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MOTLEY ARCHITECTURE & DESIGN
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General Requirements

- 1. ATTENTION ALL USERS OF THESE DRAWINGS...
2. THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES...
3. EVERY EFFORT HAS BEEN MADE TO MAKE THESE DOCUMENTS CONCISE...
4. THE DRAWINGS AND SPECIFICATIONS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING DISCIPLINES...
5. MECHANICAL AND ELECTRICAL DRAWINGS SHOW INFORMATION IN A DIAGRAMMATIC FASHION WITHOUT DIMENSIONS...
6. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE CONDITIONS AS THEY MAY AFFECT CARRYING OUT THE WORK...

Drawings and Dimensions

- 1. DO NOT SCALE THE DRAWINGS.
2. ALL DIMENSIONS ON PLANS ARE TO FACE OF BLOCK OR TO FACE OF STUD UNLESS NOTED OTHERWISE.
3. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ARCHITECT IMMEDIATELY SHOULD ANY DISCREPANCIES BE FOUND IN THE DRAWINGS AND SPECIFICATIONS.
4. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL FIELD CONDITIONS AND DIMENSIONS AS THEY RELATE TO THIS PROJECT...
5. ACTUAL CONTRACT LIMITS ARE TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER BEFORE ACTUAL CONSTRUCTION WORK BEGINS...
6. SEE GENERAL NOTES ON ALL 'A' SERIES DRAWINGS FOR INFORMATION RELATED TO PLANS AND DETAILS ON THOSE SHEETS.
7. THE TERM 'ALIGN' REFERS TO LOCATING DIFFERENT COMPONENTS OF CONSTRUCTION TO PROVIDE A FLUSH FINISH SURFACE.
8. CONTRACTORS AND ALL SUB-CONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND/OR ORDERING OF MATERIALS.
9. USE OF THE WORD 'VERIFY' POINTS OUT A SITUATION WHICH MUST BE CONFIRMED PRIOR TO PROCEEDING WITH THE WORK, FABRICATION OF EQUIPMENT, OR ORDERING MATERIAL. NOTIFY THE ARCHITECT OF ANY DISCREPANCY.
10. REFER TO THE REFLECTED CEILING PLAN WHEN PROVIDED FOR EXACT LOCATIONS OF ALL CEILING FIXTURES. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR COMPLETE CONSTRUCTION REQUIREMENTS.
11. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS SHOW WHERE EXPOSED DUCTWORK IS TO BE INSTALLED AT A SPECIFIC ELEVATION IN A CONTROLLED PATTERN...
12. THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INSTALLING THEIR RESPECTIVE EQUIPMENT IN THE CEILING PLenums, MECHANICAL, ELECTRICAL, STRUCTURAL, AND FIRE SPRINKLER SYSTEMS ALL SHARE THE SAME SPACE...
13. ALL DOORS TO BE LOCATED 4" OFF ADJACENT CMU OR METAL STUD WALL UNLESS DIMENSIONED OTHERWISE ON THE PLAN.

Construction Notes

- 1. DRAWINGS ARE PREPARED USING DIMENSIONS AND PRODUCT CONFIGURATIONS OR DETAILS OF SPECIFIC MANUFACTURERS (TYPICALLY THE FIRST MANUFACTURER LISTED UNDER 'ACCEPTABLE MANUFACTURERS' IN THE SPECIFICATIONS)...
2. PROVIDE SOLID BLOCKING WITHIN PARTITIONS AT ALL LOCATIONS WHERE ITEMS WILL BE MOUNTED ON PARTITIONS INCLUDING, BUT NOT LIMITED TO: ACCESSORIES, CASEWORK TRIM, FLASHING, WALL MOUNTED EQUIPMENT, TACK/BULLETIN MARKER BOARDS, ETC.
3. ALL WOOD BLOCKING SHALL BE FIRE-TREATED WOOD.
4. MAINTAIN RATINGS AT ALL BLOCKOUTS FOR ALL FIRE EXTINGUISHERS AND TOILET ACCESSORIES THAT ARE TO BE INSTALLED IN RATED WALLS.
5. PROVIDE 24" X 24" ACCESS PANELS IN PARTITIONS WHERE REQUIRED FOR MECHANICAL EQUIPMENT EXCEPT WHERE SIZES ARE OTHERWISE NOTED.
6. PROVIDE GYPSUM BOARD CONTROL JOINTS IN PARTITIONS AND CEILING AT 30'-0" MAX SPACINGS. COORDINATE TO MEET FIRE RESISTIVE RATINGS OF THE ASSEMBLY. FIRESTOP JOINTS AT RATED PARTITIONS. SUB-CONTRACTOR MUST PROVIDE A SUBMITTAL FOR JOINT MATERIAL.
7. CAULK ALL JOINTS OR CRACKS WHICH OCCUR WHERE DISSIMILAR MATERIALS INTERSECT PERPENDICULAR TO EACH OTHER AND WHERE THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
8. FIREBLOCK ALL CONCEALED SPACES, SOFFITS, SHAFTS, CHASES AND CEILING AREAS PER REQUIREMENTS OF THE ADOPTED IBC AND THE LOCAL JURISDICTION'S AMENDMENTS.
9. PROVIDE CONTINUOUS PERIMETER BUILDING INSULATION AT ALL EXTERIOR WALLS FROM SLAB TO ROOF DECK.
10. THE ARCHITECTURAL AND STRUCTURAL DRAWINGS BOTH DESCRIBE VARIOUS FLOOR SLAB SLOPE REQUIREMENTS, RECESSES, AND EDGE CONDITIONS USE BOTH SETS OF DRAWINGS WHEN INSTALLING THE FLOOR SLAB.
11. PROVIDE SLIP JOINT CONNECTIONS AT PARTITIONS THAT EXTEND TO STRUCTURE ABOVE. PROVIDE BRACING ABOVE AS REQUIRED. REFER TO STRUCTURAL DRAWINGS AND TO SLIP JOINT DETAILS.
12. ASSUME LEVEL 4 FINISH FOR ALL GYPSUM BOARD PARTITIONS, UNLESS NOTED OTHERWISE.
13. IT IS THE INTENT OF THE DESIGN THAT ALL METAL STUD PARTITIONS BE OF SUFFICIENT WIDTH TO ADEQUATELY ENCLOSE PIPING, CONDUITS, AND RECESSED EQUIPMENT. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES WITH THIS INTENT.
14. ALL VERTICAL AND HORIZONTAL PIPES, CONDUITS, DUCTS, ETC. IN FINISHED ROOMS OR AREAS THROUGHOUT THE BUILDING SHALL BE FURRED IN TO MATCH THE ROOM FINISH, UNLESS OTHERWISE NOTED.
15. WHERE MECHANICAL WORK PENETRATES ANY COMPONENT OF A FIRE-RATED ASSEMBLY, PROVIDE THE APPROPRIATE FIRE AND/OR SMOKE DAMPERS. IF IT IS NOT CLEAR WHETHER DUCTWORK PENETRATES A PORTION OF THE RATED ASSEMBLY, OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO BIDDING. SEAL AROUND ALL PENETRATIONS THROUGH PROPOSED FIRE RATED PARTITIONS. PROVIDE UL APPROVED FIRESTOP SYSTEM TO MEET REQUIRED RATINGS.
16. SEAL AROUND ALL PENETRATIONS THROUGH EXISTING AND PROPOSED FIRE RATED PARTITIONS. PROVIDE UL APPROVED FIRESTOP SYSTEM TO MEET REQUIRED RATINGS.

Sheet Index

Table with columns: Sheet, Sheet Name. Lists sheets for General, Civil, Arch, Structural, Mechanical, Plumbing, and Electrical.

Partition Notes

- 1. PROVIDE AND INSTALL ALL BLOCKING STIFFENERS, BRACING, BACK-UP PLATES AND SUPPORTING BRACKETS REQUIRED FOR THE INSTALLATION OF ALL CASEWORK AND OF ALL FLOOR MOUNTED OR SUSPENDED MECHANICAL AND ELECTRICAL EQUIPMENT.
2. COORDINATE METAL STUD GAUGE WITH PRE-APPROVED EQUIPMENT ANCHORAGE. WHERE A DISCREPANCY OCCURS, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
3. THERE SHALL BE NO BACK-TO-BACK ELECTRICAL, TELEPHONE, OR OTHER OUTLETS, EXCEPT WHERE SPECIFICALLY SHOWN.
4. PROVIDE ACOUSTIC (SOUND) SEALANT AT NON-RATED WALLS AND FIRE-RATED SEALANT AT SMOKE PARTITION AND AS REQUIRED BY TEST NUMBER.

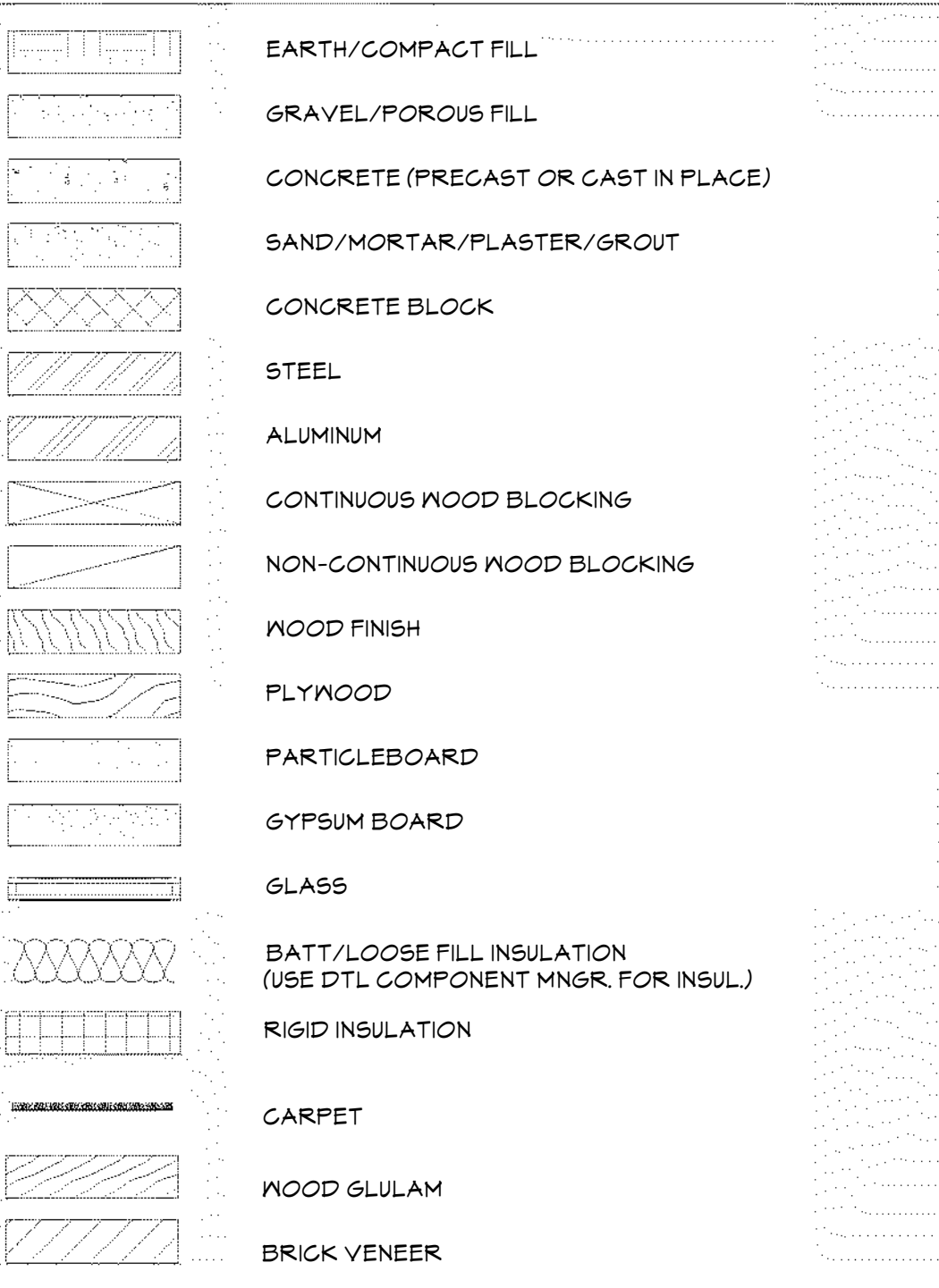
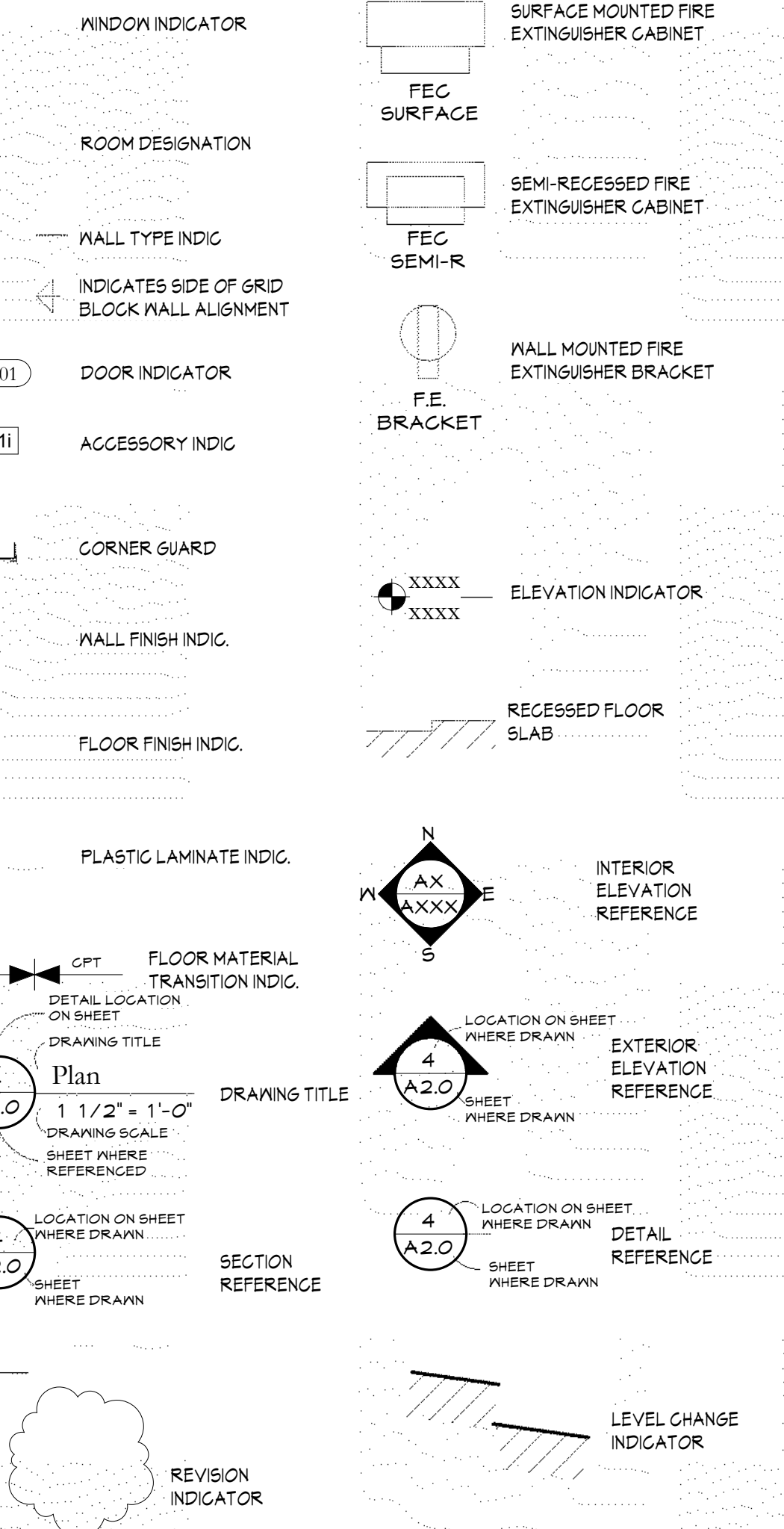


Table of abbreviations and their meanings, organized in columns (A-B, C-F, G-L, M-P, Q-T, U-Z).

Table of abbreviations and their meanings, organized in columns (A-C, D-F, G-I, J-L, M-O, P-R, S-U, V-X, Y-Z).

Table of abbreviations and their meanings, organized in columns (A-C, D-F, G-I, J-L, M-O, P-R, S-U, V-X, Y-Z).

Haven House Expansion

REVISIONS

PROJECT NO: 2033
PHASE: Bid
ISSUE: I
ISSUE DATE: 12/3/24

Cover

Acceptance
I have received and reviewed the attached Construction Drawing Set from Motley Architecture & Design. I have found it to be acceptable and to meet the requirements of this project phase. I hereby authorize Motley Architecture & Design and their team of Consultants to proceed into the next phase of the project.

This document is intended to create awareness of the impact to both design and construction schedules and design fees should major design changes occur after this phase.

Approved to proceed to Design Development Phase

Owner / Owner's Representative Date

G0.1 SHEET NUMBER

**Code Notes**

**PROJECT DESCRIPTION:** An addition to the Haven House in Olathe Colorado. The mixed use addition will consist of a Pre-School/Daycare facility on the Main Level and transitional apartments on the Upper Level.

**CODE AUTHORITY:** City of Montrose Building Department

**APPLICABLE ADOPTED CODES:** 2018 IBC, IFC, IMC, IFGC, IFGG, IECC, and current NEC

**OCCUPANCY:**  
Education-Group E  
Residential-Group R-2 (apartment) Most Restrictive

**AUTOMATIC SPRINKLER SYSTEM:**  
Building equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1

**BUILDING AREA:**  
MAIN LEVEL AREA - 4,701 s.f.  
MAIN LEVEL AREA - 5,197 s.f.  
TOTAL - 9,898 s.f.

**CONSTRUCTION TYPE:**  
CONSTRUCTION TYPICAL OF: Type VB (IBC Section 602.5)

**ALLOWABLE BUILDING HEIGHT (IBC Table 504.3):** 75 feet maximum

**ALLOWABLE STORIES (IBC Table 504.4):** 3 Stories maximum

**ALLOWABLE AREA (IBC Table 506.2):** R-2 Occupancy, Type VB, fully sprinklered, 2 stories above grade: 21,000 s.f. allowed

**FIRE RESISTANCE RATING REQUIREMENTS:**  
(FOR TYPE VB CONSTRUCTION, FULLY SPRINKLERED) [IBC TABLES 601 & 602]  
BEARING WALLS, EXTERIOR: 0 HRS  
NON-BEARING WALLS AND PARTITIONS, EXTERIOR: 0 (all property lines are greater than 10ft away from exterior walls)  
BEARING WALLS, INTERIOR: 0 HRS  
NON-BEARING WALLS, INTERIOR: 0 HRS  
FLOOR CONSTRUCTION: 0 HRS  
ROOF CONSTRUCTION: 0 HRS

**OCCUPANT LOADS:** (IBC Table 1004.5)  
Main Level Daycare/Preschool - 85 occupants  
Upper Level Apartments - 24 occupants

**EXIT TRAVEL DISTANCE:**  
FOR E OCCUPANCY GROUPS:  
EXIT ACCESS TRAVEL DISTANCE: 250 ft with sprinkler system, IBC Table 1017.2  
COMMON PATH OF EGRESS TRAVEL: 75 ft, IBC Table 1006.2.1  
FOR R-2 OCCUPANCY GROUPS:  
EXIT ACCESS TRAVEL DISTANCE: 250 ft with sprinkler system, IBC Table 1017.2  
COMMON PATH OF EGRESS TRAVEL: 125 ft, IBC Table 1006.2.1

**Building Envelope Requirements**

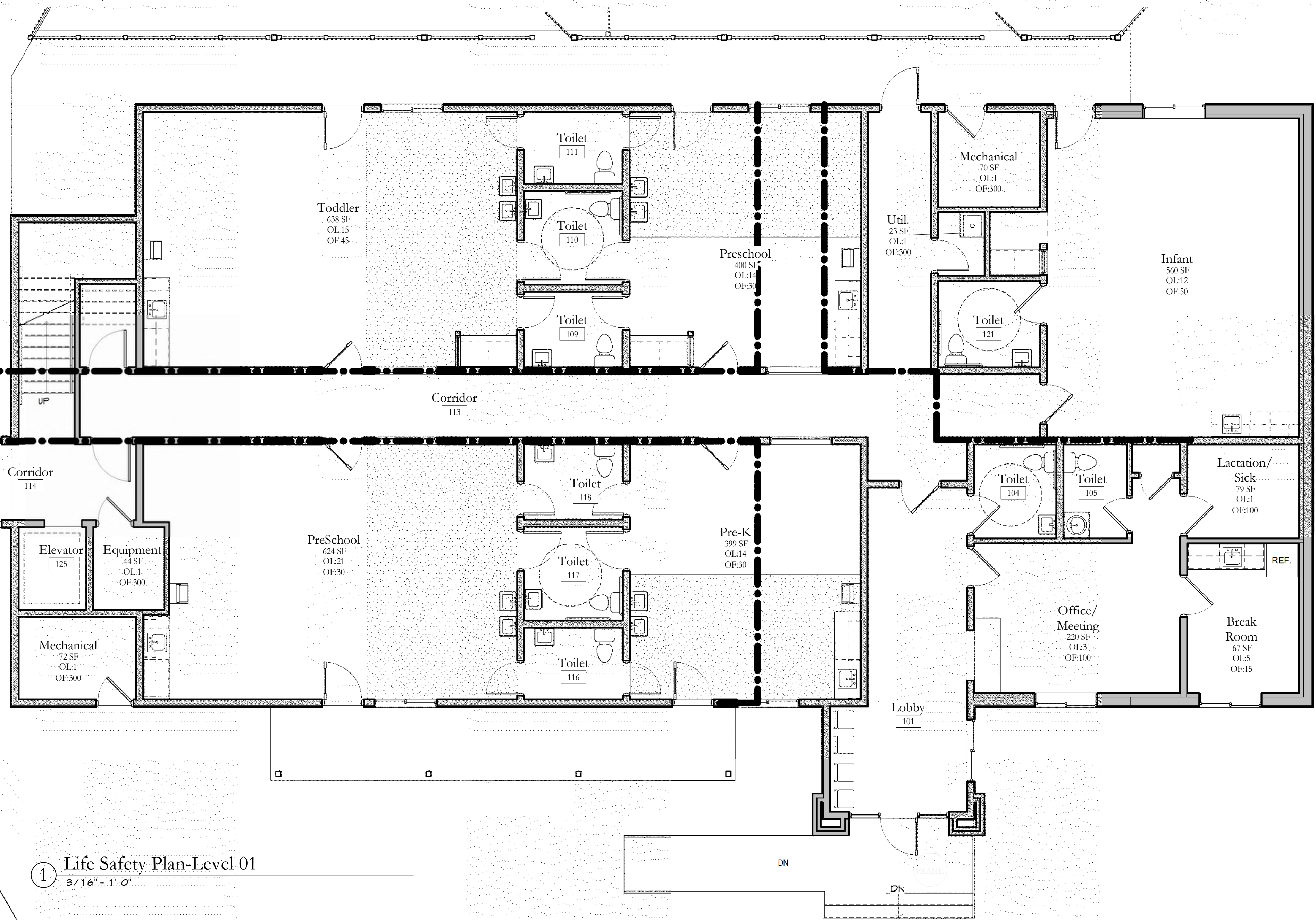
**Adopted Codes of Jurisdiction** to which the project will be constructed:  
2018 International Energy Conservation Code

Climate Zone: 5

402 (IECC) Envelope Requirements:

- Wood Framed walls above grade: R-20
- Walls Below grade: R-7.5
- Roof Attic and Other: R-38
- Floor joist framing (above outdoor air): R-30
- Unheated slab on grade: NR
- Entrance Doors with Glazing: U-.77
- Fixed Windows in wood framed walls: U-.38
- Operable Windows in wood framed walls: U-.45

502.4.3 Sealing of the building envelope. Openings and penetrations in the building envelope shall be sealed with caulking materials or closed with gasketing systems compatible with the construction materials and location. Joints and seams shall be sealed in the same manner or taped or covered with a moisture vapor-permeable wrapping material. Sealing materials spanning joints between construction materials shall allow for expansion and contraction of the construction materials.



**Life Safety Legend**

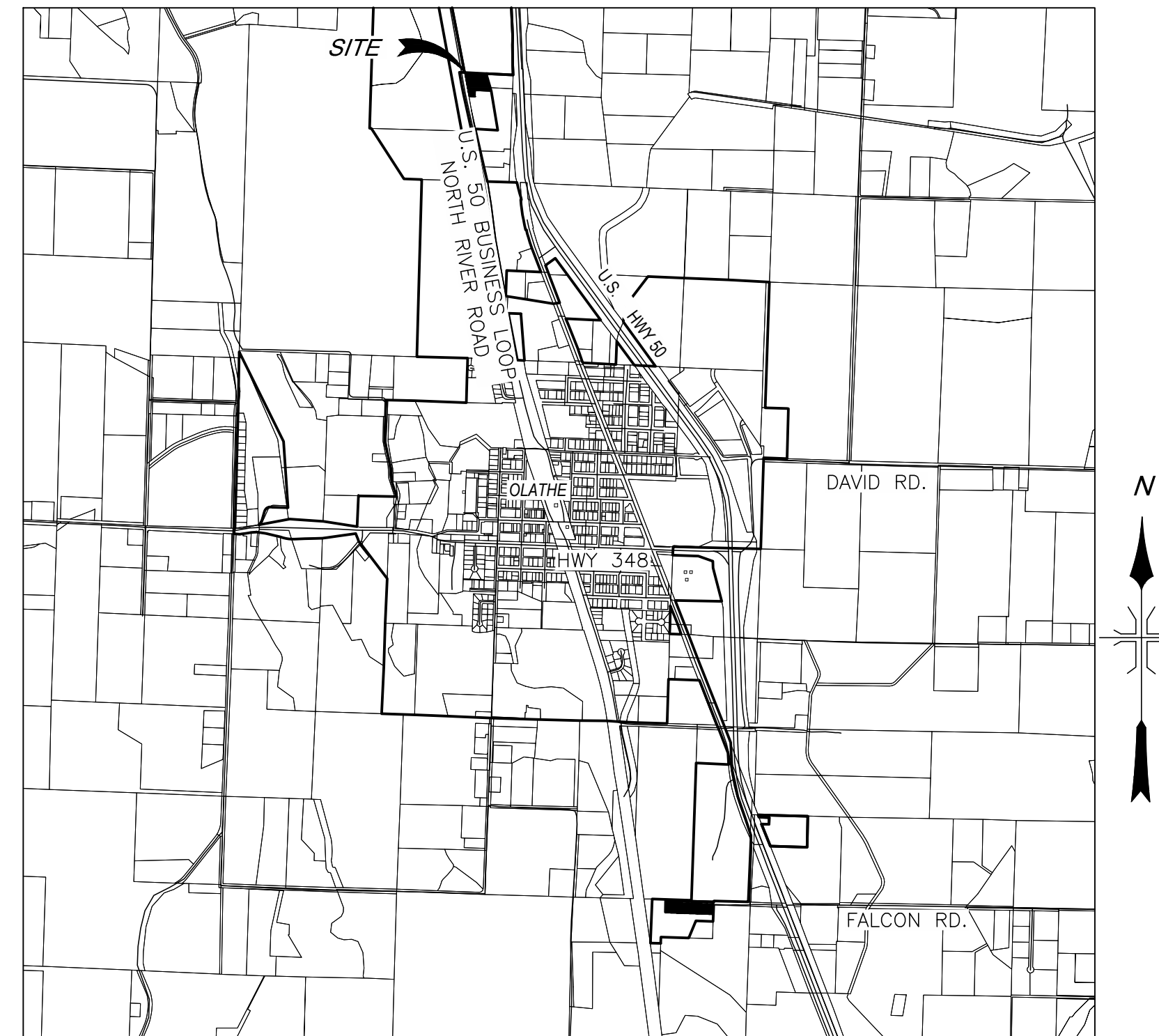
- EXTENT OF 1 HOUR FIRE RATING
- \* FIRE EXTINGUISHER
- EXIT LOAD
- ▶ EXIT ARROW
- SHADING INDICATES COMMON AREA WITH NO OCCUPANT LOAD

NOTE: SOME SYMBOLS SHOWN MAY NOT BE USED ON THIS PROJECT.

# HAVEN HOUSE - 2024 EXPANSION

## 4806 N. RIVER ROAD

### OLATHE, COLORADO



LOCATION MAP  
NOT TO SCALE

#### DRAWING INDEX

SHT. No.	SHEET NAME
01	COVER SHEET
02	CONSTRUCTION NOTES
03	LINE LEGEND AND CONSTRUCTION DETAILS
04	CONSTRUCTION DETAILS
05	EXISTING SITE CONDITIONS
07	PROPOSED HORIZONTAL LAYOUT
08	PROPOSED UTILITY PLAN
09	PROPOSED GRADING PLAN
10	PARKING AREA GRADING PLAN
11	WALL PROFILE VIEW

UTILITY CONTACTS				
Utility	Owner	Contact	Phone	Email
Natural Gas	Black Hills Energy	Nathan Hajar	(970) 808-5036	Nathan.Hajar@blackhillscorp.com
Telephone/Fiber	Century Link	Mark Preston	(970) 318-1891	Mark.Preston@lumen.com
Cable/Fiber	Charter	Todd Andrews	(970) 316-1700	Todd.Andrews1@charter.com
Power	DMEA	Phil Sanchez	(970) 275-8982	Phil.Sanchez@dmea.com
Fiber	Elevate	Jonathan Nelson	(970) 240-6818	Jonathan.Nelson@elevatefiber.com
Fiber	Clearnetworx	Doug Seacat	(970) 240-6600	support@clearnetworx.com
Water	Town of Olathe	Heath Terrell	(970) 417-1469	
Water	Tri-County Water	Kyle Thompson	(970) 249-3369	Kyle@tricitywater.org
Sanitary Sewer	Town of Olathe	Randy Inskeep	(970) 323-5701	
Storm Sewer	Town of Olathe	Heath Terrell	(970) 417-1469	



Know what's below.  
Call before you dig.  
**DRAFT**

VERTICAL DATUM: NAVD 88

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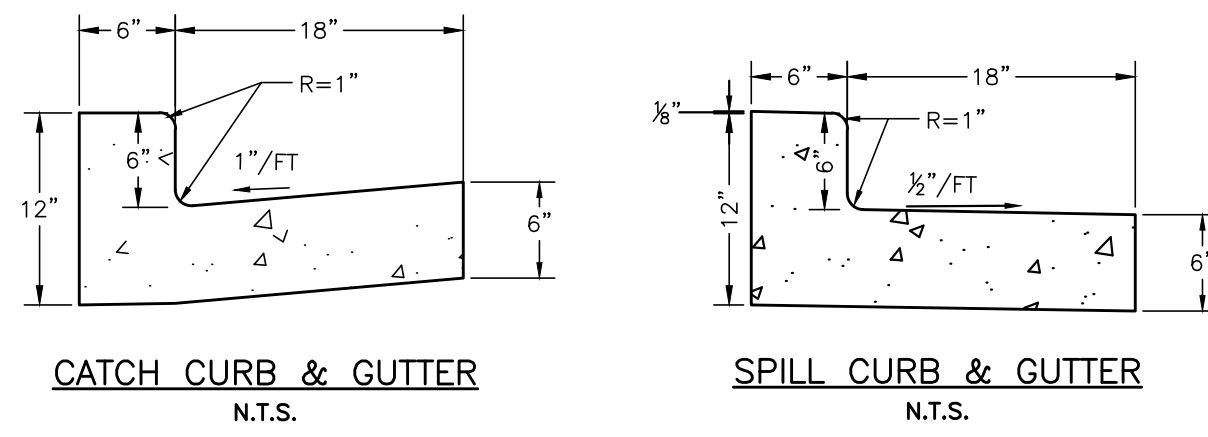
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OLATHE, CO

COVER SHEET

DMC JOB NO: 23036

SHEET NO: 01  
OF 11 SHEETS

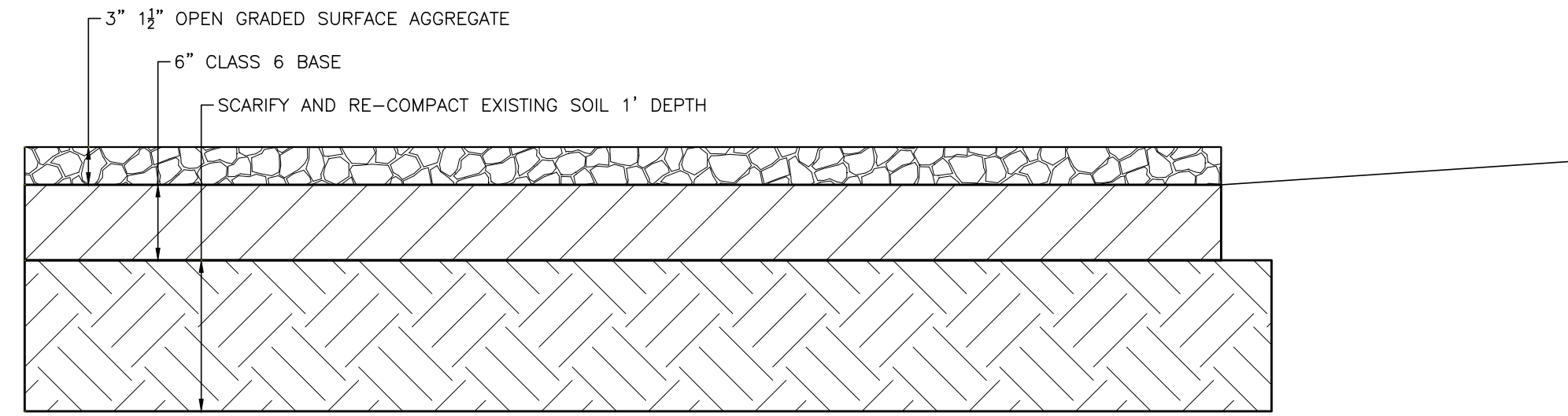




NOTE: BASE AND SUBGRADE PER TYPICAL ROAD SECTION

**TYPICAL CURB & GUTTER DETAILS**

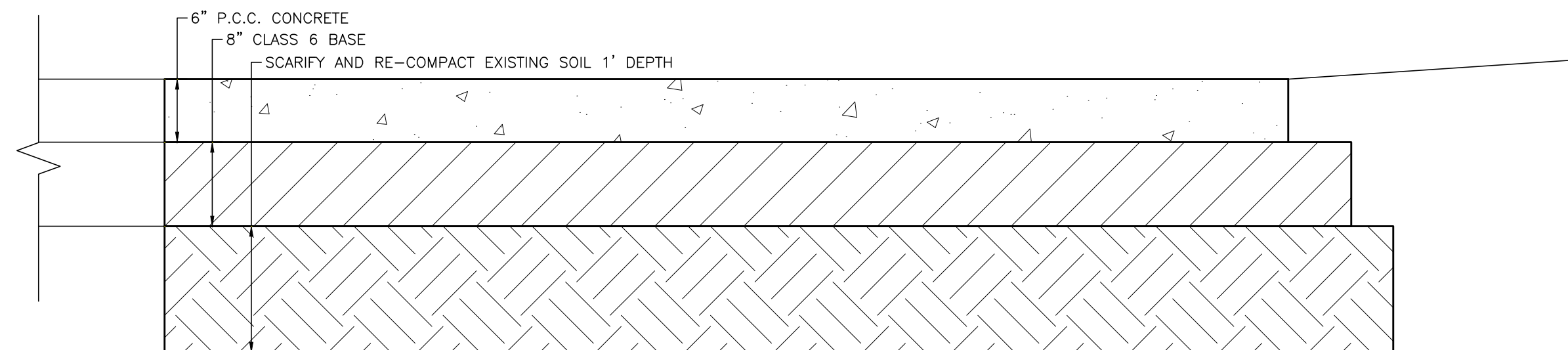
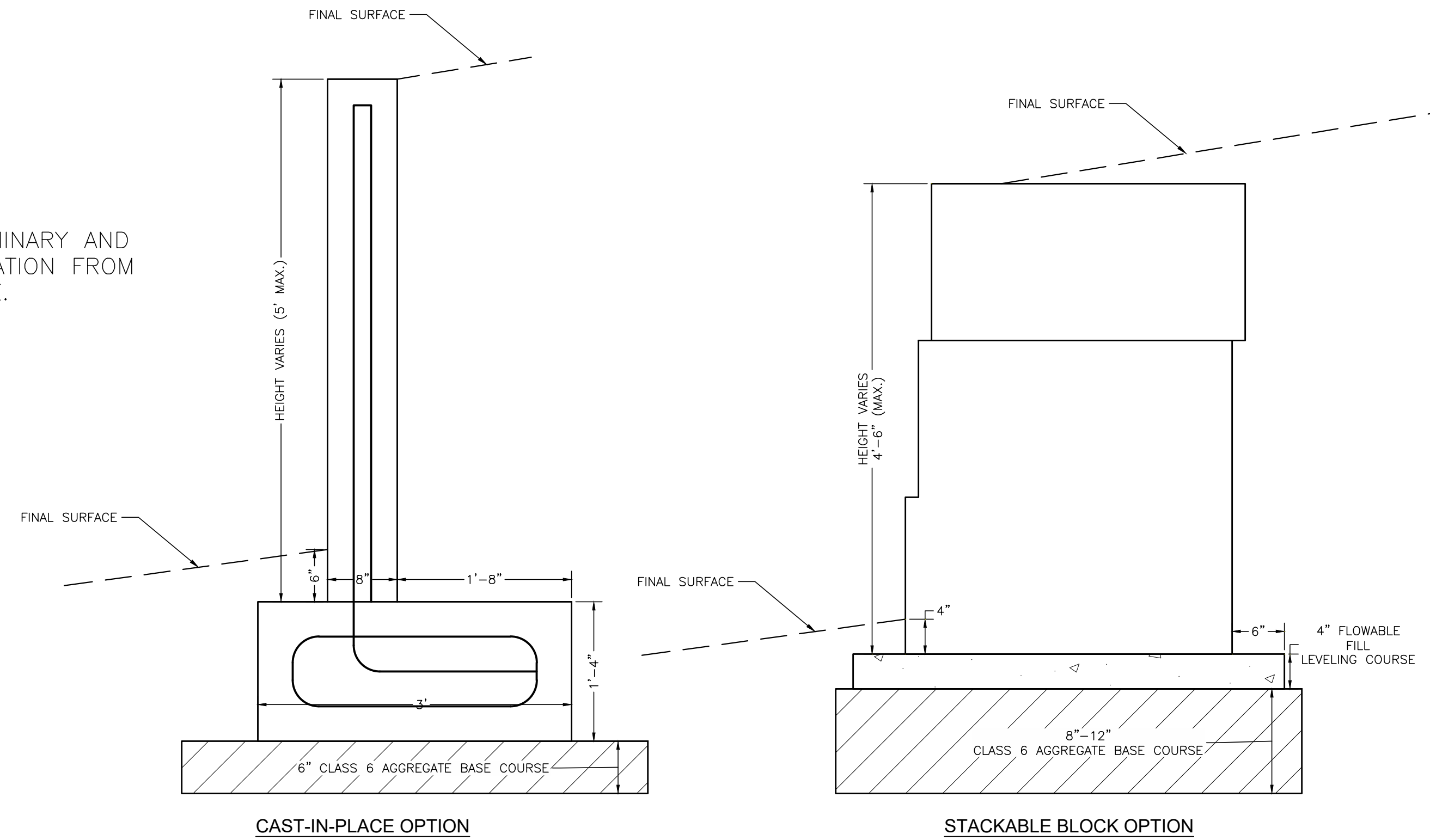
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NOTES:  
1. RETAINING WALL AND PAVEMENT DETAILS ARE PRELIMINARY AND SUBJECT TO REVISION IN REACTION TO RECOMMENDATION FROM GEOTECHNICAL INVESTIGATIONS AT THE PROJECT SITE.

**LEGEND**

---	e	EXISTING POWER LINE	---	E	PROPOSED POWER LINE
---	ohe	EXISTING OVERHEAD POWER LINE	---	OHE	PROPOSED OVERHEAD POWER LINE
---	ctv	EXISTING CABLE TV LINE	---	CTV	PROPOSED CABLE TV LINE
---	u	EXISTING UTILITY LINE	---	U	PROPOSED UTILITY LINE
---	e/t/c	EXISTING COMMON UTILITY LINE	---	E/T/C	PROPOSED COMMON UTILITY LINE
---	g	EXISTING GAS LINE	---	G	PROPOSED GAS LINE
---	t	EXISTING TELEPHONE LINE	---	T	PROPOSED TELEPHONE LINE
---	fo	EXISTING FIBER OPTIC LINE	---	FO	PROPOSED FIBER OPTIC LINE
---	w	EXISTING WATER LINE	---	W	PROPOSED WATER LINE
---	ss	EXISTING SEWER LINE	---	SS	PROPOSED SEWER LINE
---	fm	EXISTING FORCE MAIN LINE	---	FM	PROPOSED FORCE MAIN LINE
---	stm	EXISTING STORM SEWER LINE	---	STM	PROPOSED STORM SEWER LINE
---	sd	EXISTING SUBDRAIN LINE	---	SD	PROPOSED SUBDRAIN LINE
---	irr	EXISTING IRRIGATION LINE	---	IRR	PROPOSED IRRIGATION LINE
---	x	EXISTING FENCE	---	x	PROPOSED FENCE
---	x	EXISTING CULVERT	---	x	PROPOSED CULVERT
---	IP	EXISTING POWER PEDESTAL	---	IP	PROPOSED POWER PEDESTAL
---	IP	EXISTING TELEPHONE PEDESTAL	---	IP	PROPOSED TELEPHONE PEDESTAL
---	IP	EXISTING FIBER OPTIC PEDESTAL	---	IP	PROPOSED FIBER OPTIC PEDESTAL
---	IP	EXISTING CABLE TV PEDESTAL	---	IP	PROPOSED CABLE TV PEDESTAL
---	IP	EXISTING POWER METER	---	IP	PROPOSED POWER METER
---	IP	EXISTING GAS METER	---	IP	PROPOSED GAS METER
---	IP	EXISTING WATER METER	---	IP	PROPOSED WATER METER
---	IP	EXISTING TELEPHONE VAULT	---	IP	PROPOSED TELEPHONE VAULT
---	IP	EXISTING WATER VAULT	---	IP	PROPOSED WATER VAULT
---	IP	EXISTING POWER VAULT	---	IP	PROPOSED POWER VAULT
---	IP	EXISTING WATER VALVE	---	IP	PROPOSED WATER VALVE
---	IP	EXISTING FIRE HYDRANT	---	IP	PROPOSED FIRE HYDRANT
---	IP	EXISTING THRUST BLOCK	---	IP	PROPOSED THRUST BLOCK
---	IP	EXISTING WELL	---	IP	PROPOSED WELL
---	IP	EXISTING SANITARY SEWER MANHOLE	---	IP	PROPOSED SANITARY SEWER MANHOLE
---	IP	EXISTING STORM SEWER MANHOLE	---	IP	PROPOSED STORM SEWER MANHOLE
---	IP	EXISTING UTILITY POLE	---	IP	PROPOSED UTILITY POLE
---	IP	EXISTING GUY ANCHOR	---	IP	PROPOSED GUY ANCHOR
---	IP	EXISTING LIGHT POLE	---	IP	PROPOSED LIGHT POLE
---	IP	EXISTING GAS VALVE	---	IP	PROPOSED GAS VALVE
---	IP	EXISTING SIGN	---	IP	PROPOSED SIGN
---	IP	EXISTING MAIL BOX	---	IP	PROPOSED MAIL BOX
---	IP	EXISTING INDEX CONTOUR	---	IP	PROPOSED INDEX CONTOUR
---	IP	EXISTING INTERMEDIATE CONTOUR	---	IP	PROPOSED INTERMEDIATE CONTOUR
---	IP	EXISTING DRAINAGE FLOWLINE	---	IP	PROPOSED DRAINAGE FLOWLINE
---	IP		---	IP	PROPOSED STREET FLOW ARROW
---	IP		---	IP	PROPOSED LOT FLOW ARROW
---	IP		---	IP	PROPOSED SPOT ELEVATION



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**LINE LEGEND AND CONSTRUCTION DETAILS**

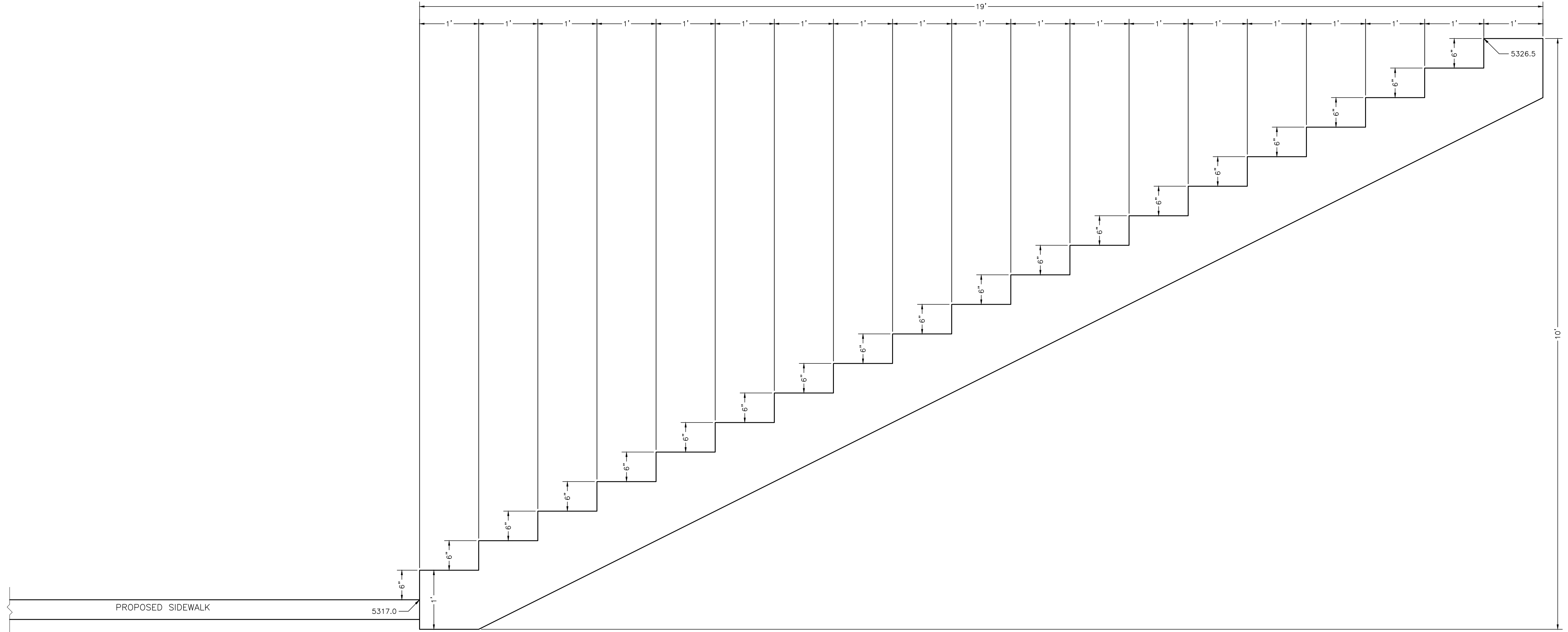
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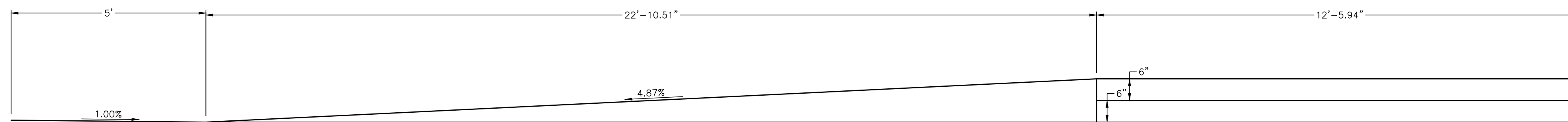
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**SECTION B-B**  
**EASTERN STAIR SECTION DETAIL**  
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**SECTION A-A**  
**RAMP & STAIR SECTION DETAIL**  
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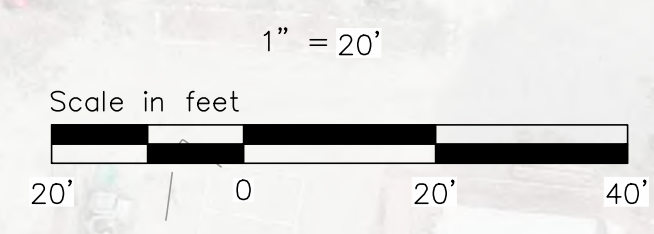
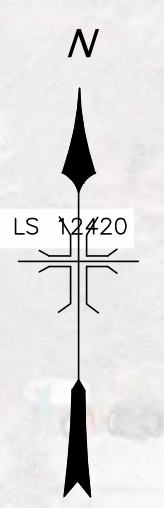
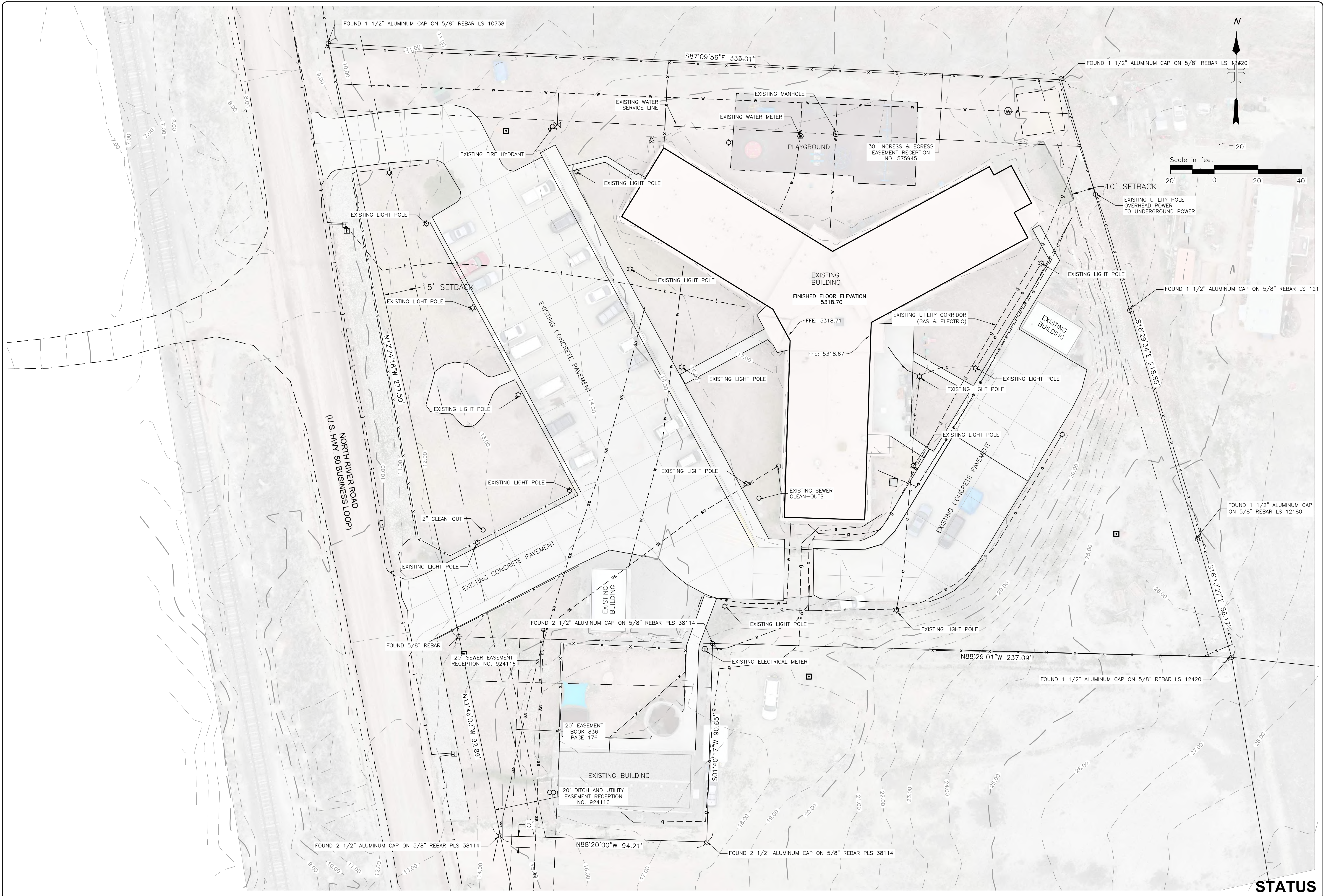
**CONSTRUCTION DETAILS**

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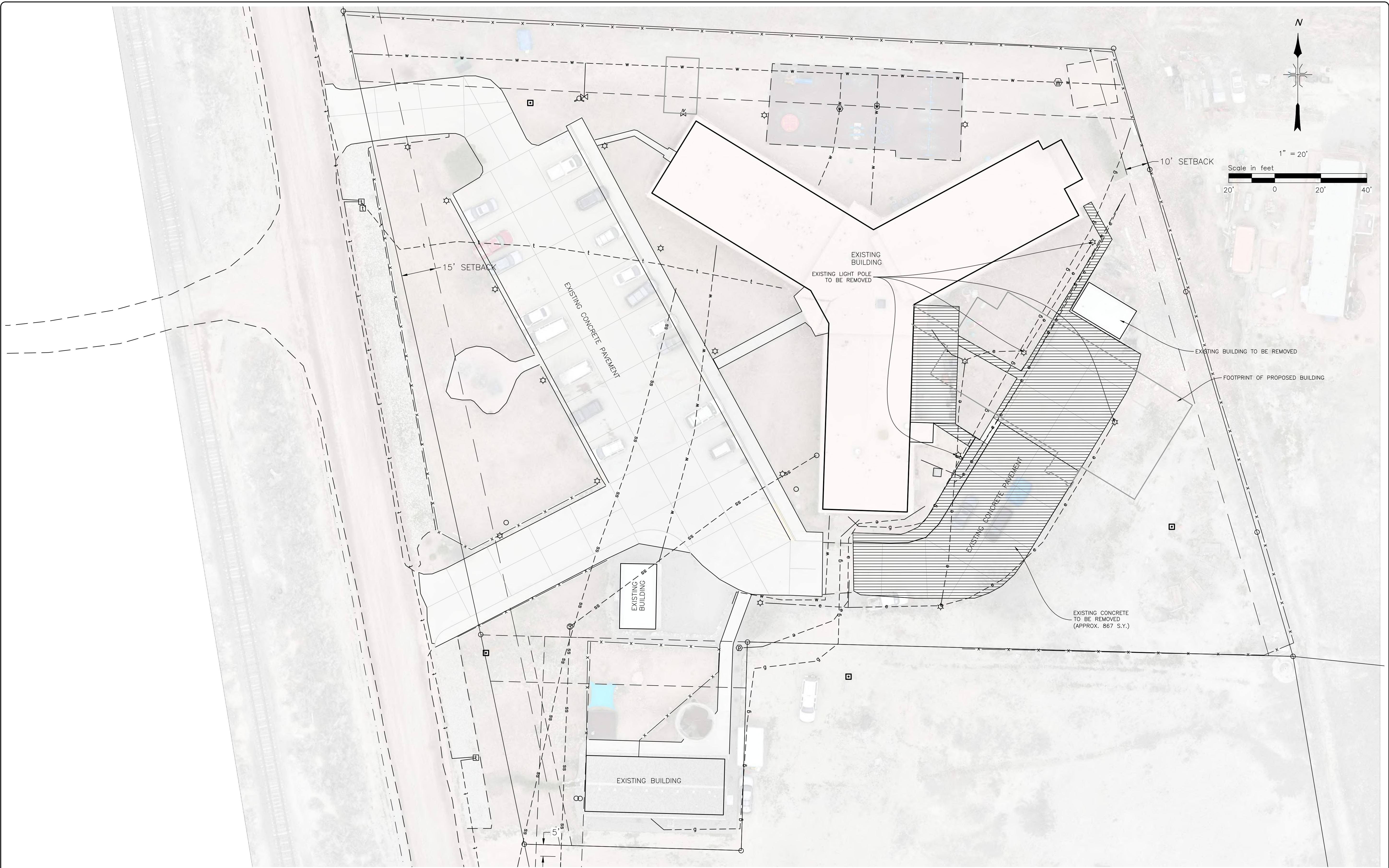
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**EXISTING SITE CONDITIONS**

**STATUS**

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**LEGEND**

	CONCRETE TO BE DEMOLISHED AND REMOVED
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**STATUS**

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MGW	MGW			2024-11-19

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**DEMOLITION PLAN**

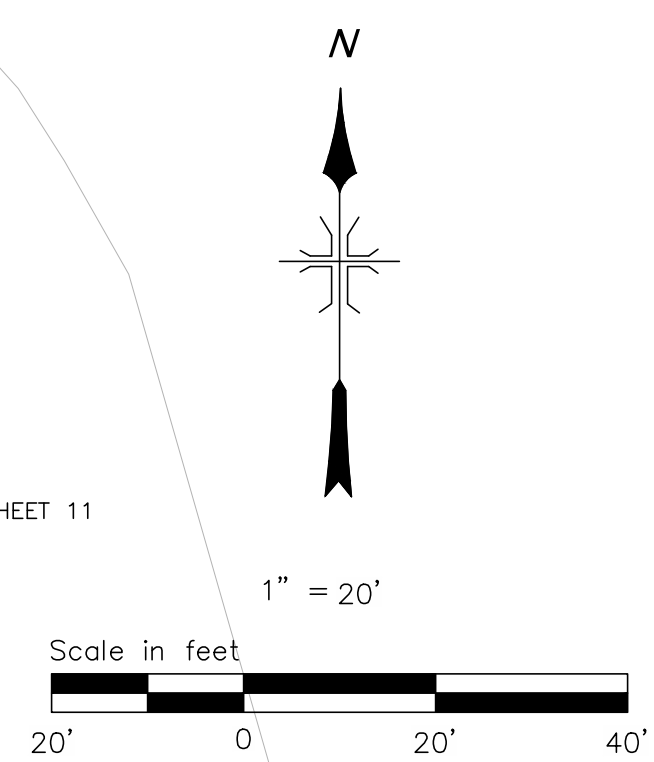
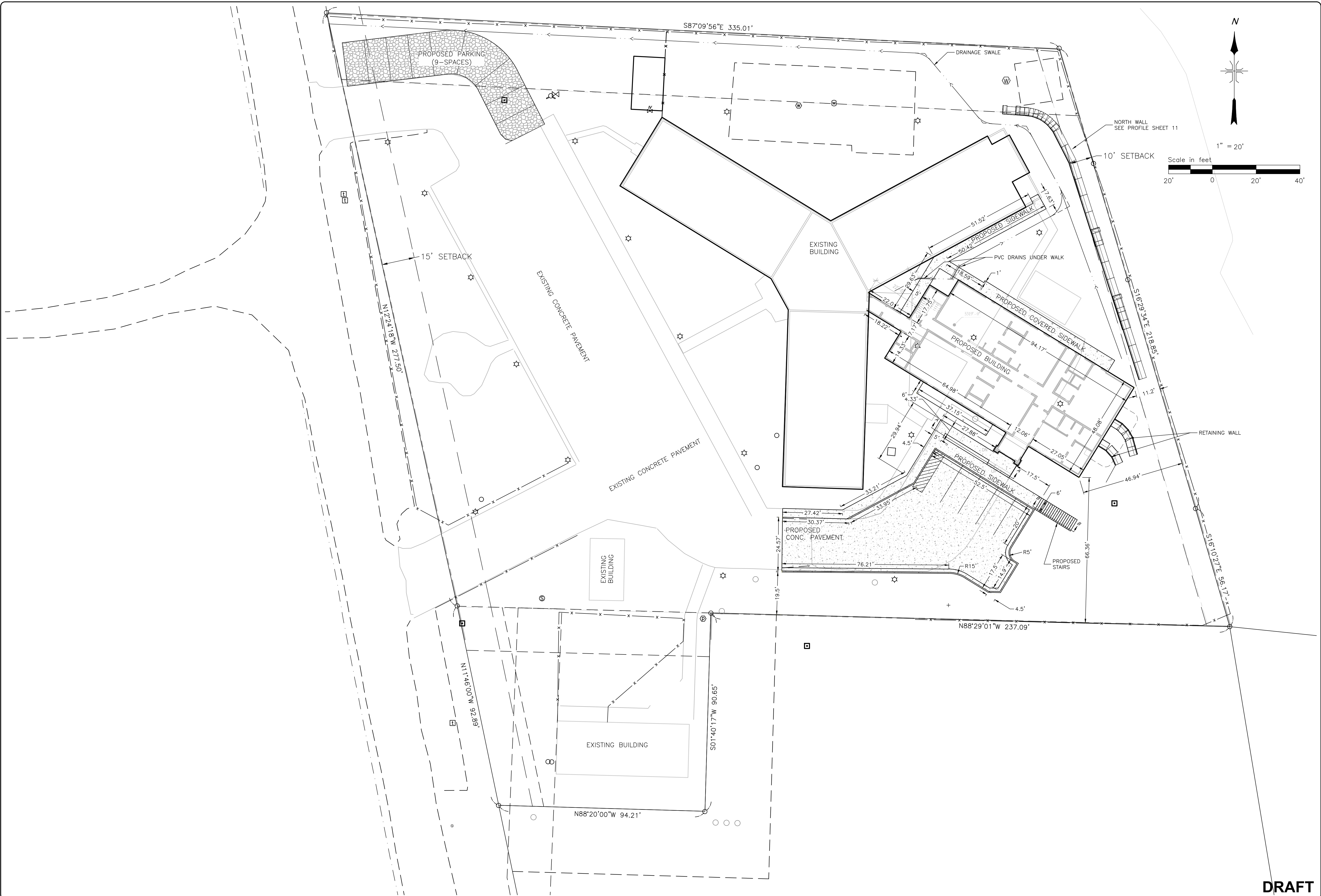
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CHECKED BY	AS NOTED
SCALE	AS NOTED
DATE ISSUED	2024-11-19

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 OLATHE, CO

**PROPOSED  
 HORIZONTAL LAYOUT**

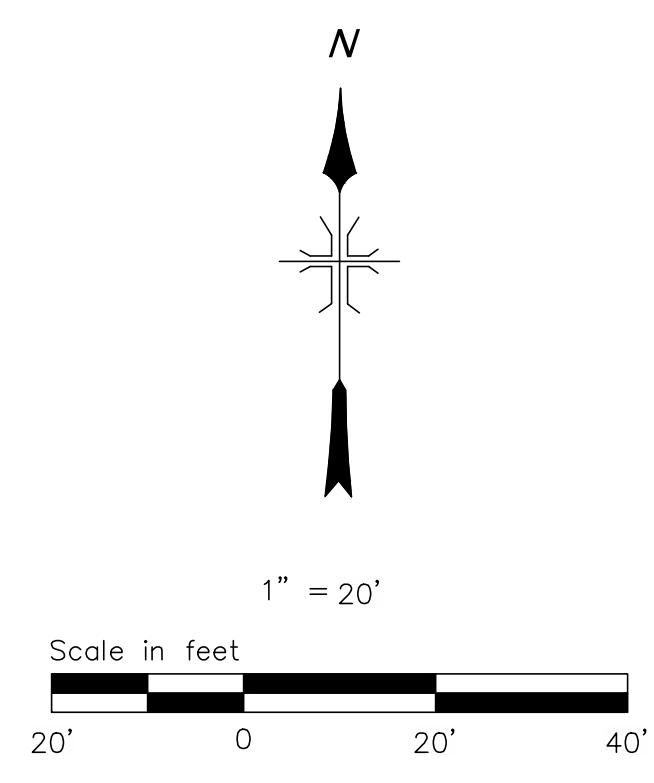
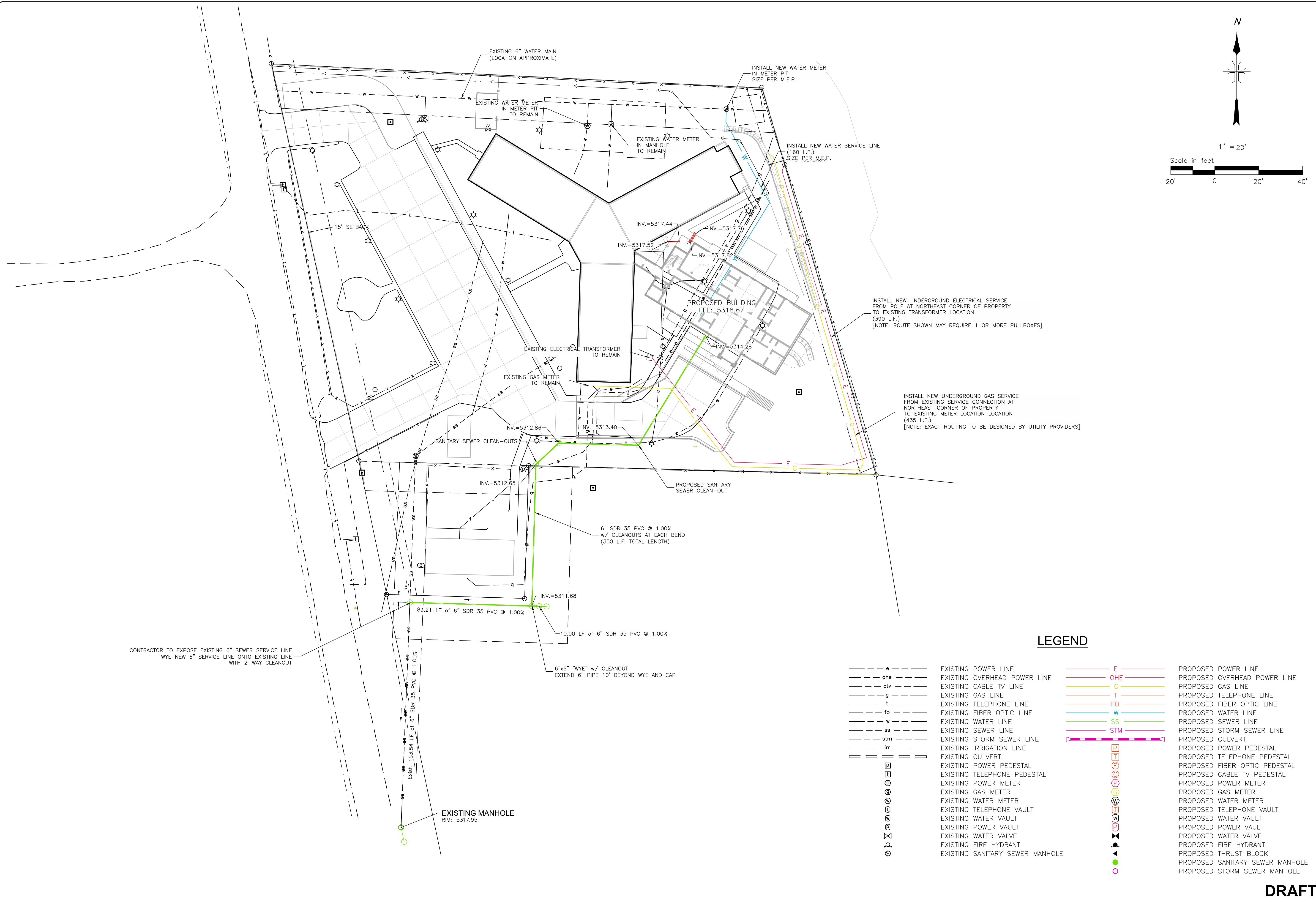
DMC JOB NO: 23036

SHEET NO: 07

11 SHEETS

**DRAFT**

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NO	DATE	REVISIONS	BY

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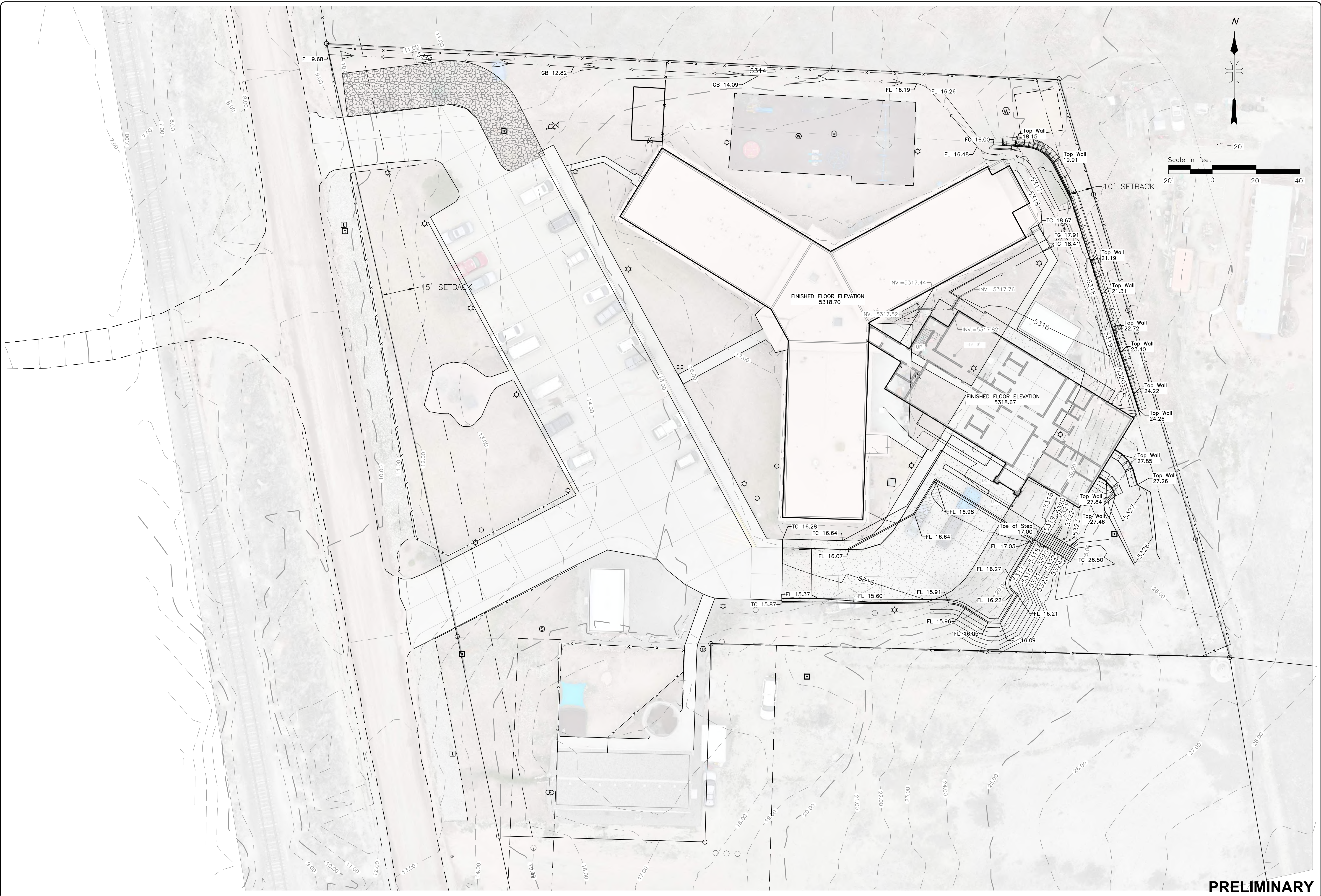
**PROPOSED UTILITY PLAN**

DMC JOB NO: 23036

SHEET NO: 08  
 OF 11 SHEETS

**DRAFT**

11/20/2024 3:58 PM



**PRELIMINARY**

NO	DATE	REVISIONS	BY

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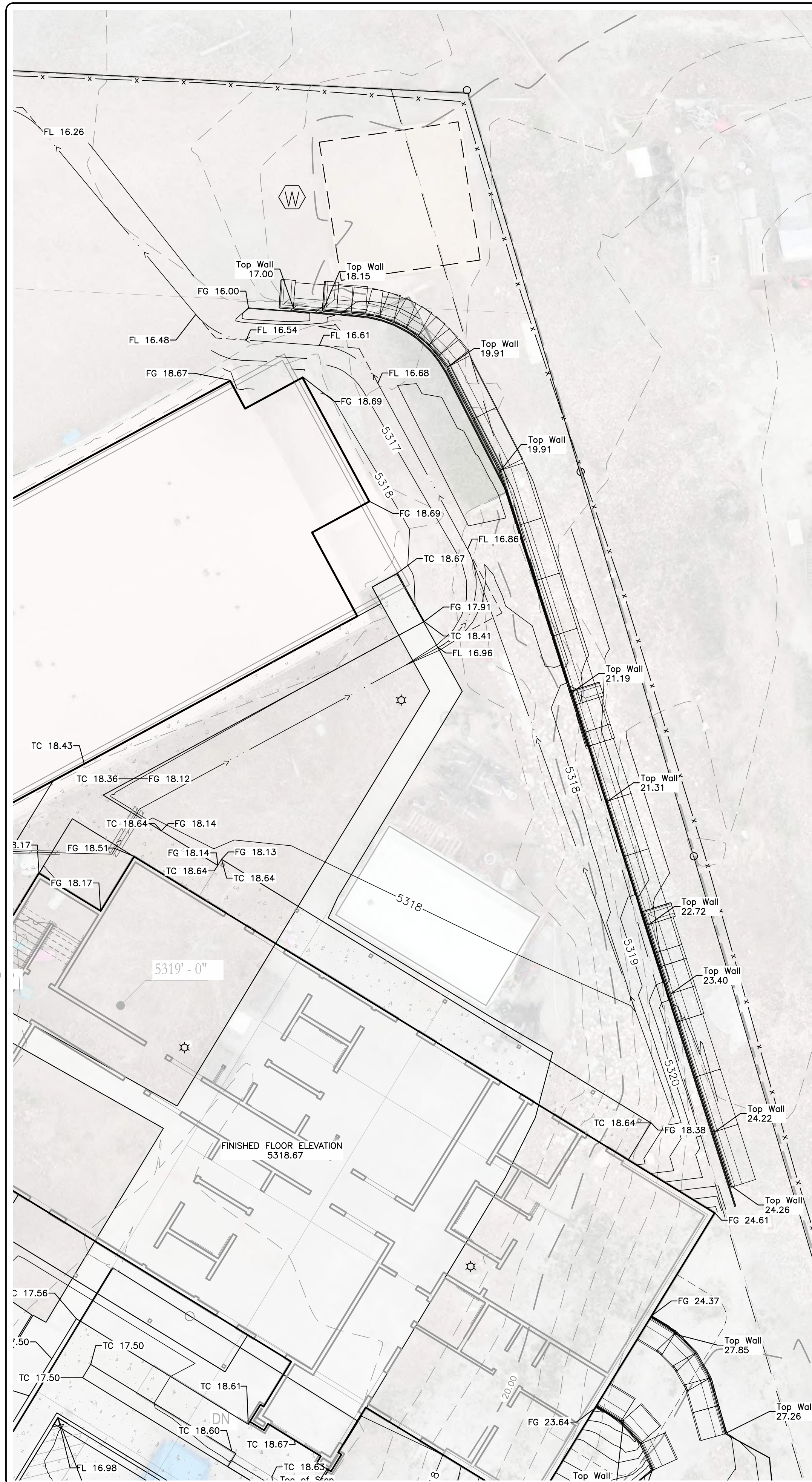
DESIGNED BY: MGW  
 CHECKED BY: AS NOTED  
 DATE ISSUED: 2024-11-19

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 OLATHE, CO

**PROPOSED GRADING PLAN**

DMC JOB NO:	23036
SHEET NO.:	09
OF SHEETS:	11

PLOTTED BY: MWWHITE, FILE PATH & NAME = \\NDMS\PROJECTS\ACTIVE PROJECTS\2023\230308-HAVEN HOUSE\SEC3\24\230308C\_BASE.DWG, PLOT DATE = 11/20/2024, 3:59 PM



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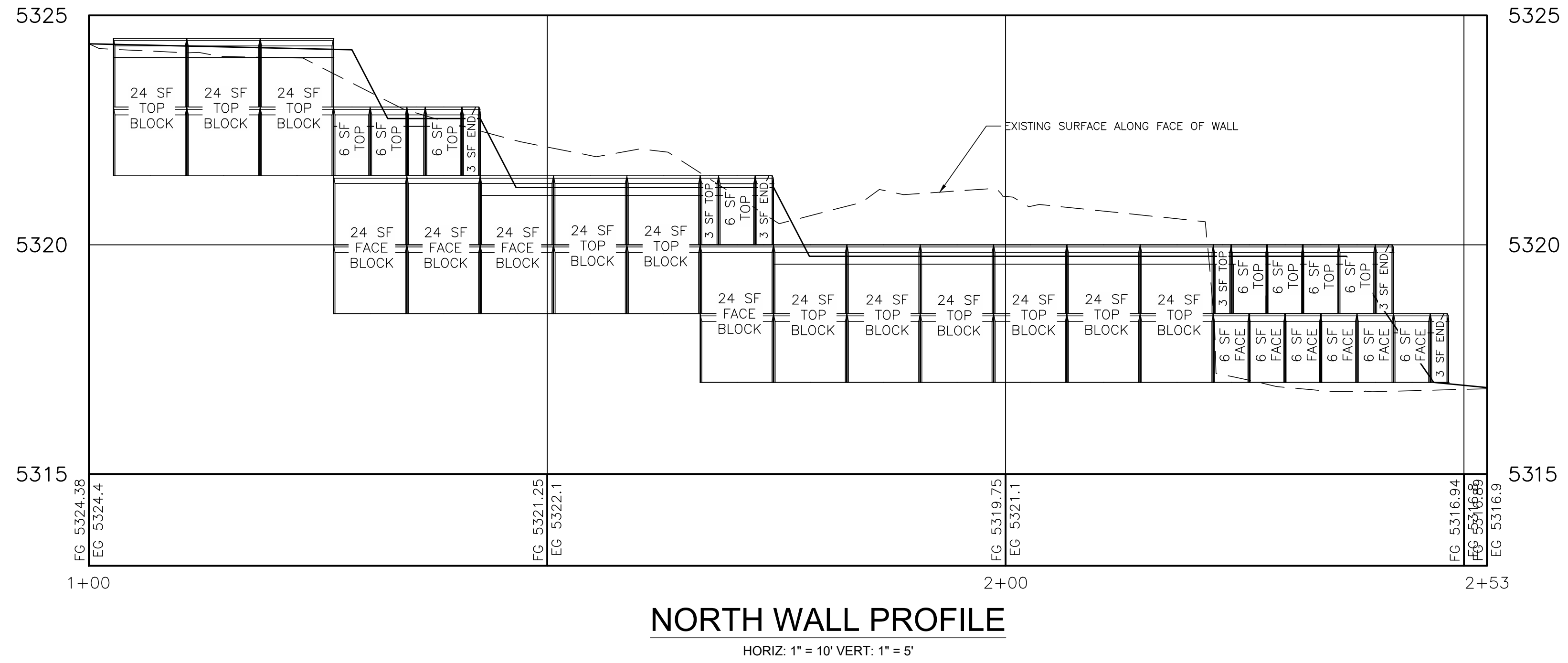
DESIGNED BY: MGW  
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**PARKING AREA GRADING PLAN**

DMC JOB NO: 23036

SHEET NO: 10  
 OF 11 SHEETS



**NORTH WALL PROFILE**

HORIZ: 1" = 10' VERT: 1" = 5'

**STATUS**

NO	DATE	REVISIONS	BY

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**WALL PROFILE VIEW**

DMC JOB NO: 23036

SHEET NO: 11  
OF 11 SHEETS

Haven House Expansion

4886 N. River Rd., Olathe, CO 81425

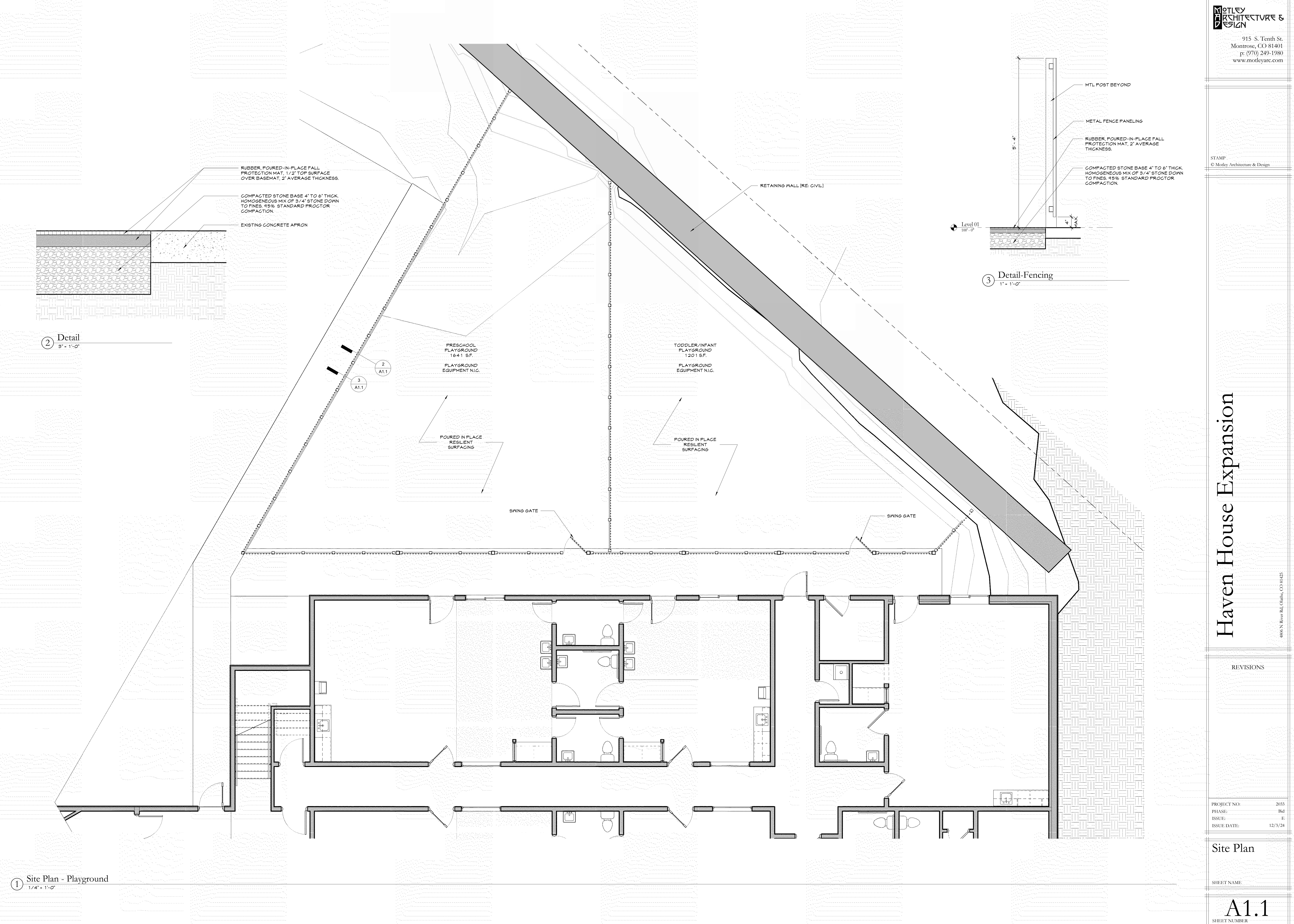
REVISIONS

PROJECT NO: 2033  
PHASE: Bid  
ISSUE: I  
ISSUE DATE: 12/3/24

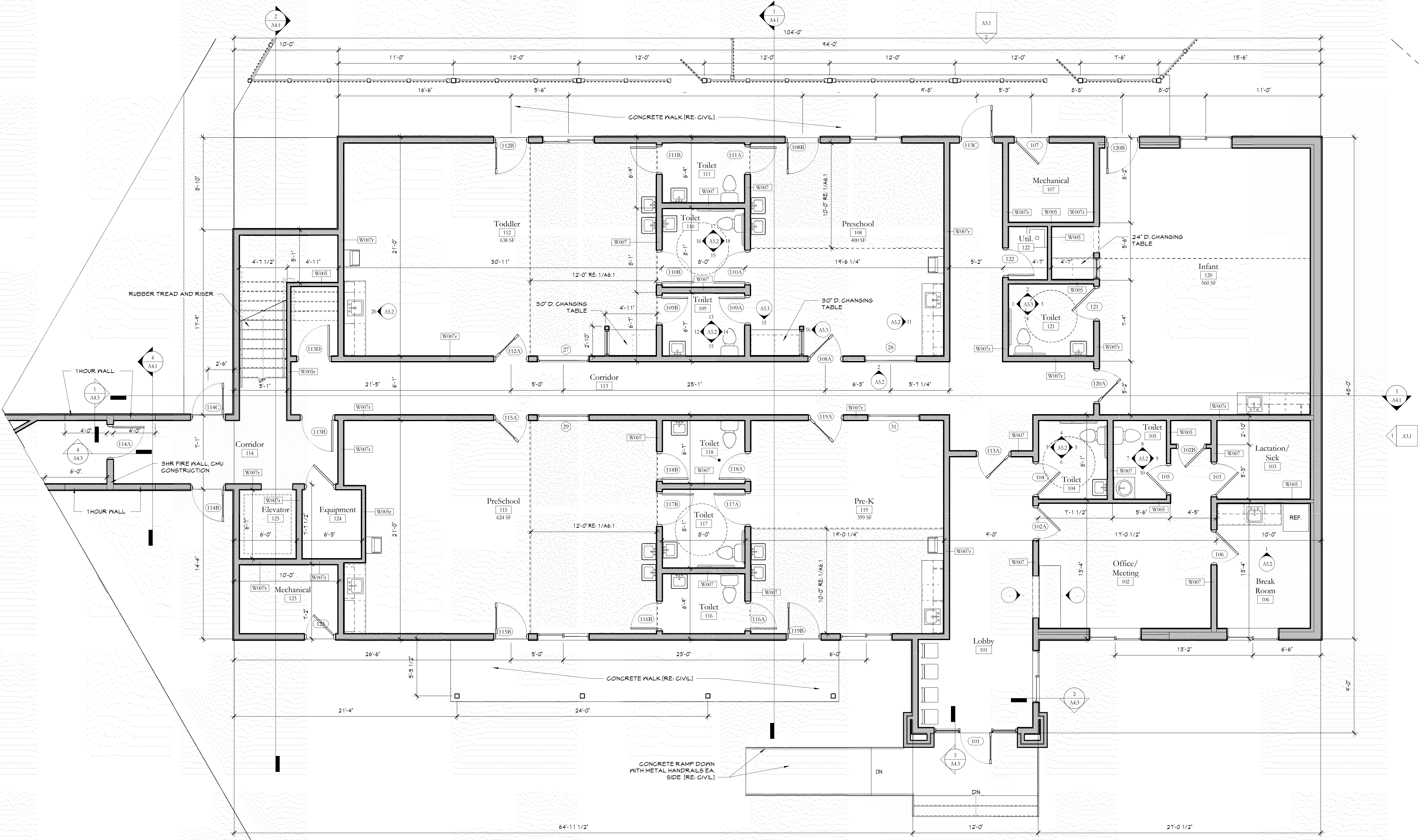
Site Plan

SHEET NAME

A1.1  
SHEET NUMBER



12/25/2024 2:00:32 PM



1 Floor Plan - Main Level  
1/4" = 1'-0"

Haven House Expansion

4886 N. River Rd., Olathe, CO 81425

REVISIONS

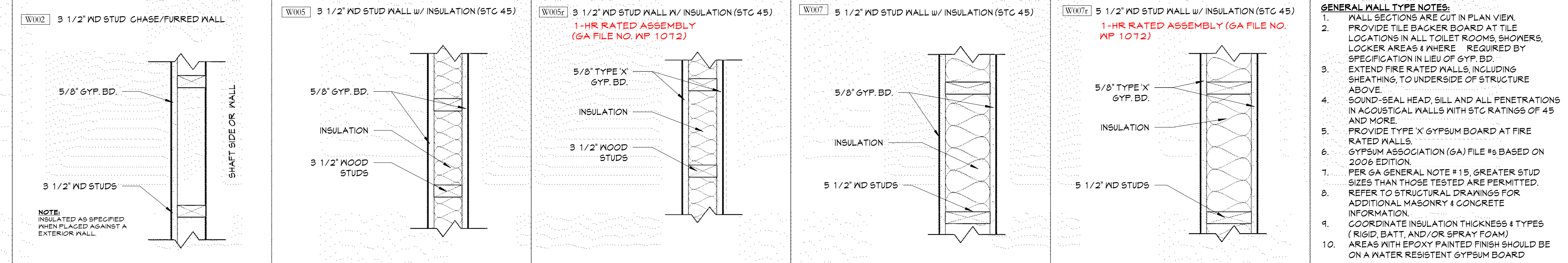
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ISSUE DATE: 12/3/24

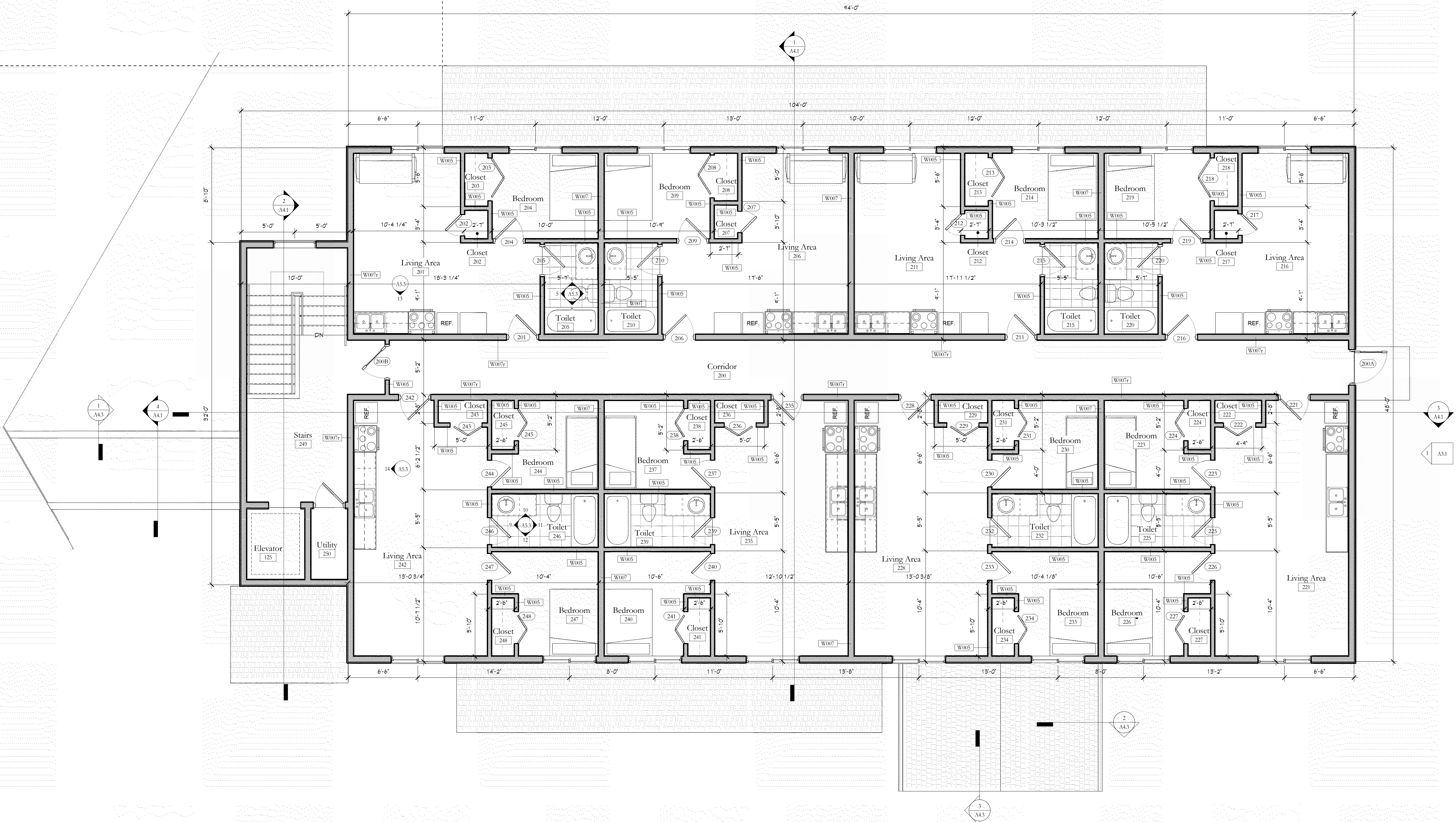
Main Level Floor Plan

SHEET NAME

A2.1  
SHEET NUMBER

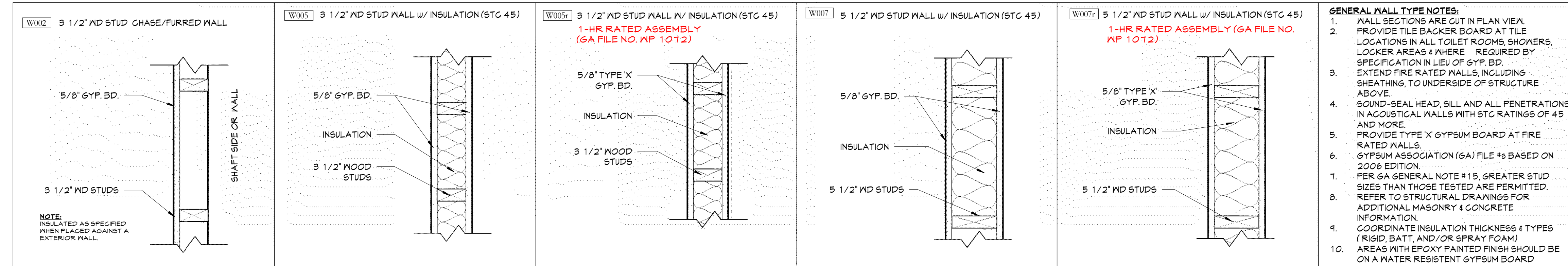
Wall Types





⊕ Floor Plan - Upper Level  
1/4" = 1'-0"

Wall Types



Haven House Expansion

486 N. River Rd., Olathe, CO 81425

REVISIONS

PROJECT NO: 2033  
PHASE: Bid  
ISSUE: E  
ISSUE DATE: 12/3/24

Upper Level  
Floor Plan

SHEET NAME

A2.2  
SHEET NUMBER



Haven House Expansion

4806 N. River Rd., Olathe, CO 81425

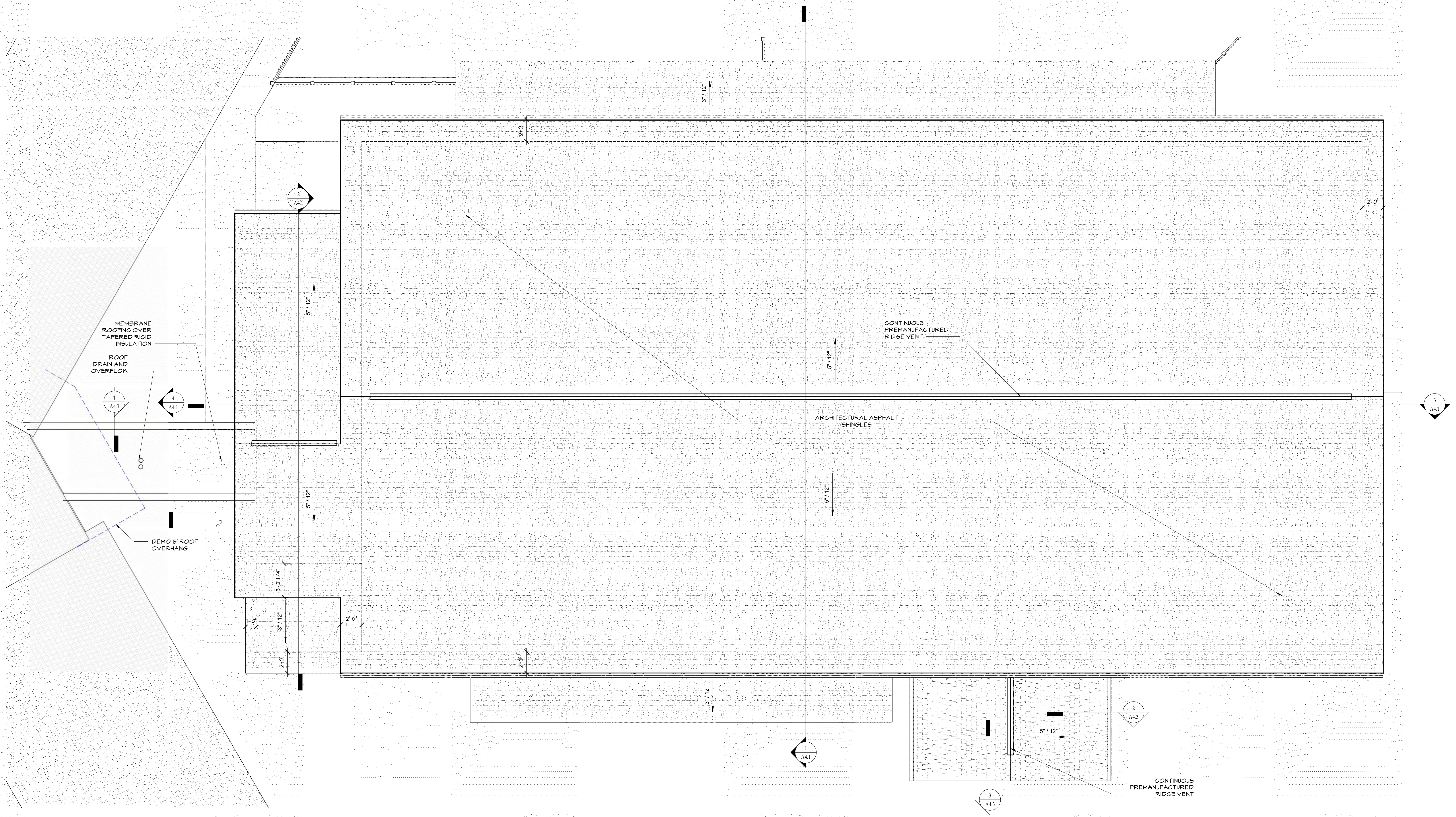
REVISIONS

PROJECT NO: 2033  
PHASE: Bid  
ISSUE: E  
ISSUE DATE: 12/3/24

Roof Plan

SHEET NAME

A2.5  
SHEET NUMBER



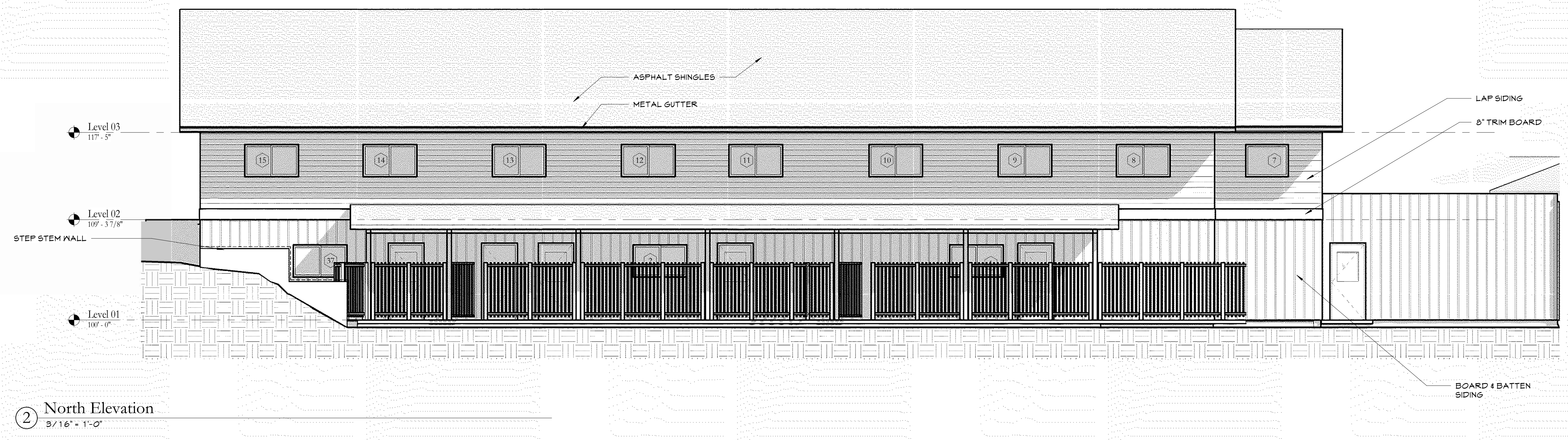
1 Roof Plan  
1/4" = 1'-0"



1 East Elevation  
3/16" = 1'-0"

Window Schedule							
Mark	Material	Glazing Type	Width	Height	Head Height	Frame Type	Comments
1	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
2	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
3	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
4	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
5	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
6	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
7	VYL	DBL	4'-0"	3'-0"	7'-0"	Fixed	Tempered
8	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
9	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
10	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
11	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
12	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
13	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
14	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
15	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
16	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
17	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
18	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
19	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
20	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
21	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
22	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
23	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
27	STL	TMP	5'-0"	3'-0"	7'-0"	Fixed	Borrowed Light - KD Frame-20 min rated
28	STL	TMP	5'-0"	3'-0"	7'-0"	Fixed	Borrowed Light - KD Frame-20 min rated
29	STL	TMP	5'-0"	3'-0"	7'-0"	Fixed	Borrowed Light - KD Frame-20 min rated
31	STL	TMP	5'-0"	3'-0"	7'-0"	Fixed	Borrowed Light - KD Frame-20 min rated
37	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	
38	VYL	DBL	5'-0"	3'-0"	7'-0"	Gliding1	

WINDOW FINISH & MATERIAL LEGEND: Al - Aluminum, VYL - Vinyl  
 NOTES:  
 1. Provide safety glazing in the following locations per Chapter 24 IBC:  
 a. Glazing adjacent to doors, within 24" of vertical edge, and less than 60" AFF  
 b. Glazing meeting all of the following conditions shall be considered located in a hazardous location:  
 • Windows with an exposed area of an individual pane greater than 9 s.f.  
 • Glazing with bottom edge less than 18" above the floor  
 • Glazing with top edge greater than 36" above the floor.  
 • One or more walking surfaces are within 36", measured horizontally  
 c. Glazing in guards and railings  
 d. Glazing in wet areas where the bottom edge of exposed glazing is less than 60" AFF, measured vertically from adjacent standing or walking surface.  
 e. Glazing adjacent to stairways and ramps.



2 North Elevation  
3/16" = 1'-0"



3 South Elevation  
3/16" = 1'-0"

Haven House Expansion

4886 N. River Rd., Olathe, CO 81425

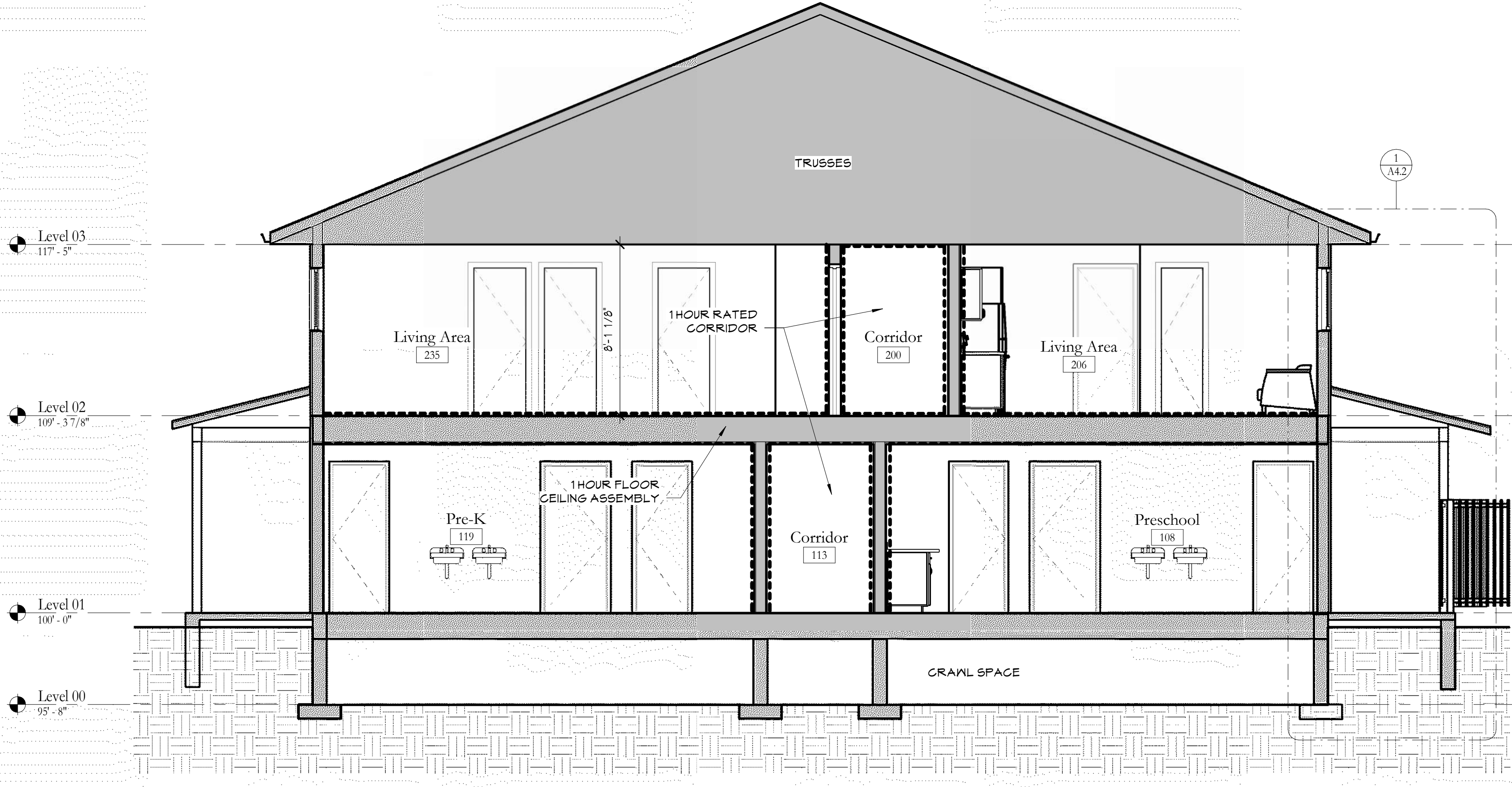
REVISIONS

PROJECT NO: 2033  
 PHASE: Bid  
 ISSUE: I  
 ISSUE DATE: 12/3/24

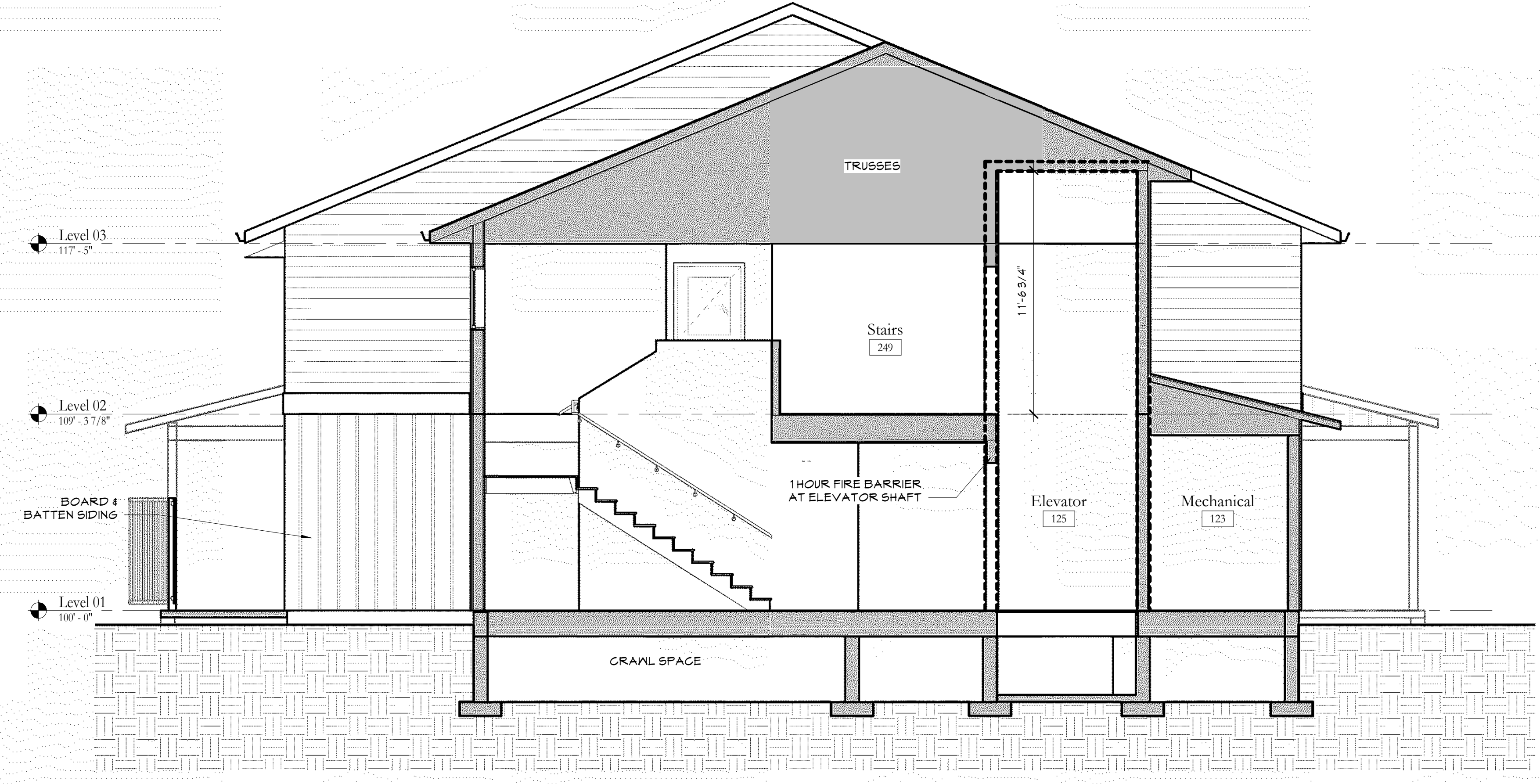
Elevations

SHEET NAME

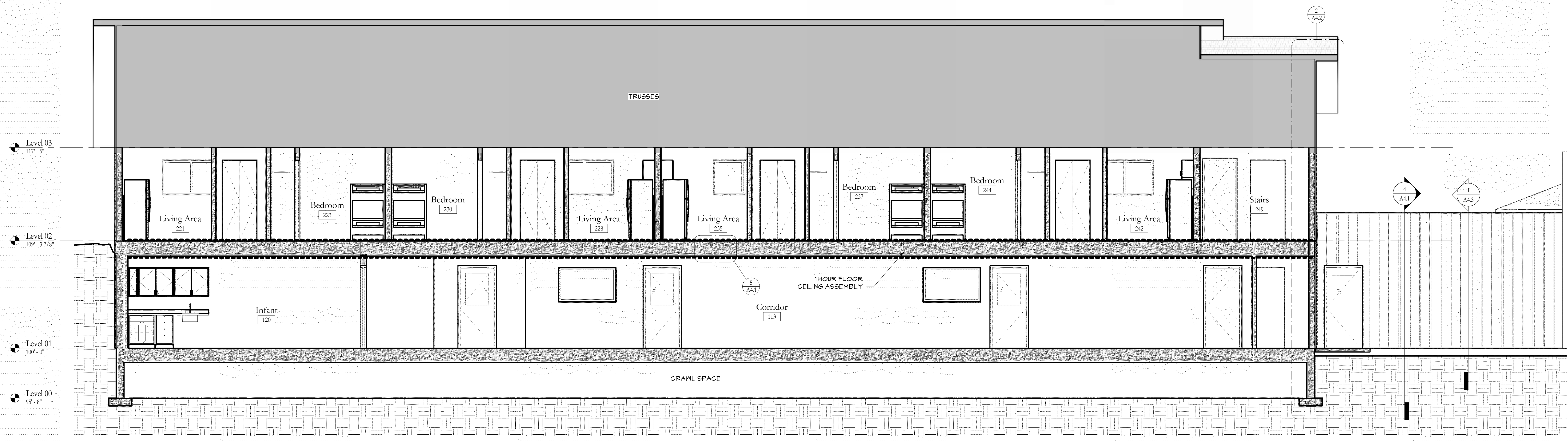
A3.1  
 SHEET NUMBER



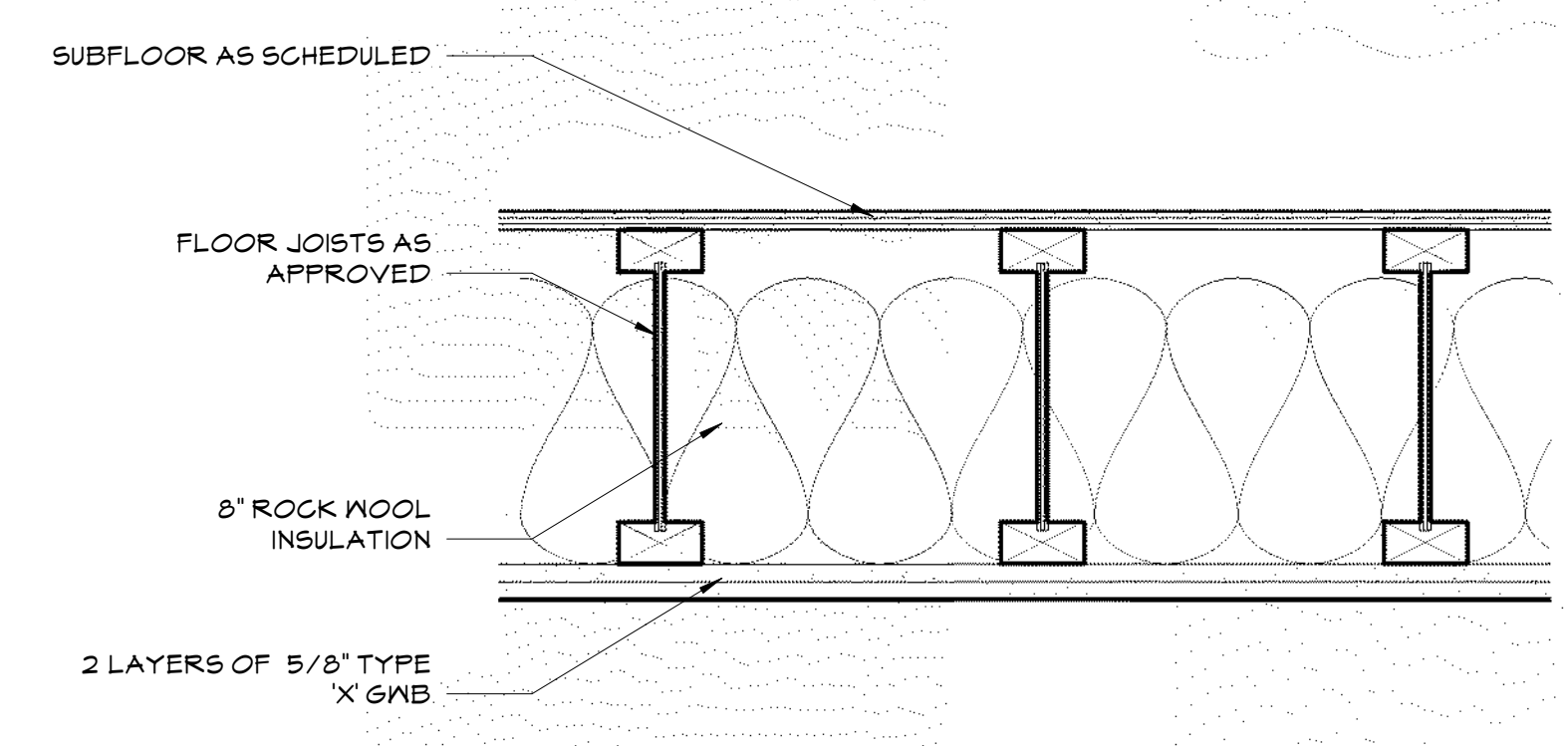
① Building Section  
1/4" = 1'-0"



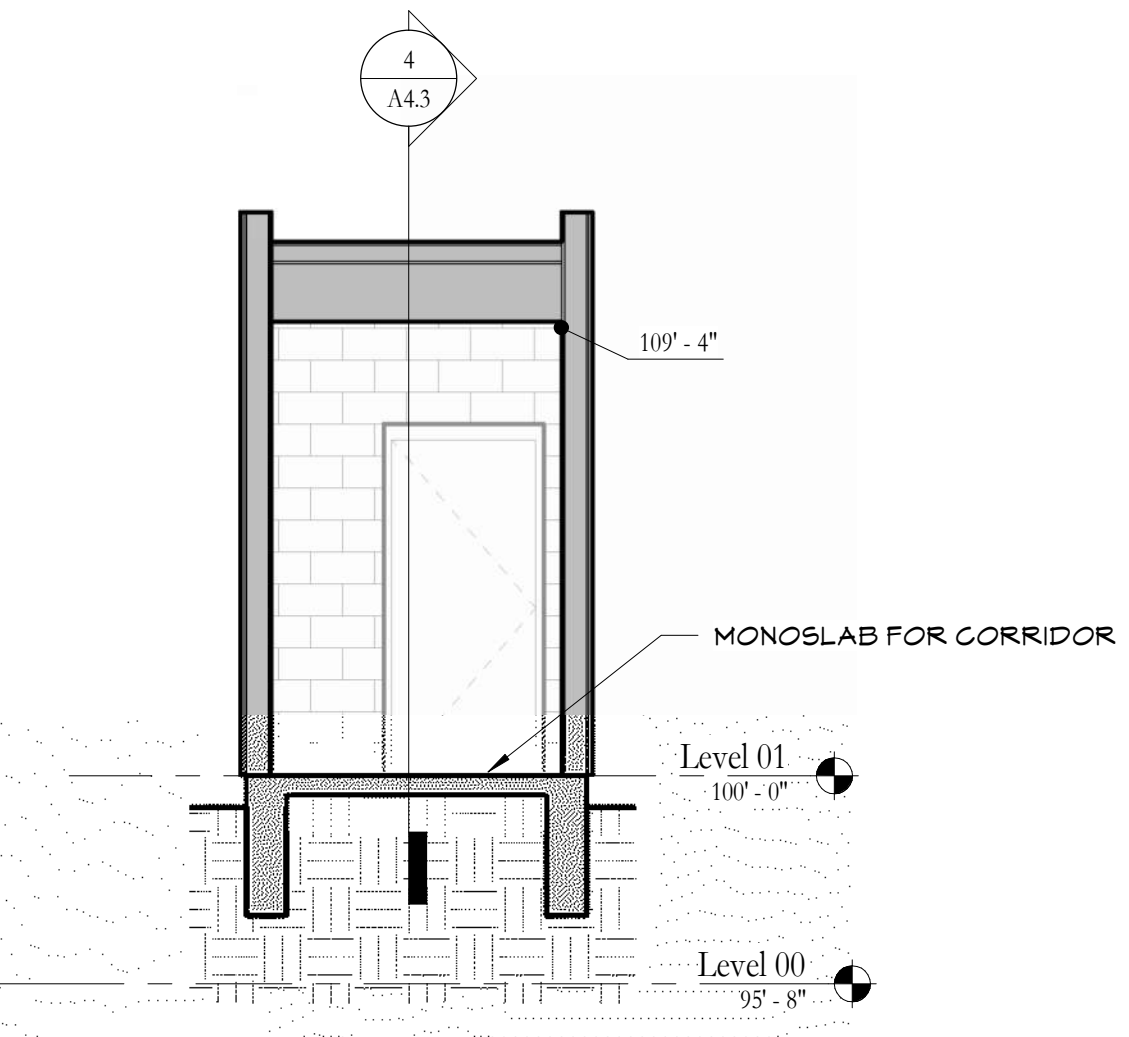
② Building Section  
1/4" = 1'-0"



③ Building Section  
1/4" = 1'-0"



⑤ 1hour Floor/Ceiling Assembly  
1 1/2" = 1'-0" GA FILE NO. FC 5401



④ Section 8  
1/4" = 1'-0"

Haven House Expansion

486 N. River Rd., Olathe, CO 81425

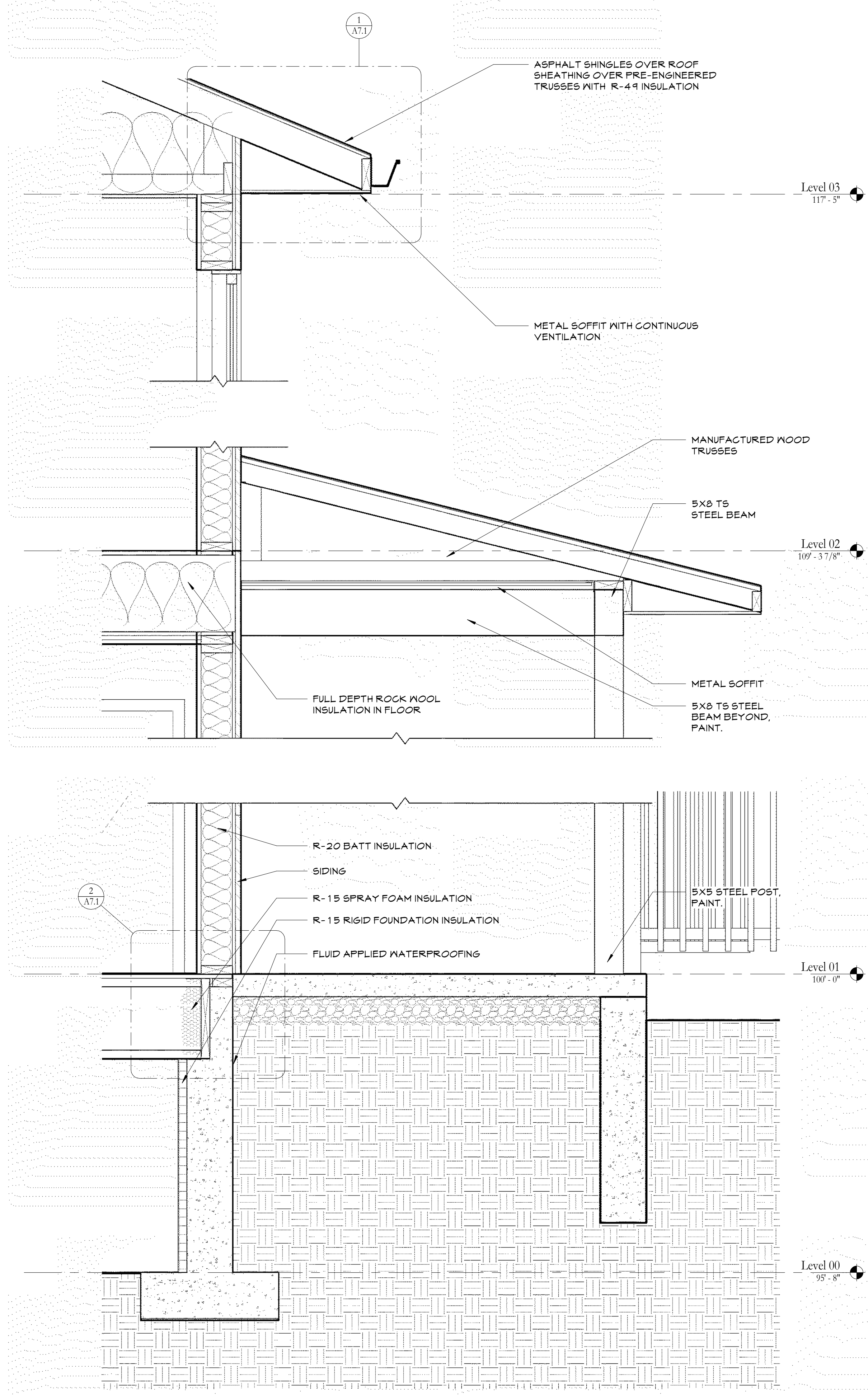
REVISIONS

PROJECT NO: 2033  
PHASE: Bid  
ISSUE: E  
ISSUE DATE: 12/3/24

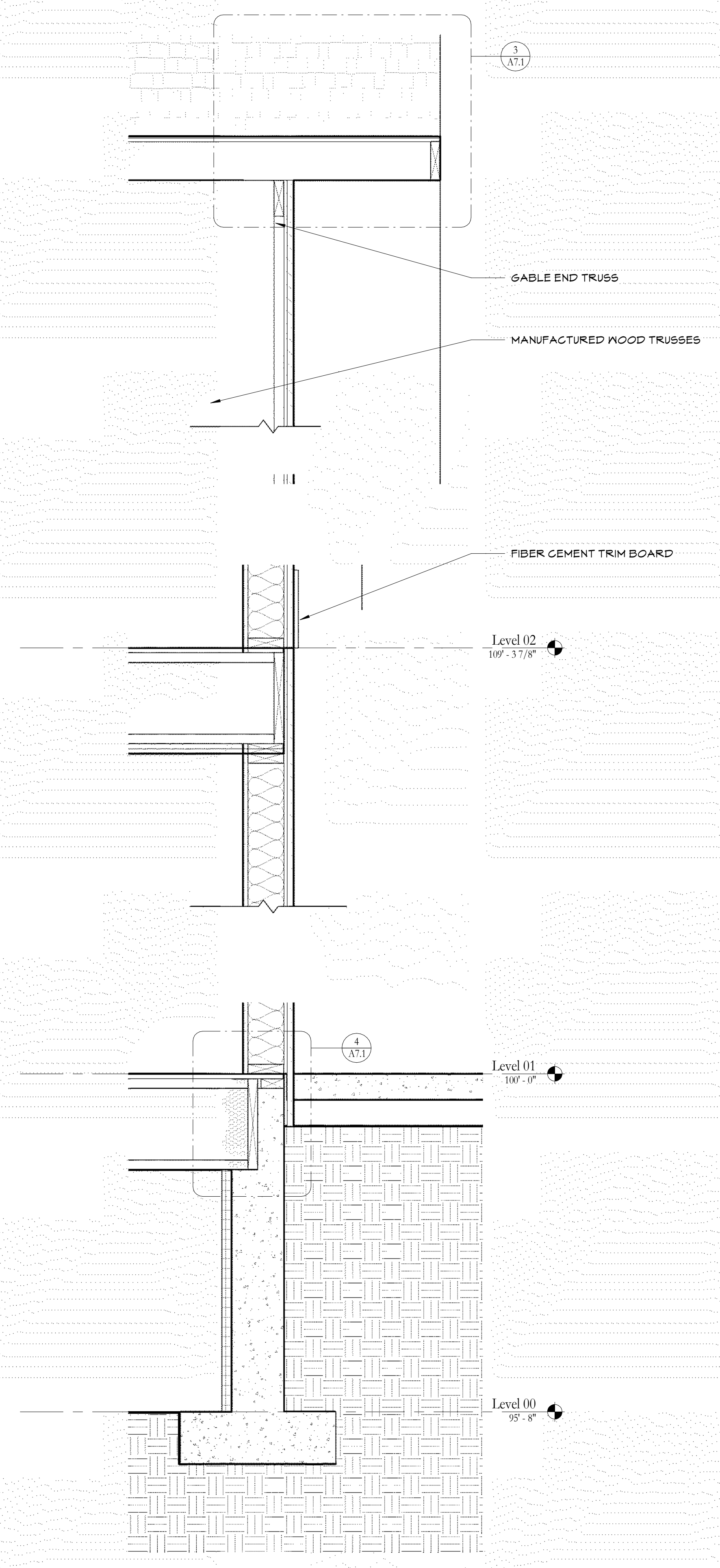
Building Sections

SHEET NAME

A4.1  
SHEET NUMBER



① Wall Section  
1" = 1'-0"



② Wall Section  
1" = 1'-0"

Haven House Expansion

4806 N. River Rd., Olathe, CO 81425

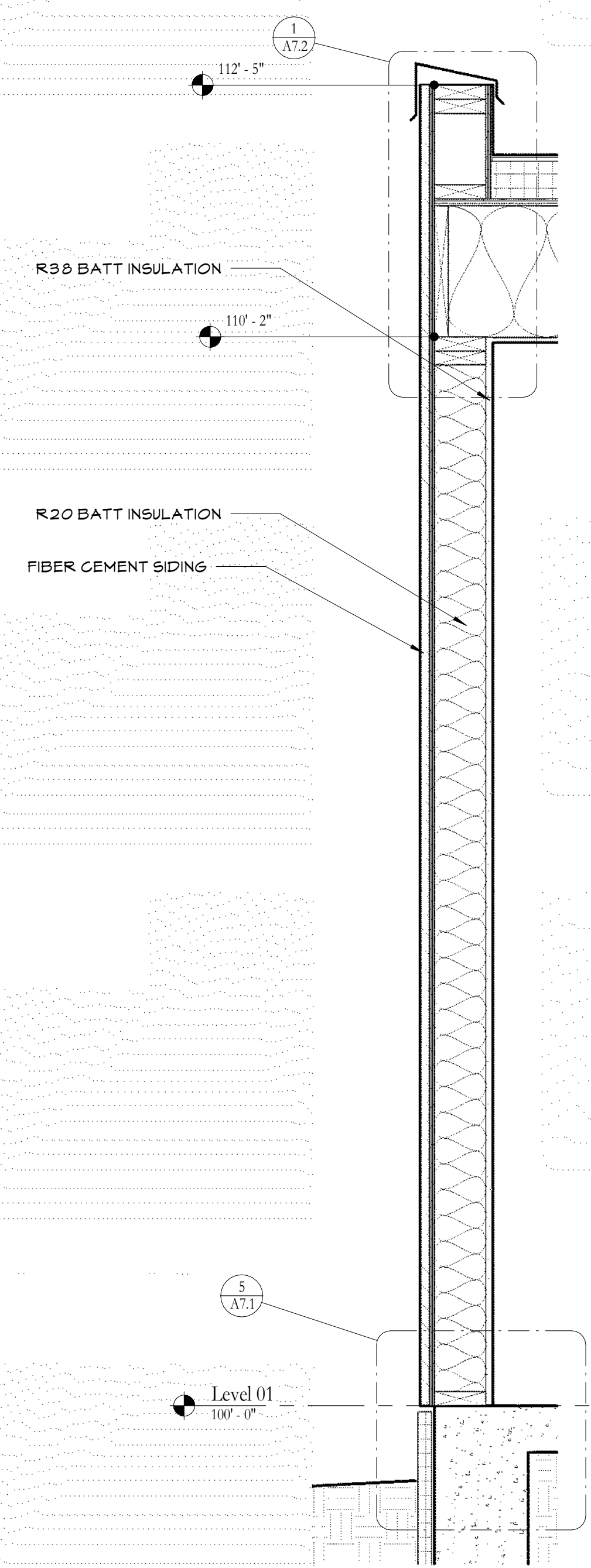
REVISIONS

PROJECT NO: 2033  
PHASE: Bid  
ISSUE: E  
ISSUE DATE: 12/3/24

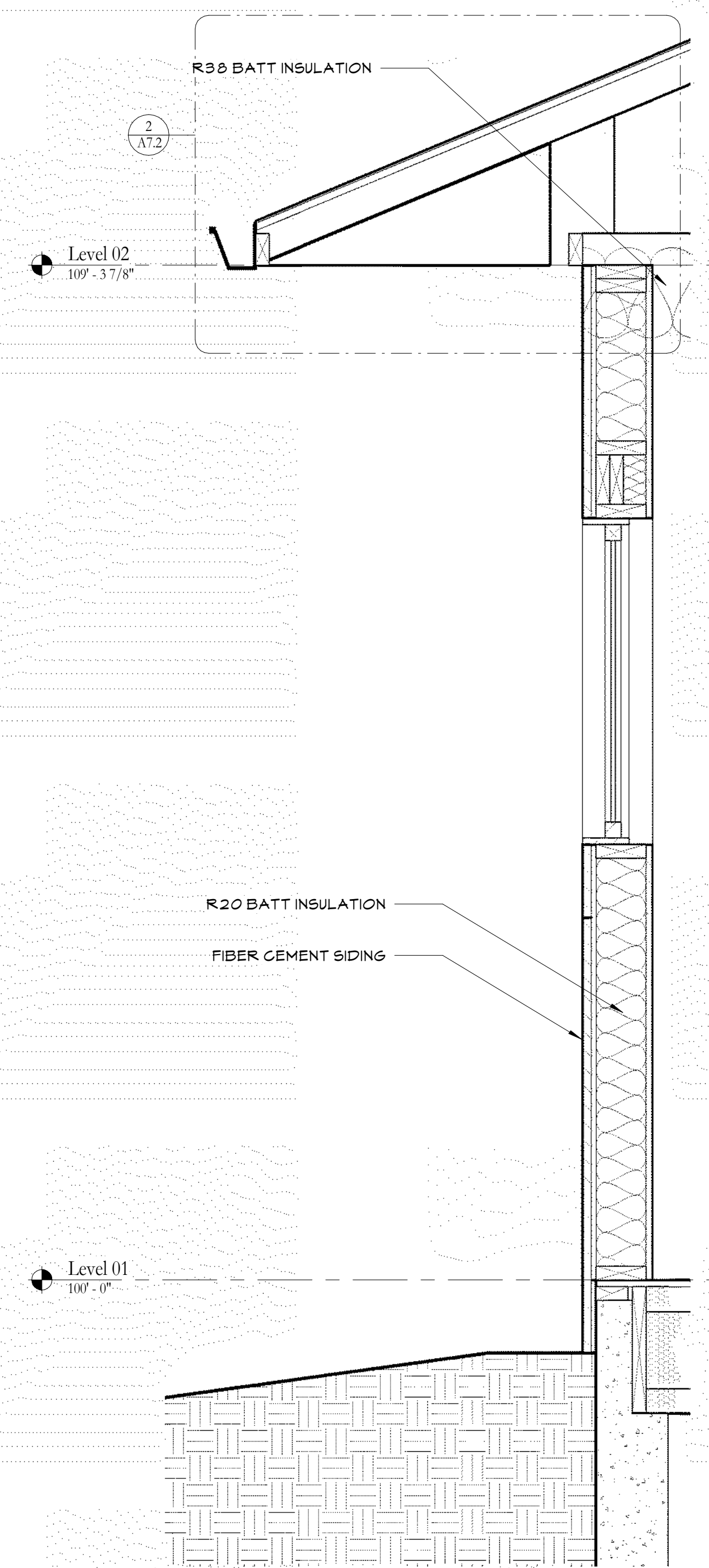
Wall Sections

SHEET NAME

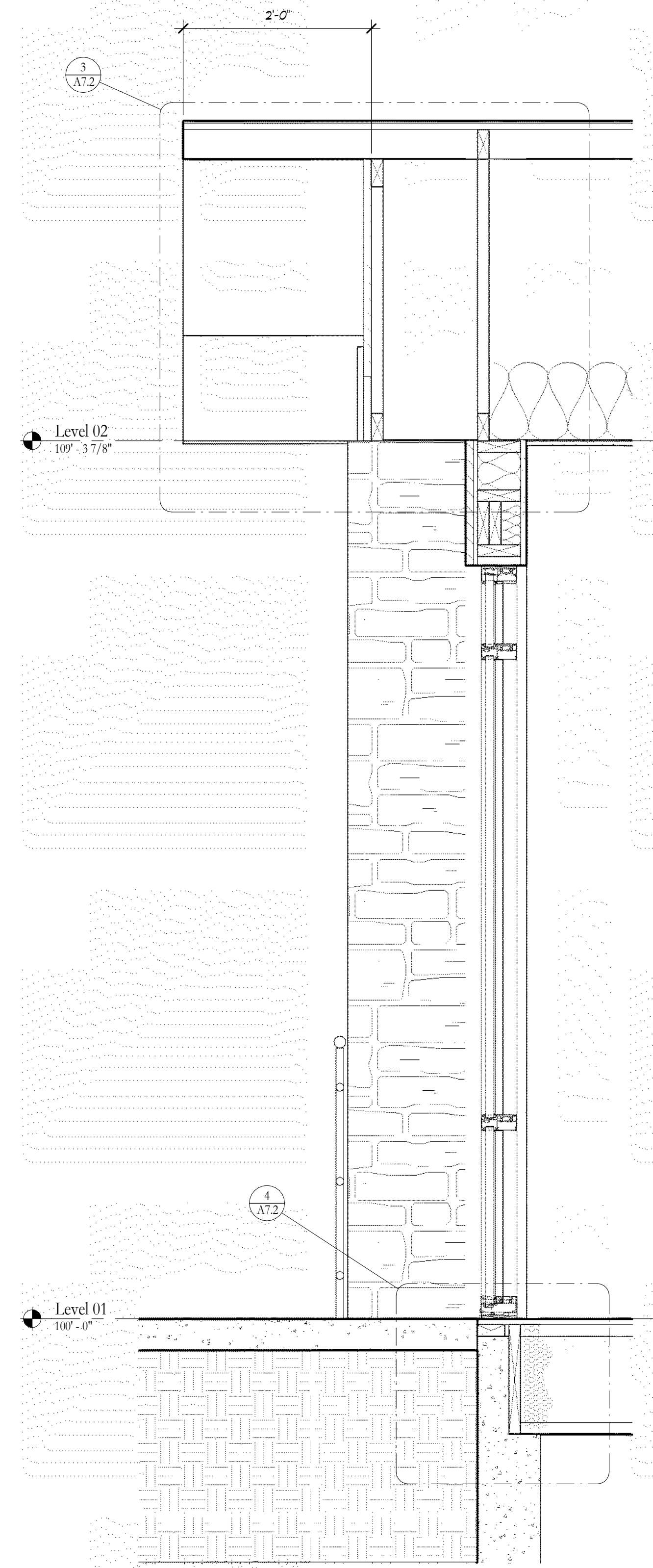
A4.2  
SHEET NUMBER



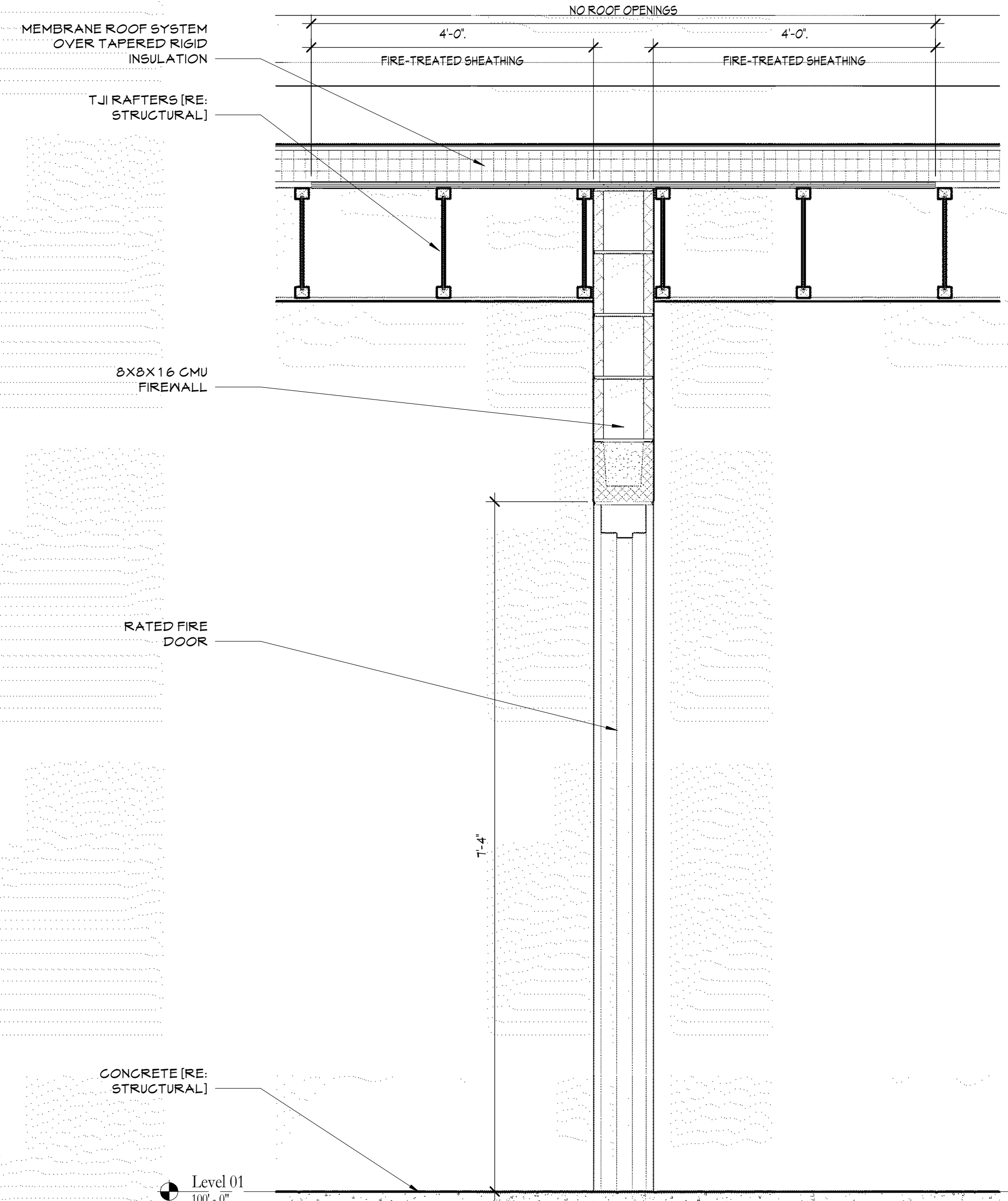
① Wall Section  
1" = 1'-0"



② Wall Section  
1" = 1'-0"



③ Wall Section  
1" = 1'-0"



④ Wall Section  
1" = 1'-0"

Haven House Expansion

486 N. River Rd., Olathe, CO 81425

REVISIONS

PROJECT NO:	2033
PHASE:	Bid
ISSUE:	I
ISSUE DATE:	12/3/24

Wall Sections

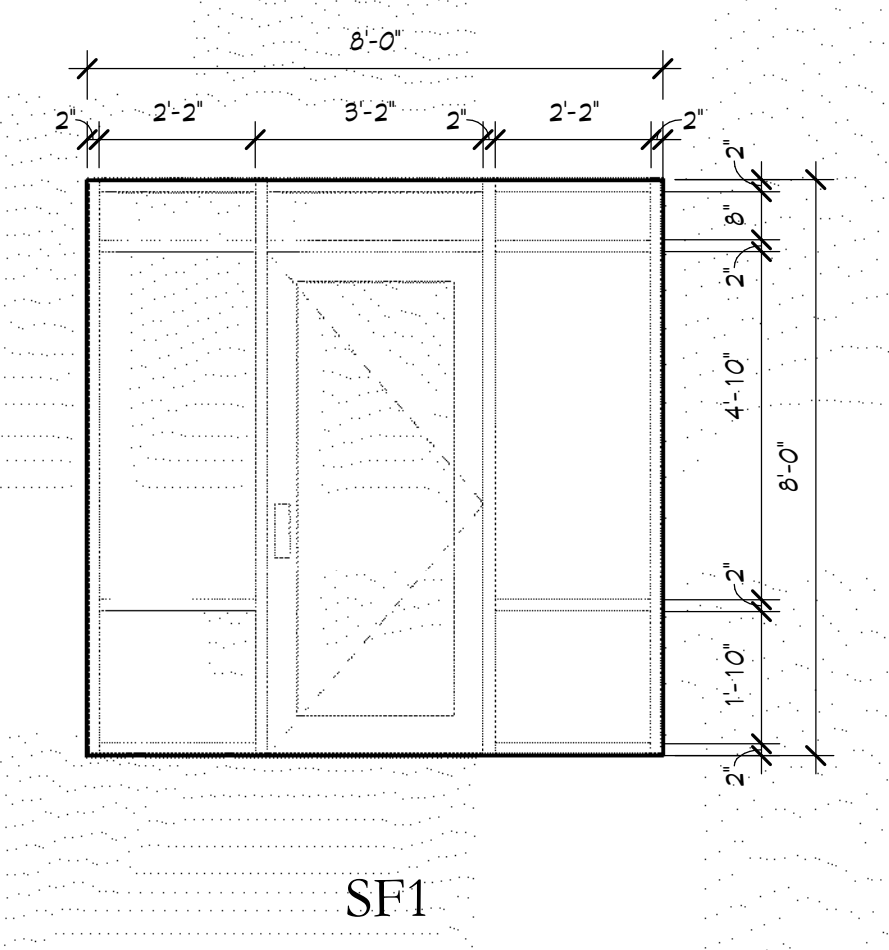
SHEET NAME

A4.3  
SHEET NUMBER

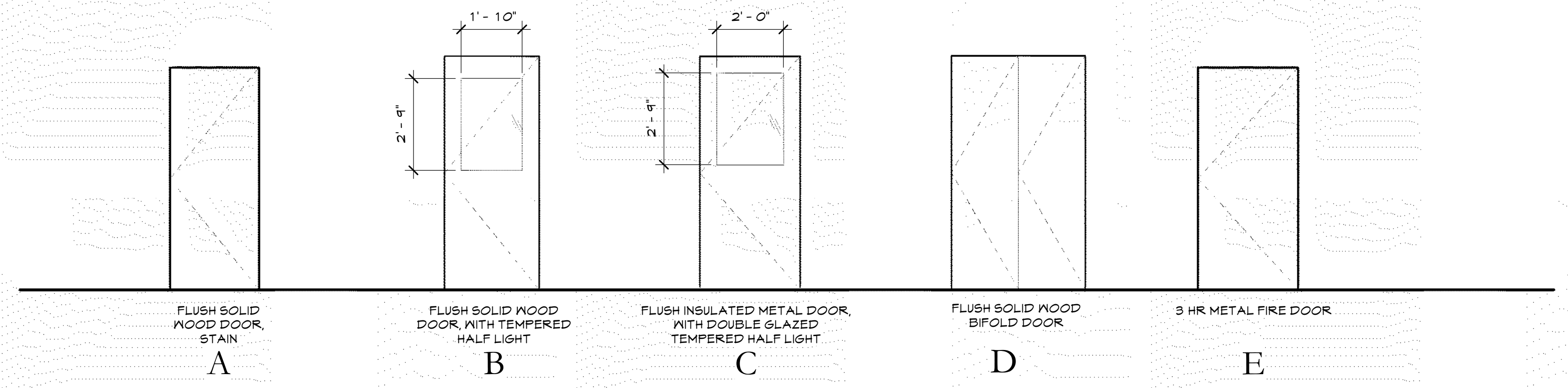
Door #	Type Mark	Height	Width	Door		Frame			Comments
				Material	Panel Finish	Frame Material	Frame Finish	Frame	
101	F	7'-0"	3'-0"	AL	FF	AL	FF		See Storefront Window SF1
102A	A	7'-0"	3'-0"	WD	ST	STL	FF		
102B	A	7'-0"	2'-6"	WD	ST	STL	FF		
103	A	7'-0"	3'-0"	WD	ST	STL	FF		
104	A	7'-0"	3'-0"	WD	ST	STL	FF		
105	A	7'-0"	2'-8"	WD	ST	STL	FF		
106	A	7'-0"	3'-0"	WD	ST	STL	FF		
107	A	7'-0"	3'-0"	WD	ST	STL	PT		
108A	B	7'-0"	3'-0"	WD	ST	MTL	FF		Closer, Half-lite, Door Seal, 20 min rated
108B	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite
109A	A	7'-0"	2'-6"	WD	ST	STL	PT		
109B	A	7'-0"	2'-6"	WD	ST	STL	FF		
110A	A	7'-0"	3'-0"	WD	ST	STL	FF		
110B	A	7'-0"	3'-0"	WD	ST	STL	FF		
111A	A	7'-0"	2'-6"	WD	ST	STL	FF		
111B	A	7'-0"	2'-6"	WD	ST	STL	FF		
112A	B	7'-0"	3'-0"	WD	ST	MTL	FF		Closer, Half-lite, Door Seal, 20 min rated
112B	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite
113A	B	7'-0"	3'-0"	WD	ST	STL	FF		Closer, Half-lite, Access Control Hardware
113B	A	7'-0"	3'-0"	WD	ST	STL	FF		Closer, Door Seal, panic hardware, 20 min rated, access control
113C	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite, Panic Hardware
113D	A	7'-0"	3'-0"	WD	FF	STL	FF		
114A	E	7'-0"	3'-0"	MTL	FF	STL	PT		3 hr Fire Door with Closer, Smoke Seal, Fire Exit Hardware
114B	C	7'-0"	3'-0"	MTL	ST	STL	FF		Closer, Half-lite, Panic Hardware
114C	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite, Panic Hardware
115A	B	7'-0"	3'-0"	WD	ST	MTL	FF		Closer, Half-lite, Door Seal, 20 min rated
115B	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite
116A	A	7'-0"	2'-6"	WD	ST	STL	FF		
116B	A	7'-0"	2'-6"	WD	ST	STL	FF		
117A	A	7'-0"	3'-0"	WD	ST	STL	FF		
117B	A	7'-0"	3'-0"	WD	ST	STL	FF		
118A	A	7'-0"	2'-6"	WD	ST	STL	PT		
118B	A	7'-0"	2'-6"	WD	ST	STL	PT		
119A	B	7'-0"	3'-0"	WD	ST	MTL	FF		Closer, Half-lite, Door Seal, 20 min rated
119B	A	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite
120A	B	7'-0"	3'-0"	WD	ST	MTL	FF		Closer, Half-lite, Door Seal, 20 min rated
120B	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite
121	A	7'-0"	3'-0"	WD	ST	STL	PT		
122	A	7'-0"	2'-6"	WD	ST	STL	PT		
123	A	7'-0"	2'-8"	WD	ST	STL	PT		
124	A	7'-0"	2'-8"	WD	ST	STL	PT		
125	A	7'-0"	2'-8"	WD	ST	STL	FF		
200A	C	7'-0"	3'-0"	MTL	FF	STL	FF		Closer, Half-lite
200B	B	7'-0"	3'-0"	WD	ST	STL	FF		Closer, Half-lite, Door Seal, 20 min rated
201	A	7'-0"	2'-8"	WD	ST	STL	FF		Door Seal, 20 min rated
202	A	7'-0"	2'-0"	WD	ST	MTL	FF		
203	D	7'-0"	4'-0"	WD	ST	-	-		Bi-fold Door
204	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
205	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
206	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
207	A	7'-0"	2'-0"	WD	ST	MTL	FF		
208	D	7'-0"	4'-0"	WD	ST	-	-		Bi-fold Door
209	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
210	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
211	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
212	B	7'-0"	2'-0"	WD	ST	MTL	FF		
213	D	7'-0"	4'-0"	WD	ST	-	-		Bi-fold Door
214	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
215	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
216	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
217	A	7'-0"	2'-0"	WD	ST	MTL	FF		
218	D	7'-0"	4'-0"	WD	ST	-	-		Bi-fold Door
219	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
220	A	7'-0"	2'-8"	WD	ST	STL	PT		Privacy Hardware
221	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
222	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
223	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
224	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
225	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
226	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
227	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
228	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
229	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
230	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
231	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
232	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
233	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
234	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
235	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
236	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
237	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
238	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
239	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
240	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
241	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
242	A	7'-0"	2'-8"	WD	ST	STL	PT		Door Seal, 20 min rated
243	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
244	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
245	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door
246	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
247	A	7'-0"	2'-6"	WD	ST	MTL	FF		Privacy Hardware
248	D	7'-0"	3'-0"	WD	ST	-	-		Bi-fold Door

DOOR FINISH & MATERIAL LEGEND: AL - Aluminum, FF - Factory Finish, MTL - Insulated Hollow Metal, ST - Stain, WD - Solid Core Wood

NOTES:  
1. Provide safety glazing in doors with vision panels or half lights.



Door Types



STAMP  
© Motley Architecture & Design

Haven House Expansion

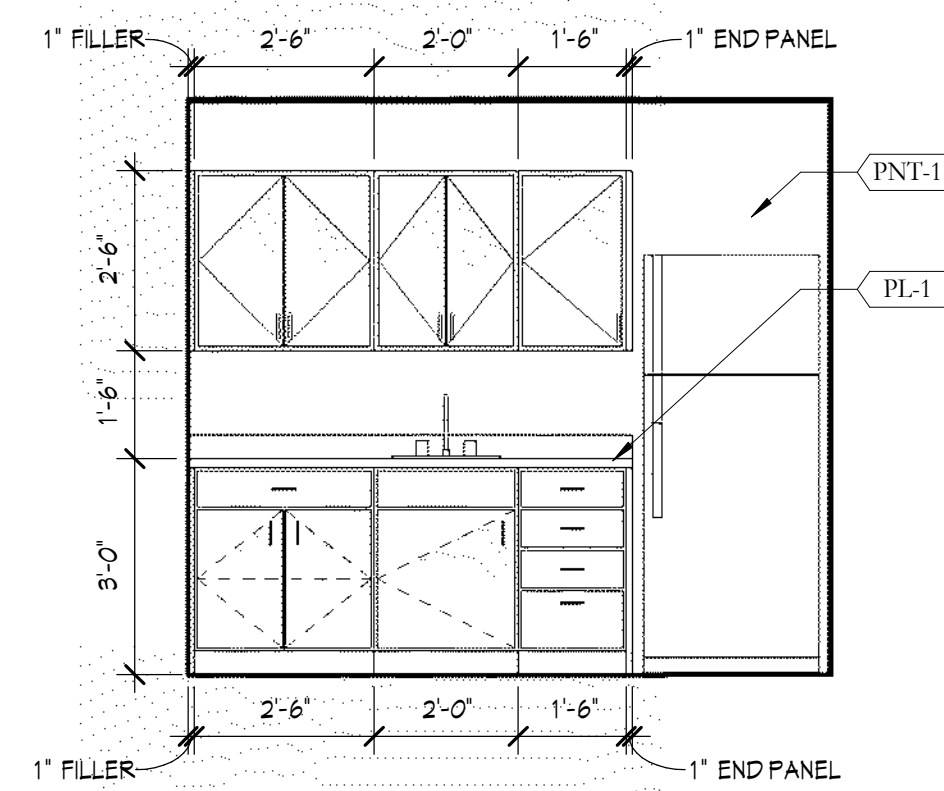
4806 N. River Rd., Durango, CO 81425

REVISIONS

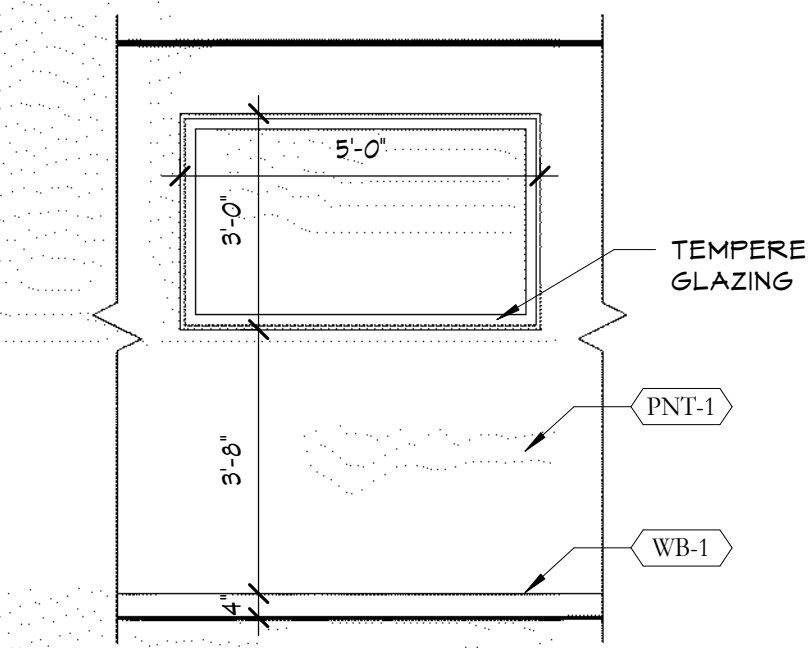
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PHASE: Bld  
ISSUE: I  
ISSUE DATE: 12/3/24

Schedules & Details

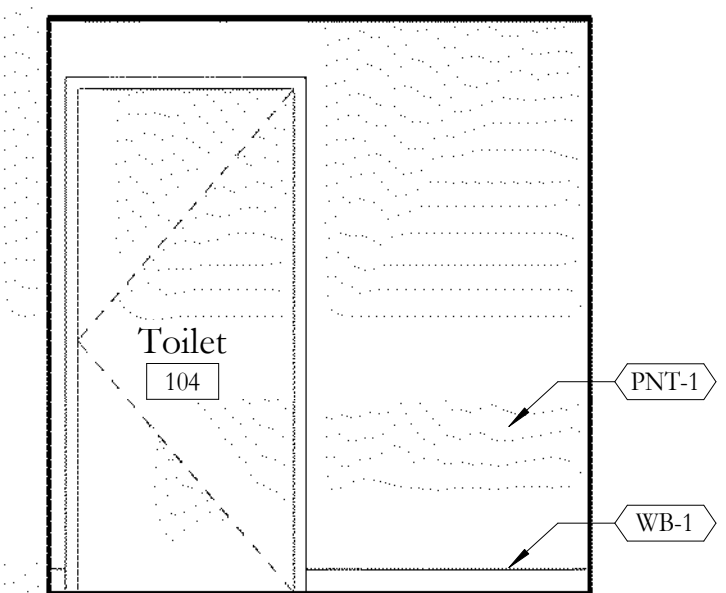
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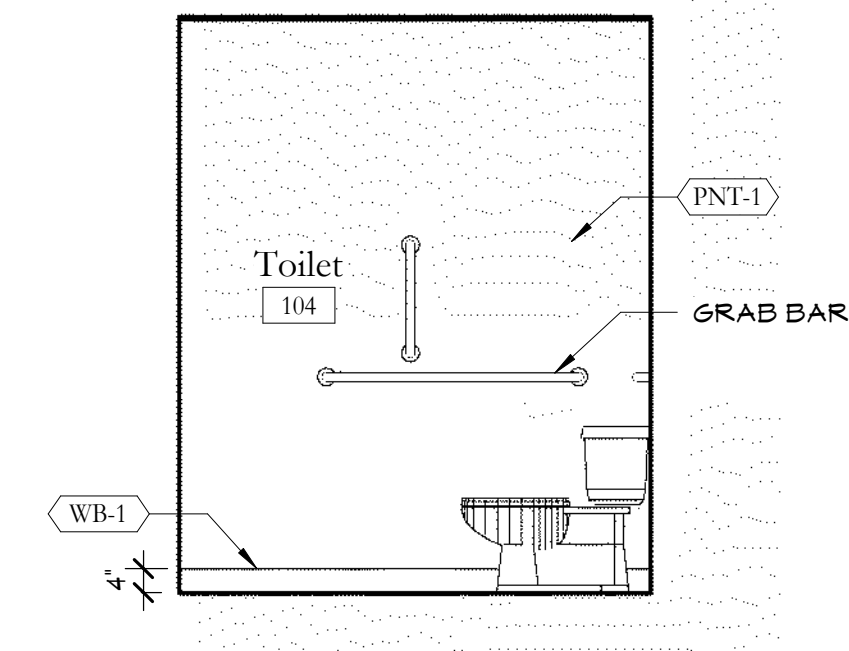
① 106N  
3/8" x 1'-0"



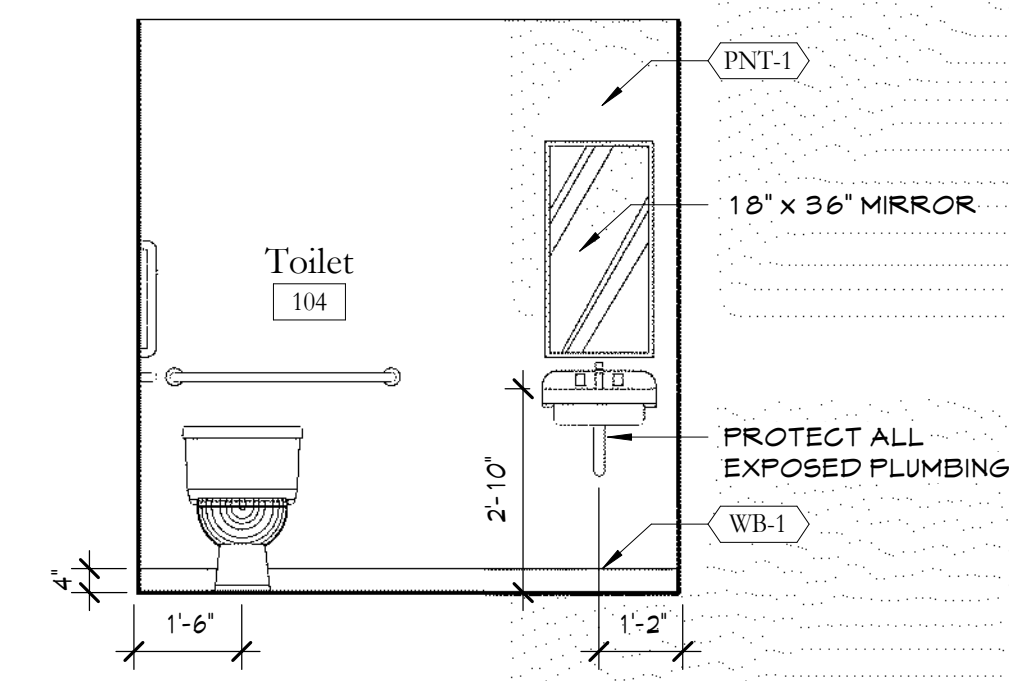
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3/8" x 1'-0"



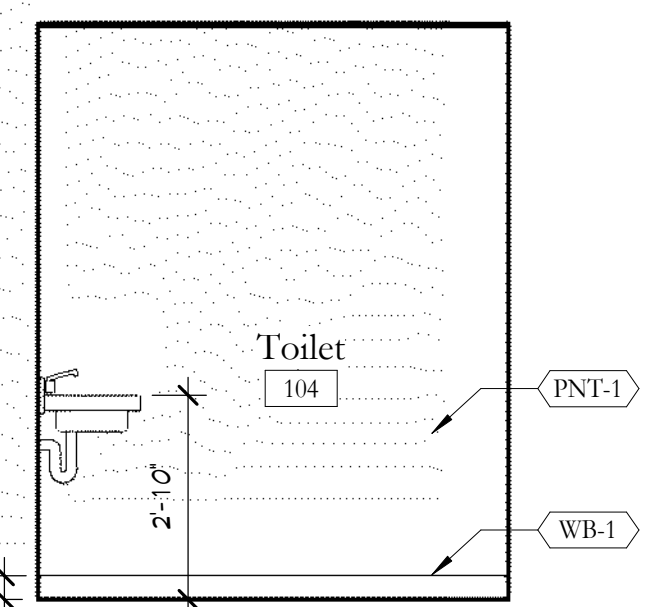
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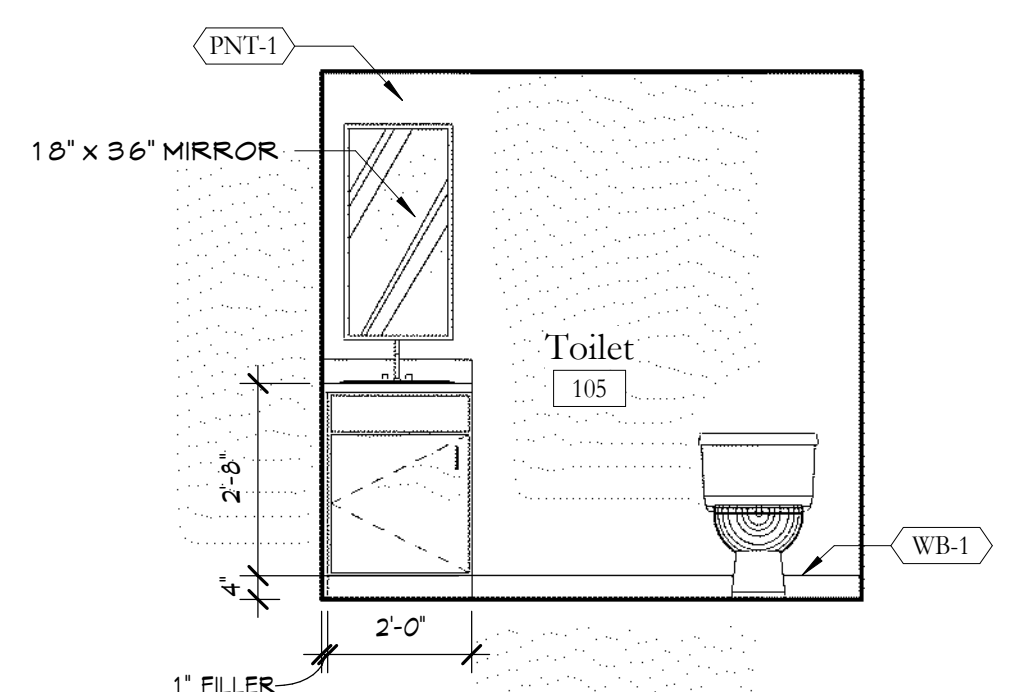
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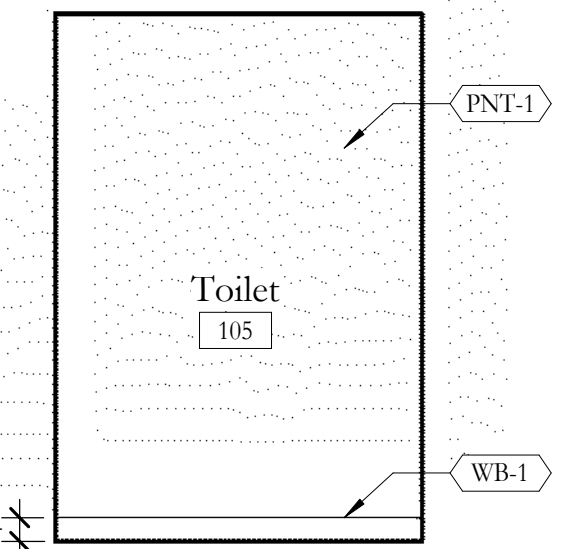
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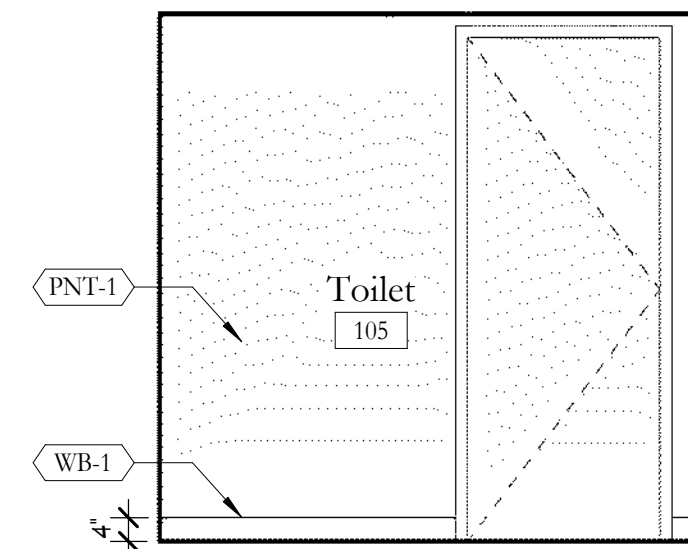
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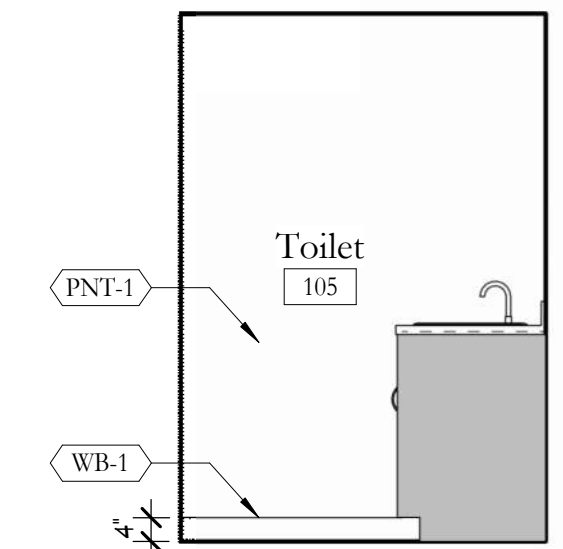
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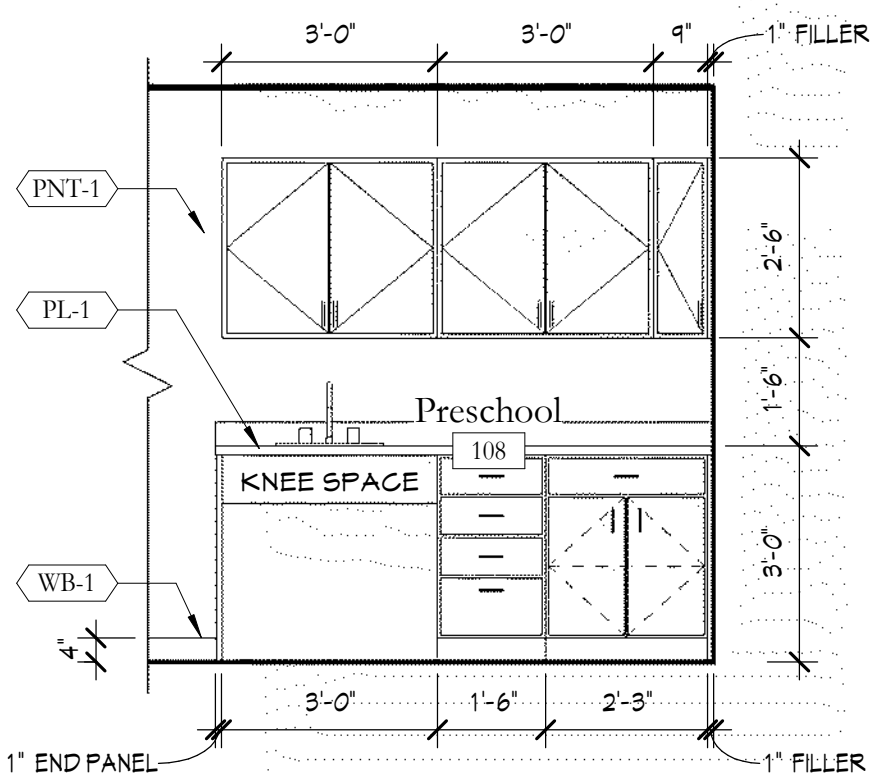
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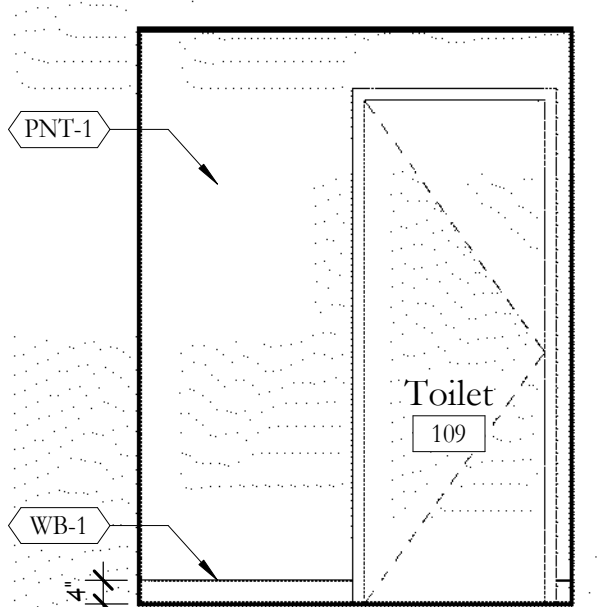
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3/8" x 1'-0"



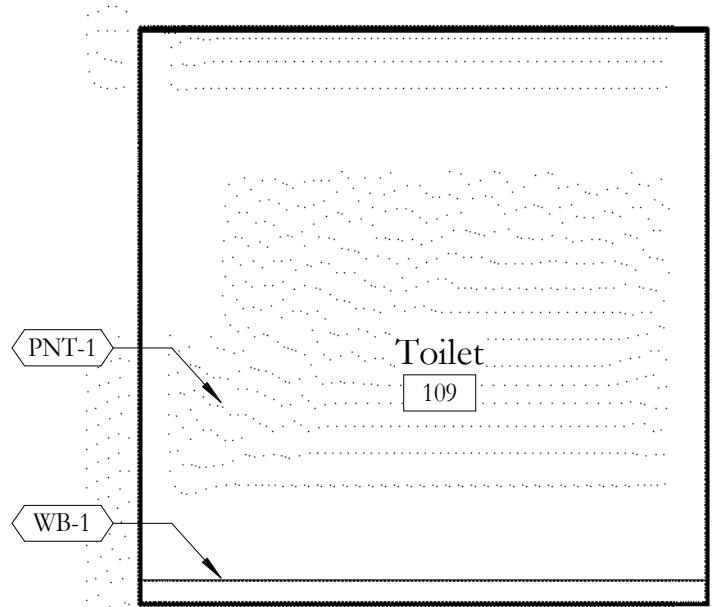
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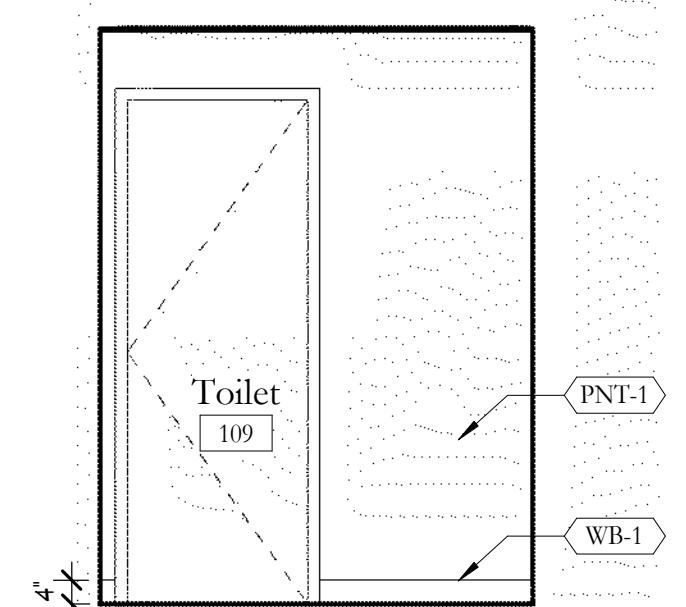
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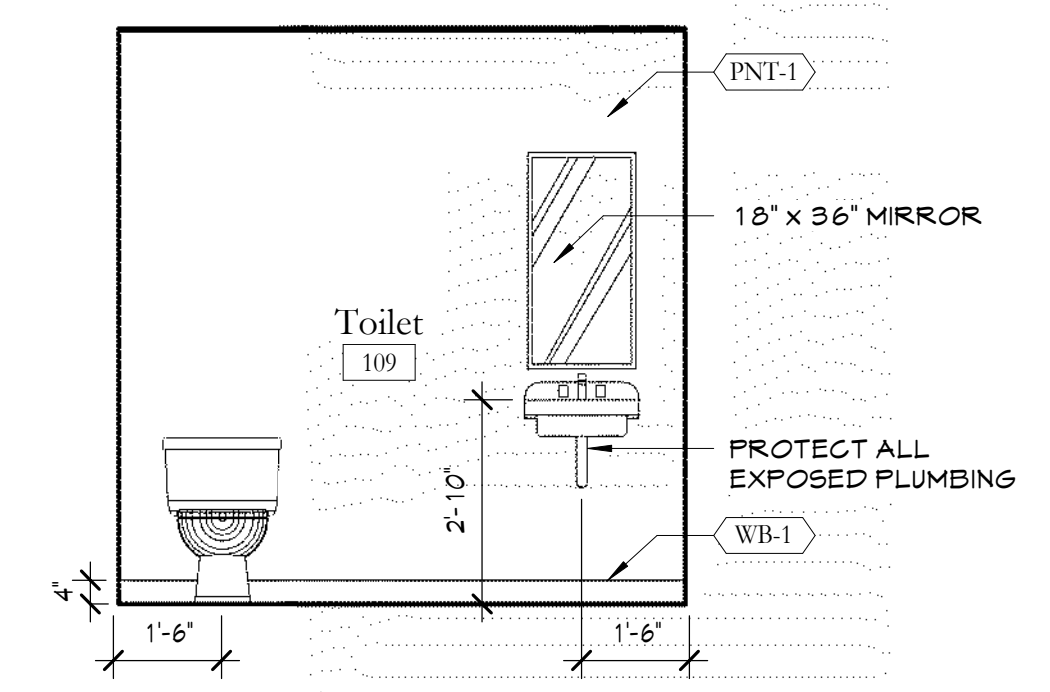
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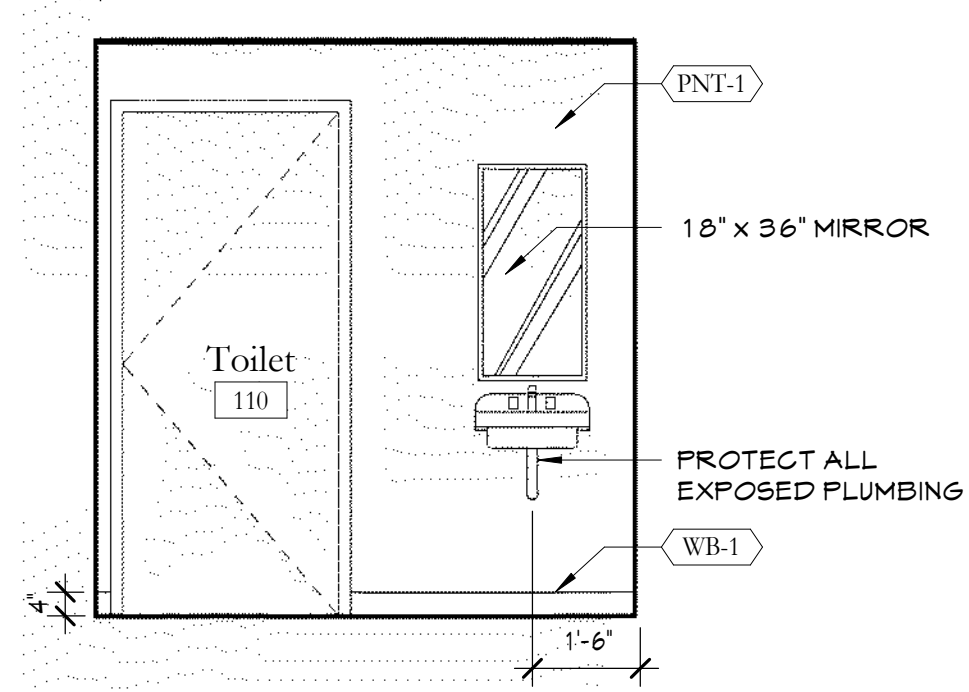
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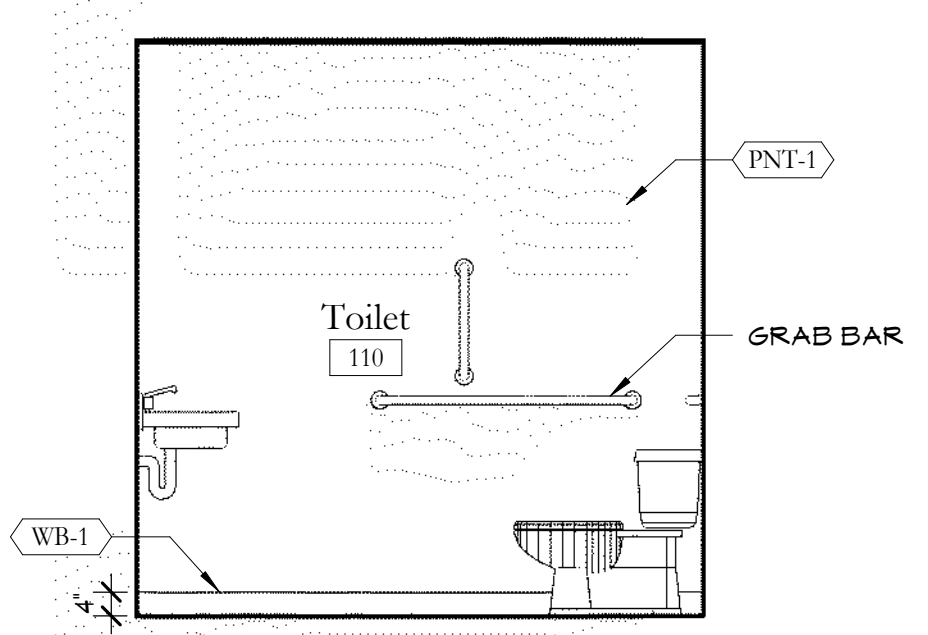
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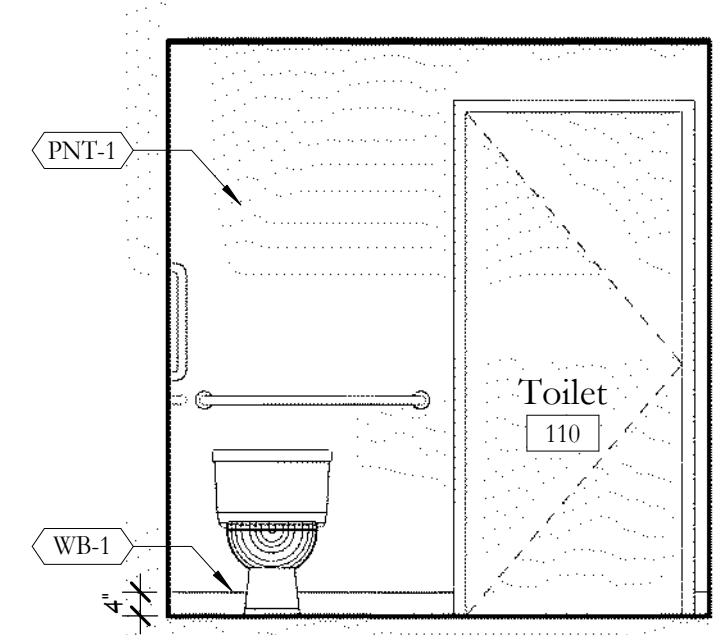
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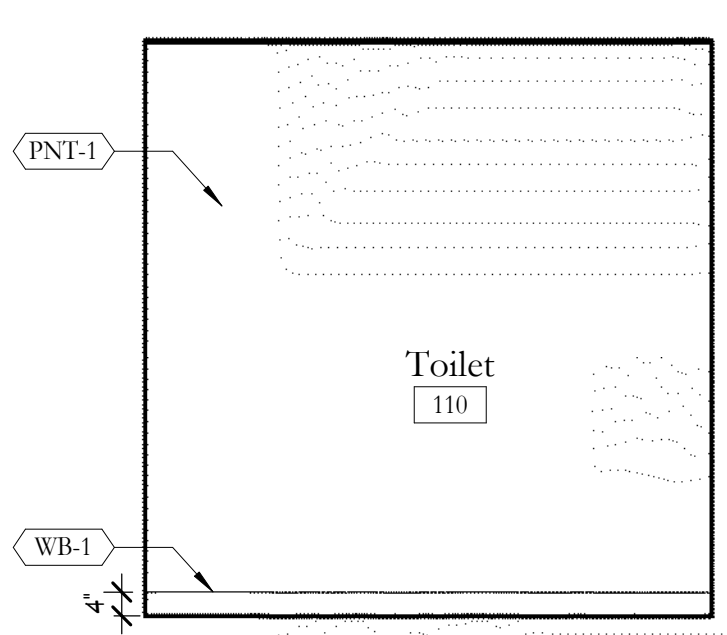
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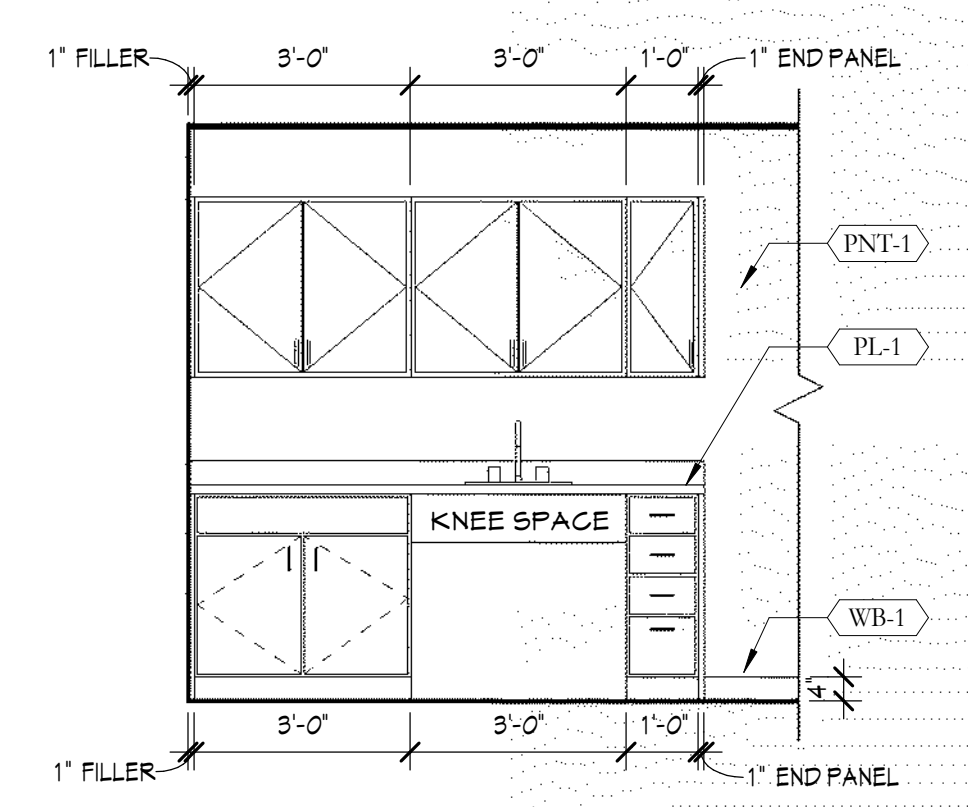
⑰ 110N  
3/8" x 1'-0"



⑱ 110E  
3/8" x 1'-0"



⑲ 110S  
3/8" x 1'-0"



⑳ Interior Elevation  
3/8" x 1'-0"

Haven House Expansion

486 N. River Rd., Olathe, CO 81425

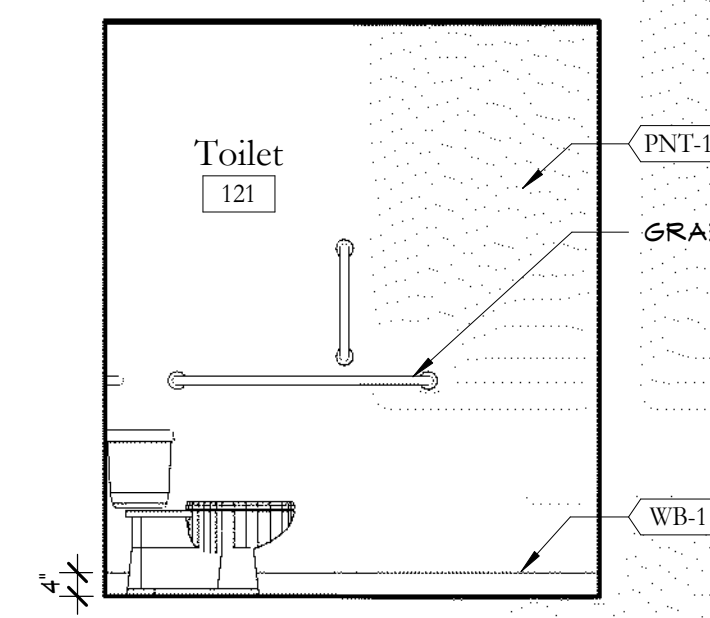
REVISIONS

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ISSUE DATE:	12/3/24

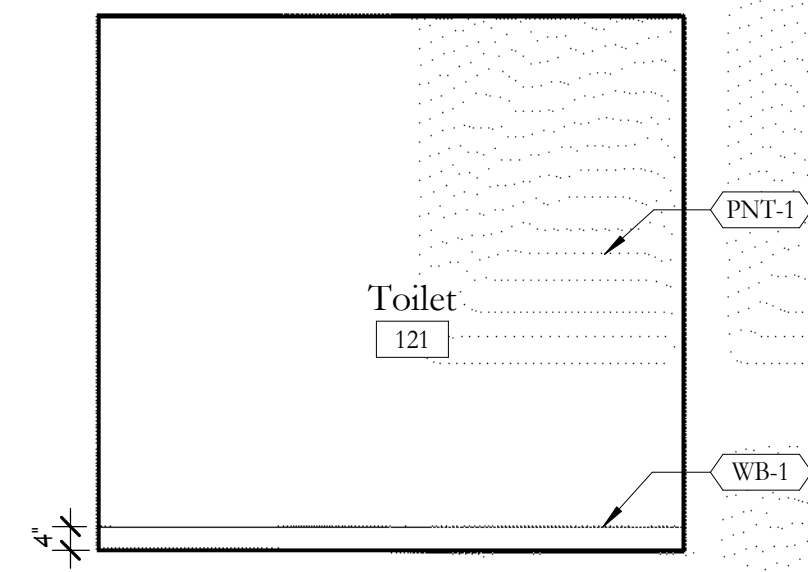
Interior Elevations

SHEET NAME

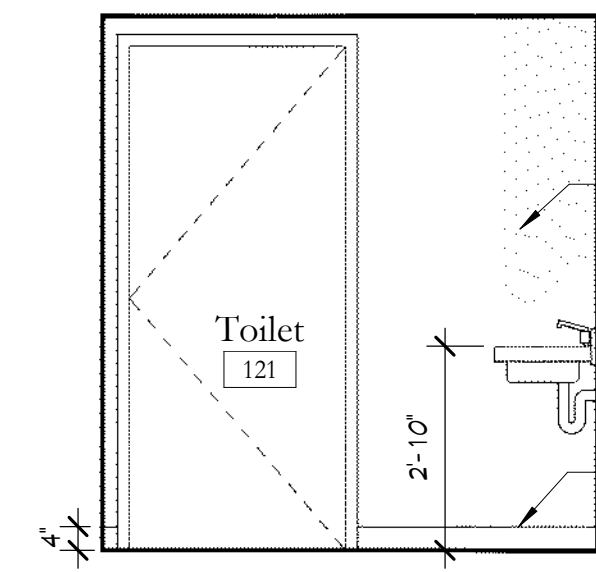
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SHEET NUMBER



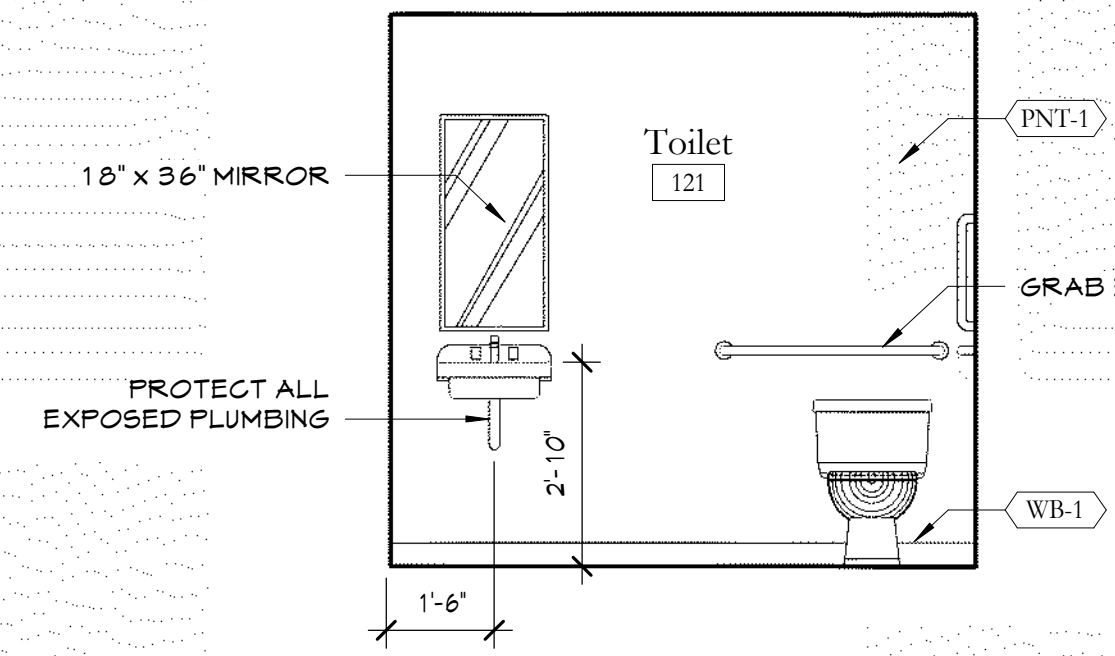
1 Interior Elevation  
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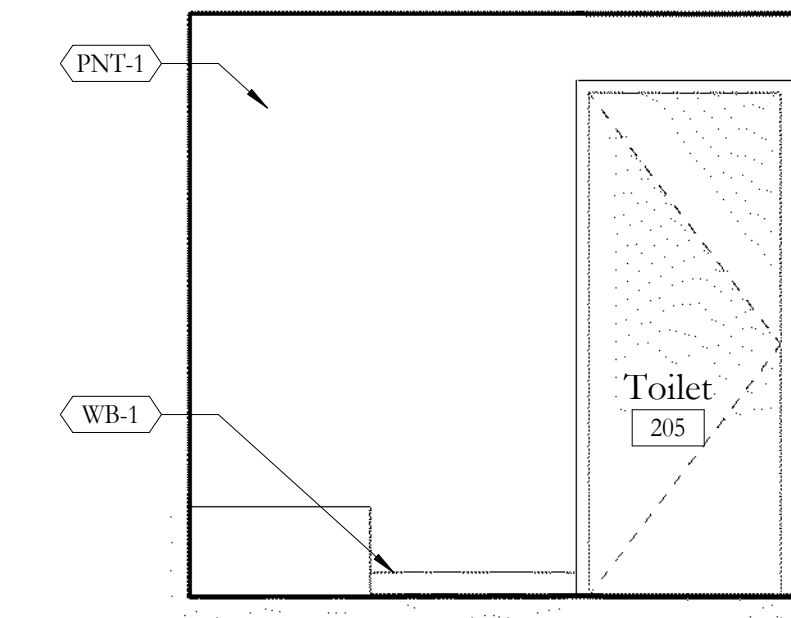
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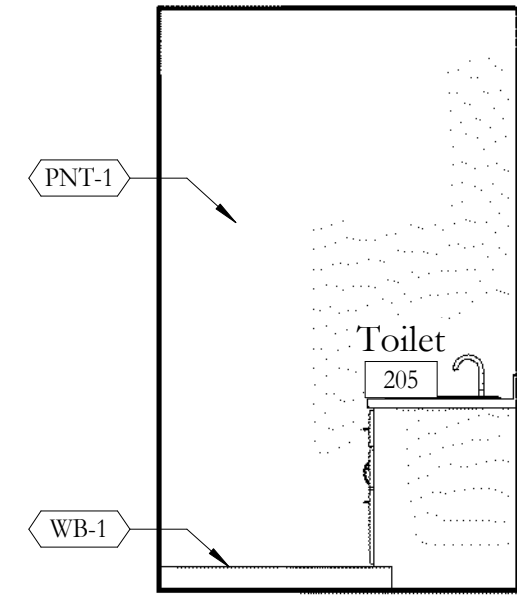
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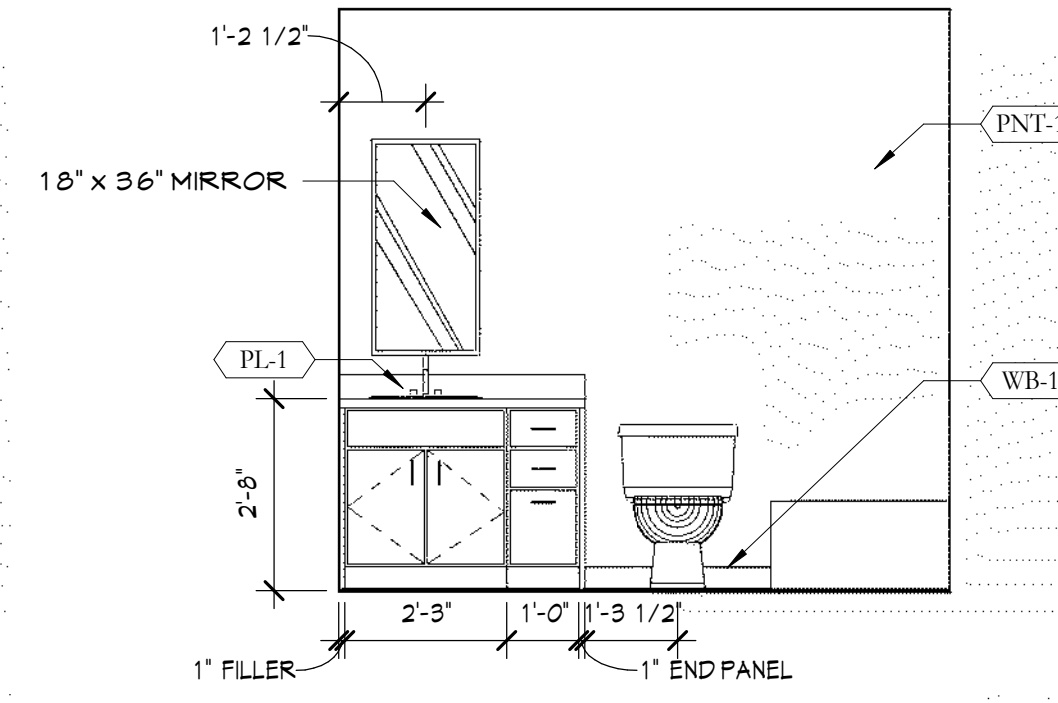
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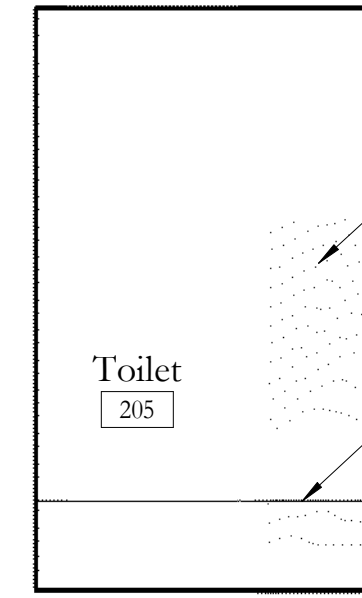
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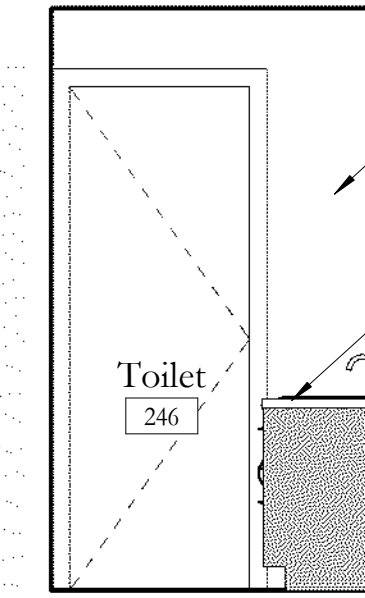
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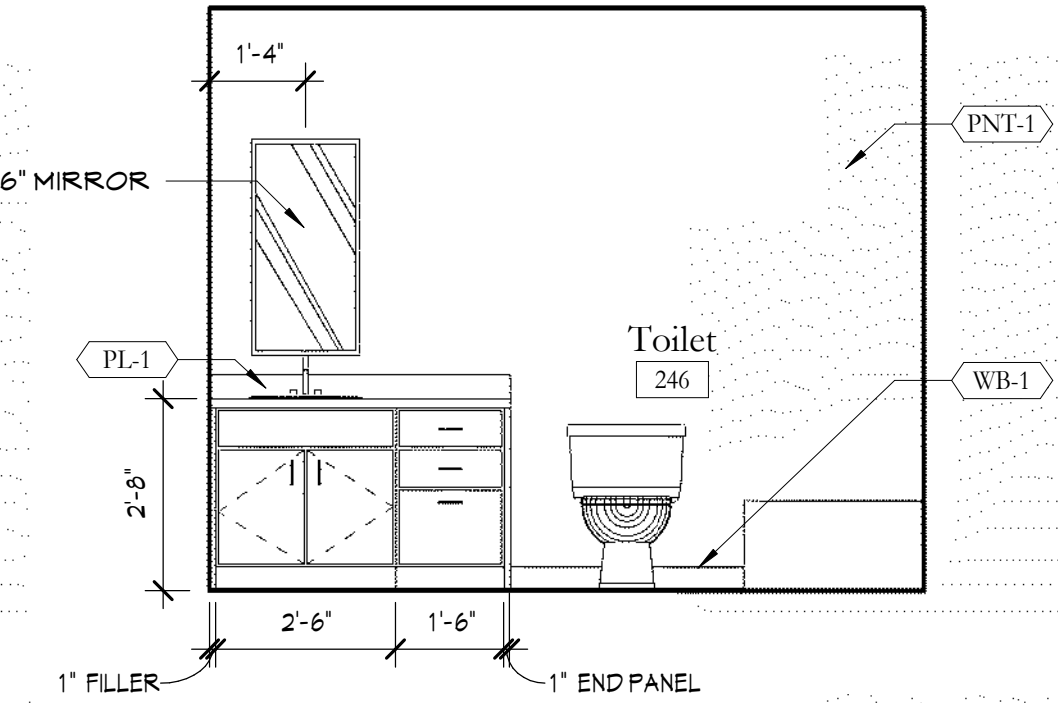
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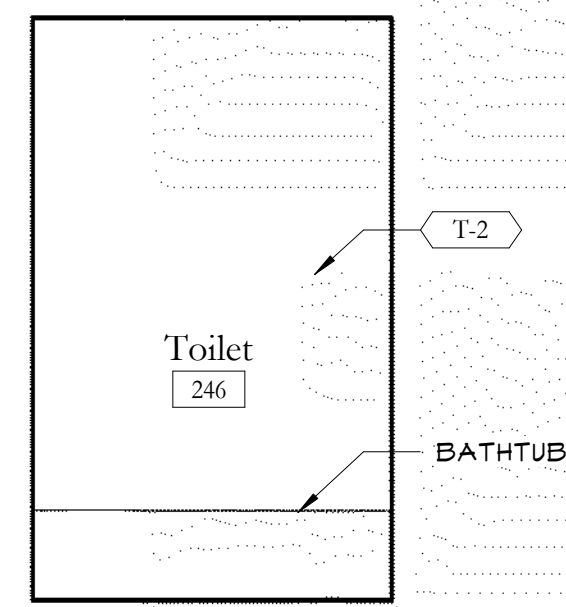
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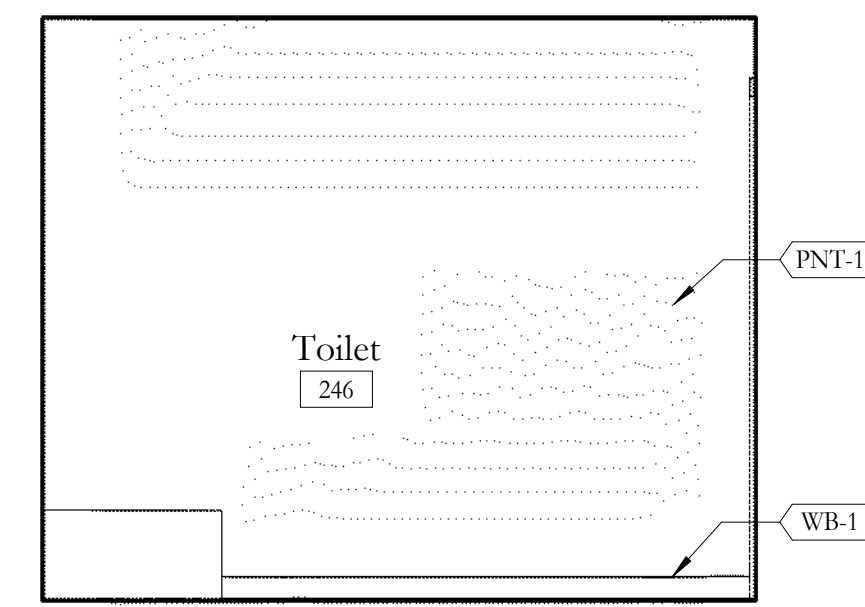
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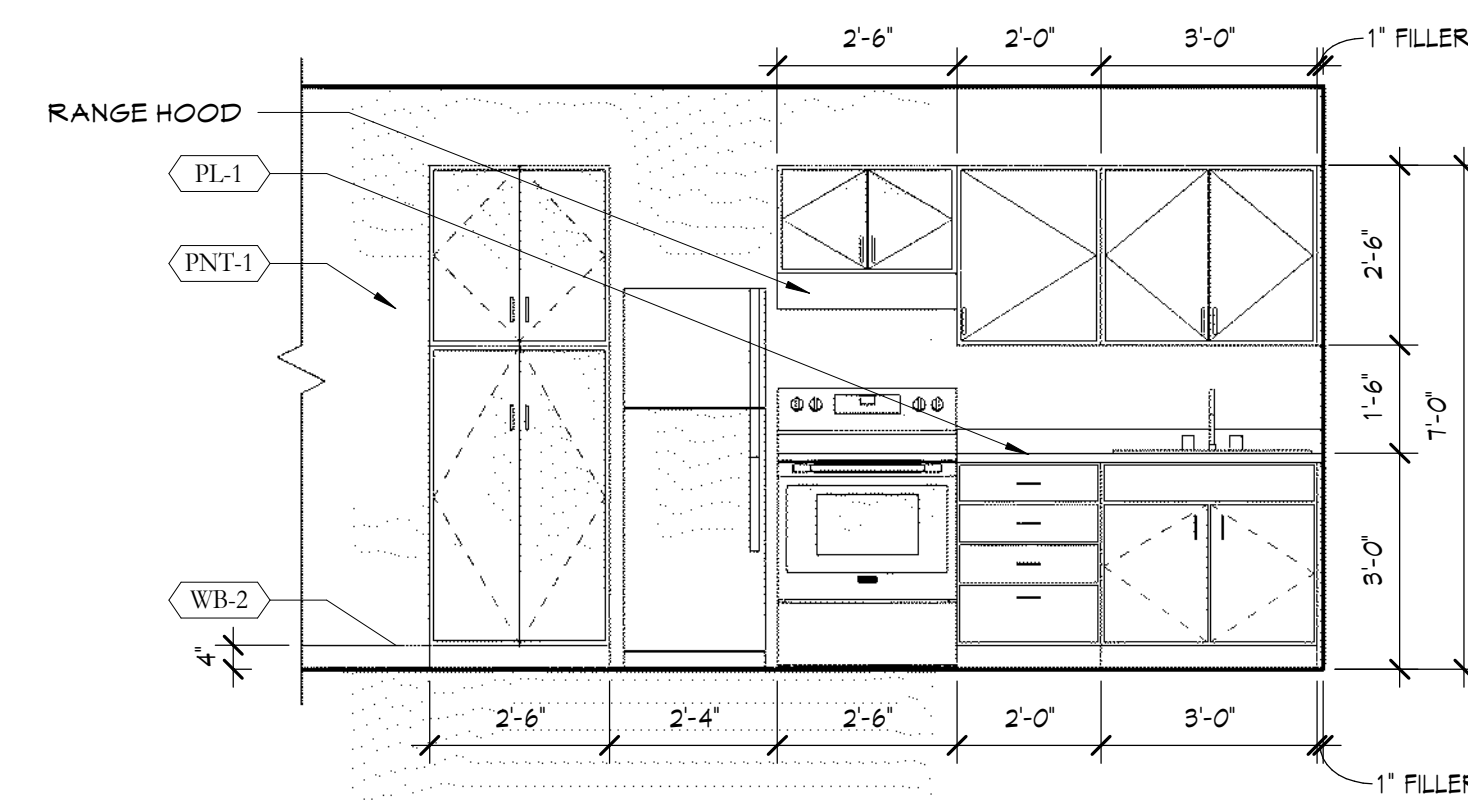
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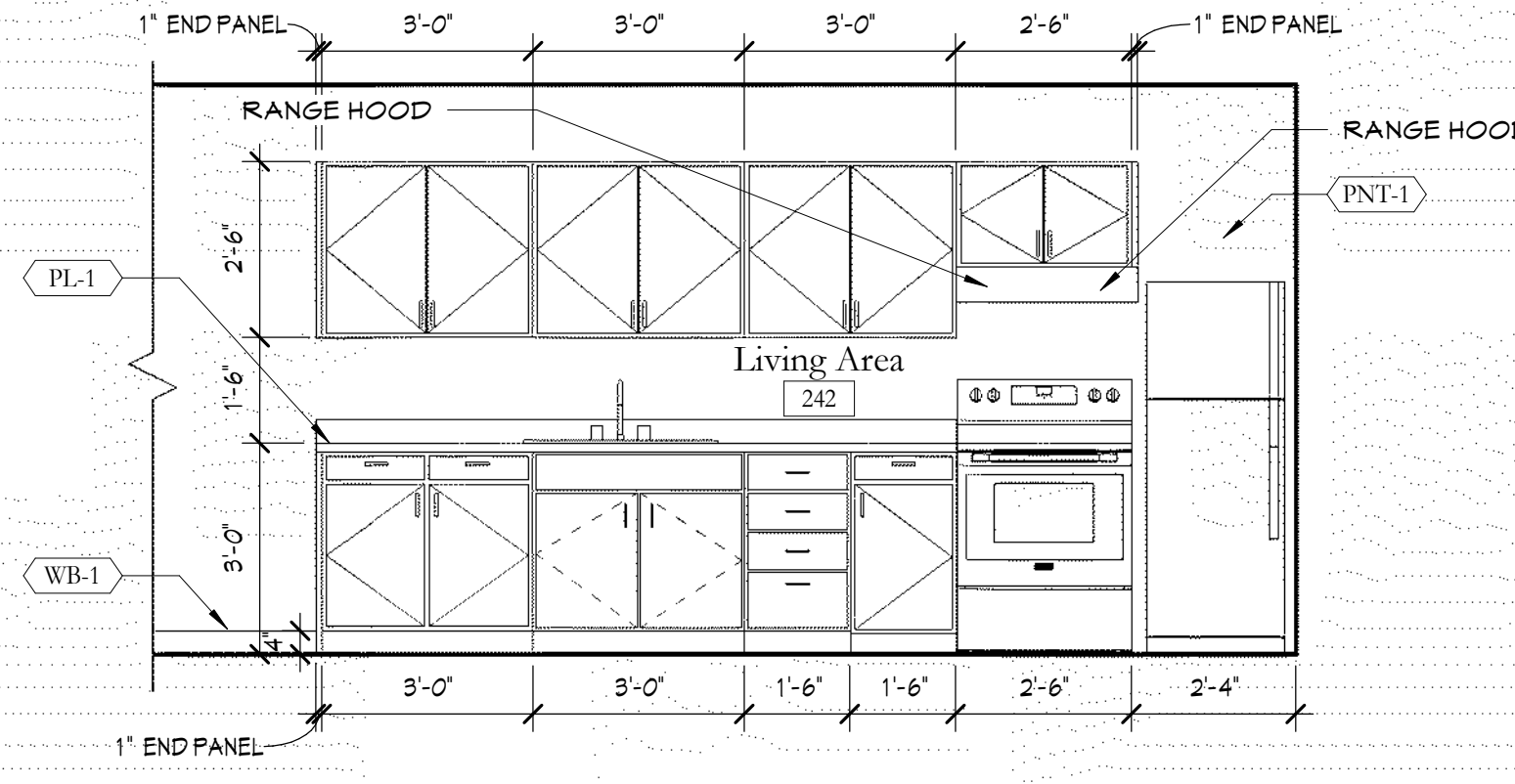
11 Interior Elevation  
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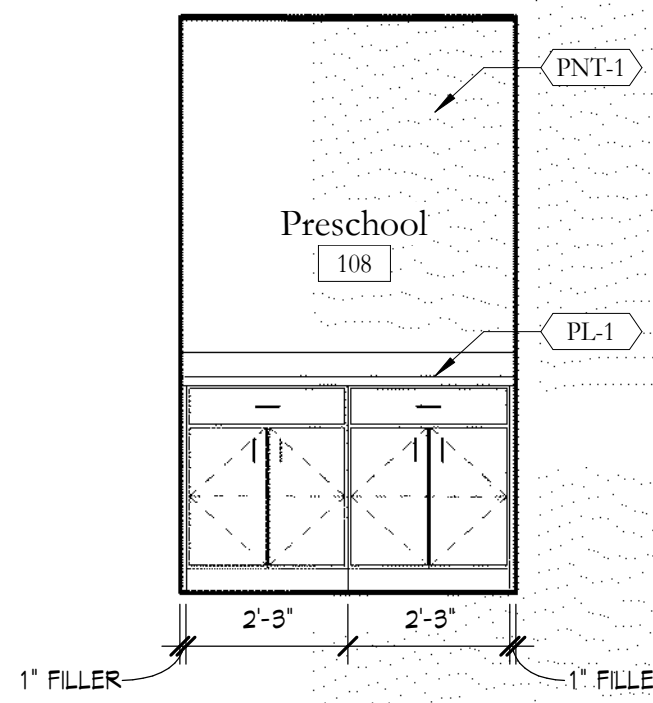
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3/8" = 1'-0"



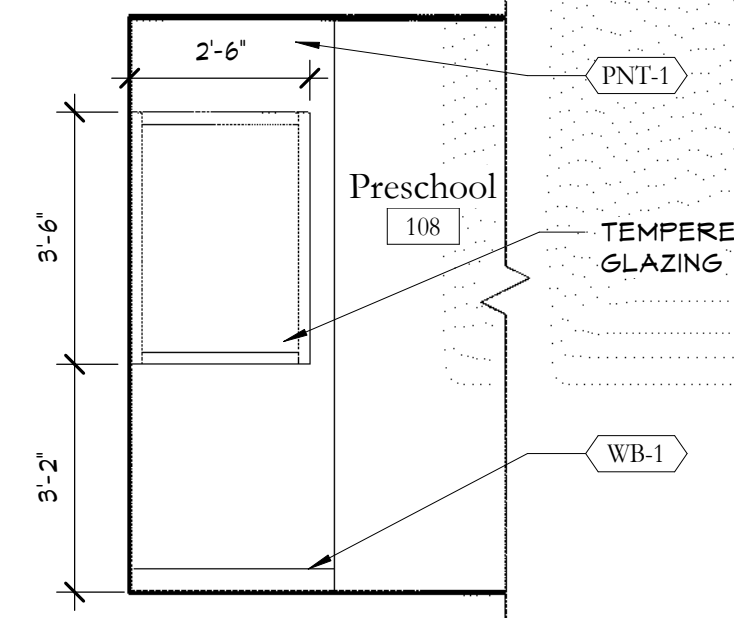
13 Interior Elevation  
3/8" = 1'-0"



14 Interior Elevation  
3/8" = 1'-0"



15 Interior Elevation  
3/8" = 1'-0"



16 Interior Elevation  
3/8" = 1'-0"

Haven House Expansion

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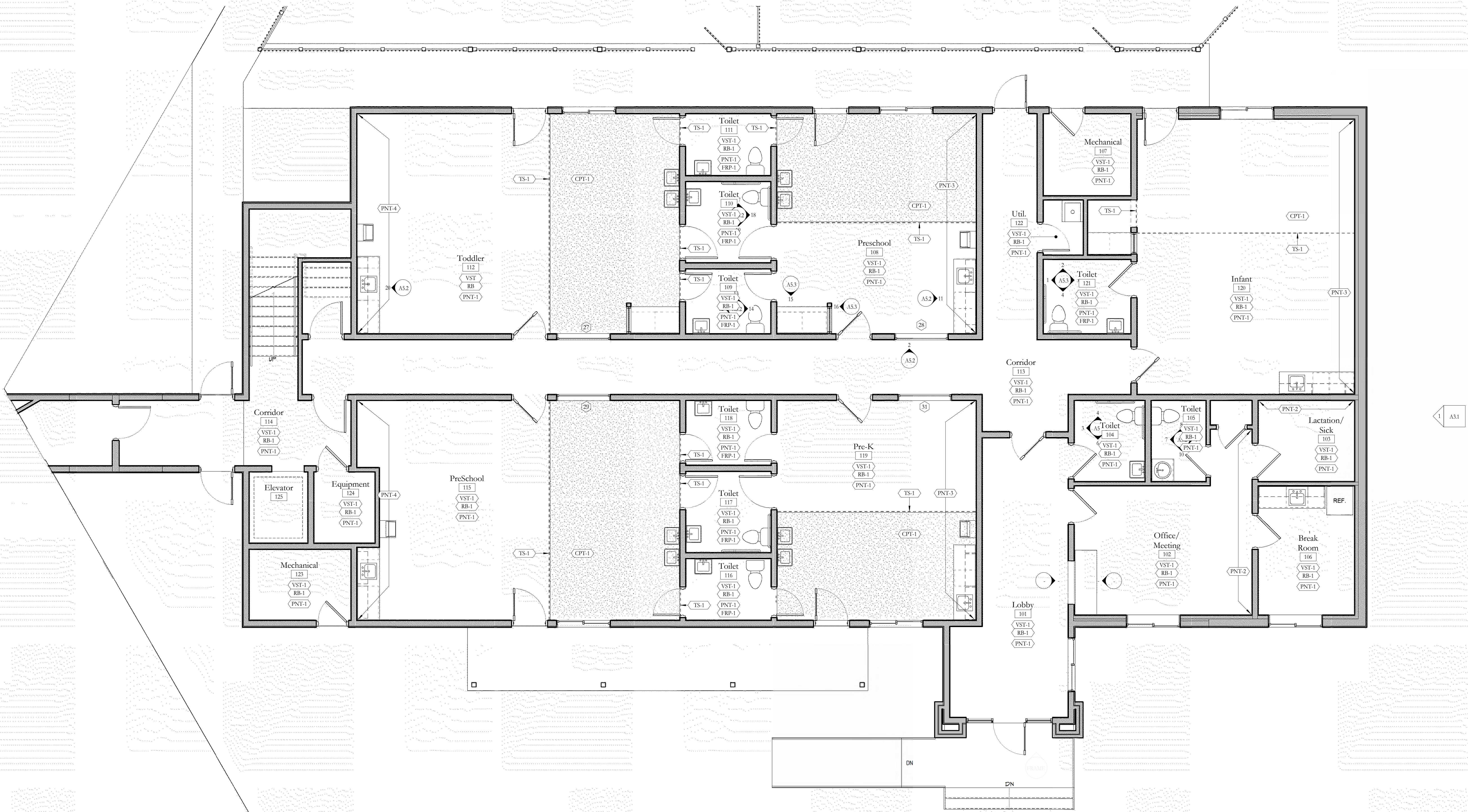
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PHASE:	Bid
ISSUE:	E
ISSUE DATE:	12/3/24

Interior Elevations

SHEET NAME

A5.3  
SHEET NUMBER





1 Finish Floor Plan - Main Level  
1/4" = 1'-0"

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Main Level  
Finish Floor  
Plan  
SHEET NUMBER

A6.1

SHEET NUMBER

Finish Schedule						
Material ID	Description	Manufacturer	Name / Style	Color	Size	Comments
CPT-1	Carpet	Shaw Contract	Connected Threads / Drop Satch Strataworks	Cozy 16111	24" X 24"	
PL-1	Plastic Laminate	Wilsonart		Organic Cotton 4945		
SS-1	Solid Surface	LivingStone		Thunder Cloud 1712		
Paint						
PNT-1	Paint	Sherwin Williams	Drift of Mist	9166		
PNT-2	Paint	Sherwin Williams	Evergreen Fog	SW 9130		
PNT-3	Paint	Sherwin Williams	Jasper Stone	SW 9135		
PNT-4	Paint	Sherwin Williams	Blossery Sky	SW 9140		
Tile						
T-1	Ceramic Floor Tile	Daltile	Severino	Genere Fog SV98	12" X 12"	
T-2	Ceramic Wall Tile	Ottimo Ceramics	Dash	Oak DAS012	16" X 48"	
Transition Strip						
TS-1	Transition Strip					
TS-2	Transition Strip					
Vinyl Strip Tile						
VST-1	Vinyl Strip Tile	Daltile	Asher Bend	Hearth Plank AB23	9" X 71"	
Wall Base						
WB-1	Rubber Base	Johnsonite	Milwork / Exhibit	Vaporize, MW-282-FS	4.25" Height	
WB-2	Wood Base					
WB-3	Tile Base	Daltile	Severino Floor Ballnose	Genere Fog SV98	3" X 12"	
Wall Covering						
FRP-1	Fiber Reinforced Panel	Marite	FRP	S100G White	4' X 8'	
Wood						
WD-1	Wood Floor		Select Red Oak		3/4" X 4"	



1 Finish Floor Plan - Upper Level  
1/4" = 1'-0"

Finish Schedule						
Material ID	Description	Manufacturer	Name / Style	Color	Size	Comments
<b>Carpet</b>						
CPT-1	Carpet	Shaw Contract	Connected Threads / Drop Satch Strataworks	Cozy 16111	24" X 24"	
<b>Countertop Material</b>						
PL-1	Plastic Laminate	Wilsonart		Organic Cotton 4945		
SS-1	Solid Surface	LivingStone		Thunder Cloud 1712		
<b>Paint</b>						
PNT-1	Paint	Sherwin Williams	Drift of Mist	9166		
PNT-2	Paint	Sherwin Williams	Evergreen Fog	SW 9130		
PNT-3	Paint	Sherwin Williams	Jasper Stone	SW 9135		
PNT-4	Paint	Sherwin Williams	Blossery Sky	SW 9140		
<b>Tile</b>						
T-1	Ceramic Floor Tile	Daltile	Severino	Genere Fog SV98	12" X 12"	
T-2	Ceramic Wall Tile	Ottimo Ceramics	Dash	Oak DAS012	16" X 48"	
<b>Transition Strip</b>						
TS-1	Transition Strip					
TS-2	Transition Strip					
<b>Vinyl Strip Tile</b>						
VST-1	Vinyl Strip Tile	Daltile	Asher Bend	Hearth Plank AB23	9" X 71"	
<b>Wall Base</b>						
WB-1	Rubber Base	Johnsonite	Milwork / Exhibit	Vaporize, MW-282-1FS	4.25" Height	
WB-2	Wood Base					
WB-3	Tile Base	Daltile	Severino Floor Ballnose	Genere Fog SV98	3" X 12"	
<b>Wall Covering</b>						
FRP-1	Fiber Reinforced Panel	Marite	FRP	S100G White	4' X 8'	
<b>Wood</b>						
WD-1	Wood Floor		Select Red Oak		3/4" X 4"	

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Upper Level  
Finish Floor  
Plan  
SHEET NAME

A6.2  
SHEET NUMBER

Haven House Expansion

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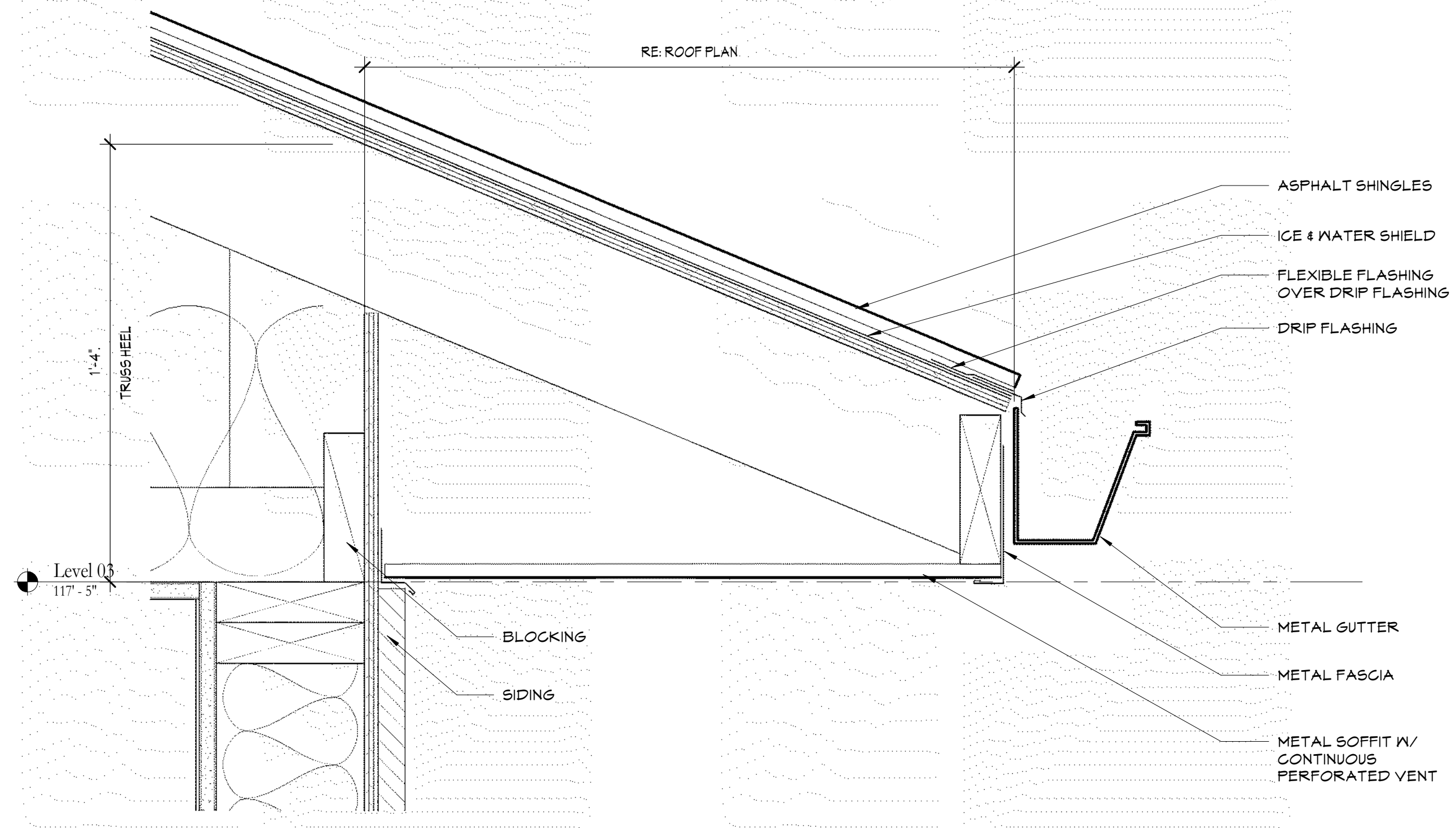
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PHASE: Bid  
ISSUE: E  
ISSUE DATE: 12/3/24

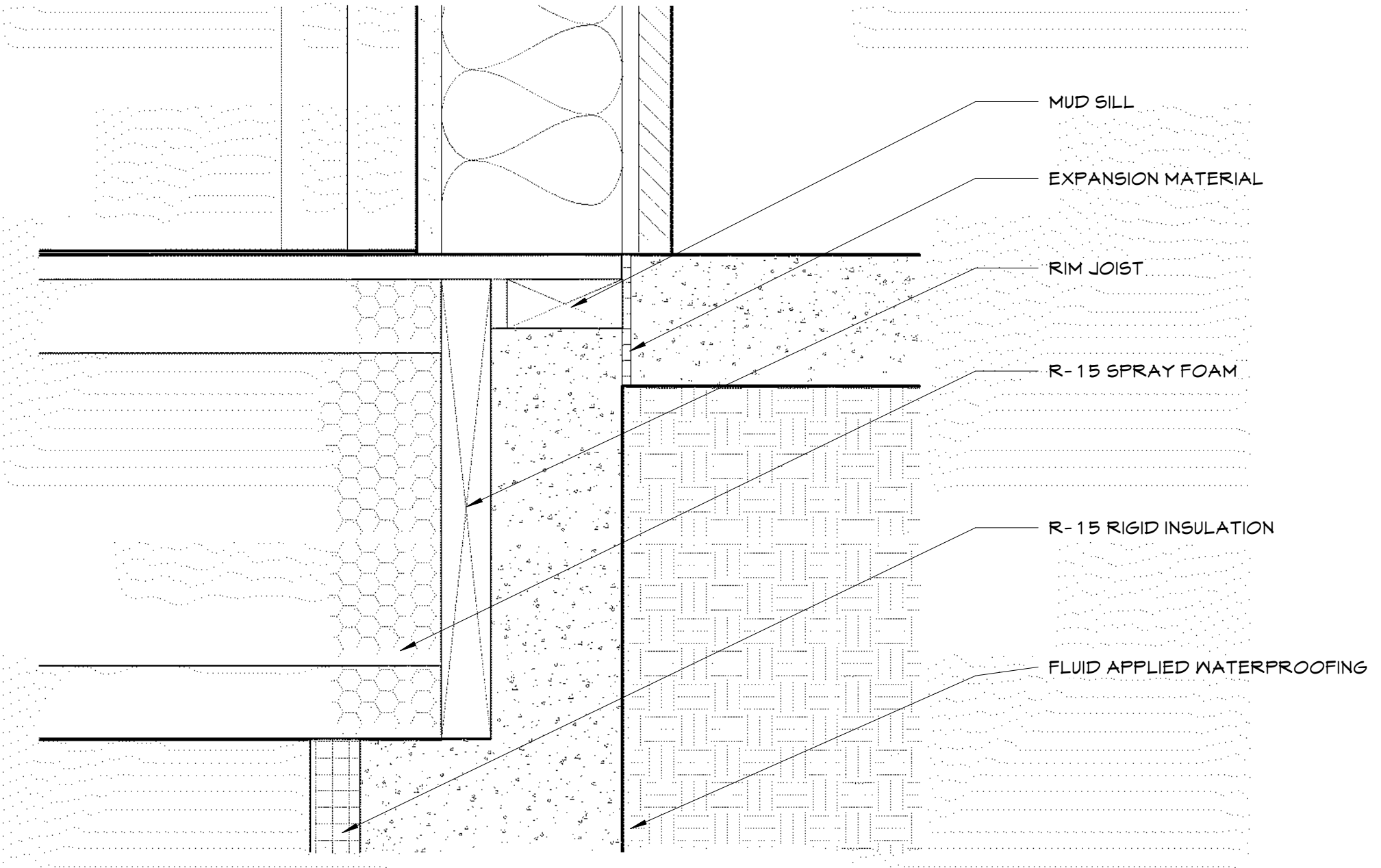
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SHEET NAME

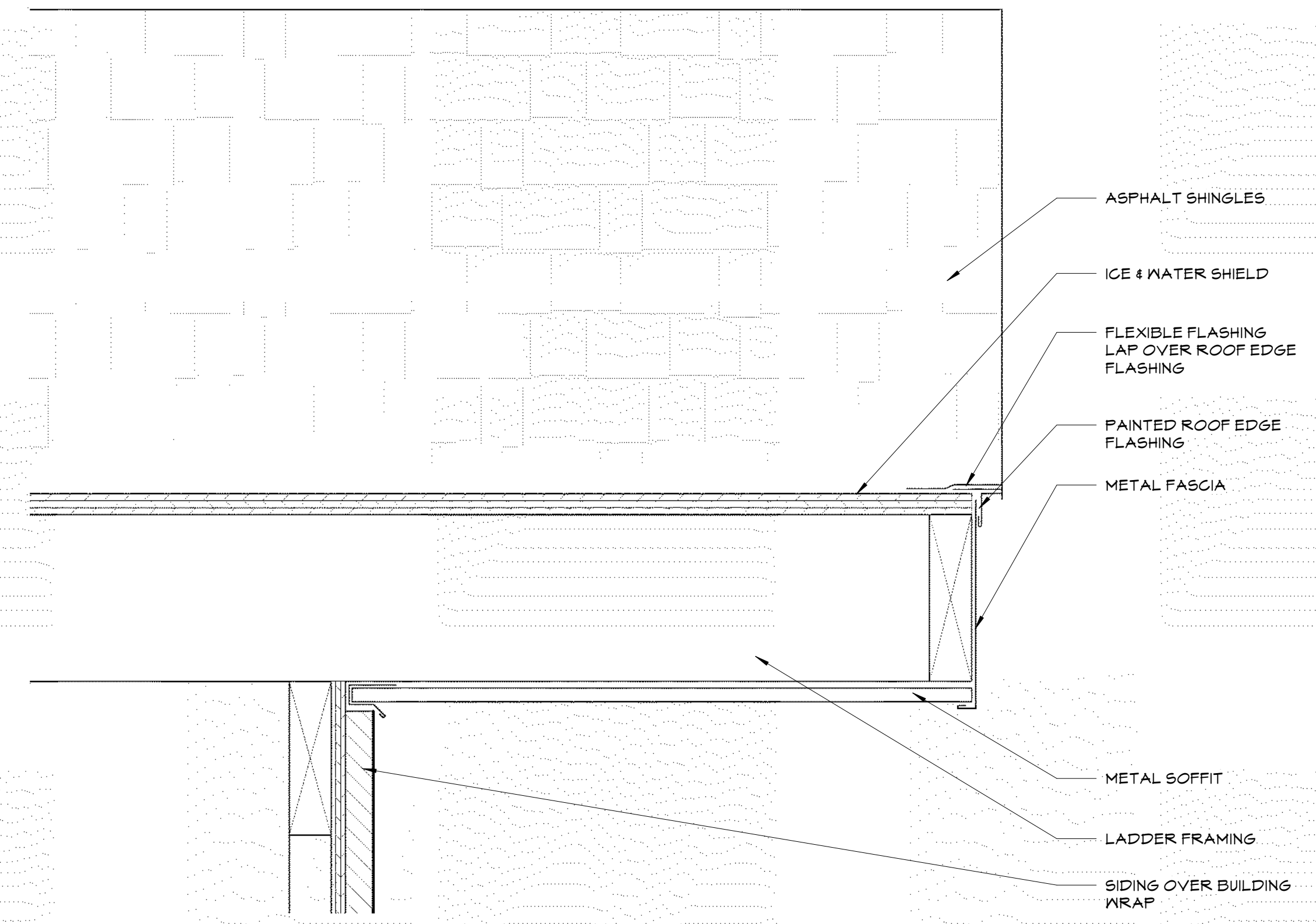
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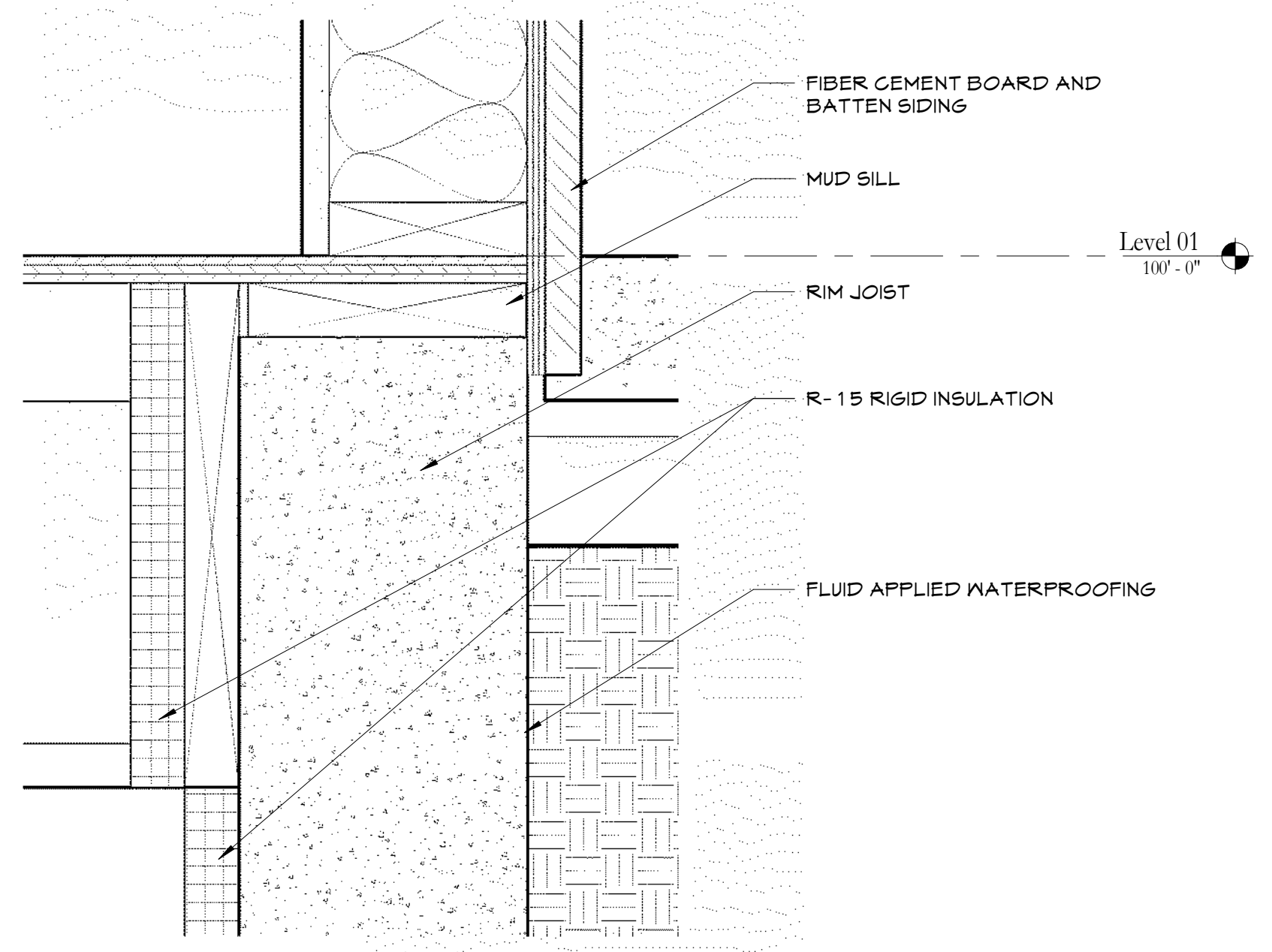
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3" = 1'-0"



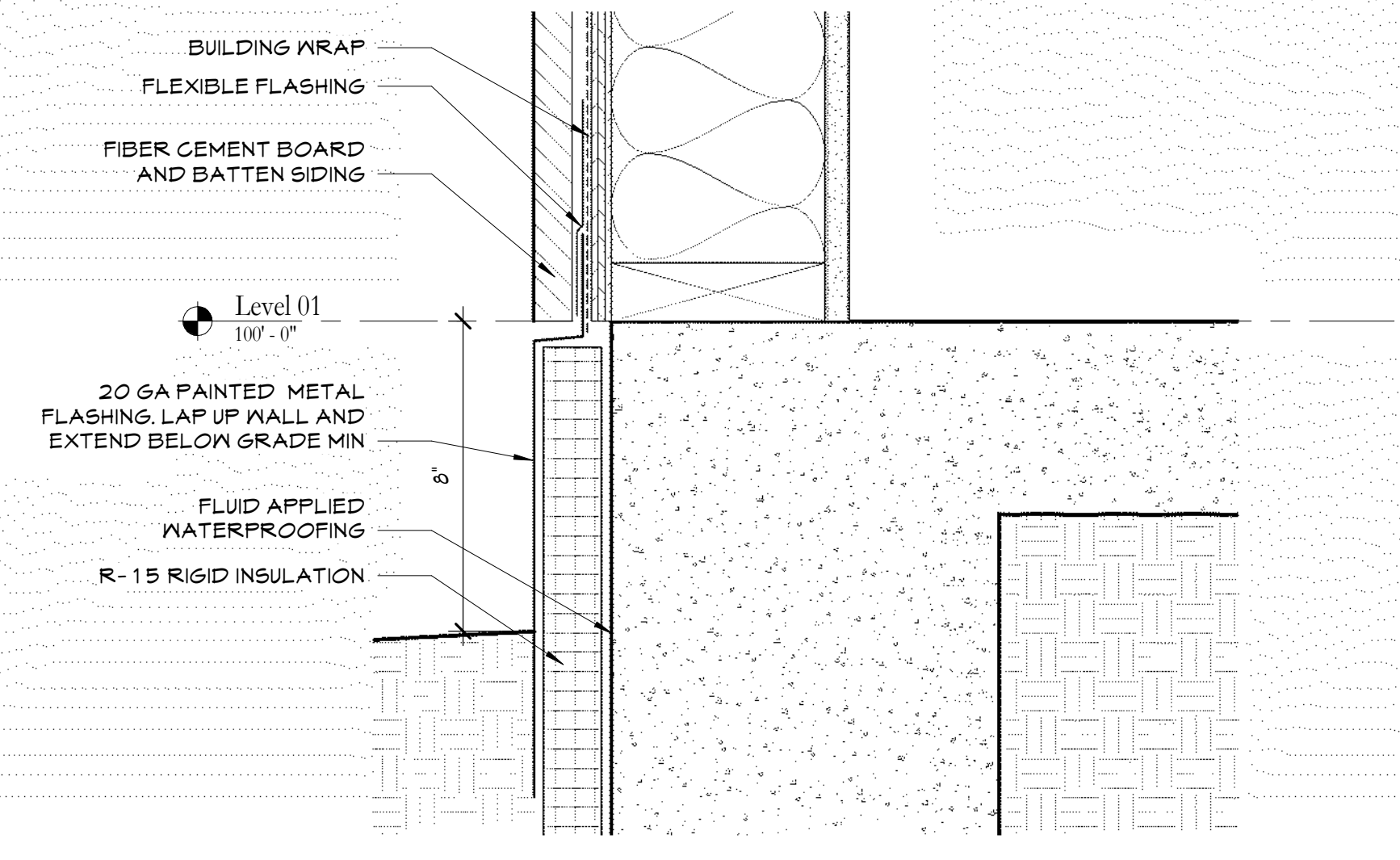
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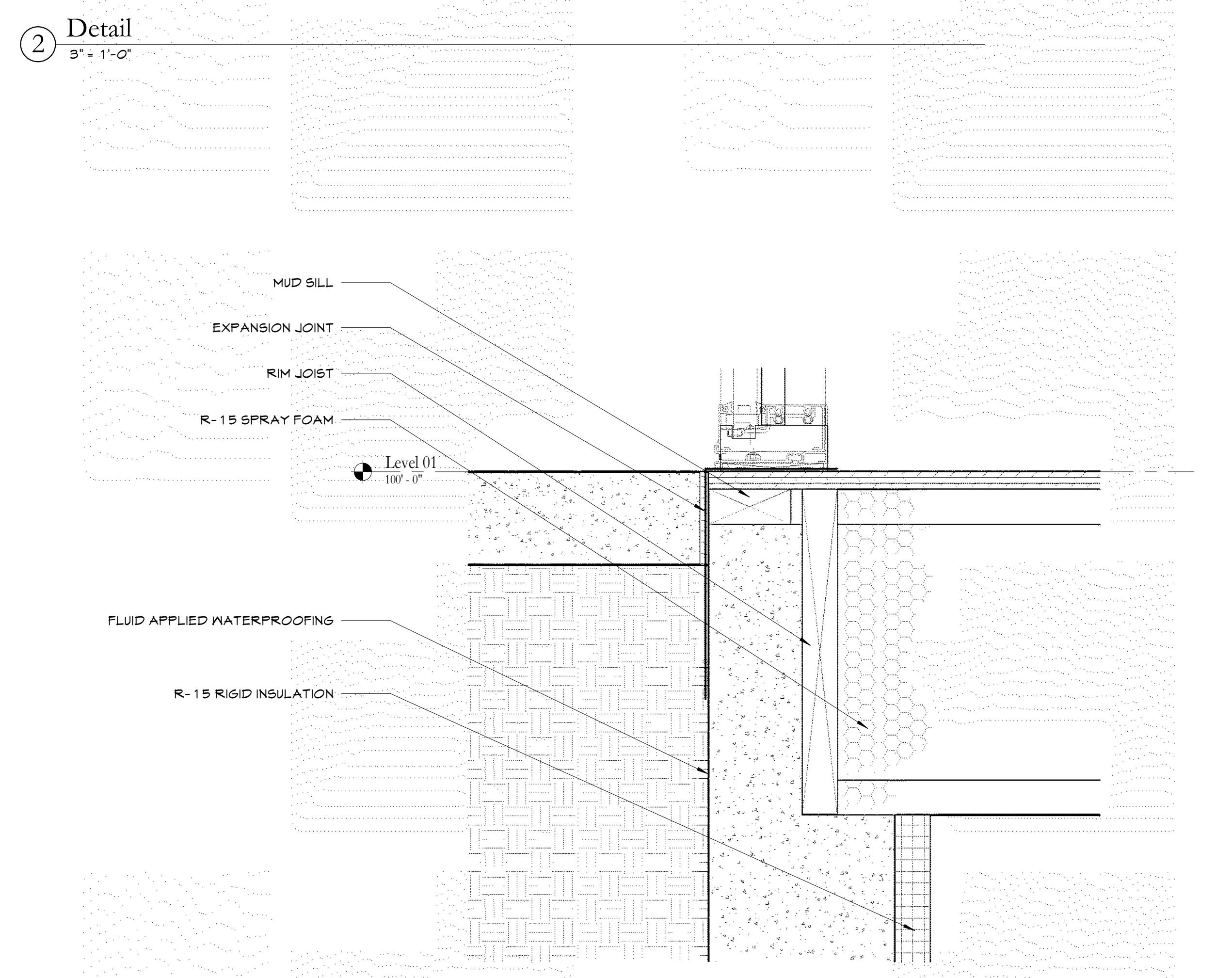
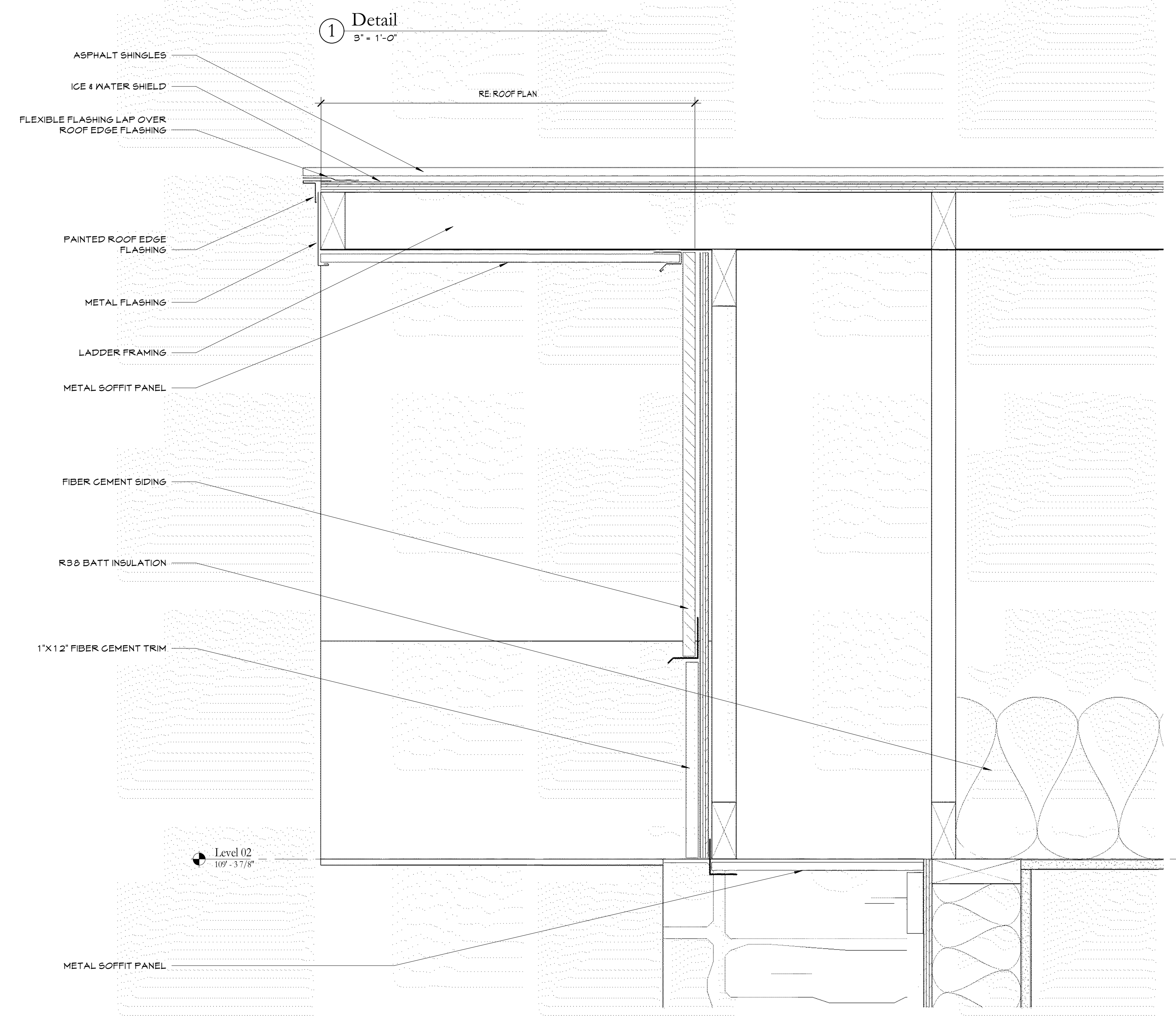
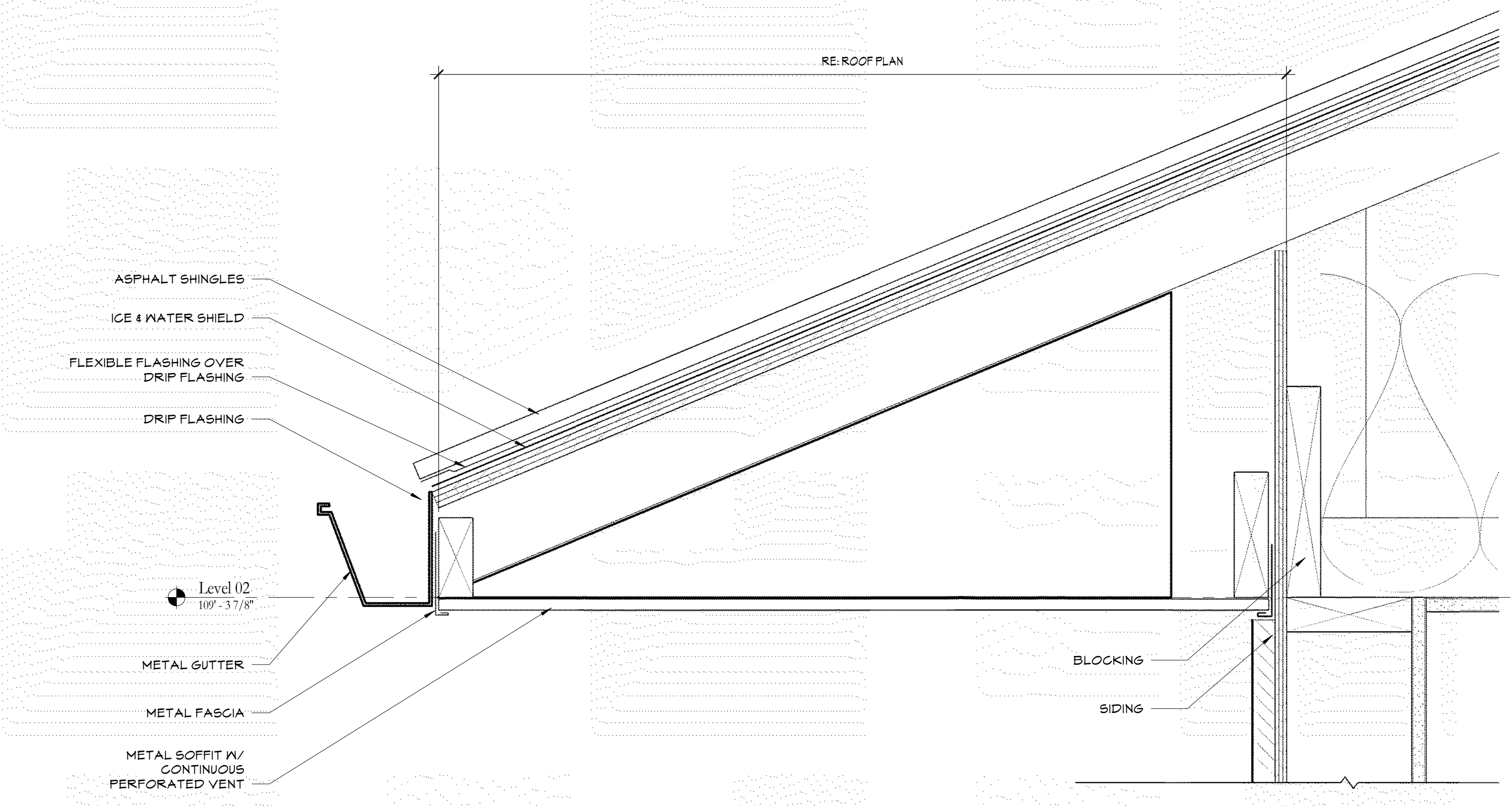
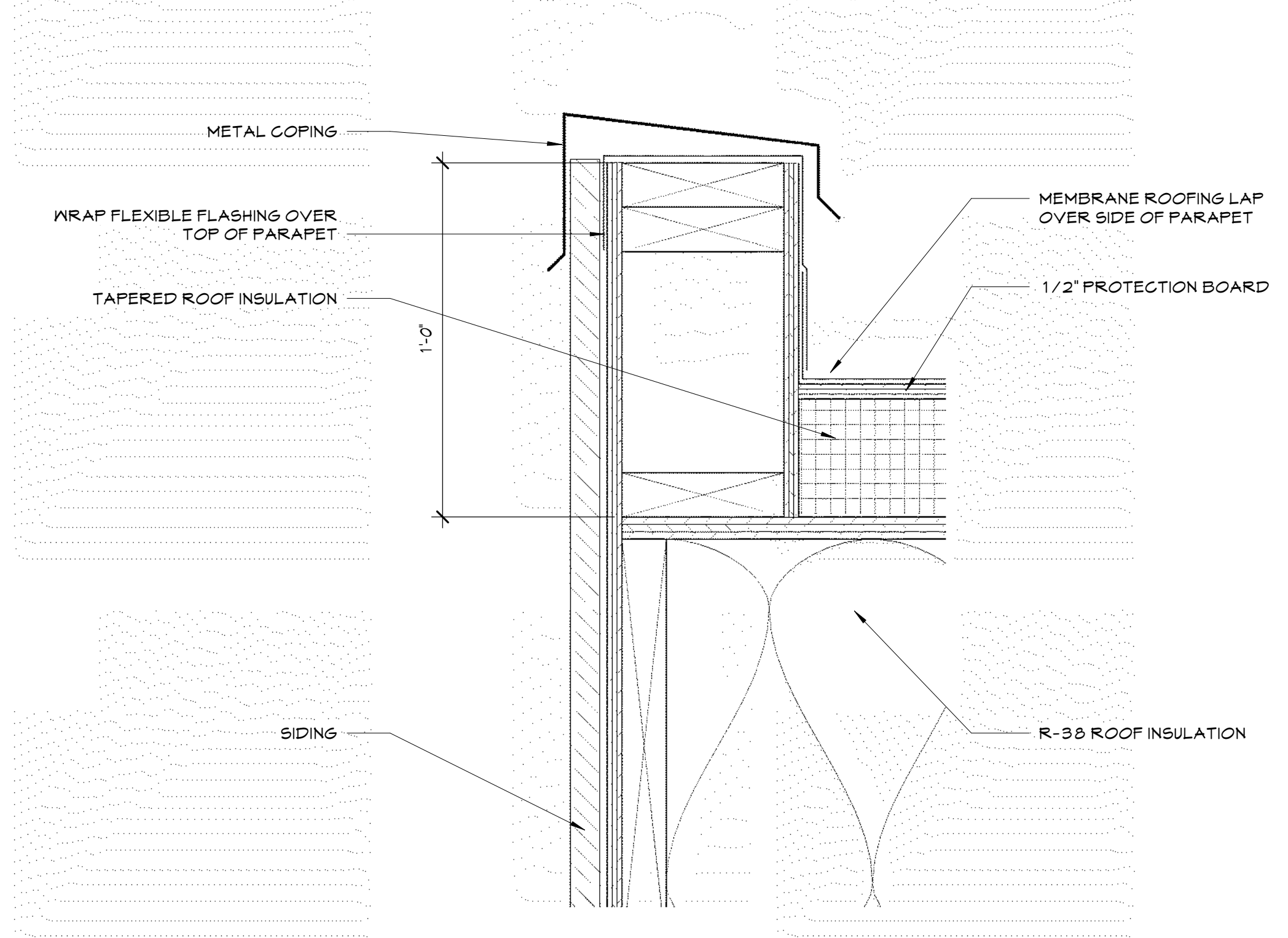
③ Details  
3" = 1'-0"



④ Detail  
3" = 1'-0"



⑤ Detail  
3" = 1'-0"



Haven House Expansion

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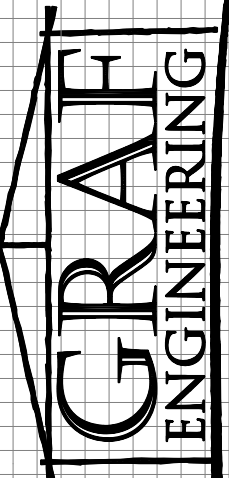
REVISIONS

PROJECT NO:	2033
PHASE:	Bid
ISSUE:	E
ISSUE DATE:	12/3/24

Details

SHEET NAME

A7.2  
SHEET NUMBER



ALPINE INVESTMENT AND REALTY

ALPINE INVESTMENT AND REALTY 218 SHERMAN ST. RIDGWAY COLORADO 81432 970-209-0195

STRUCTURAL COVER SHEET HAVEN HOUSE EXPANSION 4806 NORTH RIVER ROAD OLATHE, COLORADO

11/04/2024

HAVEN HOUSE

STRUCTURAL COVER SHEET

PLOT DATE NOVEMBER 4, 2024

Table with 2 columns: Revisions, Issue No. 4. Includes fields for Date, Design, Drafting, Checked, and Sheet.

CS1

ISSUE/REVISION LIST

Table with 4 columns: ISSUE, DATE, SHEET, DESCRIPTION OF CHANGES. Lists revisions from 1 to 4.

ISSUE/REVISION LIST

Table with 2 columns: SHEET, DESCRIPTION. Lists sheets CS1 through SD2.

DESIGN CRITERIA

OLATHE, COLORADO

Table listing design criteria for loads (snow, roof, wind, seismic) and design codes (IBC, ASCE, WFCM).

THESE DRAWINGS ARE INTENDED FOR THE EXCLUSIVE USE BY THE CLIENT INDICATED IN THE TITLE BLOCK...

CONTACT INFORMATION

PROJECT MANAGER: DUSTIN LAMBERT, P.E. GRAF ENGINEERING, LLC. 12837 W. 54TH PLACE, ARVADO, CO 80002

HAVEN HOUSE EXPANSION ALPINE INVESTMENT AND REALTY 4806 NORTH RIVER ROAD OLATHE, COLORADO

CONCRETE NOTES

ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI MANUAL OF CONCRETE PRACTICE (LATEST EDITION), EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE CONTRACT DOCUMENTS.

1) PROPERTIES

- A. ALL CONCRETE SHALL OBTAIN A MINIMUM COMPRESSIVE STRENGTH AS LISTED IN CURRENT IBC SECTION 1904. REFER TO FOUNDATION NOTES, SHEET FD1/FD2 FOR ADDITIONAL STRENGTH REQUIREMENTS...

2) FREQUENCY OF TESTING (ACI318-CHAPTER 5)

- A. 5.6.2.1 - SAMPLES FOR STRENGTH TESTS OF EACH CLASS OF CONCRETE PLACED EACH DAY SHALL BE TAKEN NOT LESS THAN ONCE A DAY, NOR LESS THAN ONCE FOR EACH 150 CUBIC YARDS OF CONCRETE...

3) MATERIALS AND METHODS OF PLACEMENT OR PROTECTION (EXCEPTS FROM 306.7)

- A. THE CONSOLIDATION METHOD SHOULD BE COMPATIBLE WITH THE CONCRETE MIXTURE, PLACING CONDITION, FORM INTRICACY, AMOUNT OF REINFORCEMENT, ETC. MANY MANUAL AND MECHANICAL METHODS ARE AVAILABLE...

4) COLD WEATHER REQUIREMENTS (318-CHAPTER 5 & ACI 306.1)

- A. DEFINITION OF COLD WEATHER: A PERIOD WHEN, FOR MORE THAN 3 CONSECUTIVE DAYS, THE FOLLOWING CONDITIONS EXIST: 1) THE AVERAGE DAILY AIR TEMPERATURE IS LESS THAN 40°F AND 2) THE AIR TEMPERATURE IS NOT GREATER THAN 50°F FOR MORE THAN ONE-HALF OF ANY 24-HOUR PERIOD...

5) HOT WEATHER REQUIREMENTS (318-CHAPTER 5 & ACI 305)

- A. DEFINITION OF HOT WEATHER: ANY COMBINATION OF THE FOLLOWING CONDITIONS THAT TENDS TO IMPAIR THE QUALITY OF FRESHLY MIXED OR HARDENED CONCRETE BY ACCELERATING THE RATE OF MOISTURE LOSS AND RATE OF CEMENT HYDRATION, OR OTHERWISE CAUSING INSTRUMENTAL RESULTS: HIGH AMBIENT TEMPERATURE, HIGH CONCRETE TEMPERATURE, LOW RELATIVE HUMIDITY, WIND SPEED, AND SOLAR RADIATION...

7) MISCELLANEOUS

- A. IF SAW CUTS/CONTRACTION JOINTS ARE NOT INDICATED FOR NON-STRUCTURAL SLAB-ON-GROUND, THEY SHOULD BE INSTALLED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER OF RECORD AND ACI RECOMMENDATIONS.

STANDARD ABBREVIATIONS

Table with 4 columns: Abbreviation, Full Name, Abbreviation, Full Name. Lists various building and material abbreviations like 2X, A.B, ABV, AC, etc.

STRUCTURAL STEEL NOTES

- 1. ALL STRUCTURAL STEEL SHAPES SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS: - W-SHAPES - HOLLOW STRUCTURAL SHAPES - PIPE COLUMNS & ALL CONNECTION MATERIAL - ANGLES, CHANNELS & ALL CONNECTION MATERIAL - FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE AISC SPECIFICATION AND CODE OF STANDARD PRACTICE, LATEST EDITION.

DESIGN DOCUMENT REFERENCES

ARCHITECTURAL DRAWINGS: THIS PLAN IS DESIGNED IN ACCORDANCE WITH ARCHITECTURAL PLANS DATED AUGUST 6, 2024 w/REVISIONS RECEIVED OCTOBER 16, 2024, AND IS NOT APPLICABLE WITH ANY OTHER ARCHITECTURAL RELEASE.

GEOTECHNICAL REPORT

SOIL DATA WAS TAKEN FROM RECOMMENDATIONS SET FORTH IN SOIL REPORT NO. M23007GE, PREPARED BY LAMBERT & ASSOC., AND DATED APRIL 12, 2023. FOR LOT SPECIFIC SOILS INFORMATION RE: FD1.

TRUSS DESIGN

TRUSS MANUFACTURER IS RESPONSIBLE TO DESIGN TRUSSES, INCLUDING ALL TRUSS TO TRUSS CONNECTIONS, IN ACCORDANCE WITH CODE AND JURISDICTION REQUIREMENTS, AND IN CONJUNCTION WITH THE TRUSS LAYOUT PROVIDED IN THESE STRUCTURAL DRAWINGS...

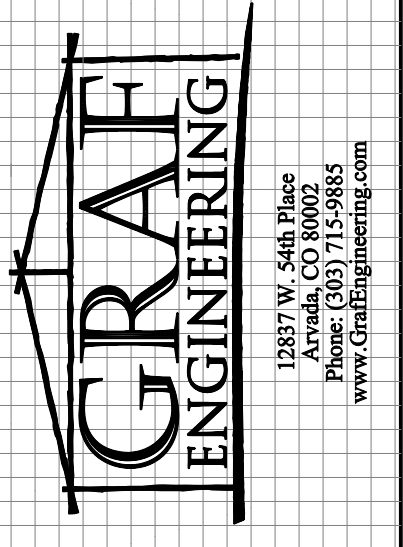
GENERAL FRAMING AND ROOF TRUSS NOTES

- GENERAL FRAMING: ALL FRAMING IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THE APPLICABLE BUILDING CODE, RE: DESIGN CRITERIA. 1) FRAMING LUMBER TO BE HEM-FIR #2, SPRUCE-PINE-FIR (NORTH) #2, OR BETTER EXCEPT STUDS LESS THAN 8'-0" MAY BE STUDY GRADE...

FASTENERS AND HARDWARE (i.e., NAILS AND HANGERS) USED IN CONJUNCTION WITH A/CQ TREATED LUMBER (i.e., SILL PLATES) ARE TO BE HOT-DIP GALVANIZED, STAINLESS STEEL, OR OTHER FASTENERS AND HARDWARE APPROVED BY THE MANUFACTURER FOR USE WITH A/CQ LUMBER...

- GENERAL ROOF TRUSS: RE: S04 FOR ROOF DETAILS AND MANUFACTURED ROOF TRUSS DESIGN/FOUNDATION. 1) PROVIDE MINIMUM CLEARANCE EQUAL TO TOTAL ANTICIPATED TRUSS DEFLECTION BETWEEN TOP PLATE OF INTERIOR PARTITIONS AND BOTTOM CHORD OF TRUSSES TO ENSURE LOADING WILL BE AS DESIGNED...

DUE TO THE RELATIONSHIPS OF FRAMING HARDWARE TO THE OTHER COMPONENTS OF THE STRUCTURE, ANY FRAMING HARDWARE SUBSTITUTIONS, WITHOUT WRITTEN APPROVAL FROM GRAF ENGINEERING, LLC, WILL RENDER THESE PLANS NULL AND VOID...



ALPINE INVESTMENT AND REALTY 218 SHERMAN ST RIDGWAY COLORADO 81432 970-209-0195

FOOTING FOUNDATION PLAN HAVEN HOUSE EXPANSION 4806 NORTH RIVER ROAD OLATHE, COLORADO



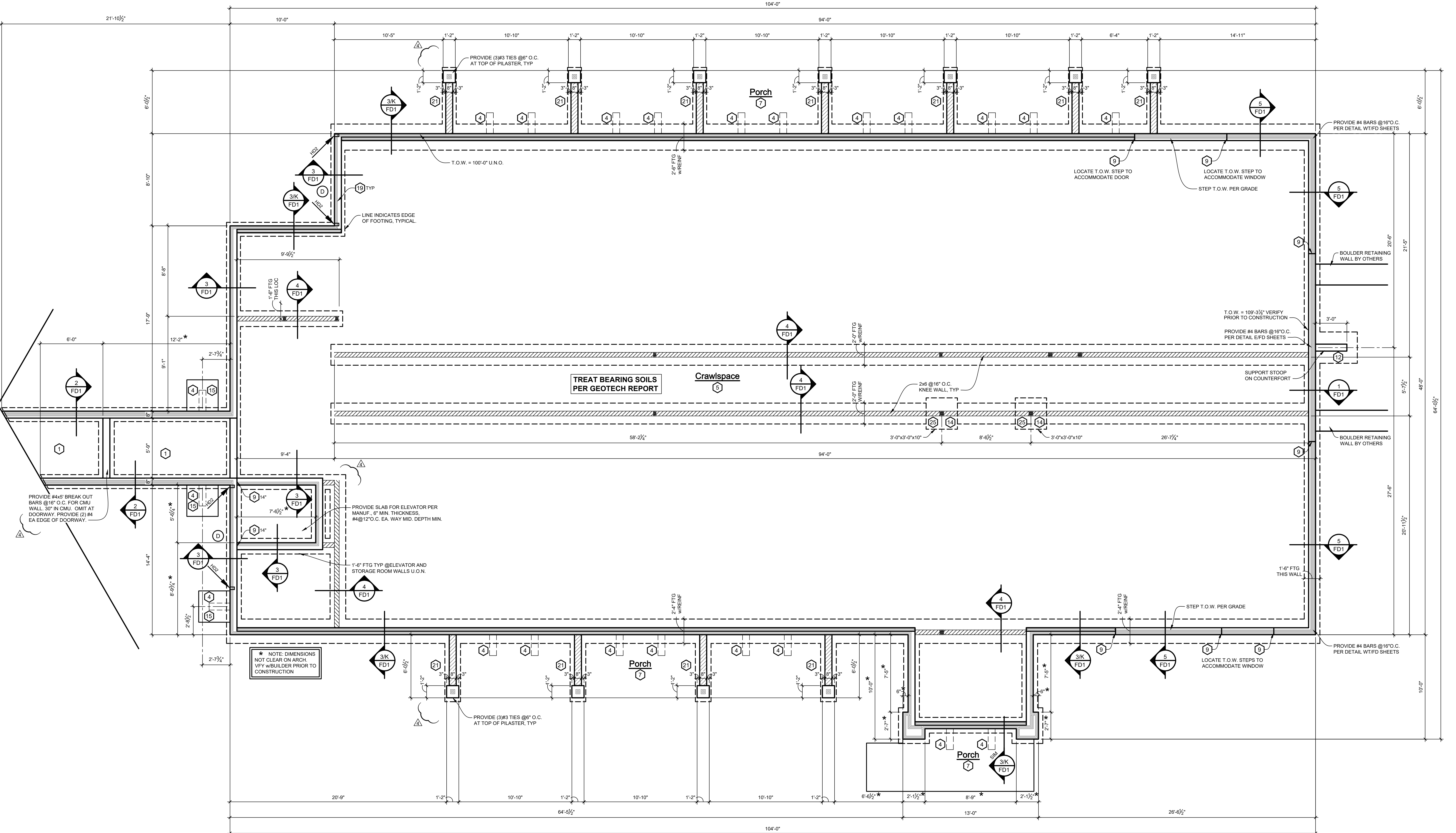
HAVEN HOUSE FOOTING FOUNDATION PLAN (1,500 PSF) NOVEMBER 4, 2024

ANCHOR BOLT SCHEDULE table with columns for ID, SIMPSON, and USP. Includes notes on spacing and application.

BOTTOM OF WALL STEPS table with columns for STEP SIZE and notes on construction.

TOP OF WALL STEPS table with columns for STEP SIZE and notes on construction.

- PLAN NOTES: 1-19 numbered list of construction and structural requirements.



FOUNDATION PLAN CRAWLSPACE

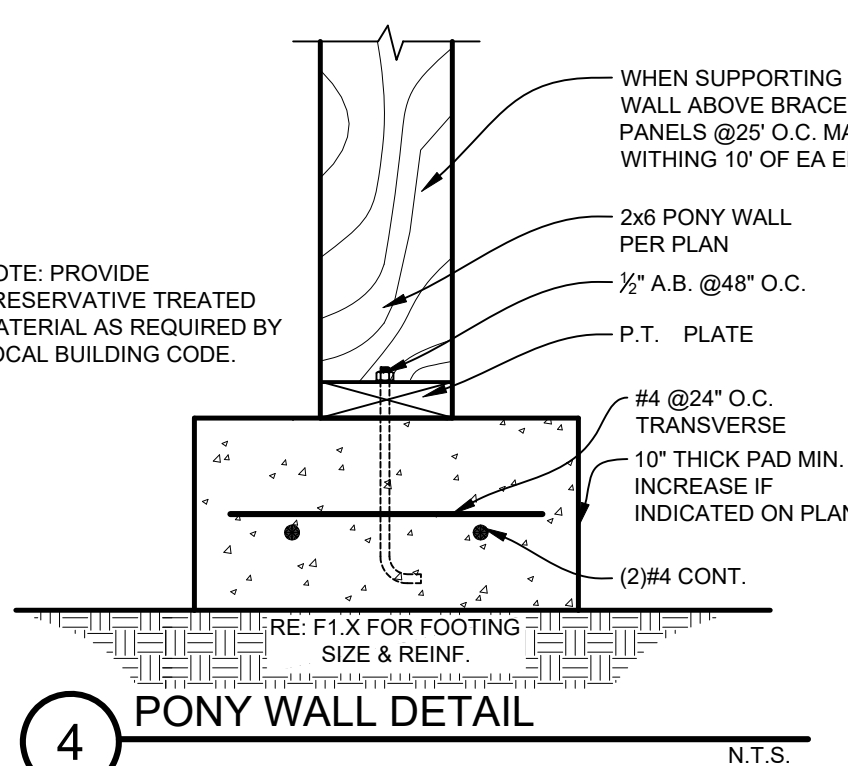
SEE CS1 & FD SHEETS FOR GENERAL NOTES, SECTIONS AND DETAILS. ALL FOUNDATION WALLS TO BE 8" WIDE UNLESS NOTED OTHERWISE.

NOTE: STEPS AND WALL ELEVATIONS ARE PROVIDED FOR REFERENCE ONLY AND MUST BE VERIFIED BY BUILDER OR BUILDER REPRESENTATIVE PRIOR TO USE.

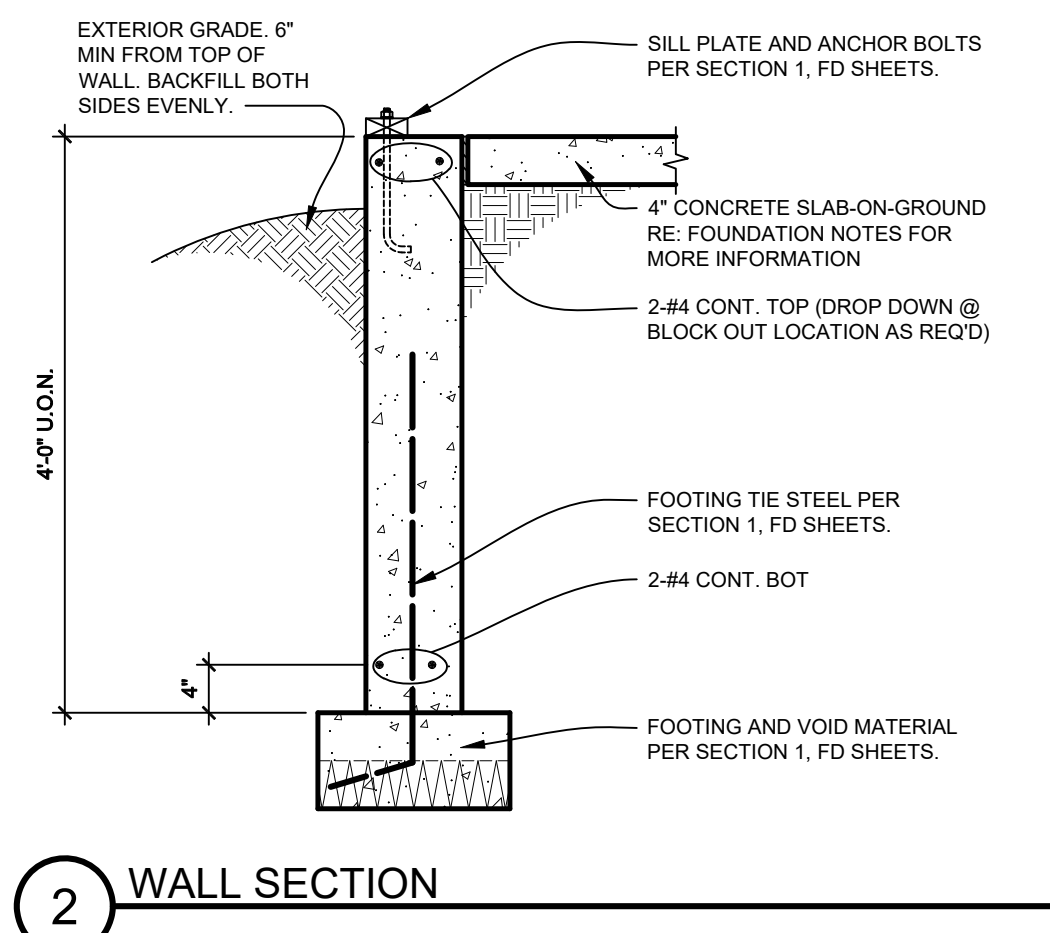
IF BOX IS 1" SQ. THEN SCALE IS 1/4"=1'-0" IF BOX IS 1/2" SQ. THEN SCALE IS 1/8"=1'-0" IF BOX IS NOT 1/2" OR 1" SQ. THEN DRAWING IS NOT TO SCALE.

NOTE: HOLD-DOWN DIMENSIONS ARE PROVIDED FOR REFERENCE ONLY AND MUST BE VERIFIED BY BUILDER OR BUILDER REPRESENTATIVE PRIOR TO USE.

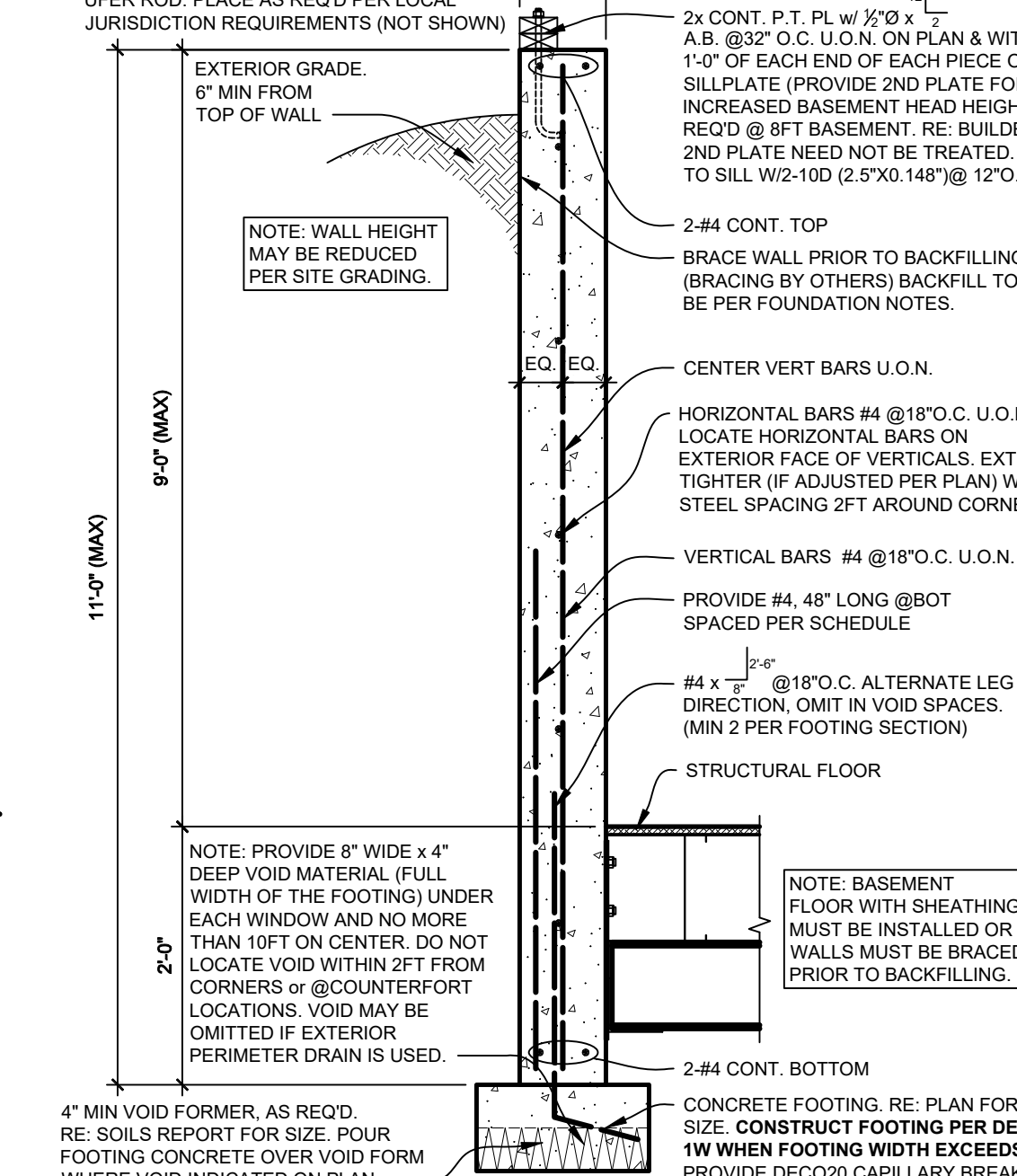
**TREAT BEARING SOILS PER GEOTECH REPORT**



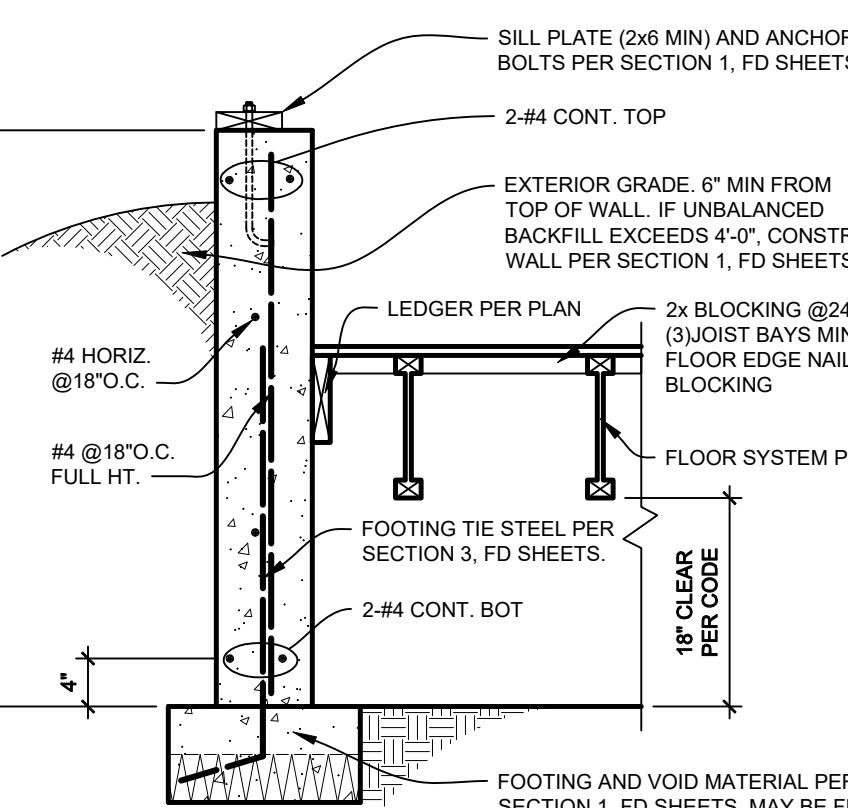
**4 PONY WALL DETAIL** N.T.S.



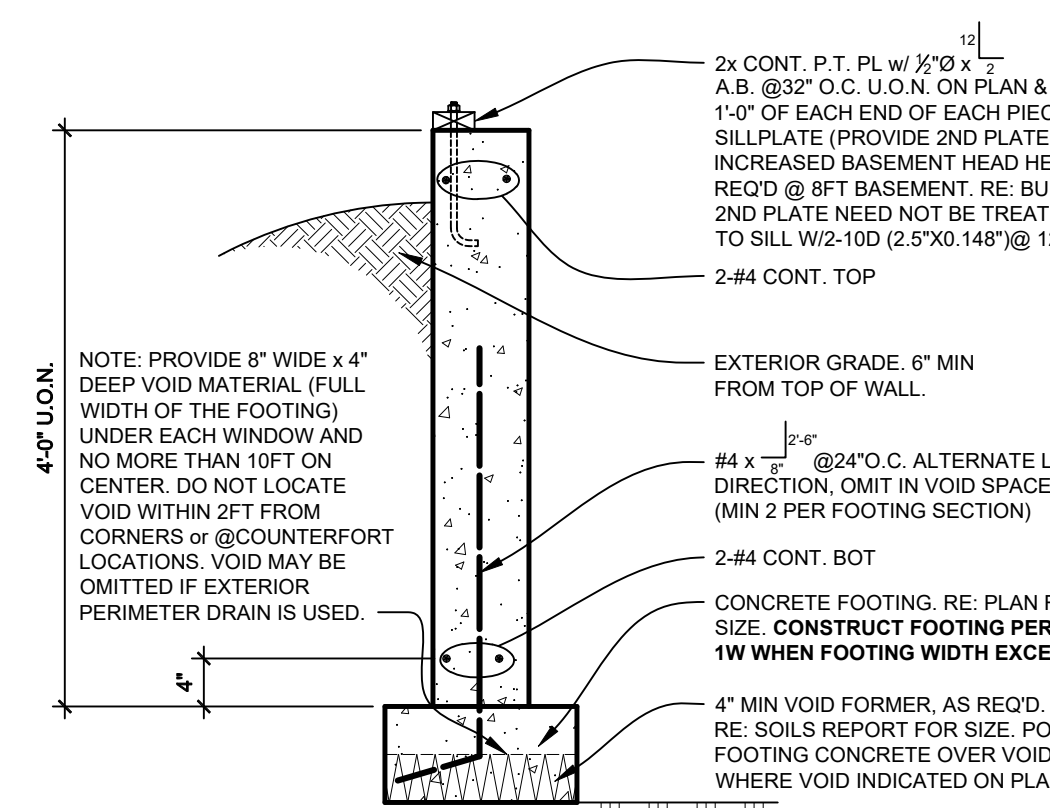
**2 WALL SECTION** N.T.S.



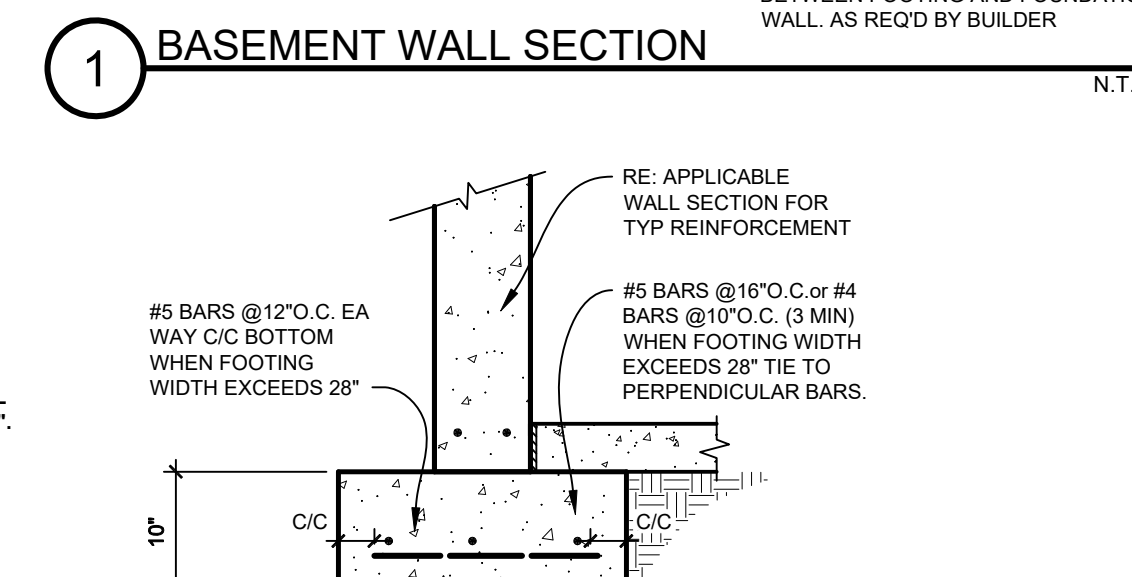
**1 BASEMENT WALL SECTION** N.T.S.



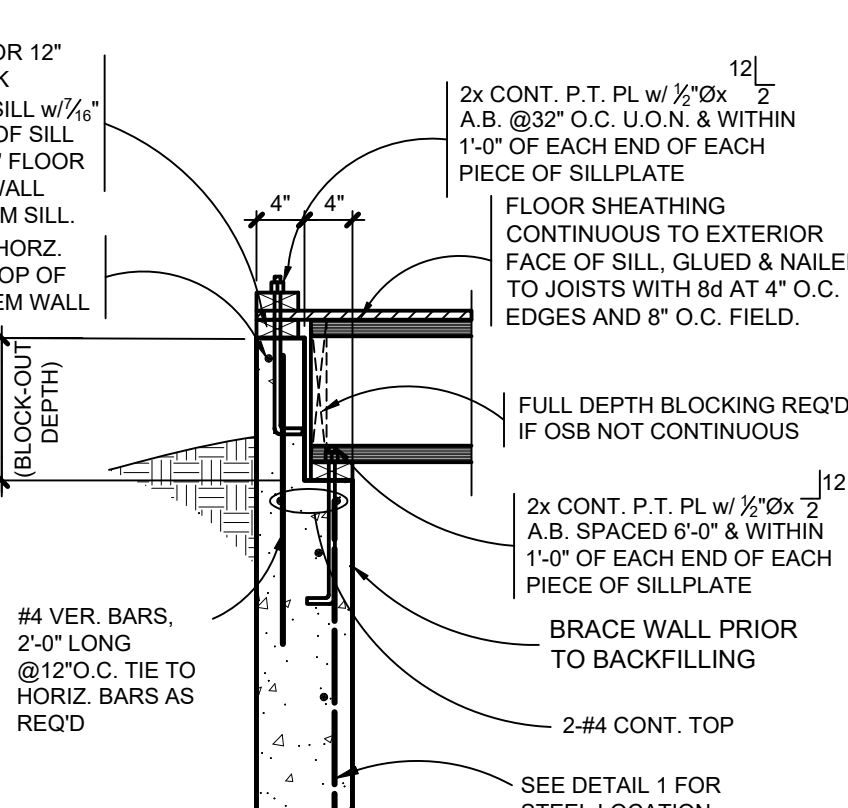
**5 GARDEN LEVEL WALL SECTION** N.T.S.



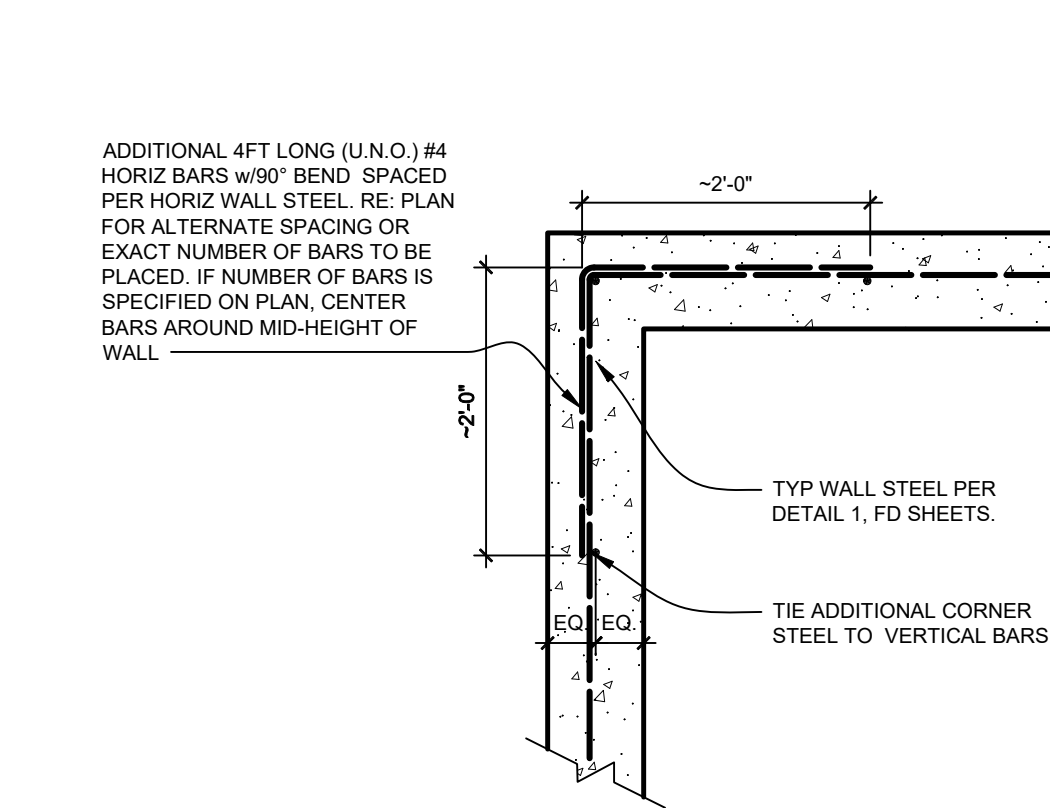
**3 CRAWLSPACE WALL SECTION** N.T.S.



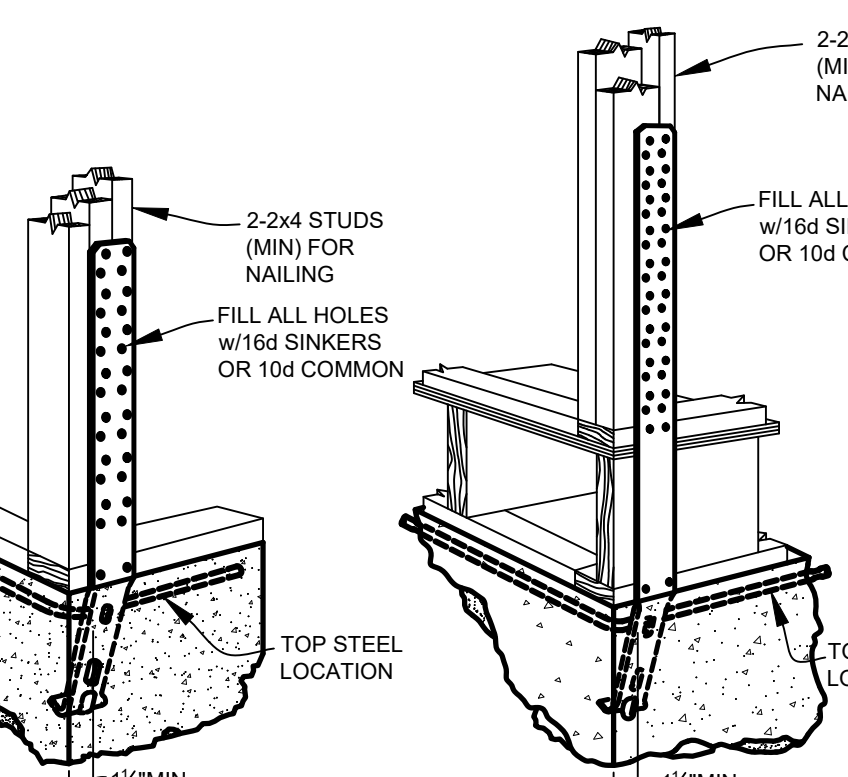
**1W WIDE FOOTING SECTION** N.T.S.



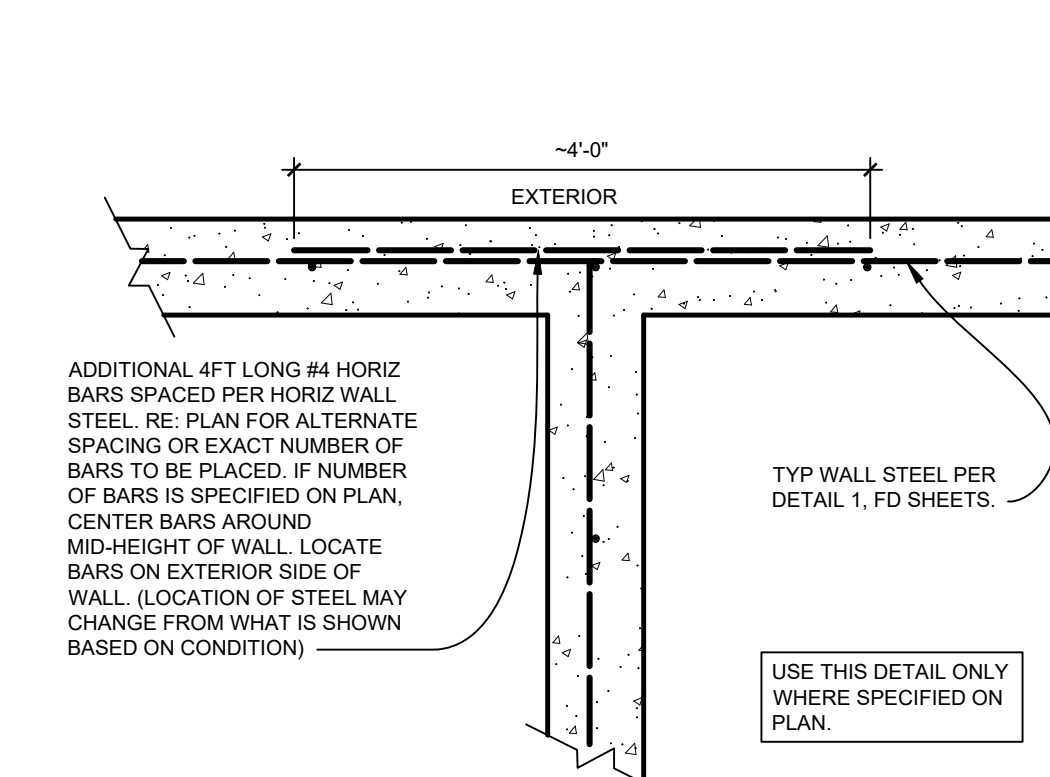
**K BLOCKOUT WALL SECTION** N.T.S.



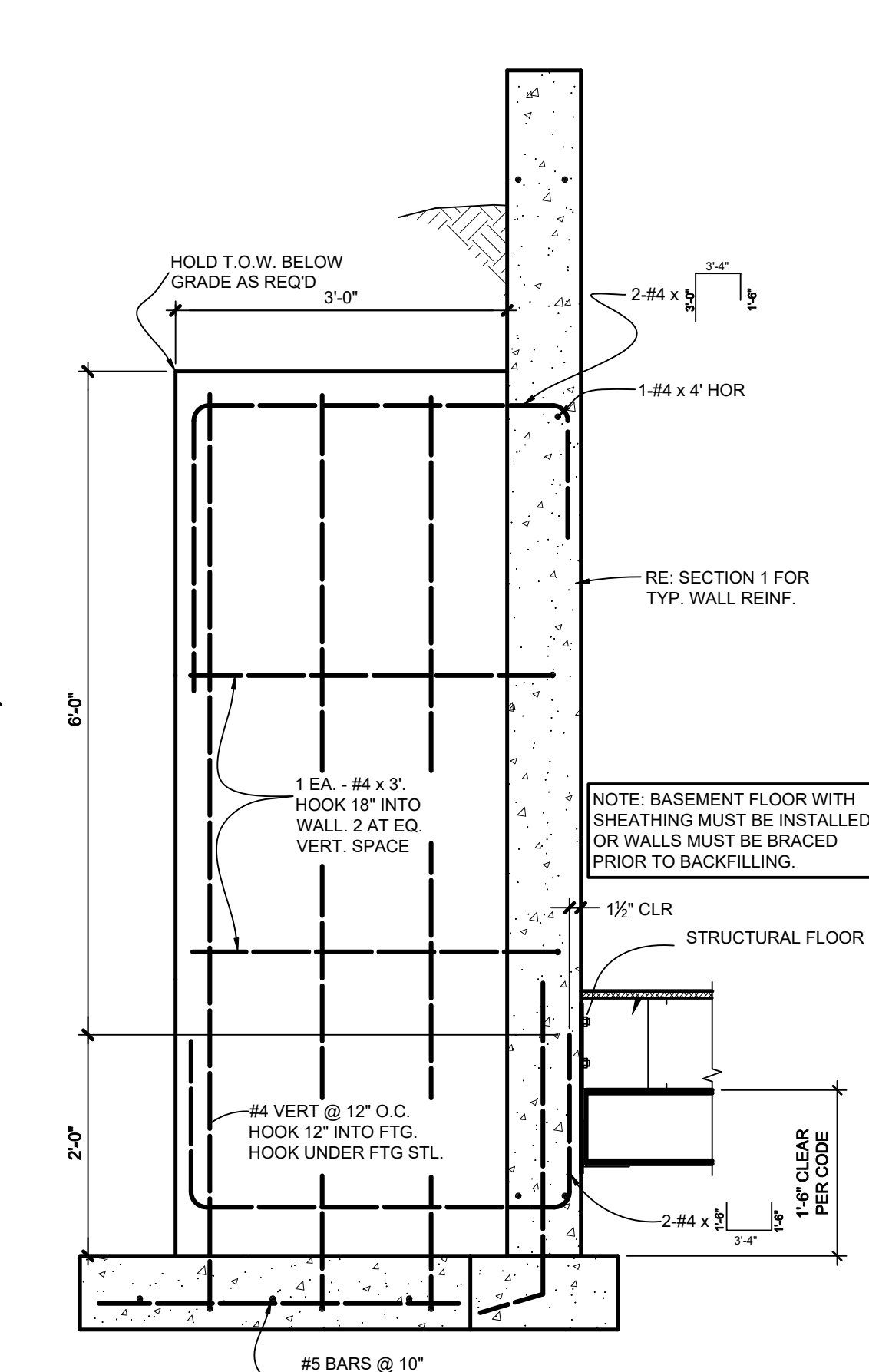
**WT TOP OF WALL @CORNER DETAIL** N.T.S.



**HD1/HD2 SIMPSON STHD/STHD-RJ INSTALLATION DETAIL** N.T.S.



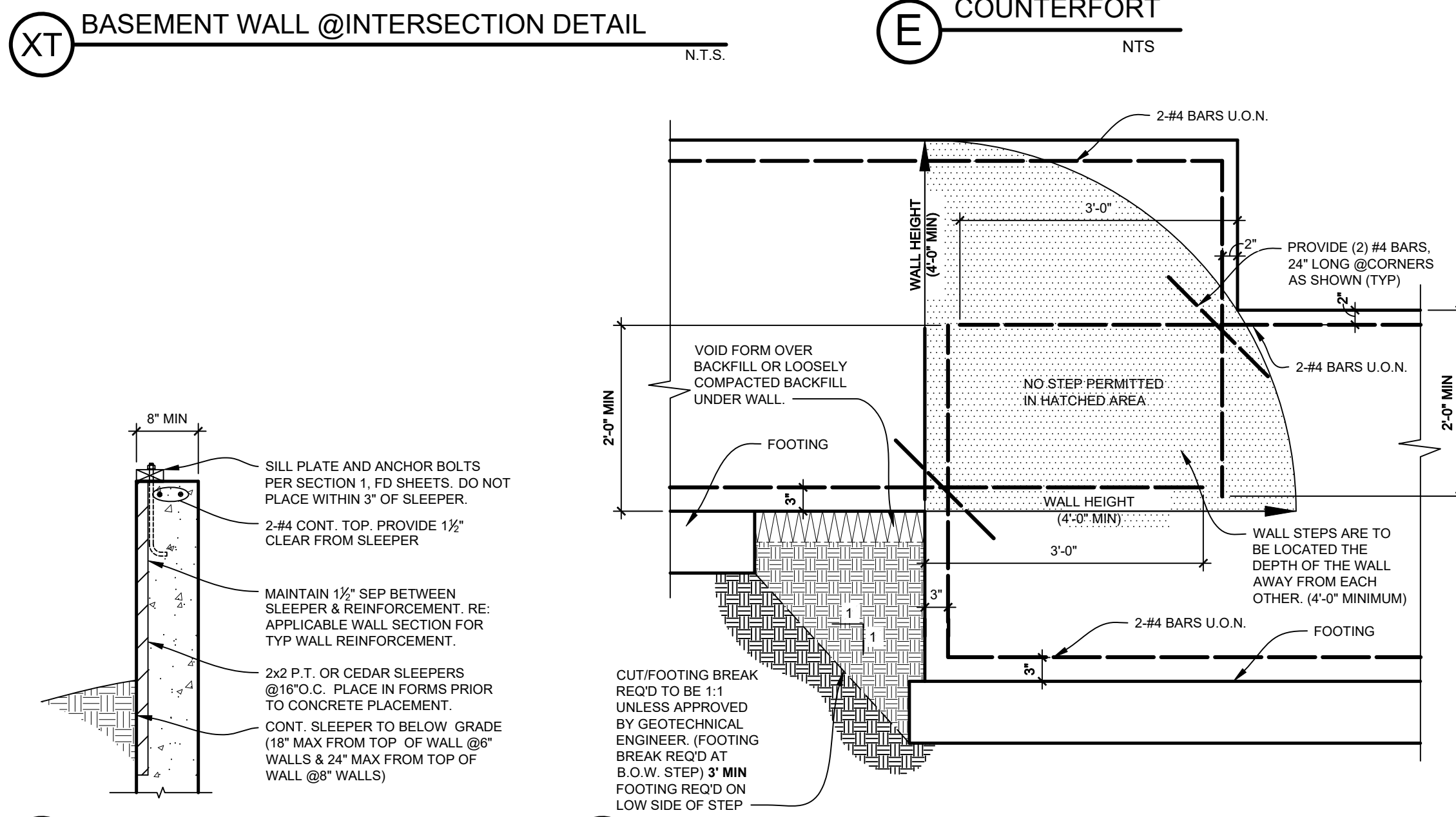
**XT BASEMENT WALL @INTERSECTION DETAIL** N.T.S.



**E COUNTERFORT** N.T.S.



**S SLEEPER INSTALLATION DETAIL** N.T.S.



**F TYPICAL WALL STEP** N.T.S.

**FOUNDATION NOTES**

A. FOUNDATION DESIGN UTILIZED THE DESIGN CRITERIA NOTED BELOW AS PROVIDED IN FOLLOWING GEOTECHNICAL ENGINEERING REPORT:  
 - PREPARED BY LAMBERT AND ASSOCIATES  
 - REPORT NUMBER: M2307  
 - DATED: APRIL 12, 2023

1. FOOTINGS AND FOUNDATIONS SHALL BE DESIGNED FOR:  
 - MAXIMUM BEARING PRESSURE = 1500 PSF  
 - MINIMUM DEADLOAD PRESSURE = NA  
 - EQUIVALENT FLUID PRESSURE = 78 PCF  
 - MINIMUM FOOTING WIDTH = 16IN  
 - MINIMUM FOOTING THICKNESS = 8IN, (10IN IF REINFORCED)  
 - VOID THICKNESS = 4IN, MINIMUM FROST PROTECTION = 36IN  
 - REFER TO SOILS REPORT FOR ANY ADDITIONAL REQUIREMENTS.

2. CONCRETE SHALL BE DESIGNED FOR THE CHECKED SITE SULFATE EXPOSURE CLASSIFICATION AND REQUIREMENTS:  
 - NO INFORMATION PROVIDED, DESIGN FOR SEVERE (S2)  
 □ NEGLIGIBLE (S0) □ MODERATE (S1) □ SEVERE (S2) □ VERY SEVERE (S3)

B. ALL VALUES AND DIMENSIONS TO BE VERIFIED BEFORE CONSTRUCTION.  
 C. CONCRETE MIX DESIGN BY CONCRETE CONTRACTOR TO BE PURSUANT TO IBC 1808.8 AND 1904 AND SHALL MEET MOST RESTRICTIVE REQUIREMENTS OF 1808.8 AND 1904 AND THIS PLAN, OR GEOTECHNICAL REPORT.  
 D. ALL CONCRETE SHALL BE MADE WITH STONE AGGREGATE AND SHALL BE TYPE II AND DEVELOP A MINIMUM OF 3,000 PSI COMPRESSIVE STRENGTH @28 DAYS. ADDITIONAL STRENGTH REQUIREMENTS AS FOLLOWS:  
 - 4,500 PSI, TYPE II CONCRETE @ALL GARAGE AND EXTERIOR FLATWORK  
 - 4,000 PSI, TYPE II CONCRETE @MODERATE SULFATE SOILS  
 - 4,500 PSI, TYPE V CONCRETE @ SEVERE SULFATE SOILS  
 - 4,500 PSI, TYPE V w/ POZZOLAN @VERY SEVERE SULFATE SOILS  
 THIS OFFICE DOES NOT RECOMMEND THE USE OF TYPE I CONCRETE.

E. A QUALIFIED GEOTECHNICAL SOIL ENGINEER SHOULD OBSERVE THE EXCAVATION TO VERIFY PROPER BEARING CONDITIONS. SUBGRADE SOILS SHALL MEET THE MINIMUM REQUIREMENTS AS SPECIFIED BY THE GEOTECHNICAL ENGINEER OF RECORD PRIOR TO PLACING CONCRETE.  
 F. SEE SOIL REPORT/GEOTECHNICAL ENGINEER & IBC FOR SLAB ON GROUND CONSTRUCTION. SCORE SLAB EACH WAY w/ 1\"/>

**DESIGN CRITERIA**  
 (LATHIE, COLORADO)

1) LOADS USED FOR DESIGN

A. ROOF SNOW LOAD (PSF)	25.2
B. GROUND SNOW LOAD (PSF)	30
C. TOTAL ROOF DEAD LOAD FOR GRAVITY DESIGN	15
D. ROOF LIVE LOAD	20
E. FLOOR LIVE LOAD	40
F. FLOOR DEAD LOAD	15
G. STAR LIVE LOAD AND EXITS (DISTRIBUTED)	100
H. STAR LIVE LOAD AND EXITS (CONCENTRATED)	300
I. FIRST FLOOR CORRIDORS (DISTRIBUTED)	100
J. FIRST FLOOR CORRIDORS (CONCENTRATED)	1000
K. RAIN LOAD	1.22
L. WIND SPEED (V30)	105

1. EXPOSURE FOR LATERAL AND UPLIFT DESIGN: C  
 2. EXPOSURE FOR SNOW LOADING: C  
 3. SEISMIC DESIGN CATEGORY: B  
 4. SEISMIC SITE CLASS: D  
 5. MINIMUM FROST PROTECTION DEPTH: 24\"/>

2) DESIGN CODES/SPECIFICATIONS  
 A. INTERNATIONAL RESIDENTIAL BUILDING CODE (IRC/IBC)-2018 EDITION  
 B. AISC STEEL CONSTRUCTION MANUAL (FIFTEENTH EDITION)  
 C. AWC NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD-2018 EDITION  
 D. ANS/ASME 1 (CURRENT EDITION)  
 E. ACI 318-14 & 318-11  
 F. ASCE 7-16 MIN DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES  
 G. AWC WOOD FRAMED CONSTRUCTION MANUAL (WFCM)-2018 EDITION  
 H. NOT USED

3) TRUSS CRITERIA  
 A. WIND EXPOSURE (LATERAL/UPLIFT DESIGN): C  
 B. WIND EXPOSURE (SNOW LOADING): B  
 C. MAX TRUSS DEFLECTION FOR SPANS UP TO 24FT: 0.75\"/>

4) CONCRETE  
 A. STRUCTURAL CONCRETE (MIN.): 3000 PSI  
 B. NON STRUCTURAL CONCRETE (EXPOSURE CLASS): F3  
 IT IS THE DUTY OF EVERY PERSON WHO PERFORMS WORK UNDER THE CODE TO COMPLY WITH THE CODE

**4**  
 ISSUE NUMBER

**GRAFF ENGINEERING**  
 1337 W. 44th Place  
 Englewood, CO 80150  
 Phone: (303) 712-9845  
 www.GraffEngineering.com

**ALPINE INVESTMENT AND REALTY**  
 218 SHERMAN ST  
 RIDGWAY COLORADO 81432  
 970-209-0195

**FOOTING FOUNDATION SECTION SHEET**

**HAVEN HOUSE EXPANSION**  
 4806 NORTH RIVER ROAD  
 OLATHE, COLORADO

**HAVEN HOUSE**  
 FOOTING FOUNDATION SECTION SHEET  
 SLAB-ON-GRADE FLOOR

34307  
 11/04/2024

PLOT DATE: NOVEMBER 4, 2024

Revisions	Issue No. 4
Design	DA
Drafting	MJF
Checked	JW
Sheet	

**FD1**

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### CONNECTOR LEGEND

TRIC NAILS ARE PROHIBITED @ ALL HUS, HHUS, AND HGUS LOCATIONS

ID	MEMBER TYPE	SIMPSON	USP
(H1)	BCI 6P	ITS3 3714	TH314
(H2)	BCI 6P	US2 3714	TH314
(H3)	LVL 8L	ITS3 2514	TH2514
(H4)	LVL 8L	US2 2514	TH2514
(H5)	LVL 8L	MIT1 8114	BP1174
(H6)	LVL 4S	HU14	HD1714
(H7)	BCI 6P	ITS3 2814	TH32814
(H8)	BCI 6P	US2 2814	TH32814
(H9)	BCI 6P	MIT1 2814	TH22814
(H10)	BCI 6P	MIT1 2514	TH22514
(H11)	(2)LVLI(2)SL4x	UK10	SUH410
(H12)	(2)LVLI(2)SL4x	HHUS410	THD410
(H13)	(2)LVLI(2)SL4x	HGUS410	THD448
(H14)	(3)LVLI(3)SL6x	HGUS5010	THD610
(H15)	(4)LVLI(4)SL8x(2)4x	HGUS72510	THD7210
(H16)	2x ROOF TRUSS	LUS24	JUS24
(H17)	2x ROOF TRUSS	LUS26	JUS26
(H18)	2x ROOF TRUSS	LUS28	JUS28
(H19)	2x ROOF TRUSS	MUS28	HUS28
(H20)	2x ROOF TRUSS	MUS28	HUS28
(H21)	2x ROOF TRUSS	HUS28	HUS28
(H22)	(2)x DBL TRUSS	HHUS28-2	THD28-2
(H23)	(2)x DBL TRUSS	HHUS28-2	THD28-2
(H24)	(2)x DBL TRUSS	HHUS210-2	THD210-2
(H25)	(2)x DBL TRUSS	HGUS28-2	THD28-2
(H26)	(2)x DBL TRUSS	HGUS28-2	THD28-2
(H27)	(2)x DBL TRUSS	HGUS210-2	THD210-2
(H28)	(3)x TRIPLE TRUSS	HGUS28-3	THD28-3
(H29)	(3)x TRIPLE TRUSS	HGUS210-3	THD210-3
(H30)	HIP TRUSS	THU28	HUC28
(H31)	ALL	LS70 (PAIR)	MP7 (PAIR)
(H32)	ROOF TRUSS	(2)RT2 or RT200 or (4) SDWC 15000	(2)RT7 or LFTA6
(H33)	ROOF TRUSS	TBE (PAIR)	SBP (PAIR)
(H34)	ROOF TRUSS	HTS20+HZ1 or HTS20+Z#3	LFTA6-RT or LFM6(Z#3)
(H35)	ROOF TRUSS	TBE (PAIR) + HTS20	SBP (PAIR) + RT7
(H36)	ROOF TRUSS	(2)HTS20	(2)LFTA6
(H37)	ROOF TRUSS	TBE (PAIR) + (2)HTS20	SBP (PAIR) + (2)MTS16
(H38)	ROOF TRUSS	(2)CS16-R	(2)RS16-R
(H39)	ROOF TRUSS	w/22-2.5"x10-14P NAILS	w/22-2.5"x10-14P NAILS

\* = PRESSURE BLOCKING/NAILING MAY REPLACE HARDWARE  
 REFER TO SCHEDULE ON SHEET SD2

**IF NO OTHER HARDWARE PROVIDED ON DRAWINGS, SECURE "HV", "HW", "HK", "HY", AND "HZ" CONNECTORS TO FOUNDATION WITH SIMPSON HTS-314 w/ 3/4" ALL THREAD w/ 8" EMBED INTO CONCRETE w/ SIMPSON SET-XP AND 2"x2" EDGE DISTANCE FOR HZ USE SIMPSON HD19 TO 4x8 POST (MIN) w/ 1.5" ALL THREAD w/ 8" EMBED w/ SET-XP. IF HARDWARE ON SECOND STORY OR ABOVE WALKOUT/BELT, BRIDGE STORIES w/ CS16 (2 @ HY & HZ).  
 NOTE: HZ STRUT & TRESSP MAY NOT BE INSTALLED ON SINGLE TOP PLATE APPLICATIONS. USE ALTERNATE HARDWARE PROVIDED.**

### GENERAL FRAMING LEGEND

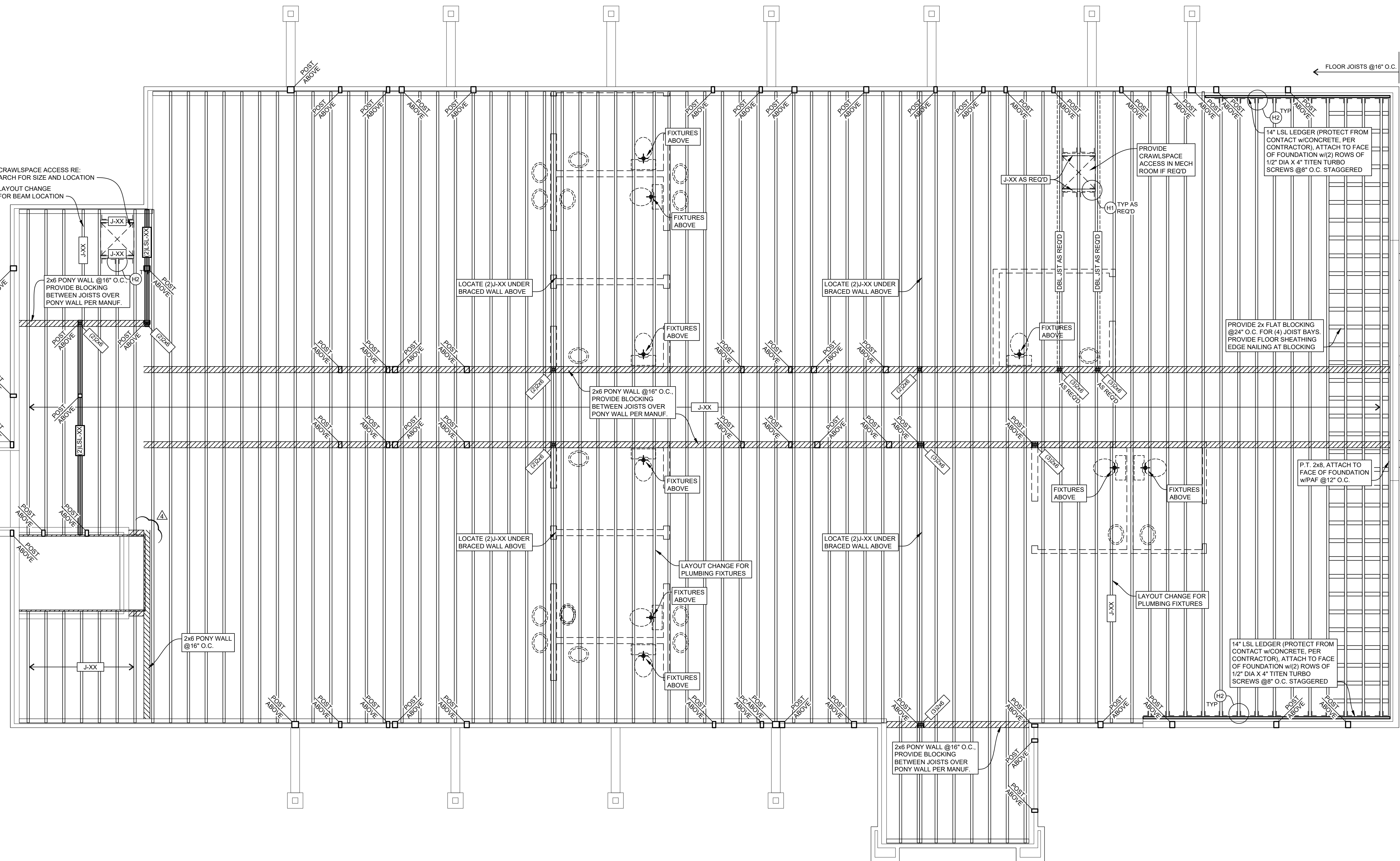
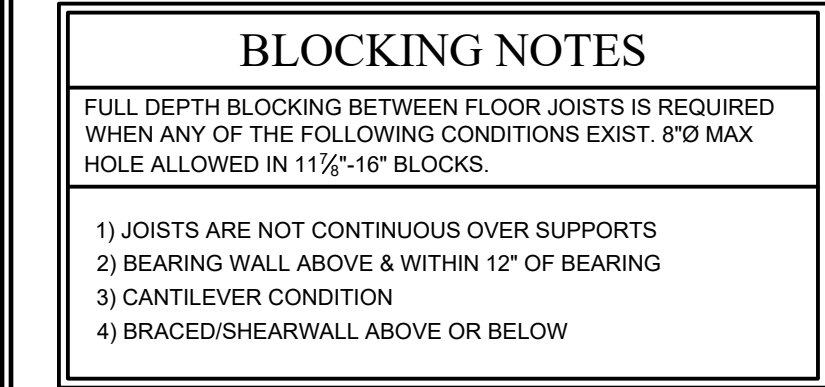
J-XX	= 14" ENGINEERED WOOD FLOOR JOIST. APPROVED MANUFACTURERS AND THEIR CORRESPONDING JOIST SERIES ARE: • LEVEL T&B SERIES (2 1/2" WIDE FLANGE) • BOISE CASCADE, BC81 90 SERIES (3 1/2" WIDE FLANGE) • PINKWOOD, PKW 40 SERIES (3 1/2" WIDE FLANGE) • LVL 8L = 1 3/4" x 14" LAMINATED STRAND LUMBER FLUSH BEAM MINIMUM DESIGN PROPERTIES: • FLEXURAL STRESS, $F_b = 2,325$ psi • MODULUS OF ELASTICITY, $E = 1,55E$ • HORIZONTAL SHEAR PARALLEL TO GRAIN, $F_v = 310$ psi • LVL PRODUCT MUST BE ICC APPROVED. APPROVED LVL PRODUCTS INCLUDE (BUT ARE NOT LIMITED TO) TIMBERTRAC® AND SOLIDSTAR™ = 1 3/2" x 14" LAMINATED VENEER LUMBER FLUSH BEAM MINIMUM DESIGN PROPERTIES: • FLEXURAL STRESS, $F_b = 2,600$ psi • MODULUS OF ELASTICITY, $E = 1,94 \times 10^6$ psi • HORIZONTAL SHEAR PARALLEL TO GRAIN, $F_v = 285$ psi • LVL PRODUCT MUST BE ICC APPROVED. APPROVED LVL PRODUCTS INCLUDE (BUT ARE NOT LIMITED TO) MICROLAM®, VERSALAM®, MULTIPLE ENGINEERED WOOD JOIST, "X" IS REQ'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.O. ON PLAN. (SEE SINGLE JOIST SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER MANUFACTURER RECOMMENDATIONS. = MULTIPLE LAMINATED STRAND LUMBER BEAM, "X" IS REQ'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.O. ON PLAN. (SEE SINGLE LVL SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER GENERAL NOTES. = MULTIPLE LAMINATED VENEER LUMBER BEAM, "X" IS REQ'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.O. ON PLAN. (SEE SINGLE LVL SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER GENERAL NOTES. XX = LENGTH OF FRAMING MEMBER ROUNDED UP TO THE NEAREST FOOT WHEN INDICATED AS "XX". FOLLOW ARCHITECTURAL DIMENSIONS FOR LENGTH OF MEMBER. = 14" ENGINEERED WOOD RIM BOARD. APPROVED MANUFACTURERS AND THEIR CORRESPONDING RM MATERIAL ARE: • LEVEL, TIMBERTRAC® (1/2" WIDE) • BOISE CASCADE, BC RIM BOARD OSB® (1/2" WIDE) = INTERIOR BEARING WALL = MINIMUM 1/2" DIA POST (LARGER POST SPECIFIED ON PLAN) REFER TO CS1 FOR KING (FULL HEIGHT) STUD REQUIREMENTS = BLOCKING TO FDN OR STRUCTURAL MEMBER REQUIRED UNDER POST ABOVE. PACK WEBS OF JOISTS PER MFG. AS REQ'D. ADDITIONAL RIM MAY BE INSTALLED FOR SQUASH BLOCKS. JOIST MATERIAL IS PROHIBITED FOR SQUASH BLOCKING = INDICATES APPROXIMATE PLUMBING DROP LOCATIONS. CONTRACTOR IS RESPONSIBLE TO VERIFY CLEARANCE FOR PLUMBING PRIOR TO SECURING FLOOR JOISTS. = STRUCTURAL PORCH POST - RE: PLAN FOR SIZE. (SEE DETAILS PH22 ON SD2 FOR CONNECTION & A4SD1 FOR PORCH HEADER CONNECTION DETAILS) = INDICATES APPROXIMATE PLUMBING DROP LOCATIONS. CONTRACTOR IS RESPONSIBLE TO VERIFY CLEARANCE FOR PLUMBING PRIOR TO SECURING FLOOR JOISTS. = STRUCTURAL PORCH POST - RE: PLAN FOR SIZE. (SEE DETAILS PH22 ON SD2 FOR CONNECTION & A4SD1 FOR PORCH HEADER CONNECTION DETAILS)
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BLOCKING NOTES

FULL DEPTH BLOCKING BETWEEN FLOOR JOISTS IS REQUIRED WHEN ANY OF THE FOLLOWING CONDITIONS EXIST. 3/8" MAX. HOLE ALLOWED IN 1 1/2"-16" BLOCKS.

- 1) JOISTS ARE NOT CONTINUOUS OVER SUPPORTS
- 2) BEARING WALL ABOVE & WITHIN 12" OF BEARING
- 3) CANTILEVER CONDITION
- 4) BRACED/SHEAR WALL ABOVE OR BELOW

**ALL DIMENSIONS ARE TO BE VERIFIED WITH ARCH PRIOR TO CONSTRUCTION.**



**MAIN LEVEL FLOOR FRAMING PLAN**

REFER TO SHEETS CS1, SD1 & SD2 FOR DETAILS & NOTES NOT SHOWN ON THIS PAGE. ALL HEADER & POST CALL OUTS ARE INDICATED IN WALL FRAMING PLAN ON PREVIOUS PAGE

**4**  
ISSUE NUMBER

**ALPINE INVESTMENT AND REALTY AND REALTY**  
 218 SHERMAN ST.  
 RIDGWAY COLORADO 81432  
 970-209-0195

**HAVEN HOUSE**  
 MAIN LEVEL FLOOR FRAMING PLAN  
 ALL ELEVATIONS  
 PLOT DATE  
 NOVEMBER 4, 2024

Revisions	Issue No. 4
Δ 1/29/2024	Date 1/14/2024
Δ 9/3/2024	Design DA
Δ 11/4/2024	Drafting MJP
	Checked JW
	Sheet

**S1.0**



### SHEARWALL FRAMING / FASTENER SCHEDULE

(APPLIES TO WALLS INDICATED AS ENGINEERED SHEARWALL PANEL U.O.N.)

MARK	SHEATHING MATERIAL (INSTALL PER L7/S/D2)	EDGE NAILING	APPROX Vv (PT) **	CONNECTORS (SEE DETAIL L1-L6/S/D2 FOR LOCATION OF FASTENERS)		
				① (SEE NOTE 12)	②	③ ***
SA	1/2" GYPSUM SHEATHING BOARD	N4" SC4"	150	A35 or LTP4 @36" O.C. or 3/8"x148 TOENAILS @10" O.C.	3/2"x162" @14" O.C.	1/2" A.B. @48" O.C.
SB	1/2" EXTERIOR RATED OSB OR STRUCT 1 PLYWOOD (1 FACE)	N6" ST4"	335	A35 or LTP4 @14" O.C. or 3/8"x148 TOENAILS @4" O.C.	3/2"x162" @6" O.C.	1/2" A.B. @23" O.C.
SC	1/2" EXTERIOR RATED OSB OR STRUCT 1 PLYWOOD (1 FACE)	N4" ST+2"	520	A35 or LTP4 @9" O.C. or 3/8"x148 TOENAILS @2 1/2" O.C.	3/2"x162" @4" O.C.	1/2" A.B. @15" O.C.
SD	1/2" EXTERIOR RATED OSB OR STRUCT 1 PLYWOOD (1 FACE)	N3"	665	A35 or LTP4 @8" O.C. or 3/8"x148 TOENAILS @2 1/4" O.C.	3/2"x162" @3" O.C.	1/2" A.B. @12" O.C.
SE	1/2" EXTERIOR RATED OSB OR STRUCT 1 PLYWOOD (1 FACE) (SEE NOTE 8)	N2"	884	A35 or LTP4 @8" O.C. or 3/8"x148 TOENAILS @3" O.C.	3/2"x162" @2" O.C.	1/2" A.B. @17" O.C.

- SPACE EDGE NAILS PER SCHEDULE AT ALL STUDS, TOP AND BOTTOM PLATES, AND BLOCKING. USE ONLY THE SPECIFIED NAIL TYPE WITH THE APPLIED PRODUCT.
  - N = NAILS FOR GYP SHALL BE 13GA (D9270) #1 7/8" CUPHEAD TYPE GYPSUM WALLBOARD NAILS U.O.N.
  - SC = #6 BY 2" LONG (#2) COURSE THREADED DRYWALL SCREWS PER GA 253 & ASTM 1280 U.O.N.
  - ST = #16A, 7/16" CROWN W/ 1/2" LESS STAPLES MAY BE INSTALLED IN OSB PER ICBO ER-2843
  - ST+2 = INTERMEDIATE NAILING SHALL BE AT 9" O.C. MAY BE INCREASED TO 12" O.C. IF STUDS ARE 18" O.C. OR LESS. GYP INTERMEDIATE NAILING SHALL BE AT 8" O.C. REDUCE INTERMEDIATE NAILING TO 6" O.C. IF STUD SPACING IS GREATER THAN 18" O.C.
- 2x BLOCKING IS REQUIRED AT ALL PANEL EDGES NOT LANDING ON STUD OR PLATE, MAY BE FLATWISE (U.O.N.). PROVIDE 3x OR 2x 2x BLOCKS @SHEARWALLS. FOR STUD SPACINGS GREATER THAN 16" O.C. SHEATHING SHALL BE ORIENTED WITH STRENGTH AXIS PERPENDICULAR TO WALL STUDS. WHERE PANELS ARE APPLIED ON BOTH SIDES OF A WALL, EXTERIOR AND INTERIOR PANEL EDGES ARE TO BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS & NAILS ON EACH SIDE SHALL BE STAGGERED AT ALL FRAMING MEMBERS. SHEAR VALUES ARE ADDITIVE.
- PROVIDE A 3-STUD CORNER OR 3-2x4-2x6 @ ALL SHEAR WALL ENDS. STUD CONFIGURATION MAY VARY. NAIL STUDS TOGETHER W/1" ROW OF 3/2"x162" NAILS @18" O.C. MIN.
- INDICATED PANEL EDGES SHALL REQUIRE 3x OR DOUBLE 2x BLOCKING STUDS AT ALL ADJOINING EDGES. NAIL BLOCKING STUDS TOGETHER W/2 1/2"x148" NAILS @3" O.C. STAGGERED. LOCATE CENTER OF DOUBLE STUD ON PANEL JOINT. PROVIDE STAGGERED NAILING @ ALL EDGES.
- AT DOUBLE TOP PLATE SPLICE, PLATES ARE TO LAP 4'-0" MINIMUM AND ARE TO BE NAILED W/2 ROWS 3/2"x162" NAILS @6" C. WHERE 4'-0" LAP IS NOT POSSIBLE, STRAP PLATES W/16GA STRAP NAILS W/ A MINIMUM OF 6'-3"x0.148" NAILS @6" C. WHERE 4'-0" LAP IS NOT POSSIBLE, STRAP PLATES W/16GA STRAP NAILS W/ A MINIMUM OF 6'-3"x0.148" NAILS @EACH END.
- BOLT HOLES FOR SIMPSON HARDWARE SHALL BE 1/8" MAX OVERSIZED.
- IN ADDITION TO THE SPACING PER THE SCHEDULE, ANCHOR BOLTS ARE TO BE LOCATED A MINIMUM OF 12" FROM EACH PLATE BREAK W/ A MINIMUM OF 2 ANCHOR BOLTS PER PLATE. 1/2" DIA TYPEN HD ANCHORS MAY BE RETORFITTED WHERE ANCHOR BOLTS ARE REQUIRED, BUT NOT INSTALLED.
- AT (2) PLY GYPSUM PANELS, BASE PLY NAILING TO BE 13GA (D9270) #1 7/8" LONG NAILS SPACED @9" O.C. AND FACE PLY NAILING TO BE 11 1/2" GA (D11370) #3 3/8" LONG NAILS SPACED @7" O.C.
- FOLLOW ALL MANUFACTURER'S INSTALLATION RECOMMENDATIONS, INCLUDING NAILING REQUIREMENTS, FOR ALL SPECIFIED HARDWARE.
- WHERE WALL SHEATHING IS INSTALLED PER DETAIL L7, 1/S/D2, HARDWARE AND FASTENERS IN CONNECTOR ① IN EXCESS OF IRC SECTION 602 REQUIREMENTS MAY BE OMITTED. AT FLOOR TRUSS CONDITIONS, TOE NAILS MAY BE INSTALLED VERTICALLY FROM TRUSS BLOCKING INTO TOP PLATE.
- OVERDRIVEN FASTENERS ARE PROHIBITED AND WILL REQUIRE AN ADDITIONAL FASTENER. IF ADDED FASTENER RESULTS IN SPACING OF 2" O.C. OR LESS THE ENTIRE PANEL WILL REQUIRE REVIEW BY THIS OFFICE OR REPLACEMENT.
- APA RATED EXTERIOR PLYWOOD (EXP 1) MAY BE SUBSTITUTED FOR STRUCTURAL I FOR SB-SD PROVIDED THE EDGE NAIL SPACING IS DECREASED TO THE NEXT SHEARWALL DOWN IN THE LIST (E.G., SB BECOMES SC).
- VALUE @ 24" O.C. STUD SPACING W/HM-FIR FRAMING
- \*\* U.O.N. ANCHOR REQUIRE 0.229"x3"x3" WASHER. CUT WASHER MAY BE USED FOR SA-SC WHERE HEIGHT TO WIDTH RATIO OF WALL PANEL DOES NOT EXCEED 2:1.

### BRACED WALL SCHEDULE

MARK	MARK EXPLANATION	SHEATHING	CONNECTOR	EDGE NAILING	FIELD NAILING	ADDITIONAL CONNECTOR NOTES
WSP	WOOD STRUCTURAL PANEL	1/2" OSB U.O.N.	2 1/2"x0.131"	6" O.C.	12" O.C.	
GB (INTERIOR)	GYPSUM BOARD	1/2" GYPSUM BOARD	5d COOLER or 1 1/2" SCREWS TYPE W or S	3" O.C.	8" O.C.	
GB (EXTERIOR)	GYPSUM BOARD	1/2" GYPSUM BOARD	1/2" GALVANIZED ROOFING NAIL, 1/2" LONG GALVANIZED STAPLE, 1/2" SCREWS TYPE W or S	7" O.C.	12" O.C.	
GB (EXTERIOR)	GYPSUM BOARD	1/2" GYPSUM BOARD	1/2" GALVANIZED ROOFING NAIL, 1/2" LONG GALVANIZED STAPLE, 1/2" SCREWS TYPE W or S	7" O.C.	7" O.C.	
PFH	INTERMITTENT PORTAL FRAMING	1/2" OSB U.O.N.	EXTEND HEADER AS REQ'D PER CODE DETAIL	RE:	RE:	SEE IBC SECTION 2308.6.5.2 FOR MORE INFORMATION

CONNECT BRACED WALLS TO FLOOR/CEILING FRAMING PER IRC REQUIREMENTS. OVERDRIVEN FASTENERS ARE PROHIBITED AND WILL REQUIRE AN ADDITIONAL FASTENER. IF ADDED FASTENER RESULTS IN SPACING OF 2" O.C. OR LESS THE ENTIRE PANEL WILL REQUIRE REVIEW BY THIS OFFICE OR REPLACEMENT. NOTE: ALL BRACED WALL TYPES REQUIRE A MINIMUM OF GYPSUM SHEATHING ON ONE SIDE OF THE WALL (BOTH SIDES @ METHOD GB), INSTALLED PER METHOD GB U.O.N. NOTE: SHEATHING TO BE THICKER OF THAT REQUIRED BY THIS TABLE, FRAMING NOTES, AND CODE.

### WALL FRAME NOTES

(FOR REFERENCE ONLY) RE: IRC

#### EXTERIOR & BEARING SUPPORTING ROOF & TWO FLOORS

**2x4 WALLS**  
 1) HEIGHTS UP TO 10'-0" (2) 2x4 @16" O.C.  
 2) HEIGHTS OVER 10'-0" - REFER TO PLAN

**2x6 WALLS**  
 1) HEIGHTS UP TO 12'-0" - 2x6 @16" O.C.  
 2) HEIGHTS OVER 12'-0" - REFER TO PLAN

#### EXTERIOR & BEARING SUPPORTING ROOF & ONE FLOOR

**2x4 WALLS**  
 1) HEIGHTS UP TO 10'-0" - 2x4 @16" O.C.  
 2) HEIGHTS FROM 10'-0" TO 12'-0" (2) 2x4 @16" O.C.  
 3) HEIGHTS OVER 12'-0" - REFER TO PLAN

**2x6 WALLS**  
 1) HEIGHTS UP TO 10'-0" - 2x6 @24" O.C.  
 2) HEIGHTS FROM 10'-0" TO 14'-0" - 2x6 @16" O.C.  
 3) HEIGHTS FROM 16'-0" TO 18'-0" - 2x6 @12" O.C.  
 4) HEIGHTS OVER 18'-0" - REFER TO PLAN

#### EXTERIOR & BEARING SUPPORTING ROOF ONLY

**2x4 WALLS**  
 1) HEIGHTS UP TO 12'-0" - 2x4 @16" O.C.  
 2) HEIGHTS FROM 12'-0" TO 14'-0" - 2x4 @16" O.C.  
 3) HEIGHTS OVER 14'-0" - REFER TO PLAN

**2x6 WALLS**  
 1) HEIGHTS UP TO 10'-0" - 2x6 @24" O.C.  
 2) HEIGHTS FROM 10'-0" TO 16'-0" - 2x6 @16" O.C.  
 3) HEIGHTS FROM 16'-0" TO 20'-0" - 2x6 @12" O.C.  
 4) HEIGHTS OVER 20'-0" - REFER TO PLAN

### LATERAL WALL FRAMING LEGEND

ALL EXTERIOR WALLS TO BE CONTINUOUS STRUCTURAL PANEL SHEATHING ABOVE AND BELOW ALL OPENINGS. SHEATHING SPECIFICATION TO MATCH ADJACENT WALL PANELS AT OPENINGS. BRACING MAY BE INSTALLED ON EITHER SIDE OF INDICATED WALL U.O.N.

- (X) = BRACED WALL LINE
- (X) = (WALL PANELS WITHIN 4'-0" OF BRACED WALL LINE & NO MORE THAN 8'-0" APART (TOTAL) ARE CONSIDERED PART OF THE BRACED WALL LINE
- = BRACED WALL PANEL
- = ENGINEERED SHEAR WALL PANEL
- ⑦ = WALL PANEL MARK. REFER TO BRACED WALL SCHEDULE. MARKS SHOWN INDICATE ENGINEERED SHEARWALL PANEL. 7" CORRELATES PANEL TO SHEARWALL SCHEDULE. PANEL MATERIAL, FASTENER TYPE AND SPACING, ADDITIONAL CRITERIA ARE NOTED IN SHEARWALL SCHEDULE.
- FULL = INDICATES PANEL LENGTH IS EQUAL TO ENTIRE WALL LENGTH
- = HEADER PER PLAN. EXTEND TO WALL ENDS AND INSTALL STRAPS AND SHEATHING PER DETAIL ON SHEET THAT MATCHES INDICATED WALL MARK.
- ( ) = HOLDOWN AS SPECIFIED IN HOLDOWN SCHEDULE. COLLECTOR OR DRAG STRUT. CONSTRUCTION DETAIL REFERENCE INDICATED ON PLANS WHEN COLLECTOR SPECIFIED.
- (U) = NO EDGE BLOCKING REQUIRED.
- (O.S.) = ONE SIDE OF WALL PANEL HAS BEEN DESIGNED FOR SINGLE FACE BRACING. NO BRACING REQUIRED ON OPPOSITE FACE.

IF BOX IS 1" SQ. THEN SCALE IS 1/2" = 1'-0"  
 IF BOX IS 1/2" SQ. THEN SCALE IS 3/4" = 1'-0"  
 IF BOX IS NOT 2" OR 1" SQ. THEN DRAWING IS NOT TO SCALE.  
 WE NOTE THAT THESE DRAWINGS ARE NOT TO BE SCALED.  
 SCALE IS PROVIDED FOR REFERENCE ONLY. REFER TO PLAN DIMENSIONS, IF DIMENSIONS NOT PROVIDED ON PLAN, REFER TO ARCHITECTURAL DRAWINGS FOR AREA IN QUESTION.

### HEADER SCHEDULE

(FRAME PER NOTES ON CS1)

D	SIMPSON	USP
HDT1 OR HD2	STDH14 / STD14R/L	STD14 / STD14R/L
HD3	CS16x48*	RS16-R
HD4	(2)CS16x48*	(2)RS16-R
HD5 OR HD6	HTT5 (U)	HTT22 (U)

\* USE (3)CS16 OR 1(CMST14 @FRAMED SHEARWALL BELOW OR 1)CS16 @ WSP OR CS-WSP BRACED WALLS.  
 (1) REQUIRES 5/8" THREADED ROD ANCHOR (A193 GR 8 OR F593 304SS) w/SIMPSON "ATXP" ADHESIVE. LOCATE ROD 4" (MIN) FROM EDGE OF CONC. AND EMBED 9 3/8" (MIN) INTO CONC.  
 (2) IF STRAP IS PLACED IN THE MIDDLE OF WALL, BEING STRAIGHT RE MANUFACTURER FOR INSTALLATION INSTRUCTIONS (R/L) SERIES REQUIRED AT GARAGE CURB AT BLOCKOUT. PLACE BENEATH CURB AS REQ'D.

WINDOW HEADERS ARE INDICATED AS 2PLY IN A 2x6 WALL TO ALLOW FOR INSULATION OF HEADER CAVITY. HEADERS TO BE PLACED ON THE EXTERIOR FACE OF THE WALL AND INSULATE THE INTERIOR FACE. PROVIDE K.S.V. PER GENERAL FRAMING & ROOF TRUSS NOTES.

### HOLDOWN SCHEDULE

CONTRACTOR TO VERIFY ALL HOLDOWN LOCATIONS w/ARCHITECTURAL DRAWINGS AND LATERAL PAGES. PROVIDED DIMENSIONS MUST BE VERIFIED PRIOR TO PLACEMENT. ALL HOLDOWN STRIPS TO BE NAILED TO FULL HEIGHT STUDS. NAILED TO SHEATHING w/EDGE NAILING.

CONTRACTOR TO VERIFY ALL HOLDOWN LOCATIONS w/ARCHITECTURAL DRAWINGS AND LATERAL PAGES. PROVIDED DIMENSIONS MUST BE VERIFIED PRIOR TO PLACEMENT. ALL HOLDOWN STRIPS TO BE NAILED TO FULL HEIGHT STUDS. NAILED TO SHEATHING w/EDGE NAILING.

**4**

ISSUE NUMBER

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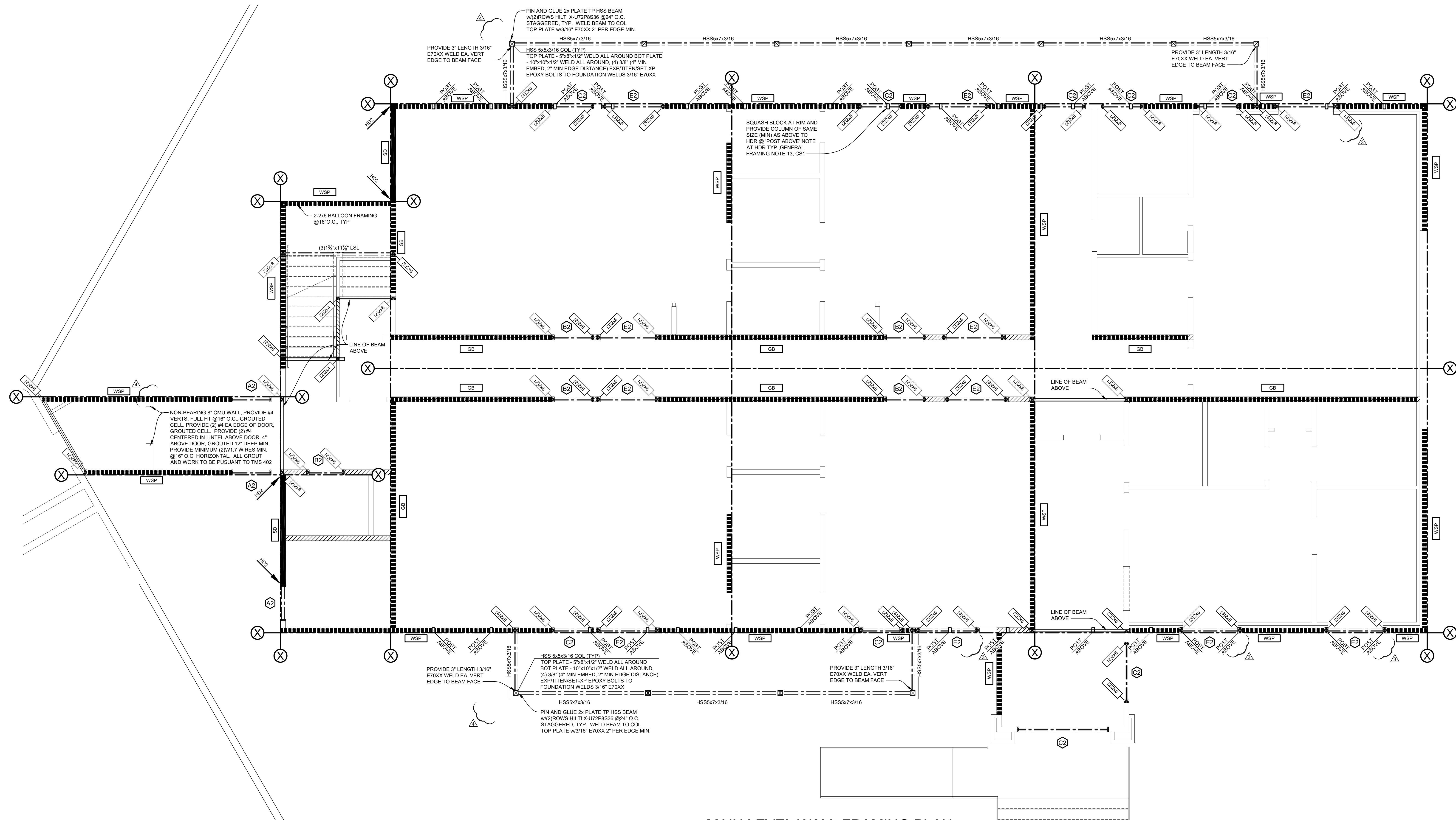
MAIN LEVEL WALL FRAMING PLAN  
 HAVEN HOUSE EXPANSION  
 4806 NORTH RIVER ROAD  
 OLATHE, COLORADO

34307  
 11/16/2024

HAVEN HOUSE  
 MAIN LEVEL WALL FRAMING PLAN  
 ALL ELEVATIONS  
 PLOT DATE: NOVEMBER 4, 2024

Revisions	Issue No. 4
1/29/2024	Date 1/14/2024
9/30/2024	Design DA
11/4/2024	Drafting JMF
	Checked JW
	Sheet

**S2.0**



**MAIN LEVEL WALL FRAMING PLAN**  
 REFER TO SHEETS CS1, SD1 & SD2 FOR DETAILS & NOTES NOT SHOWN ON THIS PAGE. ALL HEADER & POST CALL OUTS ARE INDICATED IN WALL FRAMING PLAN ON PREVIOUS PAGE

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BRACED WALL SCHEDULE						
MARK	MARK EXPLANATION	SHEATHING	CONNECTOR	EDGE NAILING	FIELD NAILING	ADDITIONAL CONNECTOR NOTES
WSP	WOOD STRUCTURAL PANEL	1/4" OSB U.O.N.	22"x0.131"	9"O.C.	12"O.C.	
GB (INTERIOR)	GYPSUM BOARD	5/8" GYPSUM BOARD	5d COOLER or 1 1/2" SCREWS TYPE W or S	3"O.C.	6"O.C.	
GB (EXTERIOR)	GYPSUM BOARD	5/8" GYPSUM BOARD	0.092x1 1/2" w 1/2" HEAD or 1 1/2" SCREWS TYPE W or S	7"O.C.	12"O.C.	
GB (EXTERIOR)	GYPSUM BOARD	5/8" GYPSUM BOARD	1 1/2" GALVANIZED ROOFING NAIL 1 1/2" LONG GALVANIZED STAPLE 1 1/2" SCREWS TYPE W or S	7"O.C.	7"O.C.	
GB (EXTERIOR)	GYPSUM BOARD	5/8" GYPSUM BOARD	1 1/2" GALVANIZED ROOFING NAIL 1 1/2" LONG GALVANIZED STAPLE 1 1/2" SCREWS TYPE W or S	7"O.C.	7"O.C.	
PFH	INTERMITTENT PORTAL FRAME	1/4" OSB U.O.N.	EXTEND HEADER AS REQ'D PER CODE DETAIL	RE:	RE:	SEE IBC SECTION 2308.6.5.2 FOR MORE INFORMATION

CONNECT BRACED WALLS TO FLOOR/CEILING FRAMING PER IBC REQUIREMENTS. OVERDRIVEN FASTENERS ARE PROHIBITED AND WILL REQUIRE AN ADDITIONAL FASTENER. IF ADDED FASTENER RESULTS IN SPACING OF 2' O.C. OR LESS THE ENTIRE PANEL WILL REQUIRE REVIEW BY THIS OFFICE OR REPLACEMENT.  
NOTE: ALL BRACED WALL TYPES REQUIRE A MINIMUM OF GYPSUM SHEATHING ON ONE SIDE OF THE WALL (BOTH SIDES @METHOD 'GB'), INSTALLED PER METHOD 'GB' U.O.N.  
NOTE: SHEATHING TO BE THICKER OF THAT REQUIRED BY THIS TABLE, FRAMING NOTES, AND CODE.

WALL FRAME NOTES (FOR REFERENCE ONLY) RE: IBC	
<b>EXTERIOR &amp; BEARING SUPPORTING ROOF &amp; TWO FLOORS</b>	
<b>2x4 WALLS</b>	
1) HEIGHTS UP TO 10'-0" - (2) 2x4 @ 16" O.C.	
2) HEIGHTS OVER 10'-0" - REFER TO PLAN	
<b>2x6 WALLS</b>	
1) HEIGHTS UP TO 12'-0" - 2x6 @ 16" O.C.	
2) HEIGHTS OVER 12'-0" - REFER TO PLAN	
<b>EXTERIOR &amp; BEARING SUPPORTING ROOF &amp; ONE FLOOR</b>	
<b>2x4 WALLS</b>	
1) HEIGHTS UP TO 10'-0" - 2x4 @ 16" O.C.	
2) HEIGHTS FROM 10'-0" TO 12'-0" - (2) 2x4 @ 16" O.C.	
3) HEIGHTS OVER 12'-0" - REFER TO PLAN	
<b>2x6 WALLS</b>	
1) HEIGHTS UP TO 10'-0" - 2x6 @ 24" O.C.	
2) HEIGHTS FROM 10'-0" TO 16'-0" - 2x6 @ 16" O.C.	
3) HEIGHTS FROM 16'-0" TO 18'-0" - 2x6 @ 12" O.C.	
4) HEIGHTS OVER 18'-0" - REFER TO PLAN	
<b>EXTERIOR &amp; BEARING SUPPORTING ROOF ONLY</b>	
<b>2x4 WALLS</b>	
1) HEIGHTS UP TO 12'-0" - 2x4 @ 16" O.C.	
2) HEIGHTS FROM 12'-0" TO 14'-0" - (2) 2x4 @ 16" O.C.	
3) HEIGHTS OVER 14'-0" - REFER TO PLAN	
<b>2x6 WALLS</b>	
1) HEIGHTS UP TO 10'-0" - 2x6 @ 24" O.C.	
2) HEIGHTS FROM 10'-0" TO 16'-0" - 2x6 @ 16" O.C.	
3) HEIGHTS FROM 16'-0" TO 20'-0" - 2x6 @ 12" O.C.	
4) HEIGHTS OVER 20'-0" - REFER TO PLAN	

LATERAL WALL FRAMING LEGEND	
(X)	= BRACED WALL LINE
(X)	= (WALL PANELS WITHIN 4'-0" OF BRACED WALL LINE & NO MORE THAN 8'-0" APART (TOTAL) ARE CONSIDERED PART OF THE BRACED WALL LINE
=====	= ENGINEERED SHEAR WALL PANEL
---	= WALL PANEL MARK. REFER TO BRACED WALL SCHEDULE. MARKS SH-SC INDICATE ENGINEERED SHEARWALL PANEL. "P" CORRELATES PANEL TO SHEARWALL SCHEDULE. PANEL MATERIAL, FASTENERS TYPE AND SPACING, ADDITIONAL CRITERIA ARE NOTED IN SHEARWALL SCHEDULE.
FULL	= INDICATES PANEL LENGTH IS EQUAL TO ENTIRE WALL LENGTH
==	= HEADER PER PLAN. EXTEND TO WALL ENDS AND INSTALL STRAPS AND SHEATHING PER DETAIL ON SHEET THAT MATCHES INDICATED WALL MARK.
---	= SIMPSON A33 BETWEEN HEADER AND KING STUD.
---	= STRAP TRIMMERS ACROSS HEADER w/CS16 w/10-2.5" 0.131" NAILS EA SIDE or UP TO TOP OF TOP PLATE (INSIDE FACE).
---	= HOLDOWN AS SPECIFIED IN HOLDOWN SCHEDULE.
---	= COLLECTOR OR DRAG STRUT. CONSTRUCTION DETAIL REFERENCE INDICATED ON PLANS WHEN COLLECTOR SPECIFIED.
(w)	= NO EDGE BLOCKING REQUIRED.
O.S.	= ONE SIDE OF WALL PANEL HAS BEEN DESIGNED FOR SINGLE FACE BRACING. NO BRACING REQUIRED ON OPPOSITE FACE.

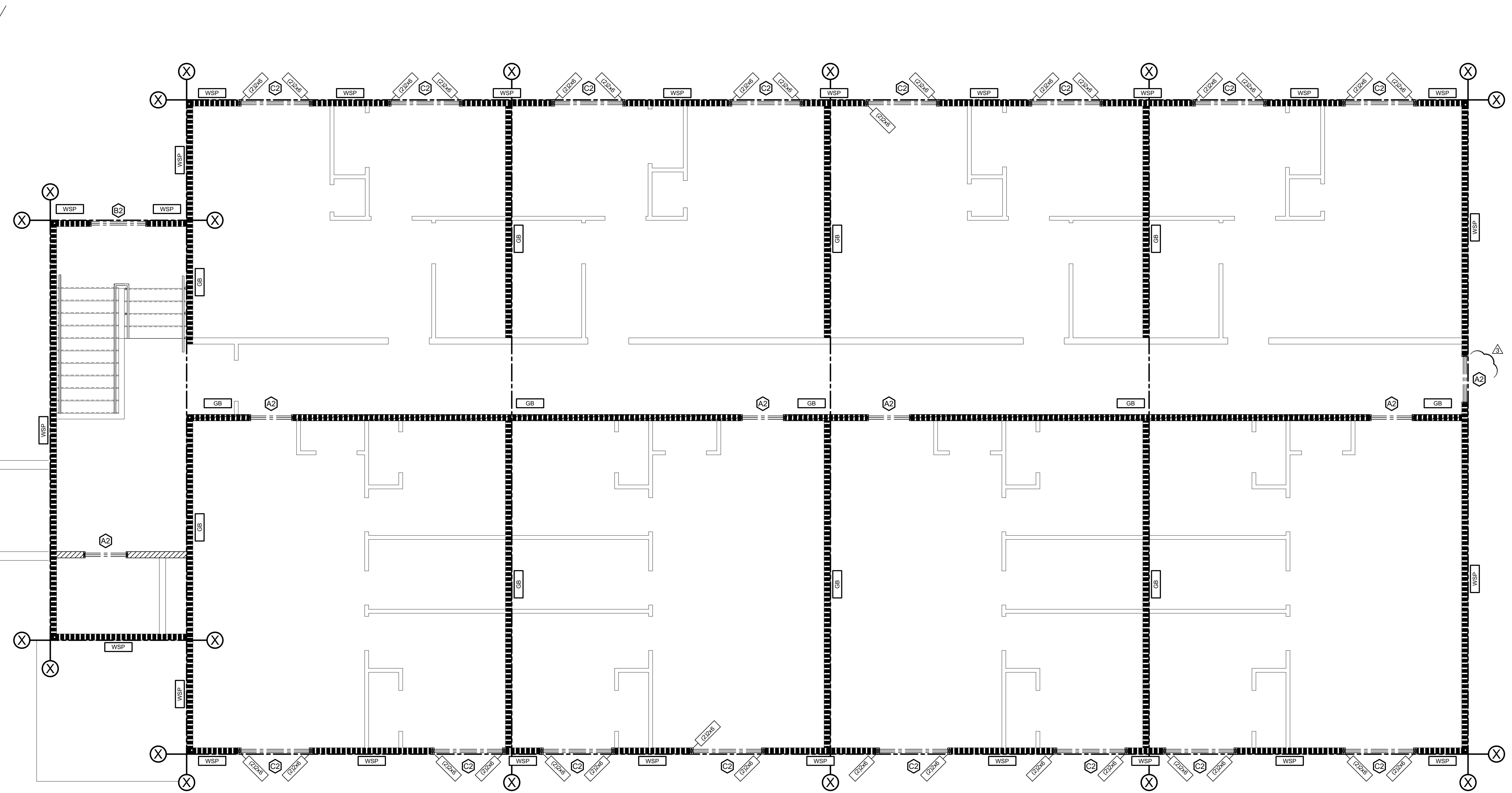
HEADER SCHEDULE (FRAME PER NOTES ON CS1)	
H1	= (7)2x6 HF/SPF#2
H2	= (7)2x6 HF/SPF#2
H3	= (7)2x10 HF/SPF#2
H4	= (7)1 3/4"x9 1/2" TIMBERSTRAND® 1.55E LSL
H5	= (7)1 3/4"x11 7/8" TIMBERSTRAND® 1.55E LSL
H6	= (7)1 3/4"x14" MICROLAM® 2.0E LVL BM
H7	= (7)1 3/4"x14" MICROLAM® 2.0E LVL BM
H8	= (7)1 3/4"x18" MICROLAM® 2.0E LVL BM

WINDOW HEADERS ARE INDICATED AS 2-PLY IN A 2x6 WALL TO ALLOW FOR INSULATION OF HEADER CAVITY. HEADERS TO BE PLACED ON THE EXTERIOR FACE OF THE WALL AND INSULATE THE INTERIOR FACE. PROVIDE K.S.'s PER GENERAL FRAMING & ROOF TRUSS NOTES.

HOLDOWN SCHEDULE CONTRACTOR TO VERIFY ALL HOLDOWN LOCATIONS w/ARCHITECTURAL DRAWINGS AND LATERAL PAGES. PROVIDED DIMENSIONS <b>MUST</b> BE VERIFIED PRIOR TO PLACEMENT. ALL HOLDOWN STRIPS TO BE NAILED TO FULL HEIGHT STUDS. NAILED TO SHEATHING WEDGE NAILING.		
HD1 OR HD2	SIMPSON	USP
HD3	STDH14 / STDH14R <sub>L</sub>	STAD14 / STAD14R <sub>L</sub>
HD4	CS16x48"	RS16-R
HD5 OR HD6	HTT5 (1)	HTT22 (1)

\* USE (3)CS16 OR (1)CMST14 @FRAMED SHEARWALL BELOW OR (1)CS16 @ WSP OR CS-WSP BRACED WALLS.  
(1)REQUIRES 5/8" TREADED ROD ANCHOR (A193 GR B7 OR F599 304SS) w/SIMPSON AT-XP ADHESIVE. LOCATE ROD 4" (MIN) FROM EDGE OF CONC. AND EMBED 3 3/8" (MIN) INTO CONC.  
(2)IF STRAP IS PLACED IN THE MIDDLE OF WALL, BEND STRAIGHT. RE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.  
PLACE BENEATH CURB AS REQ'D.

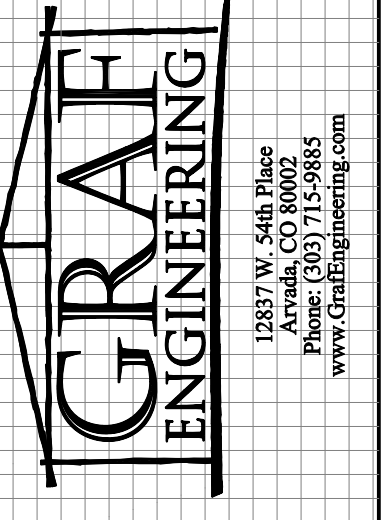
IF BOX IS 1" SQ. THEN SCALE IS 1/2" = 1'-0"  
IF BOX IS 1/2" SQ. THEN SCALE IS 1/4" = 1'-0"  
IF BOX IS NOT 1/2" OR 1" SQ. THEN DRAWING IS NOT TO SCALE. WE NOTE THAT THESE DRAWINGS ARE NOT TO SCALE. SCALE IS PROVIDED FOR REFERENCE ONLY. REFER TO PLAN DIMENSIONS. IF DIMENSIONS NOT PROVIDED ON PLAN, REFER TO ARCHITECTURAL DRAWINGS FOR AREA IN QUESTION.  
**ALL DIMENSIONS ARE TO BE VERIFIED WITH ARCH PRIOR TO CONSTRUCTION.**



### UPPER LEVEL WALL FRAMING PLAN

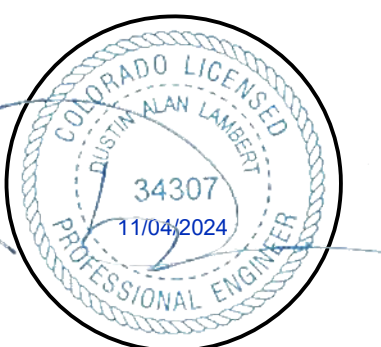
REFER TO SHEETS CS1, SD1 & SD2 FOR DETAILS & NOTES NOT SHOWN ON THIS PAGE. ALL HEADER & POST CALL OUTS ARE INDICATED IN WALL FRAMING PLAN ON PREVIOUS PAGE

4  
ISSUE NUMBER



ALPINE INVESTMENT AND REALTY  
218 SHERMAN ST  
RIDGWAY COLORADO 81432  
970-209-0195

UPPER LEVEL WALL FRAMING PLAN  
HAVEN HOUSE EXPANSION  
4806 NORTH RIVER ROAD  
OLATHE, COLORADO



HAVEN HOUSE	
UPPER LEVEL WALL FRAMING PLAN	
ALL ELEVATIONS	
PLOT DATE NOVEMBER 4, 2024	
Revisions	Issue No. 4
1/29/2024	Date 1/14/2024
3/3/2024	Design DA
10/28/2024	Drafting MJF
	Checked JW
	Sheet
<b>S4.0</b>	

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### CONNECTOR LEGEND

ID	MEMBER TYPE	SIMPSON	USP
(H1)	BCL GP	HTS 3745.5	HTS395
(H2)	BCL GP	HTS 3745.5	HTS395
(H3)	LVL-SL	LUS 2325.6	LUS2325
(H4)	LVL-SL	MT9.5	BP41795
(H5)	LVL-SL	HUB	HD17925
(H6)	BCL GP	MT9.5	HTS395
(H7)	BCL GP	HTS 3745.5	HTS395
(H8)	BCL GP	HTS 3745.5	HTS395
(H9)	LVL-SL	MT9.5	HTS395
(H10)	(2)LVL(2)SL4x	LH410	SH410
(H11)	(2)LVL(2)SL4x	HHJ8410	THD410
(H12)	(2)LVL(2)SL4x	HGU5810	THD448
(H13)	(3)LVL(3)SL6x	HGUS55010	THD610
(H14)	(4)LVL(4)SL8x(2)4x	HGUS72510	THD7210
(H15)	2x ROOF TRUSS	LUS24	JUS24
(H16)	2x ROOF TRUSS	LUS26	JUS26
(H17)	2x ROOF TRUSS	LUS28	JUS28
(H18)	2x ROOF TRUSS	MUS26	HD28
(H19)	2x ROOF TRUSS	MUS28	HUS26
(H20)	2x ROOF TRUSS	HUS26	HUS26
(H21)	2x ROOF TRUSS	HUS28	HUS28
(H22)	(2)2x DBL TRUSS	HRUS28-2	THD26-2
(H23)	(2)2x DBL TRUSS	HRUS28-2	THD28-2
(H24)	(2)2x DBL TRUSS	HRUS210-2	THD210-2
(H25)	(2)2x DBL TRUSS	HGUS26-2	THD26-2
(H26)	(2)2x DBL TRUSS	HGUS28-2	THD28-2
(H27)	(2)2x DBL TRUSS	HGUS10-2	THD10-2
(H28)	(3)2x TRIPLE TRUSS	HGUS28-3	THD28-3
(H29)	(3)2x TRIPLE TRUSS	HGUS10-3	THD10-3
(H30)	HIP TRUSS	THU26	HJ26
(H31)	ALL	LS70 (PAIR)	MP7 (PAIR)
(H32)	ROOF TRUSS	(2)RT7 or HTS20 or (4) SDWC 15600	(2)RT7 or LFTA6
(H33)	ROOF TRUSS	TBE (PAIR)	SBP (PAIR)
(H34)	ROOF TRUSS	HTS20+HT21 or HTS20+2H3	LFTA6-RT or LFM6(2)H3
(H35)	ROOF TRUSS	TBE (PAIR) + HTS20	SBP (PAIR) + RT7
(H36)	ROOF TRUSS	(2)HTS20	(2)LFTA6
(H37)	ROOF TRUSS	TBE (PAIR) + (2)HTS20	SBP (PAIR) + (2)MTS16
(H38)	ROOF TRUSS	(2)CS16-R w/22.2 5"x0.148" NAILS	(2)RS16-R

NOTE: TRUSS BEARING ENHANCERS MAY BE REPLACED WITH BCB(BR-A2)SD1 AND RT HARDWARE WHERE NO ADDL BCB(BR-A2)SD1 IS SPECIFIED AT BEARING. ADDL HARDWARE MAY NOT BE OMITTED. TBE MUST BE REPLACED WITH BCB(BR-A2)SD1 TOP PLATE APPLICATIONS.

IF NO OTHER HARDWARE PROVIDED ON DRAWINGS, SECURE "HY", "HW", "HX", "HY" AND "HZ" CONNECTORS TO FOUNDATION WITH SIMPSON HTS-34 w/ 3/4" ALL THREAD w/ 8" EMBED INTO CONCRETE w/ SIMPSON SET-XP AND 2 7/8" EDGE DISTANCE. FOR HZ USE SIMPSON HD19 TO 488 POST (MIN) w/ 1.5" ALL-THREAD w/ 8" EMBED w/ SET-XP. IF HARDWARE ON SECOND STORY OR ABOVE WALKOUT/LO. BRIDGE STORIES w/ CS16 (2 @ HY & HZ).

NOTE: HZ STRUT & TIE BRG MAY NOT BE INSTALLED ON SINGLE TOP PLATE APPLICATIONS. USE ALTERNATE HARDWARE PROVIDED.

### GENERAL FRAMING LEGEND

J-XX	= 90° ENGINEERED WOOD FLOOR JOIST, APPROVED MANUFACTURERS AND THEIR CORRESPONDING JOIST SERIES ARE: • LP SOLIDSTAR, LP ISO SERIES (2 1/2" WIDE FLANGE)
LSL-XX	= 1 1/2" x 90° LAMINATED STRAND LUMBER FLUSH BEAM MINIMUM DESIGN PROPERTIES: • FLEXURAL STRESS, Fb = 2,325 psi • MODULUS OF ELASTICITY, E = 1,55E • HORIZONTAL SHEAR PARALLEL TO GRAIN, Fv = 310 psi LSL PRODUCT MUST BE ICC APPROVED. APPROVED LVL PRODUCTS INCLUDE (BUT ARE NOT LIMITED TO) TIMBERSTRAND® & SOLIDSTAR®. PROPERTIES: • FLEXURAL STRESS, Fb = 2,600 psi • MODULUS OF ELASTICITY, E = 1.9 x 10 <sup>6</sup> psi • HORIZONTAL SHEAR PARALLEL TO GRAIN, Fv = 285 psi LVL PRODUCT MUST BE ICC APPROVED. APPROVED LVL PRODUCTS INCLUDE (BUT ARE NOT LIMITED TO) MICROLAM®, VERSALAM™, MULTIPLE ENGINEERED WOOD JOIST, X° IS REO'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.N.O. ON PLAN. (SEE SINGLE JOIST SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER MANUFACTURER RECOMMENDATIONS.
LVL-XX	= 1 1/2" x 90° LAMINATED VENEER LUMBER FLUSH BEAM MINIMUM DESIGN PROPERTIES: • FLEXURAL STRESS, Fb = 2,600 psi • MODULUS OF ELASTICITY, E = 1.9 x 10 <sup>6</sup> psi • HORIZONTAL SHEAR PARALLEL TO GRAIN, Fv = 285 psi LVL PRODUCT MUST BE ICC APPROVED. APPROVED LVL PRODUCTS INCLUDE (BUT ARE NOT LIMITED TO) MICROLAM®, VERSALAM™, MULTIPLE ENGINEERED WOOD JOIST, X° IS REO'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.N.O. ON PLAN. (SEE SINGLE LVL SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER GENERAL NOTES.
(X)J-XX	= 90° X-BEAM 2x4-V4 AS MANUFACTURED BY ROSBORO (X) IS REO'D WIDTH IN INCHES. LVL OR SAME OR GREATER WIDTH MAY BE SUBSTITUTED AS DESIRED.
(X)LSL-XX	= MULTIPLE LAMINATED STRAND LUMBER BEAM, X° IS REO'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.N.O. ON PLAN. (SEE SINGLE JOIST SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER GENERAL NOTES.
(X)LVL-XX	= MULTIPLE LAMINATED VENEER LUMBER BEAM, X° IS REO'D PLY COUNT. CONNECT PER FRAMING NOTE #10 U.N.O. ON PLAN. (SEE SINGLE LVL SPECIFICATIONS FOR MORE INFORMATION). SECURE PILES PER GENERAL NOTES.
XX	= LENGTH OF FRAMING MEMBER ROUNDED UP TO THE NEAREST FOOT. WHEN INDICATED AS "XX", FOLLOW ARCHITECTURAL DIMENSIONS FOR LENGTH OF MEMBER.
=====	= 90° ENGINEERED WOOD RIM BOARD, APPROVED MANUFACTURERS AND THEIR CORRESPONDING RIM MATERIAL ARE: • LEVEL, TIMBERSTRAND® (1 1/2" WIDE) • BOISE CASCADE, BC RIM BOARD OSB® (1 1/2" WIDE)
=====	= INTERIOR BEARING WALL
=====	= MINIMUM 1-2x4 POST (LARGER POST SPECIFIED ON PLAN). REFER TO CSI FOR KING (FULL HEIGHT) STUD REQUIREMENTS. = BLOCKING TO FDN OR STRUCTURAL MEMBER REQUIRED UNDER POST ABOVE. PACK WEBS OF JOISTS RE: PER MFG. AS REO'D. ADDITIONAL RIM MAY BE INSTALLED FOR SQUASH BLOCKS. JOIST MATERIAL IS PROHIBITED FOR SQUASH BLOCKING.
+	= INDICATES APPROXIMATE PLUMBING DROP LOCATIONS. CONTRACTOR IS RESPONSIBLE TO VERIFY CLEARANCE FOR PLUMBING PRIOR TO SECURING FLOOR JOISTS.
+	= STRUCTURAL PORCH POST. RE: PLAN FOR SIZE (SEE DETAILS P1/P2 ON SD2 FOR CONNECTION & A4/SD1 FOR PORCH HEADER CONNECTION DETAILS)

### SINGLE SPAN TRUSS UPLIFT LEGEND

WIND SPEED	TRUSS SPAN (FT)										
	10	15	20	25	30	35	40	45	50	55	
115B	A	A	A	A	A	A	A	A	B	B	B
130C	A	A	A	A	B	B	B	B	B	C	C
135C	A	A	A	B	B	B	B	C	C	D	D
140C	A	A	B	B	B	C	C	D	D	E	E
115B	A	A	A	A	A	A	A	A	A	B	B
130C	A	A	A	B	B	B	B	B	B	C	C
135C	A	A	A	B	B	B	B	C	C	D	D
140C	A	A	A	B	B	B	B	C	C	D	D

A = H3 OR H2.5T OR SDWC15600  
 B = (2)H3 OR H2.5T OR (2)H2A OR (1)S12 OR (2)SDWC15600 (STP) OR SDWC15600 (DTP)  
 C = (2)H3 OR (2)H2.5T OR (2)H2A OR (1)S12 OR (3)SDWC15600 (STP) OR (2)SDWC15600 (DTP)  
 D = (3)H3 OR (2)H2.5T OR (2)H2A OR (1)S12 OR (2)SDWC15600 (DTP)  
 E = (4)H3 OR (3)H2.5T OR (2)H2A OR (1)S12 OR (2)SDWC15600 (DTP)  
 F = (4)H3 OR (3)H2.5T OR (2)H2A OR (1)S12 OR (3)SDWC15600 (DTP)  
 G = (4)H3 OR (3)H2.5T OR (3)H2A OR (1)S12 OR (3)SDWC15600 (DTP)

NOTE: H2.5T CLIPS MAY NOT BE INSTALLED AT SINGLE TOP PLATE APPLICATIONS. STP = SINGLE TOP PLATE, DTP = DOUBLE TOP PLATE. NOTE: DW SCREWS ARE TO BE INSTALLED IN ACCORDANCE W/MFG DETAILS.

### ROOF TRUSS LEGEND

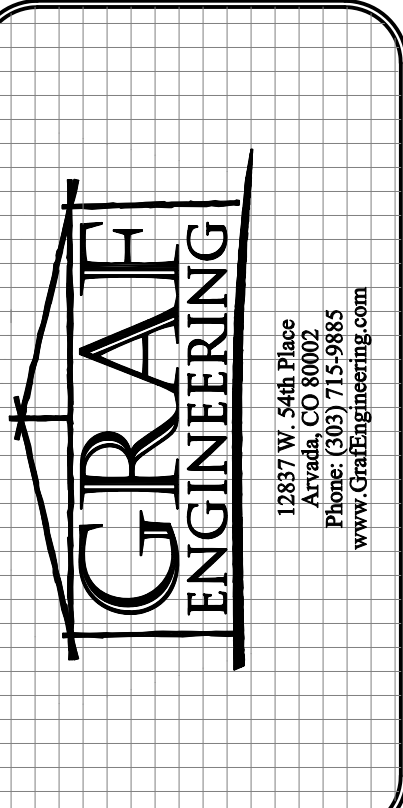
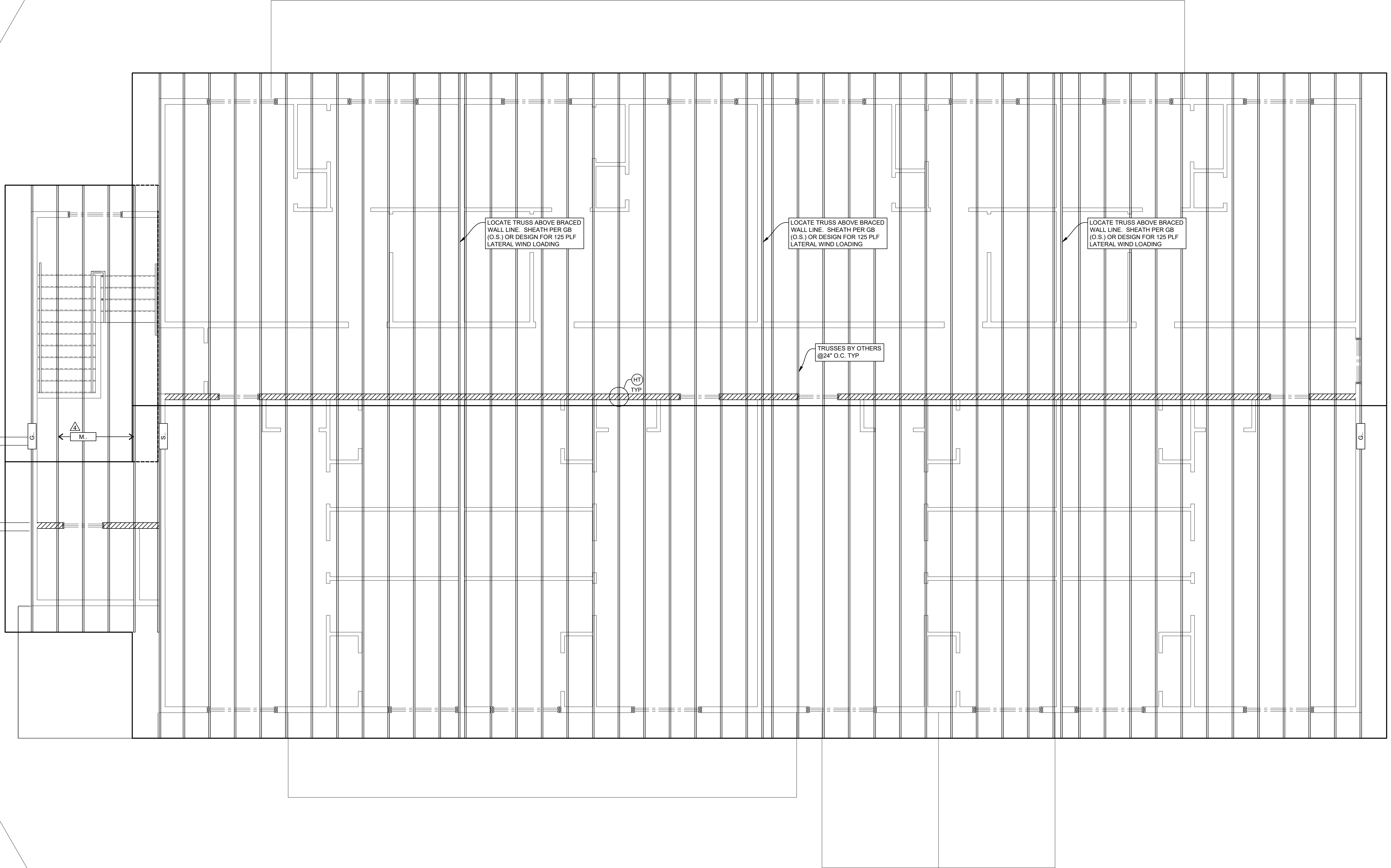
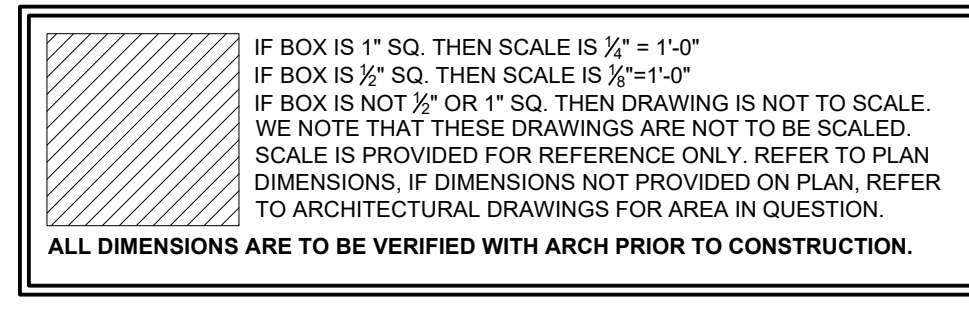
NOTE: THE FOLLOWING TRUSS CONVENTIONS ARE FOR CONCEPTUAL PURPOSES ONLY. REFER TO MFG'S LAYOUTS FOR ACTUAL TRUSS IDs

T	= ROOF TRUSS (IF SHOWN)
M	= STEPPED OR ALTERED ROOF TRUSS (IF SHOWN)
G	= GABLE END TRUSS (IF SHOWN)
S	= STRUCTURAL GABLE END TRUSS PROVIDE BRACING PER LEISD2
Y	= HIP MASTER TRUSS
H	= HIP TRUSS (IF SHOWN)
J	= JACK TRUSS (IF SHOWN)
X	= GIRDER TRUSS
E	= END TRUSS (IF SHOWN)
V	= VALLEY SET (IF SHOWN)
(X)PL@Y	= DESIGN TRUSSES FOR ADDITIONAL 'X' PLF SNOW @ 'Y' FT FROM UPPER WALL.
BCBB	= BOTTOM CHORD BEARING BLOCK REA2/SD1

### BLOCKING NOTES

FULL DEPTH BLOCKING BETWEEN FLOOR JOISTS IS REQUIRED WHEN ANY OF THE FOLLOWING CONDITIONS EXIST. 8" MAX HOLE ALLOWED IN 1 1/2" x 16" BLOCKS

- 1) JOISTS ARE NOT CONTINUOUS OVER SUPPORTS
- 2) BEARING WALL ABOVE & WITHIN 12" OF BEARING
- 3) CANTILEVER CONDITION
- 4) BRACED/SHEARWALL ABOVE OR BELOW



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UPPER ROOF FRAMING PLAN

HAVEN HOUSE EXPANSION

4806 NORTH RIVER ROAD  
 OLATHE, COLORADO

HAVEN HOUSE

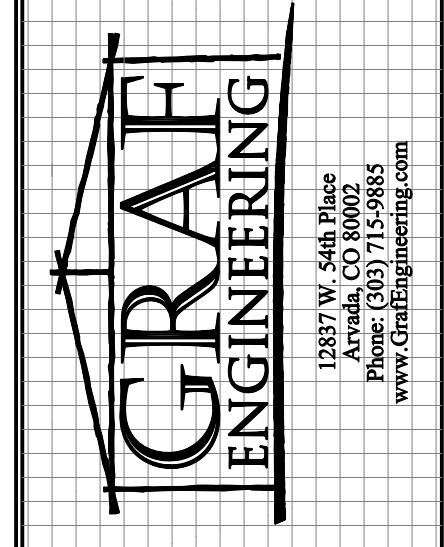
UPPER ROOF FRAMING PLAN  
 ALL ELEVATIONS  
 PLOT DATE: NOVEMBER 4, 2024

Revisions	Issue No.
1/29/2024	4
9/3/2024	11/4/2024
11/4/2024	Design: DA
	Drafting: MJF
	Checked: JW
	Sheet

S5.0

UPPER ROOF FRAMING PLAN

REFER TO SHEETS CS1, SD1 & SD2 FOR DETAILS & NOTES NOT SHOWN ON THIS PAGE. ALL HEADER & POST CALL OUTS ARE INDICATED IN WALL FRAMING PLAN ON PREVIOUS PAGE



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970-209-0195

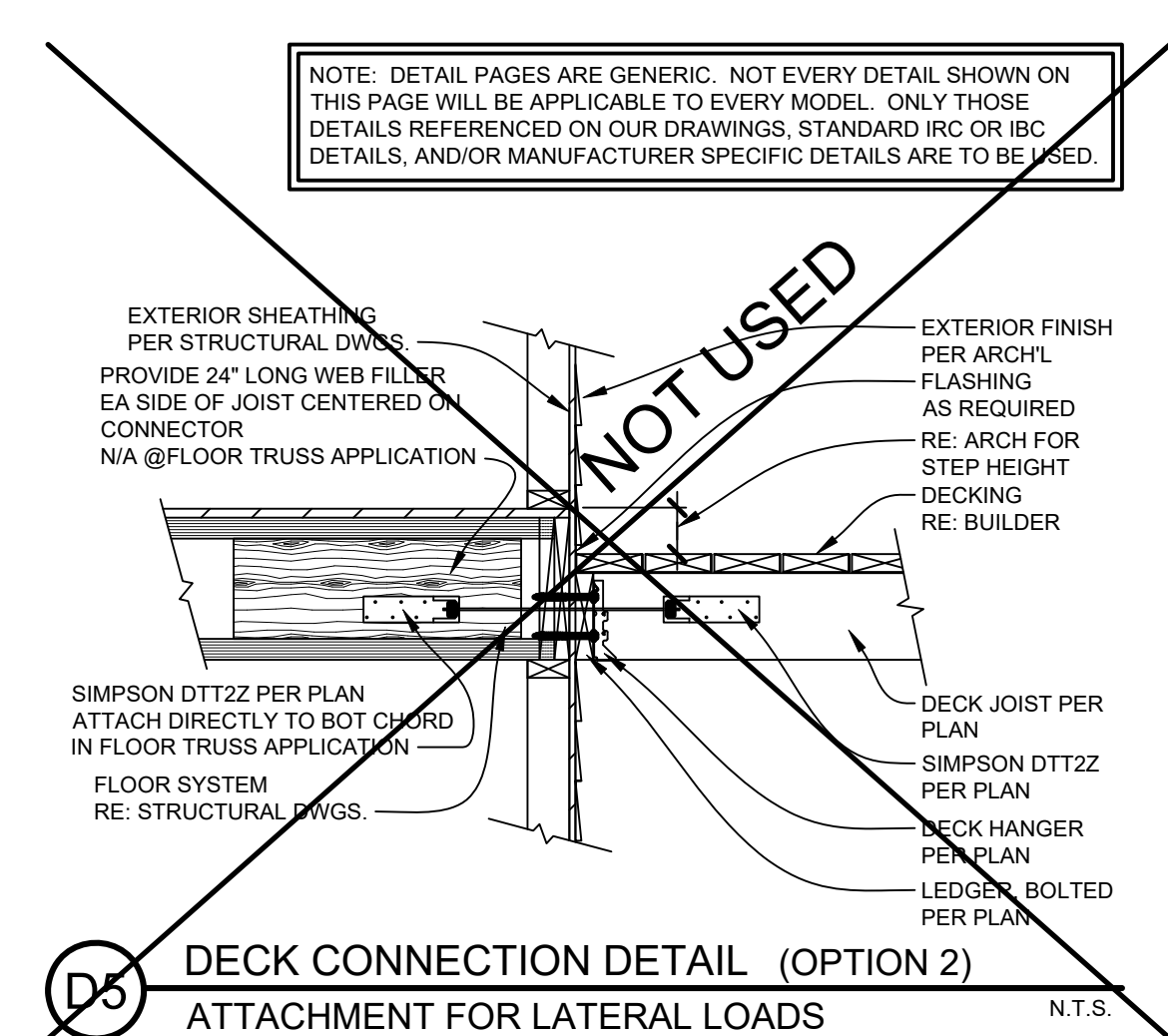
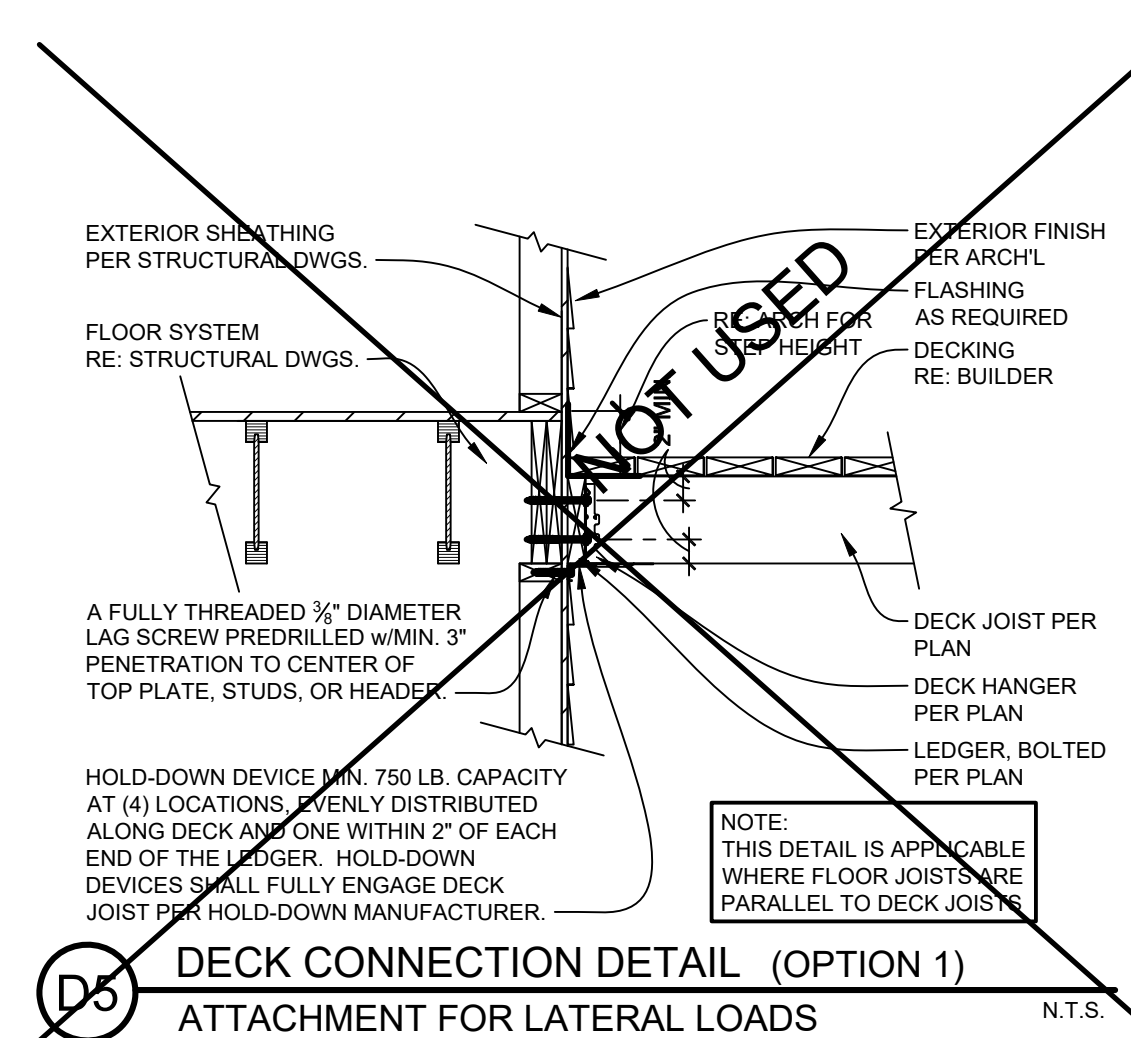
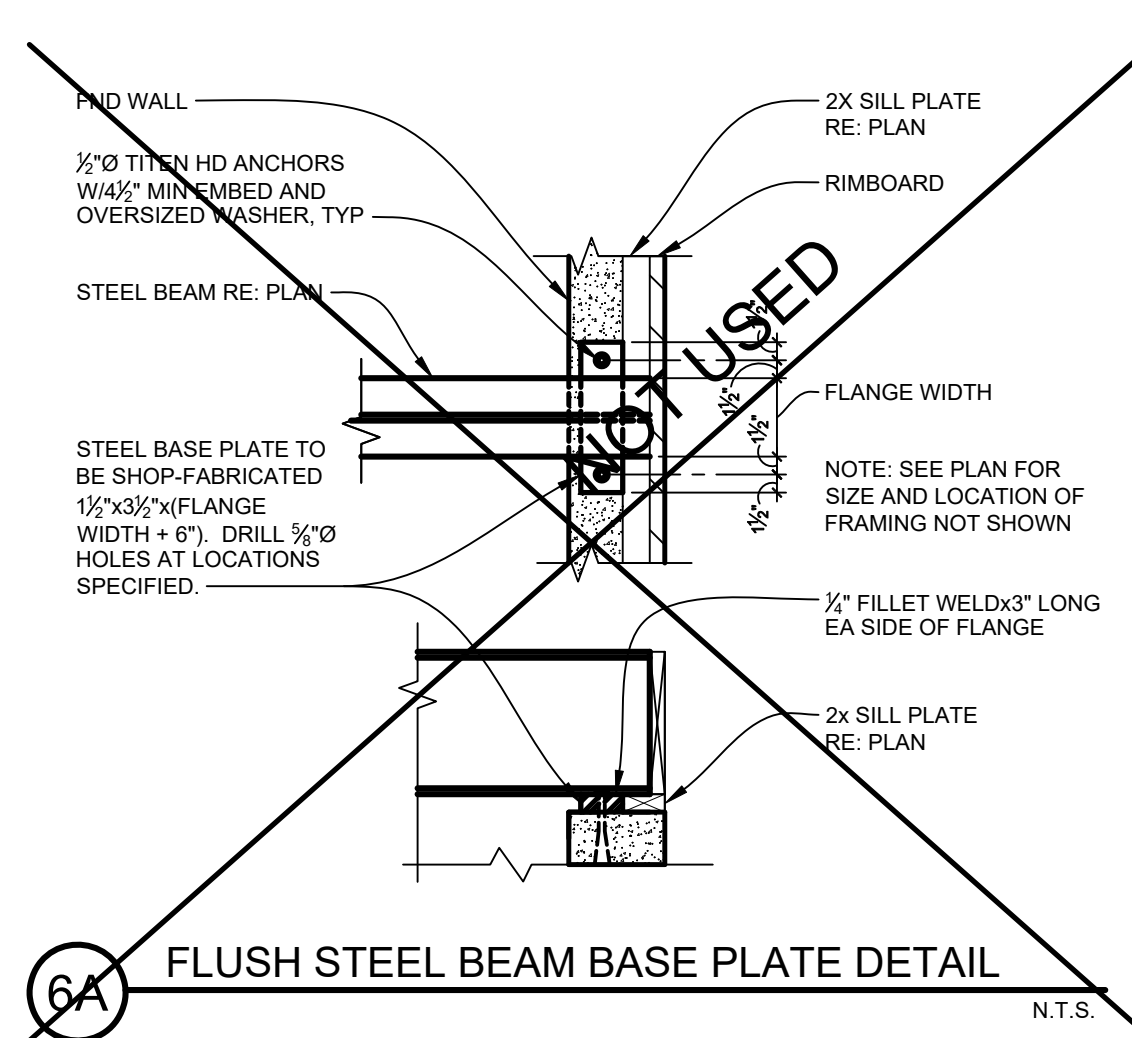
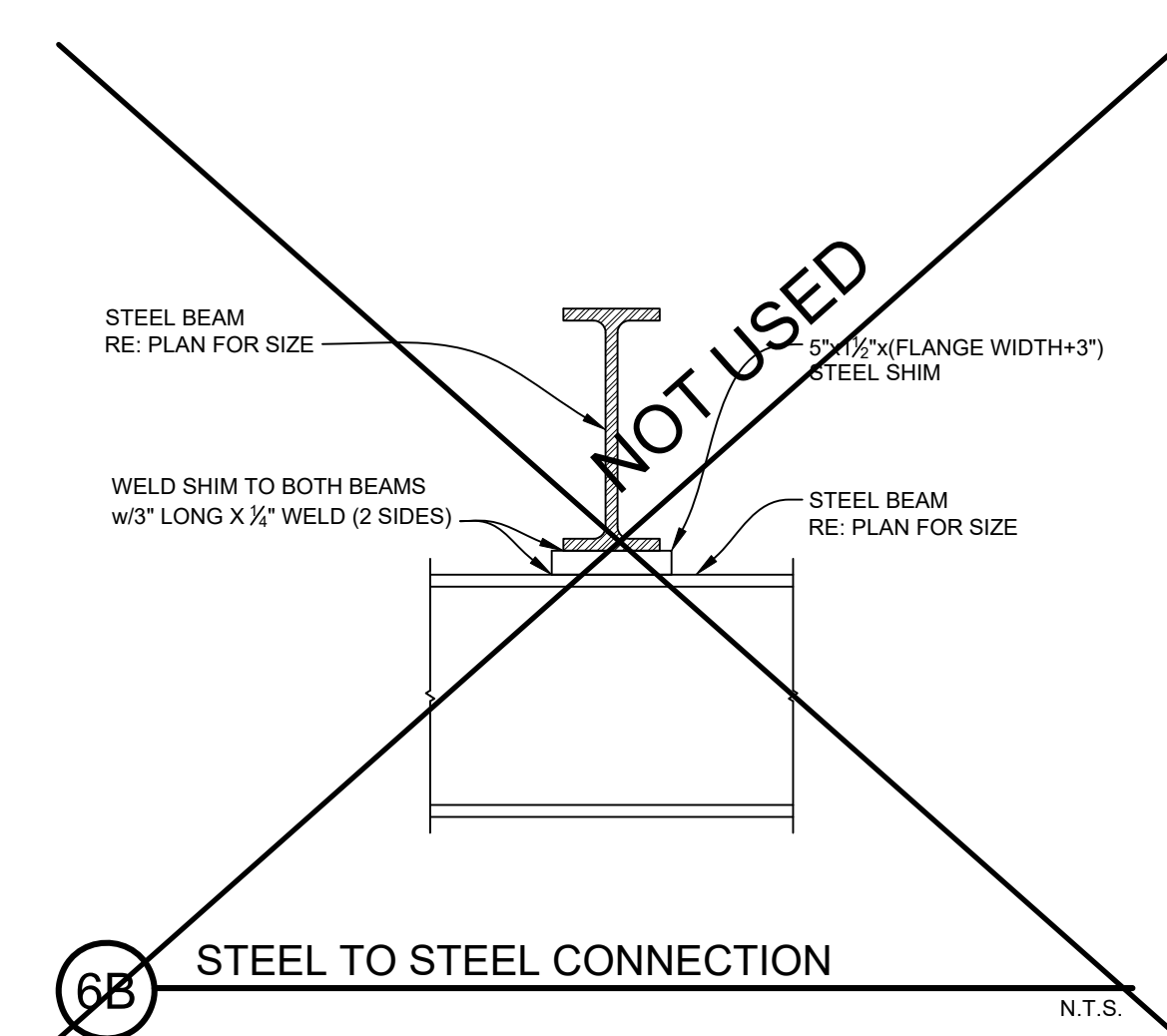
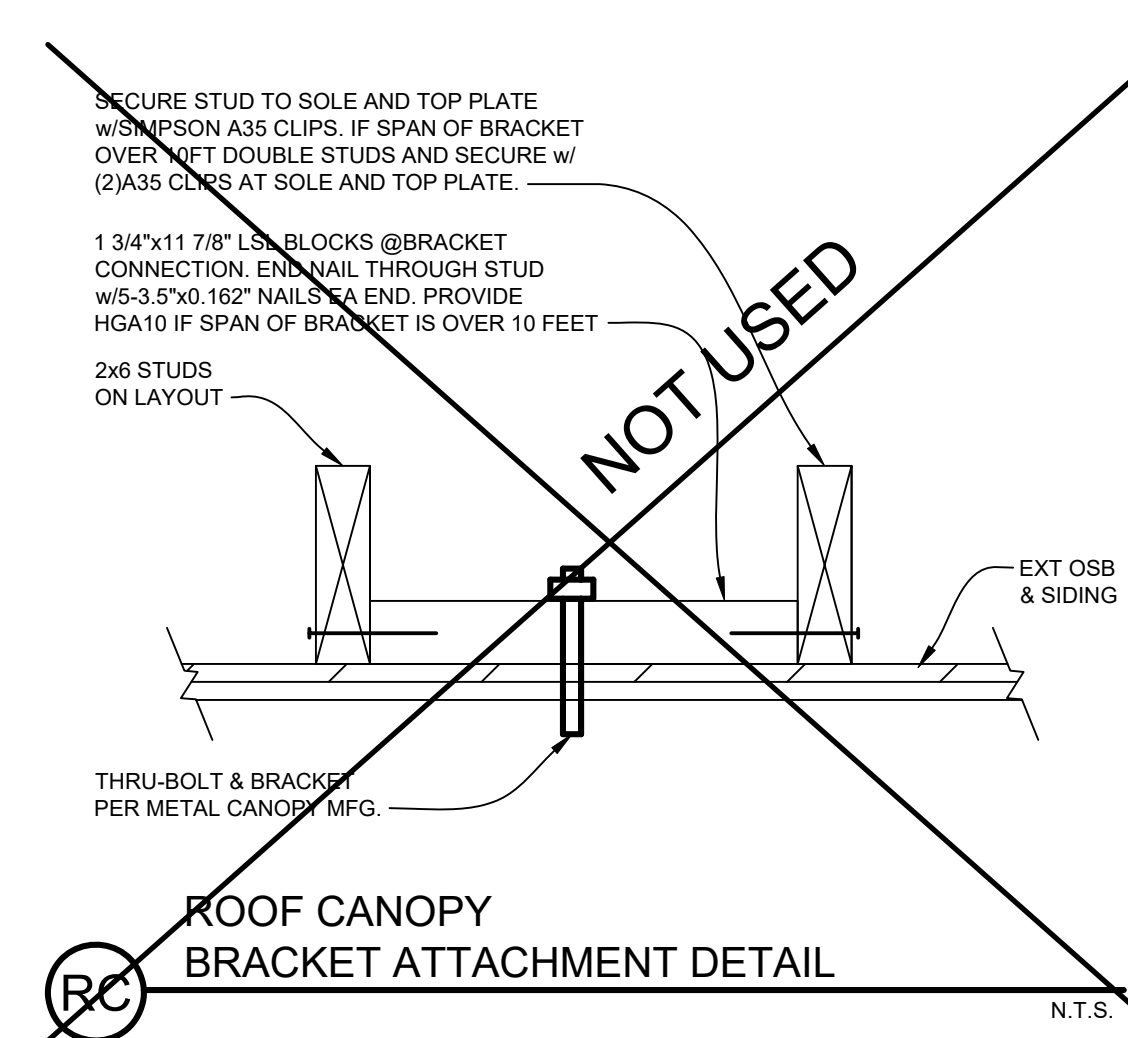
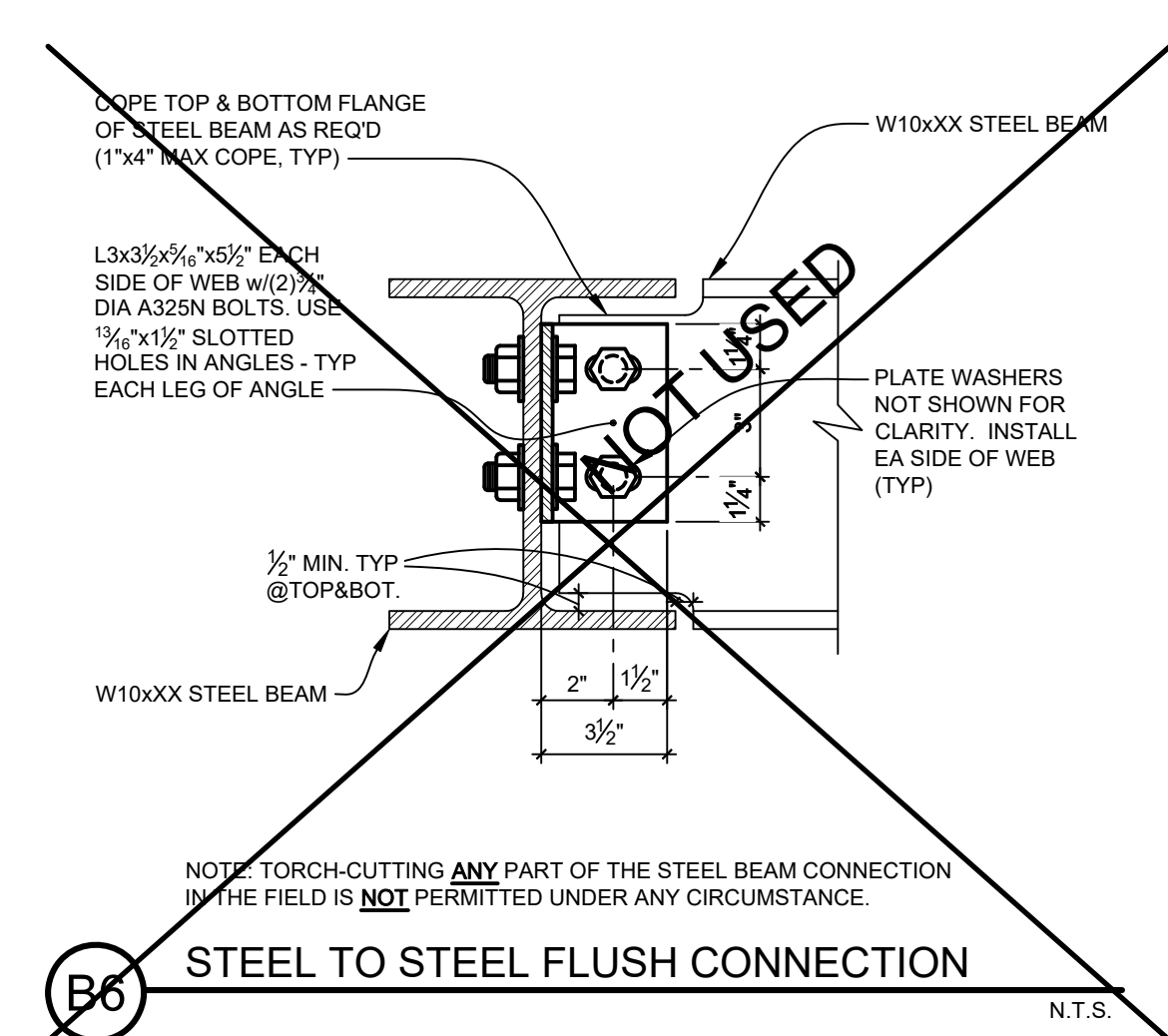
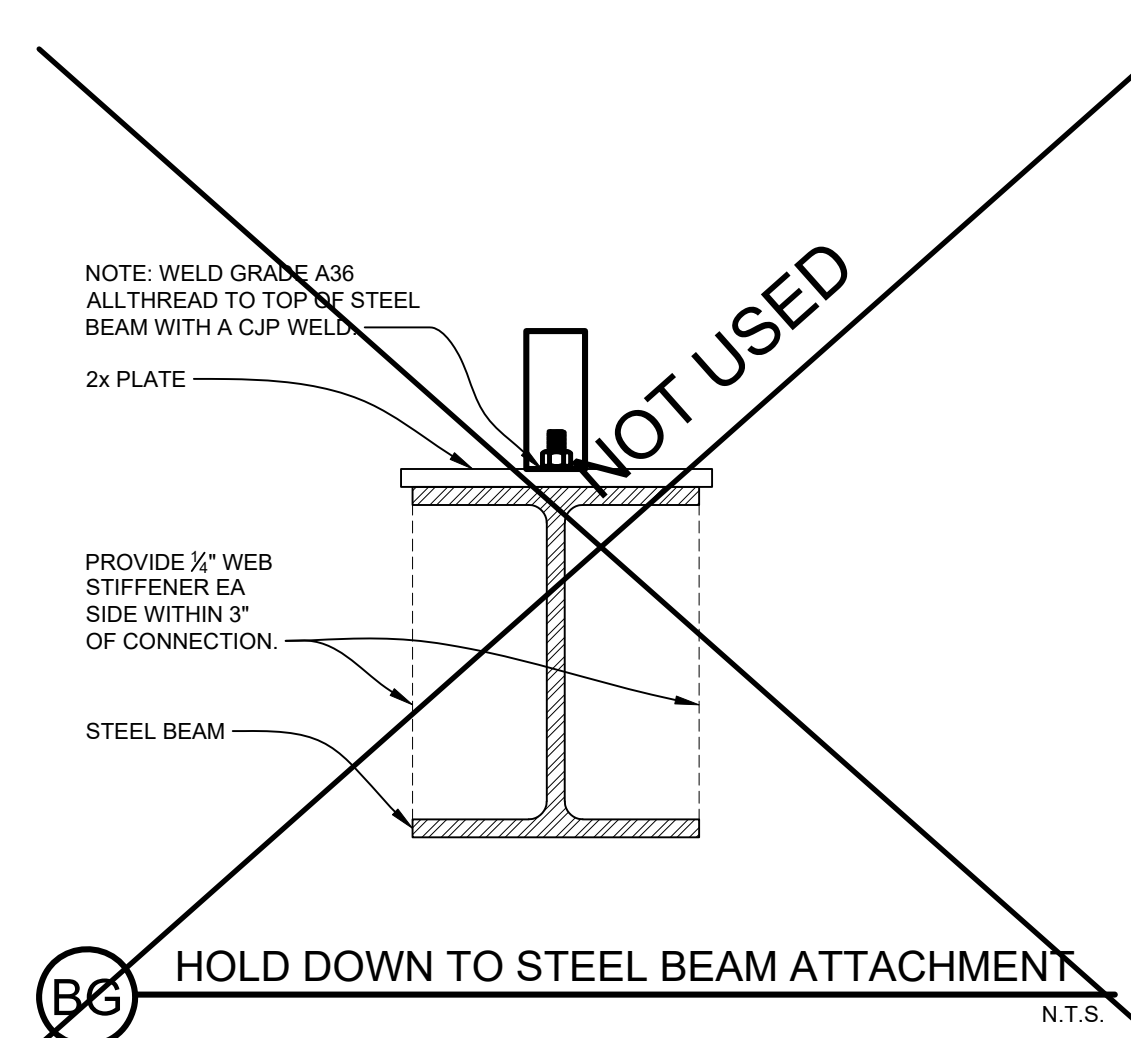
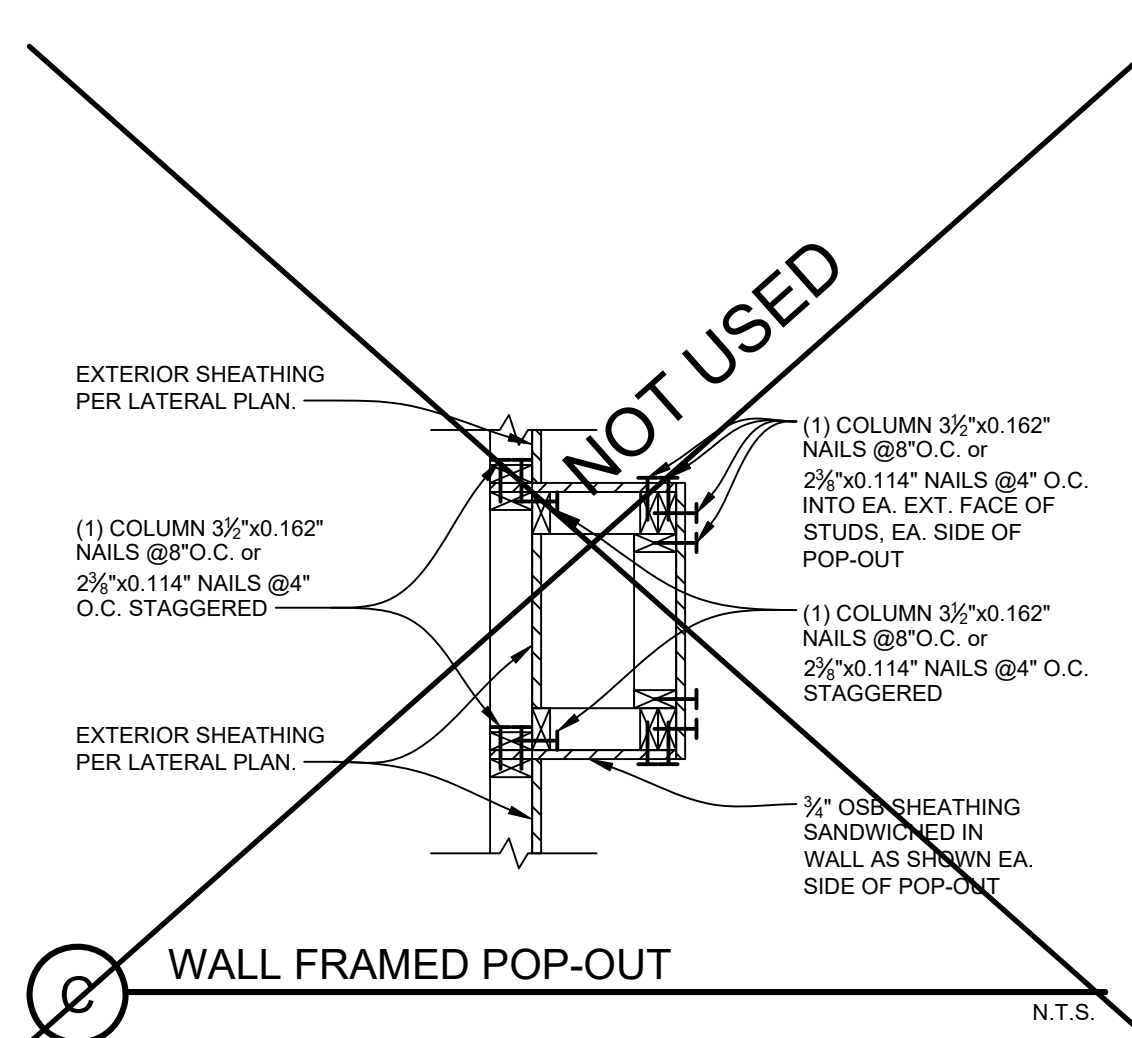
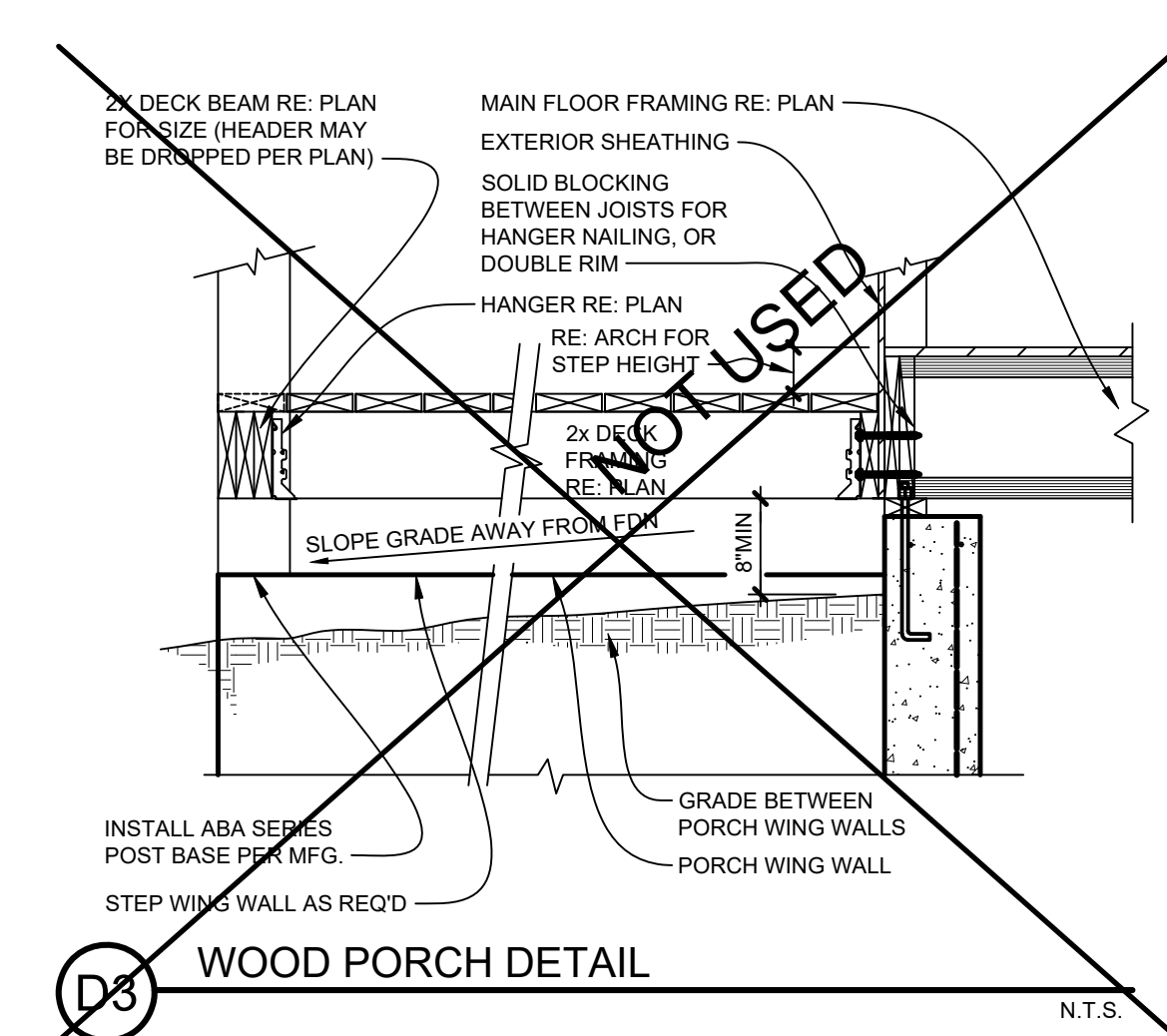
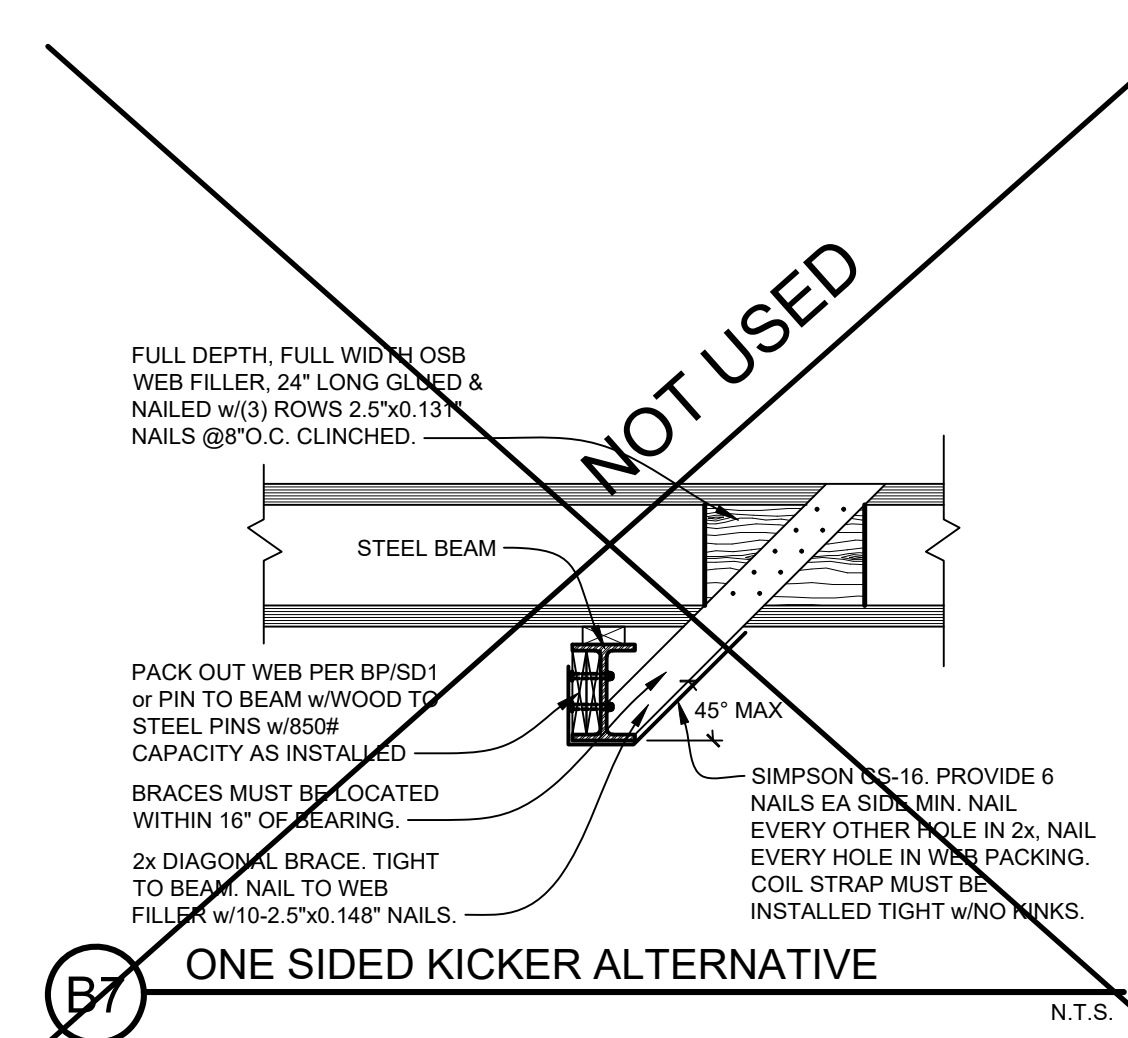
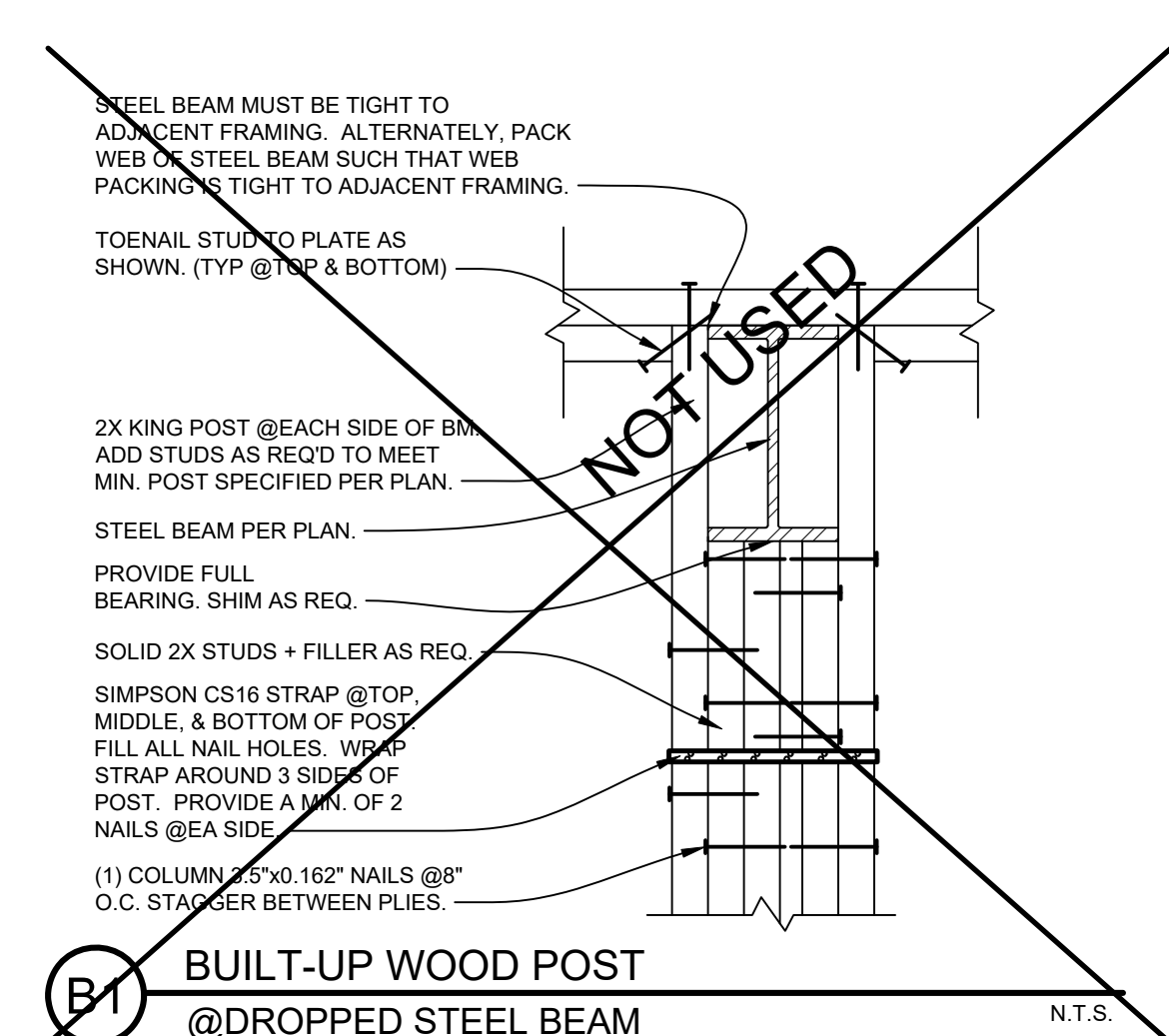
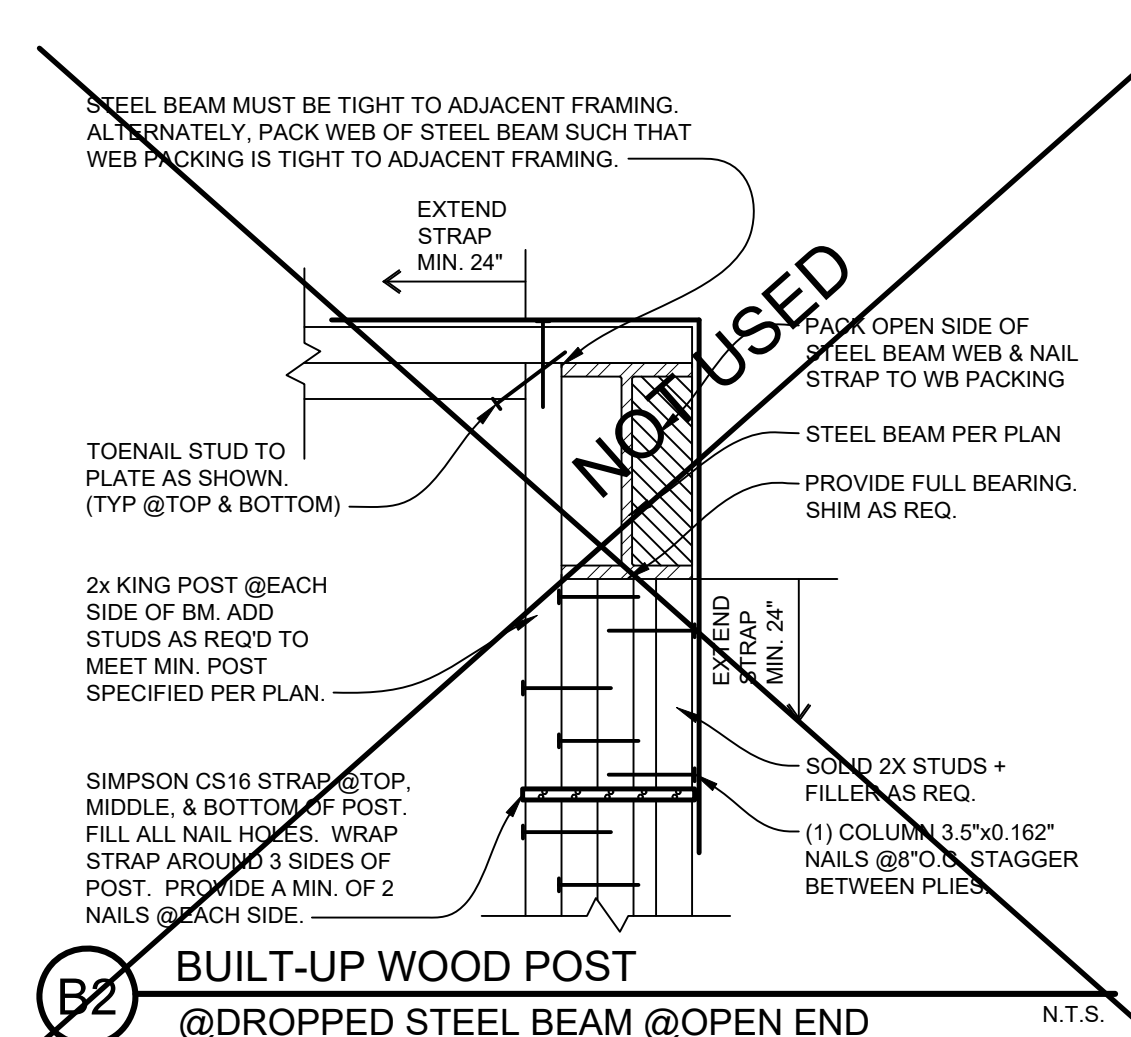
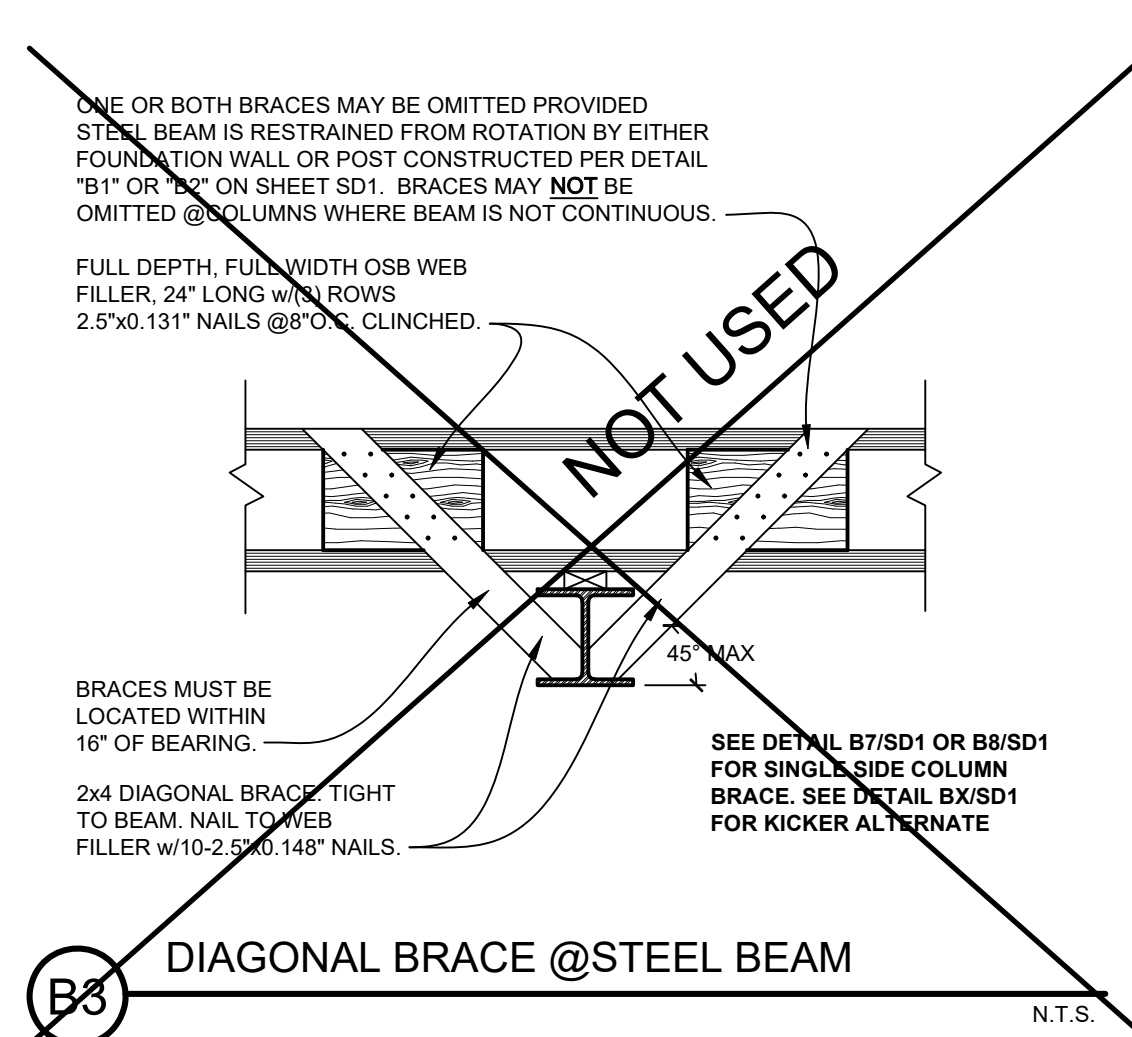
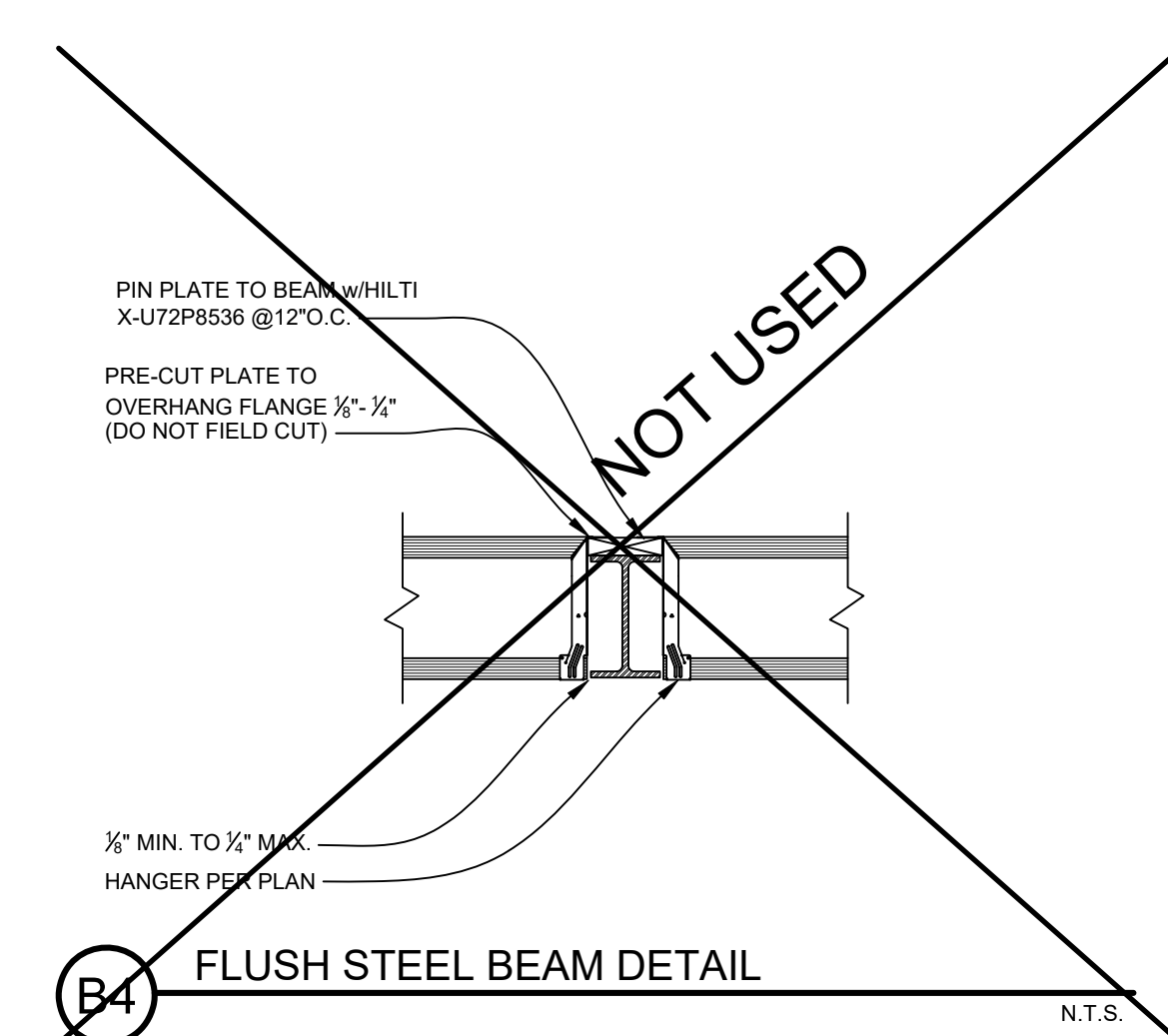
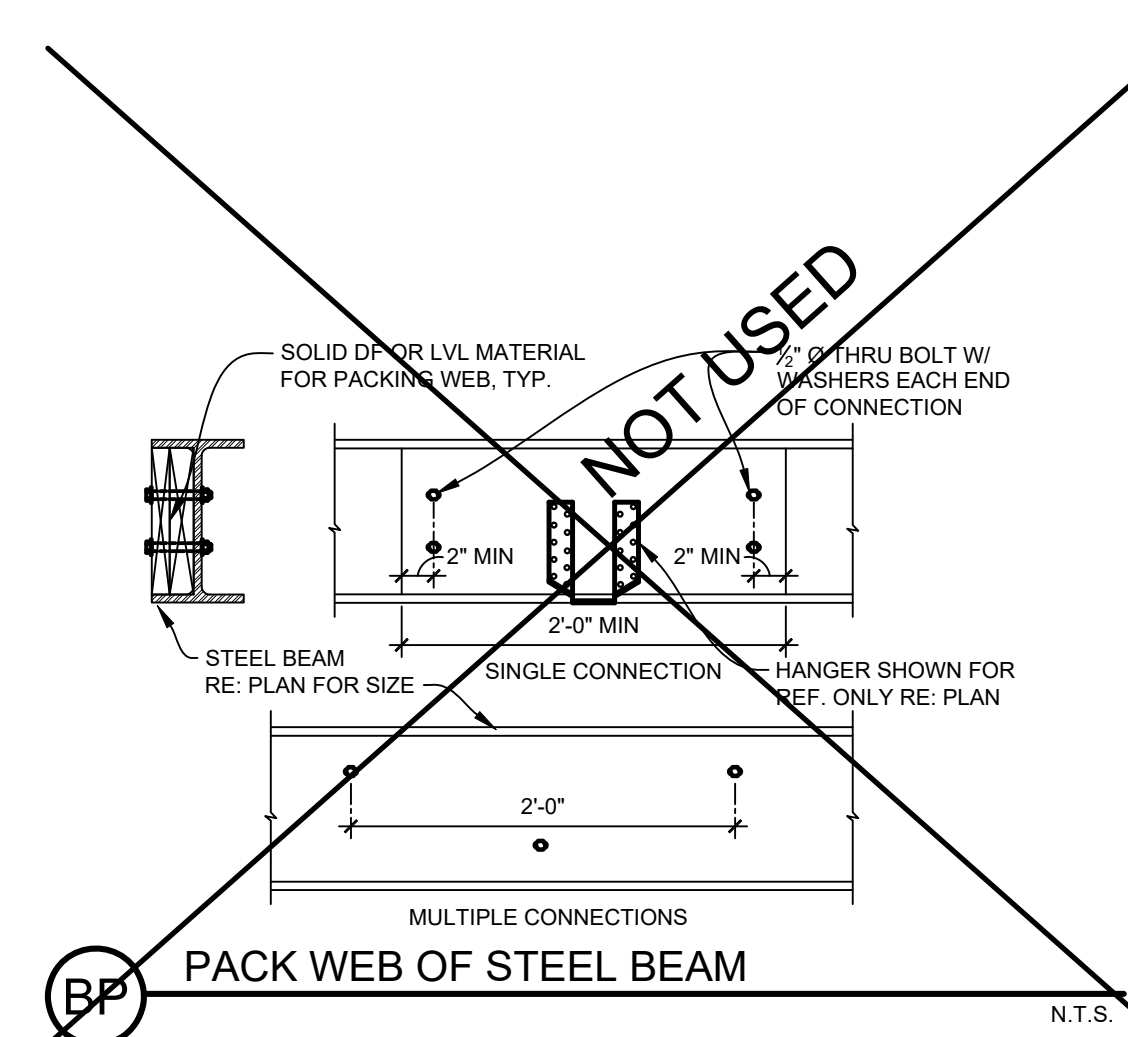
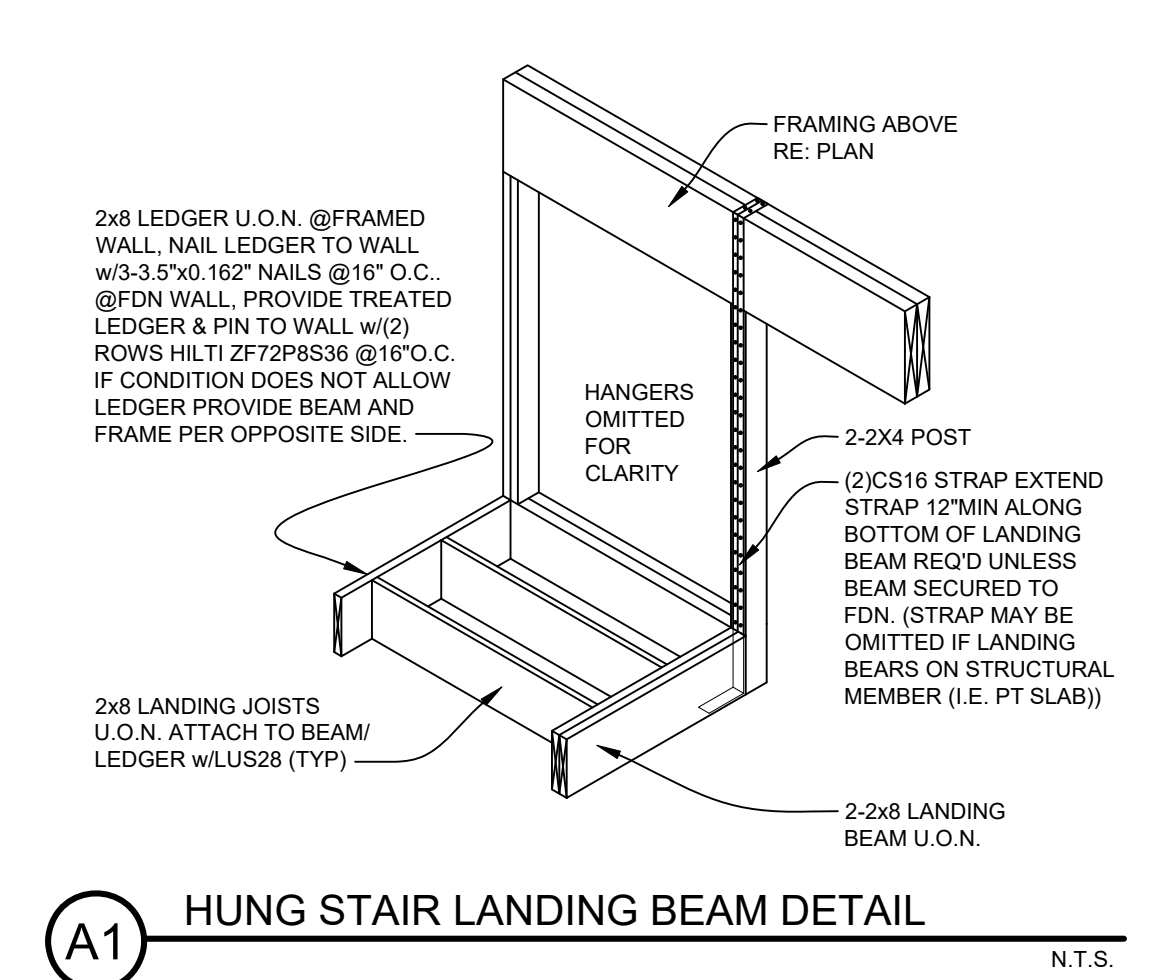
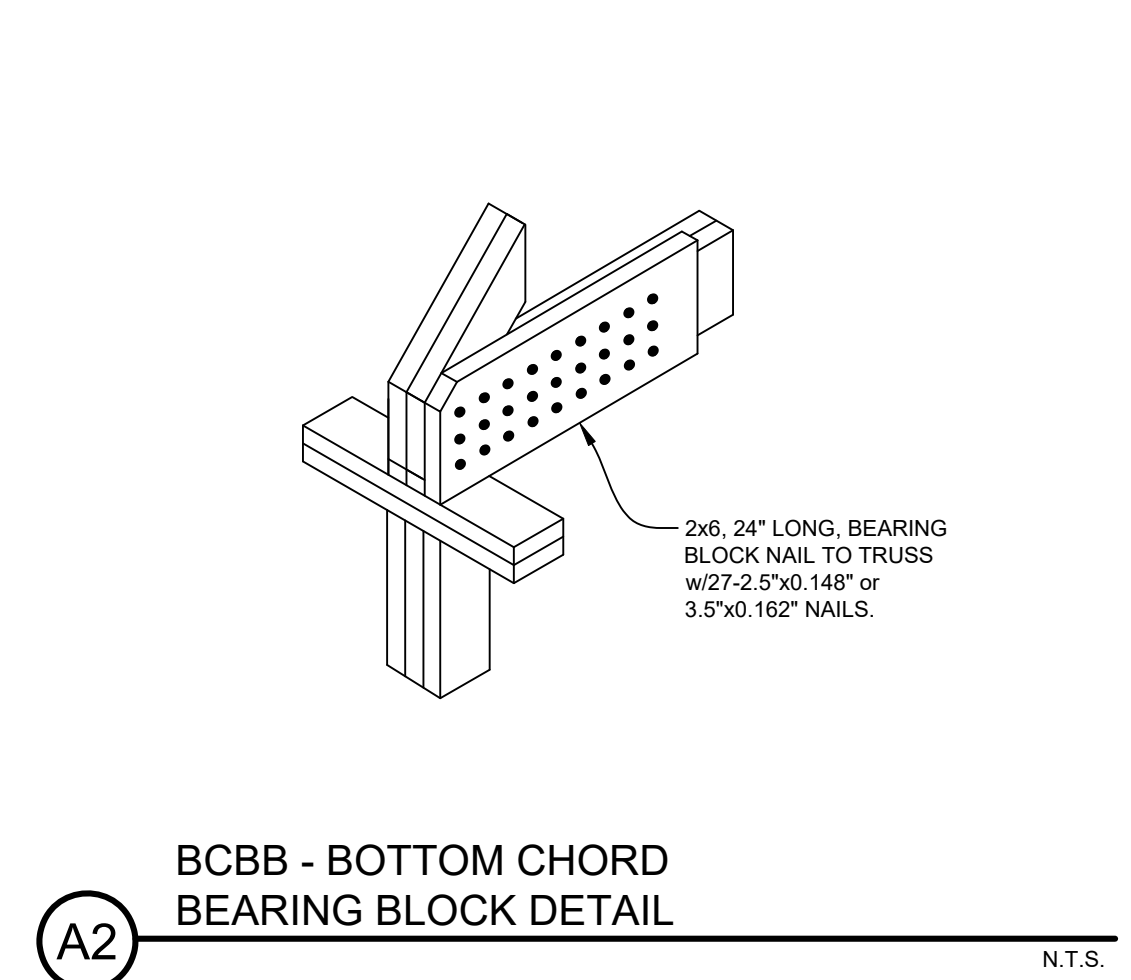
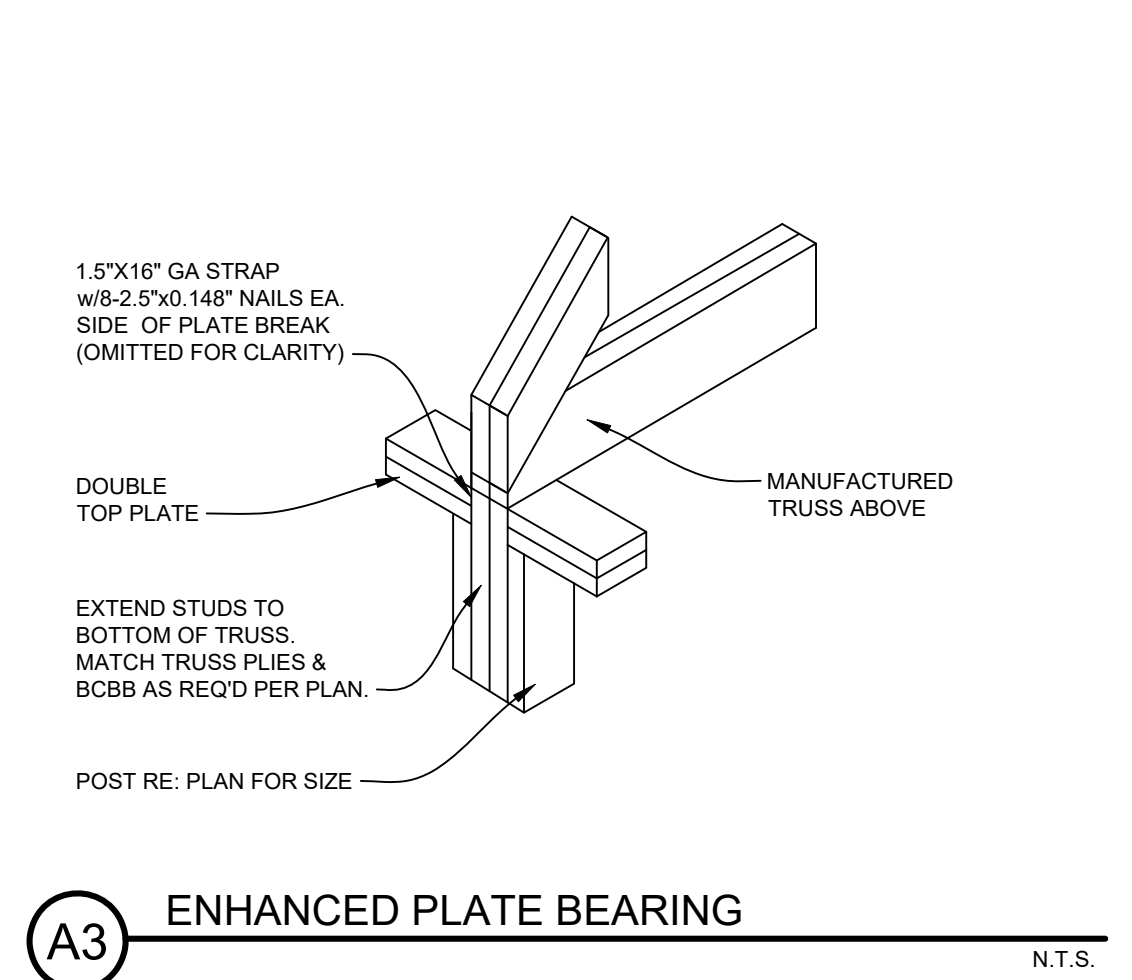
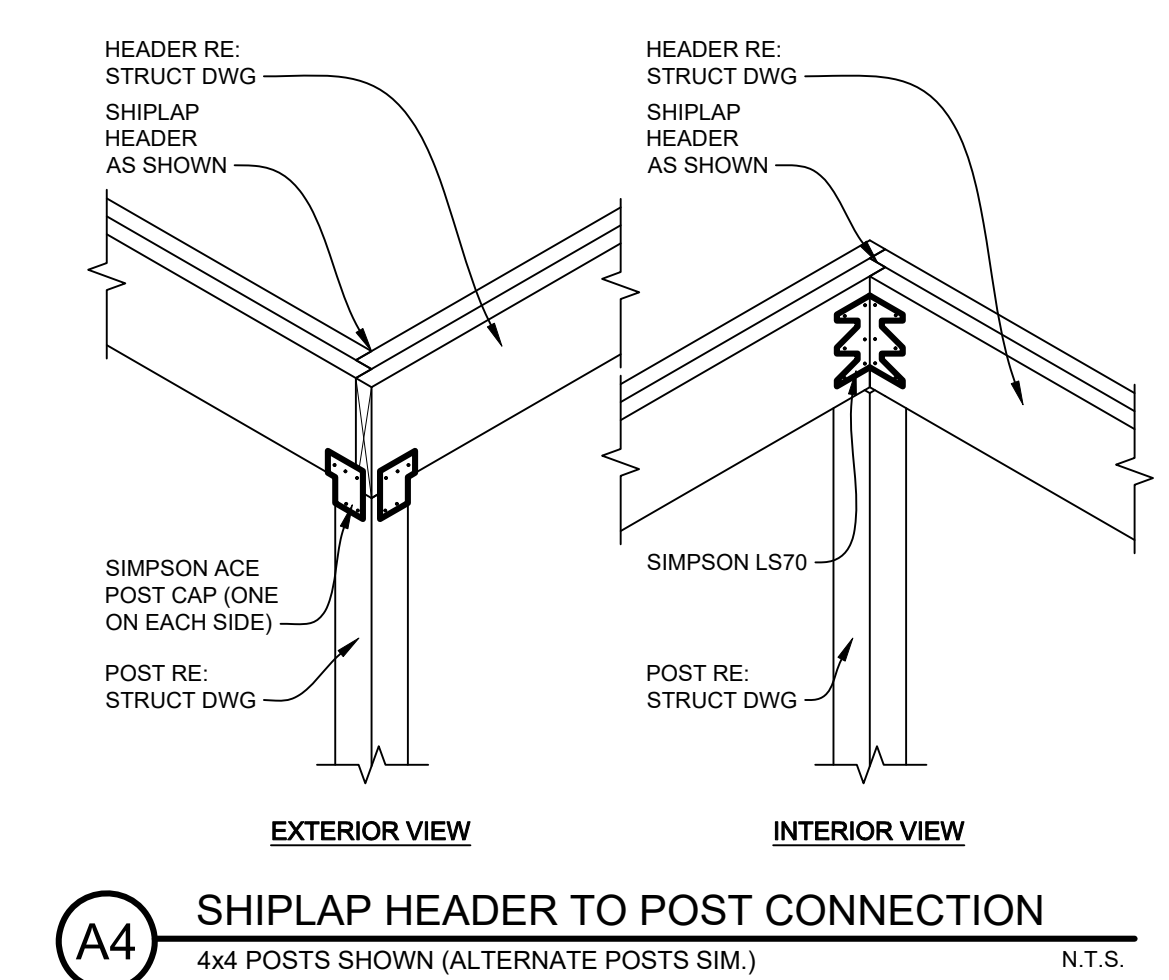
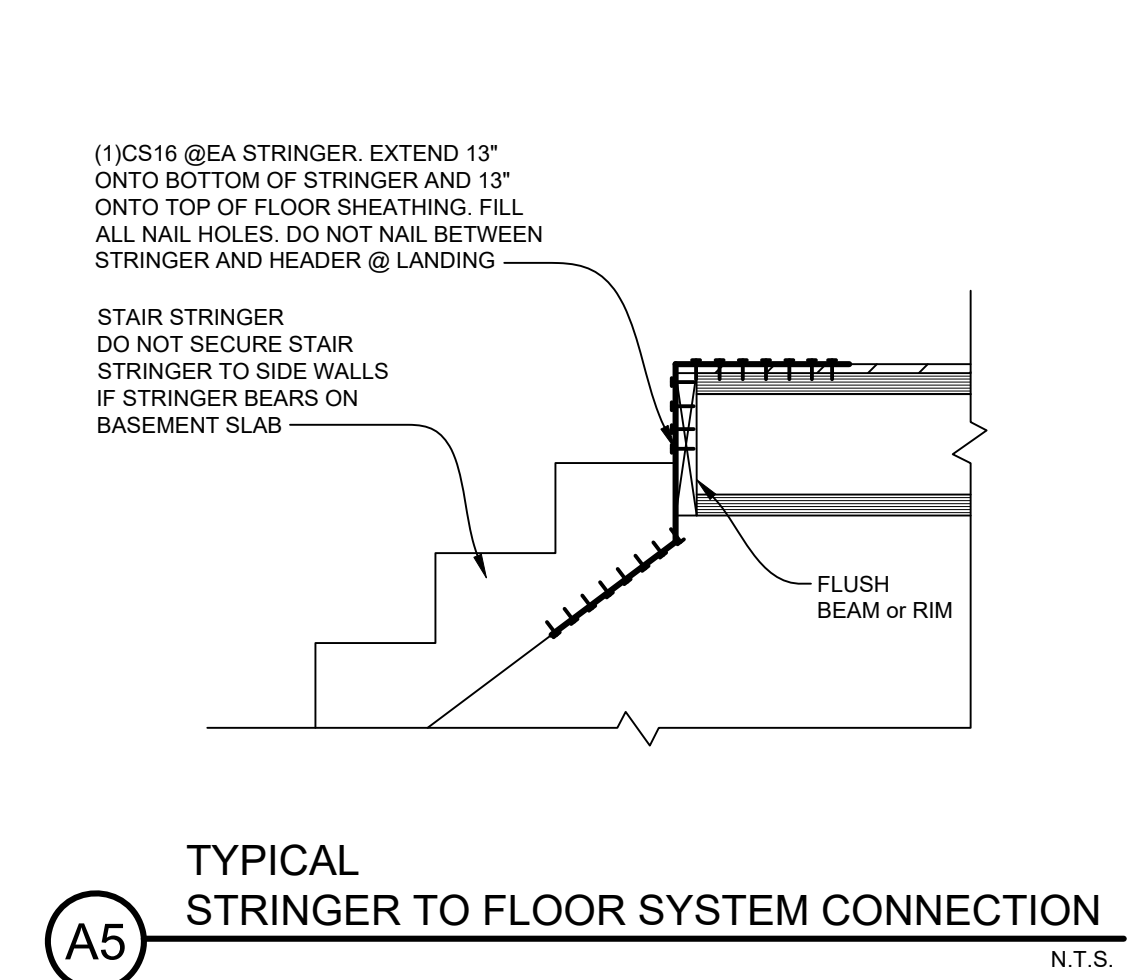
FRAMING DETAIL SHEET  
HAVEN HOUSE EXPANSION  
4806 NORTH RIVER ROAD  
OLATHE, COLORADO



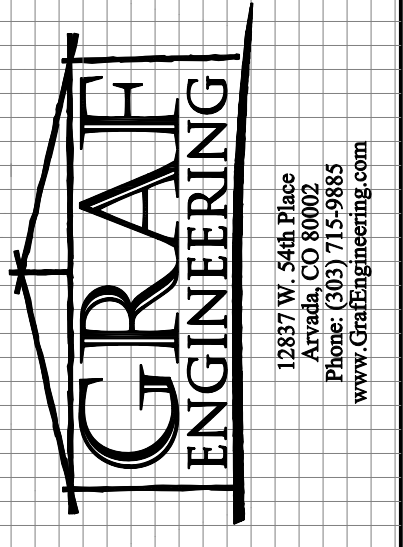
HAVEN HOUSE  
FRAMING DETAIL SHEET

Revisions	Issue No. 4
Date	11/4/2024
Design	DA
Drafting	MJF
Checked	JW
Sheet	

SD1



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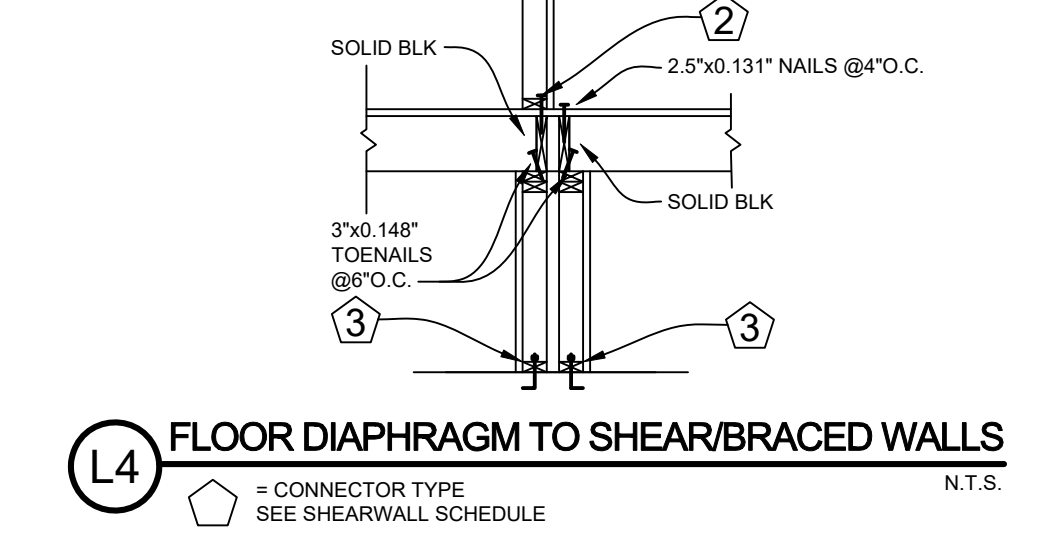
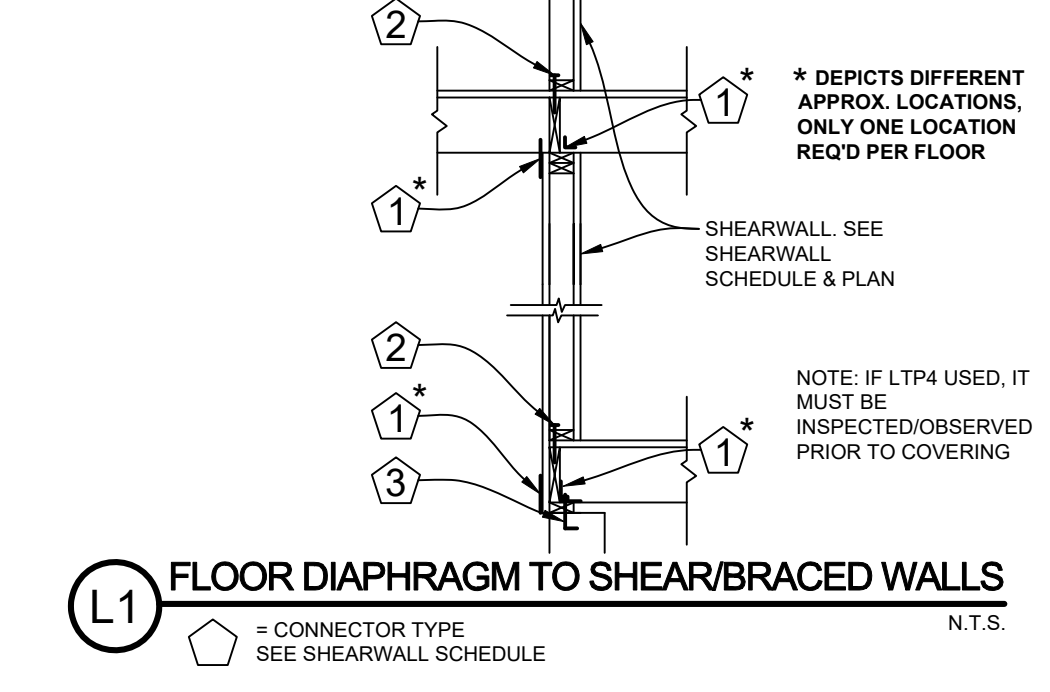
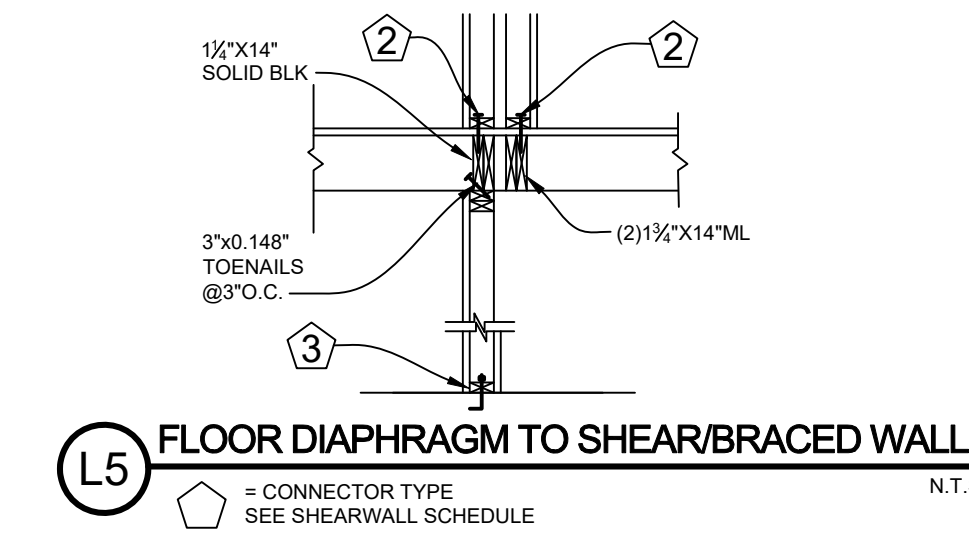
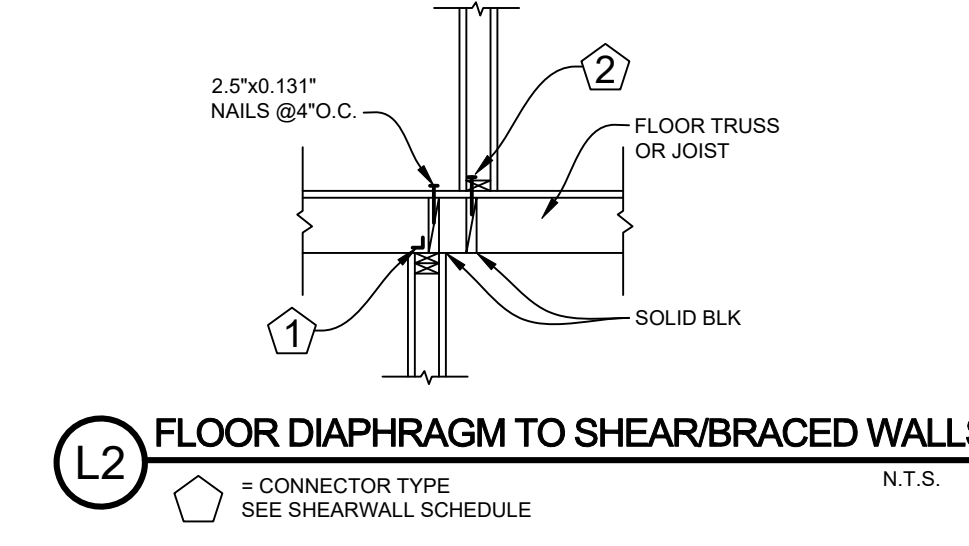
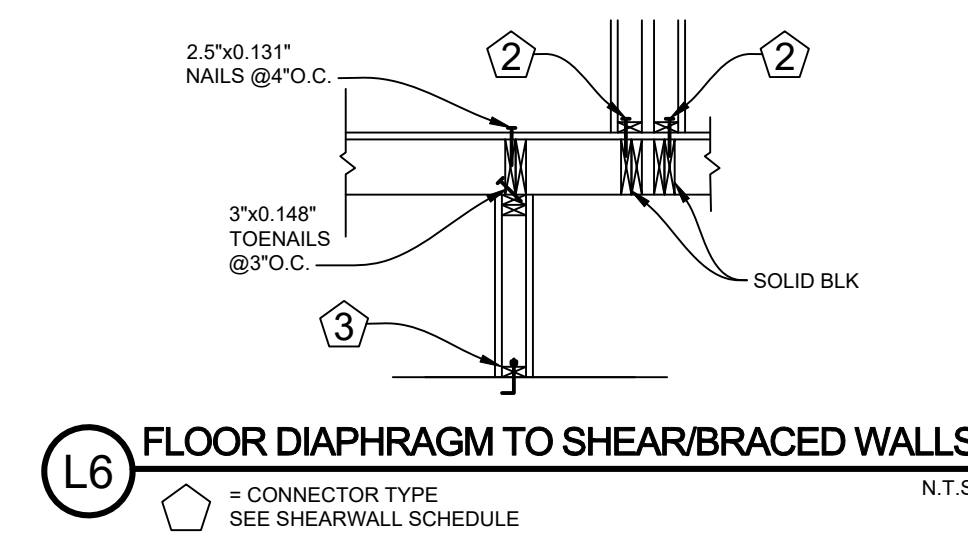
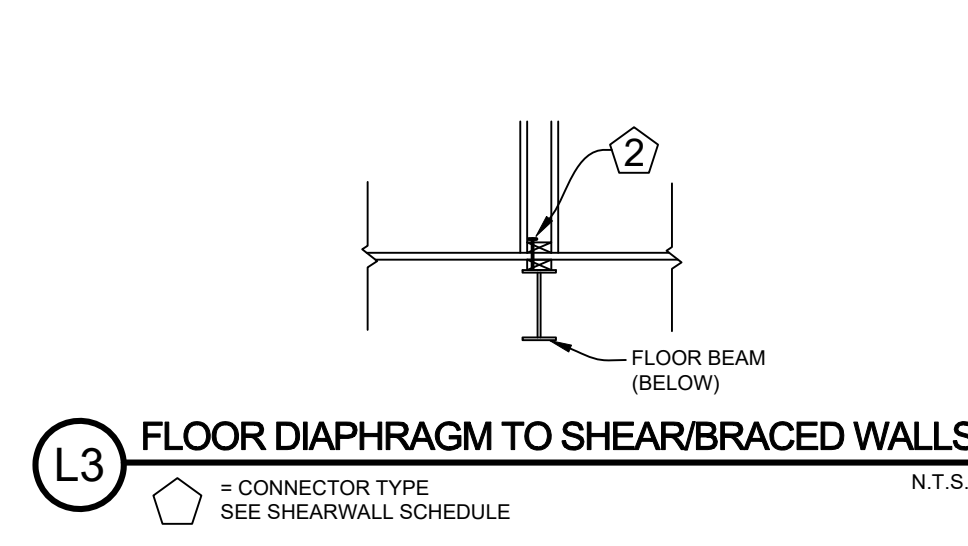
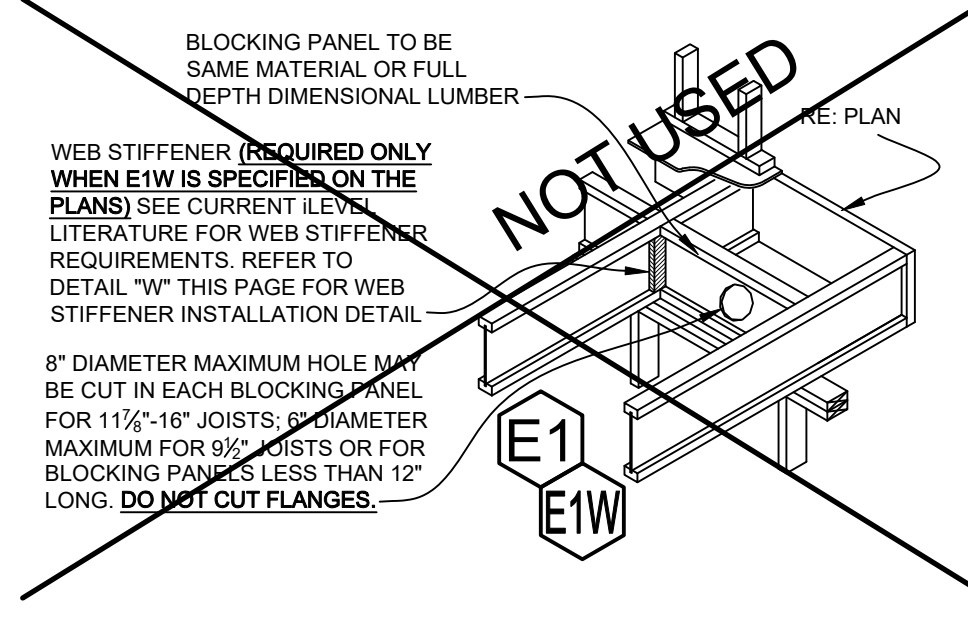
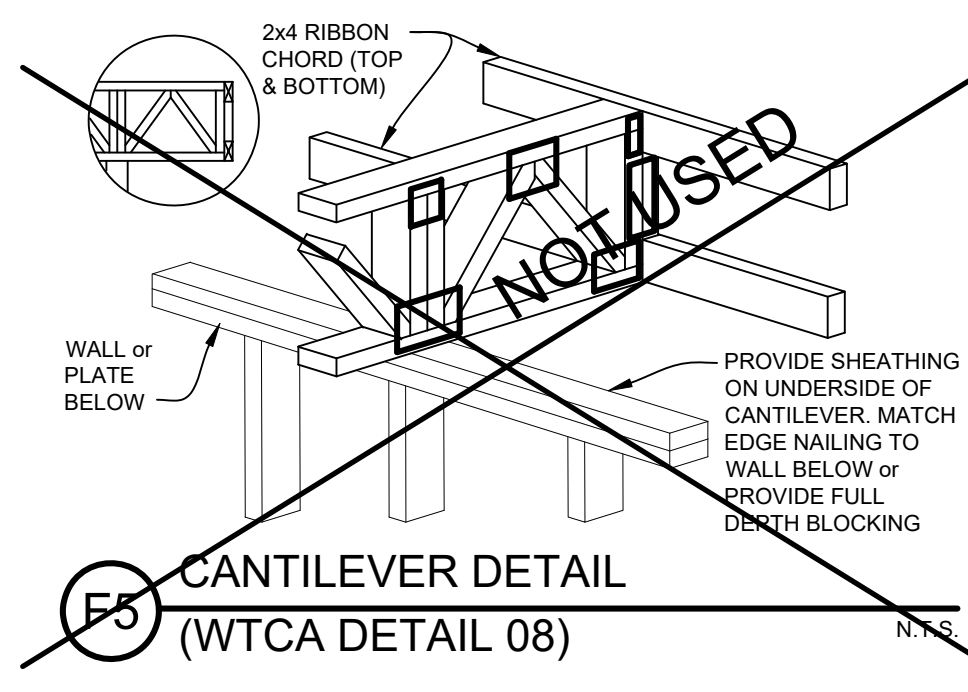
ALPINE INVESTMENT AND REALTY AND REALTY 218 SHERMAN ST RIDGWAY COLORADO 81432 970-209-0195

FRAMING DETAIL SHEET HAVEN HOUSE EXPANSION 4806 NORTH RIVER ROAD OLATHE, COLORADO

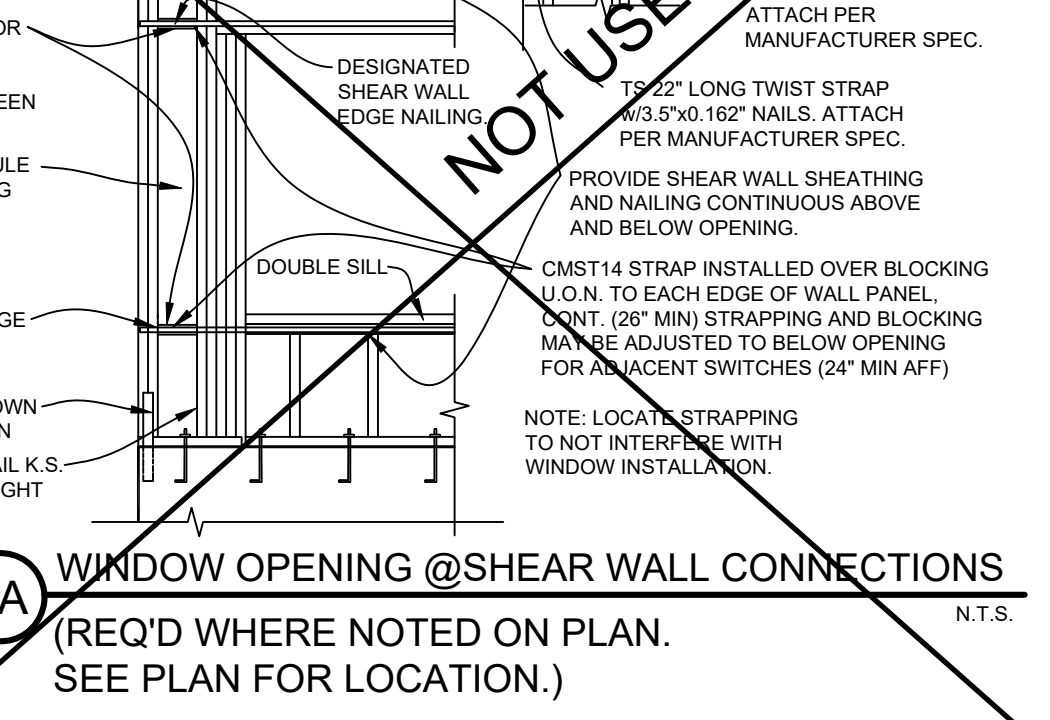
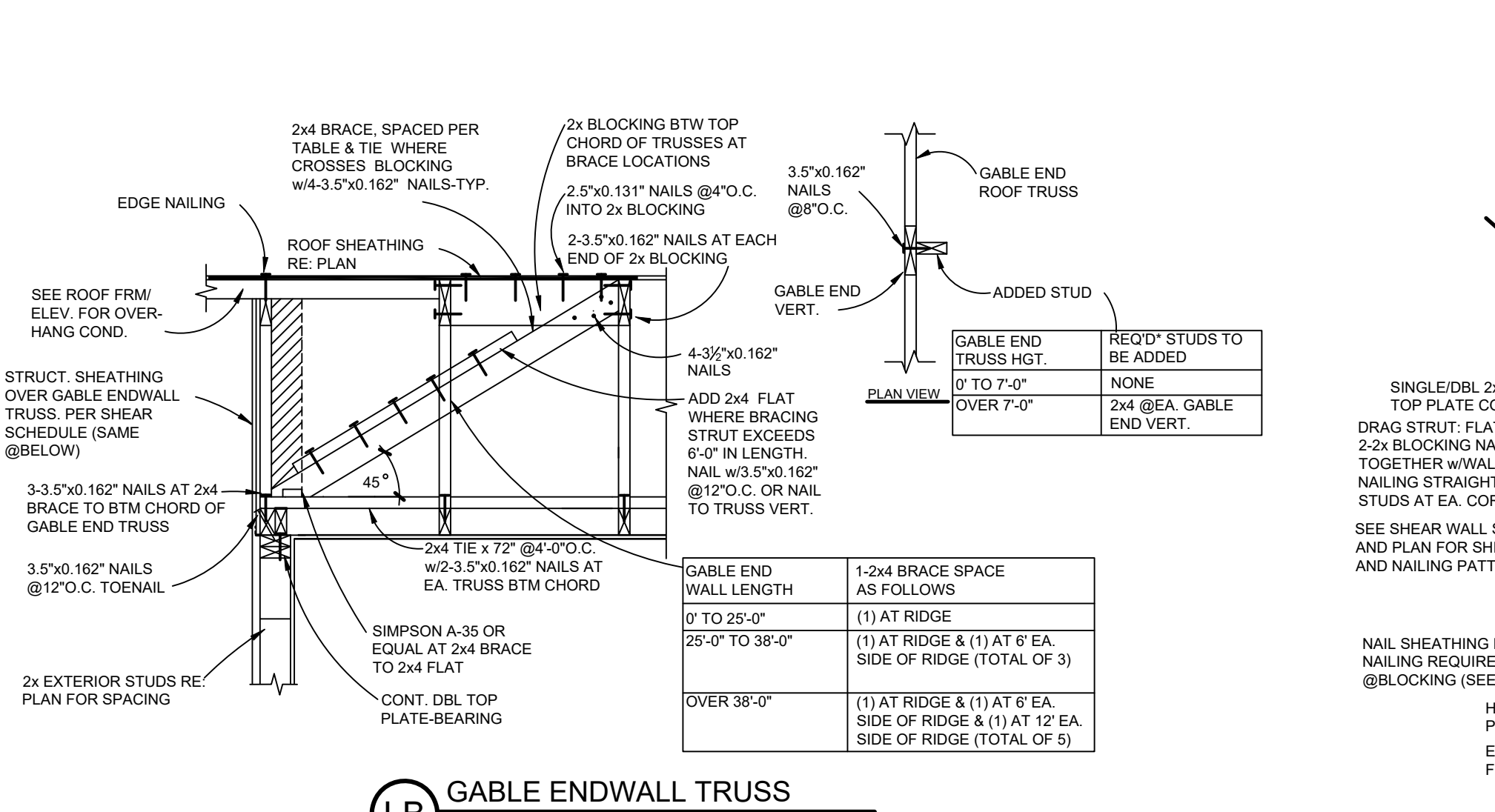
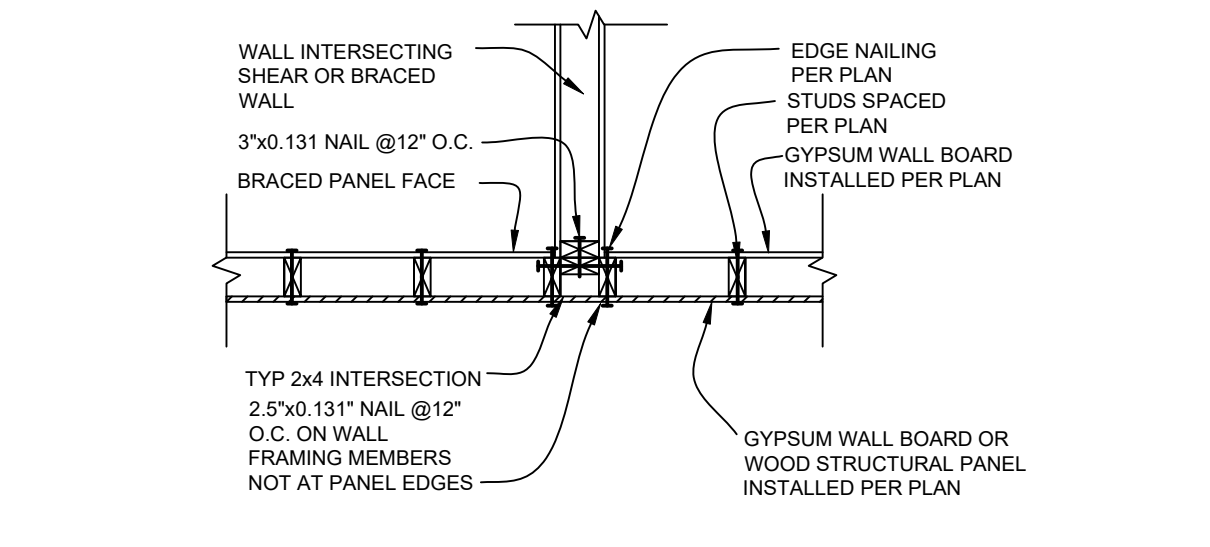
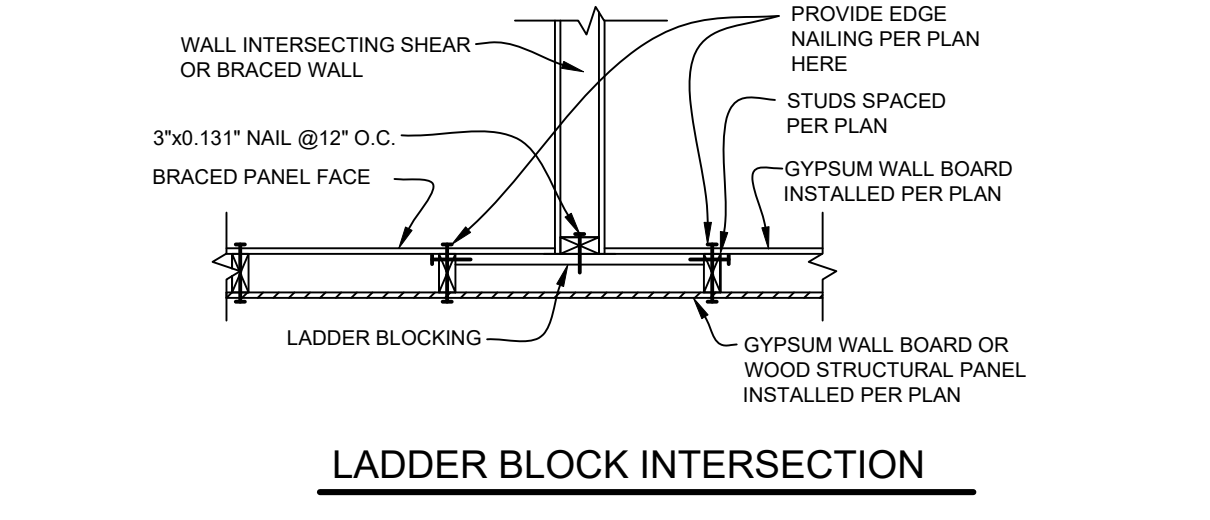
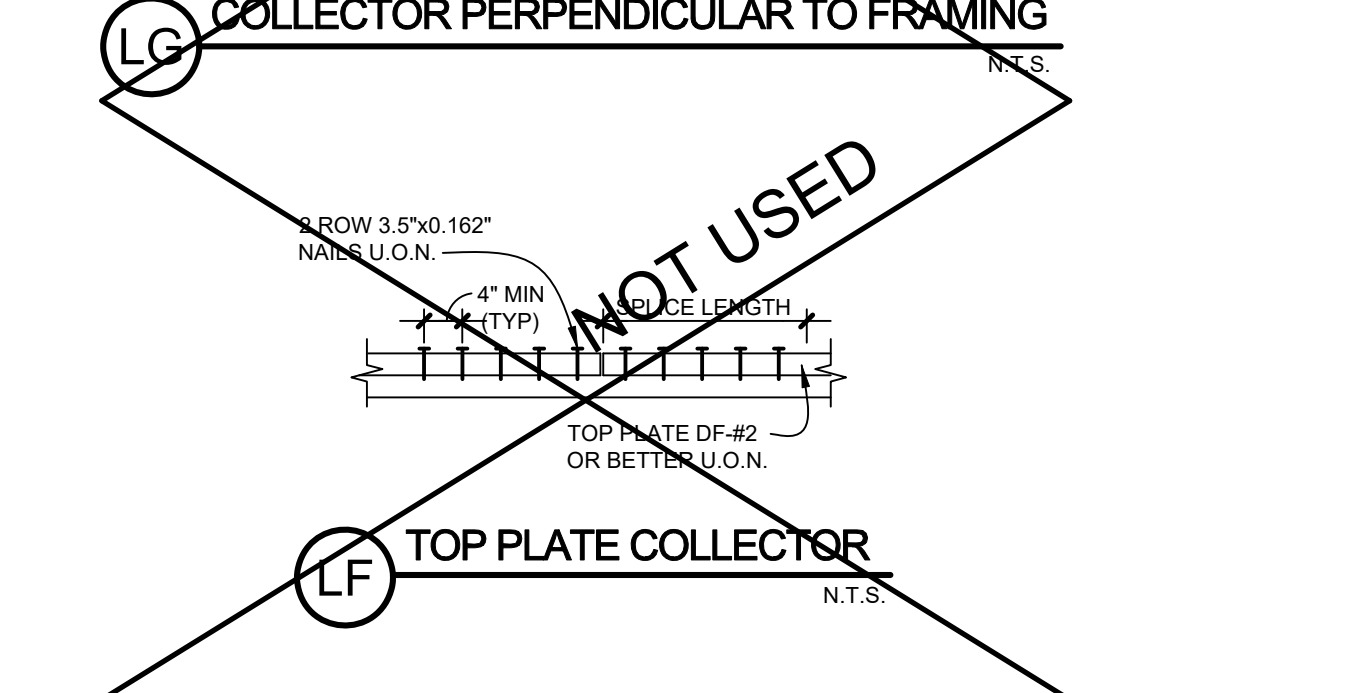
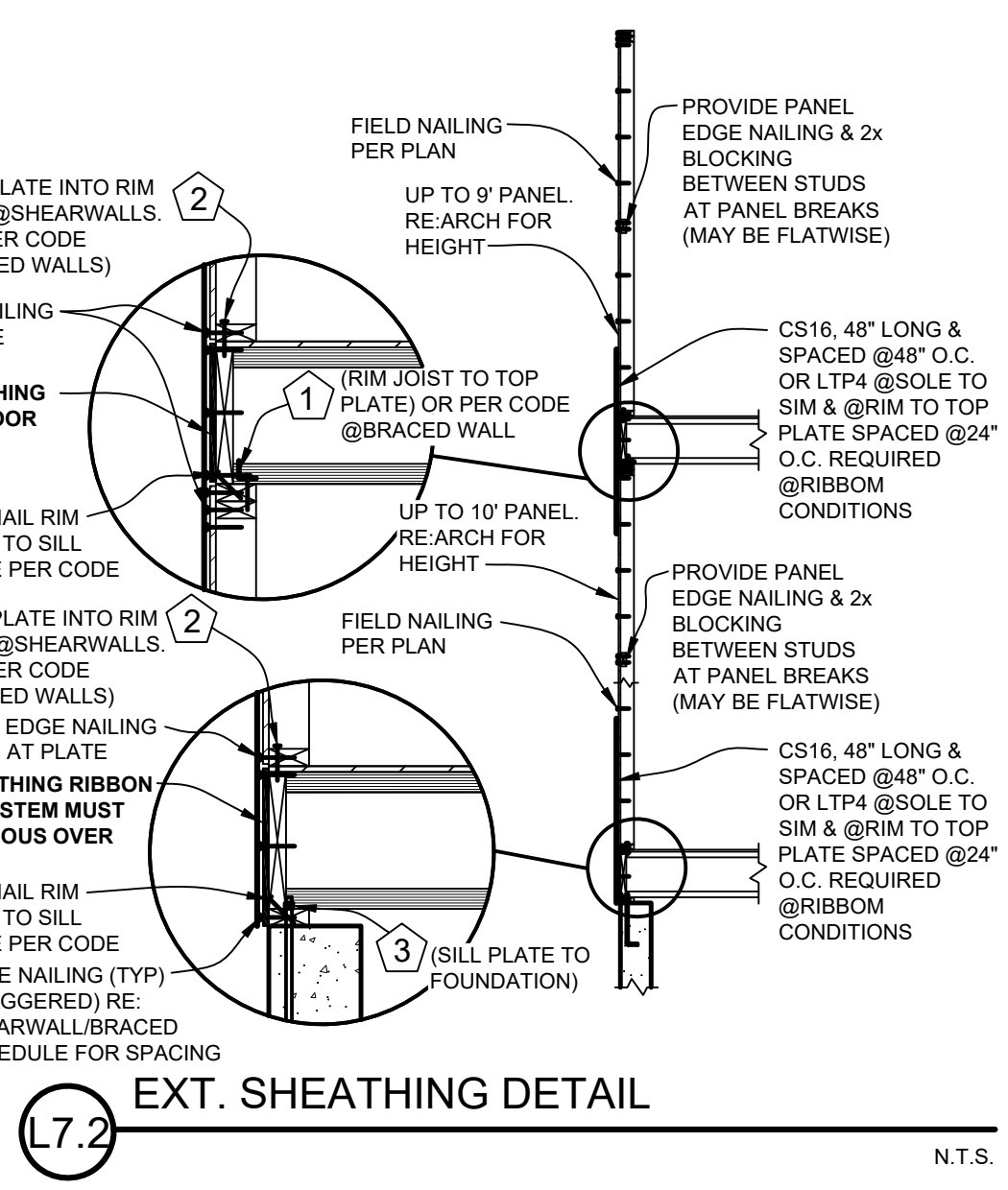
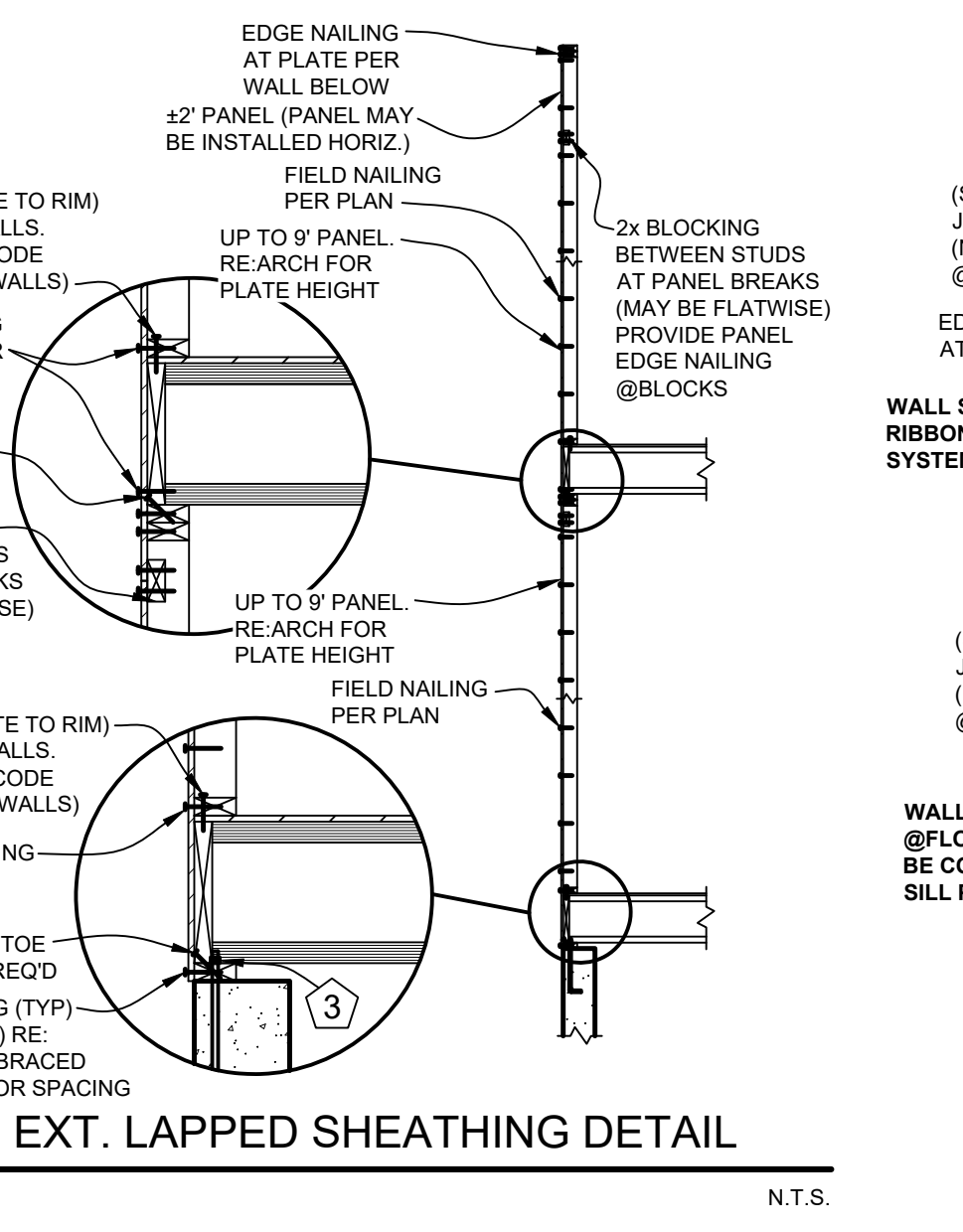
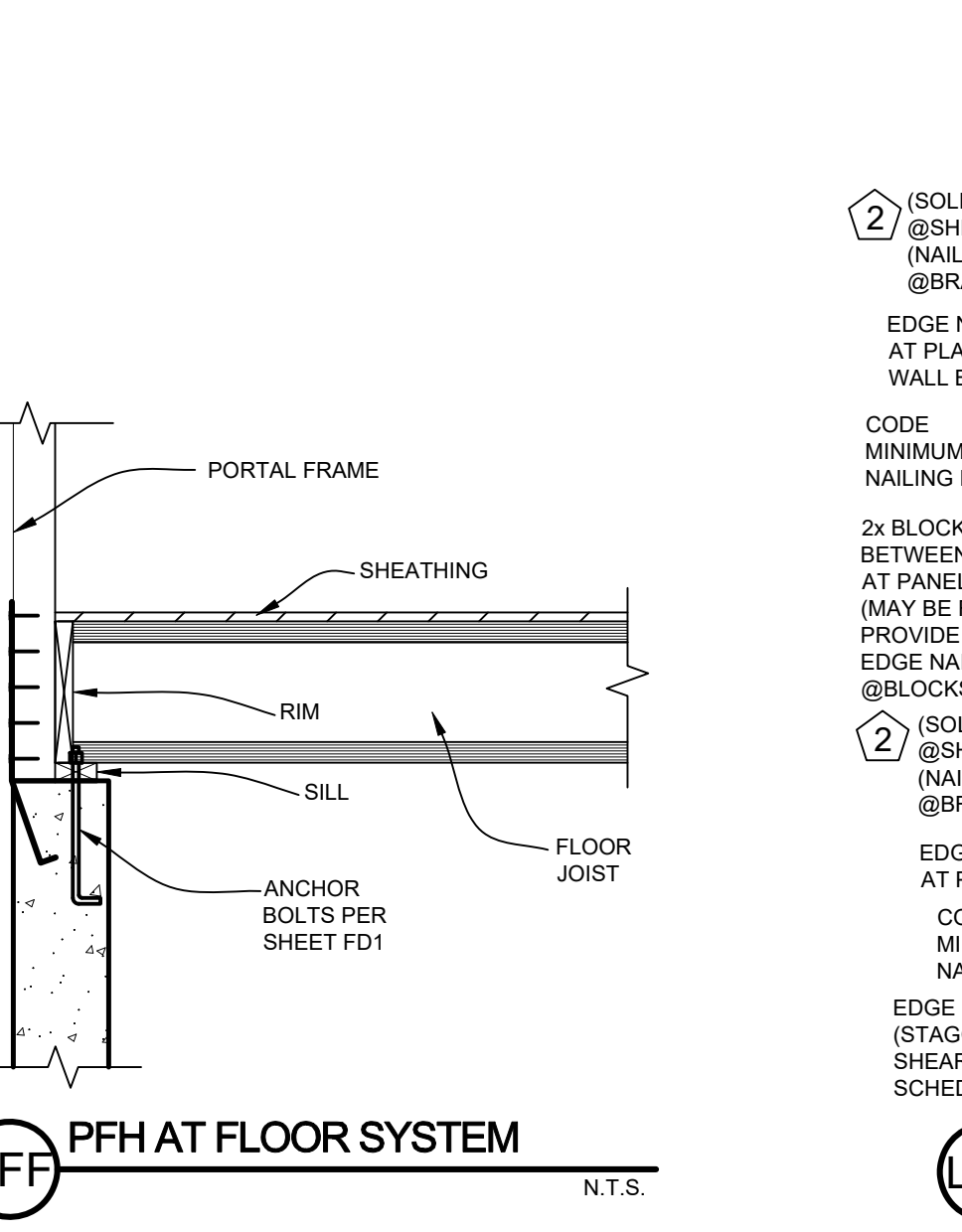
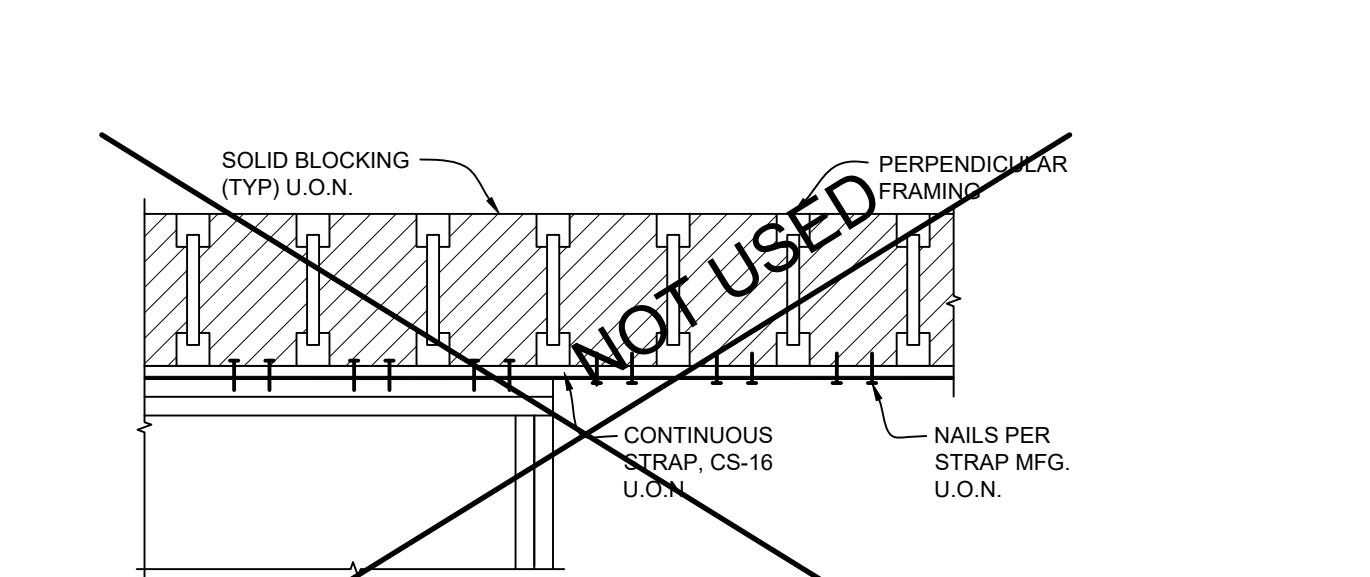


Table with project information: HAVEN HOUSE, FRAMING DETAIL SHEET, PLOT DATE NOVEMBER 4, 2024, Revisions table, and sheet number SD2.

TENSION STRAP TABLE FOR METHOD PFH, PFG, AND CS-PF BRACED WALL PANELS. Table with columns for wind speed, wall height, and strap type.



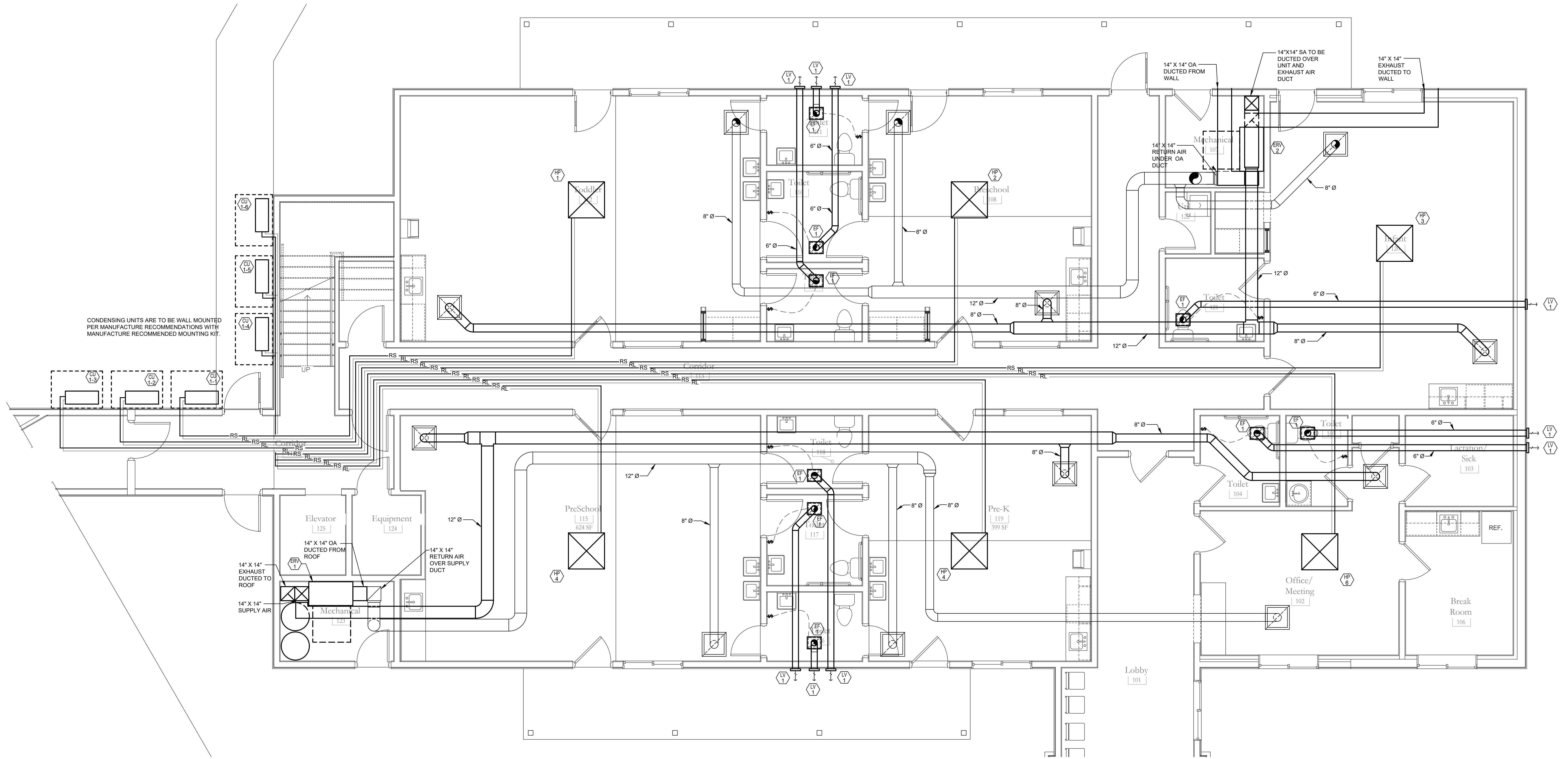
MAXIMUM TRUSS LENGTH FASTENED w/3/2"x0.162" TOE-NAILS. Table with columns for wood species and ply counts.



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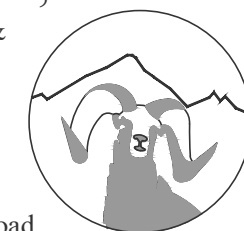
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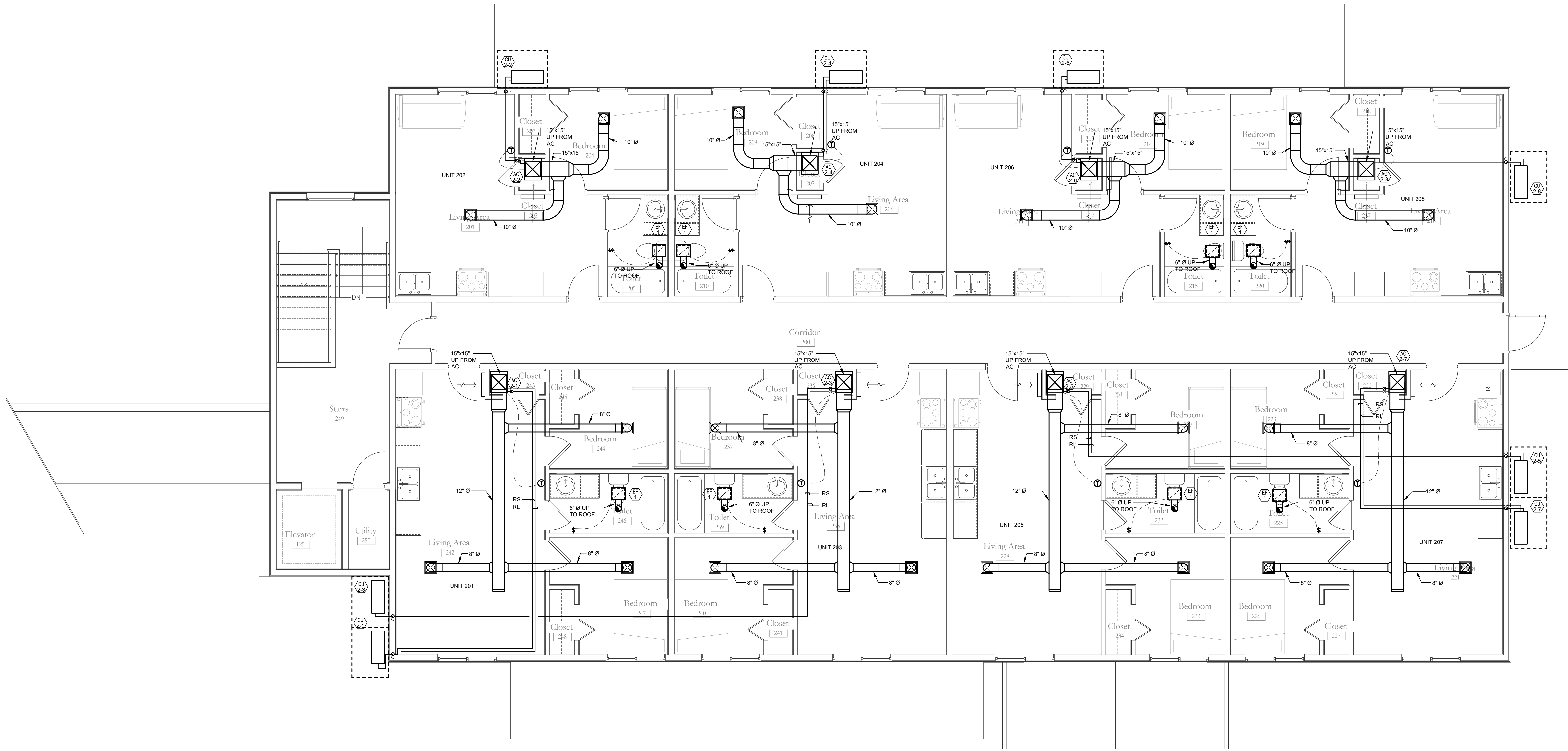


CONDENSING UNITS ARE TO BE WALL MOUNTED PER MANUFACTURE RECOMMENDATIONS WITH MANUFACTURE RECOMMENDED MOUNTING KIT.



1 Mechanical - Floor Plan - Main Level  
1/4" = 1'-0"

REVISIONS		 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042 PHASE: REVIEW SET ISSUE: A ISSUE DATE: 09/09/24
 Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			Mechanical - Main Level Floor Plan SHEET NAME
Haven House Expansion		 M1-1 SHEET NUMBER	





① Mechanical - Floor Plan - Upper Level  
 1/4" = 1'-0"

REVISIONS		 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042 PHASE: REVIEW SET ISSUE: A ISSUE DATE: 09/09/24
 Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			Mechanical - Upper Level Floor Plan SHEET NAME
Haven House Expansion		<h1>M1-2</h1> SHEET NUMBER	

LOUVER SCHEDULE							
EQUIPMENT NO.	SERVICE	WIDTH (IN)	HEIGHT (IN)	THICKNESS OF WALL (IN)	MATERIAL	MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
LV-1	FIRST FLOOR TOILETS	10	8	7 3/4"	ALUMINUM	GREENHECK ESD-202-10x8	NOTE-1
NOTES: 1. PROVIDE MOTORIZED DAMPER, HOUSING AND BIRD SCREEN.							



ENERGY RECOVER VENTILATOR SCHEDULE																			
EQUIPMENT NO.	SERVICE	LOCATION	SUPPLY CFM	TEMPERATURE		E.S.P. (IN W.G.)	SUPPLY FAN			E.S.P. (IN W.G.)	EXHAUST CFM	EXHAUST FAN			PRE-HEAT	ELECTRICAL		MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
				E.A.T	L.A.T		W	TYPE:	V./PH./HZ.			W	TYPE:	V./PH./HZ.		KW	MCA		
ERV-1.2	MAIN LEVEL	MECH	770			1.6	370		208-230/1/60	1.6	770	370		208-230/1/60	-	3.9	15	RENEWAIRE HE10IN	
NOTES: 1. PROVIDE WITH RETURN AIR THERMOSTAT, INTERNALLY MOUNTED CONTROL CENTER SENSORS, MOTOR STARTER, CONTROL TRANSFORMER, HANGERS AND RUBBER IN SHEAR VIBRATION ISOLATORS, DOUBLE WALL CONSTRUCTION, MERV 8 FILTERS ON THE OUTSIDE AIR INTAKE, DEFROST PREHEATER, DUCT FLANGES, AND CONVENIENCE OUTLETS.																			

INDOOR HP UNIT EQUIPMENT SCHEDULE											
EQUIPMENT NO.	SERVICE	NOMINAL COOLING CAPACITY (BTU/HR.)	NOMINAL HEATING CAPACITY (BTU/HR.)	CFM	EER2 (EFFICIENCY)	REFRIGERANT PIPING DIAMETER		ELECTRICAL		MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
						LIQUID	SUCTION	MCA (AMPS)	V./PH./HZ.		
HP-1	TODDLER	30,000	32,000	840	14.1	3/8"	5/8"	1	208-230/1/60	mitsubishi PLA-A30EA8	
HP-2	PRESCHOOL	30,000	32,000	840	14.1	3/8"	5/8"	1	208-230/1/60	mitsubishi PLA-A30EA9	
HP-3	INFANT	30,000	32,000	840	14.1	3/8"	5/8"	1	208-230/1/60	mitsubishi PLA-A30EA10	
HP-4	PRESCHOOL	30,000	32,000	840	14.1	3/8"	5/8"	1	208-230/1/60	mitsubishi PLA-A30EA11	
HP-5	PRE-K	30,000	32,000	840	14.1	3/8"	5/8"	1	208-230/1/60	mitsubishi PLA-A30EA12	
HP-6	OFFICE/MEETING	30,000	32,000	840	14.1	3/8"	5/8"	1	208-230/1/60	mitsubishi PLA-A30EA13	
NOTES: 1. PROVIDE WITH POWER DISCONNECT, LINESET RECOMMENDED BY MANUFACTURER.											

AIR CONDITIONING EQUIPMENT SCHEDULE											
EQUIPMENT NO.	SERVICE	NOMINAL COOLING CAPACITY (BTU/HR.)	NOMINAL HEATING CAPACITY (BTU/HR.)	CFM	EER (EFFICIENCY)	REFRIGERANT PIPING		ELECTRICAL		MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
						LIQUID	SUCTION	MCA (AMPS)	V./PH./HZ.		
AC-2-1	UNIT 201	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/60	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-2	UNIT 202	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/61	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-3	UNIT 203	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/62	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-4	UNIT 204	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/63	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-5	UNIT 205	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/64	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-6	UNIT 206	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/65	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-7	UNIT 207	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/66	mitsubishi SVZ-KP18NA	NOTE-1
AC-2-8	UNIT 208	18,000	21,600	675	12.5	1/4"	1/2"	3	208-230/1/67	mitsubishi SVZ-KP18NA	NOTE-1
NOTES: 1. PROVIDE KUMO TOUCH REDLINK WIRELESS CONTROLLER (MODEL #MHK2), BLUE DIAMOND (ADVANCED) MINI CONDENSATE PUMP W/ RESERVOIR & SENSOR (208V/230V) (MODEL #X87-721), UNIT DISCONNECT SWITCH, FILTER, UNIT TO BE SUSPENDED 1 FOOT FROM THE GROUND.											

EXHAUST FAN SCHEDULE												
EQUIPMENT NO.	SERVICE	LOCATION	CFM	EXTERNAL STATIC PRESS. (IN. W.G.)	MOTOR						MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
					WATTS	HP	RPM	MCA (A)	MOP (A)	VOLT/PH/HZ		
EF-1	TOILET	CEILING	100	0.25	19.00	-	1127	1.9	15	115/60/1	GREENHECK CSP-A390-VG	
NOTES: 1. PROVIDE WITH MOTOR STARTER, POWER DISCONNECT, AND DIRECT DRIVEN VFD MOTOR. SAME EXHAUST FAN IS TO BE INSTALLED IN EACH BATHROOM (TOTAL 17)												

AIR COOLED CONDENSING UNIT SCHEDULE											
EQUIPMENT NO.	SERVICE	NOMINAL COOLING CAPACITY (TON)	REFRIG. PIPING		ELECTRIC			MANUFACTURER & MODEL	OPTIONS/ACCESSORIES		
			LIQUID	VAPOR	V/PH/HZ	MOP (A)	MCA (A)				
CU-1-1	TODDLER	2.5	3/8"	5/8"	208-230/1/60	40	24	mitsubishi PUZ-HA30NKA	NOTE-1		
CU-1-2	PRESCHOOL	2.5	3/8"	5/8"	208-230/1/61	40	24	mitsubishi PUZ-HA30NKA	NOTE-1		
CU-1-3	INFANT	2.5	3/8"	5/8"	208-230/1/62	40	24	mitsubishi PUZ-HA30NKA	NOTE-1		
CU-1-4	PRESCHOOL	2.5	3/8"	5/8"	208-230/1/63	40	24	mitsubishi PUZ-HA30NKA	NOTE-1		
CU-1-5	PRE-K	2.5	3/8"	5/8"	208-230/1/64	40	24	mitsubishi PUZ-HA30NKA	NOTE-1		
CU-1-6	OFFICE/MEETING	2.5	3/8"	5/8"	208-230/1/65	40	24	mitsubishi PUZ-HA30NKA	NOTE-1		
CU-2-1	UNIT 201	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-2	UNIT 202	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-3	UNIT 203	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-4	UNIT 204	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-5	UNIT 205	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-6	UNIT 206	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-7	UNIT 207	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
CU-2-8	UNIT 208	1.5	1/4"	1/2"	208-230/1/60	31	17	mitsubishi SUZ-KA18NAHZ	NOTE-2		
NOTES: 1. AIR COOLED CONDENSING UNIT. PROVIDE LINE SET AS RECOMMENDED BY MANUFACTURER, MATCHING DX COIL SECTION IN HP. VARIABLE SPEED CONDENSER FAN, FREEZESTAT, CRANKCASE HEATER, SOUND COVER, LOSS OF CHARGE KIT, CONTROLS TO INTERFACE UNIT WITH 7-DAY PROGRAMMABLE THERMOSTAT WITH NIGHTTIME/DAYTIME SETTINGS, WALL MOUNTING KIT EQUIVALENT TO OSWBSS, POWERED CONVENIENCE OUTLET WITHIN 25 FEET, ICM MODEL #493 VOLTAGE SURGE/SAG PROTECTION DEVICE OR EQUIVALENT. UNIT WEIGHT 261 LBS. 2. AIR COOLED CONDENSING UNIT. PROVIDE LINE SET AS RECOMMENDED BY MANUFACTURER, MATCHING DX COIL SECTION IN HP. VARIABLE SPEED CONDENSER FAN, FREEZESTAT, CRANKCASE HEATER, SOUND COVER, LOSS OF CHARGE KIT, CONTROLS TO INTERFACE UNIT WITH 7-DAY PROGRAMMABLE THERMOSTAT WITH NIGHTTIME/DAYTIME SETTINGS, WALL MOUNTING KIT EQUIVALENT TO OSWBSS, POWERED CONVENIENCE OUTLET WITHIN 25 FEET, ICM MODEL #493 VOLTAGE SURGE/SAG PROTECTION DEVICE OR EQUIVALENT. UNIT WEIGHT 131 LBS.											

REVISIONS	 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042
		PHASE: REVIEW SET
		ISSUE: A
		ISSUE DATE: 09/09/24
 Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709		Haven House Expansion  <h1 style="font-size: 2em;">M3-1</h1> SHEET NUMBER

PLUMBING PIPE DESIGNATIONS

Table with 2 columns: LINE TYPE and DESCRIPTION. Lists various pipe types such as 140 HIGH TEMPERATURE (140°) WATER PIPE, CA COMPRESSED AIR, DC DECONTAMINATION PIPING, etc.

PLUMBING ELEMENTS / VALVING

Table with 4 columns: LINE TYPE, DESCRIPTION, LINE TYPE, DESCRIPTION. Lists plumbing elements like PIPE RISING UP, PIPE DROPPING DOWN, GATE VALVE, BALL VALVE, etc.

RESPONSIBLE DIVISION:

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

Table with 4 columns: ITEM, FURNISHED, SET, POWER CONTROL. Lists equipment items like COMBINATION MAGNETIC MOTOR STARTERS, FUSED AND UNFUSED DISCONNECT SWITCHES, etc.

- SUBSCRIPT FOOTNOTES: 1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND 'ON' AND 'OFF' PILOT LIGHTS. 2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

ABBREVIATIONS:

Large table of abbreviations including DIA DIAMETER, HP HORSEPOWER, FTAC PACKAGED TERMINAL AIR CONDITIONER, etc.

SUBSTITUTIONS:

A. SUBSTITUTIONS, SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER.

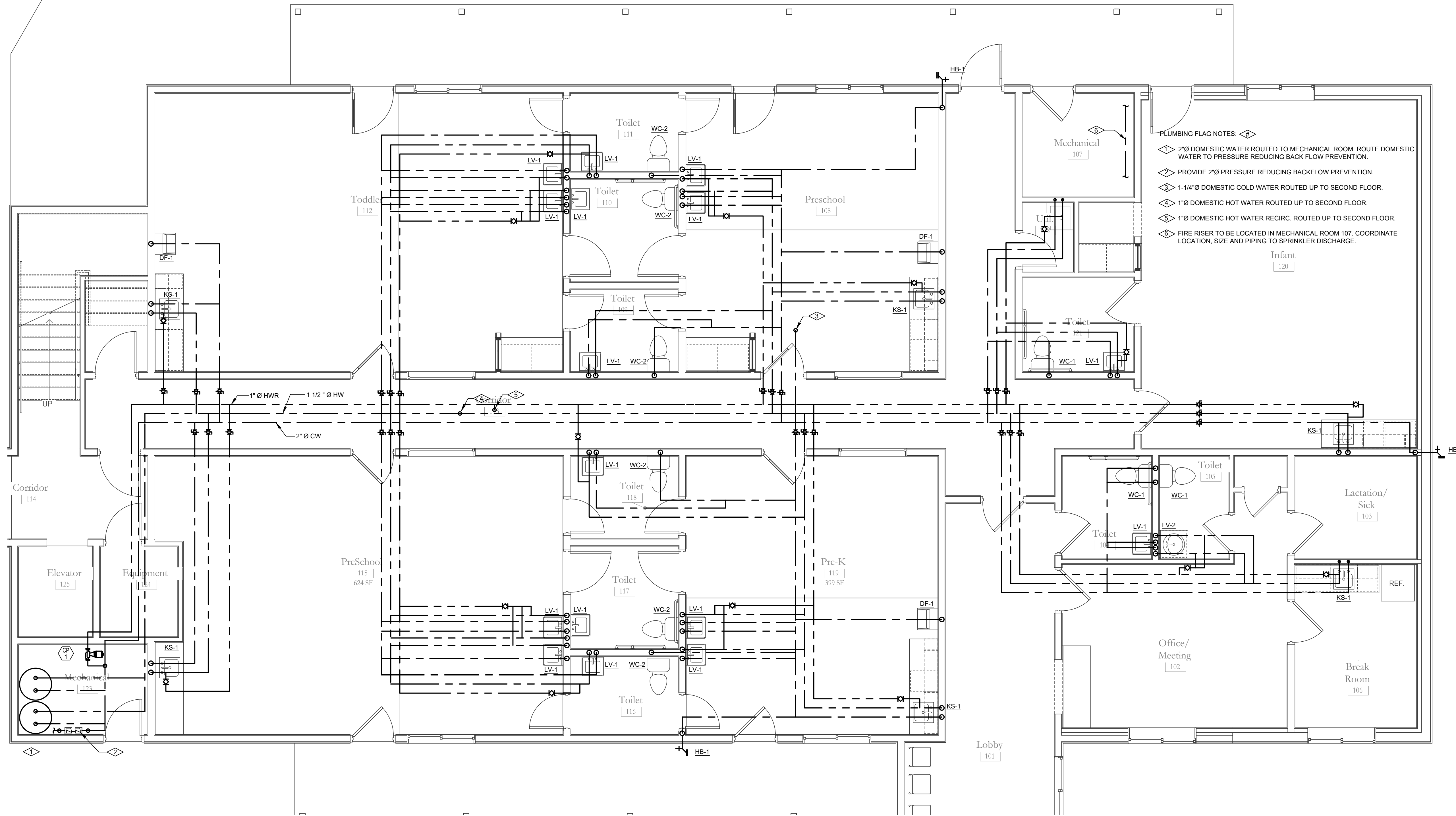
B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIATED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.

C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING, AND ENERGY CONSERVATION CODES.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION.

Project information and logos including MOTLEY ARCHITECTURE & DESIGN, BIGHORN CONSULTING ENGINEERS, INC., and Haven House Expansion. Includes project number 2033 BCE# 24042, phase REVIEW SET, and sheet number P0-1.



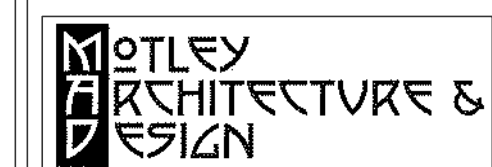
- PLUMBING FLAG NOTES:
- ◇ 2" DOMESTIC WATER ROUTED TO MECHANICAL ROOM. ROUTE DOMESTIC WATER TO PRESSURE REDUCING BACK FLOW PREVENTION.
  - ◇ PROVIDE 2" PRESSURE REDUCING BACKFLOW PREVENTION.
  - ◇ 1-1/4" DOMESTIC COLD WATER ROUTED UP TO SECOND FLOOR.
  - ◇ 1" DOMESTIC HOT WATER ROUTED UP TO SECOND FLOOR.
  - ◇ 1" DOMESTIC HOT WATER RECIRC. ROUTED UP TO SECOND FLOOR.
  - ◇ FIRE RISER TO BE LOCATED IN MECHANICAL ROOM 107. COORDINATE LOCATION, SIZE AND PIPING TO SPRINKLER DISCHARGE.

1 PLUMBING - MAIN LEVEL FLOOR PLAN - DOMESTIC WATER  
1/4" = 1'-0"

PLUMBING GENERAL NOTES:

1. DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS. CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
2. PIPE DIMENSIONS DO NOT REFLECT ADDITIONAL DIMENSIONS FOR INSULATION. ALL PIPING SHALL BE INSULATED PER 2018 IECC CODE REQUIREMENTS.
3. CONDENSING WATER HEATER, GAS FURNACE, AND BOILER VENT MATERIAL SHALL COMPLY WITH MANUFACTURER'S LISTED AND APPROVED MATERIALS. PVC SHALL NOT BE USED FOR FLUE/COMBUSTION AIR VENTING MATERIAL. ENGINEERS PREFERRED MATERIAL IS PRESSURE RATED, DOUBLE WALL, GASKETED, 316 STAINLESS STEEL CONDENSING FLUE VENTING MATERIAL. RECOMMENDED MANUFACTURER'S SELKIRK OR JERMIAS.
4. ALL PLUMBING FIXTURES WITH QUICK CLOSING VALVES ON DOMESTIC COLD/HOT WATER SHALL BE PROVIDED WITH WATER HAMMER ARRESTOR.
5. ALL PLUMBING FIXTURES SHALL BE VENTED BY PLUMBING CONTRACTOR PER IPC REQUIREMENTS.
6. ELEVATOR SUMP PUMP SHALL OPERATE AT 50 GPM PER ELEVATOR CAR. ELEVATOR SUMP PUMP SHALL BE PROVIDED WITH OIL DETECTION ALARM AND MEET ASME A17.1 ELEVATOR CODE REQUIREMENTS. ELEVATOR SUMP PUMP SHALL BE PROVIDED WITH INLINE CHECK VALVE, ISOLATION VALVES AND DISCHARGE INDIRECTLY THROUGH AIR GAP SIZED PER IPC TO NEARBY FLOOR SINK.
7. NEW GAS METER TO BE PROVIDED. GAS METER TO BE LOW PRESSURE (I.E. LESS THAN 14" W.C.) GAS METER LOAD IS --- MBH (--- CFH). LONGEST EQUIVALENT LINE LENGTH OF PIPING IS 300 FEET. GENERAL CONTRACTOR SHALL VERIFY THAT INSTALLED GAS METER CAN ACCOMMODATE GAS LOAD OF --- CFH. REFERENCE GAS PIPE SIZING CALCULATIONS TABLE ON P1-4 FOR MORE INFORMATION.
8. PLUMBING FIXTURE MANUFACTURERS AS SCHEDULED ON PLUMBING DRAWINGS ARE SUGGESTED MANUFACTURER'S AND MODELS. UNLESS NOTED OTHERWISE DUE TO OWNER/CLIENT REQUIREMENTS AND PREFERENCES. PLUMBING CONTRACTOR CAN SUBMIT EQUIVALENT FIXTURES FROM MANUFACTURERS THAT DIFFER FROM SCHEDULED PLUMBING FIXTURES. ALTERNATE MANUFACTURERS OF PLUMBING FIXTURES WILL BE REVIEWED FOR EQUIVALENCE OF PERFORMANCE AND FUNCTIONALITY BY ENGINEER.
9. ALL EXTERIOR METALLIC NATURAL GAS PIPING SHALL BE TREATED WITH CORROSION INHIBITOR COATING. COATING SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATION SO THAT COATING MAINTAINS INTEGRITY OF GAS PIPING. COATING SHALL BE UV RESISTANT.
10. PRIOR TO BIDDING OR BEGINNING ANY CONSTRUCTION, CONTRACTOR SHALL OBSERVE EXISTING CONDITIONS IN FIELD. CONTRACTOR SHALL OBSERVE AND CONFIRM FIELD LOCATIONS OF EXISTING DOMESTIC WATER AND SANITARY SEWER FOR SERVICE CONNECTIONS. CONTRACTOR SHALL VERIFY EXISTING SANITARY WASTE SEWER INVERT AT ANTICIPATED TIE IN LOCATION. CONFIRM NO OBSTACLES ARE IN PATH OF ANTICIPATED GRAVITY SANITARY SEWER TIE IN LOCATION AND INVERT IS ADEQUATE.

REVISIONS



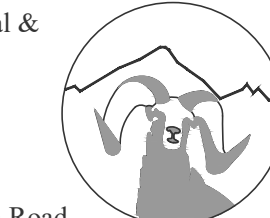
915 S. 10th St.  
Montrose, CO 81401  
p: (970) 249-1980  
motleyarc.com

PROJECT NO: 2033 BCE# 24042  
PHASE: REVIEW SET  
ISSUE: A  
ISSUE DATE: 09/09/24

PLUMBING -  
MAIN LEVEL -  
DOM. WATER  
SHEET NAME

Bighorn Consulting  
Engineers, Inc.

Mechanical &  
Electrical  
Engineers

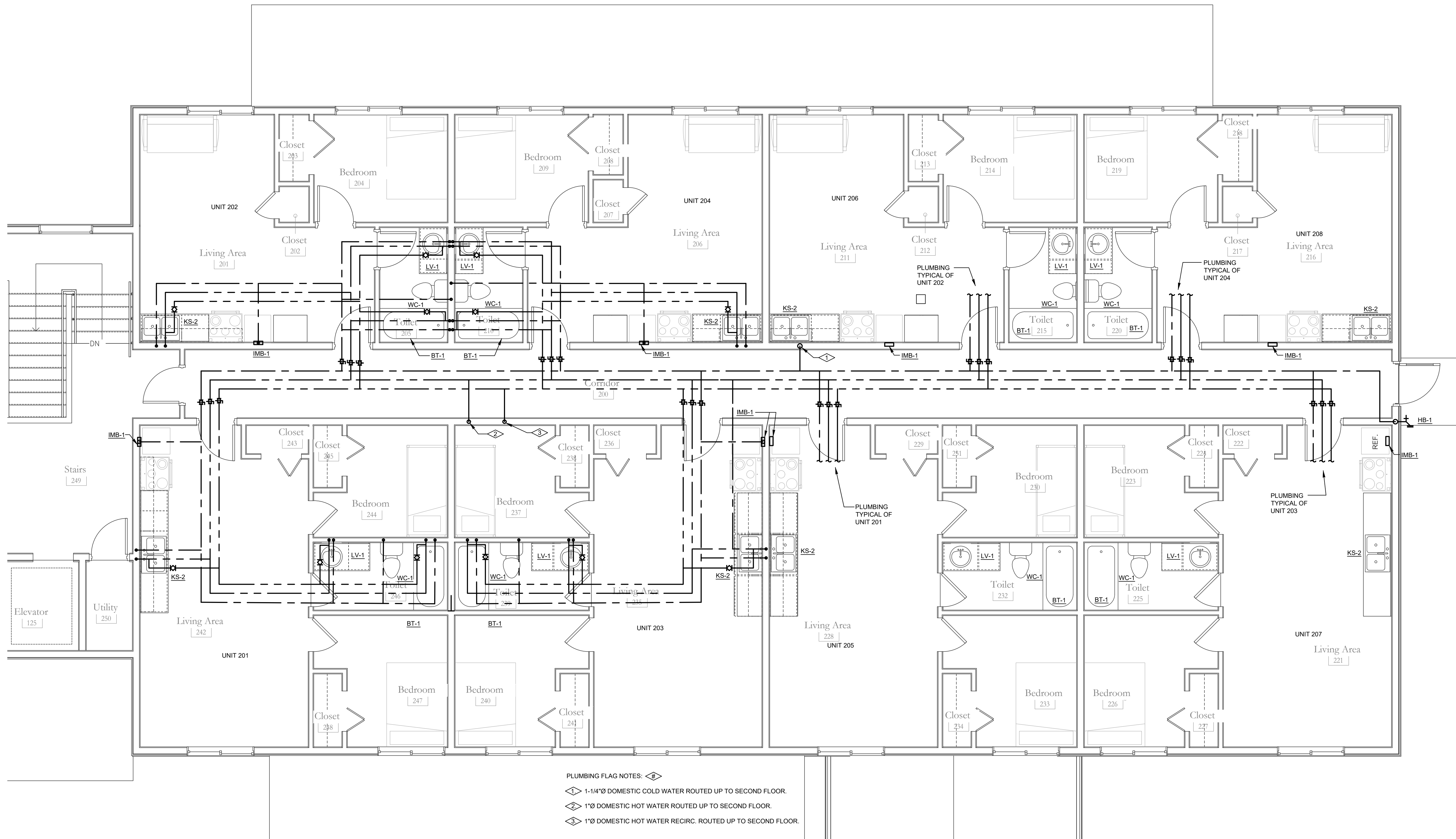


386 Indian Road  
Grand Junction, CO 81501  
Phone (970) 241-8709

Haven House  
Expansion

P1-1

SHEET NUMBER



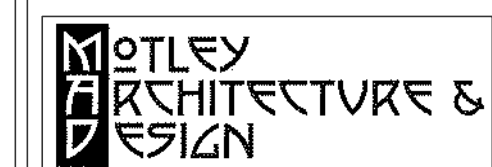
- PLUMBING FLAG NOTES:
- ◊ 1-1/4" DOMESTIC COLD WATER ROUTED UP TO SECOND FLOOR.
  - ◊ 1" DOMESTIC HOT WATER ROUTED UP TO SECOND FLOOR.
  - ◊ 1" DOMESTIC HOT WATER RECIRC. ROUTED UP TO SECOND FLOOR.

1 PLUMBING - UPPER FLOOR PLAN - DOMESTIC WATER  
1/4" = 1'-0"

PLUMBING GENERAL NOTES:

1. DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL. DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
2. PIPE DIMENSIONS DO NOT REFLECT ADDITIONAL DIMENSIONS FOR INSULATION. ALL PIPING SHALL BE INSULATED PER 2018 IECC CODE REQUIREMENTS.
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8. PLUMBING FIXTURE MANUFACTURERS AS SCHEDULED ON. PLUMBING DRAWINGS ARE SUGGESTED MANUFACTURER'S AND MODELS. UNLESS NOTED OTHERWISE DUE TO OWNER/CIENT REQUIREMENTS AND PREFERENCES. PLUMBING CONTRACTOR CAN SUBMIT EQUIVALENT FIXTURES FROM MANUFACTURERS THAT DIFFER FROM SCHEDULED PLUMBING FIXTURES. ALTERNATE MANUFACTURERS OF PLUMBING FIXTURES WILL BE REVIEWED FOR EQUIVALENCE OF PERFORMANCE AND FUNCTIONALITY BY ENGINEER.
9. ALL EXTERIOR METALLIC NATURAL GAS PIPING SHALL BE TREATED WITH CORROSIVE INHIBITOR COATING. COATING SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATION SO THAT COATING MAINTAINS INTEGRITY OF GAS PIPING. COATING SHALL BE UV RESISTANT.
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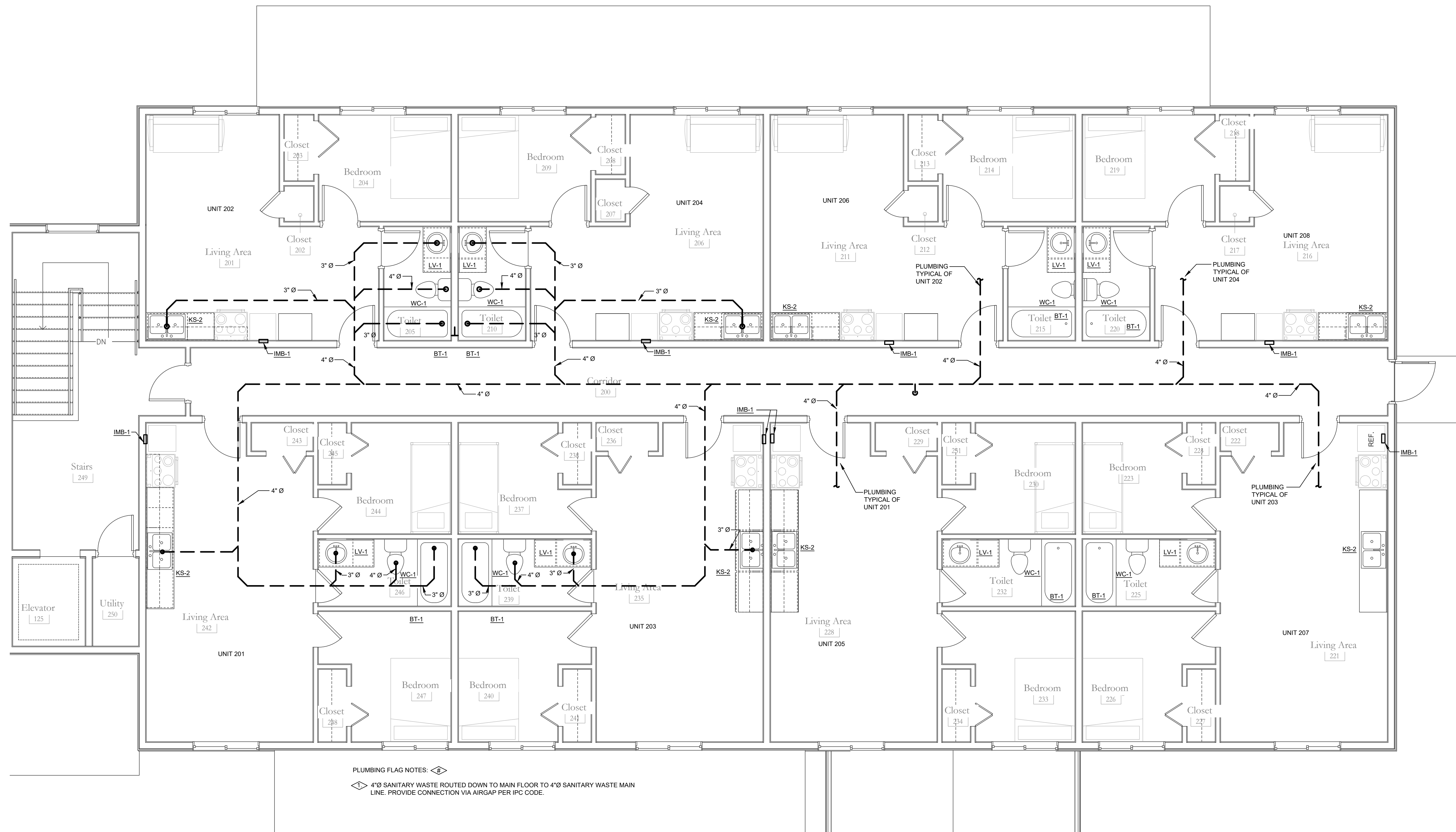
Haven House  
Expansion

PROJECT NO: 2033 BCE# 24042  
PHASE: REVIEW SET  
ISSUE: A  
ISSUE DATE: 09/09/24

PLUMBING -  
UPPER LEVEL -  
P.M. WATER  
SHEET NAME

P1-2

SHEET NUMBER



PLUMBING FLAG NOTES:   
 4" Ø SANITARY WASTE ROUTED DOWN TO MAIN FLOOR TO 4" Ø SANITARY WASTE MAIN LINE. PROVIDE CONNECTION VIA AIRGAP PER IPC CODE.

1 PLUMBING - UPPER FLOOR PLAN - SANITARY WASTE   
 1/4" = 1'-0"

PLUMBING GENERAL NOTES:

- DRAWING IS DIAGRAMMATIC IN NATURE. LOCATIONS AND SIZES MAY VARY DURING FIELD COORDINATION & INSTALLATION OF MECHANICAL, PLUMBING, & ELECTRICAL. DRAWINGS DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS. TAKE ALL DIMENSIONS FROM ARCHITECTURAL DRAWINGS, CERTIFIED EQUIPMENT DRAWINGS AND FROM THE STRUCTURE ITSELF BEFORE FABRICATING ANY WORK. VERIFY ALL SPACE REQUIREMENTS COORDINATING WITH OTHER TRADES, AND INSTALL THE SYSTEMS IN THE SPACE PROVIDED WITHOUT EXTRA CHARGES TO THE OWNER.
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- ELEVATOR SUMP PUMP SHALL OPERATE AT 50 GPM PER ELEVATOR CAR. ELEVATOR SUMP PUMP SHALL BE PROVIDED WITH OIL DETECTION ALARM AND MEET ASME A17.1 ELEVATOR CODE REQUIREMENTS. ELEVATOR SUMP PUMP SHALL BE PROVIDED WITH INLINE CHECK VALVE, ISOLATION VALVES AND DISCHARGE INDIRECTLY THROUGH AIR GAP SIZED PER IPC TO NEARBY FLOOR SINK.
- NEW GAS METER TO BE PROVIDED. GAS METER TO BE LOW PRESSURE (I.E. LESS THAN 14" W.C.) GAS METER LOAD IS --- MBH (--- CFH). LONGEST EQUIVALENT LINE LENGTH OF PIPING IS 300 FEET GENERAL CONTRACTOR SHALL VERIFY THAT INSTALLED GAS METER CAN ACCOMMODATE GAS LOAD OF --- CFH. REFERENCE GAS PIPE SIZING CALCULATIONS TABLE ON P1-4 FOR MORE INFORMATION.
- PLUMBING FIXTURE MANUFACTURERS AS SCHEDULED ON PLUMBING DRAWINGS ARE SUGGESTED MANUFACTURER'S AND MODELS. UNLESS NOTED OTHERWISE DUE TO OWNER/CUSTOMER REQUIREMENTS AND PREFERENCES. PLUMBING CONTRACTOR CAN SUBMIT EQUIVALENT FIXTURES FROM MANUFACTURERS THAT DIFFER FROM SCHEDULED PLUMBING FIXTURES. ALTERNATE MANUFACTURERS OF PLUMBING FIXTURES WILL BE REVIEWED FOR EQUIVALENCE OF PERFORMANCE AND FUNCTIONALITY BY ENGINEER.
- ALL EXTERIOR METALLIC NATURAL GAS PIPING SHALL BE TREATED WITH CORROSIVE INHIBITOR COATING. COATING SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATION SO THAT COATING MAINTAINS INTEGRITY OF GAS PIPING. COATING SHALL BE UV RESISTANT.
- PRIOR TO BIDDING OR BEGINNING ANY CONSTRUCTION, CONTRACTOR SHALL OBSERVE EXISTING CONDITIONS IN FIELD. CONTRACTOR SHALL OBSERVE AND CONFIRM FIELD LOCATIONS OF EXISTING DOMESTIC WATER AND SANITARY SEWER FOR SERVICE CONNECTIONS. CONTRACTOR SHALL VERIFY EXISTING SANITARY WASTE SEWER INVERT AT ANTICIPATED TIE IN LOCATION. CONFIRM NO OBSTACLES ARE IN PATH OF ANTICIPATED GRAVITY SANITARY SEWER TIE IN LOCATION AND INVERT IS ADEQUATE.

REVISIONS			PROJECT NO: 2033 BCE# 24042
			PHASE: REVIEW SET
		915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	ISSUE: A
			ISSUE DATE: 09/09/24
			<b>PLUMBING - UPPER FLOOR - SANITARY WASTE</b> SHEET NAME
		Haven House Expansion	<h1>P1-3</h1> SHEET NUMBER
		386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709	

**PLUMBING SPECIFICATION:**

1. SCOPE OF WORK
- A. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- B. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH THE INTERNATIONAL PLUMBING CODE (LATEST EDITION), ALL LOCAL CODES AND ALL OTHER REGULATION GOVERNING WORK OF THIS NATURE.
- C. THE CONTRACTOR SHALL, BEFORE SUBMITTING ANY PROPOSAL, EXAMINE THE PROPOSED SITE AND SHALL DETERMINE FOR HIMSELF THE CONDITIONS THAT MAY AFFECT THE WORK. NO ALLOWANCE SHALL BE MADE IF THE CONTRACTOR FAILS TO MAKE SUCH EXAMINATIONS.
- D. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR "APPROVED AS EQUAL" BY THE ENGINEER OR ARCHITECT.
2. PERMITS
- A. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES.
3. SHOP DRAWINGS
- A. SUBMIT MATERIAL LIST AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE ARCHITECT/ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL SUBMIT FIVE SETS OF SHOP DRAWINGS AND THEY SHALL BE CLEARLY LABELED.
4. DOMESTIC WATER SUPPLY PIPING
- A. UNDERGROUND: PROVIDE TYPE "K" SOFT DRAWN COPPER TUBING WITH BRAZED CONNECTIONS.
- B. ABOVE GROUND: PROVIDE TYPE "L" HARD DRAWN COPPER TUBING WITH 125 PSI SOLDER JOINTS, COPPER OR BRASS FITTINGS. ALL SOLDER TO BE "NO LEAD" TYPE.
- C. ALL HOT WATER PIPING TO BE INSULATED WITH 1" FIBERGLASS INSULATION.
- D. ALL COLD WATER PIPING TO BE INSULATED WITH ½" FOAM INSULATION.
5. SANITARY/STORM DRAINAGE AND VENT PIPING
- A. ABOVE GRADE:
  - 2" BELOW: SCHEDULE 40 GALV. STEEL PIPE WITH SCREWED ENDS OR SOLID CORE SCHEDULE 40 PVC WITH SOLVENT JOINTS OR DWV COPPER WITH SOLDER JOINTS. ALL SOLDER TO BE "NO LEAD" TYPE.
  - 3" AND ABOVE: SERVICE WT. CAST IRON WITH NO-HUB OR BELL AND SPIGOT JOINTS; OR SOLID CORE SCHEDULE 40 PVC WITH SOLVENT JOINTS.
- B. BELOW GRADE: SERVICE WT. CAST IRON WITH NO-HUB OR BELL AND SPIGOT JOINTS; OR SOLID CORE SCHEDULE 40 PVC WITH SOLVENT JOINTS.
- C. PVC PIPING SHALL NOT BE USED IN AIR PLENUM CEILINGS AND SHALL NOT CROSS FIRE RATED WALLS, CEILINGS, OR FLOORS.
- D. DRAINAGE PIPING SHALL BE RUN AS STRAIGHT AS POSSIBLE AND SHALL HAVE LONG TURN FITTINGS.
- E. DRAINAGE PIPING 3" SIZE AND SMALLER SHALL RUN AT A UNIFORM GRADE OF AT LEAST ¼" PER FOOT. AND PIPING LARGER THAN 3" SHALL BE RUN AT A GRADE OF NO LESS THAN ¼" PER FOOT.
- F. ALL VENT PIPING SHALL BE SLOPED TO DRAIN BACK TO FIXTURES.
- G. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FLASHING OF THE VENT PIPING RUN THROUGH THE ROOF.
- H. PVC USED TO BE SOLID CORE TYPE SCHEDULE 40 PVC.
7. PIPE SUPPORTS
- A. ABOVE GRADE: ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. THE USE OF WIRE AND PERFORATED METAL TO SUPPORT PIPES WILL NOT BE PERMITTED. SPACING OF PIPE SUPPORTS SHALL BE AS SPECIFIED IN INTERNATIONAL PLUMBING CODE (LATEST EDITION).
- B. BELOW GRADE: EARTH SHALL BE EXCAVATED TO A MINIMUM DEPTH WITH AN EVEN SURFACE TO INSURE SOLID BEARING OF PIPE FOR ITS ENTIRE LENGTH.
  - INTERIOR: THE PIPE SHALL BE INSTALLED (UNLESS OTHERWISE SPECIFIED) A MINIMUM OF 4 INCHES BELOW THE BOTTOM OF THE SLAB AND SHALL NOT BE IN ANY DIRECT CONTACT WITH THE CONCRETE AT ANY POINT.
  - EXTERIOR: THE WATER PIPE SHALL HAVE A MINIMUM OF 60" OF COVER AND THE SANITARY WASTE PIPE SHALL HAVE A MINIMUM OF 24" OF COVER.
8. MISCELLANEOUS
- A. COORDINATE INSTALLATION OF ALL ROOFS FLASHING AT ROOF PENETRATIONS.
- B. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS AND DIMENSIONS AT THE JOB SITE.
- C. THE PLUMBING PLANS ARE INTENDED TO BE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION. THE EXACT DIMENSIONS OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT THE AVAILABLE SPACE.
9. TESTING
- A. PLUMBING SYSTEM SHALL BE FLOW AND PRESSURE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE (LATEST EDITION).
10. GUARANTEE
- A. MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTORS EXPENSE.
- B. FOR THE SAME PERIOD THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

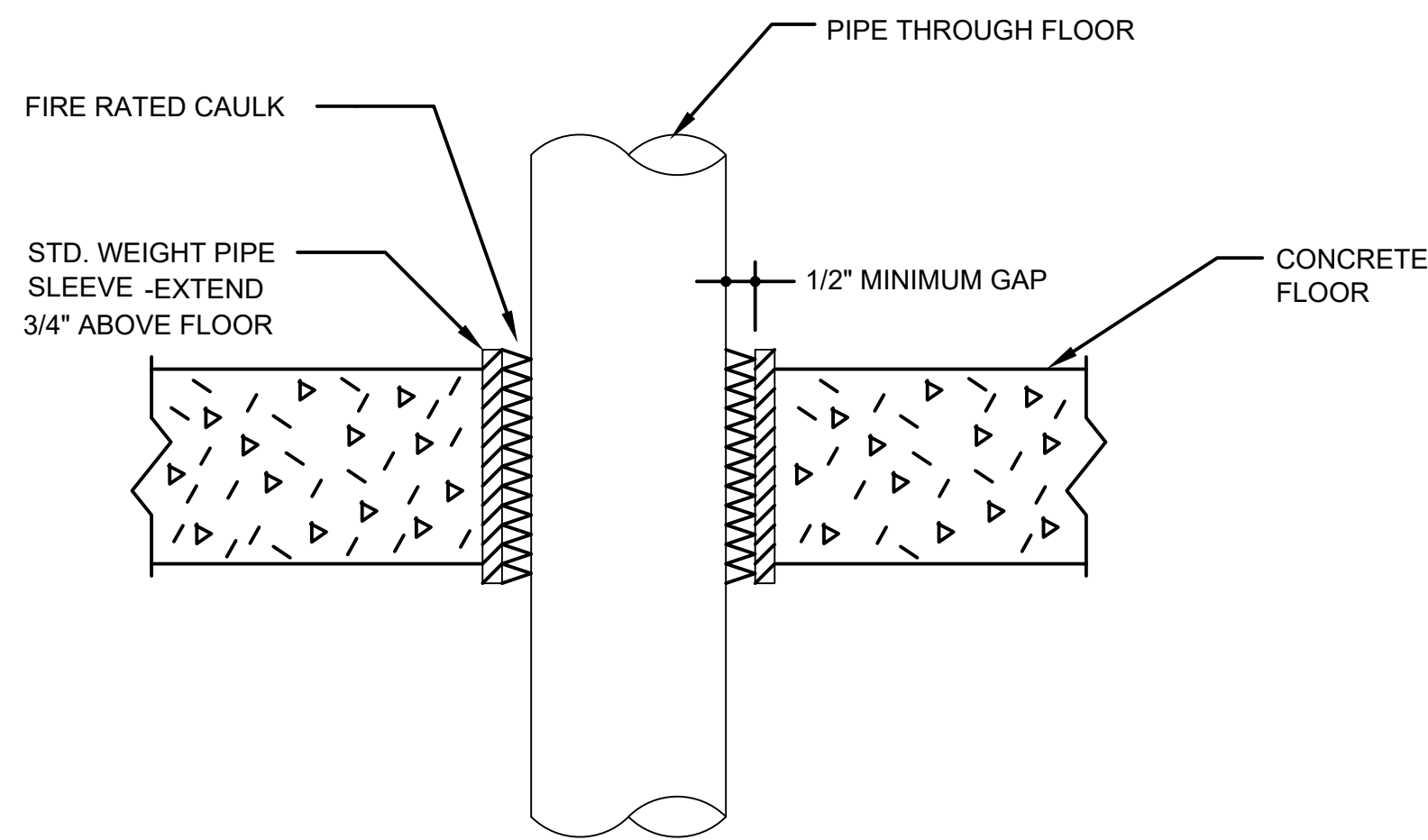
PLUMBING FIXTURE SCHEDULE									
FIXTURE NO.	DESCRIPTION	MANUFACTURER	MODEL	TRIM	PIPING CONNECTIONS				OPTIONS-ACCESSORIES
					S/W	VENT	C.W.	HW	
DF-1	BARRIER FREE WALL MOUNT FOUNTAIN	ELKAY	LZSTL8WSLK	-	1 1/2"	1 1/2"	1/2"	-	PROVIDE WITH WALL CARRIER, 1/4 TURNS, CHROME WALL ESCUTCHEONS, 8 GPH FILTERED DOMESTIC COLD WATER, FLEXI-GUARD SAFETY BUBBLER, 115V/1PH/60HZ 370 WATTS FLA 6 AMPS, DUAL LEVEL ADA DRINKING FOUNTAIN WITH BOTTLE FILLER.
FD-1	FLOOR DRAIN	ZURN	Z415S	CAST IRON HOUSING, NICKEL BRONZE STRAINER	3"	2"	-	-	PROVIDE NICKEL BRONZE STRAINER, ASSE 1017 RATED J.R. SMITH QUAD-CLOSE MECHANICAL TRAP SEAL. PROVIDE ACID RESISTING EPOXY COATED CAST IRON AT FLOOR DRAINS WHICH RECEIVE CONDENSATE DISCHARGE FROM HIGH EFFICIENCY GAS EQUIPMENT.
HB-1	FREEZE PROOF HOSE BIB	WOODFORD	B67	-	-	-	3/4"	-	FREEZE PROOF ANTI-SIPHON EXTERIOR HOSE BIB. PROVIDE WITH LOCKING ENCLOSURE. COORDINATE STANDPIPE LENGTH WITH INSTALLATION LOCATION IN FIELD PRIOR TO ORDERING HOSE BIBB.
LV-1	ADA WALL HUNG BATHROOM SINK	AMERICAN STANDARD	9024.901EC	PROVIDE WITH AMERICAN STANDARD - 605B.204 .35 GPM SELECTRONIC FAUCET.	1 1/2"	1 1/2"	3/4"	3/4"	PROVIDE WITH LOCAL THERMOSTATIC MIXING VALVE, 1/4 TURNS ON DOMESTIC WATER CONNECTIONS, FLEXIBLE BRAIDED STAINLESS STEEL DOMESTIC WATER CONNECTIONS, CHROME WALL ESCUTCHEON, P-TRAP, WALL CARRIER, ADA COMPLIANT FAUCET AND SINK, BATTERY OPERATED INFRARED .35 GPM FAUCET.
LV-2	ADA COUNTER TOP MOUNTED BATHROOM SINK	AMERICAN STANDARD	476228	PROVIDE WITH 605B.204 .35 GPM SELECTRONIC FAUCET.	1 1/2"	1 1/2"	3/4"	3/4"	PROVIDE WITH LOCAL THERMOSTATIC MIXING VALVE, 1/4 TURNS ON DOMESTIC WATER CONNECTIONS, FLEXIBLE BRAIDED STAINLESS STEEL DOMESTIC WATER CONNECTIONS, CHROME WALL ESCUTCHEON, P-TRAP, WALL CARRIER, ADA COMPLIANT FAUCET AND SINK, BATTERY OPERATED INFRARED .35 GPM FAUCET.
MSB-1	MOP SERVICE SINK BASIN	FIAT	TSB200	PROVIDE WITH FIAT FAUCET MODEL# 830AA000, SERVICE SINK FAUCET	3"	1-1/2"	1/2"	1/2"	PROVIDE TERRAZO BASIN, S.S. WALL GUARDS, FLAT DRAIN, INTEGRAL VACUUM BREAKER ON UTILITY TOP BRACE FAUCET, HOSE AND HOSE BRACKET, MOP HANGER, SILICONE SEALANT.
KS-1	1 COMPARTMENT SINK	JUST MANUFACTURING	SLADA1921A55-J	PROVIDE WITH JUST MANUFACTURING FAUCET MODEL # JPO-250	1 1/2"	1 1/2"	1/2"	1/2"	PROVIDE WITH JUST MANUFACTURING SINK DRAINS AND STRAINER BASKET.
KS-2	KITCHEN SINK	JUST MANUFACTURING	DLADA1829A55-J	PROVIDE WITH JUST MANUFACTURING FAUCET MODEL # JPO-250	1 1/2"	1 1/2"	3/4"	3/4"	PROVIDE WITH JUST MANUFACTURING SINK DRAINS, AND STRAINER BASKET. PROVIDE WITH INSINKERATOR BADGER 5 GARBAGE DISPOSAL.
GD-1	GARBAGE DISPOSAL	INSINKERATOR	BADGER 5	1/2 HORSEPOWER, WITH POWER CORD	-	-	-	-	120 V, 1/2 HP, SINGLE PHASE, 60 HZ
BT-1	ALCOVE BATH	AMERICAN STANDARD	2390.202	PROVIDE WITH AMERICAN STANDARD BATH/SHOWER FAUCET #7413508.002, CHROME FINISH, 1.8 GPM	1-1/2"	1-1/2"	1/2"	1/2"	PRESSURE BALANCED MIXING VALVE, CURTAIN ROD, SINGLE LEVER VALVE, GRID FLOOR DRAIN. CONTRACTOR TO FIELD COORDINATE. ARCH TO COORDINATE FINISHES.
IMB-1	FIRE RATED REFRIGERATOR WALL BOX	OATEY	38490	FIRE RATED WHERE LOCATED IN FIRE RATED ASSEMBLY	-	-	1/2"	-	PROVIDE STANDARD WALL BOX WITH WATER HAMMER ARRESTOR AND 1/4 TURN VALVE. IF ICE MAKER BOX IS LOCATED WITHIN FIRE RATED ASSEMBLY PROVIDED UL LISTED ICE MAKER BOX THAT MAINTAINS FIRE RATING OF ASSEMBLY BEING PENETRATED. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
WC-1	ADA FLOOR MOUNTED WATER CLOSET	AMERICAN STANDARD	2467.1	TWO PIECE 1.1 gpf	4"	2"	1"	-	PROVIDE ELONGATED SEAT, EPDM SEAL, EPA WATER SENSE, ADA FLOOR MOUNTED FLUSH TANK WATER CLOSET, 1/4 TURN ON DOMESTIC WATER SUPPLY, BRAIDED STAINLESS STEEL FLEXIBLE DOMESTIC WATER CONNECTION, WATER HAMMER ARRESTOR. COORDINATE TRIP LEVER SIDE WITH LOCATION IN FIELD PRIOR TO ORDERING.
WC-2	ADA FLOOR MOUNTED WATER CLOSET	AMERICAN STANDARD	2315.228	TWO PIECE 1.28 gpf	4"	2"	1"	-	PROVIDE BABY DEVORO SEAT, EPDM SEAL, EPA WATER SENSE, ADA FLOOR MOUNTED FLUSH TANK WATER CLOSET, 1/4 TURN ON DOMESTIC WATER SUPPLY, BRAIDED STAINLESS STEEL FLEXIBLE DOMESTIC WATER CONNECTION, WATER HAMMER ARRESTOR. COORDINATE TRIP LEVER SIDE WITH LOCATION IN FIELD PRIOR TO ORDERING.

GAS FIRED WATER HEATER SCHEDULE							
EQUIPMENT NO.	CAPACITY	RECOVERY @100 DEG F. RISE	BTU PER HR.	GAS CONN.	WATER CONN.	MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
WH-1	81	197	199,999	1/2"	3/4"	BRADFORD WHITE UCG-60H-199-3N	NOTE-1

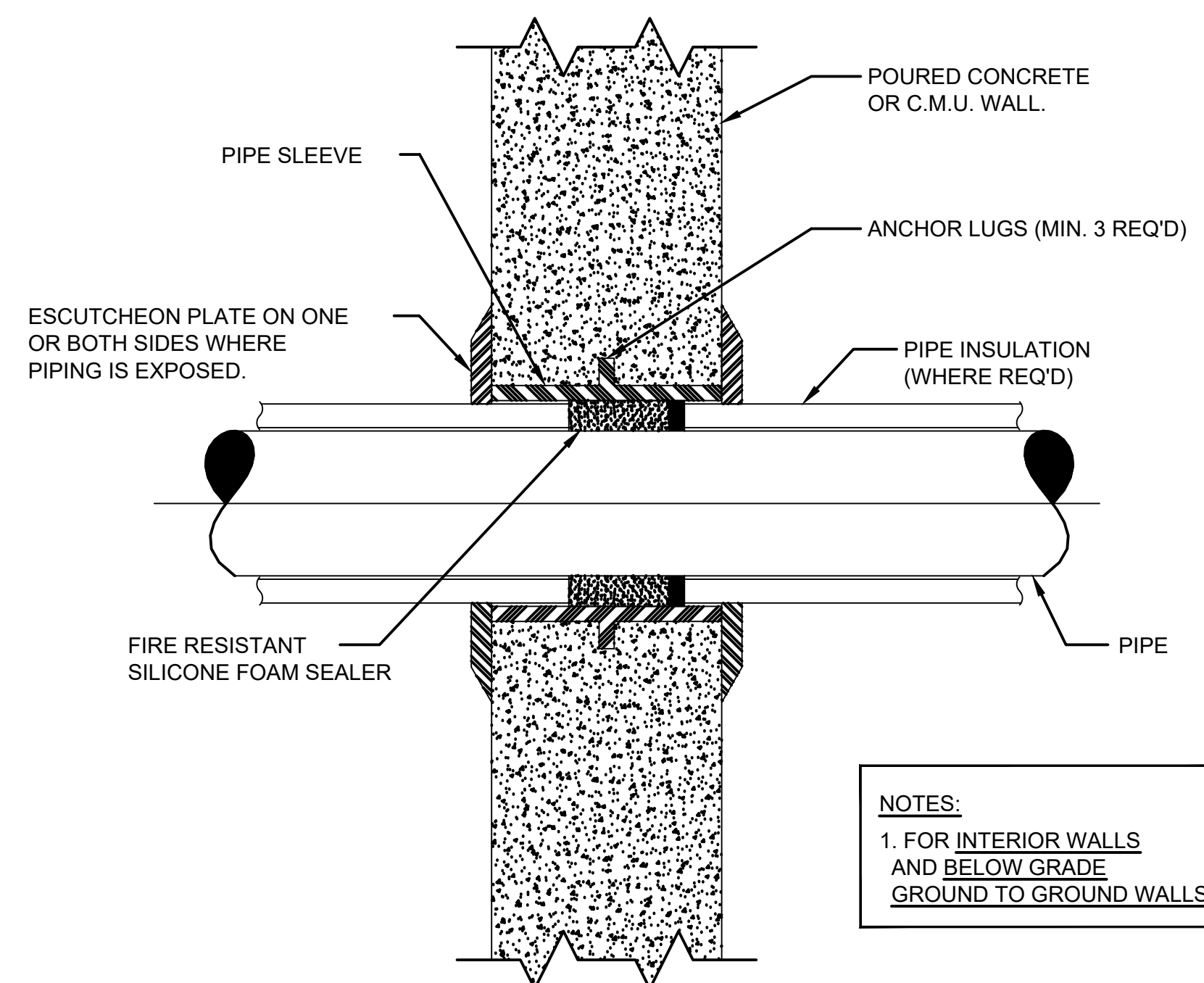
NOTES:  
1. ASME RELIEF VALVE, HIGH ALTITUDE KIT SIZED PER LOCATION ELEVATION.

PUMP SCHEDULE											
EQUIPMENT NO.	SERVICE	LOCATION	GPM	HEAD (FT.)	MOTOR					MANUFACTURER & MODEL	OPTIONS/ACCESSORIES
					WATTS	RPM	V./PH./HZ.	HP	FLA		
CP-1	BUILDING	MECH	20	26	-	3250	115/1/60	1/6	2	TACO 0013-F3-1-FC	NOTE-1
SP-1	ELEVATOR	ELEVATOR ROOM	55	10	-	3450	230/1/60	1/2	4	LIBERTY ELV280HV	NOTE-2

NOTES:  
1. PROVIDE WITH CAST IRON CASING, STAINLESS STEEL IMPELLER, FLANGED CONNECTIONS AND VFD. MOTOR HORSEPOWER SHALL BE GREATER THAN NON-OVERLOADING BRAKE HORSEPOWER.  
2. POLYMER IMPELLER, STAINLESS STEEL SHAFT AND HARDWARE, THERMAL OVERLOAD PROTECTION, CAST IRON HOUSING, OIL DETECTION AND ALARM SYSTEM, SUMP PIT TO BE 24" DIAMETER, AND NOT LESS THAN 30" DEEP

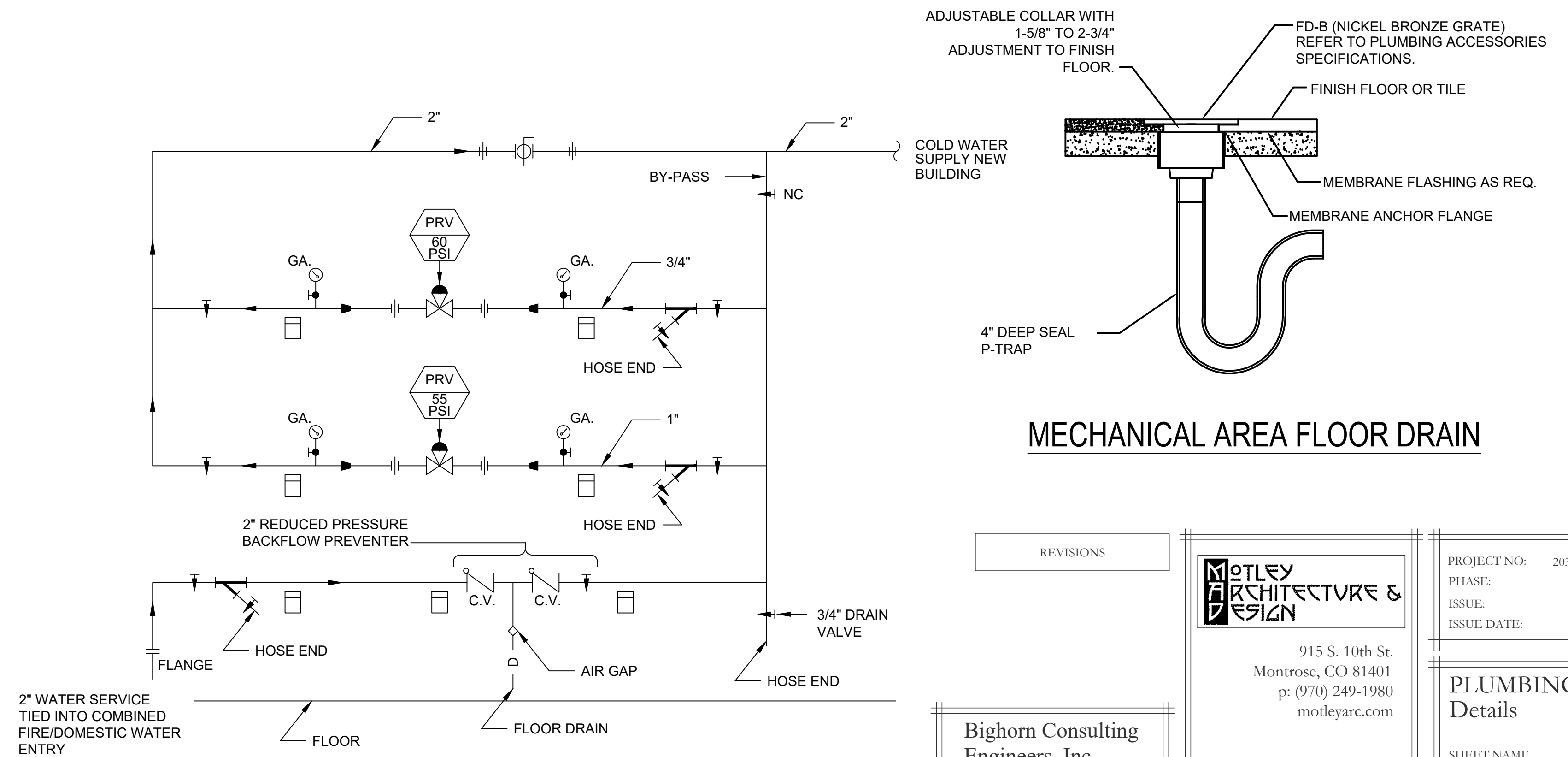


**PIPE SLEEVE THROUGH FLOOR DETAIL**

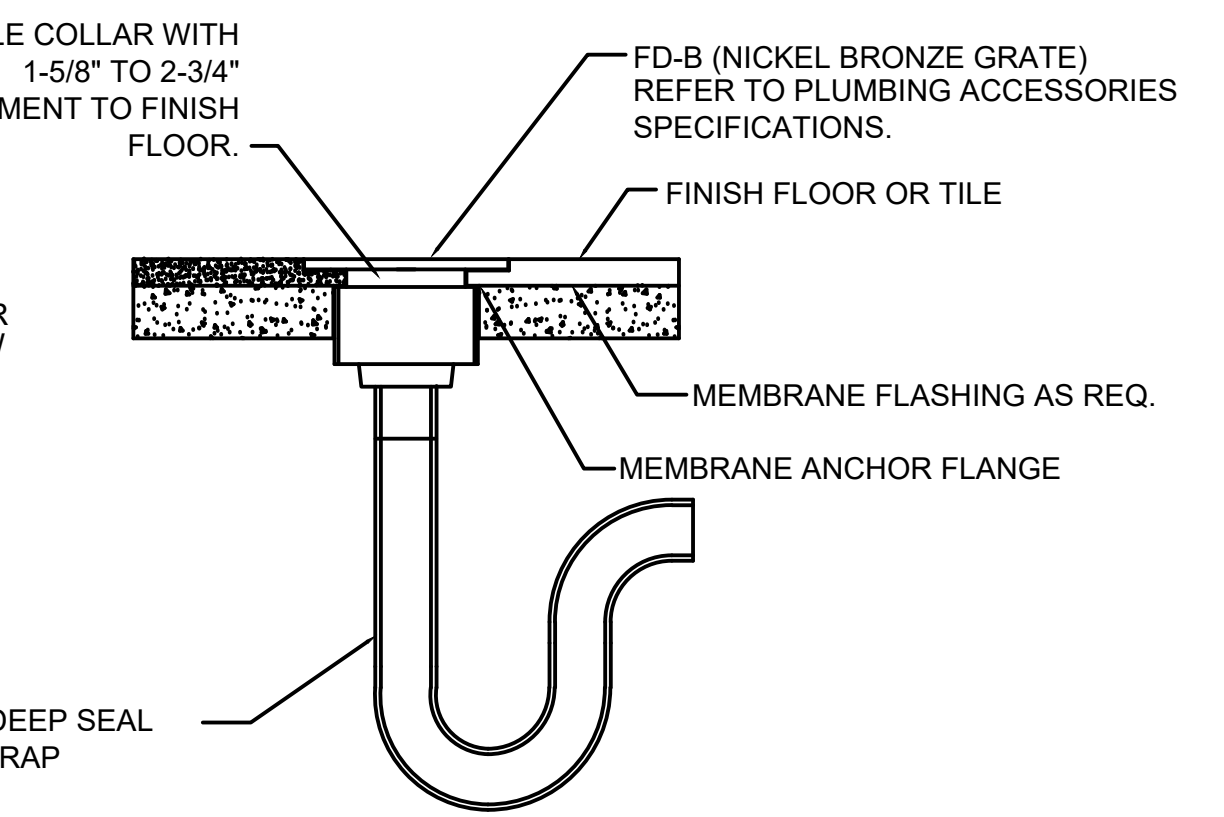


**PIPE SLEEVE THROUGH WALL DETAIL**

NOTES:  
1. FOR INTERIOR WALLS AND BELOW GRADE GROUND TO GROUND WALLS.



**DOMESTIC WATER PRESSURE REDUCING STATION DETAIL**  
NOT TO SCALE



**MECHANICAL AREA FLOOR DRAIN**

REVISIONS		 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042 PHASE: REVIEW SET ISSUE: A ISSUE DATE: 09/09/24
 Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			<b>PLUMBING - Details</b> SHEET NAME
Haven House Expansion		<b>P3-1</b> SHEET NUMBER	

RESPONSIBLE DIVISION:

UNLESS OTHERWISE INDICATED ALL HEATING, VENTILATING, AIR CONDITIONING, PLUMBING, AND OTHER MECHANICAL EQUIPMENT, MOTORS, AND CONTROLS SHALL BE FURNISHED, SET IN PLACE AND WIRED AS FOLLOWS:

Table with columns: ITEM, EQUIPMENT, FURNISHED, SET, POWER WIRED, CONTROL WIRED. Lists various electrical components and their specifications.

SUBSCRIPT FOOTNOTES:

- 1. MOTOR STARTER TO INCLUDE CONTROL TRANSFORMER, HOA SWITCH, (1) NO AND (1) NC AUXILIARY CONTACT, AND 'ON' AND 'OFF' PILOT LIGHTS.
2. IF ITEM IS FOR LINE VOLTAGE, SET IN PLACE AND CONNECT UNDER DIVISION 26. WHERE FACTORY MOUNTED ON EQUIPMENT OR ATTACHED TO PIPING OR DUCTS AND USING LINE VOLTAGE, FURNISH AND SET UNDER DIVISION 23, CONNECT UNDER DIVISION 26.

ABBREVIATIONS:

Table of abbreviations for various construction terms and materials, including mounting heights, electrical components, and materials.

SUBSTITUTIONS:

A. SUBSTITUTIONS: SUBSTITUTION OF SPECIFIED EQUIPMENT WILL BE ALLOWED THROUGH A PRIOR APPROVAL PROCESS INITIATED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT INTENDED SUBSTITUTION AT LEAST FIVE DAYS PRIOR TO BID FOR APPROVAL FROM ENGINEER. SUBMITTAL SHALL INCLUDE CAPACITIES, DIMENSIONS AND OPERATING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT.

EXAMINATION OF SITE, DRAWINGS, SPECIFICATIONS:

- A. EXAMINE CAREFULLY THE SITE AND CONDITIONS OF THE SITE. PROVIDE ALL NECESSARY EQUIPMENT AND LABOR TO INSTALL A COMPLETE WORKING SYSTEM WITHIN THE SITE CONDITIONS.
B. EXAMINE THE DRAWINGS AND SPECIFICATIONS AND 5 DAYS PRIOR TO BIDDING REPORT ANY ERRORS, OMISSIONS, INCONSISTENCIES, AND CONFLICTS TO THE ENGINEER TO BE REMEDIATED IN AN ADDENDUM TO THE PROJECT PRIOR TO BID TIME.
C. DRAWINGS ARE DIAGRAMMATIC AND CATALOG NUMBERS GIVEN ARE FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE CAPACITY OF THE EQUIPMENT MEETS THE DRAWING REQUIREMENTS AND SHALL NOT DIMENSION FROM THE MECHANICAL, PLUMBING, OR PIPING DRAWINGS.

D. THE LATEST ADOPTED VERSIONS OF THE INTERNATIONAL BUILDING CODES SHALL BE USED AS REQUIRED. THIS WILL ALSO INCLUDE THE LATEST ADOPTED VERSIONS OF THE MECHANICAL, PLUMBING, AND ENERGY CONSERVATION CODES. ALL METHODS AND MATERIALS REQUIRED BY THESE CODES SHALL BE REQUIRED BY THESE SPECIFICATIONS UNLESS INDICATED OTHERWISE. OTHER APPLICABLE LOCAL CODES AND ORDINANCES SHALL BE AS REQUIRED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE KNOWLEDGEABLE OF THESE REQUIREMENTS.

E. WHERE INSTALLATION PROCEDURES OR ANY PART THEREOF ARE REQUIRED TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL BEING INSTALLED, PRINTED COPIES OF THESE RECOMMENDATIONS SHALL BE FURNISHED TO THE ENGINEER PRIOR TO INSTALLATION. INSTALLATION OF THE ITEM WILL NOT BE ALLOWED TO PROCEED UNTIL THE RECOMMENDATIONS ARE RECEIVED. FAILURE TO FURNISH THESE RECOMMENDATIONS CAN BE CAUSE FOR REJECTION OF THE MATERIAL.

FIRE ALARM EQUIPMENT LEGEND

Legend for fire alarm equipment including symbols for fire alarm control panel, fire alarm pull station, fire alarm horn, fire alarm strobe, fire alarm horn/strobe, ceiling mounted speaker, duct detector, remote lamp, smoke detector - photoelectric, 135° standard heat detector, PIR detector, door hold - magnetic hold, flow switch, and tamper switch.

COMMUNICATION LEGEND

Legend for communication equipment including symbols for clock only, clock / PA speaker wall mounted, round ceiling mounted speaker, square speaker, intercom push to call switch, wireless access point above the ceiling, projector, wall mounted HDMI, plain data outlet, plain data outlet with mounting height, combination data/telephone, floor mounted combination data/telephone, ceiling mounted combination data/telephone, television outlet.

SECURITY SYSTEM LEGEND

Legend for security system equipment including symbols for security camera, ADA door operator push button, electric door strike, and card reader for door operator.

LIGHTING LEGEND

NOTES:
SYMBOLS SHOWN ARE STANDARD. VARIATION AND/OR COMBINATIONS MAY BE USED ON THE PLANS. THIS LIST SHOWS STANDARD SYMBOLS AND ALL MAY NOT APPEAR ON THE PROJECT DRAWINGS, HOWEVER, WHEREVER THE SYMBOL ON THE PROJECT DRAWINGS OCCUR, THE ITEM SHALL BE PROVIDED AND INSTALLED.
VARIATION AND/OR COMBINATION MAY BE USED ON THE PLANS.
A NUMBER NEXT TO A RECEPTACLE OR DEVICE INDICATES A CIRCUIT NUMBER.
AN UPPER CASE LETTER NEXT TO A SWITCH INDICATES THE FUNCTION OF THE SWITCH, A LOWER CASE LETTER INDICATES THE SWITCH CIRCUIT.
AN UPPER CASE LETTER NEXT TO A LIGHT FIXTURE INDICATES THE TYPE OF FIXTURE. REFER TO THE LUMINAIRE SCHEDULE FOR FIXTURE SPECIFICATIONS. A LOWER CASE LETTER NEXT TO A LIGHT CORRESPONDS TO THE SWITCH DESIGNATION.

SWITCHES

- Single pole switch, two pole switch, three-way switch, four-way switch, dimmer switch, 3 way dimmer switch - (4D INDICATES A 4WAY DIMMER), door activated switch, wall mounted dual technology manual on / auto off vacancy sensor switch, low voltage light switch, manual motor starter, pilot light switch, auto on / auto off light switch, dual technology motion / occupancy sensor light switch, manual on / auto off dimming light switch, key operated light switch, manual on - timed off light switch, ceiling mounted dual technology occupancy sensor switch, ceiling mounted dual technology manual on / auto off vacancy sensor, ceiling mounted daylight harvesting sensor, scene control station, unit lighting management control station.

LIGHT FIXTURES

- 1'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FIXTURE GRID, FLANGE OR SURFACE MOUNTED.
2'x4' LED TROFFER OR DIRECT/INDIRECT TYPE FIXTURE GRID, FLANGE OR SURFACE MOUNTED.
2'x2' LED TROFFER OR DIRECT/INDIRECT TYPE FIXTURE GRID, FLANGE OR SURFACE MOUNTED.
Open strip fixture, wall bracket linear fixture, wall mounted sconce light fixture, recessed downlight can fixture, surface ceiling or pendant mounted fixture, double face exit sign, wall and ceiling mounted, single face exit sign, wall and ceiling mounted, wall mounted emergency light, emergency exterior egress fixture.

ELECTRICAL EQUIPMENT LEGEND

- Branch circuit panelboard, telephone terminal board, electric motor, fused safety switch / disconnect combination, motor starter, contactor, circuitry homerun: panel LA - CIR. #7, conduit or wire concealed in wall/CLG, (solid line type), conduit or wire underfloor/undergrnd, (center line type).

MAIN DISTRIBUTION GEAR

- Circuit breaker in a panel board, pad mounted utility transformer, fused disconnect 100A - AMP RATING 2P = NUMBER OF POLES, electrical meter shown on one-line diagrams, electrical power panel with main lug or main breaker, pilot light switch, manual on / auto off dimming light switch, key operated light switch, manual on - timed off light switch, ceiling mounted dual technology occupancy sensor switch, ceiling mounted dual technology manual on / auto off vacancy sensor, ceiling mounted daylight harvesting sensor, scene control station, unit lighting management control station.

ELECTRICAL DEVICE LEGEND

- Ceiling junction box - surface/flush, wall junction box - surface/flush, duplex receptacle, floor mounted receptacle, split wired duplex receptacle, ceiling mounted duplex receptacle, floor mounted fourplex receptacle, appliance receptacle - 3 wire, duplex receptacle, fourplex receptacle, abbreviations pertain to all duplex and fourplex receptacles: above counter, above counter - ground fault circuit interrupter, above counter with USB port, ARC fault protected, ARC fault protected with USB port, ARC fault with ground fault circuit interrupter, dedicated receptacle, dedicated receptacle with USB port, receptacle circuited to the emergency panel with red cover plate, ground fault circuit interrupter, weather proof ground fault circuit interrupter, plug load, general purpose with mounting height, electric hand dryer, thermostat, open/close/stop push button, drawing key notes, room, room designation.

- GENERAL ELECTRICAL NOTES:
1. ALL ELECTRICAL WORK TO COMPLY WITH LATEST EDITION OF NEC, IECC AND ALL APPLICABLE GOVERNING CODES.
2. FIELD COORDINATION DURING CONSTRUCTION IS IMPERATIVE. CONTRACTORS BIDDING THIS WORK MUST MAKE REASONABLE ALLOWANCES FOR UNFORESEEN CONTINGENCIES.
3. ELECTRIC UTILITY TO ADVISE OWNER AND/OR THE ELECTRICAL ENGINEER PRIOR TO SERVICE MODIFICATION REQUIRING COST TO THE OWNER.

- WIRING:
1. ALL WIRING IS SHOWN DIAGRAMMATICALLY ON DRAWING, FIELD VERIFY ALL CONDITIONS PRIOR TO ROUGH-IN.
2. ALL CONDUITS AND CONVEYANCES SHALL BE CONCEALED, IN THE EVENT THAT A NEW DEVICE IS BEING INSTALLED IN AN EXISTING DRYWALL PARTITION, PROVIDE A CUT IN TYPE BOX AND FISH FLEXIBLE CONDUIT DOWN INSIDE THE WALL FROM ABOVE THE CEILING AND REPAIR THE DRYWALL AROUND THE CONDUIT, TRANSITION TO EMT ABOVE THE CEILING.
3. SIZES OF WIRE AND CABLES ARE BASED UPON COPPER CONDUCTORS, UNLESS OTHERWISE INDICATED. ALL CIRCUITS SHALL CONTAIN (2) #12 AWG WITH (1) #12 GND IN 1/2" CONDUIT UNLESS NOTED OTHERWISE.
4. ALL BRANCH CIRCUITS WITH HOME RUNS OVER 50 FEET, WILL BE SIZED ONE SIZE LARGER.
5. ALL PENETRATIONS IN OR THROUGH FIRE RATED PARTITIONS SHALL BE FIRE STOPPED IN SUCH A WAY THAT THE PENETRATION MATCHES THE FIRE RATING OF THE WALL.
6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION BETWEEN THE APPROPRIATE DISCIPLINES AND CONTRACTORS.
7. COORDINATE ALL DEVICE, FIXTURE AND HARDWARE COLOR SELECTIONS WITH THE ARCHITECT PRIOR TO MAKING SHOP DRAWING SUBMITTALS.
8. COORDINATE THE MOUNTING HEIGHTS OF ALL RECEPTACLES MOUNTED ABOVE COUNTERS, CASEWORK AND APPLIANCE RECEPTACLES WITH ARCHITECTURAL ELEVATIONS.
9. BRANCH CIRCUIT AND SPECIAL SYSTEMS WIRING FOR DEVICES ON WALLS IN FINISHED AREAS WHICH CANNOT BE CONCEALED SHALL BE INSTALLED IN SURFACE MOUNTED RACEWAY.
10. ALL EXPOSED CONDUITS, BOXES, ETC. IN ROOMS TO BE PAINTED SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE. EXPOSED CONDUITS, BOXES, ETC. IN ROOMS WHICH ARE NOT PAINTED MAY BE LEFT UN-PAINTED. EXPOSED CONDUIT, BOXES, ETC. ON THE EXTERIOR OF BUILDINGS SHALL BE PAINTED TO MATCH THE SURROUNDING SURFACE AS CLOSELY AS POSSIBLE.
11. THE CONTRACTOR IS RESPONSIBLE FOR PATCHING, PAINTING, REPAIRING OR REPLACEMENT OF ALL WALLS, CEILING OR OTHER BUILDING ELEMENTS WHICH ARE DISTURBED AS PART OF THE DEMOLITION AND/OR INSTALLATION OF ELECTRICAL WORK.
12. PROVIDE ELECTRICAL CONNECTION TO ALL FIRE, SMOKE, AND FIRE / SMOKE DAMPERS INCLUDING POWER AND FIRE ALARM. VERIFY EXACT SIZE AND FINAL LOCATION OF ALL DAMPERS WITH THE MECHANICAL CONTRACTOR. ALL ROOFTOP UNITS RATED AT MORE THAN 2000 CFM WILL BE OUTFITTED WITH A DUCT DETECTOR IN THE RETURN DUCT. ALL ROOFTOP UNITS RATED AT MORE THAN 15000 CFM WILL BE OUTFITTED WITH A DUCT DETECTOR IN BOTH THE SUPPLY AND RETURN DUCT AT ROOFTOP LEVEL AND IN THE RETURN DUCT AT EVERY LEVEL THAT IS SERVED. ELECTRICAL CONTRACTOR WILL PROVIDE A REMOTE TEST STATION AND ALL WIRING NECESSARY TO COMPLETE INSTALLATION.
13. REFER TO THE MECHANICAL EQUIPMENT SCHEDULE FOR ADDITIONAL REQUIREMENTS ASSOCIATED WITH PLUMBING AND HVAC EQUIPMENT AND OWNER/GENERAL CONTRACTOR FURNISHED EQUIPMENT.

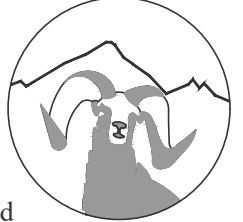
- LUMINAIRES:
1. COORDINATE THE LOCATION OF ALL LIGHTING EQUIPMENT INCLUDING BUT NOT LIMITED TO THE LUMINAIRES, SWITCHES WITH THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS AND ALL OTHER TRADES AS REQUIRED. REFER TO THE INTERIOR DESIGNER'S REFLECTED CEILING PLANS FOR DIMENSIONAL LOCATION OF LIGHT FIXTURES.
2. LIGHTING FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE AND SHALL NOT BE SUPPORTED FROM THE T-BAR CEILING GRID.
3. THE ELECTRICAL CONTRACTOR IS TO CONFIRM THE LIGHT FIXTURES ORDERED WILL BE COMPATIBLE WITH THE CEILING TYPES AS SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLANS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING THE FIXTURES.
4. VERIFY LUMINAIRE MOUNTING REQUIREMENTS AND OVERALL HEIGHT OF ALL PENDANT MOUNTED FIXTURES PRIOR TO ORDERING.
5. ALL LIGHT FIXTURES NEED TO BE COMPATIBLE WITH THE SWITCHES AND CONTROLS BEING PROVIDED.
6. THE LIGHTING PACKAGE SHALL BE APPROVED BY BOTH THE ARCHITECT AND ENGINEER AS APPROVED EQUAL BEFORE BID. NO LIGHT FIXTURE SHALL BE ORDERED UNTIL THE LIGHT FIXTURE SUBMITTAL PACKAGE HAS BEEN APPROVED IN WRITING BY THE ARCHITECT, GENERAL CONTRACTOR AND ELECTRICAL ENGINEER.
7. COORDINATE LUMINAIRE MOUNTING REQUIREMENTS PRIOR TO PLACING ORDER.

REVISIONS



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Bighorn Consulting
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PROJECT NO: 2033 BCE# 2402
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ISSUE DATE: 09/09/24

Electrical -
Cover Sheet

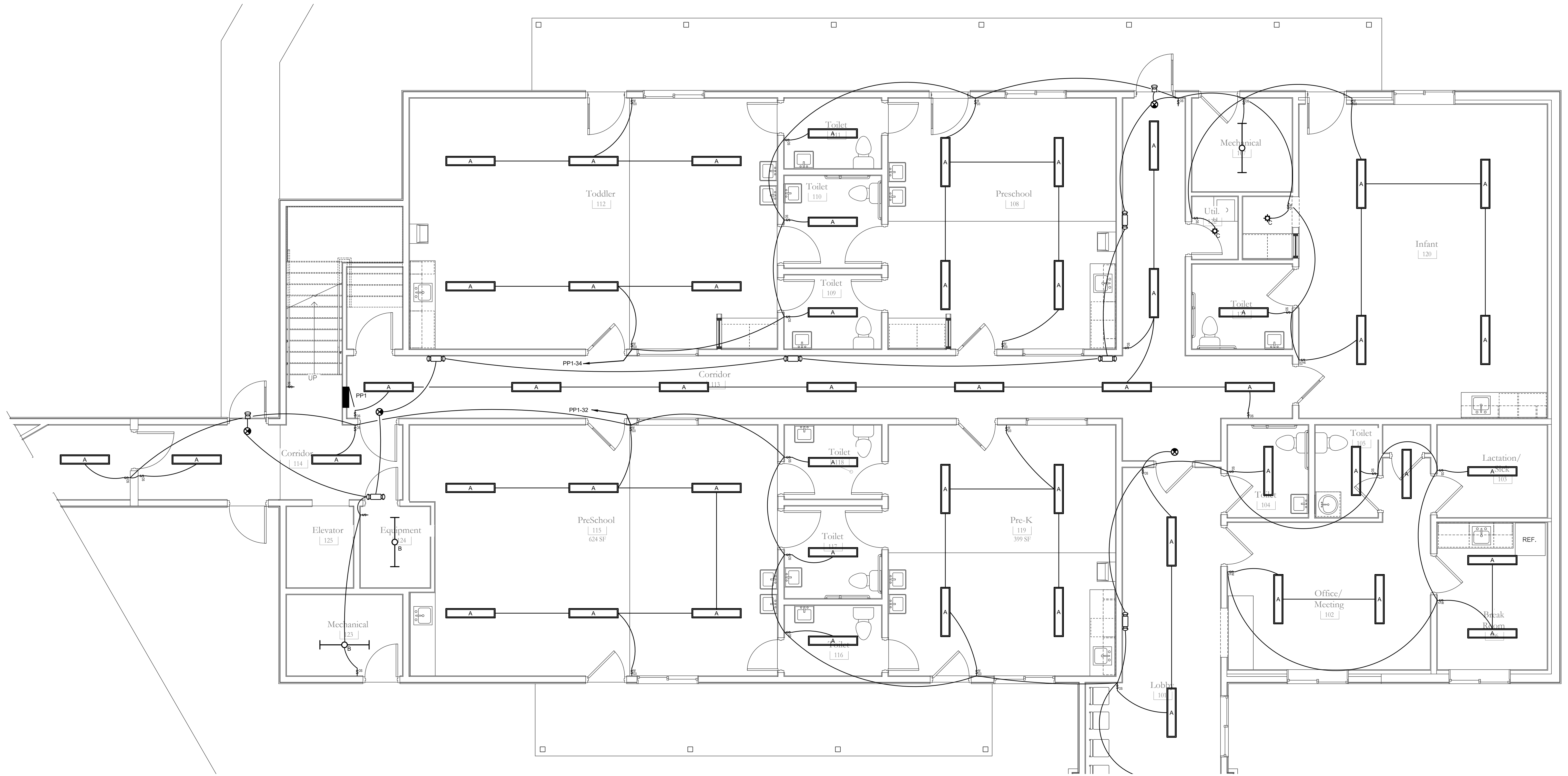
SHEET NAME

Haven House
Expansion

E0-1



SHEET NUMBER

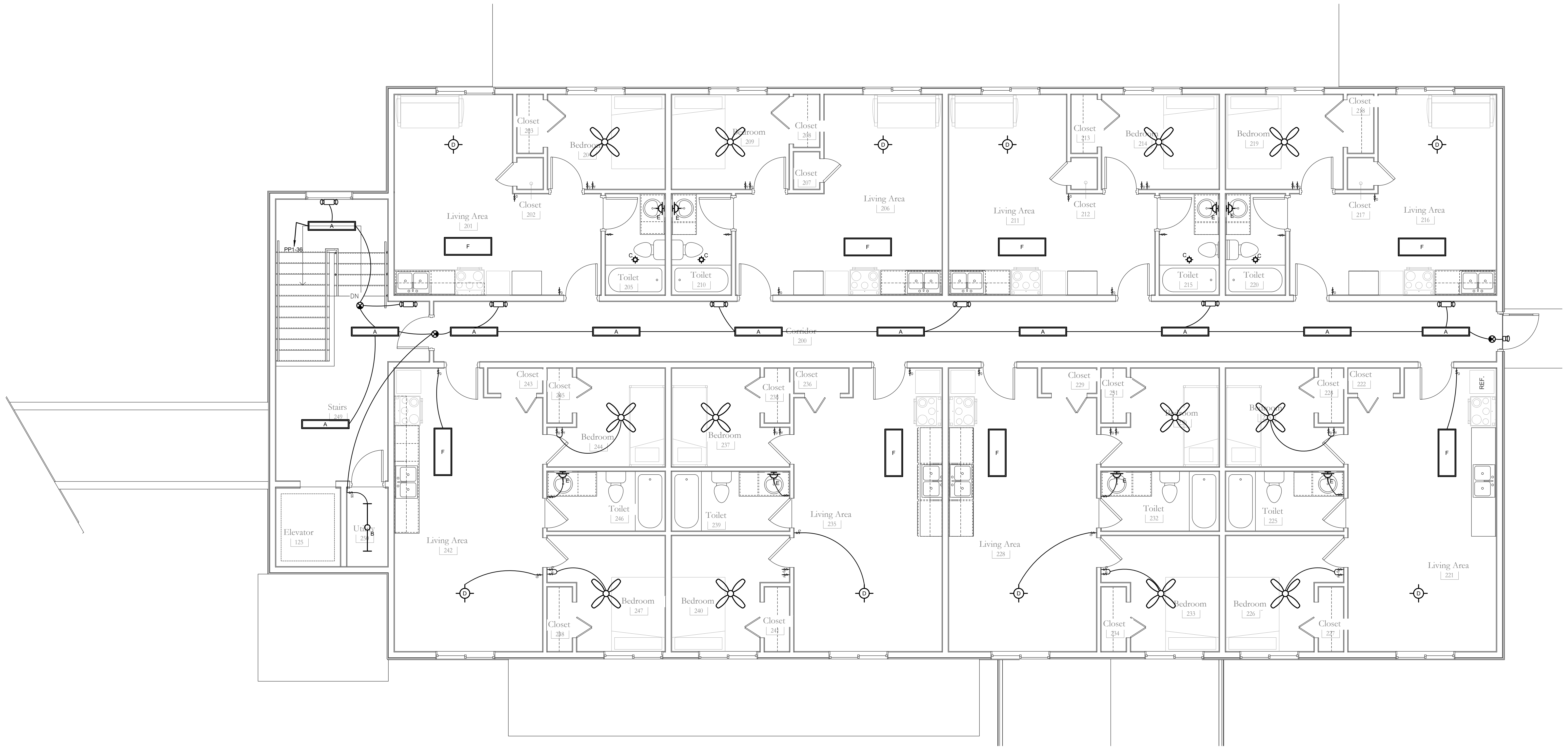






① Lighting - Floor Plan - Main Level  
 1/4" = 1'-0"

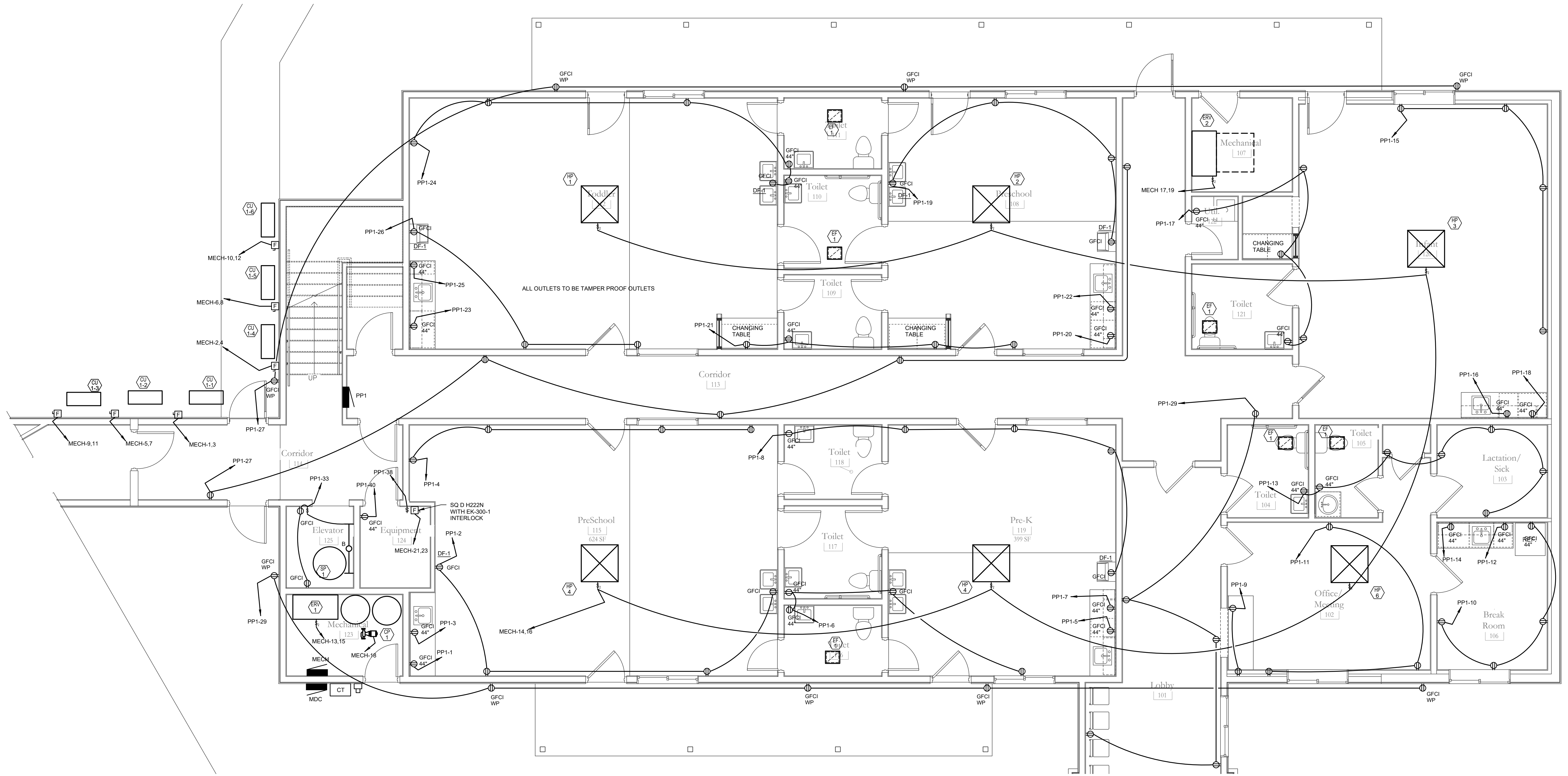
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REVISIONS		 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042 PHASE: REVIEW SET ISSUE: A ISSUE DATE: 09/09/24
 Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			Lighting - Main Level Floor Plan SHEET NAME
Haven House Expansion		<b>E1-1</b> SHEET NUMBER	



① Lighting - Floor Plan - Upper Level  
1/4" = 1'-0"

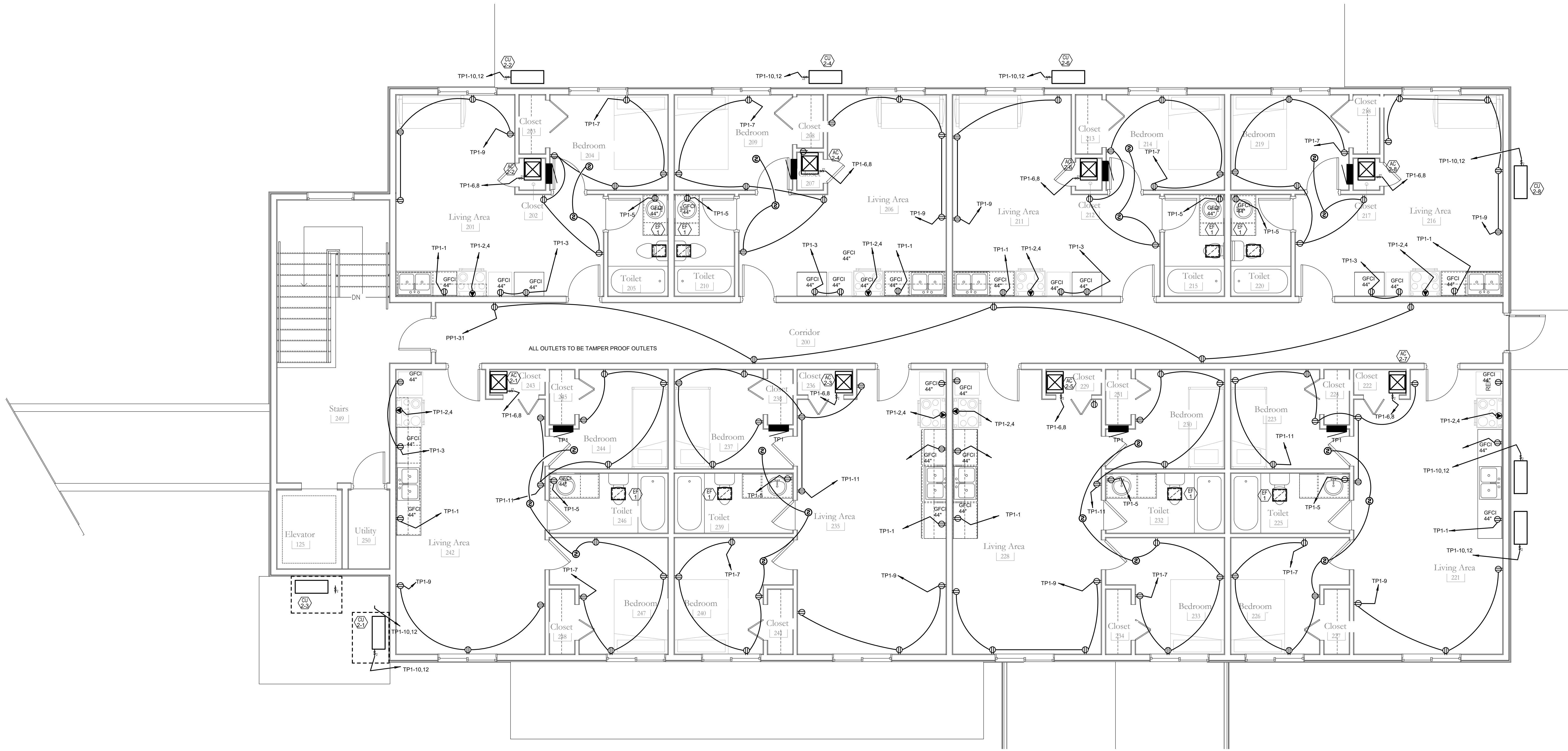
REVISIONS		 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042 PHASE: REVIEW SET ISSUE: A ISSUE DATE: 09/09/24
 Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			Lighting - Upper Level Floor Plan SHEET NAME
Haven House Expansion		<b>E1-2</b> SHEET NUMBER	





1 Electrical - Floor Plan - Main Level  
 1/4" = 1'-0"

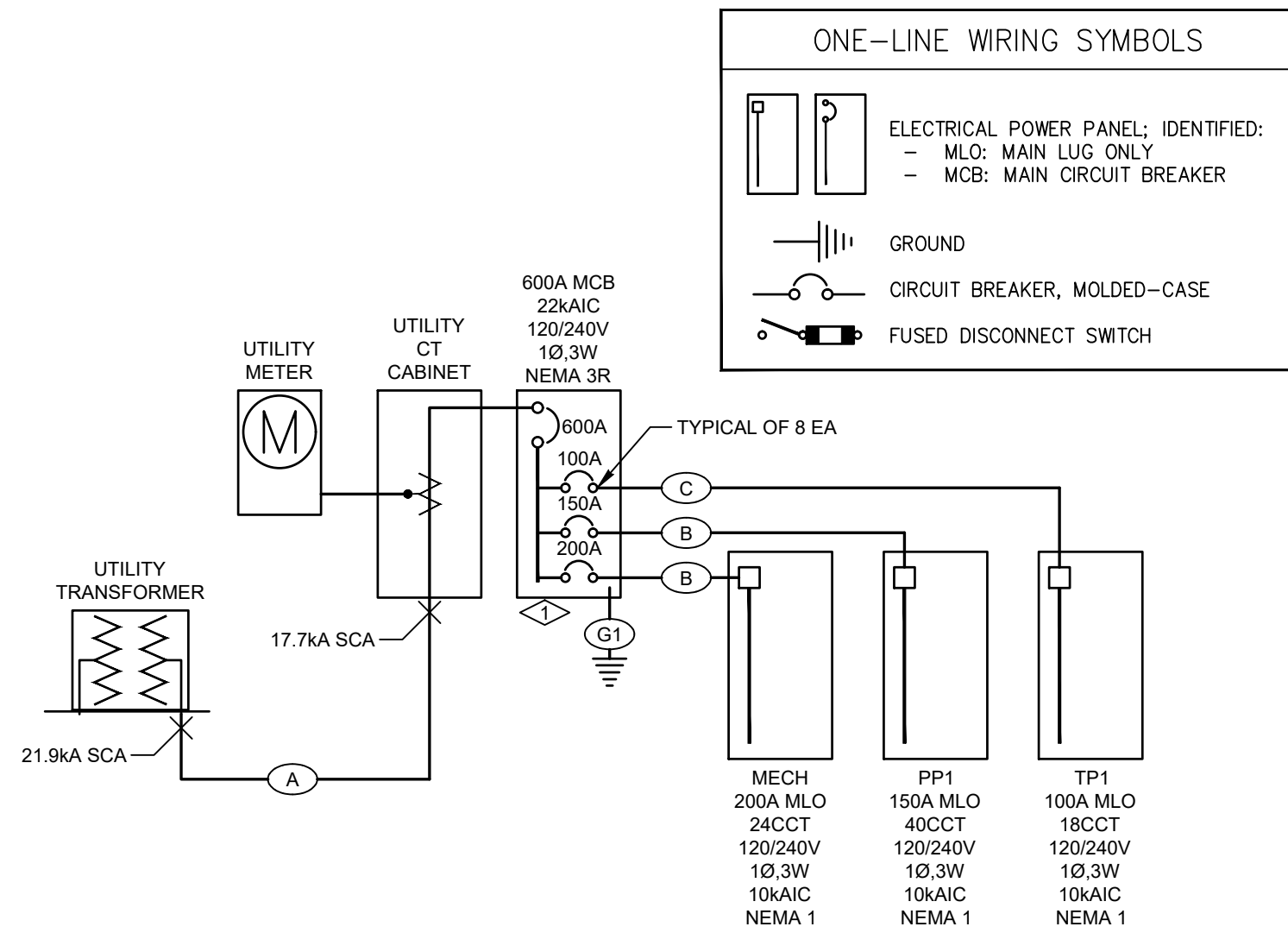
REVISIONS			PROJECT NO: 2033 BCE# 24042
			PHASE: REVIEW SET
		915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	ISSUE: A
			ISSUE DATE: 09/09/24
		<b>Haven House Expansion</b>	<b>Electrical - Main Level Floor Plan</b> SHEET NAME
Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			<b>E2-1</b> SHEET NUMBER

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1 Electrical - Floor Plan - Upper Level  
1/4" = 1'-0"

REVISIONS		 915 S. 10th St. Montrose, CO 81401 p: (970) 249-1980 motleyarc.com	PROJECT NO: 2033 BCE# 24042 PHASE: REVIEW SET ISSUE: A ISSUE DATE: 09/09/24
 Bighorn Consulting Engineers, Inc. Mechanical & Electrical Engineers 386 Indian Road Grand Junction, CO 81501 Phone (970) 241-8709			Electrical - Upper Level Floor Plan SHEET NAME
		Haven House Expansion	<b>E2-2</b> SHEET NUMBER



**ONE-LINE DIAGRAM**

NOT TO SCALE

**NOTES:**

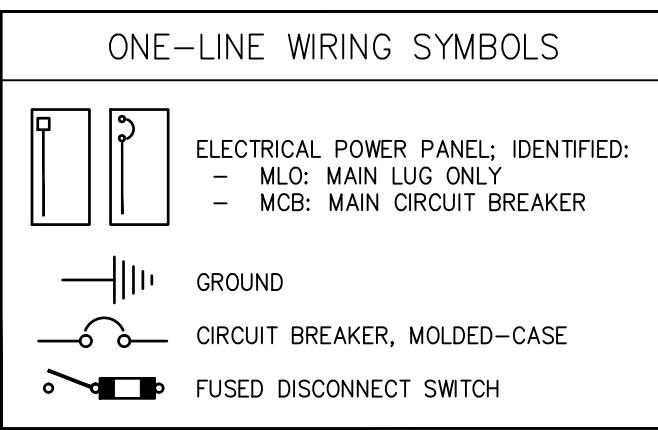
1. PROVIDE GROUNDING AND BONDING TO MEET THE 2023 NEC ARTICLE 250 REQUIREMENTS.
2. FAULT CURRENT CALCULATIONS BASED UPON AN ANTICIPATED 100KVA TRANSFORMER AT AN ESTIMATED DISTANCE OF 50FT FROM THE TRANSFORMER TO THE SERVICE DISTRIBUTION PANEL.
3. PROVIDE LABELING TO MEET THE REQUIREMENTS OF NEC 110.21 AND 230.85.
4. PROVIDE SERIES RATED COMBINATIONS BETWEEN THE FEEDER BREAKERS IN PANEL MDP AND THE BRANCH BREAKERS OF PANELS P1, P2 AND P3 TO MEET THE REQUIREMENTS OF 240.86.
5. PROVIDE SURGE PROTECTIVE DEVICES THAT COMPLY WITH NEC 225.42 AND 230.67.

**WIRE SCHEDULE:**

- (A) 2" 3" C - (3#500KCMIL(AL, THWN))
- (B) 2" C - (3#30AWG(CU, THHN) + 1#6AWG(CU)G)
- (C) 1 1/4" C - (3#3AWG(CU, THHN) + 1#8AWG(CU)G)
- (G1) #10AWG CU TO METAL WATER PIPES AND STRUCTURAL STEEL  
#4AWG CU TO 20' UNCOATED CONCRETE ENCASED ELECTRODE

**FAULT CURRENT CALCULATIONS:**

$F = L \times I^2$   
 $L = \frac{K \times X^2}{N}$   
 L - LENGTH OF CABLE IN FEET  
 I - AVAILABLE FAULT CURRENT  
 N - NUMBER OF CONDUCTORS PER PHASE  
 C - CONDUCTANCE CONSTANT  
 = 50KCMIL ALUMINUM: 21,391  
 E - VOLTAGE LINE TO LINE  
 F - INTERMEDIARY VALUE FOR COMPUTATION  
 M = 1/(1+F)  
 M - MULTIPLIER TO ACHIEVE AVAILABLE FAULT  
 (SC) = (SC) \* M  
 RUN #1: TRANSFORMER TO SERVICE  
 $F = L \times I^2 = 50FT \times 21,900A \times 2 = 0.213$   
 $N \times C \times E = 2 \times 21,391 \times 240V$   
 $M = 1 = 1 = 0.824$   
 $I^2 \times F = 1 \times 0.213$   
 (SC) =  $I \times M = 21,900A \times 0.824 = 18,080A$



PANEL SCHEDULE - MDC2				BUS SIZE: 1000			PHASES: 1		NEUTRAL BUS: YES		
TYPE: SERVICE				MAIN BRKR: 1000			WIRES: 3		GROUND BUS: YES		
VOLTAGE: 120/240				MOUNTING: FLUSH			SC RATING: 10000				
ENCLOSURE: NEMA1											
<b>LOADS BY TYPE:</b>				<b>LOADS BY PHASE:</b>							
LOAD TYPE	CONNECTED LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (VA)	PHASE	CONNECTED LOAD (VA)	CONNECTED LOAD (AMPS)	BALANCE (PERCENT)				
LIGHTING	4000.00	1.25	5000.00	A	112860.00	940.50	A-B: 92.9				
KITCHEN PROCESS	0.00	0.65	0.00	B	104850.00	873.33	B-A: 92.9				
RECEPTACLES	10000.00	1.00	10000.00	C	---	---	---				
MECH	200A MLO	240CT	400CT								
RECEPTACLES	60940.00	0.50	30470.00								
MECH HEATING	33280.00	1.00	33280.00								
MECH COOLING	0.00	1.00	0.00								
MECH YEAR ROUND	38240.00	1.00	38240.00								
APPLIANCE	64000.00	.36	23040.00								
MISCELLANEOUS	0.00	1.00	0.00								
MOTOR	0.00	1.00	0.00								
SPARE	0000.00	1.00	0000.00								
LARGEST MOTOR 1	ABOVE	0.25	1440.00								
<b>TOTAL</b>	<b>217660.00</b>		<b>118430.00</b>								

NOTES:  
 1. THE LARGEST CONNECTED MOTOR LOAD IS INCLUDED IN MECHANICAL, PROCESS, OR MOTOR LOADS.

MECHANICAL EQUIPMENT SCHEDULE												
COMB: COMBINATION MOTOR STARTER			NR: NONE REQUIRED			CONT: CONTRACTOR						
MAG: MAGNETIC MOTOR STARTER			PI: PLUG-IN UNIT			MAN: MANUAL MOTOR STARTER						
			WU: SUPPLIED WITH UNIT:									
UNIT NO	FUNCTION (NOTES)	LOAD	VOLTS	Ø	FULL LOAD AMPS	BRANCH CIRCUIT CONDUIT SIZE	NO. CONDUCTORS	WIRE SIZE	GRND WIRE SIZE	BRKR SIZE	START	DISC FUSE
(AC) 1	AIR CONDITIONING UNIT ALL AC UNITS ARE SIMILAR		208V	1	3A	1/2"	2	12	12	15	W/U	↓
(CU) 1-1	AIR CONDITIONING UNIT UNITS CU 1-2 / CU 1-6 ARE SIMILAR		208V	1	24A	1/2"	2	10	10	30	W/U	30
(CU) 2-1	AIR CONDITIONING UNIT UNITS CU 2-2 / CU 2-8 ARE SIMILAR		208V	1	17A	1/2"	2	10	10	30	W/U	30
(EX) 1	EXHAUST FAN		115V	1	1.9A	1/2"	2	12	12	20	W/U	PI
(HP) 1	HEAT PUMP UNITS HP-2 / HP-6 ARE SIMILAR		208V	1	1.0A	1/2"	2	12	12	20	W/U	↓
(ER) 1	ENERGY RECOVERY UNIT UNIT ERV-2 IS SIMILAR		208V	1	5.84A	1/2"	2	12	12	15	W/U	↓
(DF) 1	DRINKING FOUNTAIN		115V	1	6.0A	1/2"	2	12	12	15	W/U	PI

PANEL SCHEDULE - TP1		TYPE: 120/240		PANELBOARD ENCL: NEMA1		BUS SIZE: 1000	
		VOLTAGE:		ENCLOSURE:		MAIN BRKR: 1000	
						SC RATING: 10000	
						GROUND BUS: YES	
LOAD TYPE	LOAD DESCRIPTION	AMPS POLES	CKT# LOAD	Ø	CKT LOA		
RECEPTACLE	KITCHEN CIRCUIT ARC FAULT BREAKER	20A 1P	1 1500	A	2	400	
RECEPTACLE	KITCHEN CIRCUIT ARC FAULT BREAKER	20A 1P	3 1500	B	4	400	
RECEPTACLE	BATHROOM OUTLET ARC FAULT BREAKER	20A 1P	5 1500	A	6	312	
RECEPTACLE	BEDROOM OUTLETS ARC FAULT BREAKER	15A 1P	7 1440	B	8	312	
RECEPTACLE	DINING ROOM ARC FAULT BREAKER	20A 1P	9 540	A	10	176	
RECEPTACLE	BEDROOM OUTLETS ARC FAULT BREAKER	15A 1P	11 360	B	12	176	
LIGHTING	LIGHTS ARC FAULT BREAKER	15A 1P	13 500	A	14	0	
SPACE	---	---	15 0	B	16	0	
SPACE	---	---	17 0	A	18	0	
SPACE	---	---	---	---	---	0	
<b>LOADS BY TYPE:</b>				<b>LOADS BY PHASE:</b>			
LOAD TYPE	CONNECTED LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (VA)	PHASE			
LIGHTING	500.00	1.25	625.00	A			
KITCHEN PROCESS	0.00	0.65	0.00	B			
RECEPTACLES	6840.00	1.00	6840.00	C			
MECH HEATING	4160.00	1.00	4160.00	TOTAL/AVERAGE			
MECH COOLING	0.00	1.00	0.00	NOTES:			
MECH YEAR ROUND	0.00	1.00	0.00	1. THE LARGEST CO			
APPLIANCE	8000.00	1.00	8000.00				
MISCELLANEOUS	0.00	1.00	0.00				
MOTOR	0.00	1.00	0.00				
SPARE	0.00	1.00	0.00				
LARGEST MOTOR 1	ABOVE	0.25	0.00				
<b>TOTAL</b>	<b>19500.00</b>		<b>19625.00</b>				

PANEL SCHEDULE - PP1		TYPE: 120/240		PANELBOARD ENCL: NEMA1		BUS SIZE: 1000	
		VOLTAGE:		ENCLOSURE:		MAIN BRKR: 1000	
						SC RATING: 10000	
						GROUND BUS: YES	
LOAD TYPE	LOAD DESCRIPTION	AMPS POLES	CKT# LOAD	Ø	CKT LOA		
RECEPTACLE	PRESCHOOL 115 COUNTER	20A 1P	1 180	A	2	720	
RECEPTACLE	PRESCHOOL 115 COUNTER	20A 1P	3 180	B	4	720	
RECEPTACLE	PRE-K 119 COUNTER	20A 1P	5 180	A	6	720	
RECEPTACLE	PRE-K 119 COUNTER	20A 1P	7 180	B	8	720	
RECEPTACLE	OFFICE MEETING 102	20A 1P	9 360	A	10	720	
RECEPTACLE	OFFICE MEETING 102	20A 1P	11 360	B	12	180	
RECEPTACLE	TOILETS 104, 105 & LACTATION 103	20A 1P	13 1260	A	14	180	
RECEPTACLE	INFANT 120	20A 1P	15 720	B	16	180	
RECEPTACLE	TOILETS 104, 105 & LACTATION 103	20A 1P	17 720	A	18	180	

1 Electrical - Roof Plan  
 1/4" = 1'-0"

REVISIONS

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Electrical -  
 Roof Plan  
 Plan  
 SHEET NAME

**Bighorn Consulting Engineers, Inc.**  
 Mechanical & Electrical Engineers

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Haven House  
 Expansion

**E2-3**  
 SHEET NUMBER