION**  
COMPLY WITH MANUFACTURER'S PRODUCT DATA, INCLUDING PRODUCT TECHNICAL BULLETINS, TECHNICAL MEMOS, INSTALLATION INSTRUCTIONS AND DESIGN DRAWINGS, INCLUDING: ZURN OR EQUAL, PEX PLUMBING INSTALLATION GUIDE

VERIFY THAT SITE CONDITIONS ARE ACCEPTABLE FOR THE INSTALLATION OF THE PEX POTABLE WATER SYSTEM. DO NOT PROCEED WITH INSTALLATIONS OF THE PEX POTABLE WATER SYSTEM UNTIL UNACCEPTABLE CONDITIONS ARE CORRECTED

DO NOT INSTALL PEX TUBING WITHIN 6 INCHES OF GAS APPLIANCE VENTS OR WITHIN 12 INCHES OF ANY RECESSED LIGHT FIXTURES

DO NOT SOLDER WITHIN 18 INCHES OF PEX TUBING IN THE SAME WATERLINE. MAKE SWEAT CONNECTIONS PRIOR TO MAKING PEX CONNECTIONS

ENSURE NO GLUES, SOLVENTS, SEALANTS OR CHEMICALS COME IN CONTACT WITH THE TUBING WITHOUT PRIOR PERMISSION FROM THE TUBING MANUFACTURER

DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN 6 MONTHS

USE GROMMETS OR SLEEVES AT THE PENETRATION FOR PEX TUBING PASSING THROUGH METAL STUDS

USE A PEX MANUFACTURER RECOMMENDED FIRE STOP SEALANT MANUFACTURER

PROTECT PEX TUBING WITH SLEEVES WHERE ABRASION MAY OCCUR

USE HALL PLATES WHERE PEX TUBING PENETRATES WALL STUD OR JOISTS AND HAS THE POTENTIAL FOR BEING STRUCK WITH A SCREW OR NAIL

ALLOW SLACK OF APPROXIMATELY 1/8 INCH PER FOOT OF TUBE LENGTH TO COMPENSATE FOR EXPANSION AND CONTRACTION

PRESSURIZE ZURN OR EQUAL PEX TUBING IN ACCORDANCE WITH APPLICABLE CODES OR IN THE ABSENCE OF APPLICABLE CODES, TEST PRESSURE SHALL BE AT LEAST EQUAL TO NORMAL SYSTEM WORKING PRESSURE, BUT NOT LESS THAN 40 PSI WATER OR AIR AND NOT GREATER THAN 225 PSI WATER, 125 PSI AIR

TO ENSURE SYSTEM INTEGRITY, PRESSURE TEST THE SYSTEM BEFORE COVERING TUBING IN CONCRETE AND AFTER OTHER TRADES HAVE WORKED IN THE VICINITY OF THE TUBING. REPAIR AND REPLACE ANY PRODUCT THAT HAS BEEN DAMAGED ACCORDING TO MANUFACTURER'S RECOMMENDATION

#### 22-06 PLUMBING WASTE COMPONENT/PIPING

**GENERAL PRODUCTS**  
THIS SPECIFICATION COVERS ABS CELLULAR CORE (FOAM CORE) PIPE AND ABS DWV FITTINGS USED IN SANITARY DRAIN, WASTE, AND VENT (DWV), SEWER, AND STORM DRAINAGE APPLICATIONS. THIS SYSTEM IS INTENDED FOR USE IN NON-PRESSURE APPLICATIONS WHERE THE OPERATING TEMPERATURE WILL NOT EXCEED 160°F.

ALL WASTE PIPING SHALL BE THE FOLLOWING:

ABS CELLULAR CORE (FOAM CORE) PIPE AND ABS DWV FITTINGS

PIPE SHALL BE MANUFACTURED FROM VIRGIN RIGID ABS (ACRYLONITRILE-BUTADIENE-STYRENE) COMPOUNDS WITH A CELL CLASS OF 42222 AS IDENTIFIED IN ASTM D 3965. FITTINGS SHALL BE MANUFACTURED FROM VIRGIN RIGID ABS COMPOUNDS WITH A CELL CLASS OF 32222 AS IDENTIFIED IN ASTM D 3965.

ABS CELL

## BUILDING KEYNOTES AND SPECIFICATIONS

### DIVISION 23- HEATING AND COOLING

#### 23-00 GENERAL MECHANICAL NOTES

THE MECHANICAL SYSTEM SHALL COMPLY WITH 2012 I.R.C. AND IFGC AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NATIONAL CODES. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ITEMS RELATED TO THE PROJECT, AS PER INDUSTRY STANDARDS.

THE MECHANICAL CONTRACTOR TO BE RESPONSIBLE FOR THE COMPLETE MECHANICAL INSTALLATION AND PROVIDE A 1 YEAR WARRANTY AFTER OWNERS ACCEPTANCE. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH OPERATION AND MAINTENANCE MANUALS.

VISIT THE JOB SITE PRIOR TO BIDDING THE PROJECT TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND ANY INTERFERENCE.

DRYER EXHAUST DUCT TO BE VENTED TO EXTERIOR. DUCTS TO BE RIGID ALUMINUM WITH SMOOTH INTERIOR SURFACES. NO HEAT SCREENS OR FASTENERS SHALL PENETRATE INTO THE DUCT. DOWN DRAIN IN DIRECTION OF AIR FLOW. MAXIMUM LENGTH SHALL NOT EXCEED 35'-0" EXCLUDING FRESH TRANSITION DUCT. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED BY 2.5 FEET FOR EACH 45 DEGREE BEND AND 5 FEET FOR EACH 90 DEGREE BEND. TRANSITION DUCTS SHALL NOT BE CONCEALED WITH CONSTRUCTION. (I.R.C. M1302)

BATHROOM EXHAUST DUCT WORK TO BE ALUMINUM, GALVANIZED STEEL, OR APPROVED BRASS GLASS. KITCHEN HOOD EXHAUST DUCTS TO BE GALVANIZED STEEL, STAINLESS STEEL OR COPPER. DUCTS TO BE AIR TIGHT AND EQUIPPED WITH A BACK DRAFT DAMPER. ALL DUCTS TO TERMINATE AT OUTSIDE. BATHROOM VENTILATION SYSTEM SHALL BE RATED AT 50 CFM (INTERMEDIATE VENTILATION) (I.R.C. CHAPTER 15 AND R303)

LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING IS BY THE MECHANICAL CONTRACTOR. COORDINATE WITH THE ELECTRICAL CONTRACTOR.

SUBMIT SPECIFICATION SHEETS ON ALL EQUIPMENT TO BE REVIEWED BY ARCHITECT.

MECHANICAL HEATING SYSTEM TO BE 90% EFFICIENT FORCED AIR FURNACE SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE 1" MINIMUM CLEARANCE AROUND EQUIPMENT AT SIDES AND REAR OF THE APPLIANCE AND 6" MINIMUM CLEARANCE IN FRONT OF THE APPLIANCE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

MECHANICAL HEATING SYSTEM TO BE 80% EFFICIENT BOILER WITH RADIANT IN FLOOR HYDRONIC HEATING SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE 1" MINIMUM CLEARANCE AROUND EQUIPMENT AT SIDES AND REAR OF THE APPLIANCE AND 6" MINIMUM CLEARANCE IN FRONT OF THE APPLIANCE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

ALL HABITABLE ROOMS SHALL HAVE NATURAL VENTILATION EQUATING 4% OF THE FLOOR AREA. THIS SHALL BE PROVIDED THROUGH WINDOWS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOORS UNLESS AN APPROVED MECHANICAL VENTILATION SYSTEM IS PROVIDED CAPABLE OF PRODUCING 0.35 AIR CHANGES PER HOUR IN THE ROOM OR A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS INSTALLED.

EXHAUST FANS SHALL BE SIZED FOR A MINIMAL RATE OF 50 CFM. ALL FANS TO BE DUCTED TO OUTSIDE. ALL EXHAUST DUCTS TO HAVE APPROVED TERMINATIONS WITH SCREENS. TERMINATIONS SHALL BE INSTALLED AS NOT TO BE BLOCKED BY SNOW AND ICE. FANS TO BE INSTALLED WITH OVER SPEED MOTOR, PROVIDE ACOUSTICAL INSULATION, GRILLS, CAPS, ETC. AS REQUIRED. (I.R.C. R303.3 AND M1507)

THE CONTRACTOR SHALL LAYOUT AND REFERENCE ALL MECHANICAL DRAWINGS. CONTRACTOR SHALL PROVIDE ALL ENGINEERING REQUIRED TO SIZE DUCTS, GRILLS, REGISTERS, ETC. REVIEW ALL LOCATIONS AND PLACEMENT FOR GRILLS, ETC. WITH OWNER PRIOR TO PLACEMENT. THE ASSOCIATED ARCHITECTURAL MECHANICAL LAYOUTS AND DRAWINGS SHALL BE FOR THE PURPOSE TO SHOW INTENT.

PROJECTS THAT REQUIRE MECHANICAL DUCT WORK SHALL CONFORM TO THE FOLLOWING. ALL DUCT WORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET STEEL TO CONFORM WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND I.R.C. CHAPTER 16. FABRICATE SHEET METAL DUCTS WITH CROSS-BREAK OR RINK-FLAT SURFACES TO PREVENT VIBRATION AND PULSATION. HANG DUCTS WITH STRAPS OF 18 GAUGE GALVANIZED STEEL OF 1" WIDE. ANCHOR DUCTS SECURELY TO STRUCTURE WITH SCREWS, IN SUCH A MANNER AS TO PREVENT TRANSMISSION WITH VIBRATION. UNDERGROUND ROUND DUCT SHALL BE SCHEDULE 40 P.V.C. PIPE OR P.V.S. PIPE AS REQUIRED BY LOCAL JURISDICTION WITH FUSION WELDED JOINTS AND CONNECTIONS. RUN OUTS TO FLOOR GRILLES SHALL BE FABRICATED FROM SHEET P.V.C. OR P.V.S. OF SAME THICKNESS AS PIPE WITH ALL JOINTS AND CONNECTIONS FUSION WELDED.

REMOVE DEBRIS AND TRASH FROM DUCT WORK AND VACUUM CLEAN DUCTS. RUN SUPPLY AND EXHAUST FANS THROUGH GRILLES AND REGISTERS ARTS INSTALLED AND BEFORE CEILINGS AND WALLS ARE FINISHED. THE ADJUSTMENT OF AIR SYSTEMS SHALL BE DONE BY THE MECHANICAL CONTRACTOR SYSTEMS SHALL BE ADJUSTED TO WITHIN PLUS OR MINUS 5% OF THE AIR CAPACITY.

INSULATE ALL HEATING TRUNK AND BRANCH SUPPLY DUCTS IN UNFINISHED AREAS, CRAWLS SPACES, ATTICS AND GARAGES.

ALL GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. NATURAL GAS SERVICE LINES SHALL BE LESS THAN 1/2" INCH IN DIAMETER. ALL NATURAL GAS LINES TO BE SCHEDULE 40 BLACK STEEL OR FLEX PLASTIC PIPE AS APPROVED BY GAS COMPANY. (I.R.C. CHAPTER 24, R156-56-700 (B) AND STATE AMENDMENT TO IFGC)

ALL GAS APPLIANCES SHALL BE PROVIDED WITH A SHUT OFF VALVE. SHUT OFF VALVES SHALL BE LOCATED IN A PLACE SO AS TO PROVIDE ACCESS FOR OPERATION AND SHALL BE INSTALLED SO AS TO BE PROTECTED FROM DAMAGE.

#### 23-01 RADIANT HEAT

MECHANICAL HEATING SYSTEM TO BE 80% EFFICIENT BOILER WITH RADIANT IN FLOOR HYDRONIC HEATING SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE CLEARANCES AS PER MANUFACTURE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

#### 23-02 MECHANICAL HEATING AND COOLING

MECHANICAL HEATING SYSTEM TO BE 90% EFFICIENT FORCED AIR FURNACE SYSTEM. THE SYSTEM SHALL BE CAPABLE OF MAINTAINING THE TEMPERATURE WITHIN 1 DEGREE OF THE THERMOSTAT SET POINT. THE CONTRACTOR SHALL GUARANTEE THAT THE SYSTEM SHALL HEAT AND COOL THE FACILITY TO 38 DEGREES FAHRENHEIT HEATING AND 70 DEGREES FAHRENHEIT COOLING AT 3'-0" ABOVE THE FLOOR AND 2'-0" FROM EXTERIOR WALLS THROUGH OUT THE STRUCTURE. SUPPLIER TO PROVIDE HEAT LOSS CALCULATIONS, SHOP DRAWINGS, THERMOSTAT LOCATIONS AND CUT SHEETS ON ALL PROPOSED EQUIPMENT. SIZE EQUIPMENT AS PER (I.R.C. M140.3). PROVIDE CLEARANCES AS PER MANUFACTURE. PROVIDE TWO SEPARATE COMBUSTION AIR DUCTS. (FROM EXTERIOR) ONE TERMINATING IN LOWER 12" AND ONE TERMINATING IN UPPER 12" OF THE SPACE AS REQUIRED. EACH DUCT SHALL HAVE A FREE AREA TO ALLOW COMBUSTION AIR AT A RATE OF 1 SQUARE INCH PER 4,000 BTUS (FOR VERTICAL DUCTS) AND 1 SQUARE INCH PER 2,000 BTUS (FOR HORIZONTAL DUCTS) OF TOTAL INPUT RATING OF ALL APPLIANCES IN THE SPACE, OR AS PER MANUFACTURERS SPECIFICATIONS. ALTERNATE COMBUSTION AIR OPTIONS COMPLIANT WITH I.R.C. CHAPTER 17 AND G2407 MAY BE ALLOWED WHEN DEEMED APPROPRIATE AND APPROVED. PROVIDE CLEARANCE BETWEEN COMBUSTIBLE MATERIALS AND VENTS AS PER CODE. (I.R.C. R303.8, CHAPTER 14, CHAPTER 17)

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-05 METAL DUCTWORK

PROJECTS THAT REQUIRE MECHANICAL DUCT WORK SHALL CONFORM TO THE FOLLOWING. ALL DUCT WORK SHALL BE CONSTRUCTED FROM GALVANIZED SHEET STEEL TO CONFORM WITH "SMACNA" LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND I.R.C. CHAPTER 16. FABRICATE SHEET METAL DUCTS WITH CROSS-BREAK OR RINK-FLAT SURFACES TO PREVENT VIBRATION AND PULSATION. HANG DUCTS WITH STRAPS OF 18 GAUGE GALVANIZED STEEL OF 1" WIDE. ANCHOR DUCTS SECURELY TO STRUCTURE WITH SCREWS, IN SUCH A MANNER AS TO PREVENT TRANSMISSION WITH VIBRATION. UNDERGROUND ROUND DUCT SHALL BE SCHEDULE 40 P.V.C. PIPE OR P.V.S. PIPE AS REQUIRED BY LOCAL JURISDICTION WITH FUSION WELDED JOINTS AND CONNECTIONS. RUN OUTS TO FLOOR GRILLES SHALL BE FABRICATED FROM SHEET P.V.C. OR P.V.S. OF SAME THICKNESS AS PIPE WITH ALL JOINTS AND CONNECTIONS FUSION WELDED.

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-06 AIR CONDITIONING CONDENSER

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-07 EXHAUST FAN

GENERAL PRODUCTS

PROVIDE EXHAUST FANS IN ALL BATHROOMS.

FANS SHALL BE DIRECTLY VENTED TO THE EXTERIOR.

FANS MUST BE CAPABLE OF TO MAINTAIN 50 CFM WITHIN ROOM LOCATED.

EXCLUSION

COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ALL EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH MECHANICAL AND PLUMBING FIXTURE SCHEDULES. COORDINATE WITH MECHANICAL AND PLUMBING KEY NOTES, INTERNATIONAL BUILDING CODE AND RELATED CODES FOR INSTALLATION REQUIREMENTS.

#### 23-08 RECESSED DRYER VENT BOX

GENERAL PRODUCTS

DBX PRODUCTS

DBX 1000 PLASTIC DRYER VENT BOX

MADE OF HIGH IMPACT POLYSTYRENE, AND IS AVAILABLE IN 4" OR 6" SIZE. THE DRYER VENT BOX CAN BE USED BOTH FOR UP AND DOWN VENT. A SNAP ON TRIM RING FOR FINISH TRIM AT EDGE.

THE DBX 1000M IS 9 7/8" X 13 7/8" AND 3 1/2" DEEP. IT IS A 22 GAUGE METAL DRYER VENT BOX WITH A 22 GAUGE "SNAP ON TRIM RING". IT CAN BE INSTALLED IN 1 1/2" OR 2" O.C. FRAMING. THE DBX 1000M DRYER VENT BOXING IS POWDER COATED. FOR OPTIMUM RESULTS INSTALL THE DBX 1000M UP/DOWN VENTING IN 2"x4" OR 2"x6" FRAMED WALLS AS FOLLOWS:

CONTRACTOR MAY SUBMIT A EQUAL SUBSTITUTE

EXCLUSION

FOLLOW MANUFACTURER RECOMMENDED INSTALLATION INSTRUCTIONS.

1. CREDIT BOX TO MATCH DESIRED VENTING DIRECTION. SCORE & REMOVE APPROPRIATE TOP OR REAR INCH AVOID VENT PENNECK-OUT. ALLOW MINIMUM OF 4 INCHES OF VENT PIPE EXTEND INSIDE THE BOX
2. IF GAS LINE IS TO BE INSTALLED, LOCATE 1/8" STRAW CLAMP ON TOP OF BOX. CUT THE WEBS BETWEEN THE RING WITH UTILITY KNIFE. PUSH THE GAS LINE THROUGH THE STRAW CLAMP. THE RING WILL FLEX FORWARD HOLDING THE PIPE.
3. SLIDE BOX INTO POSITION TAKING CARE TO CORRECTLY ALIGN VENT PIPE AND GAS PIPE (IF PRESENT).
4. SPACING TABS WILL AUTOMATICALLY POSITION BOX SO THAT BOTTOM, INSIDE EDGE OF 2 1/4 TO 2 1/2 INCHES ABOVE FINISHED FLOOR TO ALLOW CLEARANCE BETWEEN TRIM RING AND FINISHED FLOOR. COVERING TABS MAY ALSO BE USED IF ADJEFENT SPACING IS DESIRED.
5. ATTACH BOX DIRECTLY TO BOTH RIGHT AND LEFT STUDS USING 3/8" FLANGE SCREW HOLES. SCREWS ARE RECOMMENDED FOR MOUNTING.

TRIM INSTRUCTIONS:

1. SNAP OUT LEFT OR RIGHT TRIM RING "CUT OUT" (SEE DETAIL BELOW).
2. LEAVE 1/8" INCHES BETWEEN INSIDE EDGE OF BOX AND END OF BASEBOARD TO ALLOW FOR TRIM RING CLEARANCE.
3. SNAP TRIM RING INTO OPENING, NO CAULKING REQUIRED.
4. LEAVE UNFINISHED OR PAINT WITH DESIRED COLOR.

THE DBX 1000M - METAL BOX INSTALLATION

1. CREDIT BOX TO MATCH DESIRED VENTING DIRECTION. ALLOW A MINIMUM OF 4" OF VENT PIPE TO EXTEND INTO THE BOX.
2. IF GAS LINE IS TO BE INSTALLED, INSERT INTO KNOCKOUT PROVIDED.
3. SLIDE BOX INTO POSITION TAKING CARE TO CORRECTLY ALIGN VENT PIPE AND GAS PIPE (IF PRESENT).
4. SET BOX SO THAT THE BOTTOM IS 1/8" ABOVE THE FLOOR TO ALLOW CLEARANCE FOR THE TRIM RING.
5. ATTACH BOX DIRECTLY TO EITHER FRAMING MEMBER AND USE STRAPS TO SECURE THE OTHER SIDE TO THE OPPOSITE FRAMING MEMBER.
6. SCREWS OR NAILS (1 1/4") IN LENGTH TO ATTACH THE DBX1000M BOX TO FRAMING.

TRIM INSTALLATION INSTRUCTIONS:

1. TRIM CARPENTER TO LEAVE 1/8" BETWEEN INSIDE EDGE OF BOX AND END OF BASEBOARD TO ALLOW TRIM RING CLEARANCE.
2. SNAP TRIM RING INTO OPENING, NO CAULKING REQUIRED.
3. TRIM RING IS POWDER COATED, NO FINISHING REQUIRED.
4. TRIM RING ACCOMMODATES 3/4" OR 3/8" DRYWALL.

### DIVISION 26- ELECTRICAL

#### 26-00 GENERAL ELECTRICAL

ALL DRAWINGS INDICATE LOCATIONS OF ELECTRICAL ITEMS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER.

CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PLANS FOR ALL DESIRED LOCATIONS FOR ELECTRICAL SWITCHES, OUTLETS, SCHEMATIC WIRING, EQUIPMENT AND FIXTURE LOCATIONS. COORDINATE WITH ELECTRICAL FIXTURE SCHEDULES AS RELATED BY ARCHITECT OR OWNER. COORDINATE WITH ELECTRICAL KEY NOTES, INTERNATIONAL BUILDING CODE AND SELECTED CODES FOR INSTALLATION REQUIREMENTS, AND ADDITIONAL INFORMATION.

ELECTRICAL CONTRACTOR SHALL INSTALL ALL BOXES FOR OUTLETS, SWITCHES, LIGHTS, DATA, COMMUNICATIONS AND ALL SPECIALTY ITEMS AND SHALL REVIEW AND RECEIVE APPROVAL FROM OWNER/ARCHITECT/DESIGNER PRIOR TO INSTALLATION OR WIRING. RELOCATION OF BOXES AFTER WIRING AS DIRECTED BY OWNER/ARCHITECT/DESIGNER WITHOUT APPROVAL OF LOCATION SHALL BE COMPLETED WITH NOT COST TO THE OWNER.

THE ELECTRICAL SYSTEM SHALL COMPLY WITH 2012 I.R.C. AND 2005 N.E.C. AND BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE, AND NATIONAL CODES. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMITY WITH THESE REGULATIONS WHETHER OR NOT SUCH WORK IS SPECIFICALLY SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL FEEDERS, PANELS, BOARDS, RELAY BRANCH CIRCUIT WIRING, CONDUITS, WIRE, METER BASES, COMPLETE WIRING FOR MOTORS, EXHAUST FANS, LINE VOLTAGE CONNECTIONS FOR HVAC EQUIPMENT, SPECIALTY LIGHTING FIXTURES, OUTLET BOXES, COVER PLATES, WALL SWITCHES, FIXTURES, RECEPTACLES, ETC.

ALL DRAWINGS INDICATE LOCATIONS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL POWER REQUIREMENTS. (I.R.C. E3801)

PROVIDE A 1/8" GROUND. AN ELECTRODE ENCASED BY AT LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2" INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E3805.1.2 AND N.E.C. 250.50)

1. PROVIDE A SERVICE CAPACITY AND SIZE SHALL BE COMPLETED BY METHOD INDICATED IN THE I.R.C. AND NATIONAL ELECTRICAL CODE. PANELS OR CABINETS ENCLOSED FUSES, CIRCUIT BREAKERS, SWITCHES OR OTHER ELECTRICAL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCES TO BE A MINIMUM 30" WIDTH, 36" DEPTH AND 6'-6" FROM FLOOR TOP. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER. (I.R.C. E3805)

ALL RECEPTACLES LOCATED WITH THE FOLLOWING CONDITIONS TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN BATHROOMS, OUTSIDE AT GRADE LEVEL, UNFINISHED BASEMENTS, CRAWL SPACES, AND IN GARAGES. GARAGE RECEPTACLES TO BE 18" ABOVE FINISHED FLOOR. (I.R.C. E3802)

- ALL SWITCHES, RECEPTACLES, TELEPHONE JACKS AND CATV JACKS TO BE "LEVITON" 5601 ROCKER SERIES IN WHITE. (O.A.E.) DIMMER SWITCHES TO BE "LITTON" DIVA ROCKER SERIES IN WHITE. (O.A.E.) HEIGHT OF LIGHT SWITCHES FROM FINISHED FLOOR TO TOP OF SWITCH TO BE 48" UNLESS NOTED OTHERWISE. THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 18" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE 12" TO CENTER ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WORKING.

UNLESS NOTED OTHERWISE, LOCATE AND INSTALL ONE (1) GFCI WEATHER PROTECTED RECEPTACLE AT GRADE LEVEL AND OUTSIDE AT SLOTT AT EACH EXTERIOR DOOR.

- ALL FIXTURES SHALL HAVE A U.L. LABEL LISTING. IF NOT U.L. LISTED LIGHTS SHALL NOT BE USED. ALL RECESS DOWN LIGHTS TO BE INSTALLED WITH GROUNDING AND GROUNDING SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. FIXTURES TO BE INCLUDED IN BASE BID. ALL RECESSED DOWN LIGHTS TO BE INCLUDED IN BASE BID WITH TRIM RINGS AS SELECTED BY DESIGNER OR OWNER. ALL LIGHTS IN CLOSETS SHALL MEET I.R.C. E3903.11 REQUIREMENTS. ALL LIGHTS LOCATED IN WED OR DAMP LOCATIONS SHALL MEET I.R.C. E3903.8 - E3903.10 REQUIREMENTS.

SMOKE DETECTORS TO BE HARD WIRED TO BUILDING CIRCUIT AND INTERCONNECTED WITH BATTERY BACK UP. PROVIDE SMOKE DETECTORS AT ALL BUILDING LEVELS, IN ALL BEDROOMS, ACCESS TO ALL BEDROOMS, ETC. (I.R.C. R313)

- ALL BRANCH CIRCUITS THAT SUPPLY RECEPTACLES IN BEDROOMS NEED TO BE PROVIDED WITH ARC-FAULT PROTECTION. (N.E.C. 210.12) (IRC E3802.12)

ALL STRUCTURED WIRING (IE. FIBER SMART CABLE, CAT5E, ETC.) TO HAVE A MINIMUM SEPARATION OF 12" BETWEEN HIGH VOLTAGE WIRING.

CARBON MONOXIDE DETECTOR TO BE INSTALLED ON EACH HABITABLE LEVEL OF A DWELLING UNIT EQUIPPED WITH FUEL BURNING APPLIANCE. DETECTORS TO BE HARD WIRED TO BUILDING CIRCUIT WITH BATTERY BACK UP. (I.R.C. 312.2 AND STATE AMENDMENT)

#### 26-01 ELECTRICAL SERVICE EQUIPMENT

EXCLUSION

ELECTRICAL SYSTEM TO BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE, AND FEDERAL BUILDING CODES. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMITY WITH THESE REGULATIONS WHETHER OR NOT SUCH WORK IS SPECIFICALLY SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL FEEDERS, PANEL BOARDS, RELAY BRANCH CIRCUIT WIRING, CONDUITS, WIRE, METER BASES, COMPLETE WIRING FOR MOTORS, EXHAUST FANS, LINE VOLTAGE CONNECTIONS FOR HVAC EQUIPMENT, SPECIALTY LIGHTING FIXTURES, OUTLET BOXES, COVER PLATES, WALL SWITCHES, RECEPTACLES, ETC.

ALL DRAWINGS INDICATE LOCATIONS OF ELECTRICAL ITEMS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER.

ELECTRICAL SERVICE CAPACITY AND SIZE SHALL BE COMPLETED BY THE METHOD IRC CHAPTER 36.

UNLESS INDICATED IN THE 2012 I.R.C. AND NATIONAL ELECTRICAL CODE, PANELS OR CABINETS ENCLOSED FUSES, CIRCUIT BREAKERS, SWITCHES, OR OTHER ELECTRICAL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCES TO BE A MINIMUM 30" WIDTH, 36" DEPTH AND 6'-6" FROM FINISHED FLOOR. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER.

#### 26-02 ELECTRICAL LIGHT FIXTURES

GENERAL PRODUCTS

LIGHTING CONTROLS AND MOTORIZED SHADES BY LITRON. MANUFACTURER TO PROVIDE SHOP DRAWINGS AND SPECIFICATIONS TO BE REVIEWED BY ARCHITECT.

EXCLUSION

LIGHT SWITCHES SHALL BE INSTALLED AT A HEIGHT OF 48" FROM FINISHED FLOOR TO TOP OF SWITCH, UNLESS NOTED OTHERWISE. THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 18" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE A MAXIMUM OF 12" FROM THE CENTER LINE OF THE OUTLET ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WIRING.

#### 26-03 ELECTRICAL OUTLETS

GENERAL PRODUCTS

LEVITON 5601 ROCKER SERIES IN WHITE

DIMMER SWITCHES - LITRON "DIVA" ROCKER SERIES IN WHITE

ALL RECEPTACLES LOCATED WITH THE FOLLOWING LOCATIONS ARE TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN ALL BATHROOMS, OUTSIDE AT GRADE LEVEL, IN UNFINISHED BASEMENTS, AND IN GARAGES. GARAGE RECEPTACLES TO BE 18" ABOVE FINISHED FLOOR. (IRC E3902)

#### 26-06 TELEPHONE EQUIPMENT

THE TELEPHONE SYSTEM SHALL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER/CONTRACTOR TO COORDINATE AND PROVIDE DIRECTION FOR INSTALLATION AND LOCATION OF OUTLETS.

#### 26-07 STRUCTURED WIRING

GENERAL PRODUCTS

ALL STRUCTURED WIRING SHALL BE A MINIMUM OF CAT 6 ALL LOCATIONS OF STRUCTURED WIRING SHALL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER/ CONTRACTOR TO COORDINATE AND PROVIDE DIRECTION FOR INSTALLATION AND LOCATION OF OUTLETS

### DIVISION 31- EARTHWORK

#### 31-01 SITE CLEARING

GENERAL PRODUCTS

PROTECT EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS TO REMAIN.

REMOVING EXISTING TREES, SHRUBS, GROUNDCOVERS, PLANTS, AND GRASS.

CLEARING AND GRUBBING.

STRIPPING AND STOCKPIPING TOPSOIL.

REMOVING ABOVE- AND BELOW-GRADE SITE IMPROVEMENTS.

DISCONNECTION AND CAPPING OR SEALING SITE UTILITIES.

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES.

EXCLUSION

SAVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS IDENTIFIED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.

UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED.

DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.

OBTAIN APPROVED BORROW SOIL MATERIALS OFF-SITE WHEN SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE ON-SITE.

PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.

LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.

PROTECT EXISTENT SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION. RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.

TEMPORARY EROSION AND SEDIMENTATION CONTROL

PROTECT EXISTING EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT SOIL EROSION AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PREMISES AND WALKWAYS.

INSPECT, REPAIR, AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED.

REMOVE EROSION AND SEDIMENTATION CONTROLS AND RESTORE AND STABILIZE AREAS DISTURBED DURING REMOVAL.

TREE PROTECTION

FURNISH, INSTALL, MONITOR, AND MAINTAIN EXCAVATION SUPPORT AND PROTECTION SYSTEM CAPABLE OF SUPPORTING EXCAVATION SIDEWALLS AND OF RESISTING SOIL AND HYDROSTATIC PRESSURE AND SUPERIMPOSED AND CONSTRUCTION LOADS. DESIGN EXCAVATION SUPPORT AND PROTECTION SYSTEMS, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER, USING PERFORMANCE REQUIREMENTS AND DESIGN CRITERIA AS INDICATED.

DO NOT EXCAVATE WITHIN TREE PROTECTION ZONES, UNLESS OTHERWISE INDICATED.

REPAIR OR REPLACE TREES AND VEGETATION IDENTIFIED TO REMAIN THAT ARE DAMAGED BY CONSTRUCTION OPERATIONS, IN A MANNER APPROVED BY ARCHITECT.

UTILITIES

LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED. ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.

DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES ACCORDING TO REQUIREMENTS INDICATED.

1. NOTIFY ARCHITECT NOT LESS THAN TWO DAYS IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS.

2. DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITH ARCHITECT'S PERMISSION.

CLEARING AND GRUBBING

REMOVE EXISTING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED. PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES AND CONTACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.

MATERIALS

GENERAL: PROVIDE MATERIALS THAT ARE EITHER NEW OR IN SERVICEABLE CONDITION.

TOPSOIL STRIPPING

REMOVE SOIL AND GRASS BEFORE STRIPPING TOPSOIL. STRIP TOPSOIL TO WHATEVER DEPTHS ARE INDICATED IN A MANNER TO PREVENT INTERMIXING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.

STOCKPILE TOPSOIL MATERIALS AWAY FROM THE EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.

SITE IMPROVEMENTS

REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.

DISPOSAL: REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTION, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE

**BUILDING KEYNOTES AND SPECIFICATIONS**

**DIVISION 32- EXTERIOR IMPROVEMENTS/LANDSCAPING**

**32-04 UNIT PAVERS/ RETAINING WALLS/ STAIRS**

GENERAL PRODUCTS  
PAVERS SHALL BE THE FOLLOWING: AS PER LANDSCAPE DRAWINGS  
PAVERS SHALL BE INSTALLED IN FOLLOWING PATTERN: AS PER LANDSCAPE DRAWINGS  
PAVER COLOR SHALL BE SELECTED BY ARCHITECT. AS PER LANDSCAPE DRAWINGS

SUBMITTALS  
SAMPLES FOR UNIT PAVERS, JOINT MATERIALS, AND EDGE RESTRAINTS

EXECUTION  
DO NOT USE FROZEN MATERIALS OR BUILD ON FROZEN SUBGRADE OR SETTING BEDS. PROTECT UNIT PAVEMENT WORK AGAINST FREEZING FOR 24 HOURS AFTER INSTALLATION.

MIX PAVERS FROM SEVERAL PALLETS OR CUBES, AS THEY ARE PLACED, TO PRODUCE UNIFORM BLEND OF COLORS AND TEXTURES.

CUT UNIT PAVERS WITH MOTOR-DRIVEN MASONRY SAW EQUIPMENT TO PROVIDE PATTERN INDICATED AND TO FIT ADJOINING WORK NEATLY. USE FULL UNITS WITHOUT CUTTING WHERE POSSIBLE. INSTALL EDGE RESTRAINTS BEFORE PLACING UNIT PAVERS.

TOLERANCES: DO NOT EXCEED 1/16-INCH UNIT-TO-UNIT OFFSET FROM FLUSH (UPPAGE) NOR 1/8 INCH IN 24 INCHES AND 1/4 INCH IN 10 FEET FROM LEVEL OR INDICATED SLOPE, FOR FINISHED SURFACE OF PAVING.

COMPACT SOIL SUBGRADE UNIFORMLY AND PLACE AGGREGATE BASE. COMPACT BY TAMPING WITH PLATE VIBRATOR, AND SCREED TO DEPTH AS INDICATED.

PLACE LEVELING COURSE AND SCREED TO A THICKNESS OF 1 TO 1-1/2 INCHES, TAKING CARE THAT MOISTURE CONTENT REMAINS CONSTANT AND DENSITY IS LOOSE AND CONSTANT UNTIL PAVERS ARE SET AND COMPACTED. TREAT LEVELING COURSE WITH HERBICIDE TO INHIBIT GROWTH OF GRASS AND WEEDS.

SET PAVERS WITH A MINIMUM JOINT WIDTH OF 1/16-INCH AND A MAXIMUM OF 1/8 INCH. BEING CAREFUL NOT TO DISTURB LEVELING BASE. IF PAVERS HAVE SPACER BARS, PLACE PAVERS HAND TIGHT AGAINST SPACER BARS.

VIBRATE PAVERS INTO LEVELING COURSE AND SPREAD DRY SAND AND FILL JOINTS IMMEDIATELY AFTER VIBRATING PAVERS INTO LEVELING COURSE. VIBRATE PAVERS AND ADD SAND UNTIL JOINTS ARE COMPLETELY FILLED, THEN REMOVE EXCESS SAND. LEAVE A SLIGHT SURPLUS OF SAND ON THE SURFACE FOR JOINT FILLING.

32-10 IRRIGATION SYSTEMS  
GENERAL PRODUCTS  
SEE LANDSCAPE DRAWINGS

ALL IRRIGATION SHALL MEET ALL CITY LANDSCAPE REQUIREMENTS.

32-11 PLANTING  
GENERAL PRODUCTS  
SEE LANDSCAPE DRAWINGS.

ALL PLANTING SHALL MEET ALL CITY LANDSCAPE REQUIREMENTS.



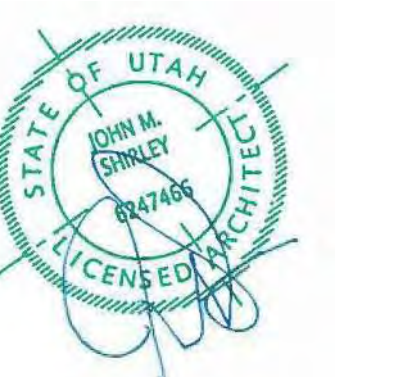
Architecture

Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34

DATE: 2023.06.30

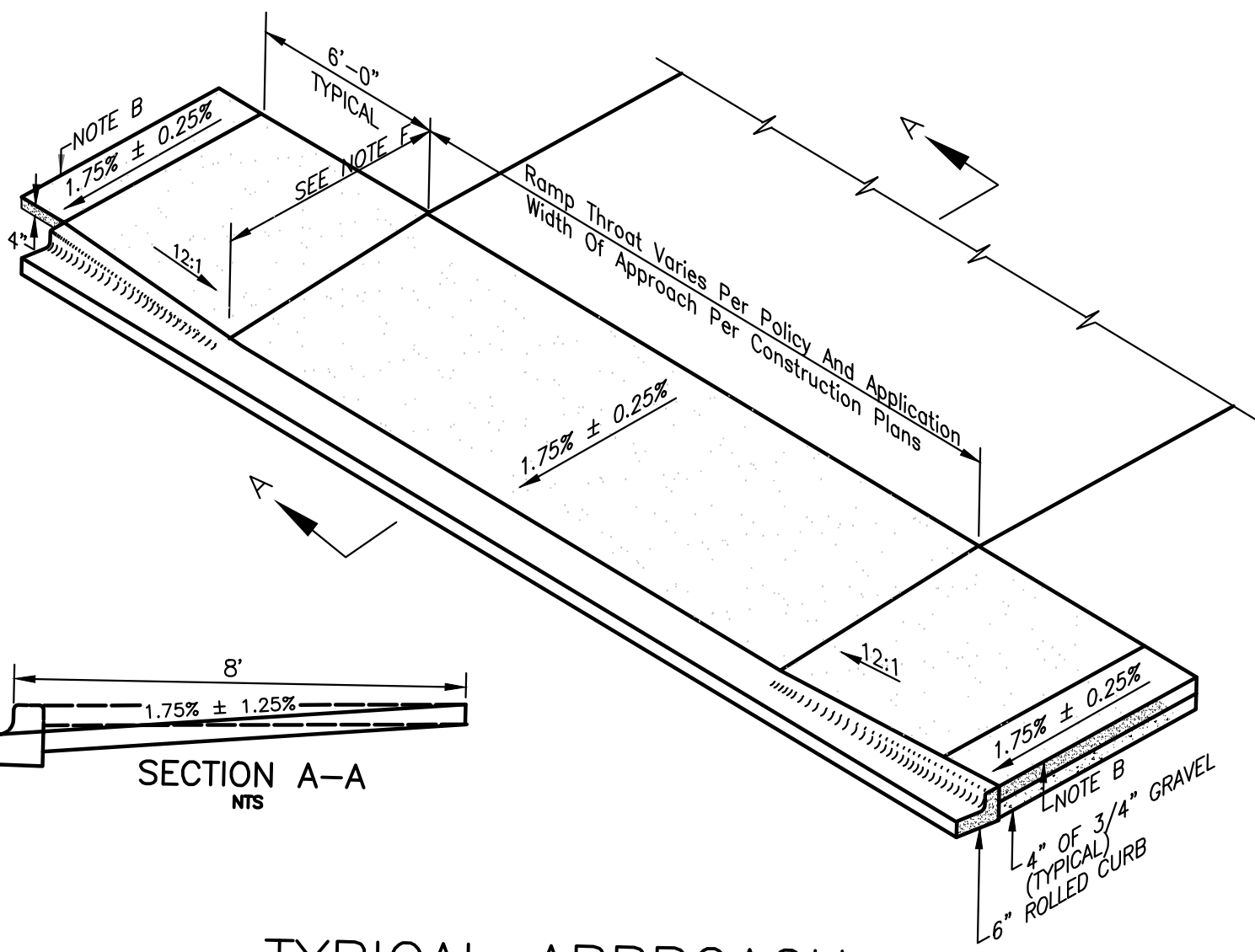
REVISIONS:

SHEET TITLE:  
SPECIFICATIONS

SHEET NUMBER:  
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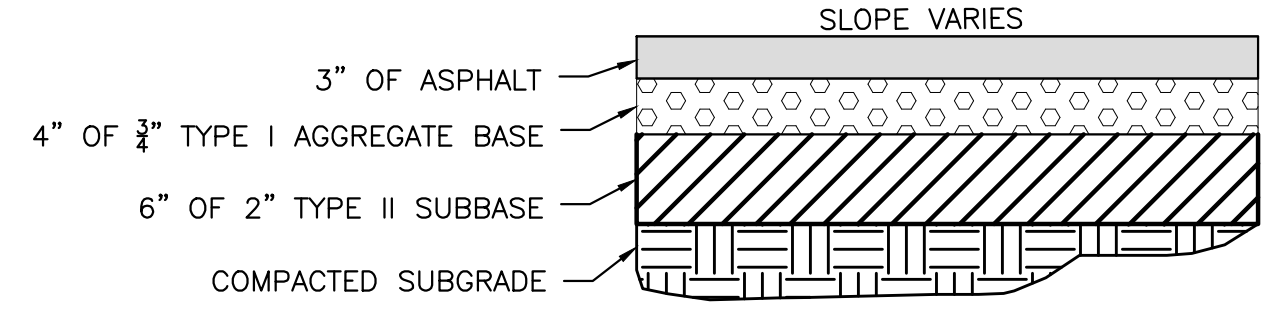
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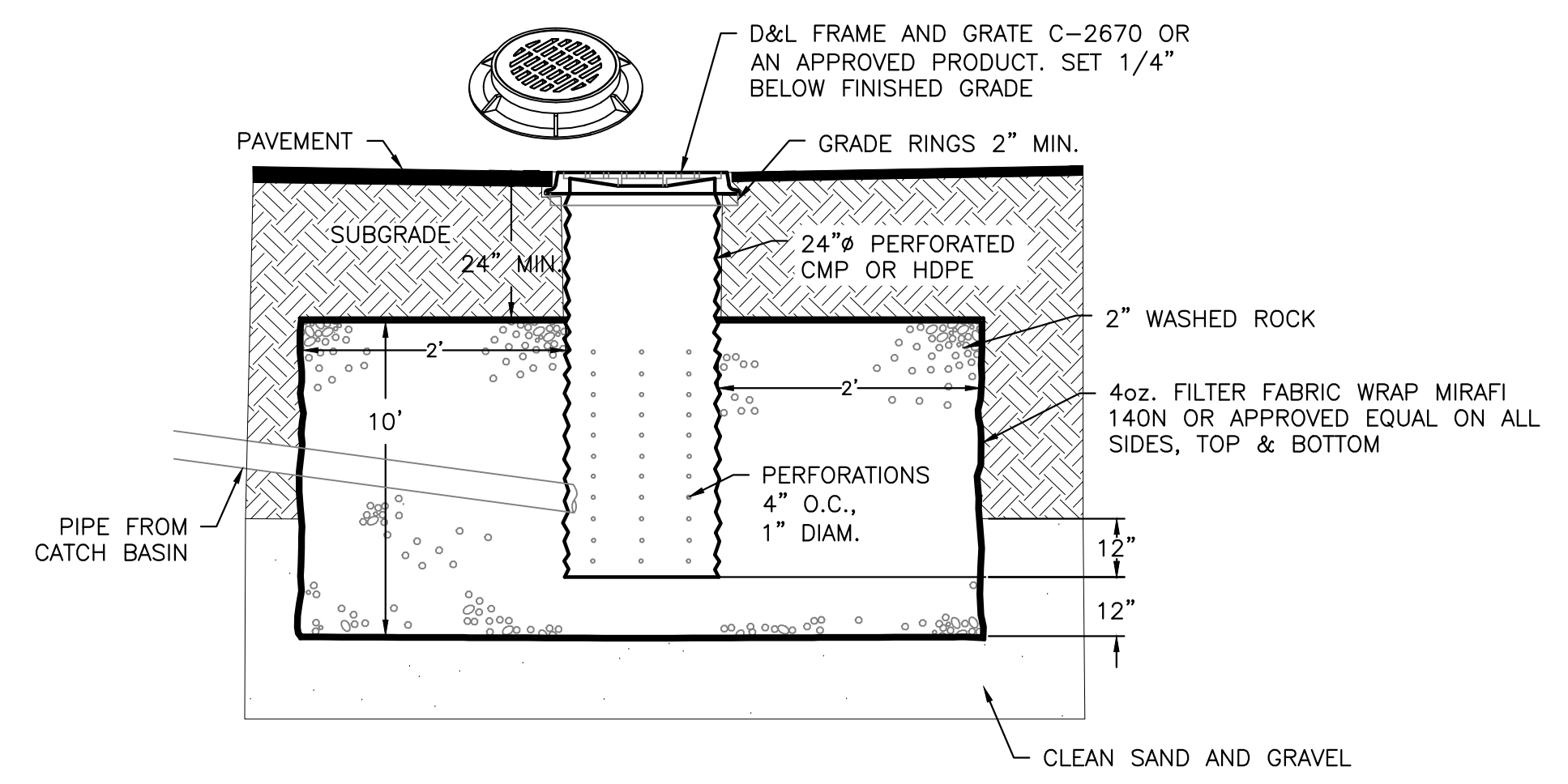
TYPICAL APPROACH

- NOTES:**
- (A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.
  - (B) INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS WHERE SIDEWALK CHANGES THICKNESS.
  - (C) BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION-802.
  - (D) APPROACH THROAT WIDTHS SET BY POLICY AND APPLICATION. ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPARATE FROM CURB THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.
  - (E) ALL CONCRETE SHALL BE CLASS 3000 PER SECTION-703. SEE GENERAL NOTES 7 & 8.
  - (F) SIDEWALK WIDTH IS 8 FEET.

1 CONCRETE DRIVEWAY WITH RAMPED SIDEWALK  
SCALE: NONE



2 TYPICAL STREET ASPHALT SECTION  
SCALE: NONE



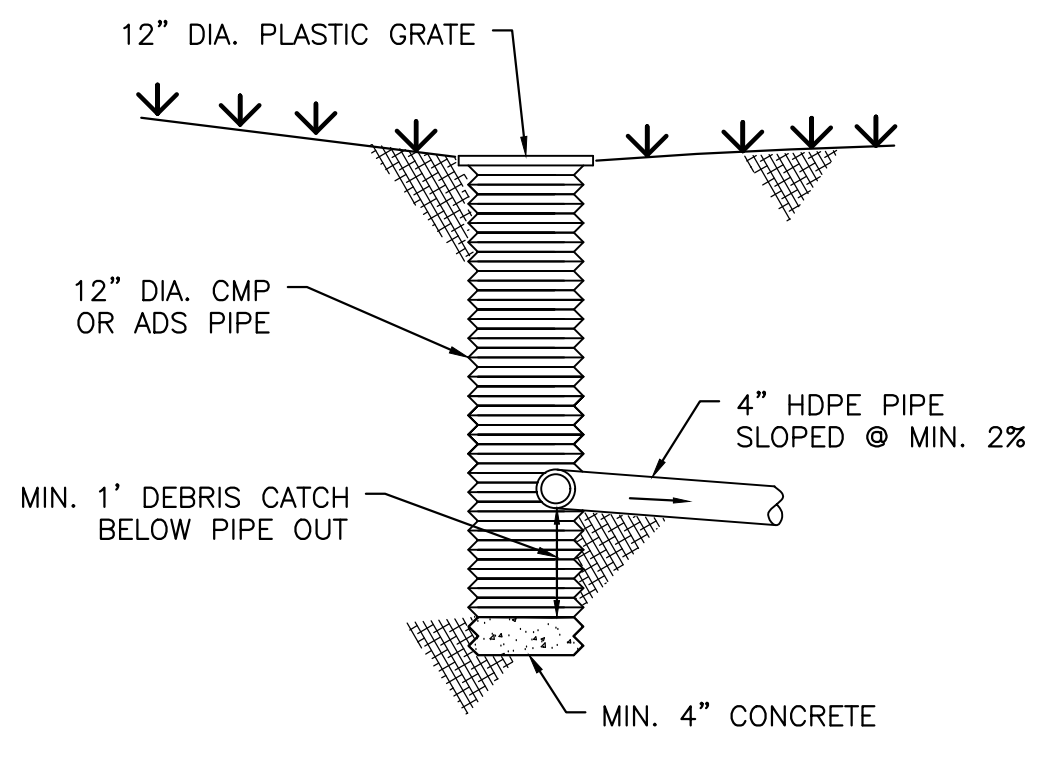
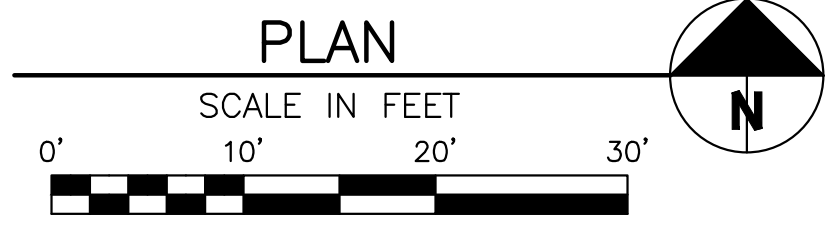
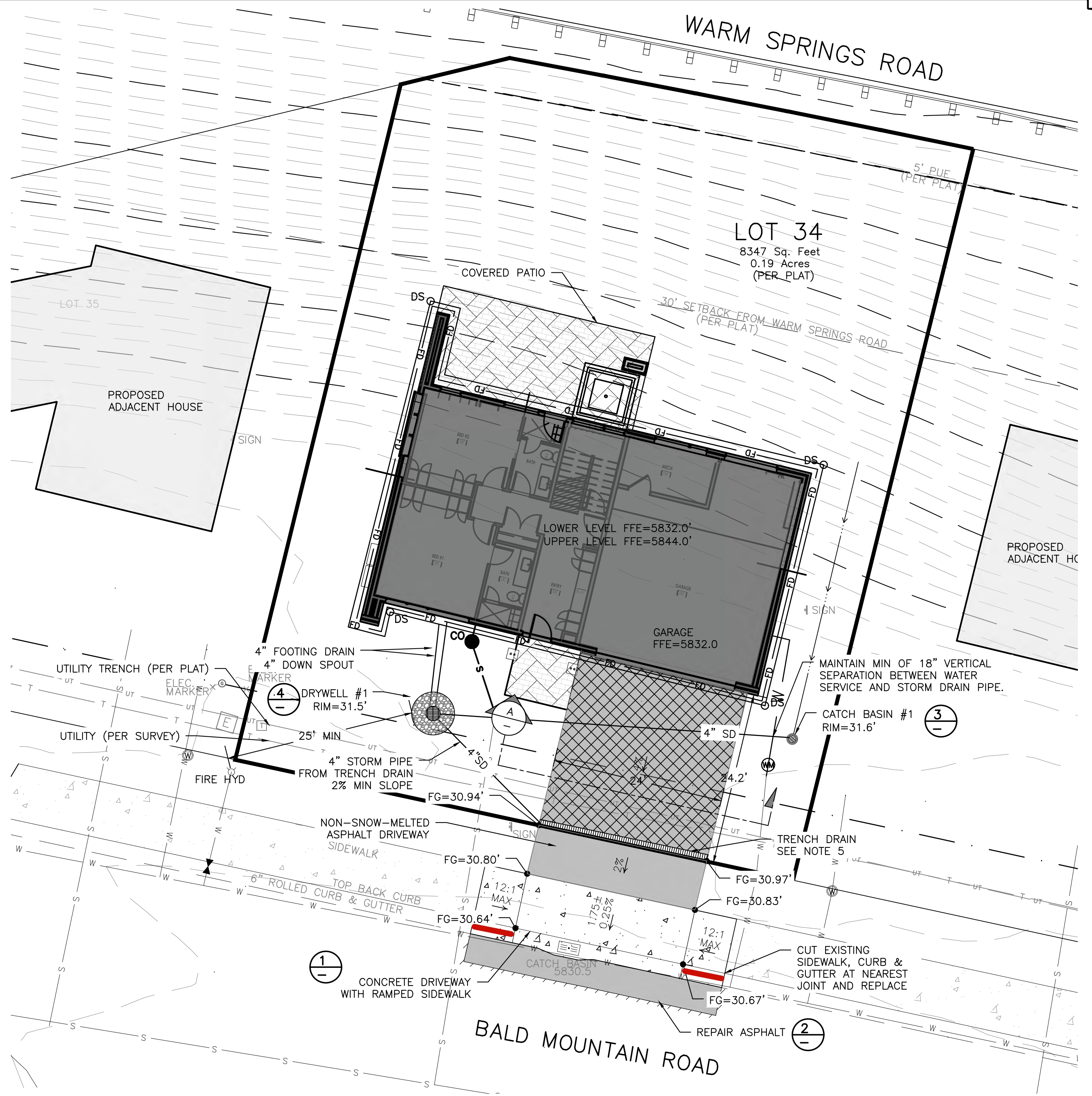
- NOTES:**
- 1. THE BED SHALL BE EXCAVATED A MINIMUM OF 24" INTO CLEAN SAND AND GRAVEL.
  - 2. MAXIMUM DEPTH SHALL NOT EXCEED 12 FEET.
  - 3. IF CLEAN SAND AND GRAVEL IS NOT ENCOUNTERED WITHIN 12 FEET, THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER.
  - 4. GRATE OR SOLID LID AS APPROVED BY CITY OF KETCHUM.

4 TYPICAL DRYWELL DETAIL  
SCALE: NONE

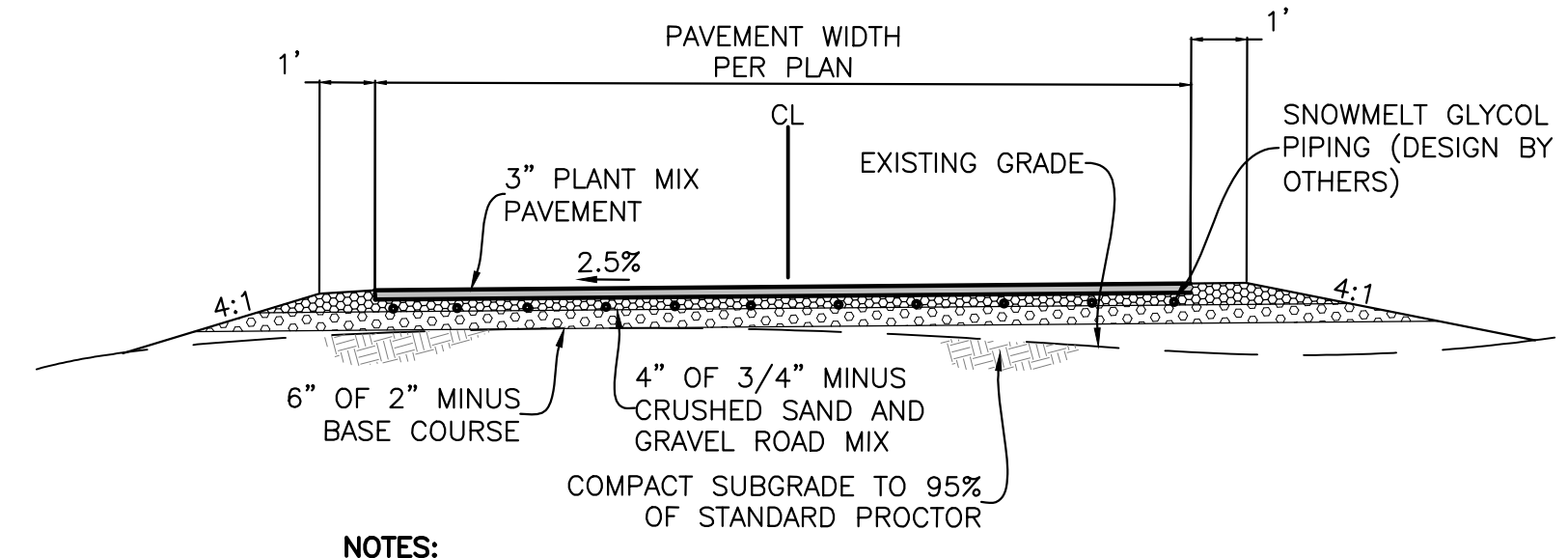
**LEGEND**

PROPERTY LINE	---
ADJOINING PROPERTY LINE	---
EASEMENT	---
FENCE	X
EDGE OF PAVEMENT	S
SEWER	S
SEWER MANHOLE (MH)	⊙
WATER	W
WATER GATE VALVE	⊕
HYDRANT	⊕
CURB STOP	⊕
TELEPHONE	T
UTILITY TRENCH	UT
ELEVATION CONTOUR	5775
PROPOSED ELEV CONTOUR	59
SAWCUT LINE	---
CURB TRANSITION	---
FLOW LINE	---
FOOTING DRAIN	FD
STORM DRAIN PIPE	---
DOWN SPOUT	DS
CATCH BASIN-CITY	⊙
CATCH BASIN	⊙
DRYWELL	⊙
LANDSCAPE DRYWELL	⊙
ASPHALT PAVEMENT	---
ASPHALT PAVEMENT (SNOW MELTED)	---
PAVERS	---
CONCRETE	---
FG	---
EG	---
GB	---
ME	---
FINISHED GRADE	---
EXISTING GROUND	---
GRADE BREAK	---
MATCH EXISTING	---

- GENERAL NOTES**
1. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING CONSTRUCTION. ANY CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
  2. CONTRACTOR SHALL NOTIFY DIGLINE (1-800-342-1585) AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION.
  3. CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE CONSTRUCTION OF ALL ITEMS HEREON. DUST CONTROL SHALL BE CONTINUOUS DURING CONSTRUCTION, 24 HOURS PER DAY 7 DAYS PER WEEK.
  4. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE HOUSE.
  5. TRENCH DRAIN SHALL BE A 6" WIDE HDPE CHANNEL WITH A 0.75 BUILT IN CHANNEL SLOPE (ZURN FLO-THRU MODEL Z886 OR EQUIVALENT). GRATE SHALL BE DUCTILE IRON WITH A SLOTTED PATTERN. CATCH BASIN SHALL BE 6" WIDE X 20" LONG X 20" DEEP AND SHALL BE MADE OF HDPE. OUTLET PIPE SHALL BE 4" DIAMETER. (FLO-THRU MODEL Z887 OR EQUIVALENT). ALL COMPONENTS SHALL BE RATED FOR H2O LOADING.
  6. ALL WORK WITHIN THE CITY RIGHT OF WAY SHALL CONFORM TO CITY OF KETCHUM STANDARDS.
  7. CONCRETE WITHIN CITY RIGHT-OF-WAY SHALL BE TITAN MIX OR EQUAL. ALTERNATE COLD WEATHER MIX WILL NEED TO BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT.
  8. CONCRETE SHALL BE SEALED WITH AN OPAQUE SEALER.
  9. 6" ROLLED CURB & GUTTER SHALL BE PER CITY OF KETCHUM STANDARD DETAIL #4.
  10. CONCRETE SIDEWALK SHALL BE PER CITY OF KETCHUM STANDARD DETAIL #7.



3 12" CATCH BASIN PROFILE  
NOT TO SCALE



- NOTES:**
1. COMPACT DRIVEWAY SUBGRADE AND ALL STRUCTURAL FILL MATERIAL TO AT LEAST 95% OF THE MAXIMUM DENSITY OF EACH MATERIAL ACCORDING TO STANDARD PROCTOR ASTM D-698.

A DRIVEWAY SECTION WITH SNOW-MELTED PAVEMENT  
SCALE: NTS

PROFESSIONAL ENGINEER  
LICENSE NO. 17661  
STATE OF IDAHO  
PROBIE JOHANNESSEN  
3/13/23

REVISIONS	DATE	BY
No. 1		

**BENCHMARK ASSOCIATES**  
PREPARED BY:  
BENCHMARK ASSOCIATES, P.A.  
P.O. BOX 733 100 BELL DRIVE  
KETCHUM, IDAHO 83340  
(208) 726-9512  
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MAIL: WWW.BMASB.COM

**GRADING & DRAINAGE PLAN**  
WARM SPINGS RANCH LOT 34  
T4N, R17E, SEC 12, B.M., BLAINE COUNTY, IDAHO  
PREPARED FOR: MAGLEBY CONSTRUCTION

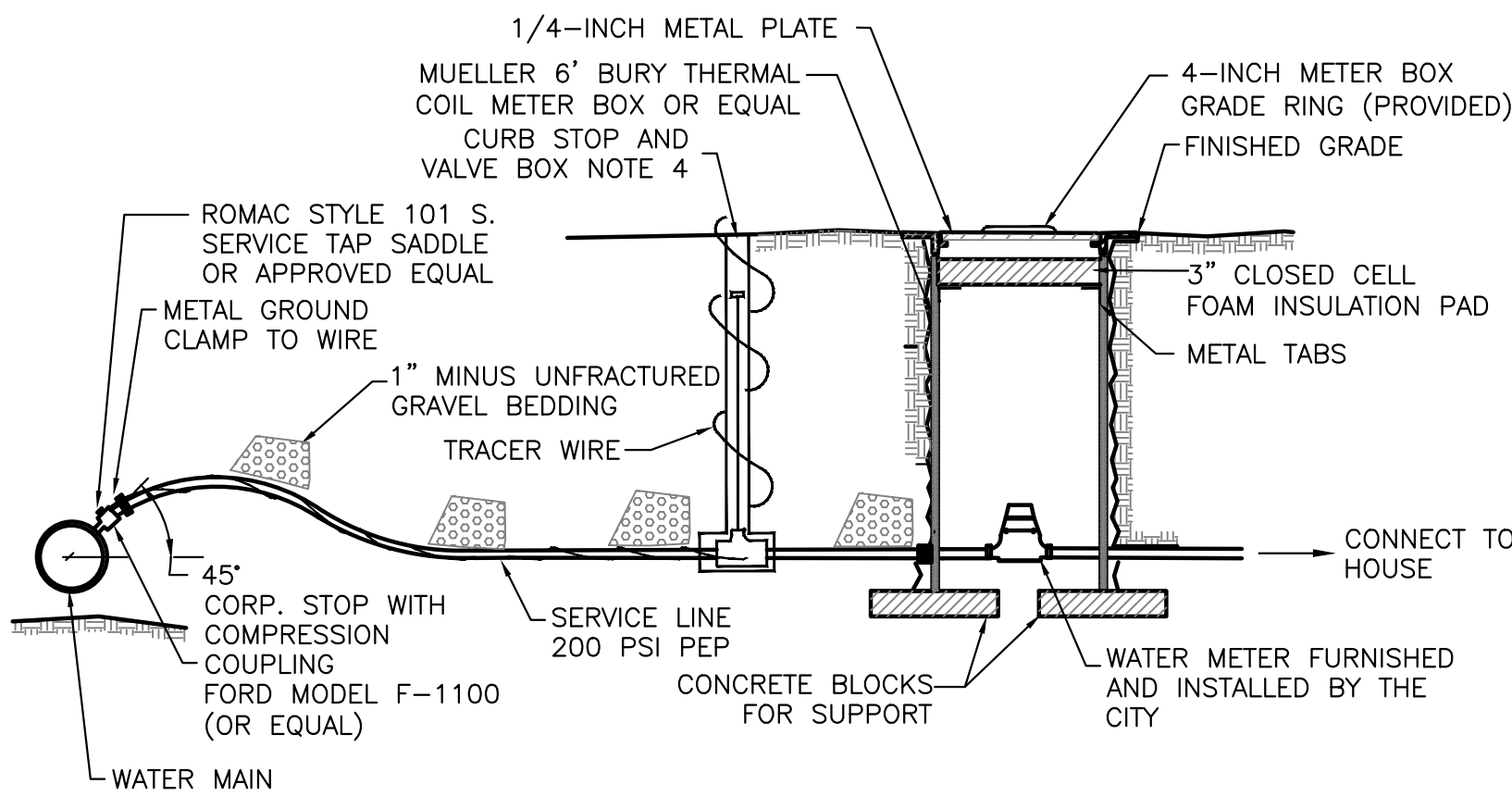
DRAWN BY: SLS  
DESIGNED BY: SLS  
CHECKED BY: PLJ  
DATE: 03/13/2023  
PROJECT NO.: 22075

DRAWING NO.

**C-1**

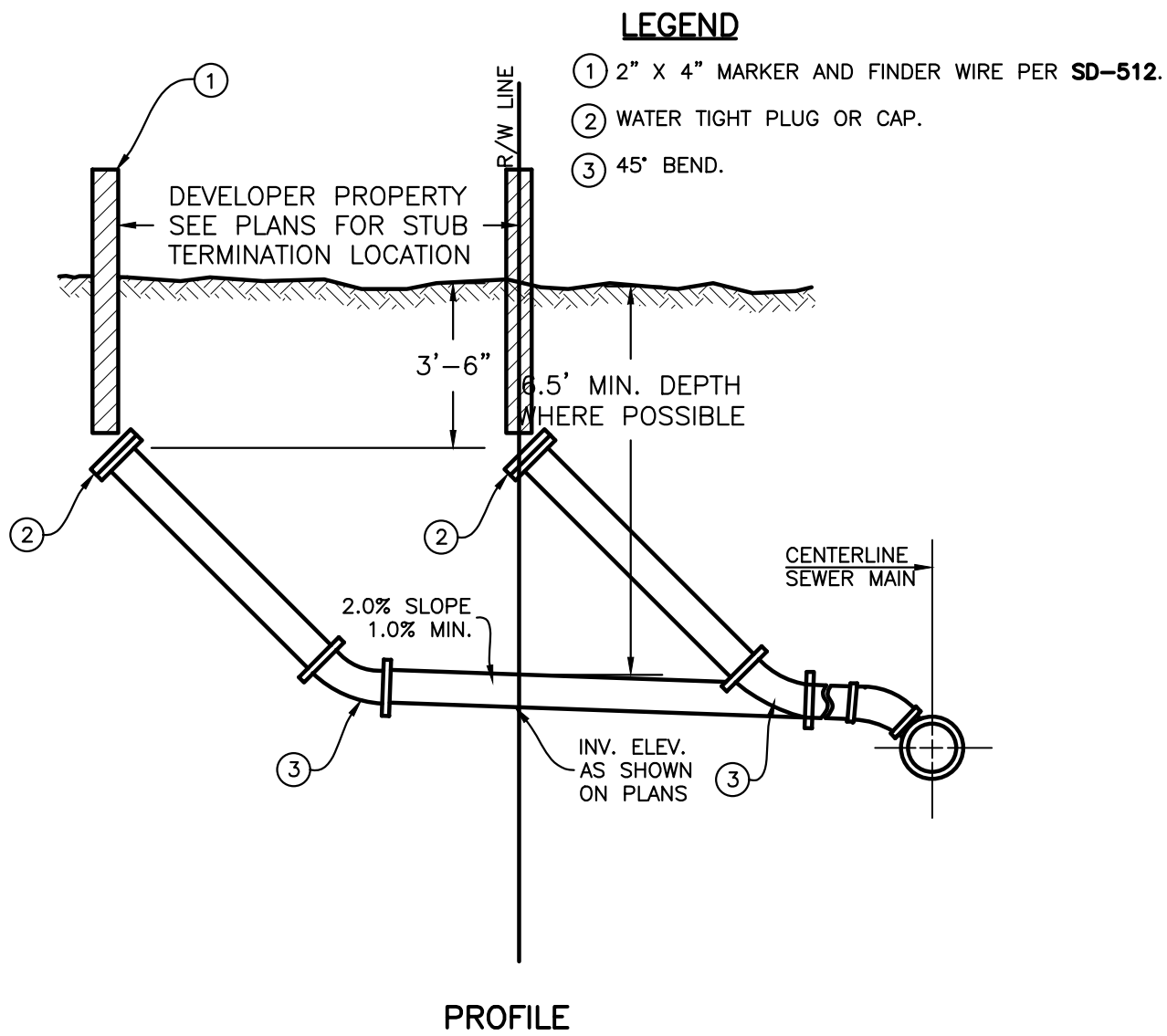
**UTILITY LEGEND**

SEWER PROPOSED	
SEWER CLEANOUT	
WATER PROPOSED	
WATER METER PROPOSED	



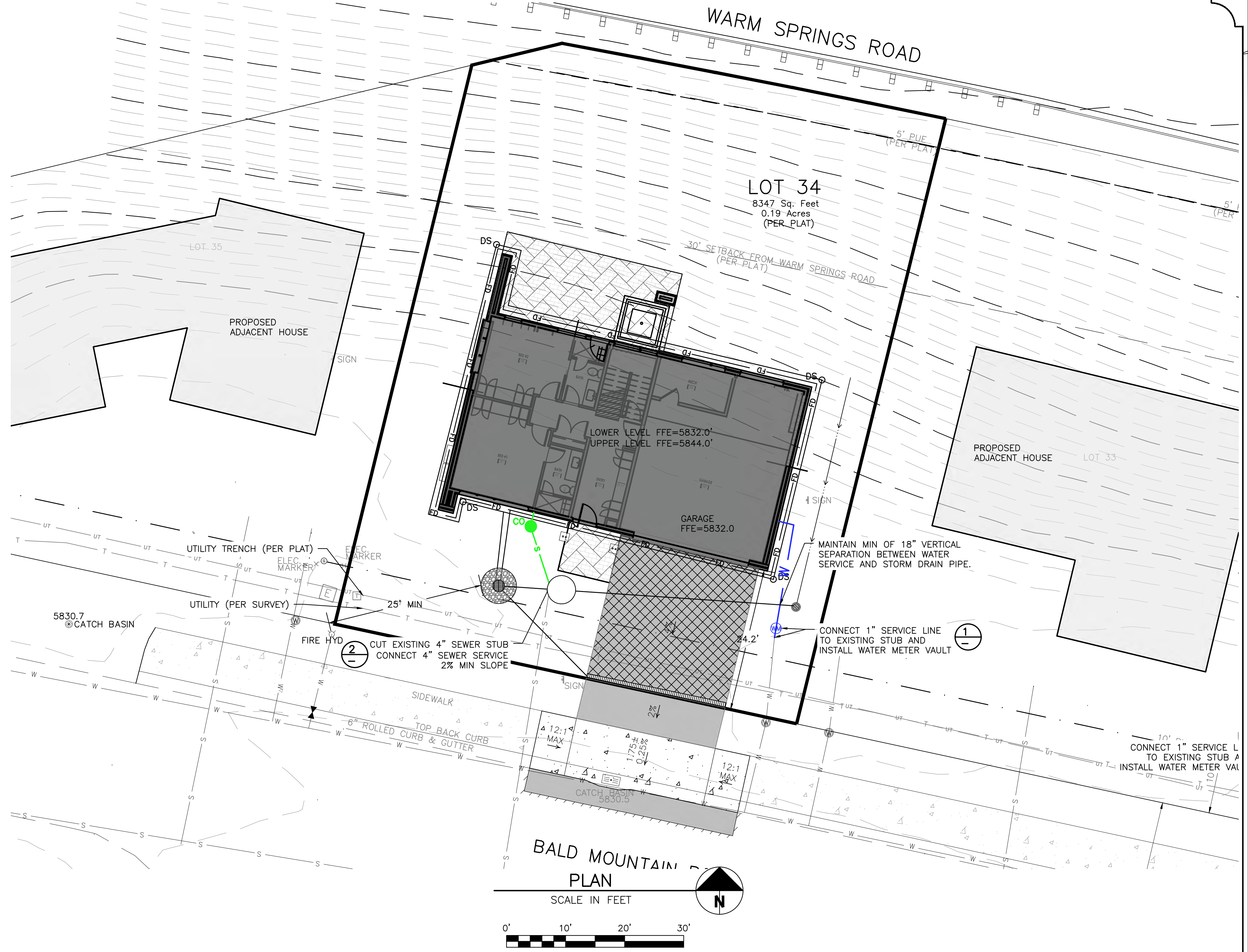
- NOTES**
1. WATER SERVICE LINE SHALL HAVE A 6" MIN. BURY DEPTH
  2. SERVICE LINE SHALL BE 1" DIAMETER POLYETHYLENE PIPE UNLESS OTHERWISE SPECIFIED.
  3. WATER SERVICE LINES SHALL BE BEDDED WITH 1" MINUS UNFRACTURED GRAVEL. BEDDING SHALL BE INSTALLED 4" UNDER THE PIPE AND 6" OVER THE PIPE.
  4. FORD MODEL B-111 RESILIENT SEAT, CURB BALL VALVE (OR EQUAL), FORD EXTENSION CURB BOX WITH ARCHED BASE, 1-INCH UPPER SECTION, AND 2 HOLE "ERIE" PATTERN LID.

**1 WATER SERVICE AND METER CONNECTION**  
SCALE: N.T.S.



- NOTES**
1. INSULATION REQUIRED WHERE SEWER LINE BURY DEPTH IS LESS THAN 5'.

**2 STANDARD SEWER SERVICE CONNECTION DETAIL**  
SCALE: NONE

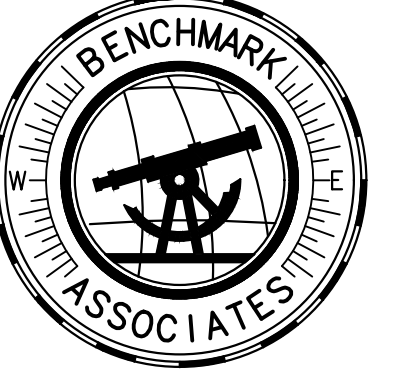


**BALD MOUNTAIN PLAN**  
SCALE IN FEET



PROFESSIONAL ENGINEER  
LICENSE NO. 17661  
STATE OF IDAHO  
PROF. JOHANNESSEN  
3/13/23

NO.	REVISIONS	DESCRIPTION	DATE	BY
1				



PREPARED BY:  
BENCHMARK ASSOCIATES, P.A.  
P.O. BOX 733 100 BELL DRIVE  
KETCHUM, IDAHO 83340  
(208) 726-9512  
FAX: 726-9514  
WEB: WWW.BMA5B.COM  
MAIL: WWW.BMA5B.COM

**UTILITY PLAN**  
WARM SPRINGS RANCH LOT 34  
T4N, R17E, SEC 12, B.M., BLAINE COUNTY, IDAHO  
PREPARED FOR: MAGLEBY CONSTRUCTION

DRAWN BY: SLS  
DESIGNED BY: SLS  
CHECKED BY: PLW  
DATE: 03/13/2023  
PROJECT NO.: 22075

DRAWING NO.

**C-2**

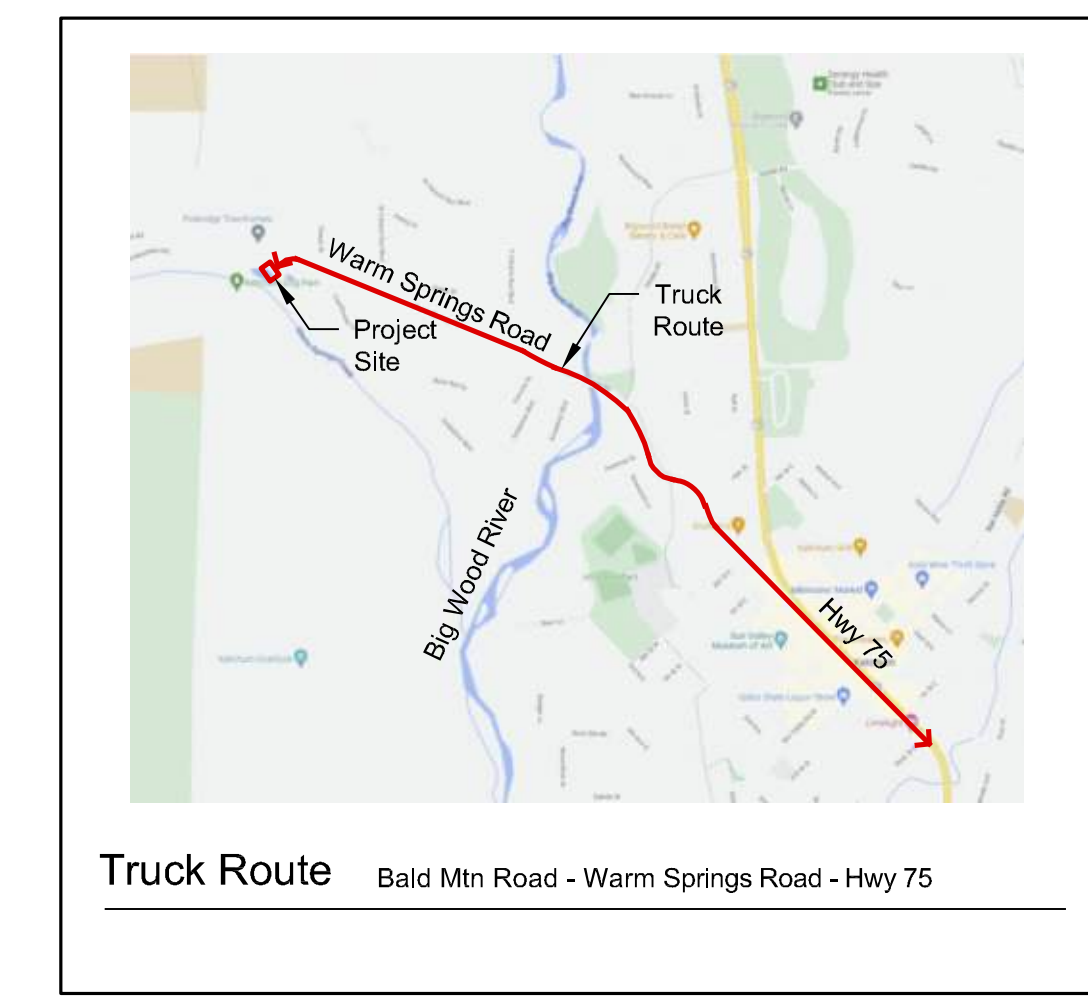
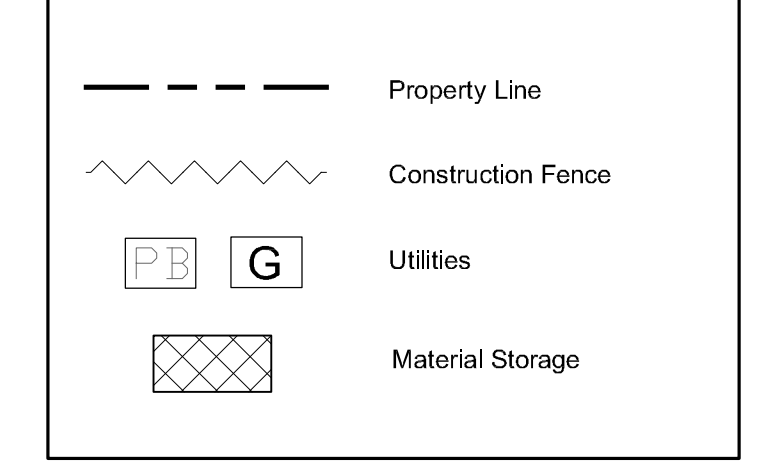
General Notes

1. Base map information taken from survey by Benchmark Associates dated 11/24/21 and from on-site information. Architectural information provided by Think Architecture dated 02/22/22. Contractor shall verify conditions in the field prior to construction.
2. Landscape architect is not responsible for any deviation from these plans, unless such changes are authorized by the landscape architect in writing.
3. All existing utilities are underground. All new utilities shall be underground.
4. Site serviced by City of Ketchum.

Cut And Fill:

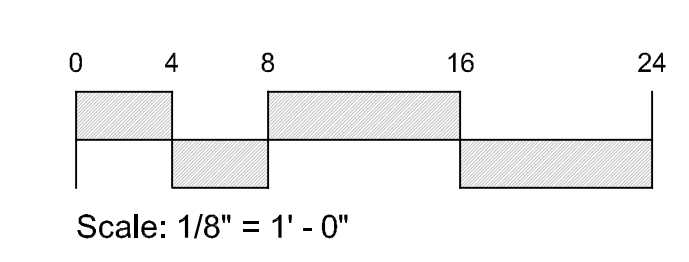
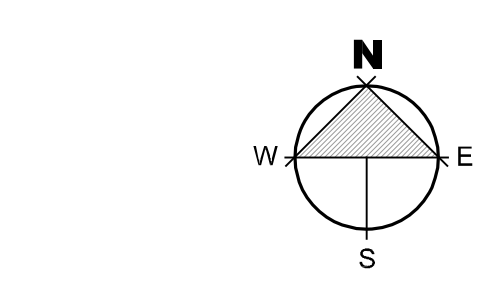
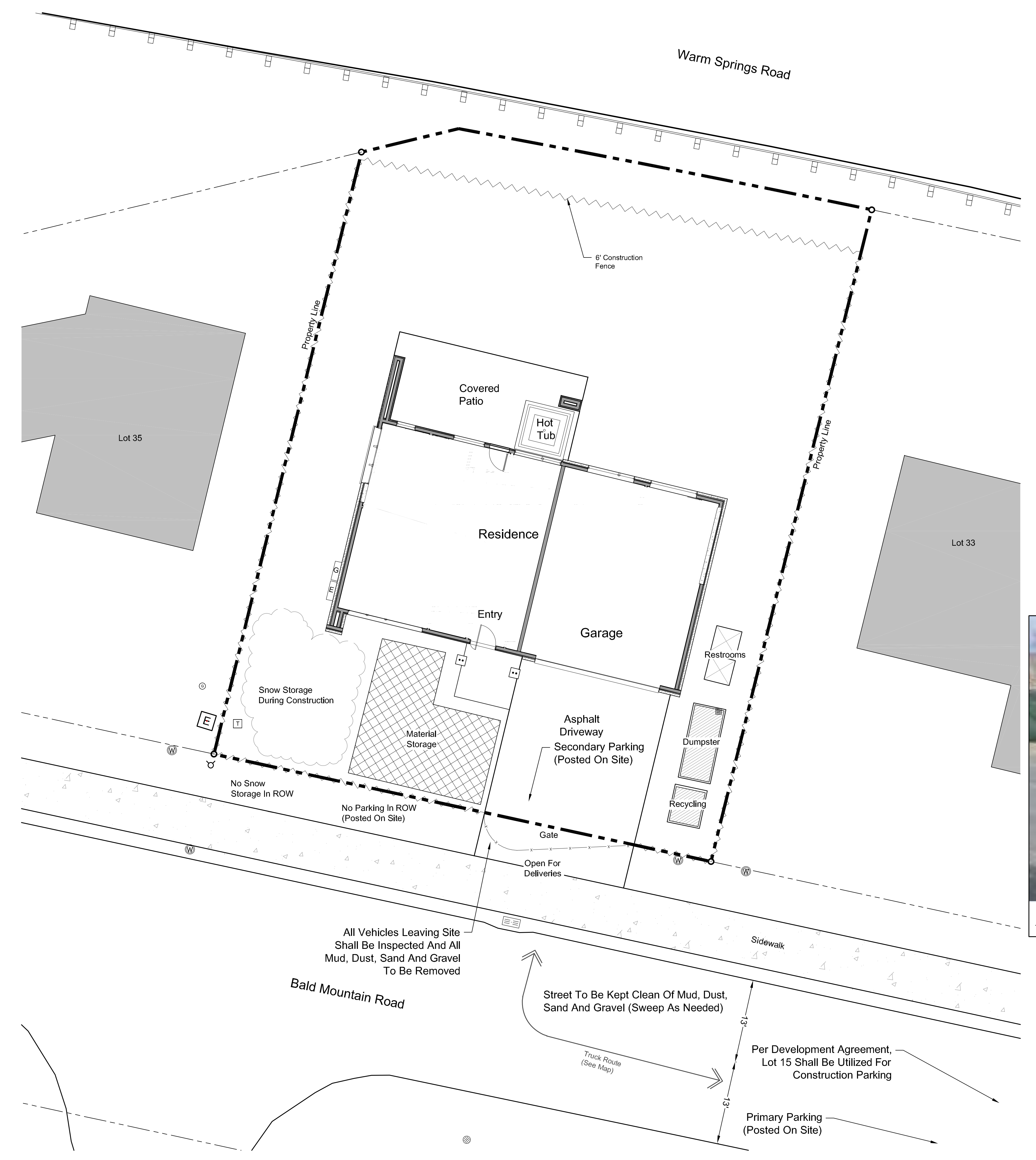
Total Cut = 350 Cubic Yards  
Total Fill = 0 Cubic Yards  
Total Export = 350 Cubic Yards

Plan Legend



NOTES:

- (1) See Civil Plans for All Work in Right of Way.
- (2) Dust Control Using Water Truck as Needed.
- (3) All Construction Traffic Shall Have Tires Inspected for Mud, Sand, and Gravel Prior to Leaving Site. Any Material Shall be Removed Prior to Entering City Streets.
- (4) Contractor is Responsible for Snow Removal of Site and Construction Parking.
- (5) Any Temporary Use Of The Public Right-Of-Way Will Require A Temporary Use Right-Of-Way (TURP) Permit From The City.
- (6) All Neighbors In The Project Vicinity Shall Be Provided Notice Of The Project, Schedule And The General Contractor's Contact Information In Advance Of Construction.
- (7) The Job Site Shall Be Kept In A Clean And Orderly Condition, Trash Shall Be Picked Up On The Site And Surrounding Areas On A Daily Basis, And Materials Shall Be Stored In Neat, Tidy Piles.
- (8) The Condition Of The Right-Of-Way Shall Be Documented With Photographs And A Site Visit With Street Department Personnel. Repair Of Damage To The Right-Of-Way Shall Be The Responsibility Of The General Contractor.
- (9) Manholes May Not Be Obstructed At Any Time. In Addition, Minimum Three Feet Clear Shall Be Maintained On Back And Sides Of Fire Hydrants, And Minimum 15 Feet Clear Shall Be Maintained On The Front, Street Side Of Fire Hydrants.
- (10) Speed Limits For Construction Vehicles Shall Be Limited To 15 MPH Within One Block Of The Construction Site, Unless Otherwise Determined Be The Ketchum Police Department.



General Notes

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\* See Civil Plan (C1) For  
Site Grading And Drainage

Plan Legend

- Property Line
- - - - - Existing Contour
- x 92.7 (92.5) Existing Spot Elevations
- 95 Proposed Contour
- ⊕ Landscape Drywell
- ⊞ Catch Basin
- 2% Slope Proposed Drainage Direction With Slope Percentage
- + 92.5 Proposed Spot Elevations
- ⊖ Boulder Retainage
- ⊖ 4" Perforated Footing Drain
- ⊖ 4" Solid Drain Pipe (Roof & Downspouts)
- ⊖ Drystack Retaining Wall
- W — Water Line
- Electrical Service
- Gas Service
- Water Service
- Sewer Service

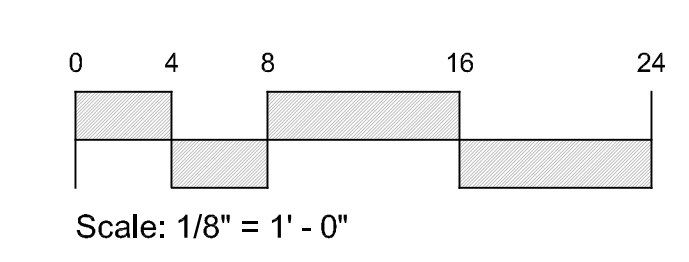
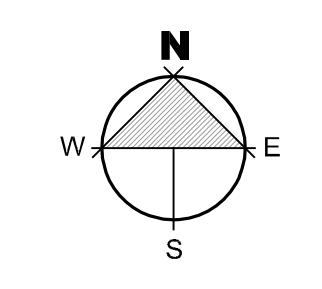
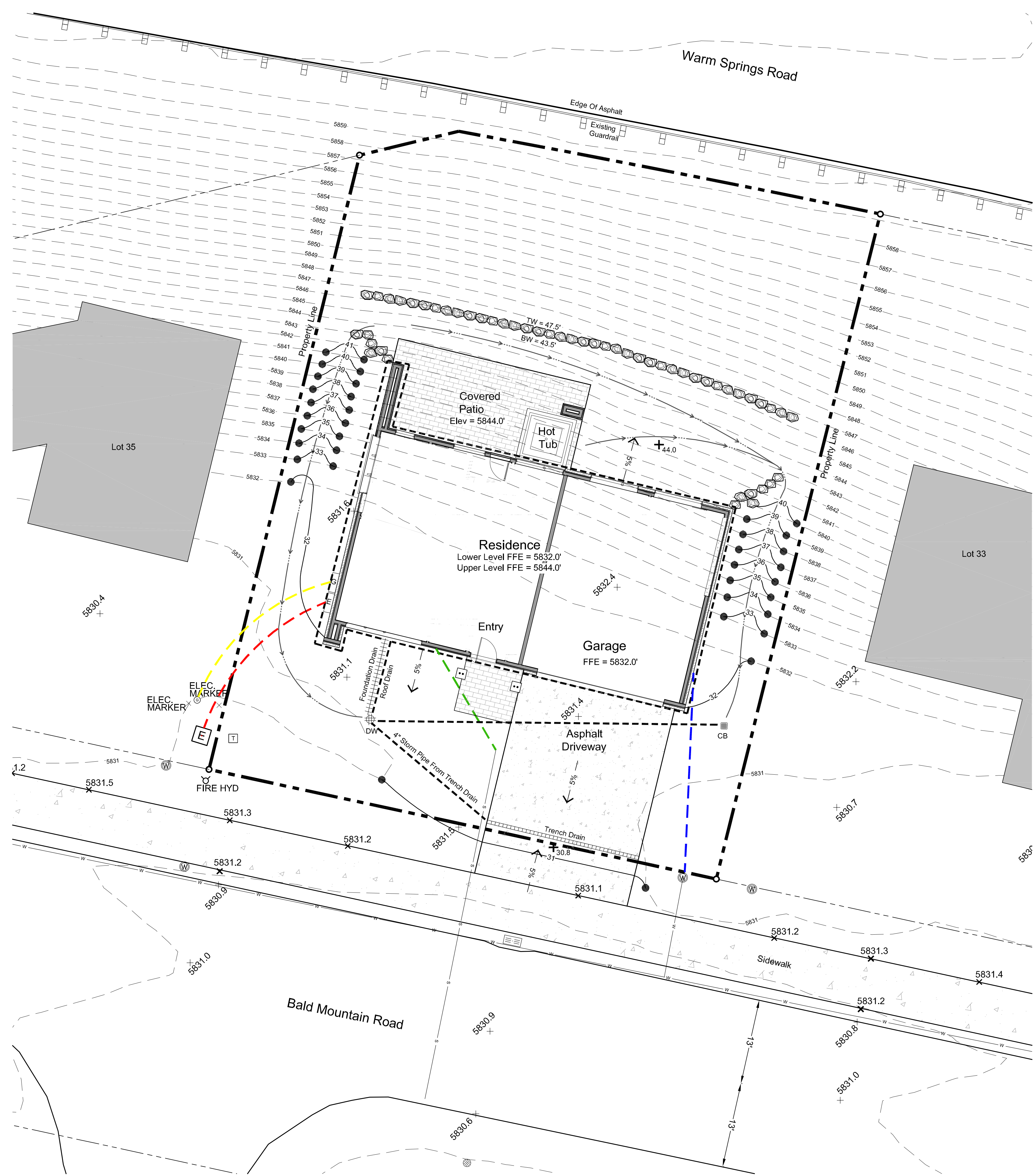
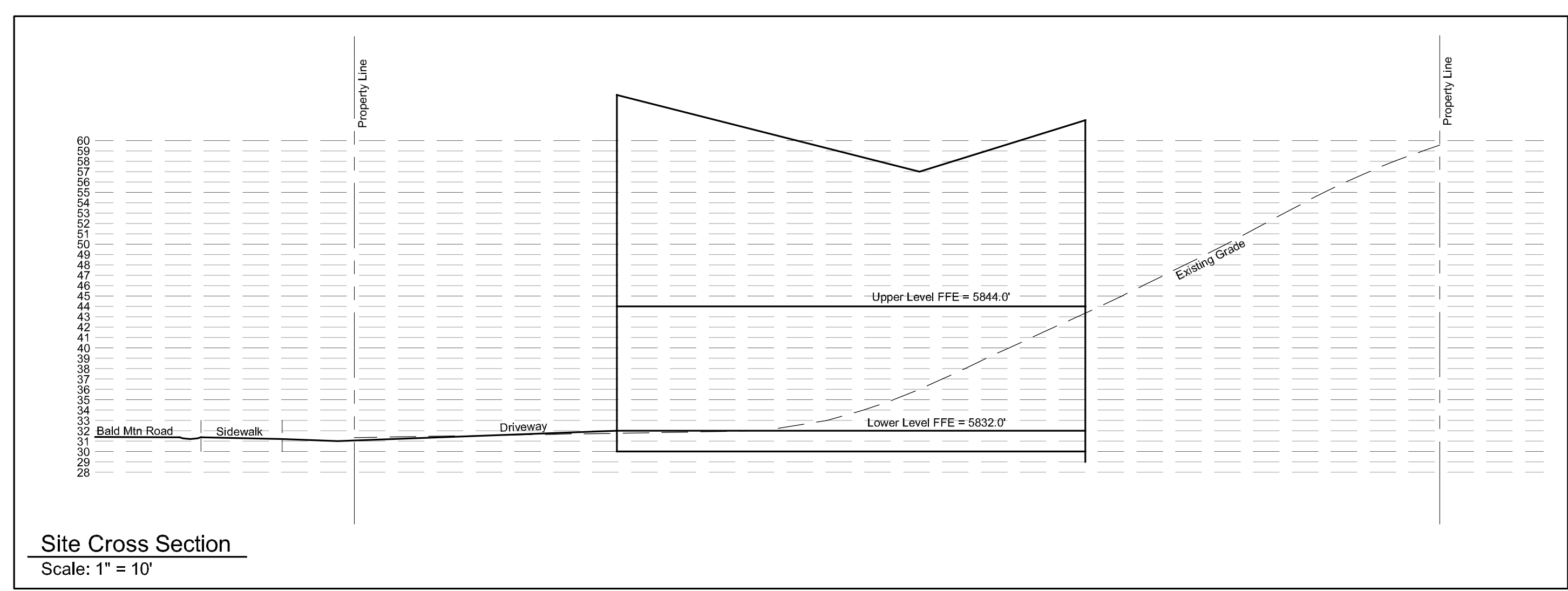
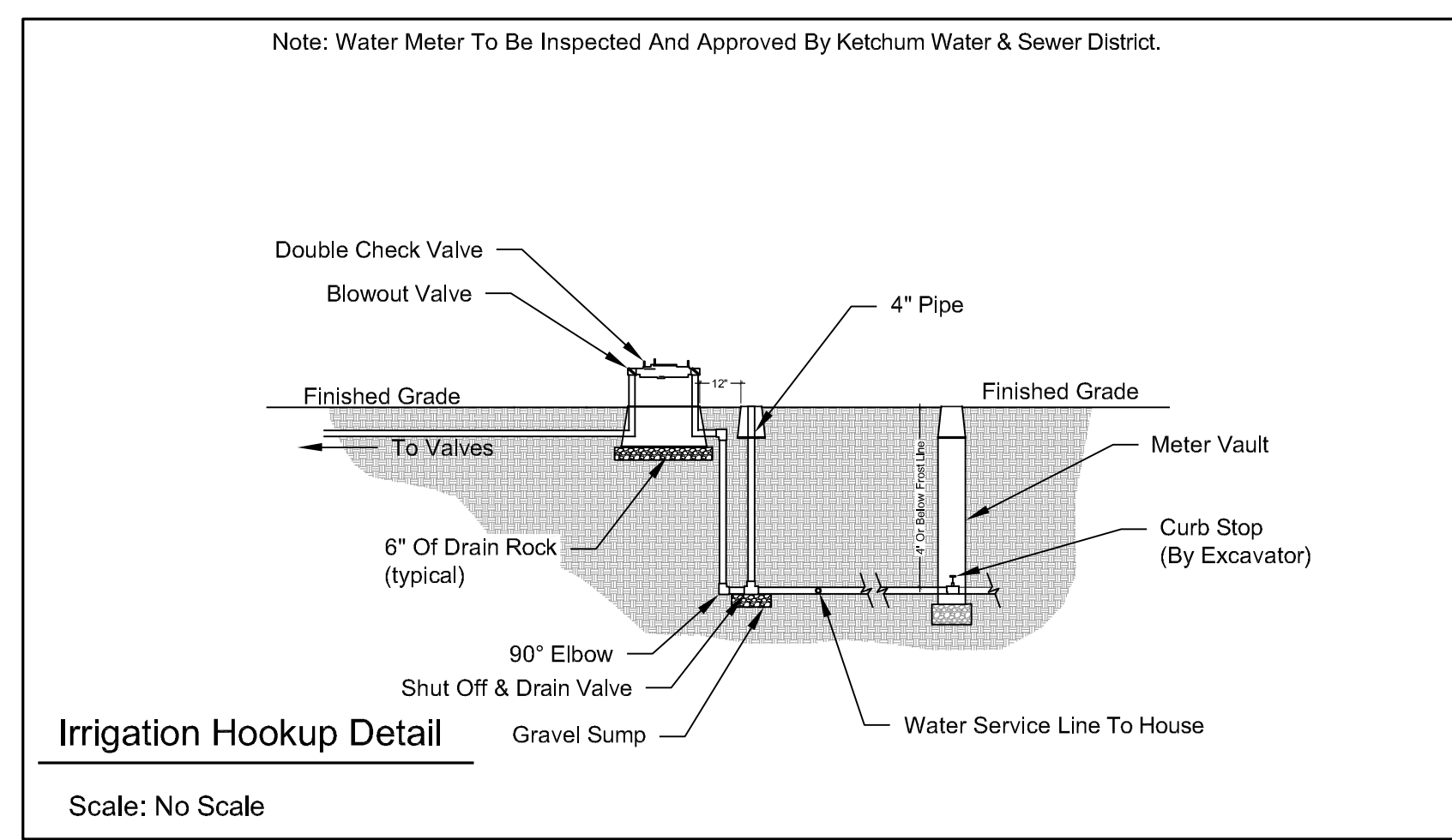
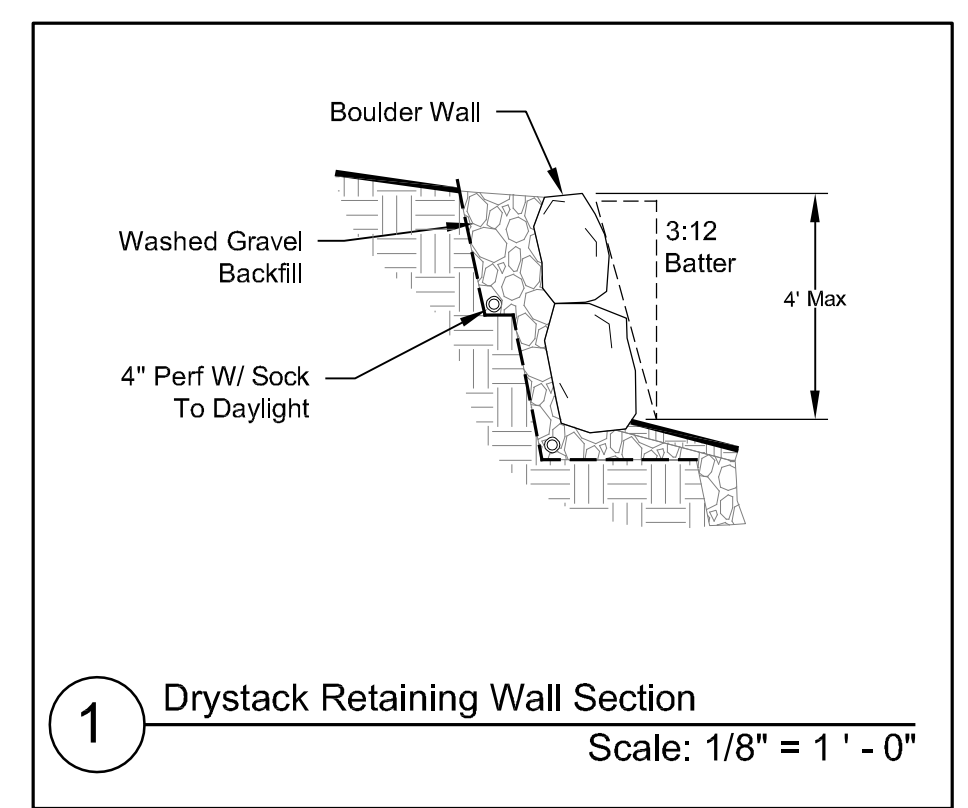
**Cut & Fill**

Excavation:

Building/Garage:	350 Cu/Yds
Site:	0 Cu/Yds
<b>Total Cut:</b>	<b>350 Cu/Yds</b>

Fill:

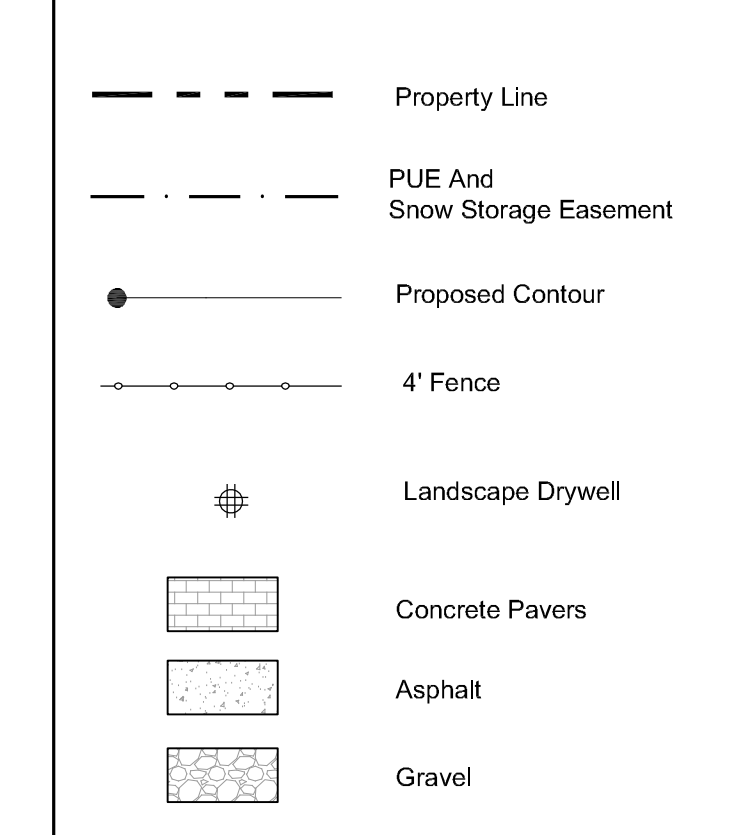
Site Landscape Fill:	0 Cu/Yds
Driveway:	0 Cu/Yds
<b>Total Fill:</b>	<b>0 Cu/Yds</b>
<b>Total Export:</b>	<b>350 Cu/Yds</b>



General Notes

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3. All existing utilities are underground. All new utilities shall be underground.
4. Site serviced by City of Ketchum.

Plan Legend



Irrigation Calculation

(Lot = ± .19 Acres)

Description	Square Footage
Natural Grass	5,200 sq.ft.
Planter Beds	50 sq.ft.
Total Irrigated Area	5,250 sq.ft.
	+/- .12 Acres

Snow Storage

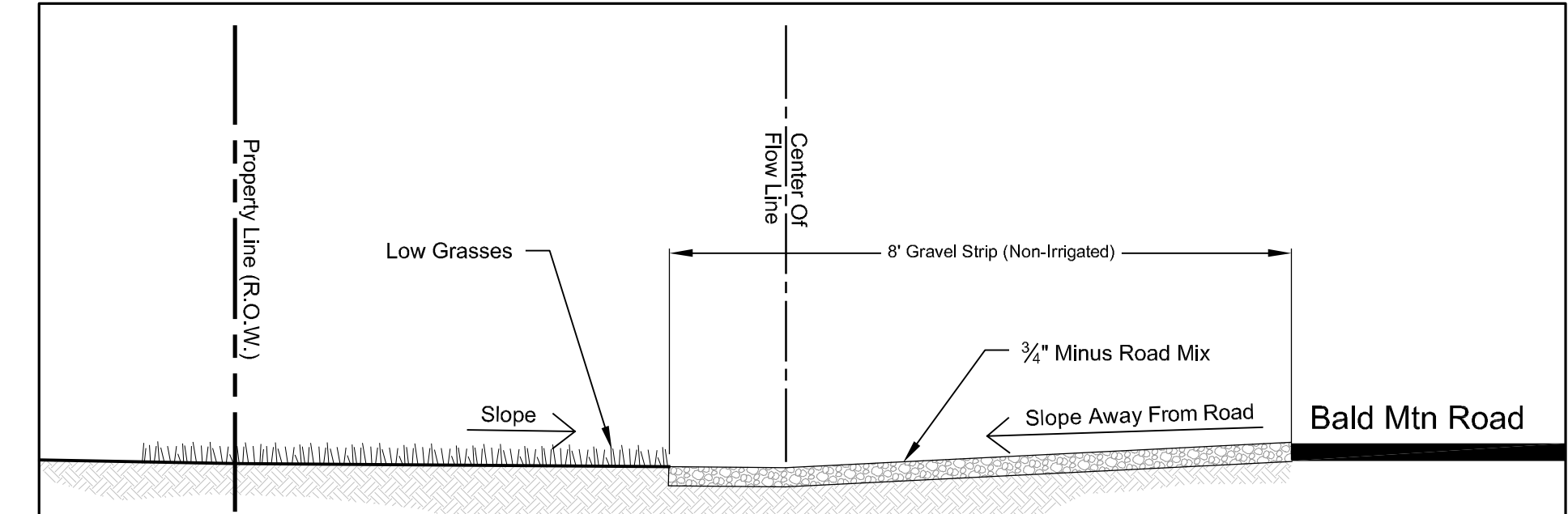
Driveway Area:	760 sq ft
Walkway Area:	75 sq ft
	x .30%
Required Area:	251 sq ft
Snow Storage Provided:	275 sq ft

Per Development Agreement:

- 1) Landscaping Shall Be Drought Tolerant
- 2) Irrigation System Shall Be Equipped With Shut Off Valve Not Impacting Water Service To Residence
- 3) Irrigation System Shall Be Water Efficient In Ground Components, Controller With Rain/Freeze Sensor.
- 4) Isolate Zones Per Plant Type And Exposure.

Landscape Notes:

- 1) The Area 12" Horizontal From The Base Of A Wall Shall Be Finished In A Way To Prevent Any Vegetation Growing, And For Vegetative Debris To Be Easily Removed.
- 2) Any Trees With Crowns Closer Than 30 Feet To Any Structure Shall Be Limbed Up A Minimum Of 6' From Ground Level.
- 3) Any Tree Crowns Shall Be Pruned To Have A Minimum 10' Horizontal Clearance From Any Structure.

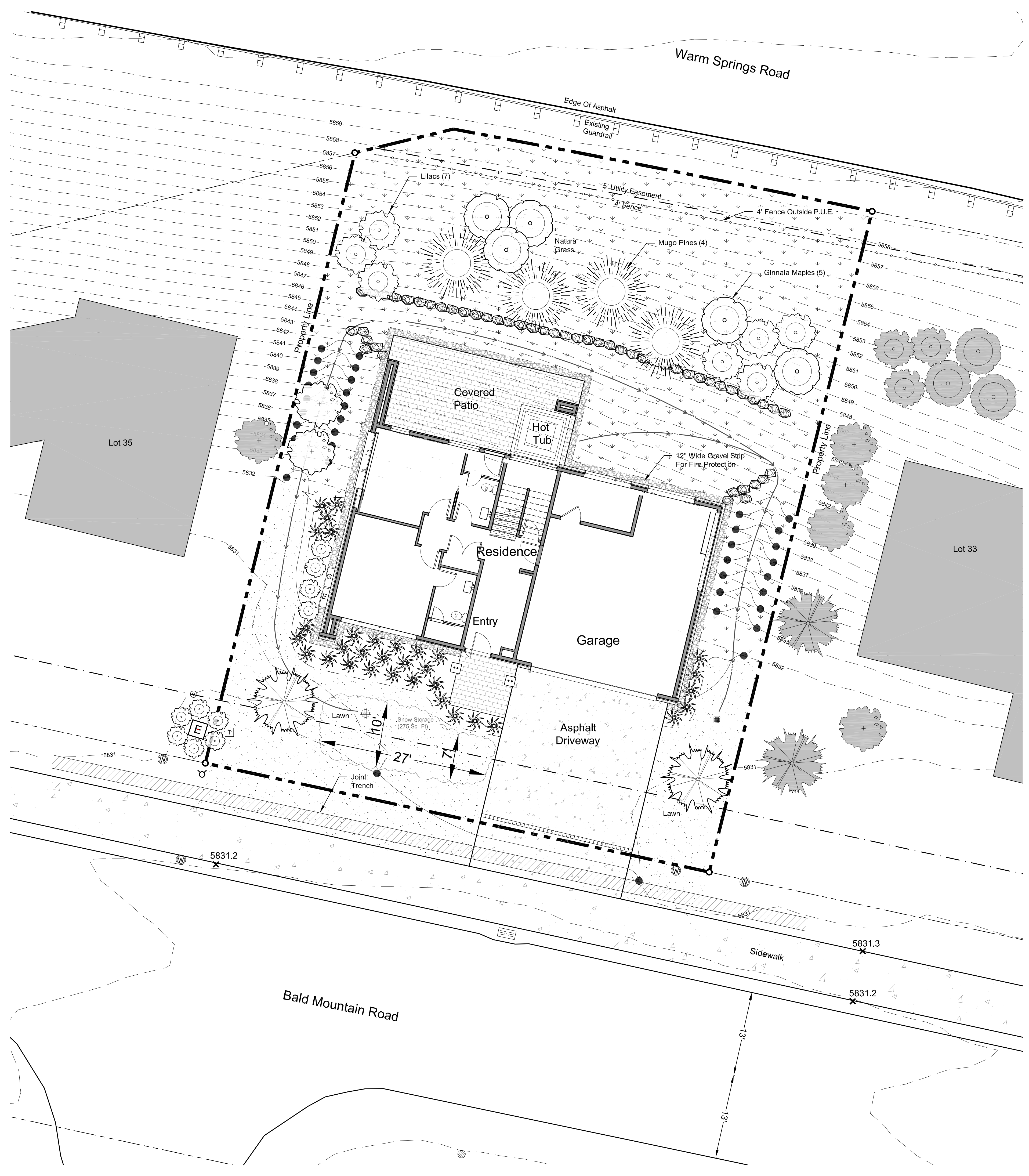
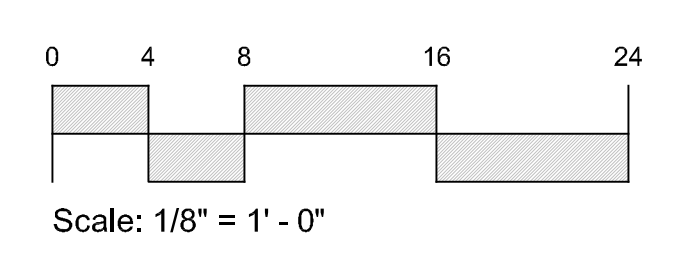
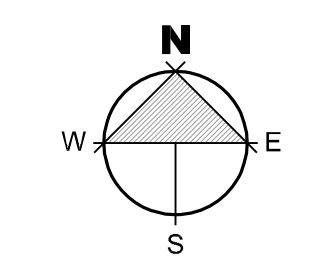


Note: No Sprinkler Heads In ROW.  
Cross Section A - Right Of Way  
Scale: 1/2" = 1' - 0"

- A. Material shall be pervious/permeable to allow drainage
- B. Surface must allow for vehicle parking and be consistent along the entire property frontage
- C. Material within the first eight (8) feet from edge of asphalt shall be distinct from driveway and rest of property in order to visually appear to be available for parking
- D. Grading and drainage improvements as required by City Engineer - Minimum 5% slope
- E. No obstructions, such as boulders or berms
- F. No buried irrigation systems within the first eight (8) feet from the edge of asphalt (Street). Subsurface irrigation lines are permitted beyond the first eight (8) feet, however pop up heads are not permitted anywhere in the ROW.
- G. No live plant material within the first eight (8) feet from edge of asphalt (Street). Low ground cover plant material, such as turf grass, is permitted beyond the first eight (8) feet. Drought-tolerant species is preferred.
- H. No snow-melt system.

Plant Legend

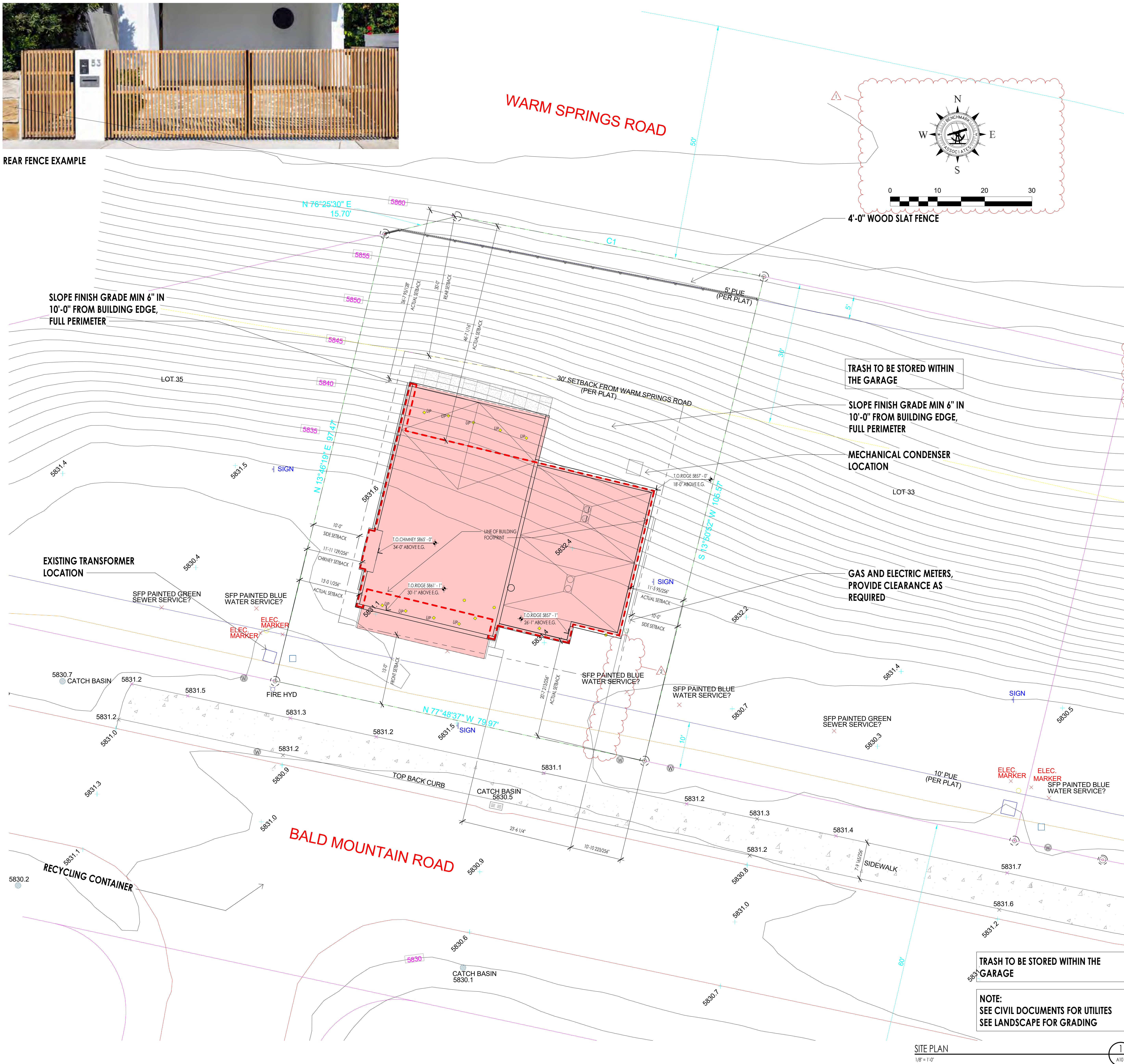
Qty.	Common Name	Botanical Name	Size
<b>Conifer Trees</b>			
4	Mugo Pine	<i>Pinus mugo</i>	12' -16'
2	Subalpine Fir	<i>Abies lasiocarpa</i>	12'-14'
<b>Deciduous Trees</b>			
2	Aspen	<i>Populus tremuloides</i>	12'-14'
5	Ginnala Maple	<i>Acer spp.</i>	20 gal. (6')
14	<b>Deciduous Shrubs</b>		5-20 gal.
	Lilac	<i>Syringa spp.</i>	
	Alpine Currant	<i>Ribes alpinum</i>	
	Burning Bush	<i>Euonymus alatus</i>	
	Colocheaster	<i>Colocheaster spp.</i>	
	Dogwood	<i>Cornus spp.</i>	
	Mockorange	<i>Philadelphus spp.</i>	
	Ninebark	<i>Physocarpus spp.</i>	
	Snowberry	<i>Symphoricarpos spp.</i>	
	Spiraea	<i>Spiraea spp.</i>	
40	<b>Ornamental Grasses</b>		Flats
	Blue Fescue	<i>Festuca ovina glauca</i>	
	Ribbon Grass	<i>Phalaris arundinacea "Picata"</i>	
	Karl Foerster Feather Reed	<i>C. arundinacea "Karl Foerster"</i>	
3,600 Sq.Ft.	<b>Grasses &amp; Wildflowers</b>		Sod or Seed
(20%)	Hard Fescue	<i>Festuca trachyphylla</i>	
(20%)	Chewing Fescue	<i>Festuca rubra var. commutata</i>	
(20%)	Sheep Fescue	<i>Festuca ovina</i>	
(20%)	Creeping Red Fescue	<i>Festuca rubra</i>	
(20%)	Wildflowers	<i>Various</i>	
1,700 Sq.Ft.	<b>Grasses - Lawn Mix</b>		Sod or Seed
(33%)	Tall Fescue	<i>Festuca arundinacea</i>	
(33%)	Hard Fescue	<i>Festuca trachyphylla</i>	
(33%)	Chewing Fescue	<i>Festuca rubra var. commutata</i>	







REAR FENCE EXAMPLE



**SITE PLAN GENERAL NOTES**

1. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES AND LOCATIONS. PROTECT AS REQUIRED.
2. CONTRACTOR TO PROTECT EXISTING TREES TO BE PRESERVED.
3. UTILITY TRENCHING TO BE CONDUCTED IN A WAY TO NOT DISTURB EXISTING TREES.
4. ANY TREES LOCATED WITHIN 10'-0" HORIZONTAL OF THE STRUCTURE MUST BE MIN. 10'-0" HIGHER THAN THE ADJACENT STRUCTURE OR WILL NEED TO BE REMOVED IN ACCORDANCE TO THE FIRE CODE AS DEFENSIBLE SPACE.
5. ALL DEAD WOOD AND COMBUSTIBLE MATERIALS WITHIN 30'-0" OF THE STRUCTURE TO BE REMOVED BY CONTRACTOR AS PER THE FIRE CODE DEFENSIBLE SPACES.
6. INSTALL EROSION CONTROL MAT ON ALL SLOPES 3:1 AND GREATER.

**DATUM:**

LEVEL 1 100'-0" = 5,833.00 USGS  
 LEVEL 2 112'-0" = 5,845.00 USGS

VERIFY FINISHED FLOOR HEIGHT WITH FINAL CIVIL ENGINEER'S DRAWINGS.

**SITE PLAN KEY NOTES**

**LOT SIZE:**  
 AREA = .19 ACRES OR 8,347 SQ. FT.  
 ZONE: GR-1  
 HEIGHT LIMIT: 35' MAX

**BUILDING PAD:**  
 AREA = 3,470 SQ. FT.

**PROPOSED BUILDING FOOTPRINT:**  
 AREA = 2,456 SQ. FT. - EQUALS 29%

**LOT COVERAGE ALLOWED: 35%, 2,921 SQ. FT.**

- RECESSED LIGHT LOCATION
- WALL SCONCE LOCATION

**LEGAL DESCRIPTION:**

LOT 34 BALD MOUNTAIN ROAD

**SITE NOTES:**

1. ALL CONSTRUCTION TO BE DONE ACCORDING TO TOWN STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO VERIFY PROPER DRAINAGE AWAY FROM HOUSE.
4. PROVIDE DRAINAGE SWALE FROM HIGH TO LOW SIDE OF HOUSE.
5. ZONING: GR-1
6. CONTRACTOR TO VERIFY EXISTING GRADES/TOPOGRAPHY PRIOR TO EXCAVATION AND/OR CONSTRUCTION. VERIFY DRIVEWAY DOES NOT EXCEED 10% GRADE.
7. EXISTING TOPOGRAPHY SHOWN IS BASED ON ROAD DESIGN GRADES & SITE OBSERVATIONS. CONTRACTORS/OWNER TO VERIFY.
8. HEIGHT LIMIT OF 35'-0" OVER EXISTING GRADE. 5'-0" ALLOWANCE FOR CHIMNEYS AND MECHANICAL.

TRASH TO BE STORED WITHIN THE GARAGE

NOTE:  
 SEE CIVIL DOCUMENTS FOR UTILITIES  
 SEE LANDSCAPE FOR GRADING

SITE PLAN  
 1/8" = 1'-0"

1  
 A101



Architecture  
 Interior Design  
 Landscape Architecture  
 Land Planning  
 Construction Management

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 Sandy, Utah 84094  
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 www.thinkaec.com

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WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

PROJECT NC22023.34  
 DATE: 2023.06.30

- REVISIONS:
- 1 04-27-2023 PER CITY COMMENTS
  - 2 06-14-2023 PER CITY COMMENTS

SHEET TITLE:  
 SITE PLAN

SHEET NUMBER:  
 A101

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FOUNDATION PLAN LEGEND	
HATCH PATTERN	DESCRIPTION
	POURED IN PLACE CONCRETE
	2" RIGID FOAM INSULATION TO EXTEND FROM BOTTOM OF SLAB DOWN TO FOOTING AND HORIZONTALLY UNDER SLAB 4'-0" MIN. AT PERIMETER OF FOUNDATION.

FOUNDATION PLAN SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	FOOTING STEP
	WALL STEP
	TOP OF FOOTING ELEVATION
	TOP OF WALL ELEVATION
	TOP OF SLAB ELEVATION
	TOP OF PIER ELEVATION

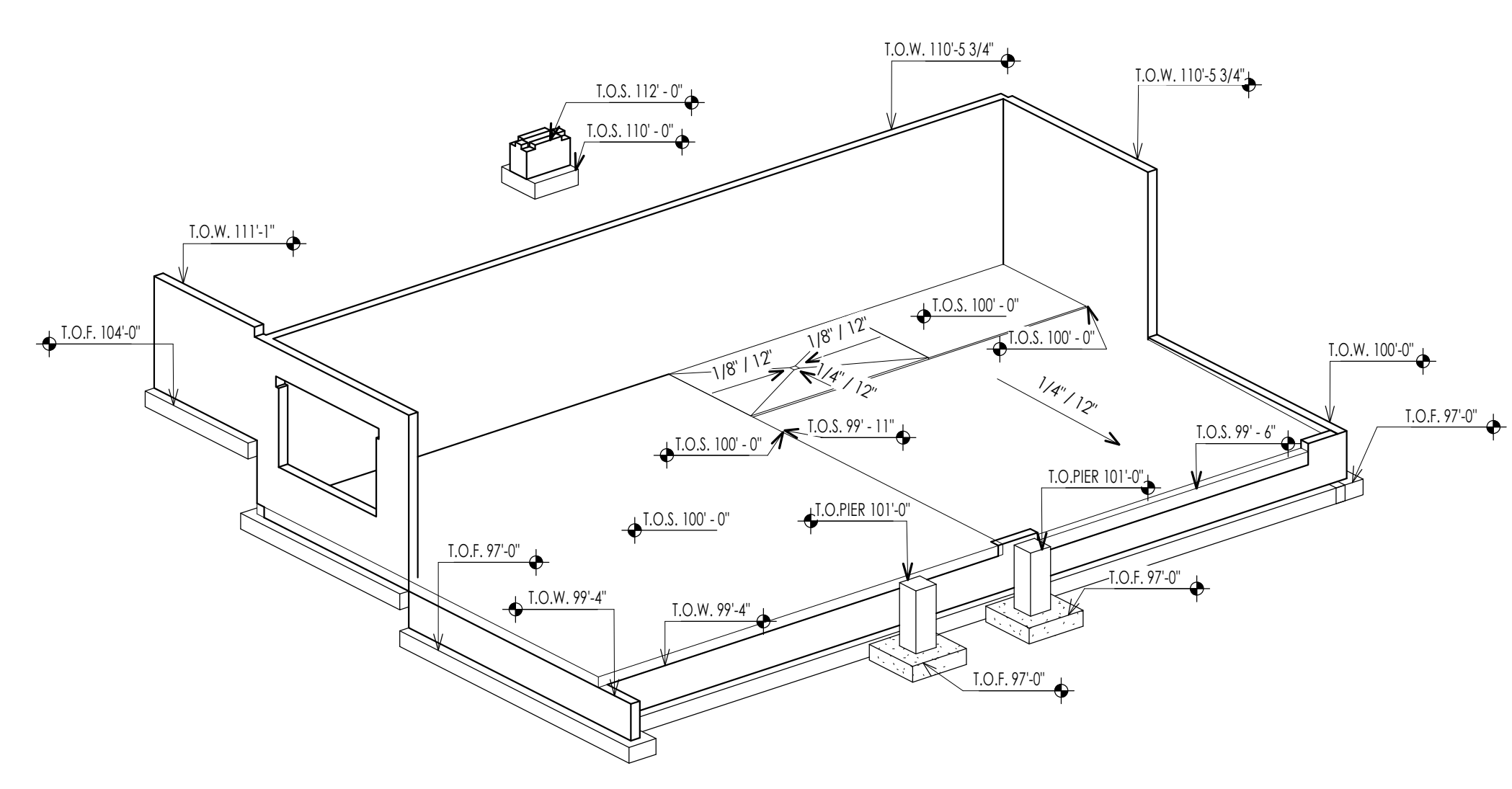
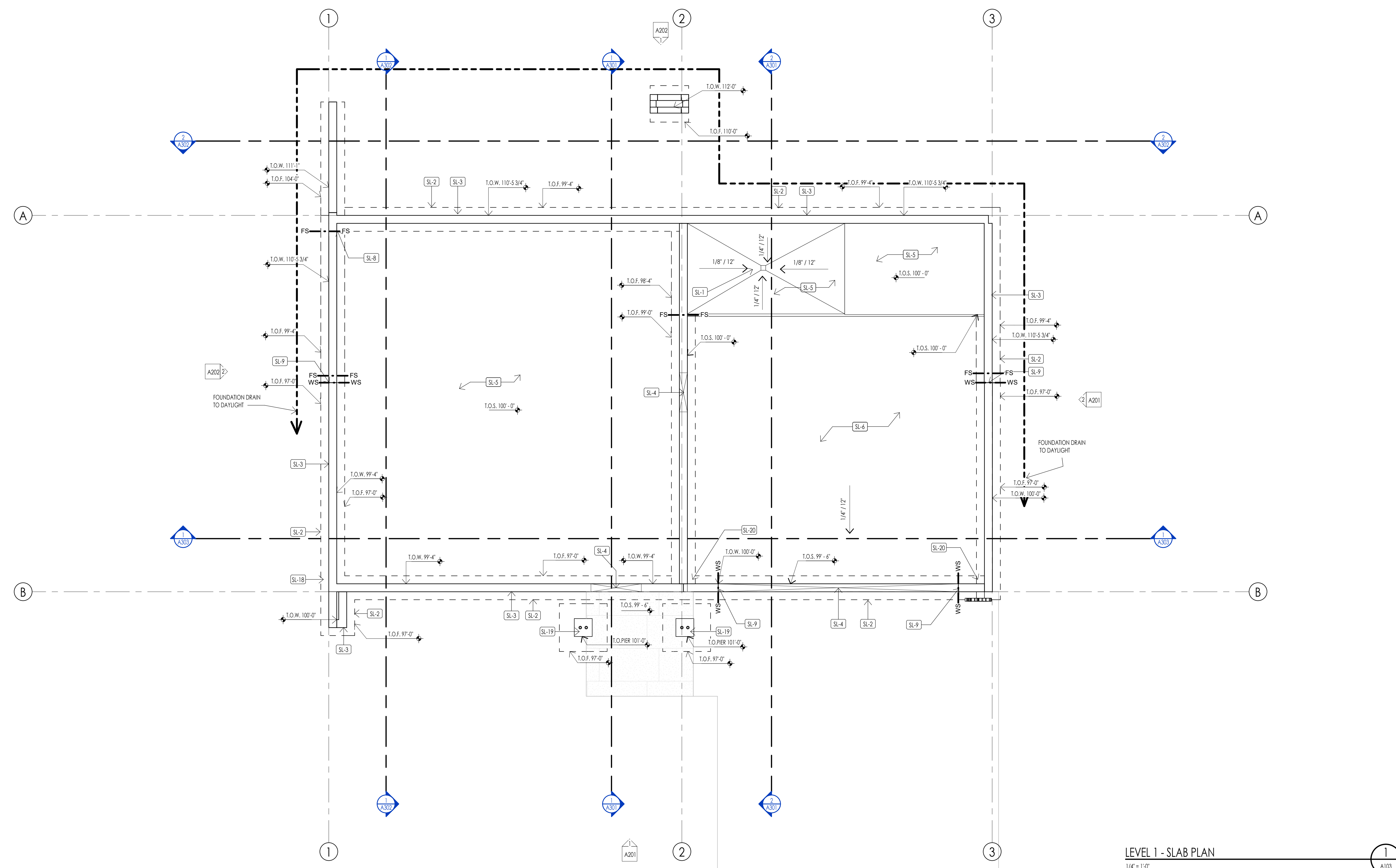
- FOUNDATION GENERAL NOTES**
- COORDINATE ARCHITECTURAL FOUNDATION PLAN WITH STRUCTURAL FOUNDATION PLAN. CONTRACTOR SHALL REPORT ANY DISCREPANCIES IN THE PLANS TO THE ARCHITECT PRIOR TO COMMENCING RELATED WORK.
  - COORDINATE MECHANICAL, ELECTRICAL, & PLUMBING PRIOR TO CONSTRUCTION OF FOOTINGS & FOUNDATION.
  - VERIFY ELEVATIONS OF FOUNDATION WALLS & FOOTINGS. COORDINATE WITH SITE PLAN & PROPOSED CONTOURS.
  - CONCRETE FLOOR SLABS, EXCEPT THOSE IN UNHEATED ACCESSORY STRUCTURES, SHALL HAVE A VAPOR RETARDER CONSISTING OF 6 MIL POLYETHYLENE (OR APPROVED EQUAL) VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 4 INCHES PLACED BETWEEN THE CONCRETE FLOOR SLAB & THE BASE COURSE OF THE PREPARED SUB-GRADE WHERE NO BASE COURSE EXISTS.
  - FOUNDATION REBAR INSPECTIONS ARE REQUIRED FOR FOUNDATION WALLS OVER 8 FEET HIGH. FORMS ARE NOT TO BE INSTALLED ON ONE SIDE UNTIL AFTER THE REBAR HAS BEEN INSPECTED.

**DATUM ELEVATIONS**

ARCHITECTURE	CIVIL	LEVEL
87'-6"	-	LEVEL 00 - TOP OF SLAB
88'-6"	-	LEVEL 0 - TOP OF SLAB
99'-0"	-	TOP OF SLAB AT FRONT OF GARAGE
100'-0"	-	LEVEL 1 - TOP OF PLYWOOD

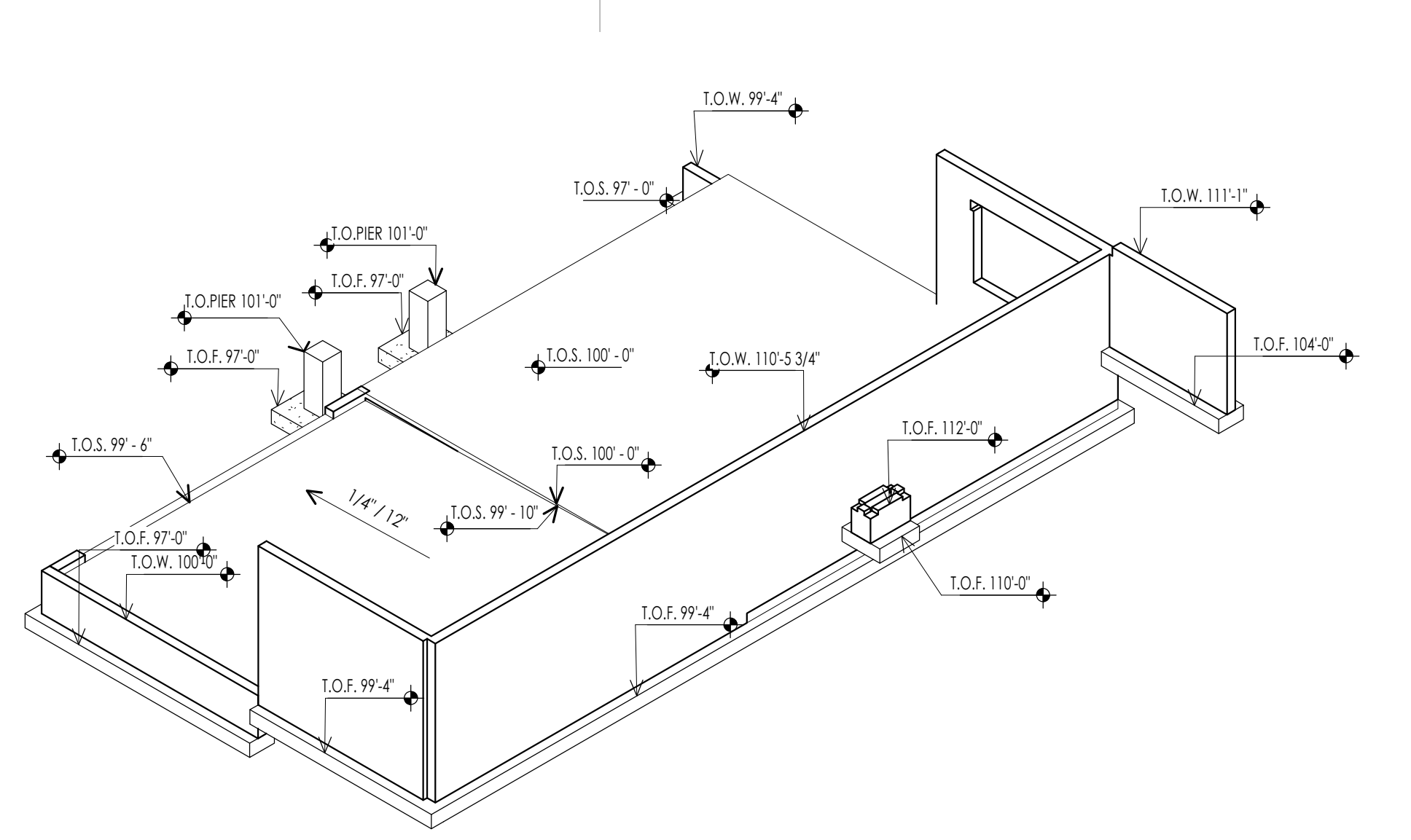
**FOUNDATION PLAN KEYNOTES**

KEYNOTES	
SL-1	CONTRACTOR TO COORDINATE LOCATION OF FLOOR DRAIN - SLOPE SLAB TOWARDS DRAIN AS REQUIRED
SL-2	CAST IN PLACE FOOTINGS TO BEAR ON UNDISTURBED SOIL OR ENG COMPACTED FILL - SEE STRUCTURAL GENERAL NOTES & PROJECT MANUAL
SL-3	CAST IN PLACE FOUNDATION WALLS WITH WATER PROOFING AS NOTED - SEE STRUCTURAL NOTES AND DETAILS
SL-4	PROVIDE BLOCKOUT AT FOUNDATION WALL AT DOOR OPENINGS AND POUR SLAB OVER TOP OF WALL - SEE DETAILS
SL-5	CAST IN PLACE INTERIOR CONCRETE SLABS TO BE 4" CONCRETE SLAB REINFORCED WITH FIBER MESH OVER 4" GRAVEL BASE - SEE STRUCTURAL NOTES
SL-6	CAST IN PLACE GARAGE CONCRETE SLABS TO BE 5" CONCRETE SLAB OVER 4" GRAVEL BASE AND FINISH AS NOTED - SEE STRUCTURAL NOTES
SL-8	CONTRACTOR TO COORDINATE FOOTING STEPS TO ASSURE REQUIRED FROST PROTECTION AT EACH FOOTING - NOTIFY ARCHITECT IF FOOTING ELEVATIONS NEED TO CHANGE
SL-9	CONTRACTOR TO COORDINATE FOUNDATION WALL STEPS WITH FINAL GRADING SPECIFIED AND NOTIFY ARCHITECT OF CHANGES PRIOR TO POURING CONCRETE FOUNDATION
SL-18	PROVIDE A LIVE WIRE GROUND. AN ELECTRODE INDICATED BY AT LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2 INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E3508.1.2 AND I.N.E.C. 250.50)
SL-19	CONCRETE COLUMN PER STRUCTURAL
SL-20	WARP SLAB AT GARAGE DOORS TO PROVIDE DRAINAGE TOWARD THE DOOR OPENING



ISOMETRIC A

2  
A103



ISOMETRIC B

3  
A103

WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30

REVISIONS:

SHEET TITLE:  
FOUNDATION PLAN

SHEET NUMBER:  
A103

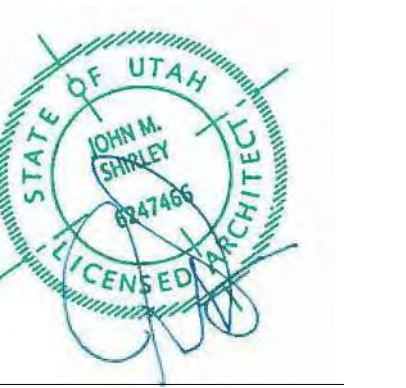
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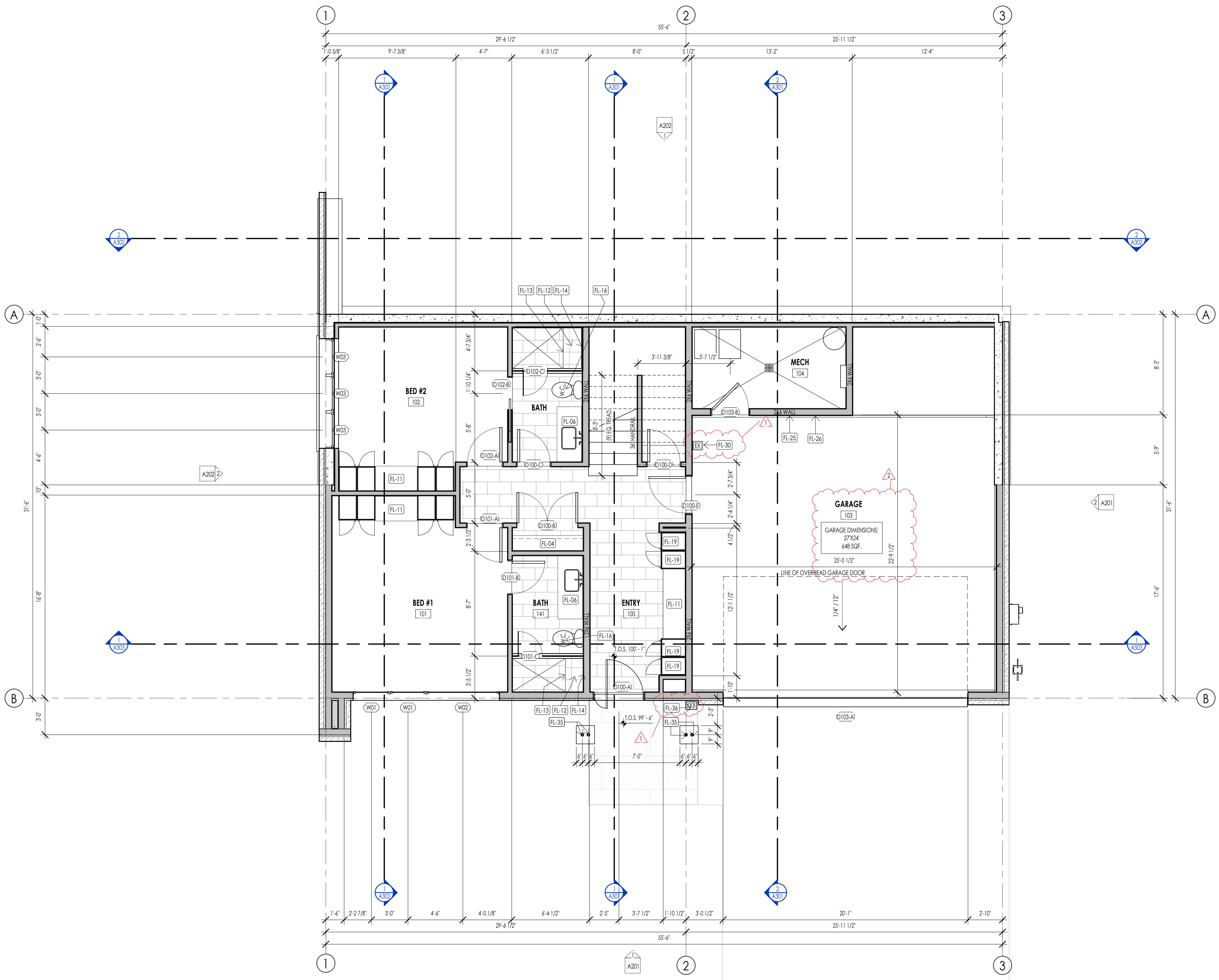


FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
	POURED IN PLACE CONCRETE WALL		CARPET FINISH
	CMU BLOCK WALL		TILE FINISH
	STONE VENEER		EXTERIOR CONCRETE SLABS
	METAL STUD WALL		
	WOOD STUD WALL		

- FLOOR PLAN GENERAL NOTES**
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECKS/PATIOS.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X6 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

**FLOOR PLAN KEYNOTES**

KEYNOTES	
FL-04	CLOSET SHELVING/ ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-11	CABINET SYSTEM/SHELVING PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGNER
FL-13	PROVIDE 'SCHLERTER' KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH. INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD PER INTERIOR DESIGNER
FL-16	W.C. TO BE 'KOHLER' PERSUADE CURBY COMFORT
FL-19	BUILT IN MUD/GEAR CABINETS AS PER INTERIOR DESIGNER
FL-25	PROVIDE HOT/COLD HOOK UP
FL-26	PROVIDE 50 AMP/EV CONNECTION POINT
FL-30	FIRE EXTINGUISHERS SHALL BE INSTALLED AND MAINTAINED PER 2018 IFC SECTION 908 BOTH DURING CONSTRUCTION AND UPON OCCUPANCY OF THE BUILDING. DURING CONSTRUCTION FIRE EXTINGUISHERS SHALL BE PLACED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION THAT IS LESS THAN 75' TRAVEL DISTANCE TO ANY COMBUSTIBLES ON SITE. 30' TO ANY HOT WORK. EXTINGUISHERS SHALL BE MOUNTED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION. UPON COMPLETION OF PROJECT EVERY SINGLE-FAMILY RESIDENCE SHALL HAVE A MINIMUM OF ONE EXTINGUISHER PER GARAGE AND ONE EXTINGUISHER PER KITCHEN AREA.
FL-35	WIRE STEEL COLLUMNS - SEE STRUCTURAL FOR SIZE AND SPECS.
FL-36	AN APPROVED KEY BOX SHALL BE INSTALLED, WITH THE APPROPRIATE KEYS FOR EMERGENCY FIRE DEPARTMENT ACCESS IN A LOCATION APPROVED BY THE FIRE DEPARTMENT. THE KEY BOX SHALL BE A KNIX BOX BRAND AND SIZED TO ACCOMMODATE KEYS TO EVERY DOOR OF THE PROJECT. LOCATION NO MORE THAN 3FT HOK. FROM MAIN DOOR AND NO MORE THAN 5.5FT VERTICAL - VERIFY LOCAL CODE.



WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30

REVISIONS:

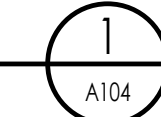
1	04-27-2023	PER CITY COMMENTS
2	06-14-2023	PER CITY COMMENTS

SHEET TITLE:  
LEVEL 1 FLOOR PLAN

SHEET NUMBER:  
A104

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LEVEL 1 - FLOOR PLAN  
1/4" = 1'-0"



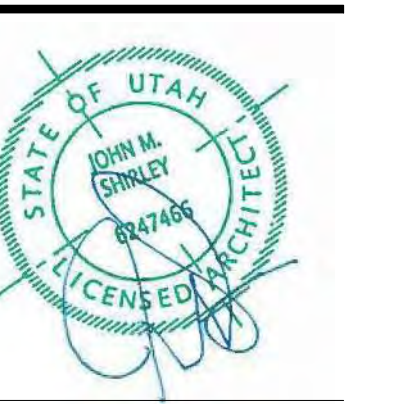
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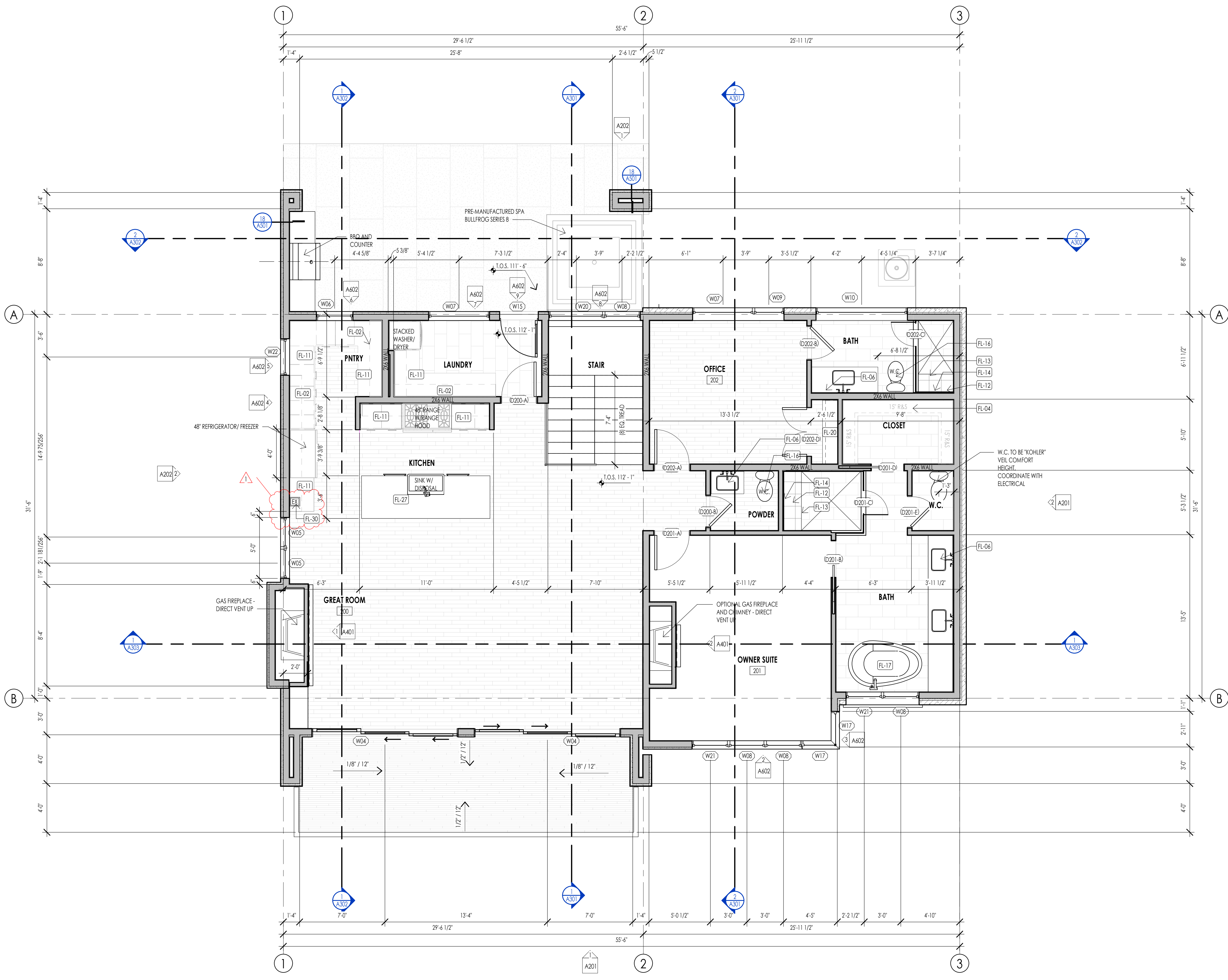


FLOOR PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	POURED IN PLACE CONCRETE WALL	[Hatch Pattern]	CARPET FINISH
[Hatch Pattern]	CMU BLOCK WALL	[Hatch Pattern]	TILE FINISH
[Hatch Pattern]	STONE VENEER	[Hatch Pattern]	EXTERIOR CONCRETE SLABS
[Hatch Pattern]	METAL STUD WALL		
[Hatch Pattern]	WOOD STUD WALL		

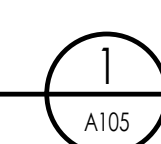
- ### FLOOR PLAN GENERAL NOTES
- ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  - CEILING HEIGHTS MEASURED FROM FLYWOOD OR CONCRETE - SEE SECTIONS
  - REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  - REFER TO ENLARGED PLANS FOR ALL DECKSPATIOES.
  - COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  - ALL TOPPING SLABS MUST BE POURED AFTER ROOF IS COMPLETE AND BUILDING IS DRIED IN.
  - SEE SHEET A202 FOR PROJECT GENERAL NOTES AND SHEET A203 FOR PROJECT KEYNOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - COORDINATE WITH STRUCTURAL FRAMING PLANS AND SHEAR WALL PLANS FOR LOCATIONS OF COLUMNS, BEAMS, SHEAR WALLS, ETC.
  - COORDINATE WITH BUILDER/OWNER FOR ALL INTERIOR FINISHES
  - COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  - ALL EXTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL INTERIOR WALLS ARE ASSUMED TO BE 2X4 STUD WALLS UNLESS SHOWN/NOTED OTHERWISE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).

### FLOOR PLAN KEYNOTES

KEYNOTES	
FL-02	OVERHEAD CABINETS PROJECTION
FL-04	CLOSET SHELVING/ ROD - PER INTERIOR DESIGNER
FL-06	BATHROOM SINK - VANITY PER INTERIOR DESIGNER
FL-11	CABINET SYSTEM/SHELVING PER INTERIOR DESIGNER
FL-12	PROVIDE SHOWER BENCH AS PER OWNER/ INTERIOR DESIGNER
FL-13	PROVIDE "COHLER" KEROLINE LINEAR TRENCH DRAIN AGAINST BENCH, INTERIOR DESIGNER TO PROVIDE DRAIN COVER SPEC.
FL-14	SHOWER HEAD PER INTERIOR DESIGNER
FL-16	W.C. TO BE "COHLER" PERKUADE CURVY COMFORT
FL-17	TUB/ SOAKER TUB AS PER INTERIOR DESIGNER
FL-20	OFFICE BUILT IN CABINETS AS PER INTERIOR DESIGNER
FL-27	PROVIDE COUNTER BUITION SWITCH FOR DISPOSAL UNIT
FL-30	FIRE EXTINGUISHERS SHALL BE INSTALLED AND MAINTAINED PER 2018 IFC SECTION 906 BOTH DURING CONSTRUCTION AND UPON OCCUPANCY OF THE BUILDING. DURING CONSTRUCTION FIRE EXTINGUISHERS SHALL BE PLACED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION THAT IS LESS THAN 75' TRAVEL DISTANCE TO ANY COMBUSTIBLES ON SITE. 30' TO ANY HOT WORK. EXTINGUISHERS SHALL BE MOUNTED IN A CONSPICUOUS, EASY TO ACCESS, UNOBSTRUCTED LOCATION. UPON COMPLETION OF PROJECT EVERY SINGLE-FAMILY RESIDENCE SHALL HAVE A MINIMUM OF ONE EXTINGUISHER PER GARAGE AND ONE EXTINGUISHER PER KITCHEN AREA.



LEVEL 2 - FLOOR PLAN  
1/4" = 1'-0"



WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30

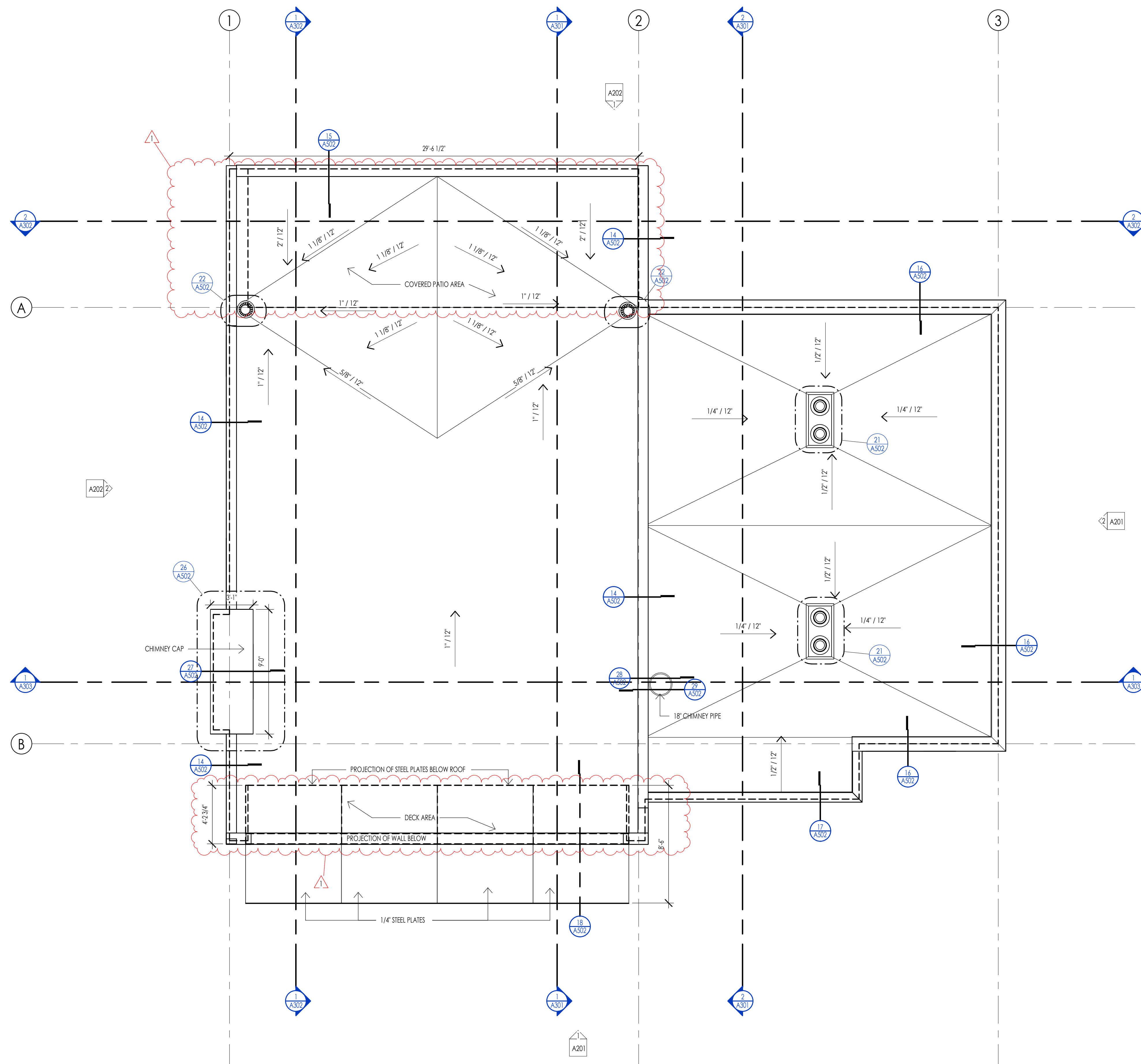
REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
LEVEL 2 FLOOR PLAN

SHEET NUMBER:  
A105

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ROOF PLAN LEGEND			
HATCH PATTERN	DESCRIPTION	HATCH PATTERN	DESCRIPTION
	SINGLE PLY ROOFING MEMBRANE WITH GRAVEL BALLAST		
	STANDING SEAM METAL ROOFING SYSTEM		
	RAIN GUTTER WITH DOWN SPOUT		

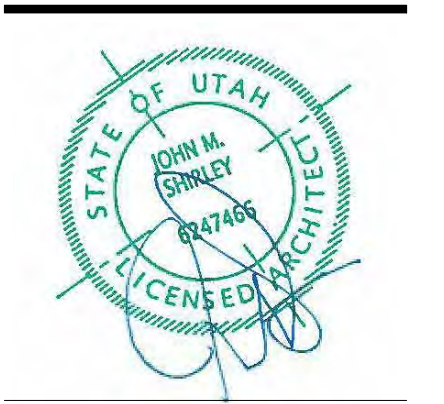
- ROOF PLAN GENERAL NOTES**
- SEE SHEET G002 FOR PROJECT GENERAL NOTES. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  - FLASH ALL ROOF PENETRATIONS WHETHER SHOWN OR NOT.
  - COORDINATE WITH MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS FOR ALL ROOF PENETRATIONS.
  - PROVIDE HEAT TRACE IN ALL RAIN GUTTERS, DOWN SPOUTS AND RAIN CHAINS.
  - ROOFING CONTRACTOR SHALL REVIEW ALL SUBSTRATES PRIOR TO BEGINNING WORK.
  - ALL ROOFING SHALL BE REVIEWED PRIOR TO INSTALLATION.
  - CONTRACTOR IS RESPONSIBLE TO ASSUME THAT NO ROOF SLOPES CREATE DEAD SPOTS OR LOW SPOTS THAT WILL PREVENT DRAINAGE.
  - ALL ROOF TRUSSES TO HAVE RAISED ENERGY HEEL CONSTRUCTION TO ALLOW FOR FULL DEPTH INSULATION OVER EXTERIOR WALLS (COORDINATE INSULATION REQUIREMENTS WITH RESCHECKS).
  - DIMENSIONS SHOWN ON THE ROOF PLAN ARE FROM THE EXTERIOR SIDE OF THE STUD FRAMING BELOW.

ROOF PLAN KEYNOTES	
KEYNOTES	



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WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

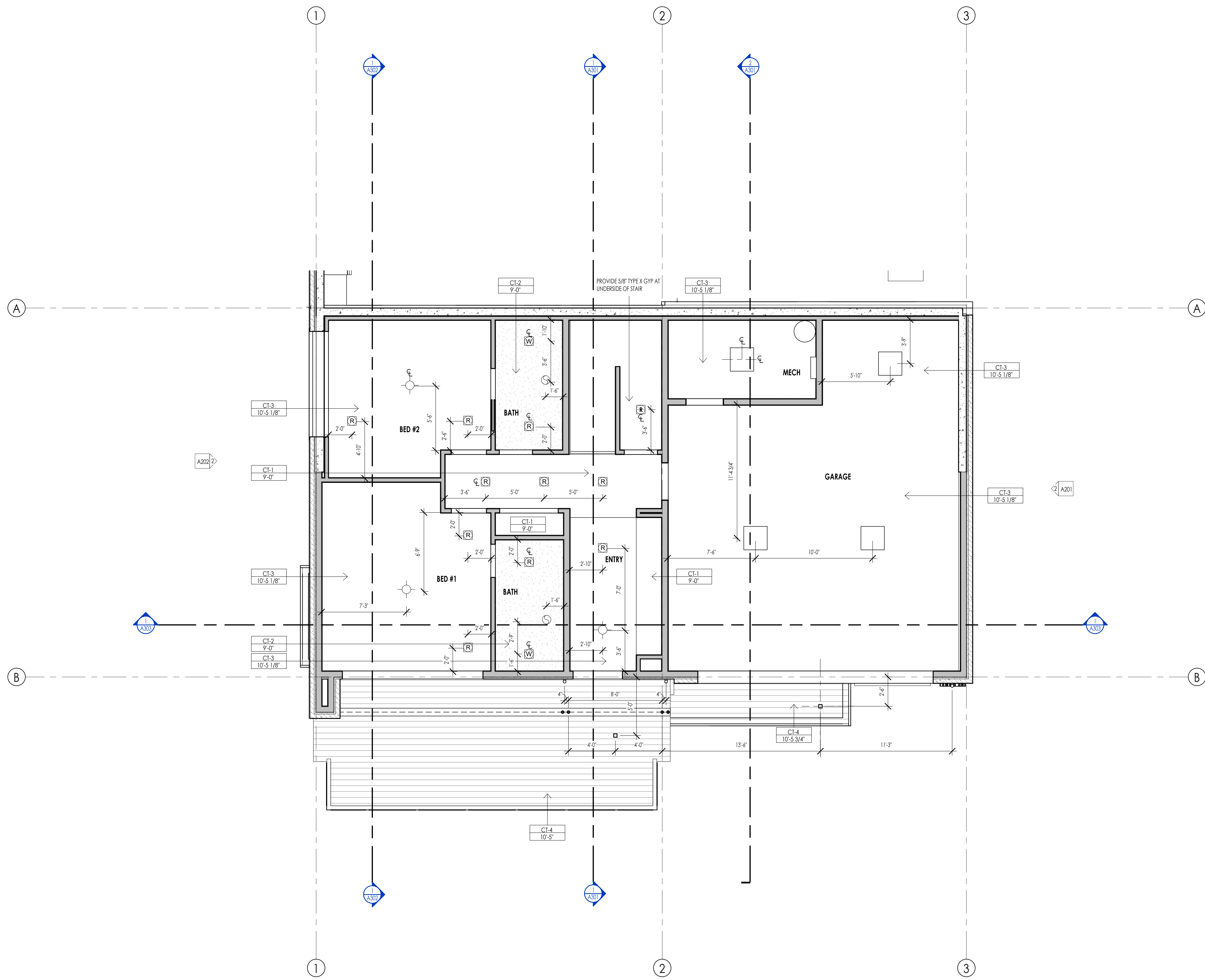
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 DATE: 2023.06.30  
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 1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
 ROOF PLAN

SHEET NUMBER:  
 A107

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ROOF PLAN  
 1/8" = 1'-0" 1  
 A107



REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
[Hatch Pattern]	CT-1	3/8" GYPSUM BOARD 2X4			
[Hatch Pattern]	CT-2	5/8" WATER RESISTANT GYPSUM BOARD 2X4			
[Hatch Pattern]	CT-3	5/8" GYPSUM BOARD @ FLOOR OR ROOF			
[Hatch Pattern]	CT-4	3/4" 1-G INTERIOR SOFFIT @ ROOF			
[Hatch Pattern]	CT-5	3/4" 1-G EXTERIOR SOFFIT 2X4			
[Hatch Pattern]	CT-6	5/8" GYPSUM BOARD TYPE X FIRE RESISTANT			

- REFLECTED CEILING PLAN GENERAL NOTES**
1. ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.
  2. ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.
  3. REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.
  4. REFER TO ENLARGED PLANS FOR ALL DECKS.
  5. COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.
  6. SEE SHEET G022 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.
  7. COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.
  8. ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.

CEILING TAG SYMBOL	DESCRIPTION
CT-1	CEILING TYPE
1'-0"	HEIGHT

**REFLECTED CEILING PLAN KEYNOTES**

KEYNOTES

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**WARM SPRINGS RESIDENCE #34**  
 180 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

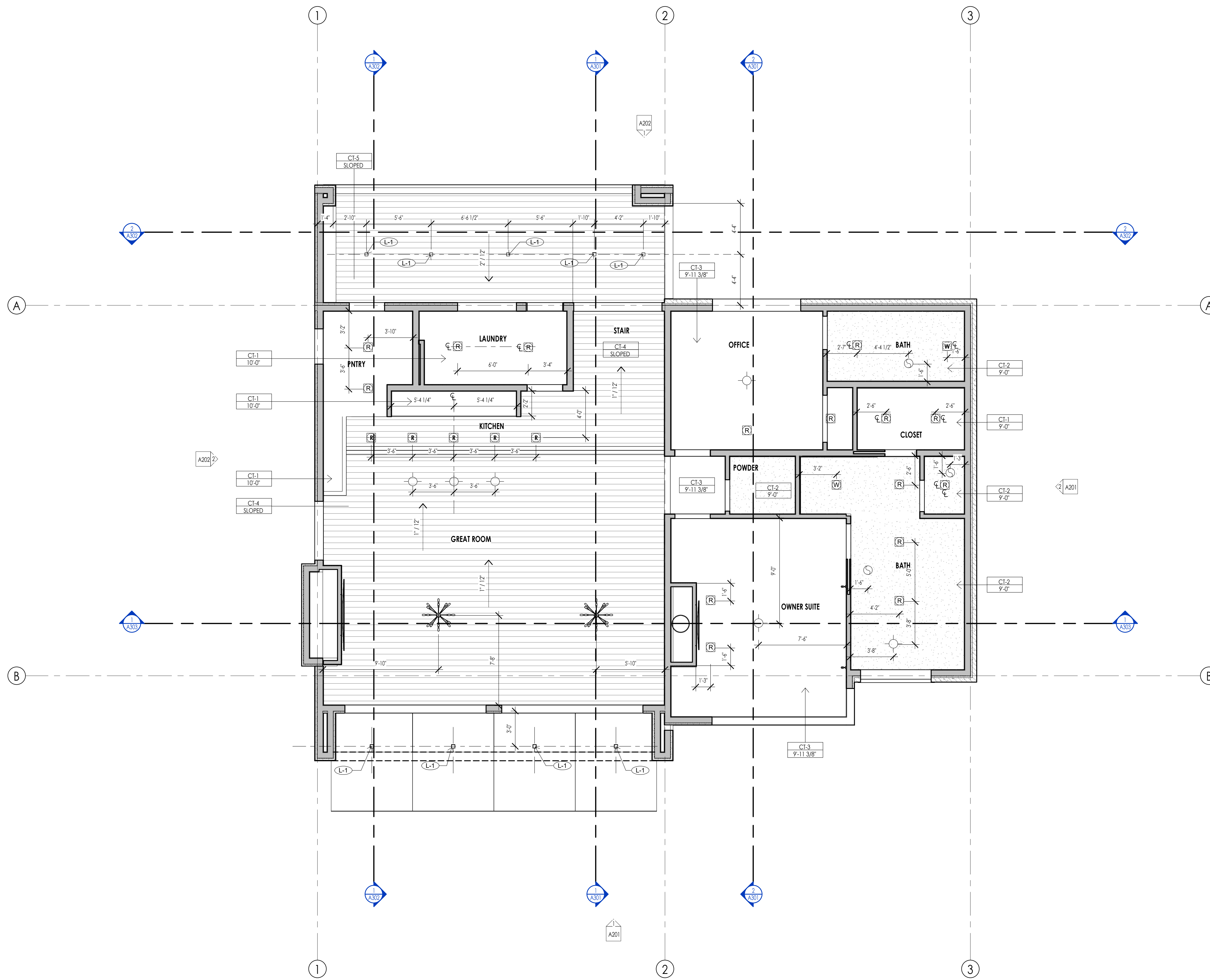
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 DATE: 2023.06.30  
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SHEET TITLE:  
 LEVEL 1 CEILING PLAN

SHEET NUMBER:  
**A109**

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REFLECTED CEILING PLAN MATERIAL LEGEND					
HATCH PATTERN	TYPE	DESCRIPTION	HATCH PATTERN	TYPE	DESCRIPTION
[Hatch Pattern]	CT-1	3/8" GYPSUM BOARD 2X4	[Hatch Pattern]		
[Hatch Pattern]	CT-2	5/8" WATER RESISTANT GYPSUM BOARD 2X4	[Hatch Pattern]		
[Hatch Pattern]	CT-3	5/8" GYPSUM BOARD @ FLOOR OR ROOF	[Hatch Pattern]		
[Hatch Pattern]	CT-4	3/4" 1-G INTERIOR SOFFIT @ ROOF	[Hatch Pattern]		
[Hatch Pattern]	CT-5	3/4" 1-G EXTERIOR SOFFIT 2X4	[Hatch Pattern]		
[Hatch Pattern]	CT-6	5/8" GYPSUM BOARD TYPE X FIRE RESISTANT	[Hatch Pattern]		

REFLECTED CEILING PLAN GENERAL NOTES	
<ol style="list-style-type: none"> <li>ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.</li> <li>ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.</li> <li>REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.</li> <li>REFER TO ENLARGED PLANS FOR ALL DECKS.</li> <li>COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.</li> <li>SEE SHEET G002 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.</li> <li>COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.</li> <li>ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.</li> </ol>	
CEILING TAG SYMBOL	DESCRIPTION
[Symbol]	CEILING TYPE
[Symbol]	HEIGHT

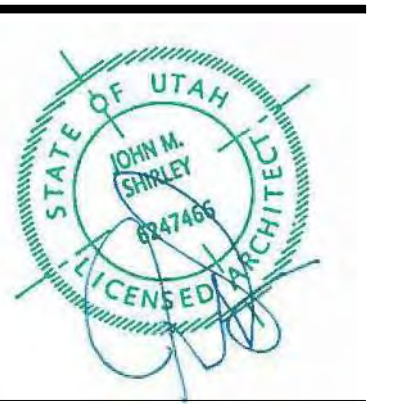
REFLECTED CEILING PLAN KEYNOTES	
<p>1. ALL DIMENSIONS ARE TO INTERIOR FACE-OF-STUD (F.O.S.) UNLESS NOTED OTHERWISE.</p> <p>2. ALL CEILING HEIGHTS MEASURED FROM TOP OF PLYWOOD OR CONCRETE SLAB TO BOTTOM OF CEILING FRAMING, U.N.O. - SEE SECTIONS.</p> <p>3. REFER TO ENLARGED PLANS FOR ALL UNIT DIMENSIONS, WINDOW TYPES, DOORS AND WALLS.</p> <p>4. REFER TO ENLARGED PLANS FOR ALL DECKS.</p> <p>5. COORDINATE WITH ALL ENLARGED PLANS FOR ADDITIONAL INFORMATION AND DETAILS.</p> <p>6. SEE SHEET G002 FOR PROJECT SPECIFICATION LIST. REVIEW ALL NOTES PRIOR TO CONSTRUCTION.</p> <p>7. COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL LIGHTING, POWER AND DATA REQUIREMENTS.</p> <p>8. ALL INTERIOR FINISHES ARE NOTED FOR CONCEPT ONLY. SEE INTERIOR DRAWINGS FOR MATERIAL SPECIFICATIONS, COLORS, PATTERNS, AND OTHER REQUIREMENTS PRIOR TO INSTALLATION.</p>	



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WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30

SHEET TITLE:  
LEVEL 2 CEILING PLAN

SHEET NUMBER:  
A110

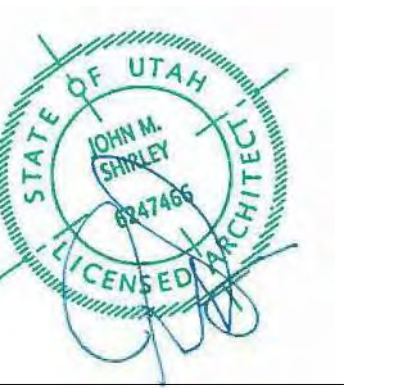
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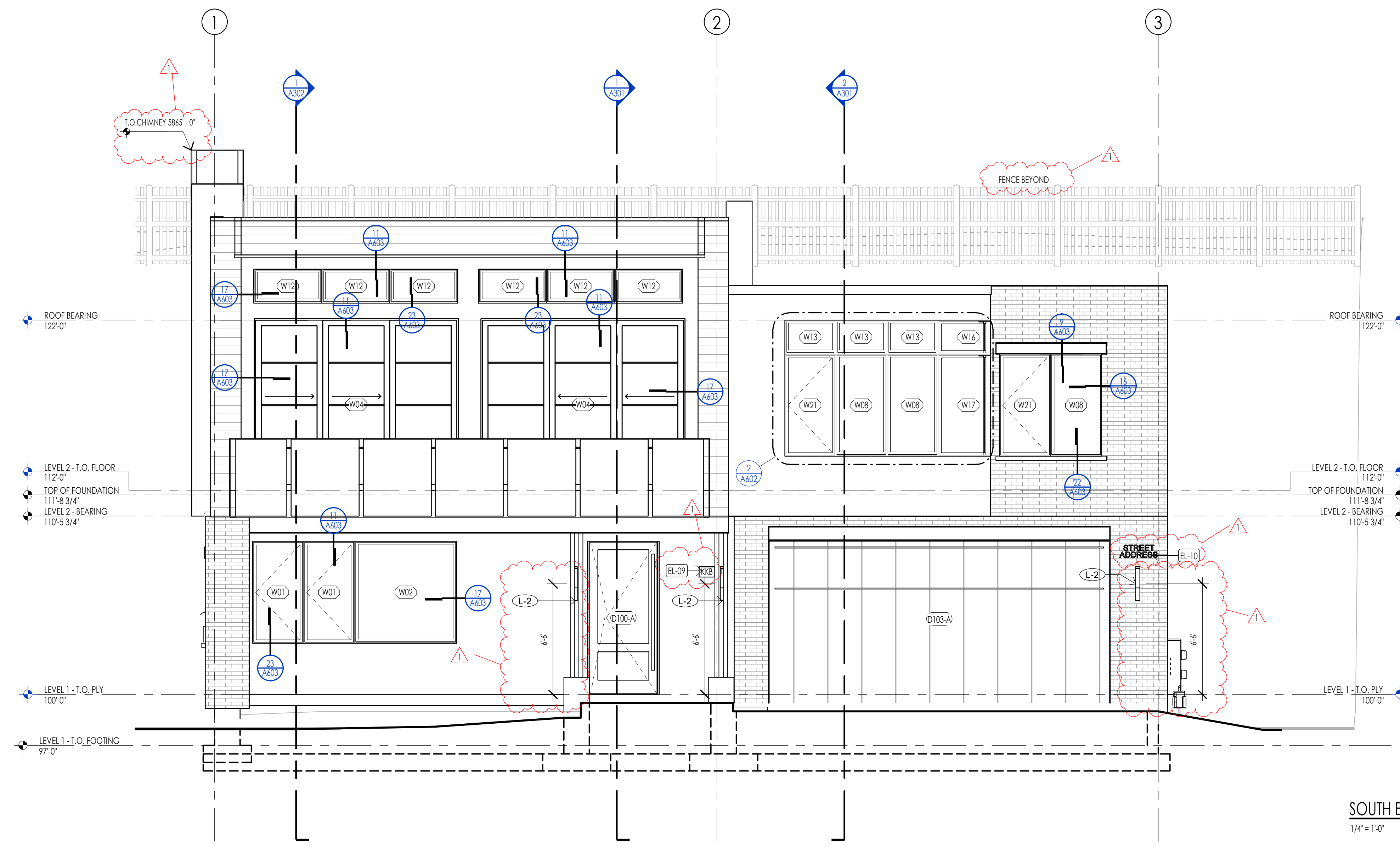
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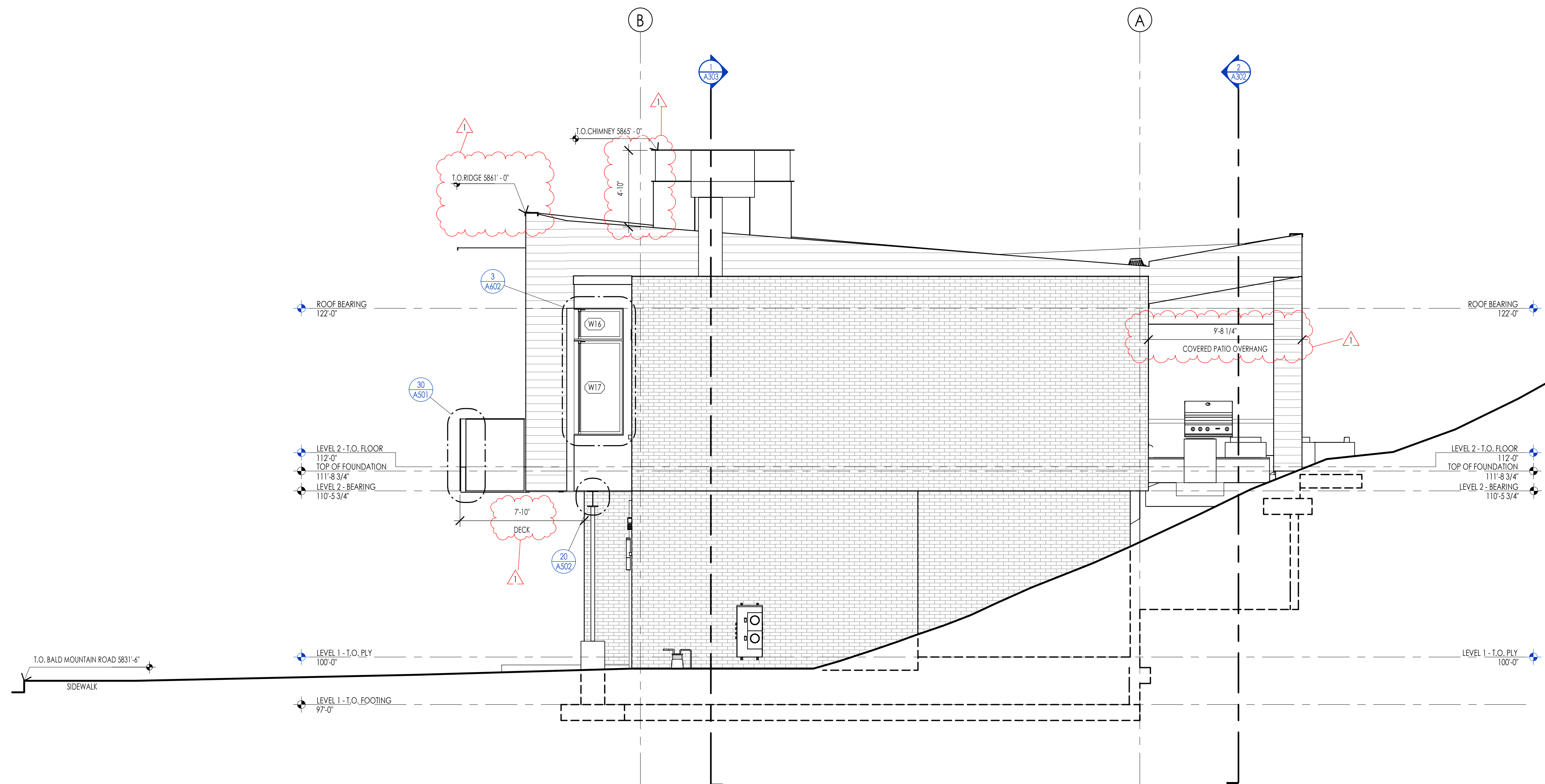
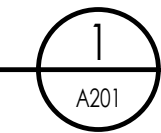
ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	SINGLE PLY ROOFING MEMBRANE SYSTEM
	2X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR BRICK VENEER
	METAL PANEL WALL SYSTEM

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES	
KEYNOTES	
EL-09	AN APPROVED KEY BOX SHALL BE INSTALLED, WITH THE APPROPRIATE KEYS FOR EMERGENCY FIRE DEPARTMENT ACCESS IN A LOCATION APPROVED BY THE FIRE DEPARTMENT. THE KEY BOX SHALL BE A KNOX BOX BRAND AND SIZED TO ACCOMMODATE KEYS TO EVERY DOOR OF THE PROJECT. LOCATION NO MORE THAN 3FT HOR. FROM MAIN DOOR AND NO MORE THAN 5.5FT VERTICAL- VERIFY LOCAL CODE.
EL-10	APPROVED ADDRESS NUMBERS SHALL BE PLACED IN SUCH A POSITION TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE ROAD FRONTING THE PROPERTY. NUMBERS AND LETTERS SHALL BE A MINIMUM OF FOUR (4) INCHES TALL, HAVE A MINIMUM 1/8" BRUSH STROKE, CONTRAST WITH THEIR BACKGROUND, AND BE POSITIONED A MINIMUM OF FORTY-EIGHT (48) INCHES ABOVE FINAL GRADE.



SOUTH ELEVATION  
1/4" = 1'-0"



EAST ELEVATION  
1/4" = 1'-0"



WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:

1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
EXTERIOR ELEVATIONS

SHEET NUMBER:  
A201

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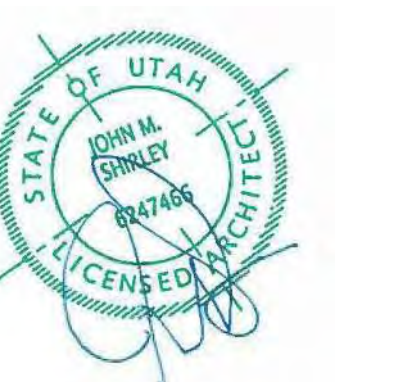




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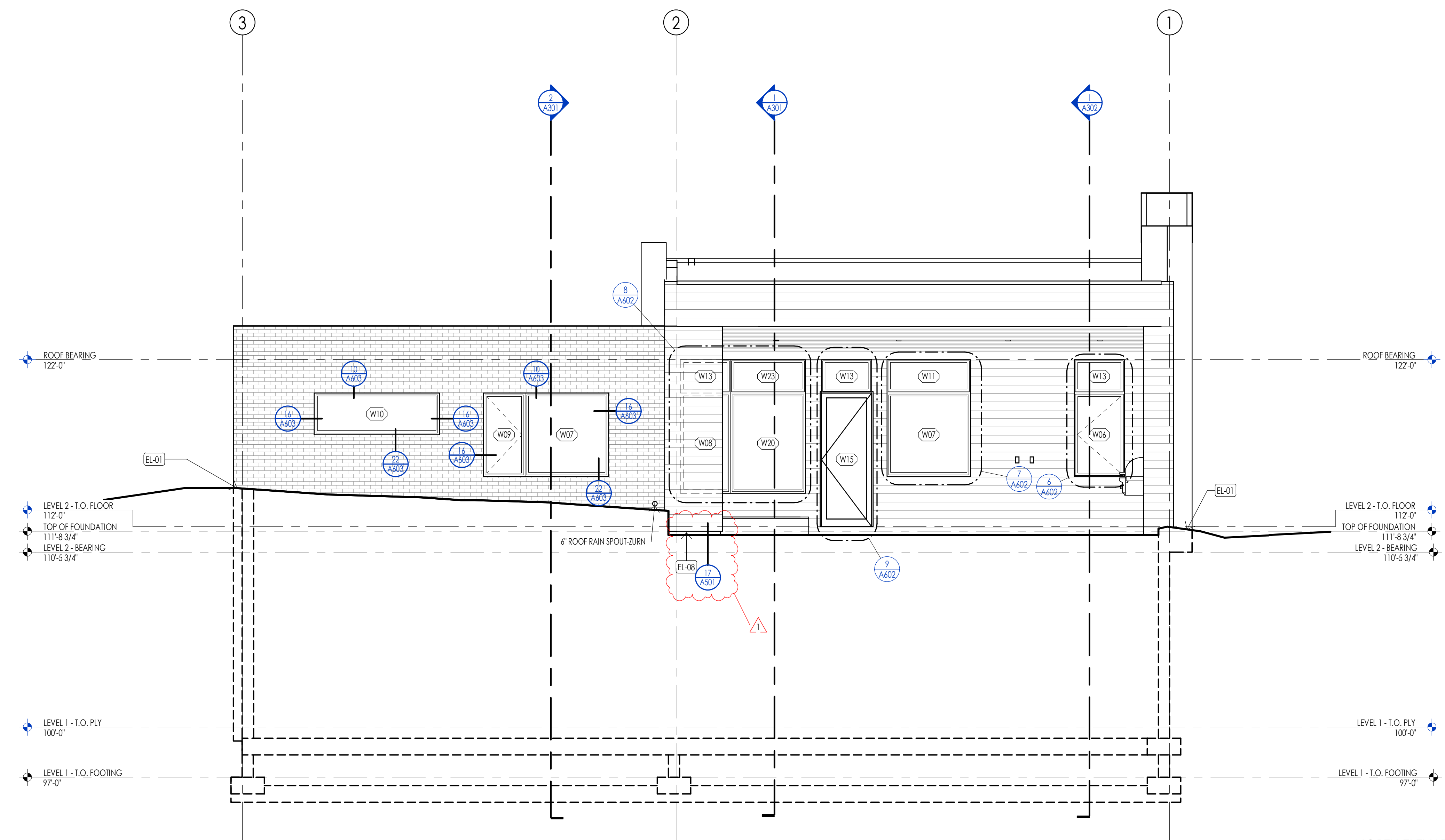


ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	SINGLE PLY ROOFING MEMBRANE SYSTEM
	2X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR BRICK VENEER
	METAL PANEL WALL SYSTEM

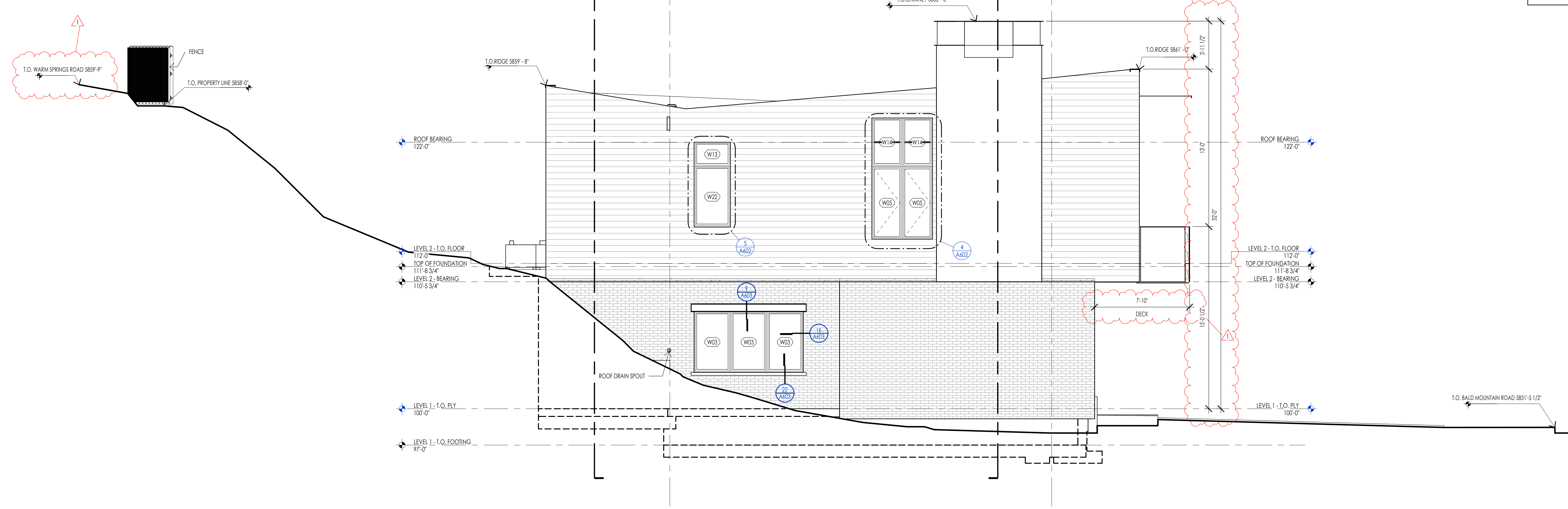
NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES

KEYNOTES	
EL-01	CONTRACTOR SHALL VERIFY THAT ALL GRADE SLOPES AWAY FROM BUILDING. SLOPE SHALL BE 4" SLOPE IN FIRST 10'-0"
EL-08	CONTRACTOR SHALL PROVIDE FLASHING AT ALL SIDING / MATERIAL TRANSITIONS WHETHER SHOWN OR NOT.



NORTH ELEVATION  
1/4" = 1'-0"



WEST ELEVATION  
1/4" = 1'-0"

WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

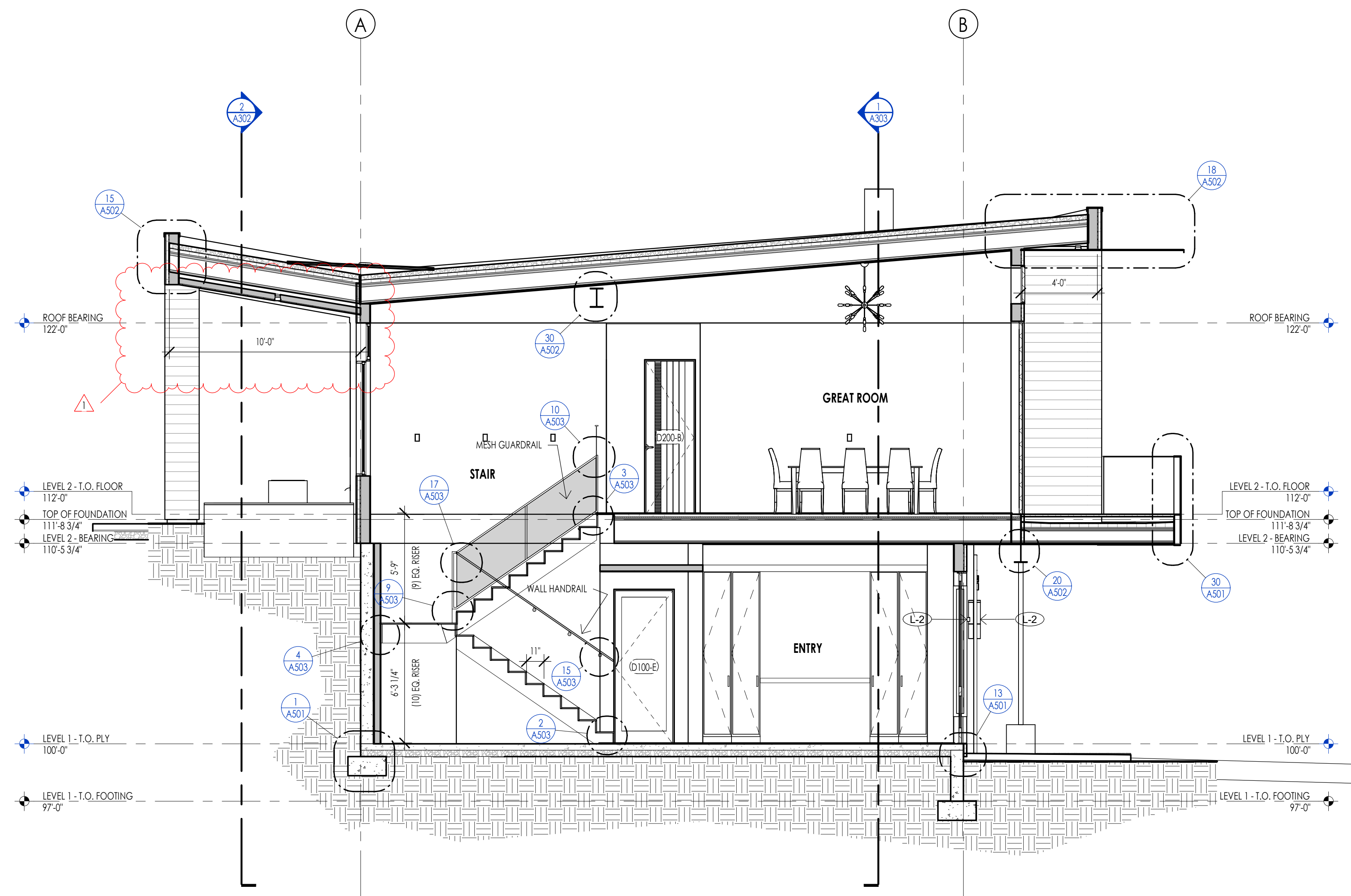
PROJECT NC22023.34  
DATE: 2023.06.30

- REVISIONS:
- 04-27-2023 PER CITY COMMENTS
  - 06-14-2023 PER CITY COMMENTS

SHEET TITLE:  
EXTERIOR ELEVATIONS

SHEET NUMBER:  
A202

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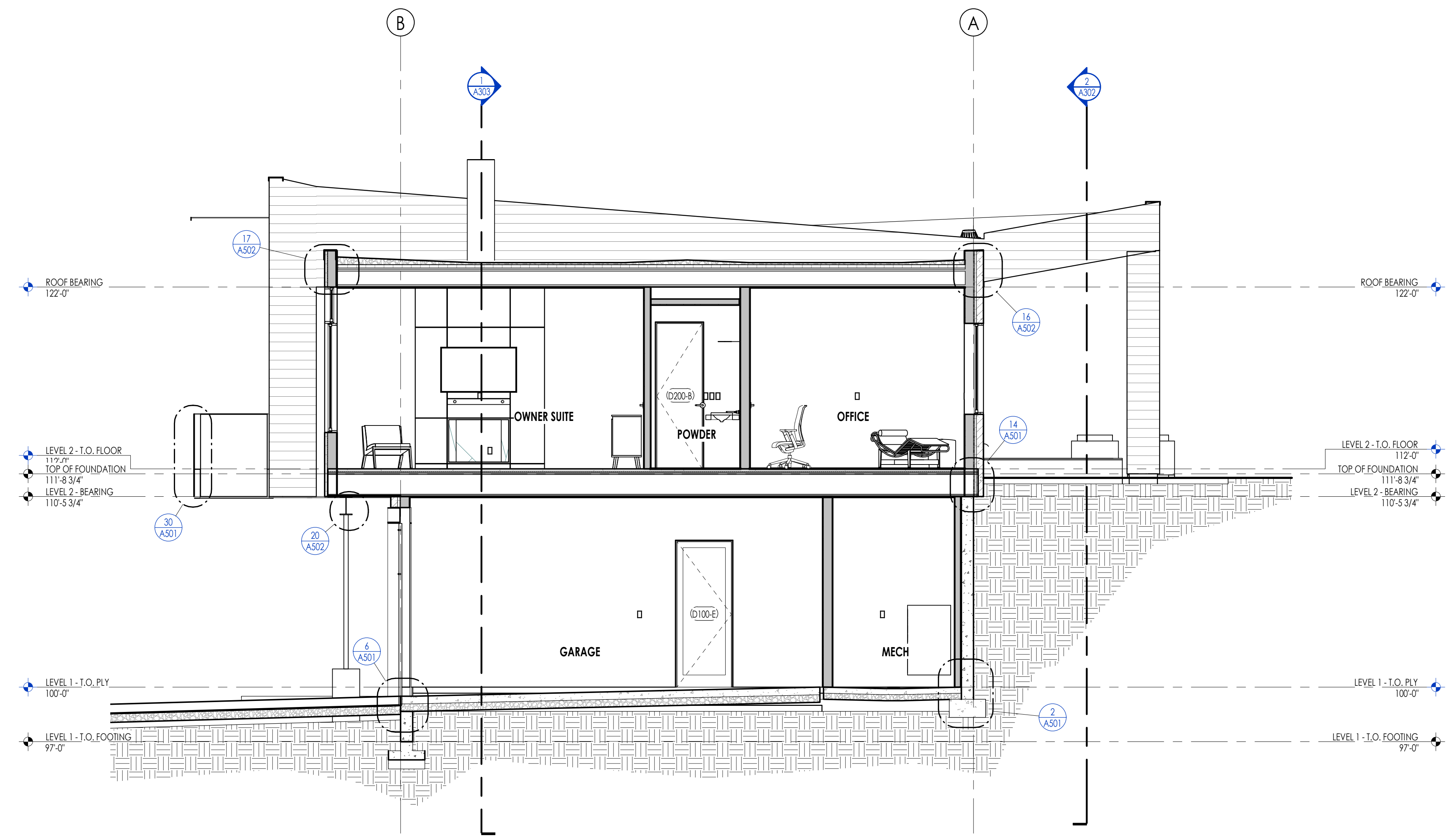


Section 1  
1/4" = 1'-0"

ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	SINGLE PLY ROOFING MEMBRANE SYSTEM
[Hatch Pattern]	2X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES
[Hatch Pattern]	EXTERIOR BRICK VENEER
[Hatch Pattern]	METAL PANEL WALL SYSTEM

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES



Section 2  
1/4" = 1'-0"



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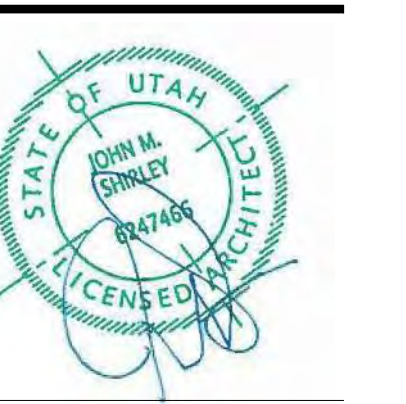
WARM SPRINGS RESIDENCE #34  
180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
BUILDING SECTIONS

SHEET NUMBER:  
A301

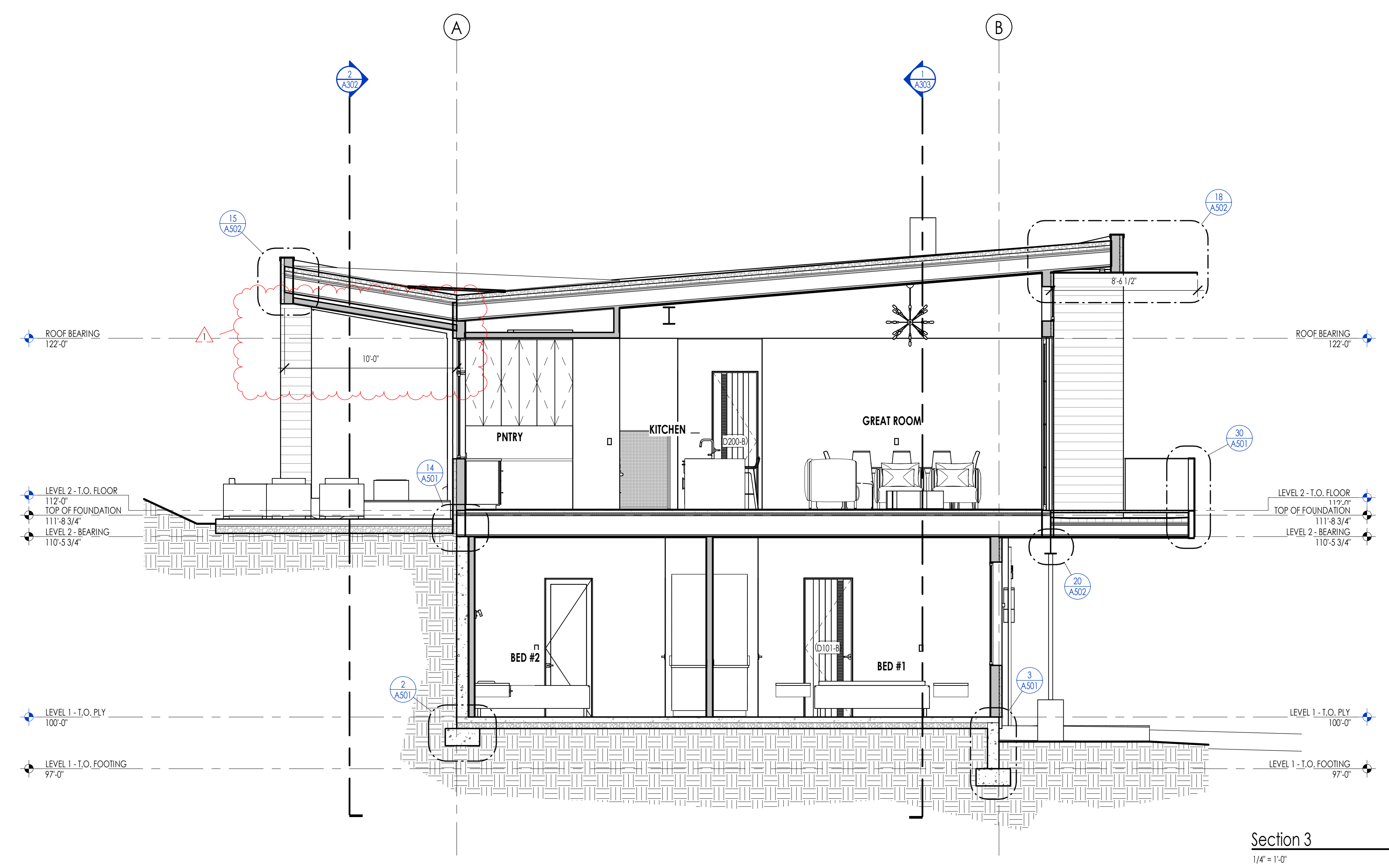
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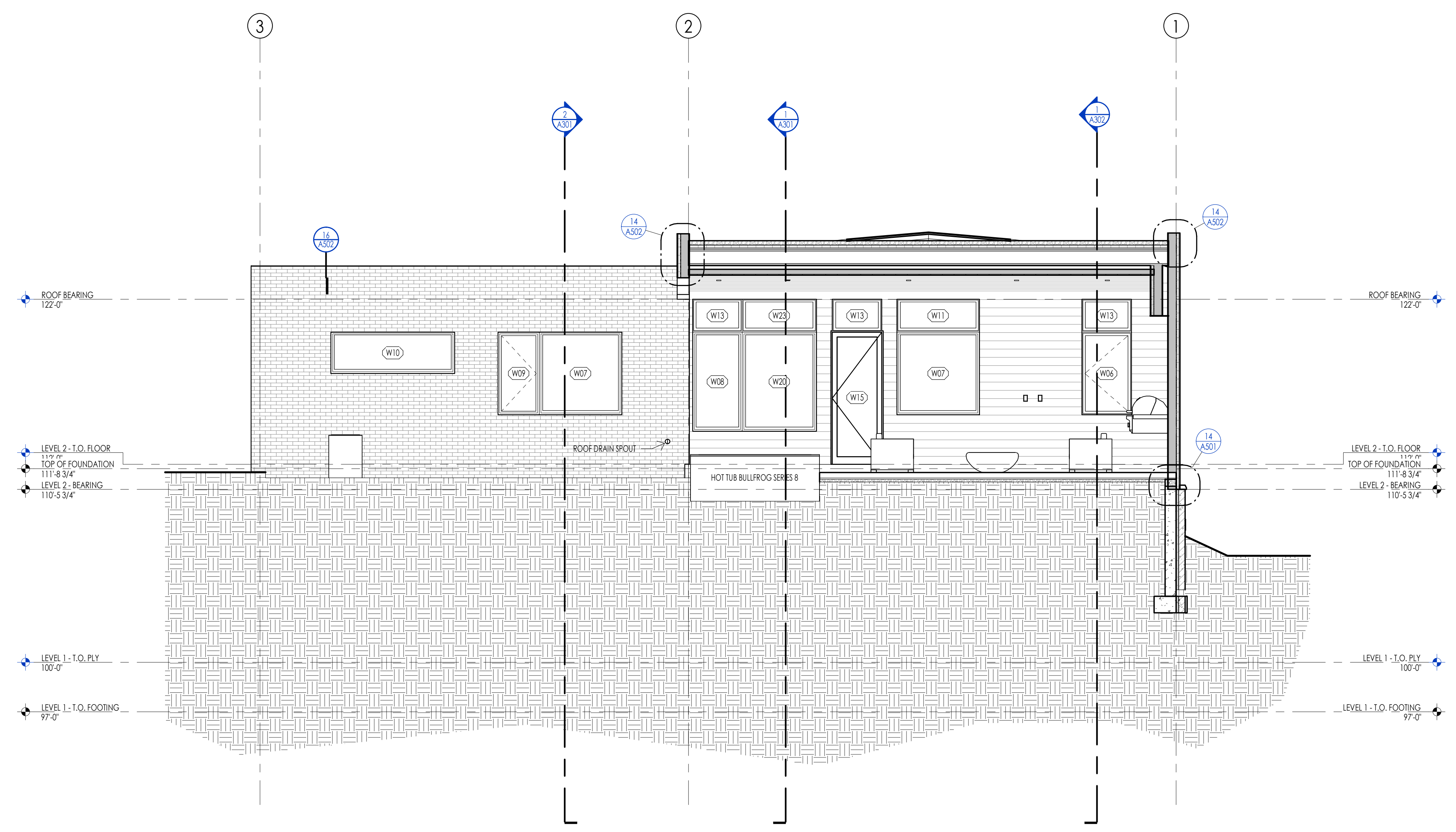
ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
	SINGLE PLY ROOFING MEMBRANE SYSTEM
	2X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES
	EXTERIOR BRICK VENEER
	METAL PANEL WALL SYSTEM

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES	
1	



Section 3  
1/4" = 1'-0"



Section 4  
1/4" = 1'-0"

WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

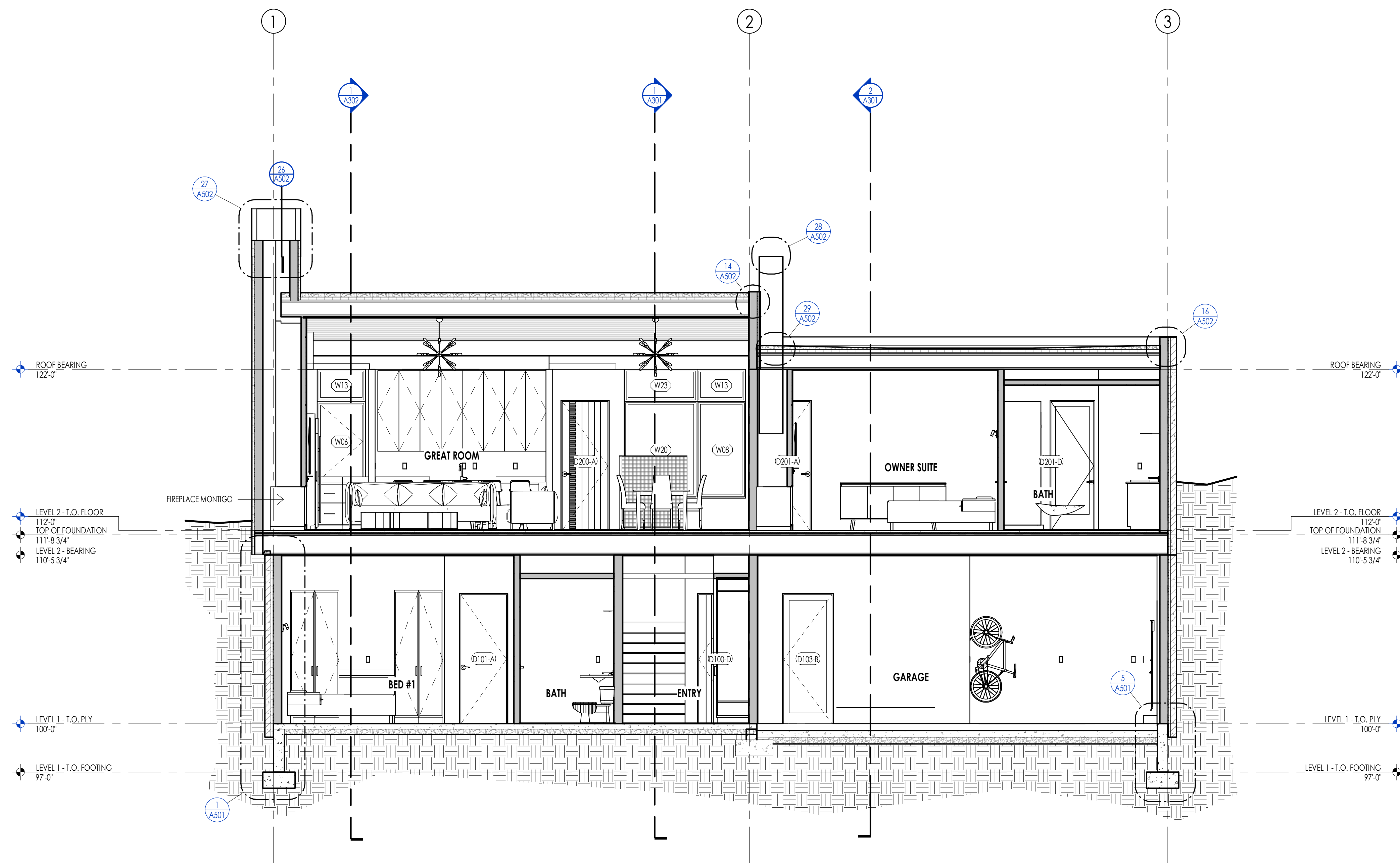
PROJECT NC22023.34  
DATE: 2023.06.30

REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
BUILDING SECTIONS

SHEET NUMBER:  
A302

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Section 5  
1/4" = 1'-0"

ELEVATION/ SECTION MATERIAL LEGEND	
HATCH PATTERN	DESCRIPTION
[Hatch Pattern]	SINGLE PLY ROOFING MEMBRANE SYSTEM
[Hatch Pattern]	2X6 CEDAR CHANNEL LAP VERTICAL SIDING SYSTEM WITH SQUARE EDGES
[Hatch Pattern]	EXTERIOR BRICK VENEER
[Hatch Pattern]	METAL PANEL WALL SYSTEM

NOTE: REFER TO MATERIAL SPECIFICATIONS DOCUMENT FOR DETAILED INFORMATION REGARDING EACH FINISH MATERIAL.

ELEVATION/ SECTION KEYNOTES	



**Think**  
Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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**WARM SPRINGS RESIDENCE #34**  
180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:

SHEET TITLE:  
BUILDING SECTIONS

SHEET NUMBER:  
**A303**

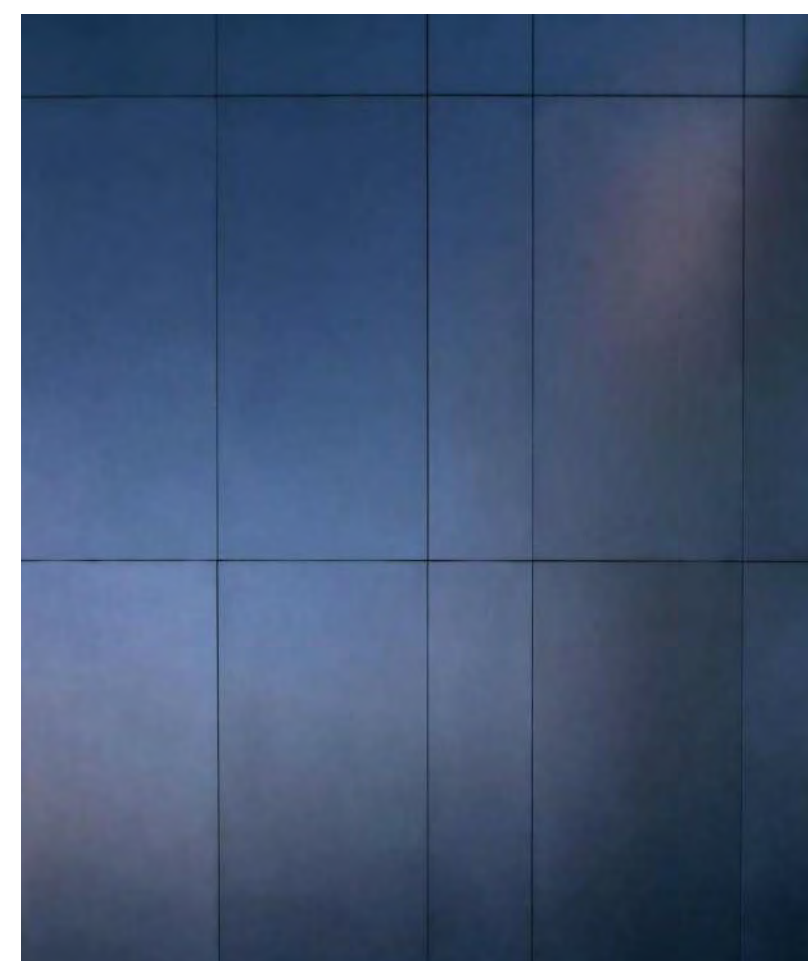
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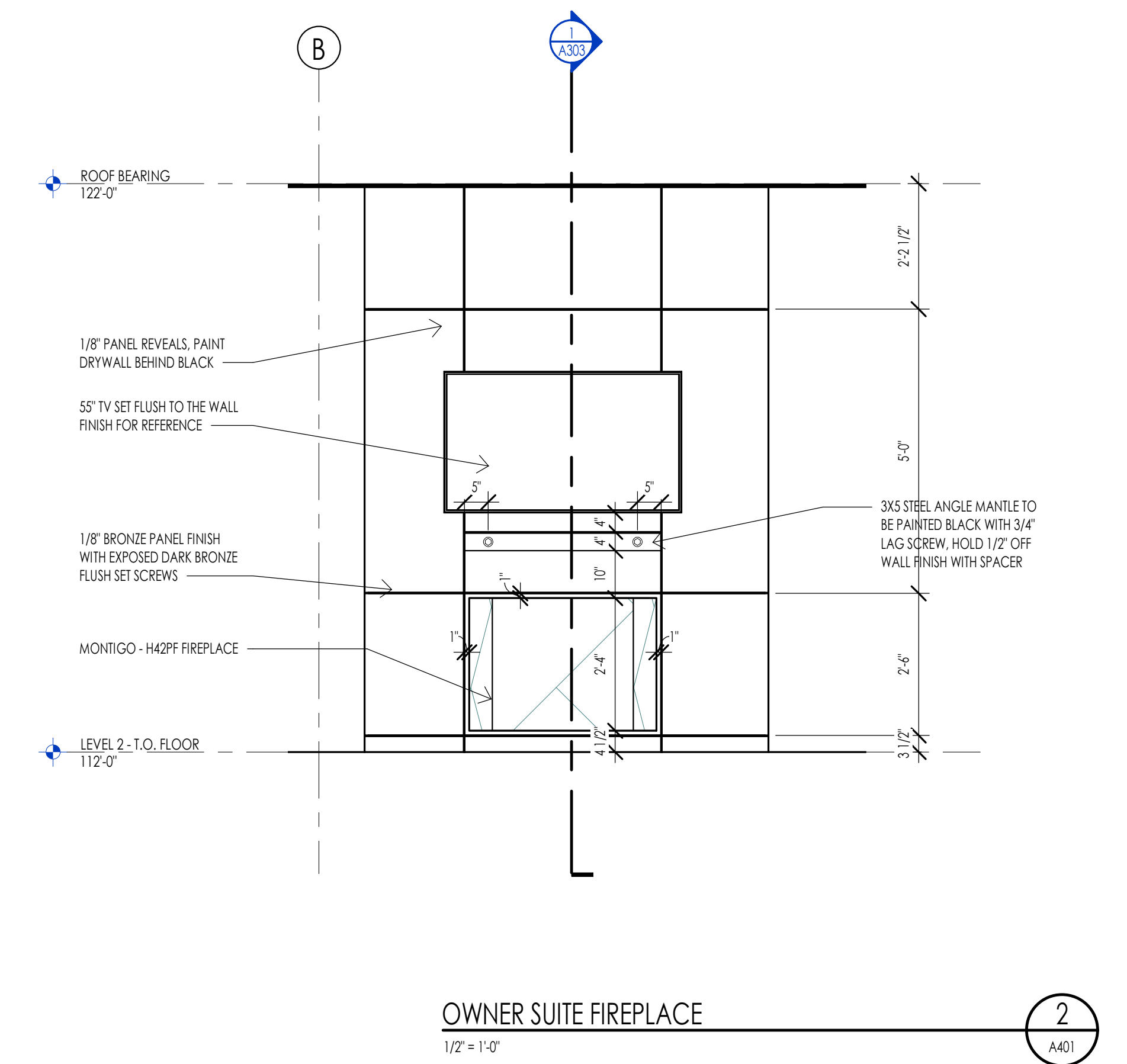
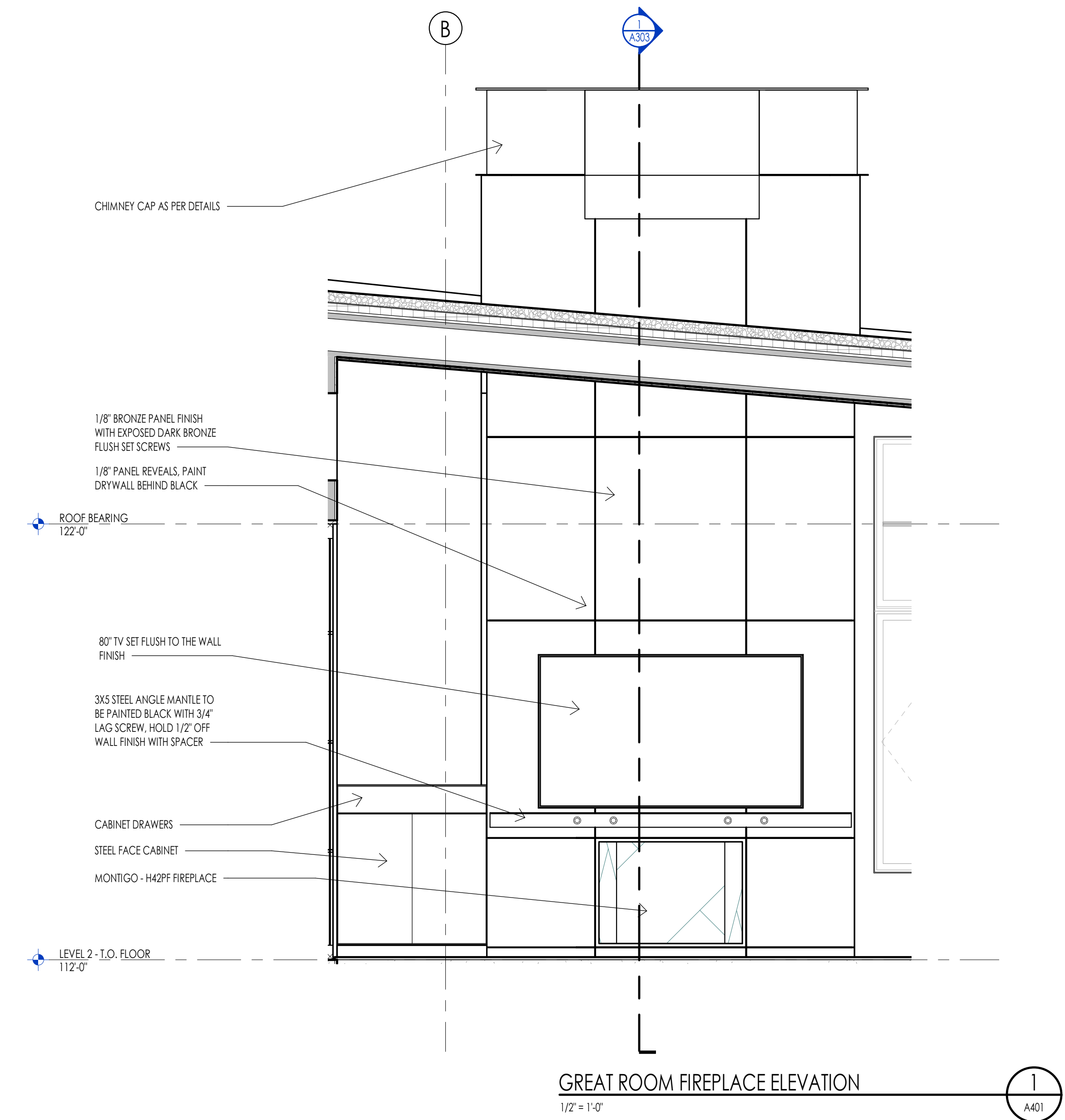
GREAT ROOM INTERIOR VIEW

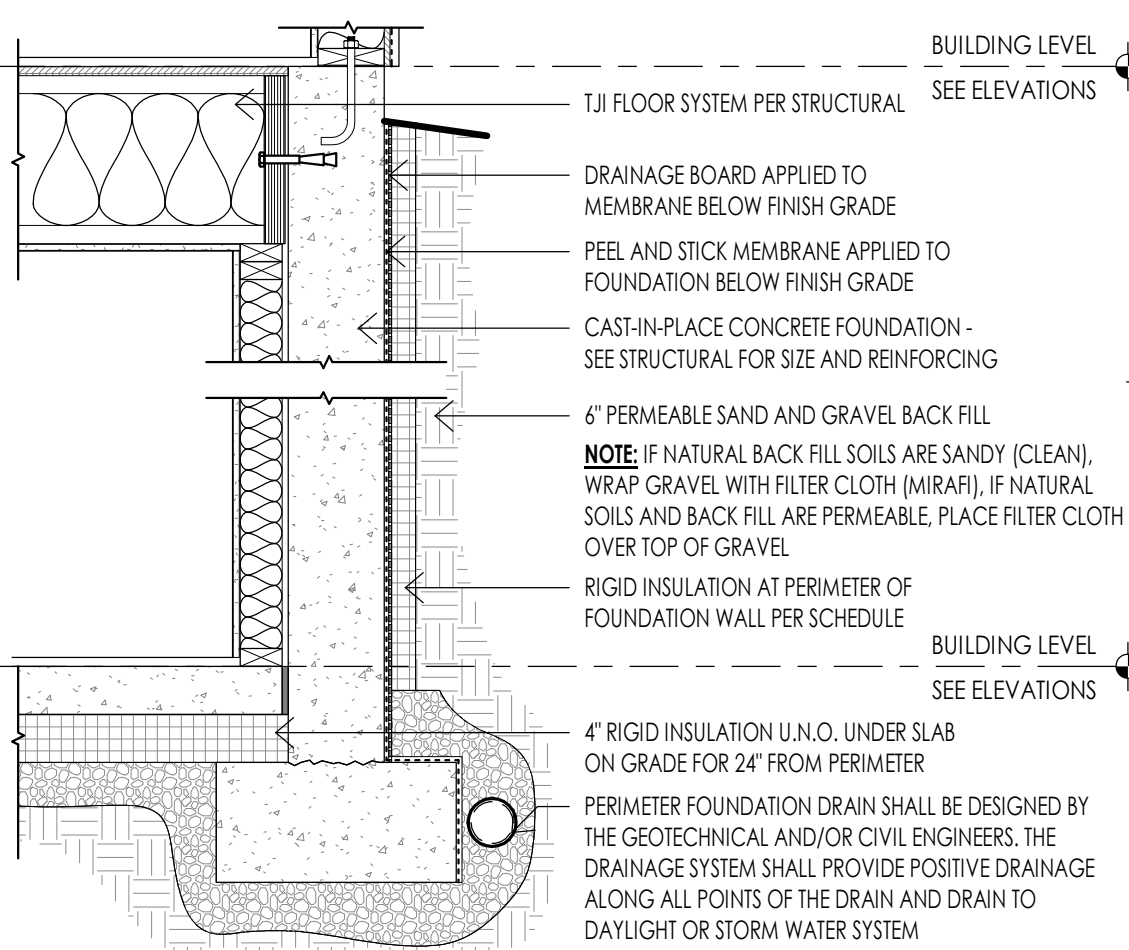


OUTDOOR LIVING VIEW

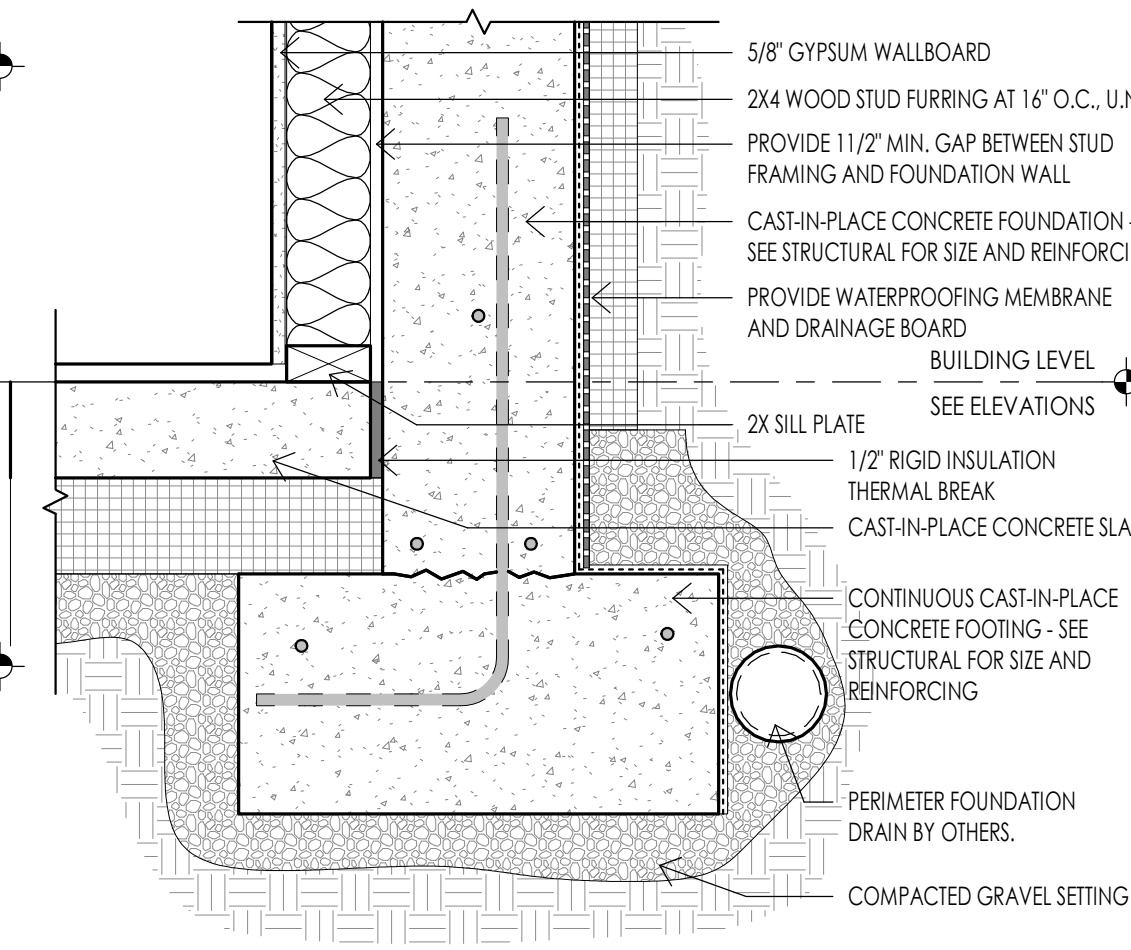


STEEL FIREPLACE SURROUND

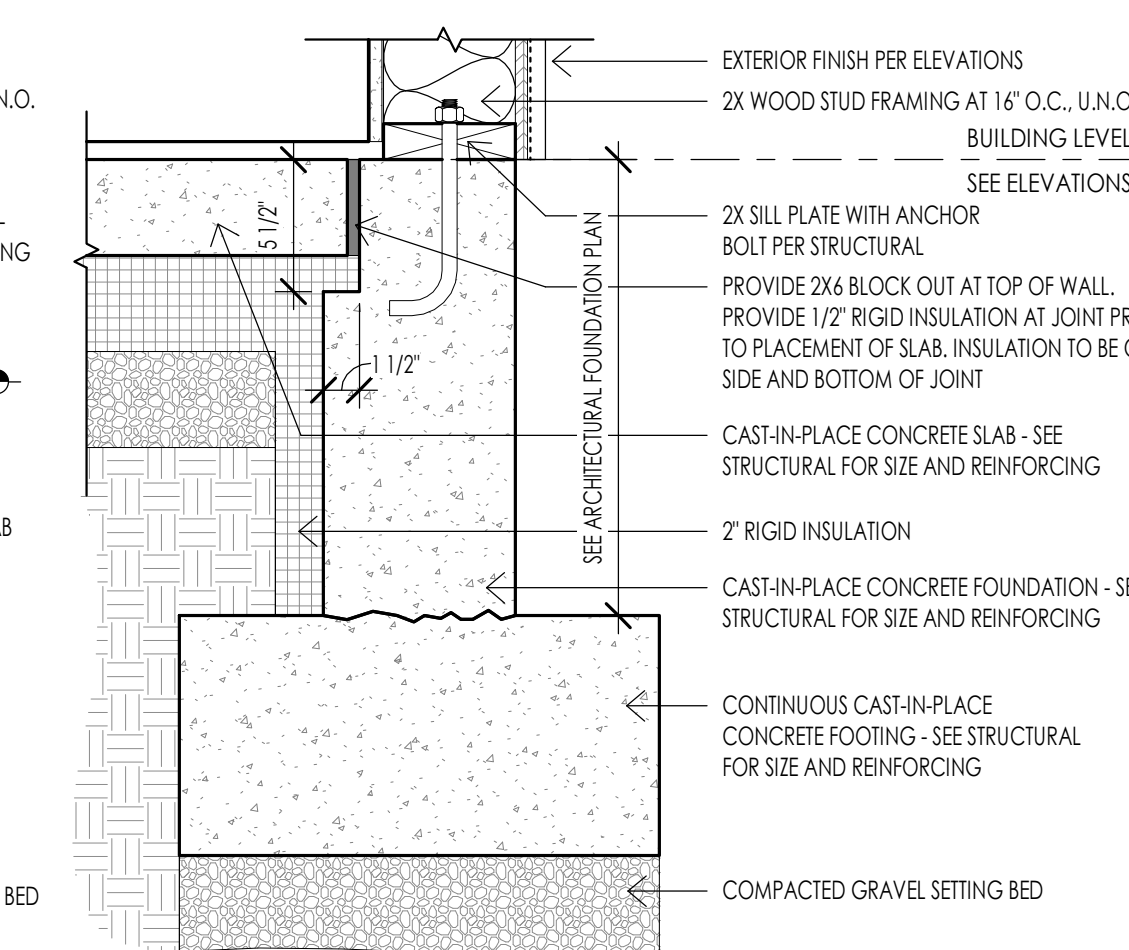




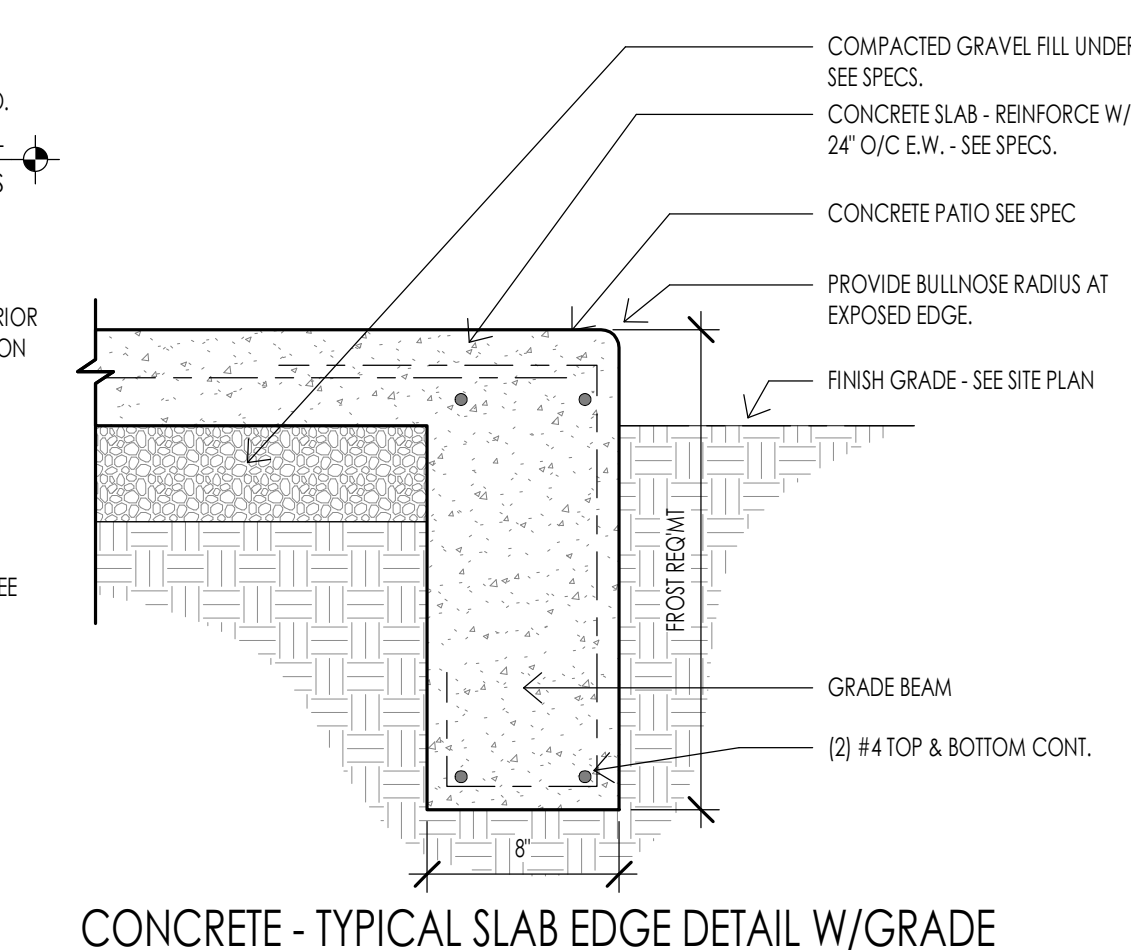
**CONCRETE - TYPICAL FOUNDATION WATERPROOFING** 1  
3/4" = 1'-0"



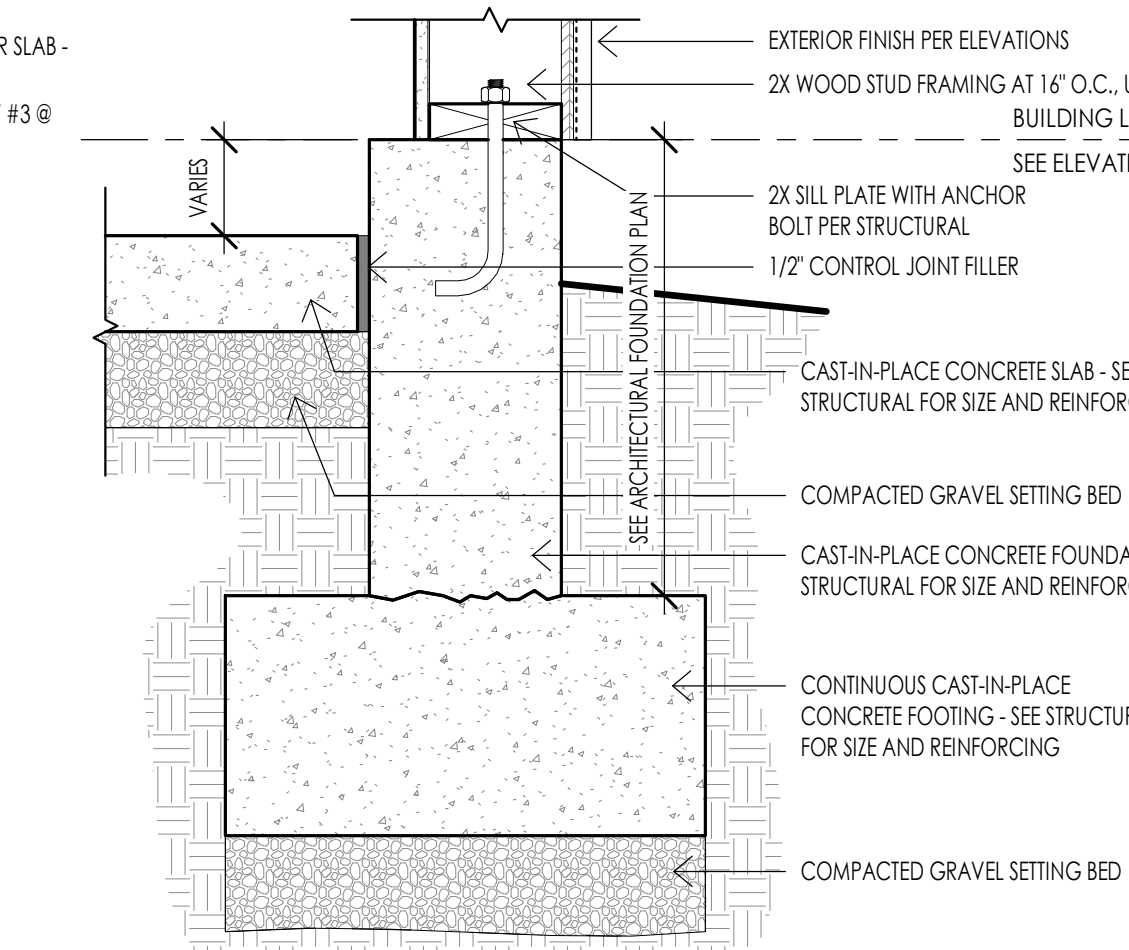
**CONCRETE - TYPICAL FOUNDATION FURR OUT WALL** 2  
1 1/2" = 1'-0"



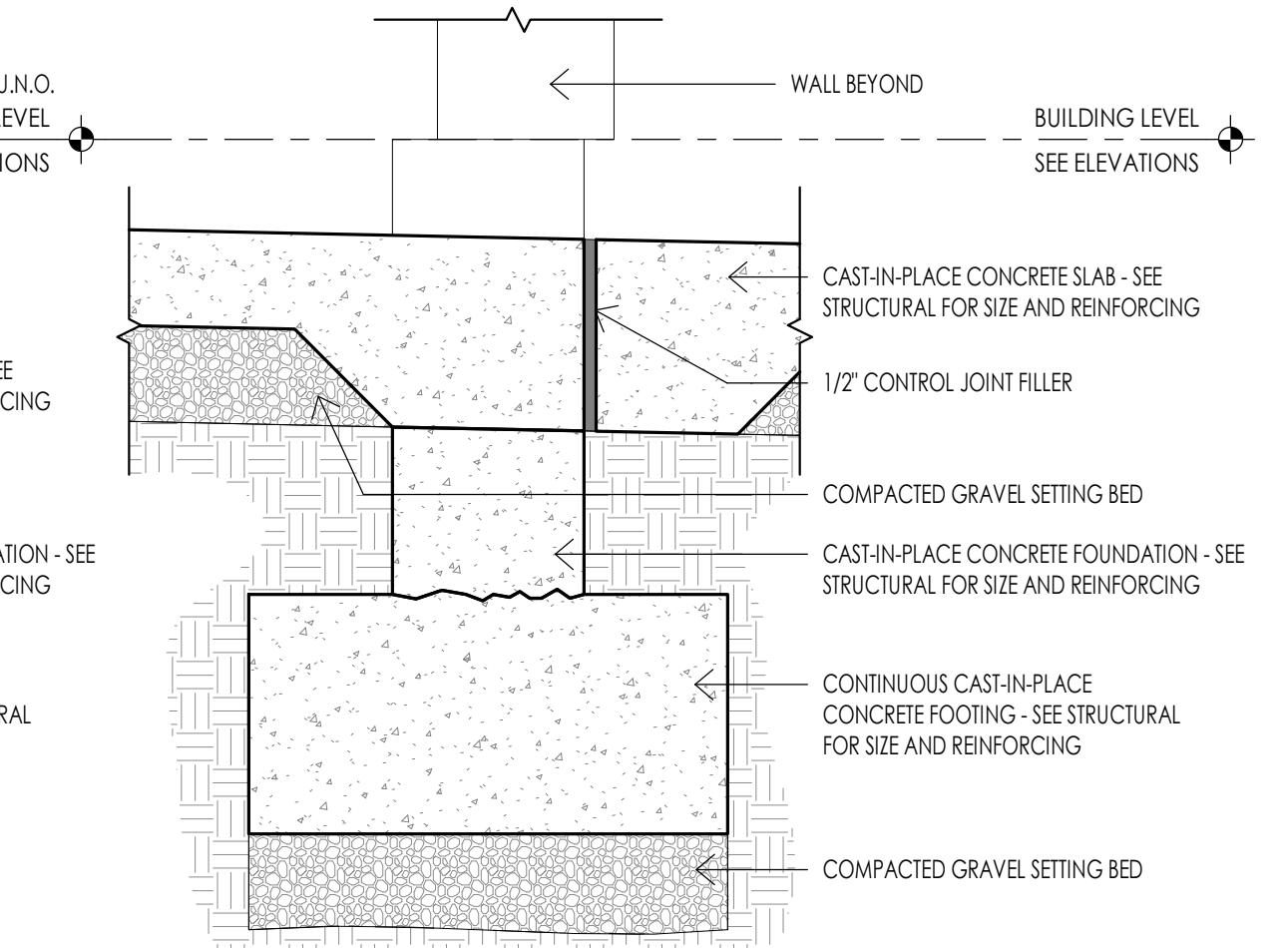
**CONCRETE - FOUNDATION DETAIL AT WALKOUT** 3  
1 1/2" = 1'-0"



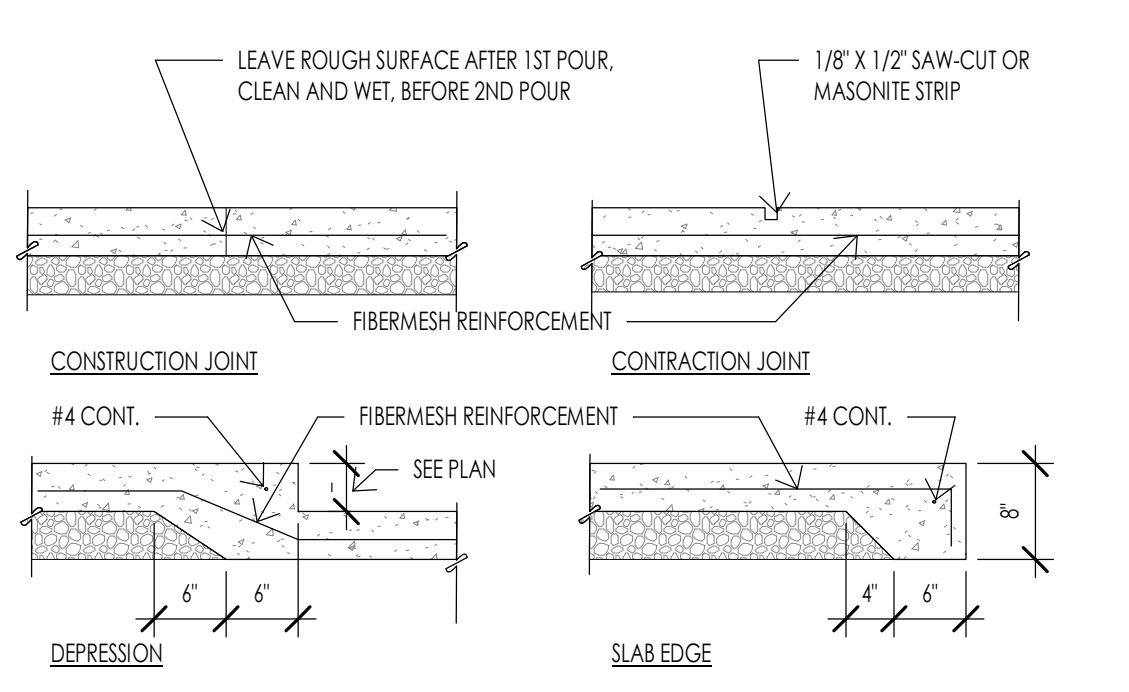
**CONCRETE - TYPICAL SLAB EDGE DETAIL W/ GRADE BEAM** 4  
1 1/2" = 1'-0"



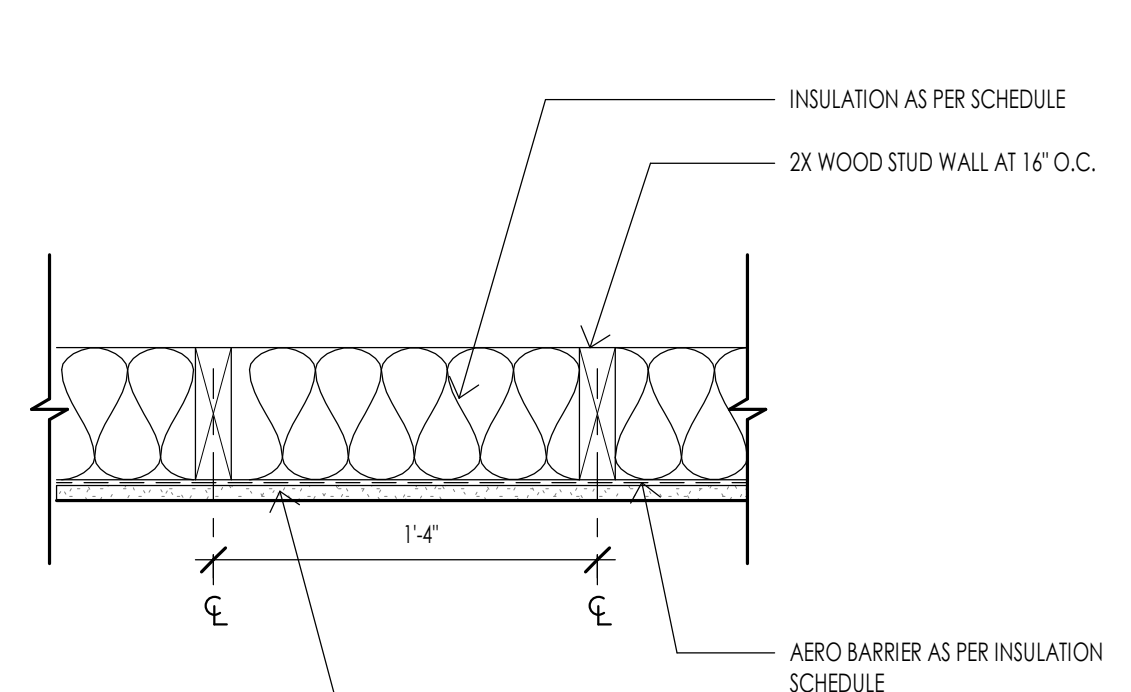
**CONCRETE - FOUNDATION DETAIL AT GARAGE** 5  
1 1/2" = 1'-0"



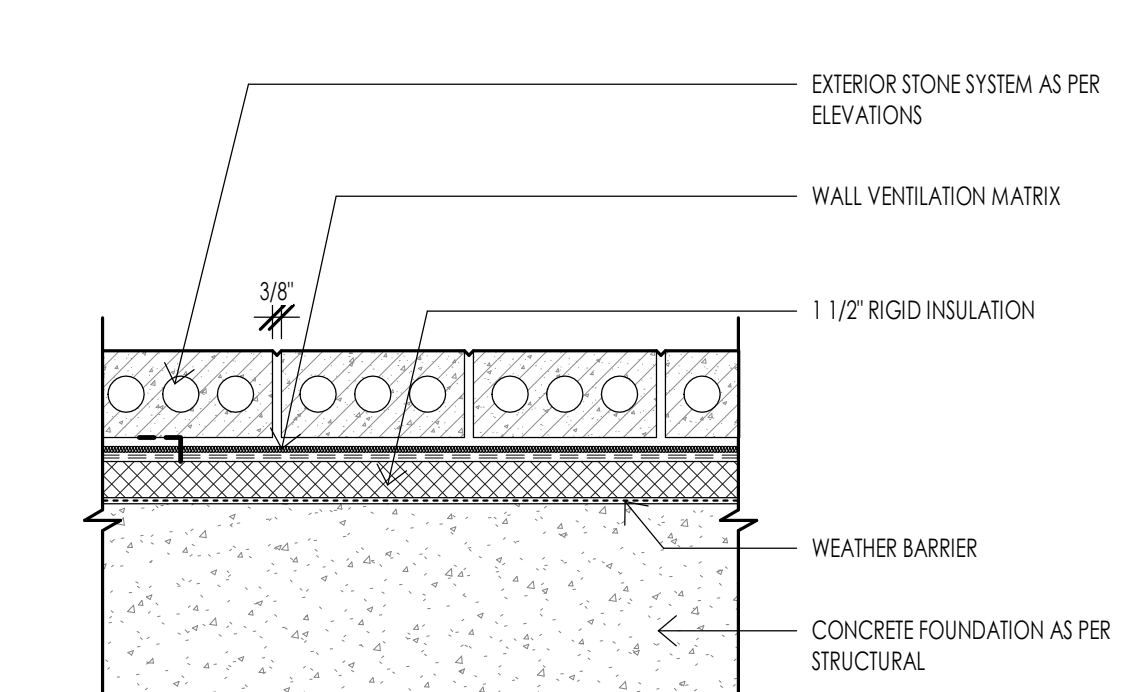
**CONCRETE - FOUNDATION DETAIL AT GARAGE DOOR** 6  
1 1/2" = 1'-0"



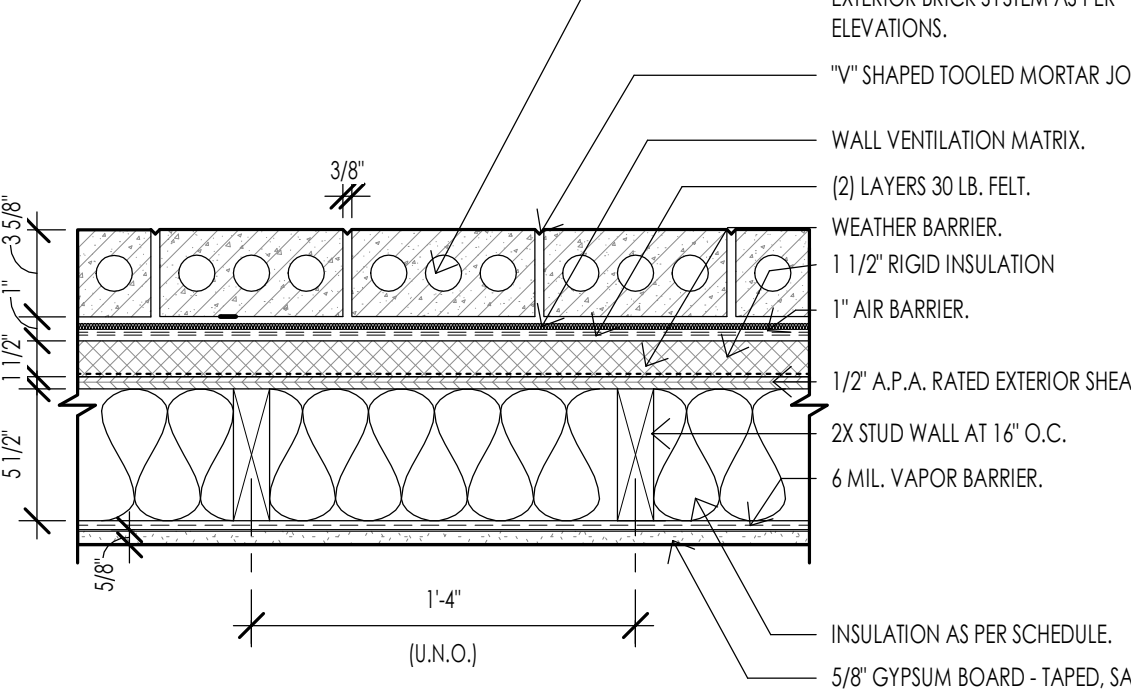
**CONCRETE - TYPICAL SLAB DETAILS** 7  
3/4" = 1'-0"



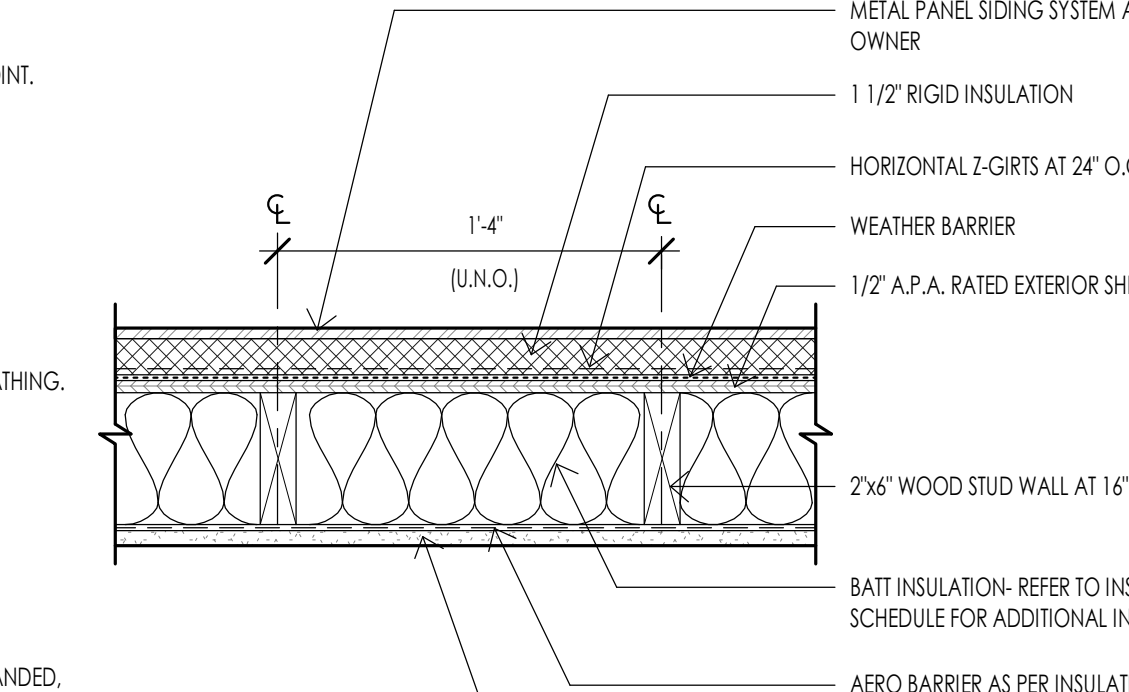
**FRAMING- FURR OUT WALL ASSEMBLY** 8  
1 1/2" = 1'-0"



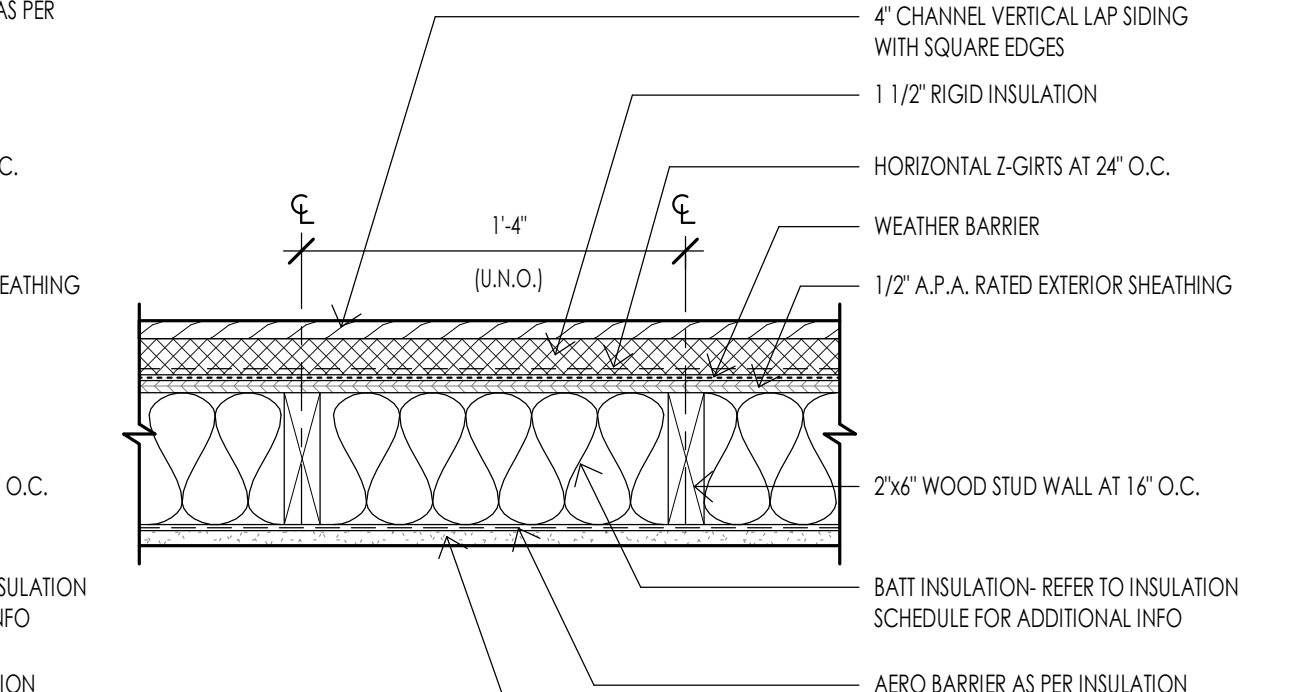
**FRAMING- BRICK ASSEMBLY W/ INSULATION** 9  
1 1/2" = 1'-0"



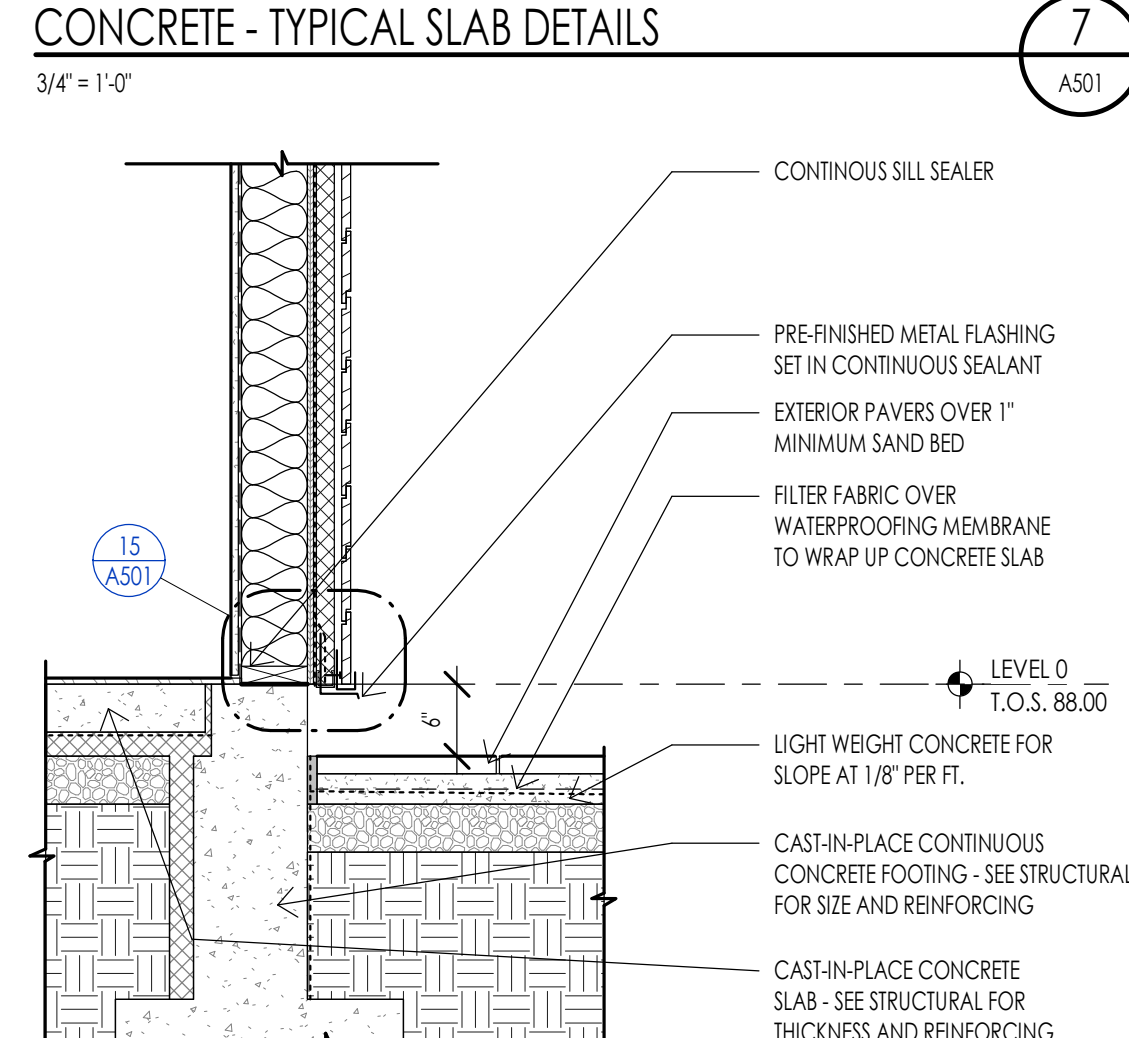
**FRAMING - TYPICAL BRICK MASONRY WALL ASSEMBLY** 10  
1 1/2" = 1'-0"



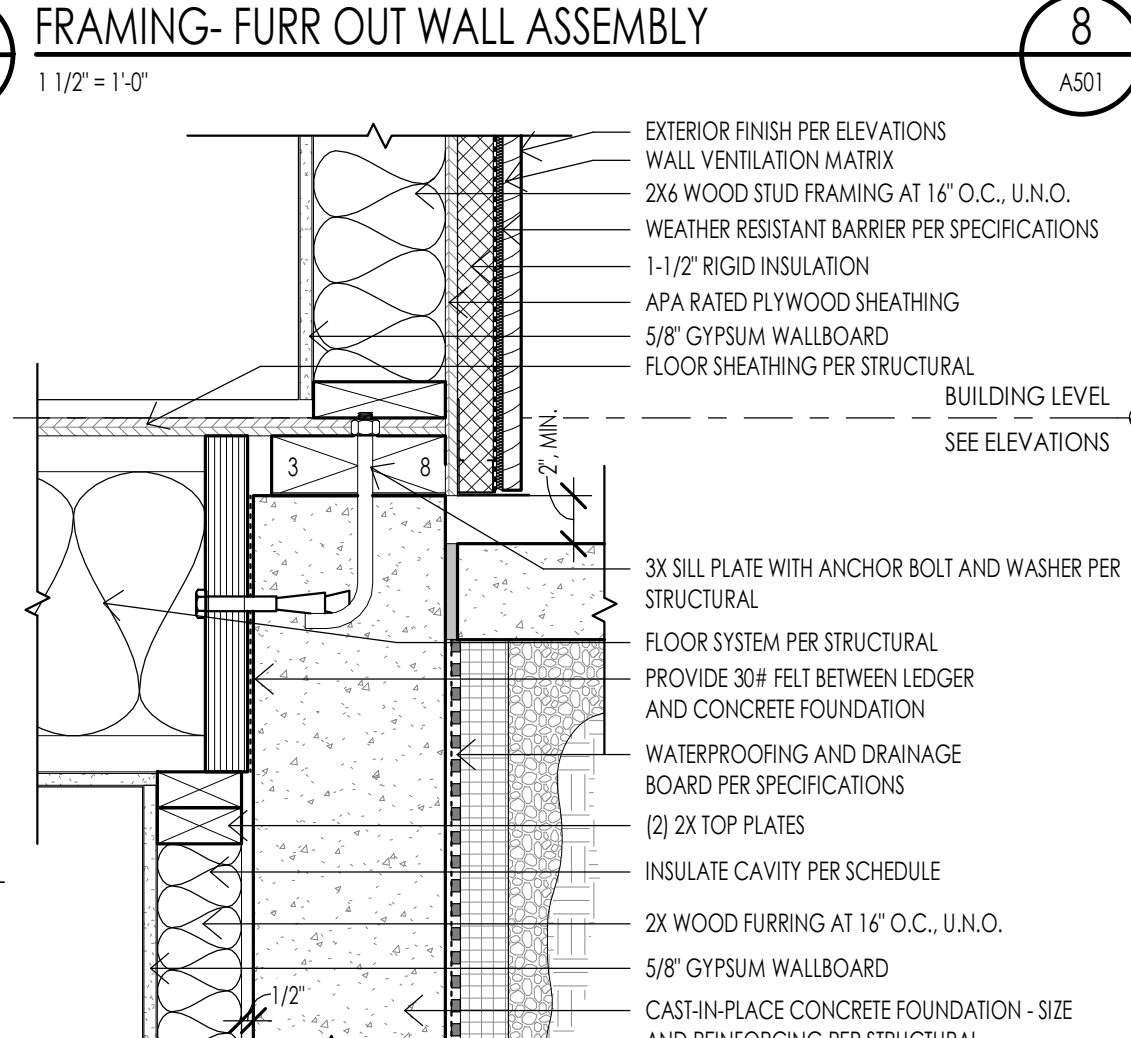
**FRAMING- METAL PANEL WALL ASSEMBLY** 11  
1 1/2" = 1'-0"



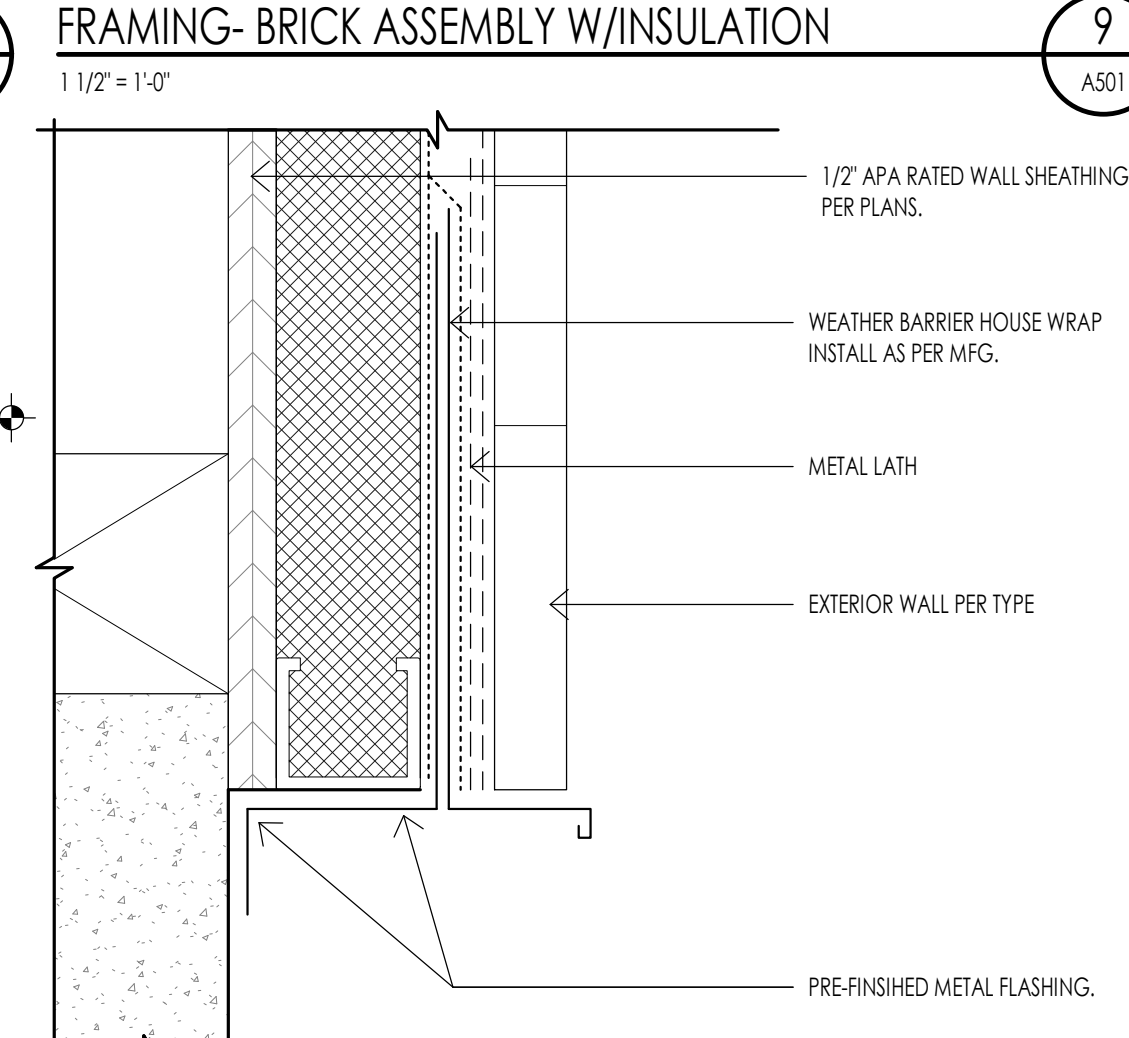
**FRAMING- WOOD SIDING WALL ASSEMBLY** 12  
1 1/2" = 1'-0"



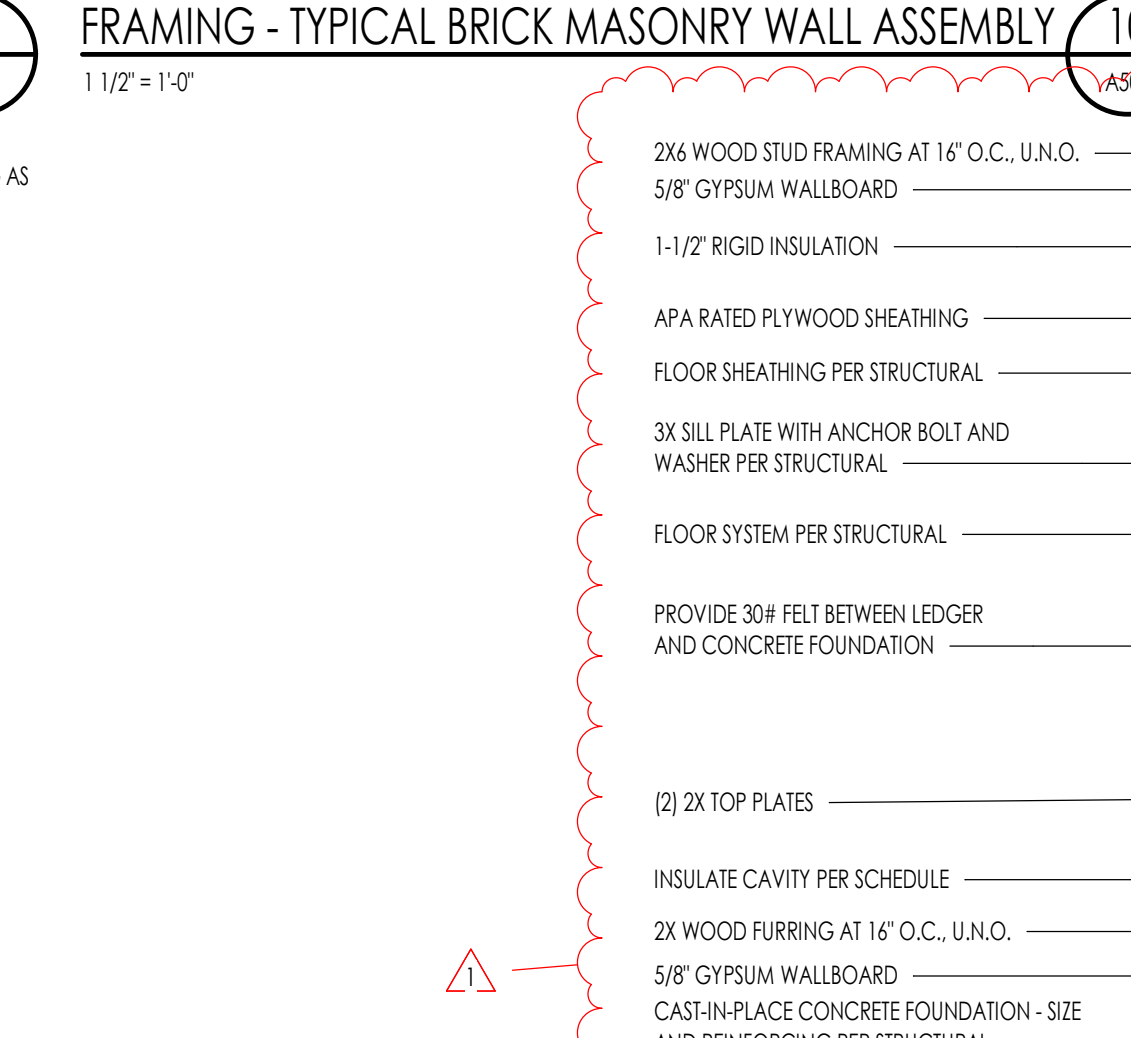
**CONCRETE - FOUNDATION AT PAVERS** 13  
3/4" = 1'-0"



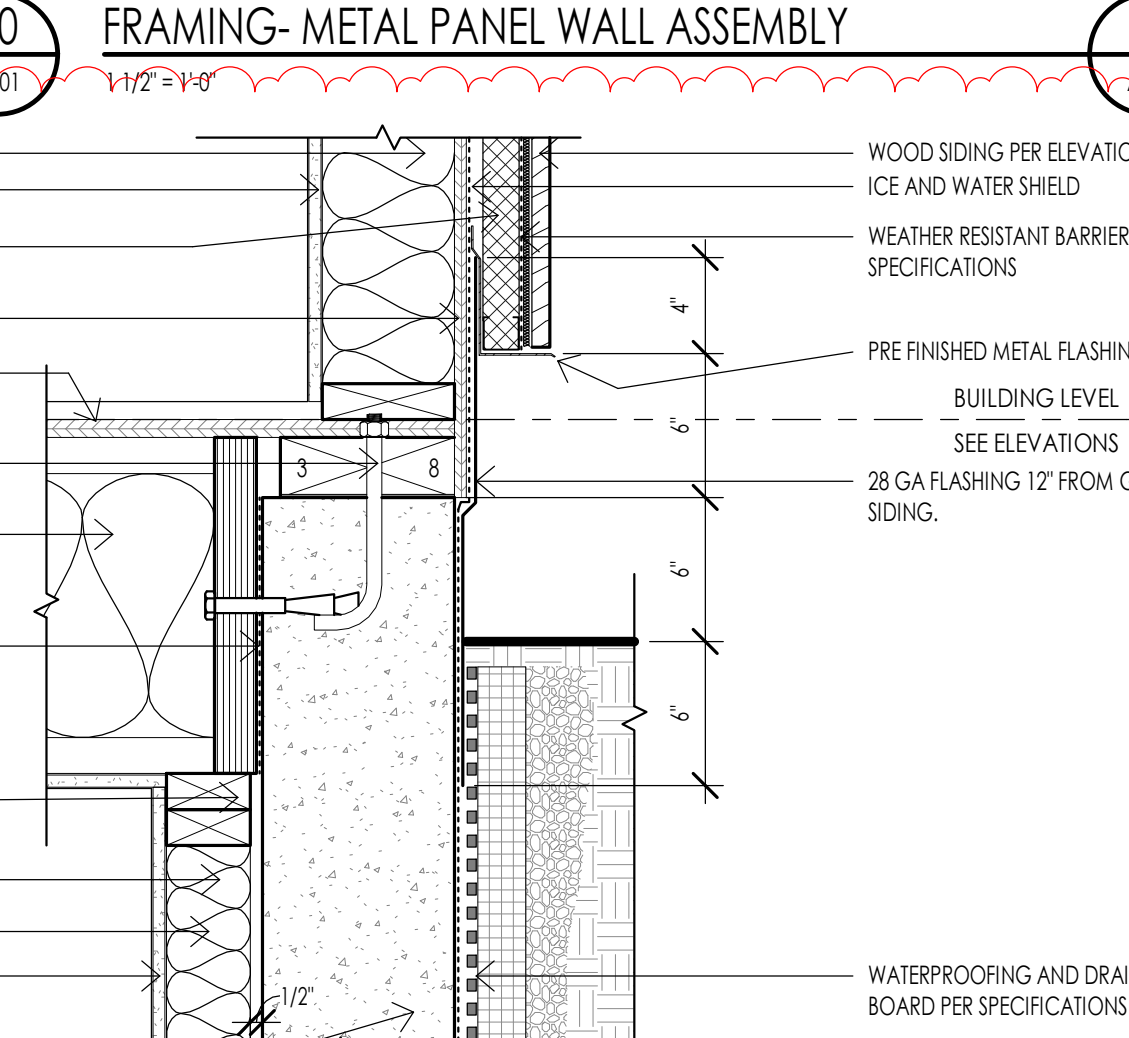
**FLOOR DETAIL AT FOUNDATION/PATIO** 14  
1 1/2" = 1'-0"



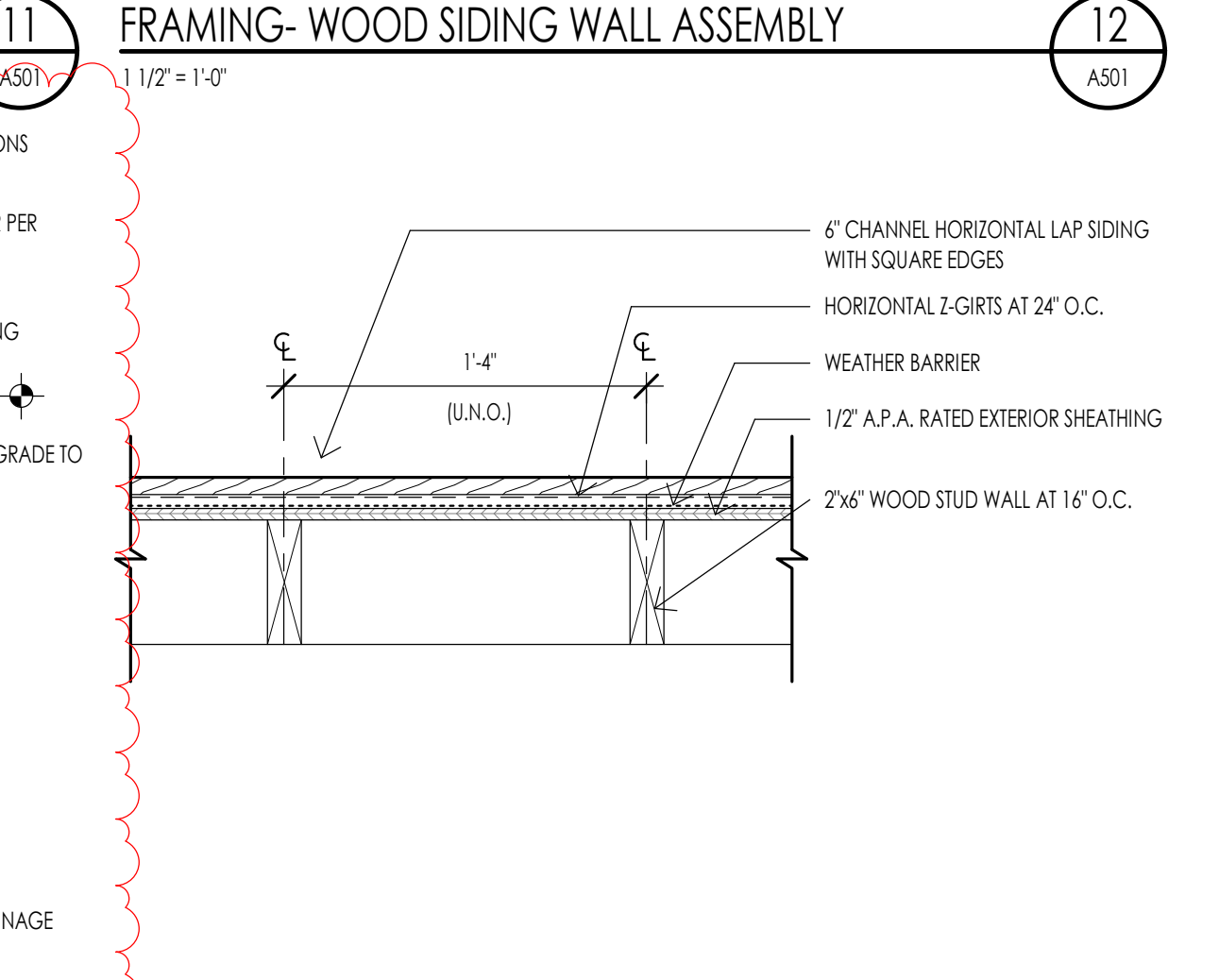
**CONCRETE - WOOD SIDING BASE FLASHING** 15  
6" = 1'-0"



**FRAMING- FLASHING DETAIL - SIDING AT GRADE** 17  
1 1/2" = 1'-0"



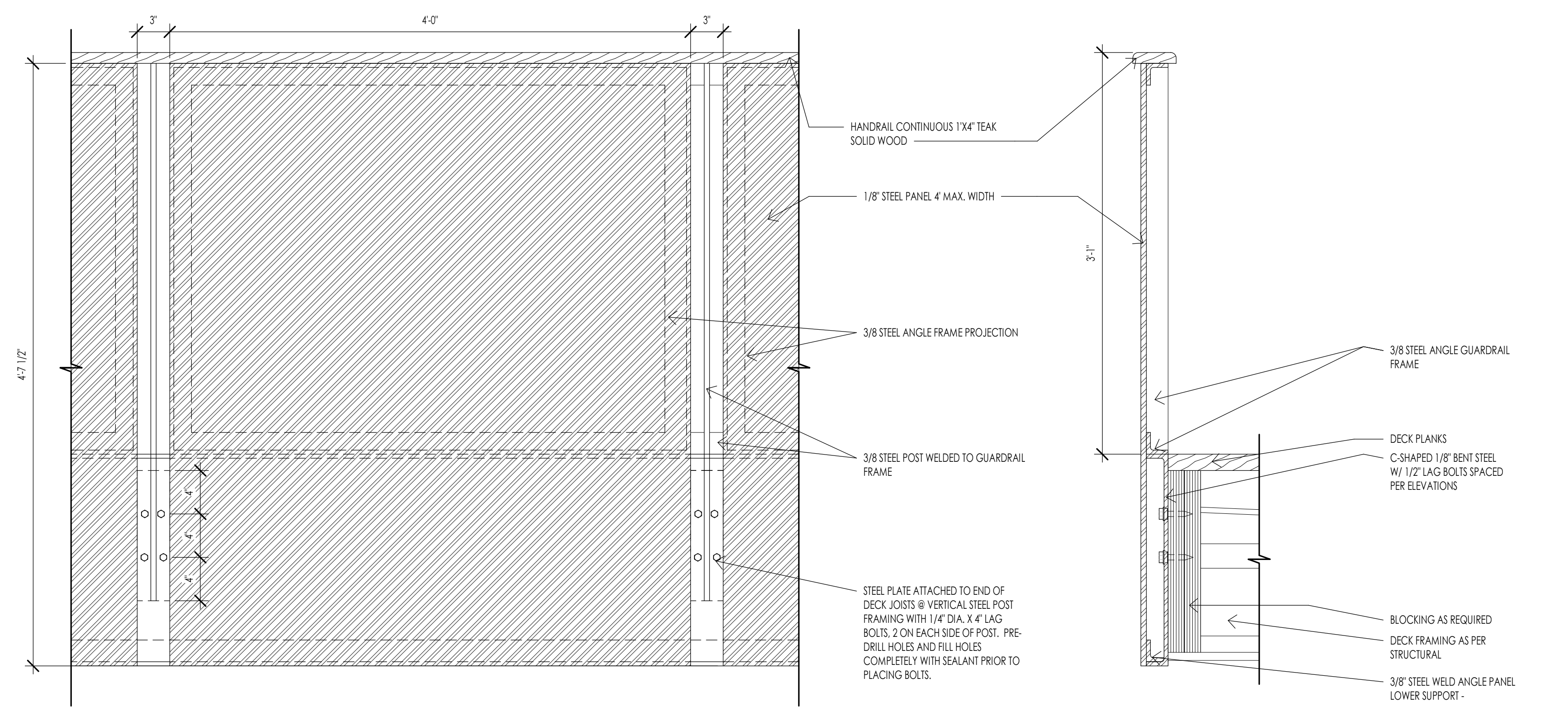
**FRAMING- METAL PANEL WALL ASSEMBLY** 11  
1 1/2" = 1'-0"



**FRAMING- WOOD SIDING WALL ASSEMBLY** 12  
1 1/2" = 1'-0"

**WARM SPRINGS RESIDENCE #34**

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



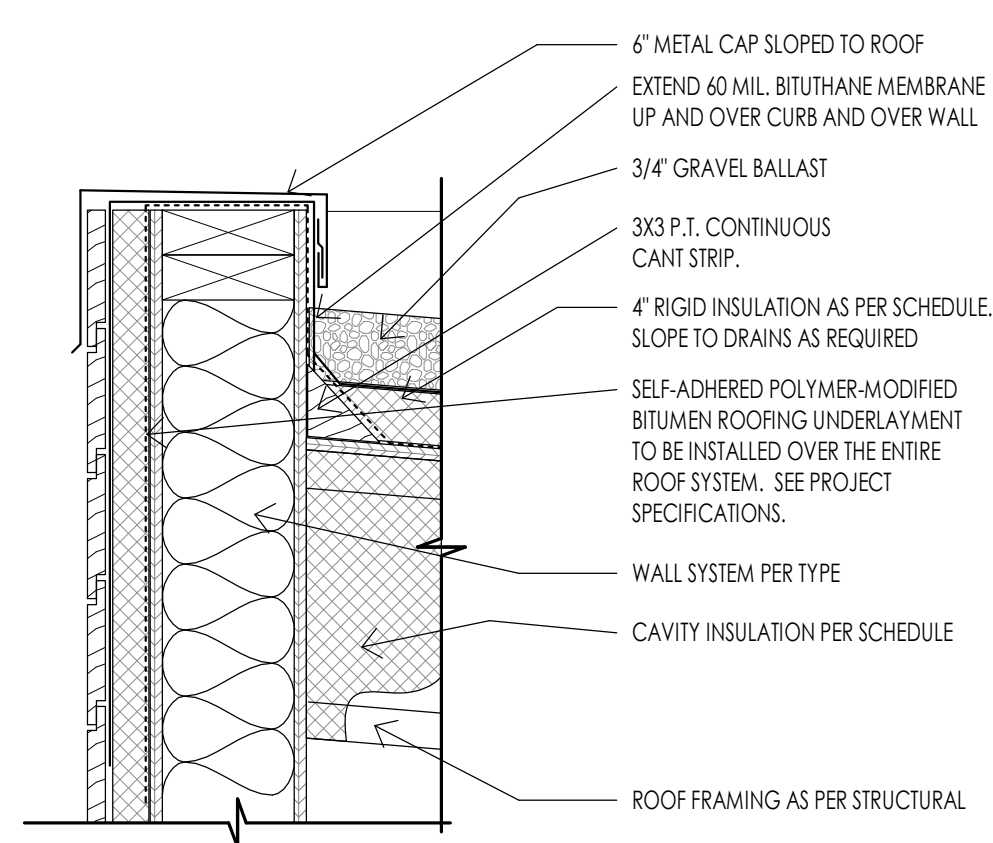
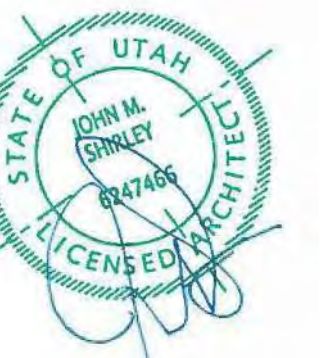
**DECK - GUARDRAIL DETAIL** 30  
1 1/2" = 1'-0"

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:  
1 04-27-2023 PER CITY COUNCIL

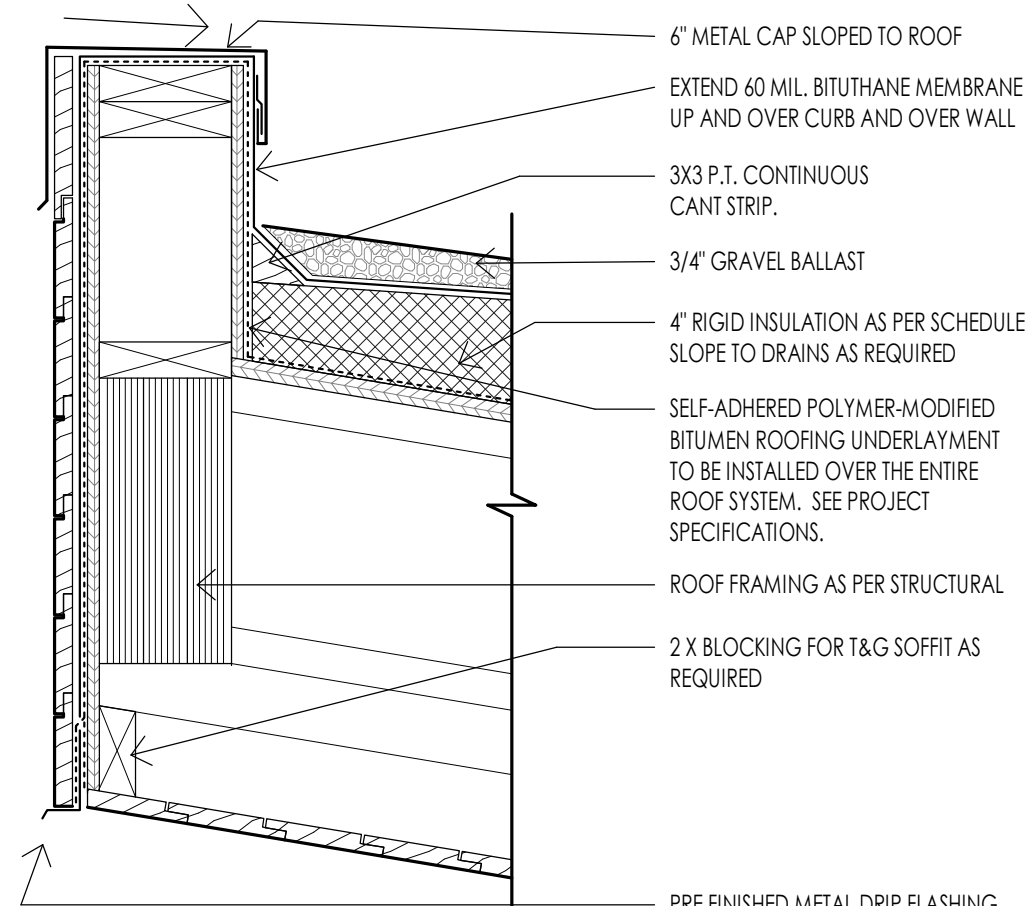
SHEET TITLE:  
**ARCHITECTURAL DETAILS**

SHEET NUMBER:  
**A501**

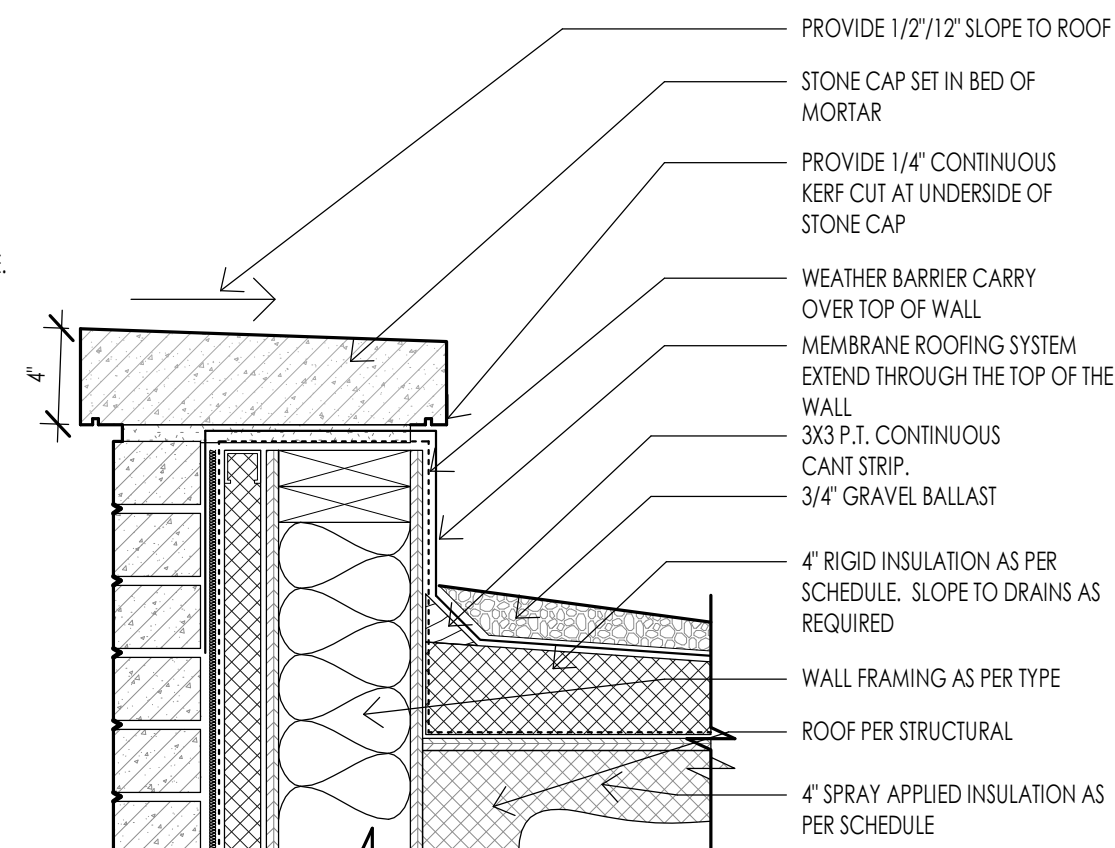
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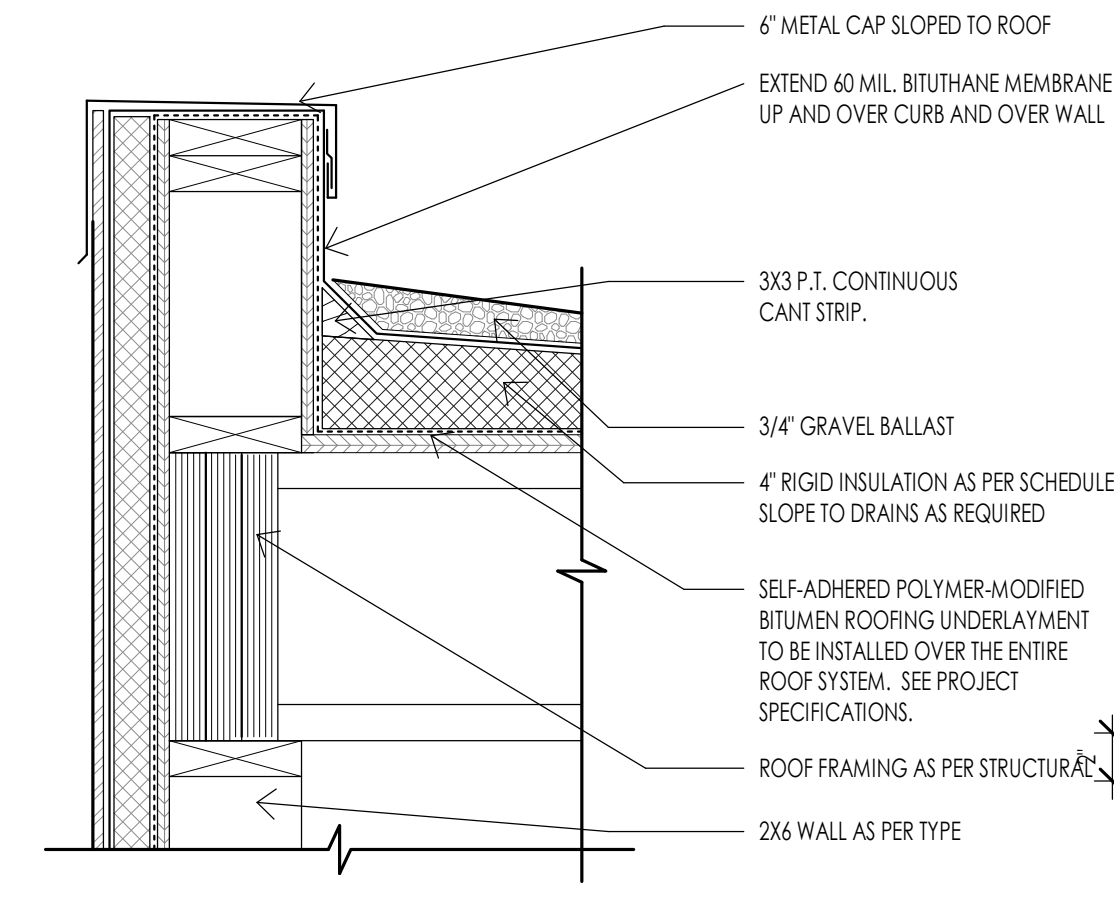
**14** ROOF - SIDING CAP AT PARAPET DETAIL  
1 1/2" = 1'-0"



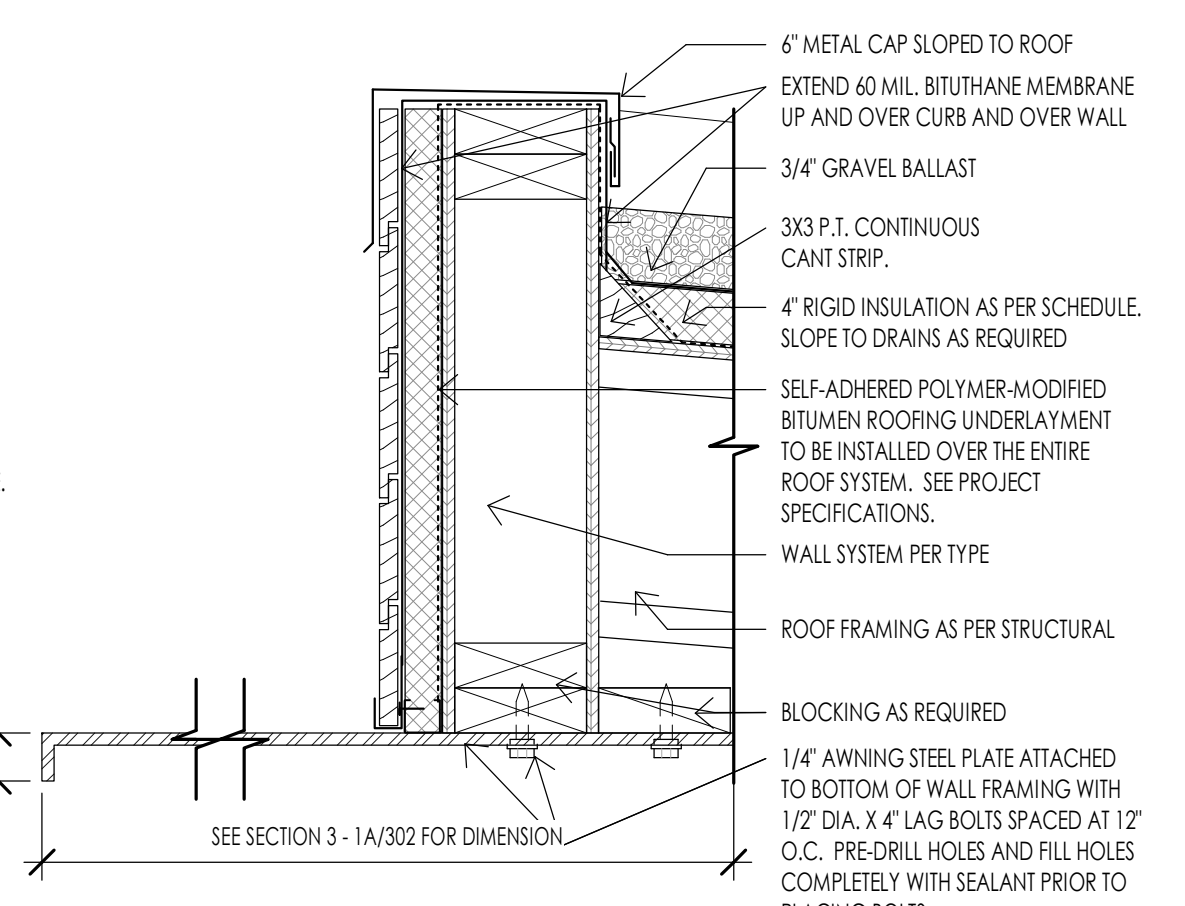
**15** ROOF - WOOD SIDING PARAPET TO ROOF  
1 1/2" = 1'-0"



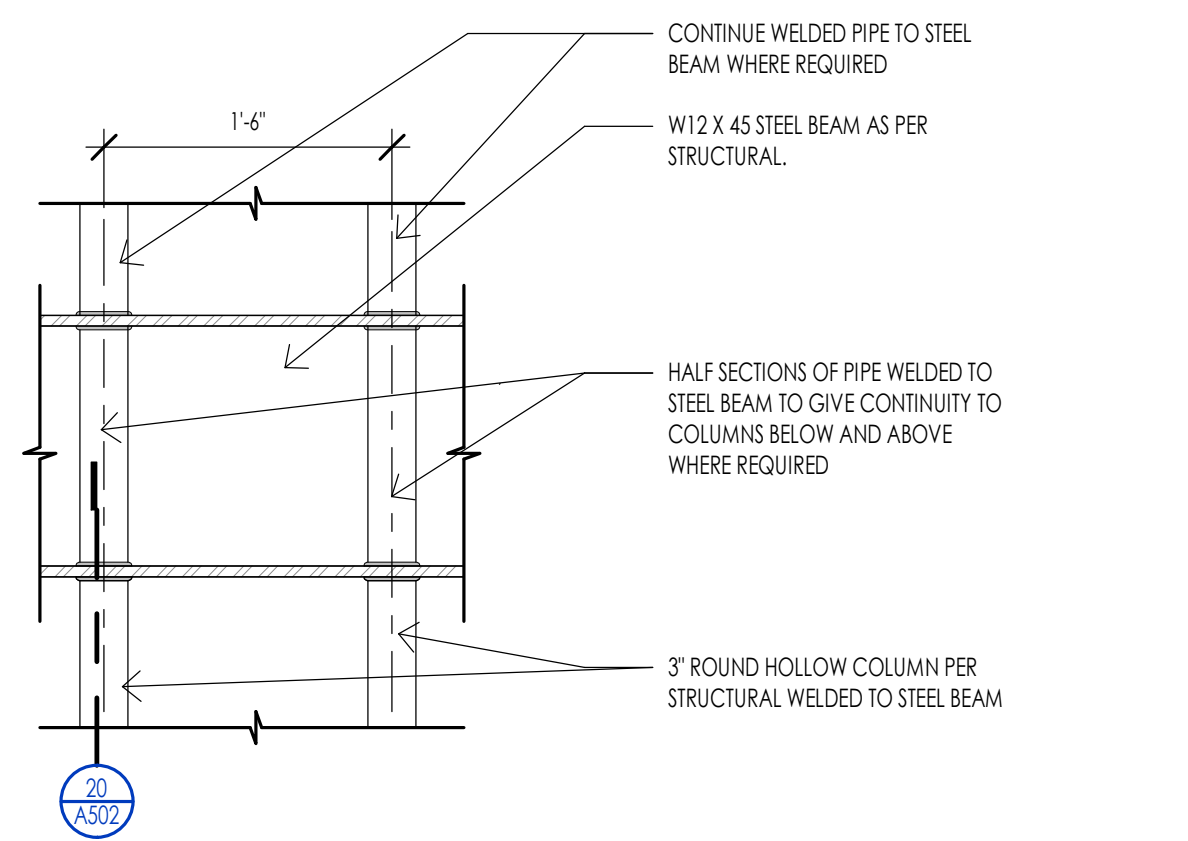
**16** ROOF - STONE CAP AT BRICK PARAPET  
1 1/2" = 1'-0"



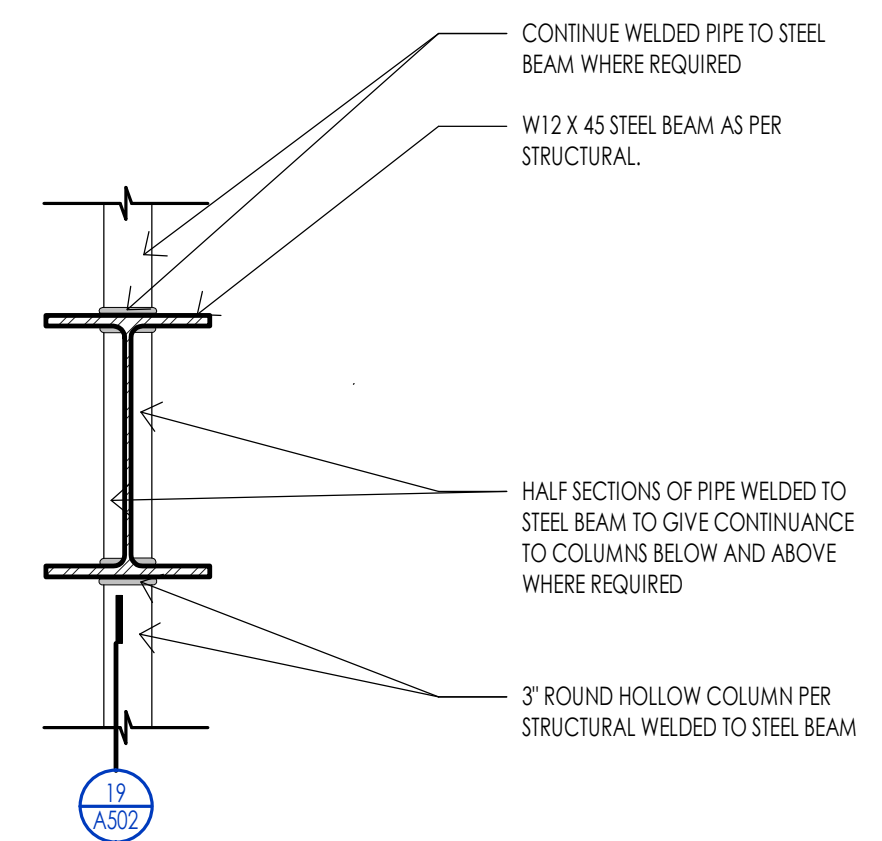
**17** ROOF - PARAPET DETAIL AT METAL WALL  
1 1/2" = 1'-0"



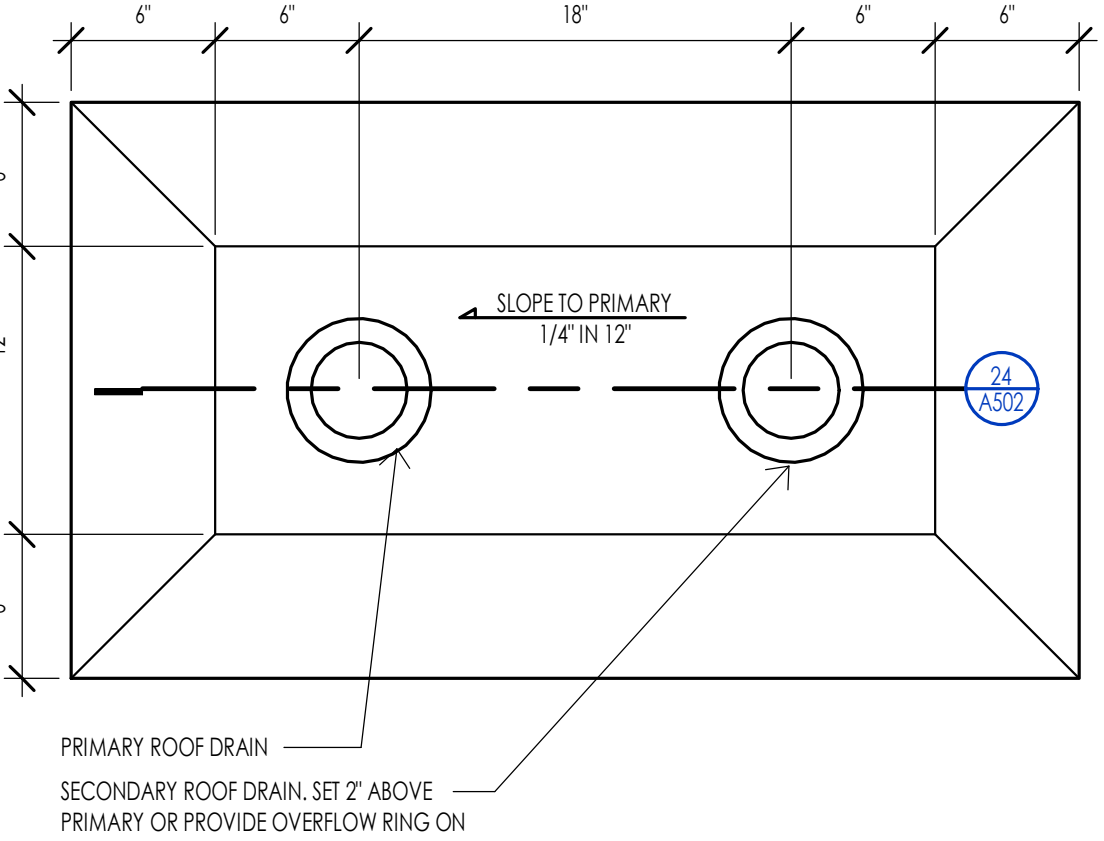
**18** ROOF - AWNING AND PARAPET DETAIL  
1 1/2" = 1'-0"



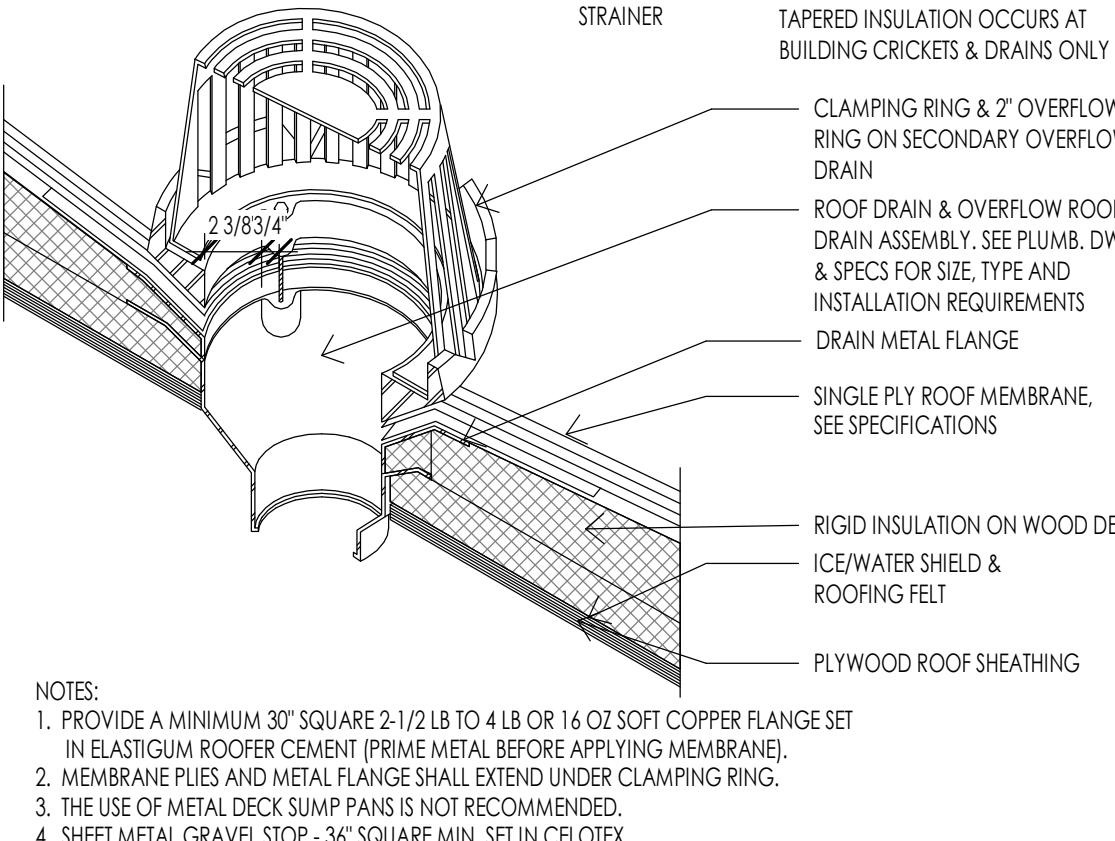
**19** ROOF - PIPE COLUMN TO STEEL BEAM DETAIL  
1" = 1'-0"



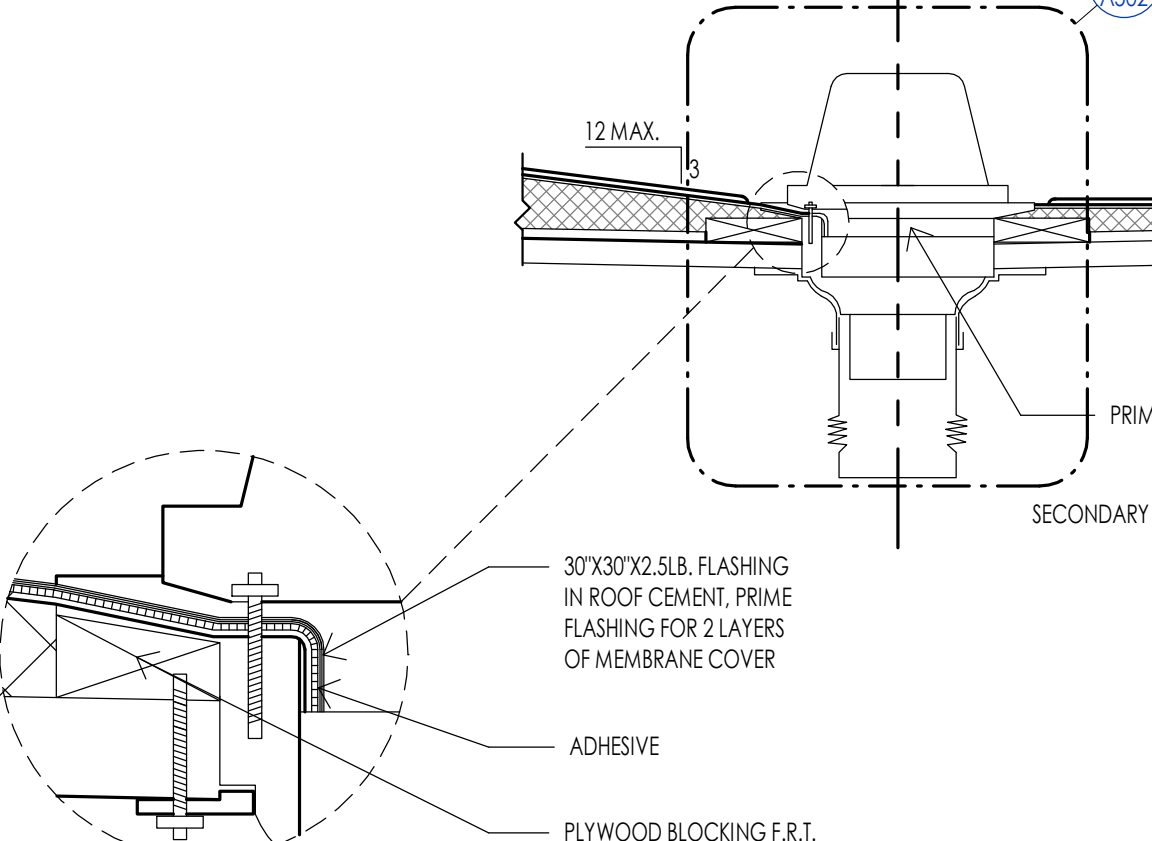
**20** ROOF - PIPE COLUMN TO STEEL BEAM SECTION  
1" = 1'-0"



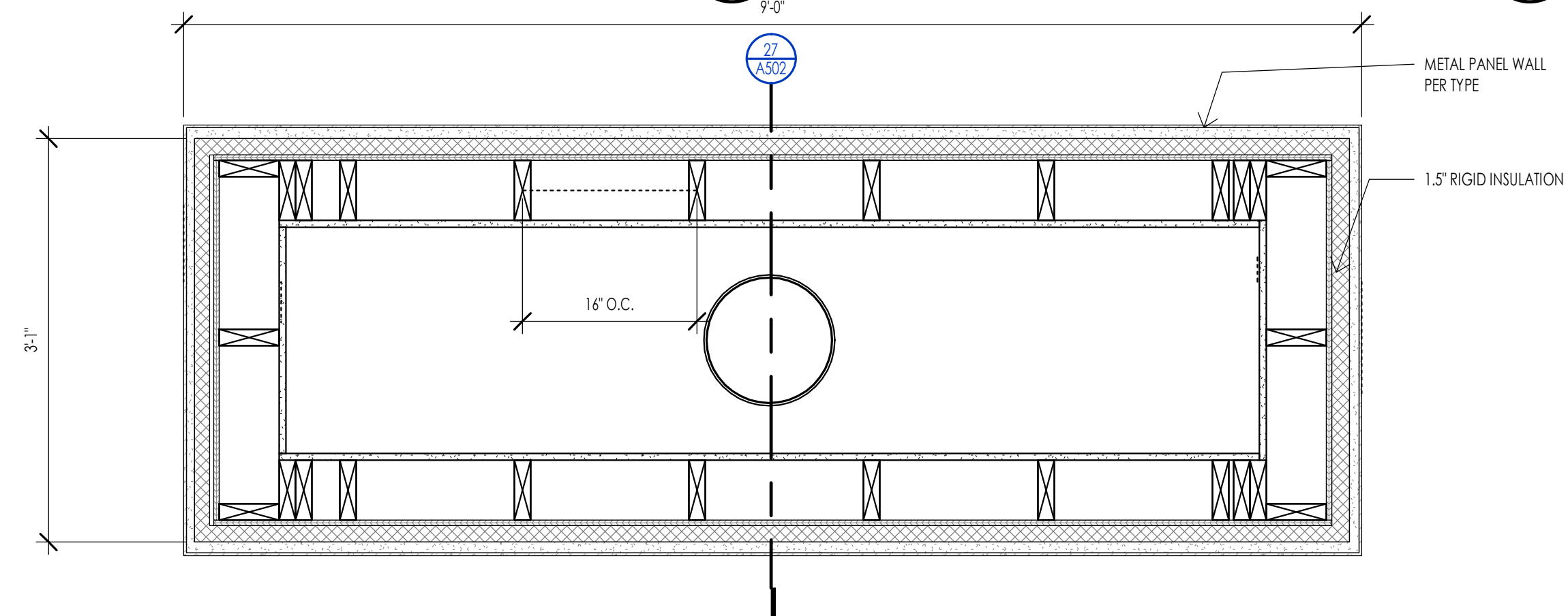
**21** ROOF - ENLARGED DRAIN DETAIL  
1 1/2" = 1'-0"



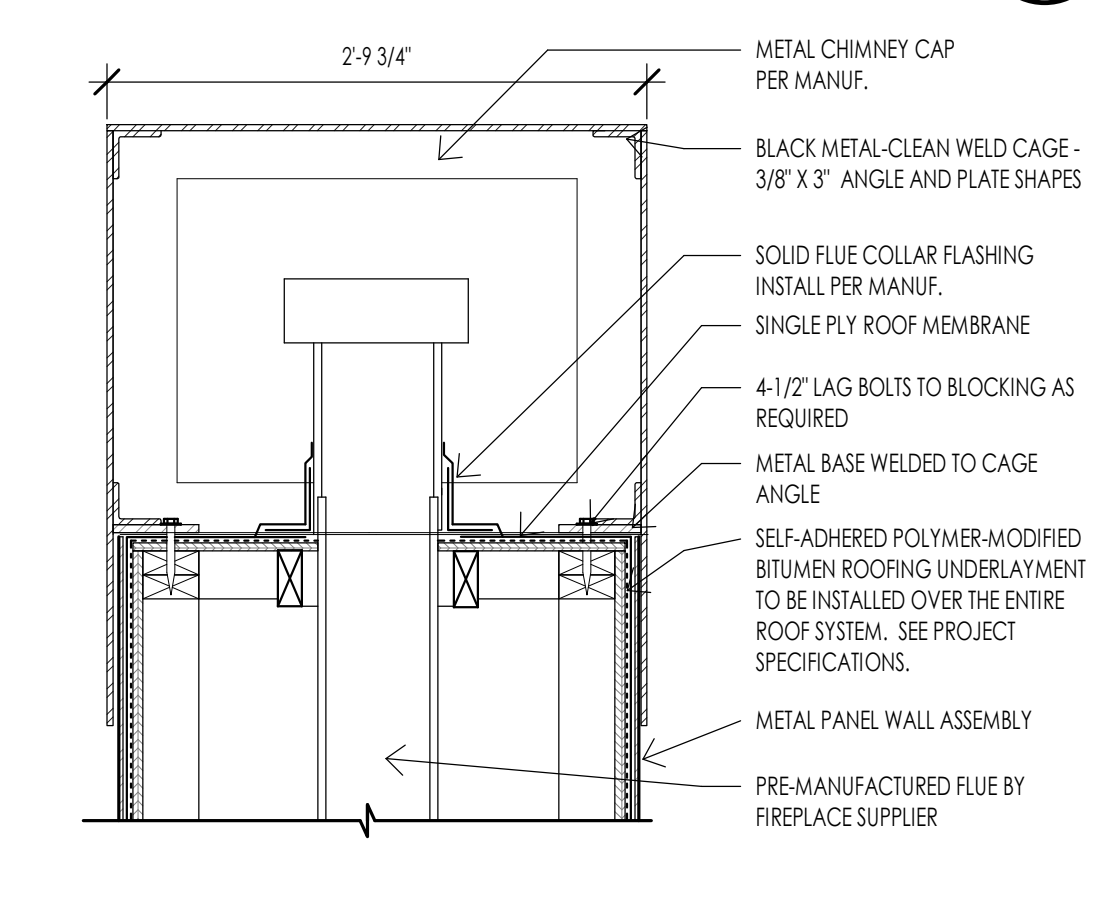
**22** ROOF - DRAIN DETAIL  
1 1/2" = 1'-0"



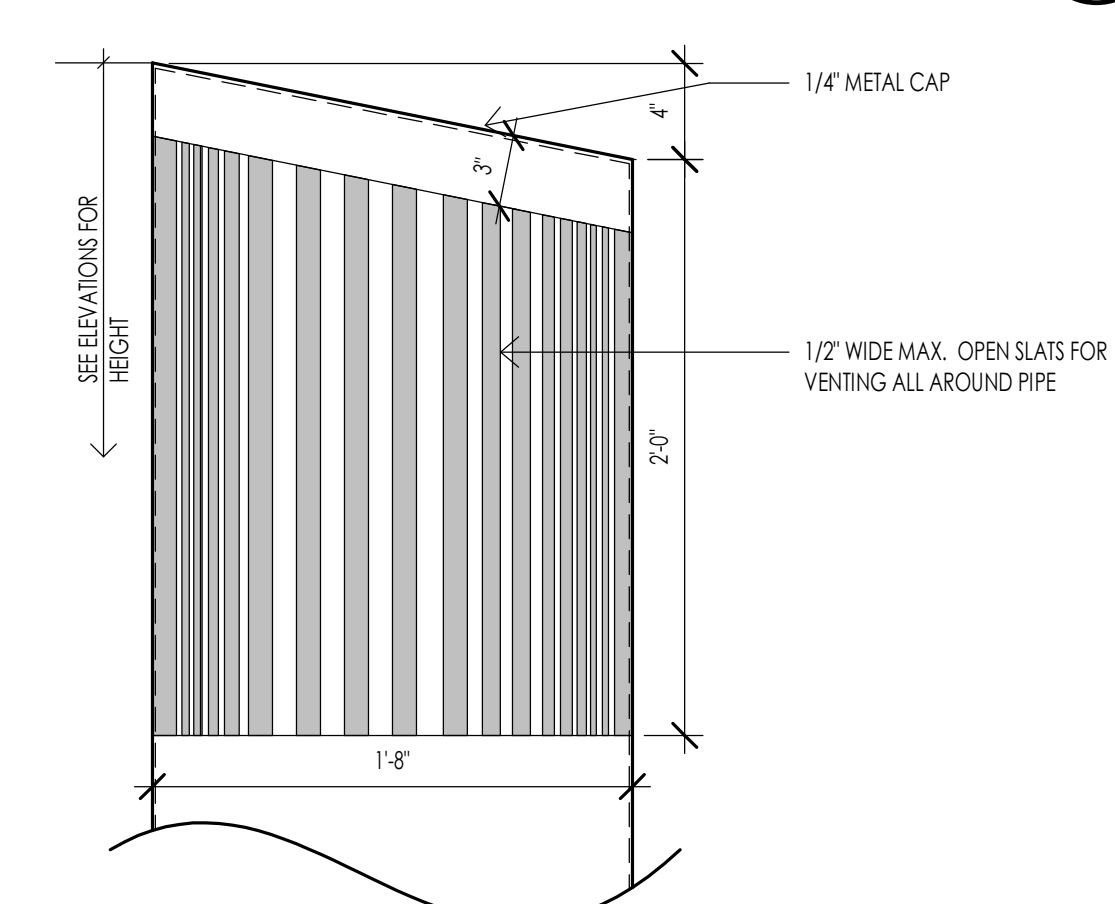
**24** ROOF - DRAIN SECTION  
1" = 1'-0"



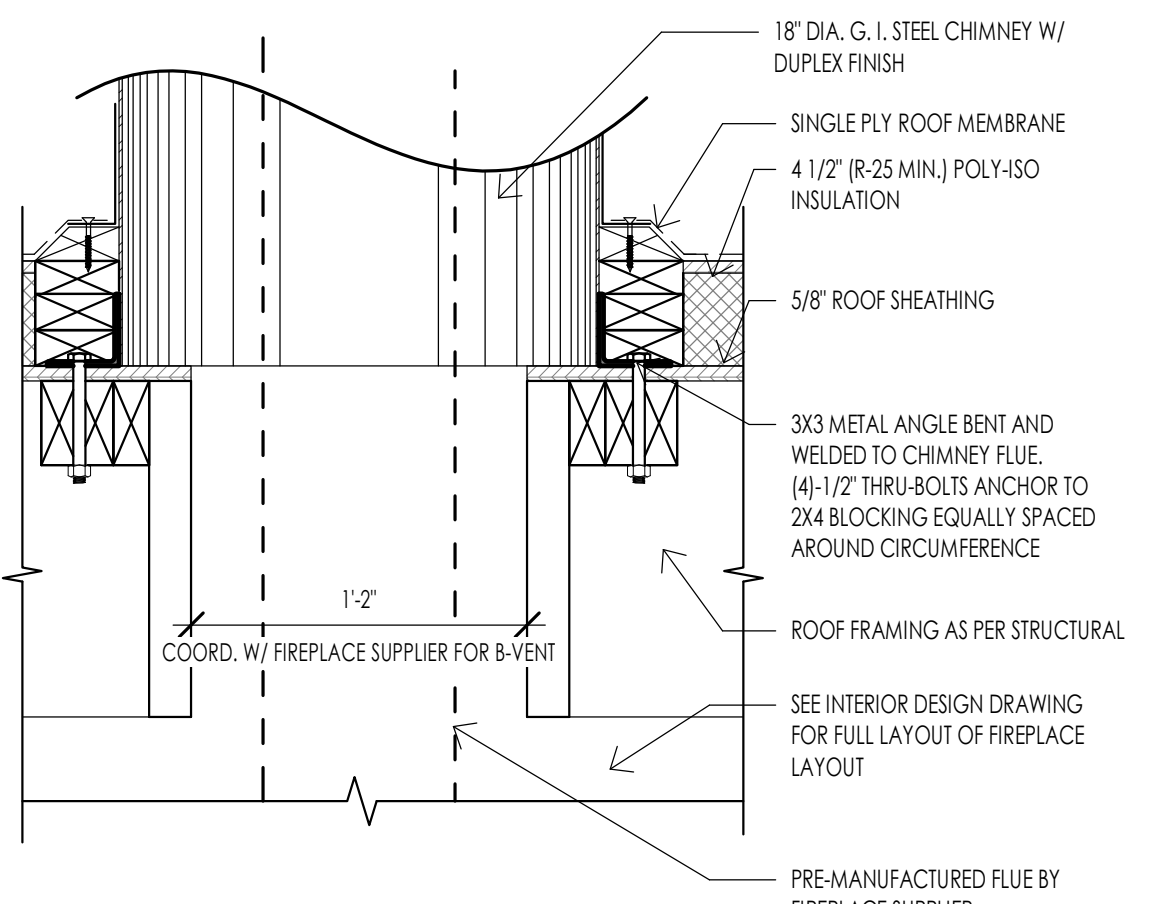
**26** ROOF - CHIMNEY TYPICAL FRAMING  
1" = 1'-0"



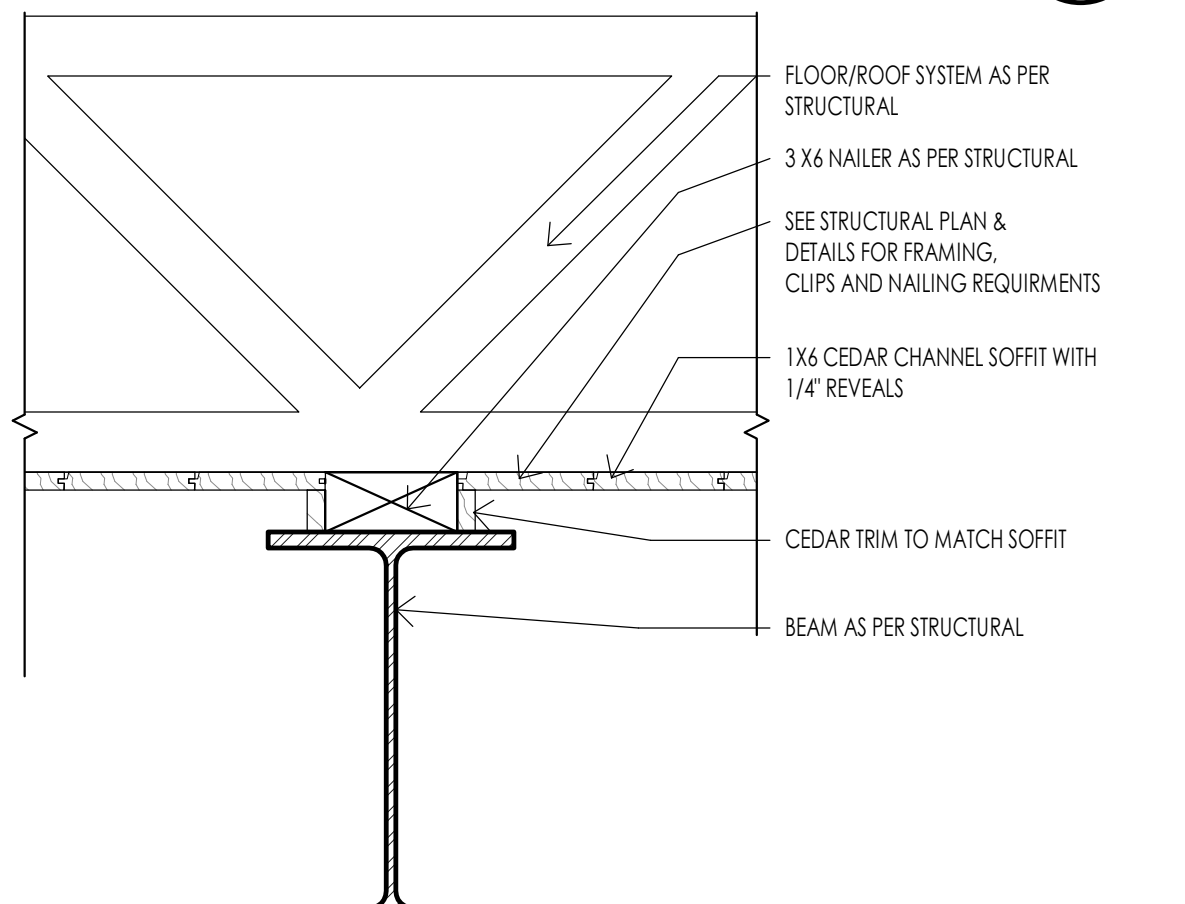
**27** ROOF - OPEN SIDE CHIMNEY CAP DETAIL  
1" = 1'-0"



**28** ROOF - CHIMNEY CAP DETAIL  
1 1/2" = 1'-0"



**29** ROOF - CHIMNEY ROOF DETAIL  
1 1/2" = 1'-0"

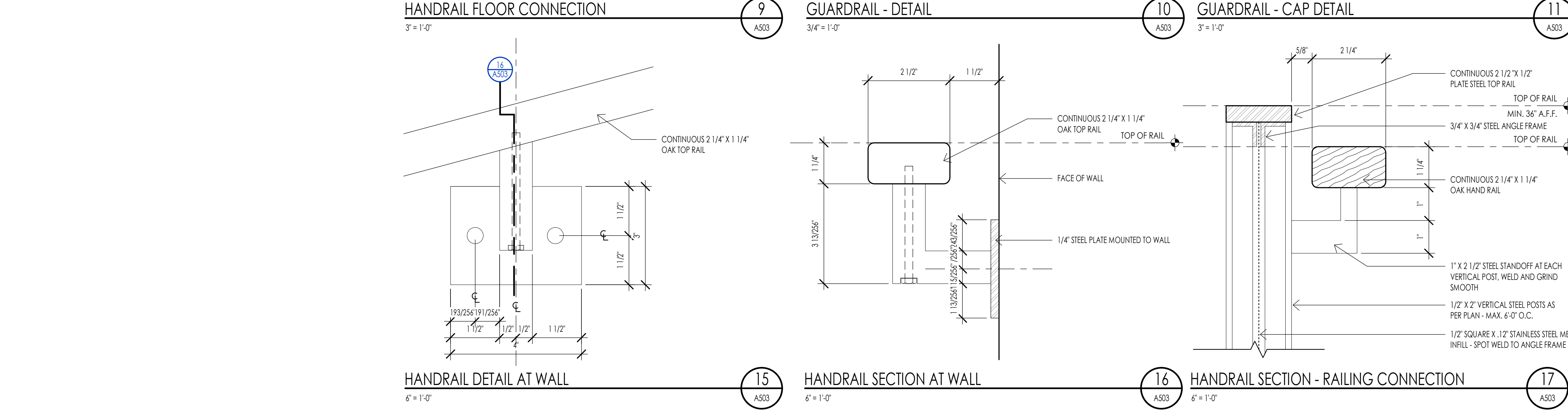
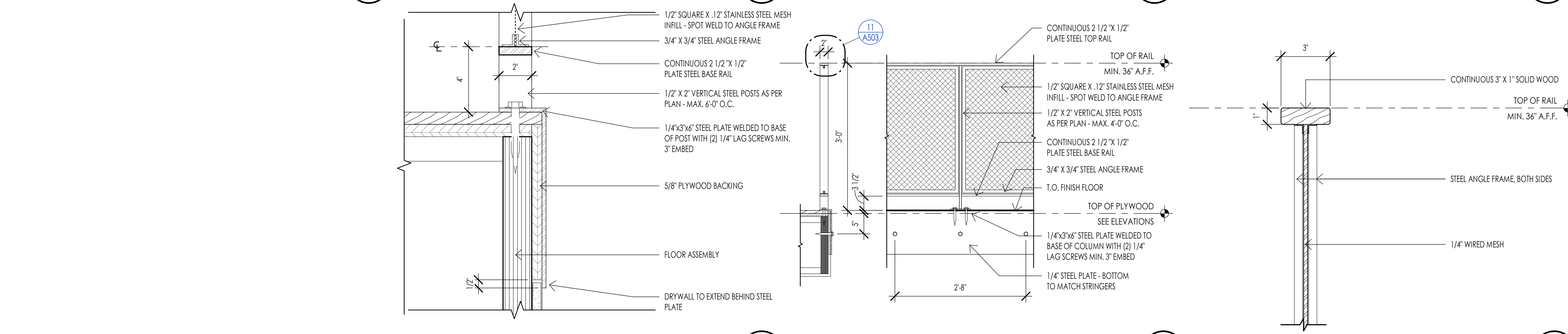
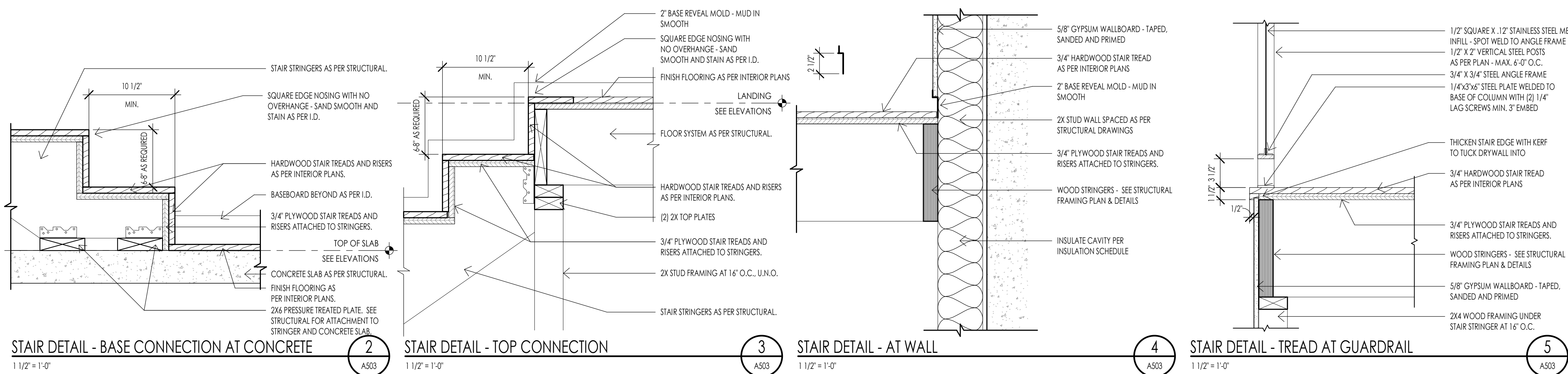


**30** CEILING - BEAM AT T&G CEILING  
1 1/2" = 1'-0"



- ### STAIR PLAN GENERAL NOTES
- STAIR CONSTRUCTION SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R311.5.
    - THE MINIMUM STAIRWAY WIDTH SHALL NOT BE LESS THAN 36 INCHES CLEAR WIDTH. HANDRAILS MAY PROJECT INTO THE REQUIRED WIDTH A DISTANCE OF 4 1/2 INCHES FROM EACH SIDE OF A STAIRWAY. (I.R.C. R311.7.1) FOR ADDITION WIDTH REQUIREMENTS OR FOR SPIRAL, CIRCULAR, WINDING STAIRS, ETC. REQUIREMENTS SEE I.R.C. SECTION R311.7.10.1
    - THE MAXIMUM STAIR RISER HEIGHT SHALL NOT EXCEED 7 3/4 INCHES AND THE MINIMUM STAIR TREAD DEPTH SHALL BE 10 INCHES. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS. THE GREATEST RISER HEIGHT OR TREAD DEPTH SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH. (UTAH STATE AMENDMENT) (REPLACES R311.7.5 AND ALLOWS FOR 8" MAX RISERS AND 9" MIN. TREADS)
    - LANDINGS: EVERY LANDING SHALL HAVE A WIDTH DIMENSION OF NOT LESS THAN THE STAIRWAY SERVED. EVERY LANDING SHALL HAVE A MINIMUM DEPTH DIMENSION OF 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. FOR LANDINGS WITH ADJOINING DOORS SEE I.R.C. SECTION R311.7.6 FOR SOME EXCEPTIONS/OPTIONS.
    - ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH GYPSUM BOARD. (I.R.C. R302.7)
    - HEADROOM: EVERY STAIRWAY SHALL HAVE A MINIMUM HEADROOM CLEARANCE IN ALL PARTS OF THE STAIR OF NOT LESS THAN 6 FEET 8 INCHES. SUCH CLEARANCES SHALL BE MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING. (I.R.C. R311.7.2)
  - HEADROOM: EVERY STAIRWAY SHALL HAVE A MINIMUM HEADROOM CLEARANCE IN ALL PARTS OF THE STAIR OF NOT LESS THAN 6 FEET 8 INCHES. SUCH CLEARANCES SHALL BE MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING. (I.R.C. R311.7.2)
    - HANDRAILS SHALL BE MOUNTED A MINIMUM OF 34 INCHES AND A MAXIMUM OF 38 INCHES ABOVE THE NOSING OF THE TREAD AND SHALL BE PROVIDED ON AT LEAST ONE SIDE OF STAIRWAYS. ALL REQUIRED HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS WITH FOUR OR MORE RISERS FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER. HANDS SHALL BE RETURNED OR SHALL TERMINATE IN NEVEL POSTS, VOLUTES, TURNOUT OR STARTING EASING SHALL BE ALLOWED OVER THE LOWEST TREAD.
    - THE HAND GRIP PORTION OF HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1 1/4 INCHES MINIMUM TO 2 5/8 INCHES MAXIMUM. OTHER HANDRAIL SHAPES THAT HAVE AN EQUIVALENT GRASPING SURFACE ARE PERMISSIBLE. SEE BUILDING CODE. EDGES SHALL HAVE A MINIMUM RADIUS OF 0.01 INCH. R311.7.8.3.
    - HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE HANDRAIL.
  - GUARD RAILS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R312.
    - GUARDRAILS ARE REQUIRED AT ALL PORCHES, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW AND SHALL BE NOT LESS THAN 36 INCHES IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30 INCHES ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 34 INCHES IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREAD.
    - REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREAS, BALCONIES, ETC. SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.
    - THE TRIANGLE OPENINGS FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH A SIZE THAT A SPHERE 6 INCHES IN DIAMETER CANNOT PASS THROUGH.
    - THE GUARDS AT SIDES OF STAIRS SHALL HAVE GUARD SUCH THAT A 4-3/8" SPHERE CANNOT PASS THROUGH IT.

### STAIR PLAN KEYNOTES





**DOOR SCHEDULE**

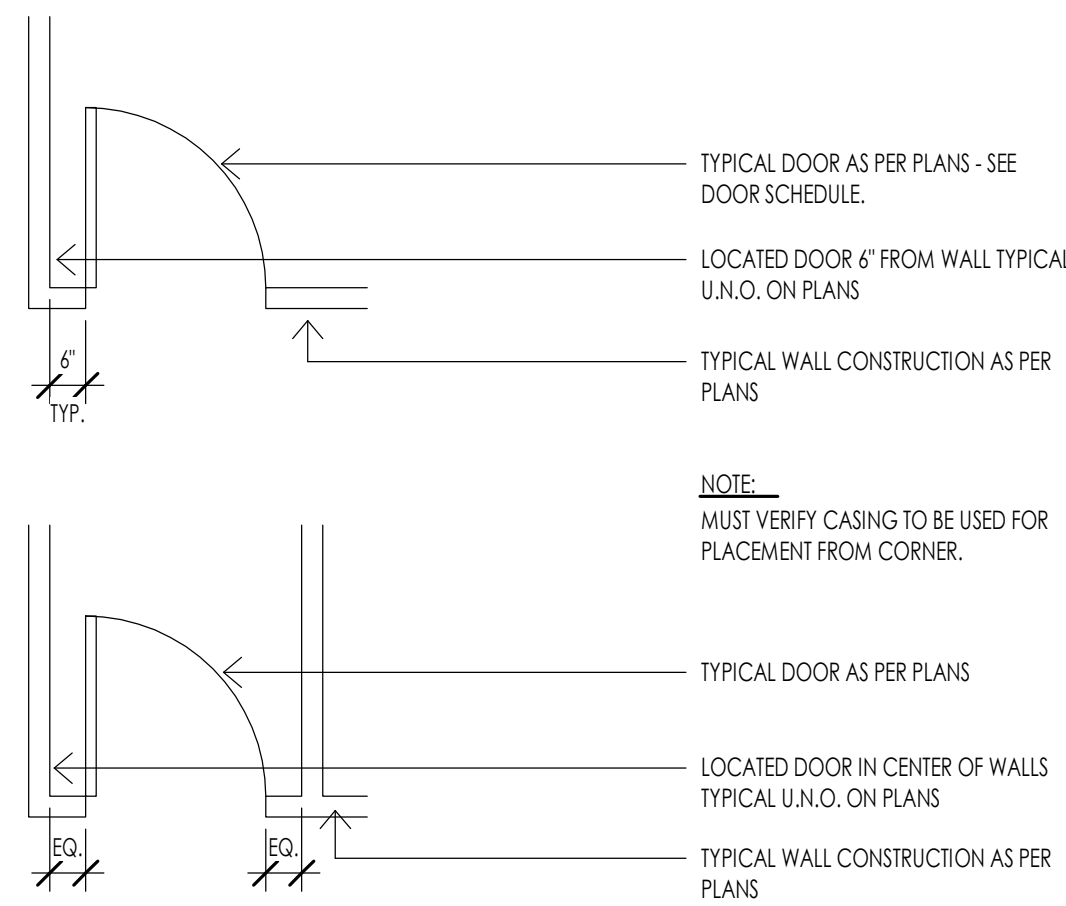
MARK	DOOR						FRAME						REMARKS	
	SIZE		MATERIAL	TYPE	FINISH	FIRE RATING	DETAILS			MATERIAL	TYPE	FINISH		HARDWARE
	WIDTH	HEIGHT					HEAD	JAMB	SILL					
D100-A	4'-0"	9'-0"	1 1/2"	WOOD-GLASS	D5	PER I.D.	19/A601	20/A601	21/A601	WOOD	F1	PER I.D.	NON-RATED	H10
D100-B	5'-0"	8'-0"	2"	WOOD	D2	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H9
D100-C	2'-8"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D100-D	2'-8"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H5
D100-E	3'-0"	8'-0"	2"	WOOD	D1	PER I.D.	22/A601	23/A601	24/A601	STEEL	P2	PER I.D.	20 MIN.	H3
D101-A	2'-10"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D101-B	2'-8"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D101-C	2'-0"	7'-0"	1/4"	GLASS	D4					FRAMELESS				H8
D102-A	2'-10"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D102-B	2'-8"	8'-0"	1 1/2"	WOOD	D3	PER I.D.				WOOD	F1	PER I.D.	NON-RATED	H12
D102-C	2'-0"	7'-0"	1/4"	GLASS	D4					FRAMELESS				H12
D103-A	20'-0"	10'-0"		METAL	D6		30/A601	29/A601					NON-RATED	H2
D103-B	2'-0"	8'-0"	2"	WOOD	D1	PER I.D.	22/A601	23/A601	24/A601	WOOD	F1	PER I.D.	NON-RATED	H1
D200-A	2'-10"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H5
D200-B	2'-4"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D201-A	2'-10"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D201-B	3'-0"	8'-0"	1 1/2"	WOOD	D3	PER I.D.				WOOD	F1	PER I.D.	NON-RATED	H12
D201-C	2'-0"	7'-0"	1/4"	GLASS	D4					FRAMELESS				H12
D201-D	2'-8"	8'-0"	1 1/2"	WOOD	D3	PER I.D.				WOOD	F1	PER I.D.	NON-RATED	H12
D201-E	2'-4"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D202-A	2'-10"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D202-B	2'-8"	8'-0"	2 1/4"	WOOD	D1	PER I.D.	22/A601	23/A601		WOOD	F1	PER I.D.	NON-RATED	H8
D202-C	2'-0"	7'-0"	1/4"	GLASS	D4					FRAMELESS				H8
D202-D	4'-0"	8'-0"	2"		D22									

**DOOR SCHEDULE GENERAL NOTES**

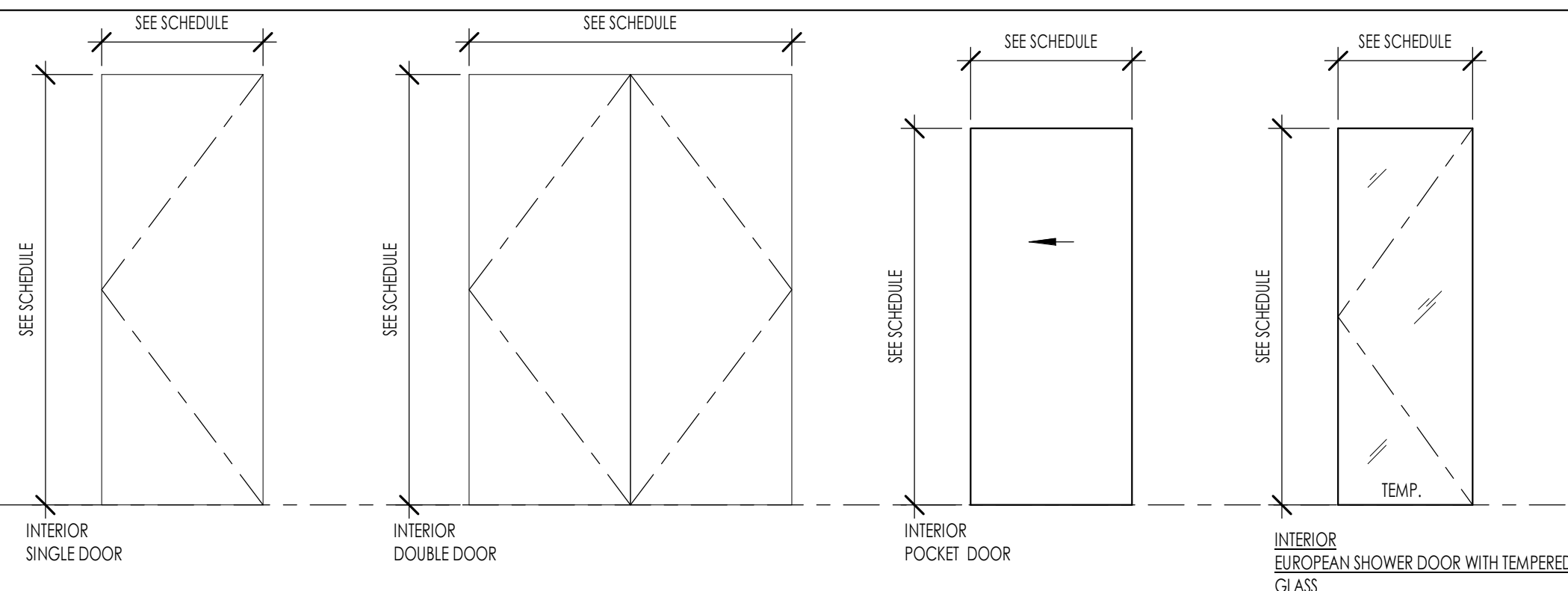
- SEE SHEET A601 FOR DOOR AND FRAME TYPES.
- CONTRACTOR SHALL FIELD VERIFY ALL DOOR OPENINGS PRIOR TO ORDERING ALL DOORS.
- CONTRACTOR SHALL SUBMIT COMPLETE DOOR AND HARDWARE SHOP DRAWINGS AND SUBMITTALS FOR APPROVAL FOR EACH BUILDING PRIOR TO ORDERING AND TAKING RECEIPT OF DOOR ORDER. ARCHITECT SHALL REVIEW ALL DOORS FOR COMPLIANCE SPECIFICATIONS AND BUILDING CODE.
- ALL DOORS REQUIRED TO BE RATED SHALL HAVE APPROPRIATE U.L. RATINGS AS INDICATED IN DOOR SCHEDULE AND SPECIFICATION. ALL DOORS SHALL HAVE LABEL ON DOOR AND FRAME FOR INSPECTION ON SITE AND SHALL NOT BE REMOVED.
- ALL DOORS SHALL BE INSTALLED SO AS NOT TO HAVE MORE THAN 1/2" THRESHOLD AT EACH DOOR.
- REFER TO INTERIOR DESIGNER FOR CORRECT DOOR STYLES, SPECIES, AND FINISHES.
- OPENINGS BETWEEN GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOOR NOT LESS THAN 1 3/8 INCHES THICK, SOLID HONEYCOMB CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES THICK, OR 20 MINUTE FIRE RATED DOORS. SEE I.R.C. SECTION R302.5.1.

**HARDWARE GROUPS**

- H1 MECHANICAL ROOM**
  - 2 PAIR SPRING HINGES
  - 1 SMOKE SEAL
  - 1 PASSAGE SET
- H2 OVERHEAD GARAGE DOORS**
  - GARAGE ENTRY PROVIDED BY OVERHEAD DOOR MANUFACTURER
- H3 SECONDARY ENTRY DOOR**
  - 3 PAIR SPRING HINGES
  - 1 SMOKE SEAL
  - 1 LOCKSET
  - 1 DEADBOLT
  - 1 THRESHOLD
- H4 GARAGE/HOUSE**
  - 3 PAIR HINGES
  - 1 WEATHER STRIP
  - 1 LOCKSET
  - 1 DEADBOLT
- H5 INTERIOR DOOR**
  - 3 PAIR HINGES
  - 1 PASSAGE SET
- H6 INTERIOR BARN DOOR**
  -
- H7 INTERIOR DOUBLE BARN DOOR**
  -
- H8 INTERIOR DOOR**
  - 3 PAIR HINGES
  - 1 PRIVACY SET
- H9 INTERIOR DOUBLE DOOR**
  - 6 PAIR HINGES
  - 2 KNOBS (SINGLE SIDE ONLY)
- H10 ENTRY DOOR**
  - 1 WEATHER STRIP
  - 1 THRESHOLD
  - 1 LOCKSET
  - 1 DEADBOLT
  - 1 PIVOT HINGE (TOP AND BOTTOM)
- H11 INTERIOR DOUBLE DOOR**
  - 6 PAIR HINGES
  - 2 PASSAGE SET
- H12 POCKET DOOR**
  -



**DOOR TYPES**

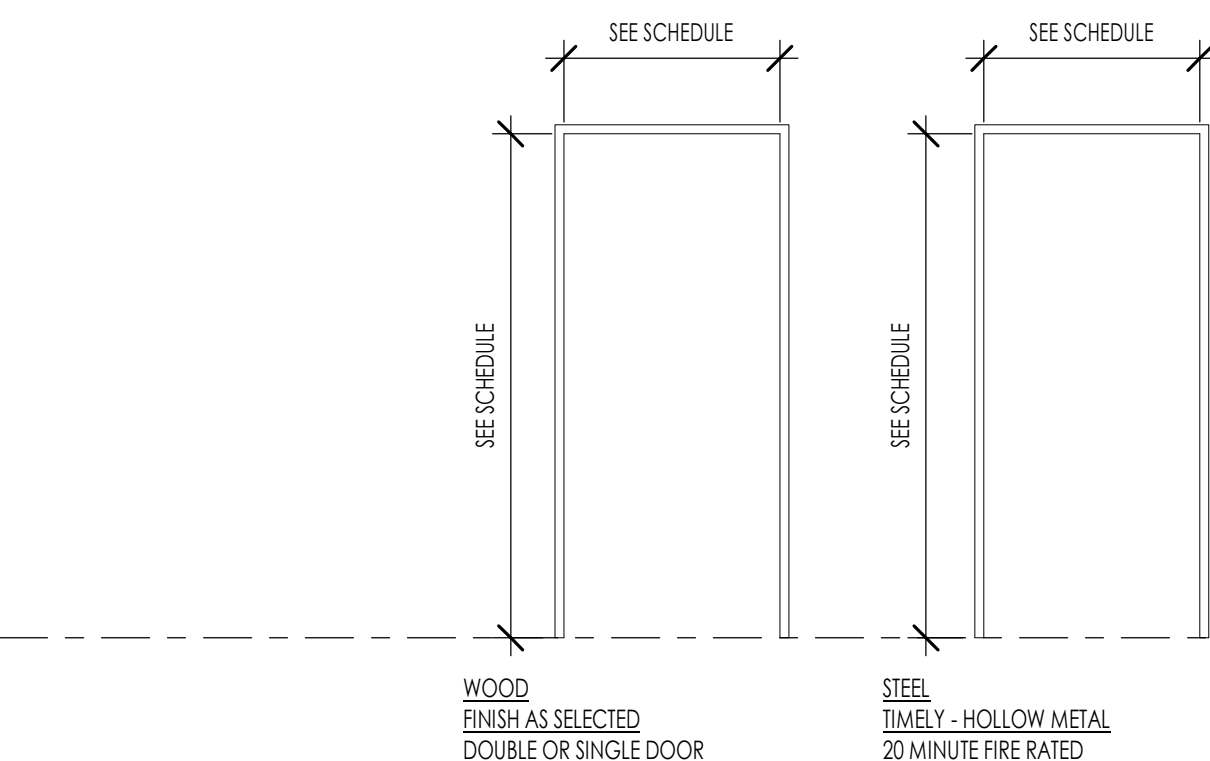


**TYPE D1**      **TYPE D2**      **TYPE D3**      **TYPE D4**



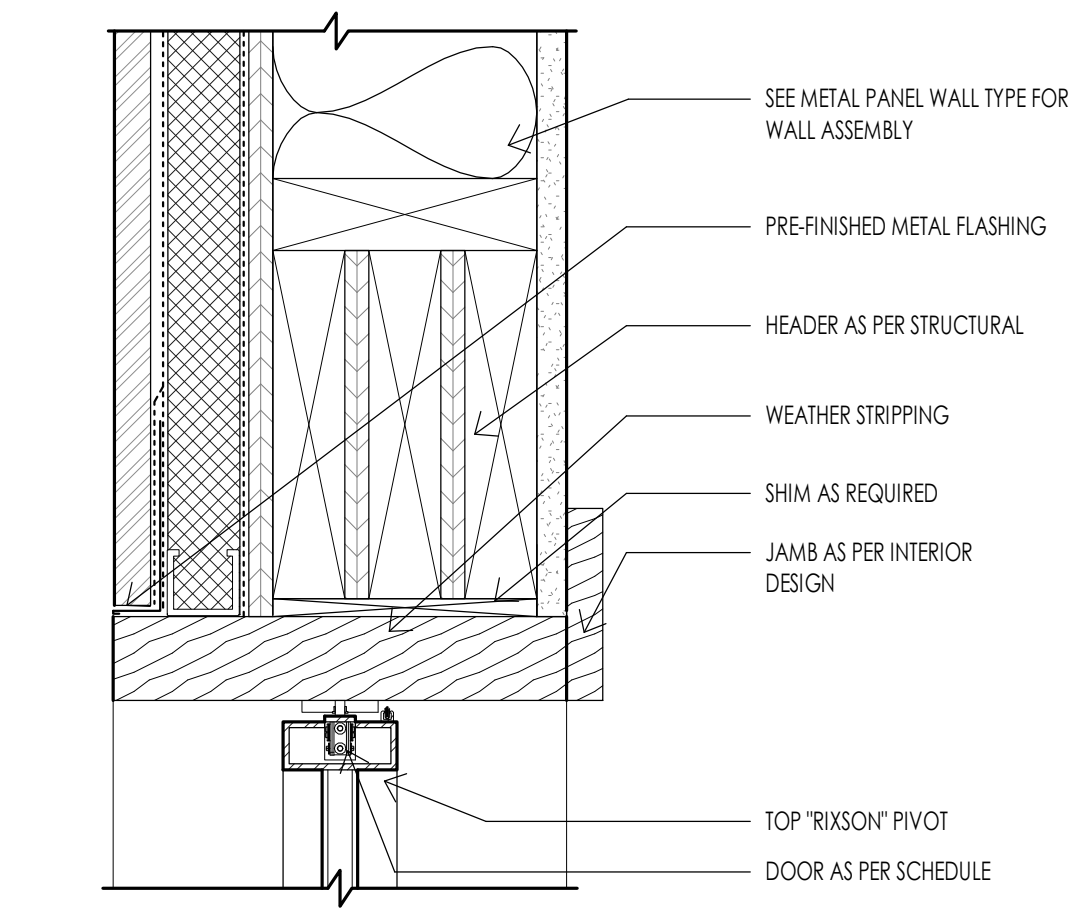
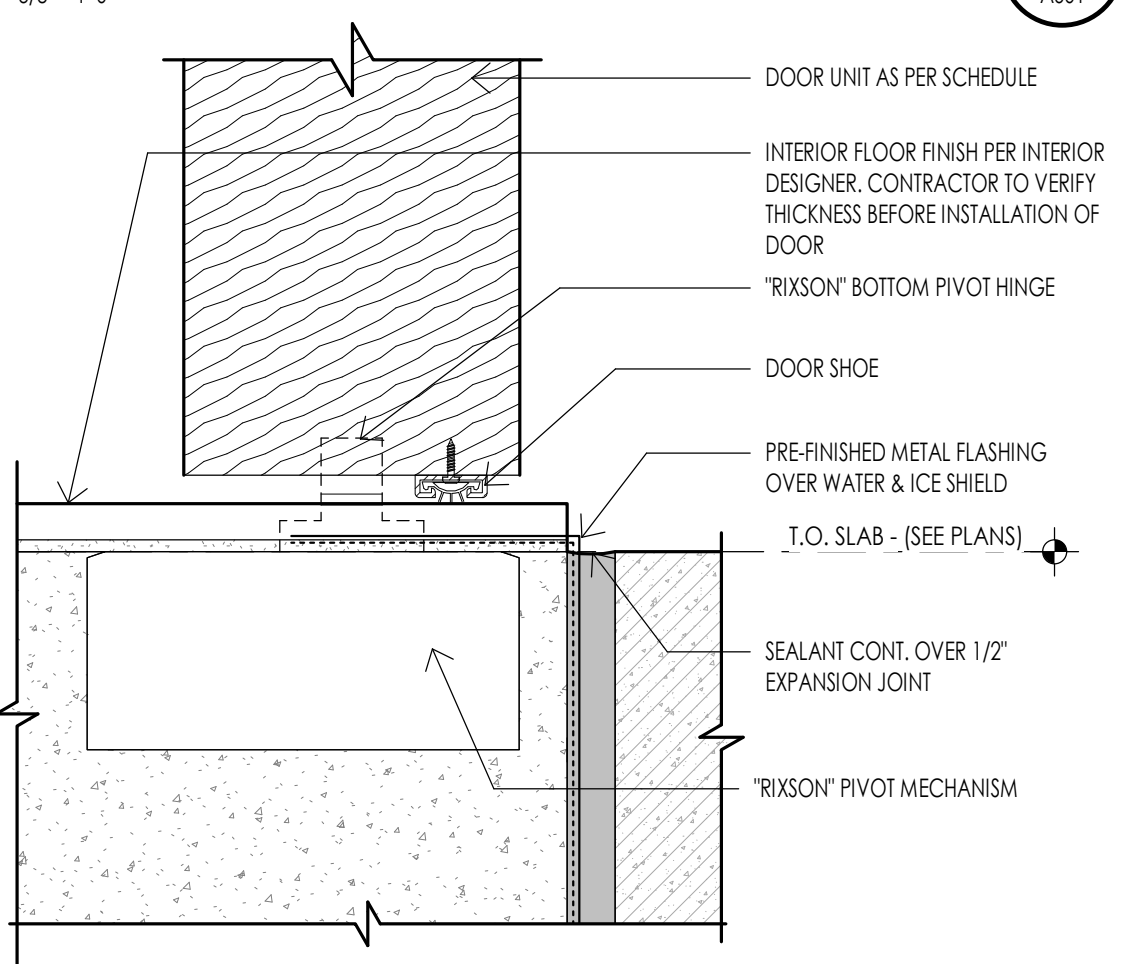
**TYPE D5**      **TYPE D6**

**FRAME TYPES**

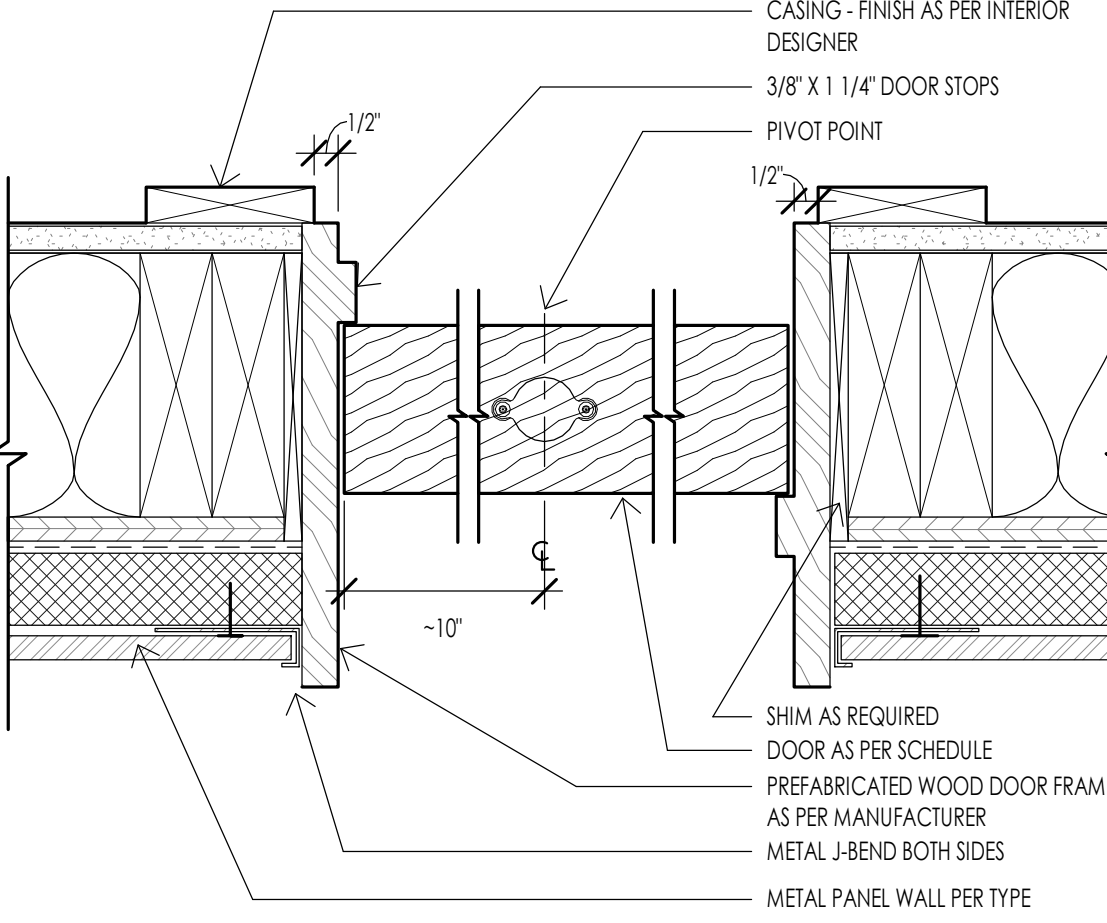


**TYPE F1**      **TYPE F2**

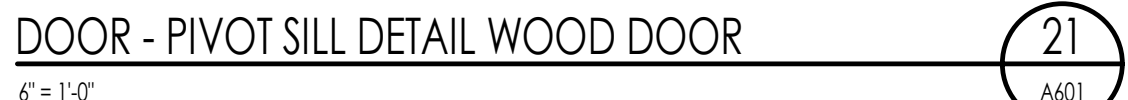
**DOOR - TYPICAL PLACEMENT DETAIL**



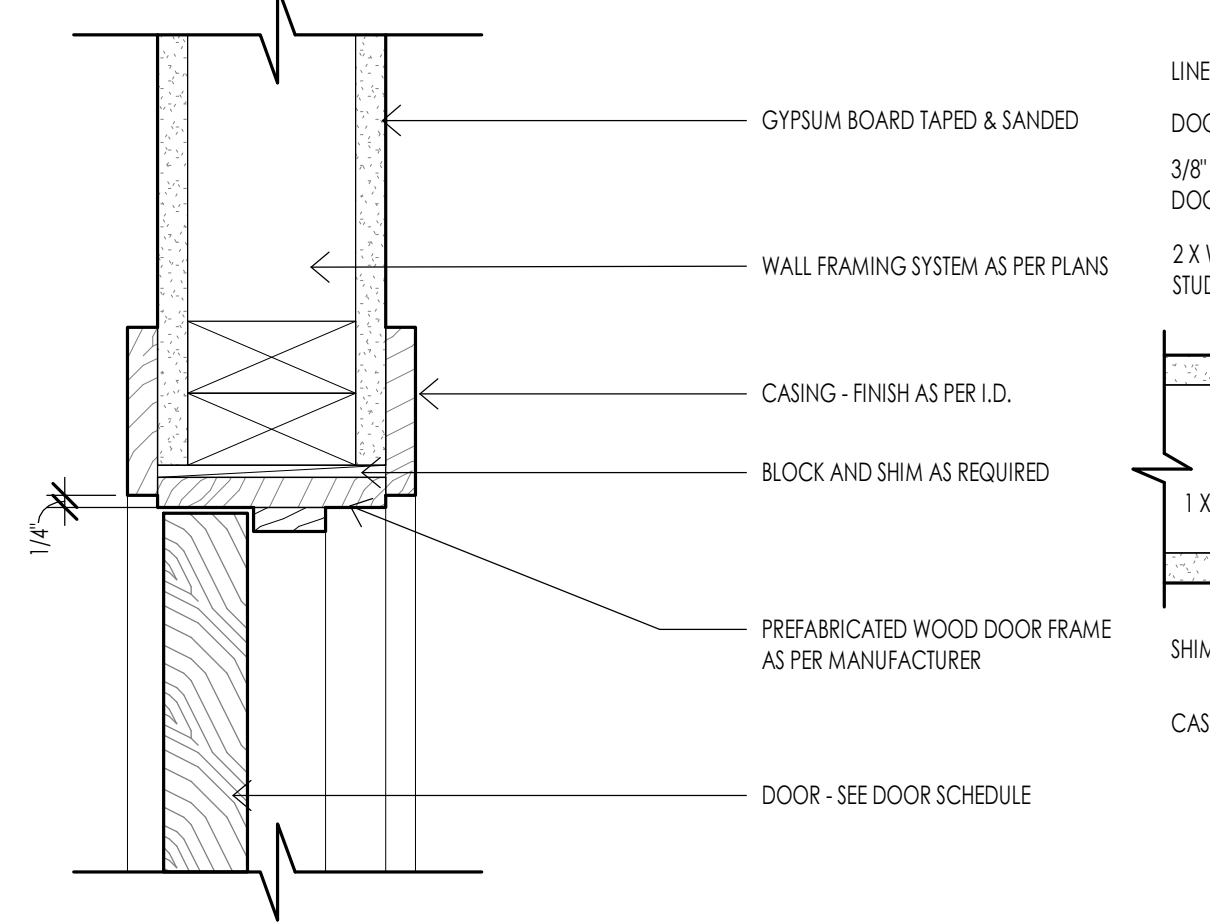
**DOOR - PIVOT HEAD DETAIL**



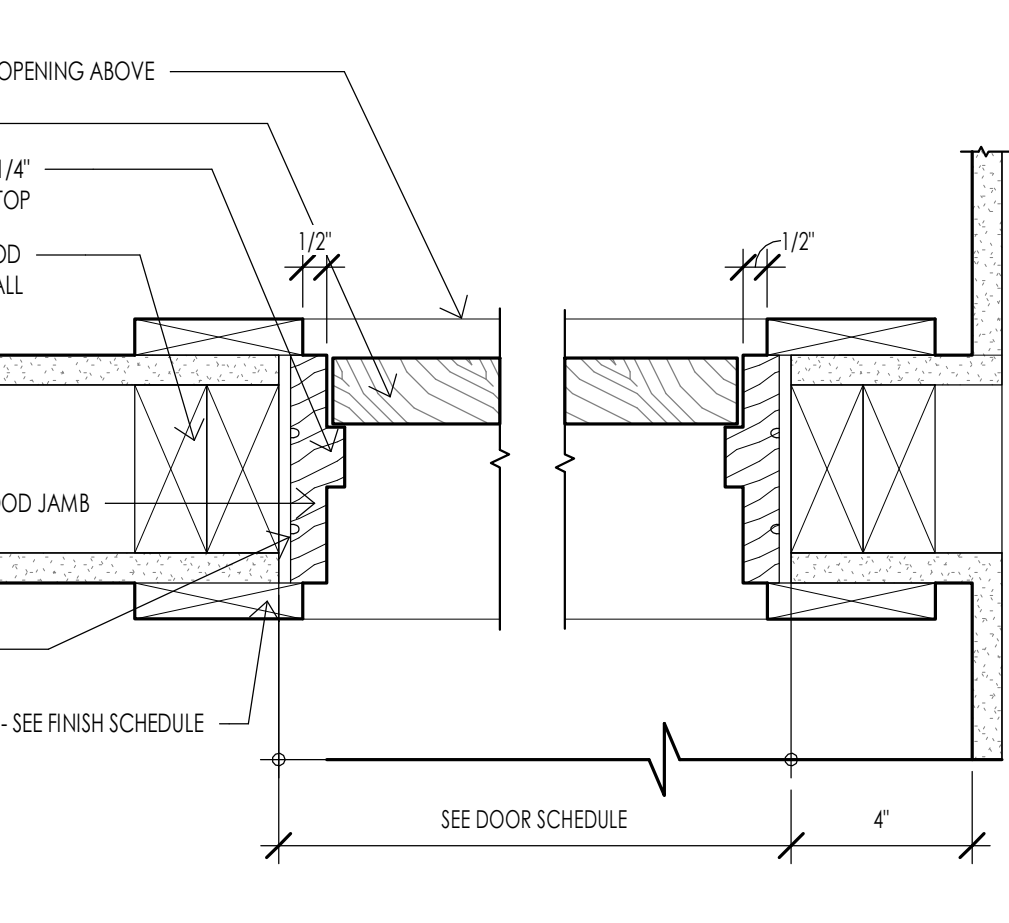
**DOOR - PIVOT JAMB DETAIL WOOD DOOR**



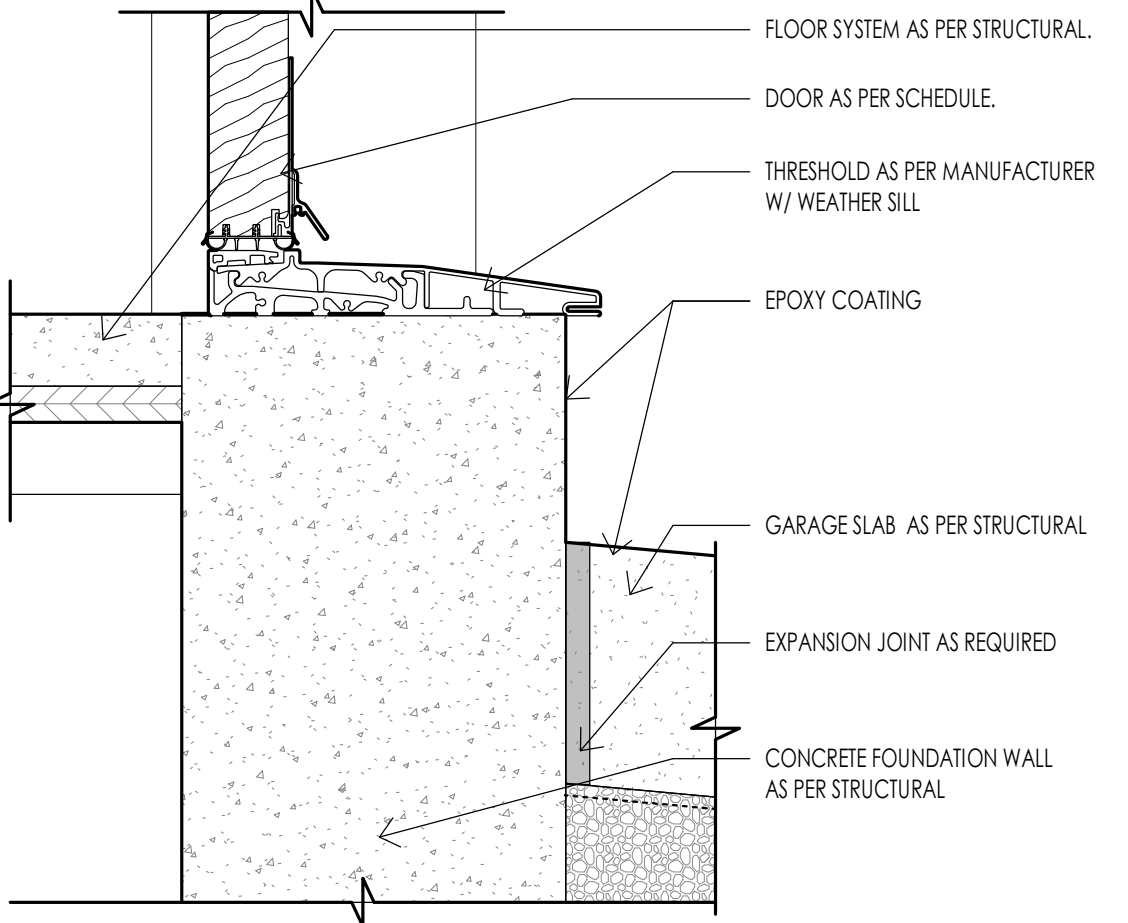
**DOOR - PIVOT SILL DETAIL WOOD DOOR**



**DOOR - TYPICAL INTERIOR HEAD**



**DOOR - INTERIOR TYPICAL JAMB DETAIL**



**DOOR - THRESHOLD DETAIL @ GARAGE**



**DOOR - GARAGE JAMB @ BRICK WALL**



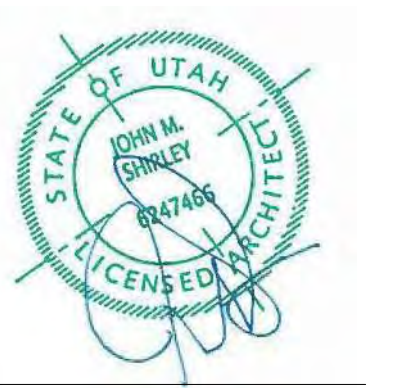
**DOOR - GARAGE HEAD @ BRICK WALL**



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WARM SPRINGS RESIDENCE #34  
180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:

SHEET TITLE:  
**DOOR SCHEDULE & ELEVATIONS**

SHEET NUMBER:  
**A601**

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**WINDOW SCHEDULE**

MARK	UNIT SIZE			OPERATION	MATERIAL	DETAILS			FINISH	GLAZING		COMMENTS
	WIDTH	HEIGHT	HEAD HEIGHT			HEAD	JAMB	SILL		THICKNESS	TYPE	
W01	3'-0"	6'-0"	9'-0"	CASEMENT	ALUMINUM CLAD	11/A603	17/A603	23/A603	AS PER I.D.			
W02	6'-0"	6'-0"	9'-0"	FIXED	ALUMINUM CLAD	11/A603	17/A603	23/A603	AS PER I.D.			
W03	3'-0"	5'-0"	8'-0"	FIXED	ALUMINUM CLAD	9/A603	14/A603	22/A603	AS PER I.D.			
W04	11'-10"	10'-0"	10'-0"	DOOR SLIDER TRIPLE	ALUMINUM CLAD	11/A603	17/A603	PER MANUF.	AS PER I.D.			
W05	2'-4"	6'-0"	8'-0"	CASEMENT	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			
W06	3'-0"	5'-0"	8'-0"	CASEMENT	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			
W07	5'-0"	5'-0"	8'-0"	FIXED	ALUMINUM CLAD	VARIES	VARIES	VARIES	AS PER I.D.			
W08	3'-0"	6'-0"	8'-0"	FIXED	ALUMINUM CLAD	VARIES	VARIES	VARIES	AS PER I.D.			
W09	2'-4"	5'-0"	8'-0"	CASEMENT	ALUMINUM CLAD	10/A603	16/A603	22/A603	AS PER I.D.			
W10	7'-4"	2'-4"	8'-0"	FIXED	ALUMINUM CLAD	10/A603	16/A603	22/A603	AS PER I.D.			
W11	5'-0"	2'-0"	10'-0"	FIXED	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			
W12	4'-0"	2'-0"	3'-0"	FIXED	ALUMINUM CLAD	11/A603	17/A603	23/A603	AS PER I.D.			
W13	3'-0"	2'-0"	10'-0"	FIXED	ALUMINUM CLAD	11/A603	17/A603	23/A603	AS PER I.D.			
W14	2'-4"	4'-0"	12'-0"	FIXED	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			
W15	3'-0"	8'-0"	8'-0"	EXTERIOR PATIO SINGLE DOOR	ALUMINUM CLAD	PER MANUF.	PER MANUF.	PER MANUF.	AS PER I.D.			
W16	3'-0"	2'-0"	10'-0"	CORNER WINDOW	ALUMINUM CLAD	11/A603	17/A603	23/A603	AS PER I.D.			
W17	3'-0"	6'-0"	8'-0"	CORNER WINDOW	ALUMINUM CLAD	11/A603	17/A603	23/A603	AS PER I.D.			
W20	4'-4"	6'-0"	8'-0"	FIXED	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			
W21	3'-0"	6'-0"	8'-0"	CASEMENT	ALUMINUM CLAD	VARIES	VARIES	VARIES	AS PER I.D.			
W22	3'-0"	5'-0"	8'-0"	FIXED	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			
W23	4'-4"	2'-0"	10'-0"	FIXED	ALUMINUM CLAD	12/A603	18/A603	24/A603	AS PER I.D.			

**WINDOW LEGEND**

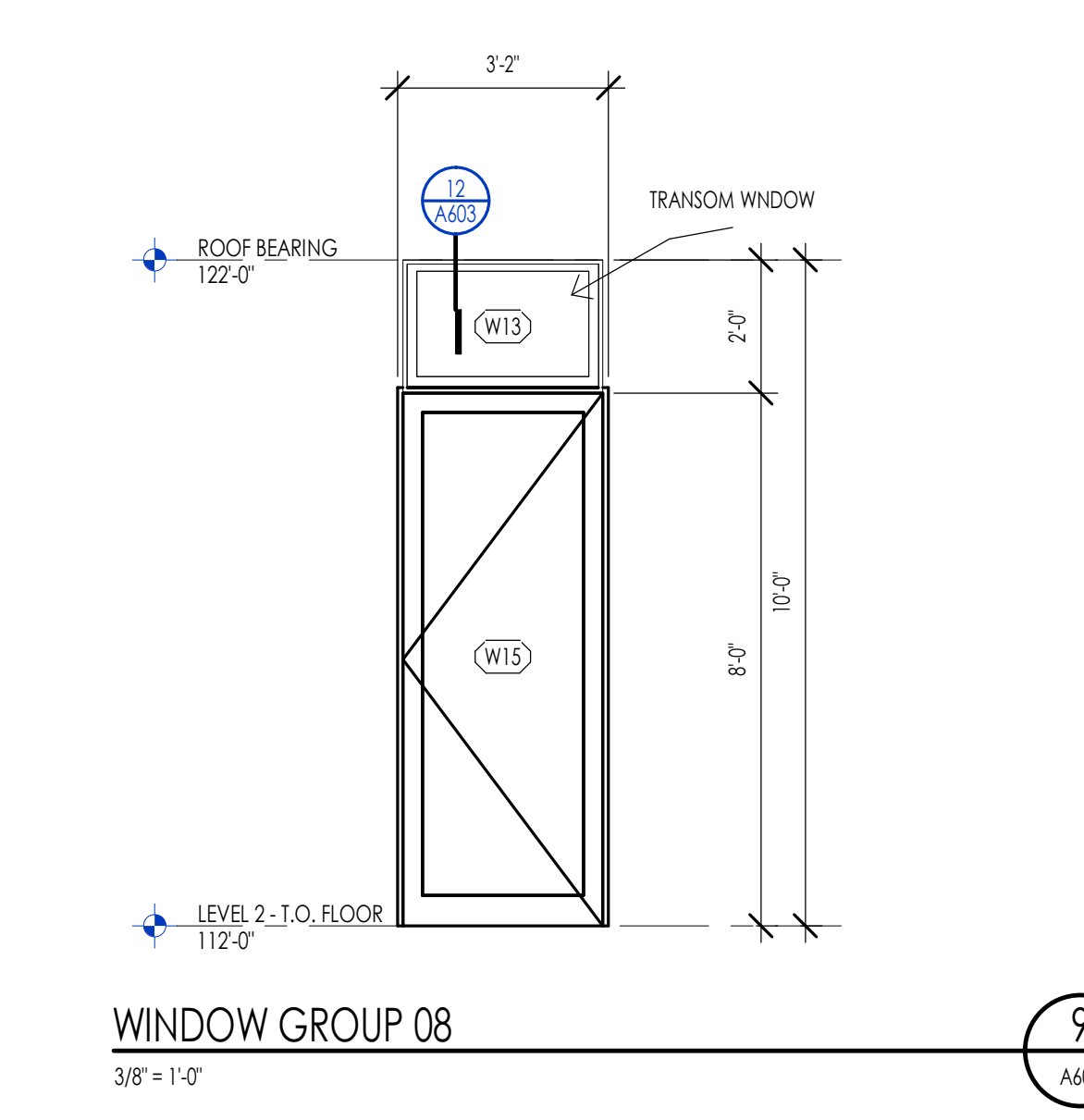
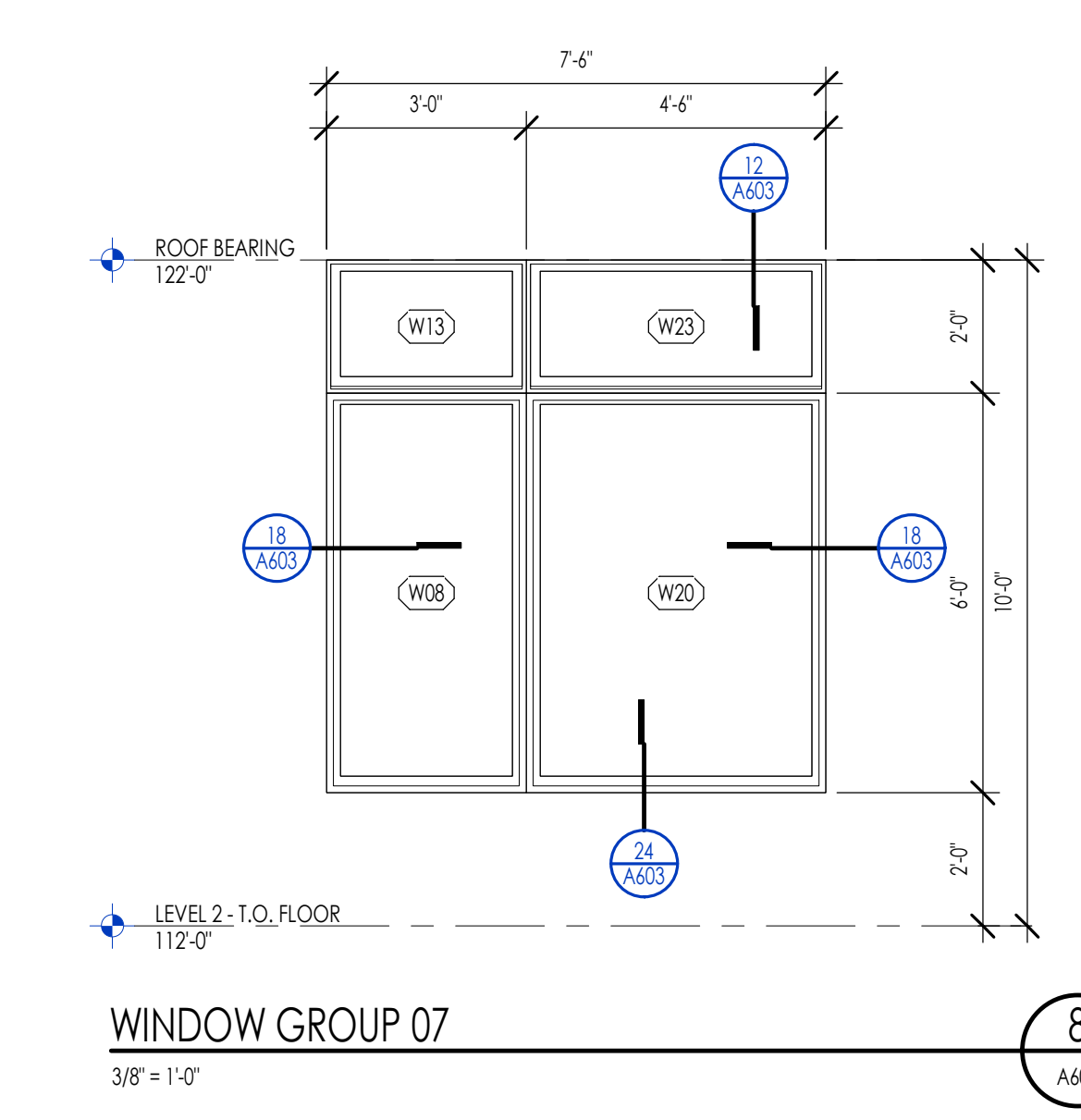
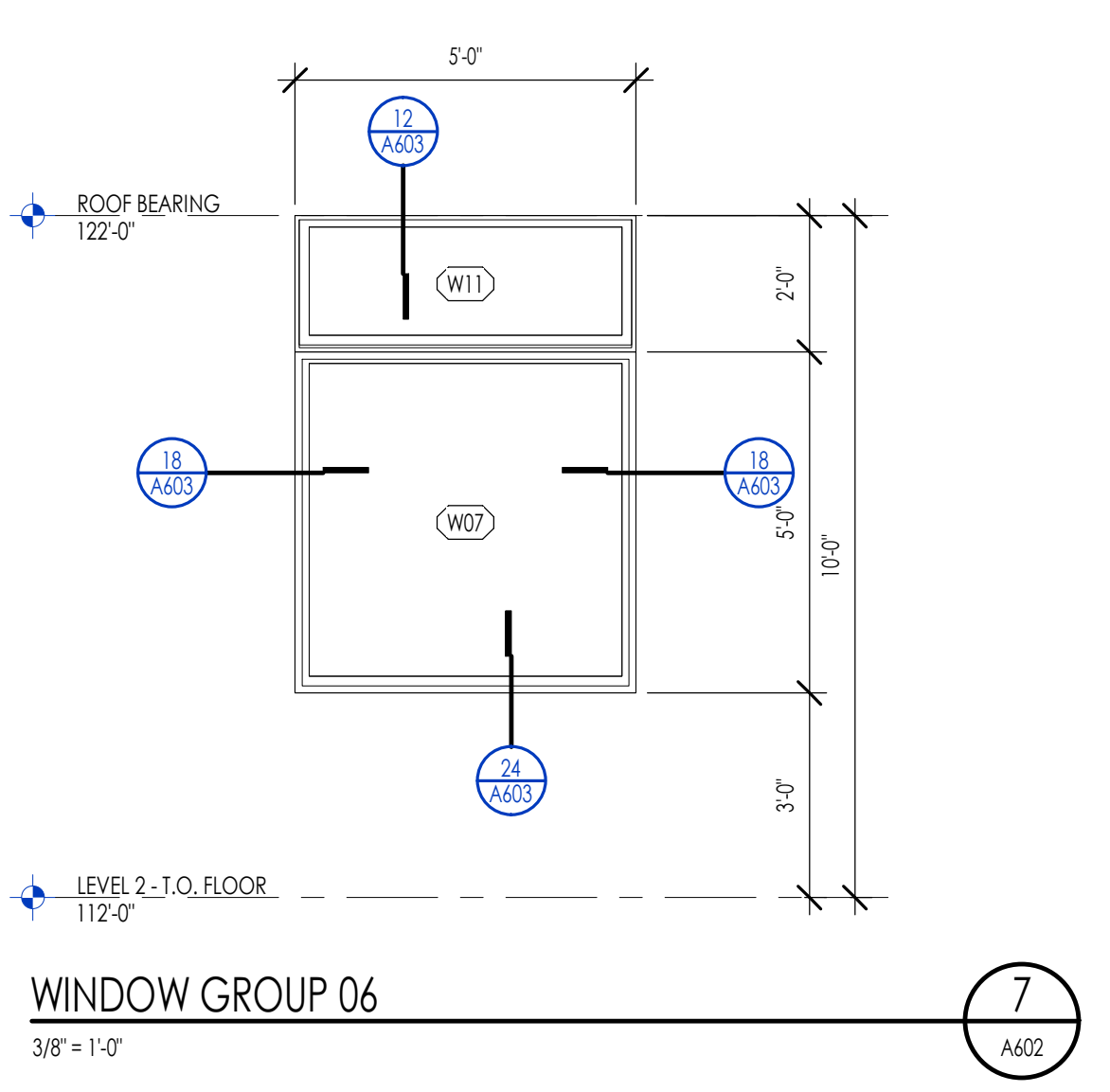
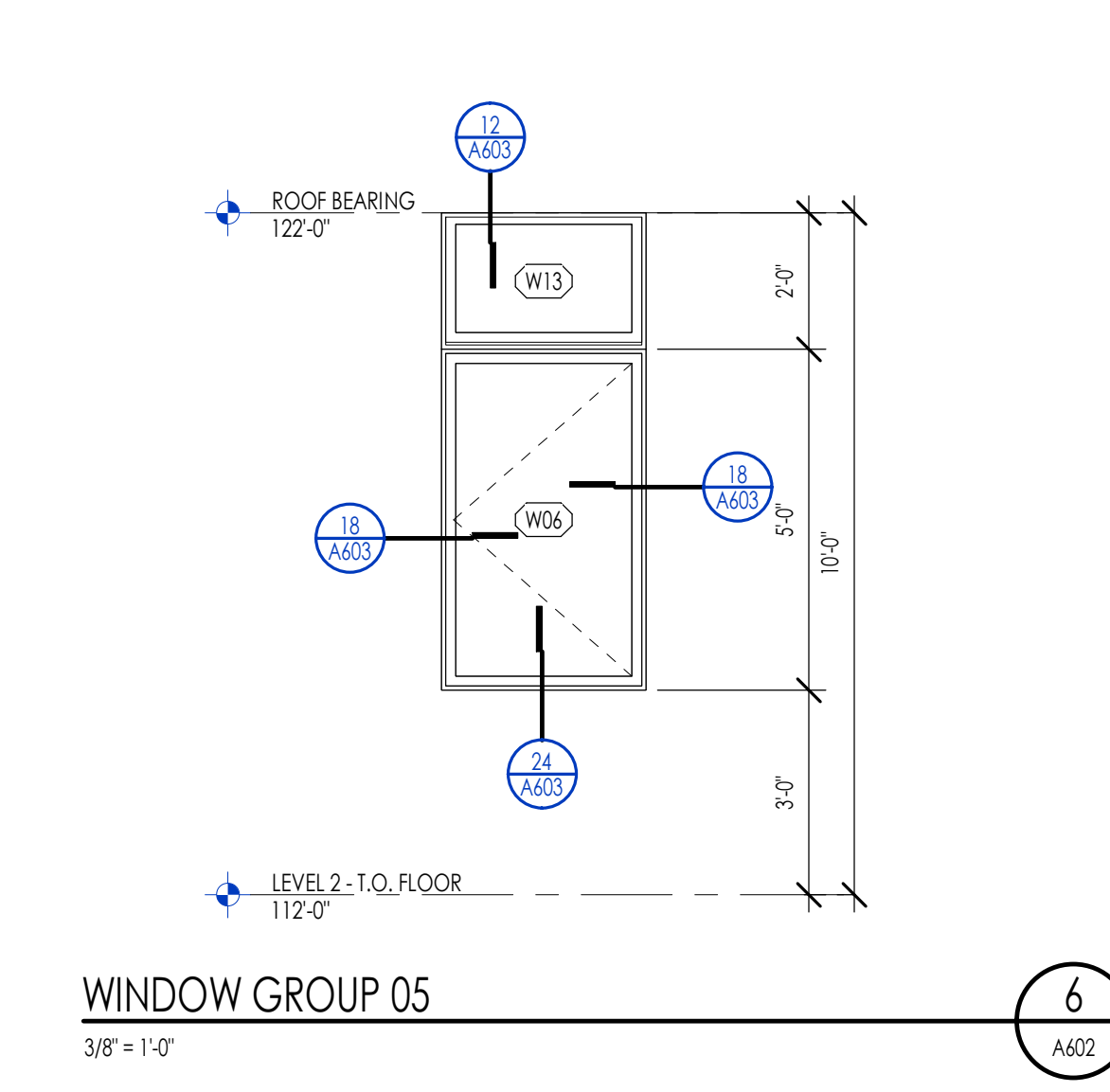
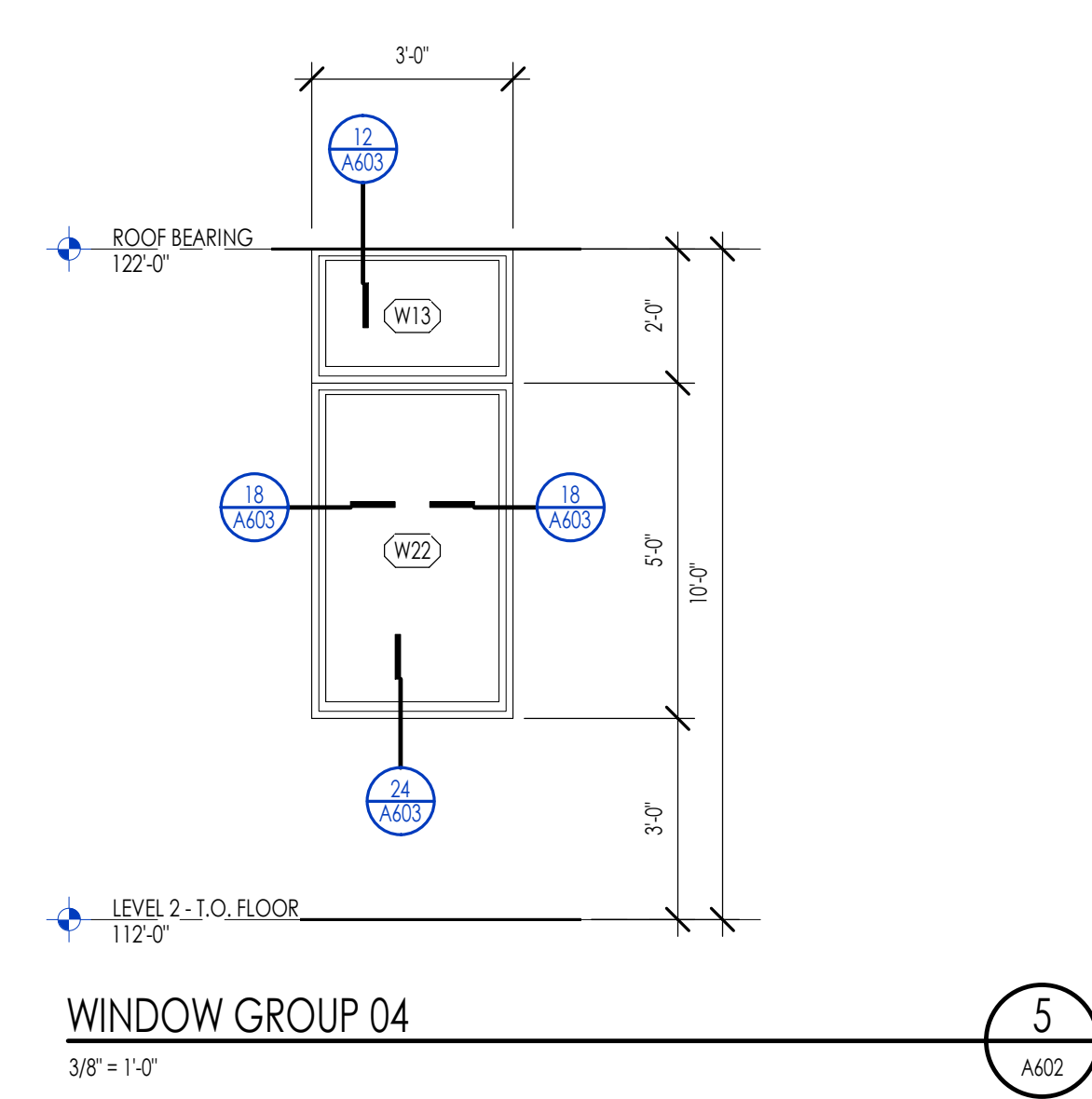
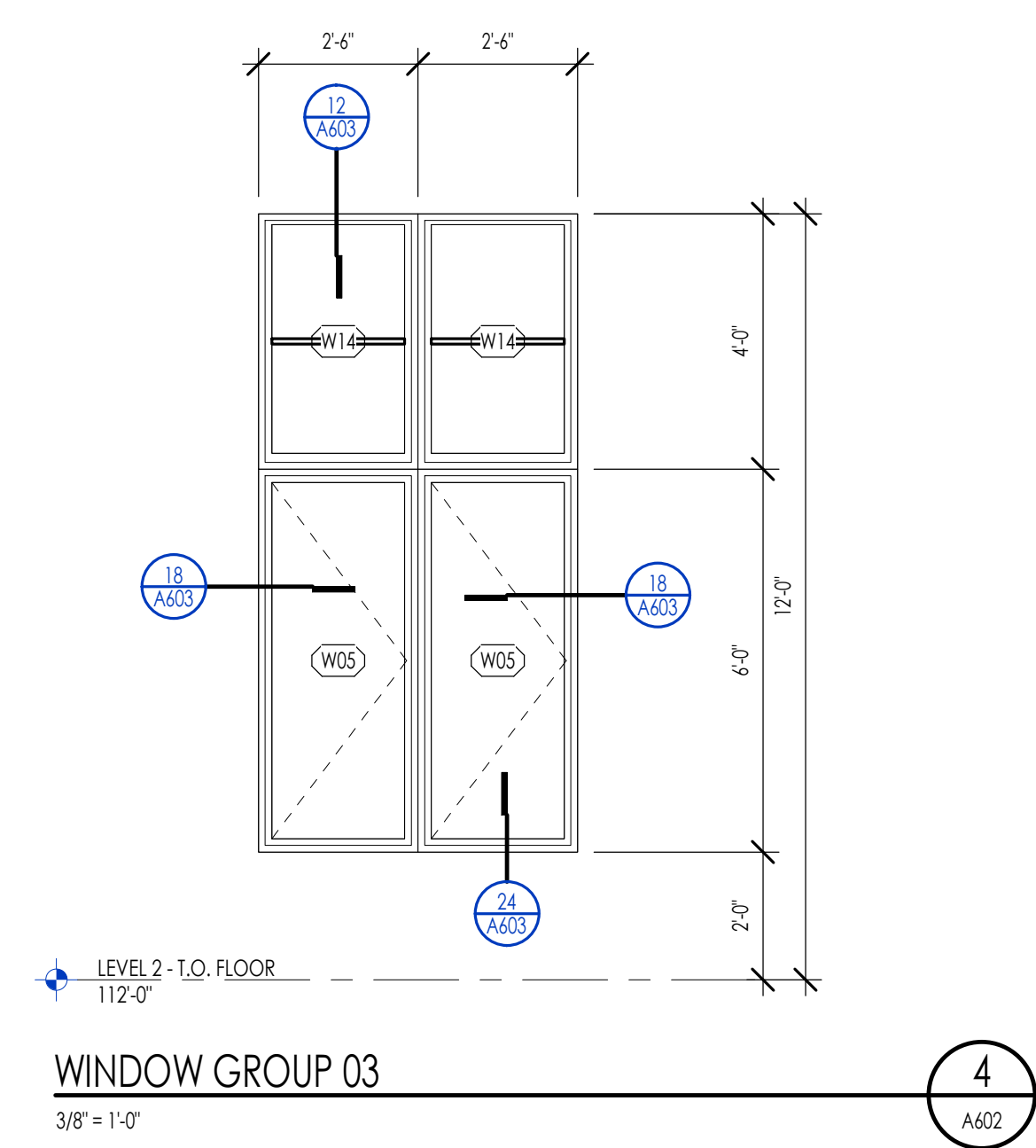
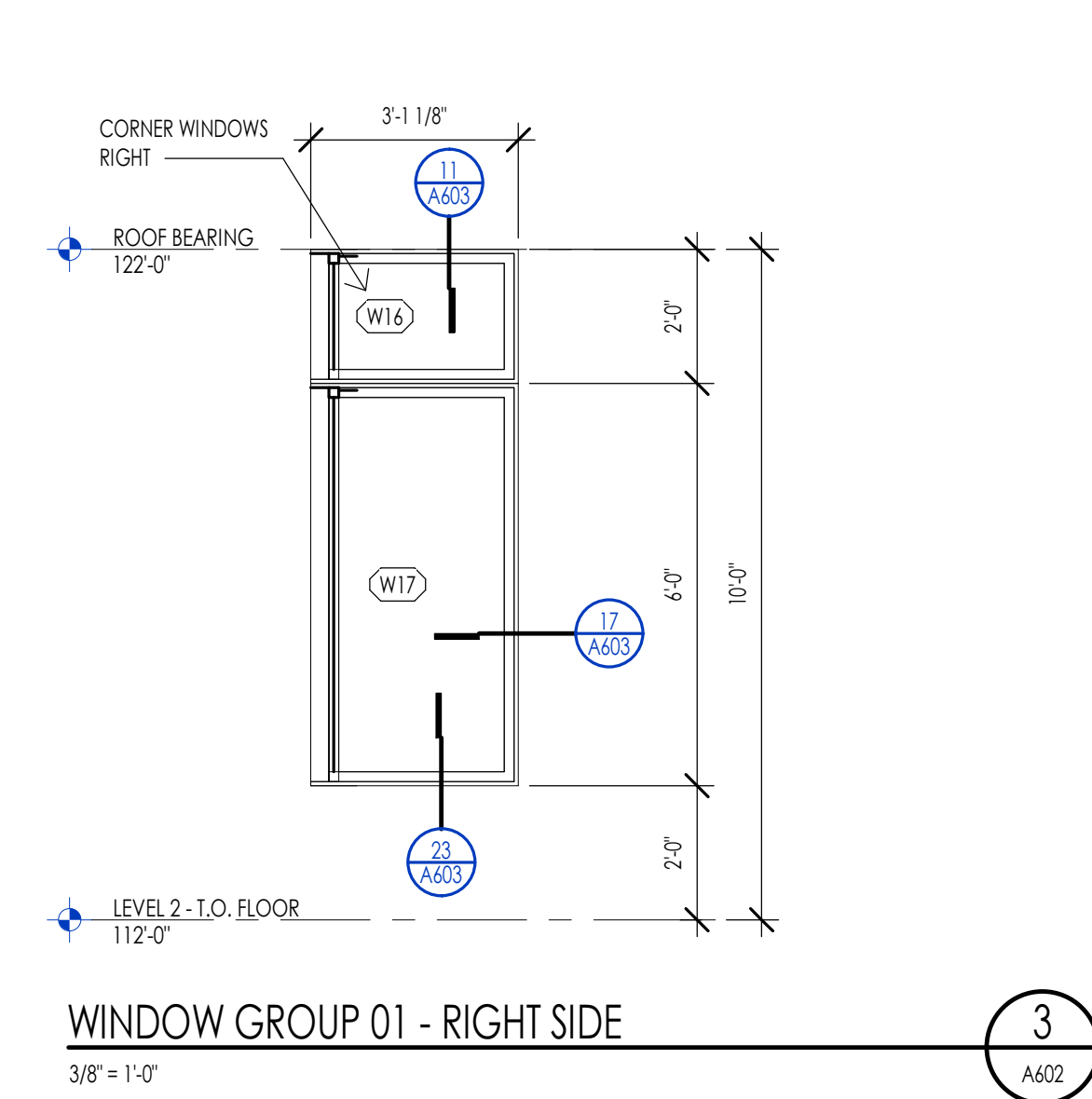
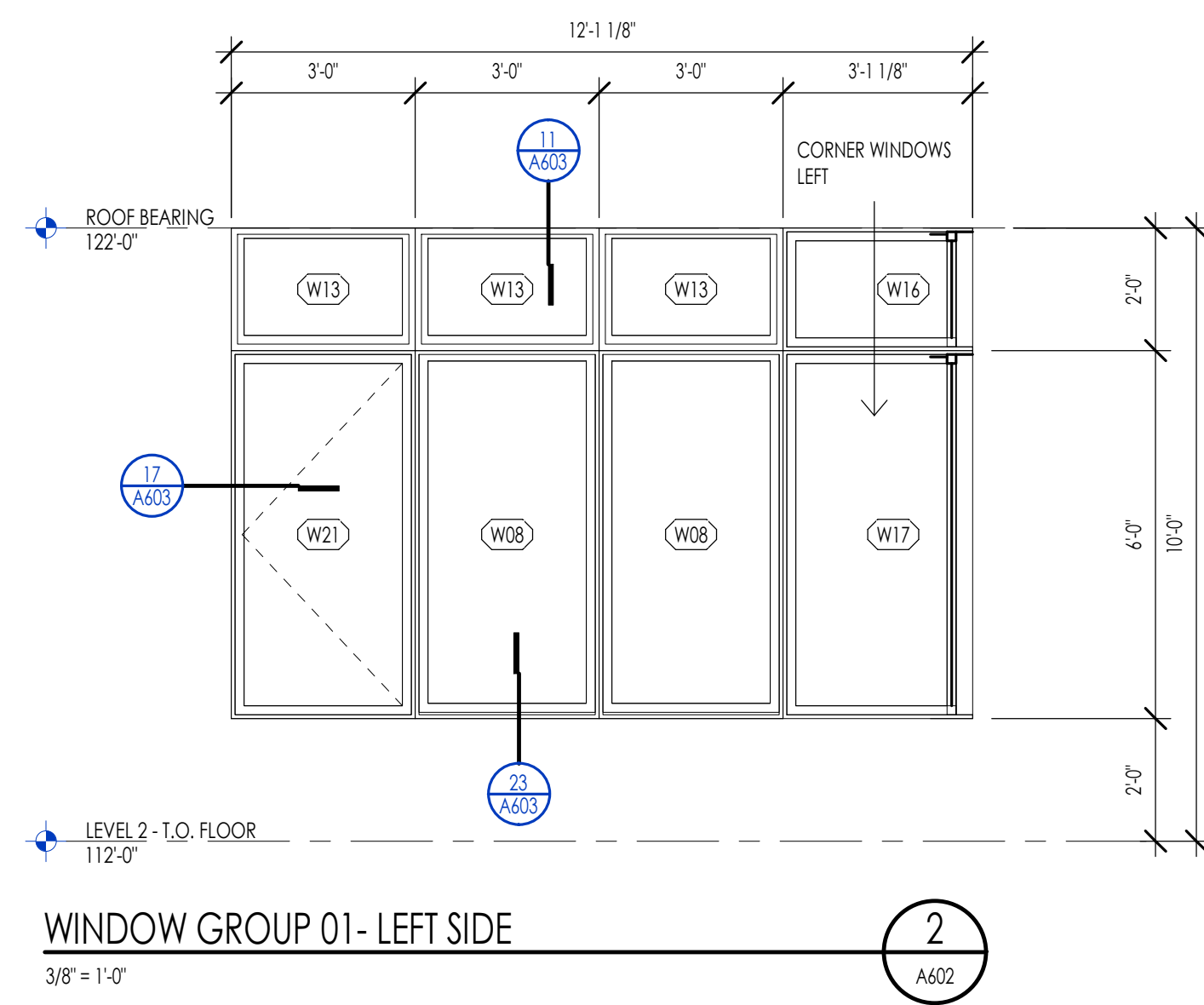
SYMBOL	DESCRIPTION
(T)	TEMPERED GLAZING LOCATIONS.
→	DIRECTION OF OPERABLE WINDOW DOOR.
(E)	WINDOW IS REQUIRED TO MEET EMERGENCY EGRESS.

**WINDOW SPECIFICATIONS**

APPROVED MANUFACTURERS:	MINIMUM U-VALUE:
SCREENS REQUIRED:	SCREEN COLOR:
BASIS OF DESIGN:	TYPICAL JAMB WIDTH:
WINDOW TYPE:	SDL WIDTH:
WINDOW COLOR:	SDL TYPE:
WINDOW GLAZING:	

**WINDOW GENERAL NOTES**

- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R310.
  - RESCUE WINDOW OR DOOR OR ACCESS TO AN ADJOINING BERGROOM WITH AN EMERGENCY ESCAPE AND RESCUE WINDOW.
  - ALL EMERGENCY OPENINGS SHALL HAVE A MINIMUM NET CLEAR OPENING AREA OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPENING HEIGHT SHALL BE 20 INCHES. THE MINIMUM NET CLEAR OPENING WIDTH SHALL BE 20 INCHES. EMERGENCY OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS OR TOOLS, EXCEPT GROUND FLOOR. NET CLEAR AREA OF 5.0 SQUARE FEET, R310.1.1 TO R310.1.4.
  - WINDOW SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR. OPENINGS WITH A FINISHED SILL HEIGHT BELOW THE ADJACENT GROUND ELEVATION SHALL BE PROVIDED WITH A WINDOW WELL. R310.2.2
  - WINDOW WELLS REQUIRED FOR ESCAPE OR RESCUE SHALL HAVE HORIZONTAL DIMENSIONS THAT ALLOW THE DOOR OR WINDOW TO BE FULLY OPENED. THE HORIZONTAL DIMENSION FOR THE WINDOW WELL SHALL PROVIDE A MINIMUM NET CLEAR AREA OF 9 SQUARE FEET WITH A MINIMUM HORIZONTAL PROJECTION AND WIDTH OF 36 INCHES. R310.2.3
  - WINDOW WELLS WITH A VERTICAL DEPTH GREATER THAN 44 INCHES BELOW THE ADJACENT GROUND LEVEL SHALL BE EQUIPPED WITH A PERMANENTLY AFFIXED LADDER OR STEPS USABLE WITH THE WINDOW IN THE FULLY OPENED POSITION. LADDERS OR RINGS SHALL HAVE AN INSIDE WIDTH OF AT LEAST 12 INCHES. SHALL PROJECT AT LEAST 3 INCHES FROM THE WALL AND SHALL BE SPACED NOT MORE THAN 18 INCHES ON CENTER VERTICALLY FOR THE FULL HEIGHT OF THE WINDOW WELL. R310.2.3.1
  - BARS, GRILLS, COVERS, SCREENS, ETC. SHALL BE PERMITTED TO BE PLACED OVER THE EMERGENCY EGRESS OPENING WINDOW WELL PROVIDED THE NET CLEAR OPENING SIZE IS NOT COMPROMISED AND THAT SUCH DEVICES SHALL BE RELEASED OR REMOVABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, TOOL, OR FORCE GREATER THAN THAT WHICH IS REQUIRED FOR NORMAL OPERATION. R310.4
- SAFETY GLAZING SHALL BE INSTALLED IN HAZARDOUS LOCATIONS AND SHALL MEET THE FOLLOWING REQUIREMENTS. SEE I.R.C. SECTION R308. FOR EXCEPTIONS SEE I.R.C. R308.4.
  - EACH PANE OF GLASS INSTALLED IN HAZARDOUS LOCATIONS SHALL BE PERMANENTLY IDENTIFIED BY MANUFACTURER DESIGNATING THE TYPE, THICKNESS, AND SAFETY GLAZING STANDARD. THE LABEL SHALL BE ACID ETCHED, SANDBLASTED, CERAMIC FIRED OR EMBOSSED ON GLASS AND BE VISIBLE WHEN THE UNIT IS GLAZED. FOR EXCEPTIONS SEE I.R.C. R308.1.
  - PROVIDE SAFETY GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING AND FOLDING DOORS (R308.4.1). SAFETY GLAZING SHALL BE PROVIDED WHEN GLAZING AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES ABOVE THE FLOOR OR WALKING SURFACE AND IS WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION OR WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE HINGE SIDE OF AN IN SWINGING DOOR. (I.R.C. R308.4.2)
  - PROVIDE SAFETY GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS. (I.R.C. R308.4.6)
  - PROVIDE SAFETY GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 40 INCHES ABOVE A STANDING OR WALKING SURFACE. (I.R.C. R308.4.5)
  - PROVIDE SAFETY GLAZING IN RAILINGS REGARDLESS OF AN AREA OR HEIGHT. (I.R.C. R308.4.4)
  - PROVIDE SAFETY GLAZING IN WALLS AND FENCES ENCLOSING SWIMMING POOLS OR HOT TUBS WHERE THE BOTTOM EDGE OF THE POOL OR SPA GLASS IS LESS THAN 40 INCHES ABOVE THE WALKING SURFACE. (I.R.C. R308.4.5)
  - PROVIDE SAFETY GLAZING IN FIXED OR OPERABLE PANELS THAT MEETS ALL OF THE FOLLOWING CONDITIONS: AREAS GREATER THAN 9 SQUARE FEET; BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR; TOP EDGE GREATER THAN 36 INCHES ABOVE FLOOR; AND WITHIN 36 INCHES OF WALKING SURFACE. (I.R.C. R308.4.3)
- THE GENERAL CONTRACTOR AND WINDOW SUPPLIER ARE RESPONSIBLE TO FIELD MEASURE ALL WINDOW OPENINGS AND PROVIDE SHOP DRAWINGS BEFORE MANUFACTURING. SHOP DRAWINGS SHALL BE PROVIDED FOR EACH BUILDING INDIVIDUALLY AND SHALL NOT BE COMBINED WITH ANY OTHER BUILDING.
- THE WINDOW SUPPLIER SHALL BE RESPONSIBLE TO VERIFY ALL EMERGENCY EGRESS, LIGHT AND VENTILATION, AND TEMPERED GLASS LOCATION REQUIREMENTS PRIOR TO EACH SUBMITTAL.
- THE GENERAL CONTRACTOR AND WINDOW SUPPLIER ARE RESPONSIBLE TO VERIFY THAT EACH OF THE ABOVE LISTED REQUIREMENTS HAVE BEEN MET AND NOTE ANY DISCREPANCIES ON SUBMITTAL. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

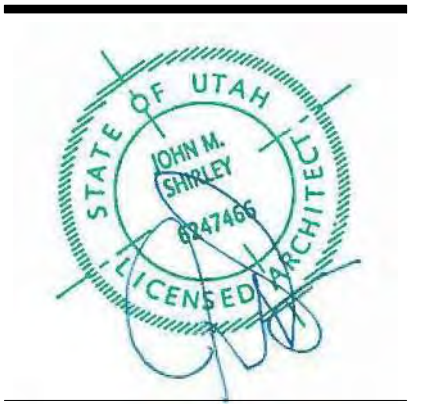


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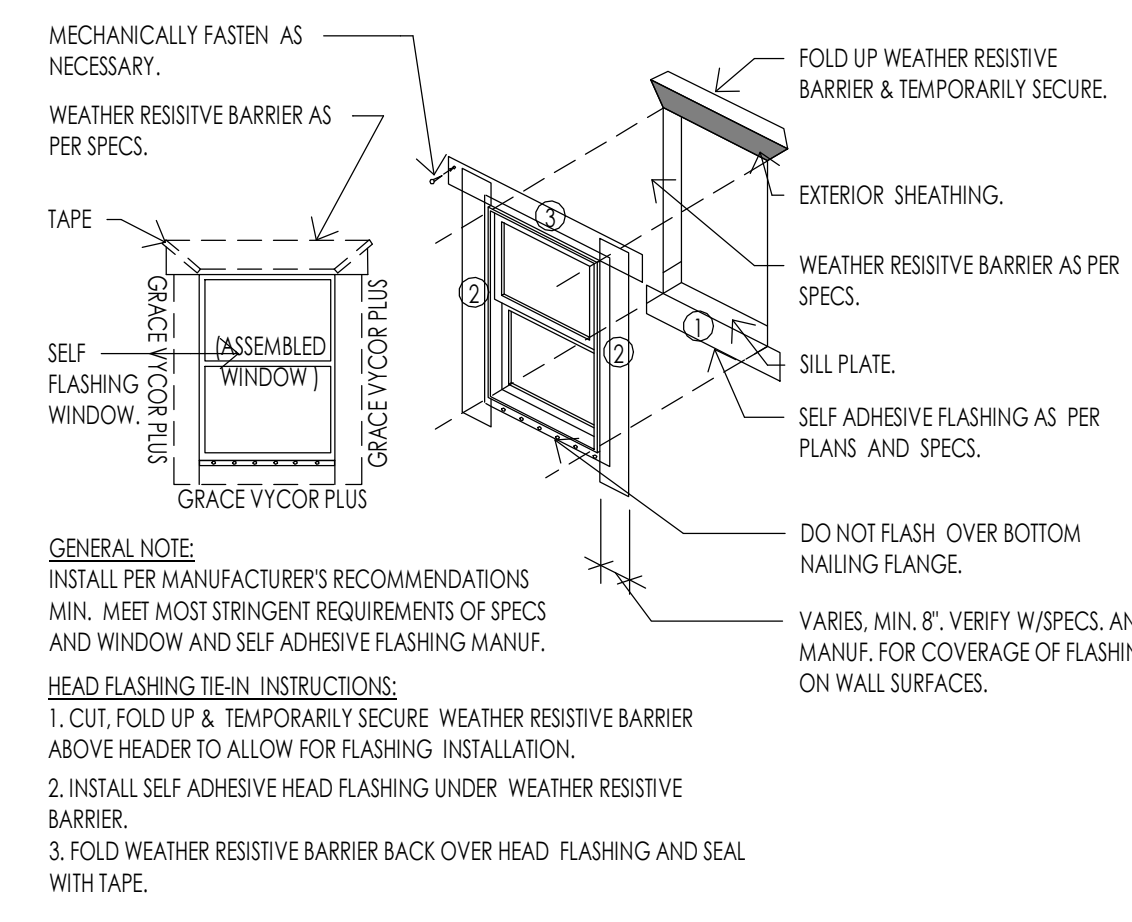
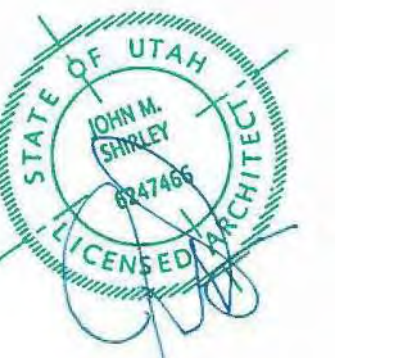
**WARM SPRINGS RESIDENCE #34**  
 180 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:

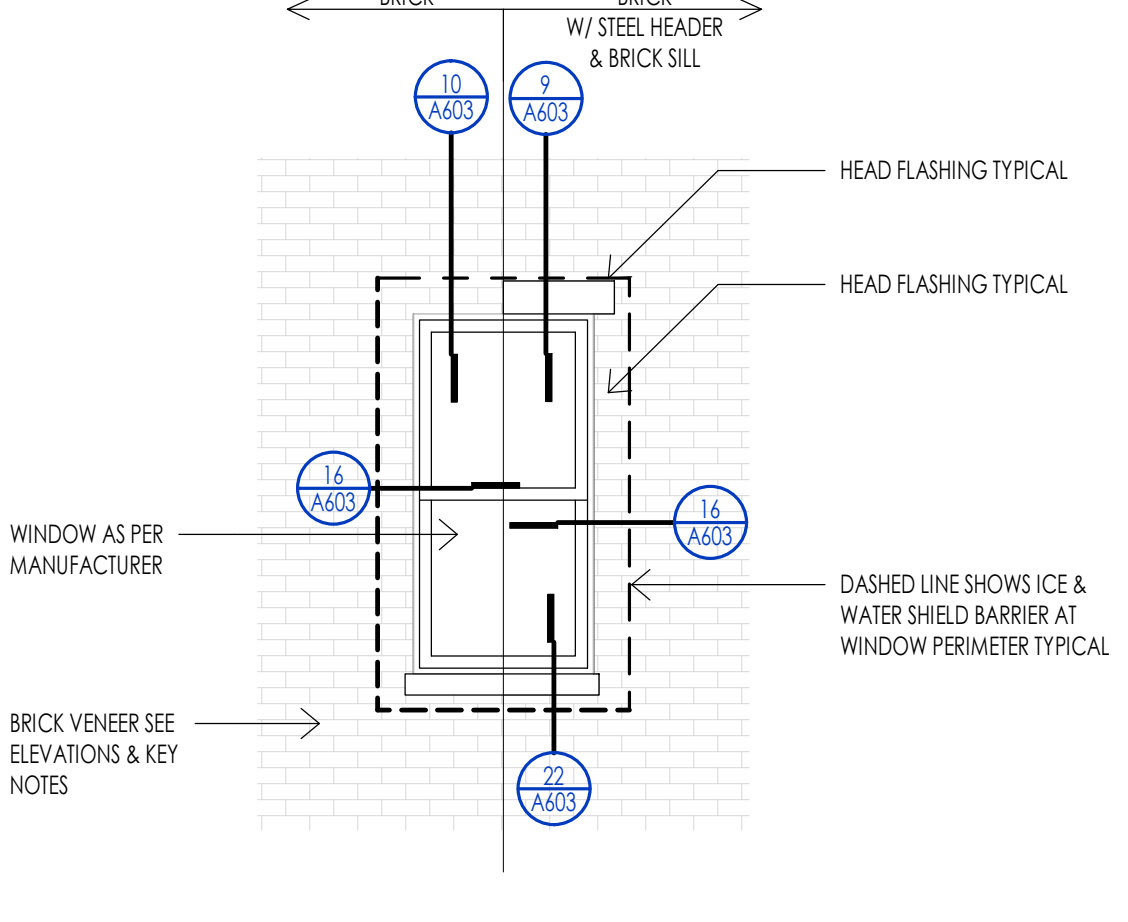
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**WINDOW SCHEDULE & ELEVATIONS**

SHEET NUMBER:  
**A602**

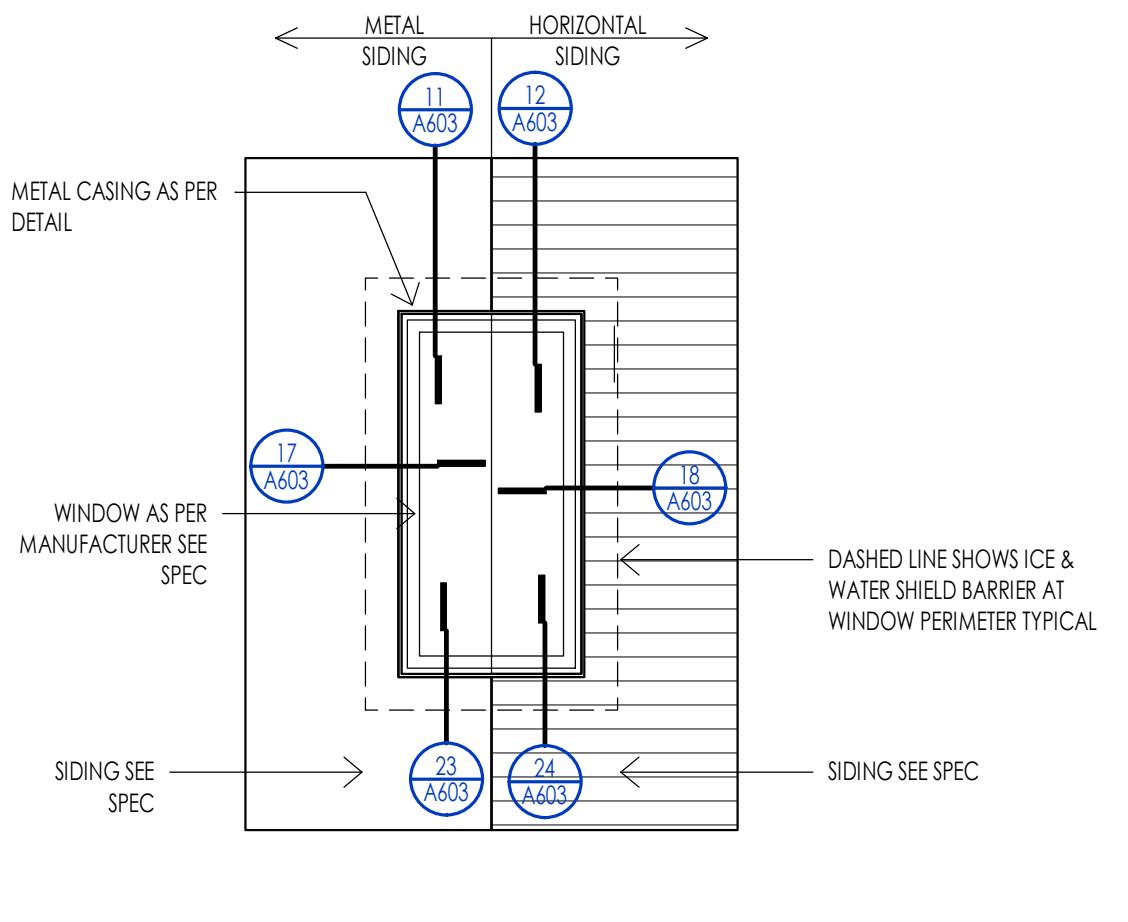
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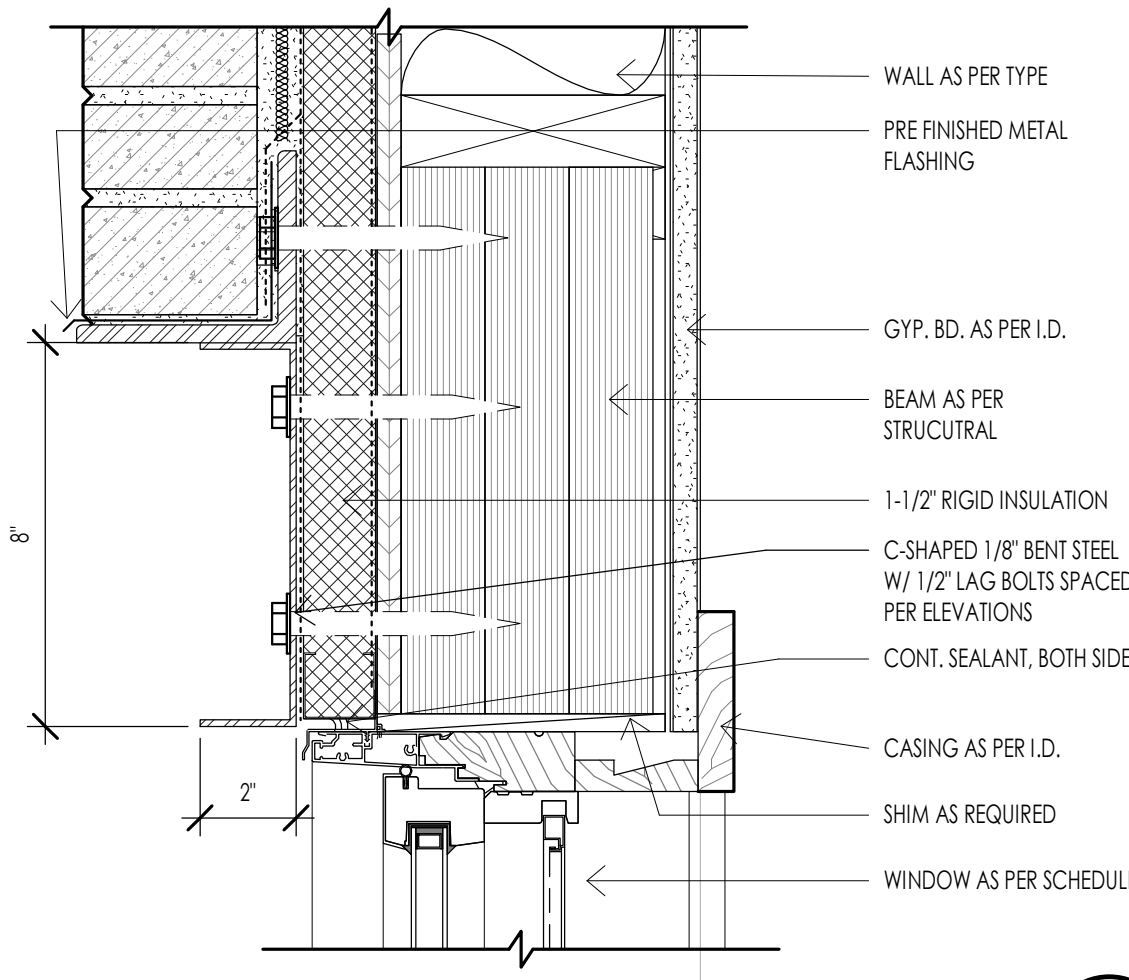
WINDOW - TYPICAL FLASHING DETAIL  
1 1/2" = 1'-0"  
A603



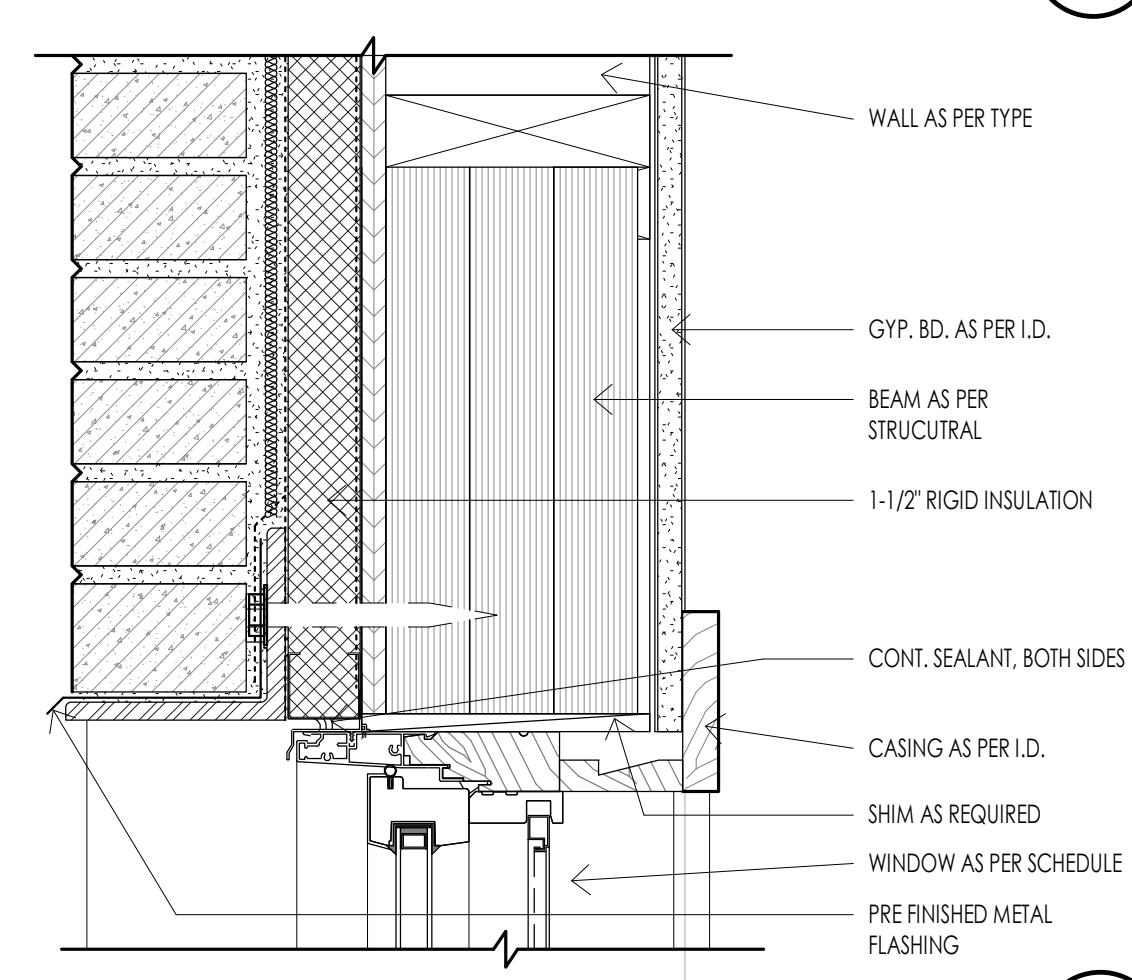
WINDOW - ELEVATION AT BRICK  
3/8" = 1'-0"  
A603



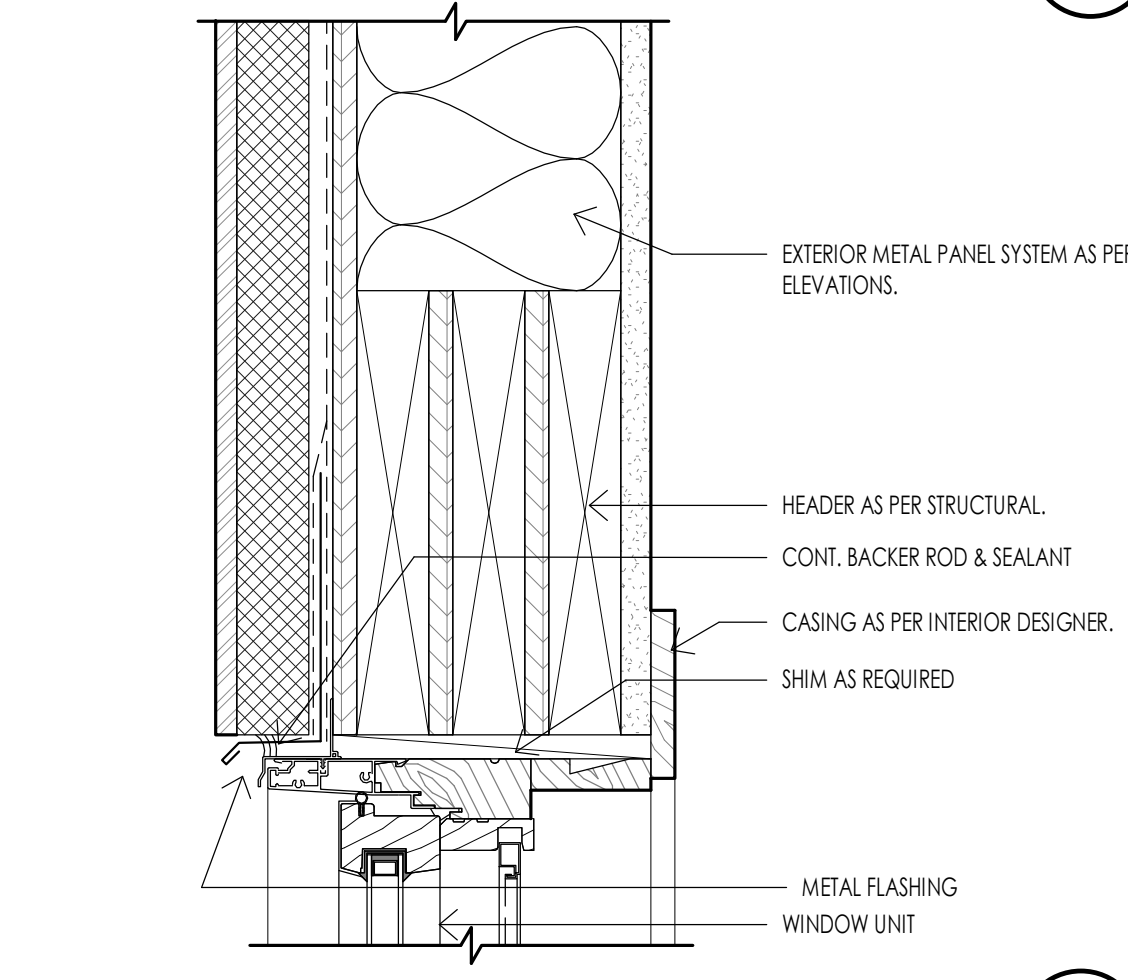
WINDOW - ELEVATION SIDING AT STEEL  
3/8" = 1'-0"  
A603



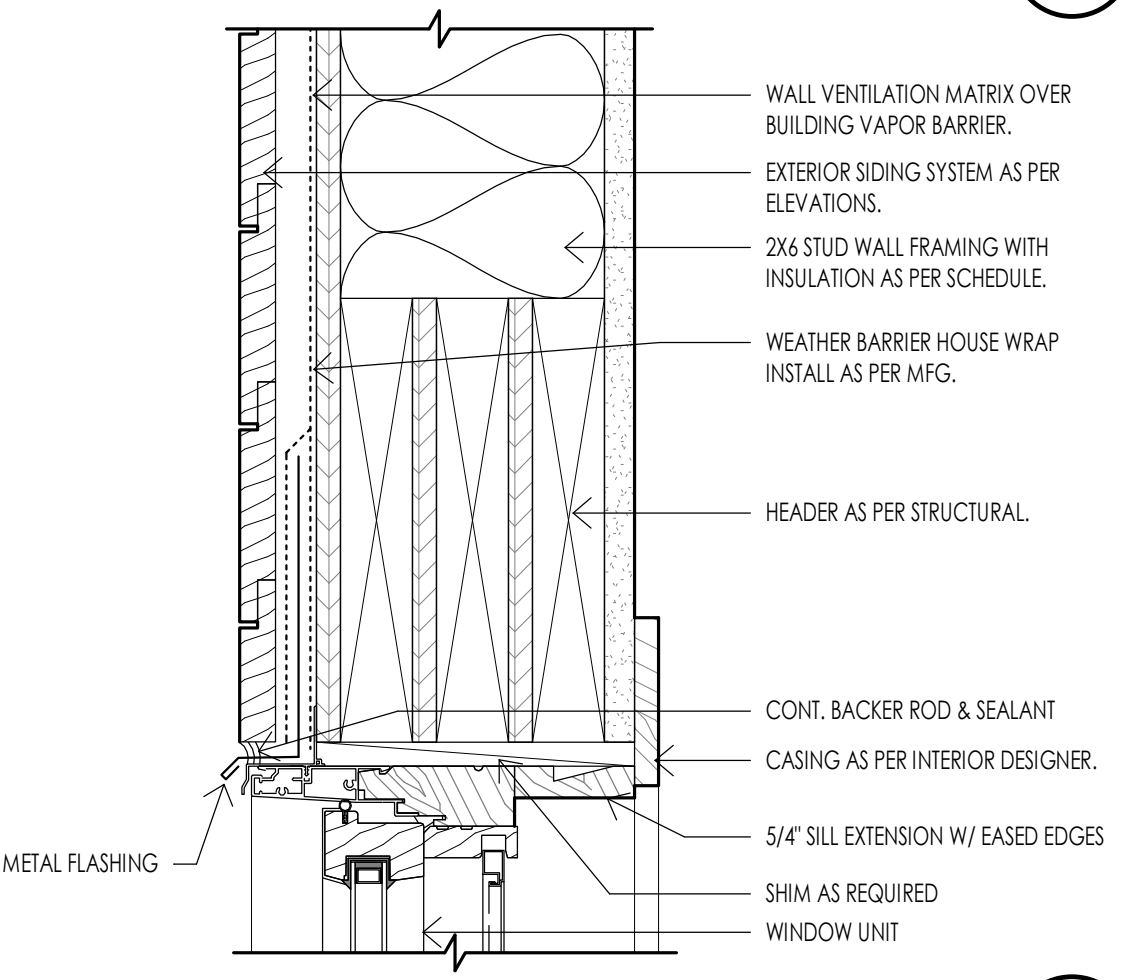
WINDOW - HEADER TRIM BAND AT BRICK  
3" = 1'-0"  
A603



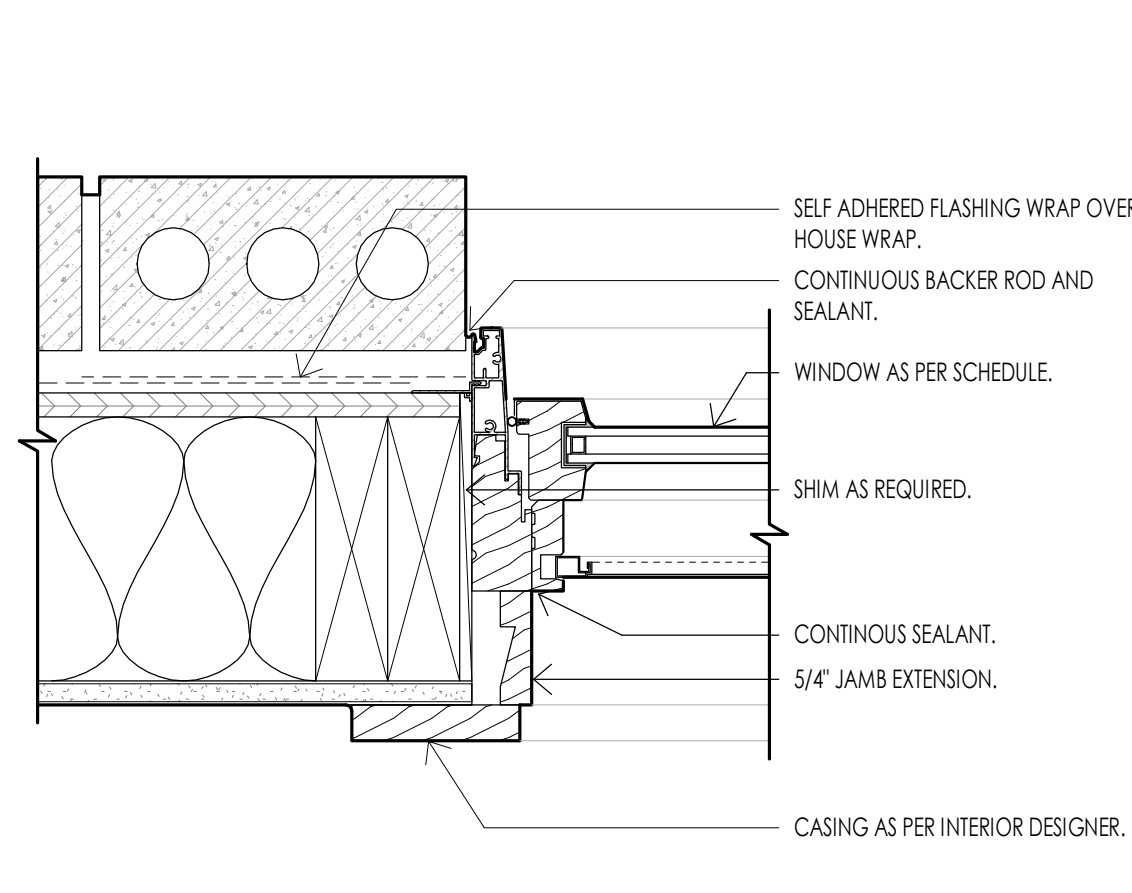
WINDOW - HEADER AT BRICK  
3" = 1'-0"  
A603



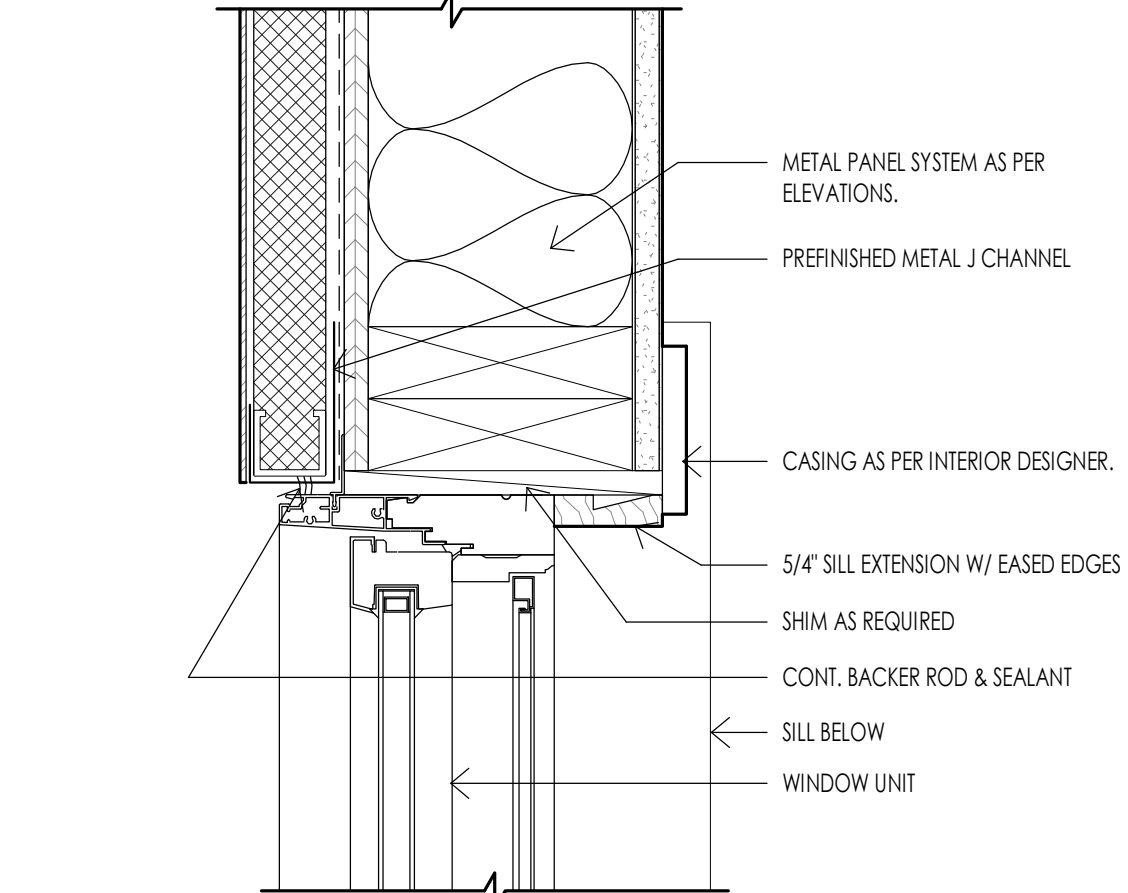
WINDOW - HEAD AT METAL PANEL  
3" = 1'-0"  
A603



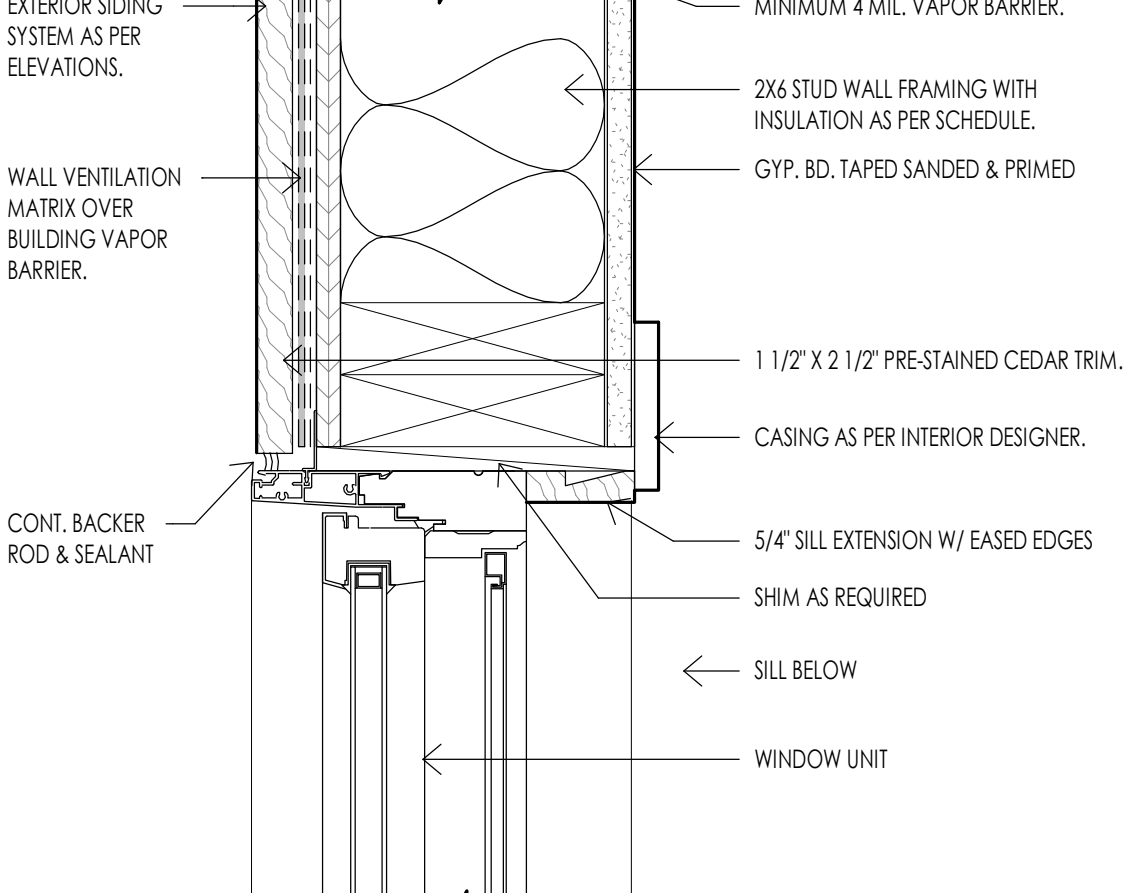
WINDOW - HEAD DETAIL AT SIDING  
3" = 1'-0"  
A603



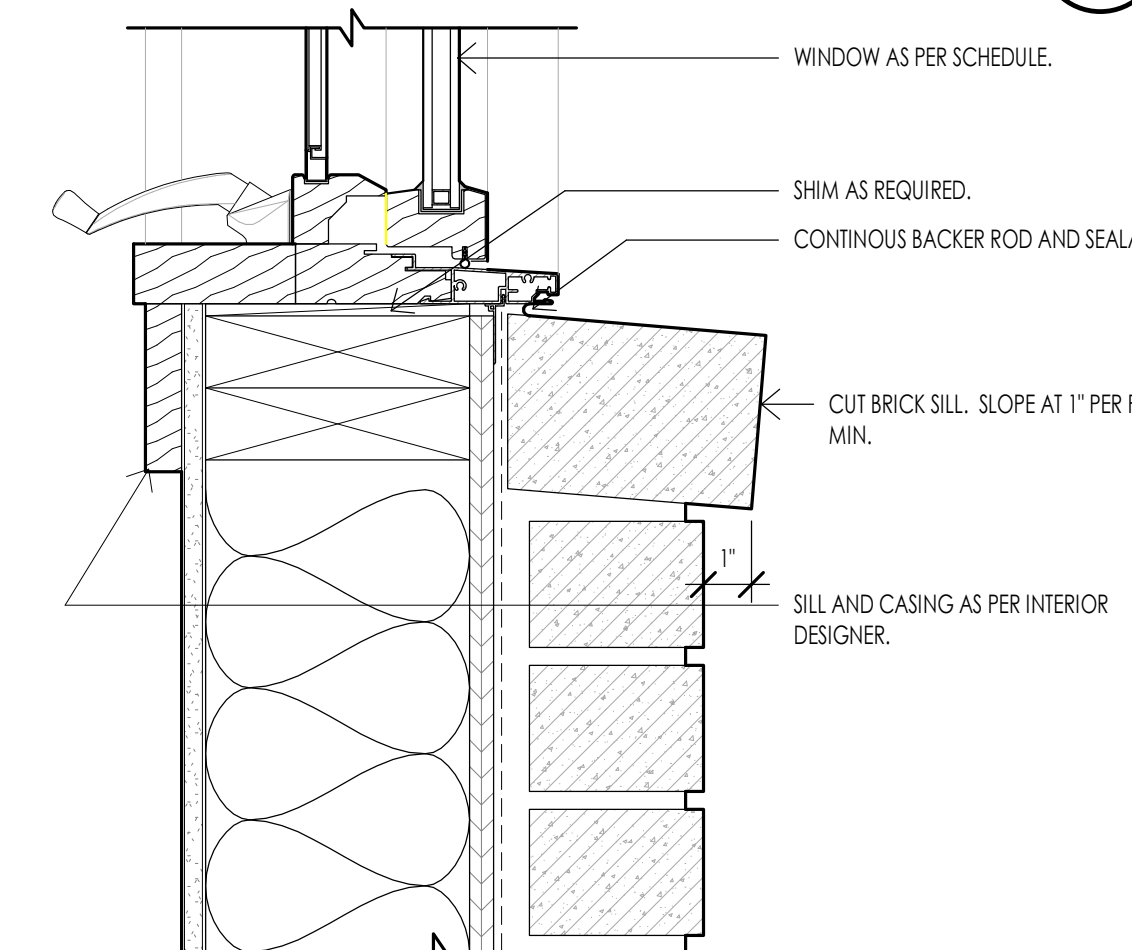
WINDOW - JAMB DETAIL AT BRICK  
3" = 1'-0"  
A603



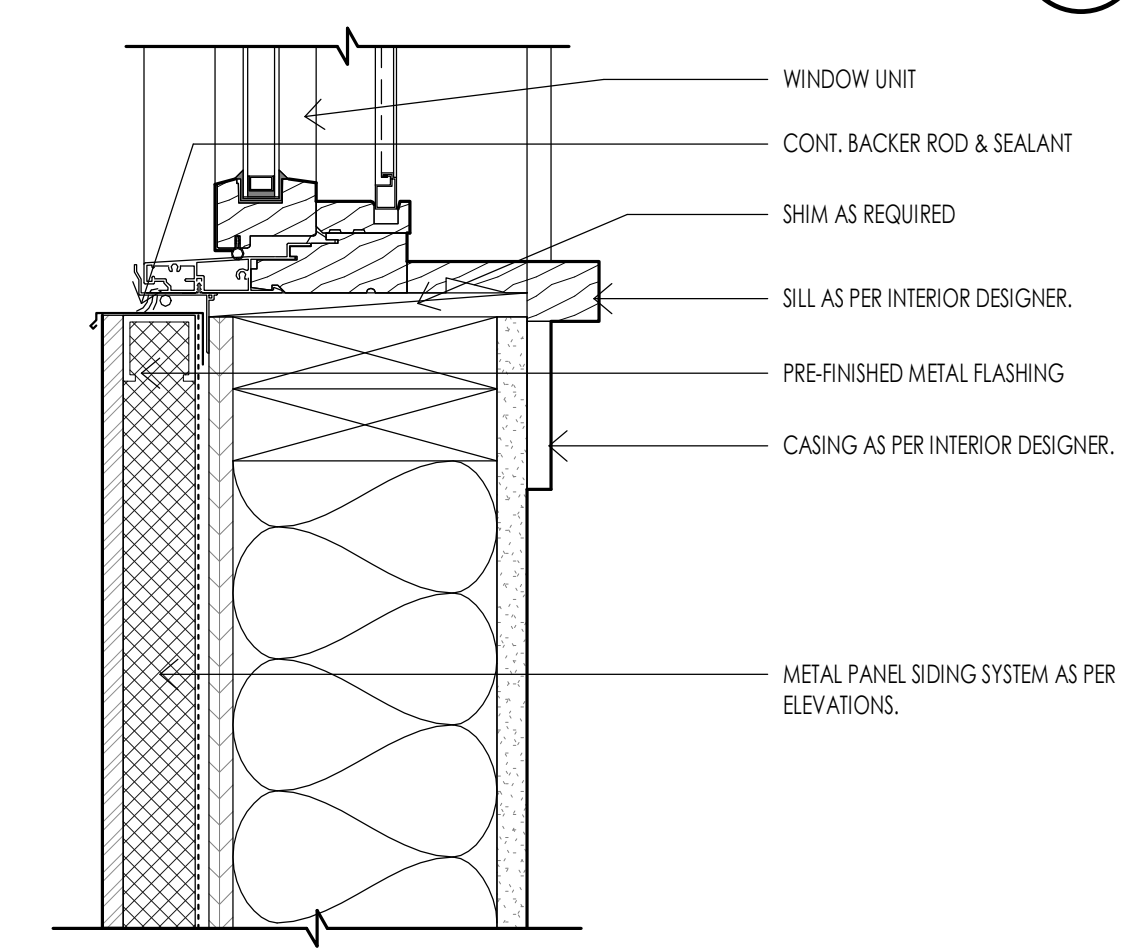
WINDOW - JAMB DETAIL AT METAL PANEL SIDING  
3" = 1'-0"  
A603



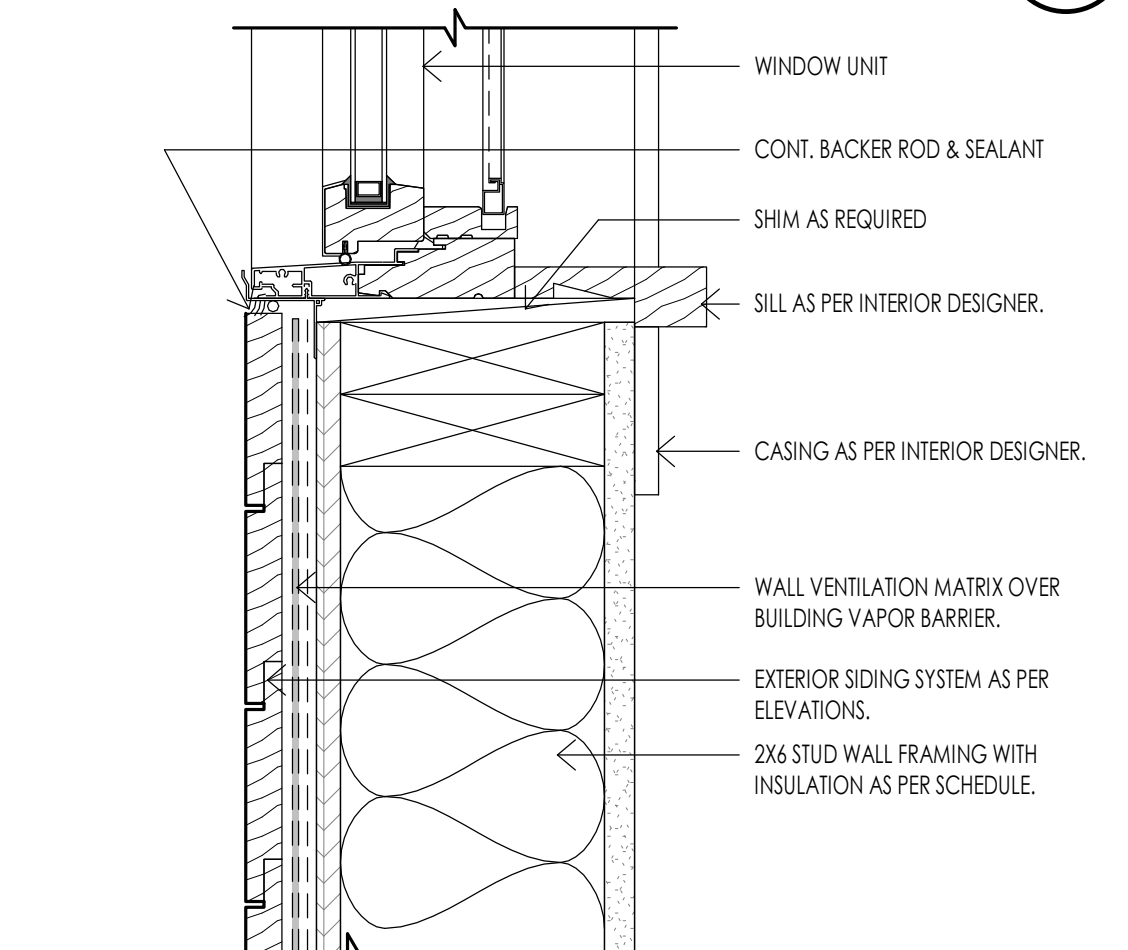
WINDOW - JAMB DETAIL AT SIDING  
3" = 1'-0"  
A603



WINDOW - SILL DETAIL AT BRICK  
3" = 1'-0"  
A603



WINDOW - SILL DETAIL AT METAL PANEL  
3" = 1'-0"  
A603

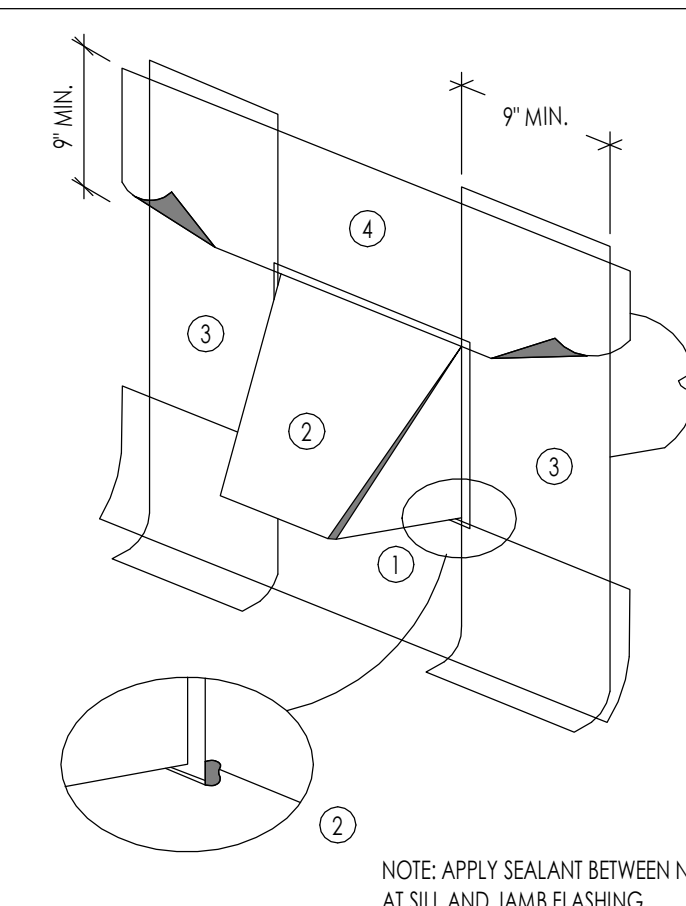


WINDOW - SILL DETAIL AT SIDING  
3" = 1'-0"  
A603

**MECHANICAL GENERAL NOTES**

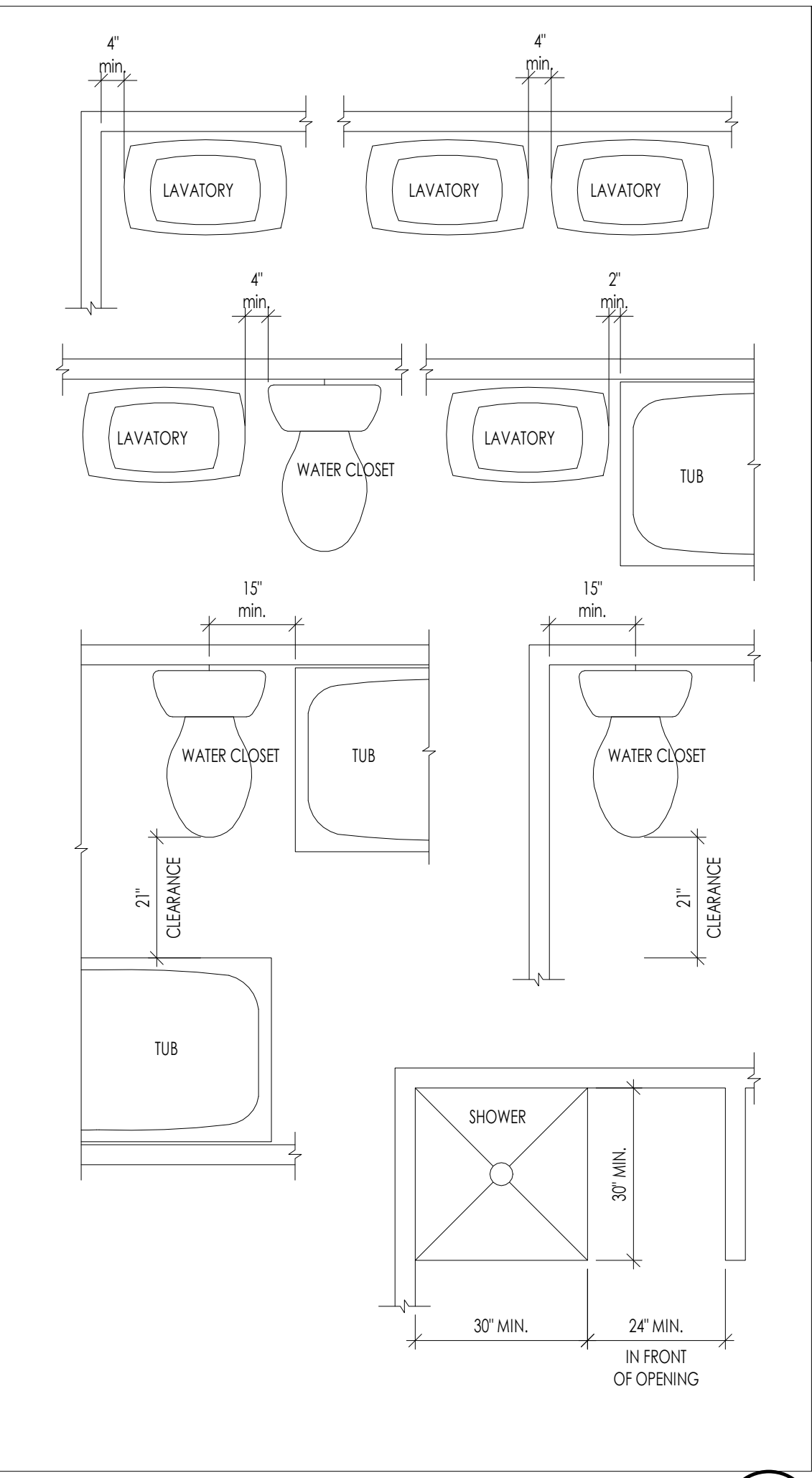
- PLUMBING GENERAL NOTES**
1. THE PLUMBING SYSTEM SHALL BE DESIGNED BY A LICENSED MECHANICAL CONTRACTOR/ DESIGNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IRC, IPC AND IECC.
  2. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE PLUMBING SYSTEM INSTALLATION AND SHALL PROVIDE A (1) ONE YEAR WARRANTY BEGINNING FROM THE TIME OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER COMPLETE OPERATION AND MAINTENANCE MANUALS. THE CONTRACTOR SHALL ALSO SET UP A TIME TO PROVIDE COMPLETE TRAINING OF THE SYSTEM TO THE OWNER.
  3. THE PLUMBING CONTRACTOR SHALL REVIEW AND SHALL GANG ALL ROOF VENTS INTO SINGLE ROOF VENTS WHERE POSSIBLE, AND SHALL RUN THE VENTS OUT OF THE ROOF AT THE HIGHEST POINT POSSIBLE. ALL VENTS SHALL HAVE BLOCKING ON EACH SIDE OF THE VENT IN THE ROOF STRUCTURE TO ENSURE THE VENTS WILL NOT BE MOVED DUE TO SNOW ON THE ROOF. ALL VENTS SHALL BE SIZED PER THE BUILDING CODE, BUT SHALL NOT BE LESS THAN 3 INCH PIPES. THE PLUMBING CONTRACTOR SHALL COORDINATE THAT THE PROPER FLASHING HAS BEEN INSTALLED FOR EACH VENT.
  4. THE ROOF VENTS SHALL EXTEND ABOVE THE ROOF AS REQUIRED BY THE LOCAL JURISDICTION AND BUILDING CODES. THE PLUMBING CONTRACTOR SHALL COORDINATE THIS INSTALLATION.
  5. ALL PLUMBING FIXTURES ARE SPECIFIED ON THE MECHANICAL DRAWINGS, AND ON THE INTERIOR DRAWINGS. THE PLUMBING CONTRACTOR SHALL PROVIDE FULL AND COMPLETE SHOP DRAWING SUBMITTAL ON ALL PLUMBING FIXTURE ITEMS FOR APPROVAL BY OWNER AND DESIGN TEAM.
  6. THE PLUMBING FIXTURES SHALL HAVE THE FOLLOWING REQUIREMENTS:
    - a. SHOWER HEADS SHALL HAVE A FLOW RATE OF 2.5 GPM OR LESS
    - b. WATER CLOSETS SHALL HAVE ECONO-FLUSH TANK 1.6 GAL. MAX FLUSH
    - c. ALL NOSE BIBS SHALL BE NON-FREEZE TYPE WITH BACK FLOW PREVENTERS
  7. THE PLUMBING CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. TAKE CARE DURING BUILDING CONSTRUCTION TO SEE THAT PROVISIONS ARE MADE FOR PROPER FUTURE SUPPORT AND THAT PROVISIONS ARE MADE FOR PROPER FUTURE SUPPORT. ROUGH IN PIPING IS ACCURATELY SET AND PROTECTED FROM MOVEMENT OF DAMAGE DURING CONSTRUCTION.
  8. THE PLUMBING CONTRACTOR SHALL MAKE SURE THAT NO PLUMBING WILL BE INSTALLED WITHIN THE EXTERIOR WALL.
  9. PLUMBING CONTRACTOR SHALL ASSESS WATER PRESSURE AND ENSURE ADEQUATE PRESSURE IS AVAILABLE FOR MULTIPLE FUTURE USE SIMULTANEOUSLY WITH OUT PRESSURE DECREASE OR TEMPERATURE FLUCTUATION.
  10. PLUMBING CONTRACTOR SHALL PROVIDE A TURN OFF VALVE AND DRAIN AT THE LOWEST LEVEL OF THE FACILITY. ALL FIXTURES SHALL BE ABLE TO DRAIN TO THIS POINT. PROVIDE A FLOOR DRAIN AT THE LOCATIONS OF PLUMBING SYSTEM DRAIN.
  11. ALL SUPPLY WASTE AND GAS LINE MATERIALS, WORKMANSHIP, AND INSTALLATION AS PER INDUSTRY STANDARDS. ALL WATER SUPPLY LINES IN THE BUILDING SHALL BE TYPE "1" COPPER. TO INCLUDE PIPING TO MANFOLDS, EQUIPMENT SHALL BE COPPER WITHIN THE BUILDING. ALL SUPPLY TO FIXTURES MAY BE POLYETHYLENE CROSS LINE PIPING FOR ABOVE GROUND AND BUILDING APPLICATIONS. INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. ALL CONNECTIONS FOR POLYETHYLENE PIPING SHALL BE BRASS. FITTINGS WITH COMPRESSION BAND FITTINGS.
  12. ALL WATER LINES UNDERGROUND SHALL BE TYPE "1" COPPER. ALL FITTINGS AND JOINTS SHALL BE SWEAT SOLDER JOINTS TOGETHER.
  13. WASTE LINES SHALL BE PROVIDED WITH CLEAN OUT AS REQUIRED. EXTEND CLEAN OUT TO ACCESSIBLE SURFACE. DO NOT PLACE CLEAN OUTS IN FLOORS UNLESS PREVIOUSLY APPROVED BY THE DESIGN TEAM AND OWNER.
  14. GAS PIPING SHALL BE INSTALLED AS PER THE LATEST CODE REQUIREMENTS FOR THIS TYPE OF PROJECT. ALL GAS PIPING SHALL BE FULLY TESTED AND INSPECTED FOR ANY LEAKS PRIOR TO FINAL COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL INSTALL SHUT OFF VALVES AT EACH GAS APPLIANCE AND SHALL LOCATE THE VALVE TO HAVE ACCESS TO THE VALVE.
  15. PLUMBING CONTRACTOR SHALL TEST ALL PIPING INCLUDING DRAINAGE WASTE LINES, WATER PIPING, NATURAL GAS PIPING AND FITTINGS. ALL TEST SHALL BE PERFORMED TO MEET THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.
  16. ALL WATER LINES SHALL FULLY DISINFECTED UPON THE FINAL COMPLETION OF THE PROJECT, AND BEFORE CERTIFICATE OF OCCUPANCY AND TURN OVER TO THE OWNER.
  17. ALL DRAINS SHALL HAVE A TRAP PRIMER OR EQUIVALENT NECESSARY TO KEEP THE INTEGRITY OF THE PLUMBING TRAP.

- MECHANICAL GENERAL NOTES**
1. THE MECHANICAL SYSTEM SHALL BE DESIGNED BY A LICENSED MECHANICAL CONTRACTOR/ DESIGNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IRC, IMC AND IECC.
  2. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE MECHANICAL SYSTEM INSTALLATION AND SHALL PROVIDE A (1) ONE YEAR WARRANTY BEGINNING FROM THE TIME OF CERTIFICATE OF OCCUPANCY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE OWNER COMPLETE OPERATION AND MAINTENANCE MANUALS. THE CONTRACTOR SHALL ALSO SET UP A TIME TO PROVIDE COMPLETE TRAINING OF THE SYSTEM TO THE OWNER.
  3. THE MECHANICAL CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO STARTING THE WORK. THE MECHANICAL CONTRACTOR MUST ALSO PROVIDE NOTIFICATION TO THE ARCHITECT AND CONTRACTOR OF CONDITIONS THAT MAY BE DIFFERENT THAN EXPECTED DURING BIDDING.
  4. ALL LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING SHALL BE RAN, INSTALLED AND CONNECTED BY THE MECHANICAL CONTRACTOR OR THE MECHANICAL CONTRACTOR SHALL CONTRACT THE SCOPE OF WORK.
  5. ALL EQUIPMENT SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW. THE CONTRACTOR MUST PROVIDE THE DOCUMENTATION THAT IT MEETS THE REQUIREMENTS OF THE ENERGY LEVELS BEING ACHIEVED WITHIN THIS BUILDING.
  6. THE MECHANICAL CONTRACTOR SHALL REVIEW AND COORDINATE WITH THE DRAWINGS FOR LOCATIONS OF ALL MECHANICAL ZONES.
  7. EXHAUST FANS WHERE SHOWN ON EITHER THE MECHANICAL OR ELECTRICAL PLANS SHALL BE SIZED FOR A MINIMAL RATE OF 30 CFM. ALL FANS SHALL BE HARD DUCTED WITH RIGID DUCT (NO FLEX DUCT SHALL BE ALLOWED), AND DIRECTED DIRECTLY TO THE EXTERIOR OF THE BUILDING IN A SOFFIT OR SIDE WALL. THE TERMINATION OF ALL EXHAUST FANS SHALL BE A MINIMUM OF 10'-0" AWAY FROM ANY OPERABLE WINDOW. TERMINATIONS SHALL BE INSTALLED AS NOT TO BE BLOCKED BY SNOW AND ICE. FANS SHALL BE A DIRECT DRIVE CENTRIFUGAL UNIT WITH SLOW SPEED MOTOR. PROVIDE AN ACOUSTICAL INSULATION, GRIPS, CAPS, ETC. AS REQUIRED.
  8. ALL GRILLS AND REGISTERS MUST BLEND TO THE ADJACENT FINISH, AND SHALL BE PROVIDED TO MEET THE REQUIREMENTS FOR THE FLOW RATE AS PER THE CFM REQUIREMENTS. ALL GRILLS SHALL BE EITHER PAINTED FOR METAL FINISH SELECTED.
  9. WATER HEATERS
    - a. THE REQUIRED NUMBER OF WATER HEATERS ARE SHOWN ON THE MECHANICAL PLANS. ALL WATER HEATERS SHALL BE 90% OR BETTER HIGH EFFICIENCY WATER HEATERS WITH RAPID RECOVERY. ALL WATER HEATERS SHALL BE INSTALLED WITH SEISMIC ANCHORING, AS PER DETAILS.
    - b. ALL WATER HEATERS SHALL BE VENTED TO THE EXTERIOR.
    - c. THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN WHETHER SHOWN OR NOT AT THE BASE OF ALL WATER HEATERS. THE FLOOR DRAIN MUST BE LOCATED, AND THE FLOOR MUST SLOPE TOWARD THE DRAIN IN A POSITIVE FLOW.
  10. GAS FIRED FURNACES
    - a. THE REQUIRED NUMBER OF GAS FIRED FURNACES SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER. THE LOCATION IS SHOWN ON THE MECHANICAL DRAWINGS WHERE THE LOCATIONS ARE PROVIDED FOR THE GAS FIRED FURNACES.
    - b. THE GAS FIRED FURNACES SHALL BE A MINIMUM OF 90% OR BETTER HIGH EFFICIENCY FURNACE. THE EXACT SIZE OF EACH OF THESE UNITS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER.
    - c. THE VENTING OF EACH GAS FIRED FURNACE SHALL BE PVC PIPE AND SHALL BE LOCATED AWAY FROM THE MAIN ENTRIES OF THE BUILDING, AND WINDOW LOCATIONS. COORDINATE THE EXACT LOCATION WITH THE OWNER AND ARCHITECT.
    - d. THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN BY THE GAS FIRED FURNACES FOR THE UNIT CONDENSATE LINES.
  11. GAS FIRED BOILERS
    - a. THE REQUIRED NUMBER OF GAS FIRED BOILERS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER. THE LOCATION IS SHOWN ON THE MECHANICAL DRAWINGS WHERE THE LOCATIONS ARE PROVIDED FOR THE GAS FIRED BOILERS.
    - b. THE GAS FIRED BOILER SHALL BE A MINIMUM OF 90% OR BETTER HIGH EFFICIENCY FURNACE. THE EXACT SIZE OF EACH OF THESE UNITS SHALL BE PER THE MECHANICAL DESIGNER/ ENGINEER.
    - c. THE VENTING OF EACH GAS FIRED BOILER SHALL BE PVC PIPE AND SHALL BE LOCATED AWAY FROM THE MAIN ENTRIES OF THE BUILDING, AND WINDOW LOCATIONS. COORDINATE THE EXACT LOCATION WITH THE OWNER AND ARCHITECT.
    - d. THE CONTRACTOR SHALL PROVIDE A FLOOR DRAIN BY THE GAS FIRED BOILER FOR THE UNIT CONDENSATE LINES.
  12. DUCTWORK
    - a. ALL DUCTWORK SHALL BE 24 GA. MINIMUM RIGID DUCT AND SHALL BE FULL SEALED AT EACH JOINT LOCATION. NO FLEXIBLE DUCT IS ALLOWED WITHIN THE INSTALLATION.
    - b. ALL DUCTWORK IN CEILINGS OF UNHEATED ROOM OR UNDER SLAB SHALL BE INSULATED DUCTWORK. ALL DUCTWORK WITHIN THE HEATING ENVELOPE OF THE STRUCTURE DOES NOT REQUIRE TO BE INSULATED, UNLESS SPECIFICALLY NOTED.
    - c. ALL DUCTWORK SHALL BE IN THE SPACE ALLOCATED, AND SHALL NOT BE DROPPED BELOW FLOOR JOISTS, UNLESS NOTED ON DRAWINGS, OR PREVIOUSLY APPROVED BY THE ARCHITECT AND OWNER.

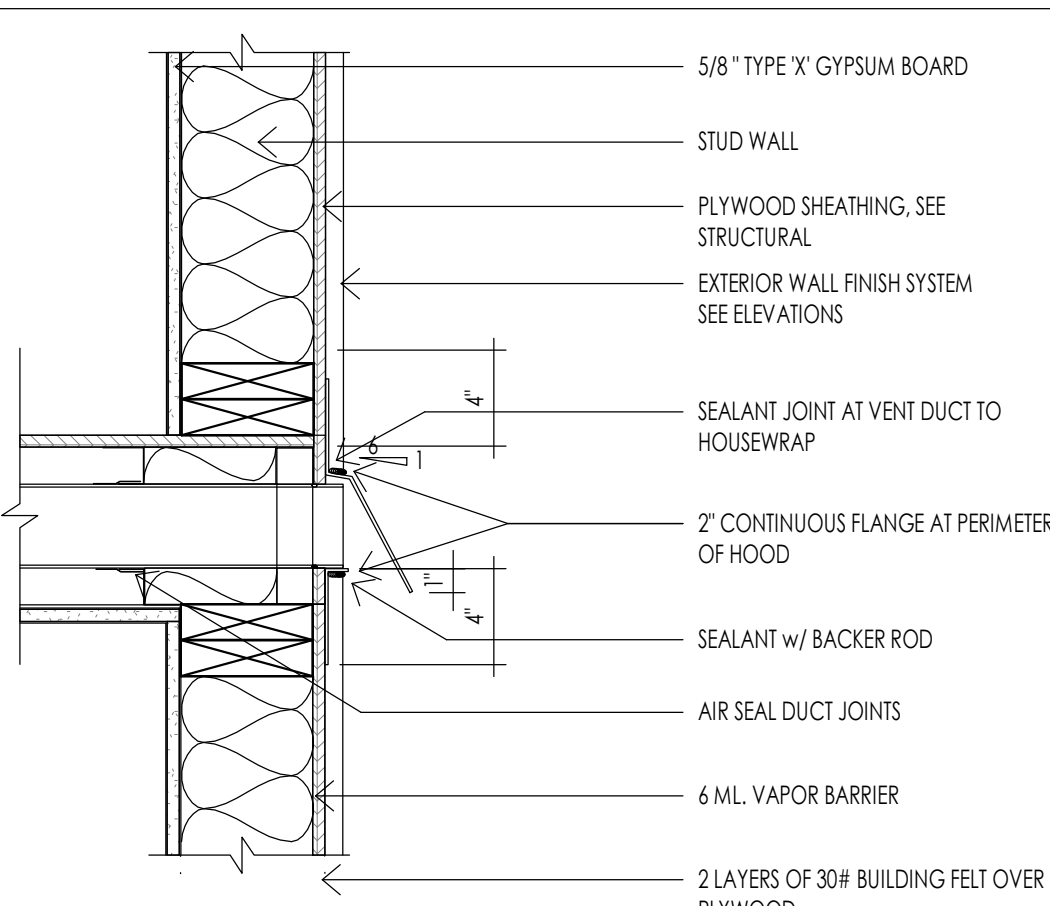


1. **SILL FLASHING**  
9 INCH MIN. WIDE SELF-ADHERED SELF-HEALING RUBBERIZED ELASTOMERIC ASPHALT FLASHING MEMBRANE INSTALLED A MIN. 9 INCHES BEYOND ROUGH OPENING  
- DO NOT OVERLAP THE TOP OF SILL FRAMING  
- ADHERE ONLY AT TOP EDGE. LEAVE UNATTACHED AT BOTTOM SO THAT THE PAPER CAN BE INSTALLED UNDERNEATH
2. **METAL EXTERIOR VENT**  
24 GA. MIN. GALV. SHEET METAL VENT MUST BE INSTALLED OVER SILL FLASHING. INSTALL JAMB FLASHING OVER OR UNDER NAILING FLANGE. SET VENT IN A CONTINUOUS BED OF SEALANT.
3. **JAMB FLASHING**  
9 INCH MIN. WIDE SELF-ADHERED SELF-HEALING RUBBERIZED ELASTOMERIC ASPHALT FLASHING MEMBRANE FLASHING INSTALLED OVER AND BELOW SILL FLASHING AND ABOVE TOP OF FUTURE HEAD FLASHING.  
- DO NOT FASTEN THE BOTTOM 9 INCHES OF THE JAMB FLASHING SO THE WEATHER-RESISTANT BARRIER APPLIED LATER MAY BE SUPPLIED UNDERNEATH THE FLASHING IN A WEATHERBOARD FASHION.
4. **HEAD FLASHING**  
APPLY SELF-ADHERED SELF-HEALING RUBBERIZED ELASTOMERIC ASPHALT FLASHING MEMBRANE OVER DRYER VENT FLANGE. EXTEND HEAD FLASHING BEYOND EACH JAMB FLASHING.

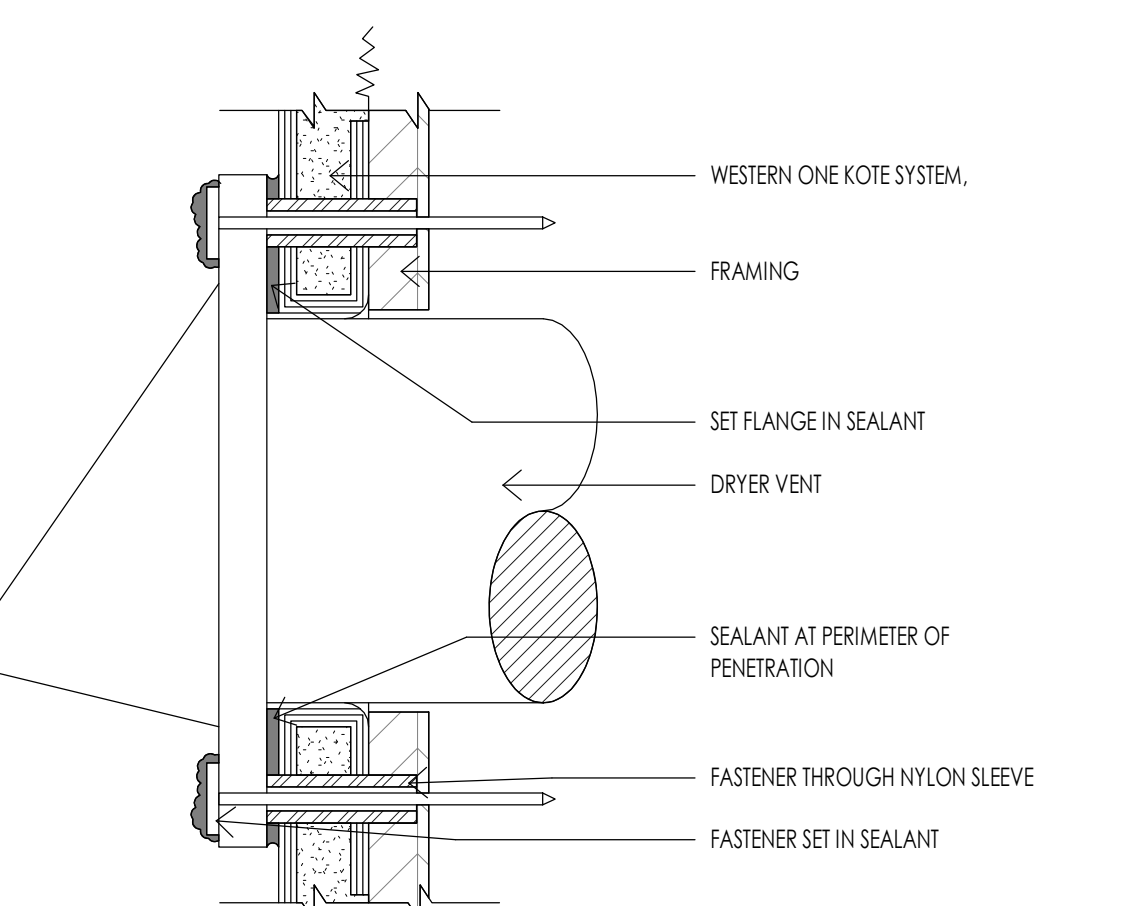
**EXHAUST VENT DETAIL**  
1/1/2" = 1'-0"



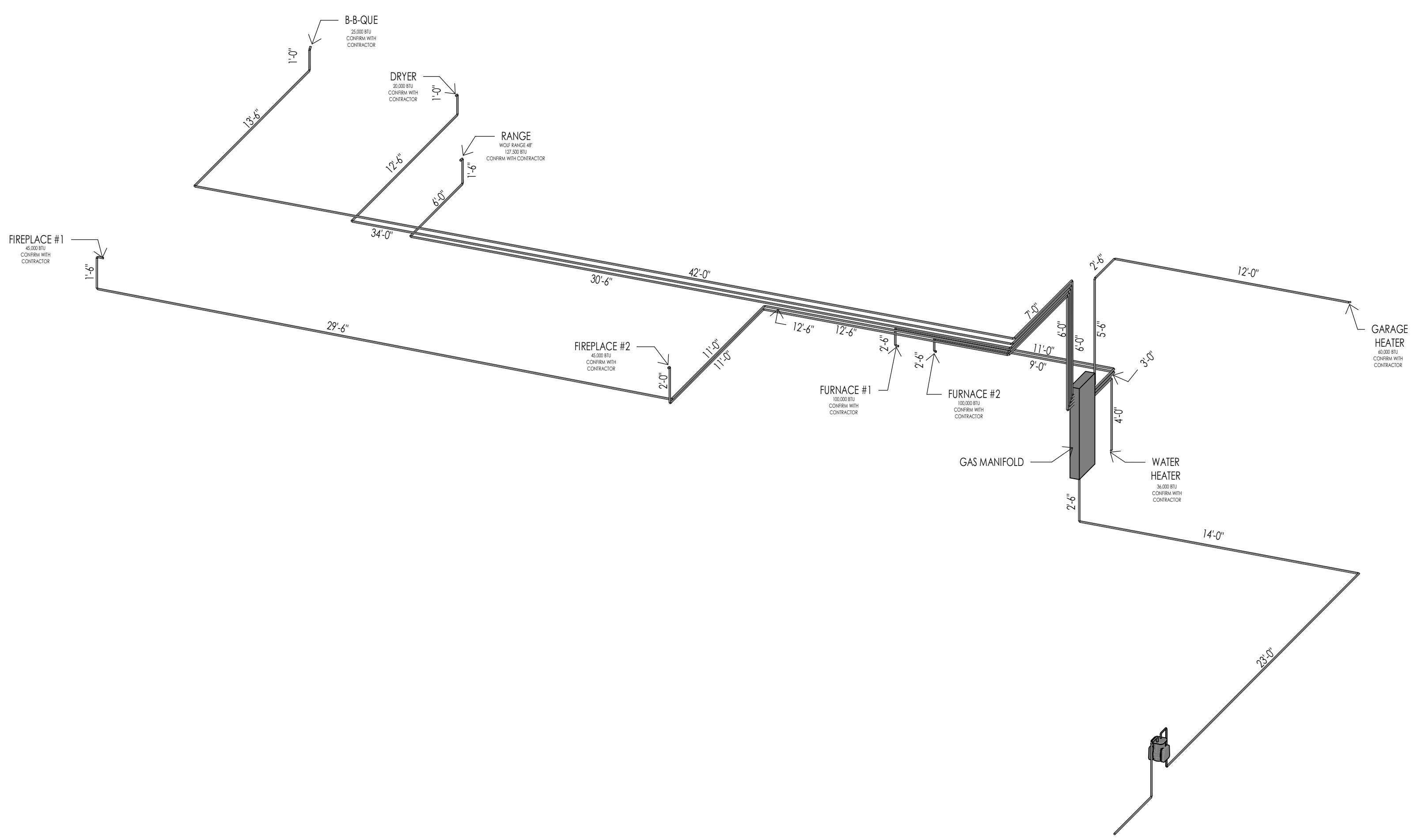
**MINIMUM PLUMBING FIXTURE CLEARANCES**  
1/8" = 1'-0"



**WALL EXHAUST VENT**  
1/1/2" = 1'-0"



**TYPICAL DRYER VENT (SHOWN WITH STUCCO)**  
6" = 1'-0"



**GAS SCHEMATIC**

5  
M101



Architecture  
Interior Design  
Landscape Architecture  
Land Planning  
Construction Management

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**WARM SPRINGS RESIDENCE #34**  
 180 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

PROJECT NC22023.34  
DATE: 2023.06.30  
REVISIONS:

SHEET TITLE:  
**MECHANICAL GENERAL NOTES**

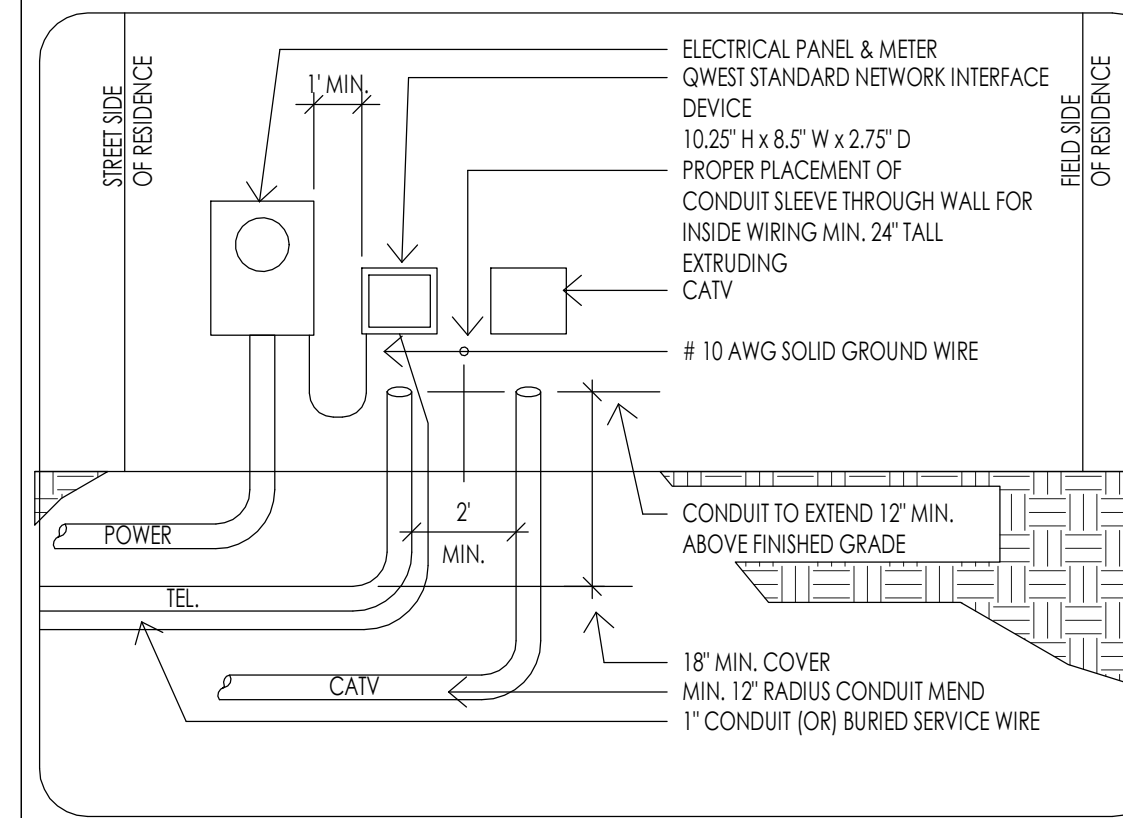
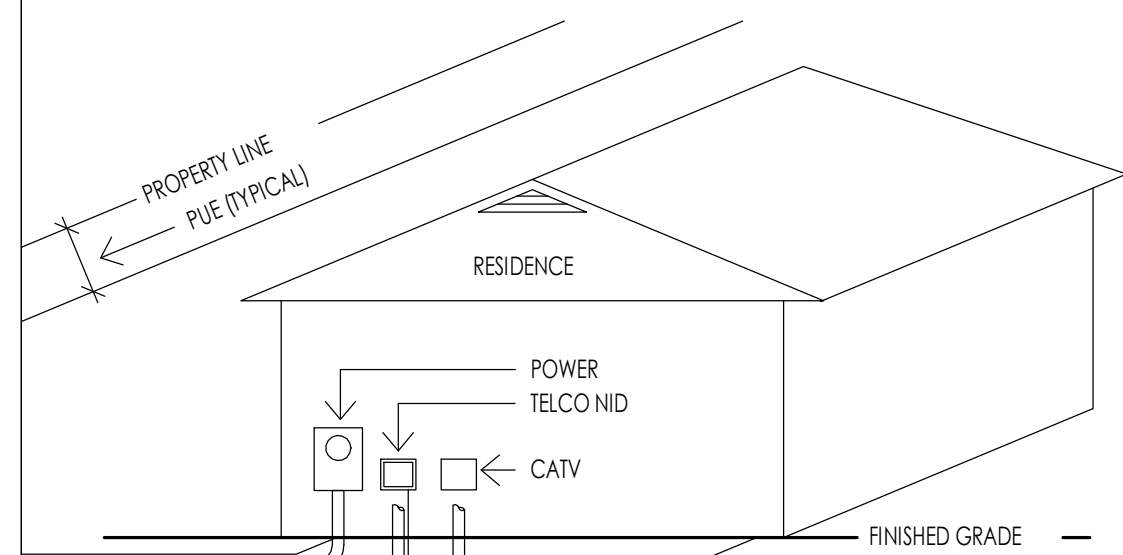
SHEET NUMBER:  
**M101**

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**ELECTRICAL GENERAL NOTES**

- ALL WORK DONE BY ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE CURRENT ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL CODE REGULATIONS AND AMENDMENTS. THE CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THESE REGULATIONS WHETHER OR NOT SUCH WORK IS SPECIFICALLY SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL FEEDERS, PANELS, BOARDS, RELAY BRANCH CIRCUIT WIRING, CONDUITS, WIRE, METER BASES, COMPLETE WIRING FOR MOTORS, EXHAUST FANS, LINE VOLTAGE CONNECTIONS FOR HVAC EQUIPMENT, SPECIALTY LIGHTING, FIXTURES, OUTLET BOXES, COVER PLATES, WALL SWITCHES, FIXTURES RECEPTACLES, ETC.
- ALL DRAWINGS INDICATE LOCATIONS AS DIAGRAMMATIC. LOCATIONS SHALL BE PER APPROPRIATE CODES AND OWNER. CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL POWER REQUIREMENTS.  
  
THE CONTRACTOR SHALL SET ALL THE BOXES AND NOTIFY THE ARCHITECT AND OWNER OF PLACEMENT OF BOXES. THE ARCHITECT, OWNER AND INTERIOR DESIGNER SHALL WALK THE HOUSE WITH THE ELECTRICAL CONTRACTOR AND SHALL VERIFY ALL THE LOCATIONS. THIS SHALL BE DONE PRIOR TO ANY WIRE BEING PULLED.  
  
IF WIRE IS PULLED, AND BOXES ARE REQUIRED TO BE MOVED, ALL COSTS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR AND NOT THE OWNER/ DESIGN TEAM.
- ELECTRICAL SERVICE CAPACITY AND SIZE SHALL BE COMPUTED BY METHOD INDICATED IN THE NATIONAL ELECTRICAL CODE. PANELS OR CABINETS INCLUDING FUSES, CIRCUIT BREAKERS, SWITCHES OR OTHER ELECTRICAL SERVICE EQUIPMENT SHALL BE IN AN INCONSPICUOUS, ACCESSIBLE AND PROTECTED LOCATION. ELECTRICAL PANEL CLEARANCE TO BE MINIMUM 30" WIDTH AND 6" HEAD ROOM. ELECTRICAL TO COMPLY WITH N.E.C. 110.16. ELECTRICAL METER BASE SHALL BE LOCATED IN AN AREA THAT IS PROTECTED FROM OUTSIDE WEATHER.
- ALL RECEPTACLES LOCATED WITH THE FOLLOWING CONDITIONS TO BE GFCI PROTECTED: ALL KITCHEN COUNTERS, IN BATHROOMS, OUTSIDE AT GRADE LEVEL, UNFINISHED BASEMENTS, AND IN GARAGES. GARAGE RECEPTACLES TO BE 18" ABOVE FINISHED FLOOR.
- ALL SWITCHES, RECEPTACLES, TELEPHONE JACKS AND CATV JACKS TO BE "LEVITON" 5601 ROCKER SERIES IN WHITE. DIMMER SWITCHES TO BE "LUTRON" DIVA ROCKER SERIES IN WHITE. HEIGHT OF LIGHT SWITCHES FROM FINISHED FLOOR TO TOP OF SWITCH TO BE 48" TYPICAL UNLESS NOTED. OTHERWISE, THE MOUNTING FROM THE FINISH FLOOR TO THE CENTER OF OUTLETS INCLUDING TELEPHONE, CATV, ETC. SHALL BE 12" TYPICAL. AT DESKS AND OTHER SURFACES THE OUTLETS SHALL BE 10" TO CENTERLINE ABOVE SURFACE. SWITCHES, OUTLETS, TELEPHONE, CATV, ETC. LOCATIONS SHALL BE APPROVED PRIOR TO COMMENCEMENT OF WIRING.
- UNLESS NOTED OTHERWISE LOCATE AND INSTALL ONE (1) GFCI WEATHER PROTECTED RECEPTACLE AT GRADE LEVEL AND OUTSIDE AT SOFFIT AT EACH EXTERIOR DOOR WHETHER INDICATED ON DRAWINGS OR NOT. PLEASE REFER TO THE ELECTRICAL DRAWINGS FOR ADDITIONAL OUTLETS AT SOFFITS.
- ALL FIXTURES SHALL HAVE A U.L. LABEL LISTING. IF NOT U.L. LISTED FIXTURE SHALL NOT BE USED. ALL RECESS DOWN LIGHTS TO BE THERMAL RATED, AND ALL CAST IN PLACE FIXTURES TO BE INCLUDED IN BASE BID. ALL RECESS DOWN LIGHTS TO BE INCLUDED IN BASE BID WITH TRIM RINGS AS SELECTED BY DESIGNER OR OWNER. ALL LIGHTS IN CLOSETS SHALL MEET N.E.C. 410.8 REQUIREMENTS. ALL LIGHTS LOCATED IN WET OR DAMP LOCATIONS SHALL MEET N.E.C. 410.4 REQUIREMENTS.
- SMOKE DETECTORS TO BE HARD WIRED TO BUILDING CIRCUIT WITH BATTERY BACK UP. PROVIDE SMOKE DETECTORS AT ALL BUILDING LEVELS, IN ALL BEDROOMS, ACCESS TO ALL BEDROOMS, ETC. (UBC 310.9)
- ELECTRICAL PANEL (PANELBOARD/SWITCHBOARD) MAY NOT BE LOCATED BEHIND A DOOR OR IN A ROOM THAT MAY BE LOCKED AND MUST HAVE PROPER WORKING CLEARANCES. PLEASE REFER TO THE ELECTRICAL DRAWINGS FOR THE LOCATIONS FOR ALL ELECTRICAL PANELS. IF THE PANEL BOARD NEEDS TO BE RELOCATED, PLEASE CONSULT THE OWNER AND OR ARCHITECT PRIOR TO MOVING.
- SMALL WALL SECTIONS 2" OR WIDER (INCLUDES BETWEEN DOORS) REQUIRE AN OUTLET.
- GFCI PROTECTION MUST BE PROVIDED FOR ANY RECEPTACLE OUTLET IN THE FOLLOWING: A BATHROOM, ANY COUNTERTOP KITCHEN/LAUNDRY, GARAGE OUTLETS MINIMUM 18" ABOVE FINISHED FLOOR HEIGHT, OUTSIDE FRONT AND REAR OUTLETS MUST HAVE WATERPROOF COVERPLATE.
- A RECEPTACLE OUTLET MUST BE PROVIDED AT EACH SECTION OF KITCHEN COUNTERTOP 12" OR WIDER. THERE MUST ALSO BE A MINIMUM OF TWO (2) DEDICATED COUNTERTOP CIRCUITS.
- A SWITCH CONTROLLED LIGHT MUST BE PROVIDED AT HALLWAYS, STAIRWAYS, EXITS, AND EACH ROOM.
- A HARD-WIRED WITH BATTERY BACKUP SMOKE DETECTOR MUST BE INSTALLED IN ALL BEDROOMS (NEW AND EXISTING) IN THE ACCESS AREA TO ALL BEDROOMS, AND AT LEAST ONE PER FLOOR. TWO (2) FOOT CHANGES IN CEILING HEIGHT ALSO REQUIRE AN ADDITIONAL SMOKE DETECTOR. ALARM SOUND MUST BE AUDIBLE IN ALL AREAS OF HOME.
- WHEN BEDROOMS OCCUR ON 2ND STORES, THE DETECTOR SHOULD BE LOCATED AT THE TOP OF THE STAIRWAY.
- KITCHEN OUTLETS REQUIRED TO BE GFCI PROTECTED, NOT MORE THAN 4'-0" APART.
- CLOSET LIGHT FIXTURES MIN. 12" CLEARANCE TO SHELF (LATERAL MEASURED)



**TYPICAL DRY UTILITY LOCATION DETAIL**

1/2" = 1'-0"

1  
E101

**HL36SA**



**Ordering Information**

**SAMPLE ORDER NUMBERS:** HL36SA02P027E010CAT, TR04F140, TL36RMW

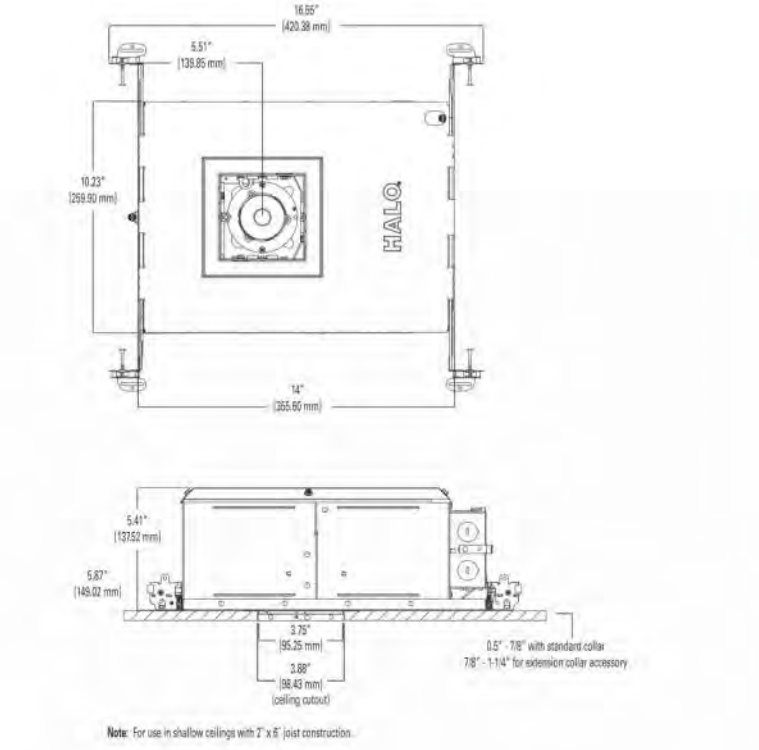
**Series:**  
HL36SA - 3-inch square shallow new construction directional housing

**Options:**  
10 = 120V (nominal)  
15 = 150V (nominal)  
20 = 200V (nominal)

**Accessories:**  
Blank = Purchase optic separately  
SP = 10" beam  
NFL = 25" beam  
6FL = 60" beam  
WFL = 55" beam

**Light Output:**  
100 = 1000 lumens  
150 = 1500 lumens  
200 = 2000 lumens  
250 = 2500 lumens  
300 = 3000 lumens  
350 = 3500 lumens  
400 = 4000 lumens  
450 = 4500 lumens  
500 = 5000 lumens  
550 = 5500 lumens  
600 = 6000 lumens  
650 = 6500 lumens  
700 = 7000 lumens  
750 = 7500 lumens  
800 = 8000 lumens  
850 = 8500 lumens  
900 = 9000 lumens  
950 = 9500 lumens  
1000 = 10000 lumens

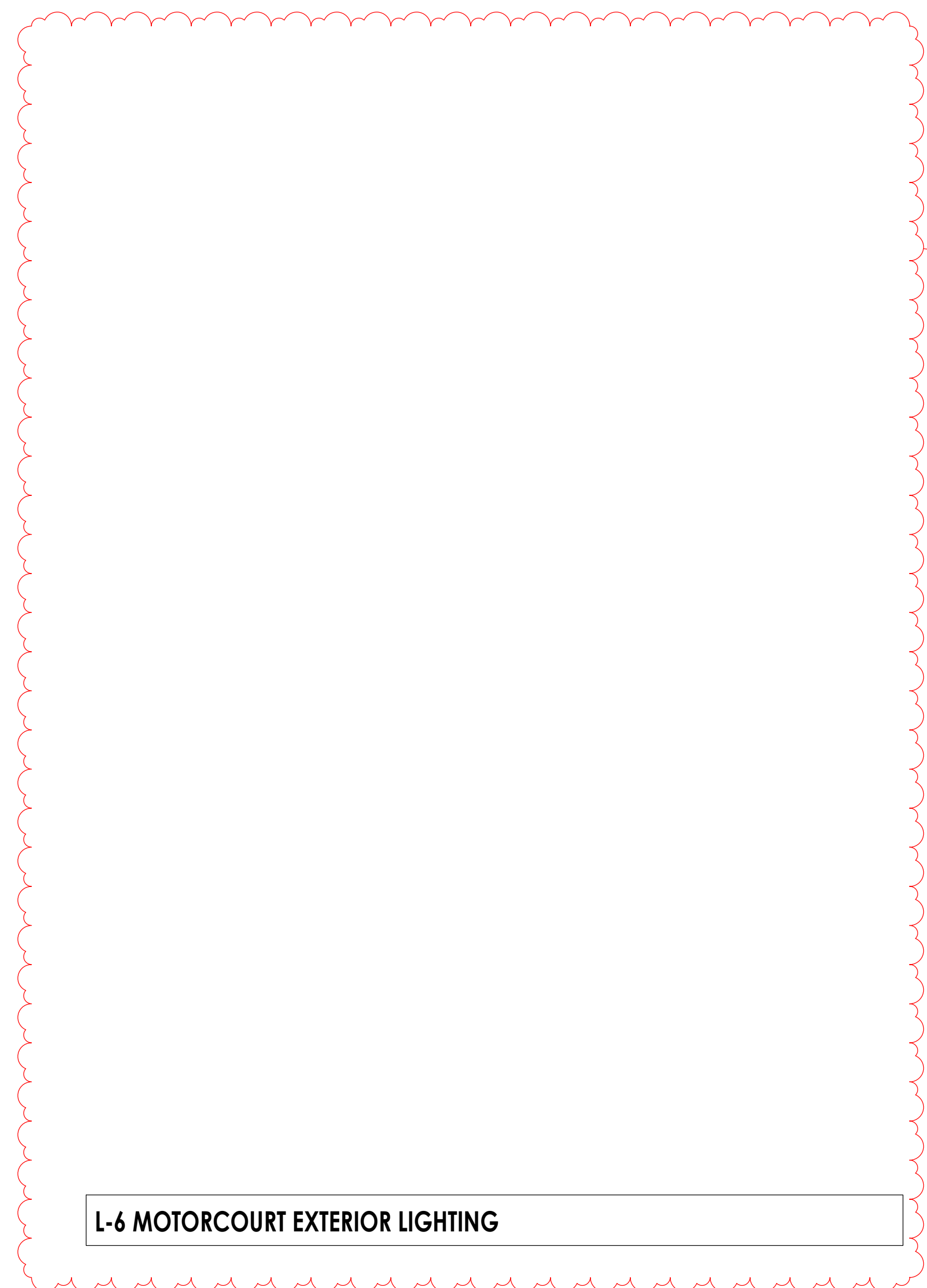
**Notes:**  
1. LED output is based on a 1000lm beam.  
2. LED output is based on a 1000lm beam.  
3. LED output is based on a 1000lm beam.  
4. LED output is based on a 1000lm beam.  
5. LED output is based on a 1000lm beam.  
6. LED output is based on a 1000lm beam.  
7. LED output is based on a 1000lm beam.  
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10. LED output is based on a 1000lm beam.



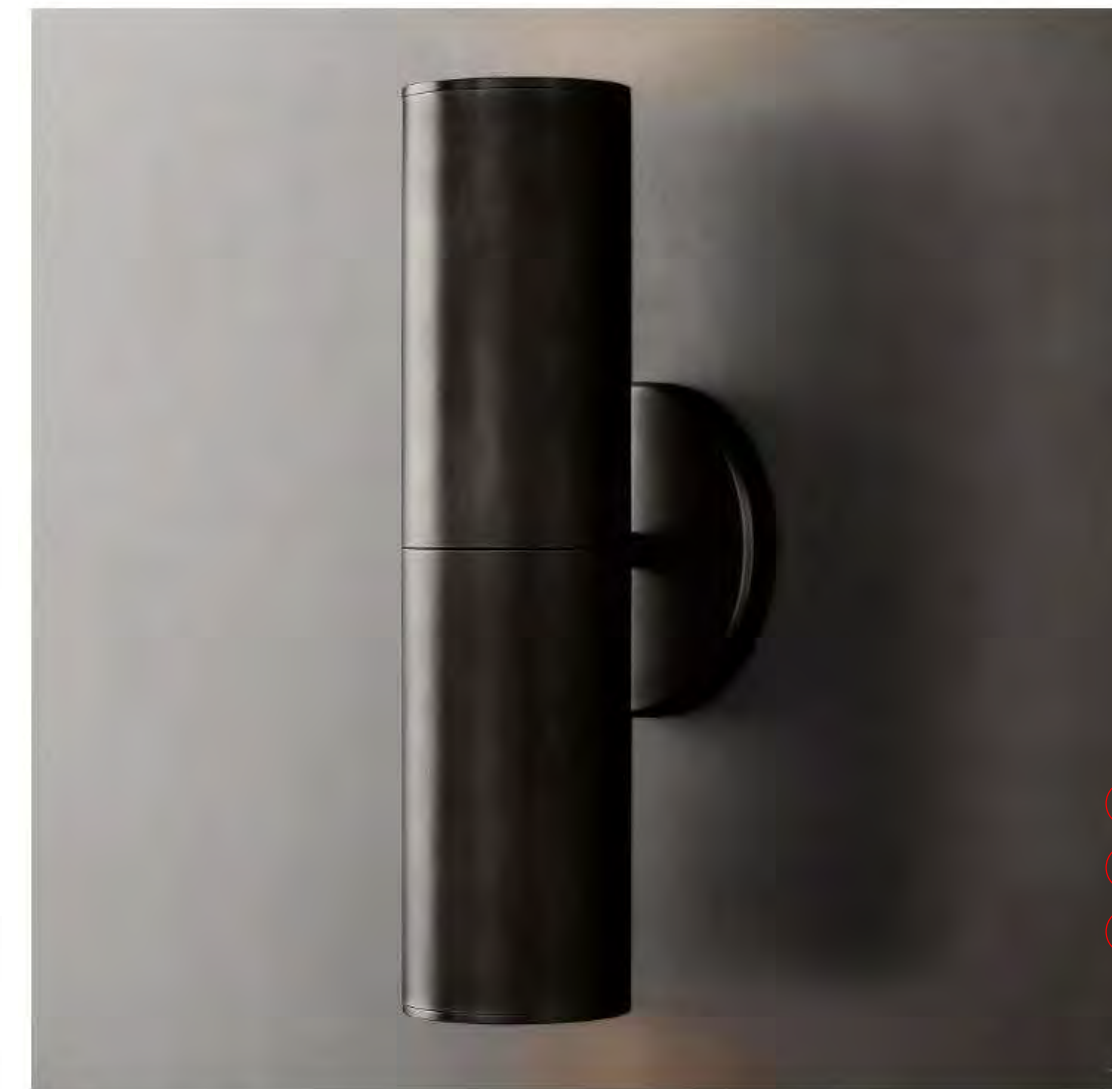
HALO HL36 3-inch LED downlighting 15

**L-1 RECESSED EXTERIOR SOFFIT LIGHT**

**L-2 DECORATIVE EXTERIOR WALL SCONCE**



**L-6 MOTORCOURT EXTERIOR LIGHTING**



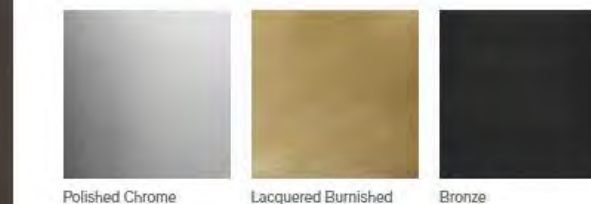
**CHAMPEAUX LINEAR SCONCE**

Starting at \$275. Member \$393. Member

Designer Jonathan Browning's Champeaux collection brings refinement and low materials to the classic sconce light, a standard of 1970s utility crafted in solid brass. Browning's thoughtful reinterpretation gives beyond function to reveal the cast as a thing of beauty. The design celebrates the clean lines inherent in the concept, but sets the form in a new context.

**SHOP THE ENTIRE COLLECTION**

**FINISH OPTIONS**

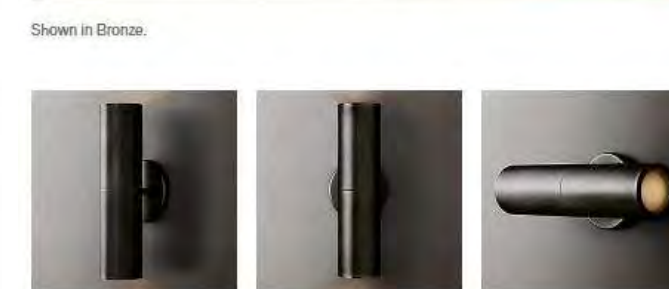


**DETAILS**

**DIMENSIONS**

**INSTALLATION INSTRUCTIONS**

MAXIMUM OF 2,700K COLOR TEMPERATURE  
MAXIMUM OF 700 LUMENS  
CAP TOP DOWNLIGHT ONLY



CHAT MEETS A L&L WE'RE HERE TO HELP



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**WARM SPRINGS RESIDENCE #34**

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

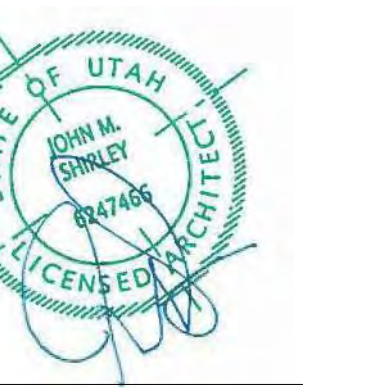
PROJECT NC22023.34  
DATE: 2023.06.30

REVISIONS:  
1 04-27-2023 PER CITY COMMENTS

SHEET TITLE:  
**ELECTRICAL GENERAL NOTES**

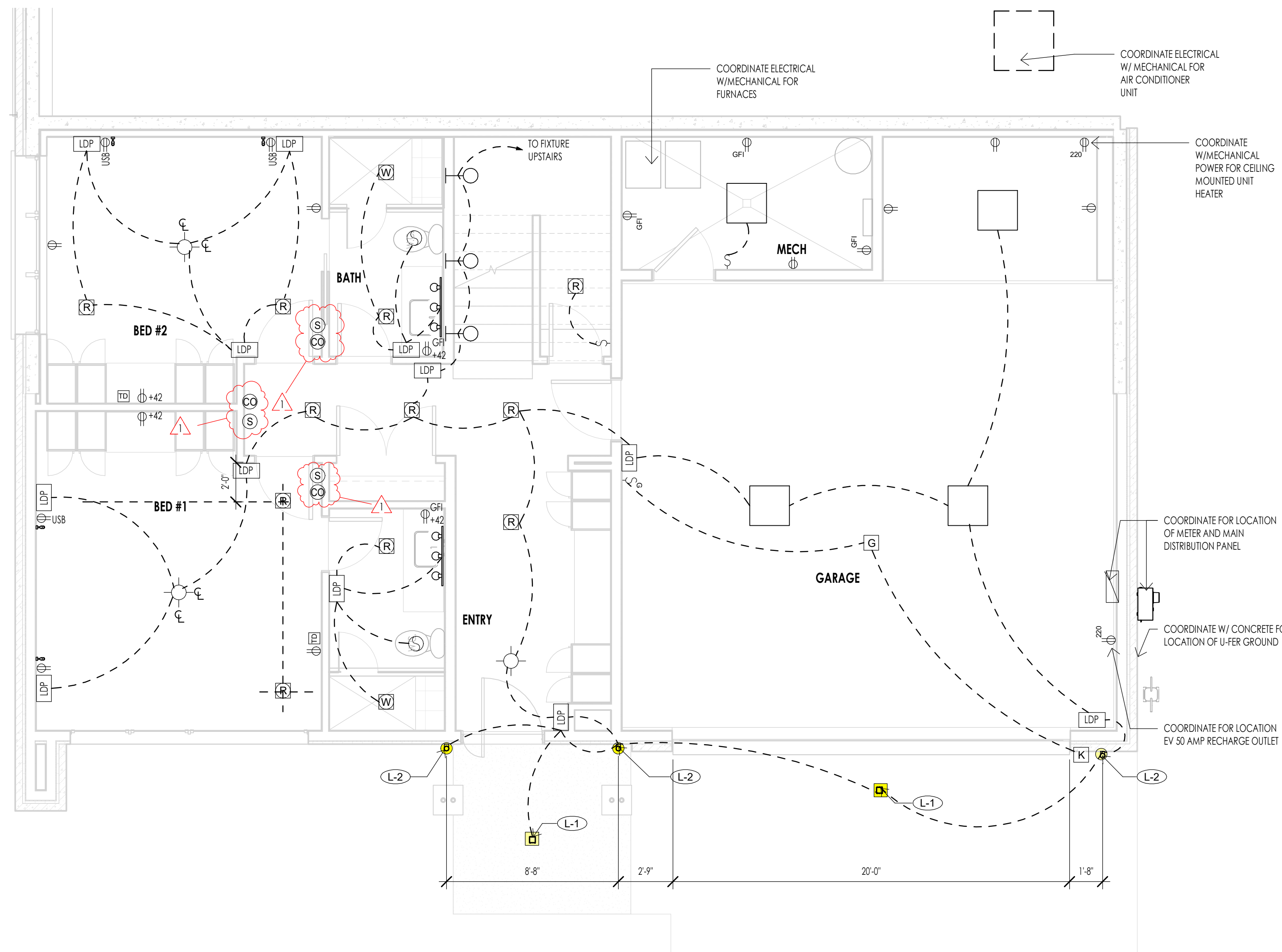
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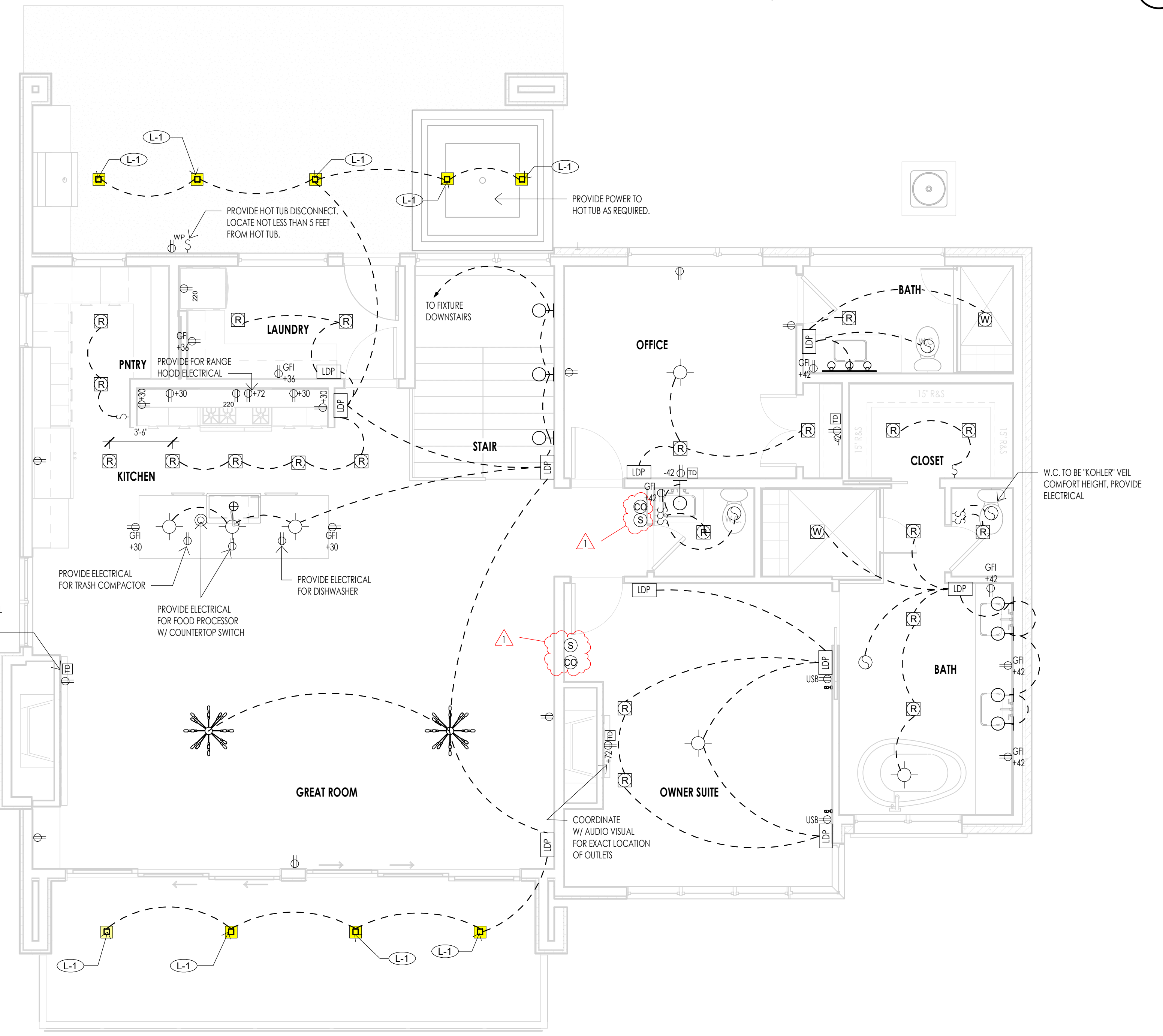


ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
S	SINGLE POLE TOGGLE SWITCH
S <sup>3</sup>	THREE WAY TOGGLE SWITCH
S <sup>4</sup>	FOUR WAY TOGGLE SWITCH
S <sup>G</sup>	GARAGE DOOR OPENER
S <sup>D</sup>	DIMMER TOGGLE SWITCH
Ⓛ	110 V DUPLEX OUTLET ON AN (AFP) ARC FAULT PROTECTED CIRCUIT
Ⓛ <sup>GFI</sup>	110 V GROUND FAULT INTERRUPTER
Ⓛ <sup>WFP</sup>	110 V WATERPROOF GFI OUTLET
Ⓛ <sup>220</sup>	220 V OUTLET
Ⓛ <sup>Q</sup>	QUADRUPLUX OUTLET
Ⓛ <sup>F</sup>	110 V FLOOR DUPLEX OUTLET
Ⓛ <sup>S</sup>	110 V SMOKE DETECTOR W/BATTI BACK-UP
Ⓛ <sup>CD</sup>	CARBON MONOXIDE DETECTOR
Ⓛ <sup>E</sup>	EXHAUST FAN
Ⓛ <sup>EL</sup>	EXHAUST FAN WITH LIGHT FIXTURE
Ⓛ <sup>R</sup>	4" LED RECESSED CAN (FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>C</sup>	4" LED RECESSED CAN (CLOSET-FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>W</sup>	RECESSED CAN (WET LOCATION-FIXTURE & TRIM PER SCHEDULE)
Ⓛ <sup>CM</sup>	CEILING MOUNT FIXTURE
Ⓛ <sup>BWS</sup>	BATHROOM WALL SCONCE
Ⓛ <sup>WM</sup>	WALL MOUNT FIXTURE
Ⓛ <sup>2X2</sup>	2X2 OR 2X4 FLUORESCENT CEILING FIXTURE
Ⓛ <sup>FLS</sup>	FLUORESCENT STRIP LIGHT
Ⓛ <sup>UL</sup>	LED UNDERCOUNTER LIGHTING
Ⓛ <sup>G</sup>	GARAGE DOOR OPENER
Ⓛ <sup>K</sup>	KEYLESS ENTRY
Ⓛ <sup>B</sup>	DOORBELL
Ⓛ <sup>T</sup>	TELEPHONE (CAT 5E WIRING) SINGLE LINE UNLESS NOTED (NUMBER) DESIGNATES PORT OUTLETS REQUIRED
Ⓛ <sup>MN</sup>	MULTI-MEDIA NETWORK OUTLET (CAT 5E WIRE) W/4 PORT OUTLET
Ⓛ <sup>SW</sup>	STRUCTURED WIRING (FUTURE SMART WIRING) (E) (2) RG6 QUAD SHIELD, (S) CAT 6E WIRE - FOR CABLE TV, VIDEO, SATELLITE, ETC. (4) PORT OUTLET
Ⓛ <sup>GD</sup>	GARBAGE DISPOSAL
Ⓛ <sup>LVC</sup>	LOW VOLTAGE RECESSED CAN
Ⓛ <sup>L1</sup>	RECESSED EXTERIOR SOFFIT LIGHT - SEE SPECS ON SHEET E101
Ⓛ <sup>L2</sup>	DECORATIVE EXTERIOR WALL SCONCE - SEE SPECS ON SHEET E101
Ⓛ <sup>L3</sup>	MOTOR COURT EXTERIOR LIGHTING - SEE SPECS ON SHEET E101
Ⓛ <sup>LDP</sup>	LIGHTING DIGITAL PAD
Ⓛ <sup>DBS</sup>	DOOR BELL SWITCH
Ⓛ <sup>WBL</sup>	WALL MOUNTED BED LIGHT

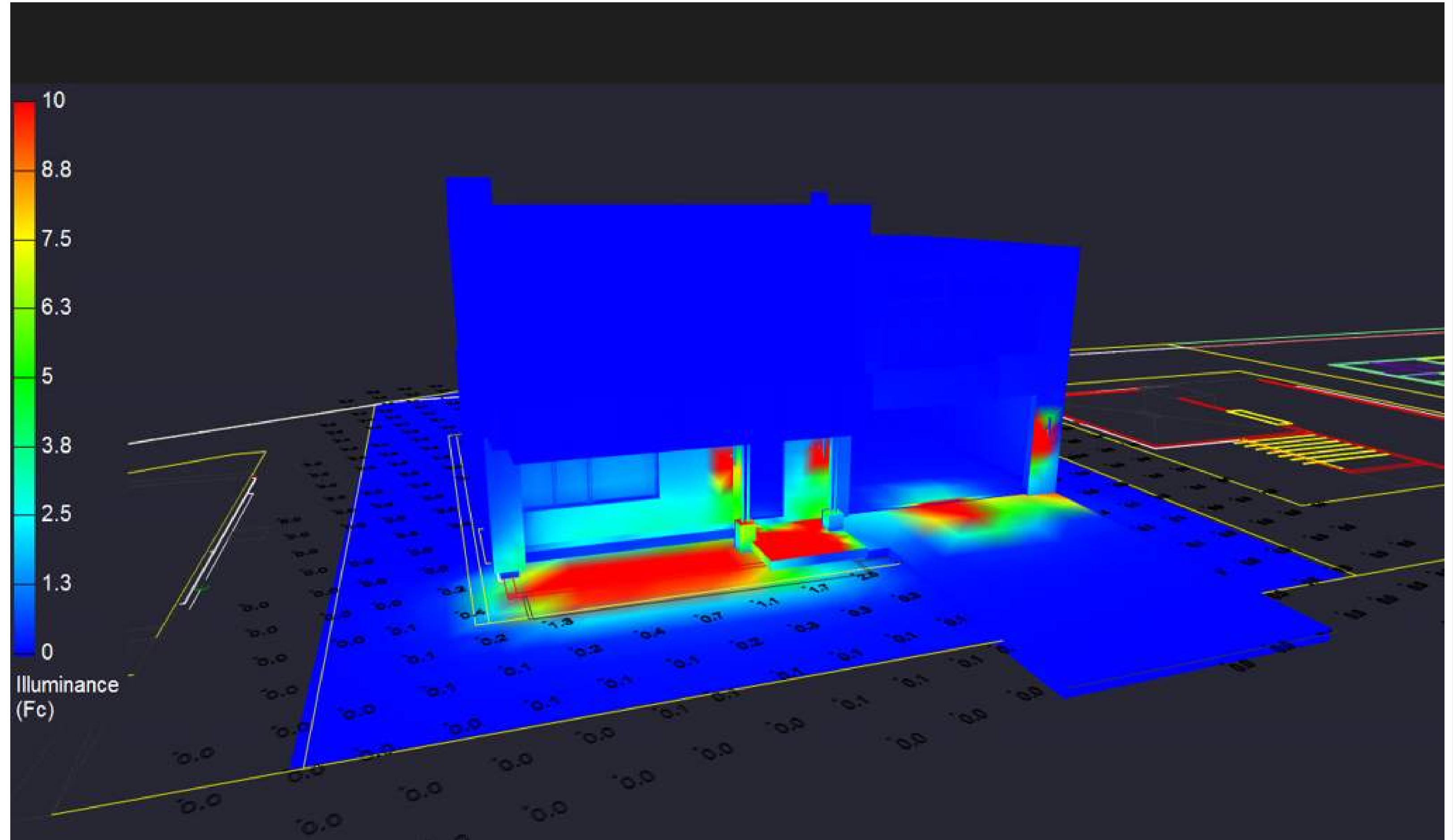
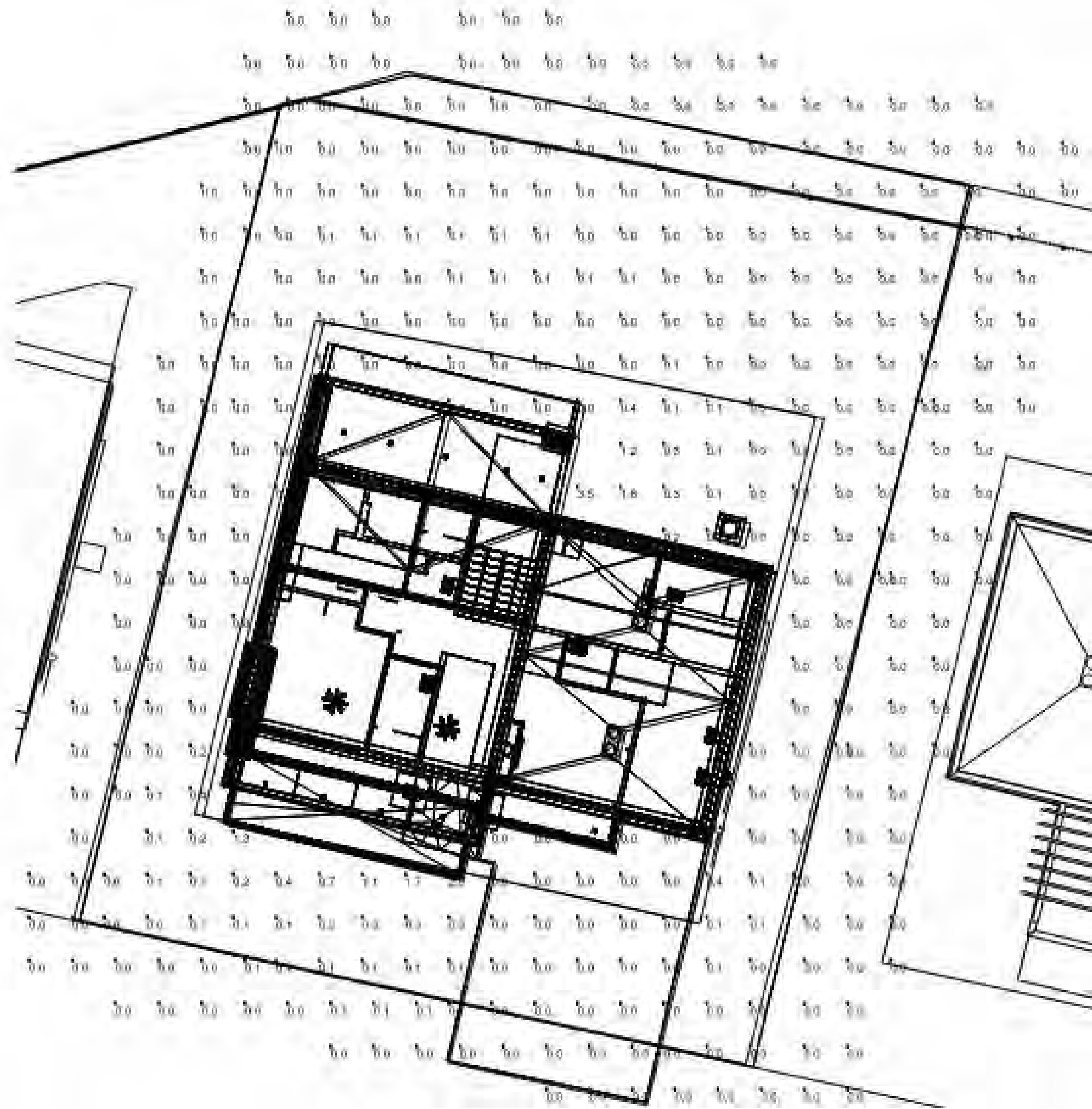
- ELECTRICAL GENERAL NOTES**
- SEE SPECS FOR ELECTRICAL INFORMATION.
  - ELECTRICAL LAYOUTS ARE SHOWN IN SCHEMATIC. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LAYOUT AND INSTALLATION OF ALL RELATED ITEMS WITH EXISTING CONDITIONS AND RELATED TRADES.
  - COORDINATE WITH OWNER, INTERIOR DESIGNER AND/OR PLANS FOR FIXTURE SCHEDULES, STYLES, FINISHES, ETC.
  - ALL WORK TO COMPLY WITH 2014 N.E.C. CODES AND 2015 I.R.C. CODES.
  - CENTER OF ALL OUTLETS TO BE 18" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. CENTER OF OUTLETS OVER CABINETS, VANITIES, ETC. TO BE 12" ABOVE FINISH COUNTER HEIGHT UNLESS NOTED OTHERWISE.
  - CONTRACTOR TO FIELD VERIFY LOCATION OF ALL ELECTRICAL FIXTURES, SWITCHES, ETC. WITH OWNER AND DESIGNER PRIOR TO WIRING.
  - PROVIDE SLOPED RECESSED CANS FOR SLOPED CEILING APPLICATIONS & THERMAL PROTECTION CANS WHERE IN CONTACT WITH INSULATION AS REQUIRED.
  - ALL BRANCH CIRCUITS BE PROTECTED BY AN ARCH-FAULT CIRCUIT INTERRUPTER LISTED TO PROVIDE PROTECTION OF THE ENTIRE BRANCH CIRCUIT.
  - PROVIDE A U-FER GROUND. AN ELECTRODE ENCASED BY A LEAST 2" OF CONCRETE SHALL BE LOCATED NEAR THE BOTTOM OF THE CONCRETE FOUNDATION SYSTEM. AND SHALL BE IN DIRECT CONTACT WITH THE EARTH, CONSISTING OF AT LEAST 20 FEET OF BARE ELECTRICALLY CONDUCTIVE ROD AT LEAST 1/2 INCH IN DIAMETER OR BARE COPPER CONDUCTOR NOT SMALLER THAN 4 AWG. (I.R.C. E558B.1.2 AND N.E.C. 250.30)
  - THE CONTRACTOR SHALL VERIFY OUTLET LOCATIONS AND VOLTAGE REQUIREMENTS AS PER APPLIANCE SPECIFICATIONS.
  - STRUCTURED WIRE MEDIA PANEL TO BE "TELEVISION" (O.A.E.) AND INCLUDE: A/C POWER MODULE, CAT 5 VOICE AND DATA MODULES, 10/100 MPS SATA HUB, CATV BOOSTER AND AUDIO / VIDEO CONTROL MODULES.
  - SMOKE AND/OR CARBON MONOXIDE DETECTORS ARE TO BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACKUP AS PER CODE REQUIREMENTS. COMBINATION UNITS ARE PERMITTED AS APPROVED.
  - ALL EXTERIOR ELECTRICAL OUTLETS TO HAVE WEATHERPROOF COVERS.
  - ALL 125V 15 AND 20 AMP RECEPTACLES WITHIN DWELLING UNITS MUST BE TAMPER PROOF.



LEVEL 1 - ELECTRICAL  
1/4" = 1'-0" 1  
E102



LEVEL 2 - ELECTRICAL  
1/4" = 1'-0" 2  
E102

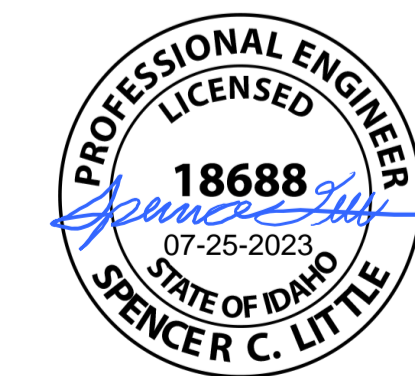



PSEUDO RENDERING WITH ILLUMINANCE SCALE

Luminaire Schedule					
Tag	Qty	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
L1	10	0.810	1255	14.2	142
L2	3	0.810	590	9.8	29.4

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY	Illuminance	Fc	0.09	3.5	0.0	N.A.	N.A.
TRESPASS	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.

POINT-BY-POINT CALCULATION AND SUMMARIES  
(5 FOOT GRID)




**WARM SPRING RESIDENCES**  
 KETCHUM, ID  


---

**LOT 34 CALCULATIONS AND**  
 RENDERINGS  
**SPECTRUM**  
 ENGINEERS





STEEL PLATE AWNING

STEEL PLATE SCREEN RAILING

WOOD SIDING

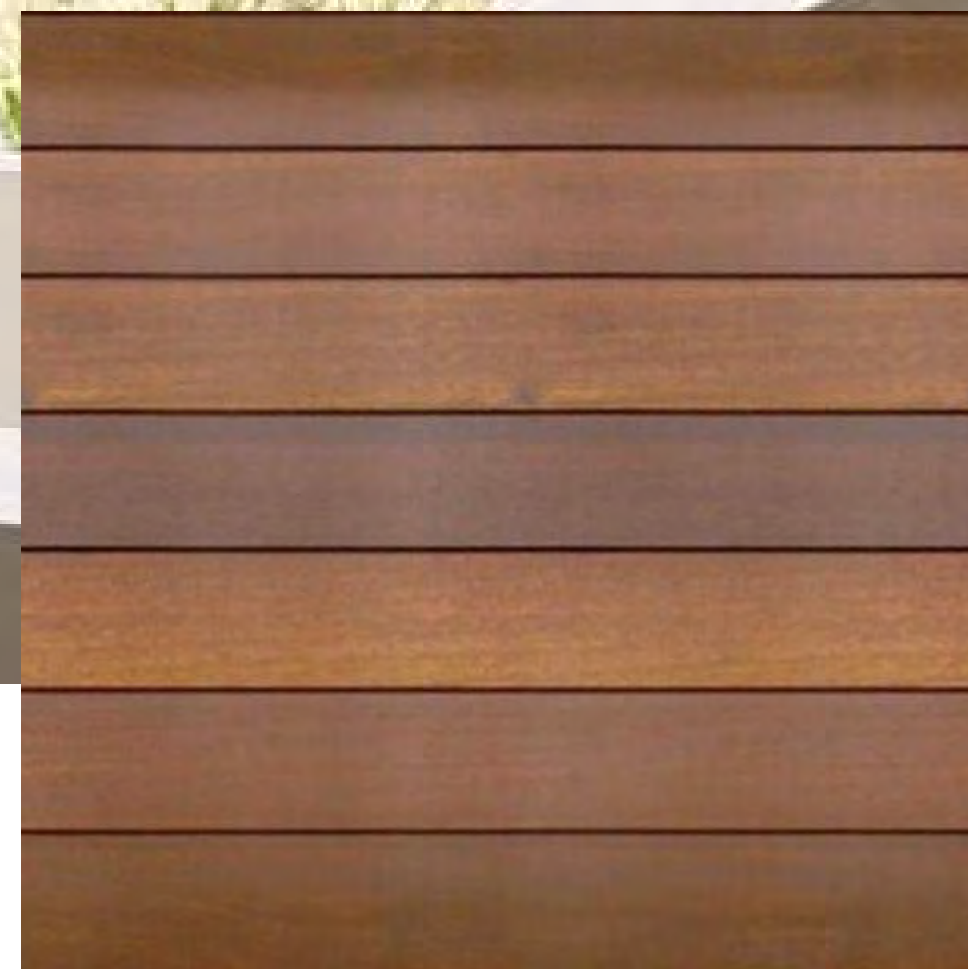
METAL SIDING

ALUMINUM GARAGE DOOR

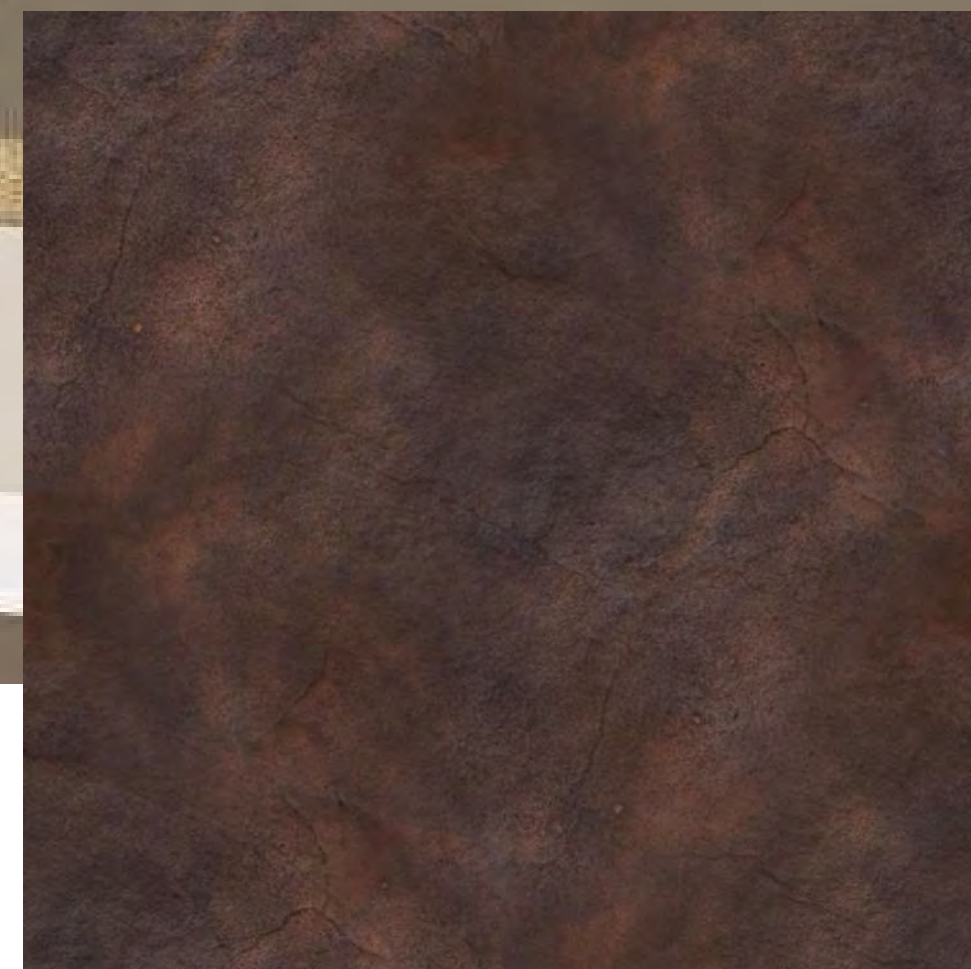
MASONRY VENEER



**THINSET MASONRY:**  
ELDORADO STONE:  
ROMA BRICK



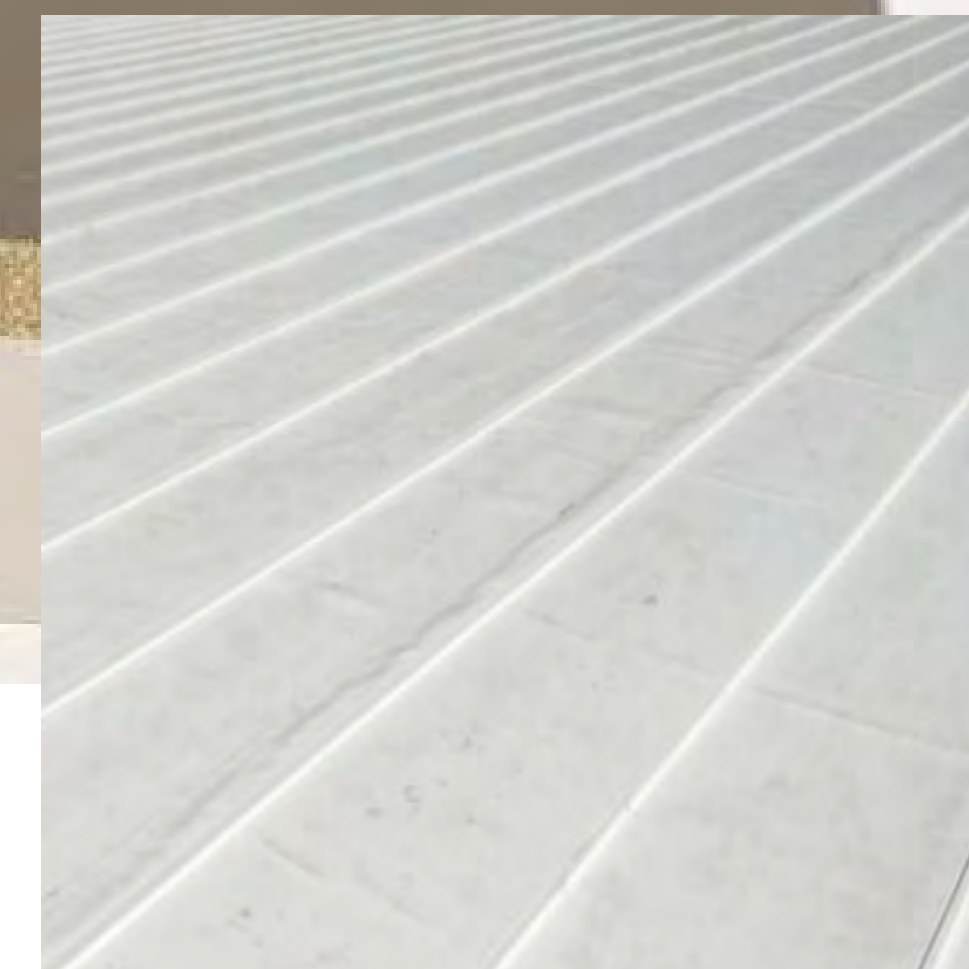
**HORIZONTAL SHIP LAP ASH SIDING:**  
PRESTAINED ASH SIDING



**METAL SIDING AND TRIM:**  
STEEL TRIM  
COLOR: AGED STEEL, LIGHT RUST FINISH



**WINDOWS:**  
ALUMINUM CLAD WOOD WINDOWS  
COLOR: DARK BRONZE



**TPO:**  
ROOFING MEMBRANE



## WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



## WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



## WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



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180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



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KETCHUM, IDAHO 83340



## WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340





## WARM SPRINGS RESIDENCE #34

180 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



City of Ketchum

Attachment E:  
Lots 32-34 Photomontage,  
Renderings, and  
Comprehensive Landscape Plan



## WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

2023.09.21



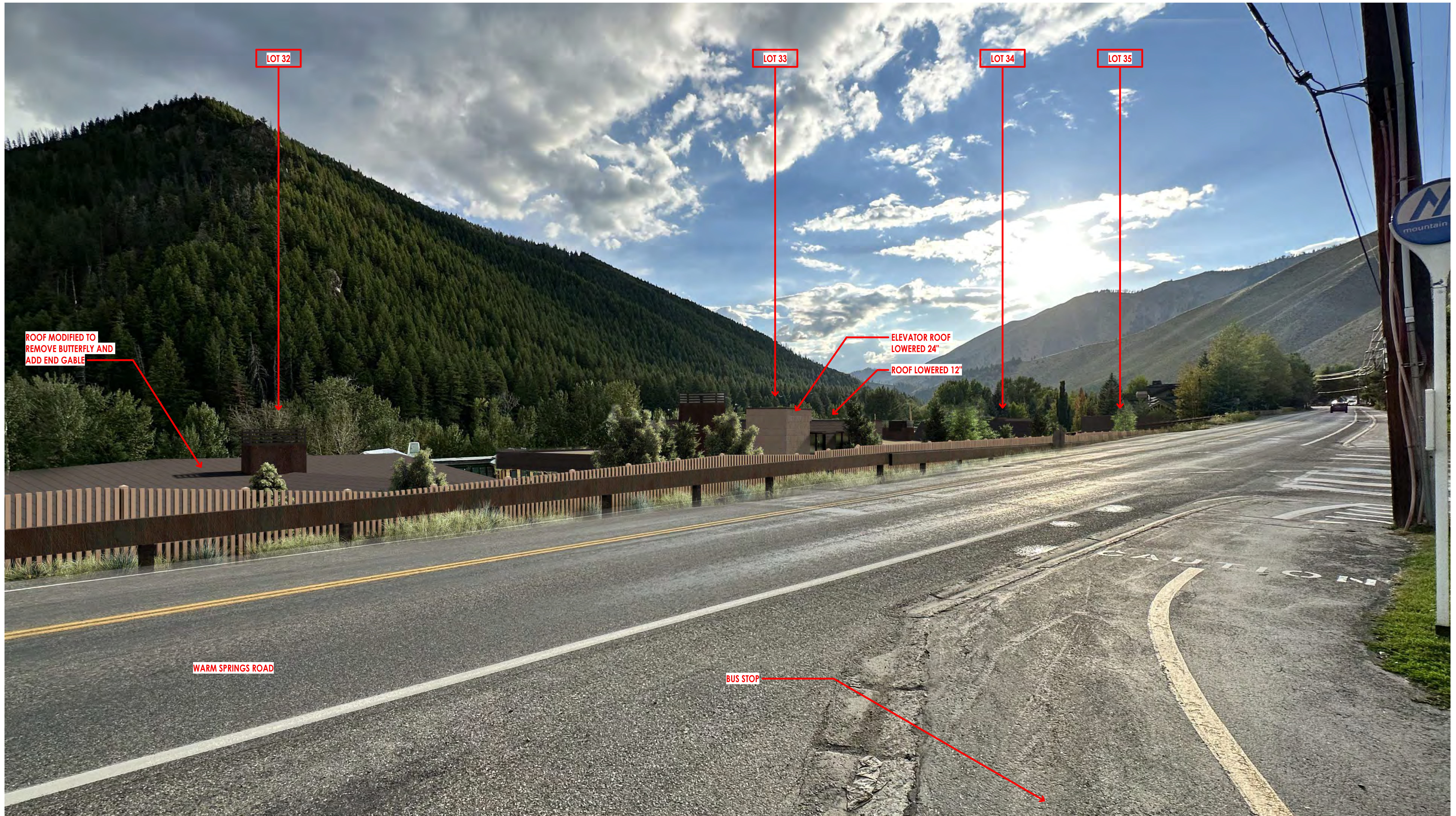
# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

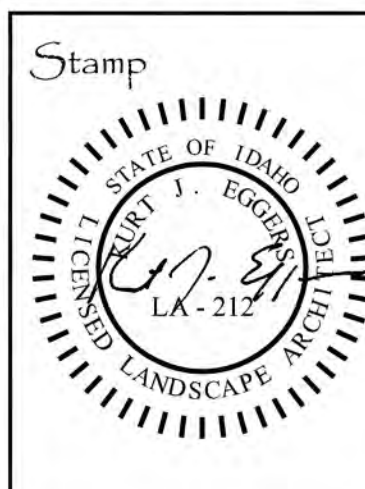




WARM SPRINGS ROAD LOOKING EAST

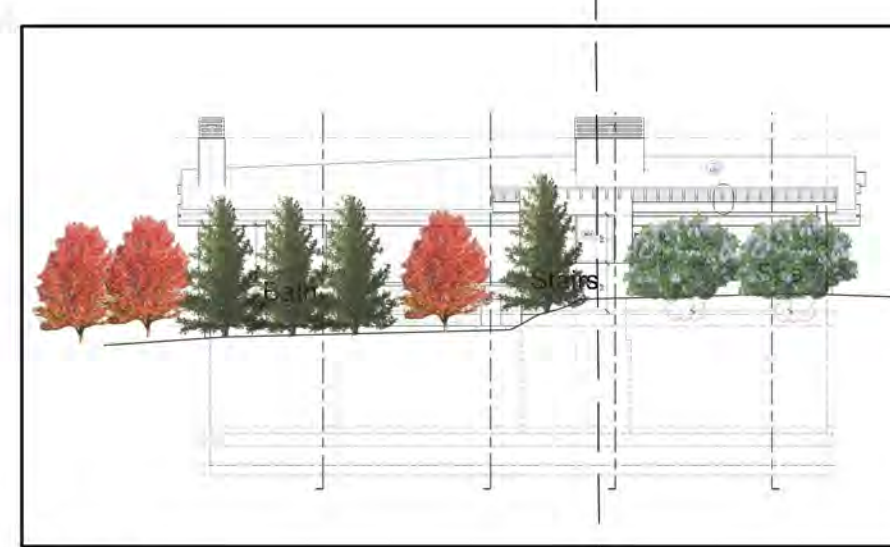
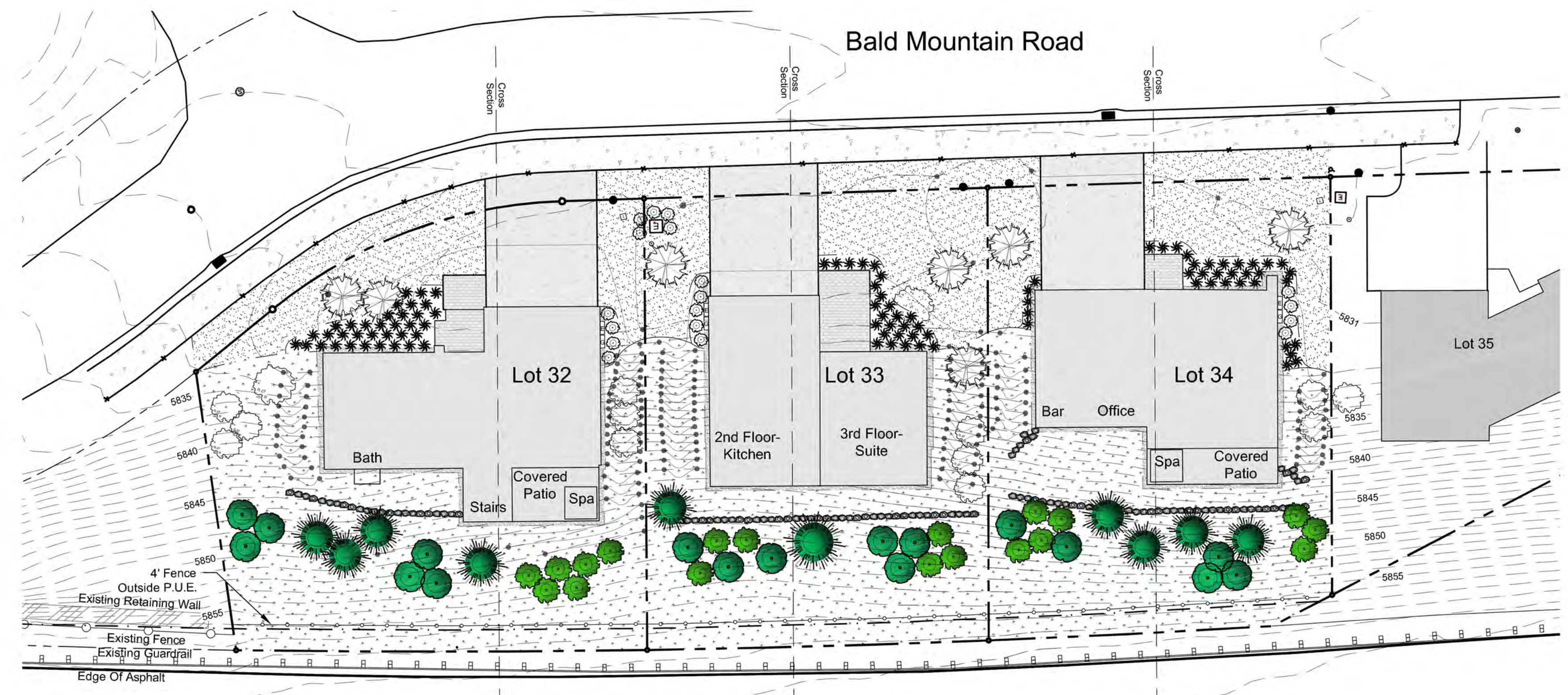
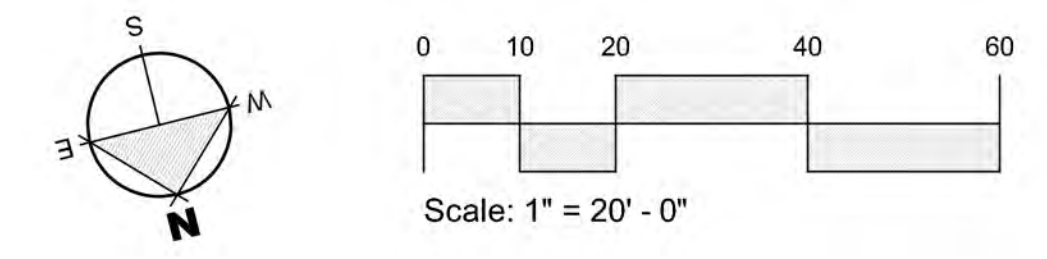


WARM SPINGS ROAD LOOKING WEST

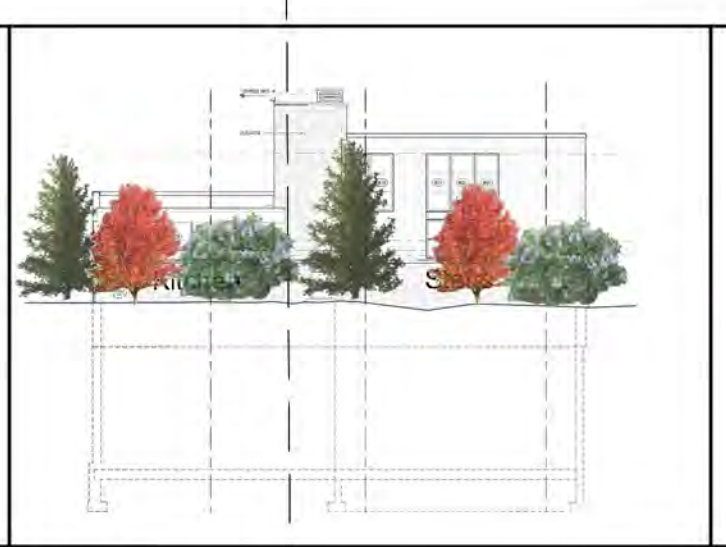


Plant Legend		
Common Name	Botanical Name	Size
<b>Conifer Trees</b>		
Mugo Pine	<i>Pinus mugo</i>	12'-16'
Subalpine Fir	<i>Abies lasiocarpa</i>	12'-14'
<b>Deciduous Trees</b>		
Ginnala Maple	<i>Acer ginnala</i>	20 gal. (6')
Aspen	<i>Populus tremuloides</i>	12'-14'
<b>Deciduous Shrubs</b>		
Lilac	<i>Syringa vulgaris</i>	20 gal. (6')
<b>Ornamental Grasses</b>		
		Flats
<b>Grasses &amp; Wildflowers</b>		
		Sod or Seed
<b>Grasses - Lawn Mix</b>		
		Sod or Seed

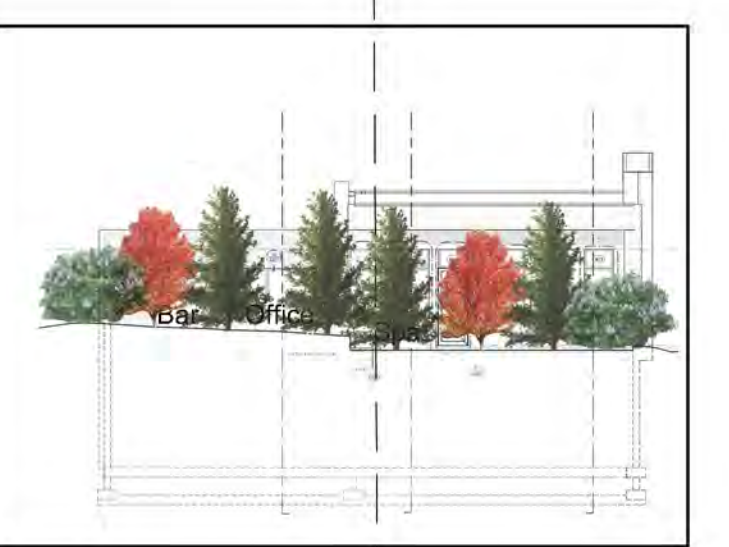
Plan Legend	
---	Property Line
- - - -	Existing Contour
- - - -	Public Utility Easement
●	Proposed Contour
—○—	4' Fence



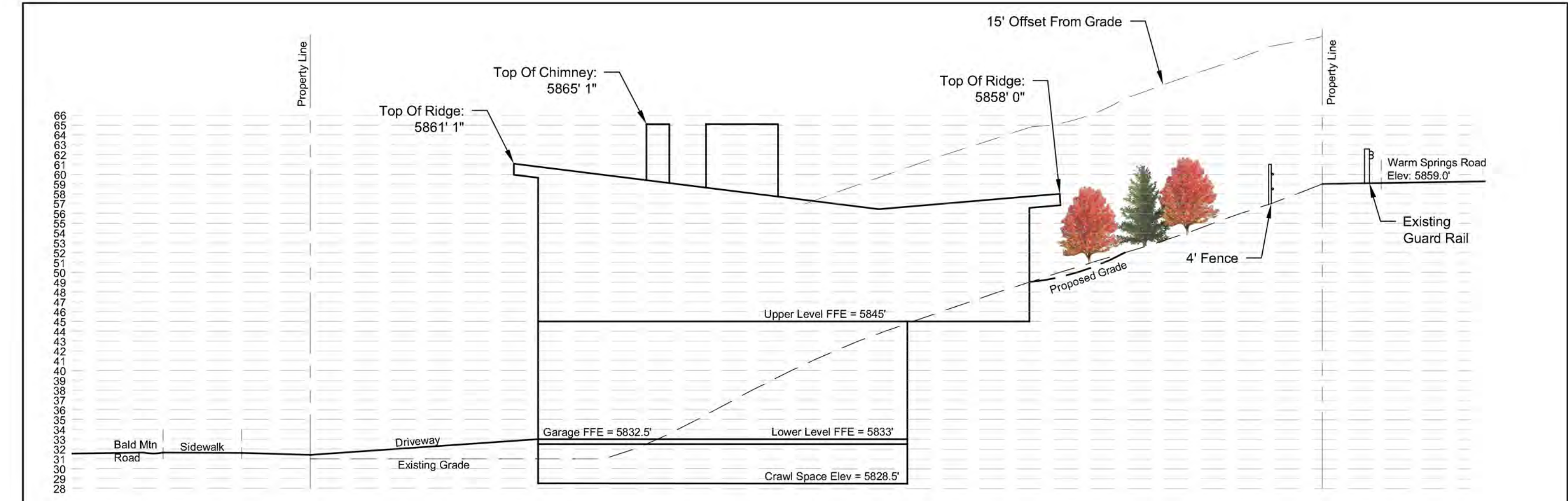
Lot 32  
Scale: 1" = 20'



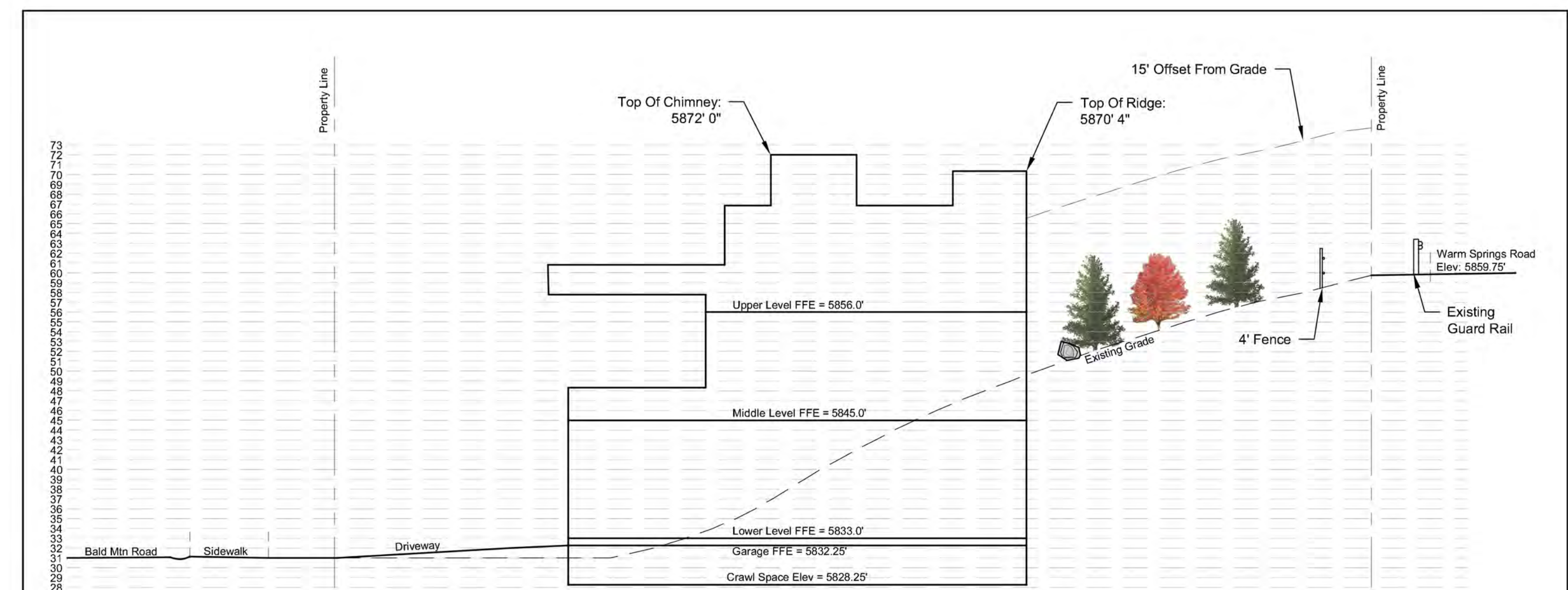
Lot 33  
Scale: 1" = 20'



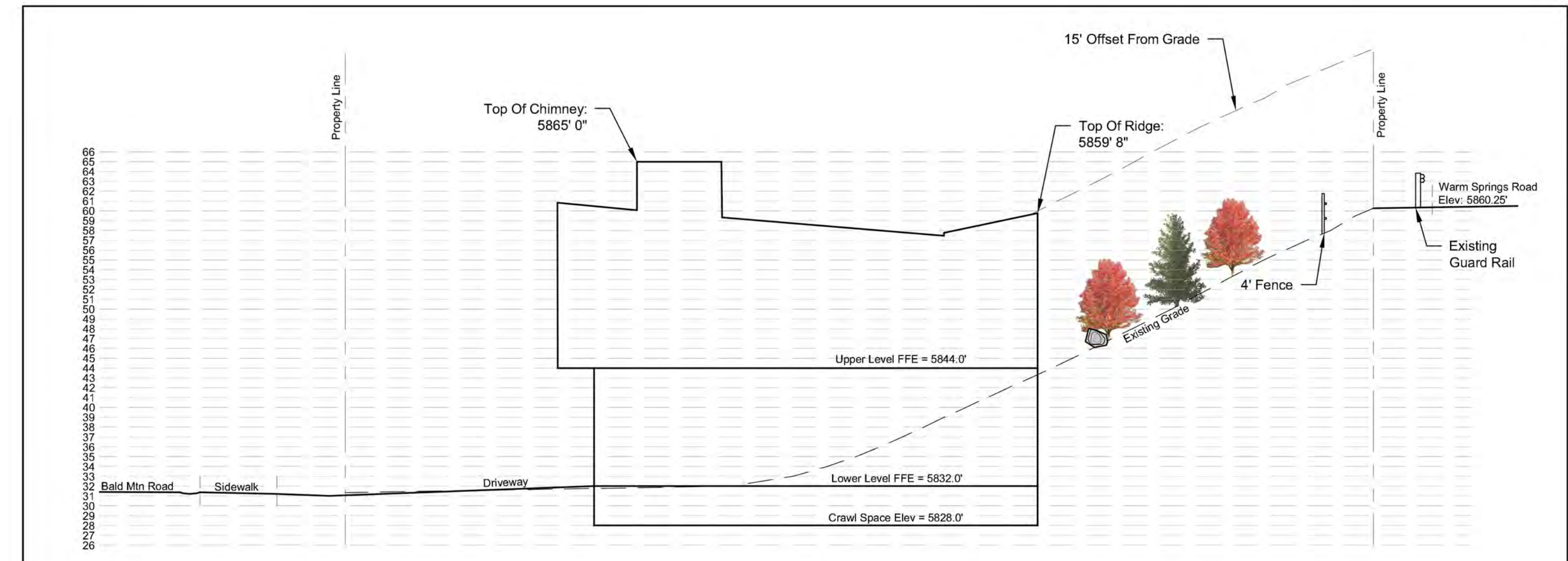
Lot 34  
Scale: 1" = 20'



Lot 32 Cross Section  
Scale: 1" = 10'



Lot 33 Cross Section  
Scale: 1" = 10'



Lot 34 Cross Section  
Scale: 1" = 10'



Mugo Pine



Ginnala Maple



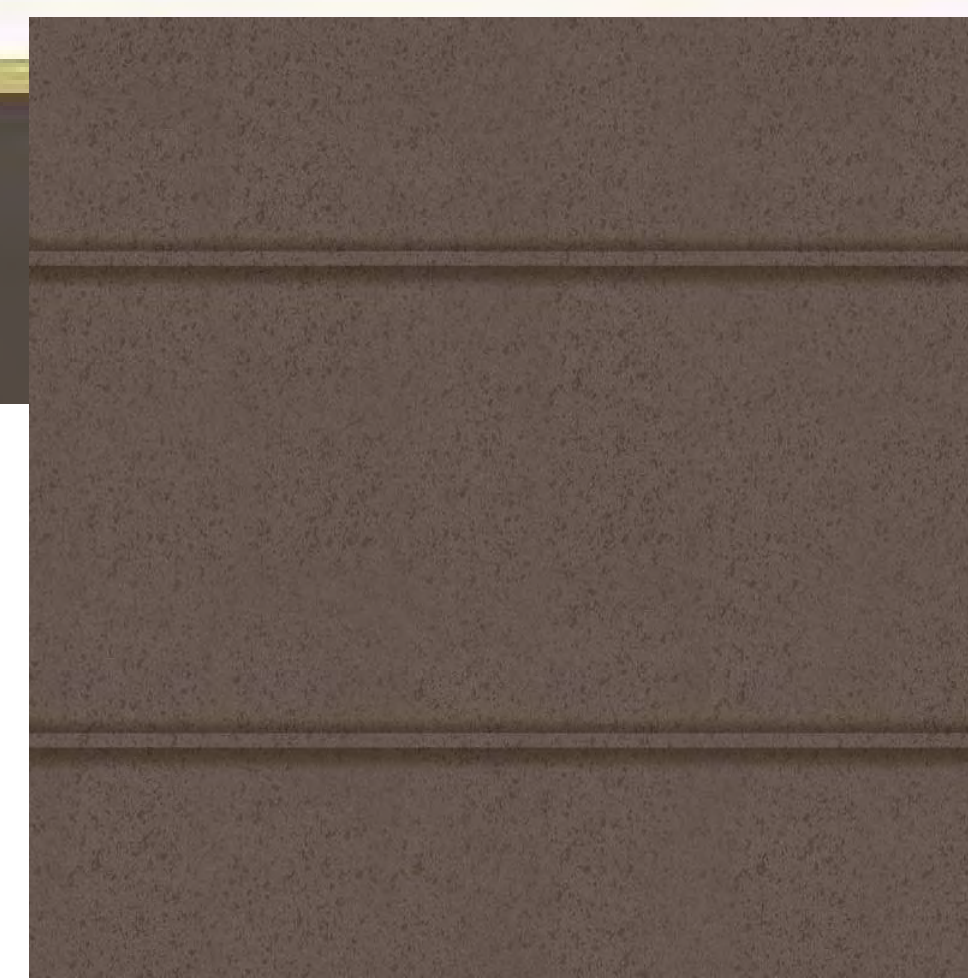
Lilac



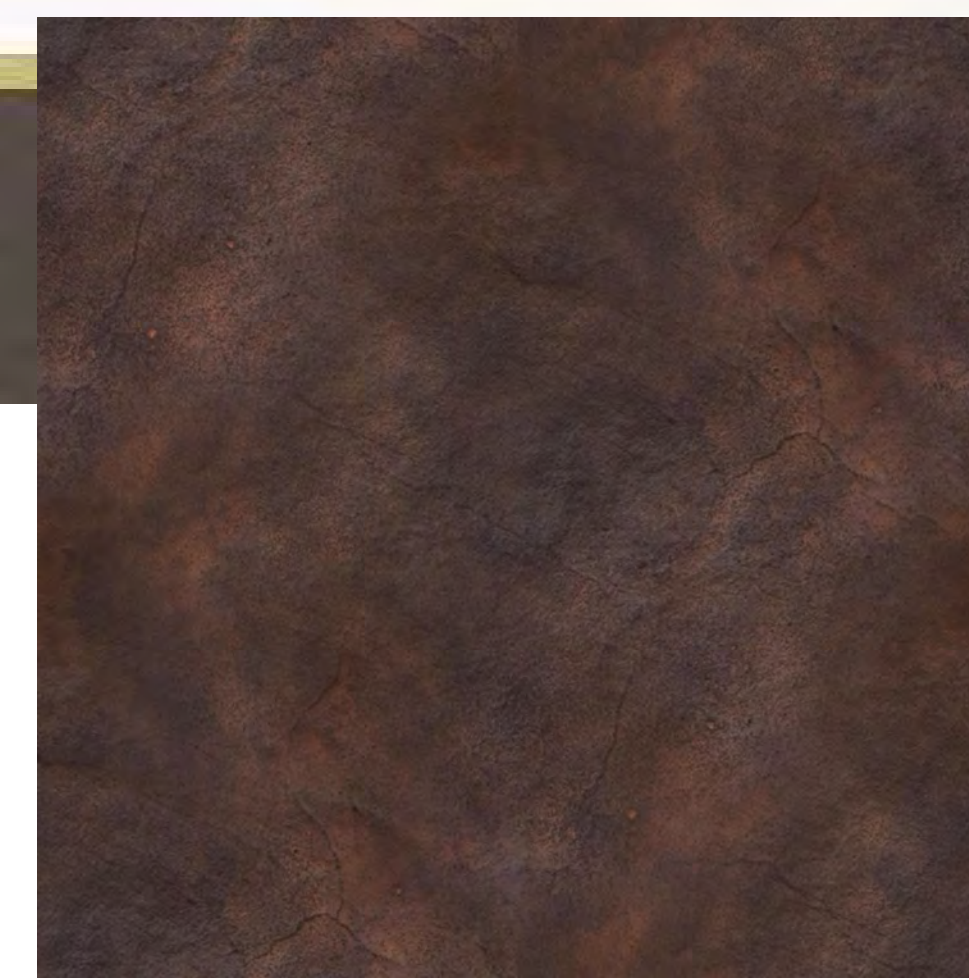
**THINSET MASONRY:**  
 EL DORADO STONE  
 MARQUEE 24 STONE  
 SANDERLING



**HORIZONTAL SHIP LAP CEDAR SIDING:**  
 PRESTAINED CEDAR SIDING



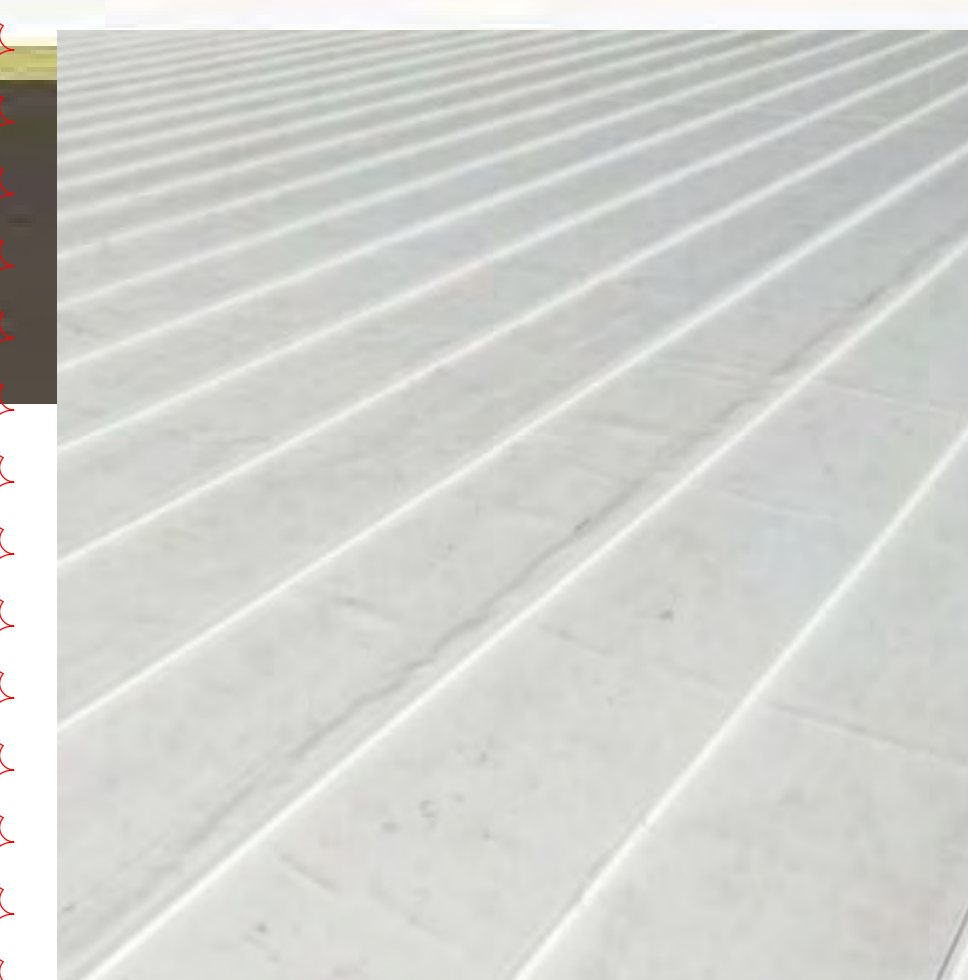
**HORIZONTAL METAL SIDING:**  
 BONDERIZED ZINC



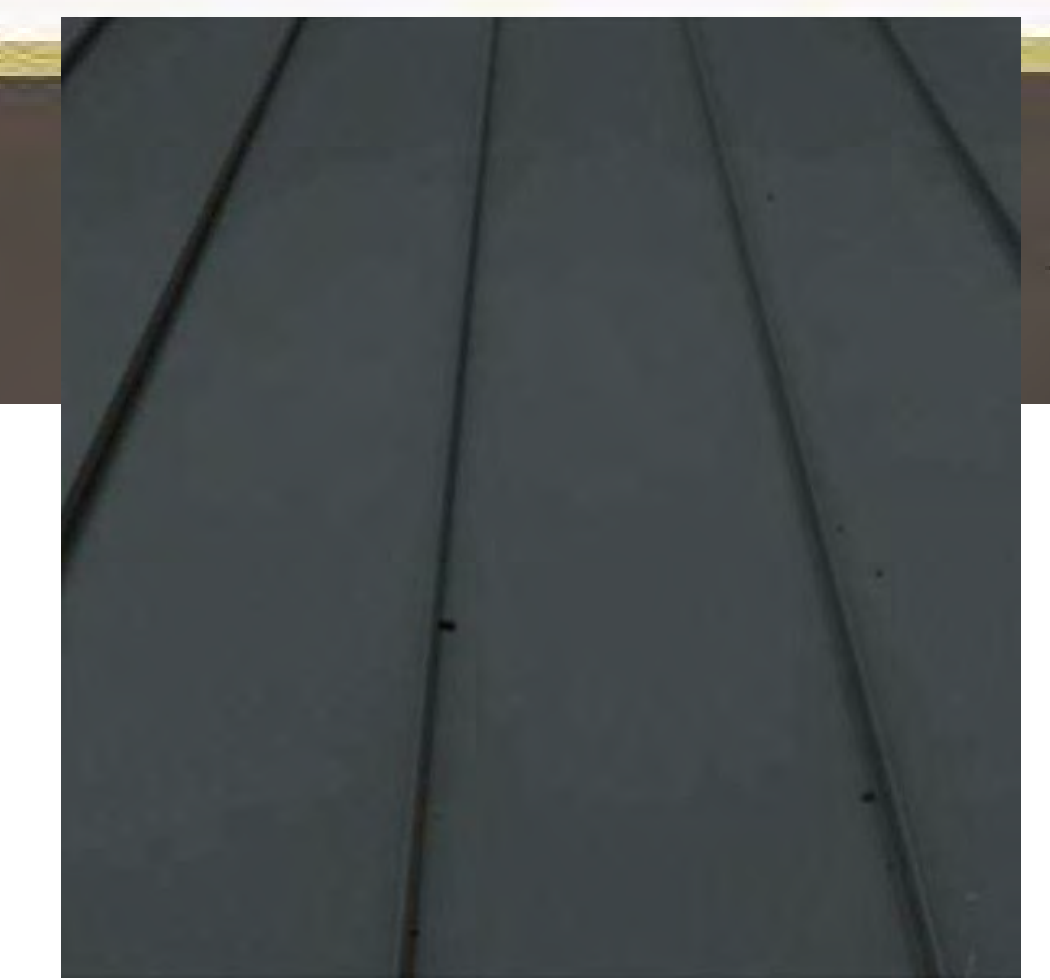
**METAL SIDING AT CHIMNEY:**  
 STEEL TRIM  
 COLOR: AGED STEEL, LIGHT RUST FINISH



**WINDOWS:**  
 ALUMINUM CLAD WOOD WINDOWS  
 COLOR: DARK BRONZE



**TPO WITH GRAVEL BALLAST**  
 ROOFING MEMBRANE



**METAL ROOFING ON ELEVATOR:**  
 STANDING SEAM METAL ROOF  
 BONDERIZED ZINC, NATURAL PATINA



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
 KETCHUM, IDAHO 83340

MATERIAL BOARD

D202

2023.09.21





LOT 33

BALD MOUNTAIN ROAD

STREET VIEW FROM BALD MOUNTAIN ROAD LOOKING NORTH



STREET VIEW FROM BALD MOUNTAIN ROAD LOOKING NORTH

# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



BALD MOUNTAIN ROAD VIEW LOOKING NORTH EAST

## WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340



PERSON FOR SCALE ALONG  
EDGE OF WARM SPRINGS  
ROAD

PROPOSED WOOD SLAT FENCE

EXISTING STEEL GAURDRAIL

PROPOSED LANDSCAPING TO  
SCREEN ROAD FROM WINDOWS

LOT 32

LOT 33

WARM SPRINGS ROAD LOOKING SOUTH



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D303

2023.09.21



PROPOSED WOOD SLAT FENCE

PERSON FOR SCALE ALONG  
EDGE OF WARM SPRINGS  
ROAD

EXISTING STEEL GAURDRAIL

PROPOSED LANDSCAPING TO  
SCREEN ROAD TRAFFIC FROM  
WINDOWS

LOT 33

WARM SPRINGS ROAD LOOKING SOUTH



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D304

2023.09.21



WARM SPRINGS ROAD

BUS STOP

GRAVEL BALLAST OVER MEMBRANE

STANDING SEAM METAL ROOF

LOT 34

LOT 33

LOT 32

BIRDS EYE VIEW LOOKING EAST OVER BALD MOUNTAIN ROAD



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D305

2023.09.21



LOT 33

LOT 33

LOT 32

BALD MOUNTAIN ROAD



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# WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D306

2023.09.21



WARM SPRINGS BUS STOP

VIEW FROM SECOND STORY WINDOW ON NORTH SIDE OF WARM SPRINGS ROAD LOOKING WEST





STANDING SEAM METAL ROOF

GRAVEL BALLAST OVER MEMBRANE

STANDING SEAM METAL ROOF

GRAVEL BALLAST OVER MEMBRANE

LOT 32

LOT 33

LOT 34

LOT 35

BIRDS EYE VIEW LOOKING EAST OVER WARM SPRINGS ROAD



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## WARM SPRINGS RESIDENCE #33

170 BALD MOUNTAIN ROAD  
KETCHUM, IDAHO 83340

EXTERIOR VIEWS

D308

2023.09.21



City of Ketchum

# Attachment F: Lots 32-34 Design Review Standards Analysis



Lots 32-34, Block 4, Warm Springs Ranch Residences  
DESIGN REVIEW STANDARDS ANALYSIS

17.96.060.A.1 - Streets	Conformance
<i>The applicant shall be responsible for all costs associated with providing a connection from an existing City street to their development.</i>	YES
<p><b>Finding:</b> The project proposes to construct new asphalt driveways to access Lots 32-34 from Bald Mountain Road. All project costs associated with the development, including the City street connection, are the responsibility of the applicant.</p>	

17.96.060.A.2 - Streets	Conformance
<i>All street designs shall be approved by the City Engineer.</i>	YES
<p><b>Finding:</b> The City Engineer has reviewed the proposed driveway designs for Lots 32-34 and finds them to be sufficient for the project.</p> <p>All street designs shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit for the project.</p>	

17.96.060.B.1 - Sidewalks	Conformance
<i>All projects under subsection 17.96.010.A of this chapter that qualify as a "substantial improvement" shall install sidewalks as required by the Public Works Department.</i>	YES
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, included as Attachment H, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Staff recommend condition of approval #5 ensure any damage to the right-of-way, including sidewalks, be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.2 - Sidewalks	Conformance
<i>Sidewalk width shall conform to the City's right-of-way standards, however the City Engineer may reduce or increase the sidewalk width and design standard requirements at their discretion.</i>	YES
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.3 - Sidewalks	Conformance
<p><i>Sidewalks may be waived if one of the following criteria is met:</i></p> <ul style="list-style-type: none"> <li><i>a) The project comprises an addition of less than 250 square feet of conditioned space.</i></li> <li><i>b) The City Engineer finds that sidewalks are not necessary because of existing geographic limitations, pedestrian traffic on the street does not warrant a sidewalk, or if a sidewalk would not be beneficial to the general welfare and safety of the public.</i></li> </ul>	<p>YES</p>
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.4 - Sidewalks	Conformance
<p><i>The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.</i></p>	<p>YES</p>
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.5 – Sidewalks	Conformance
<p><i>New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.</i></p>	<p>YES</p>
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.6 - Sidewalks	Conformance
<p><i>The City may approve and accept voluntary cash contributions in lieu of the above described improvements, which contributions must be segregated by the City and not used for any purpose other than the provision of these improvements. The contribution amount shall be 110 percent of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the City Engineer. Any approved in lieu contribution shall be paid before the City issues a certificate of occupancy.</i></p>	<p>YES</p>
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.C.1 - Drainage	Conformance
<p><i>All stormwater shall be retained on site.</i></p>	<p>YES</p>
<p><b>Finding:</b> Pursuant to KMC §17.96.060.C.1, all storm water drainage shall be retained on site. Drainage improvements are specified on Sheet C-1 on each of the project plans for Lots 32-34. The drainage improvements include the installation of a trench drain bordering the width of the driveways. A combination of drywells and catch basins on each lot will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan for each lot and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on all the subject properties.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit for each lot.</p>	

17.96.060.C.2 - Drainage	Conformance
<p><i>Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.</i></p>	<p>YES</p>
<p><b>Finding:</b> Drainage improvements are specified on Sheet C-1 on each of the project plans for Lots 32-34. The drainage improvements include the installation of a trench drain bordering the width of the driveways. A combination of drywells and catch basins on each lot will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan for each lot and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on all the subject properties.</p>	

All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit for each lot.

17.96.060.C.3 - Drainage	Conformance
<i>The City Engineer may require additional drainage improvements as necessary, depending on the unique characteristics of a site.</i>	YES
<p><b>Finding:</b> The City Engineer has reviewed the proposed drainage plan for Lots 32-34 and believes the trench drain and drywell/catch basin improvements are sufficient to maintain storm water drainage on each of the subject properties. The City Engineer may require additional drainage improvements if necessary. If approved, the applicant shall submit final civil drawings for all drainage improvements with the building permit application for each lot to be verified, reviewed, and approved by the City Engineer and Streets Department.</p>	

17.96.060.C.4 - Drainage	Conformance
<i>Drainage facilities shall be constructed per City standards.</i>	YES
<p><b>Finding:</b> The drainage improvements include the installation of a trench drain bordering the width of each driveway for Lots 32-34 along Bald Mountain Road. A combination of drywells and catch basins on each lot will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan for each lot and believes the proposed trench drain and drywell improvements meet city standards.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit for each lot.</p>	

17.96.060.D.1 - Utilities	Conformance
<i>All utilities necessary for the development shall be improved and installed at the sole expense of the applicant.</i>	YES
<p><b>Finding:</b> All project costs associated with the development, including the installation of utilities, are the responsibility of the applicant. The applicant has not made requests for funding to the City for utility improvements. No funds have been provided by the City for the project.</p>	

17.96.060.D.2 - Utilities	Conformance
<i>Utilities shall be located underground and utility, power, and communication lines within the development site shall be concealed from public view.</i>	YES
<p><b>Finding:</b> As shown on Sheet C-1 of the project plans for Lots 32-34, the applicant proposes connecting to the municipal water and sewer systems from existing lines on Bald Mountain Road. Requirements and specification for the water and sewer connections will be verified,</p>	

reviewed, and approved by the Utilities Department prior to issuance of a Building Permit for each lot.

17.96.060.D.3 - Utilities	Conformance
<i>When extension of utilities is necessary all developers will be required to pay for and install two-inch SDR11 fiber optical conduit. The placement and construction of the fiber optical conduit shall be done in accordance with City of Ketchum standards and at the discretion of the City Engineer.</i>	N/A
<b>Finding:</b> N/A. Extension of utilities is not necessary to service the proposed residences.	

17.96.060.E.1 – Compatibility of Design	Conformance
<i>The project's materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.</i>	YES
<b>Finding:</b> Pursuant to KMC §17.96.060.E.1, “The project’s materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.” The Warm Springs Ranch Subdivision was platted in 2021 and is in the process of being developed. Multiple single-family residences are currently being constructed on Bald Mountain Road and Mountain Creek Drive. All of which have similar, yet unique architectural styles that utilize both modern (flat and shed roofs with cold materials such as concrete and metal) and traditional (gabled roofs with warmer materials such as wood and stone) designs. The proposed developments feature flat, butterfly, and gabled roofs with large windows and a mix of cold and warm materials including wood, metal, and stone.	

17.96.060.E.2 – Compatibility of Design	Conformance
<i>Preservation of significant landmarks shall be encouraged and protected, where applicable. A significant landmark is one which gives historical and/or cultural importance to the neighborhood and/or community.</i>	N/A
<b>Finding:</b> N/A. The subject properties do not contain any significant landmarks.	

17.96.060.E.3 – Compatibility of Design	Conformance
<i>Additions to existing buildings, built prior to 1940, shall be complementary in design and use similar material and finishes of the building being added to.</i>	N/A
<b>Finding:</b> N/A. The subject properties are vacant.	

17.96.060.F.1 – Architectural	Conformance
<i>Building(s) shall provide unobstructed pedestrian access to the nearest sidewalk and the entryway shall be clearly defined.</i>	YES
<b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision	

Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.

17.96.060.F.2 – Architectural	Conformance
<i>The building character shall be clearly defined by use of architectural features.</i>	YES
<b>Finding:</b> As stated previously, the proposed structures feature both modern and traditional designs with a mix of flat, butterfly, and gabled roofs and wood, metal, and stone materials.	

17.96.060.F.3 – Architectural	Conformance
<i>There shall be continuity of materials, colors and signing within the project.</i>	YES
<b>Finding:</b> The proposed structures feature dark bronze trimmed windows and a mix of wood, metal, and stone materials.	

17.96.060.F.4 – Architectural	Conformance
<i>Accessory structures, fences, walls and landscape features within the project shall match or complement the principal building.</i>	YES
<b>Finding:</b> A 4’ wooden fence is proposed on the rear of Lots 32-34 along Warm Springs Road. No accessory structures are proposed. The project proposes landscaping improvements that complement and soften the visual appearance of the single-family residences from Warm Springs Road. The landscaping includes trees, shrubs, and grasses. Utilities on each lot will be screened with shrubs. New Aspen, Crabapple, and Pine trees will be installed on each lot to provide screening for the residences from adjacent properties and from Warm Springs Road.	

17.96.060.F.5 – Architectural	Conformance
<i>Building walls shall provide undulation/relief, thus reducing the appearance of bulk and flatness.</i>	YES
<b>Finding:</b> The project plans propose a two-story structure on Lots 32 and 34, and a three-story structure on Lot 33. Each of the proposed residences feature multiple wall and deck pop-outs to provide undulation and reduce the appearance of flatness.	

17.96.060.F.6 – Architectural	Conformance
<i>Building(s) shall orient toward their primary street frontage.</i>	YES
<b>Finding:</b> The structures on Lots 32-34 are proposed to be oriented towards the primary street frontage along Bald Mountain Road.	



<b>17.96.060.F.7 – Architectural</b>	<b>Conformance</b>
<i>Garbage storage areas and satellite receivers shall be screened from public view and located off alleys.</i>	YES
<p><b>Finding:</b> No satellite receivers are proposed for the project. Sheet A101 on the project plans for Lots 32-34 indicates that garbage bins will be stored within the garage for each structure and screened from public view.</p>	

<b>17.96.060.F.8 – Architectural</b>	<b>Conformance</b>
<i>Building design shall include weather protection which prevents water to drip or snow to slide on areas where pedestrians gather and circulate or onto adjacent properties.</i>	YES
<p><b>Finding:</b> The roof plan for Lot 32 indicates that portions of the roofs will have snow clips installed, and that other areas will have gutters and be sloped to downspouts. The roof plan for Lots 33 and 34 indicates that gutters will be installed, and the roofs will be sloped to downspouts.</p>	

<b>17.96.060.G.1 – Circulation Design</b>	<b>Conformance</b>
<i>Pedestrian, equestrian and bicycle access shall be located to connect with existing and anticipated easements and pathways.</i>	YES
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

<b>17.96.060.G.2 – Circulation Design</b>	<b>Conformance</b>
<i>Awnings extending over public sidewalks shall extend five feet or more across the public sidewalk but shall not extend within two feet of parking or travel lanes within the right-of-way.</i>	YES
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.G.3 – Circulation Design	Conformance
<p><i>Traffic shall flow safely within the project and onto adjacent streets. Traffic includes vehicle, bicycle, pedestrian and equestrian use. Consideration shall be given to adequate sight distances and proper signage.</i></p>	<p>YES</p>
<p><b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p> <p>The City Engineer has reviewed the proposed driveways for Lots 32-34 and finds the circulation design to meet city standards. Final circulation design shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit for the project.</p>	

17.96.060.G.4 – Circulation Design	Conformance
<p><i>Curb cuts and driveway entrances shall be no closer than 20 feet to the nearest intersection of two or more streets, as measured along the property line adjacent to the right-of-way. Due to site conditions or current/projected traffic levels or speed, the City Engineer may increase the minimum distance requirements.</i></p>	<p>YES</p>
<p><b>Finding:</b> The proposed driveways for Lots 32 and 33 are located further than 20 feet away from the nearest intersection of Bald Mountain Road and Mountain Creek Drive. The proposed driveway for Lot 34 is located further than 20 feet away from the nearest intersection of Bald Mountain Road and Lopey Lane.</p>	

17.96.060.G.5 – Circulation Design	Conformance
<p><i>Unobstructed access shall be provided for emergency vehicles, snowplows, garbage trucks and similar service vehicles to all necessary locations within the proposed project.</i></p>	<p>YES</p>
<p><b>Finding:</b> Access for emergency vehicles, snowplows, and garbage trucks is provided along Bald Mountain Road for Lots 32-34.</p>	

17.96.060.H.1 – Snow Storage	Conformance
<p><i>Snow storage areas shall not be less than 30 percent of the improved parking and pedestrian circulation areas.</i></p>	<p>YES</p>

**Finding:**

Lot 32: Sheet L3 of Attachment B shows the proposed snow storage areas to include a total of 415 square feet, greater than the required 30% ( $1,080 * .30 = 324$  square feet).

Lot 33: Sheet L3 of Attachment C shows the proposed snow storage areas to include a total of 275 square feet, greater than the required 30% ( $837 * .30 = 251$  square feet).

Lot 34: Sheet L3 of Attachment D shows the proposed snow storage areas to include a total of 275 square feet, greater than the required 30% ( $835 * .30 = 251$  square feet).

17.96.060.H.2 – Snow Storage	Conformance
<i>Snow storage areas shall be provided on site.</i>	YES
<b>Finding:</b> Locations of snow storage areas are indicated on Sheet L3 on each of the project plans for Lots 32-34.	

17.96.060.H.3 – Snow Storage	Conformance
<i>A designated snow storage area shall not have any dimension less than five feet and shall be a minimum of 25 square feet.</i>	YES
<b>Finding:</b> None of the snow storage areas on Lots 32-34 have dimensions less than five feet.	

17.96.060.H.4 – Snow Storage	Conformance
<i>In lieu of providing snow storage areas, snowmelt and hauling of snow may be allowed.</i>	YES
<b>Finding:</b> The applicant is proposing a driveway snowmelt system within the property boundary and not within the Bald Mountain Road right-of-way for each driveway on Lots 32-34. In addition to the snowmelt systems, each lot is also proposing snow storage areas on-site.	

17.96.060.I.1 – Landscaping	Conformance
<i>Landscaping is required for all projects.</i>	YES
<b>Finding:</b> Landscaping has been provided for the project as indicated on Sheets L3 of the project plans for Lots 32-34.	

17.96.060.I.2 – Landscaping	Conformance
<i>Landscape materials and vegetation types specified shall be readily adaptable to a site's microclimate, soil conditions, orientation and aspect, and shall serve to enhance and complement the neighborhood and townscape.</i>	YES
<b>Finding:</b> The front, side, and rear yard setback areas for Lots 32-34 will be vegetated with native grasses. Shrubs and trees are proposed along the sides of each residence, which will screen utilities. New pine, aspen, and crabapple trees will be installed to provide screening for	

the residences from Warm Springs Road and adjacent properties. Ornamental grasses and wildflowers are also proposed around each structure.

17.96.060.I.3 – Landscaping	Conformance
<i>All trees, shrubs, grasses and perennials shall be drought tolerant. Native species are recommended but not required.</i>	YES
<b>Finding:</b> The landscape plan for each lot proposes drought-tolerant and native species, including pine trees, native shrubs, and drought tolerant grasses.	

17.96.060.I.4 – Landscaping	Conformance
<i>Landscaping shall provide a substantial buffer between land uses, including, but not limited to, structures, streets and parking lots. The development of landscaped public courtyards, including trees and shrubs where appropriate, shall be encouraged.</i>	YES
<b>Finding:</b> Each lot is proposing landscaping along the rear to provide a buffer from Warm Springs Road and landscaping on the front and side yards to allow for privacy between adjacent properties.	

17.96.060.J.1 – Public Amenities	Conformance
<i>Where sidewalks are required, pedestrian amenities shall be installed. Amenities may include, but are not limited to, benches and other seating, kiosks, bus shelters, trash receptacles, restrooms, fountains, art, etc. All public amenities shall receive approval from the Public Works Department prior to design review approval from the Commission.</i>	YES
<b>Finding:</b> Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-34 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.K.1 – Underground Encroachments	Conformance
<i>Encroachments of below grade structures into required setbacks are subject to subsection 17.128.020.K of this title and shall not conflict with any applicable easements, existing underground structures, sensitive ecological areas, soil stability, drainage, other sections of this Code or other regulating codes such as adopted International Code Council Codes, or other site features concerning health, safety, and welfare.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures are proposed on Lots 32-34.	

17.96.060.K.2 – Underground Encroachments	Conformance
<i>No below grade structure shall be permitted to encroach into the riparian setback.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures are proposed, and the structures on Lots 32-34 are not located within the riparian setback.	



City of Ketchum

# Attachment G: Lots 32-34 Zoning and Dimensional Standards Analysis



**Lots 32-34, Block 4, Warm Springs Ranch Residences  
COMPLIANCE WITH ZONING REGULATIONS**

Compliance with Zoning and Dimensional Standards				
Compliant			Standards and Findings	
Yes	No	N/A	Ketchum Municipal Code	City Standards and Findings
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	<b>Minimum Lot Area</b>
			Finding	<b>Required:</b> 8,000 square feet <b>Existing:</b> Lot 32: 9,552 square feet (.22 acres) Lot 33: 8,429 square feet (.19 acres) Lot 34: 8,347 square feet (.19 acres)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	<b>Building Coverage</b>
			Finding	<b>Permitted:</b> 35% <b>Proposed:</b> Lot 32: 29% (2,813.67 square feet building coverage / 9,552 square feet lot area)  Lot 33: 26% (2,189 square feet building coverage / 8,429 square feet lot area)  Lot 34: 29% (2,456 square feet building coverage / 8,347 square feet lot area)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	<b>Minimum Building Setbacks</b>
			Finding	<b>Minimum Required Setbacks:</b> Front: 15' Side: > of 1' for every 3' in building height, or 5' Rear: > of 1' for every 3' in building height, or 15'  <b>Proposed:</b> Lot 32 Front (south): 15'-4 7/8" Side (east): 26'-4 1/8" Side (west): 11' Rear (north): 30'-2 7/64"  Lot 33 Front (south): 23'-1 9/256" Side (east): 15' Side (west): 14'-3 7/32"




				<p>Rear (north): 38'-2 29/256"</p> <p>Lot 34</p> <p>Front (south): 20'-7 213/256"</p> <p>Side (east): 11'-5 95/256"</p> <p>Side (west): 13'-0 1/256"</p> <p>Rear (north): 46'-7 1/16"</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	<b>Building Height</b>
			<b>Finding</b>	<p><b>Maximum Permitted:</b> 35' (properties which step up or down hillsides may extend 5 feet above the maximum height permitted in the zoning district)</p> <p><b>Proposed:</b></p> <p>Lot 32: 28'- 0 31/32"</p> <p>Lot 33: 33'- 2"</p> <p>Lot 34: 29'- 11 1/2"</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.125.030.H	<b>Curb Cut</b>
			<b>Finding</b>	<p><b>Permitted:</b></p> <p>A total of 35% of the linear footage of any street frontage can be devoted to access off street parking.</p> <p><b>Proposed:</b></p> <p>Lot 32: 23% (26-foot-wide driveway/115 feet of property frontage along Bald Mountain Road Road).</p> <p>Lot 33: 31% (25-foot-wide driveway/80 feet of property frontage along Bald Mountain Road Road).</p> <p>Lot 34: 30% (24-foot-wide driveway/80 feet of property frontage along Bald Mountain Road Road).</p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.125.020.A. 2 & 17.125.050	<b>Parking Spaces</b>
			<b>Finding</b>	<p>Off-street parking standards of this chapter apply to any new development and to any new established uses.</p> <p><b>Required:</b></p> <p>Residential (one family dwelling), in all applicable zoning districts require two parking spaces.</p> <p><b>Proposed:</b></p> <p>The project plans for Lots 32-34 indicate 2 parking spaces within the enclosed garage for each structure.</p>





City of Ketchum

Attachment H:  
Warm Springs Ranch  
Residences Subdivision  
Development Agreement

<p>RECORDING REQUESTED BY AND WHEN RECORDED RETURN TO:</p> <p>OFFICE OF THE CITY CLERK CITY OF KETCHUM POST OFFICE BOX 2315 KETCHUM, IDAHO 83340</p>	<p><b>Instrument # 682013</b>  <b>HAILEY, BLAINE, IDAHO</b>  4-28-2021 06:28:02 PM No. of Pages: 13  Recorded for : CITY OF KETCHUM  JOLYNN DRAGE Fee: 0.00  Ex-Officio Recorder Deputy  Index to: AGREEMENT/CORRECTION</p> 
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(SPACE ABOVE LINE FOR RECORDER'S USE)

**DEVELOPMENT AND REZONING AGREEMENT 20609**

THIS DEVELOPMENT AGREEMENT ("**Agreement**") is dated for reference purposes this 28 day of April, 2020, by and between the CITY OF KETCHUM, IDAHO, a municipal corporation ("**Ketchum**" or "**City**") and BRENNAN HOLDINGS NO. 300, LLC, an Idaho limited liability company ("**Owner**", and together with the City, the "**Parties**").

**BACKGROUND AND CONTEXT**

A. Ketchum is a municipal corporation possessing all powers granted to municipalities under the applicable provisions of the Idaho Code, including the power to grant conditional use permits, approve planned unit developments, subdivide real property and the power to contract. A development agreement between the Parties is a collaboration that will provide mutual benefit for the Parties and residents of the City.

B. Owner owns the real property situated in the State of Idaho, County of Blaine, commonly known as the Warm Springs Ranch Resort, Ketchum, Idaho ("**Property**") and more particularly described as Blocks 1, 2, 3, 4, 5, 6, 7, and 8 of Warm Springs Ranch Resort P.U.D. Large Block Plat, according to the plat thereof, recorded as Instrument No. 576508, records of Blaine County, Idaho except for a parcel within Block 2 ("**Large Block Plat**").

C. On August 11, 2009 Ketchum and Owner entered into the Warm Springs Ranch Resort Development Agreement ("**Original Agreement**"), recorded on August 13, 2009 in the records of Blaine County, Idaho as Instrument No. 570190, for the purpose of establishing certain rights and obligations of the Parties with regard to annexation of the real property and the development of the PUD Property, including limitations as to the use, development, design, phasing, construction of necessary improvements (on-site and off-site) and mitigating the impacts directly attributable to the PUD. The Original Agreement was first amended by Amendment dated May 10, 2010 and recorded on June 2, 2010 as Instrument No. 577973, records of Blaine County, Idaho and next amended by instrument entitled Second Amendment, dated January 18, 2011, and recorded on March 7, 2011, as Instrument No. 585686, records of Blaine County, Idaho. The Original Agreement was then restated, amended, and superseded on April 2, 2012 by mutual agreement of the Parties to the [First] Amended and Restated Warm Springs Ranch Resort Annexation and Development Agreement. ("**First Amended Agreement**"). On December 19, 2016 Ketchum and Owner

entered into the Second Amended and Restated Warm Springs Ranch Resort Development Agreement, recorded on January 11, 2017, in the records of Blaine County, Idaho as Instrument No. 640939.

D. It is the intention of Ketchum and the Owner in this Development and Rezoning Agreement to rescind, and repeal:

- i. The Second Amended and Restated Warm Springs Ranch Resort Development Agreement, recorded on January 11, 2017, in the records of Blaine County, Idaho as Instrument No. 640939 (“Existing Development Agreement”) and all prior iterations of the Warm Springs Ranch Development Agreements.
- ii. The Large Block Plat Planned Unit Development Conditional Use Permit LBP-08-008 as approved in the April 7, 2009 City Council Findings of Fact, Conclusions of Law and Decisions.
- iii. The Planned Unit Development and Conditional Use Permit PUD-CUP-08-008 as approved in the April 7, 2009 City Council Findings of Fact

E. It is the intention of Ketchum and the Owner to enter into a new Development and Rezoning Agreement and a new Warm Springs Ranch Large Block Plat Subdivision (Large Block Plat).

F. Owner has applied for subdivision of Block 1 of the Large Block Plat consisting of thirty-six (35) residential single-family lots and parcels A, B, C, D and E.

G. Ketchum and the Owner agree to rezone Block 1 from T-Tourist Zoning Designation to GR-L General Residential Low-Density Zoning and to retain the existing zoning on the remainder of the Property. It is the intention of Ketchum and Owner that Owner retain all rights incident to ownership of the Property except as otherwise expressly provided herein.

H. The Parties agree that the Property shall be developed in accordance with this Agreement; all applicable City ordinances; and any additional conditions and requirements imposed upon the Property by the Ketchum Planning and Zoning Commission (“**Commission**”) and/or City Council (“**Council**”) during the design review approval process.

I. The parties have agreed to enter into a separate Option Agreement for the purchase of Blocks 2-8. The Option Agreement shall be signed by both parties once the Development Agreement is signed.

## **AGREEMENT**

NOW, THEREFORE, in consideration of the mutual covenants, promises, agreements, terms and conditions set forth herein, the Parties agree as hereinafter provided.

**1. Incorporation of Recitals.** The Recitals set forth above are hereby incorporated into and made an integral part of this Agreement.

**2. Termination of Existing Development Agreement.** The Property is encumbered by the Warm Springs Ranch Resort Annexation and Development Agreement by and between the City and Helios Development, LLC recorded August 13, 2009 as Instrument No. 570190, records of Blaine County, Idaho as amended by Amendment to Warm Springs Ranch Resort Annexation and Development Agreement, recorded June 2, 2010 as Instrument No. 577973 and Second Amendment to Warm Springs Ranch Resort Annexation and Development Agreement, recorded March 7, 2011 as Instrument No. 585686, records of Blaine County, Idaho and the Amended and Restated Warm Springs Ranch Resort Annexation and Development Agreement, dated April 2, 2012 a Memorandum of which was recorded on August 7, 2012 as Instrument No. 599902, records of Blaine County, Idaho and the Second Amended and Restated Warm Springs Ranch Resort Annexation and Development Agreement, dated December 19, 2016 a Memorandum of which was recorded on January 11, 2017 as Instrument No. 640939, records of Blaine County, Idaho. The Existing Development Agreement provides in paragraph 23 that it may be amended or cancelled in whole or in part by mutual written consent of the Parties. Pursuant to said paragraph 23, the City and Owner as successor in interest to Helios Development, LLC agree to and hereby do terminate, extinguish, cancel, and rescind the Existing Development Agreement and neither Party shall have any further rights or obligations thereunder. Notwithstanding the previous sentence. the Property shall remain annexed into the City with Blocks 3, 4, 5, 6, and 8 zoned Tourist and Blocks 2 and 7 zoned RU-Recreational Use and Block 1 rezoned from Tourist to GR-L, General Residential Low Density. The Parties agree to execute such documents as may be reasonably required to remove from the Property the encumbrance of the Existing Development Agreement and rescind and repeal the Warm Springs Ranch Resort PUD Large Block Plat and the Planned Unit Development and Conditional Use Permit PUD-CUP-08-008.

**3. Incorporation of Related Agreements, Approvals, Plans, Permits and other documents.** The following agreements, approvals, plans, permits, and other documents are hereby incorporated into and made an integral part of this Agreement by reference as if restated herein in full:

Warm Springs Ranch Preliminary Plat creating sublots 1-35 and parcels A, B, C, D and E.

Any material failure to comply with the terms and conditions of any of the above-referenced agreements, approvals, plans, permits and other documents shall constitute a breach of this Agreement. In the event of any inconsistency between the terms and conditions of this Agreement and the agreements, approvals, plans, permits and other documents listed above, the terms and conditions of this Agreement shall govern.

This Agreement shall vest the zoning designation for Block 1 of the Large Block Plat and the subdivision map for Block 1. All development within Block 1 shall be governed by the policies, procedures, guidelines, ordinances, codes, regulations, and fees of the City governing land use in effect at the time an application is filed for development.

#### **4. Right to Develop.**

This Agreement only authorizes development of Block 1 of the Large Block Plat. No development in Blocks 2, 3, 4, 5, 6, 7, and 8 shall be permitted until a PUD and preliminary plat application is submitted to Ketchum.

##### **A. Phase One Block 1 Development**

1. The City has approved of Owner's application for the subdivision of Block 1 of the Large Block Plat ("**Block 1**") into thirty-five (35) single family residential lots and parcels A, B, C, D and E as described and depicted in the preliminary plat of Warm Springs Ranch. Subject to the requirements of this Agreement, the Owner, and all future owners of some or all of Block 1 shall have the right to demolish all or any portion of existing structures and redevelop, construct, improve and use Block 1 and the lots and parcels located therein in accordance with this Agreement, the Large Block Plat and applicable zoning.

2. Owner shall have the right to develop Lots 32-35 for deed restricted multifamily units consistent with the GR-L General Residential Low Density development standards.

3. Owner shall have right to permit Accessory Dwelling Units subject to compliance with all requirements in the Ketchum Municipal Code.

4. Any application for a building permit shall comply with the requirements of applicable codes, agreements, approvals, plans, permits and other documents as such requirements exist on the day the building permit application is submitted.

5. A building permit application that does not comply with the requirements contained in applicable codes, agreements, approvals, plans, permits and other applicable project documents may be rejected by the City within a reasonable time after completing review of the application by providing notice describing the non-compliance in detail. The permit applicant shall have the right to cure any non-compliance. If a building permit application contains material changes to applicable codes, agreements, approvals, plans, permits and other documents an amendment to this Agreement must be applied for by Owner and considered by the Council. If such amendment is approved by the Council, all inconsistent terms and conditions of the approvals referenced herein shall be deemed to have been amended to conform the amendment to this Agreement.

6. Development on parcels 32, 33, 34, and 35 in the Block 1 subdivision shall be subject to the standards of Ketchum Municipal Code Chapter 17.96, Design Review. Driveway access to Lots 32, 33, 34, and 35 in Block 1 subdivision shall be restricted to Bald Mountain Road.

7. The public shall be permitted access on all private roads within the Block 1 subdivision for the purpose of walking and driving. No public parking or other use shall

be permitted on the private roads. Resident parking shall be permitted on the private roads.

8. A ten-foot (10') fisherman/sportsman access and nature study easement shall exist on both sides of the creek from the mean high-water mark on Warm Springs Creek as shown on the Block 1 subdivision plat and shall be open to the public after sunrise and before sunset in accordance with applicable regulations of the Idaho Department of Fish and Game. Public fishing access shall be available from Block 2 and accessed from Parcel D of the Block 1 subdivision.

9. Landscaping within parcels 1-35 and parcels A, B, C of the Block 1 subdivision shall consist of drought tolerant sustainable landscaping tailored to the specific climate zone of Ketchum . Existing trees shall be preserved as much as practicable.

10. Owner shall record the Large Block Plat, with the Office of the Blaine County Recorder within six (6) months after the date of its final approval.

11. No unauthorized construction activity shall occur within the riparian setbacks. Riparian setbacks shall be as follows: South side of Warm Springs Creek: fifty (50) feet from the MHW; North side of Warm Springs Creek: twenty-five (25) feet from the MHW.

12. The existing cottonwood riparian vegetation along Warm Springs Creek on the northern and southern portion of the Block 1 subdivision shall be undisturbed as much as practicable.

13. The riparian zone identified in Block 1 shall be designated as an easement governed and managed by an Owners Association (HOA) to ensure future modifications to the riparian zone and the stream bank do not occur individually but occur in a comprehensive coordinated approach. Prior to any modification to the riparian zone or stream bank, an overall plan must be developed and approved by Ketchum. Ketchum will not unreasonably withhold, condition, or delay approval of such plan. Any riparian and stream bank alternations must conform to the approved plan.

14. The Owners of Lots 1-13 and the Owner's Association (HOA) shall participate in the preparation of a Warm Springs Creek Restoration Plan for the portion of creek adjacent to the lots and shall not unreasonably withhold, condition, or delay approval of such plan.

15. Development in Block 1 shall not be eligible for variances or waivers due to the configuration, slope, or topography of the lot. All development shall comply with the development standards in place at the time the development is proposed. Lots 32-35 are not considered to have natural slopes or grades for purposes of subdivision and zoning standards.

16. Consolidation of lots shall be limited. A maximum of eight lots may be combined with only one other lot totaling 16 combined lots out of the 35 lots.

B. Phase One Block 1 Infrastructure Improvements.

1. Owner requests water and sewer service from Ketchum for Block 1. Ketchum hereby agrees to provide domestic potable and irrigation water service and sewer service to properties in Block 1. Such water and sewer service shall be at the same fees as charged to equivalent users. Owner shall engineer, construct, and otherwise provide, at its sole expense, the improvements, facilities, and services (public and private) set forth in the engineering plans and specifications for such improvements.

2. Irrigation systems for each Lot and common landscape areas shall be equipped with a separate shut off so the irrigation system may be turned off without impacting water service to the residence or other development on the Lot.

3. The irrigation systems for all landscape zones shall be, to the greatest extent possible, water efficient, in- ground, and use rotor and drip irrigation technology. Monitoring technology shall be used to regulate irrigation rates to conserve water use.

4. At the time of recording the final plat for Block 1, Owner shall transfer and convey to City by quit claim deed its Water Right No. 37-11885.

5. All utilities, including water, sewer, gas, cable, phone and electric shall be installed underground within the street rights-of-way prior to completion of the construction of the roads or as otherwise shown on Block 1 subdivision plat map. Detailed engineered construction drawings and specifications for construction of such improvements shall be prepared by Owner and approved by City prior to construction. Prior to acceptance of any such improvements to be dedicated to City, City shall inspect and approve same, and Owner shall provide City with "*as built*" drawings thereof. Owner hereby warrants that to the best of its knowledge the "*as built*" drawings will be substantially correct and Owner shall be liable and hold City harmless from any damage which may result from material errors in said drawings for a period of one (1) year after acceptance by City of said utilities unless such damage is caused directly or indirectly by the acts or omissions of Ketchum, or its agents or contractors. Owner hereby warrants construction of the public streets, water system and sewer system improvements will be free from faulty materials and faulty workmanship for a period of eighteen months after the work is completed and accepted by the City. City shall give Owner written notification of any defect or nonconforming work. On receipt of notice from City, Owner agrees to remedy, by repair or replacement, without cost to City, all defects and non-conforming work appearing within a period of one (1) year after the work is completed. Except as expressly set forth in this Agreement, it is understood and agreed that Owner has not made and is not making, and Owner expressly disclaims, any warranties or representations, express or implied, with respect to the improvements described herein and that City shall accept said improvements, "AS-IS, WHERE IS, WITH ALL FAULTS", except to the extent expressly provided elsewhere in this Agreement. Owner agrees to assign any warranties accruing to it and arising out of construction of the improvements described in this Section remaining in effect at the time such improvements are transferred and/or dedicated to City, subject to all applicable state and federal laws.

6. Owner shall be responsible for the year-round maintenance of all private roadways, including, without limitation, snow removal to maintain access and parking, as well as emergency vehicle turnaround, within the Block 1 subdivision.

7. Without conferring any third-party beneficiary status on any person or entity not a party to this Agreement, and without waiving any claims, causes of action or other rights it may have against the Warm Springs Ranch Townhome Condominium Association (“WSRTCA”) relating to access or other easements the WSRTCA may claim on or after the Effective Date, Owner agrees to provide an easement to WSRTCA for ingress and egress to and from Townhouse Lane to replace the existing easement.

8. Ketchum shall not issue any building permits for any building in Block 1 prior to completion of the components of the water system sufficient to provide portable water and fire flow protection for structures in Block 1. Ketchum shall not issue any Certificates of Occupancy for any building prior to completion of the water system and irrigation system for service of Block 1.

9. To provide pedestrian and bicycle access to the open space in Blocks 2, 3, 4, 5, 6, 7 and 8, an eight-foot-wide sidewalk separated from the street by a curb, shall be installed adjacent to Bald Mountain Road from Warm Springs Road to Lot 3 in Block 1. Bald Mountain Road shall be stiped with sharrows and signage for sharing the road with bicyclists.

10. Owner shall install an unimproved parking lot to accommodate a minimum of 12 and a maximum of 24 public parking spaces to access the south side of Warm Springs Creek. This area may be reconfigured and/or relocated as part of Phase 2 development. The parking lot shall be installed as part of the infrastructure improvements for the Block 1 subdivision and available for public use once Bald Mountain Road is open for access.

11. A bus stop shall be constructed by Owner, near the corner of Warm Springs Road and Bald Mountain Road within six months of recording the final map for Block 1. The design of the bus stop shall be similar to the bus shelter on Saddle Road near Zenergy and approved by Ketchum. Upon completion of the bus stop and acceptance thereof by Ketchum, Ketchum shall assume all responsibility for maintenance, repair, and replacement subject to Owner’s warranty set forth above.

12. A detailed Construction Activity Plan shall be submitted and approved by Ketchum prior to commencing infrastructure construction and construction on any Lot in Block 1. Ketchum and the Owner shall mutually agree on the amount and form of financial assurance to mitigate all reasonably foreseeable impacts to Ketchum resulting from actual damage to water, sewer, streets and/or other city-owned systems during construction of the Project. The Construction Activity Plan shall identify mitigations to limit the impact on adjacent neighborhoods. Staging, material deliveries and all construction parking shall occur on site. Use of vacant lots shall be utilized to limit the impact of construction on adjacent neighborhoods.



13. Owner agrees to participate in the design, placement, and construction of the Bald Mountain Connector Trail at the sole expense of the City. The Owner agrees placement of the trail or public access to the trail may occur on the Property to the extent it does not impair development of Blocks 1 or 2. Development of the Bald Mountain Connector Trail shall be in collaboration with Owner and Ketchum Parks and Recreation. Notwithstanding any contrary provision of this Agreement the failure of the collaborative development effort shall have no impact on Owner's rights hereunder.

14. Owner shall install a right turn lane on Bald Mountain Road to facilitate right turns east bound on Warm Springs Road.

15. Lopey Lane shall become a public street, dedicated to the City of Ketchum if Blocks 2-8 are owned by the City of Ketchum.

## **5. Phase 2 Development**

1. This Agreement only authorizes Owner to develop Block 1 of the Large Block Plat, install an unimproved parking lot with a minimum of 12 and a maximum of 24 public parking spaces on Block 2 accessed from Parcel D of the Block 1 subdivision, a Bald Mountain Connector Trail, a vault toilet near the parking lot on Block 2 and stream restoration of Warm Springs Creek. Future development proposed by the Owner in Blocks 2, 3, 4, 5, 6, 7, and 8 shall be considered in Phase 2 as part of a PUD and preliminary plat application filed with Ketchum.

2. Nothing contained in this Agreement including but not limited to the provisions of paragraphs 4B9 and 4B10 shall confer upon Ketchum or the general public any right to access or use Blocks 2, 3, 4, 5, 6, 7 and 8, or any part thereof. Owner may terminate the pedestrian access, parking, access to the south side of Warm Springs Creek and all rights of entry or use of Blocks 2, 3, 4, 5, 6, 7 and 8 at any time, for any reason whatsoever, without notice. Access restrictions identified in this Section (5. 2) shall no longer be in effect if Blocks 2-8 are owned by the City of Ketchum.

**6. Covenants, Conditions and Restrictions.** The covenants, conditions and restrictions recorded against Block 1 shall contain at least the following provisions:

A. An allocation of responsibility for maintenance of all community and privately owned landscaping, streets and amenities; and

B. No person or entity acquiring any portion of the Property shall be permitted to develop, construct, erect, or install any building, utility, improvement, or landscaping which does not conform in all respects to this Agreement and Block 1 subdivision plat as applicable.

C. Any lot that is located within an avalanche zone, regardless of the building location, shall meet the notice requirements of Section 17.92.010E, KMC.

D. All private roads within Block 1 are subject to closure, in Owner's sole

discretion, during times of high avalanche danger. Owner shall work with Ketchum Emergency Services personnel to establish standard protocols to be followed during times of elevated avalanche danger. Owner and Ketchum acknowledge that the intent of such protocols is to reduce the risk to both the public and emergency responders during periods of increased avalanche danger, and such protocols will therefore include procedures for limiting or restricting access in avalanche zones to reduce these risks.

7. **Term.** The term of this Agreement shall be perpetual.

8. **Default and Enforcement.** In the event either Party, their respective heirs, successors, assigns or any other person acquiring an interest in the Property, fails to faithfully comply with all of the terms and conditions included herein, the same shall constitute a default entitling the non-defaulting party to all legal and equitable remedies available.

A. A petition filed by Owner under any bankruptcy, reorganization, arrangement, insolvency, dissolution, or liquidation law of any jurisdiction, whether now or hereafter in effect, that is not dismissed within ninety (90) days after such filing shall constitute an event of default of this Agreement and shall entitle Ketchum to seek all available legal and equitable remedies.

B. A waiver by a party of any default by the other party of any one or more of the covenants or conditions hereof shall apply solely to the breach or breaches so waived and shall not bar any other rights or remedies or apply to any subsequent breach of any such or other covenants and conditions.

C. In the event of a material violation of this Agreement the Parties shall have the right, without prejudice, to specific performance, or any other rights or remedies available under the Ketchum Municipal Code or Idaho law, including but not limited to the right to demand the non-defaulting party to cure such default or enjoin violation and otherwise enforce the requirements contained in this Agreement.

D. In the event of a material breach of this Agreement, the Parties agree that City and Owner shall have sixty (60) days after delivery of notice of said breach to cure and correct the same prior to the non-breaching party seeking any remedy provided for herein; provided, however, in the event that the default or breach cannot with diligence be cured within such 60-day period, if the defaulting party shall commence to cure the same within such 60-day period, and thereafter prosecute the cure of same with diligence, then the time within which such breach may be cured shall be extended for such period as necessary to complete the cure.

E. Owner hereby grants City a license to enter upon the Property, during business hours and upon reasonable advance notice, with Owner or Owner's representatives having the right to be present during such times, to (a) inspect the same, (b) determine if Owner is complying with this Agreement, and (c) to undertake the cure of any default of Owner; provided, however, all such cures shall be performed as promptly as possible and so as to cause the least interference to guests, invitees and other occupants of property in the Project. Ketchum agrees to indemnify, defend, and hold harmless Owner from any and all liability, claims, damages, expenses, judgments, proceedings and causes of action of any kind whatsoever, arising

out of Ketchum's negligent exercise of the license granted herein.

**9. Miscellaneous Provisions.**

A. Police Powers. Except as otherwise expressly provided herein, nothing contained herein is intended to limit the police powers of Ketchum or its discretion in review of subsequent applications regarding development of the Property. This Agreement shall not be construed to modify or waive any law, ordinance, rule, or regulation not expressly provided for herein, including, without limitation, applicable building codes, fire codes, Ketchum's Zoning Ordinance, and Ketchum's Subdivision Ordinance requirements for the Property.

B. Amendment. This Agreement may be revised, amended, or canceled in whole or in part, only by means of a written instrument executed by both Parties and as evidenced by amended plats and development plans.

C. Specific Performance. In the event of a breach of this Agreement, in addition to all other remedies at law or in equity, this Agreement shall be enforceable by specific performance by either party hereto. All remedies shall be cumulative.

D. Attorney's Fees. In the event either party hereto is required to retain counsel to enforce a provision of this Agreement, or to recover damages resulting from a breach hereof, the prevailing party shall be entitled to recover from the other party all reasonable attorney's fees incurred, whether or not litigation is actually instituted or concluded.

E. Notices. All notices required or provided for under this Agreement shall be in writing and deemed delivered upon delivery in person or upon mailing by certified mail, return receipt requested, postage prepaid. However, the time period in which a response to such notice must be given shall commence to run from the date of receipt on the return receipt of the notice. Rejection or refusal to accept, or the inability to deliver because of a change of address of which no notice was given shall be deemed to be receipt of the notice.

Notices to City shall be addressed as follows:

City of Ketchum  
Post Office Box 2315  
Ketchum, ID 83340  
Attn: Planning and Building Director  
Telephone: 208.726-7801

Notices given to Owner shall be addressed as follows:

Robert M. Brennan, Managing Member  
Brennan Holdings No. 300, LLC  
Post Office Box 1991  
Sun Valley, ID 83353  
Email: [brennanholdings@gmail.com](mailto:brennanholdings@gmail.com)

with a copy to:

Lawson Laski Clark & Pogue, PLLC  
675 Sun Valley Road, Suite A  
Post Office Box 3310  
Ketchum, Idaho 83340  
Attn.: Edward A. Lawson  
Telephone: 208.725-0055  
Email: [eal@lawsonlaski.com](mailto:eal@lawsonlaski.com)

A party may change the address to which further notices are to be sent by notice in writing to the other party, and thereafter notices shall be addressed and transmitted to the new address.

F. Relationship of Parties. It is understood that the contractual relationship between City and Owner is such that neither party is the agent, partner, or joint venturer of the other party.

G. Successors and Assigns; Covenant Running With the Land. This Agreement shall inure to the benefit of City and Owner and their respective heirs, successors, and assigns. This Agreement, including all covenants, terms, and conditions set forth herein, shall be and is hereby declared a covenant running with the land with regard to the Property or any portion thereof, and is binding on both parties to this Agreement as well as their respective heirs, successors and assigns with the exception of the purchasers of lots, condominium, or townhouse units. Upon conveyance of a lot, condominium unit or townhouse unit to a third party, the lien and encumbrance of this Agreement shall be automatically released from said lot and unit and a prospective purchaser and all lenders and title insurers are entitled to rely upon said release. In the event that Owner or a successor in interest to Owner sells or transfers the Property written notice of said transaction shall be given to City no less than sixty (60) days prior to closing. This requirement shall not apply to the sale and/or transfer of individual lots, condominium units or townhouse units. Individual lots, townhouse, or condominium owners are not intended to have any ownership interest, third-party beneficiary, easement, or other interest in any of the terms, conditions or obligations of this Agreement.

H. Recordation and Release. This Agreement shall be recorded with the Blaine County Recorder. City agrees to execute all appropriate documentation to cause the encumbrance of this Agreement to be terminated in the event of termination.

I. No Waiver. In the event that City or Owner, or its successors and assigns, do not strictly comply with any of the obligations and duties set forth herein, thereby causing a default under this Agreement, any forbearance of any kind that may be granted or allowed by Owner, City, or their successors and assigns, to the other party under this Agreement shall not in any manner be deemed or construed as waiving or surrendering any of the conditions or covenants of this Agreement with regard to any subsequent default or breach.

J. Partial Invalidity. In the event any portion of this Agreement, or part hereof, shall be determined by any court of competent jurisdiction to be invalid, void, or otherwise unenforceable, the remaining provisions of this Agreement, or parts hereof, shall remain in full force and effect and shall in no way be affected, impaired or invalidated, it being understood that such remaining provisions shall be construed in a manner most closely

approximating the intention of the parties with respect to the invalid, void, or unenforceable provision or part hereof.

K. Entire Agreement. This Agreement constitutes the full and complete agreement and understanding between the parties hereto. Excluding formal conditions placed upon the design review approval, subsequent plat approvals or other matters related to the public process, no representations or warranties made by either party shall be binding unless contained in this Agreement or subsequent written amendments hereto.

L. Exhibits. All exhibits referred to herein are incorporated in this Agreement by reference, whether or not actually attached.

M. Authority. Each of the persons executing this Agreement represents and warrants that he or she has the lawful authority and authorization to execute this Agreement, as well as all deeds, easements, liens, and other documents required hereunder, for and on behalf of the entity executing this Agreement.

N. Force Majeure. If either party hereto is delayed in the performance of any of its obligations hereunder because of inclement weather; material shortages; labor shortages; unavailability of gas, electric or other utilities through no fault of Owner; dispute or strike; civil strife; acts beyond the control of the delayed party including, acts of God; the Covid-19 virus or other pandemic; and actions by the United States of America or the State of Idaho, or Ketchum or any of their agencies, the time of performance for completion of such obligation shall be extended for the same time as lost by the cause hereinabove set forth.

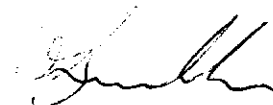
O. Choice of Law. This Agreement shall be governed by and construed in accordance with the laws of the state of Idaho, which shall be the sole jurisdiction and venue for any action which may be brought by either party with respect to this Agreement or the subject matter hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

Brennan Holdings No. 300, LLC, an Idaho limited liability company

By:   
Robert M. Brennan, Managing Member

City of Ketchum, Idaho, a municipal corporation

By:   
Neil Bradshaw, Mayor





City of Ketchum

Attachment I:  
P&Z Staff Report September  
12<sup>th</sup>, 2023



**City of Ketchum  
Planning & Building**

**STAFF REPORT  
KETCHUM PLANNING AND ZONING COMMISSION  
REGULAR MEETING OF SEPTEMBER 12, 2023**

**PROJECT:** Warm Springs Ranch Residences Lots 32-35

**FILE NUMBER:** P23-017, P23-018, P23-019, and P23-020

**APPLICATION TYPE:** Design Review

**REPRESENTATIVE:** John Shirley – Think Architecture (architect)

**PROPERTY OWNER:** Brennan Holdings No. 300 LLC

**REQUEST:** Design Review applications for the development of four (4) new single-family residences, ranging in size from 3,505 square feet to 3,988 square feet.

**LOCATION:** 160 Bald Mountain Road (Lot 32, Block 4, Warm Springs Ranch Residences)  
170 Bald Mountain Road (Lot 33, Block 4, Warm Springs Ranch Residences)  
180 Bald Mountain Road (Lot 34, Block 4, Warm Springs Ranch Residences)  
190 Bald Mountain Road (Lot 35, Block 4, Warm Springs Ranch Residences)

**ZONING:** General Residential – Low Density (GR-L)

**OVERLAY:** None

**REVIEWER:** Paige Nied – Associate Planner

**NOTICE:** A public hearing notice for the project was mailed to all owners of property within 300 feet of the project site and all political subdivisions on August 23, 2023. The public hearing notice was published in the Idaho Mountain Express on August 23, 2023. A notice was posted on the project site and the City’s website on September 5, 2023. Story poles were documented on the project site as of September 6, 2023.

**I. EXECUTIVE SUMMARY:**

The applicant is proposing to construct four (4) single-family residences, ranging in size from 3,505 square feet to 3,988 square feet (the “project”), located at Lots 32-35, Block 4, Warm Springs Ranch Residences (the “subject properties”). The subject properties are zoned General Residential – Low Density (GR-L) and the lots are currently vacant. Pursuant to Ketchum Municipal Code (KMC) §17.96.010.B.1, single family residences (that are not within the Mountain Overlay Zone District) are



exempt from Design Review. However, the Warm Springs Ranch Residences Subdivision, which was platted in 2021, includes plat note #22 which states, "Development on Lots 32, 33, 34, and 35 shall be subject to the standards of Ketchum Municipal Code, Chapter 17.96, Design Review." This plat note was added to ensure that the development of Lots 32-35 will have a minimal visual impact to the view of Bald Mountain from Warm Springs Road. Each proposed residence is associated with an individual Design Review application, however, Planning staff felt it would be easier for the Commission and the public to review all the proposed residences concurrently and evaluate the full context of the potential visual impact of the project. A rendering of the proposed residences on Lots 32-35 can be seen in Figure 1 below.

*Figure 1: Rendering of Proposed Residences on Lots 32-35*



Based on a thorough review of the application materials and the standards within the KMC, staff believe the project to be in conformance with all requirements of the zoning code and all standards related to design review. Therefore, staff recommends approval with conditions of the design review applications.

## **II. BACKGROUND:**

The Planning and Building Department received the Design Review applications on March 28, 2023. Following the receipt of the applications, staff routed the application materials to all City departments for review. The applications were reviewed concurrently, and the applications were deemed complete on July 28, 2023, after two rounds of review. As of the date of this letter, all department comments have been resolved or addressed through conditions of approval recommended below.

## **III. CONFORMANCE WITH ZONING AND DESIGN REVIEW STANDARDS:**

Prior to granting Design Review approval, the Commission must determine that the application meets two criteria: (1) the project doesn't jeopardize the health, safety, or welfare of the public, and (2) the project conforms to all Design Review standards and zoning regulations (KMC §17.96.050.A).

### **Criteria #1: Health, Safety, and Welfare of the Public**

The 2014 Comprehensive Plan contains the community's vision for Ketchum and sets goals and policies to guide future development. The vision is shaped by 10 core values identified by Ketchum residents as important to consider for all future land uses decisions. The community's core values include protecting the community character of Ketchum and preserving its environmental quality and scenic beauty. Ketchum's undeveloped hillsides are visual assets that define the character of our community. Protecting and preserving Ketchum's natural resources is critical to maintaining our economy, quality of life, and community identity. The comprehensive plan states:

*Community Character: You know when you have entered Ketchum; this is a place centered on the "town" and identifiable from the "country" by distinct edges. Residents and visitors desire this clear division that has been lost in so many American cities through strip commercial development and sprawling residential subdivisions. Protecting and enhancing the visual character of our community gateways, the undeveloped hillsides, and night skies is a priority (page 9).*

*Environmental Quality and Scenic Beauty: Ketchum's citizens place great value on the exceptional natural setting and resources of the Wood River Valley. The community is surrounded by rugged alpine peaks, forested and sage-covered open spaces, pristine wildlife habitat, and beautiful rivers and riparian areas. Key open spaces create visual buffers between the built and natural environment. Unobstructed views exist in every direction in large part due to Ketchum's wide streets and lack of hillside development. These environmental features and resources sustain our economy and are why many people choose to live in Ketchum. We will be excellent stewards of these resources in order to preserve them for the future (page 10).*

The comprehensive plan sets policies to guide land-use decisions and identifies the following objectives regarding hillside development:

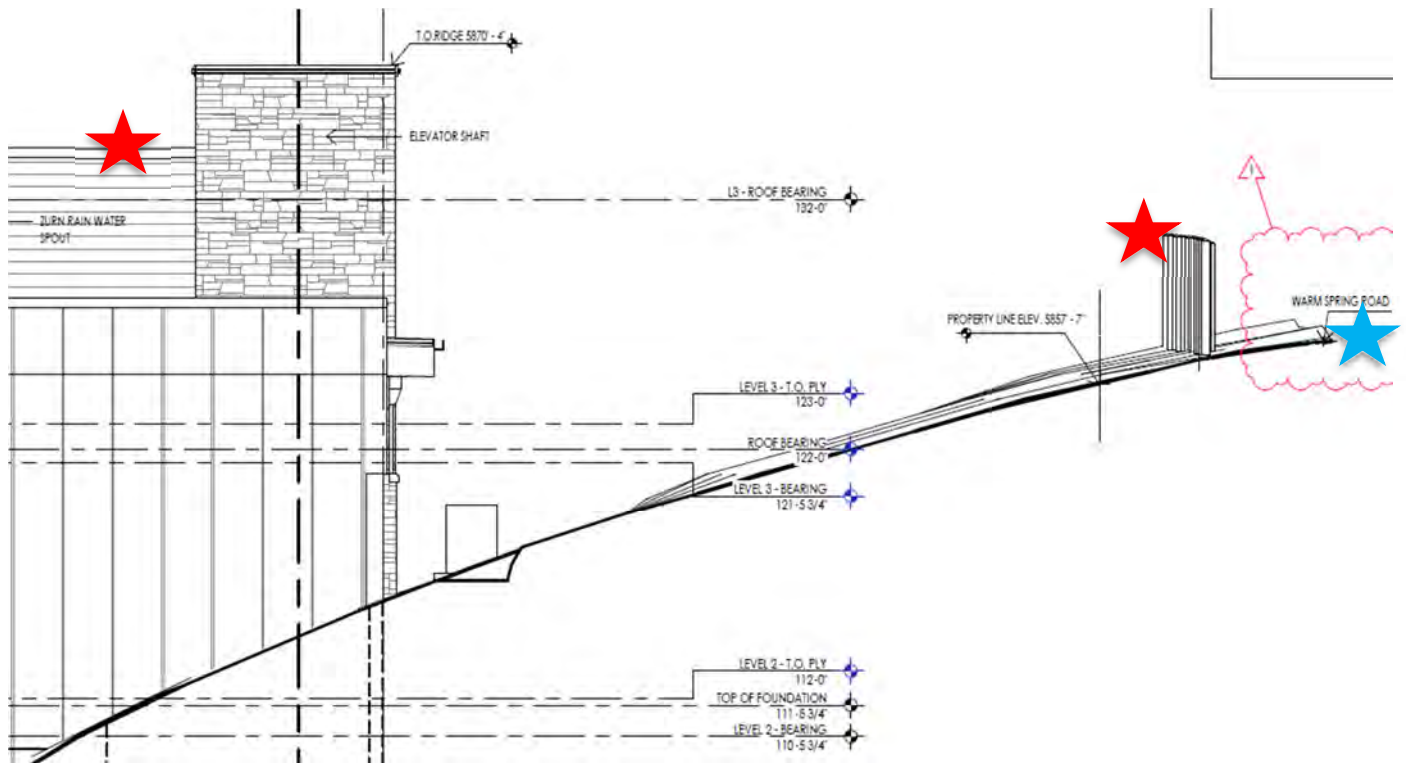
- Goal CD-2: Protect and enhance views of the surrounding mountains and natural features.
- Policy OS-3.2: Establish and maintain open space buffers in important scenic areas to maintain the community's separate identity from surrounding communities and to protect views and open space.
- Policy OS-3.6: Establish, preserve, and enhance scenic entryways along major roadways entering the City.

The comprehensive plan's future land use map designates the future land use for Lots 32-35 as Low Density Residential. Desired primary uses within this future land use category include single-family residences and duplexes. The proposed single-family residences fall within the primary uses of the Low Density Residential land use category.

As previously mentioned, Goal CD-2 of the plan indicates that views of mountains and natural features need to be protected and enhanced. The impetus for design review of the new single-family residences on Lots 32-35 is to assess precisely that. Warm Springs Road is situated at a higher elevation of 5,859'-4" compared to Bald Mountain Road which sits at 5,832' (27'-4" height difference). Due to this topography, the proposed structures on Bald Mountain Road will be tucked into the hillside. The tallest structure proposed is on Lot 33 and has a maximum building height of 34'-0 ½", which is just 7'-4 ½" above the elevation of Warm Springs Road. All the structures propose roof appurtenances which extend above the roof ridges; however, staff believe the proposed building

heights on Lots 32-35 are reasonable because the structures will still have a lesser height than all the existing one- and two-story structures along Warm Springs Road before and after the Warm Springs Ranch Residences Subdivision. Further, the continuous 4' fence to the rear of Lots 32-34 along Warm Springs Road further mitigates the visual impacts of all the structures. The elevation sheet in Figure 2 below indicates the height of the roof ridge and fence (marked by red stars) on Lot 33 in comparison to the elevation of Warm Springs Road (marked by a blue star).

Figure 2: Lot 33 Height of Roof Ridge and Fence in Comparison to Warm Springs Road Elevation



Staff believes that the goals and policies of the comprehensive plan related to the protection of mountain views and scenic areas are met with the project. The proposed structures achieve this by mitigating visual impact on the mountain view by being situated at a lower elevation on Bald Mountain Road and by the fence to the rear of the structures on Lots 32-34 along Warm Springs Road which buffers their visual appearance.

**Criteria #2: Applicable Standards and Criteria**

Conformance with Design Review Improvements and Standards

Plat Note #22 of the Warm Springs Ranch Residences requires Lots 32-35 be subject to the Design Review criteria outlined in 17.96.060. During department review, City staff reviewed the project for conformance with all design review standards and required improvements specified in KMC §17.96.060. Additionally, staff reviewed the project for conformance with all City code requirements for right-of-way improvements, utilities, and drainage. Staff believes the project meets the design review standards. Please see Attachment F for staff’s comprehensive design review standards analysis. Below is an overview of some of the more noteworthy design review criteria for the proposed project.

### *Sidewalks (KMC 17.96.060.B)*

Sidewalks have already been installed along Bald Mountain Road adjacent to Lots 32-35 as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Residences Subdivision Development Agreement, included as Attachment H, sidewalks were required to be installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Staff recommend condition of approval #5 to ensure any damage to the right-of-way, including sidewalks, be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

### *Compatibility of Design (KMC 17.96.060.E) & Architectural Features (KMC 17.96.060.F)*

Per KMC §17.96.060.E.1, "The project's materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures." The Warm Springs Ranch Residences Subdivision was platted in 2021 and is in the process of being developed. Multiple single-family residences are currently being constructed on Bald Mountain Road and Mountain Creek Drive. All of which have similar, yet unique architectural styles that utilize both modern (flat and shed roofs with cold materials such as concrete and metal) and traditional (gabled roofs with warmer materials such as wood and stone) designs. The proposed residences feature flat, shed, and gabled roofs with large windows and a mix of cold and warm materials including wood, metal, and stone. Lots 32, 34, and 35 are two stories in height and Lot 33 is three stories in height. Additionally, per KMC §17.96.060.F.2 & 5, "The building character shall be clearly defined by the use of architectural features" and "Buildings walls shall provide undulation/relief, thus reducing the appearance of bulk and flatness." Each of the proposed residences features multiple wall and deck pop-outs to provide undulation and reduce the appearance of flatness.

### Conformance with Zoning Regulations

During City department review, planning staff reviewed the project for conformance with all applicable zoning code requirements including permitted uses, dimensional limitations, parking, development standards, and dark skies. Staff believes the project complies with all zoning code regulations and dimensional standards required in the GR-L Zone. Comprehensive analysis of the project's conformance with zoning code requirements and dimensional standards is provided in Attachment G. Below is an overview of the development standard related to fences, hedges, and walls for the project.

### *Fences, Hedges and Walls (KMC 17.124.130)*

Staff identified inconsistencies in plan sets for Lots 32-34 regarding the location of the proposed 4' wooden fence. The plan sets indicate the fence in three different locations. Staff recommends the fence to be located offset from the property line and the public utility easement, to enable access for Idaho Power and other utility providers. In conversations between staff and the applicant, the applicant explained how the fence was intended to be aligned with other existing fences along Warm Springs Road. However, the applicant is supportive of relocating the fence to the south of the utility easement within the property boundary. To ensure the fence is relocated on the plan sets, staff recommend condition of approval #6, which states that prior to building permit application for Lots 32-35, the plan set shall be revised to locate the fence to the south of the public utility easement and shall have a consistent location throughout the plan set.

### **STAFF RECOMMENDATION**

Staff recommends **approval** of the Design Review applications (File No. P23-017, P23-018, P23-019, and P23-020) subject to the following conditions:

1. This Design Review approval is based on the project plans for Lots 32-35 presented at the September 12, 2023, Planning and Zoning Commission meeting. The project plans for all on-site improvements submitted for the building permits must conform to the approved design review plans unless otherwise approved in writing by the Planning and Zoning Commission or Administrator. Any building or site discrepancies which do not conform to the approved plans will be subject to review by the Commission and/or removal.
2. The applicant shall submit final civil drawings prepared by an engineer registered in the State of Idaho which include specifications for right-of-way, circulation design, utilities, and drainage improvements for review and approval by the City Engineer, Streets, and Utilities departments prior to issuance of a building permit for the project.
3. The term of Design Review approval shall be twelve (12) months from the date that the Findings of Fact, Conclusions of Law, and Decision are adopted by the Commission or upon appeal, the date the approval is granted by the Council subject to changes in zoning regulations.
4. In addition to the requirements set forth in this Design Review approval, this project shall comply with all applicable local, state, and federal laws.
5. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.
6. Prior to building permit application for Lots 32-34, the plan sets shall be revised to relocate the fence to the south of the public utilities easement and shall have a consistent location throughout the plan set.

#### **IV. RECOMMENDED MOTIONS**

Design Review:

"I move to approve the Lots 32-35, Block 4, Warm Springs Ranch Residences Design Review applications, as conditioned, and adopt the Findings of Fact, Conclusions of Law and Decision."

#### **ATTACHMENTS:**

- A. Design Review Applications for Lots 32-35 and Supplemental Documents
- B. Lot 32 Plan Set
- C. Lot 33 Plan Set
- D. Lot 34 Plan Set
- E. Lot 35 Plan Set
- F. Design Review Standards Analysis
- G. Zoning and Dimensional Standards Analysis
- H. Warm Springs Ranch Subdivision Development Agreement



City of Ketchum

**Attachment J:  
Lot 32 Draft Findings of Fact,  
Conclusions of Law and  
Decision**



**CITY OF KETCHUM**

Planning & Building  
office: 208.726.7801  
planningandbuilding@ketchumidaho.org  
P.O. Box 2315, 191 5th Street West, Ketchum, ID 83340  
ketchumidaho.org

<b>IN RE:</b>	)	
	)	
<b>Warm Springs Ranch Residences Lot 32</b>	)	<b>KETCHUM PLANNING &amp; ZONING COMMISSION</b>
<b>Design Review</b>	)	<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, AND</b>
<b>Date: October 10, 2023</b>	)	<b>DECISION</b>
	)	
<b>File Number: P23-017</b>	)	

**PROJECT:** Warm Springs Ranch Residences Lot 32

**FILE NUMBER:** P23-017

**APPLICATION TYPE:** Design Review

**REPRESENTATIVE:** John Shirley – Think Architecture (architect)

**PROPERTY OWNER:** Brennan Holdings No. 300 LLC

**LOCATION:** 160 Bald Mountain Road (Lot 32, Block 4, Warm Springs Ranch Residences)

**ZONING:** General Residential – Low Density (GR-L)

**OVERLAY:** None

**RECORD OF PROCEEDINGS**

The Planning and Building Department received the Design Review application on March 28, 2023. Following the receipt of the application, staff routed the application materials to all City departments for review. The application was deemed complete on July 28, 2023, after two rounds of review. As of the date of this letter, all department comments have been resolved or addressed through conditions of approval recommended below.

A public hearing notice for the project was mailed to all owners of property within 300 feet of the project site and all political subdivisions on August 23, 2023. The public hearing notice was published in the Idaho Mountain Express on August 23, 2023. A notice was posted on the project site and the city’s website on September 5, 2023. Story poles were documented on the project site as of September 6, 2023.

## FINDINGS OF FACT

The Planning & Zoning Commission, having reviewed the entire project record, provided notice, and conducted the required public hearing, does hereby make and set forth these Findings of Fact, Conclusions of Law, and Decision as follows:

### BACKGROUND

The applicant is proposing to construct a new 3,759 square foot single-family residence (the “project”), located at Lot 32, Block 4, Warm Springs Ranch Residences (the “subject property”). The subject property is zoned General Residential – Low Density (GR-L) and the lot is currently vacant. The Warm Springs Ranch Subdivision, which was platted in 2021, includes plat note which requires development on Lots 32-35 be subject to Design Review standards of the Ketchum Municipal Code to ensure development on the lots have a minimal visual impact to the view of Bald Mountain from Warm Springs Road.

The project will construct improvements to the right-of-way per the City of Ketchum improvement standards. The project proposes a driveway snowmelt system located entirely within the property boundary and not within the Bald Mountain Road right-of-way. All improvements to the right-of-way have been preliminarily reviewed by the Streets Department and the City Engineer. Final review of the proposed improvements will be conducted by the City Engineer and Streets Department prior to issuance of building permit.

During the Planning and Zoning meeting on September 12, 2023, the Planning & Zoning Commission requested the following additional information: the type of pine trees proposed, a comprehensive landscape plan for Lots 32-34, renderings from the bike path vantage point, analyze the roof’s appearance of bulk and flatness, and verify the roof material. The application was continued to the October 10, 2023, meeting. The applicant submitted revised plans that indicate that a gable end has been added to the north elevation of the roof and that the roof material is a nonreflective standing seam metal. The plant legend was revised to indicate that Mugo Pine and Subalpine Fir pine trees are proposed, and the revised plans included a comprehensive landscape plan for Lots 32-34. The applicant also provided new renderings and a photomontage of the structures from the bike path vantage point. Lastly, the 4’ wooden fence to the rear of the lot has been relocated to the south of the public utility easement and has a consistent location throughout the plan set. Upon review of the new application materials, staff and the applicant presentation, and public comment, the Commission approved the Design Review application.

### FINDINGS REGARDING COMPLIANCE WITH ZONING CODE AND DIMENSIONAL STANDARDS

Compliance with Zoning and Dimensional Standards				
Compliant			Standards and Findings	
Yes	No	N /A	Ketchum Municipal Code	City Standards and Findings
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	Minimum Lot Area
			Finding	Required: 8,000 square feet Existing: 9,552 square feet (.22 acres)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	Building Coverage
			Finding	Permitted: 35%



				<b>Proposed:</b> 29% (2,813.67 square feet building coverage / 9,552 square feet lot area)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	<b>Minimum Building Setbacks</b>
			<b>Finding</b>	<b>Minimum Required Setbacks:</b> Front: 15' Side: > of 1' for every 3' in building height, or 5' Rear: > of 1' for every 3' in building height, or 15'  <b>Proposed:</b> Front (south): 15'-4 7/8" Side (east): 26'-4 1/8" Side (west): 11' Rear (north): 30'-2 7/64"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	<b>Building Height</b>
			<b>Finding</b>	<b>Maximum Permitted:</b> 35' <b>Proposed:</b> 28'-0 31/32"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.125.030.H	<b>Curb Cut</b>
			<b>Finding</b>	<b>Permitted:</b> A total of 35% of the linear footage of any street frontage can be devoted to access off street parking. <b>Proposed:</b> 23% (26-foot-wide driveway/115 feet of property frontage along Bald Mountain Road Road).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.125.020.A. 2 & 17.125.050	<b>Parking Spaces</b>
			<b>Finding</b>	Off-street parking standards of this chapter apply to any new development and to any new established uses. <b>Required:</b> Residential (one family dwelling), in all applicable zoning districts require two parking spaces. <b>Proposed:</b> The project plans indicate 2 parking spaces within the enclosed garage.

#### FINDINGS REGARDING COMPLIANCE WITH DESIGN REVIEW STANDARDS

17.96.060.A.1 - Streets	Conformance
<i>The applicant shall be responsible for all costs associated with providing a connection from an existing City street to their development.</i>	YES
<b>Finding:</b> The project proposes to construct a new asphalt driveway to access the subject property from Bald Mountain Road. All project costs associated with the development, including the City street connection, are the responsibility of the applicant.	

17.96.060.A.2 - Streets	Conformance
<i>All street designs shall be approved by the City Engineer.</i>	YES
<p><b>Finding:</b> The City Engineer has reviewed the proposed driveway design for the property and finds it to be sufficient for the project.</p> <p>All street designs shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.B.1 - Sidewalks	Conformance
<i>All projects under subsection 17.96.010.A of this chapter that qualify as a "substantial improvement" shall install sidewalks as required by the Public Works Department.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.2 - Sidewalks	Conformance
<i>Sidewalk width shall conform to the City's right-of-way standards, however the City Engineer may reduce or increase the sidewalk width and design standard requirements at their discretion.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.3 - Sidewalks	Conformance
<p><i>Sidewalks may be waived if one of the following criteria is met:</i></p> <ul style="list-style-type: none"> <li>a) <i>The project comprises an addition of less than 250 square feet of conditioned space.</i></li> <li>b) <i>The City Engineer finds that sidewalks are not necessary because of existing geographic limitations, pedestrian traffic on the street does not warrant a sidewalk, or if a sidewalk would not be beneficial to the general welfare and safety of the public.</i></li> </ul>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.4 - Sidewalks	Conformance
<p><i>The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.5 – Sidewalks	Conformance
<p><i>New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.6 - Sidewalks	Conformance
<p><i>The City may approve and accept voluntary cash contributions in lieu of the above described improvements, which contributions must be segregated by the City and not used for any purpose other than the provision of these</i></p>	YES

<p><i>improvements. The contribution amount shall be 110 percent of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the City Engineer. Any approved in lieu contribution shall be paid before the City issues a certificate of occupancy.</i></p>	
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.C.1 - Drainage	Conformance
<p><i>All stormwater shall be retained on site.</i></p>	<p>YES</p>
<p><b>Finding:</b> Pursuant to KMC §17.96.060.C.1, all storm water drainage shall be retained on site. Drainage improvements are specified on Sheet C-1 of the project plans. The drainage improvements include the installation of a trench drain bordering the width of the driveway. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on the subject property.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.C.2 - Drainage	Conformance
<p><i>Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.</i></p>	<p>YES</p>
<p><b>Finding:</b> Drainage improvements are specified on Sheet C-1 of the project plans. The drainage improvements include the installation of a trench drain bordering the width of the driveway. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on the subject property.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.C.3 - Drainage	Conformance
<p><i>The City Engineer may require additional drainage improvements as necessary, depending on the unique characteristics of a site.</i></p>	<p>YES</p>
<p><b>Finding:</b> The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell/catch basin improvements are sufficient to maintain storm water drainage</p>	

on the subject property. The City Engineer may require additional drainage improvements if necessary. If approved, the applicant shall submit final civil drawings for all drainage improvements with the building permit application to be verified, reviewed, and approved by the City Engineer and Streets Department.

17.96.060.C.4 - Drainage	Conformance
<i>Drainage facilities shall be constructed per City standards.</i>	YES
<p><b>Finding:</b> The drainage improvements include the installation of a trench drain bordering the width of the driveway along Bald Mountain Road. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the proposed trench drain and drywell improvements meet city standards.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.D.1 - Utilities	Conformance
<i>All utilities necessary for the development shall be improved and installed at the sole expense of the applicant.</i>	YES
<p><b>Finding:</b> All project costs associated with the development, including the installation of utilities, are the responsibility of the applicant. The applicant has not made requests for funding to the City for utility improvements. No funds have been provided by the City for the project.</p>	

17.96.060.D.2 - Utilities	Conformance
<i>Utilities shall be located underground and utility, power, and communication lines within the development site shall be concealed from public view.</i>	YES
<p><b>Finding:</b> As shown on Sheet C-1 of the project plans, the project will connect to the municipal water and sewer systems from existing lines on Bald Mountain Road. Requirements and specification for the water and sewer connections will be verified, reviewed, and approved by the Utilities Department prior to issuance of a Building Permit.</p>	

17.96.060.D.3 - Utilities	Conformance
<i>When extension of utilities is necessary all developers will be required to pay for and install two-inch SDR11 fiber optical conduit. The placement and construction of the fiber optical conduit shall be done in accordance with City of Ketchum standards and at the discretion of the City Engineer.</i>	N/A
<p><b>Finding:</b> N/A. Extension of utilities is not necessary to service the residence.</p>	

17.96.060.E.1 – Compatibility of Design	Conformance
<i>The project's materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.</i>	YES

**Finding:** Pursuant to KMC §17.96.060.E.1, “The project’s materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.” The Warm Springs Ranch Subdivision was platted in 2021 and is in the process of being developed. Multiple single-family residences are currently being constructed on Bald Mountain Road and Mountain Creek Drive. All of which have similar, yet unique architectural styles that utilize both modern (flat and shed roofs with cold materials such as concrete and metal) and traditional (gabled roofs with warmer materials such as wood and stone) designs. The proposed development features a butterfly roof and a gabled end roof with large windows and a mix of cold and warm materials including wood, metal, and stone.

17.96.060.E.2 – Compatibility of Design	Conformance
<i>Preservation of significant landmarks shall be encouraged and protected, where applicable. A significant landmark is one which gives historical and/or cultural importance to the neighborhood and/or community.</i>	N/A
<b>Finding:</b> N/A. The subject property does not contain any significant landmarks.	

17.96.060.E.3 – Compatibility of Design	Conformance
<i>Additions to existing buildings, built prior to 1940, shall be complementary in design and use similar material and finishes of the building being added to.</i>	N/A
<b>Finding:</b> N/A. The subject property is vacant.	

17.96.060.F.1 – Architectural	Conformance
<i>Building(s) shall provide unobstructed pedestrian access to the nearest sidewalk and the entryway shall be clearly defined.</i>	YES
<b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.F.2 – Architectural	Conformance
<i>The building character shall be clearly defined by use of architectural features.</i>	YES
<b>Finding:</b> As stated previously, the proposed structure features both modern and traditional designs with a butterfly and gabled end roofs, large windows, and a mix of wood, metal, and stone materials.	

17.96.060.F.3 – Architectural	Conformance
<i>There shall be continuity of materials, colors and signing within the project.</i>	YES
<b>Finding:</b> The proposed structure features dark bronze trimmed windows and a mix of wood, metal, and stone materials.	

17.96.060.F.4 – Architectural	Conformance
<i>Accessory structures, fences, walls and landscape features within the project shall match or complement the principal building.</i>	YES
<p><b>Finding:</b> A 4’ wooden fence is located to the south of the public utility easement and is setback 5’-2” from the northern property line. No accessory structures are proposed. The project proposes landscaping improvements that complement and soften the visual appearance of the structure from Warm Springs Road and neighboring properties. The landscaping includes trees, shrubs, and grasses. Utilities on the lot are screened with shrubs. New Mugo Pine trees, Ginnala Maple trees, and lilac shrubs to the north of the structure will provide screening from Warm Springs Road.</p>	

17.96.060.F.5 – Architectural	Conformance
<i>Building walls shall provide undulation/relief, thus reducing the appearance of bulk and flatness.</i>	YES
<p><b>Finding:</b> The project features a two-story structure with multiple wall and deck pop-outs to provide undulation and reduce the appearance of flatness. The gable end on the north elevation breaks up the massing of the roof.</p>	

17.96.060.F.6 – Architectural	Conformance
<i>Building(s) shall orient toward their primary street frontage.</i>	YES
<p><b>Finding:</b> The structure is oriented towards the primary street frontage along Bald Mountain Road.</p>	

17.96.060.F.7 – Architectural	Conformance
<i>Garbage storage areas and satellite receivers shall be screened from public view and located off alleys.</i>	YES
<p><b>Finding:</b> No satellite receivers are proposed for the project. Sheet A101 of the project plans indicates that garbage bins will be stored within the garage and screened from public view.</p>	

17.96.060.F.8 – Architectural	Conformance
<i>Building design shall include weather protection which prevents water to drip or snow to slide on areas where pedestrians gather and circulate or onto adjacent properties.</i>	YES
<p><b>Finding:</b> The roof plan indicates that sections of the roofs will have snow clips installed and that other areas will have gutters sloped to downspouts installed.</p>	

17.96.060.G.1 – Circulation Design	Conformance
<i>Pedestrian, equestrian and bicycle access shall be located to connect with existing and anticipated easements and pathways.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs</p>	

Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

17.96.060.G.2 – Circulation Design	Conformance
<i>Awnings extending over public sidewalks shall extend five feet or more across the public sidewalk but shall not extend within two feet of parking or travel lanes within the right-of-way.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.G.3 – Circulation Design	Conformance
<p><i>Traffic shall flow safely within the project and onto adjacent streets. Traffic includes vehicle, bicycle, pedestrian and equestrian use. Consideration shall be given to adequate sight distances and proper signage.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p> <p>The City Engineer has reviewed the proposed driveway and finds the circulation design to meet city standards. Final circulation design shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.G.4 – Circulation Design	Conformance
<p><i>Curb cuts and driveway entrances shall be no closer than 20 feet to the nearest intersection of two or more streets, as measured along the property line adjacent to the right-of-way. Due to site conditions or current/projected traffic levels or speed, the City Engineer may increase the minimum distance requirements.</i></p>	YES
<p><b>Finding:</b> The proposed driveway is located further than 20 feet away from the nearest intersection of Bald Mountain Road and Mountain Creek Drive.</p>	



17.96.060.G.5 – Circulation Design	Conformance
<i>Unobstructed access shall be provided for emergency vehicles, snowplows, garbage trucks and similar service vehicles to all necessary locations within the proposed project.</i>	YES
<b>Finding:</b> Access for emergency vehicles, snowplows, and garbage trucks is provided along Bald Mountain Road.	

17.96.060.H.1 – Snow Storage	Conformance
<i>Snow storage areas shall not be less than 30 percent of the improved parking and pedestrian circulation areas.</i>	YES
<b>Finding:</b> Sheet L3 of the project plans indicate the proposed snow storage areas to include a total of 415 square feet, greater than the required 30% (1,080 * .30 = 324 square feet).	

17.96.060.H.2 – Snow Storage	Conformance
<i>Snow storage areas shall be provided on site.</i>	YES
<b>Finding:</b> Locations of snow storage areas are indicated on Sheet L3 of the project plans.	

17.96.060.H.3 – Snow Storage	Conformance
<i>A designated snow storage area shall not have any dimension less than five feet and shall be a minimum of 25 square feet.</i>	YES
<b>Finding:</b> None of the snow storage areas have dimensions less than five feet.	

17.96.060.H.4 – Snow Storage	Conformance
<i>In lieu of providing snow storage areas, snowmelt and hauling of snow may be allowed.</i>	YES
<b>Finding:</b> A driveway snowmelt system within the property boundary, and not within the Bald Mountain Road right-of-way, will be installed. In addition to the snowmelt system, snow storage areas are also provided on-site.	

17.96.060.I.1 – Landscaping	Conformance
<i>Landscaping is required for all projects.</i>	YES
<b>Finding:</b> Landscaping has been provided for the project as indicated on Sheets L3 of the project plans.	

17.96.060.I.2 – Landscaping	Conformance
<i>Landscape materials and vegetation types specified shall be readily adaptable to a site's microclimate, soil conditions, orientation and aspect, and shall serve to enhance and complement the neighborhood and townscape.</i>	YES
<b>Finding:</b> The front, side, and rear yards will be vegetated with native grasses. The project proposes landscaping improvements that complement and soften the visual appearance of the	

structure from Warm Springs Road and neighboring properties. The landscaping includes trees, shrubs, and grasses. Utilities on the lot are screened with shrubs. New pine trees to the north of the structure will provide screening from Warm Springs Road. Ornamental grasses and wildflowers are also proposed around the structure.

17.96.060.I.3 – Landscaping	Conformance
<i>All trees, shrubs, grasses and perennials shall be drought tolerant. Native species are recommended but not required.</i>	YES
<b>Finding:</b> The landscape plan proposes drought-tolerant and native species, including pine trees, native shrubs, and drought tolerant grasses.	

17.96.060.I.4 – Landscaping	Conformance
<i>Landscaping shall provide a substantial buffer between land uses, including, but not limited to, structures, streets and parking lots. The development of landscaped public courtyards, including trees and shrubs where appropriate, shall be encouraged.</i>	YES
<b>Finding:</b> Landscaping to the rear of the property provides a buffer from Warm Springs Road. Landscaping on the front and side yards provides privacy from adjacent properties.	

17.96.060.J.1 – Public Amenities	Conformance
<i>Where sidewalks are required, pedestrian amenities shall be installed. Amenities may include, but are not limited to, benches and other seating, kiosks, bus shelters, trash receptacles, restrooms, fountains, art, etc. All public amenities shall receive approval from the Public Works Department prior to design review approval from the Commission.</i>	YES
<b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.K.1 – Underground Encroachments	Conformance
<i>Encroachments of below grade structures into required setbacks are subject to subsection 17.128.020.K of this title and shall not conflict with any applicable easements, existing underground structures, sensitive ecological areas, soil stability, drainage, other sections of this Code or other regulating codes such as adopted International Code Council Codes, or other site features concerning health, safety, and welfare.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures are proposed.	

17.96.060.K.2 – Underground Encroachments	Conformance
<i>No below grade structure shall be permitted to encroach into the riparian setback.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures into the riparian setback are proposed.	

**CONCLUSIONS OF LAW**

1. The City of Ketchum is a municipal corporation established in accordance with Article XII of the Constitution of the State of Idaho and Title 50 Idaho Code and is required and has exercised its authority pursuant to the Local Land Use Planning Act codified at Chapter 65 of Title 67 Idaho Code and pursuant to Chapters 3, 9 and 13 of Title 50 Idaho Code to enact the ordinances and regulations, which ordinances are codified in the Ketchum Municipal Code (“KMC”) and are identified in the Findings of Fact and which are herein restated as Conclusions of Law by this reference and which City Ordinances govern the applicant’s Design Review application for the development and use of the project site.
2. The Commission has authority to hear the applicant’s Design Review Application pursuant to Chapter 17.96 of Ketchum Municipal Code Title 17.
3. The City of Ketchum Planning Department provided notice for the review of the application in accordance with Ketchum Municipal Code §17.96.080.
4. The Design Review application is governed under Ketchum Municipal Code Chapters 17.96, 17.124, 17.08, 17.12, 17.18, and 17.128.
5. The Warm Springs Ranch Residences Lot 32 Design Review application meets all applicable standards specified in Title 17 of Ketchum Municipal Code.

**DECISION**

**THEREFORE**, the Planning and Zoning Commission **approves** the Design Review Application File No. P23-017 this Tuesday, October 10, 2023, subject to the following conditions of approval.

**CONDITIONS OF APPROVAL**

1. This Design Review approval is based on the project plans for Lot 32 presented at the October 10, 2023, Planning and Zoning Commission meeting. The project plans for all on-site improvements submitted for the building permit must conform to the approved design review plans unless otherwise approved in writing by the Planning and Zoning Commission or Administrator. Any building or site discrepancies which do not conform to the approved plans will be subject to review by the Commission and/or removal.
2. The applicant shall submit final civil drawings prepared by an engineer registered in the State of Idaho which include specifications for right-of-way, circulation design, utilities, and drainage improvements for review and approval by the City Engineer, Streets, and Utilities departments prior to issuance of a building permit for the project.

3. The term of Design Review approval shall be twelve (12) months from the date that the Findings of Fact, Conclusions of Law, and Decision are adopted by the Commission or upon appeal, the date the approval is granted by the Council subject to changes in zoning regulations.
4. In addition to the requirements set forth in this Design Review approval, this project shall comply with all applicable local, state, and federal laws.
5. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

Findings of Fact **adopted** this 10<sup>th</sup> day of October 2023.

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Neil Morrow, Chair  
City of Ketchum  
Planning and Zoning Commission



City of Ketchum

**Attachment K:  
Lot 33 Draft Findings of Fact,  
Conclusions of Law and  
Decision**



**CITY OF KETCHUM**

Planning & Building  
office: 208.726.7801  
planningandbuilding@ketchumidaho.org  
P.O. Box 2315, 191 5th Street West, Ketchum, ID 83340  
ketchumidaho.org

<b>IN RE:</b>	)	
	)	
<b>Warm Springs Ranch Residences Lot 33</b>	)	<b>KETCHUM PLANNING &amp; ZONING COMMISSION</b>
<b>Design Review</b>	)	<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, AND</b>
<b>Date: October 10, 2023</b>	)	<b>DECISION</b>
	)	
<b>File Number: P23-018</b>	)	

**PROJECT:** Warm Springs Ranch Residences Lot 33

**FILE NUMBER:** P23-018

**APPLICATION TYPE:** Design Review

**REPRESENTATIVE:** John Shirley – Think Architecture (architect)

**PROPERTY OWNER:** Brennan Holdings No. 300 LLC

**LOCATION:** 170 Bald Mountain Road (Lot 33, Block 4, Warm Springs Ranch Residences)

**ZONING:** General Residential – Low Density (GR-L)

**OVERLAY:** None

**RECORD OF PROCEEDINGS**

The Planning and Building Department received the Design Review application on March 28, 2023. Following the receipt of the application, staff routed the application materials to all City departments for review. The application was deemed complete on July 28, 2023, after two rounds of review. As of the date of this letter, all department comments have been resolved or addressed through conditions of approval recommended below.

A public hearing notice for the project was mailed to all owners of property within 300 feet of the project site and all political subdivisions on August 23, 2023. The public hearing notice was published in the Idaho Mountain Express on August 23, 2023. A notice was posted on the project site and the city’s website on September 5, 2023. Story poles were documented on the project site as of September 6, 2023.

## FINDINGS OF FACT

The Planning & Zoning Commission, having reviewed the entire project record, provided notice, and conducted the required public hearing, does hereby make and set forth these Findings of Fact, Conclusions of Law, and Decision as follows:

### BACKGROUND

The applicant is proposing to construct a new 3,988 square foot single-family residence (the “project”), located at Lot 33, Block 4, Warm Springs Ranch Residences (the “subject property”). The subject property is zoned General Residential – Low Density (GR-L) and the lot is currently vacant. The Warm Springs Ranch Subdivision, which was platted in 2021, includes plat note which requires development on Lots 32-35 be subject to Design Review standards of the Ketchum Municipal Code to ensure development on the lots have a minimal visual impact to the view of Bald Mountain from Warm Springs Road.

The project will construct improvements to the right-of-way per the City of Ketchum improvement standards. The project proposes a driveway snowmelt system located entirely within the property boundary and not within the Bald Mountain Road right-of-way. All improvements to the right-of-way have been preliminarily reviewed by the Streets Department and the City Engineer. Final review of the proposed improvements will be conducted by the City Engineer and Streets Department prior to issuance of building permit.

During the Planning and Zoning meeting on September 12, 2023, the Planning & Zoning Commission requested the following additional information: the type of pine trees proposed, a comprehensive landscape plan for Lots 32-34, renderings from the bike path vantage point, analyze the building height, and verify the roof material. The application was continued to the October 10, 2023, meeting. The applicant submitted revised plans that indicate that the structure has a membrane roof and gravel balled has been added on top. The revised architectural plans indicate that the building height has been reduced by 1’-6” (for a new building height of 33’-2”), the elevator shaft was reduced by 2’-2”, and the chimney was reduced by 2’. The plant legend was revised to indicate that Mugo Pine and Subalpine Fir pine trees are proposed, and the revised plans included a comprehensive landscape plan for Lots 32-34. The applicant also provided new renderings and a photomontage of the structures from the bike path vantage point. Lastly, the 4’ wooden fence to the rear of the lot has been relocated to the south of the public utility easement and has a consistent location throughout the plan set. Upon review of the new application materials, staff and the applicant presentation, and public comment, the Commission approved the Design Review application.

### FINDINGS REGARDING COMPLIANCE WITH ZONING CODE AND DIMENSIONAL STANDARDS

Compliance with Zoning and Dimensional Standards				
Compliant			Standards and Findings	
Yes	No	N/A	Ketchum Municipal Code	City Standards and Findings
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	Minimum Lot Area
			Finding	Required: 8,000 square feet Existing: 8,429 square feet (.19 acres)
			17.12.030	Building Coverage

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Finding</b>	<b>Permitted:</b> 35% <b>Proposed:</b> 26% (2,189 square feet building coverage / 8,429 square feet lot area)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.12.030</b>	<b>Minimum Building Setbacks</b>
			<b>Finding</b>	<b>Minimum Required Setbacks:</b> Front: 15' Side: > of 1' for every 3' in building height, or 5' Rear: > of 1' for every 3' in building height, or 15'  <b>Proposed:</b> Front (south): 23'-1 9/256" Side (east): 15' Side (west): 14'-3 7/32" Rear (north): 38'-2 29/256"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.12.030</b>	<b>Building Height</b>
			<b>Finding</b>	<b>Maximum Permitted:</b> 35' <b>Proposed:</b> 33' - 2"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.125.030.H</b>	<b>Curb Cut</b>
			<b>Finding</b>	<b>Permitted:</b> A total of 35% of the linear footage of any street frontage can be devoted to access off street parking. <b>Proposed:</b> 31% (25-foot-wide driveway/80 feet of property frontage along Bald Mountain Road Road).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.125.020.A.2 &amp; 17.125.050</b>	<b>Parking Spaces</b>
			<b>Finding</b>	Off-street parking standards of this chapter apply to any new development and to any new established uses. <b>Required:</b> Residential (one family dwelling), in all applicable zoning districts require two parking spaces. <b>Proposed:</b> The project plans indicate 2 parking spaces within the enclosed garage.

### FINDINGS REGARDING COMPLIANCE WITH DESIGN REVIEW STANDARDS

<b>17.96.060.A.1 - Streets</b>	<b>Conformance</b>
<i>The applicant shall be responsible for all costs associated with providing a connection from an existing City street to their development.</i>	YES
<b>Finding:</b> The project proposes to construct a new asphalt driveway to access the subject property from Bald Mountain Road. All project costs associated with the development, including the City street connection, are the responsibility of the applicant.	
<b>17.96.060.A.2 - Streets</b>	<b>Conformance</b>



<i>All street designs shall be approved by the City Engineer.</i>	YES
<p><b>Finding:</b> The City Engineer has reviewed the proposed driveway design for the property and finds it to be sufficient for the project.</p> <p>All street designs shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

<b>17.96.060.B.1 - Sidewalks</b>	<b>Conformance</b>
<i>All projects under subsection 17.96.010.A of this chapter that qualify as a "substantial improvement" shall install sidewalks as required by the Public Works Department.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

<b>17.96.060.B.2 - Sidewalks</b>	<b>Conformance</b>
<i>Sidewalk width shall conform to the City's right-of-way standards, however the City Engineer may reduce or increase the sidewalk width and design standard requirements at their discretion.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.3 - Sidewalks	Conformance
<p><i>Sidewalks may be waived if one of the following criteria is met:</i></p> <ul style="list-style-type: none"> <li>a) <i>The project comprises an addition of less than 250 square feet of conditioned space.</i></li> <li>b) <i>The City Engineer finds that sidewalks are not necessary because of existing geographic limitations, pedestrian traffic on the street does not warrant a sidewalk, or if a sidewalk would not be beneficial to the general welfare and safety of the public.</i></li> </ul>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.4 - Sidewalks	Conformance
<p><i>The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.5 – Sidewalks	Conformance
<p><i>New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.6 - Sidewalks	Conformance
<p><i>The City may approve and accept voluntary cash contributions in lieu of the above described improvements, which contributions must be segregated by the City and not used for any purpose other than the provision of these</i></p>	YES

<p><i>improvements. The contribution amount shall be 110 percent of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the City Engineer. Any approved in lieu contribution shall be paid before the City issues a certificate of occupancy.</i></p>	
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.C.1 - Drainage	Conformance
<p><i>All stormwater shall be retained on site.</i></p>	<p>YES</p>
<p><b>Finding:</b> Pursuant to KMC §17.96.060.C.1, all storm water drainage shall be retained on site. Drainage improvements are specified on Sheet C-1 of the project plans. The drainage improvements include the installation of a trench drain bordering the width of the driveway. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on the subject property.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.C.2 - Drainage	Conformance
<p><i>Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.</i></p>	<p>YES</p>
<p><b>Finding:</b> Drainage improvements are specified on Sheet C-1 of the project plans. The drainage improvements include the installation of a trench drain bordering the width of the driveway. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on the subject property.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.C.3 - Drainage	Conformance
<p><i>The City Engineer may require additional drainage improvements as necessary, depending on the unique characteristics of a site.</i></p>	<p>YES</p>
<p><b>Finding:</b> The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell/catch basin improvements are sufficient to maintain storm water drainage</p>	

on the subject property. The City Engineer may require additional drainage improvements if necessary. If approved, the applicant shall submit final civil drawings for all drainage improvements with the building permit application to be verified, reviewed, and approved by the City Engineer and Streets Department.

17.96.060.C.4 - Drainage	Conformance
<i>Drainage facilities shall be constructed per City standards.</i>	YES
<p><b>Finding:</b> The drainage improvements include the installation of a trench drain bordering the width of the driveway along Bald Mountain Road. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the proposed trench drain and drywell improvements meet city standards.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.D.1 - Utilities	Conformance
<i>All utilities necessary for the development shall be improved and installed at the sole expense of the applicant.</i>	YES
<p><b>Finding:</b> All project costs associated with the development, including the installation of utilities, are the responsibility of the applicant. The applicant has not made requests for funding to the City for utility improvements. No funds have been provided by the City for the project.</p>	

17.96.060.D.2 - Utilities	Conformance
<i>Utilities shall be located underground and utility, power, and communication lines within the development site shall be concealed from public view.</i>	YES
<p><b>Finding:</b> As shown on Sheet C-1 of the project plans, the project will connect to the municipal water and sewer systems from existing lines on Bald Mountain Road. Requirements and specification for the water and sewer connections will be verified, reviewed, and approved by the Utilities Department prior to issuance of a Building Permit.</p>	

17.96.060.D.3 - Utilities	Conformance
<i>When extension of utilities is necessary all developers will be required to pay for and install two-inch SDR11 fiber optical conduit. The placement and construction of the fiber optical conduit shall be done in accordance with City of Ketchum standards and at the discretion of the City Engineer.</i>	N/A
<p><b>Finding:</b> N/A. Extension of utilities is not necessary to service the residence.</p>	

17.96.060.E.1 – Compatibility of Design	Conformance
<i>The project's materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.</i>	YES

**Finding:** Pursuant to KMC §17.96.060.E.1, “The project’s materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.” The Warm Springs Ranch Subdivision was platted in 2021 and is in the process of being developed. Multiple single-family residences are currently being constructed on Bald Mountain Road and Mountain Creek Drive. All of which have similar, yet unique architectural styles that utilize both modern (flat and shed roofs with cold materials such as concrete and metal) and traditional (gabled roofs with warmer materials such as wood and stone) designs. The proposed development is a modern design which features a flat roof with large windows and a mix of cold and warm materials including wood, metal, and stone.

17.96.060.E.2 – Compatibility of Design	Conformance
<i>Preservation of significant landmarks shall be encouraged and protected, where applicable. A significant landmark is one which gives historical and/or cultural importance to the neighborhood and/or community.</i>	N/A
<b>Finding:</b> N/A. The subject property does not contain any significant landmarks.	

17.96.060.E.3 – Compatibility of Design	Conformance
<i>Additions to existing buildings, built prior to 1940, shall be complementary in design and use similar material and finishes of the building being added to.</i>	N/A
<b>Finding:</b> N/A. The subject property is vacant.	

17.96.060.F.1 – Architectural	Conformance
<i>Building(s) shall provide unobstructed pedestrian access to the nearest sidewalk and the entryway shall be clearly defined.</i>	YES
<b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.F.2 – Architectural	Conformance
<i>The building character shall be clearly defined by use of architectural features.</i>	YES
<b>Finding:</b> As stated previously, the proposed structure features a modern design with a flat roof, large windows, and a mix of wood, metal, and stone materials.	

17.96.060.F.3 – Architectural	Conformance
<i>There shall be continuity of materials, colors and signing within the project.</i>	YES
<b>Finding:</b> The proposed structure features dark bronze trimmed windows and a mix of wood, metal, and stone materials.	

17.96.060.F.4 – Architectural	Conformance
<i>Accessory structures, fences, walls and landscape features within the project shall match or complement the principal building.</i>	YES
<p><b>Finding:</b> A 4' wooden fence is located to the south of the public utility easement and is setback 5'-2" from the northern property line. The project proposes landscaping improvements that complement and soften the visual appearance of the structure from Warm Springs Road and neighboring properties. The landscaping includes trees, shrubs, and grasses. Utilities on the lot are screened with shrubs. New Mugo Pine trees, Ginnala Maple trees, and lilac shrubs to the north of the structure will provide screening from Warm Springs Road.</p>	

17.96.060.F.5 – Architectural	Conformance
<i>Building walls shall provide undulation/relief, thus reducing the appearance of bulk and flatness.</i>	YES
<p><b>Finding:</b> The project features a three-story structure with multiple wall and deck pop-outs to provide undulation and reduce the appearance of flatness.</p>	

17.96.060.F.6 – Architectural	Conformance
<i>Building(s) shall orient toward their primary street frontage.</i>	YES
<p><b>Finding:</b> The structure is oriented towards the primary street frontage along Bald Mountain Road.</p>	

17.96.060.F.7 – Architectural	Conformance
<i>Garbage storage areas and satellite receivers shall be screened from public view and located off alleys.</i>	YES
<p><b>Finding:</b> No satellite receivers are proposed for the project. Sheet A101 of the project plans indicates that garbage bins will be stored within the garage and screened from public view.</p>	

17.96.060.F.8 – Architectural	Conformance
<i>Building design shall include weather protection which prevents water to drip or snow to slide on areas where pedestrians gather and circulate or onto adjacent properties.</i>	YES
<p><b>Finding:</b> The roof plan indicates that gutters will be installed, and the roof will be sloped to downspouts.</p>	

17.96.060.G.1 – Circulation Design	Conformance
<i>Pedestrian, equestrian and bicycle access shall be located to connect with existing and anticipated easements and pathways.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way,</p>	

including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.

17.96.060.G.2 – Circulation Design	Conformance
<p><i>Awnings extending over public sidewalks shall extend five feet or more across the public sidewalk but shall not extend within two feet of parking or travel lanes within the right-of-way.</i></p>	<p>YES</p>
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.G.3 – Circulation Design	Conformance
<p><i>Traffic shall flow safely within the project and onto adjacent streets. Traffic includes vehicle, bicycle, pedestrian and equestrian use. Consideration shall be given to adequate sight distances and proper signage.</i></p>	<p>YES</p>
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p> <p>The City Engineer has reviewed the proposed driveway and finds the circulation design to meet city standards. Final circulation design shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.G.4 – Circulation Design	Conformance
<p><i>Curb cuts and driveway entrances shall be no closer than 20 feet to the nearest intersection of two or more streets, as measured along the property line adjacent to the right-of-way. Due to site conditions or current/projected traffic levels or speed, the City Engineer may increase the minimum distance requirements.</i></p>	<p>YES</p>
<p><b>Finding:</b> The proposed driveway is located further than 20 feet away from the nearest intersection of Bald Mountain Road and Mountain Creek Drive.</p>	

17.96.060.G.5 – Circulation Design	Conformance
<i>Unobstructed access shall be provided for emergency vehicles, snowplows, garbage trucks and similar service vehicles to all necessary locations within the proposed project.</i>	YES
<b>Finding:</b> Access for emergency vehicles, snowplows, and garbage trucks is provided along Bald Mountain Road.	

17.96.060.H.1 – Snow Storage	Conformance
<i>Snow storage areas shall not be less than 30 percent of the improved parking and pedestrian circulation areas.</i>	YES
<b>Finding:</b> Sheet L3 of the project plans indicate the proposed snow storage areas to include a total of 275 square feet, greater than the required 30% ( $837 * .30 = 251$ square feet).	

17.96.060.H.2 – Snow Storage	Conformance
<i>Snow storage areas shall be provided on site.</i>	YES
<b>Finding:</b> Locations of snow storage areas are indicated on Sheet L3 of the project plans.	

17.96.060.H.3 – Snow Storage	Conformance
<i>A designated snow storage area shall not have any dimension less than five feet and shall be a minimum of 25 square feet.</i>	YES
<b>Finding:</b> None of the snow storage areas have dimensions less than five feet.	

17.96.060.H.4 – Snow Storage	Conformance
<i>In lieu of providing snow storage areas, snowmelt and hauling of snow may be allowed.</i>	YES
<b>Finding:</b> A driveway snowmelt system within the property boundary, and not within the Bald Mountain Road right-of-way, will be installed. In addition to the snowmelt system, snow storage areas are also provided on-site.	

17.96.060.I.1 – Landscaping	Conformance
<i>Landscaping is required for all projects.</i>	YES
<b>Finding:</b> Landscaping has been provided for the project as indicated on Sheets L3 of the project plans.	

17.96.060.I.2 – Landscaping	Conformance
<i>Landscape materials and vegetation types specified shall be readily adaptable to a site's microclimate, soil conditions, orientation and aspect, and shall serve to enhance and complement the neighborhood and townscape.</i>	YES
<b>Finding:</b> The front, side, and rear yards will be vegetated with native grasses. The project proposes landscaping improvements that complement and soften the visual appearance of the structure from Warm Springs Road and neighboring properties. The landscaping includes trees,	



shrubs, and grasses. Utilities on the lot are screened with shrubs. Mugo Pine trees to the north of the structure will provide screening from Warm Springs Road. Ornamental grasses and wildflowers are also proposed around the structure.

17.96.060.I.3 – Landscaping	Conformance
<i>All trees, shrubs, grasses and perennials shall be drought tolerant. Native species are recommended but not required.</i>	YES
<b>Finding:</b> The landscape plan proposes drought-tolerant and native species, including pine trees, native shrubs, and drought tolerant grasses.	

17.96.060.I.4 – Landscaping	Conformance
<i>Landscaping shall provide a substantial buffer between land uses, including, but not limited to, structures, streets and parking lots. The development of landscaped public courtyards, including trees and shrubs where appropriate, shall be encouraged.</i>	YES
<b>Finding:</b> Landscaping to the rear of the property provides a buffer from Warm Springs Road. Landscaping on the front and side yards provides privacy from adjacent properties.	

17.96.060.J.1 – Public Amenities	Conformance
<i>Where sidewalks are required, pedestrian amenities shall be installed. Amenities may include, but are not limited to, benches and other seating, kiosks, bus shelters, trash receptacles, restrooms, fountains, art, etc. All public amenities shall receive approval from the Public Works Department prior to design review approval from the Commission.</i>	YES
<b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.K.1 – Underground Encroachments	Conformance
<i>Encroachments of below grade structures into required setbacks are subject to subsection 17.128.020.K of this title and shall not conflict with any applicable easements, existing underground structures, sensitive ecological areas, soil stability, drainage, other sections of this Code or other regulating codes such as adopted International Code Council Codes, or other site features concerning health, safety, and welfare.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures are proposed.	

17.96.060.K.2 – Underground Encroachments	Conformance
<i>No below grade structure shall be permitted to encroach into the riparian setback.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures into the riparian setback are proposed.	

**CONCLUSIONS OF LAW**

1. The City of Ketchum is a municipal corporation established in accordance with Article XII of the Constitution of the State of Idaho and Title 50 Idaho Code and is required and has exercised its authority pursuant to the Local Land Use Planning Act codified at Chapter 65 of Title 67 Idaho Code and pursuant to Chapters 3, 9 and 13 of Title 50 Idaho Code to enact the ordinances and regulations, which ordinances are codified in the Ketchum Municipal Code (“KMC”) and are identified in the Findings of Fact and which are herein restated as Conclusions of Law by this reference and which City Ordinances govern the applicant’s Design Review application for the development and use of the project site.
2. The Commission has authority to hear the applicant’s Design Review Application pursuant to Chapter 17.96 of Ketchum Municipal Code Title 17.
3. The City of Ketchum Planning Department provided notice for the review of the application in accordance with Ketchum Municipal Code §17.96.080.
4. The Design Review application is governed under Ketchum Municipal Code Chapters 17.96, 17.124, 17.08, 17.12, 17.18, and 17.128.
5. The Warm Springs Ranch Residences Lot 33 Design Review application meets all applicable standards specified in Title 17 of Ketchum Municipal Code.

**DECISION**

**THEREFORE**, the Planning and Zoning Commission **approves** the Design Review Application File No. P23-018 this Tuesday, October 10, 2023, subject to the following conditions of approval.

**CONDITIONS OF APPROVAL**

1. This Design Review approval is based on the project plans for Lot 33 presented at the October 10, 2023, Planning and Zoning Commission meeting. The project plans for all on-site improvements submitted for the building permit must conform to the approved design review plans unless otherwise approved in writing by the Planning and Zoning Commission or Administrator. Any building or site discrepancies which do not conform to the approved plans will be subject to review by the Commission and/or removal.
2. The applicant shall submit final civil drawings prepared by an engineer registered in the State of Idaho which include specifications for right-of-way, circulation design, utilities, and drainage improvements for review and approval by the City Engineer, Streets, and Utilities departments prior to issuance of a building permit for the project.
3. The term of Design Review approval shall be twelve (12) months from the date that the Findings of Fact, Conclusions of Law, and Decision are adopted by the Commission or upon

appeal, the date the approval is granted by the Council subject to changes in zoning regulations.

4. In addition to the requirements set forth in this Design Review approval, this project shall comply with all applicable local, state, and federal laws.
5. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

Findings of Fact **adopted** this 10<sup>th</sup> day of October 2023.

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Neil Morrow, Chair  
City of Ketchum  
Planning and Zoning Commission



City of Ketchum

Attachment L:  
Lot 34 Draft Findings of Fact,  
Conclusions of Law and  
Decision



**CITY OF KETCHUM**

Planning & Building  
office: 208.726.7801  
planningandbuilding@ketchumidaho.org  
P.O. Box 2315, 191 5th Street West, Ketchum, ID 83340  
ketchumidaho.org

<b>IN RE:</b>	)	
	)	
<b>Warm Springs Ranch Residences Lot 34</b>	)	<b>KETCHUM PLANNING &amp; ZONING COMMISSION</b>
<b>Design Review</b>	)	<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, AND</b>
<b>Date: October 10, 2023</b>	)	<b>DECISION</b>
	)	
<b>File Number: P23-019</b>	)	

**PROJECT:** Warm Springs Ranch Residences Lot 34

**FILE NUMBER:** P23-019

**APPLICATION TYPE:** Design Review

**REPRESENTATIVE:** John Shirley – Think Architecture (architect)

**PROPERTY OWNER:** Brennan Holdings No. 300 LLC

**LOCATION:** 180 Bald Mountain Road (Lot 34, Block 4, Warm Springs Ranch Residences)

**ZONING:** General Residential – Low Density (GR-L)

**OVERLAY:** None

**RECORD OF PROCEEDINGS**

The Planning and Building Department received the Design Review application on March 28, 2023. Following the receipt of the application, staff routed the application materials to all City departments for review. The application was deemed complete on July 28, 2023, after two rounds of review. As of the date of this letter, all department comments have been resolved or addressed through conditions of approval recommended below.

A public hearing notice for the project was mailed to all owners of property within 300 feet of the project site and all political subdivisions on August 23, 2023. The public hearing notice was published in the Idaho Mountain Express on August 23, 2023. A notice was posted on the project site and the city’s website on September 5, 2023. Story poles were documented on the project site as of September 6, 2023.

## FINDINGS OF FACT

The Planning & Zoning Commission, having reviewed the entire project record, provided notice, and conducted the required public hearing, does hereby make and set forth these Findings of Fact, Conclusions of Law, and Decision as follows:

### BACKGROUND

The applicant is proposing to construct a new 3,988 square foot single-family residence (the “project”), located at Lot 34, Block 4, Warm Springs Ranch Residences (the “subject property”). The subject property is zoned General Residential – Low Density (GR-L) and the lot is currently vacant. The Warm Springs Ranch Subdivision, which was platted in 2021, includes plat note which requires development on Lots 32-35 be subject to Design Review standards of the Ketchum Municipal Code to ensure development on the lots have a minimal visual impact to the view of Bald Mountain from Warm Springs Road.

The project will construct improvements to the right-of-way per the City of Ketchum improvement standards. The project proposes a driveway snowmelt system located entirely within the property boundary and not within the Bald Mountain Road right-of-way. All improvements to the right-of-way have been preliminarily reviewed by the Streets Department and the City Engineer. Final review of the proposed improvements will be conducted by the City Engineer and Streets Department prior to issuance of building permit.

During the Planning and Zoning meeting on September 12, 2023, the Planning & Zoning Commission requested the following additional information: the type of pine trees proposed, a comprehensive landscape plan for Lots 32-34, renderings from the bike path vantage point, and verification of the roof material. The application was continued to the October 10, 2023, meeting. The applicant submitted revised plans that indicate that the structure has a membrane roof and gravel balled has been added on top. The plant legend was revised to indicate that Mugo Pine and Subalpine Fir pine trees are proposed, and the revised plans included a comprehensive landscape plan for Lots 32-34. The applicant also provided new renderings and a photomontage of the structures from the bike path vantage point. Lastly, the 4’ wooden fence to the rear of the lot has been relocated to the south of the public utility easement and has a consistent location throughout the plan set. Upon review of the new application materials, staff and the applicant presentation, and public comment, the Commission approved the Design Review application.

### FINDINGS REGARDING COMPLIANCE WITH ZONING CODE AND DIMENSIONAL STANDARDS

Compliance with Zoning and Dimensional Standards				
Compliant			Standards and Findings	
Yes	No	N /A	Ketchum Municipal Code	City Standards and Findings
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	Minimum Lot Area
			Finding	Required: 8,000 square feet Existing: 8,347 square feet (.19 acres)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.12.030	Building Coverage
			Finding	Permitted: 35% Proposed:

				29% (2,456 square feet building coverage / 8,347 square feet lot area)
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.12.030</b>	<b>Minimum Building Setbacks</b>
			<b>Finding</b>	<b>Minimum Required Setbacks:</b> Front: 15' Side: > of 1' for every 3' in building height, or 5' Rear: > of 1' for every 3' in building height, or 15'  <b>Proposed:</b> Front (south): 20'-7 213/256" Side (east): 11'-5 95/256" Side (west): 13'-0 1/256" Rear (north): 46'-7 1/16"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.12.030</b>	<b>Building Height</b>
			<b>Finding</b>	<b>Maximum Permitted:</b> 35' <b>Proposed:</b> 29'- 11 1/2"
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.125.030.H</b>	<b>Curb Cut</b>
			<b>Finding</b>	<b>Permitted:</b> A total of 35% of the linear footage of any street frontage can be devoted to access off street parking. <b>Proposed:</b> 30% (24-foot-wide driveway/80 feet of property frontage along Bald Mountain Road Road).
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>17.125.020.A.2 &amp; 17.125.050</b>	<b>Parking Spaces</b>
			<b>Finding</b>	Off-street parking standards of this chapter apply to any new development and to any new established uses. <b>Required:</b> Residential (one family dwelling), in all applicable zoning districts require two parking spaces. <b>Proposed:</b> The project plans indicate 2 parking spaces within the enclosed garage.

**FINDINGS REGARDING COMPLIANCE WITH DESIGN REVIEW STANDARDS**

17.96.060.A.1 - Streets	Conformance
<i>The applicant shall be responsible for all costs associated with providing a connection from an existing City street to their development.</i>	YES
<b>Finding:</b> The project proposes to construct a new asphalt driveway to access the subject property from Bald Mountain Road. All project costs associated with the development, including the City street connection, are the responsibility of the applicant.	

17.96.060.A.2 - Streets	Conformance
<i>All street designs shall be approved by the City Engineer.</i>	YES

**Finding:** The City Engineer has reviewed the proposed driveway design for the property and finds it to be sufficient for the project.

All street designs shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.

17.96.060.B.1 - Sidewalks	Conformance
<i>All projects under subsection 17.96.010.A of this chapter that qualify as a "substantial improvement" shall install sidewalks as required by the Public Works Department.</i>	YES

**Finding:** A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

17.96.060.B.2 - Sidewalks	Conformance
<i>Sidewalk width shall conform to the City's right-of-way standards, however the City Engineer may reduce or increase the sidewalk width and design standard requirements at their discretion.</i>	YES

**Finding:** A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.



17.96.060.B.3 - Sidewalks	Conformance
<p><i>Sidewalks may be waived if one of the following criteria is met:</i></p> <ul style="list-style-type: none"> <li>a) <i>The project comprises an addition of less than 250 square feet of conditioned space.</i></li> <li>b) <i>The City Engineer finds that sidewalks are not necessary because of existing geographic limitations, pedestrian traffic on the street does not warrant a sidewalk, or if a sidewalk would not be beneficial to the general welfare and safety of the public.</i></li> </ul>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.4 - Sidewalks	Conformance
<p><i>The length of sidewalk improvements constructed shall be equal to the length of the subject property line(s) adjacent to any public street or private street.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.5 – Sidewalks	Conformance
<p><i>New sidewalks shall be planned to provide pedestrian connections to any existing or future sidewalks adjacent to the site. In addition, sidewalks shall be constructed to provide safe pedestrian access to and around a building.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.B.6 - Sidewalks	Conformance
<p><i>The City may approve and accept voluntary cash contributions in lieu of the above described improvements, which contributions must be segregated by the City and not used for any purpose other than the provision of these</i></p>	YES

<p><i>improvements. The contribution amount shall be 110 percent of the estimated costs of concrete sidewalk and drainage improvements provided by a qualified contractor, plus associated engineering costs, as approved by the City Engineer. Any approved in lieu contribution shall be paid before the City issues a certificate of occupancy.</i></p>	
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.C.1 - Drainage	Conformance
<p><i>All stormwater shall be retained on site.</i></p>	<p>YES</p>
<p><b>Finding:</b> Pursuant to KMC §17.96.060.C.1, all storm water drainage shall be retained on site. Drainage improvements are specified on Sheet C-1 of the project plans. The drainage improvements include the installation of a trench drain bordering the width of the driveway. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on the subject property.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.C.2 - Drainage	Conformance
<p><i>Drainage improvements constructed shall be equal to the length of the subject property lines adjacent to any public street or private street.</i></p>	<p>YES</p>
<p><b>Finding:</b> Drainage improvements are specified on Sheet C-1 of the project plans. The drainage improvements include the installation of a trench drain bordering the width of the driveway. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell improvements are sufficient to maintain all storm water drainage on the subject property.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.C.3 - Drainage	Conformance
<p><i>The City Engineer may require additional drainage improvements as necessary, depending on the unique characteristics of a site.</i></p>	<p>YES</p>
<p><b>Finding:</b> The City Engineer has reviewed the proposed drainage plan and believes the trench drain and drywell/catch basin improvements are sufficient to maintain storm water drainage</p>	

on the subject property. The City Engineer may require additional drainage improvements if necessary. If approved, the applicant shall submit final civil drawings for all drainage improvements with the building permit application to be verified, reviewed, and approved by the City Engineer and Streets Department.

17.96.060.C.4 - Drainage	Conformance
<i>Drainage facilities shall be constructed per City standards.</i>	YES
<p><b>Finding:</b> The drainage improvements include the installation of a trench drain bordering the width of the driveway along Bald Mountain Road. A combination of drywells and catch basins will be installed to collect stormwater from the rest of the property. The City Engineer has reviewed the proposed drainage plan and believes the proposed trench drain and drywell improvements meet city standards.</p> <p>All drainage plans and specifications shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.D.1 - Utilities	Conformance
<i>All utilities necessary for the development shall be improved and installed at the sole expense of the applicant.</i>	YES
<p><b>Finding:</b> All project costs associated with the development, including the installation of utilities, are the responsibility of the applicant. The applicant has not made requests for funding to the City for utility improvements. No funds have been provided by the City for the project.</p>	

17.96.060.D.2 - Utilities	Conformance
<i>Utilities shall be located underground and utility, power, and communication lines within the development site shall be concealed from public view.</i>	YES
<p><b>Finding:</b> As shown on Sheet C-1 of the project plans, the project will connect to the municipal water and sewer systems from existing lines on Bald Mountain Road. Requirements and specification for the water and sewer connections will be verified, reviewed, and approved by the Utilities Department prior to issuance of a Building Permit.</p>	

17.96.060.D.3 - Utilities	Conformance
<i>When extension of utilities is necessary all developers will be required to pay for and install two-inch SDR11 fiber optical conduit. The placement and construction of the fiber optical conduit shall be done in accordance with City of Ketchum standards and at the discretion of the City Engineer.</i>	N/A
<p><b>Finding:</b> N/A. Extension of utilities is not necessary to service the residence.</p>	

17.96.060.E.1 – Compatibility of Design	Conformance
<i>The project's materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.</i>	YES

**Finding:** Pursuant to KMC §17.96.060.E.1, “The project’s materials, colors and signing shall be complementary with the townscape, surrounding neighborhoods and adjoining structures.” The Warm Springs Ranch Subdivision was platted in 2021 and is in the process of being developed. Multiple single-family residences are currently being constructed on Bald Mountain Road and Mountain Creek Drive. All of which have similar, yet unique architectural styles that utilize both modern (flat and shed roofs with cold materials such as concrete and metal) and traditional (gabled roofs with warmer materials such as wood and stone) designs. The proposed development is a modern design which features a butterfly roof with large windows and a mix of cold and warm materials including wood, metal, and stone.

17.96.060.E.2 – Compatibility of Design	Conformance
<i>Preservation of significant landmarks shall be encouraged and protected, where applicable. A significant landmark is one which gives historical and/or cultural importance to the neighborhood and/or community.</i>	N/A
<b>Finding:</b> N/A. The subject property does not contain any significant landmarks.	

17.96.060.E.3 – Compatibility of Design	Conformance
<i>Additions to existing buildings, built prior to 1940, shall be complementary in design and use similar material and finishes of the building being added to.</i>	N/A
<b>Finding:</b> N/A. The subject property is vacant.	

17.96.060.F.1 – Architectural	Conformance
<i>Building(s) shall provide unobstructed pedestrian access to the nearest sidewalk and the entryway shall be clearly defined.</i>	YES
<b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.F.2 – Architectural	Conformance
<i>The building character shall be clearly defined by use of architectural features.</i>	YES
<b>Finding:</b> As stated previously, the proposed structure features a modern design with a butterfly roof, large windows, and a mix of wood, metal, and stone materials.	

17.96.060.F.3 – Architectural	Conformance
<i>There shall be continuity of materials, colors and signing within the project.</i>	YES
<b>Finding:</b> The proposed structure features dark bronze trimmed windows and a mix of wood, metal, and stone materials.	

17.96.060.F.4 – Architectural	Conformance
<i>Accessory structures, fences, walls and landscape features within the project shall match or complement the principal building.</i>	YES
<p><b>Finding:</b> A 4' wooden fence is located to the south of the public utility easement and is setback 5'-2" from the northern property line. The project proposes landscaping improvements that complement and soften the visual appearance of the structure from Warm Springs Road and neighboring properties. The landscaping includes trees, shrubs, and grasses. Utilities on the lot are screened with shrubs. New Mugo Pine trees, Ginnala Maple trees, and lilac shrubs to the north of the structure will provide screening from Warm Springs Road.</p>	

17.96.060.F.5 – Architectural	Conformance
<i>Building walls shall provide undulation/relief, thus reducing the appearance of bulk and flatness.</i>	YES
<p><b>Finding:</b> The project features a two-story structure with multiple wall and deck pop-outs to provide undulation and reduce the appearance of flatness.</p>	

17.96.060.F.6 – Architectural	Conformance
<i>Building(s) shall orient toward their primary street frontage.</i>	YES
<p><b>Finding:</b> The structure is oriented towards the primary street frontage along Bald Mountain Road.</p>	

17.96.060.F.7 – Architectural	Conformance
<i>Garbage storage areas and satellite receivers shall be screened from public view and located off alleys.</i>	YES
<p><b>Finding:</b> No satellite receivers are proposed for the project. Sheet A101 of the project plans indicates that garbage bins will be stored within the garage and screened from public view.</p>	

17.96.060.F.8 – Architectural	Conformance
<i>Building design shall include weather protection which prevents water to drip or snow to slide on areas where pedestrians gather and circulate or onto adjacent properties.</i>	YES
<p><b>Finding:</b> The roof plan indicates that gutters will be installed, and the roof will be sloped to downspouts.</p>	

17.96.060.G.1 – Circulation Design	Conformance
<i>Pedestrian, equestrian and bicycle access shall be located to connect with existing and anticipated easements and pathways.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way,</p>	

including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

17.96.060.G.2 – Circulation Design	Conformance
<i>Awnings extending over public sidewalks shall extend five feet or more across the public sidewalk but shall not extend within two feet of parking or travel lanes within the right-of-way.</i>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p>	

17.96.060.G.3 – Circulation Design	Conformance
<p><i>Traffic shall flow safely within the project and onto adjacent streets. Traffic includes vehicle, bicycle, pedestrian and equestrian use. Consideration shall be given to adequate sight distances and proper signage.</i></p>	YES
<p><b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.</p> <p>The City Engineer has reviewed the proposed driveway and finds the circulation design to meet city standards. Final circulation design shall be reviewed and approved by the City Engineer and Streets Department prior to issuance of a Building Permit.</p>	

17.96.060.G.4 – Circulation Design	Conformance
<p><i>Curb cuts and driveway entrances shall be no closer than 20 feet to the nearest intersection of two or more streets, as measured along the property line adjacent to the right-of-way. Due to site conditions or current/projected traffic levels or speed, the City Engineer may increase the minimum distance requirements.</i></p>	YES
<p><b>Finding:</b> The proposed driveway is located further than 20 feet away from the nearest intersection of Bald Mountain Road and Lopey Lane.</p>	

17.96.060.G.5 – Circulation Design	Conformance
<i>Unobstructed access shall be provided for emergency vehicles, snowplows, garbage trucks and similar service vehicles to all necessary locations within the proposed project.</i>	YES
<b>Finding:</b> Access for emergency vehicles, snowplows, and garbage trucks is provided along Bald Mountain Road.	

17.96.060.H.1 – Snow Storage	Conformance
<i>Snow storage areas shall not be less than 30 percent of the improved parking and pedestrian circulation areas.</i>	YES
<b>Finding:</b> Sheet L3 of the project plans indicate the proposed snow storage areas to include a total of 275 square feet, greater than the required 30% ( $835 * .30 = 251$ square feet).	

17.96.060.H.2 – Snow Storage	Conformance
<i>Snow storage areas shall be provided on site.</i>	YES
<b>Finding:</b> Locations of snow storage areas are indicated on Sheet L3 of the project plans.	

17.96.060.H.3 – Snow Storage	Conformance
<i>A designated snow storage area shall not have any dimension less than five feet and shall be a minimum of 25 square feet.</i>	YES
<b>Finding:</b> None of the snow storage areas have dimensions less than five feet.	

17.96.060.H.4 – Snow Storage	Conformance
<i>In lieu of providing snow storage areas, snowmelt and hauling of snow may be allowed.</i>	YES
<b>Finding:</b> A driveway snowmelt system within the property boundary, and not within the Bald Mountain Road right-of-way, will be installed. In addition to the snowmelt system, snow storage areas are also provided on-site.	

17.96.060.I.1 – Landscaping	Conformance
<i>Landscaping is required for all projects.</i>	YES
<b>Finding:</b> Landscaping has been provided for the project as indicated on Sheets L3 of the project plans.	

17.96.060.I.2 – Landscaping	Conformance
<i>Landscape materials and vegetation types specified shall be readily adaptable to a site's microclimate, soil conditions, orientation and aspect, and shall serve to enhance and complement the neighborhood and townscape.</i>	YES
<b>Finding:</b> The front, side, and rear yards will be vegetated with native grasses. The project proposes landscaping improvements that complement and soften the visual appearance of the structure from Warm Springs Road and neighboring properties. The landscaping includes trees,	

shrubs, and grasses. Utilities on the lot are screened with shrubs. Mugo Pine trees to the north of the structure will provide screening from Warm Springs Road. Ornamental grasses and wildflowers are also proposed around the structure.

17.96.060.I.3 – Landscaping	Conformance
<i>All trees, shrubs, grasses and perennials shall be drought tolerant. Native species are recommended but not required.</i>	YES
<b>Finding:</b> The landscape plan proposes drought-tolerant and native species, including pine trees, native shrubs, and drought tolerant grasses.	

17.96.060.I.4 – Landscaping	Conformance
<i>Landscaping shall provide a substantial buffer between land uses, including, but not limited to, structures, streets and parking lots. The development of landscaped public courtyards, including trees and shrubs where appropriate, shall be encouraged.</i>	YES
<b>Finding:</b> Landscaping to the rear of the property provides a buffer from Warm Springs Road. Landscaping on the front and side yards provides privacy from adjacent properties.	

17.96.060.J.1 – Public Amenities	Conformance
<i>Where sidewalks are required, pedestrian amenities shall be installed. Amenities may include, but are not limited to, benches and other seating, kiosks, bus shelters, trash receptacles, restrooms, fountains, art, etc. All public amenities shall receive approval from the Public Works Department prior to design review approval from the Commission.</i>	YES
<b>Finding:</b> A sidewalk has already been installed along Bald Mountain Road adjacent to the subject property as part of the Warm Springs Ranch Residences Subdivision Development Agreement. Per Phase One Block 1 Infrastructure Improvements listed in the Warm Springs Ranch Subdivision Development Agreement, sidewalks were installed adjacent to Bald Mountain Road to Warm Springs Road to Lot 3 in Block 1. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner’s expense prior to issuance of Certificate of Occupancy.	

17.96.060.K.1 – Underground Encroachments	Conformance
<i>Encroachments of below grade structures into required setbacks are subject to subsection 17.128.020.K of this title and shall not conflict with any applicable easements, existing underground structures, sensitive ecological areas, soil stability, drainage, other sections of this Code or other regulating codes such as adopted International Code Council Codes, or other site features concerning health, safety, and welfare.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures are proposed.	



17.96.060.K.2 – Underground Encroachments	Conformance
<i>No below grade structure shall be permitted to encroach into the riparian setback.</i>	N/A
<b>Finding:</b> N/A. No encroachments of below grade structures into the riparian setback are proposed.	

**CONCLUSIONS OF LAW**

1. The City of Ketchum is a municipal corporation established in accordance with Article XII of the Constitution of the State of Idaho and Title 50 Idaho Code and is required and has exercised its authority pursuant to the Local Land Use Planning Act codified at Chapter 65 of Title 67 Idaho Code and pursuant to Chapters 3, 9 and 13 of Title 50 Idaho Code to enact the ordinances and regulations, which ordinances are codified in the Ketchum Municipal Code (“KMC”) and are identified in the Findings of Fact and which are herein restated as Conclusions of Law by this reference and which City Ordinances govern the applicant’s Design Review application for the development and use of the project site.
2. The Commission has authority to hear the applicant’s Design Review Application pursuant to Chapter 17.96 of Ketchum Municipal Code Title 17.
3. The City of Ketchum Planning Department provided notice for the review of the application in accordance with Ketchum Municipal Code §17.96.080.
4. The Design Review application is governed under Ketchum Municipal Code Chapters 17.96, 17.124, 17.08, 17.12, 17.18, and 17.128.
5. The Warm Springs Ranch Residences Lot 34 Design Review application meets all applicable standards specified in Title 17 of Ketchum Municipal Code.

**DECISION**

**THEREFORE**, the Planning and Zoning Commission **approves** the Design Review Application File No. P23-019 this Tuesday, October 10, 2023, subject to the following conditions of approval.

**CONDITIONS OF APPROVAL**

1. This Design Review approval is based on the project plans for Lot 34 presented at the October 10, 2023, Planning and Zoning Commission meeting. The project plans for all on-site improvements submitted for the building permit must conform to the approved design review plans unless otherwise approved in writing by the Planning and Zoning Commission or Administrator. Any building or site discrepancies which do not conform to the approved plans will be subject to review by the Commission and/or removal.
2. The applicant shall submit final civil drawings prepared by an engineer registered in the State of Idaho which include specifications for right-of-way, circulation design, utilities, and drainage improvements for review and approval by the City Engineer, Streets, and Utilities departments prior to issuance of a building permit for the project.
3. The term of Design Review approval shall be twelve (12) months from the date that the Findings of Fact, Conclusions of Law, and Decision are adopted by the Commission or upon

appeal, the date the approval is granted by the Council subject to changes in zoning regulations.

4. In addition to the requirements set forth in this Design Review approval, this project shall comply with all applicable local, state, and federal laws.
5. Any damage to the right-of-way, including sidewalks, must be reconstructed to City standards at the owner's expense prior to issuance of Certificate of Occupancy.

Findings of Fact **adopted** this 10<sup>th</sup> day of October 2023.

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Neil Morrow, Chair  
City of Ketchum  
Planning and Zoning Commission