

# THE PEARL ON PEARL



## PROJECT INFORMATION:

**ADDRESS:**  
1863 S PEARL ST  
DENVER, CO 80210

**SCOPE OF WORK INCLUDES:**  
REMODEL EXISTING  
COMMERCIAL SPACE  
INCLUDING ADDITION TO  
SECOND FLOOR

**ANALYSIS:**  
OCCUPANCY GROUP: B  
CONSTRUCTION TYPE: TYPE V-B

## GRAPHIC STANDARDS

**EXTERIOR ELEVATION**  
1 A4.01 DRAWING NUMBER SHEET NUMBER

**INTERIOR ELEVATION**  
99 A7.01 99 DRAWING NUMBER SHEET NUMBER

**DETAIL**  
1 A9.01 DRAWING NUMBER SHEET NUMBER

**WALL SECTION**  
1 A5.11 DRAWING NUMBER SHEET NUMBER

**BUILDING SECTION**  
1 A5.01 DRAWING NUMBER SHEET NUMBER

**ENLARGED DETAIL**  
AREA OF DRAWING TO BE ENLARGED  
1 A6.01 DRAWING NUMBER SHEET NUMBER

**KEYNOTE IDENTIFICATION**  
NOTE NUMBER

**STRUCTURAL GRID**  
A COLUMN LETTER  
1 COLUMN REFERENCE GUIDE  
99 COLUMN NUMBER

**ELEVATION DATUM**  
Name LEVEL NAME  
Elevation ELEVATION

**ROOM/SPACE/AREA IDENTIFICATION**  
ROOM NAME ROOM NAME  
314 ROOM NUMBER  
876 SF ROOM AREA

**DOOR IDENTIFICATION**  
DX DOOR TAG  
\*REFER TO DOOR SCHEDULE FOR SIZE AND OPERATION INFORMATION

**WINDOW IDENTIFICATION**  
WX WINDOW TAG  
\*REFER TO WINDOW SCHEDULE FOR SIZE AND OPERATION INFORMATION

**PARTITION TYPE**  
23A PARTITION TYPE RE: PARTITION TYPE SCHEDULE

**ACOUSTIC PARTITION TYPE**  
76H PARTITION TYPE RE: PARTITION TYPE SCHEDULE

**REVISION IDENTIFICATION**  
001 REVISION NUMBER  
ASI REVISION DESCRIPTION

**SECTION MATERIAL GRAPHICS**  
CONCRETE  
UNDISTURBED OR COMPACTED EARTH  
NON-EXPANSIVE NEW FILL SOIL  
STEEL  
ALUMINUM  
MASONRY - BRICK  
MASONRY - CONCRETE BLOCK  
SPRAY FOAM INSULATION OR RIGID INSULATION  
BATT INSULATION  
GYPSUM PLASTER  
PLYWOOD  
FINISH WOOD

## AIR BARRIER & INSULATION INSTALLATION

COMPONENT	AIR BARRIER CRITERIA	INSULATION INSTALLATION CRITERIA
GENERAL REQUIREMENTS	- A CONTINUOUS AIR BARRIER SHALL BE INSTALLED IN THE BUILDING ENVELOPE. - THE EXTERIOR THERMAL ENVELOPE CONTAINS A CONTINUOUS AIR BARRIER. - BREAKS OR JOINTS IN THE AIR BARRIER SHALL BE SEALED.	- AIR-PERMEABLE INSULATION SHALL NOT BE USED AS A SEALING MATERIAL.
CEILING/ ATTIC	- THE AIR BARRIER IN ANY DROPPED CEILING/ SOFFIT SHALL BE ALIGNED WITH THE INSULATION AND ANY GAPS IN THE AIR BARRIER SEALED. - ACCESS OPENINGS, DROP-DOWN STAIRS, OR KNEE WALL DOORS TO UNCONDITIONED ATTIC SPACES SHALL BE SEALED.	- THE INSULATION IN ANY DROPPED CEILING/ SOFFIT SHALL BE ALIGNED WITH THE AIR BARRIER.
WALLS	- THE JUNCTION OF THE FOUNDATION AND SILL PLATE SHALL BE SEALED. - THE JUNCTION OF THE TOP PLATE AND THE TOP OF EXTERIOR WALLS SHALL BE SEALED. - KNEE WALLS SHALL BE SEALED.	- CAVITIES WITHIN THE CORNERS AND HEADERS OF FRAME WALLS SHALL BE INSULATED BY COMPLETELY FILLING THE CAVITY WITH A MATERIAL HAVING A THERMAL RESISTANCE OF R-3 PER INCH MINIMUM. - EXTERIOR THERMAL ENVELOPE INSULATION FOR FRAMED WALLS SHALL BE INSTALLED IN SUBSTANTIAL CONTACT AND CONTINUOUS ALIGNMENT WITH THE AIR BARRIER.
WINDOWS, SKYLIGHTS, AND DOORS	- THE SPACE BETWEEN WINDOW/DOOR JAMBS & FRAMING, AND SKYLIGHTS & FRAMING SHALL BE SEALED.	
RIM JOIST	- RIM JOIST SHALL INCLUDE THE AIR BARRIER.	- RIM JOIST SHALL BE INSULATED.
FLOORS (INCLUDING ABOVE GARAGE AND CANTILEVERED FLOORS)	- THE AIR BARRIER SHALL BE INSTALLED AT ANY EXPOSED EDGE OF INSULATION.	- FLOOR FRAMING CAVITY INSULATION SHALL BE INSTALLED TO MAINTAIN PERMANENT CONTACT WITH THE UNDERSIDE OF SUBFLOOR DECKING, OR FLOOR FRAMING CAVITY INSULATION SHALL BE PERMITTED TO BE IN CONTACT WITH THE TOP SIDE OF SHEATHING, OR CONTINUOUS INSULATION INSTALLED ON THE UNDERSIDE OF FLOOR FRAMING; AND EXTENDS FROM THE BOTTOM TO THE TOP OF ALL PERIMETER FLOOR FRAMING MEMBERS.
CRAWL SPACE WALLS	- EXPOSED EARTH IN UNVENTED CRAWL SPACES SHALL BE COVERED WITH A CLASS I VAPOR RETARDER WITH OVERLAPPING JOINTS TAPED.	- WHERE PROVIDED INSTEAD OF FLOOR, INSULATION SHALL BE PERMANENTLY ATTACHED TO THE CRAWL SPACE WALLS.
SHAFTS, PENETRATIONS	- DUCT SHAFTS, UTILITY PENETRATIONS, AND FLUE SHAFTS OPENING TO EXTERIOR OR UNCONDITIONED SPACE SHALL BE SEALED.	
NARROW CAVITIES		- BATT IN NARROW CAVITIES SHALL BE CUT TO FIT, OR NARROW CAVITIES SHALL BE FILLED BY INSULATION THAT ON INSTALLATION READILY CONFORMS TO THE AVAILABLE CAVITY SPACES.
GARAGE SEPARATIONS	- AIR SEALING SHALL BE PROVIDED BETWEEN THE GARAGE AND CONDITIONED SPACES.	
RECESSED LIGHTING	- RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO DRYWALL.	- RECESSED LIGHT FIXTURES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE AIR TIGHT AND IC RATED.
PLUMBING AND WIRING		- BATT INSULATION SHALL BE CUT NEATLY TO FIT AROUND PLUMBING AND WIRING IN EXTERIOR WALLS, OR INSULATION THAT ON INSTALLATION READILY CONFORMS TO AVAILABLE SPACE SHALL EXTEND BEHIND PLUMBING AND WIRING.
SHOWER/TUB ON EXTERIOR WALL	- THE AIR BARRIER INSTALLED AT EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL SEPARATE THEM FROM THE SHOWERS AND TUBS.	- EXTERIOR WALLS ADJACENT TO SHOWERS AND TUBS SHALL BE INSULATED.
ELECTRICAL/PHONE BOX ON EXTERIOR WALLS	- THE AIR BARRIER SHALL BE INSTALLED BEHIND ELECTRICAL OR COMMUNICATION BOXES OR AIR-SEALED BOXES SHALL BE INSTALLED.	
HVAC REGISTER BOOTS	- HVAC REGISTER BOOTS THAT PENETRATE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO THE SUBFLOOR OR DRYWALL.	

## DENVER COUNTY CODE

2021 International Residential Code  
2021 International Building Code  
2021 International Fire Code  
2021 International Plumbing Code  
2021 International Mechanical Code  
2021 International Fuel Gas Code  
2021 International Energy Conservation Code  
2021 International Existing Building Code  
2023 National Electric Code  
2022 Denver Building and Fire Code  
2022 Denver Green Code

LOCAL AMENDMENTS:  
Ground Snow Load - See Snow Load Map  
Wind Speed - 120 mph Vult.  
Seismic Design Category - C  
Frost Depth - See Minimum Footing & Foundation Requirements  
Winter Design Temp 0° F

## BUILDING INFORMATION

OCCUPANCY: B  
ZONING: U-MS-2  
BUILDING FORM: SHOPFRONT

## IECC COMPLIANCE

CLIMATE ZONE: 5 B  
WALL INSULATION: WALL CAVITY R-19  
CEILING INSULATION: R-49  
FLOOR INSULATION: R-30  
CRAWLSPACE: C.I. R-15 INTERIOR WALL  
FENESTRATIONS U-FACTOR: .35

BUILDING TO BE CONSTRUCTED TO MEET SECTION N1102.4.1. (2015 IRC)

THE UNVENTED CRAWLSPACE SHALL COMPLY WITH THE FOLLOWING PER SECTION R408.

CONDITIONED AIR SUPPLY SIZED TO DELIVER AT A RATE EQUAL TO 1 CUBIC FOOT PER MINUTE FOR EACH 50 SQUARE FEET OF CRAWLSPACE AREA, INCLUDING A RETURN AIR PATHWAY TO THE COMMON AREA (TRANSFER GRILLE), AND PERIMETER WALLS INSULATED IN ACCORDANCE WITH SECTION N1102.2.7.

GROUND SHALL BE COVERED BY A CLASS 1 VAPOR RETARDER MATERIAL WITH OVERLAPPING JOINT TAPED/ SEALED.

DUCT WORK WITHIN BUILDINGS THERMAL ENVELOPE DO NOT NEED INSULATED. SEAL DUCTS PER THE IRC

RECESSED LIGHTING: IC-AT RATED RECESSED LIGHTING FIXTURES SEALED WHERE PENETRATING THE THERMAL ENVELOPE AT HOUSING/ INTERIOR FINISH AND LABELED TO INDUCATE LESS THAN 2.0CRM LEAKAGE @ 75 PA.

## PROJECT TEAM

OWNER:  
NAME: 1863 PEARL LLC  
ADDRESS: 1400 16TH ST STE600

ARCHITECTURE FIRM: DAKE COLLABORATIVE  
NAME: MILES DAKE  
ADDRESS: 1855 SOUTH LOGAN STREET  
DENVER, CO 80210  
CONTACT #: 720.583.4735

## GROSS BUILDING AREA

NAME	AREA
EXISTING	
FIRST FLOOR	1538 SF
SECOND FLOOR	1438 SF
BASEMENT	440 SF
	3416 SF
Grand total:	3416 SF

## SHEET LIST

SHEET NUMBER	SHEET NAME
A001	LEGEND SHEET
A002	CODE ANALYSIS
A100	SITE PLAN
A101	FLOOR PLANS
A102	FLOOR PLANS
A103	REFLECTED CEILING PLANS
A201	ELEVATIONS
A202	ELEVATIONS
A301	SECTIONS
A302	DETAILS
A801	AREA PLAN & 3D VIEWS
AD101	DEMOLITION FLOOR PLANS
AD201	DEMOLITION ELEVATIONS
M001	MECHANICAL LEGEND AND NOTES
M101	MECHANICAL PLANS
P001	PLUMBING LEGEND AND NOTES
P101	PLUMBING PLANS

## VICINITY MAP



PRELIMINARY  
NOT FOR  
CONSTRUCTION

## LEGEND SHEET

Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>A001</b>	
Scale	As indicated

# CODE SUMMARY

## PROJECT DESCRIPTION

2-STORY OFFICE/RETAIL BUILDING  
WITH COMMERCIAL STOREFRONT AND OFFICE SPACE

## APPLICABLE CODES AND STANDARDS

JURISDICTION	2022 Denver Building and Fire Code 2022 Denver Green Code
APPLICABLE CODES	2021 International Residential Code 2021 International Building Code 2021 International Fire Code 2021 International Plumbing Code 2021 International Mechanical Code 2021 International Fuel Gas Code 2021 International Energy Conservation Code 2021 International Existing Building Code 2023 National Electric Code
ACCESSIBILITY STANDARDS	STATE LAW CRS 9-5 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN 2009 ICC / ANSI 117.1 ACCESSIBLE USEABLE BUILDINGS AND FACILITIES

## GENERAL PLAN REVIEW NOTES

**FIRE ALARM SYSTEM** IS TO BE DESIGN-BUILD BY CONTRACTOR AND TO BE SUBMITTED FOR PERMIT SEPARATELY

## USE AND OCCUPANCY CLASSIFICATIONS

USE & OCCUPANCY OFFICE: BUSINESS (B) FLOOR 1 & 2

## BUILDING HEIGHTS AND AREAS

**PROPOSED CONSTRUCTION TYPE:** V - B NON-SPRINKLERED

**ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE (TABLE 504.3)**  
- REQUIRED MAX / PROPOSED B = 40 FEET

**ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE (TABLE 504.4)**  
- REQUIRED MAX / PROPOSED B = 2 STORIES / 2 STORIES

**ALLOWABLE AREA FACTOR IN SQUARE FEET (SF) (TABLE 506.2)**  
- ALLOWABLE / PROPOSED B = 9,000 SF / 3,426 SF

## CONSTRUCTION REQUIREMENTS

**TYPE OF CONSTRUCTION:** TYPE V - B (NON-SPRINKLERED)

### FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS) PER TABLE 601

STRUCTURAL FRAME	0 HOUR
BEARING WALLS EXTERIOR	0 HOUR
BEARING WALLS INTERIOR	0 HOUR
NON-BEARING WALLS EXTERIOR	SEE BELOW TABLE 602
NON-BEARING WALLS INTERIOR	0 HOUR
FLOOR CONSTRUCTION	0 HOUR
ROOF CONSTRUCTION	0 HOUR

### FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED UPON FIRE SEPARATION DISTANCE PER TABLE 602

OCCUPANCY GROUP B, TYPE V - B CONSTRUCTION	
X < 5	1 HOUR
5 < X < 10	1 HOUR
10 < X < 30	0 HOUR
X > 30	0 HOUR

### BUILDING SEPARATION DISTANCES

PER TABLE 602, NOTE G, WHERE TABLE 705.8 PERMITS NONBEARING EXTERIOR WALLS WITH UNLIMITED AREA OF UNPROTECTED OPENINGS, THE REQUIRED FIRE-RESISTANCE RATING FOR THE EXTERIOR WALLS IS 0 HOURS. SECTION 705.8.1 EXCEPTION 2, BUILDINGS WHOSE EXTERIOR BEARING WALLS, EXTERIOR NONBEARING WALLS AND EXTERIOR PRIMARY STRUCTURAL FRAME ARE NOT REQUIRED TO BE FIRE-RESISTANCE RATED, SHALL BE PERMITTED TO HAVE UNLIMITED PROTECTED OPENINGS.

WEST (REAR, ALLEY):	GREATER THAN 10'-0"	0 HOUR REQUIRED
NORTH (NEIGHBORING BLDG):	0'-0"	1 HOUR REQUIRED
SOUTH (NEIGHBORING BLDG):	0'-0"	1 HOUR REQUIRED
EAST (STREET):	10'-0" ± +/- 1'-6" < 30'-0"	0 HOUR REQUIRED

NOTE: PER DEFINITION IN 2021 IBC, SECTION 702.1, FIRE SEPARATION DISTANCES HAVE BEEN MEASURED FROM BUILDING FACE TO:

- 1) THE CLOSEST LOT LINE OR,
- 2) THE CENTERLINE OF A STREET, ALLEY, OR PUBLIC WAY

### MAXIMUM AREA OF EXTERIOR WALL OPENING BASED ON FIRE SEPARATION DISTANCE AND DEGREE OF OPENING PROTECTION (TABLE 705.8)

EAST (STREET) X > 30	UNPROTECTED, NON-SPRINKLERED	NO LIMIT
WEST (REAR, ALLEY) X > 30	UNPROTECTED, NON-SPRINKLERED	NO LIMIT

## FIRE AND SMOKE PROTECTION REQUIREMENTS

### SHAFT ENCLOSURE (SECTION 713)

FIRE RESISTANCE RATING (713.4)  
SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 2 HOURS WHERE CONNECTING FOUR STORIES OR MORE, AND NOT LESS THAN 1 HOUR WHERE CONNECTING LESS THAN FOUR STORIES. THE NUMBER OF STORIES CONNECTED BY THE SHAFT ENCLOSURE SHALL INCLUDE ANY BASEMENTS BUT NOT ANY MEZZANINES. SHAFT ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING NOT LESS THAN THE FLOOR ASSEMBLY PENETRATED BUT NEED NOT EXCEED 2 HOURS. SHAFT ENCLOSURES SHALL MEET THE REQUIREMENTS OF SECTION 703.2.1.  
**PROPOSED: 1 HOUR MECHANICAL SHAFT**

## INTERIOR FINISHES

### INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY (TABLE 803.11)

B OCCUPANCY - NON-SPRINKLERED	
EXIT ENCLOSURES AND EXIT PASSAGEWAYS=	CLASS 'C'
CORRIDORS=	CLASS 'C'
ROOMS AND ENCLOSED SPACES=	CLASS 'C'

## FIRE PROTECTION SYSTEMS

NONE PROVIDED

PORTABLE FIRE EXTINGUISHERS: REQUIRED THROUGHOUT GROUP B (SECTION 906.1 ITEM 1)  
FIRE EXTINGUISHERS FOR CLASS A FIRE HAZARDS (TABLE 906.3.1)  
MAXIMUM DISTANCE OF TRAVEL TO EXTINGUISHER = 75'-0"

## MEANS OF EGRESS

### MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT (TABLE 1004.1.2)

**BUSINESS AREA:**  
OFFICE/BUSINESS = 100 GSF/PERSON

**OCCUPANCY LOAD (SECTION 1004)**  
**TOTAL OCCUPANCY LOAD (3426 SF/100) = 36 PEOPLE**

### MEANS OF EGRESS SIZING (SECTION 1005)

STAIRWAY (SECTION 1005.3.1): 0.3 INCH PER OCCUPANT  
OTHER EGRESS COMPONENT (SECTION 1005.3.2): 0.2 INCH PER OCCUPANT  
REFER TO CODE COMPLIANCE PLANS (THIS SHEET) FOR PROPOSED SIZING.

### NUMBER OF EXITS AND EXIT ACCESS DOORWAYS (SECTION 1006)

OCCUPANCY "B" MAXIMUM OCCUPANT LOAD OF SPACE ≤ 49, ADHERES TO SECTION 1006.2.1  
MAX. COMMON PATH OF EGRESS TRAVEL DISTANCE (FEET) NO SPRINKLER (TABLE 1006.2.1) = 100 FEET

MINIMUM NUMBER OF EXITS OR ACCESS TO EXITS FROM STORY (TABLE 1006.2.1): 1 EXIT REQUIRED  
PROPOSED: 1 EXIT PROVIDED FOR OCCUPANCY LOAD "B" ≤ 49

### ACCESSIBLE MEANS OF EGRESS (SECTION 1009)

STAIRWAYS (1009.3)  
IN ORDER TO BE CONSIDERED PART OF AN ACCESSIBLE MEANS OF EGRESS, A STAIRWAY BETWEEN STORIES SHALL HAVE A CLEAR WIDTH OF 48 INCHES (1219 MM) MINIMUM BETWEEN HAND-RAILS AND SHALL EITHER INCORPORATE AN AREA OF REFUGE WITHIN AN ENLARGED FLOOR-LEVEL LANDING OR SHALL BE ACCESSED FROM AN AREA OF REFUGE COMPLYING WITH SECTION 1009.6. EXIT ACCESS STAIRWAYS THAT CONNECT LEVELS IN THE SAME STORY ARE NOT PERMITTED AS PART OF AN ACCESSIBLE MEANS OF EGRESS.  
PROPOSED STAIRWAY: EXTERIOR STAIR, NORTH

EXCEPTION: 1009.3.2 - 2 - THE CLEAR WIDTH OF 48 INCHES BETWEEN HANDRAILS IS NOT REQUIRED FOR STAIRWAYS ACCESSED FROM AN AREA OF REFUGE IN CONJUNCTION WITH A HORIZONTAL EXIT.

### EXIT ACCESS (SECTION 1014)

EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2)  
OCCUPANCY B WITHOUT SPRINKLER SYSTEM = 200 FEET  
**PROPOSED MAXIMUM EXIT ACCESS TRAVEL DISTANCE = 74'-1" (EGRESS PATH 2)**

## PLUMBING SYSTEMS

### MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (TABLE 2902.1)

#### WATER CLOSETS:

"B" OCCUPANCY FOR BUSINESS:  
1 PER 25 FOR THE FIRST 50 AND 1 PER 50 FOR THE REMAINDER EXCEEDING 50

WATER CLOSETS REQUIRED:  
REQUIRED FOR "B" PER 2902.1.2 (SINGLE-USER/SEPARATE FACILITIES) = 2  
**PROVIDED: 2**

#### LAVATORIES:

"B" OCCUPANCY FOR BUSINESS:  
1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER EXCEEDING 80 (MALE / FEMALE)

LAVATORIES REQUIRED:  
REQUIRED FOR "B" PER 2902.1.2 (SINGLE-USER/SEPARATE FACILITIES) = 2  
**PROVIDED: 2**

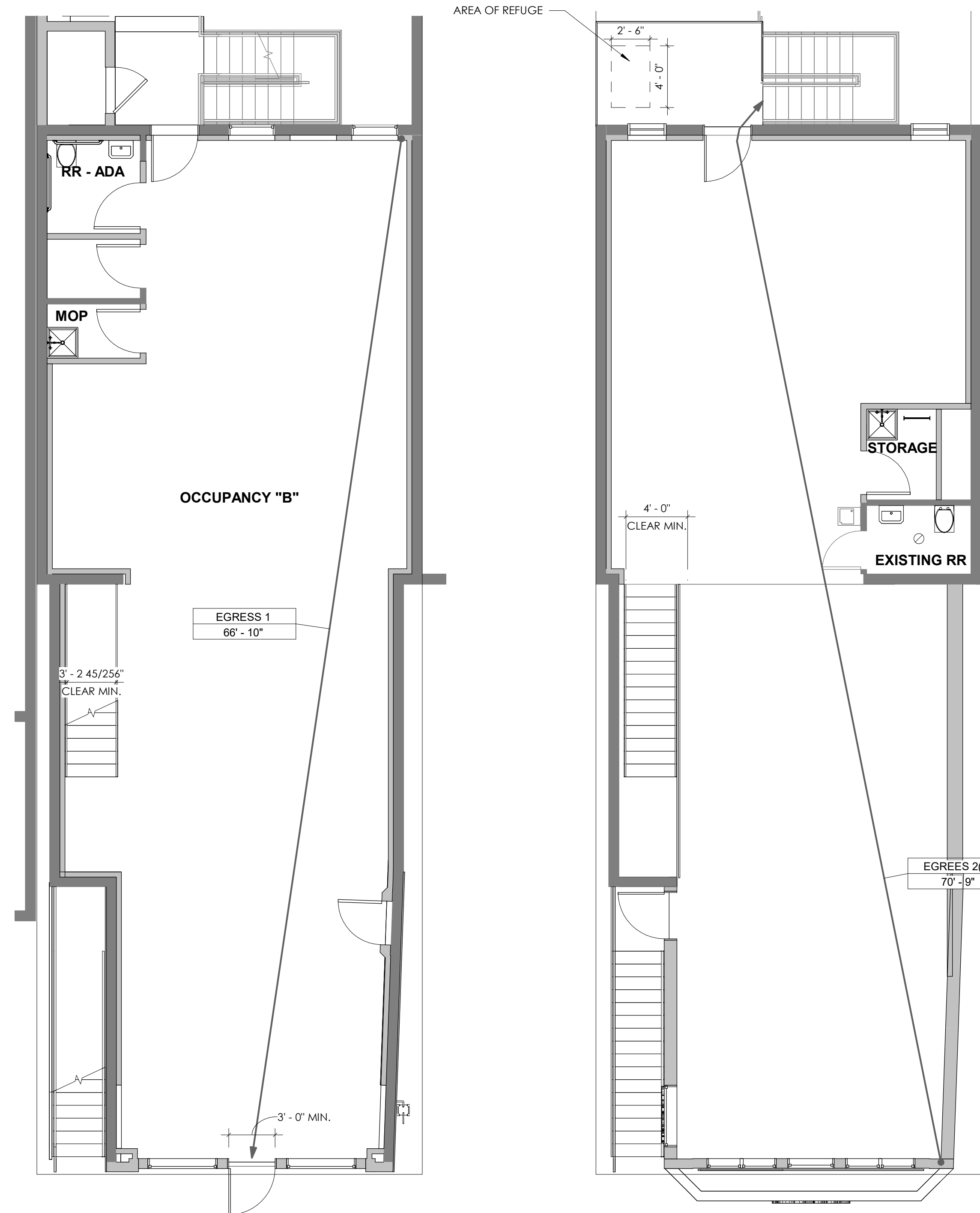
#### DRINKING FOUNTAINS:

DRINKING FOUNTAINS SHALL CONFORM TO ASME A112.19.1M, ASME A112.19.2M OR ASME A112.19.9M AND WATER COOLERS SHALL CONFORM TO ARI 1010. DRINKING FOUNTAINS AND WATER COOLERS SHALL CONFORM TO NSF 61, SECTION 9. WHERE WATER IS SERVED IN RESTAURANTS, DRINKING FOUNTAINS SHALL NOT BE REQUIRED. IN OTHER OCCUPANCIES, WHERE DRINKING FOUNTAINS ARE REQUIRED, WATER COOLERS OR BOTTLED WATER DISPENSERS SHALL BE PERMITTED TO BE SUBSTITUTED FOR NOT MORE THAN 50 PERCENT OF THE REQUIRED DRINKING FOUNTAINS.

DRINKING FOUNTAINS REQUIRED:  
REQUIRED FOR "B": 1 PER 100  
**PROVIDED: 1**

#### SERVICE SINK:

REQUIRED FOR "B" = 1  
**PROVIDED: 1**



**1 CODE EGRESS PLAN - LEVEL 1**  
SCALE: 3/16" = 1'-0"

**2 CODE EGRESS PLAN - LEVEL 2**  
SCALE: 3/16" = 1'-0"



MILES@DAKECOLLABORATIVE.COM 720.583.4735

1863 PEARL STREET

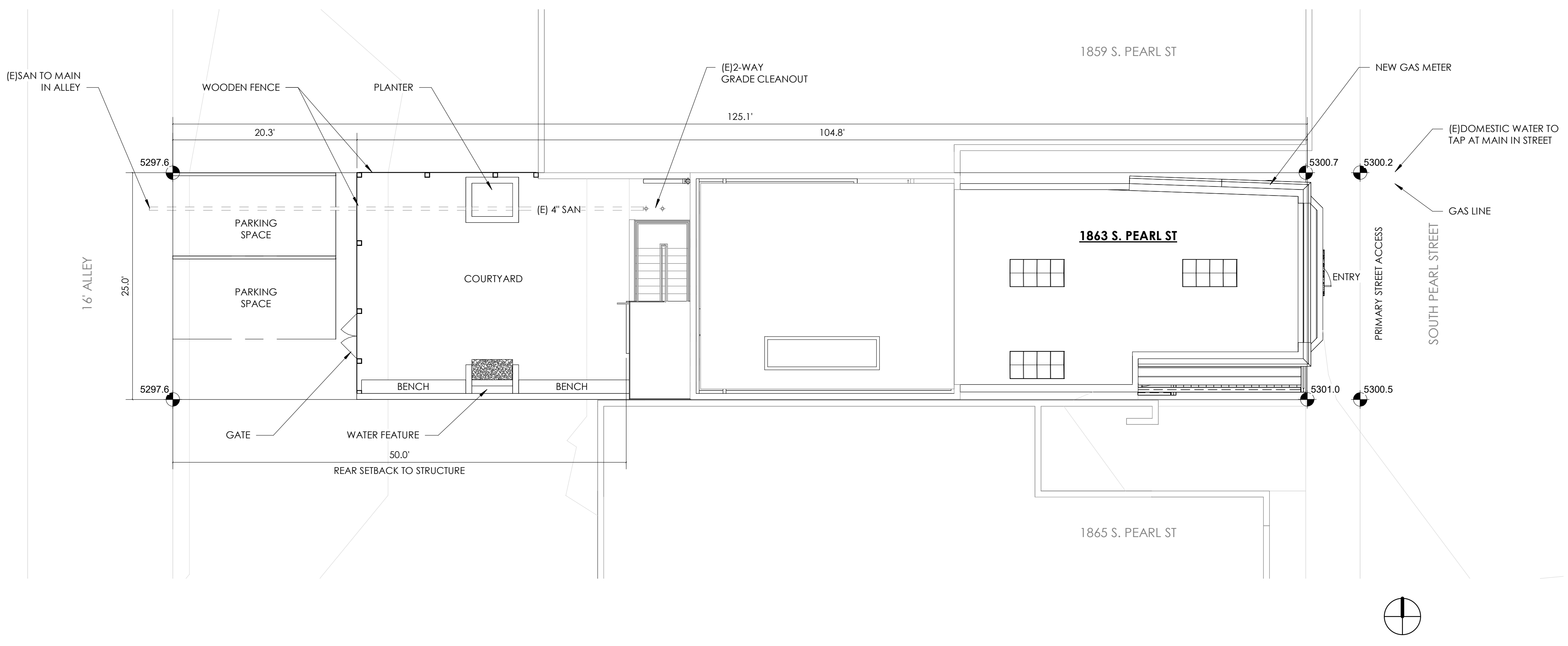
1863 S PEARL ST  
DENVER, CO 80210

PRELIMINARY  
NOT FOR  
CONSTRUCTION

NO.	DESCRIPTION	DATE

## CODE ANALYSIS

Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>A002</b>	
Scale	As indicated



**1 SITE PLAN**  
SCALE: 1/8" = 1'-0"

**1863 PEARL STREET**

1863 S PEARL ST  
DENVER, CO 80210

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

ZONING ANALYSIS			
ZONING INFORMATION	SITING:	ALLOWED:	PROPOSED:
ZONE DISTRICT: U-MS-2	ZONE LOT AREA:	N/A	3,125 SF
OCCUPANCY: B - BUSINESS	ZONE LOT WIDTH:	N/A	25.0'
BUILDING FORM: SHOPFRONT	<b>ALLOWED SETBACKS:</b>		
	SETBACK FRONT (PRIMARY STREET):	0.0'	0.0'
	SETBACK SIDE INTERIOR:	0.0'	0.0'
	SETBACK REAR (ALLEY):	0.0'	50.0'
<b>LEGAL DESCRIPTION</b>	<b>BUILDING COVERAGE CALCULATIONS:</b>		
GRANT SUB 811 L33	EXISTING PRIMARY STRUCTURE FOOTPRINT:		1,538 SF
SCHEDULE NUMBER: 05227-36-018-000	<b>TOTAL BUILDING COVERAGE</b>	<b>1,538 SF / 3,125 SF</b>	<b>50 %</b>

NO.	DESCRIPTION	DATE

**SITE PLAN**

Date: JANUARY 10, 2024  
 Drawn by: MD  
 Checked by: MD

**A100**

Scale: As indicated

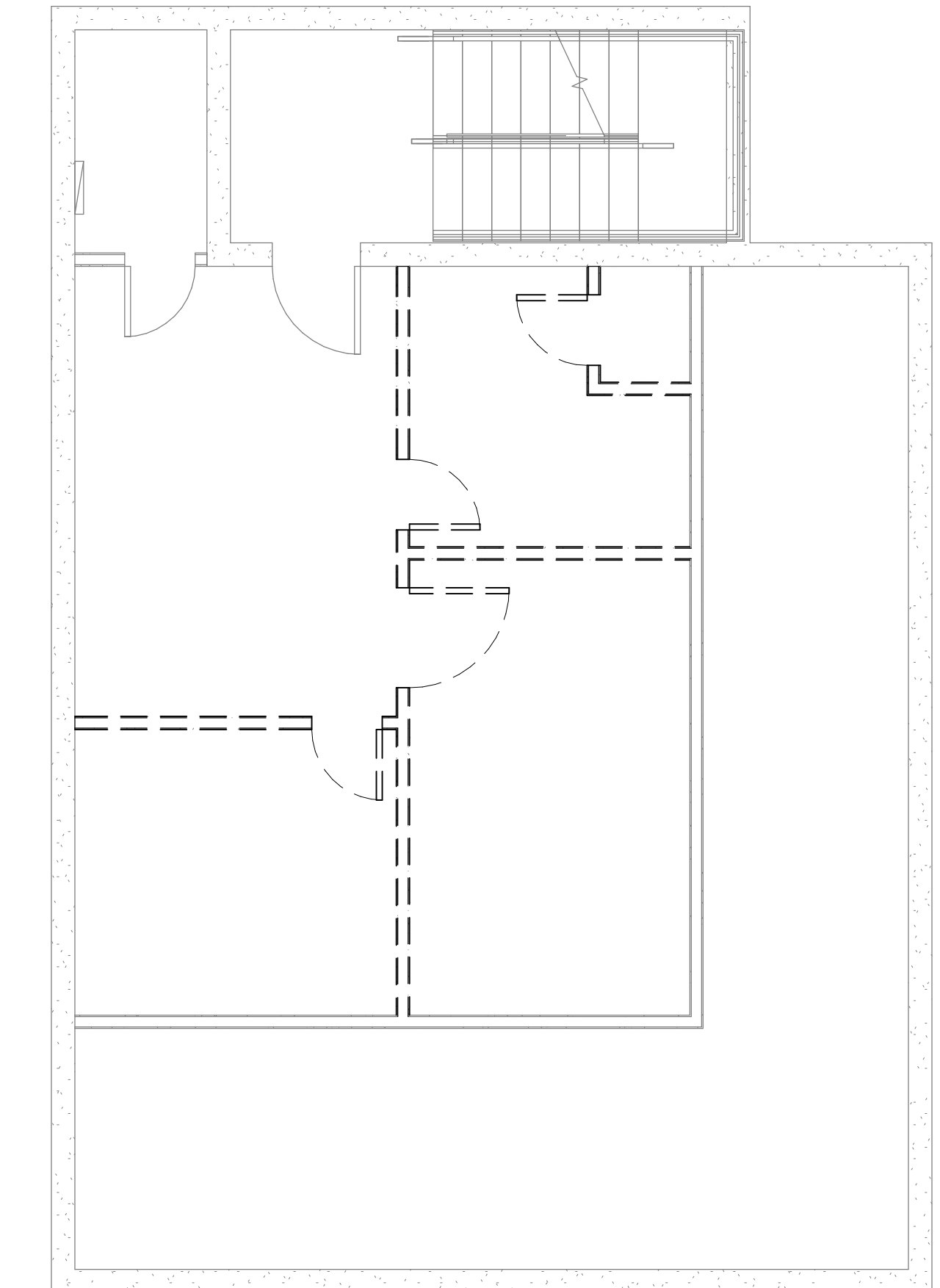
1863 PEARL STREET

1863 S PEARL ST  
DENVER, CO 80210

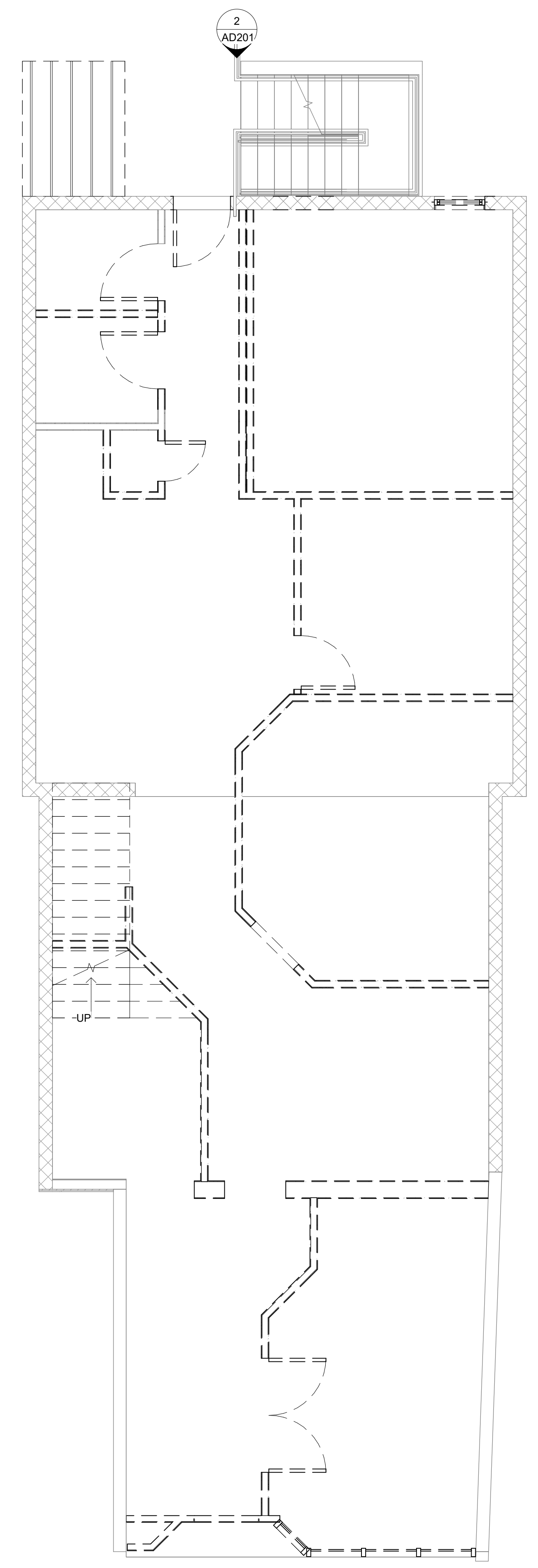
PRELIMINARY  
NOT FOR  
CONSTRUCTION

NO.	DESCRIPTION	DATE

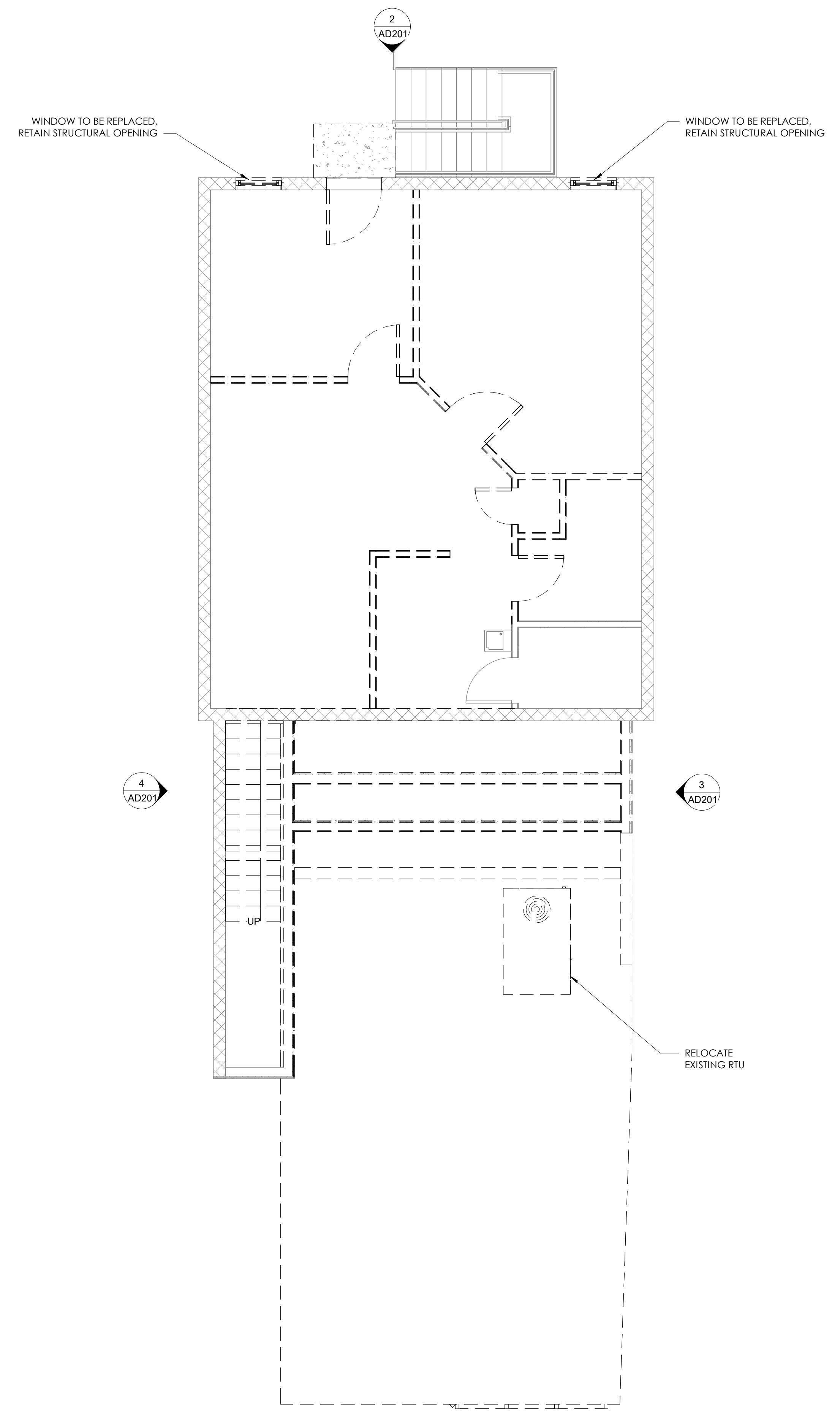
DEMOLITION FLOOR PLANS	
Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
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Scale	1/4" = 1'-0"



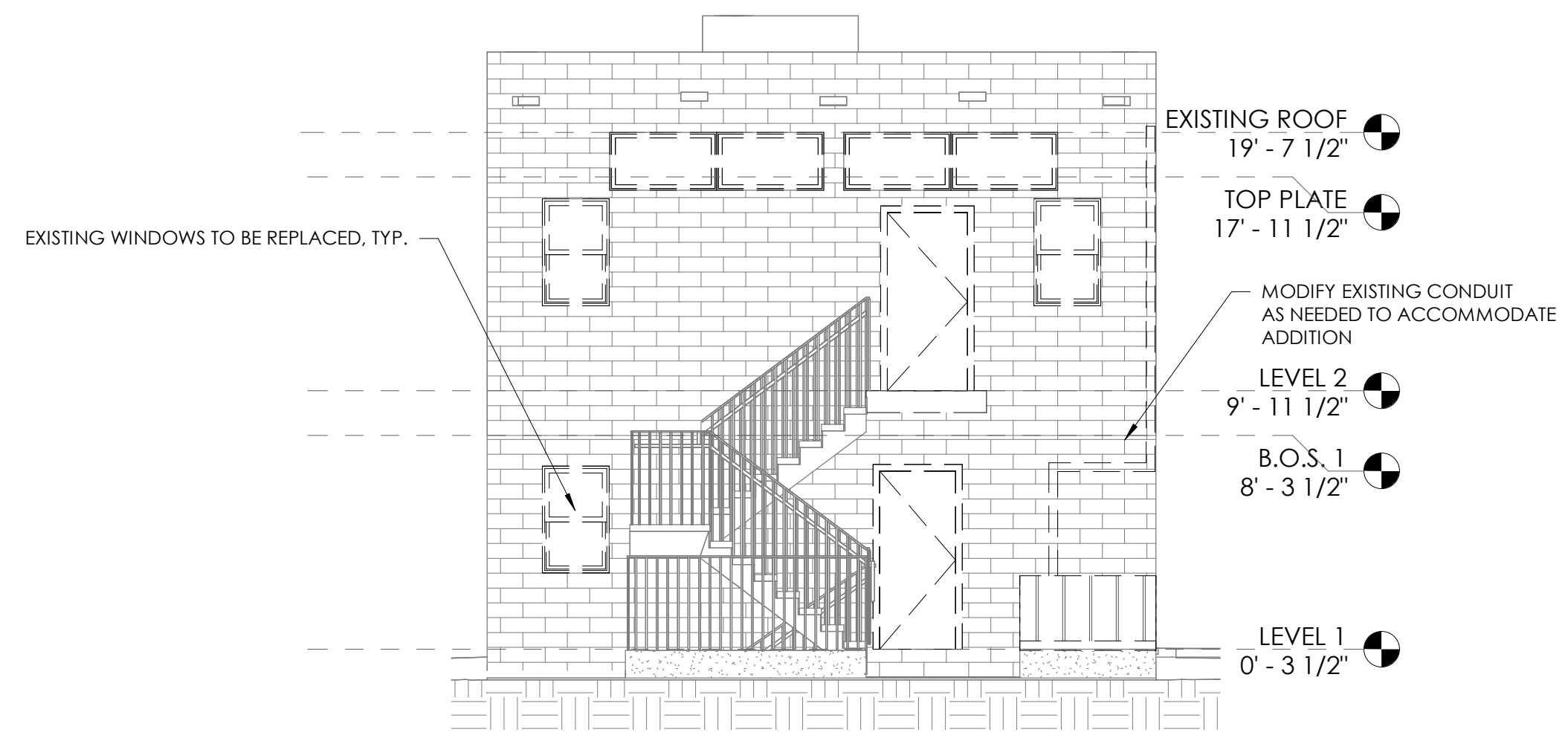
**1 DEMOLITION FLOOR PLAN - BASEMENT**  
SCALE: 1/4" = 1'-0"



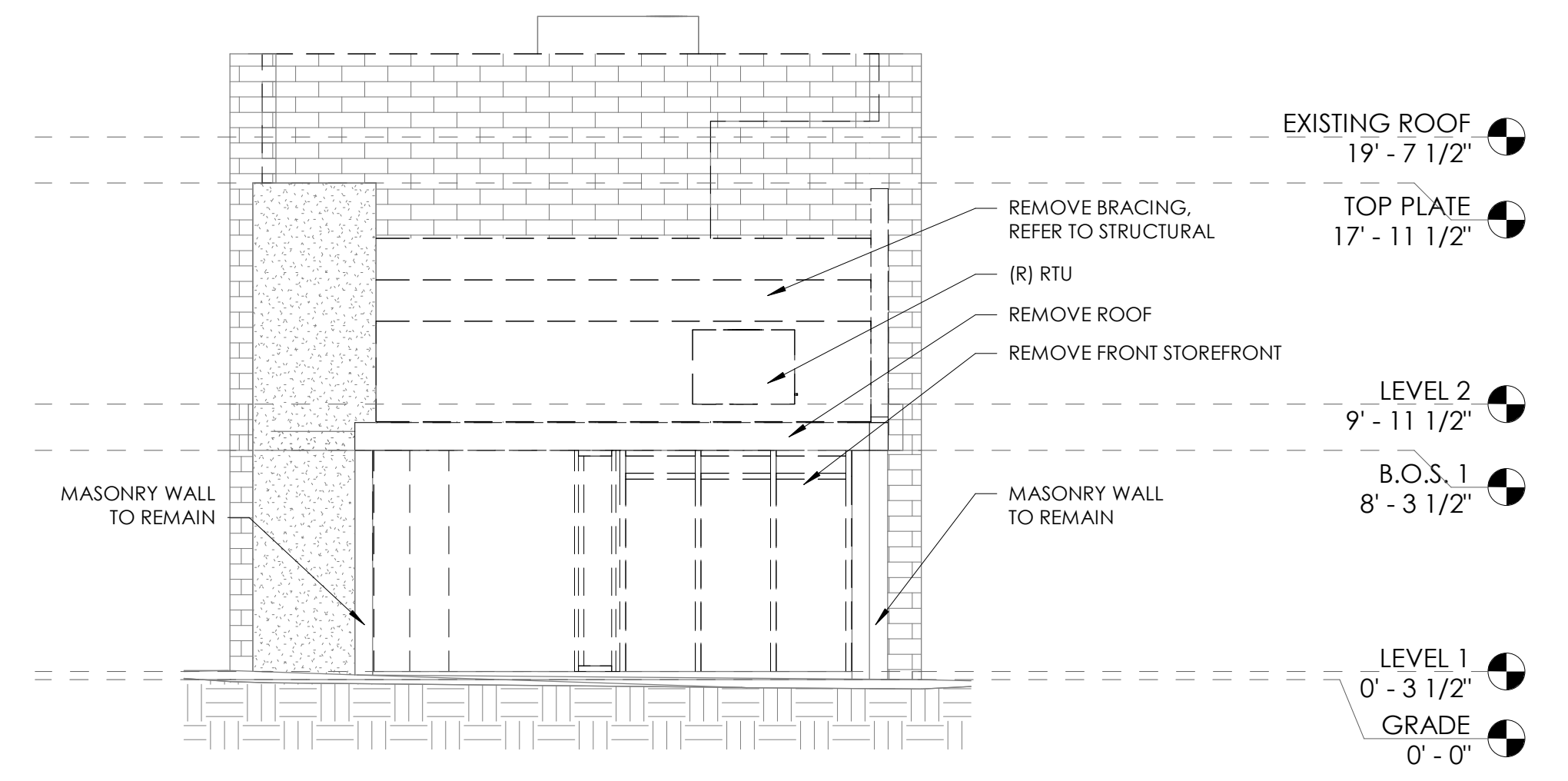
**2 DEMOLITION FLOOR PLAN - LEVEL 1**  
SCALE: 1/4" = 1'-0"



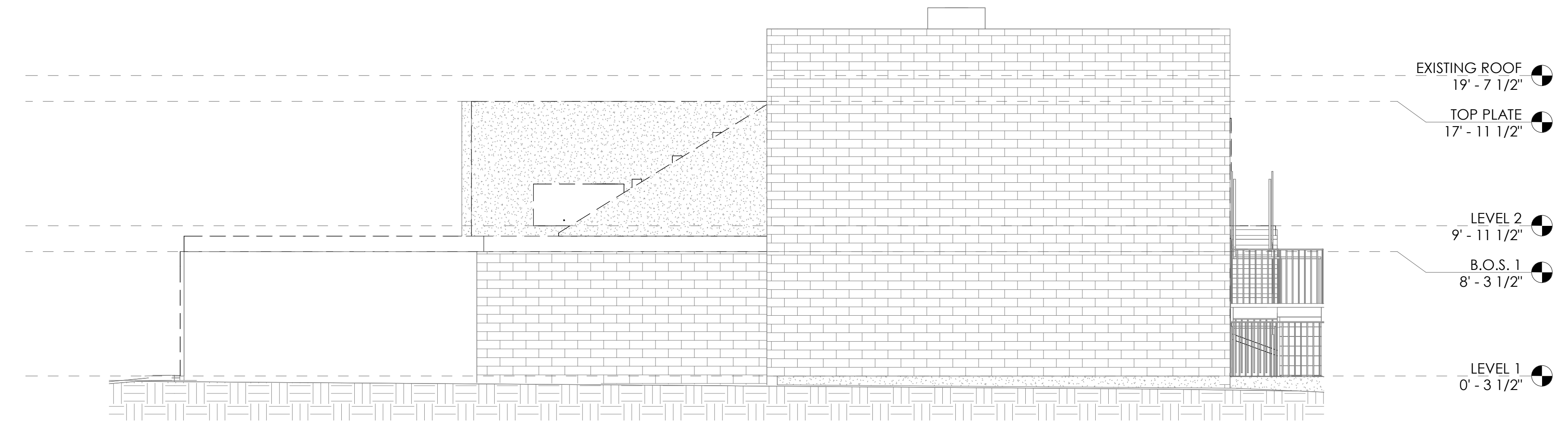
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SCALE: 1/4" = 1'-0"



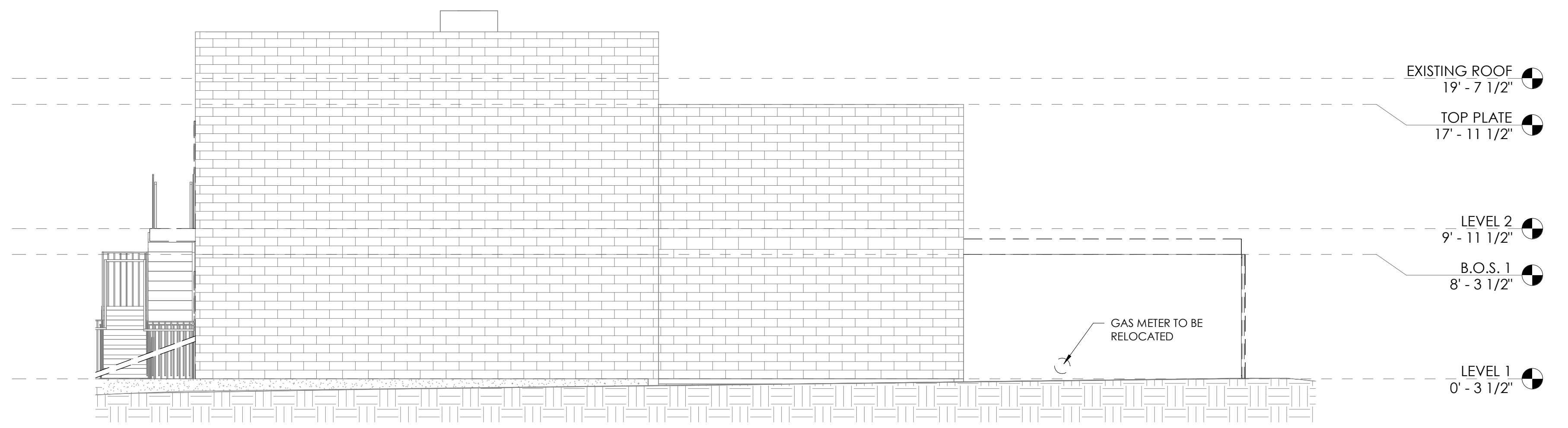
**2 WEST ELEVATION - DEMOLITION**  
SCALE: 3/16" = 1'-0"



**1 EAST ELEVATION - DEMOLITION**  
SCALE: 3/16" = 1'-0"



**3 NORTH ELEVATION - DEMOLITION**  
SCALE: 3/16" = 1'-0"



**4 SOUTH ELEVATION - DEMOLITION**  
SCALE: 3/16" = 1'-0"

1863 PEARL STREET

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DENVER, CO 80210

PRELIMINARY  
NOT FOR  
CONSTRUCTION

NO.	DESCRIPTION	DATE

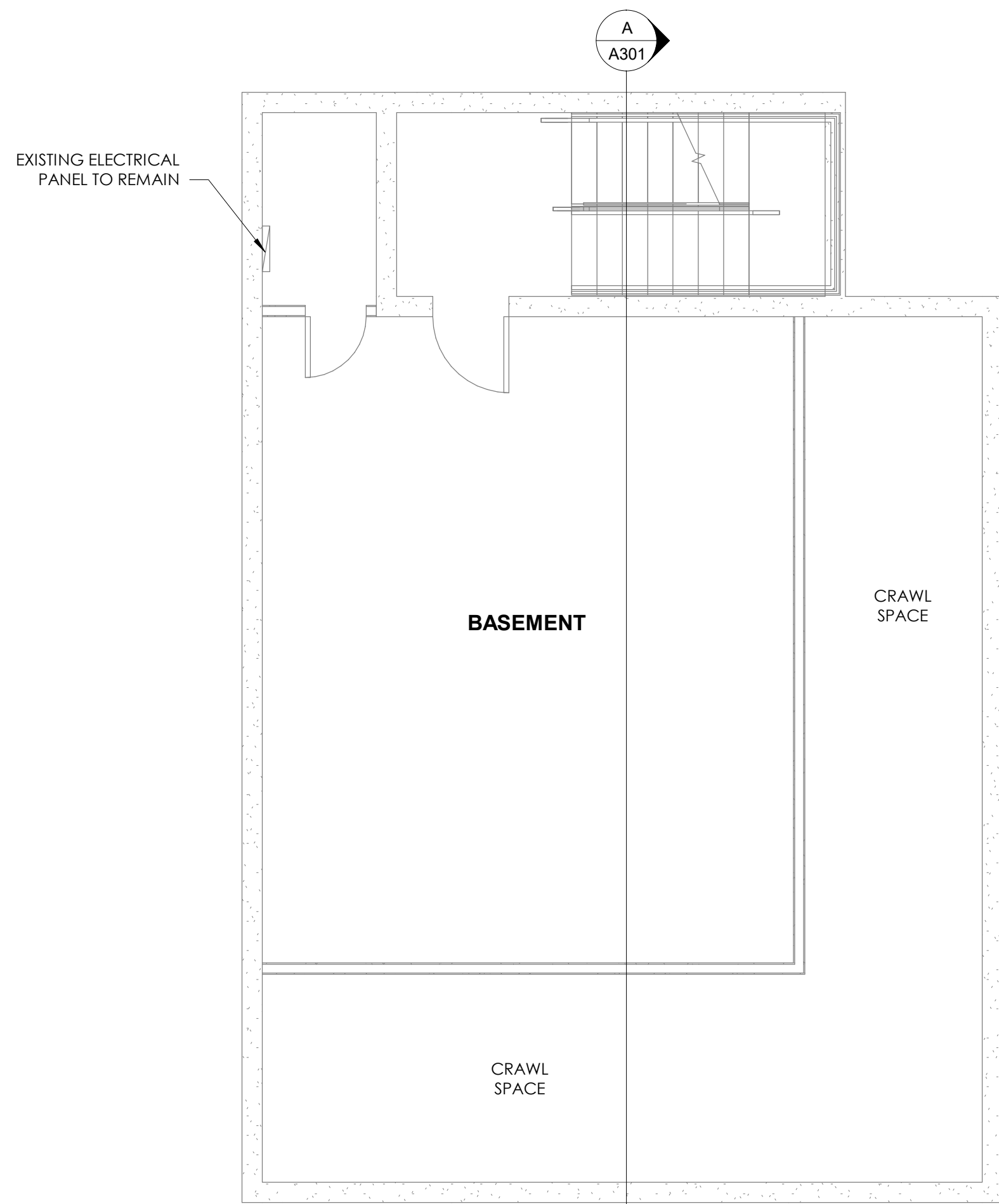
**DEMOLITION  
ELEVATIONS**

Date JANUARY 10, 2024  
Drawn by MD  
Checked by MD

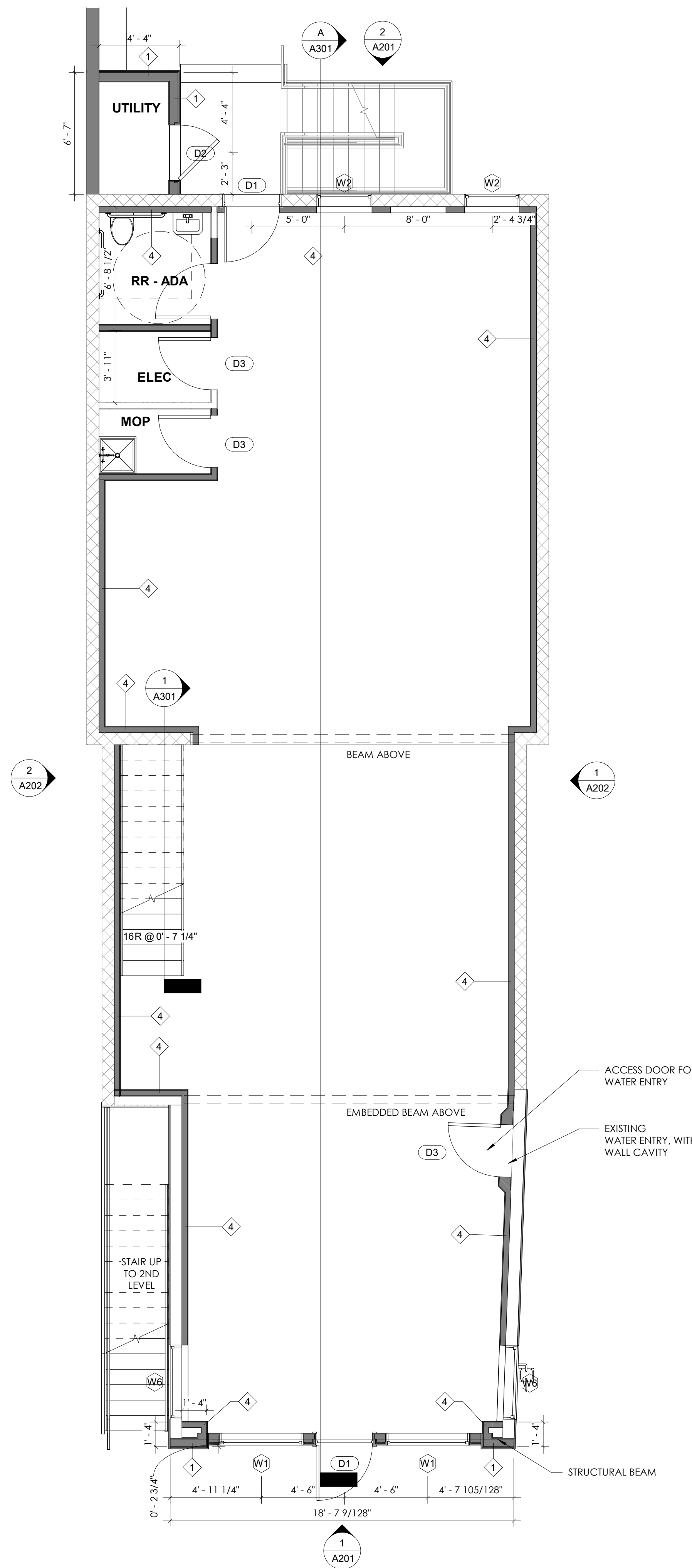
**AD201**

Scale 3/16" = 1'-0"





**2 BASEMENT**  
SCALE: 1/4" = 1'-0"



**1 FLOOR PLAN - LEVEL 1**  
SCALE: 1/4" = 1'-0"

**GENERAL NOTES**

- INTERIOR DIMENSIONS TAKEN FROM FACE OF STUD, EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUD/ FOUNDATION.
- FURNITURE NOT IN CONTRACT.
- ALL WORK TO BE PERFORMED IN COMPLIANCE WITH ALL STATE AND LOCAL CODE. CONTRACTOR RESPONSIBLE TO SECURE ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
- PENETRATIONS AT ROOF SHALL BE COORDINATED WITH MECHANICAL CONTRACTOR FOR SIZE AND LOCATION.
- DIMENSION FROM EDGE OF DOOR FRAME TO EDGE OF ADJACENT PERPENDICULAR WALL SHALL BE 4" U.N.O.
- DOOR HARDWARE SETS DESIGN-BUILD BY GENERAL CONTRACTOR.
- PROVIDE WATER RESISTANT GYP BOARD AT ALL WET WALLS.
- ALL SINKS 1'-3" MIN. AWAY FROM WALL PER CODE.
- ALL WATER CLOSETS 1'-3" MIN. AWAY FROM WALL PER CODE.

**PARTITION TYPES**

- EXTERIOR WALL:**
- 1 EXTERIOR MATERIAL (SEE ELEVATIONS FOR EXTERIOR MATERIAL), WEATHER BARRIER, SHEATHING (RE: STRUCTURAL), 2x6 STUD (RE: STRUCTURE FOR SPACING), R-19 INSULATION IN CAVITY, VAPOR BARRIER, 1/2" GYP. BD.
  - 2 THIN BRICK (REFER TO ELEVATIONS), METAL LATH, WEATHER BARRIER, ONE LAYER GRADE D BUILDING PAPER, 1" ZIP SHIELD SHEATHING, 2x6 STUD (RE: STRUCTURE FOR SPACING), R-19 DENSE PACKED CELLULOSE INSULATION, VAPOR BARRIER, 1/2" GYP. BD.
- INTERIOR WALL:**
- 3 1/2" GYP. BD., 2x4 STUD (RE: STRUCTURE FOR SPACING) (TYP.), 1/2" GYP. BD. TYPICAL IF WALL IF NOT MARKED
- INTERIOR FURRING PARTITION**
- 4 2x4 STUD, R-15 INSULATION IN CAVITY, 1/2" GYP. BD.

**DOOR SCHEDULE**

MARK	TYPE	WIDTH	HEIGHT	COUNT	COMMENTS
D1	EXTERIOR GLASS	3'-0"	7'-0"	3	
D2	EXTERIOR SOLID PANEL	3'-0"	8'-0"	1	
D3	INTERIOR PANEL	2'-10"	6'-8"	4	
D4	<varies>	3'-0"	<varies>	2	

**WINDOW SCHEDULE**

MARK	OPERATION	WIDTH	HEIGHT	COUNT	COMMENTS
W1	FIXED	4'-6"	6'-0"	2	
W2	FIXED	3'-0"	5'-0"	2	TEMPERED
W3	SKYLIGHT	3'-0"	6'-0"	3	
W4	INFILL	2'-3"	6'-6"	4	
W5	FIXED	3'-0"	6'-6"	1	
W6	FIXED	4'-0"	2'-2"	6	
W7	FIXED	4'-0"	5'-0"	1	
W8	SINGLE HUNG	2'-6"	4'-0"	2	
W10		2'-3"	1'-6"	4	
W13		3'-0"	1'-6"	1	



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1863 PEARL STREET

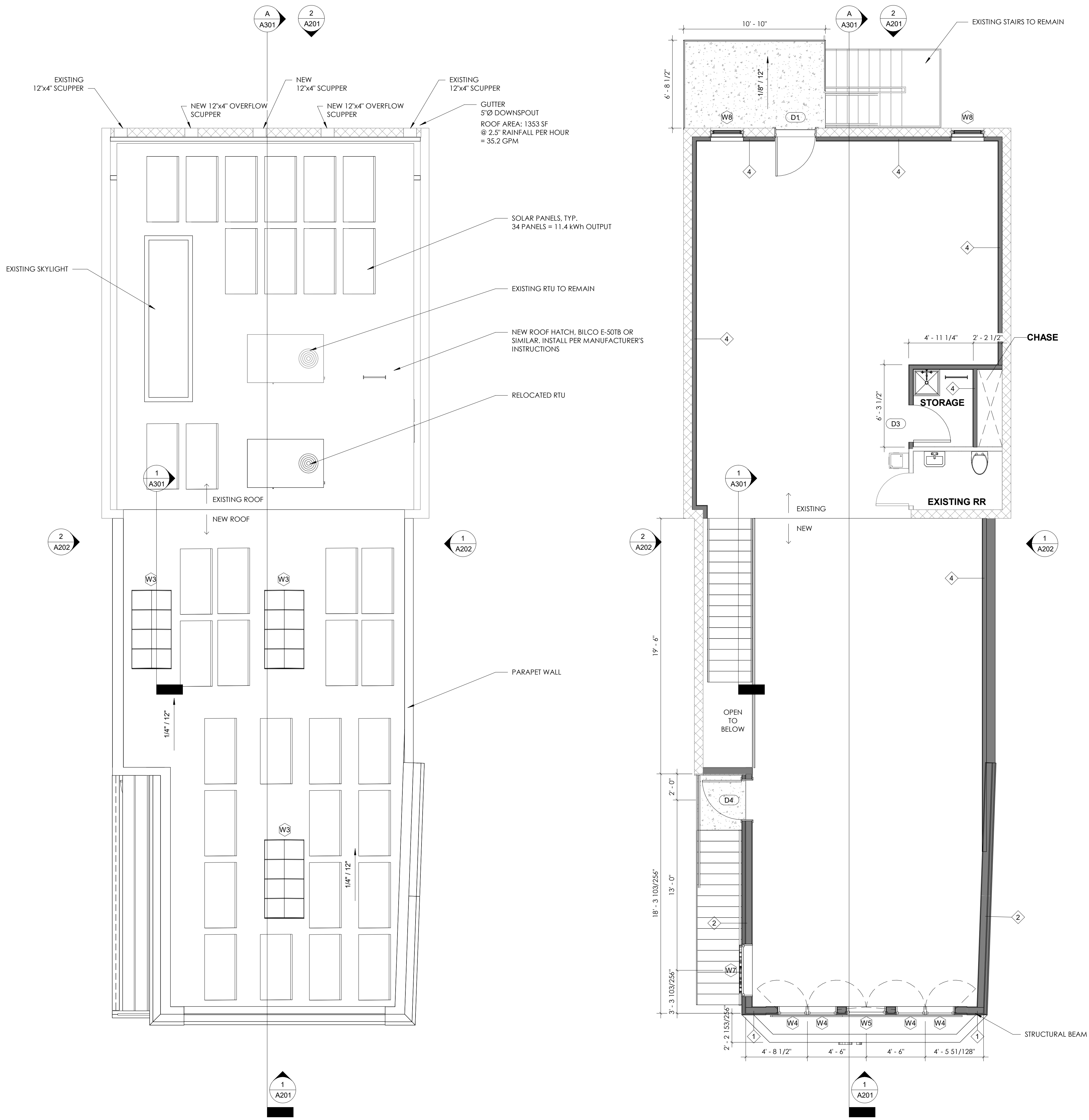
1863 S PEARL ST  
DENVER, CO 80210

PRELIMINARY  
NOT FOR  
CONSTRUCTION

NO.	DESCRIPTION	DATE

**FLOOR PLANS**

Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>A101</b>	
Scale	As indicated



**2 ROOF PLAN**  
SCALE: 1/4" = 1'-0"

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

**GENERAL NOTES**

- INTERIOR DIMENSIONS TAKEN FROM FACE OF STUD, EXTERIOR DIMENSIONS TAKEN FROM FACE OF STUD/ FOUNDATION.
- FURNITURE NOT IN CONTRACT.
- ALL WORK TO BE PERFORMED IN COMPLIANCE WITH ALL STATE AND LOCAL CODE. CONTRACTOR RESPONSIBLE TO SECURE ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
- PENETRATIONS AT ROOF SHALL BE COORDINATED WITH MECHANICAL CONTRACTOR FOR SIZE AND LOCATION.
- DIMENSION FROM EDGE OF DOOR FRAME TO EDGE OF ADJACENT PERPENDICULAR WALL SHALL BE 4" U.N.O.
- DOOR HARDWARE SETS DESIGN-BUILD BY GENERAL CONTRACTOR.
- PROVIDE WATER RESISTANT GYP BOARD AT ALL WET WALLS.
- ALL SINKS 1'-3" MIN. AWAY FROM WALL PER CODE.
- ALL WATER CLOSETS 1'-3" MIN. AWAY FROM WALL PER CODE.

**PARTITION TYPES**

- EXTERIOR WALL:**
- 1 EXTERIOR MATERIAL (SEE ELEVATIONS FOR EXTERIOR MATERIAL), WEATHER BARRIER, SHEATHING (RE: STRUCTURAL), 2x6 STUD (RE: STRUCTURE FOR SPACING), R-19 INSULATION IN CAVITY, VAPOR BARRIER, 1/2" GYP. BD.
  - 2 THIN BRICK (REFER TO ELEVATIONS), METAL LATH, WEATHER BARRIER, ONE LAYER GRADE D BUILDING PAPER, 1" ZIP SHIELD SHEATHING, 2x6 STUD (RE: STRUCTURE FOR SPACING), R-19 DENSE PACKED CELLULOSE INSULATION, VAPOR BARRIER, 1/2" GYP. BD.
- INTERIOR WALL:**
- 3 1/2" GYP. BD., 2x4 STUD (RE: STRUCTURE FOR SPACING) (TYP.), 1/2" GYP. BD. TYPICAL IF WALL IF NOT MARKED
- INTERIOR FURRING PARTITION**
- 4 2x4 STUD, R-15 INSULATION IN CAVITY, 1/2" GYP. BD.

**DOOR SCHEDULE**

MARK	TYPE	WIDTH	HEIGHT	COUNT	COMMENTS
D1	EXTERIOR GLASS	3'-0"	7'-0"	3	
D2	EXTERIOR SOLID PANEL	3'-0"	8'-0"	1	
D3	INTERIOR PANEL	2'-10"	6'-8"	4	
D4	<varies>	3'-0"	<varies>	2	

**WINDOW SCHEDULE**

MARK	OPERATION	WIDTH	HEIGHT	COUNT	COMMENTS
W1	FIXED	4'-6"	6'-0"	2	
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W4	INFILL	2'-3"	6'-6"	4	
W5	FIXED	3'-0"	6'-6"	1	
W6	FIXED	4'-0"	2'-2"	6	
W7	FIXED	4'-0"	5'-0"	1	
W8	SINGLE HUNG	2'-6"	4'-0"	2	
W10		2'-3"	1'-6"	4	
W13		3'-0"	1'-6"	1	

**ROOF NOTES**

1. MAINTAIN SLOPE AT ALL AREAS OF ROOF.
2. ALL ROOF PENETRATIONS TO BE SEALED AND WATERPROOFED PER IBC 2021 P2607 AND M1804.
3. ALL ROOF WATER TO BE CAPTURED BY GUTTERS AND DOWNSPOUTS. END OF DOWNSPOUT TO TERMINATE 2' AWAY FROM FOUNDATION AT A SPLASH BLOCK.
4. PROVIDE R-49 BATT OR BLOWN IN INSUL (W/ 1" MIN TO 6" MAX VENTILATION SPACE OVER TOP OF INSUL) OR CLOSED CELL FOAM INSULATION. BELOW PLYWOOD DECK AT ALL ROOFS OCCURRING ABOVE INTERIOR BUILDING AREA. SEE SECTIONS AND DETAILS.



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1863 PEARL STREET

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CONSTRUCTION

NO.	DESCRIPTION	DATE

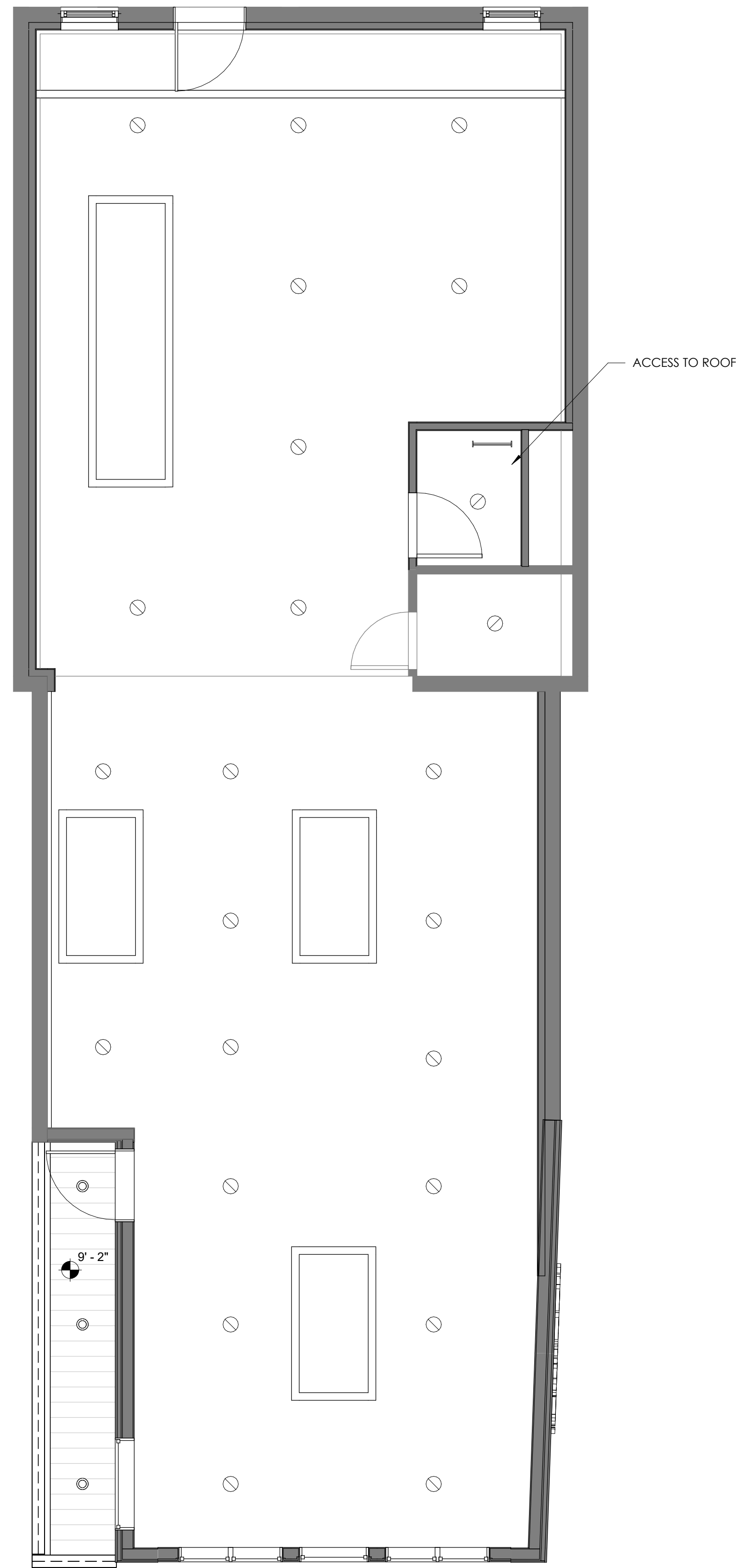
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Date: JANUARY 10, 2024  
Drawn by: MD  
Checked by: MD

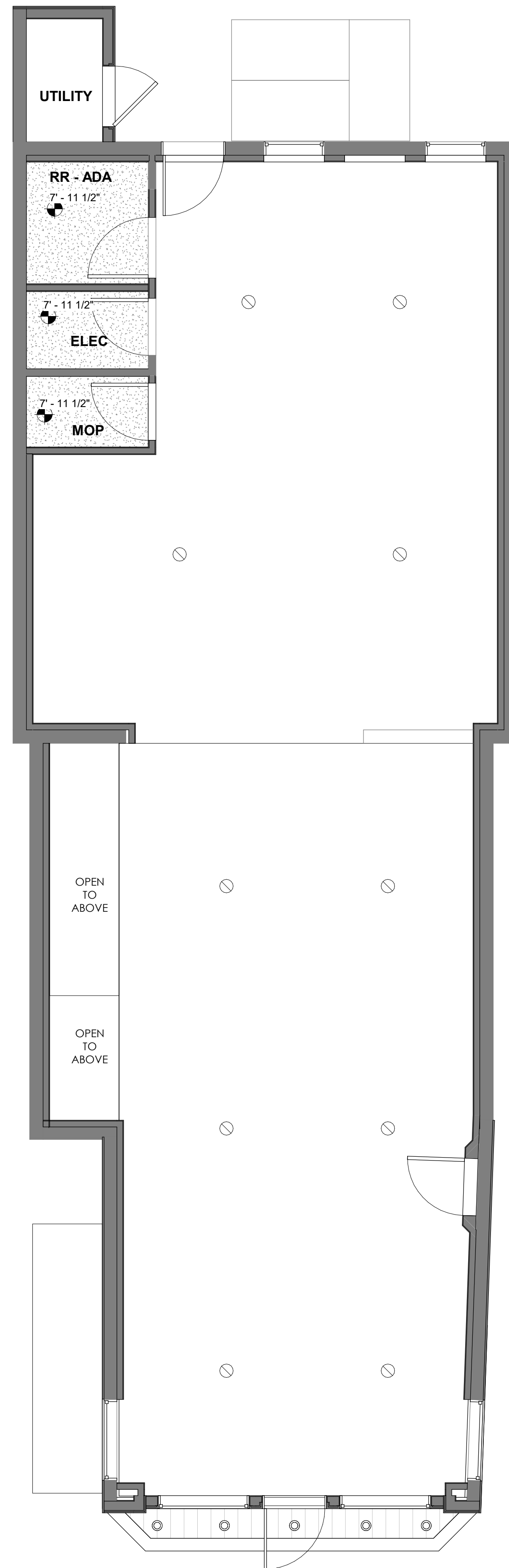
**A102**

Scale: As indicated

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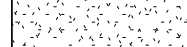


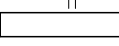
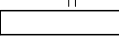
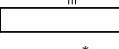
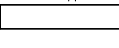
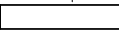
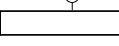




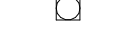









**2 REFLECTED CEILING PLAN - LEVEL 2**  
SCALE: 1/4" = 1'-0"



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

**RCP LEGEND**

-  GYP BOARD CEILING
-  GYP BOARD DROP SOFFIT/CEILING
-  FLOOR/SURFACE DUPLEX OUTLET
-  WALL DUPLEX OUTLET
-  SPLIT WIRED DUPLEX OUTLET
-  220 V RECEPTACLE
-  GFCI RECEPTACLE
-  SPECIALTY
-  SWITCH
-  MOTOR (GARBAGE DISPOSAL) W/PUSH BUTTON SWITCH
-  SMOKE/CO DETECTOR
-  SURFACE MOUNTED LIGHT FIXTURE
-  RECESSED CAN LIGHT FIXTURE WR = WATER RESISTANT
-  LARGE PENDANT LIGHT FIXTURE
-  FAN/LIGHT.
-  LINEAR EXTRUSION/LED TAPE LIGHT
-  TRACK LIGHT FIXTURE
-  VANITY LIGHT BAR
-  EXHAUST FAN
-  WALL PACK/DIRECTIONAL SCNCE
-  COACH LIGHTS ON PHOTOCCELL



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NO.	DESCRIPTION	DATE





**REFLECTED CEILING PLANS**

Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>A103</b>	
Scale	1/4" = 1'-0"

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EXTERIOR LEGEND

-  STUCCO SIDING - WHITE
-  WINDOW  
RE: WINDOW SCHEDULE FOR TYPE
-  LIGHT FIXTURE - GOOSENECK
-  LIGHT FIXTURE - SCONCE



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CONSTRUCTION

NO.	DESCRIPTION	DATE

ELEVATIONS

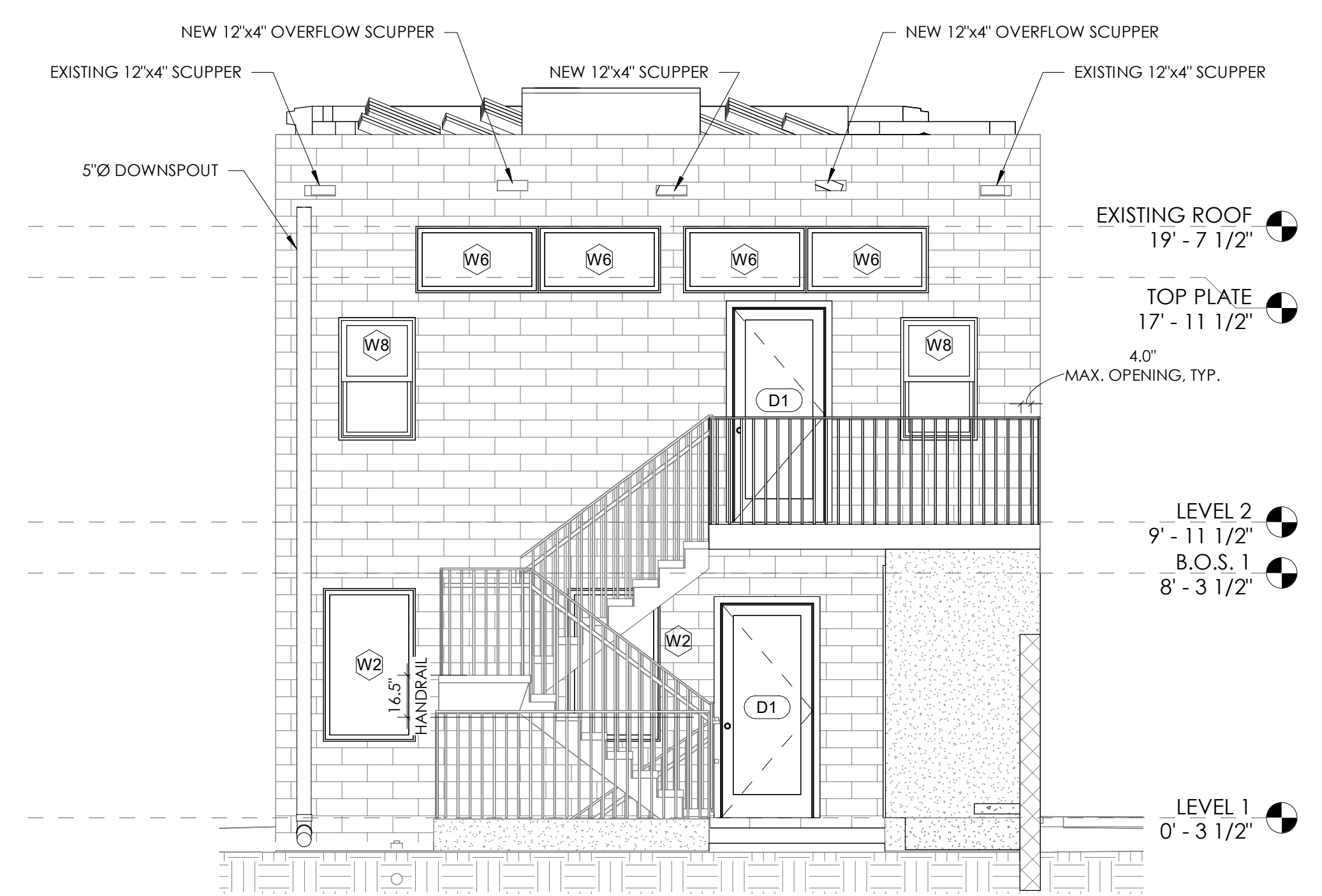
Date JANUARY 10, 2024  
 Drawn by MD  
 Checked by MD

A201

Scale 1/4" = 1'-0"

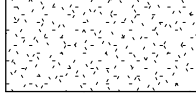





1 EAST ELEVATION  
SCALE: 1/4" = 1'-0"



2 WEST ELEVATION  
SCALE: 1/4" = 1'-0"

EXTERIOR LEGEND

-  STUCCO SIDING - WHITE
-  WINDOW  
RE: WINDOW SCHEDULE FOR TYPE
-  LIGHT FIXTURE - GOOSENECK
-  LIGHT FIXTURE - SCONCE

1863 PEARL STREET

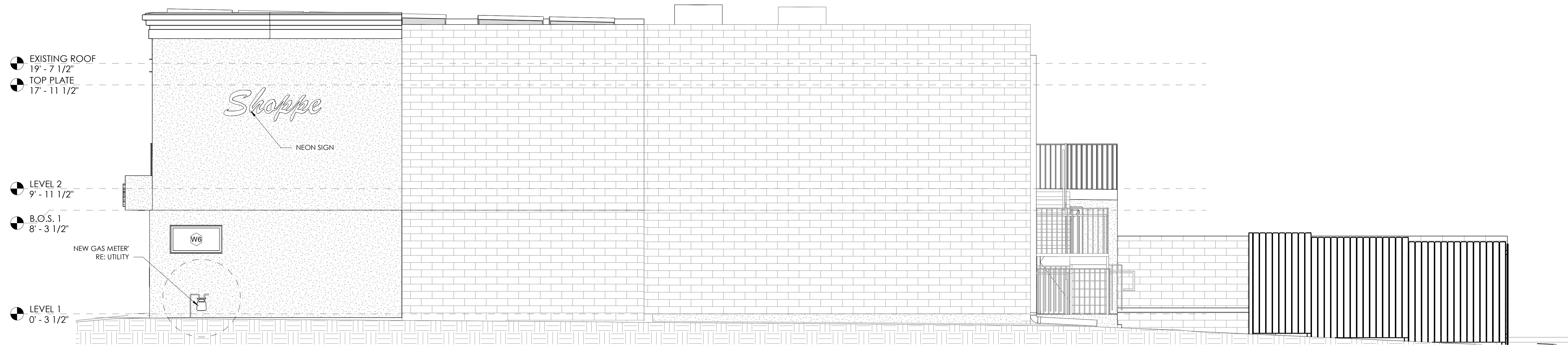
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PRELIMINARY  
NOT FOR  
CONSTRUCTION

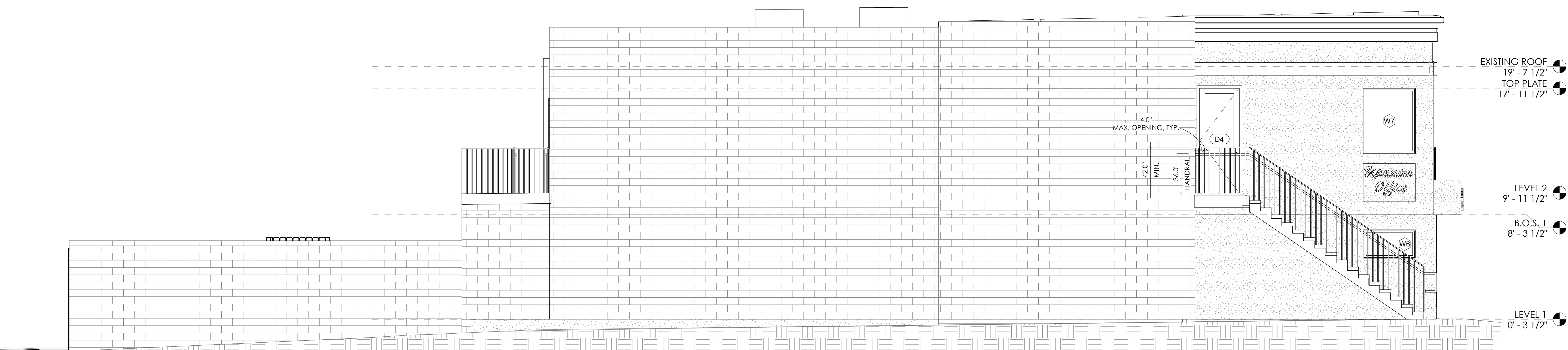
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ELEVATIONS

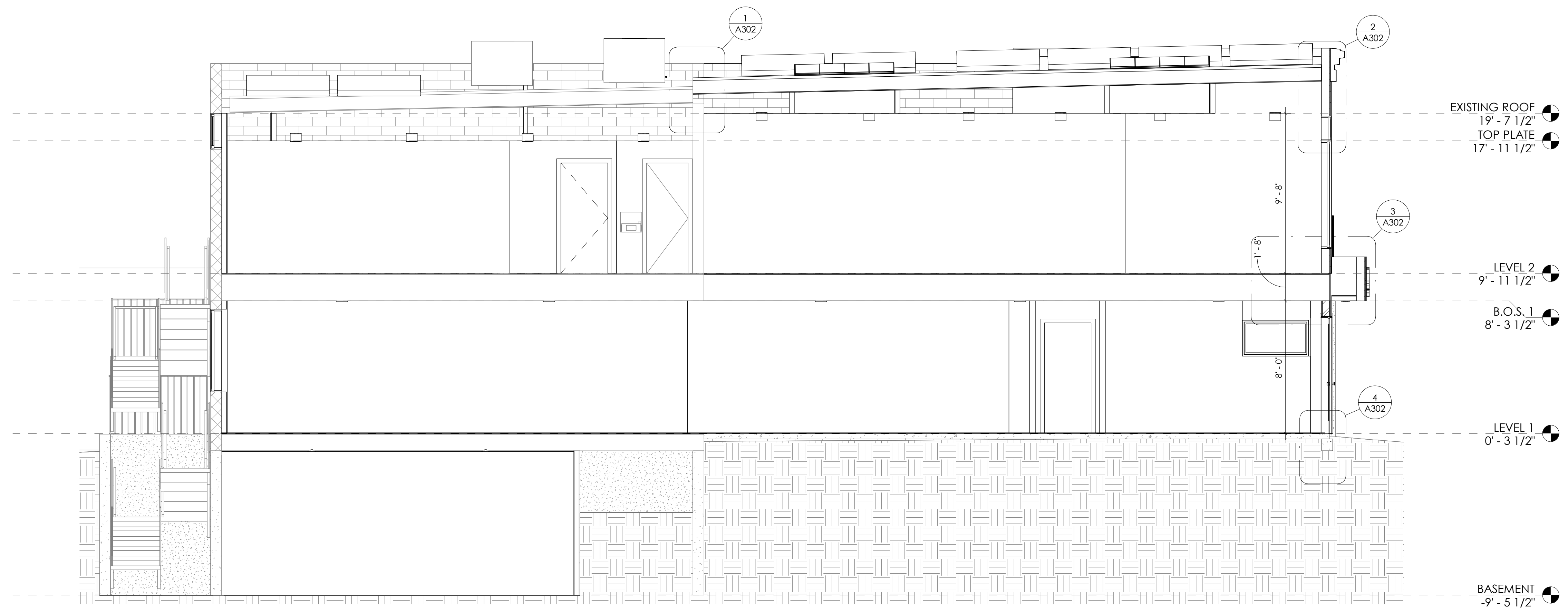
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Drawn by	MD
Checked by	MD
<b>A202</b>	
Scale	1/4" = 1'-0"



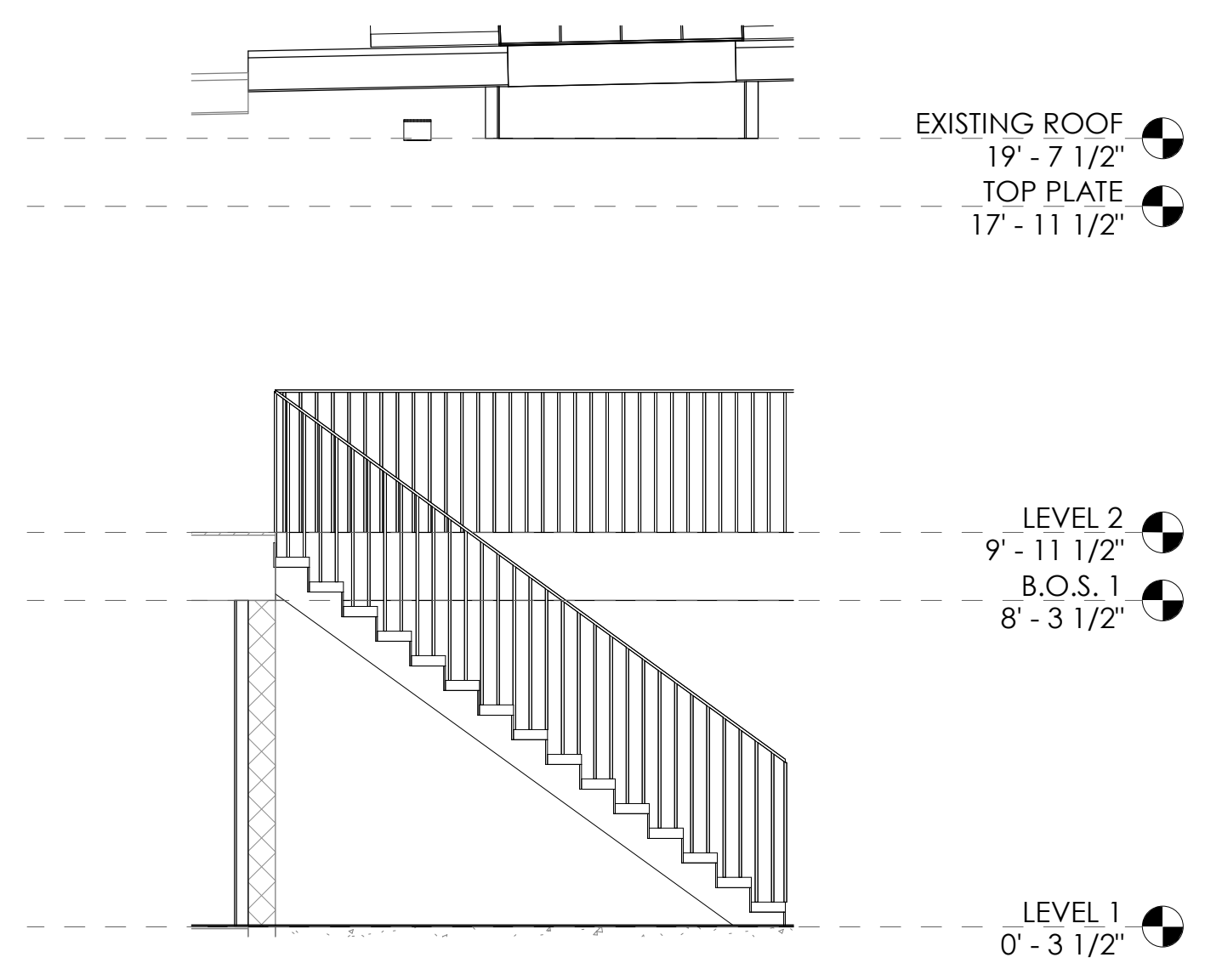
1 NORTH ELEVATION  
SCALE: 1/4" = 1'-0"



2 SOUTH ELEVATION  
SCALE: 1/4" = 1'-0"



**A SECTION A**  
SCALE: 1/4" = 1'-0"



**1 STAIR SECTION DETAIL**  
SCALE: 1/4" = 1'-0"

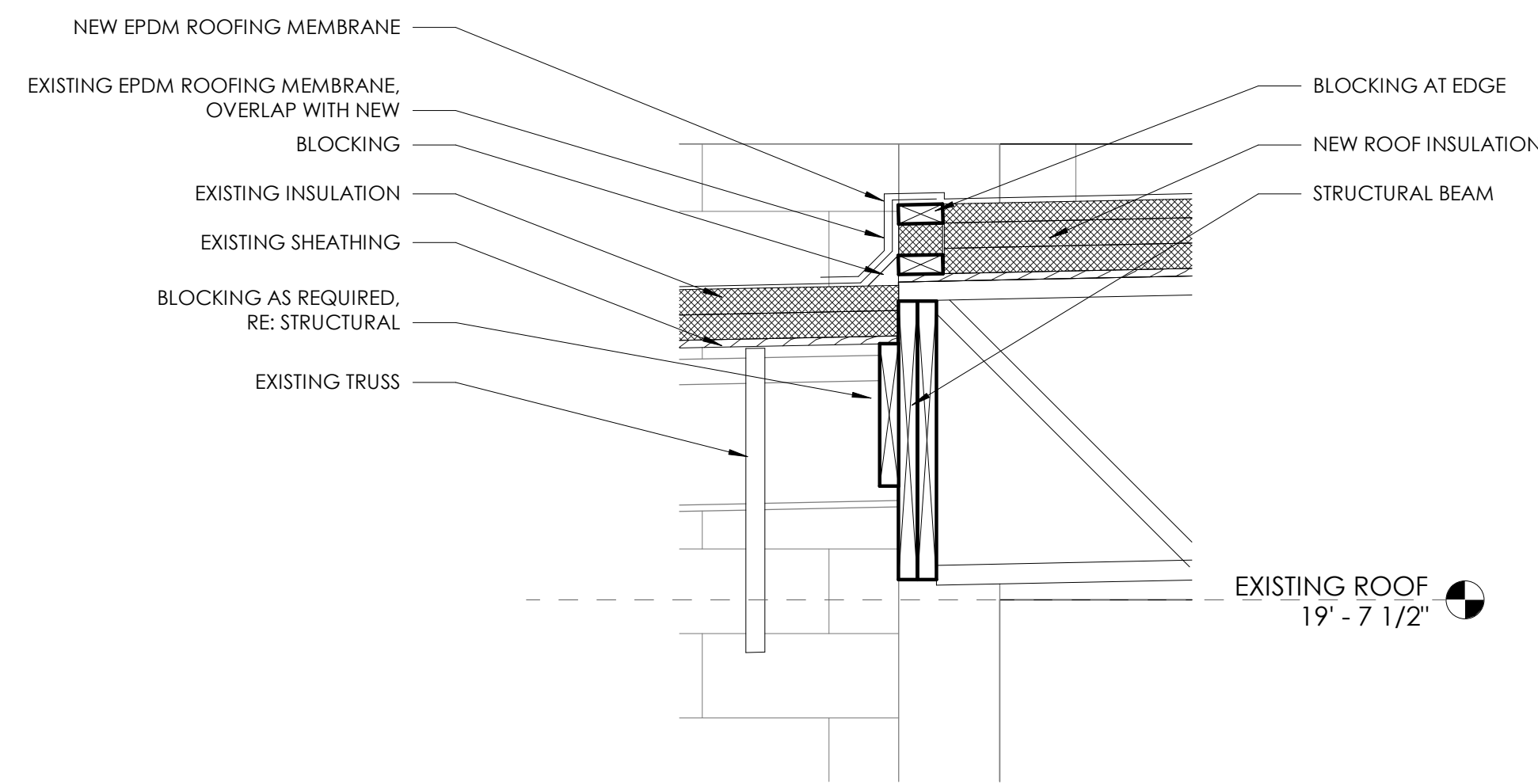
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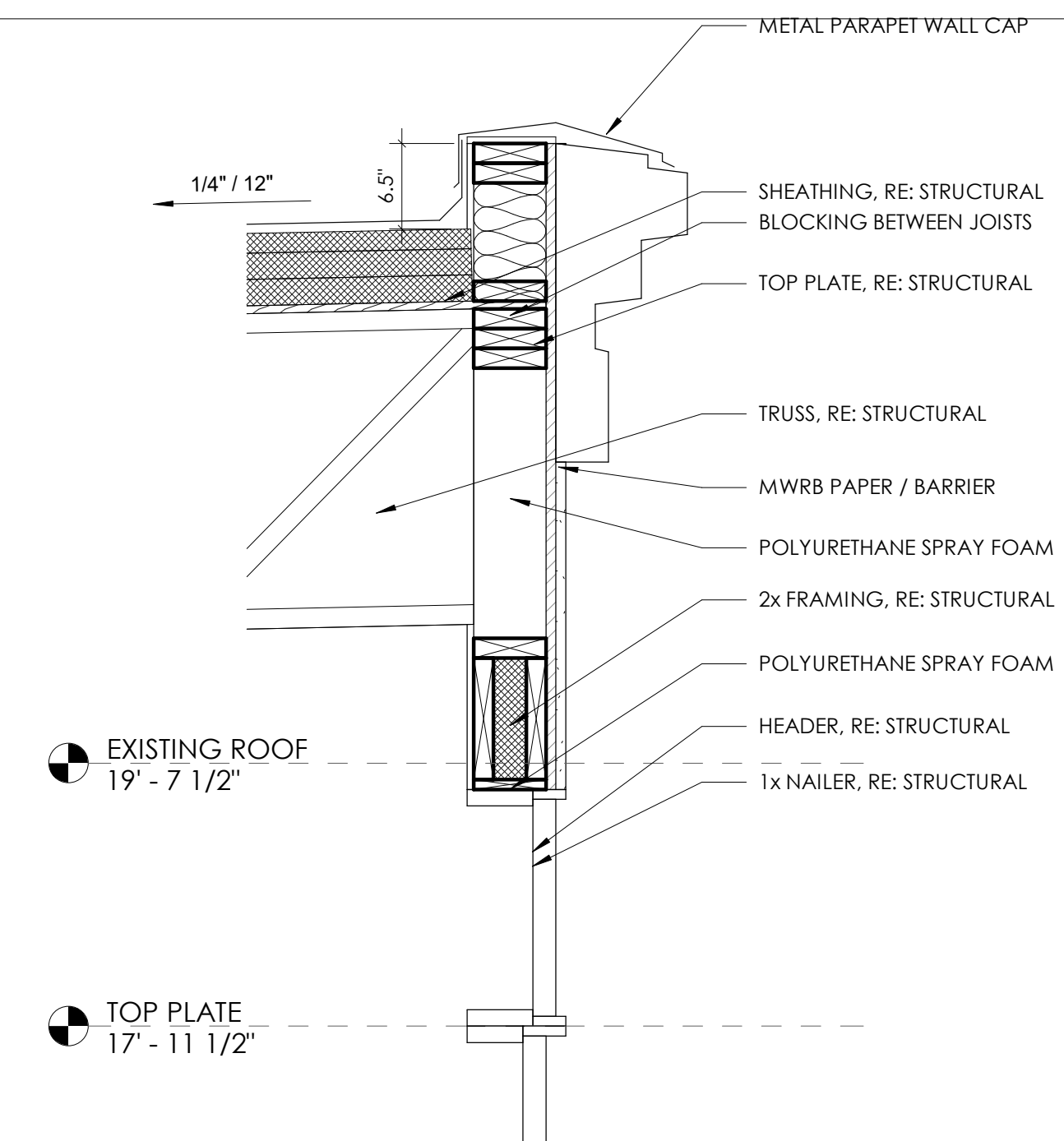
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NOT FOR  
CONSTRUCTION

NO.	DESCRIPTION	DATE

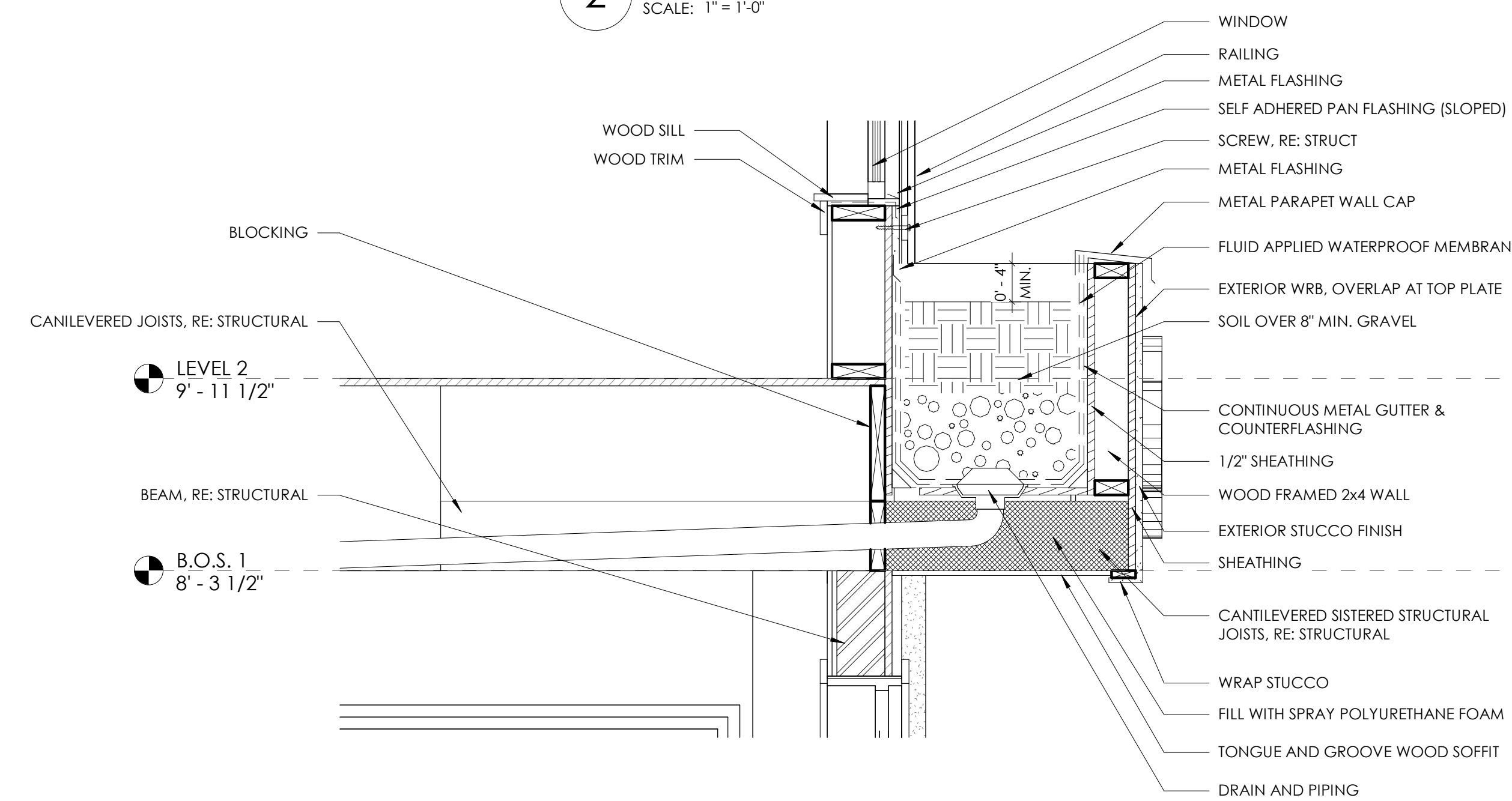
SECTIONS	
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Drawn by	MD
Checked by	MD
<b>A301</b>	
Scale	1/4" = 1'-0"



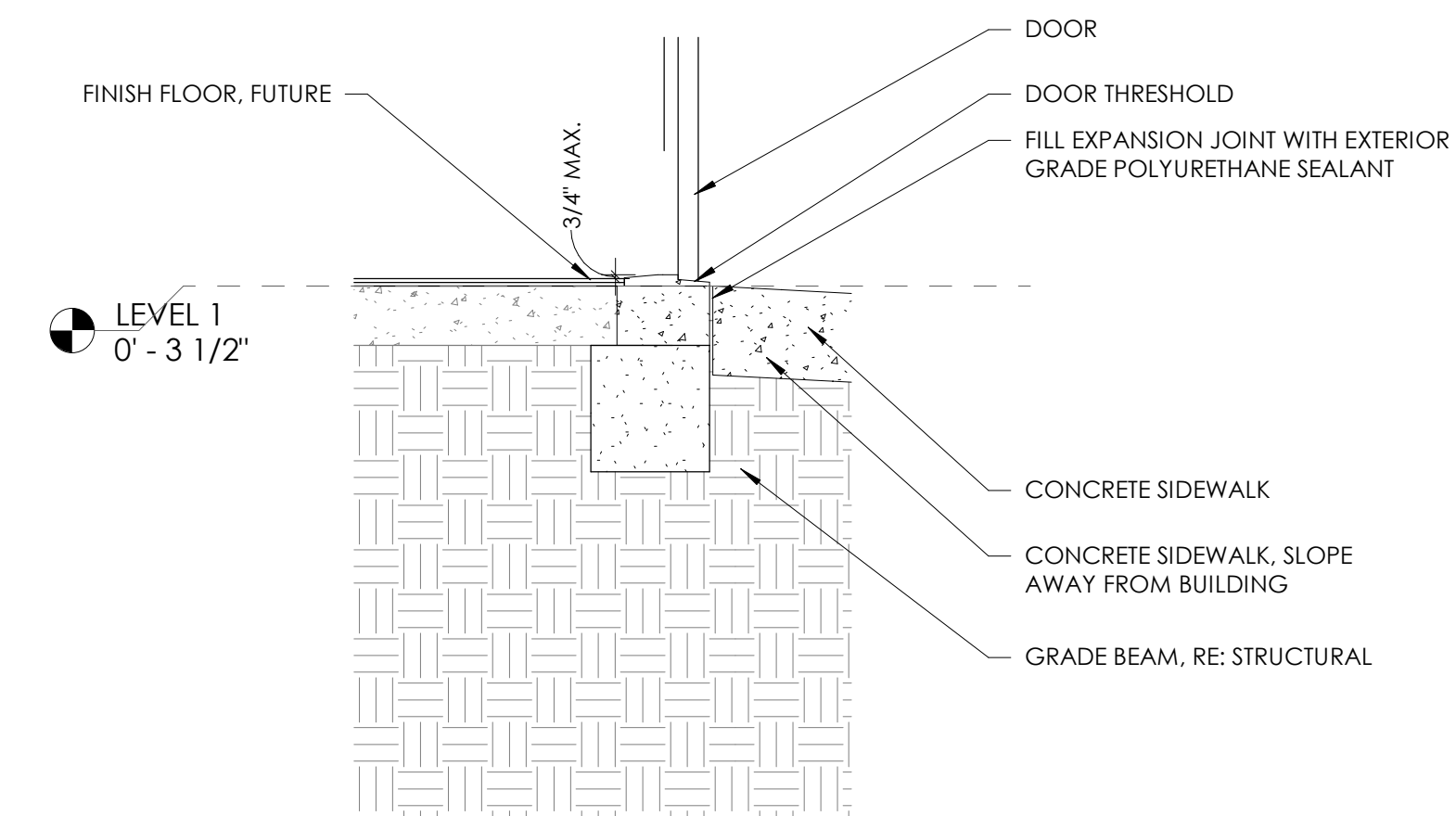
**1** ROOF CONNECTION DETAIL  
SCALE: 1" = 1'-0"



**2** ROOF FRONT CONNECTION DETAIL  
SCALE: 1" = 1'-0"



**3** FRONT OVERHANG CONNECTION DETAIL  
SCALE: 1" = 1'-0"



**4** FRONT FOUNDATION DETAIL  
SCALE: 1" = 1'-0"

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NOT FOR  
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DETAILS

Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>A302</b>	
Scale	1" = 1'-0"

**GROSS BUILDING AREA**

EXISTING	NAME	AREA
FIRST FLOOR		1538 SF
SECOND FLOOR		1438 SF
BASEMENT		440 SF
Grand total:	3	3416 SF



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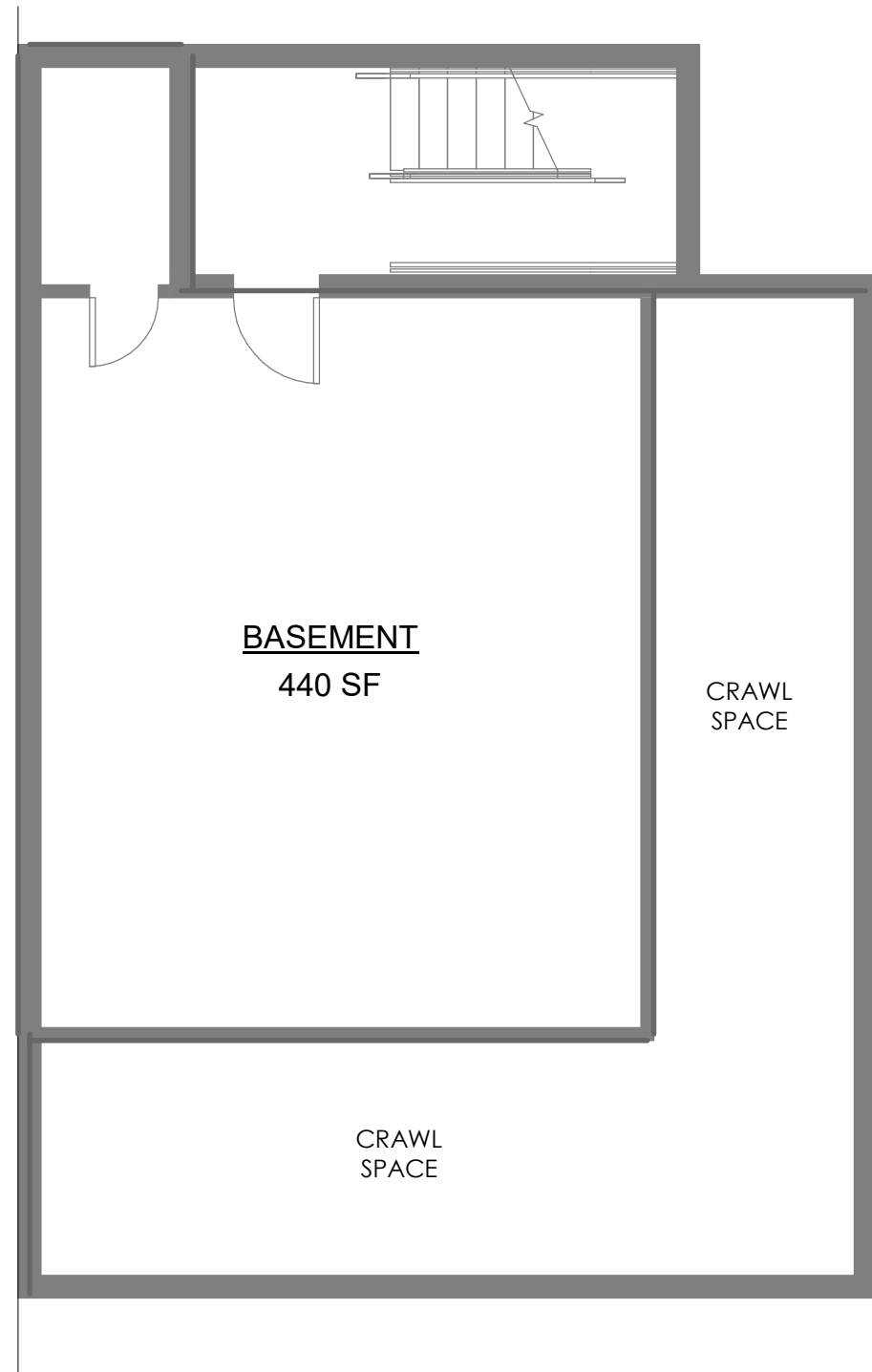
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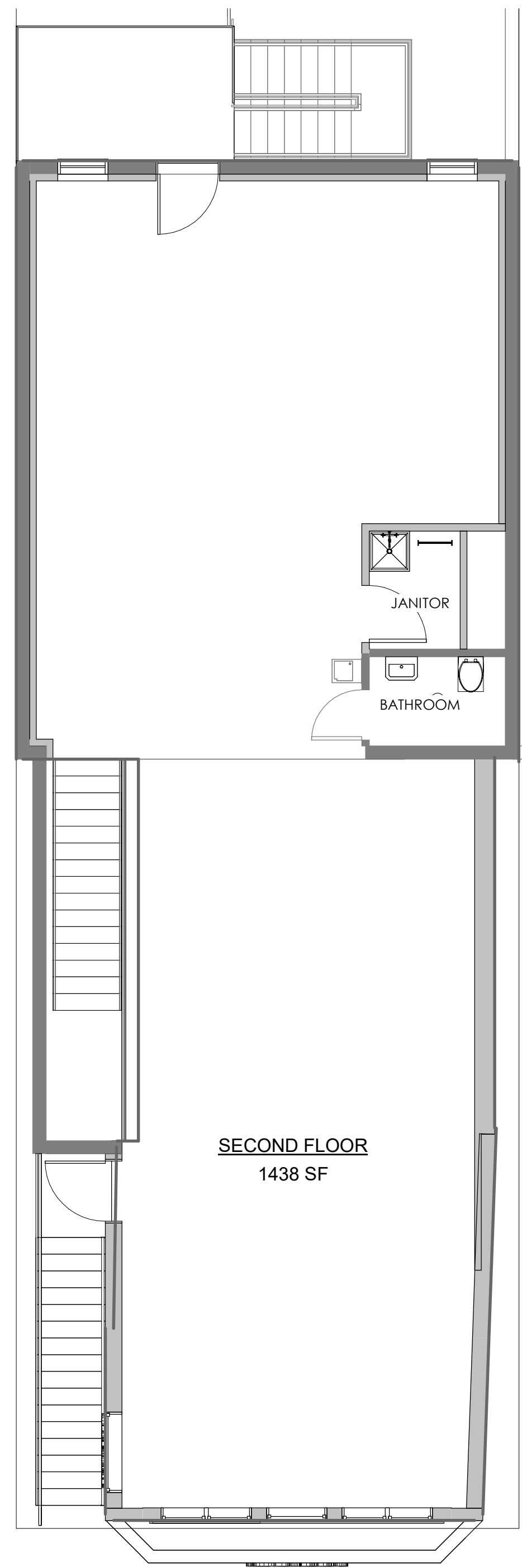
NO.	DESCRIPTION	DATE

**AREA PLAN & 3D VIEWS**

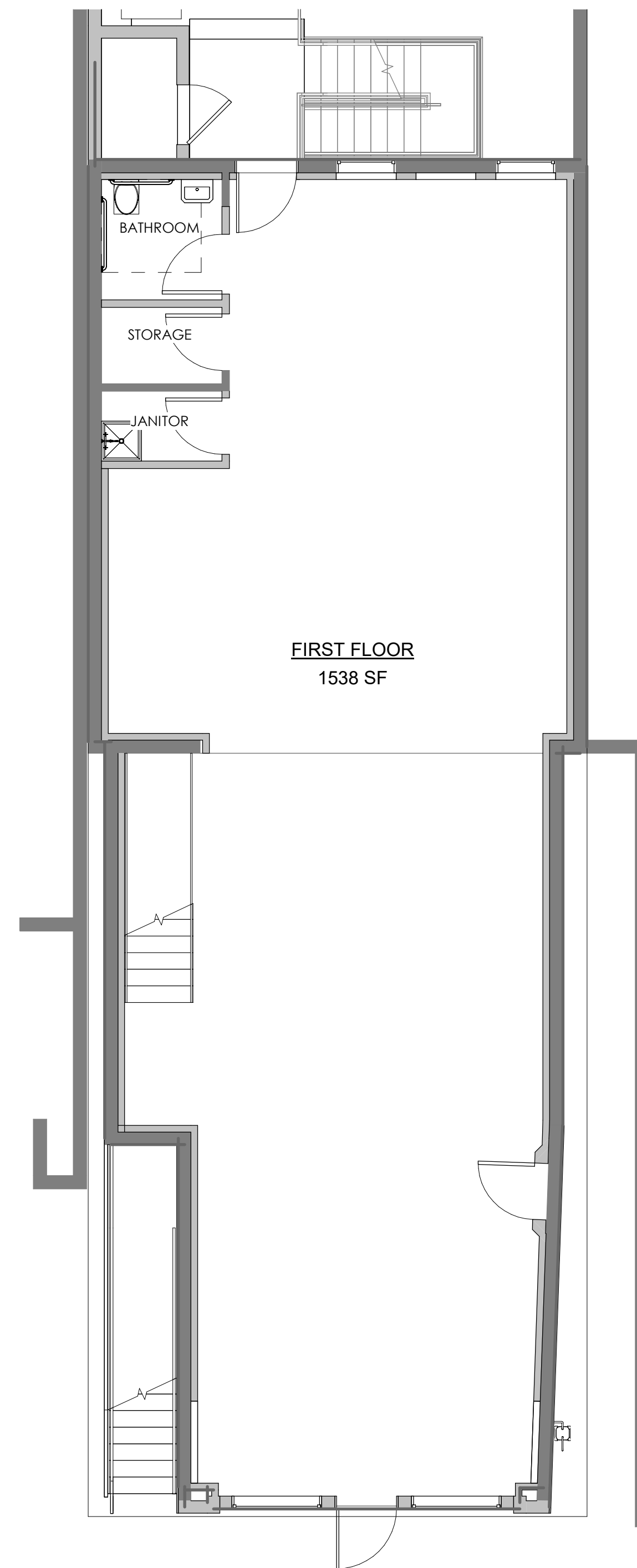
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Checked by	MD
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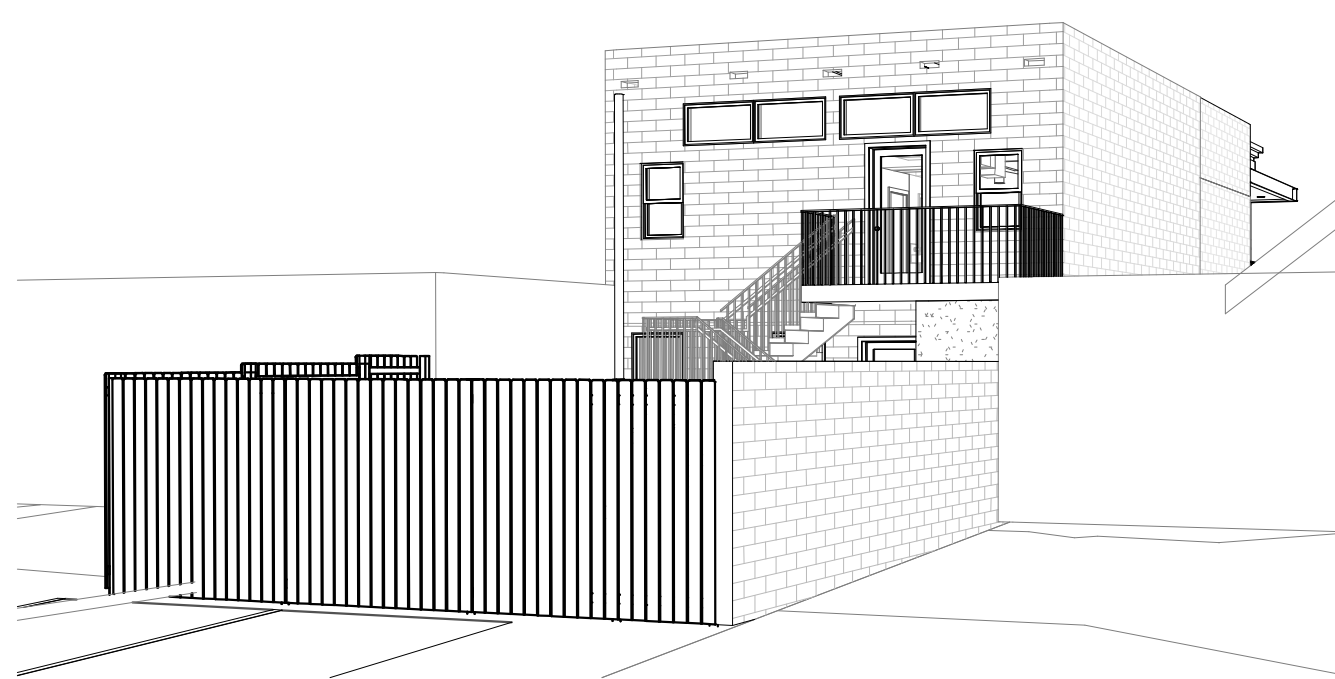
**3 AREA PLAN - BASEMENT**  
SCALE: 3/16" = 1'-0"



**2 AREA PLAN - LEVEL 2**  
SCALE: 3/16" = 1'-0"



**1 AREA PLAN - LEVEL 1**  
SCALE: 3/16" = 1'-0"



**B 3D SOUTHWEST**  
SCALE:



**A 3D NORTHEAST**  
SCALE:



# GENERAL STRUCTURAL NOTES

## DESIGN CRITERIA

The 2021 edition of the International Building Code (IBC) with the CITY OF DENVER (the **Authority Having Jurisdiction**) amendments (the **Building Code**), ASCE 7-16, and the 2021 NDS were followed by Knott Laboratory, LLC (the **Structural Engineer**) in the design of the completed project depicted on the structural plans, details, and notes (the **Structural Documents**). All materials and workmanship by the builder or general contractor (the **Contractor**), and any sub-contractors shall be in accordance with the applicable requirements of the Building Code and the Structural Documents.

ASCE 7 Occupancy Category: II
Use Group: CMU and Wood frame
Vertical Loads: Roof dead load = 15 psf total, Roof snow load = 30 psf (Pg = 35 psf), Floor dead load = 15 psf total, Roof live load = 100 psf
Horizontal Loads: WIND
Basic wind speed: 115 mph (Vult)
Exposure category: B
Importance factor, Iw: 1.0
SEISMIC
Acceleration Parameters
Short Period (g) (Ss & Sds) 0.214, 0.229
One Second (g) (S1 & S1d) 0.058, 0.093
Seismic importance factor: 1.0
Soil site class: D
Seismic design category: B

## HELICAL PIERS

- 1. Helical piers shall be manufactured by the A.B. Chance company or approved equal.
2. Helical piers shall be installed with an adequate size and quantity of helices to support the working loads designated on the drawings with a minimum safety factor of 2.0 based upon the type of soils to be encountered.
3. Helical piers shall be installed by a certified installer.
4. The helical load sections and extensions shall be solid-steel, rounded-corner, square-shaft configuration with one or more helical bearing plates welded to the shaft.
5. Helical piers shall be hot-dipped galvanized.

## CONSTRUCTION GENERAL NOTES

- 1. Material and workmanship shall be in accordance with the requirements of the Building Code.
2. The following general requirements for materials and workmanship apply unless noted otherwise on the Structural Documents or subsequent documents issued by the Structural Engineer.
3. Periodic construction observations by the Structural Engineer do not constitute "Special Inspections" nor do they necessarily meet the Authority Having Jurisdiction's requirements for inspections.
4. The Contractor shall be responsible for contacting the Structural Engineer to schedule site observation visits.
5. Product substitutions or changes to the Structural Documents must be approved by the Structural Engineer in writing.
6. The Contractor is responsible for the means, methods, techniques, sequences, and procedures of construction.
7. The Structural Engineer assumes no liability for jobsite safety.
8. The Structural Documents indicate the completed structure with the elements in their final position.
9. The structural drawings represent final conditions only.
10. Shop drawings shall be furnished to and reviewed by the Structural Engineer before any fabrication or erection is started.
11. Shop drawings submitted to the Structural Engineer are reviewed for general conformance with the structural design.
12. The Contractor shall coordinate with other trades (architectural, mechanical, electrical, etc.) for dimension verification and notify Structural Engineer of any discrepancies prior to construction.
13. Do not scale the Structural Documents for dimensions.
14. The Contractor shall verify all dimensions on the Structural Documents in the field.
15. The Contractor shall notify the Structural Engineer of omissions, conflicts, or discrepancies between the Structural Documents and the drawings for other trades or existing conditions.
16. The Contractor shall verify all openings in floors, roof, walls and beams with the individual trades and the Structural Engineer and coordinate the requirements for mechanical / electrical / plumbing / HVAC or other penetrations through structural members with the Structural Engineer.
17. Conditions not specifically shown on the Structural Documents shall be constructed in a manner similar to the details that are shown for like conditions.
18. The Structural Engineer assumes no liability for waterproofing or flashing requirements.
19. Do not place galvanized and non-galvanized metals in contact with one another.
20. The Contractor shall not cut, notch, or otherwise modify structural framing members or the foundation without the written consent of the Structural Engineer of Record.
21. Despite significant efforts to provide a complete and clear set of construction documents, discrepancies or omissions may occur.

## CONCRETE GENERAL NOTES

- 1. Concrete material and workmanship shall conform to the specifications of ACI's "Building Code Requirements for Structural Concrete" (ACI 318), latest edition, and the other applicable sections of the Building Code.
2. Concrete Mixtures
a. Foundations (footings, stem walls, and grade beams) shall be normal-weight concrete having a minimum 28-day compressive strength of 4,500 psi mixed with 3/4" aggregate, Type II Portland cement, less than 0.55 water-to-cement ratio, 5% to 7% air content, less than 0.3% water soluble chloride ion content, and less than 4-inch slump without plasticizer.
b. Interior Flatwork (slabs on grade and topping slabs) shall be normal-weight concrete having a minimum 28-day compressive strength of 4,000 psi mixed with 3/4" aggregate, Type I/II Portland cement, less than 1% water soluble chloride ion content.
c. Sitework (retaining walls, sidewalks, curb and gutter, pavement) shall be normal-weight concrete having a minimum 28-day compressive strength of 5,000 psi mixed with 3/4" aggregate, Type V Portland cement, less than 0.40 water-to-cement ratio, 5% to 8% air content, less than 0.15% water soluble chloride ion content, and less than 4-inch slump without plasticizer.
d. No fly ash additives may be used in flatwork or exterior concrete.
e. Calcium chloride or other chloride salts shall not be added to fresh concrete.

- 3. Concrete Placing
a. Cold weather concreting procedures shall be provided as recommended in the ACI "Standard Specification for Cold Weather Concrete" (ACI 306).
b. Mechanically vibrate freshly placed concrete.
c. Cast a closure pour around each steel column after the dead load of the structure is applied.
d. The Contractor shall not cast foundations, stem walls, or retaining walls against excavated vertical side surfaces without written approval of the Structural Engineer.
e. Concrete slabs on grade shall be bound by control joints (keyed or cut), as shown on the foundation plan and/or details, such that the enclosed area does not exceed 225 square feet and the spacing does not exceed 36 times the slab thickness.
f. Exposed site walls, retaining walls, and stem walls greater than 20-feet in length shall have control joints installed and spaced no greater than 20-feet on center or 3 times the wall height, whichever is less.
g. The contractor is responsible for determining when it is safe to remove formwork and shoring.
h. Removal of forms and shoring shall be in accordance with the ACI "Guide to Formwork for Concrete" (ACI 347).
i. Prior to concrete placement, the Contractor shall submit to the Structural Engineer the end of pour locations for concrete grade beams, concrete columns, and concrete beams.
j. No concrete shall be placed in an excavation containing water or on frozen ground.

- 4. Anchors in Concrete
a. Anchor rods for base plates and bearing plates shall be placed with setting templates.
b. Anchor rods embedded in concrete shall be ASTM F1554 Gr. 36 with a hooked end.
c. Anchor rods for wood sill plates shall be at least 1/2-inch-diameter steel bolts with at least 7-inches embedment into the concrete.
d. Expansion anchors and epoxy anchors installed in concrete shall be "Hilti" or "Simpson Strong-Tie" with at least the following embedment, spacing and edge distance:
i. 1/2" bolts = 2 1/2" embedment, 3" spacing, and 4" edge distance
ii. 5/8" bolts = 3" embedment, 3" spacing, and 4" edge distance
iii. 3/4" bolts = 4" embedment, 4" spacing, and 4" edge distance
iv. Expansion anchors for concrete shall be "Hilti" Kwik Bolt 3 or "Simpson" Titen HD anchors, "Redhead" Trubolt Anchors or other equivalent product pre-approved by the Structural Engineer of Record.
v. Epoxy anchors for concrete shall be "Hilti" HY-200 or "Simpson" SET XP High Strength Anchoring Adhesive or other equivalent product pre-approved by the Structural Engineer of Record.

## REINFORCING STEEL GENERAL NOTES

- 1. Detailing, fabrication, and placing of reinforcing steel shall be in accordance with ACI's "Building Code Requirements for Structural Concrete" (ACI 318), latest edition, and ACI's "Details and Detailing of Concrete Reinforcement" (ACI 315), latest edition, and the other applicable sections of the Building Code.
2. Reinforcing steel, shall conform to ASTM A615, Grade 60, unless noted otherwise.
3. Where welded reinforcement or deformed bar anchors are indicated on the Structural Documents, steel specifications and welding shall conform to "Structural Welding Code - Reinforcing Steel" (AWS D1.4, latest edition) by the American Welding Society.
4. Bar supports shall be provided in accordance with ACI 315, latest edition and be placed in proper location, and wired adequately at intersections to hold bars firmly in position while concrete is placed.
5. Bar supports and spacers which rest on or against exposed surface shall be hot dipped galvanized or plastic coated.
6. Form ties shall be either of the threaded or snap-off type so that no metal will be left within 1" of the surface of the wall.
7. See architectural, mechanical and electrical drawings for additional openings, depressions, curbs, floor finishes, inserts and other embedded items.
8. Slabs shall be reinforced with smooth welded wire fabric that conforms to ASTM A185.
9. Welded Wire Fabric (W.W.F.) shall conform to ASTM A185 and shall lap minimum of one full mesh plus 2 inches (6 inches minimum) at side and end laps and shall be securely wire together, unless otherwise shown.
10. Deck chairs shall be provided for all welded wire fabric in slabs over metal deck.
11. Reinforcing bar sizes shown are English designation.
12. Continuous bars shall lap and dowels shall project adequately to provide lap lengths as shown below unless shown otherwise on the Structural Documents.
13. Horizontal reinforcing bars shall be continuous at supports.
14. Extend reinforcing steel 30" minimum beyond cold joints.
15. Reinforce around openings and steps in concrete with (2) #5 bars minimum.
16. Reinforcing steel not be tack welded or welded in any manner unless specifically detailed on the structural plans.
17. Concrete coverage for reinforcing steel
a. Concrete cast against and permanently exposed to earth = 3"
b. Concrete exposed to earth or weather: #4 and smaller = 1.5"
c. Concrete exposed to earth or weather: #5 and larger = 2"
d. Concrete not exposed to earth or weather:
i. Slabs, walls, and joists = 1.5"
ii. Beams and columns = 3"
e. Typical minimum cover and spacing unless noted otherwise (in inches)
i. Bar Size #3 #4 #5 #6 #7 #8 #9 #10 #11
ii. Minimum cover 1.5 1.5 2 2 2.5 2.5 3 3.5 3.5
iii. Minimum spacing 2 2.5 3 4 4.5 5 6 6.5 7
18. Reinforcing bars shall be in physical contact at splices.
19. Reinforcing bars shall be in physical contact at splices.
20. Reinforcing bars shall be in physical contact at splices.

## TIMBER GENERAL NOTES

- 1. Sawn Lumber
a. Sawn lumber for structural framing shall conform to the NFPA's "National Design Specification for Wood Construction" (NDS) latest edition and shall comply with the grading rules of the Western Wood Products Association (WWPA), the West Coast Lumber Inspection Bureau (WCLIB), or the Southern Pine Inspection Bureau (SPIB).
b. Sawn lumber products shall bear the grade stamp of an approved lumber grading agency.
c. Wood framing members in contact with concrete shall be pressure treated Hem-Fir (HF) #2 grade (per NDS) or better.
d. 2x, 3x, and 4x framing lumber shall be Hem Fir (HF) #2 grade or better.
e. 6x and larger framing members, including beams and posts, shall be Douglas Fir-Larch (DF-L)#1 Grade or better.
2. Glue Laminated Beams (GLB)
a. Glue Laminated lumber for structural framing shall conform to the NFPA's "National Design Specification for Wood Construction", (NDS) latest edition.
b. Simple-span Glue Laminated members shall be Douglas Fir 24F-V4 1.8E at interior locations, and Alaskan Yellow Cedar 20F-V12 1.5E at exterior locations.
c. Glue laminated structural beams that are continuous over one or more supports shall be Doug Fir 24F-V8 1.8E at interior locations, and Alaskan Yellow Cedar 20F-V13 1.5E at exterior locations.
d. Adhesives for glue laminated structural framing members shall meet the requirements for the conditions of service.
3. Engineered lumber
a. Joists and Laminated Veneer Lumber (LVL) shall be manufactured by Weyerhaeuser Products or equivalent.
b. Unless noted otherwise, "LVL" refers to Weyerhaeuser's "Microlam 2.0E" 2900Fb product.
c. Unless noted otherwise, "PSL" refers to Weyerhaeuser's "Parallam 2.0E" 2900Fb product.
d. Equivalent substitutions may be utilized with Structural Engineer's approval.
e. Engineered lumber products shall be manufactured, shipped, stored, handled, and installed per the manufacturer's recommendations.
f. LVL members shall be separated from contact with concrete by a waterproof membrane or pressure treated wood.
g. Provide joist blocking, web stiffeners, filler blocks, backer blocks, rim boards, and rim blocking per the manufacturer's recommendations.

- 4. Pre-engineered wood trusses
a. Pre-engineered wood trusses shall be designed and manufactured by truss professionals in accordance with the "National Design Standard for Metal Plate Connected Wood Truss Construction" published by the Truss Plate Institute and the NFPA's "National Design Specification for Wood Construction" (NDS) latest edition.
b. Trusses shall be shipped, stored, handled, and installed per the manufacturer's recommendations.

- c. Truss shop drawings and keyed layout drawings (Truss Drawings) shall be provided to the Structural Engineer of Record for coordinating review.
d. The Contractor shall provide blocking at truss bearing locations and bridging/bracing as required for truss stability.
e. Wood structural panels for wall, floor, and roof sheathing may be nailed or screwed to supporting framing members in accordance with the Building Code, Structural Documents, and as noted herein.
a. Panels to be continuous over two or more spans.
b. Sheathing panels shall be identified with the appropriate trademark of the American Plywood Association and shall meet the requirements of U.S. Product Standard PS1-07 or APA PRP-108 performance standards, latest edition.
c. Exterior wall sheathing shall be 7/16" thick APA rated plywood or OSB, Exposure 1, Structural 32/16 span rating, attached to the exterior face of framing with 8d nails (2" long) at 6" o.c. along panel edges and at 12" o.c. to intermediate supports.
d. Floor sheathing shall be 23/32" APA rated, Exposure 1, Structural plywood or OSB sheathing with a minimum 48/24 span rating.
e. Roof sheathing shall be 19/32" APA rated, Exposure 1, Structural plywood or OSB sheathing with a minimum 40/20 span rating.
f. Roof sheathing shall be 19/32" APA rated, Exposure 1, Structural plywood or OSB sheathing with a minimum 40/20 span rating.
g. Roof sheathing shall be 19/32" APA rated, Exposure 1, Structural plywood or OSB sheathing with a minimum 40/20 span rating.
h. Roof sheathing shall be 19/32" APA rated, Exposure 1, Structural plywood or OSB sheathing with a minimum 40/20 span rating.
i. Roof sheathing shall be 19/32" APA rated, Exposure 1, Structural plywood or OSB sheathing with a minimum 40/20 span rating.
6. Exterior walls not noted otherwise
a. Exterior walls shall be 2x6 studs @ 16" o.c. up to a maximum height of 12'-6", 2x6 studs @ 12" o.c. up to a maximum height of 14'-6", and (2) 2x6 studs @ 12" o.c. up to a maximum height of 18'-0".
b. Walls taller than 18'-0" shall be engineered lumber.
c. Provide (2) 2x6 top plates and overlap at corners and intersecting walls.
d. Minimum header size for window and door openings is (3) 2x10 with (1) 2x6 king stud unless noted otherwise.
e. Roof and floor framing members shall be aligned to bear within 5" of the studs beneath.
f. Gable end walls shall be balloon framed to underside of rafters and outriggers.

- 7. Interior load bearing walls not noted otherwise
a. Interior load-bearing walls shall be 2x4 or 2x6 studs at 16" o.c. - see plan for wall width.
b. Provide 5/8" gypsum wallboard at each face of framing and attach with #8 x 1-1/8" drywall screws at 7" o.c. along panel edges and at intermediate framing members.
c. Provide double 2x top plate as required for exterior walls.
c. Align framing members with studs and provide headers, trim studs, and king studs as required for exterior walls.
8. Built-up Wood Framing Members
a. Built-up posts and stud-packs shall consist of individual studs nailed together with (2) rows of 16d nails @ 8" o.c. along each stud.
b. Built-up beams shall consist of individual members nailed together with (2) rows of 16d nails @ 12" on center or bolted together with (2) rows of 1/2-inch diameter bolts spaced at 24-inches on center.

- 9. Wood Blocking
a. Provide solid blocking or framing below posts, stud-packs, and beam bearing locations continuously down to foundation or transfer beams indicated on the plans.
b. Powder driven fasteners shall have a 0.145 inch shaft diameter and be equivalent to Hilti's ENP deck fasteners unless noted otherwise.
c. Nail plates installed over concrete walls or over steel beams shall be ripped to match the width of the covered surface.
10. Wood Framing Exposed to Weather, Concrete, etc
a. Wood used for exposed exterior applications shall be moisture sealed unless a naturally decay resistant species such as Cedar or Redwood is used.
b. A coat of end sealer shall be applied to the ends of exposed members as soon as practicable after end trimming, unless otherwise noted.
c. Wood beams bearing in a beam pocket at concrete walls shall bear on a pressure treated 2x6 bearing block.
d. Engineered lumber products installed in unprotected exterior or wet-service applications and/or in contact with concrete, masonry, or ground shall be treated with an appropriate preservative in accordance with the manufacturer's recommendations.
e. Fasteners and connectors in contact with preservative treated lumber or in contact with concrete, masonry, or ground shall be stainless steel (Type 304 or 316) or hot-dip galvanized (per ASTM A153 for fasteners and ASTM A653 Class G185 for connectors).

- 11. Structural Wood Framing Connections
a. Minimum nailing schedules shall be per IBC Table 2304.10.1 [IRC Table R602.3.1], as applicable.
b. Bolts used for wood framing connections shall be ASTM A307 and include standard washers and nuts.
c. Framing connectors manufactured by Simpson Strong-Tie or USP Structural Connectors shall be attached using standard fasteners in each of the manufacturer's recommended locations.
d. Hurricane clips with a minimum 350-lb capacity shall be installed per the manufacturer's specifications at each rafter at each bearing location.
12. Fastener Installation at Structural Wood Framing
a. Wood members that split, check, or crack as a result of fastener insertion must be replaced.
b. Drilled holes for bolts shall be 1/32" to 1/16" larger than the bolt diameter.
c. Drilled holes for the threaded portion of lag screws shall be 40-70 percent of the threaded lag screw diameter.
d. The threaded portion of the lag screws shall be inserted in its lead hole by turning with a wrench, not by driving with a hammer.
e. Soap or other lubricant shall be used on lag screws or in the lead hole to facilitate insertion and prevent damage to the screw.

## STRUCTURAL AND MISCELLANEOUS STEEL

- 1. Structural steel shall be detailed, fabricated, and erected in accordance with AISC's "Specification for Structural Steel Buildings" (AISC 360), latest edition, and AISC's "Code of Standard Practice for Steel Buildings and BEPOSED DF#1 RIDGE (STEELBEAM OPTIONAL)" (AISC 303), latest edition, and the other applicable sections of the Building Code.
2. ASTM steel shall receive one shop coat of Thematic "series 10 (99) Red" primer or equivalent.
3. ASTM Specifications for Structural Steel Shapes
a. Structural steel W shapes shall conform to the ASTM designation A992 or ASTM A572 Grade 50 unless noted otherwise.
b. Structural steel angles (L), plates (PL), bars, and channels (C and MC), shall conform to ASTM A36 unless noted otherwise.
c. Round hollow structural steel (HSS) sections shall conform to ASTM A500 Grade B, Fy=42ksi unless noted otherwise.
d. Square and rectangular hollow structural sections (HSS) shall conform to ASTM A500 Grade B, Fy=46ksi unless noted otherwise.
4. Bolted Connections
a. Bolted connections of structural steel to structural steel shall conform to AISC and RCSC's "Specification for Structural Joints using ASTM A325 or A490 bolts", latest edition.
b. Bolts shall be long enough to extend through the connected parts and nut with at least 2 threads showing.
c. Field connections of structural steel to structural steel shall be made with 3/4-inch Type 1 ASTM A325 bolts, unless noted otherwise.
d. Shop connections of structural steel members shall be welded or bolted with 3/4-inch diameter A325 Type 1 "Slip Critical" bolts.
e. Fasteners noted as "Slip Critical" shall be "Load Indicator Bolts" as manufactured by Lohr, Le Jeune, Bethlehem Steel, or approved equal and tightened per the manufacturer's specification.
f. Faying surfaces at "Slip Critical" bolted connections shall be prepared as Class A slip resistant.
5. Welded Connections
a. Equivalent welded connections may be substituted for bolted connections subject to the Structural Engineer of Record's approval.
b. Structural welding shall be done by certified welding operators and shall conform to AWS "Structural Welding Code" (AWS D1.1), latest edition.
c. Structural welding shall be performed with AWS A5.1 or A5.5 E70 X8 electrodes.
d. Weld sizes not otherwise shown shall be continuous fillet welds, 1/4-inch or equal to the thickness of the thinner material minus 1/16-inch, whichever is less.
e. Areas within 2 inches of field welds shall not be painted until after welding.
6. Connection Detailing
a. Structural steel beam connections not shown on the Structural Documents shall be designed by the steel fabricator in accordance with Table 10-1 or Table 10-2 or Table 10-4 of AISC's "Steel Construction Manual", latest edition.
7. Column Baseplates
a. Column baseplates shall have 1-1/2-inch groud pad with at least four 3/4-inch diameter anchors unless noted otherwise.
b. Groud beneath steel baseplates shall be non-shrink, non-metallic, with a minimum compressive strength of 6,000psi.

- 1. Structural steel deck shall be fabricated and erected in accordance with Steel Deck Institute (SDI) specifications, latest edition.
2. Refer to the framing plan's of steel deck gage, finish, and connection schedule.
3. Provide a minimum of 1 1/2" bearing for all steel deck.
4. All splices and laps shall be a minimum of 2" and shall be located directly above supports.
5. Decking shall be continuous over two or more spans.
6. Powder driven fasteners shall have a 0.145 inch shaft diameter and be equivalent to Hilti's ENP deck fasteners unless noted otherwise.

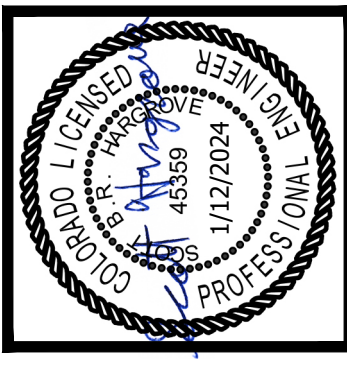
## STEEL DECK

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Table with 4 columns: ABBREVIATIONS, EXP., MECH., and others. Contains various abbreviations and their meanings for structural engineering.

SCOPE: KNOTT LABORATORY, LLC (KNOTT) WAS RETAINED BY LIN MERAGE OF 1863 PEARL, LLC TO DESIGN STRUCTURAL AS-BUILTS AND TO DESIGN STRUCTURAL COMPONENTS FOR A REMODEL AND ADDITION BASED ON ARCHITECTURAL PLANS FROM DAKE COLLABORATIVE DATED: 12/07/2023

Table with 2 columns: SHEET NO. and INDEX OF SHEETS. Lists sheet numbers and their corresponding titles.



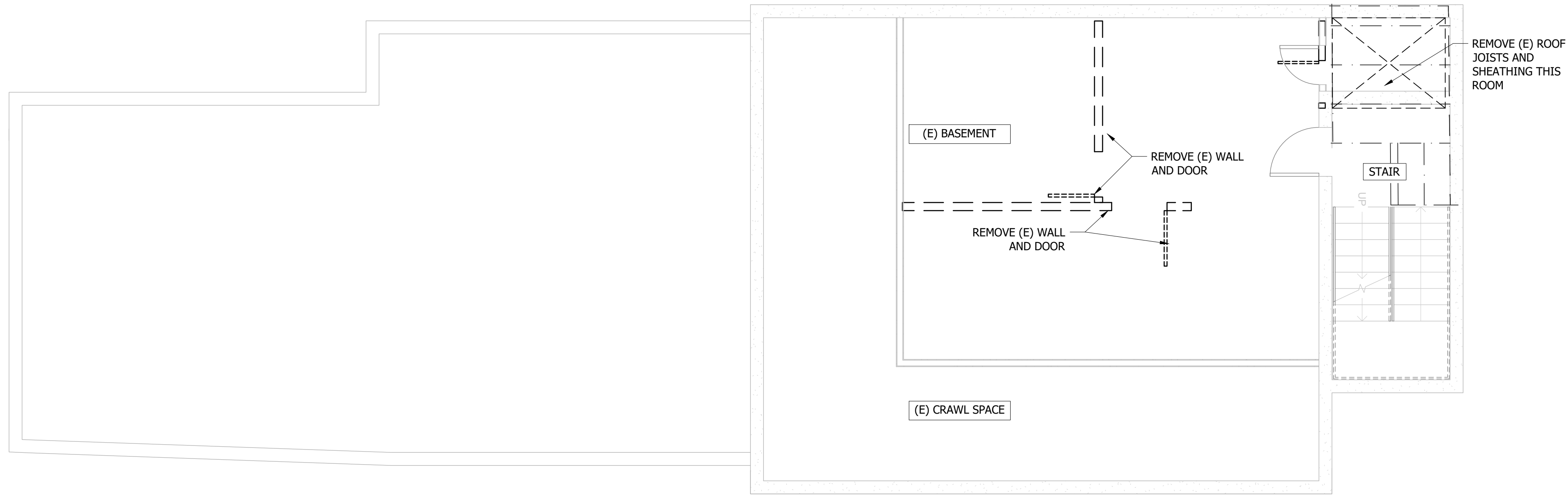
RENOVATION OF EXISTING BUILDING
1863 SOUTH PEARL STREET
DENVER, COLORADO 80210
GENERAL NOTES

Table with 4 columns: FILE NAME, SCALE, DRAWN, DESIGNED, REVIEWED, DATE, AS NOTED, DES, SBH, SBH, PERMIT SET, DATE, DATE, DATE, DATE, DATE, DATE.

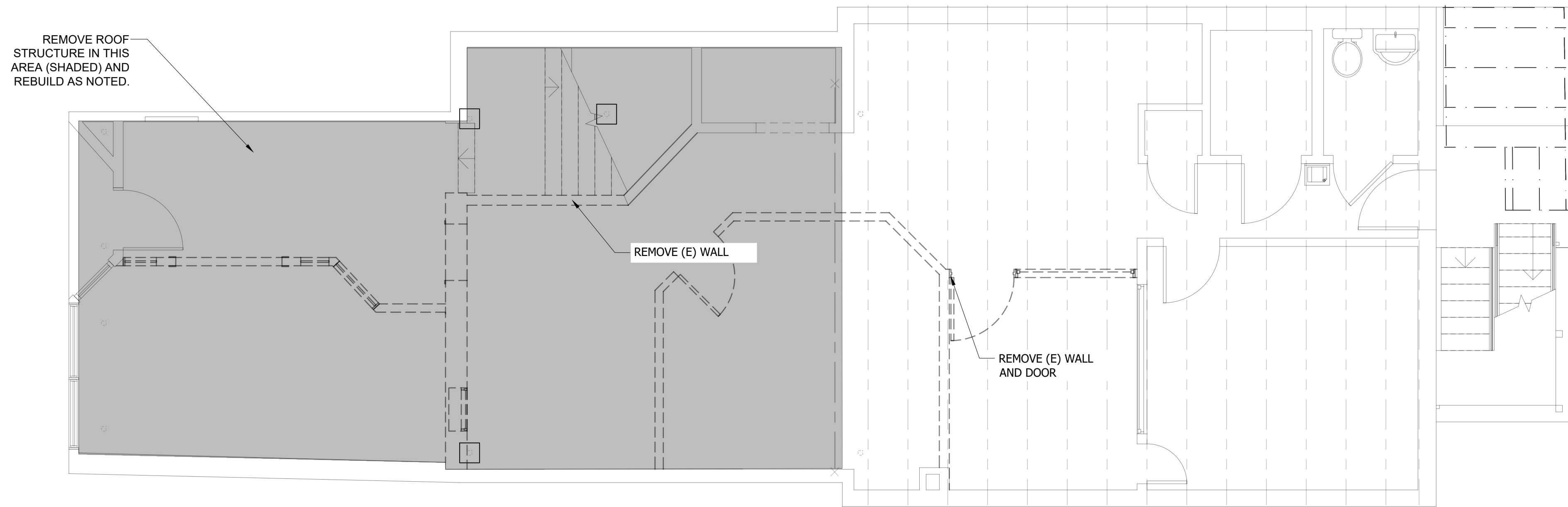
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S0.0 SHEET 1 OF 8

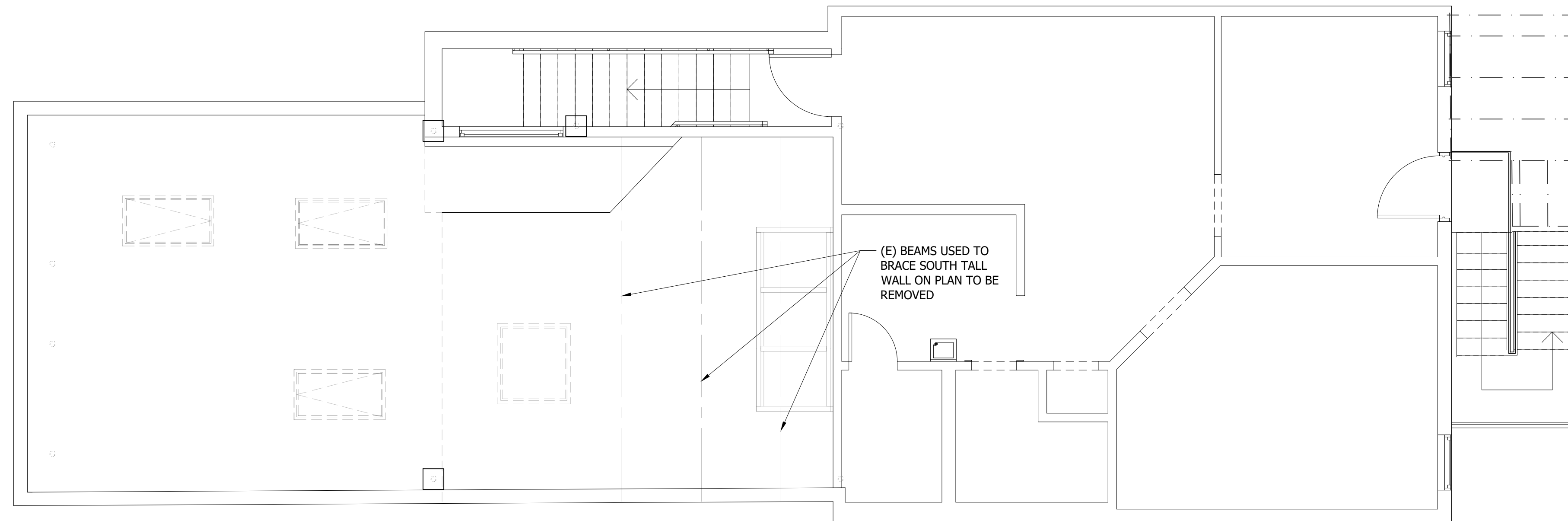




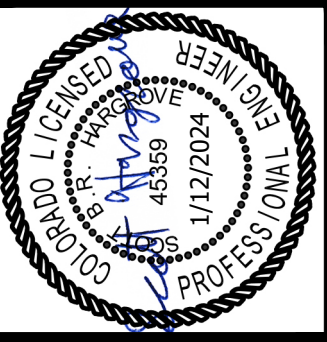
**BASEMENT DEMOLITION PLAN**  
SCALE: 1/4" = 1'-0"



**LOWER ROOF / UPPER FLOOR DEMOLITION PLAN**  
SCALE: 1/4" = 1'-0"

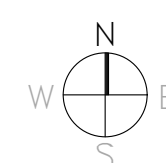
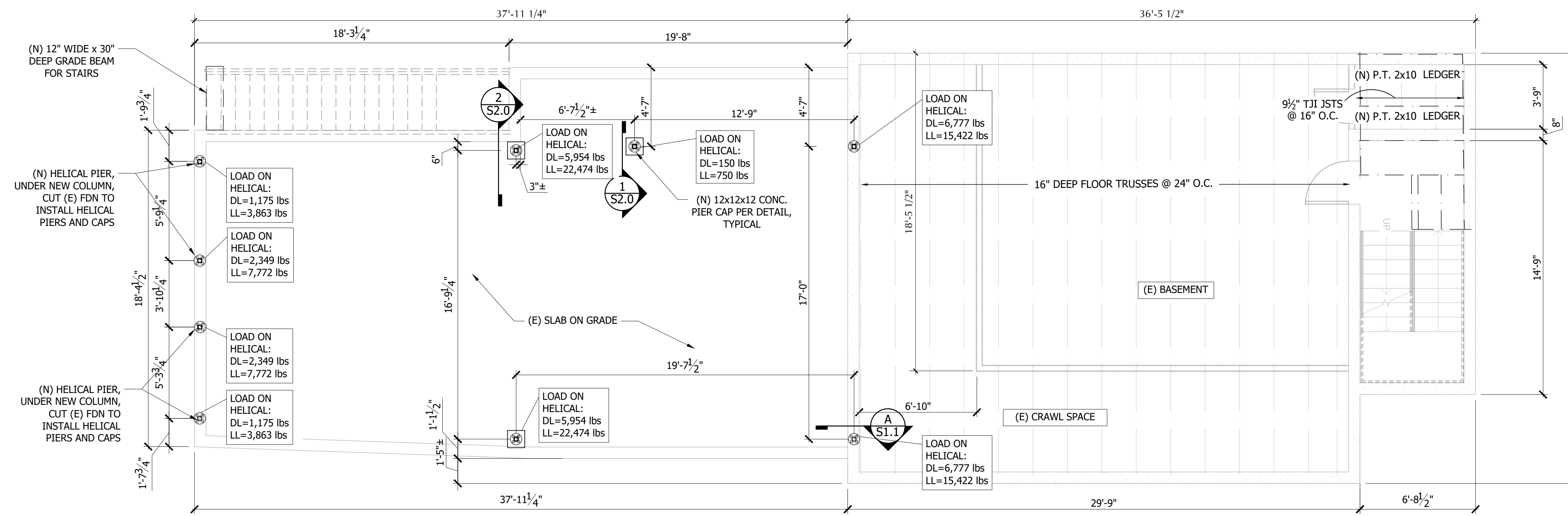


**ROOF DEMOLITION PLAN**  
SCALE: 1/4" = 1'-0"



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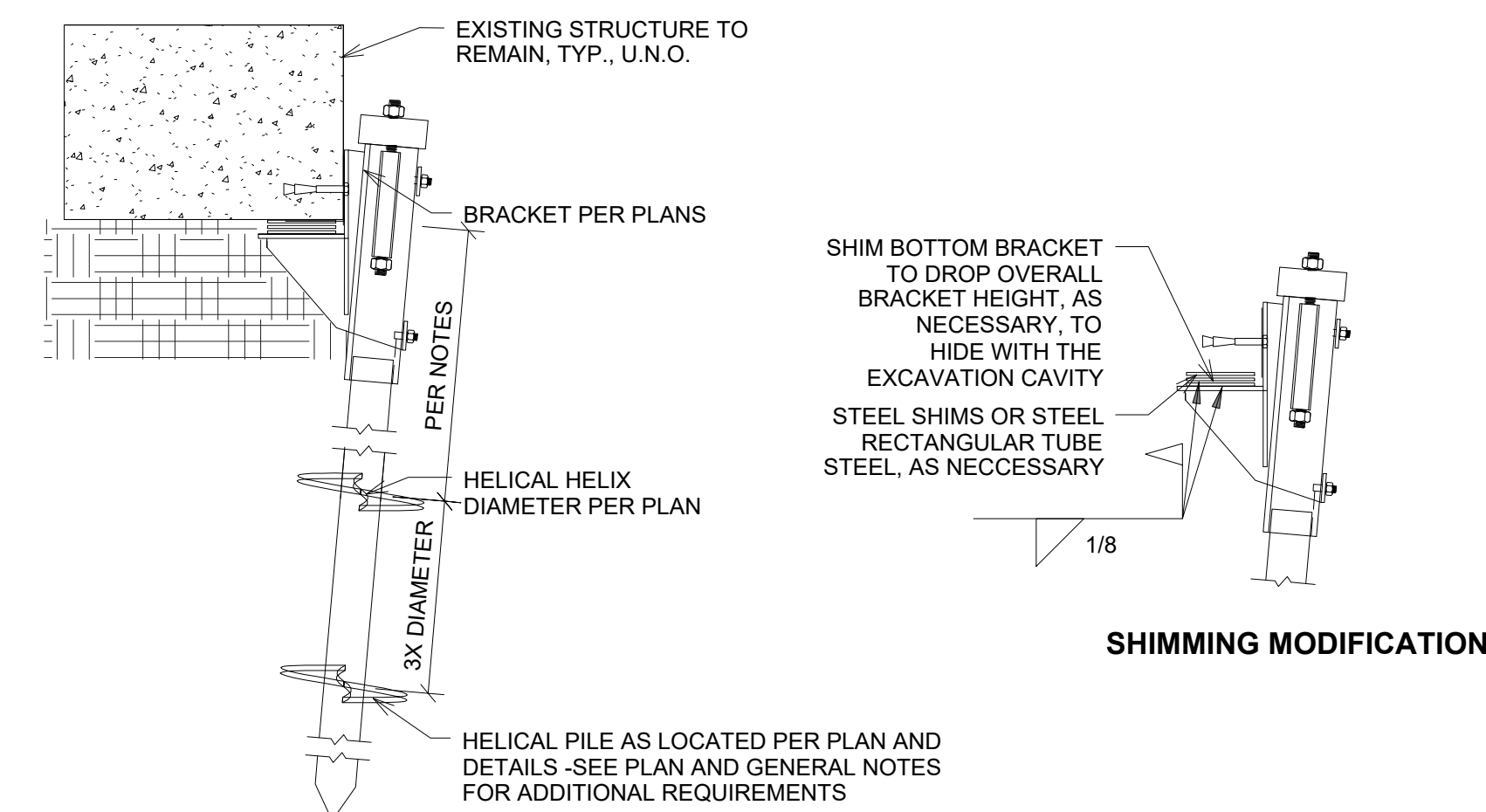
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## NEW FOUNDATION MAIN FLOOR FRAMING PLAN

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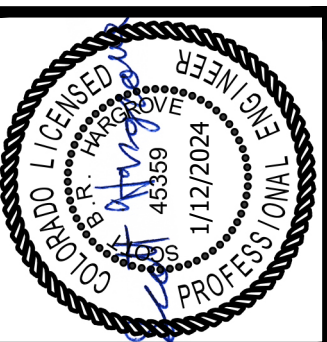
- SEE GENERAL NOTES FOR TYPICAL CONNECTION AND FRAMING INFORMATION UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE APPROXIMATE - CONTRACTOR TO VERIFY IN FIELD PRIOR TO FABRICATION AND/OR INSTALLATION OF NEW MATERIALS.



HELICAL PIER AT UNDERPINNING DETAIL

N.T.S.

(A)



RENOVATION OF EXISTING BUILDING  
1863 SOUTH PEARL STREET  
DENVER, COLORADO 80210

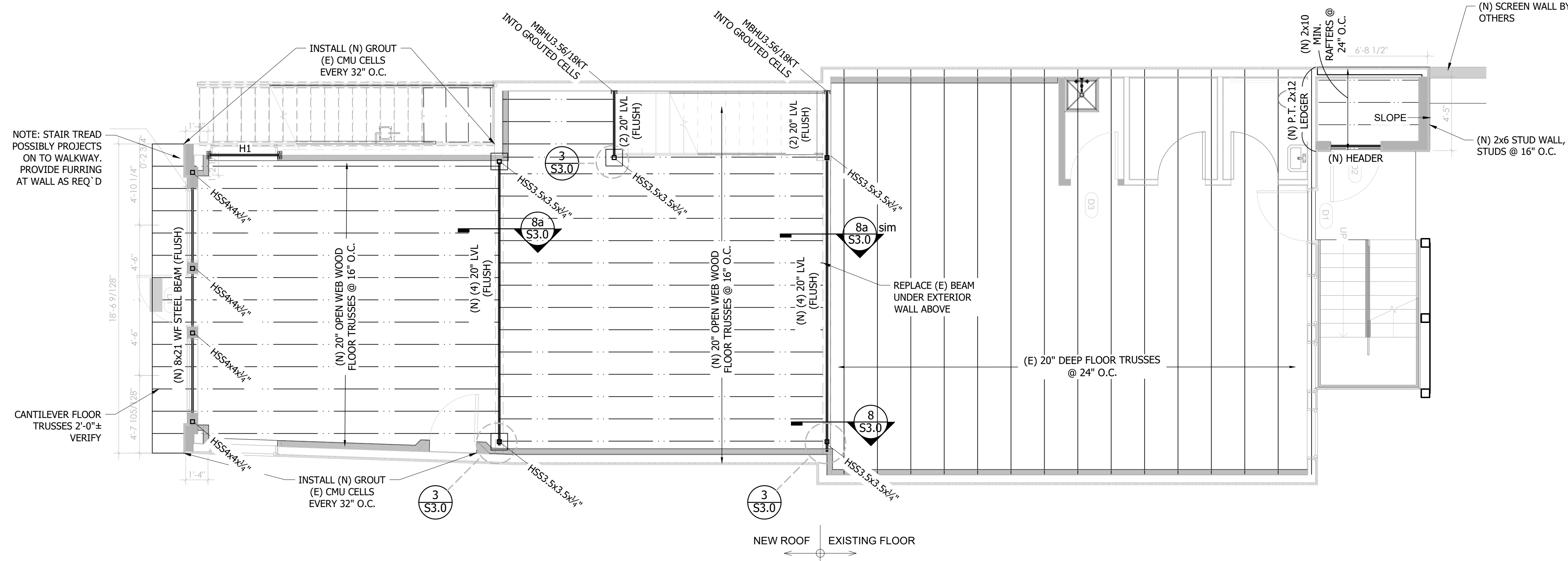
## NEW FOUNDATION PLAN

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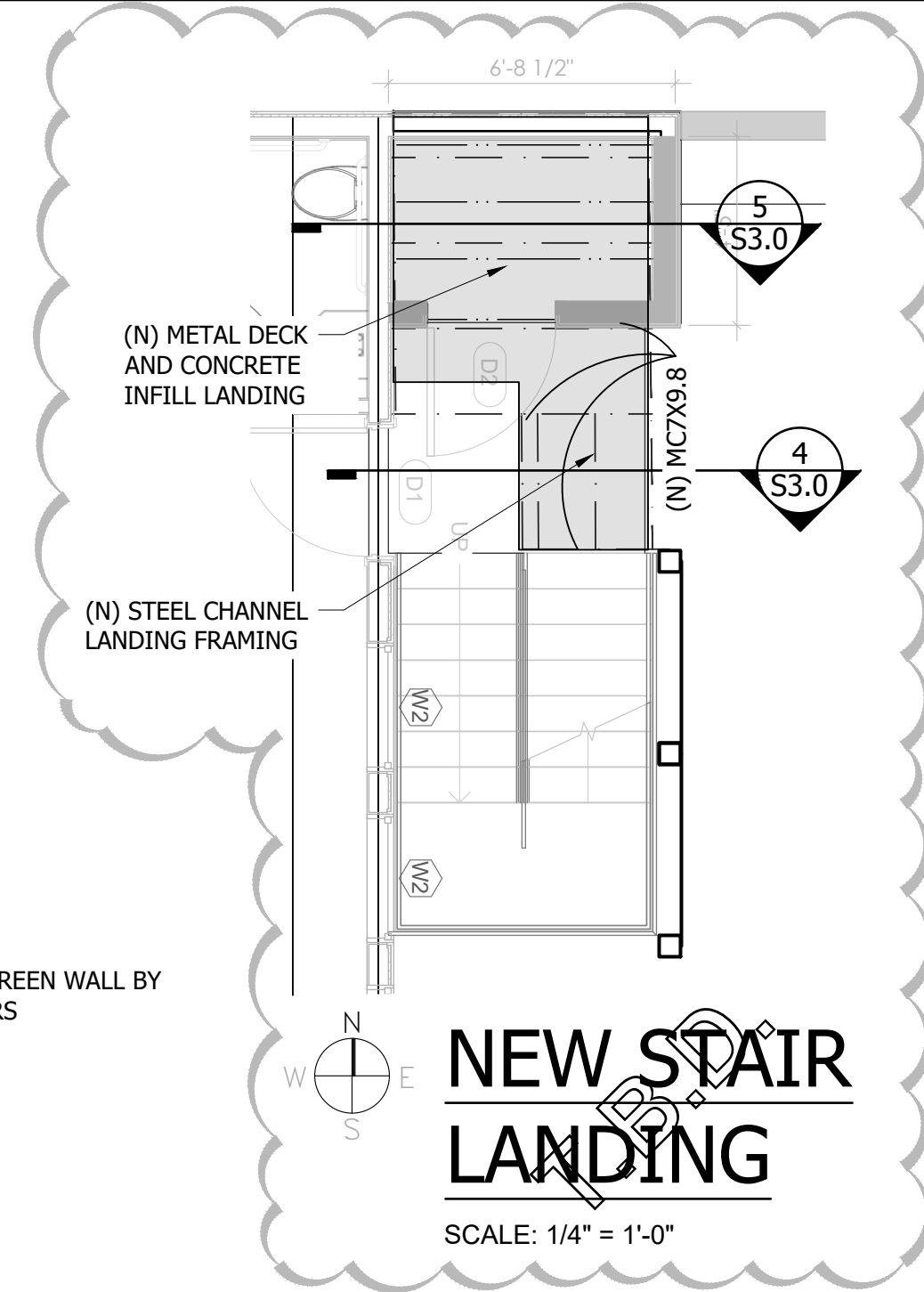
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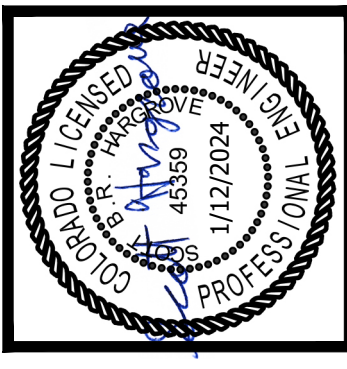
SHEET 3 OF 8



**UPPER FLOOR FRAMING**  
SCALE: 1/4" = 1'-0"



**NEW STAIR LANDING**  
SCALE: 1/4" = 1'-0"



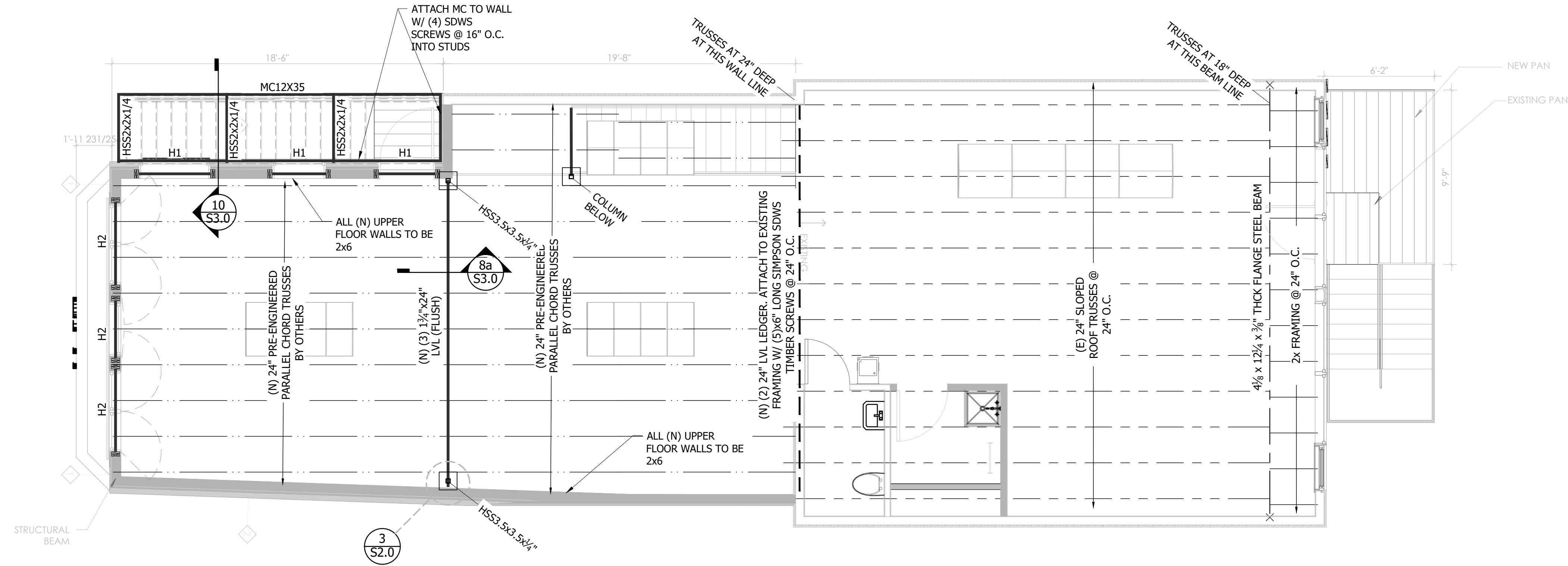
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1863 SOUTH PEARL STREET  
DENVER, COLORADO 80210

**UPPER FLOOR FRAMING**

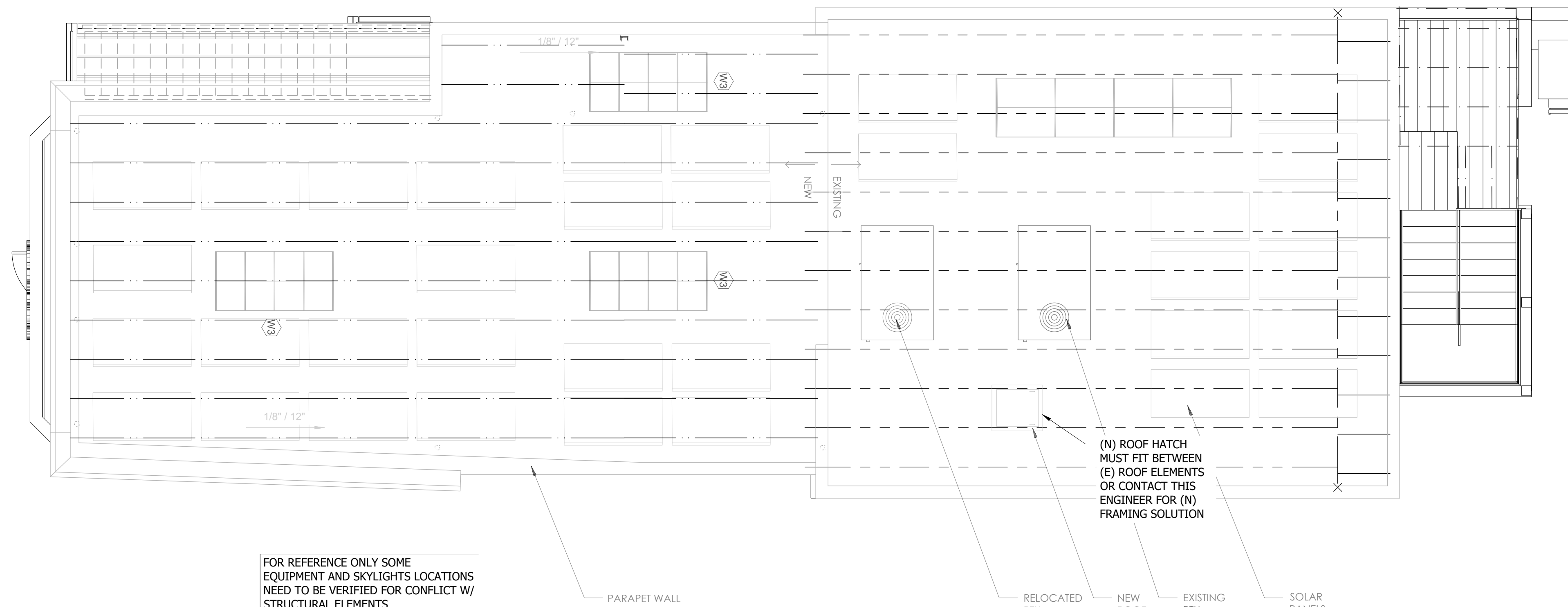
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**NEW UPPER ROOF FRAMING**  
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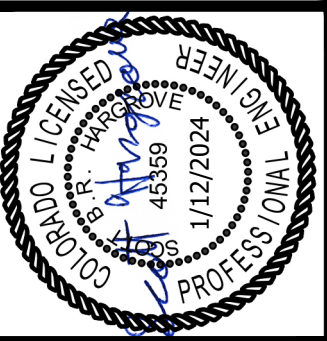


**NEW ROOF EQUIPMENT PLAN**  
SCALE: 1/4" = 1'-0"

HEADER SCHEDULE			
HEADER CALLOUT	QUANTITY AND SIZE	MATERIAL	TRIMMERS
H1	(2) 2x8	HEM FIR #2	(1) 2x
H2	(2) 2x10	HEM FIR #2	(2) 2x
H3	(2) 1 3/4" x 9 1/4"	LVL	(2) 2x

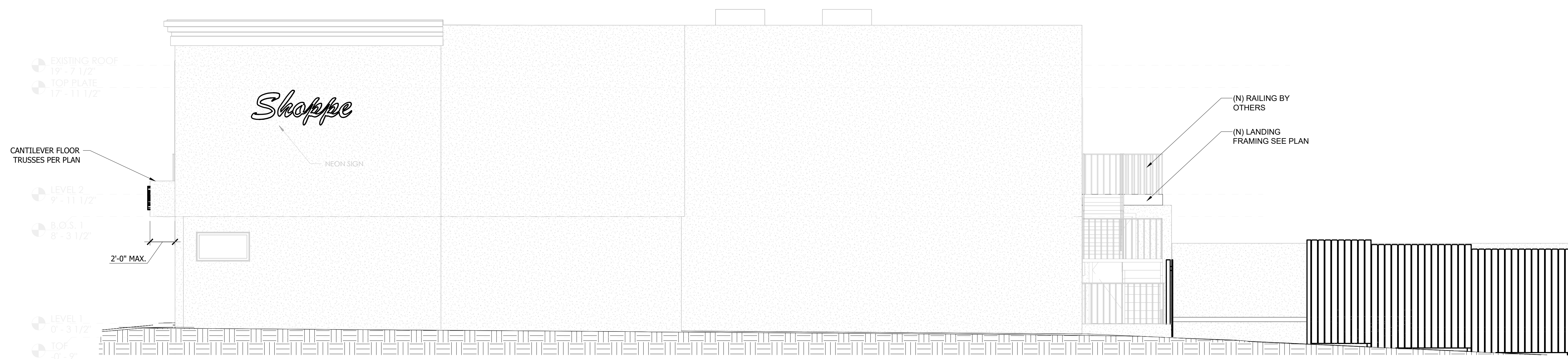
KING STUD SCHEDULE	
WIDTH OF OPENING (FT)	KING STUDS REQUIRED PER SIDE
1'-0" - 2'-11"	(1) 2x6
3'-0" - 5'-11"	(2) 2x6
6'-0" - 9'-5"	(3) 2x6
9'-6" - 12'-11"	(4) 2x6
13'-0" - 20'-0"	(3) 1 3/4" x 5 1/2" LVL

WALL STUD SCHEDULE			
HEIGHT OF STUD (FT)	STUDS REQUIRED		
	# & DEPTH	MATERIAL	SPACING
0' - 10'-9"	(1) 2x6	HF #2	16" OC
10'-10" - 13'-6"	(2) 2x6	HF #2	16" OC
13'-7" - 16'-6"	(2) 5 1/2"	2.0E LVL	16" OC
16'-7" - 18'-0"	(2) 5 1/2"	2.0E LVL	12" OC



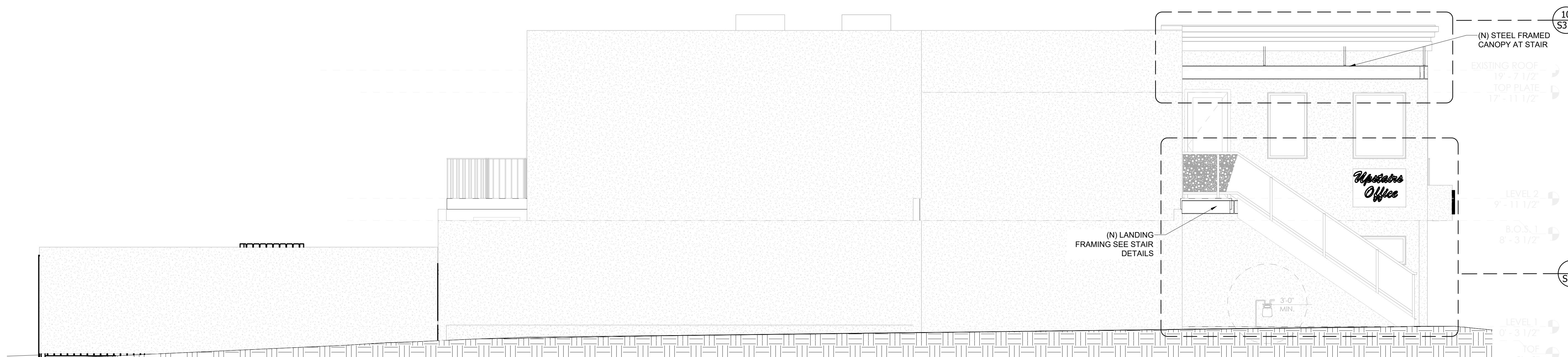
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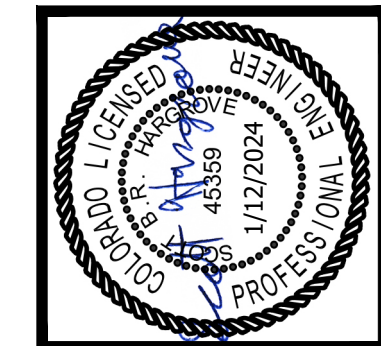
**SOUTH ELEVATION**

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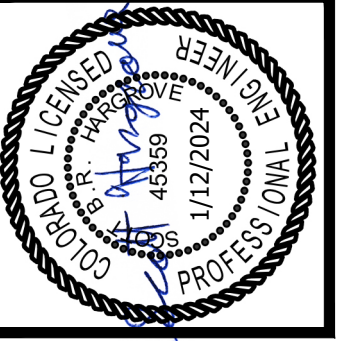
**NORTH ELEVATION**

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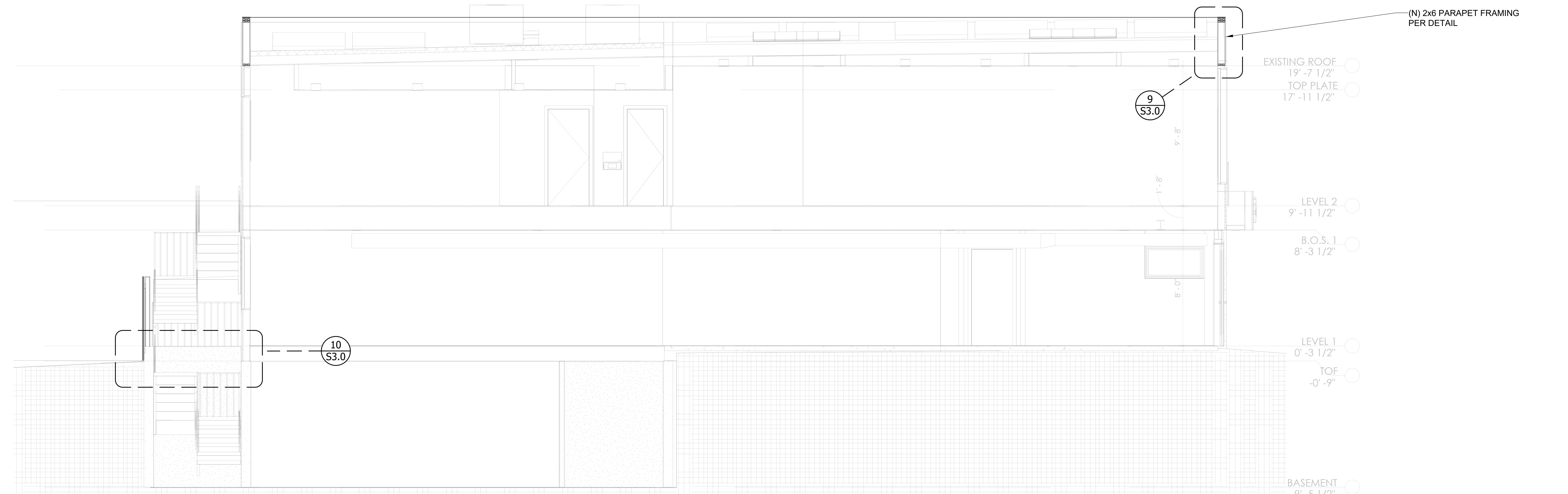
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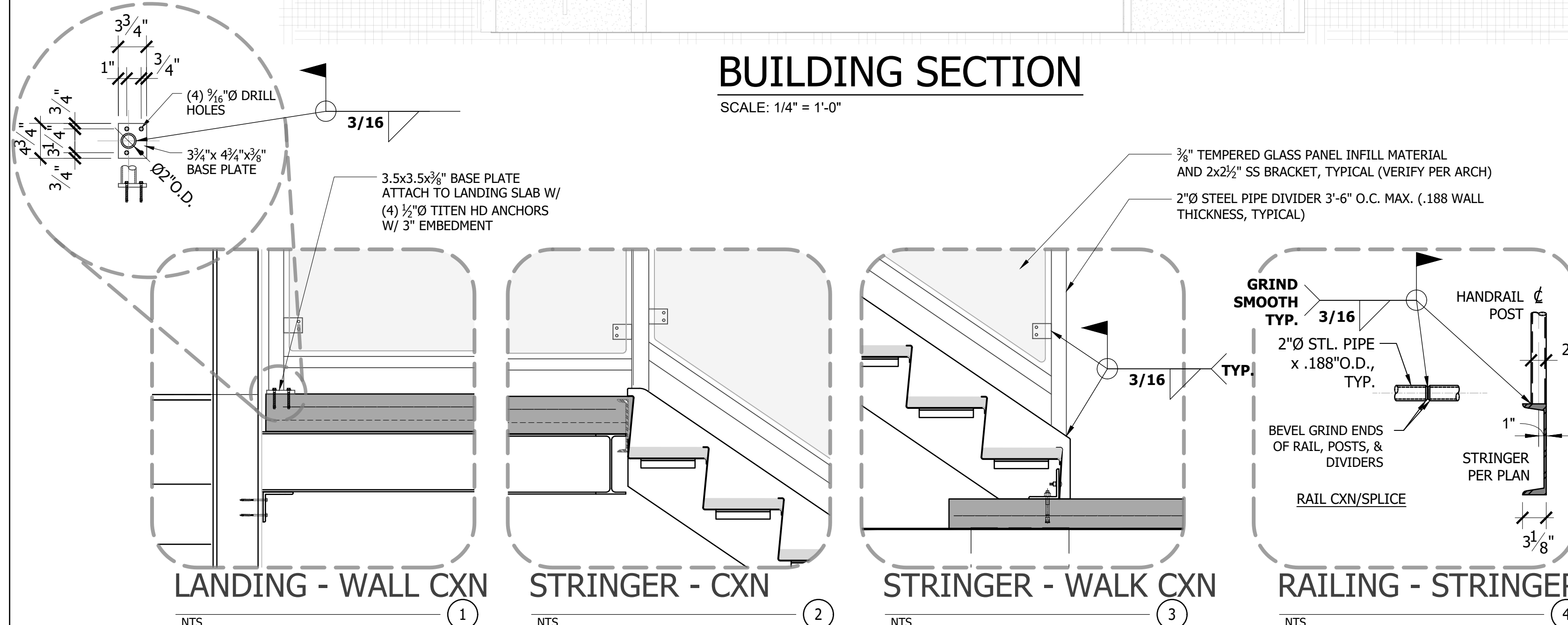


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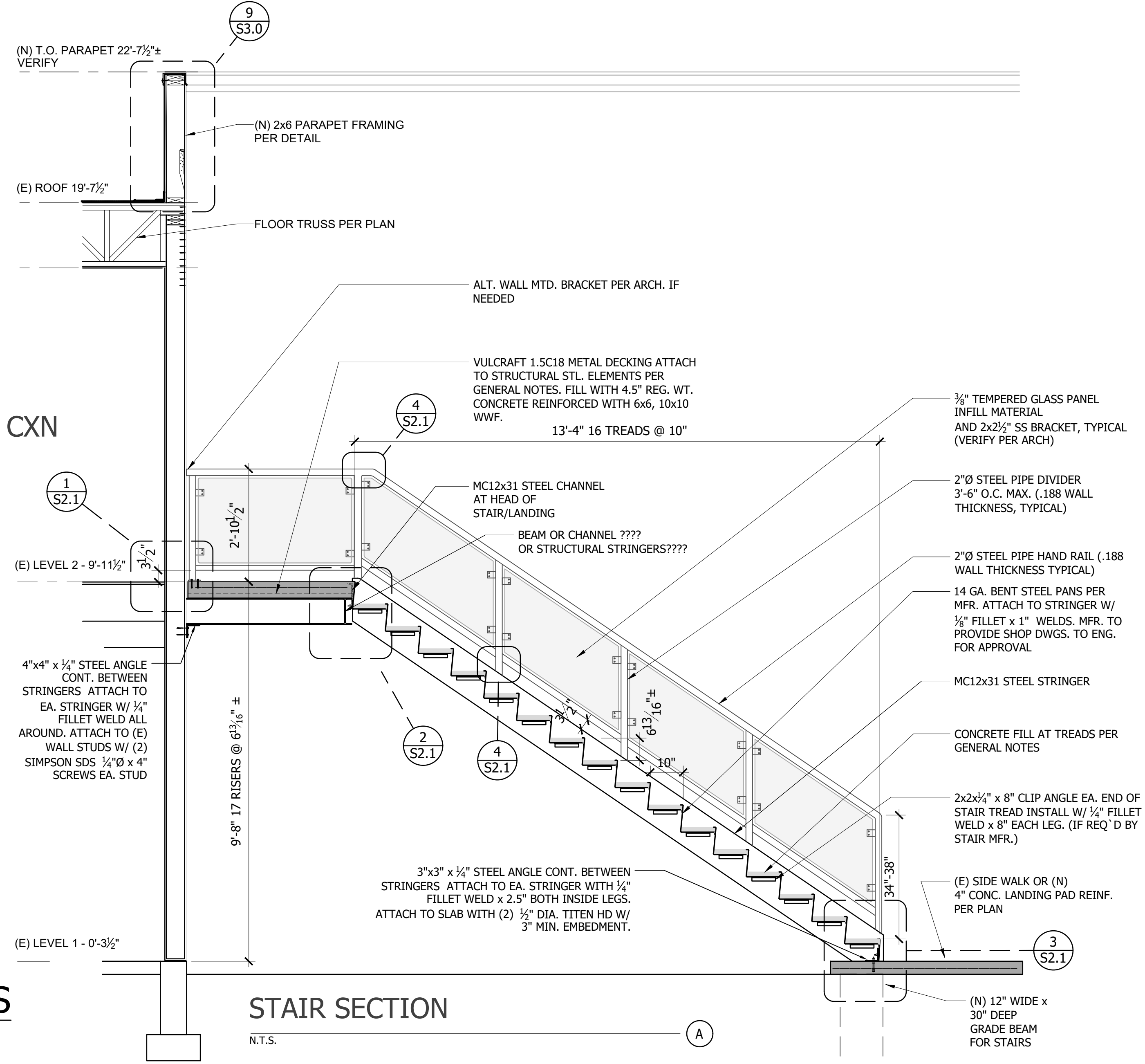


**BUILDING SECTION**  
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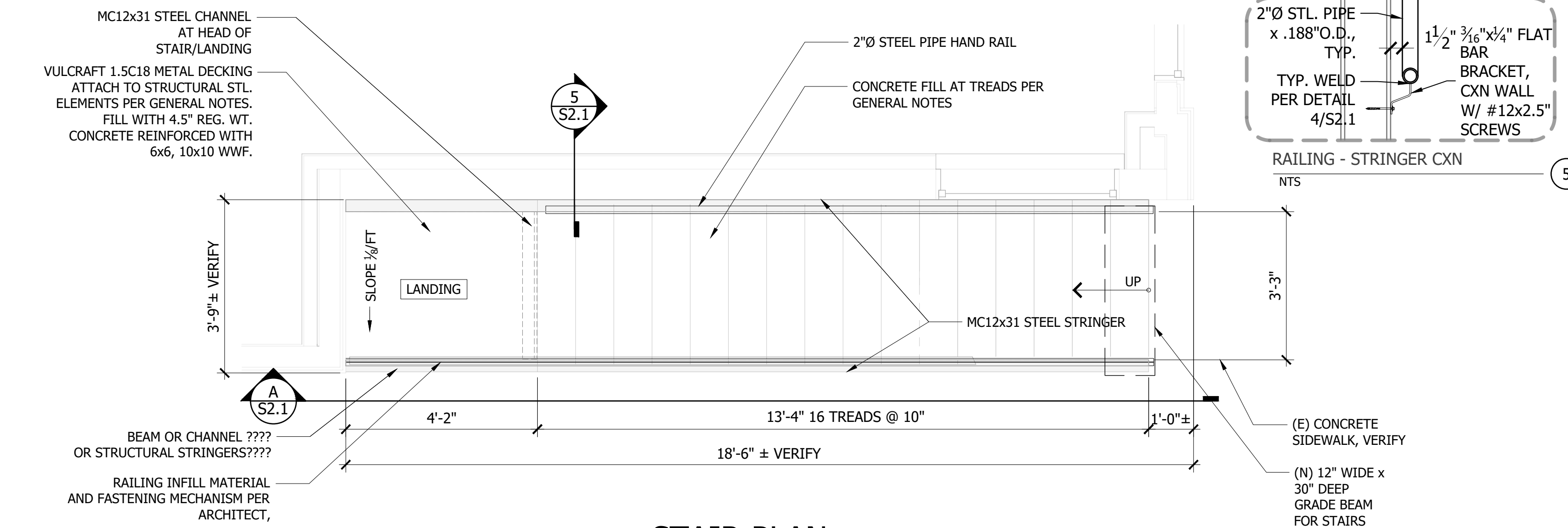
**STAIR PLAN**  
 SCALE: 1/2" = 1'-0"

STAIR BASED ON IRC CODE AND R-3 OCCUPANCY



**STAIR SECTION**  
 N.T.S.

**STAIR DETAILS**



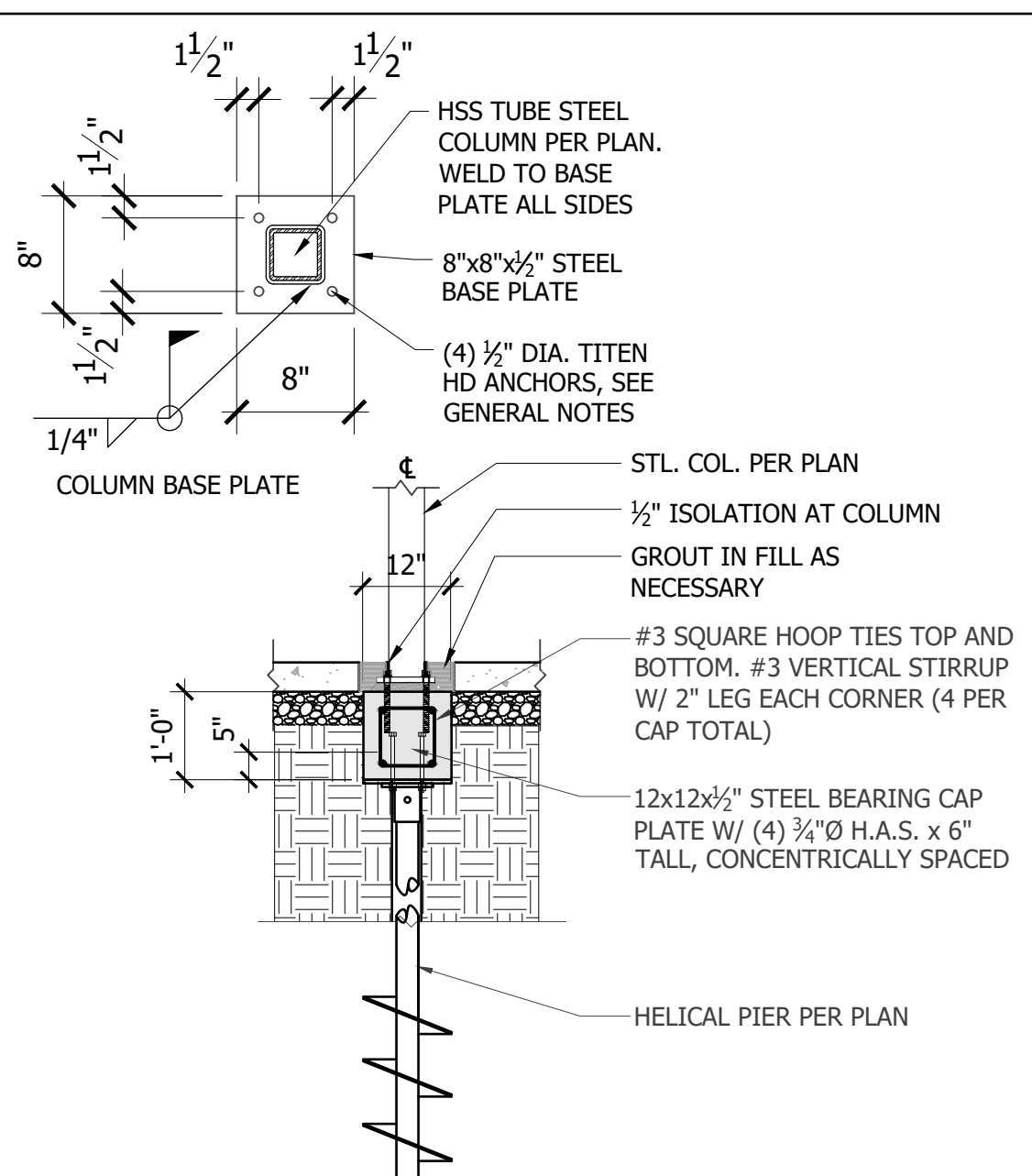
**GENERAL PLAN REVIEW NOTES**

FIRE ALARM SYSTEM IS TO BE DESIGN-BUILD BY CONTRACTOR AND TO BE SUBMITTED FOR PERMIT SEPARATELY

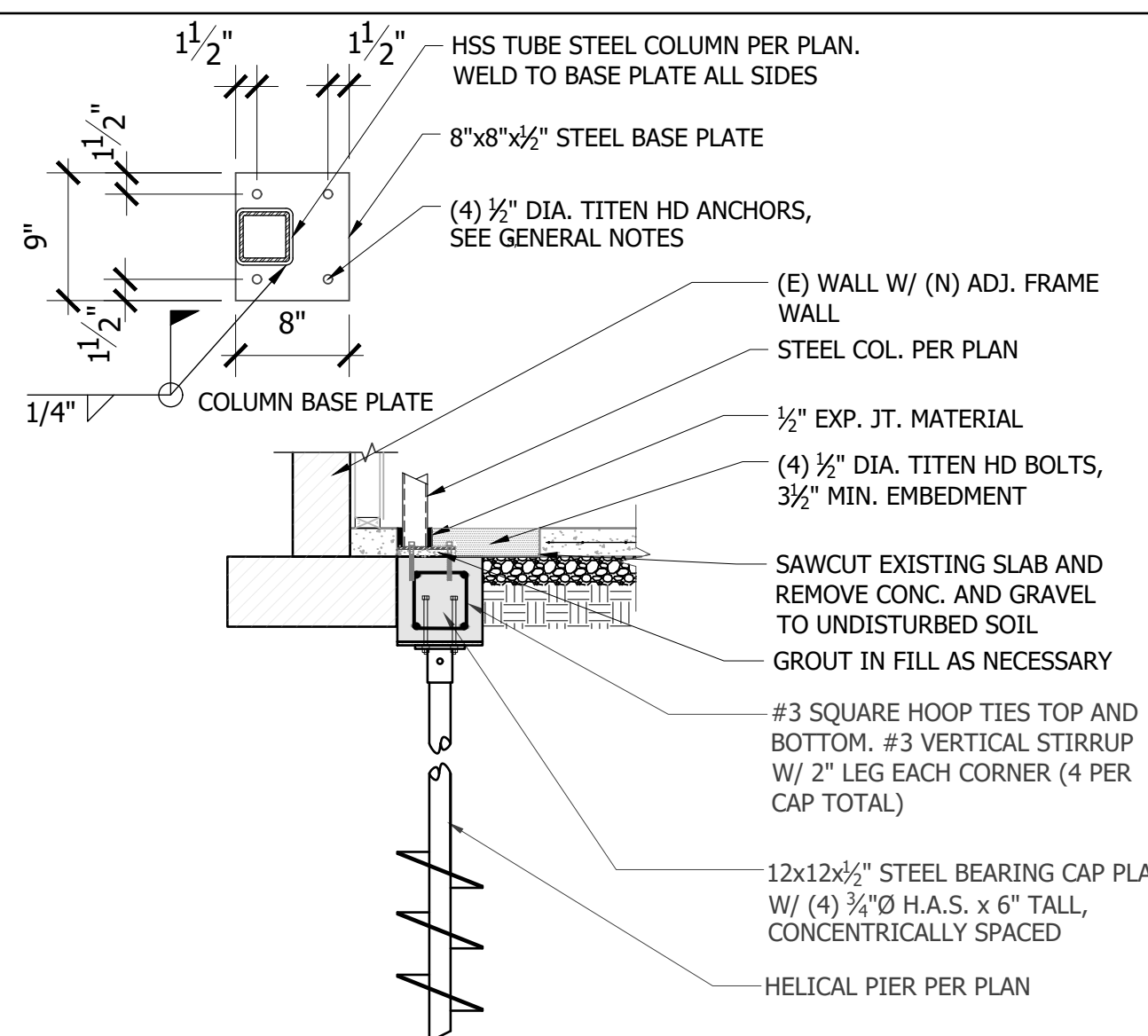
**USE AND OCCUPANCY CLASSIFICATIONS**

USE & OCCUPANCY	RESIDENTIAL: R-3	FLOORS 1, 2, & 3	PER ORDINANCE 2018-02 ADOPTED BY CHAFFEE COUNTY, SECTION 903.2.8
OFFICE: BUSINESS (B)	FLOOR 1		

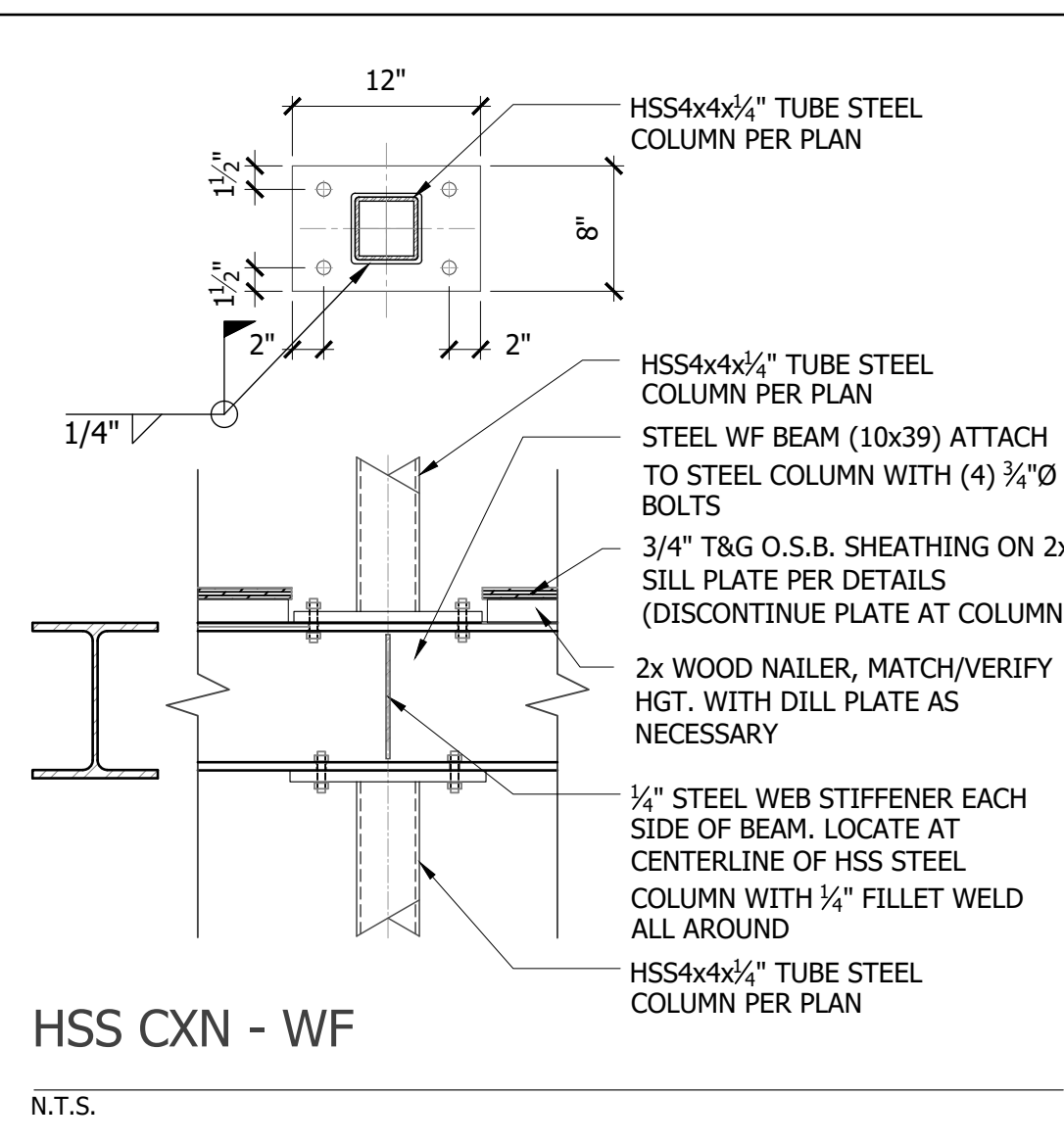




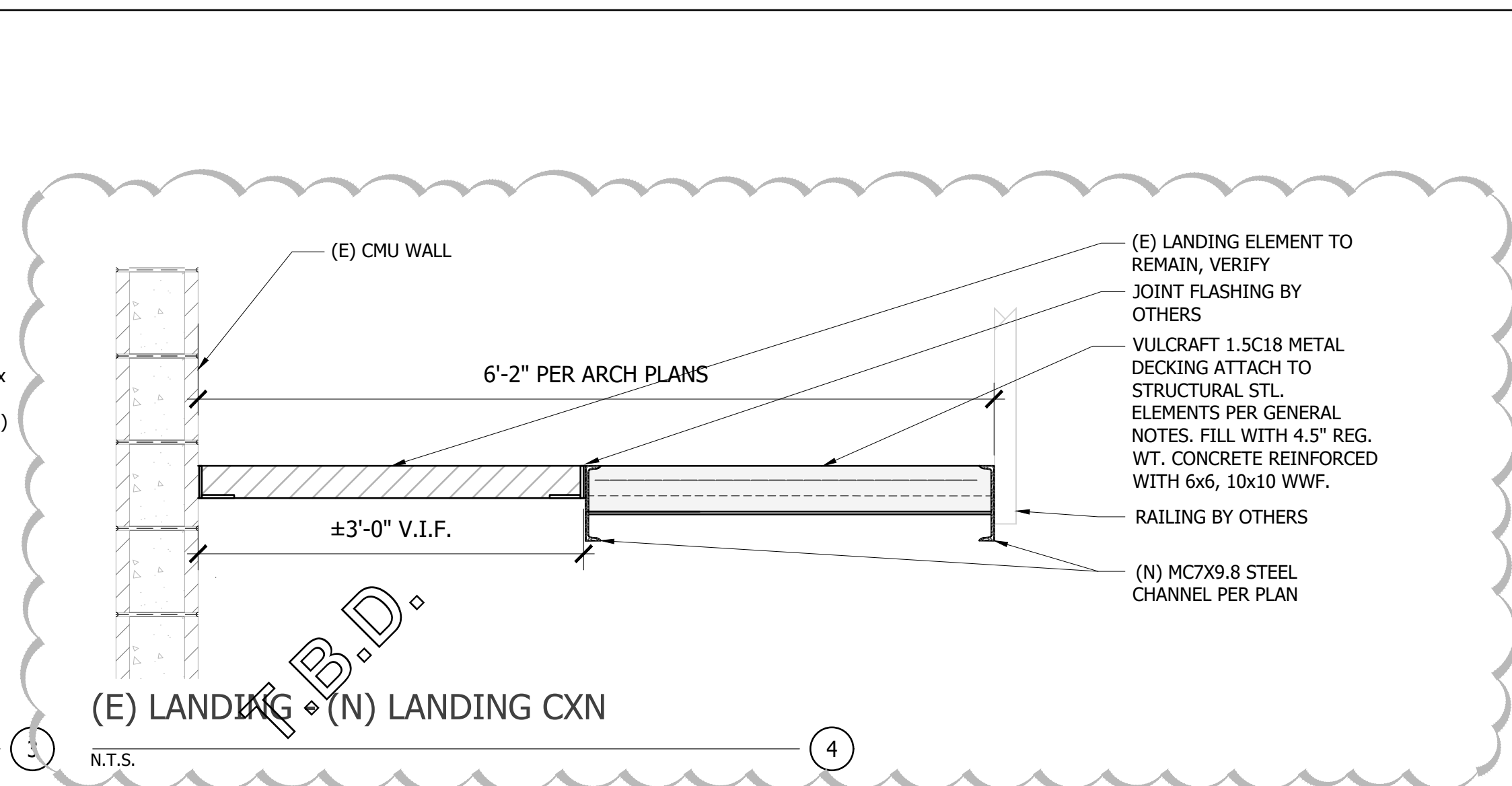
(N) STL COL HSS - CXN PIER



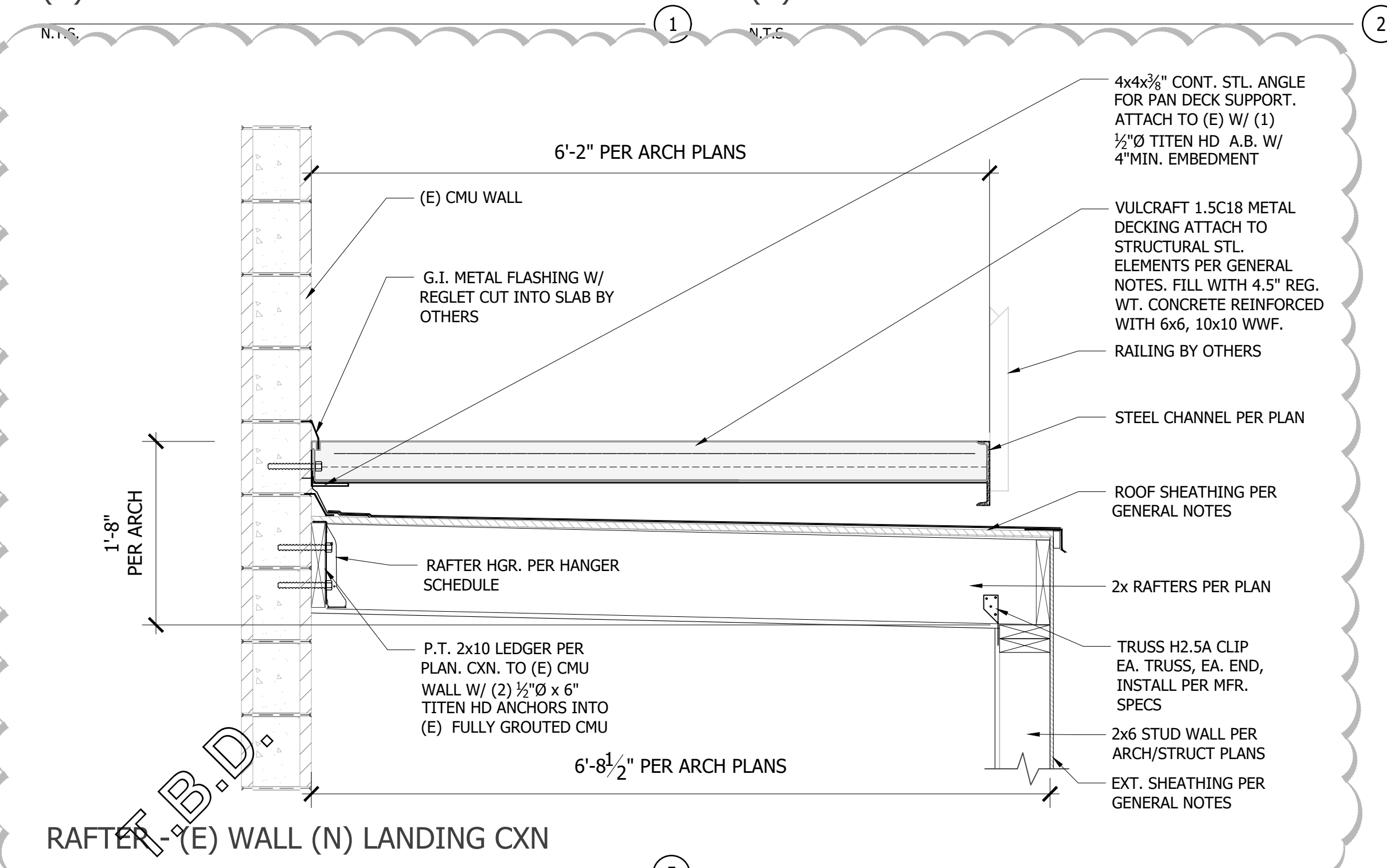
(N) ISOLATED PAD FOOTING HSS COL



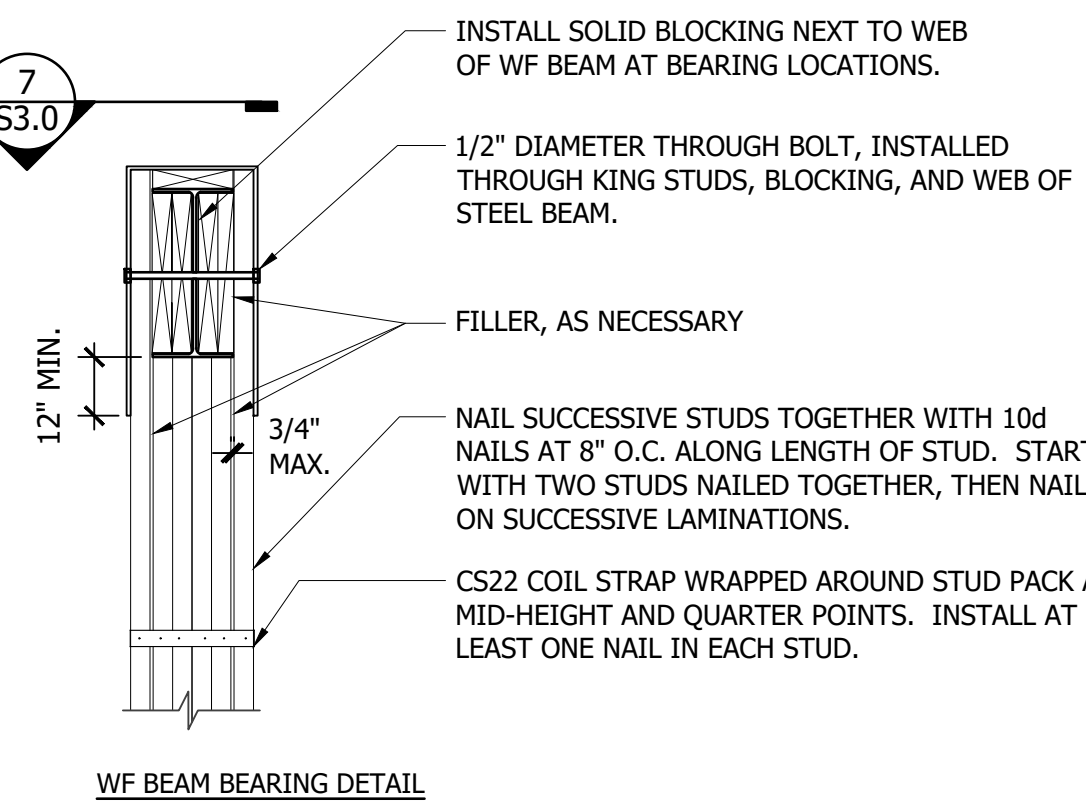
HSS CXN - WF



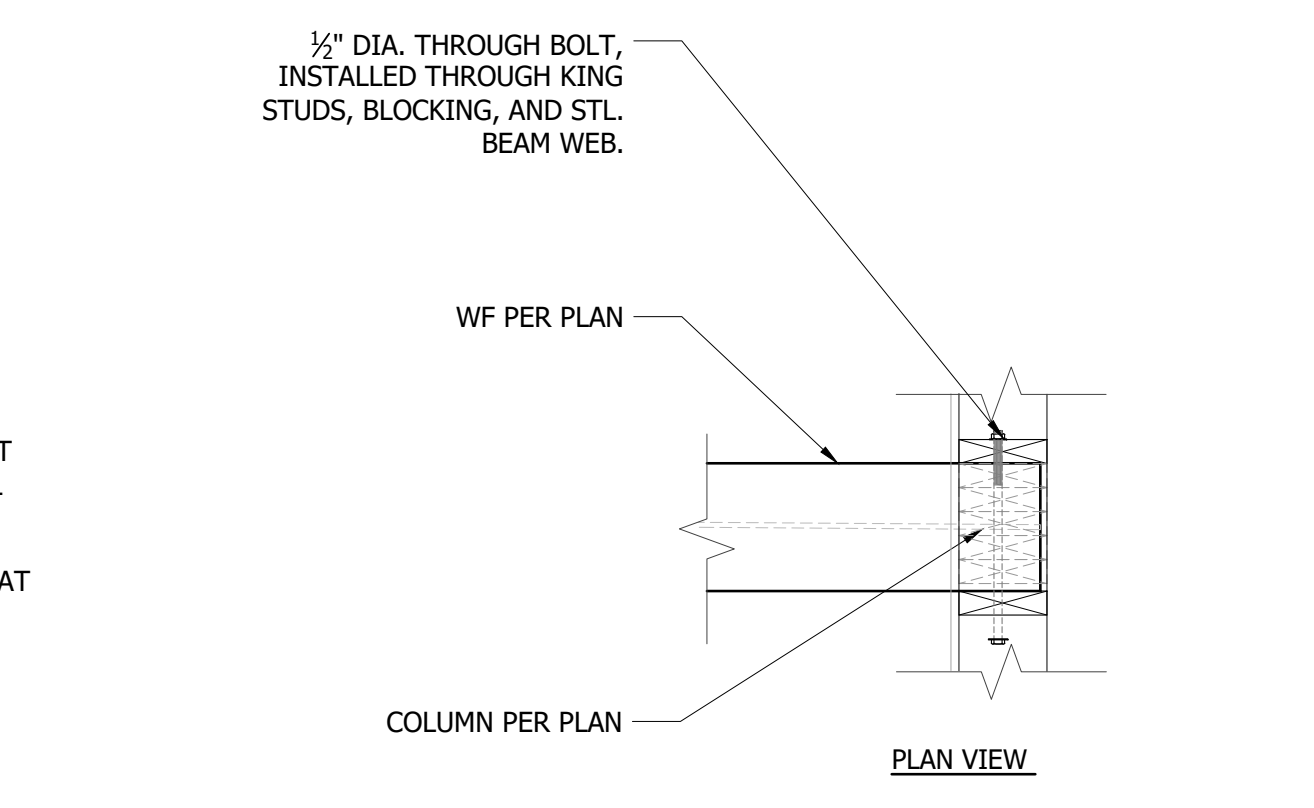
(E) LANDING (N) LANDING CXN



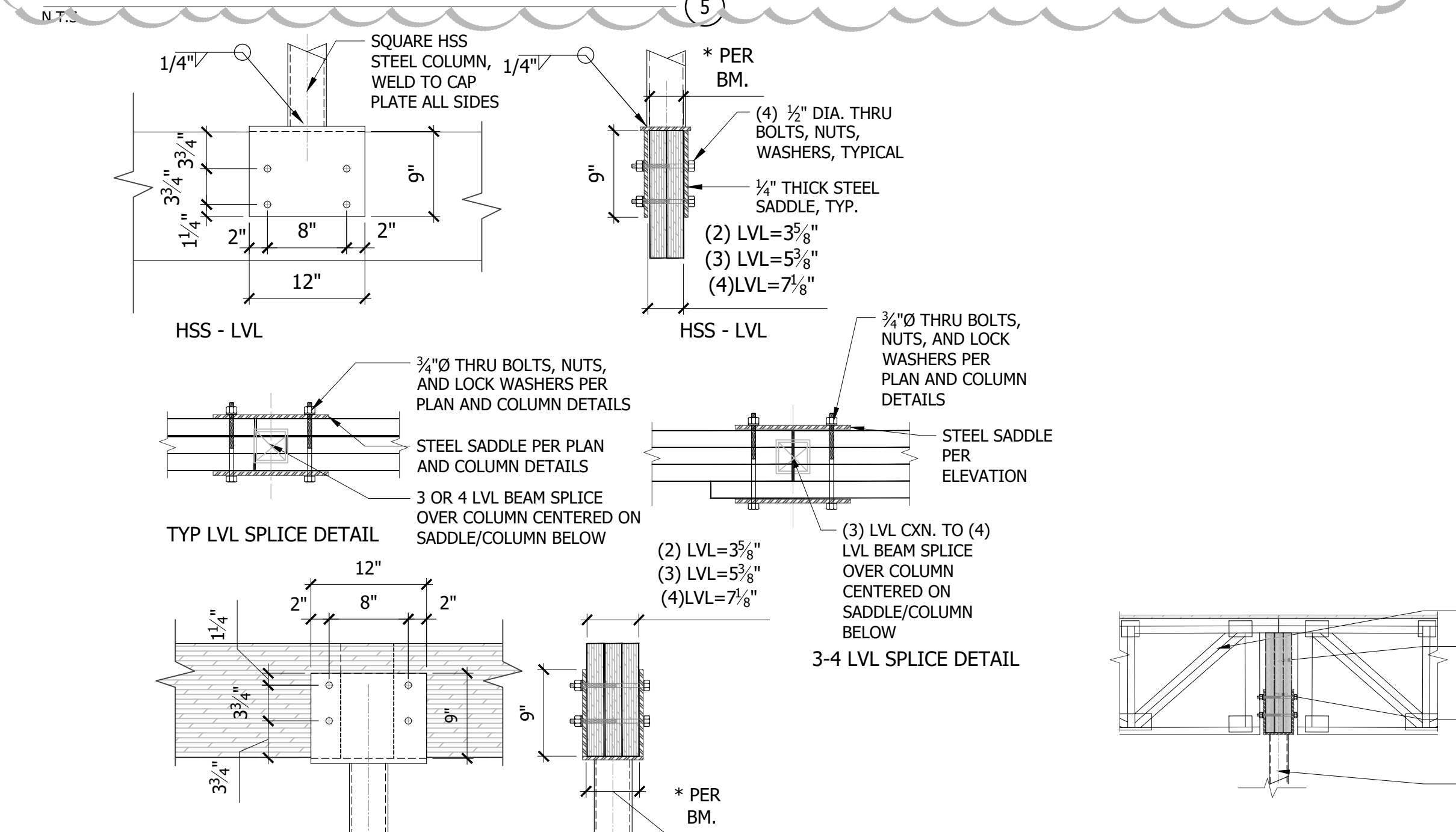
RAFTER (E) WALL (N) LANDING CXN



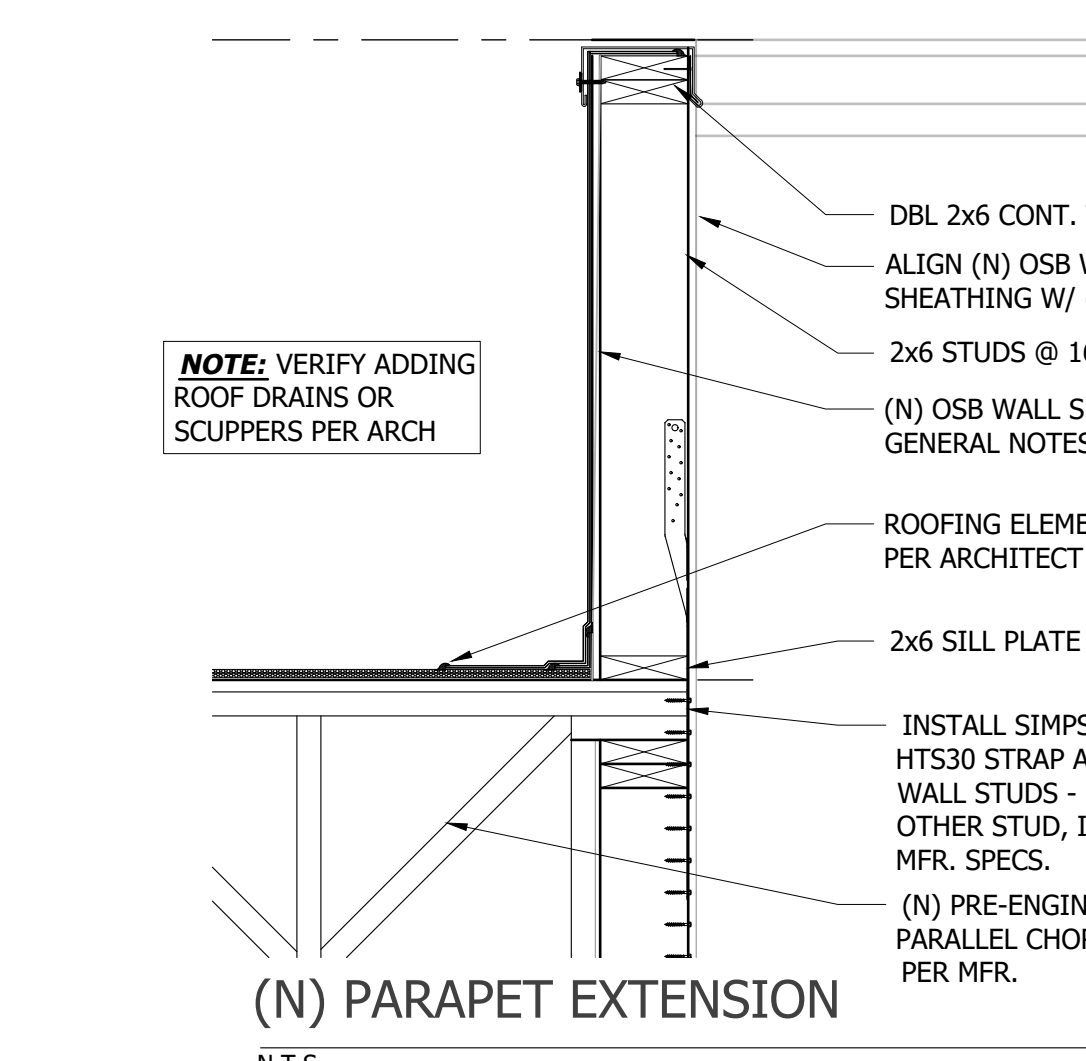
STEEL BEAM CXN AT STUD WALL



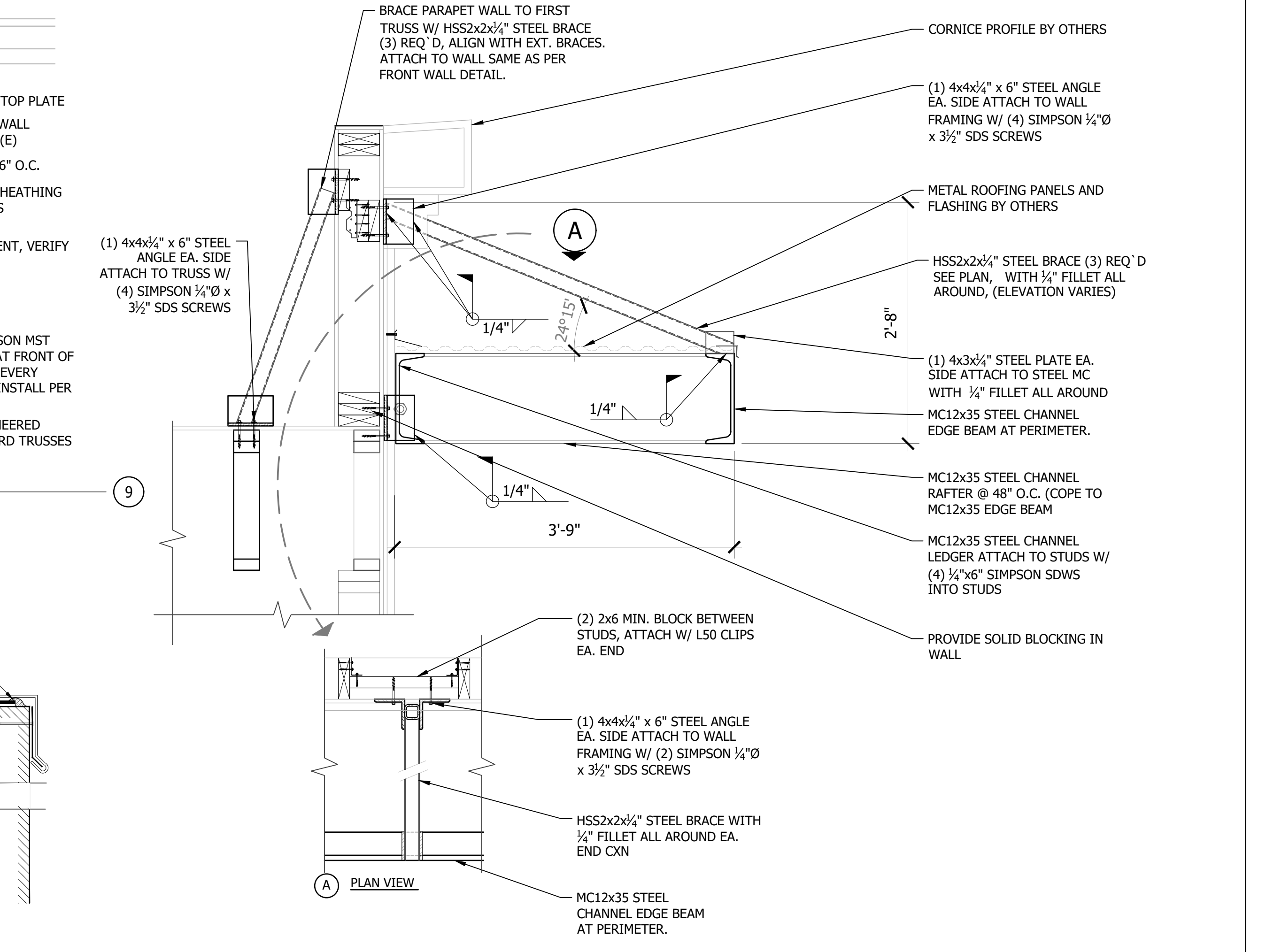
STEEL BEAM SADDLE AT CMU WALL



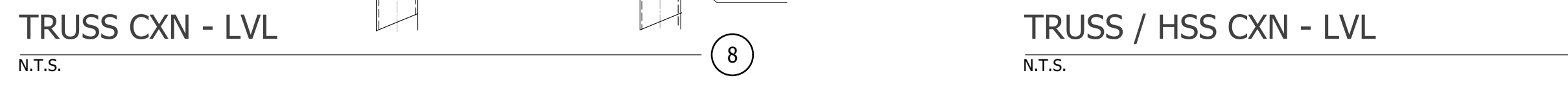
TRUSS CXN - LVL



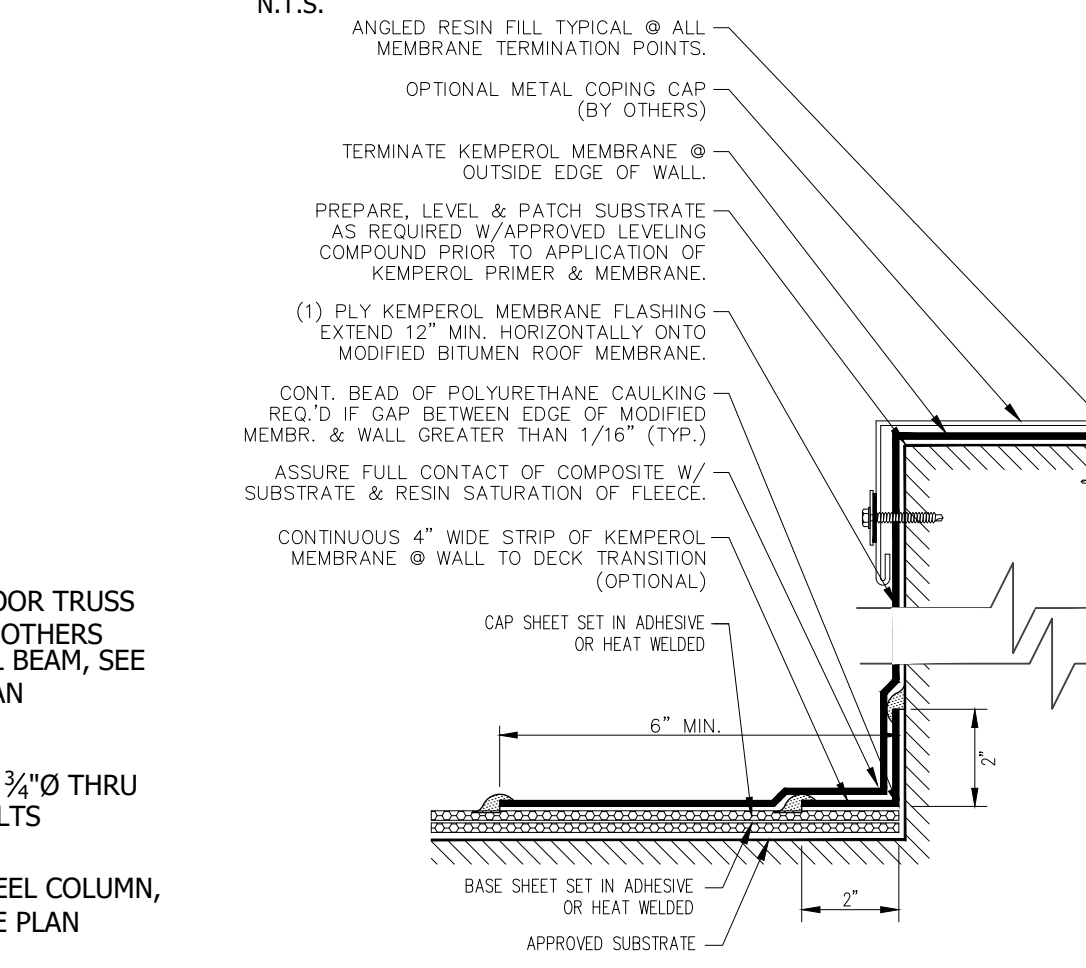
(N) PARAPET EXTENSION



STEEL CANOPY @ STAIR



TRUSS / HSS CXN - LVL



PARAPET FLASHING - REFERENCE ONLY

ISSUE DATE:	DESIGN:	REVIEWED:
01/17/2024	DES	SBH
20877.dwg	AS NOTED	SBH
DATE	DESCRIPTION	
REVISION NO.	DATE	PERMIT SET


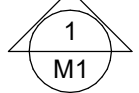

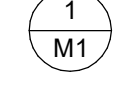

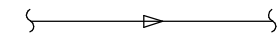
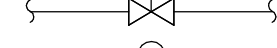

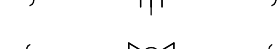
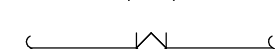
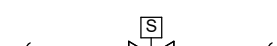
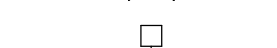
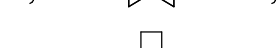


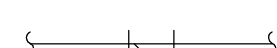
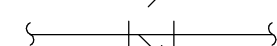


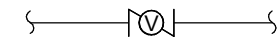
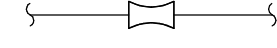
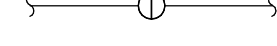
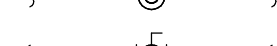
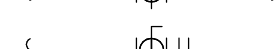
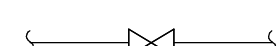
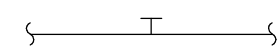
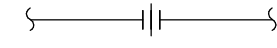
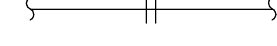


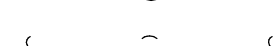


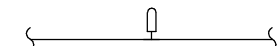
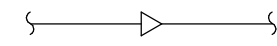



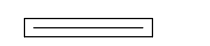
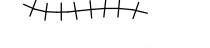

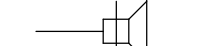


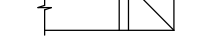
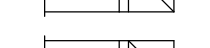
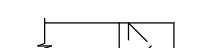
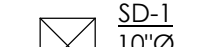
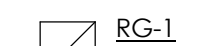
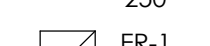
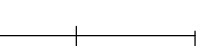
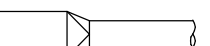



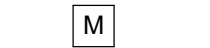

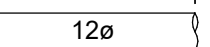
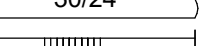
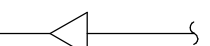
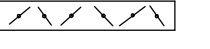








**1863 PEARL STREET**  
1863 S PEARL ST  
DENVER, CO 80210

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

NO.	DESCRIPTION	DATE

MECHANICAL LEGEND AND NOTES	
Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>M001</b>	
Scale	1" = 1'-0"

MECHANICAL SYMBOLS		ABBREVIATIONS	MECHANICAL GENERAL NOTES
<b>PIPING</b>  CONDENSATE DRAIN PIPING		<b>A/C</b> AIR CONDITIONING <b>AFF</b> ABOVE FINISHED FLOOR <b>AHU</b> AIR HANDLING UNIT  <b>BOD</b> BOTTOM OF DUCT <b>BOP</b> BOTTOM OF PIPE <b>BOS</b> BOTTOM OF STRUCTURE <b>BTU</b> BRITISH THERMAL UNIT  <b>CFM</b> CUBIC FEET PER MINUTE <b>CU</b> CONDENSING UNIT <b>CU</b> CABINET UNIT HEATER  <b>(D)</b> DEMOLISHED <b>DB</b> DRY BULB <b>DDC</b> DIRECT DIGITAL CONTROL <b>DN</b> DOWN <b>DX</b> DIRECT EXPANSION  <b>EAT</b> ENTERING AIR TEMPERATURE <b>EDB</b> ENTERING DRY BULB <b>EF</b> EXHAUST FAN <b>ERV</b> ENERGY RECOVERY VENTILATOR <b>EWB</b> ENTERING WET BULB <b>EWT</b> ENTERING WATER TEMPERATURE  <b>GPM</b> GALLONS PER MINUTE  <b>HD</b> HEAD <b>HP</b> HORSEPOWER, HEAT PUMP <b>HSTAT</b> HUMIDISTAT <b>HTG</b> HEATING  <b>IN WC</b> INCHES OF WATER COLUMN  <b>LAT</b> LEAVING AIR TEMPERATURE <b>LRA</b> LOCKED ROTOR AMPS <b>LWT</b> LEAVING WATER TEMPERATURE  <b>MBH</b> 1000 BTU PER HOUR <b>MCA</b> MINIMUM CIRCUIT AMPACITY <b>MFR</b> MANUFACTURER <b>MMBH</b> 1,000,000 BTU PER HOUR <b>MVS</b> MANIFOLD VALVE STATION  <b>N/A</b> NOT APPLICABLE <b>NC</b> NOISE CRITERIA, NORMALLY CLOSED <b>NO</b> NORMALLY OPEN  <b>OA</b> OUTSIDE AIR  <b>PH, Ø</b> PHASE <b>PRV</b> PRESSURE REDUCING VALVE  <b>RA</b> RETURN AIR <b>RH</b> RELATIVE HUMIDITY <b>RLA</b> RUNNING LOAD AMPS <b>RPM</b> REVOLUTIONS PER MINUTE  <b>SA</b> SUPPLY AIR <b>SF</b> SQUARE FEET, SUPPLY FAN <b>SP</b> STATIC PRESSURE <b>SS</b> STAINLESS STEEL <b>ST</b> SOUND TRAP, STEAM TRAP  <b>TA</b> TRANSFER AIR OPENING <b>TD</b> TRANSFER DUCT <b>TDH</b> TOTAL DYNAMIC HEAD <b>TSTAT</b> THERMOSTAT <b>TYP</b> TYPICAL  <b>UH</b> UNIT HEATER  <b>VAV</b> VARIABLE AIR VOLUME  <b>W</b> WITH <b>W/O</b> WITHOUT <b>WB</b> WET BULB <b>WC</b> WATER COLUMN <b>WPD</b> WATER PRESSURE DROP	<ol style="list-style-type: none"> <li>THE PLANS ARE, TO A GREAT EXTENT, DIAGRAMMATIC IN NATURE. DRAWING SCALES SHOULD BE VERIFIED FROM DIMENSIONS ON ARCH. PLANS. THE INFORMATION PRESENTED IS AS EXACT AS COULD BE SECURED. THE CONTRACTOR SHALL OBTAIN EXACT LOCATION, MEASUREMENTS LEVELS, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT THE WORK TO THE ACTUAL CONDITIONS AT THE PROJECT SITE.</li> <li>CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO SUBMITTING A BID TO COVER THE CONDITIONS AT THE SITE INFORMING THEMSELVES OF ALL DETAILS.</li> <li>ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS AND ORDINANCES, AND ALL AUTHORITIES HAVING JURISDICTION.</li> <li>THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL ENGINEERING REQUIREMENTS, THE OWNER'S DESIGN CRITERIA, UTILITY COMPANY REQUIREMENTS, APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.</li> <li>RECORD DRAWINGS - PREPARE AND SUBMIT TO THE OWNER RECORD DRAWINGS INDICATING THE EXACT LOCATION OF ALL EQUIPMENT INCLUDING THE EQUIPMENTS "AS INSTALLED" SIZE(S), MANUFACTURER, MODEL NUMBERS, AND PERFORMANCE RATINGS.</li> <li>SUPPORTS - EQUIPMENT, PIPING, DUCTWORK OR ANY OTHER ACCESSORY SHALL NOT BE SUPPORTED FROM OTHER PIPING, DUCTWORK, METAL ROOF DECK, LATERAL BRACING BRIDGING, OR CONDUIT. ITEMS SHALL ONLY BE SUPPORTED FROM BUILDING STRUCTURE.</li> <li>COORDINATE EXACT LOCATION OF ALL DUCTWORK, AIR TERMINAL UNITS, PIPING, ETC., WITH STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND OTHER MECHANICAL SYSTEMS.</li> <li>WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL MECHANICAL SERVICES AND OVERHEAD EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE.</li> <li>ALL DUCTWORK, PIPING, AND TEMPERATURE CONTROL CONDUIT TO VIBRATING EQUIPMENT SHALL HAVE FLEXIBLE CONNECTORS.</li> <li>COORDINATE ALL ROOF AND CHASE PENETRATIONS WITH STRUCTURAL DRAWINGS AND ROOF INSTALLER.</li> <li>THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.</li> <li>ALL TESTS SHALL BE COMPLETED BEFORE ANY MECHANICAL EQUIPMENT OR PIPING INSULATION IS APPLIED.</li> <li>CONCRETE HOUSEKEEPING PADS TO SUIT MECHANICAL EQUIPMENT SHALL BE SIZED AND LOCATED BY THE MECHANICAL CONTRACTOR. MINIMUM CONCRETE PAD THICKNESS SHALL BE 4 INCHES. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6 INCHES ON EACH SIDE. CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE SIZE AND LOCATION OF CONCRETE HOUSEKEEPING PADS WITH GENERAL CONTRACTOR.</li> <li>PROVIDE MINIMUM 36" ACCESS CLEARANCE TO ALL MAINTENANCE PANELS.</li> <li>CONTRACTOR TO COORDINATE DUCTWORK WITH FIRE RATED WALLS AND FLOORS SHOWN ON ARCHITECTURAL DRAWINGS, MAINTAINING NECESSARY RATING OF WALLS. CONTRACTOR IS RESPONSIBLE FOR ALL CONNECTIONS TO SMOKE-FIRE DAMPERS.</li> <li>ALL SA DUCT BRANCH TAKE-OFFS TO DIFFUSER TO BE SAME SIZE AS DIFFUSER NECK UNLESS OTHERWISE NOTED.</li> <li>ALL DUCTWORK DIMENSIONS, AS SHOWN ON THE DRAWINGS, ARE INTERNAL CLEAR DIMENSIONS AND DUCT SIZE SHALL BE INCREASED TO COMPENSATE FOR DUCT LINING THICKNESS.</li> <li>PROVIDE MIN. OF 5'-0" OF DUCT FROM AHU AND/OR HEAT PUMP TO FIRST DIFFUSER TAKE-OFFS.</li> <li>CONTRACTOR SHALL COORDINATE LOCATION OF ALL DIFFUSERS AND GRILLES WITH STRUCTURAL, ELECTRICAL, AND ARCHITECTURAL REFLECTED CEILING PLANS.</li> <li>PROVIDE SIZES AND NUMBER OF REFRIGERANT LINES ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.</li> <li>BEFORE INSTALLATION, EQUIPMENT CONTRACTOR SHALL VERIFY THAT COILS CAN BE REMOVED WITHOUT INTERFERENCE. CONTRACTOR SHALL PROVIDE ADEQUATE ACCESS AND COIL REMOVAL SPACE FOR ALL EQUIPMENT.</li> <li>ACCESS PANELS ARE REQUIRED (MIN. 18"X18") FOR ACCESS TO EVERY VALVE, DAMPER, AIR TERMINAL UNIT, AND CONTROL SENSOR IF NOT OTHERWISE ACCESSIBLE.</li> </ol>
<b>MISCELLANEOUS</b>  SECTION CUT, UPPER NUMBER INDICATED DRAWING NUMBER LOWER NUMBER INDICATES SHEET NUMBER  CONNECTION POINT OF NEW WORK TO EXISTING  DETAIL REFERENCE- UPPER NUMBER INDICATES SHEET NUMBER LOWER NUMBER INDICATES SHEET NUMBER  NOTE REFERENCE SYMBOL			
<b>VALVES / SYMBOLS</b>  DIRECTION OF FLOW IN PIPING  TWO WAY CONTROL VALVE  THREE WAY CONTROL VALVE  BUTTERFLY VALVE  GLOBE VALVE  BALANCING VALVE  SOLENOID VALVE  CONTROL VALVE  THERMOSTATIC MIXING VALVE  TRIPLE DUTY VALVE WITH PRESSURE PORTS  CHECK VALVE  STRAINER  STRAINER WITH BLOWOFF  RELIEF/SAFETY VALVE  PRESSURE REDUCING VALVE  VACUUM BREAKER  VENTURI  GAS COCK  SIGHT GLASS  BALL VALVE  3/4" BALL DRAIN VALVE WITH 3/4" HOSE CONNECTION AND CAP ON CHAIN  GATE VALVE  PRESSURE/TEMPERATURE PORT  UNION  FLANGE CONNECTION  PIPING ELBOW UP  PIPING ELBOW DOWN  PIPING TEE UP  PIPING TEE DOWN  PIPING CAP  GAUGE COCK  WATER HAMMER ARRESTOR  PIPING REDUCER		<b>NOTE: ALL DUCT DIMENSIONS SHOWN ON DRAWINGS ARE INSIDE DIMENSIONS.</b>  LINEAR SLOT DIFFUSER  INSULATED FLEXIBLE DUCT (MAXIMUM 6'-0" LONG)  BRANCH DUCT WITH 45° TAP AND MANUAL VOLUME DAMPER   BRANCH DUCT WITH CONICAL FITTING AND MANUAL VOLUME DAMPER   SUPPLY OR OUTSIDE AIR DUCT UP  SUPPLY OR OUTSIDE AIR DUCT DOWN  RETURN OR TRANSFER AIR DUCT UP  RETURN OR TRANSFER AIR DUCT DOWN  EXHAUST AIR DUCT UP  EXHAUST AIR DUCT DOWN  TYPE, NECK SIZE, CFM AT SUPPLY DIFFUSER OR REGISTER  TYPE, THROAT SIZE, CFM AT RETURN GRILLE OR REGISTER  TYPE, SIZE AT EXHAUST GRILLE OR REGISTER  MANUAL VOLUME DAMPER  SQUARE TO ROUND TRANSITION  THERMOSTAT  HUMIDISTAT  CARBON DIOXIDE SENSOR  CARBON MONOXIDE SENSOR  TEMPERATURE SENSOR  MOTORIZED DAMPER  ROUND/OVAL DUCT RISER  RECTANGULAR DUCT (PLAN DIMENSION SHOWN FIRST)  ROUND DUCT  FLAT OVAL DUCT (PLAN DIMENSION SHOWN FIRST)  FLEXIBLE DUCT  TRANSITION IN DUCT SIZE  OPPOSED BLADE DAMPER  PARALLEL BLADE DAMPER	
		<b>MOUNTING HEIGHTS U.N.O</b> THERMOSTATS (USER ADJ.) 48" (ADA)/ 60" CONTROLS (CENTERLINE) 48" (ADA)/ 60"	

DUCT INSULATION SCHEDULE					
SERVICE	LOCATION	INSULATION MATERIAL	INSULATION THICKNESS	NOMINAL DENSITY	NOTES
SUPPLY-AIR DUCT RECTANGULAR/ROUND	INDOOR: CONCEALED	MINERAL-FIBER BLANKET INSULATION	1-1/2 INCHES	3/4-LB/CU.FT.	
SUPPLY-AIR DUCT RECTANGULAR/ROUND	INDOOR: EXPOSED	MINERAL-FIBER BLANKET INSULATION / INTERNALLY LINED FIBROUS GLASS, TYPE I	1-1/2 INCHES	3-LB/CU.FT.	
RETURN-AIR DUCT RECTANGULAR/ROUND	INDOOR: ALL	-	-	-	1
OUTDOOR-AIR DUCT (LOUVER TO AHU)	INDOOR: ALL	MINERAL-FIBER BOARD	3 INCHES	3-LB/CU.FT.	2
EXHAUST-AIR DUCT	INDOOR: ALL	MINERAL-FIBER BOARD	3 INCHES	3-LB/CU.FT.	
SUPPLY-AIR PLENUM	INDOOR: ALL	MINERAL-FIBER BOARD	1-1/2 INCHES	3-LB/CU.FT.	
RETURN-AIR PLENUM	INDOOR: ALL	NONE	-	-	
OUTDOOR-AIR PLENUM	INDOOR: ALL	MINERAL-FIBER BOARD	3 INCHES	3-LB/CU.FT.	
EXHAUST-AIR PLENUM	INDOOR: ALL	MINERAL-FIBER BOARD	3 INCHES	3-LB/CU.FT.	

1. NOT INSULATED UNLESS NOTED ON CONSTRUCTION DOCUMENTS.  
 2. OUTDOOR-AIR DUCT TO MEET MINIMUM R-10.

**1863 PEARL STREET**

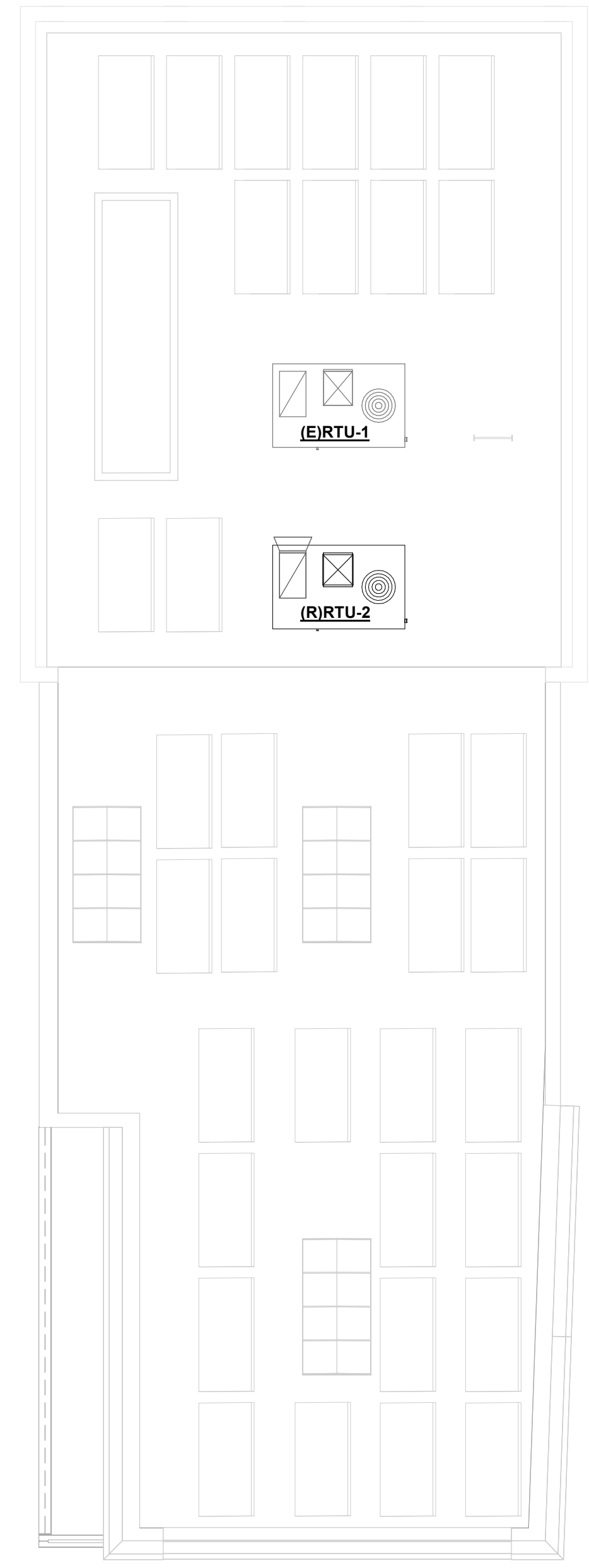
1863 S PEARL ST  
DENVER, CO 80210

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

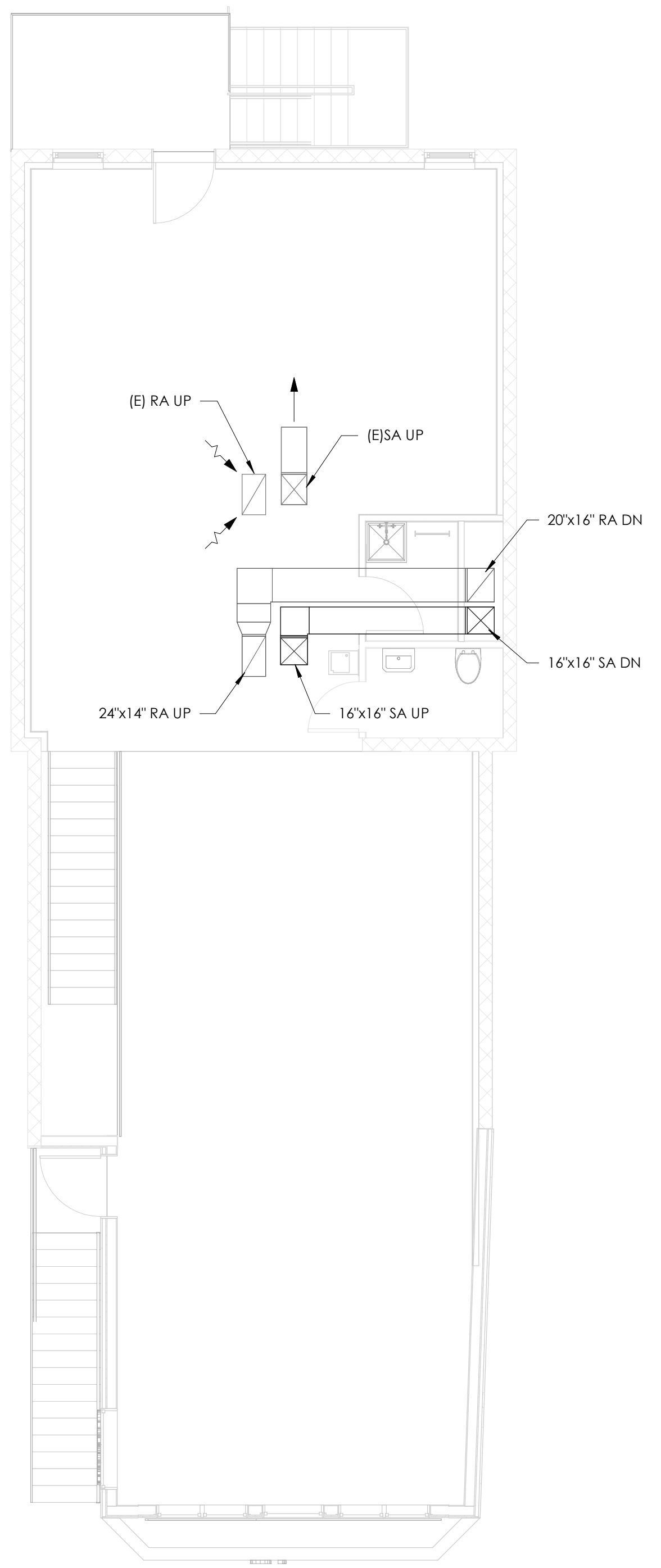
NO.	DESCRIPTION	DATE

**MECHANICAL PLANS**

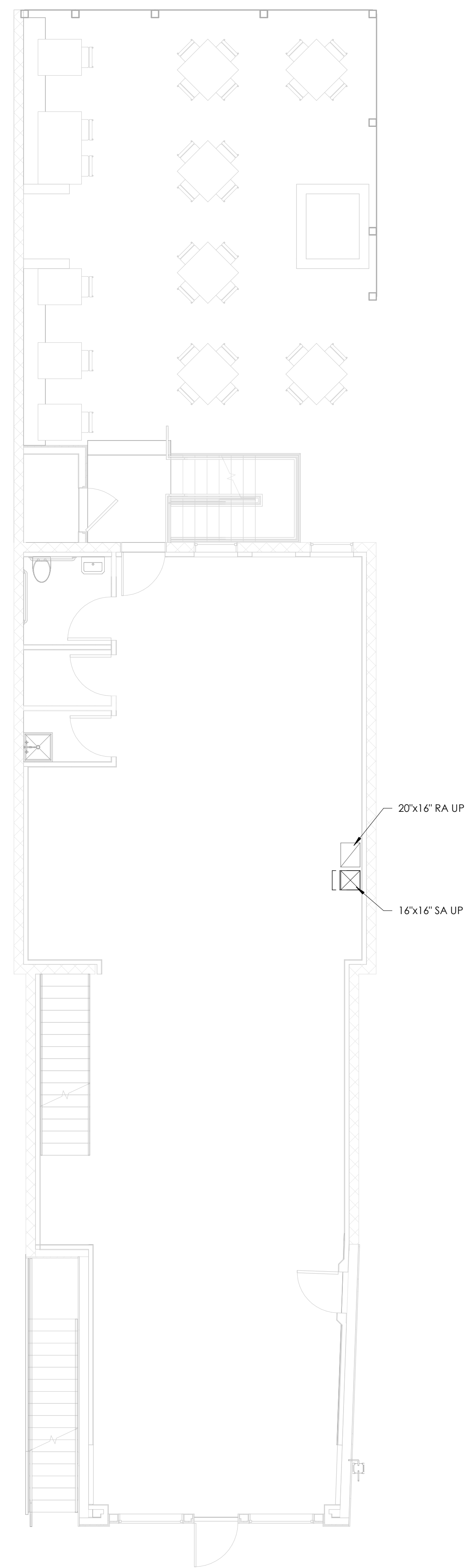
Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>M101</b>	
Scale	3/16" = 1'-0"



**3 MECHANICAL PLAN - ROOF**  
SCALE: 3/16" = 1'-0"




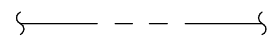
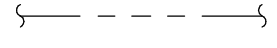

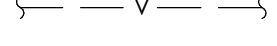
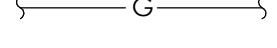
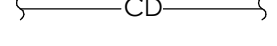
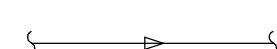


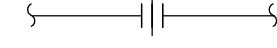

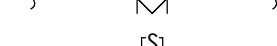


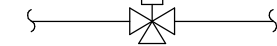

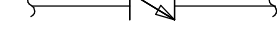
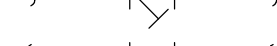
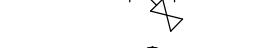
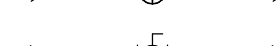
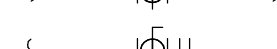

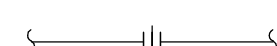
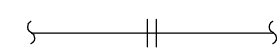

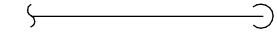
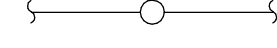
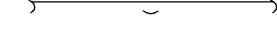


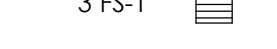









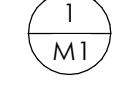

**2 MECHANICAL PLAN - UPPER LEVEL**  
SCALE: 3/16" = 1'-0"



**1 MECHANICAL PLAN - MAIN LEVEL**  
SCALE: 3/16" = 1'-0"

**B MECHANICAL PLAN - BASEMENT**  
SCALE: 3/16" = 1'-0"



PLUMBING SYMBOLS		ABBREVIATIONS		PLUMBING GENERAL NOTES		
<b>PIPING</b>  <b>PLUMBING</b>  DOMESTIC COLD WATER PIPING  DOMESTIC HOT WATER PIPING  DOMESTIC HOT WATER RECIRC. PIPING  SANITARY PIPING  VENT PIPING  NATURAL GAS PIPING  CONDENSATE PIPING		<b>VALVES / SYMBOLS</b>  DIRECTION OF FLOW IN PIPING  TWO WAY CONTROL VALVE  THREE WAY CONTROL VALVE  BUTTERFLY VALVE  GLOBE VALVE  BALANCING VALVE  SOLENOID VALVE  CONTROL VALVE  THERMOSTATIC MIXING VALVE  TRIPLE DUTY VALVE WITH PRESSURE PORTS  CHECK VALVE  STRAINER  STRAINER WITH BLOWOFF  GAS COCK  BALL VALVE  3/4" BALL DRAIN VALVE WITH 3/4" HOSE CONNECTION AND CAP ON CHAIN  GATE VALVE  UNION  FLANGE CONNECTION  PIPING ELBOW UP  PIPING ELBOW DOWN  PIPING TEE UP  PIPING TEE DOWN  PIPING CAP  VENT THRU ROOF  FLOOR SINK, SIZE AND TYPE  FLOOR DRAIN, SIZE AND TYPE  ROOF DRAIN, SIZE AND TYPE  HOSE BIBB / WALL HYDRANT  LINE CLEANOUT / WALL CLEANOUT  FLOOR CLEANOUT  GRADE CLEANOUT		<b>ABBREVIATIONS</b> AAV AIR ADMITTANCE VALVE AD AREA DRAIN AFF ABOVE FINISHED FLOOR BFP BACKFLOW PREVENTER BHP BRAKE HORSEPOWER BT BATH TUB BTU BRITISH THERMAL UNIT CD CONDENSATE DRAIN CO CLEANOUT CP CIRCULATION PUMP CW COLD WATER DEG.° DEGREES DDC DIRECT DIGITAL CONTROL DN DOWN (E) EXISTING ESP EXTERNAL STATIC PRESSURE EWT ENTERING WATER TEMPERATURE FD FLOOR DRAIN FFE FINISHED FLOOR ELEVATION FPM FEET PER MINUTE FS FLOOR SINK G NATURAL GAS GCO GRADE CLEANOUT GD GARBAGE DISPOSAL GPM GALLONS PER MINUTE GT GAS TURRET GV GAS VALVE GWH GAS WATER HEATER HB HOSE BIBB HD HEAD HP HORSEPOWER HW HOT WATER HWC HOT WATER CIRCULATION HZ HERTZ IE INVERT ELEVATION IMB ICE MAKER BOX IN.WC INCHES OF WATER COLUMN KW KILOWATT L LAVATORY LBS POUNDS LPG LIQUEFIED PETROLEUM GAS LWT LEAVING WATER TEMPERATURE MBH 1000 BTU PER HOUR MFR MANUFACTURER MH MANHOLE MSB MOP SINK BASIN (N) NEW N/A NOT APPLICABLE NC NORMALLY CLOSED NO NORMALLY OPEN PH.Ø PHASE PRV PRESSURE REDUCING VALVE QTY QUANTITY (R) RELOCATED EXISTING RC REFRIGERANT CHARGE RD ROOF DRAIN RPM REVOLUTIONS PER MINUTE S SINK SA SHOCK ARRESTOR SAN SANITARY SE SEWAGE EJECTOR SH SHOWER SP SUMP PUMP ST STORM, STORAGE TANK TD TRENCH DRAIN TDH TOTAL DYNAMIC HEAD TEA THERMAL EXPANSION ABSORBER TG TRAP GUARD TMV THERMOSTATIC MIXING VALVE TP TRAP PRIMER TSP TOTAL STATIC PRESSURE TW TEPID WATER U URINAL U/F UNDERFLOOR U/G UNDERGROUND U/S UNDERSLAB V VENT VAC VACUUM VTR VENT THROUGH ROOF WB WASHER BOX WC WATER COLUMN, WATER CLOSET WCO WALL CLEANOUT WH WALL HYDRANT		<b>PLUMBING GENERAL NOTES</b> 1. THE PLANS ARE, TO A GREAT EXTENT, DIAGRAMMATIC IN NATURE. DRAWING SCALES SHOULD BE VERIFIED FROM DIMENSIONS ON ARCH. PLANS. THE INFORMATION PRESENTED IS AS EXACT AS COULD BE SECURED. THE CONTRACTOR SHALL OBTAIN EXACT LOCATION, MEASUREMENTS LEVELS, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT THE WORK TO THE ACTUAL CONDITIONS AT THE PROJECT SITE. 2. CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO SUBMITTING A BID TO COVER THE CONDITIONS AT THE SITE INFORMING THEMSELVES OF ALL DETAILS. 3. ALL WORK SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, LAWS, ACTS AND ORDINANCES, AND ALL AUTHORITIES HAVING JURISDICTION. 4. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL ENGINEERING REQUIREMENTS, THE OWNER'S DESIGN CRITERIA, UTILITY COMPANY REQUIREMENTS, APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION. 5. RECORD DRAWINGS - PREPARE AND SUBMIT TO THE OWNER RECORD DRAWINGS INDICATING THE EXACT LOCATION OF ALL EQUIPMENT INCLUDING THE EQUIPMENT'S "AS INSTALLED" SIZE(S), MANUFACTURER, MODEL NUMBERS, AND PERFORMANCE RATINGS. 6. SUPPORTS - EQUIPMENT, PIPING, OR ANY OTHER ACCESSORY SHALL NOT BE SUPPORTED FROM OTHER PIPING, DUCTWORK, METAL ROOF DECK, LATERAL BRACING BRIDGINGS, OR CONDUIT ITEMS SHALL ONLY BE SUPPORTED FROM BUILDING STRUCTURE. 7. COORDINATE EXACT LOCATION OF ALL PIPING AND EQUIPMENT WITH STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND OTHER MECHANICAL SYSTEMS. 8. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL MECHANICAL SERVICES AND OVERHEAD EQUIPMENT TO PROVIDE THE MAXIMUM HEADROOM POSSIBLE. 9. ALL PIPING TO VIBRATING EQUIPMENT SHALL HAVE FLEXIBLE CONNECTORS. 10. COORDINATE ALL ROOF AND CHASE PENETRATIONS WITH STRUCTURAL DRAWINGS AND ROOF INSTALLER. 11. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. 12. ALL TESTS SHALL BE COMPLETED BEFORE ANY MECHANICAL EQUIPMENT OR PIPING INSULATION IS APPLIED. 13. CONCRETE HOUSEKEEPING PADS TO SUIT MECHANICAL EQUIPMENT SHALL BE SIZED AND LOCATED BY THE MECHANICAL CONTRACTOR. MINIMUM CONCRETE PAD THICKNESS SHALL BE 4 INCHES. PAD SHALL EXTEND BEYOND THE EQUIPMENT A MINIMUM OF 6 INCHES ON EACH SIDE. CONCRETE HOUSEKEEPING PADS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE THE SIZES AND LOCATIONS OF CONCRETE HOUSEKEEPING PADS WITH THE GENERAL CONTRACTOR. 14. ACCESS PANELS ARE REQUIRED (MIN. 18"X18") FOR ACCESS TO EVERY VALVE AND CONTROL SENSOR IF NOT OTHERWISE ACCESSIBLE. ACCESS PANEL SHALL BE APPROVED BY ARCHITECT/ENGINEER. COORDINATE PANEL LOCATIONS WITH THE ARCHITECT PRIOR TO INSTALLATION. 15. PROVIDE SHUTOFF VALVES IN ALL DOMESTIC WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES TWO OR MORE FIXTURES. 16. ROUTE ALL PIPING PARALLEL TO BUILDING WALLS, STRUCTURE AND FEATURES, AS HIGH AS POSSIBLE, AND OFFSET AS NECESSARY TO AVOID STRUCTURAL MEMBERS, MECHANICAL EQUIPMENT AND THE LIKE. 17. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS OF STANDARD AND ACCESSIBLE PLUMBING FIXTURES. 18. SLOPE ALL SANITARY WASTE PIPE SIZES 3" AND UNDER AT 2.08%. 19. SLOPE ALL SANITARY WASTE PIPE SIZES 4" AND ABOVE AT 1.04%. 20. SLOPE ALL CONDENSATE DRAINAGE PIPING AT 1.04%.
<b>MISCELLANEOUS</b>  SECTION CUT, UPPER NUMBER INDICATED DRAWING NUMBER LOWER NUMBER INDICATES SHEET NUMBER  CONNECTION POINT OF NEW WORK TO EXISTING  DETAIL REFERENCE: UPPER NUMBER INDICATES DETAIL NUMBER LOWER NUMBER INDICATES SHEET NUMBER  NOTE REFERENCE SYMBOL						



MILES@DAKECOLLABORATIVE.COM 720.583.4735

1863 PEARL STREET

1863 S PEARL ST  
DENVER, CO 80210

PRELIMINARY  
NOT FOR  
CONSTRUCTION

NO.	DESCRIPTION	DATE

PLUMBING LEGEND  
AND NOTES

Date	JANUARY 10, 2024
Drawn by	MD
Checked by	MD
<b>P001</b>	
Scale	1" = 1'-0"

**1863 PEARL STREET**

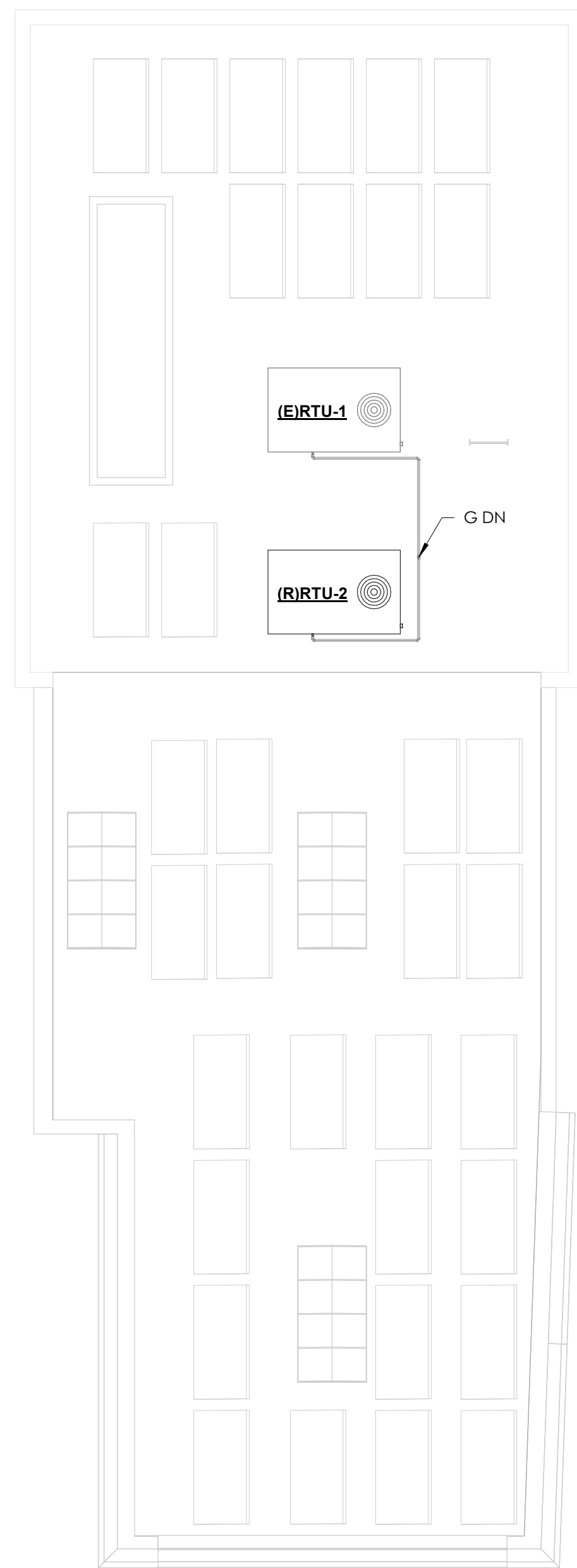
1863 S PEARL ST  
DENVER, CO 80210

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

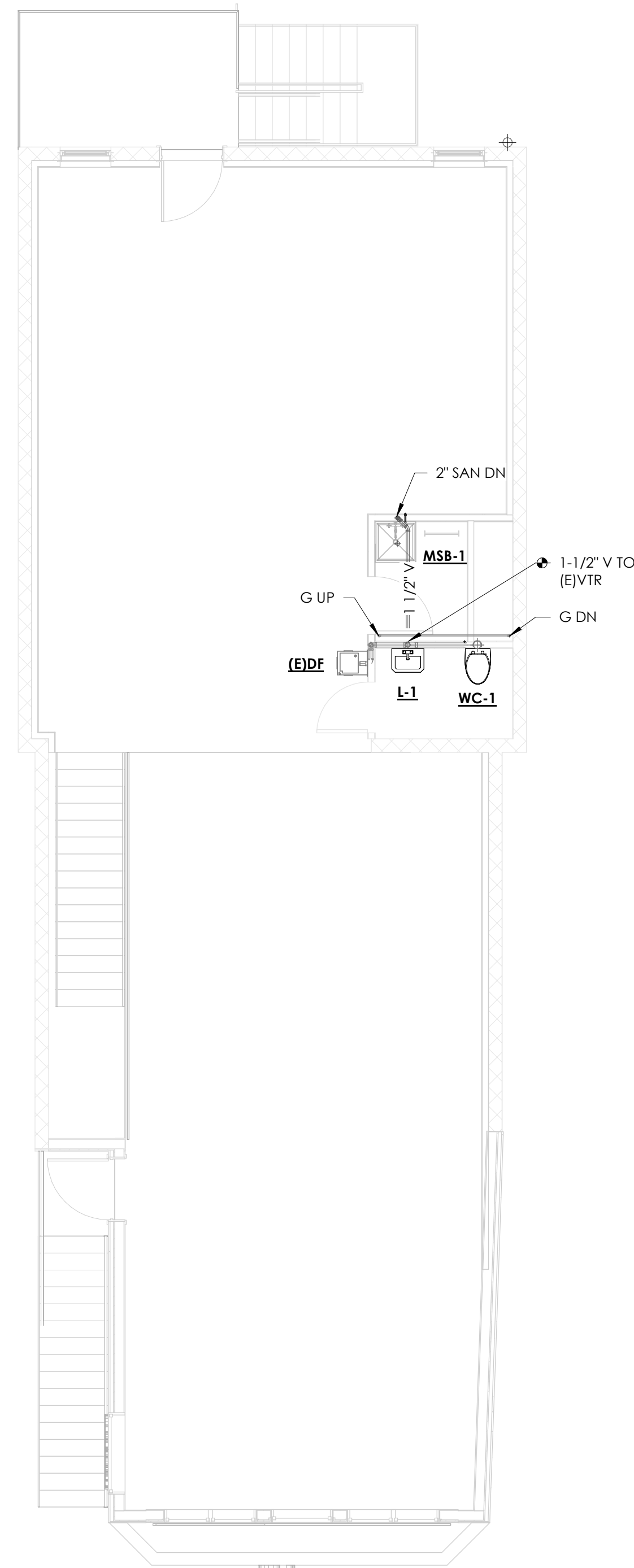
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**PLUMBING PLANS**

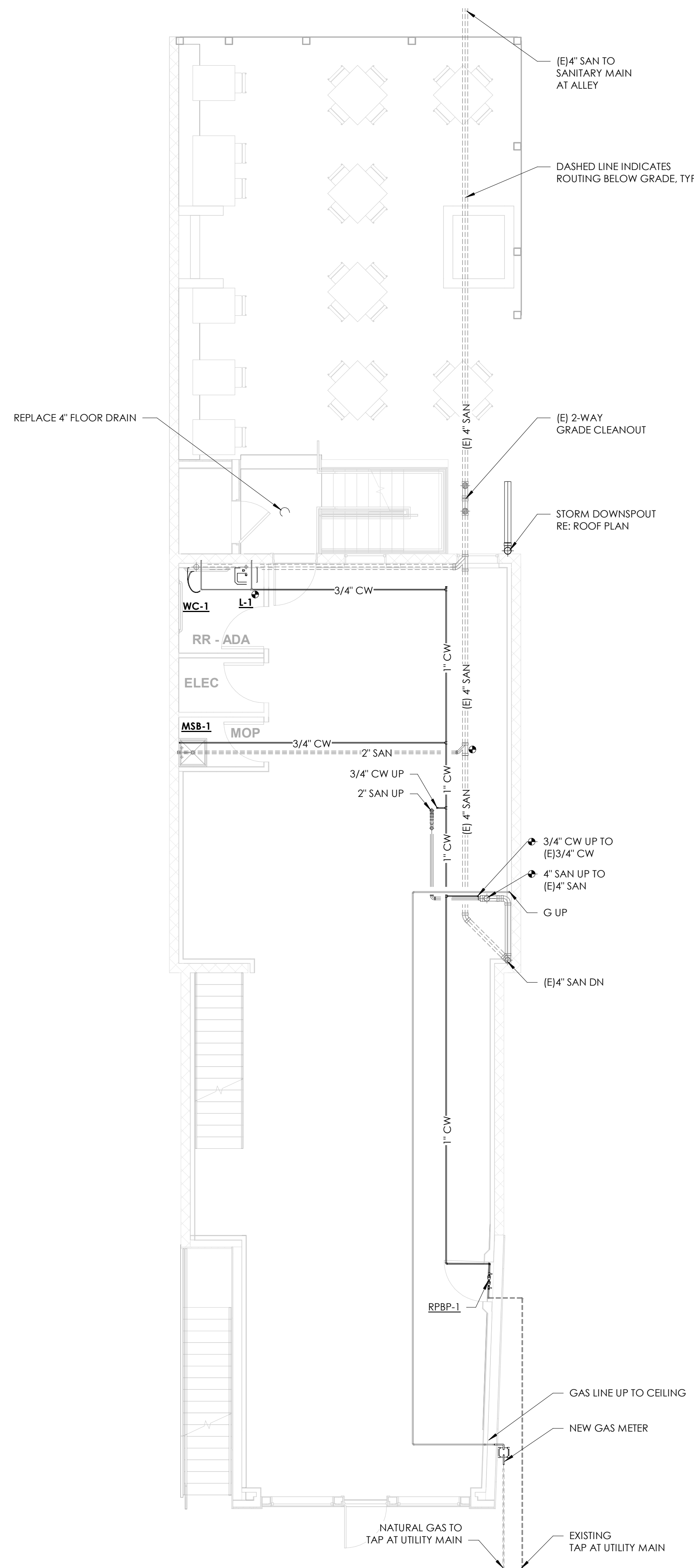
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Drawn by	MD
Checked by	MD
<b>P101</b>	
Scale	3/16" = 1'-0"



**3 PLUMBING PLAN - ROOF**  
SCALE: 3/16" = 1'-0"



**2 PLUMBING PLAN - UPPER LEVEL**  
SCALE: 3/16" = 1'-0"



**1 PLUMBING PLAN - MAIN LEVEL**  
SCALE: 3/16" = 1'-0"