

# 146 Thornton St.

Boston, Massachusetts

Owner: Joe Higginbottom

ELEVATION TARGET



INTERIOR ELEVATION TARGET



DETAIL TARGET



WINDOW TARGET



## GENERAL NOTES:

- ALL WORK SHALL COMPLY WITH STATE, NATIONAL CODES, REGULATIONS AND RESTRICTIONS WHICH APPLY TO THIS PROJECT.
- THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON. THE CONTRACTOR SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT AND SHALL NOTIFY THE ARCHITECT OF ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND POSTING ALL NECESSARY VALID CONSTRUCTION PERMITS FROM ALL LOCAL, STATE AND FEDERAL AUTHORITIES HAVING JURISDICTION PRIOR TO THE START OF ON-SITE CONSTRUCTION.
- THE CONTRACTOR SHALL KEEP ALL BUILDING MEANS OF EGRESS CLEAR OF ANY OBSTRUCTIONS AT ALL TIMES.
- THE GENERAL CONTRACTOR MUST COORDINATE WITH THE BUILDING FACILITIES MANAGER ALL ACTIVITIES INCLUDING, BUT NOT LIMITED TO WORK WHICH WILL GENERATE EXCESSIVE NOISE AND MODIFICATION TO UTILITIES. WORK MUST NOT INTERFERE WITH EXISTING SMOKE DETECTORS, ALARMS OR BUILDING SYSTEM MANAGEMENT
- THE GENERAL CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH ANY TENANT DESIGN AND CONSTRUCTION MANUAL AND ANY OTHER BUILDING OWNER OR BUILDING STANDARDS.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION ACTIVITIES, MATERIALS, MEANS AND METHODS. THE CONTRACTOR IS TO COORDINATE ALL SUBCONTRACTORS TO COMPLETE THE FULL SCOPE OF WORK AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
  - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROPERLY LAYING OUT THE WORK AND FOR ALL LINES AND MEASUREMENTS FOR THE WORK.
  - BUILDING OR SITE COMPONENTS WHICH ARE AFFECTED OR DAMAGED BY THE WORK SHALL BE REPLACED OR RESTORED TO ORIGINAL CONDITION AND COLOR, OR AS APPROVED BY THE OWNER.
  - WHERE THE DESIGN INTENT CANNOT BE DETERMINED FROM THE DRAWINGS, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. (312) 780-9456
- THE CONTRACTOR SHALL VERIFY THE DIMENSIONS SHOWN ON THE DRAWINGS BEFORE LAYING OUT THE WORK, AND SHALL BE HELD RESPONSIBLE FOR ANY ERRORS OR INACCURACIES RESULTING FROM FAILURE TO DO SO.
  - DETAILS SHOWN ARE INDICATIVE OF THE CHARACTER, PROFILES, MATERIALS AND SYSTEMS REQUIRED FOR THE WORK INCLUDING THOSE CONDITIONS NOT COVERED BY SPECIFIC DETAILS.
  - DIMENSIONS SHALL GOVERN, DO NOT SCALE THE DRAWINGS. WHERE THERE APPEARS TO BE A CONFLICT OR WHERE DIMENSIONS CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
  - ALL DIMENSIONS ARE TO INSIDE FACE OF WALLS.
  - UNLESS SHOWN OTHERWISE, ALL DOORS SHALL BE LOCATED SUCH THAT THERE IS A 2 INCH WALL RETURN BETWEEN THE JAMB FRAME AND THE ADJACENT PERPENDICULAR WALL.
- CONSULT WITH THE ARCHITECT OR ENGINEER BEFORE PENETRATING ANY JOISTS, BEAMS, OR OTHER STRUCTURAL MEMBERS
- ALL CONSTRUCTION MATERIALS AND EQUIPMENT ARE TO BE STORED NEATLY WITHIN THE SCOPE OF WORK AREA ONLY.
- ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS
  - SUBMIT SHOP DRAWINGS AND SAMPLES FOR ALL STEEL, MILLWORK, SIGNAGE, HARDWARE AND INTERIOR FINISHES
  - SUBMIT PRODUCT DATA FOR FIXTURES AND HARDWARE
  - ALL INTERIOR AND EXTERIOR FINISHES, COLORS AND MATERIALS ARE TO BE SELECTED AND APPROVED BY THE OWNER PRIOR TO CONSTRUCTION
  - ALL INTERIOR FINISHES AND FURNISHINGS ARE TO BE CLASS 'A' FIRE RATED AND ARE TO COMPLY WITH MASSACHUSETTS BUILDING CODE AND THE BOSTON FIRE CODE
  - ALL WOOD COMPONENTS SHALL BE FIRE TREATED
  - CONFIRM THAT ALL MATERIALS AND FINISHES, INCLUDING THEIR FABRICATION AND INSTALLATION WILL NOT RELEASE FUMES OR AROMAS WHICH MAY BE A HAZARD OR NUISANCE TO PERSONNEL
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PANEL CONTROL AND CIRCUIT DESIGN AND FOR COMPLIANCE WITH ALL BUILDING, LIFE SAFETY, AND STATE AND NATIONAL ELECTRICAL CODES WHICH MAY APPLY
  - ALL EXPOSED UTILITY WIRES AND PIPES SHALL BE INSTALLED IN A WAY THAT DOES NOT OBSTRUCT OR PREVENT THE CLEANING OF FLOORS, WALLS AND CEILINGS; THEY SHALL BE INSTALLED A MINIMUM OF 6" OFF OF FLOORS AND 1" OFF OF WALLS, CEILINGS OR ADJACENT PIPES OR WIRES
- WHERE APPROPRIATE, EXISTING SPRINKLER HEADS ALARM SYSTEM AND DETECTORS ARE TO REMAIN. MODIFY LOCATIONS ONLY WHERE CEILING IS ALTERED OR AS INDICATED ON FIRE PROTECTION DRAWINGS.
- EQUIPMENT INFORMATION AND SPECIFICATIONS, INCLUDING EQUIPMENT SUPPLIED BY THE OWNER, ARE TO BE THE MOST CURRENT AT THE TIME OF DOCUMENTATION PREPARATION.
  - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT DIMENSIONS AND EQUIPMENT CONNECTION REQUIREMENTS.
  - MAKE ALL FINAL CONNECTIONS, INSTALL THE SET UP IN WORKING ORDER, CHECK WARRANTIES, TEST AND NOTE VOID WARRANTIES.
  - COORDINATE WITH THE OWNER DELIVERY, STORAGE AND INSTALLATION OF ALL EQUIPMENT, INCLUDING THAT SUPPLIED BY THE OWNER.
- PROVIDE ALL TEMPORARY FACILITIES AND SERVICES, CONSTRUCTION AND SUPPORT FACILITIES AND SECURITY AND PROTECTION AS NEEDED TO PROTECT NEW AND EXISTING CONSTRUCTION FOR THE DURATION OF THE WORK
- ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE UNLESS OTHERWISE SPECIFIED FOR A LONGER PERIOD OF TIME FOR A CERTAIN ITEM
- SEAL AND CAULK AROUND ALL PENETRATIONS, CRACKS AND CREVICES AND ANY OPENINGS CAPABLE OF HARBORING INSECTS OR RODENTS
- EMPLOY EXPERIENCED WORKERS FOR FINAL CLEANING. CLEAN TO COMMERCIAL BUILDING PROGRAM STANDARDS
  - DISPOSE OF ALL WASTE AND DEBRIS OFF THE PREMISES



**1** LOCATION PLAN  
SCALE: NOT TO SCALE

## APPLICABLE CODES:

- BUILDING CODE: CMR 780 MASSACHUSETTS STATE BUILDING CODE, 9TH EDITION (AMENDED INTERNATIONAL BUILDING CODE 2015, INTERNATIONAL RESIDENTIAL CODE 2015 AND THE 2015 INTERNATIONAL EXISTING BUILDING CODE W/ MASSACHUSETTS AMENDMENTS)
- ACCESSIBILITY: MASSACHUSETTS ARCHITECTURAL ACCESS BOARD CMR 521 AND UNIFORM FEDERAL ACCESSIBILITY STANDARDS
- FIRE PROTECTION: MASSACHUSETTS COMPREHENSIVE FIRE SAFETY CODE CMR 527 1.00 - 2015 NFPA 1: FIRE CODE WITH AMENDMENTS
- ELECTRICAL: 527 CMR 12.00 MASSACHUSETTS ELECTRICAL CODE - 2020 NFPA 70 NATIONAL ELECTRICAL CODE WITH AMENDMENTS
- MECHANICAL: INTERNATIONAL MECHANICAL CODE 2015 W/ AMENDMENTS
- PLUMBING: 248 CMR BOARD OF STATE EXAMINERS OF PLUMBERS AND GAS FITTERS - UNIFORM STATE PLUMBING CODE
- ENERGY: INTERNATIONAL ENERGY CONSERVATION CODE 2018 (IECC)
- AMERICANS WITH DISABILITIES ACT
- BOSTON ZONING CODE
- MGL CH. 148 SECTION 26G

## BUILDING DESCRIPTION:

BUILD NEW 3-STORY BUILDING WITH 2 UNITS AND 2 PARKING. BUILDING WILL NOT HAVE AN ELEVATOR. BUILDING WILL BE FULLY SPRINKLERED.

## CODE SUMMARY:

- PROPOSED USE OR OCCUPANCY: RESIDENTIAL - 3F-4000
  - OCCUPANT LOAD: (200 GROSS SF/PERSON PER TABLE 1004.1.2) APPROX.  $\frac{3573 SF}{200} = 17$  PERSONS
- CONSTRUCTION TYPE: V.B. - TABLE 504.4
  - PER TABLE 601: STRUCTURAL FRAME, BEARING WALLS, FLOORS AND ROOF ARE NOT REQUIRED TO BE RATED
  - MAX. AREA IS 21,000 PER FLOOR PER TABLE 506 AND MAXIMUM HEIGHT IS 3 STORIES ABOVE GRADE - 504.4
- PER TABLE 1006.3.2(1) FOR USE GROUP R-2 - ONLY ONE EXIT IS REQUIRED WHEN THERE ARE LESS THAN FOUR STORIES AND 4 DWELLING UNITS OR LESS PER STORY. TRAVEL DISTANCE IS LIMITED TO 125'
- MINIMUM WIDTH OF EGRESS STAIR: 36 INCHES PER SECTION 1011.2
- MAXIMUM LENGTH OF EXIT TRAVEL: 250 FEET PER 1017.2
- FIRE RATED CONSTRUCTION:
  - PER TABLE 602, IN V.B. CONSTRUCTION EXTERIOR WALLS MORE THAN 10' FROM PROPERTY LINE ARE NOT REQUIRED TO BE RATED, 10' OR LESS MUST BE 1 HOUR RATED.
  - DEMISING PARTITION/CORRIDORS MUST BE 1 HOUR IN A SPRINKLERED TYPE V.B BUILDING 420.2 AND 708.3
  - HORIZONTAL SEPARATION BETWEEN DWELLING UNITS: 1 HOUR IN A SPRINKLERED TYPE V.B BUILDING PER 420.3 AND 711.2.4.3 - REFER TO DETAIL ON A-20
  - STAIRWAYS CONNECTING 4 OR MORE STORIES ARE TO BE 2 HOUR RATED, STAIRS CONNECTING LESS THAN 4 STORIES ARE TO BE 1 HOUR RATED PER 1023.2
  - PER TABLE 716.5: 1 HOUR ENCLOSURES AND EXIT ACCESS SHALL HAVE 1 HOUR DOORS. 1 HOUR AND  $\frac{1}{2}$  HOUR CORRIDORS SHALL HAVE A MINIMUM 20 MIN. RATED DOOR. 2 HOUR ENCLOSURES AND EXIT ACCESS SHALL HAVE 90 MINUTE RATED DOORS.
- DEMISING PARTITION MINIMUM: STC 50 PER SECTION 1207.2 AND MIN. 50 IIC BETWEEN FLOORS
- ACCESSIBILITY REQUIREMENTS:
  - CMR 521 9.3 - EXISTING BUILDINGS RENOVATED FOR RESIDENTIAL USE ARE EXEMPT FROM MAAB REQUIREMENTS PER 521 CMR; ARCHITECTURAL ACCESS BOARD, PARAGRAPH 9.2.1
- ENERGY REQUIREMENTS:

MASSACHUSETTS ENERGY STRETCH CODE, CHAPTER 4 - RESIDENTIAL ENERGY EFFICIENCY - RESIDENTIAL BUILDINGS, INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2018

  - CLIMATE ZONE 5 PER TABLE 301.1
  - EXISTING WALLS AND CEILINGS: FILL EXISTING WALL AND CEILING CAVITIES WITH INSULATION PER IECC 503.1
  - PER IECC TABLE 402.4, FENESTRATION SHALL HAVE A U-FACTOR OF 0.38 OR BETTER.
  - SKYLIGHTS SHALL HAVE A U-FACTOR OF 0.55 OR BETTER PER 402.4.
  - VAPOR RETARDER IS REQUIRED TO COMPLY WITH R402.1.1 OF THE IECC AND R702.7 OF THE INTERNATIONAL RESIDENTIAL CODE. VAPOR RETARDER IS NOT REQUIRED IN BASEMENT OR BELOW GRADE WALLS.
  - R402.1.3 - CEILING: R=49; WOOD FRAME WALL: R=20 (CAVITY)+ 3.8 (CONTINUOUS); FLOOR R=30; BASEMENT WALLS AND CRAWL SPACES: R=15 CONTINUOUS OR R=19 IN CAVITY OR R=13 IN CAVITY WITH R=5 CONTINUOUS; SLAB R=10
  - DEMAND RECIRCULATION WATER SYSTEMS SHALL HAVE CONTROLS THAT COMPLY WITH REQUIRED CODES
  - HOT WATER PIPES IN UNCONDITIONED SPACES SHALL ALL BE INSULATED TO AT LEAST R-3, AND HOT WATER PIPES IN CONDITIONED SPACES  $\frac{3}{4}$ " AND LARGER SHALL BE INSULATED TO AT LEAST R-3.

## LIST OF DRAWINGS

- A-01 ANALYSIS, DRAWING LIST AND NOTES
- A-02 SITE PLAN
- A-10 PROPOSED PLANS
- A-30 PROPOSED ELEVATIONS
- A-40 PROPOSED DETAILS
- A-41 PROPOSED DETAILS



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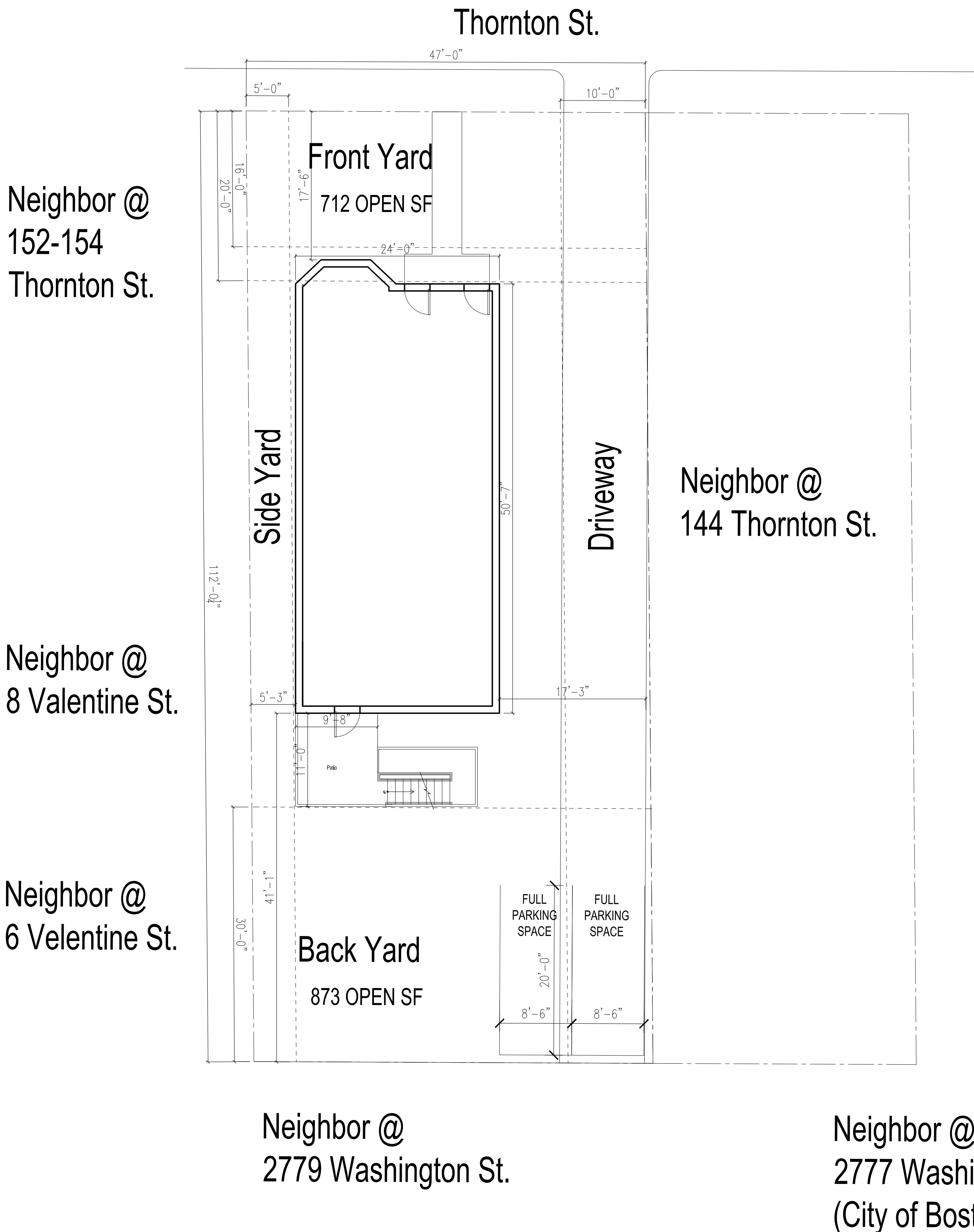
**context**  
a collaborative design workshop

Roxbury, Boston, Massachusetts

No.	Description	Date
01	Issued for Permit	03/06/2022

Drawing Title: ANALYSIS, DWG LIST, NOTES  
Project No.: 0533 Checked by: EZ

**A-01**



Neighbor @  
152-154  
Thornton St.

Neighbor @  
8 Valentine St.

Neighbor @  
6 Valentine St.

Neighbor @  
2779 Washington St.

Neighbor @  
2777 Washington St.  
(City of Boston)

ZONING ANALYSIS:	3F-4000	PROPOSED	COMMENTS
LOT AREA MIN.	2,000 SF	5,264 SF	
ADD'L LOT AREA REQ'D FOR EA. UNIT	2,000 SF		
MIN. LOT WIDTH	45'	47'	
MIN. LOT FRONTAGE	45'	47'	
MAX. F.A.R.	0.8	$\frac{3573}{5264} = 0.68$	
MAX. HEIGHT (STORIES/FEET)	3 / 35'	3 / 35'	
USABLE OPEN SPACE / UNIT	650	$\frac{1585}{2} = 792.5$	
MIN. FRONT YARD SETBACK	20'	20'-4"	
MIN. SIDE YARD SETBACK	5'/10'/15' TOTAL	5'-3"/17'-3"	
MIN. REAR YARD SETBACK	30'	30'-0"	
PARKING REQUIREMENT	1.0 / UNIT	2 SPACES	

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



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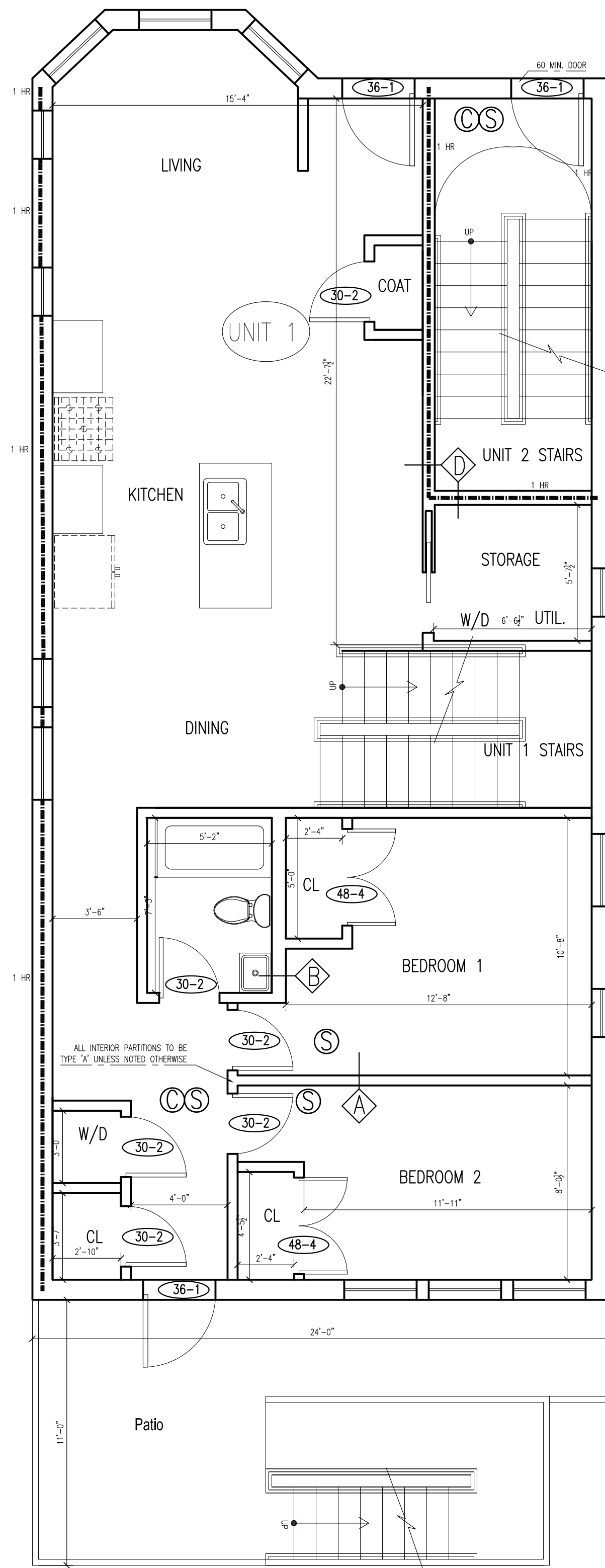
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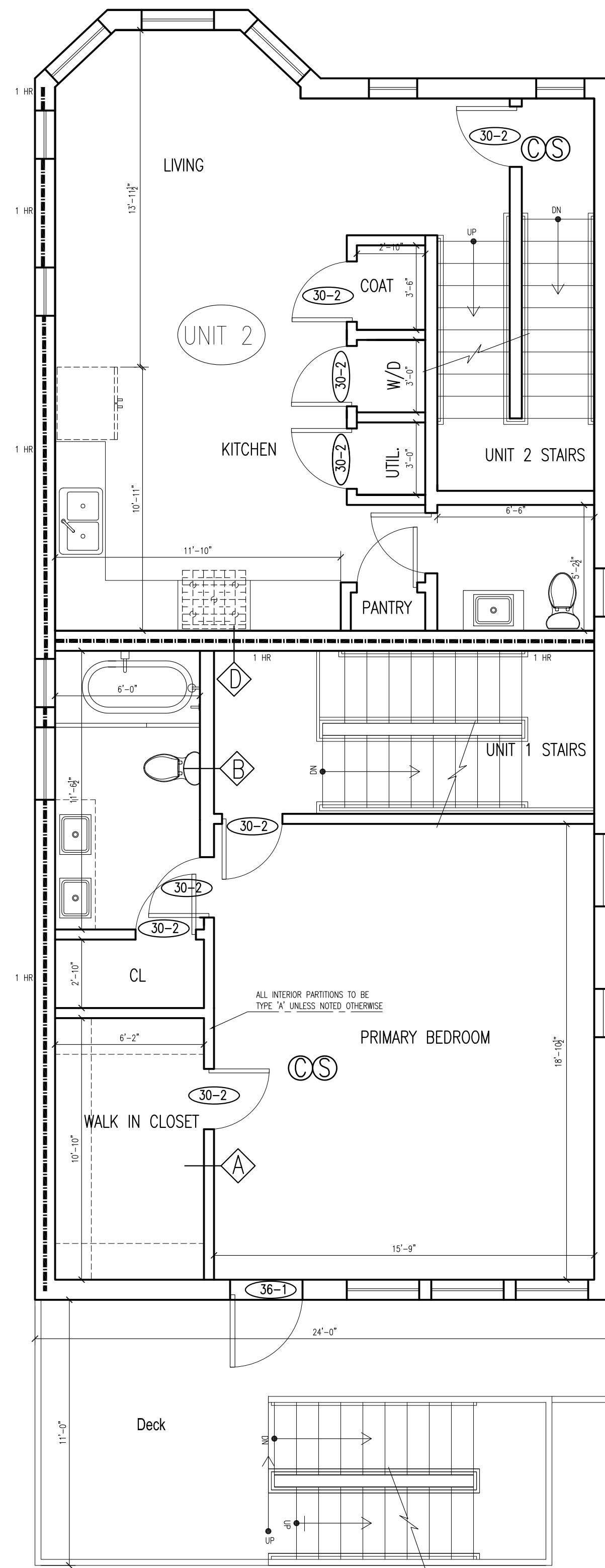
Drawing Title: Site Plan

Project No.: 0533 Checked by: EZ

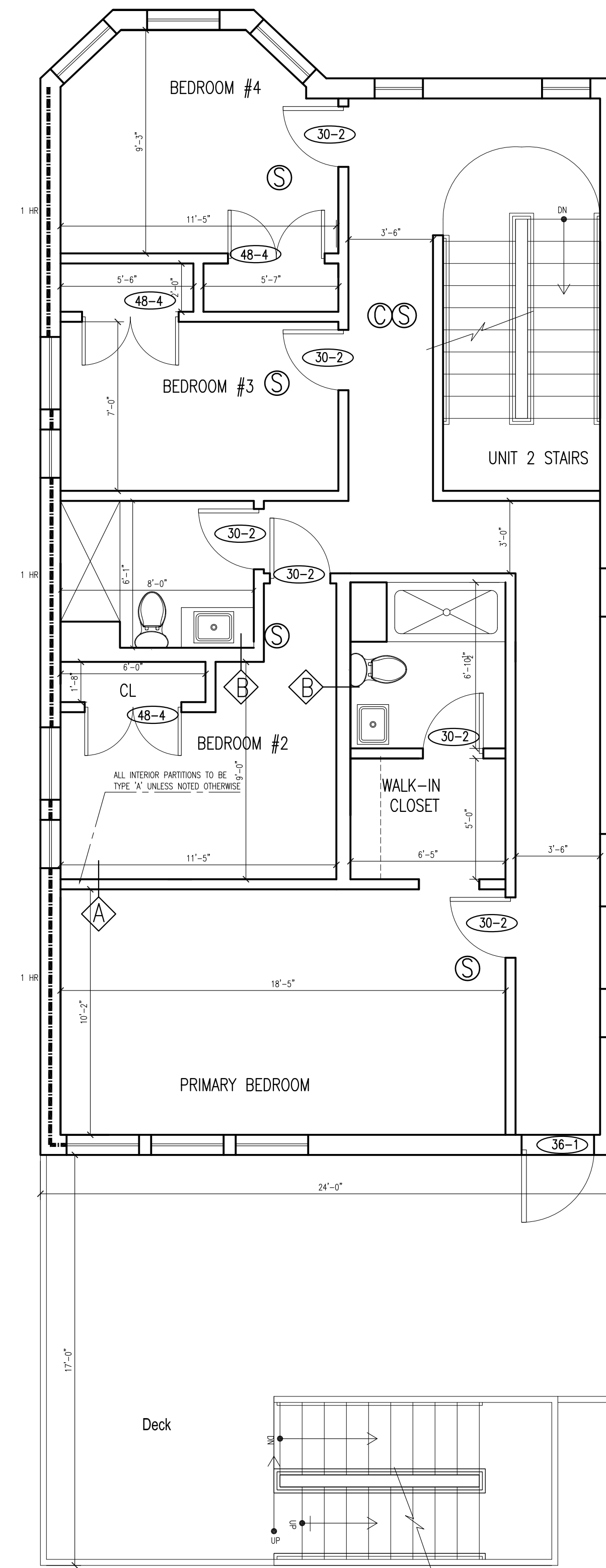
**A-02**



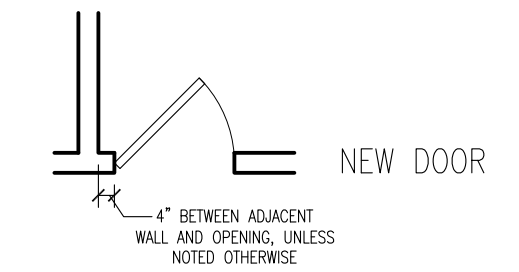
**1** LEVEL 1 PLAN  
SCALE: 1/4" = 1'-0"



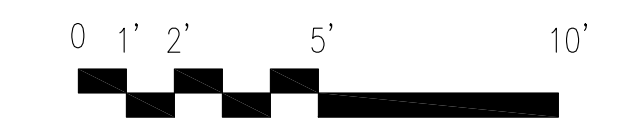
**2** LEVEL 2 PLAN  
SCALE: 1/4" = 1'-0"



**3** LEVEL 3 PLAN  
SCALE: 1/4" = 1'-0"



- SMOKE DETECTOR, HARDWIRED AND INTERCONNECTED
- CARBON MONOXIDE DETECTOR, HARDWIRED AND INTERCONNECTED
- HEAT DETECTOR, HARDWIRED AND INTERCONNECTED
- WALL TYPE, REFER TO DRAWING A-01

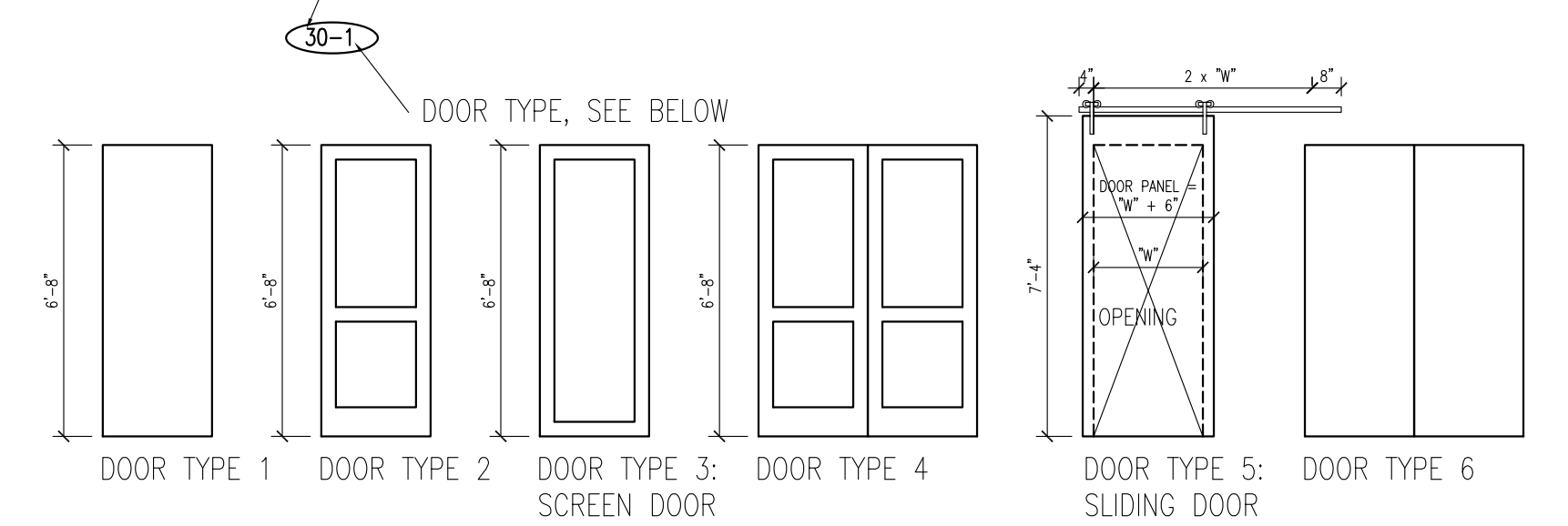


**FINISH NOTES:**

1. ALL WALLS TO BE PAINTED GWB, (WHITE TO MATCH ARCHITECT'S SAMPLE)
2. FLOORS TO BE HARDWOOD UNLESS NOTED OTHERWISE.

**DOOR NOTES:**

1. ALL NEW DOORS TO BE 6'-8" HIGH, 1 3/4" THICK SOLID CORE WOOD DOORS WITH WOOD FRAMES.
2. INTERIOR DOORS ARE TO BE PAINTED WHITE, CONFIRM EXTERIOR DOOR COLOR AND FINISH WITH OWNER AND ARCHITECT
3. DOOR TARGETS: DOOR WIDTH



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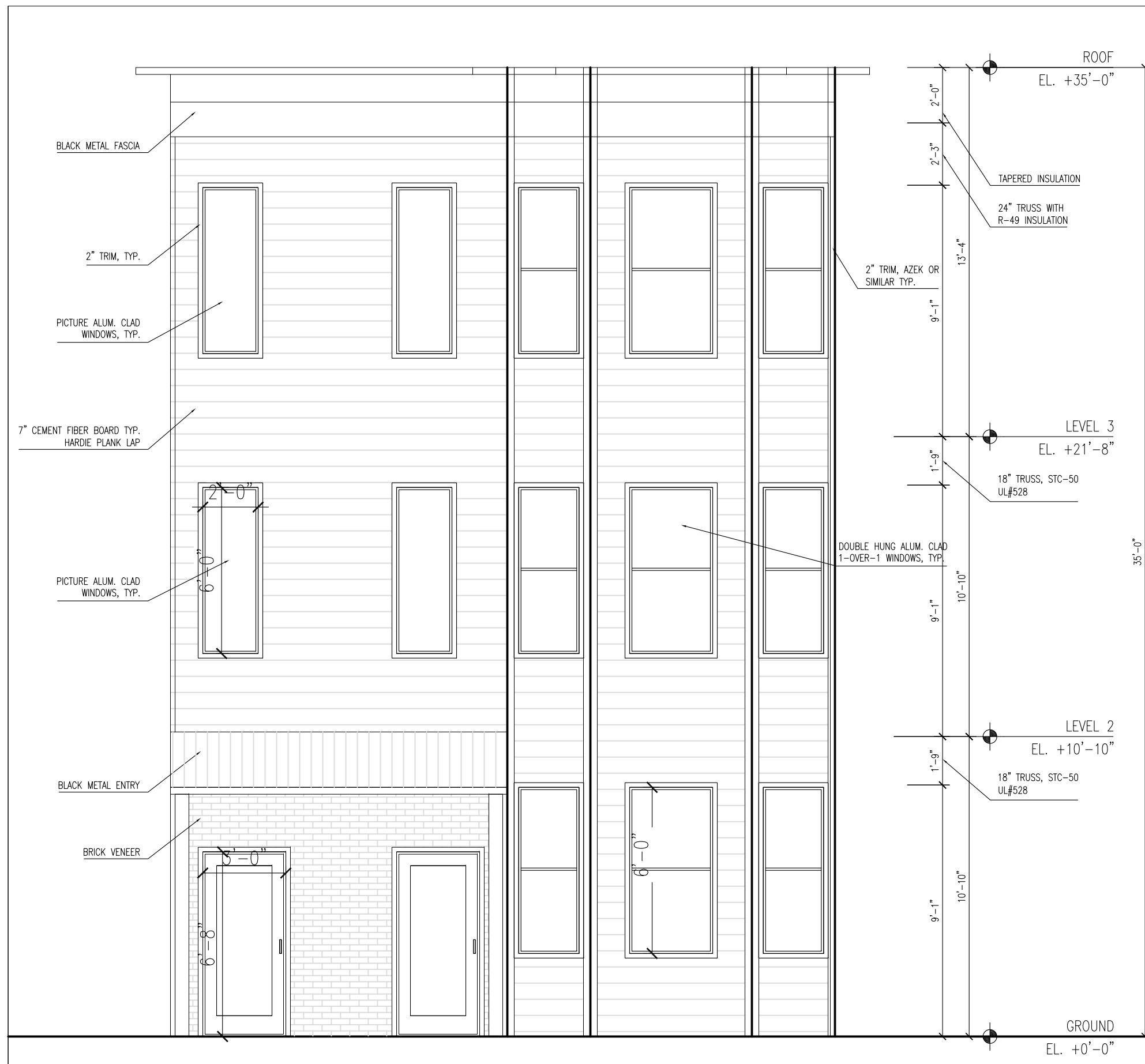
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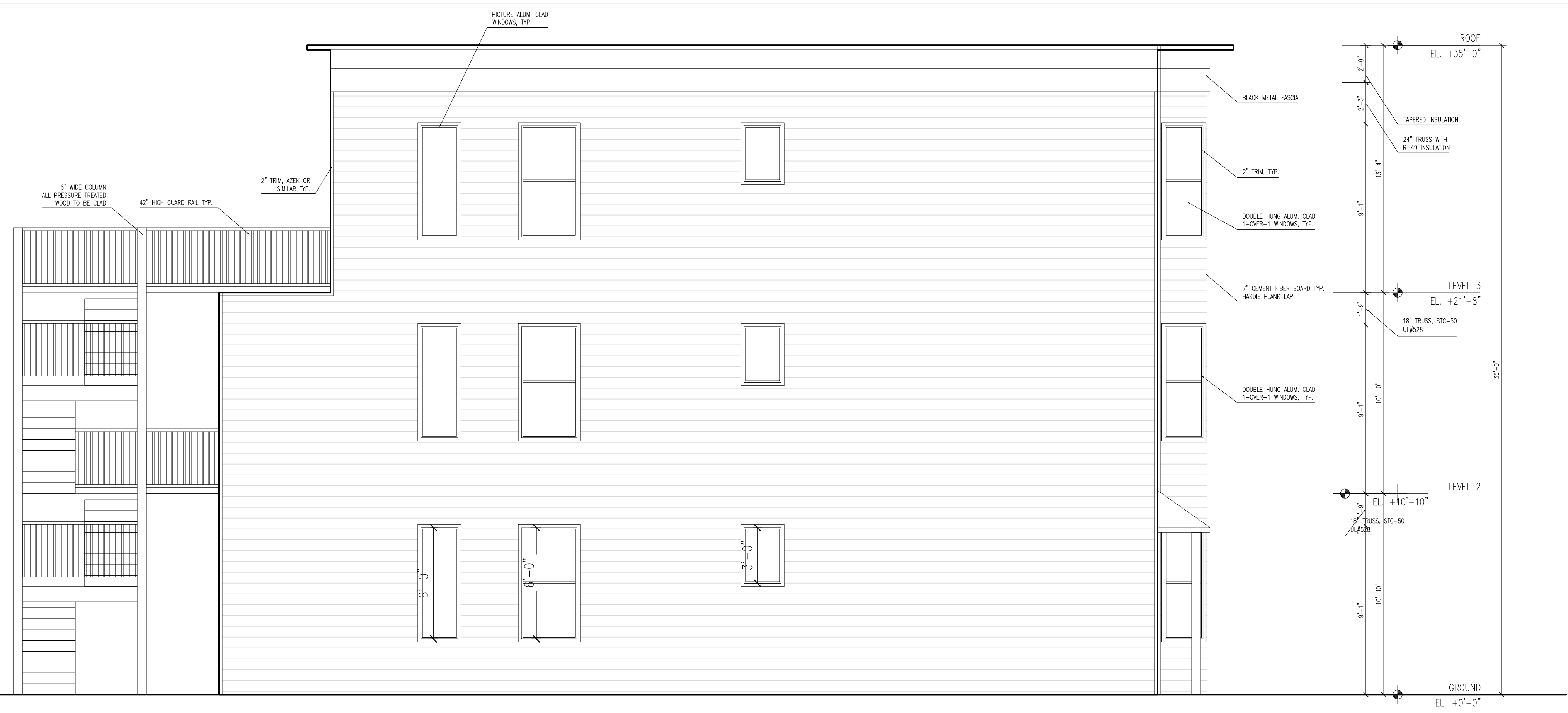
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No.	Description	Date
01	Issued for Permit	03/06/2022
Drawing Title: Proposed Plans		
Project No.: 0533		Checked by: EZ

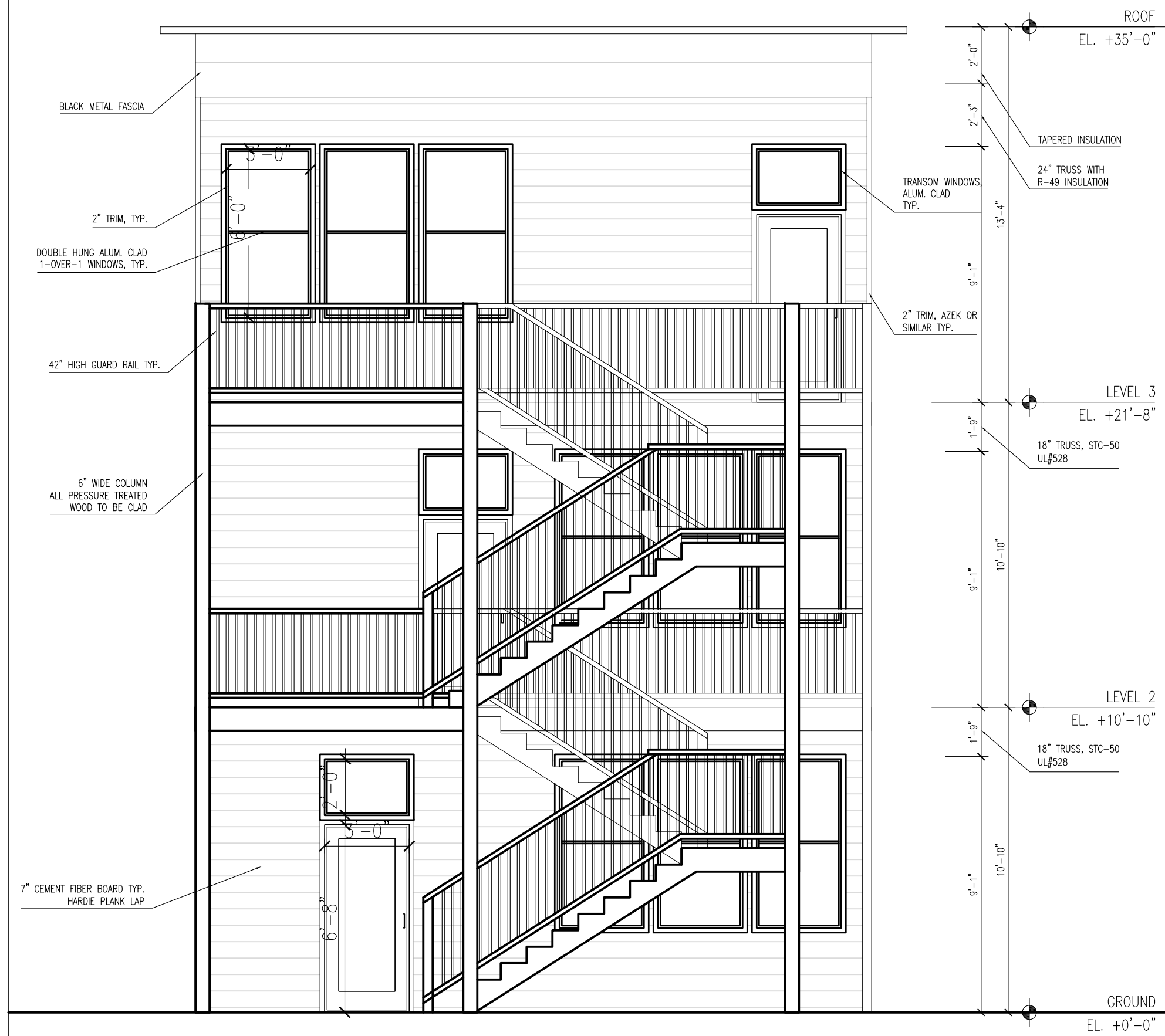
**A-10**



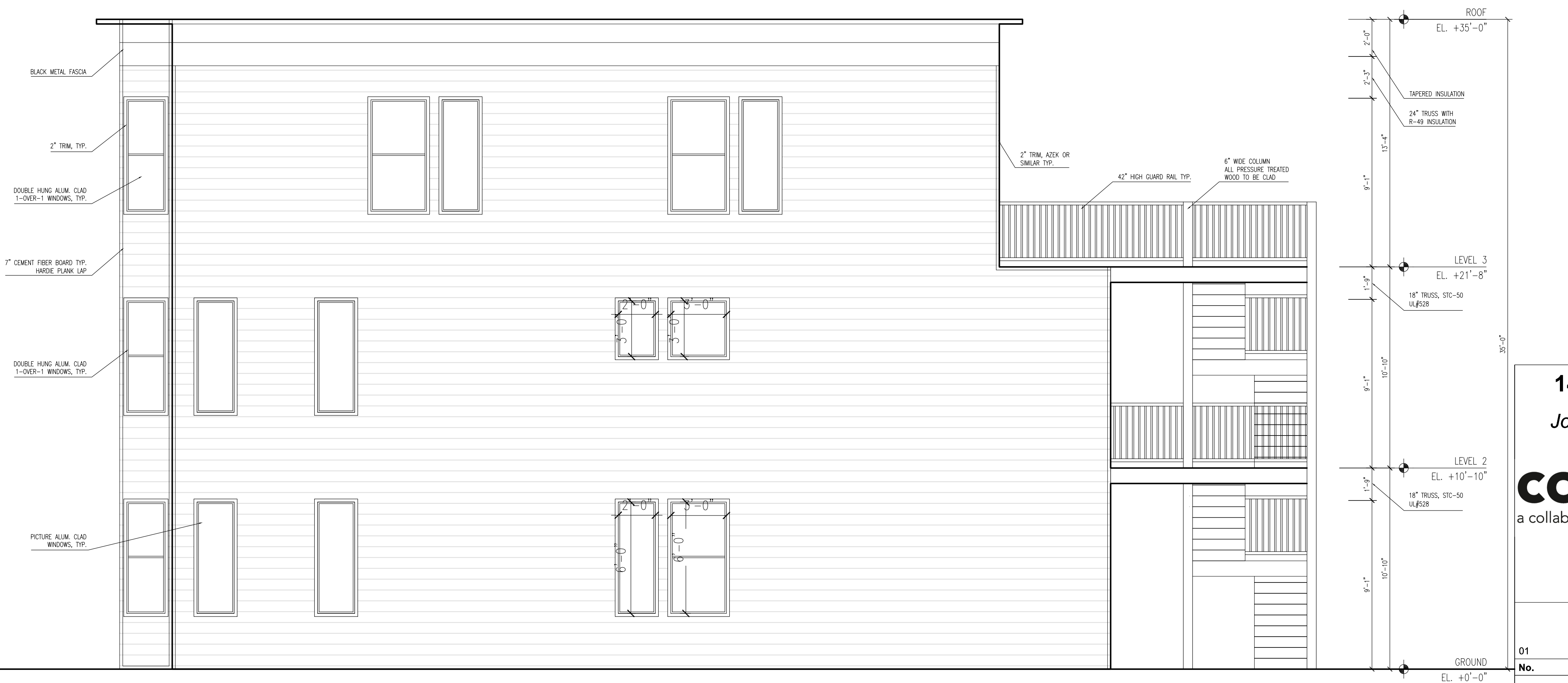
**1** PROPOSED FRONT ELEVATION  
SCALE: 1/4" = 1'-0"



**2** PROPOSED SIDE ELEVATION  
SCALE: 1/4" = 1'-0"



**3** PROPOSED REAR ELEVATION  
SCALE: 1/4" = 1'-0"



**4** PROPOSED SIDE ELEVATION  
SCALE: 1/4" = 1'-0"



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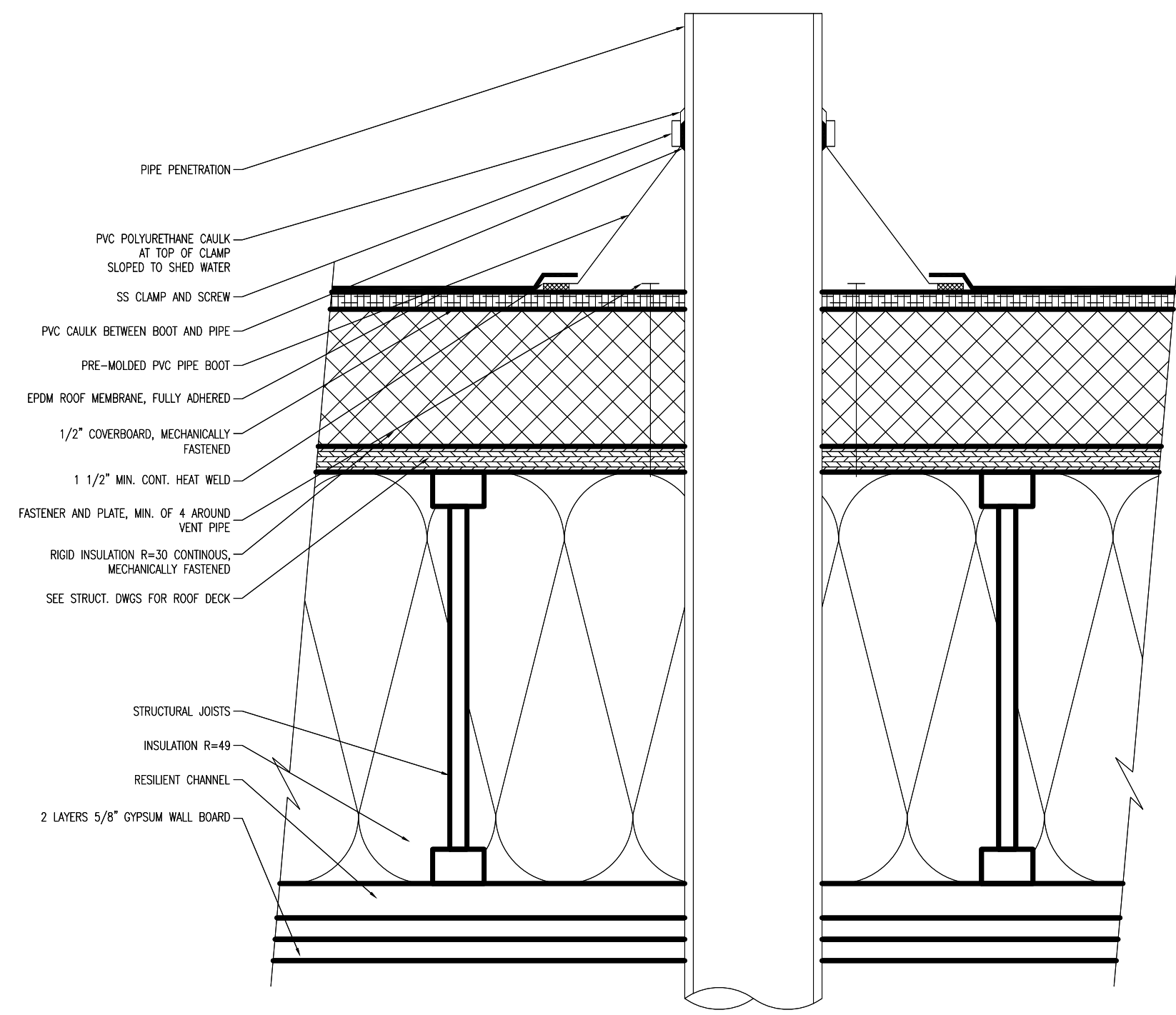
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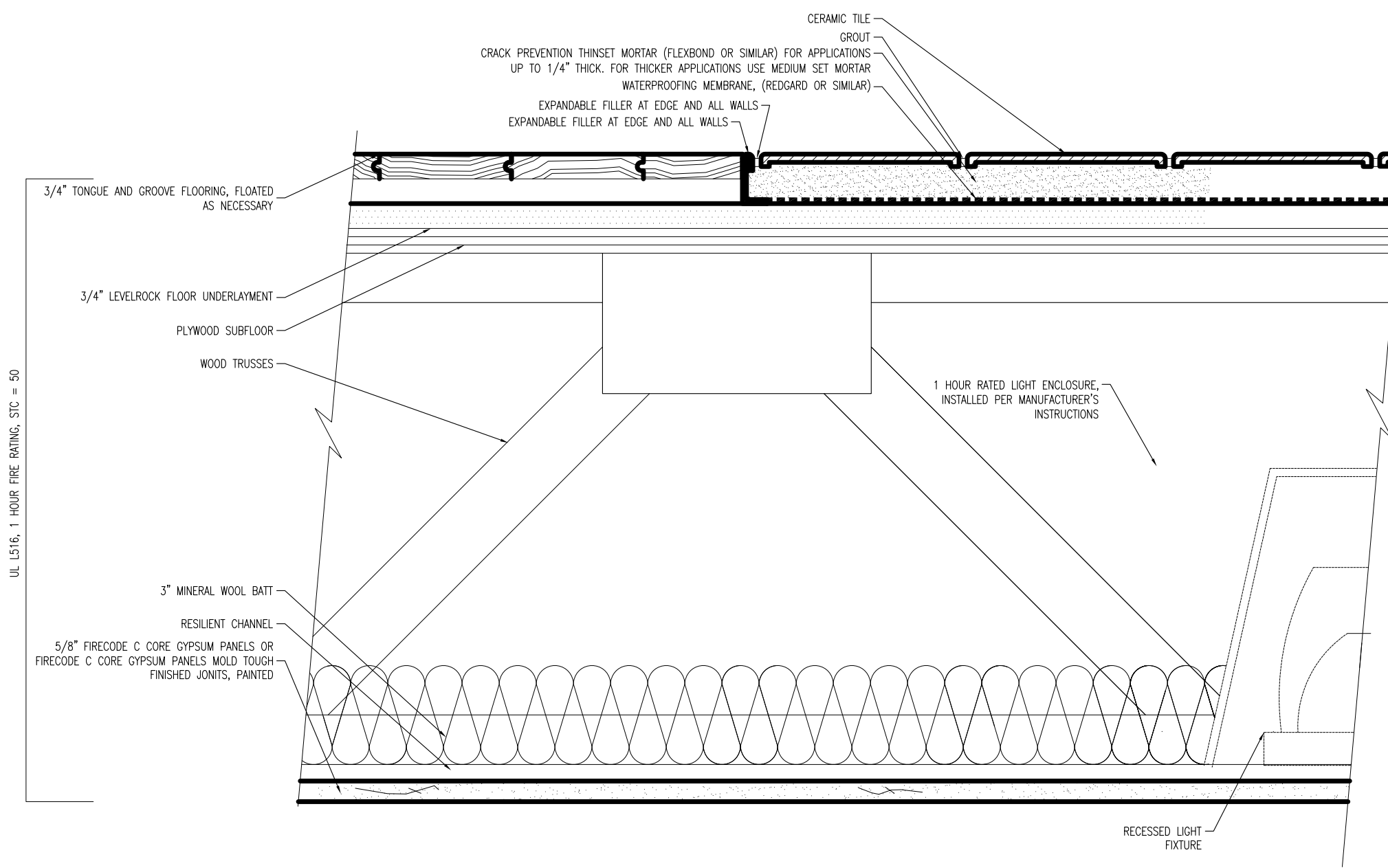
Drawing Title: Proposed Elevations

Project No.: 0533 Checked by: EZ

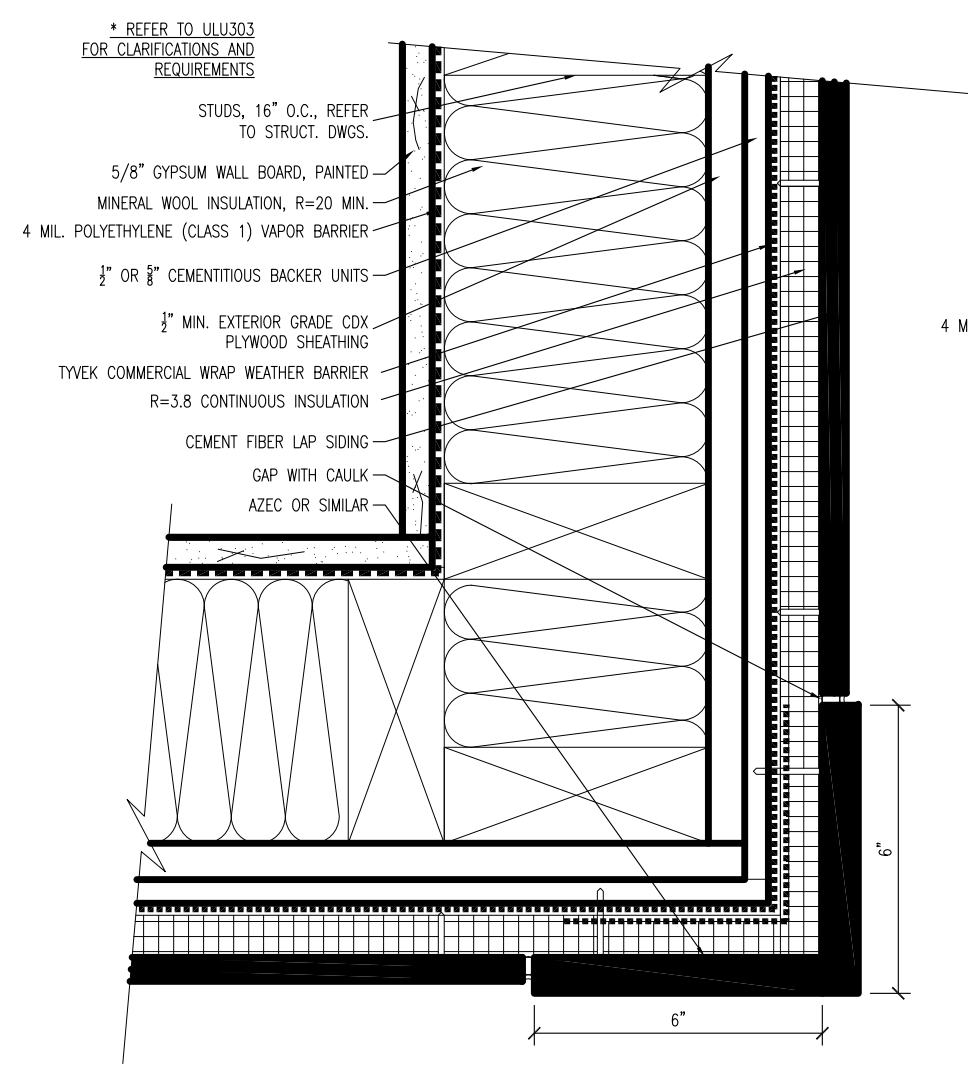
**A-30**



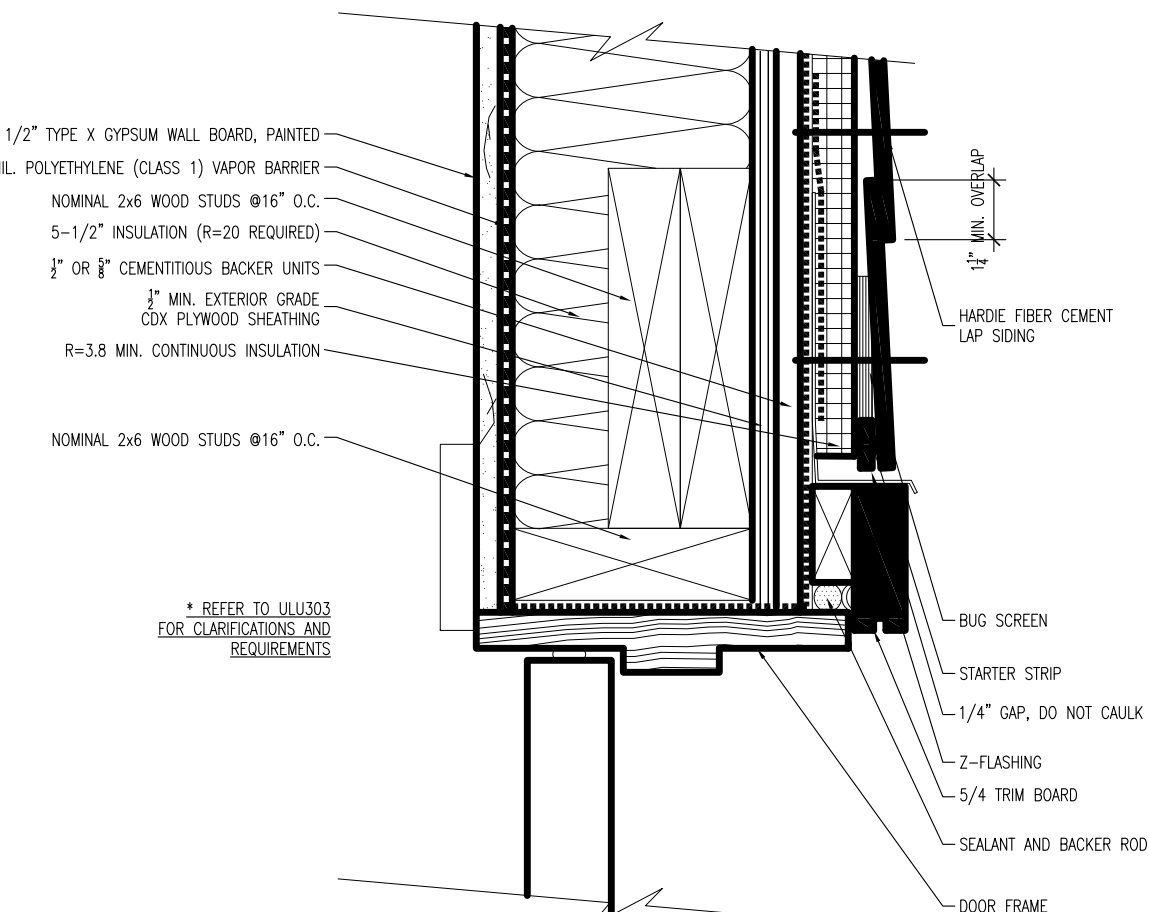
**1** ROOF PENETRATION SECTION DETAIL  
SCALE: 3" = 1'-0"



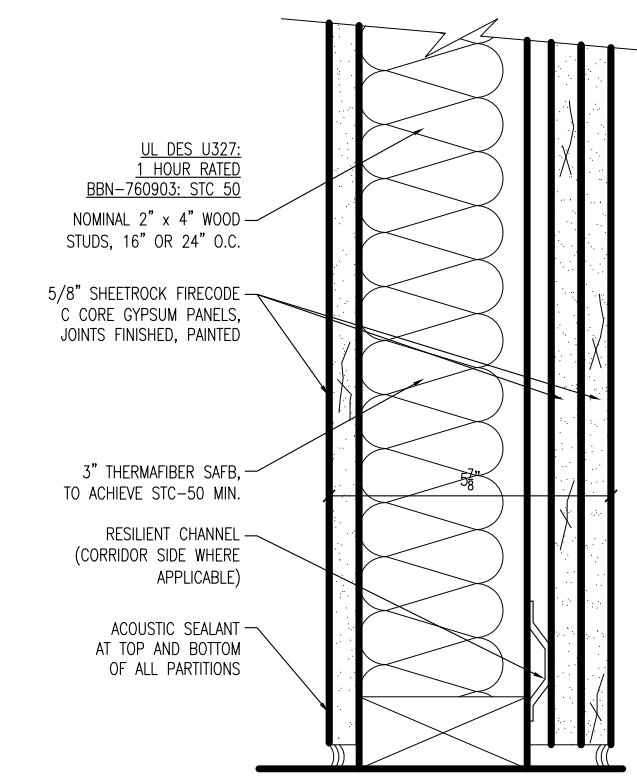
**2** CEILING SANDWICH SECTION DETAIL  
SCALE: 3" = 1'-0"



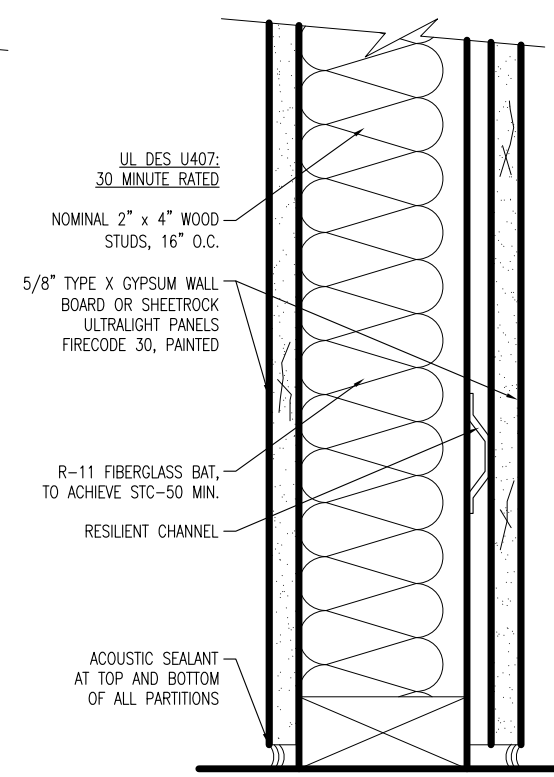
**3** RATED EXTERIOR WALL PLAN DETAIL  
SCALE: 3" = 1'-0"



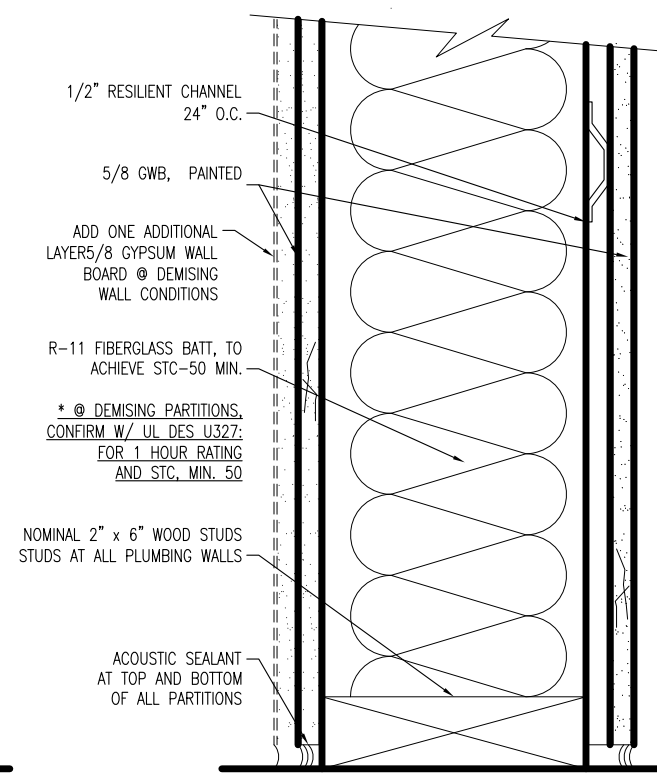
**4** RATED EXTERIOR WALL SECTION DETAIL  
SCALE: 3" = 1'-0"



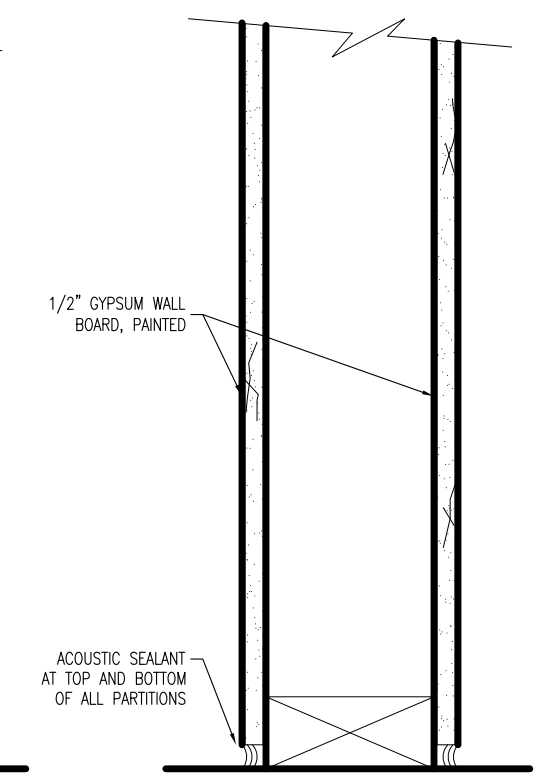
**D** WALL TYPE D  
1 HOUR RATED  
SCALE: 3" = 1'-0"



**C** WALL TYPE C  
30 MINUTE RATED  
SCALE: 3" = 1'-0"



**B** WALL TYPE B  
SECTION DETAIL  
SCALE: 3" = 1'-0"



**A** WALL TYPE A  
SECTION DETAIL  
SCALE: 3" = 1'-0"

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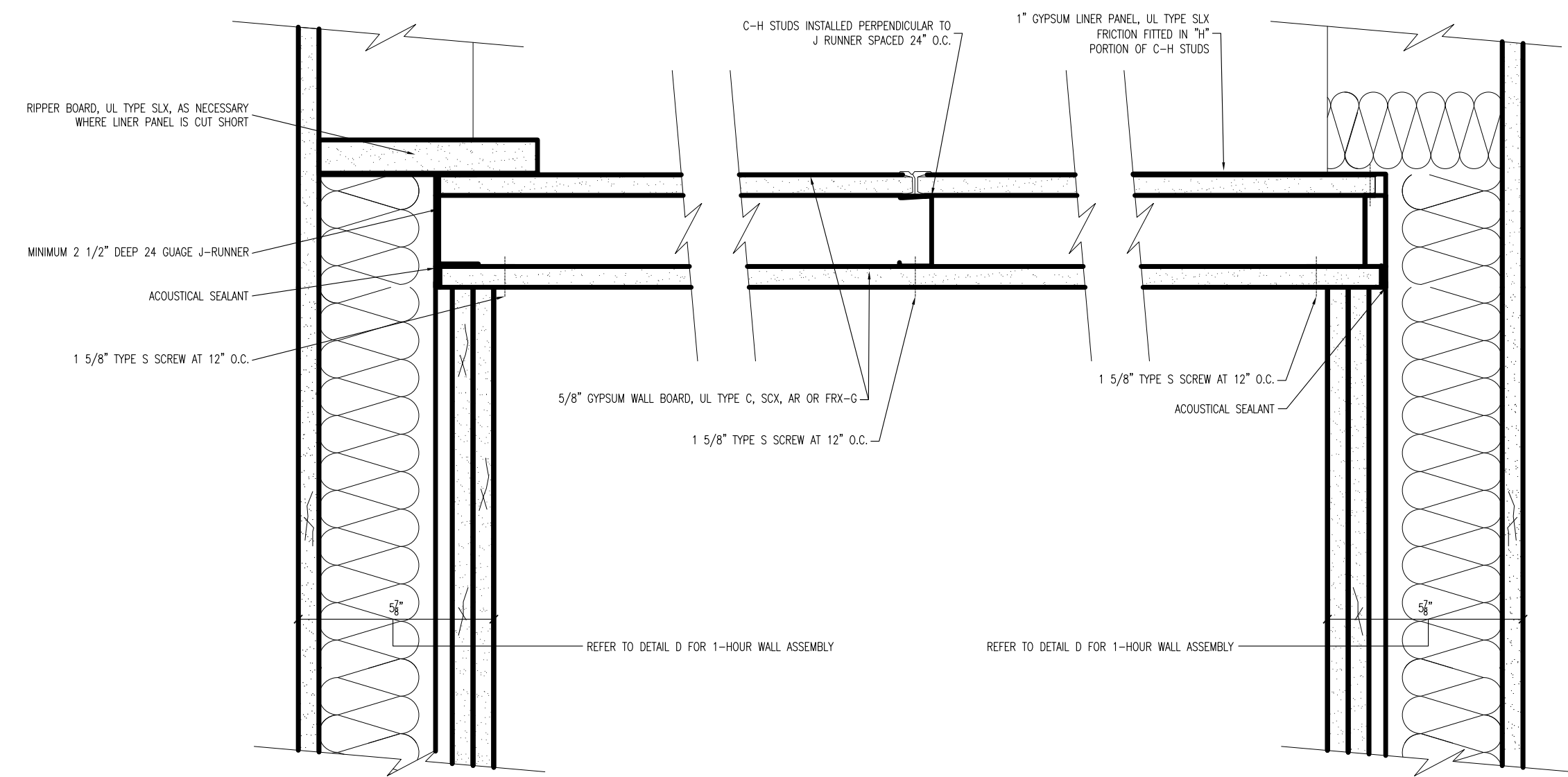
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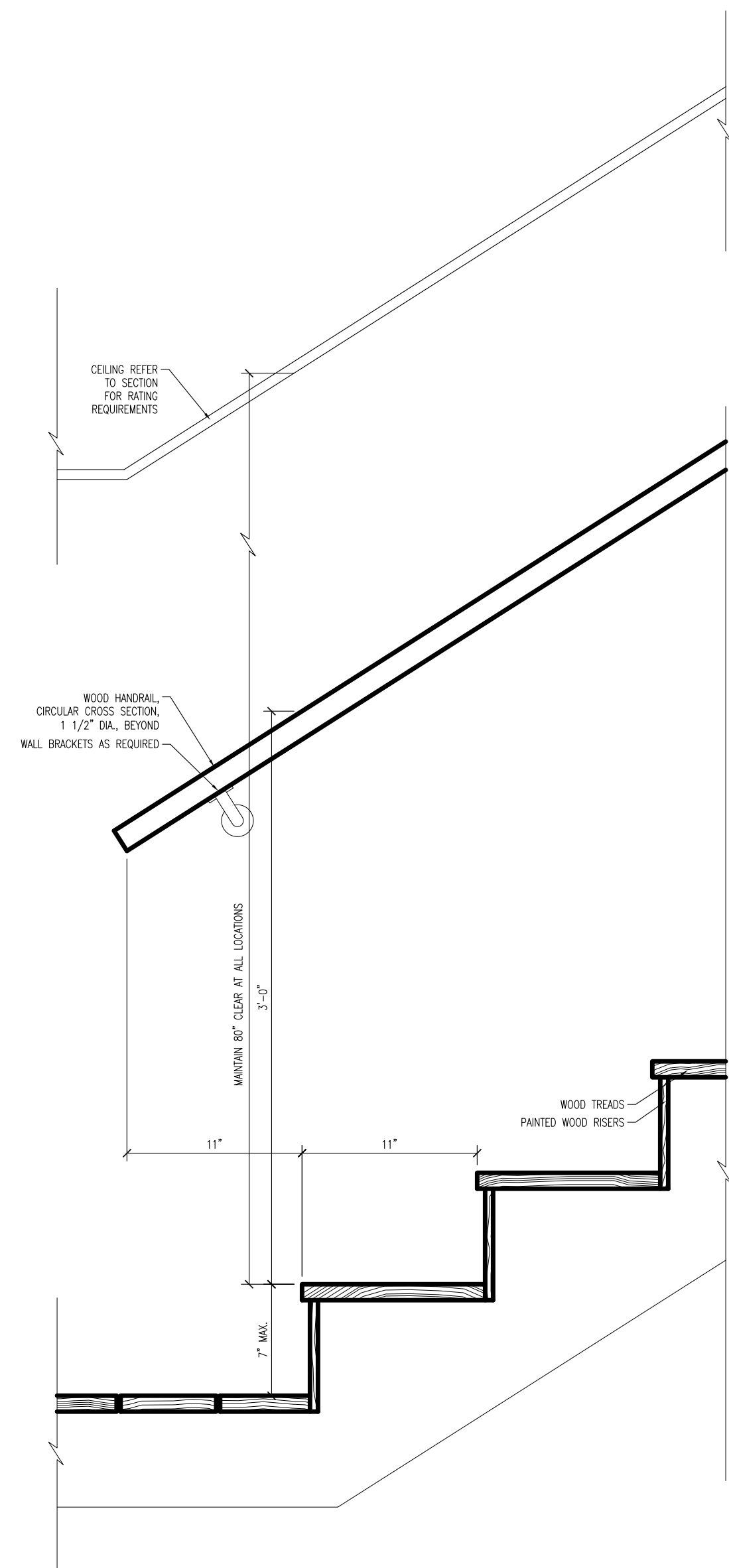
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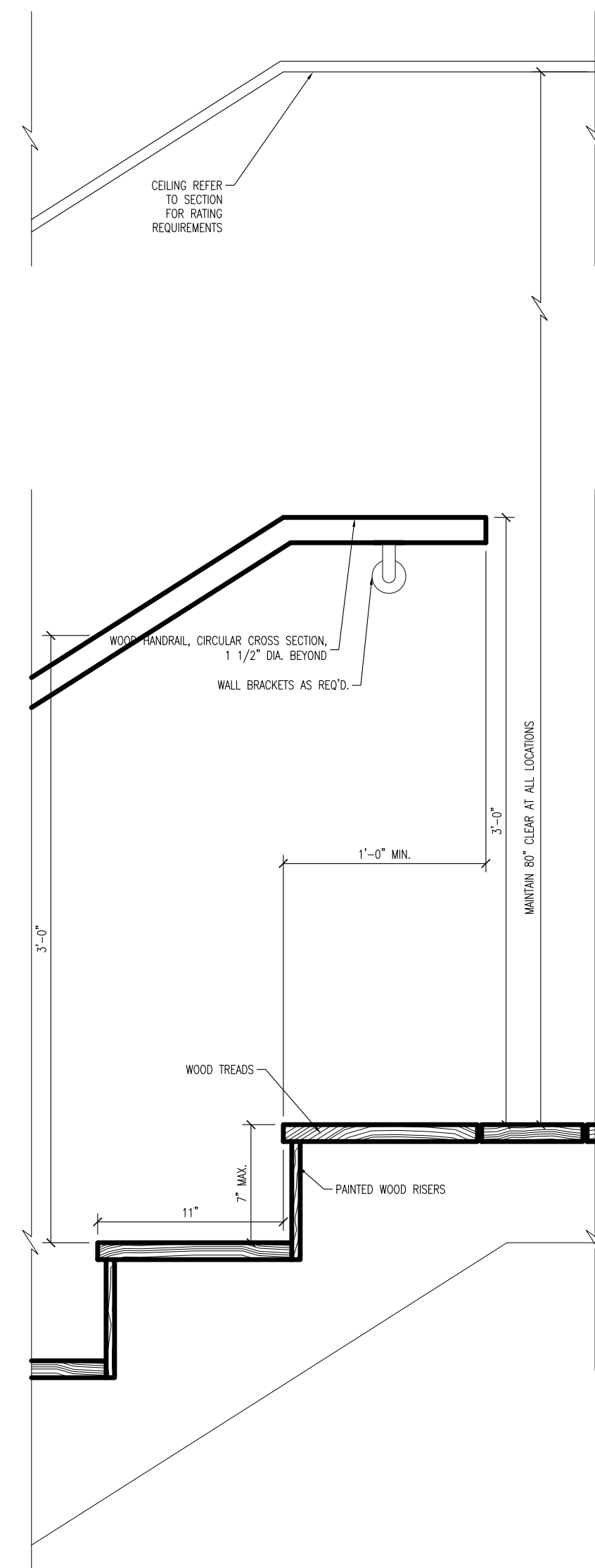
A-40



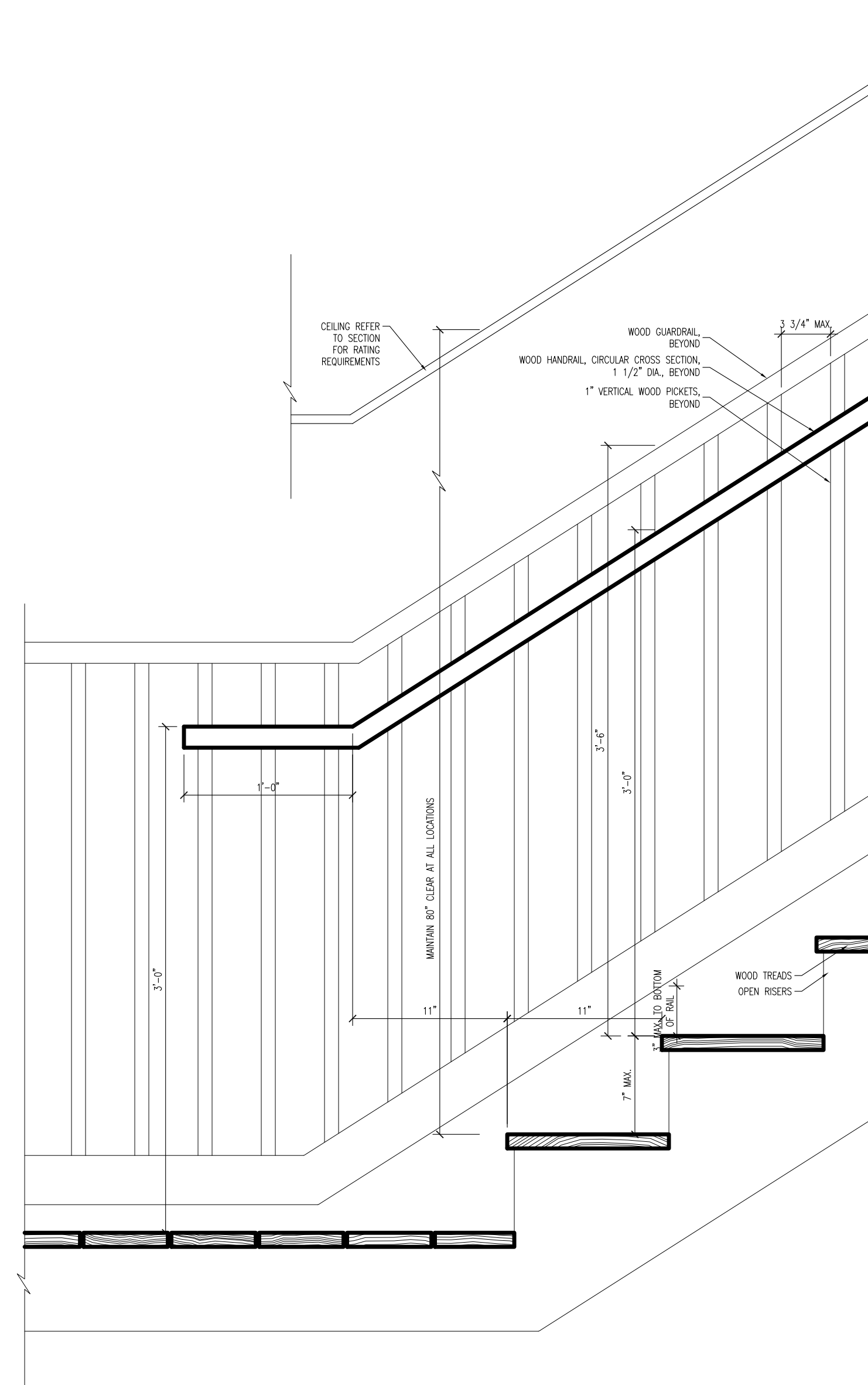
**15** SHAFT WALL/CEILING DETAIL  
SCALE: 3" = 1'-0"



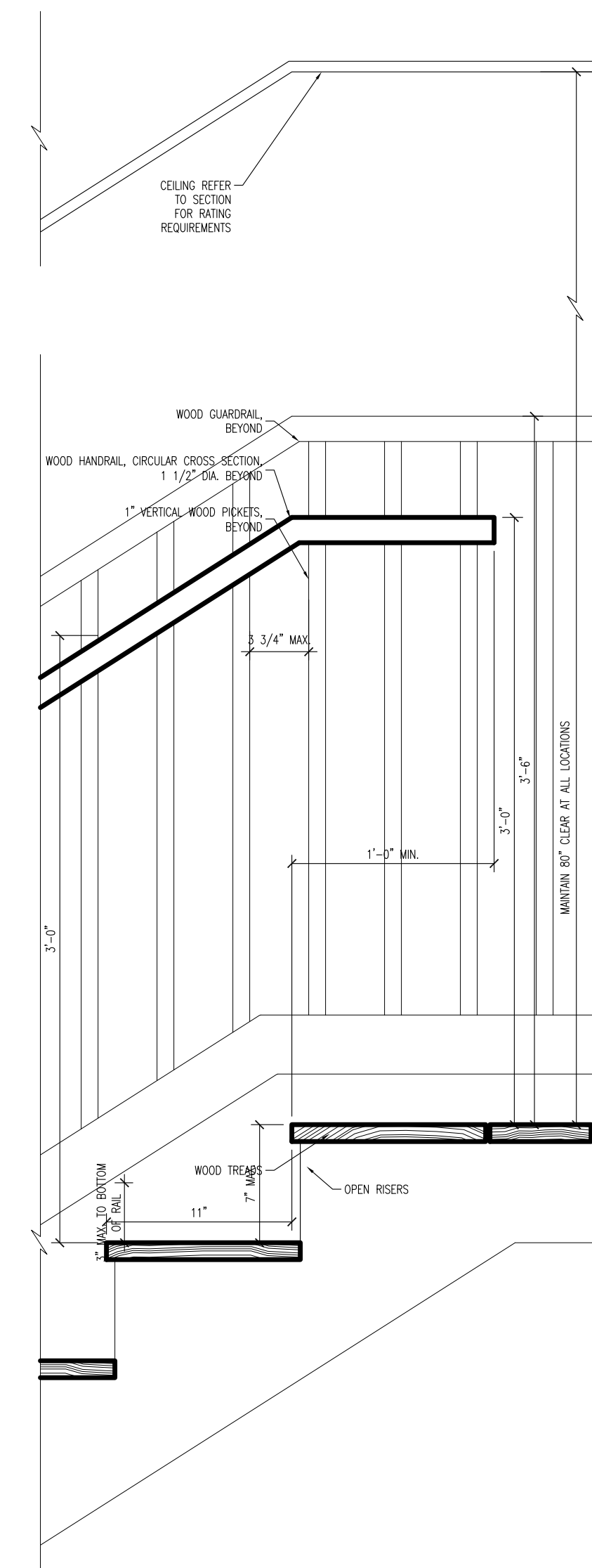
**16** BASE OF INTERIOR COMMON STAIR DETAIL  
SCALE: 1 1/2" = 1'-0"



**17** TOP OF INTERIOR COMMON STAIR DETAIL  
SCALE: 1 1/2" = 1'-0"



**18** BASE OF EXTERIOR COMMON STAIR DETAIL  
SCALE: 1 1/2" = 1'-0"



**19** TOP OF EXTERIOR COMMON STAIR DETAIL  
SCALE: 1 1/2" = 1'-0"



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