

NEW THREE UNIT APARTMENT BUILDING

for

Liv Chase & Brent Adler

52 Federal Street, Portland, Maine



NEW 52 FEDERAL STREET BUILDING

MATERIALS

	CONTINUOUS LUMBER
	NON-CONTINUOUS LUMBER
	PLYWOOD
	FINISH WOOD
	RIGID INSULATION
	BATT INSULATION
	PLASTER, GROUT, MORTAR, ETC.
	CONCRETE
	CONCRETE MASONRY UNITS
	EARTH
	GRAVEL
	METAL

SYMBOLS

	COLUMN CENTERLINE GRID
	WORK LIMIT LINE
	SECTION NUMBER
	SECTION KEY
	SHEET NUMBER WHERE SHOWN
	DETAIL NUMBER
	DETAIL KEY
	SHEET NUMBER WHERE SHOWN
	ELEVATION FLAG
	ROOM NAME
	ROOM KEY
	ROOM NUMBER
	WINDOW TYPE KEY
	DOOR KEY
	INTERIOR ELEVATION KEY
	WALL TYPE KEY
	WALL MOUNTED FIRE EXTINGUISHER

ABBREVIATIONS

ALUM	ALUMINUM	FE	FIRE EXTINGUISHER	QT	QUARRY TILE
AC P	ACOUSTIC PANEL ABOVE FINISH FLOOR	FFE	FINISH FLOOR ELEVATION		
AF	ACOUS	FIN	FINISH	RAD	RADIUS
		FLG	FLASHING	R	RADIUS
		FND	FOUNDATION	RD	ROOF DRAIN
		FIB	FIBER		
CLG	CEILING	GALV	GALVANIZED	SIM	SIMILAR
CLOS	CLOSET	GL	GLASS	STL	STEEL
CMU	CONCRETE MASONRY UNIT	GLB	GYP SUM WALLBOARD	STOR	STORAGE
COL	COLUMN			STRUC	STRUCTURAL
COMP	COMPOSITION			SUSP	SUSPENDED
CONC	CONCRETE			SYST	SYSTEM
CONF	CONFERENCE	HD	HANDRAIL	STD	STANDARD
CONSULT	CONSULTANT	HM	HOLLOW METAL	SHT	SHEET
CONT	CONTINUOUS	HR	HOUR	SIM	SIMILAR
CRS	COURSES				
		INS	INSULATION (XING XED)	T	TOILET
DEG	DEGREES	INSUL	INSULATION (XING XED)	TEL	TEMPERED
DF	DRINKING FOUNTAIN			TO	TEMPERED
DIA	DIAMETER			TOP	TOP OF MASONRY
DN	DOWN	JAN	JANITOR	TOB	TOP OF STEEL
DIAG	DIAGONAL	L	LAVATORY	TYP	TYPICAL
		LAM	LAMINATE		
				UNO	UNLESS NOTED OTHERWISE
EF	EXHAUST FAN			UL	UNDERWRITERS LABORATORY
EXT	EXTERIOR				
EL	ELEVATION	MACH	MACHINE		
ELEV	ELEVATION/ELEVATOR	MECH	MECHANICAL		
EQ	EQUAL	MET	METAL		
ELEC	ELECTRIC (AL)	MO	MASONRY OPENING		
EQUIP	EQUIPMENT	MR	MOISTURE RESISTANT		
EUC	ELECTRIC WATER COOLER			VTR	VENT THROUGH ROOF
EXIST	EXISTING			W	WITH
				WC	WHEELCHAIR
		NIC	NOT IN CONTRACT		
		OC	ON CENTER		
		OPP	OPPOSITE		
		PLAS	PLASTIC		

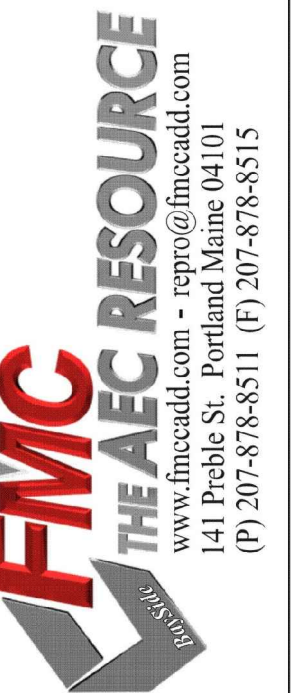
DRAWING LIST:

A0.01	COVER/LEGEND SHEET
L1.01	SITE PLAN
S1.01	FOUNDATION PLAN
S1.02	DESIGN NOTES
A1.01	GARAGE FLOOR PLAN
A1.02	FIRST FLOOR PLAN
A1.03	SECOND FLOOR PLAN
A1.04	THIRD FLOOR PLAN
A1.05	ROOF PLAN
A1.06	FIRST & SECOND FLOOR FRAMING PLANS
A1.07	THIRD FLOOR & ROOF FRAMING PLANS
A1.08	SPRINKLER PLANS
A1.09	SPRINKLER PLANS
A2.01	ELEVATIONS
A3.01	BUILDING SECTIONS
A3.02	STAIR SECTIONS
A3.03	WALL SECTIONS & DETAILS
A3.04	WALL TYPES
A3.05	MISC. DETAILS

BUILDING CODE

Building Name/Location	52 Federal Street Portland, ME 04101
Owner	Liv Chase & Brent Adler
Building Data	Garage Level 1242 sf First Floor 1256 sf Second Floor 1256 sf Third Floor 1256 sf Total 5010 sf
Codes	IBC 2009, NFPA 101 2003
Use & Occupancy	R-2 Apartment Building
Type of Construction	Type Va
Fire Resistance Rating	Structural Elements 1-hour Bearing Walls 1-hour Non-bearing walls 0-hour Floor Construction 1-hour Roof Construction 1-hour Floor/Ceiling Assemblies 1-hour Stair Enclosures 1-hour Exterior Walls 1-hour
Egress Windows in Each Bedroom	
Sprinkler System	NFPA 13R
Allowable Area/Height	Use group R-2, 3 stories and 12,000 sf Height modification with automatic sprinkler system, increase 1 story and 20-feet = total allowable height of 4 stories and 60-feet.
Actual Height	43'-1-3/4"
Building shall be equipped illuminated exist signs, emergency lighting, an automatic alarm system and single station alarms outside each sleeping area.	
Design Loads	Stairs, exitways and corridors have floor framing designed to accommodate a live load of 100 PSF. All other areas are 40PSF.

PROPERTY OF

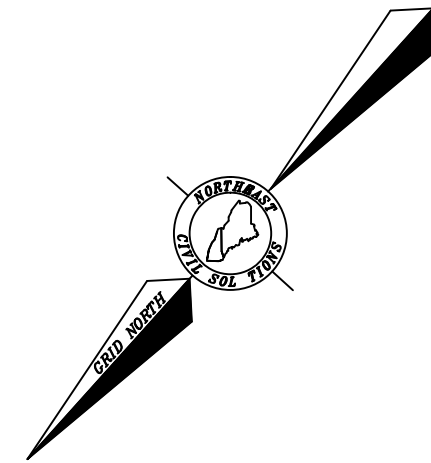


New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

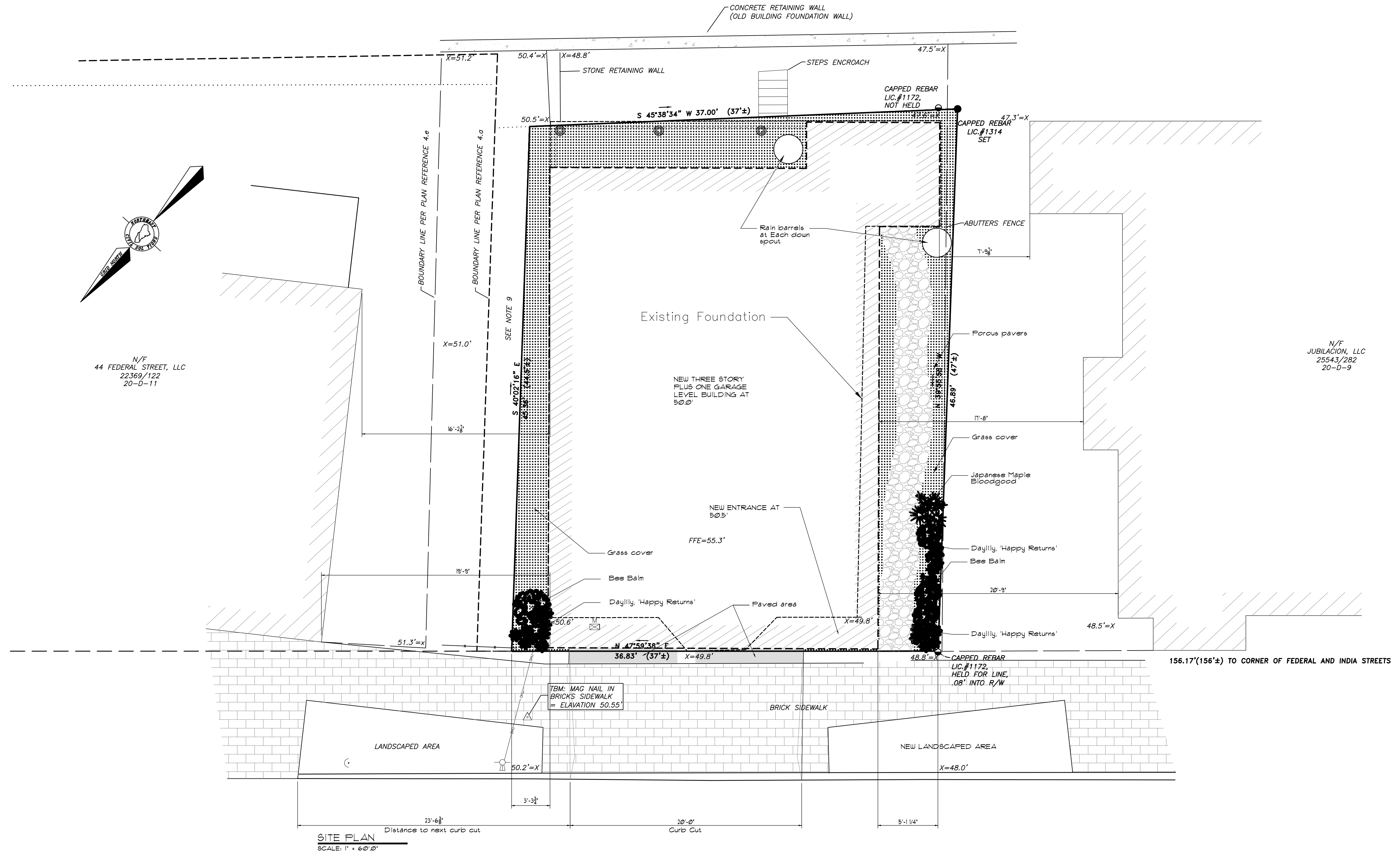
Rev.	A	B	C	D
Date	09-13-11	10-13-11	01-23-12	02-06-12
Remark	Issued for pricing	Issued for Permitting	RE-issued for Permitting	RE-issued for Permitting
CODE:	IBC 2009			
TOWN:	Portland			
DATE:	09-13-11			
SCALE:	as noted			
DESIGNED:	LC			
DRAWN:	JJO			
TITLE:	COVER SHEET			
FILE:				
SHEET:	A0.01			

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VICINITY MAP
NTS



N/F
44 FEDERAL STREET, LLC
22369/122
20-D-11



PROPERTY OF



New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

Rev.	Date	Remark
A	09-13-11	Issued for Administrative Review
B	10-10-11	Revised per City comments
C	01-23-12	RE-issued for Permitting

CODE: IBC 2009

TOWN: Portland

DATE: 09-13-11

SCALE: as noted

DESIGNED: LC

DRAWN: JJO

TITLE:

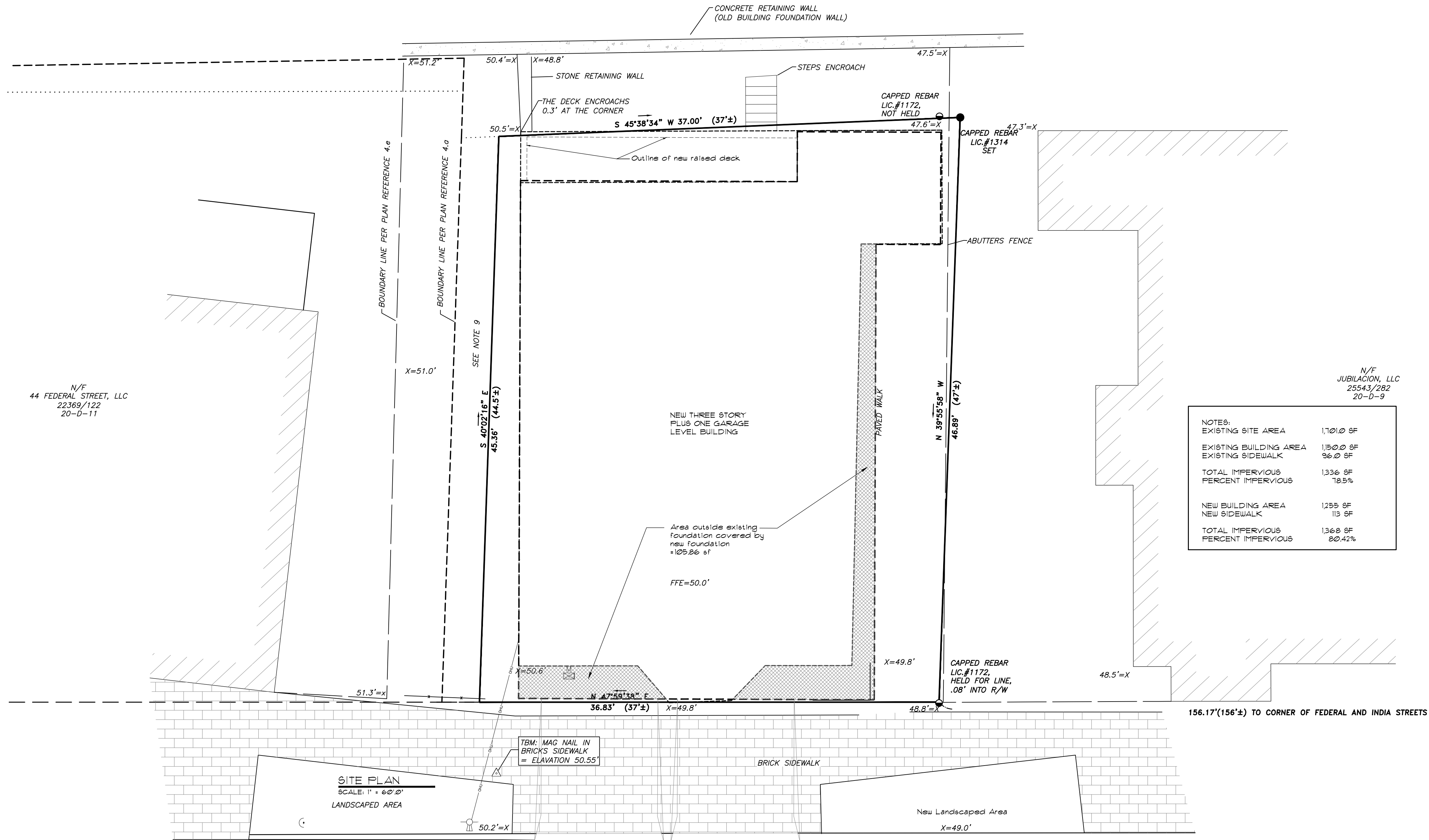
Site Plan

FILE:

SHEET: L1.01

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VICINITY MAP
NTS



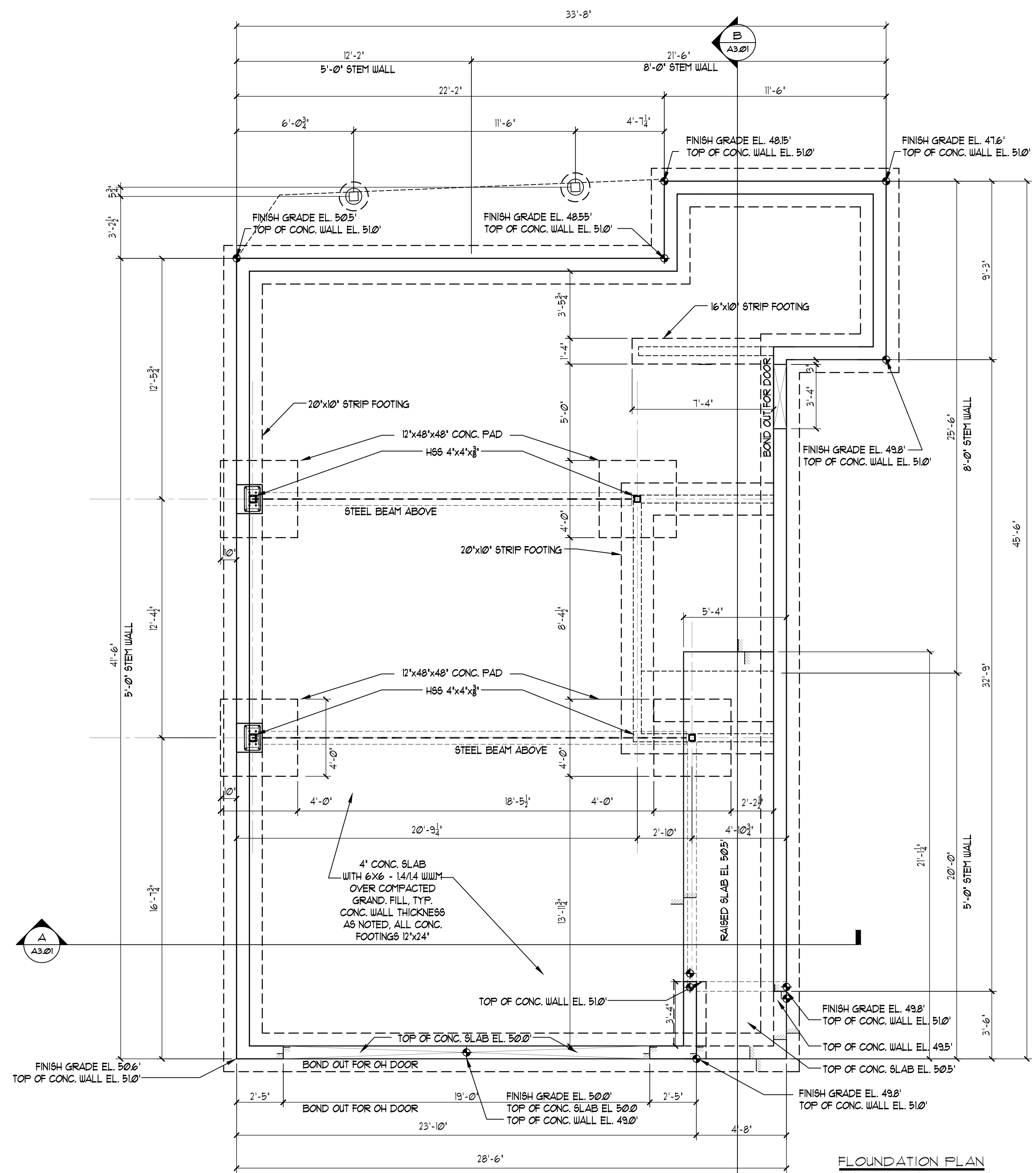
NOTES:	
EXISTING SITE AREA	1,701.0 SF
EXISTING BUILDING AREA	1,500.0 SF
EXISTING SIDEWALK	96.0 SF
TOTAL IMPERVIOUS	1,336 SF
PERCENT IMPERVIOUS	78.5%
NEW BUILDING AREA	1,255 SF
NEW SIDEWALK	115 SF
TOTAL IMPERVIOUS	1,368 SF
PERCENT IMPERVIOUS	80.42%

PROPERTY OF

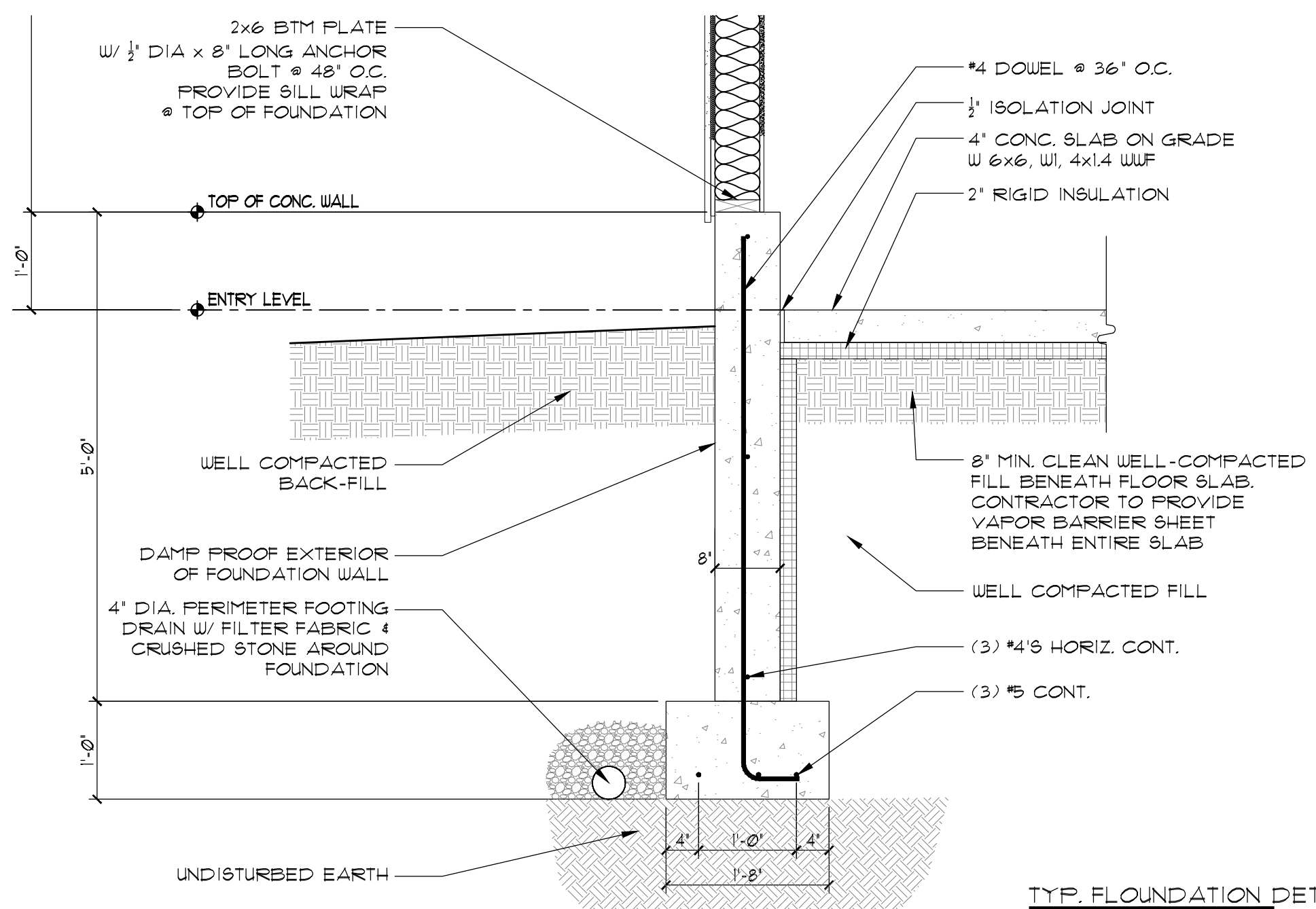


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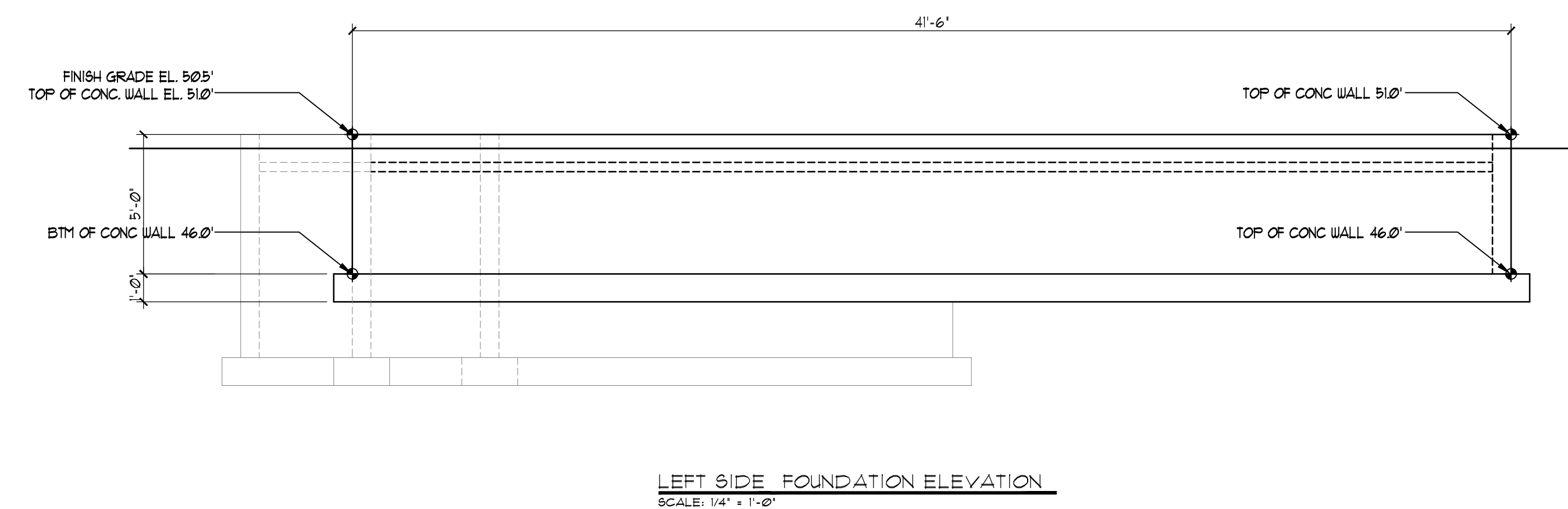
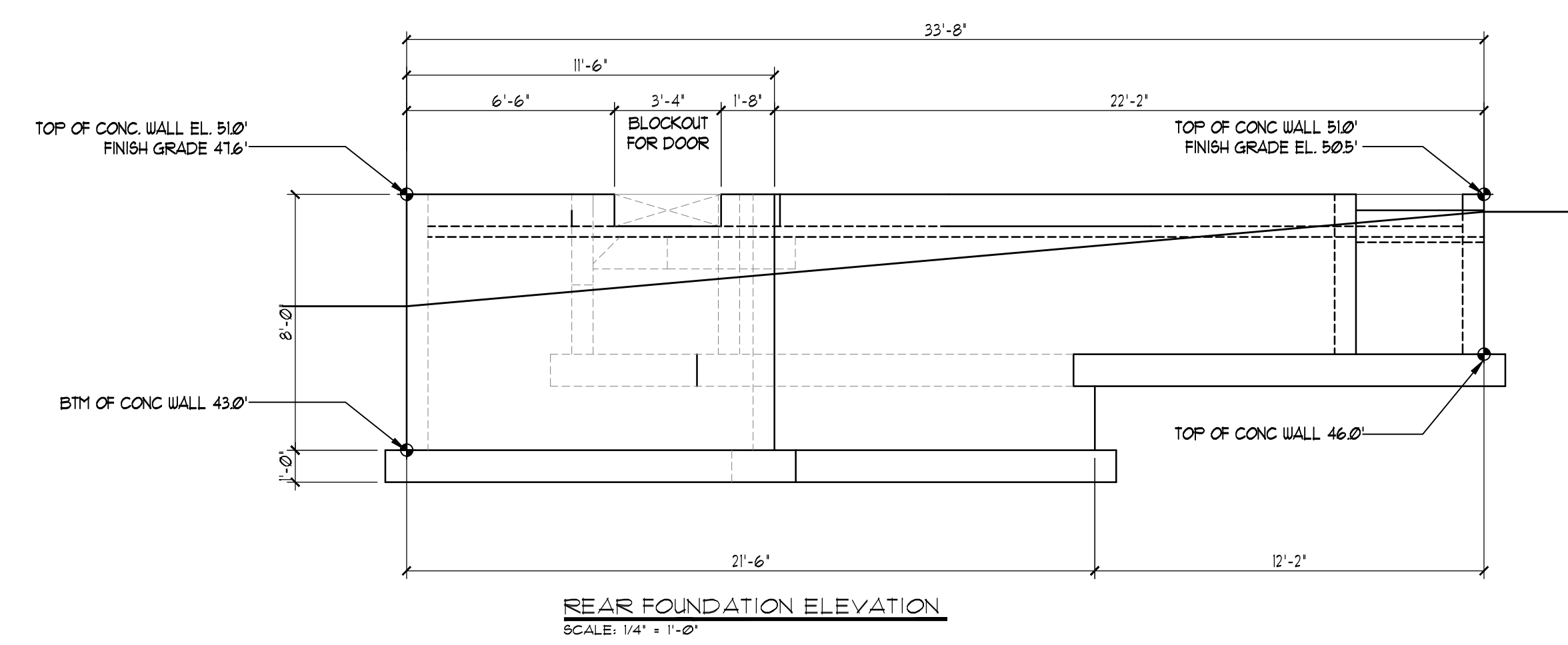
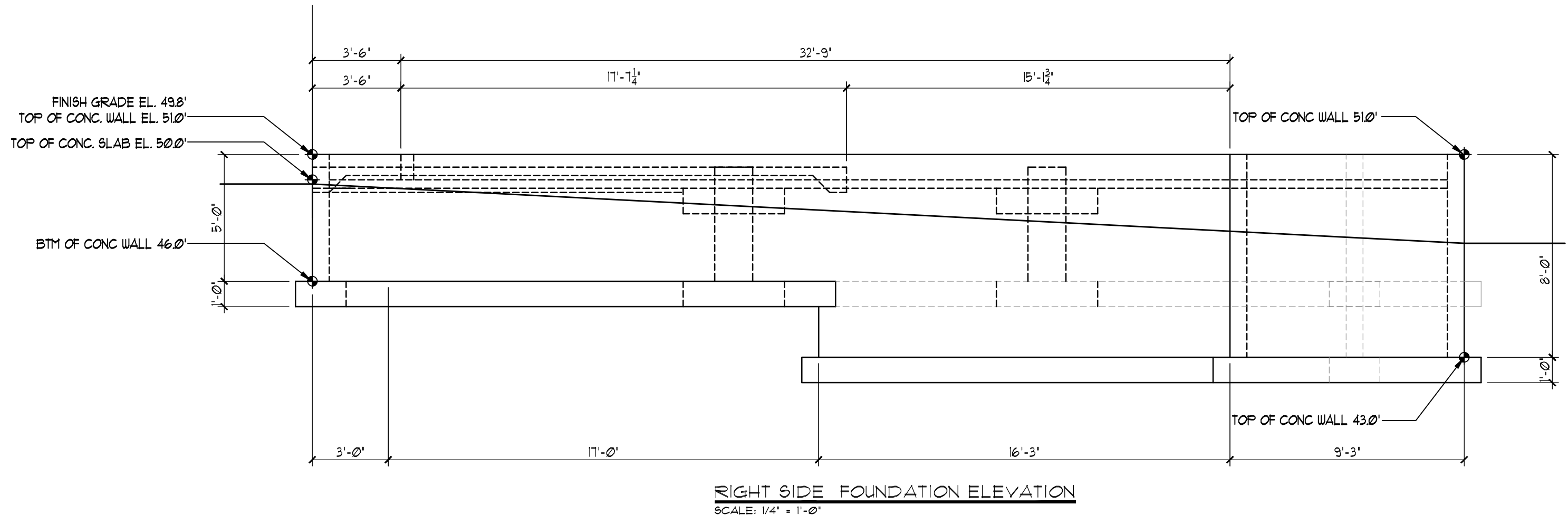
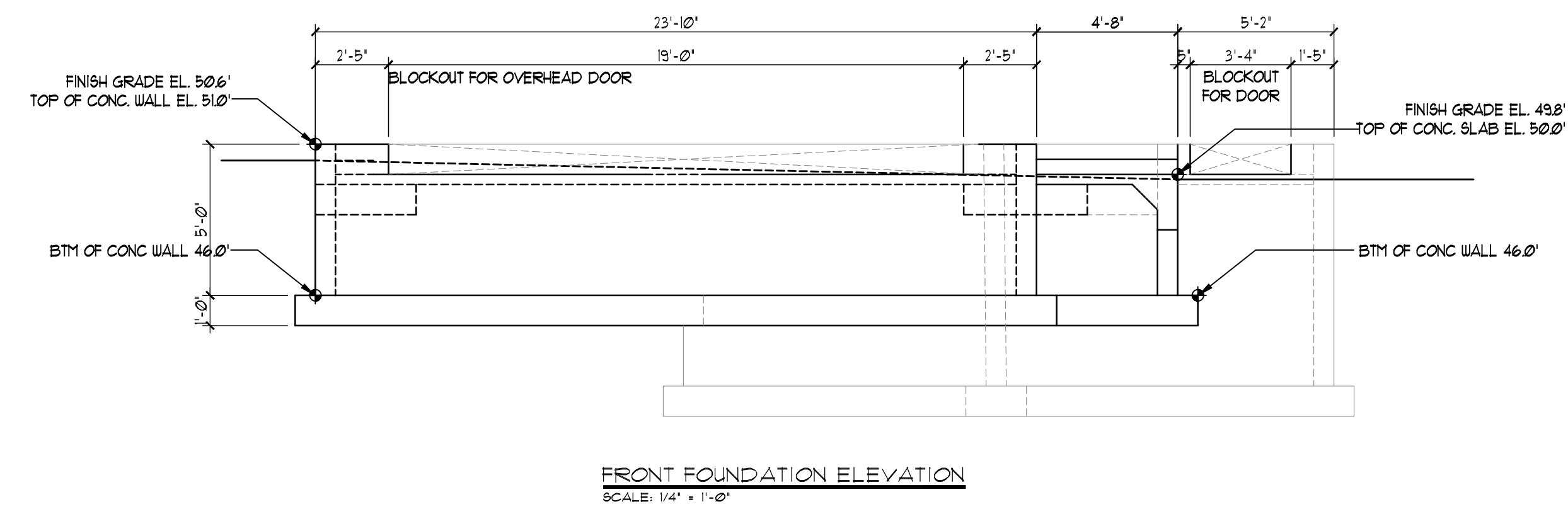
Rev.	A	C
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Remark	Issued for Administrative Review	RE-issued for Permitting
CODE:	IBC 2009	
TOWN:	Portland	
DATE:	09-13-11	
SCALE:	as noted	
DESIGNED:	LC	
DRAWN:	JJO	
TITLE:	Building Coverage	
FILE:		
SHEET:	L1.02	



DETAIL @ INTERIOR COLUMN PAD
SCALE: 3/4" = 1'-0"



TYP. CONC. PIER DETAIL
SCALE: 3/4" = 1'-0"



Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-12-11	Issued for Permitting
C	12-13-11	Issued for Permitting
D	02-06-12	RE-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
TITLE: Foundation Plan Details
FILE:
SHEET: S1.01

STRUCTURAL DESIGN CRITERIA:

1. Building Code: This Building is Designed to Comply with the 2009 Edition of the International Building Code IBC 2009, The 2005 Edition of ASCE-7, Minimum Design Loads for Buildings and Other Structures.

2. Design Loads:

Design Wind: Location: Portland, Maine
 Wind Load (Per IBC Section 1609):
 Basic Wind Speed V = 110 MPH
 Wind Exposure Factor = B
 Importance Factor I = 1.0
 Components and Cladding:
 A. Net Design Wind Pressure for a Wall Element:
 1. at non-sailant areas - Pnet = ±25 psf
 2. at sailant areas - Pnet = ±29 psf

Design Roof Snow:
 Live Load: 50 PSF Plus Snow Drift Loading Where Applicable
 (Per Section 1608)

Snow Exposure Factor Cs = 1.0
 Snow Thermal Factor Ct = 1.1
 Importance Factor I = 1.0
 Dead Load: - 12 PSF

Design Seismic:

Occupancy Category = II
 Soil Site Class D
 (E) = 1.0
 S(D5) = .326
 S(D1) = .115
 Seismic Design Category = B
 Basic Seismic Force Resisting System =
 Light Framed Wall Systems Using Shear Panels.

Floor Loads

Live:
 1st Floor Area - 40 PSF
 2nd Floor Area - 30 PSF

Dead:
 Floor - 12 PSF

ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE STRUCTURE AND PERSONNEL DURING ERECTION. THIS INCLUDES THE ADDITION OF THE NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. SUCH MATERIAL SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.

ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

IT IS THE OWNER'S SOLE RESPONSIBILITY TO EMPLOY ONE OR MORE SPECIAL INSPECTORS (IF REQUIRED) TO PROVIDE INSPECTIONS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF IBC 2009.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS, SHORING AND TEMPORARY BRACING DURING THE PROGRESS OF THE PROJECT.

12. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE RECOMMENDATIONS AND REQUIREMENTS CONTAINED IN THE MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN, AISC NINTH EDITION (INCLUDING AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES), AND STRUCTURAL STEEL WELDING CODE - STEEL, (AISC D11, LATEST EDITION).

STRUCTURAL STEEL ROLLED SHAPES, PLATES AND BARS SHALL CONFORM TO THE FOLLOWING:

- a) ASTM A992, GRADE 50; ALL WIDE FLANGE SECTIONS, FY=50
- b) ASTM A36; OTHER ROLLED SHAPES, PLATES AND BARS, FY=36
- c) ASTM A36; THREADED AND OTHER STEEL RODS

FOUNDATION NOTES:

1. SUITABLE MATERIAL FOR BACK FILLING AGAINST THE FOUNDATION WALLS AND BENEATH THE STRUCTURAL SLAB INCLUDE: SELECT FILL, STRUCTURAL FILL AND GRANULAR BACKFILL. THESE MATERIALS SHALL BE SANDY GRAVEL TO GRAVELY SAND, FREE OF ORGANIC MATERIAL, LOAM, TRASH, OR FROZEN SOIL AND CONFORM TO THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT FINER BY WEIGHT
60	100
No. 4	30-50
No. 40	10-50
No. 200	0-5

2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND THE ARCHITECTURAL AND SITE SHOP DRAWINGS.

3. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS MUST BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. THE CONTRACTOR SHALL DETERMINE ALL NECESSARY DIMENSIONS, ELEVATIONS AND CONDITIONS REQUIRED FOR THE FABRICATION AND ERECTION OF THE BUILDING COMPONENTS PRIOR TO SUBMISSION OF SHOP DRAWINGS.

4. SECTIONS AND DETAILS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL AND USED FOR SIMILAR CONDITIONS.

5. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL FOLLOW ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

6. PROVIDE CONTROL JOINTS IN STRUCTURAL SLAB AT 12'-0" ON CENTER MAX.

7. PROPORTION DESIGN MIXES TO PROVIDE CONCRETE FOR INTERIOR SLABS-ON-GRADE WITH THE FOLLOWING PROPERTIES:

- a. STRENGTH: 4000psi @ 28 DAYS, 3/4" AGGREGATE
- b. W/C RATIO: 0.40
- c. SLUMP: 3"-1"

8. PROPORTION DESIGN MIXES TO PROVIDE CONCRETE FOR EXTERIOR FROST WALLS, FOOTINGS AND ALL OTHER EXPOSED SITE CONCRETE WITH THE FOLLOWING PROPERTIES:

- a. STRENGTH: 3000psi @ 28 DAYS, 3/4" AGGREGATE
- b. W/C RATIO: 0.52
- c. ENTRAINED AIR: 6% ±3%
- d. SLUMP: 3"-1"

9. PORTLAND CEMENT: ASTM C150, TYPE I OR TYPE II

NOTE:

THE CONTRACTOR/OWNER ASSUMES ALL RESPONSIBILITY FOR LOCAL CODE COMPLIANCE. ALL DRAWINGS, PLANS, SKETCHES, ETC. ARE PROVIDED TO OUR CLIENTS BASED UPON INFORMATION PROVIDED BY THE CLIENT AND DRAWN IN ACCORDANCE WITH COMMON BUILDING PRACTICES AND LOCAL CODES. NONE OF THE EMPLOYEES OF CDT ARE REGISTERED ARCHITECTS, ENGINEERS OR LAND SURVEYORS. ALL DIMENSIONS AND SPECIFICATIONS SHOULD BE VERIFIED BY CLIENT AND/OR CONTRACTOR BEFORE ACTUAL CONSTRUCTION BEGINS. IF DIMENSIONS AND SPECIFICATIONS ARE NOT VERIFIED

CONCRETE NOTES:

VAPOR RETARDER SHALL BE PREMOLDED SEVEN-PLY MEMBRANE OF REINFORCED CORE AND CARRIER SHEET WITH FORTIFIED BUTYLEN LAYERS; PROTECTIVE WEATHER COATING, AND PLASTIC ANTI STICK SHEET. WATER VAPOR TRANSMISSION RATE OF 1 PERY WHEN TESTED TO ASTM E 96, METHOD B. PROVIDE GRIFFOLYN® REINFORCED TYPE T-65 UNDER SLAB VAPOR RETARDER.

WOOD FRAMING NOTES:

THIS BUILDING IS DESIGNED TO COMPLY WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE, IBC 2009.

LOCATION	THICKNESS	SPAN RATING	EDGE NAILING	FIELD NAILING
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

FOUNDATION NOTES
 NTS



New Three Unit at 52 Federal Street
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Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-12-11	Issued for Permitting
C	01-17-12	Issued for Permitting

CODE: IBC 2009
 TOWN: Portland
 DATE: 09-13-11
 SCALE: as noted
 DESIGNED: LC
 DRAWN: JJO
 TITLE: Design Notes
 FILE:
 SHEET: S1.02

Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-20-12	Re-Issued for Permitting
D	02-06-12	Re-Issued for Permitting

CODE: IBC 2009

TOWN: Portland

DATE: 09-13-11

SCALE: as noted

DESIGNED: LC

DRAWN: JJO

TITLE:

Garage Plans

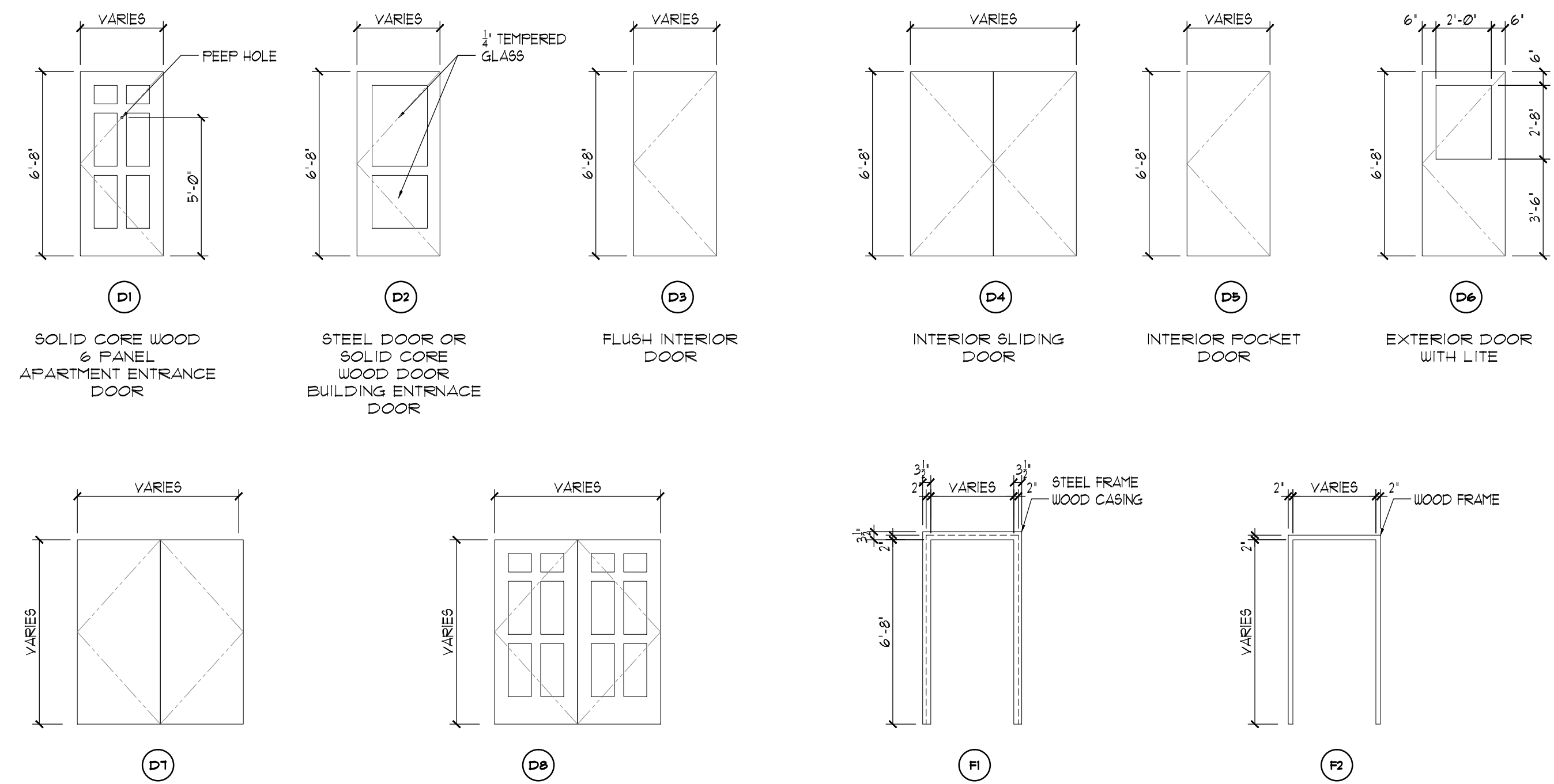
Schedules

FILE:

SHEET: A1.01

Door Schedule

Door No	Size			Door			Frame			Label	Hardware Set	Remarks
	Width	Height	Thickness	Type	Material	Finish	Type	Material	Finish			
G01	9'-0"	7'-0"	1-3/4"	Overhead	Wood	Painted	Track	Metal	Galvanized	--		
G02	9'-0"	7'-0"	1-3/4"	Overhead	Wood	Painted	Track	Metal	Galvanized	--		
G03	3'-0"	6'-8"	1-3/4"	D2	MDF/Wood	Natural	1	Metal	Painted	--		
G04	3'-0"	6'-8"	1-3/4"	D1	MDF/Wood	Natural	1	Metal	Painted	1-hour		
G05	3'-0"	6'-8"	1-3/8"	D5	Moulded	Painted	2	Wood	Painted	1-hour		
G06	2'-6"	6'-8"	1-3/8"	D3	MDF/Wood	Painted	2	Wood	Painted	2-hour		
G07	2'-6"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	--		
G08	6'-0"	6'-8"	1-3/4"	D3	MDF/Wood	Natural	2	Wood	Painted	--		
G09	3'-0"	6'-8"	1-3/4"	D2	MDF/Wood	Natural	1	Metal	Painted	1-hour		
G10	3'-0"	6'-8"	1-3/4"	D6	MDF/Wood	Natural	1	Metal	Painted	2-hour		

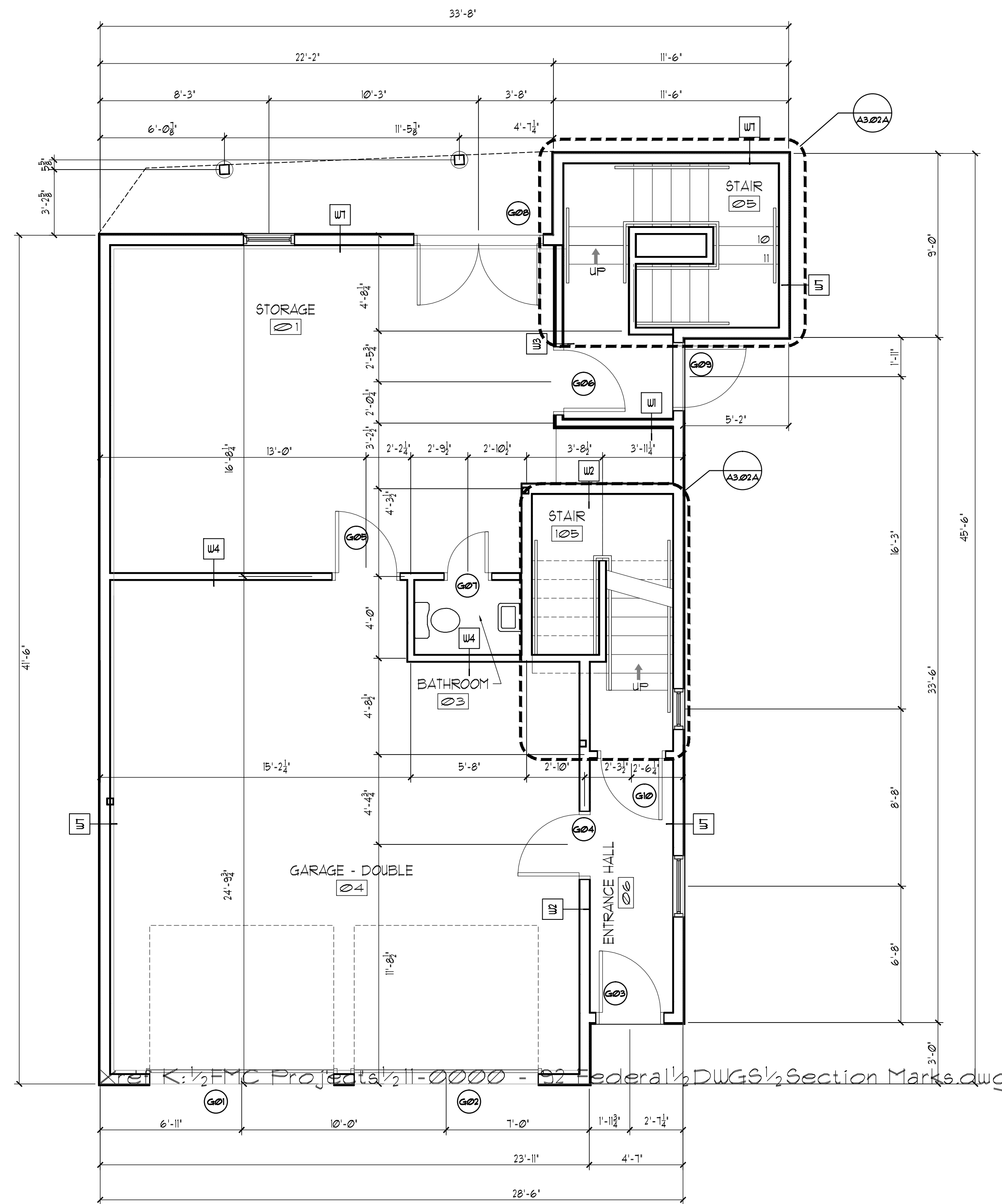


Room Finish Schedule

Room No.	Room Name	Floor	Walls				Ceiling		Remarks
			N	S	E	W	Mat'l	Height	
O1	Storage	Conc	FGWB	FGWB	FGWB	FGWB	FGWB	8'-2"	Sealed
O2	Stairway	VST	FGWB	FGWB	FGWB	FGWB	FGWB	NA	
O3	Bathroom	VCT	FGWB	FGWB	FGWB	FGWB	FGWB	8'-2"	
O4	Garage	Conc	FGWB	FGWB	FGWB	FGWB	FGWB	8'-2"	Sealed
O5	Stairway	VST	FGWB	FGWB	FGWB	FGWB	FGWB	NA	
O6	Entrance	VCT	FGWB	FGWB	FGWB	FGWB	FGWB	8'-2"	

FGWB Painted Gypsum Wall Board
VCT Vinyl Composition Tile
HW Hard Wood
CT Ceramic Tile
Conc Concrete
VST Vinyl Stair Tread

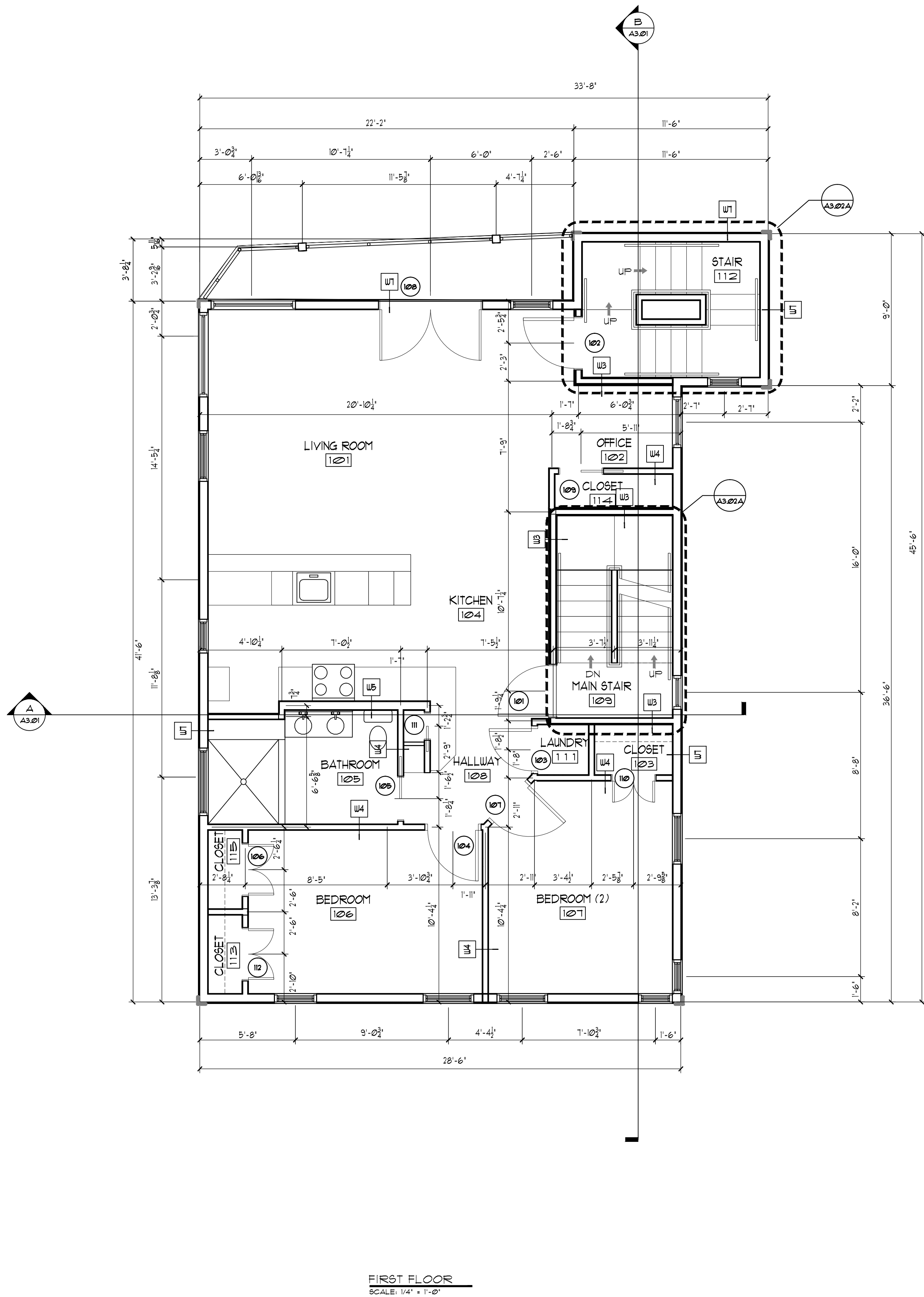
SCHEDULES
SCALE: NTS



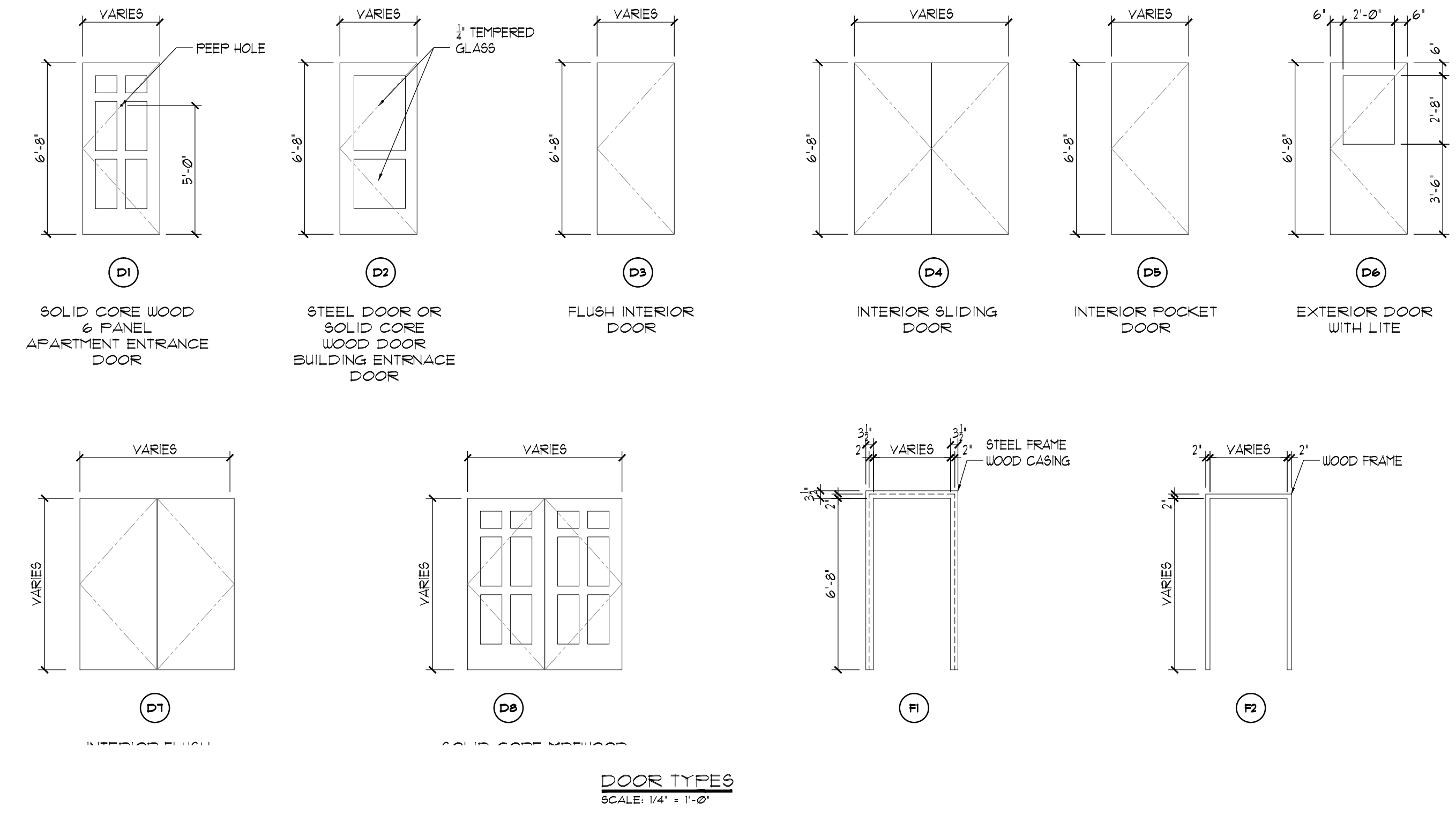
GARAGE FLOOR
SCALE: 1/4" = 1'-0"

Ref: K:\FMC Projects\11-0000 - 02 Federal\DWGS\2 Section Marks.dwg

Rev.	A	B	C	D
Date	09-13-11	10-13-11	01-23-12	02-06-12
Remark	Issued for pricing	Issued for Permitting	RE-issued for Permitting	Re-issued for Permitting
CODE:	IBC 2009			
TOWN:	Portland			
DATE:	09-13-11			
SCALE:	as noted			
DESIGNED:	LC			
DRAWN:	JJO			
TITLE:	First Floor Plan Schedules			
FILE:				
SHEET:	A1.02			

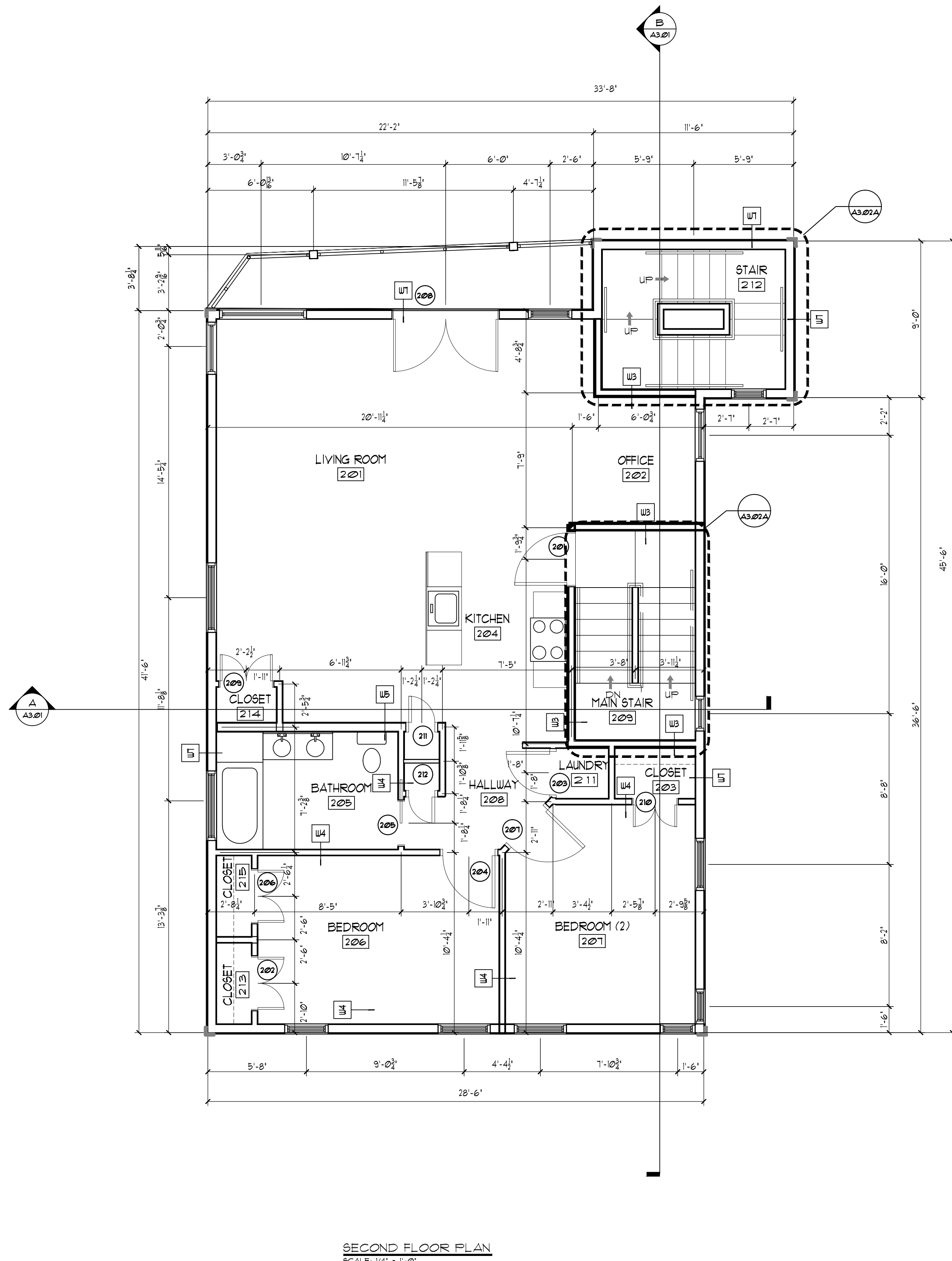


Door No	Size			Door			Frame		Label	Hardware Set	Remarks
	Width	Height	Thickness	Type	Material	Finish	Type	Finish			
101	3'-0"	6'-8"	1-3/4"	D1	MDF/Wood	Natural	1	Metal	Painted	2-hour	Stairwell
102	3'-0"	6'-8"	1-3/4"	D1	MDF/Wood	Natural	1	Metal	Painted	2-hour	Stairwell
103	2'-6"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---	Laundry
104	3'-0"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---	Bedroom
105	2'-6"	6'-8"	1-3/8"	D5	Moulded	Painted	NA	Wood	Painted	---	Bathroom
106	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---	Closet
107	3'-0"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---	Bedroom
108	6'-0"	8'-0"	1-3/4"	D8	MDF/Wood	Painted	1	Metal	Painted	1-hour	Balcony
109	3'-0"	6'-8"	1-3/8"	D5	Moulded	Painted	NA	Wood	Painted	---	Closet
110	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---	Closet
111	1'-2"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---	Pantry
112	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---	Closet



Room No.	Room Name	Floor	Walls				Ceiling		Remarks
			N	S	E	W	Mat'l	Height	
101	Living Room	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
102	Office	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
103	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
104	Kitchen	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
105	Bathroom	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
106	Bedroom	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
107	Bedroom	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
108	Hallway	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
109	Entrance Hall	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
110	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
111	Laundry	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
112	Stairway	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
113	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	

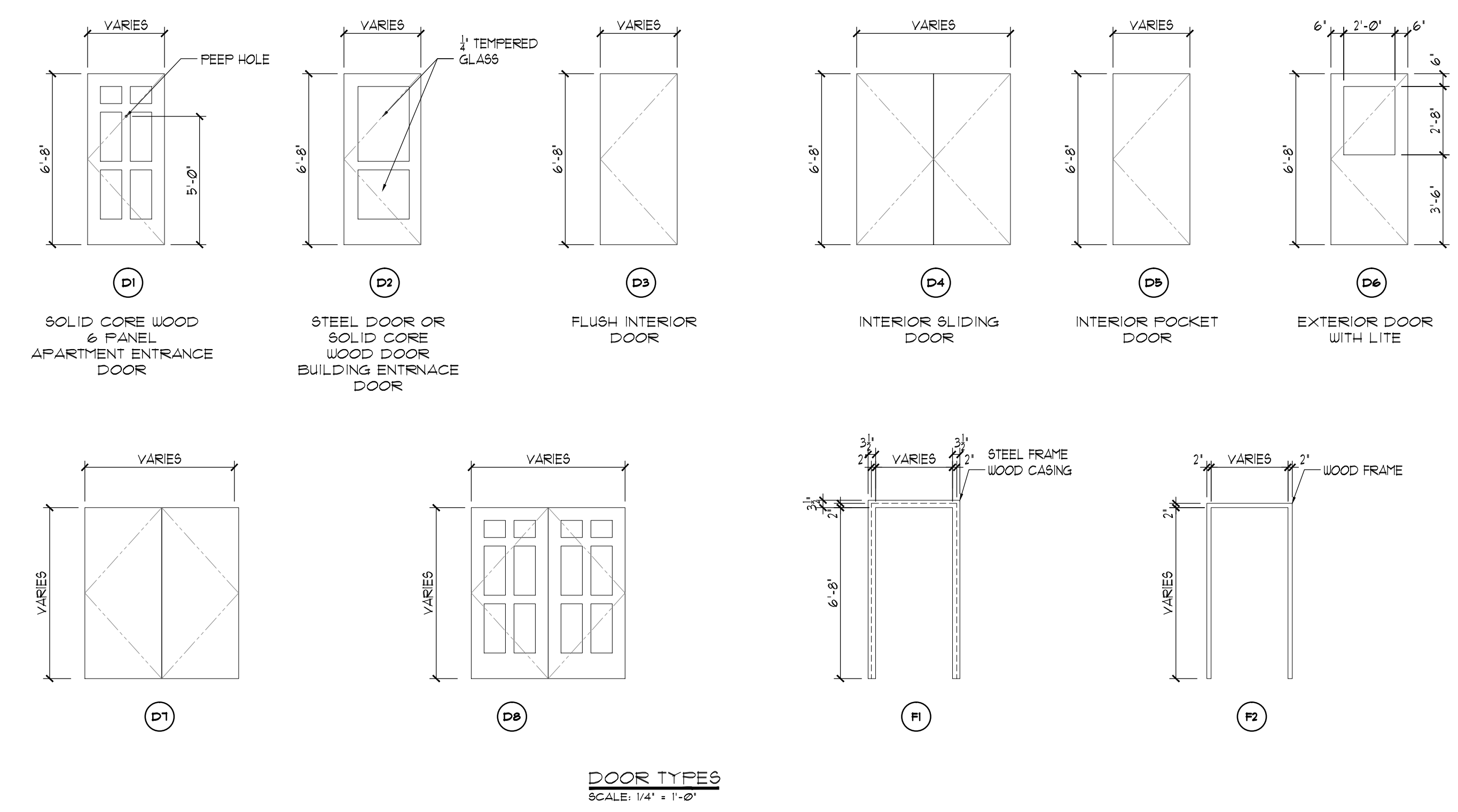
PGWB Painted Gypsum Wall Board
VCT Vinyl Composition Tile
HW Hard Wood
CT Ceramic Tile
Conc Concrete
VST Vinyl Stair Tread



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

Door Schedule

Door No	Size			Door			Frame			Label	Hardware Set	Remarks
	Width	Height	Thickness	Type	Material	Finish	Type	Material	Finish			
201	3'-0"	6'-8"	1-3/4"	D1	MDF/Wood	Natural	1	Metal	Painted	2-hour		Stairwell
202	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
203	2'-6"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---		Laundry
204	3'-0"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---		Bedroom
205	2'-6"	6'-8"	1-3/8"	D5	Moulded	Painted	NA	Wood	Painted	---		Bathroom
206	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
207	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Bedroom
208	6'-0"	8'-0"	1-3/4"	D8	MDF/Wood	Painted	1	Metal	Painted	1-hour		Balcony
209	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
210	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
211	1'-6"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---		Pantry
212	1'-6"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---		Linen



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

Room Finish Schedule

Room No.	Room Name	Floor	Walls				Ceiling		Remarks
			N	S	E	W	Mat'l	Height	
201	Living Room	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
202	Office	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
203	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
204	Kitchen	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
205	Bathroom	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
206	Bedroom	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
207	Bedroom	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
208	Hallway	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
209	Entrance Hall	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
210	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
211	Laundry	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
212	Stairway	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
213	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
214	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	

PGWB Painted Gypsum Wall Board
VCT Vinyl Composition Tile
HW Hard Wood
CT Ceramic Tile
Conc Concrete
VST Vinyl Stair Tread

SCHEDULES
NTS

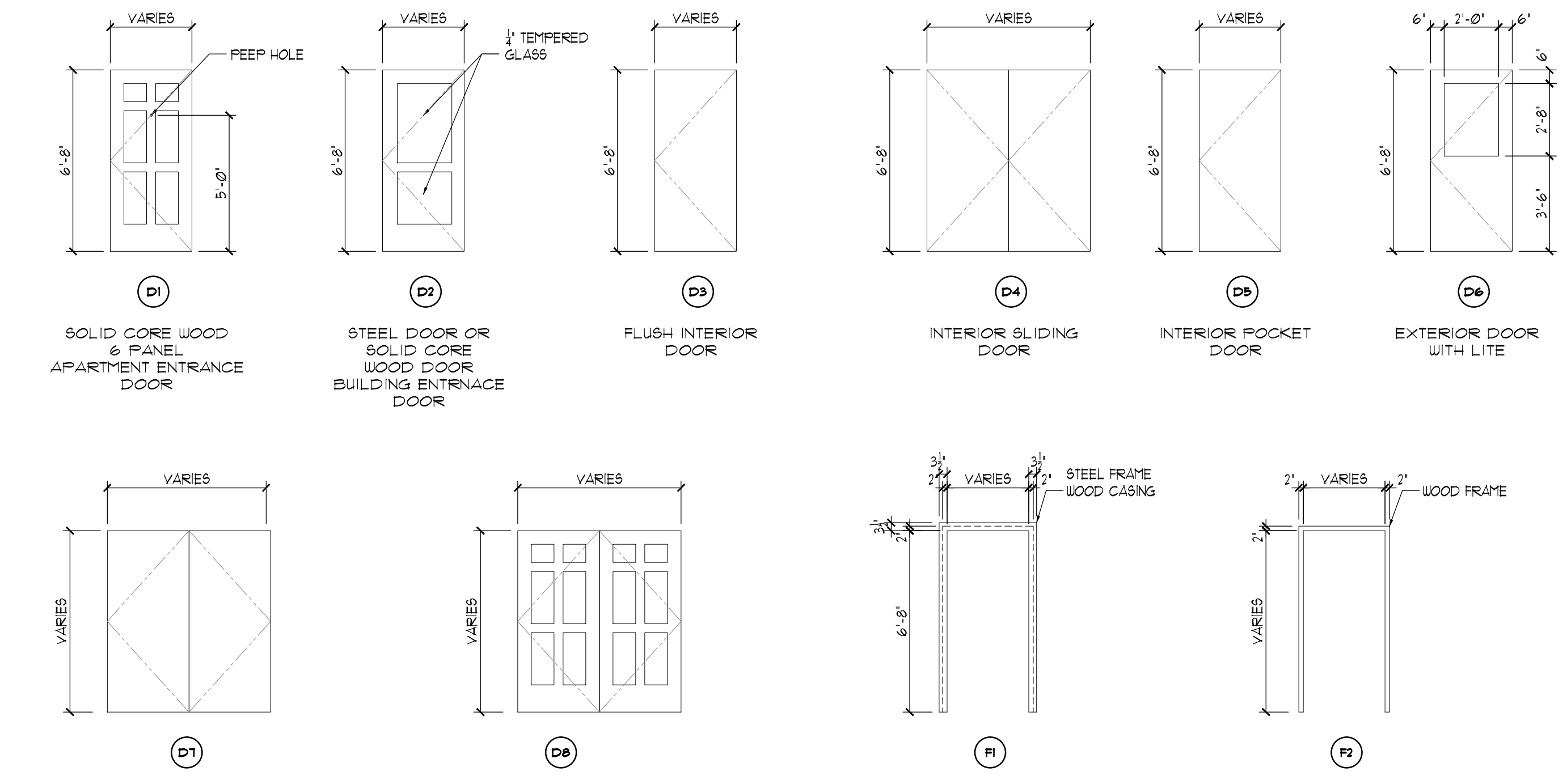
Rev.	A	B	C	D
Date	09-13-11	10-13-11	01-23-12	02-06-12
Remark	Issued for pricing	Issued for Permitting	RE-issued for Permitting	Re-issued for Permitting
CODE:	IBC 2009			
TOWN:	Portland			
DATE:	09-13-11			
SCALE:	as noted			
DESIGNED:	LC			
DRAWN:	JJO			
TITLE:	Second Floor Plan			
FILE:				
SHEET:	A1.03			

Rev.	Remark
A	Issued for pricing
B	Issued for Permitting
C	RE-issued for Permitting
D	Re-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
TITLE: Third Floor Plan Schedules
FILE:
SHEET: A1.04

Door Schedule

Door No	Size			Door			Frame			Label	Hardware Set	Remarks
	Width	Height	Thickness	Type	Material	Finish	Type	Material	Finish			
301	3'-0"	6'-8"	1-3/4"	D1	MDF/Wood	Natural	1	Metal	Painted	2-hour		Stairway
302	3'-0"	6'-8"	1-3/4"	D1	MDF/Wood	Natural	1	Metal	Painted	2-hour		Stairway
303	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
304	3'-0"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---		Bedroom
305	2'-6"	6'-8"	1-3/8"	D3	Moulded	Painted	NA	Wood	Painted	---		Bathroom
306	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
307	3'-0"	6'-8"	1-3/8"	D3	Moulded	Painted	2	Wood	Painted	---		Bedroom
308	6'-0"	6'-8"	1-3/4"	D8	MDF/Wood	Natural	1	Wood	Painted	1-hour		Balcony
309	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Closet
310	3'-0"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Laundry
311	1'-6"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Pantry
312	1'-6"	6'-8"	1-3/8"	D7	Moulded	Painted	2	Wood	Painted	---		Linen

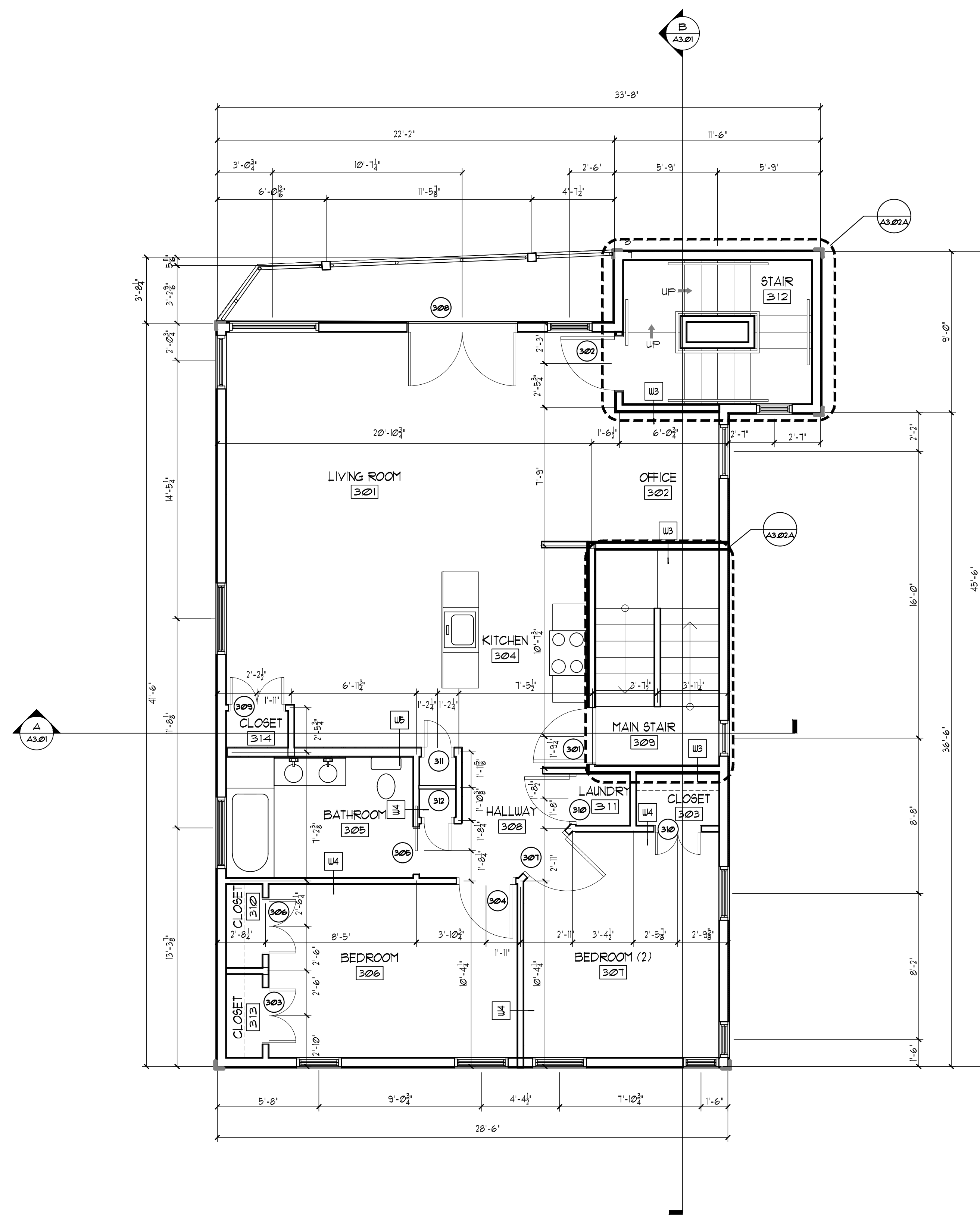


Room Finish Schedule

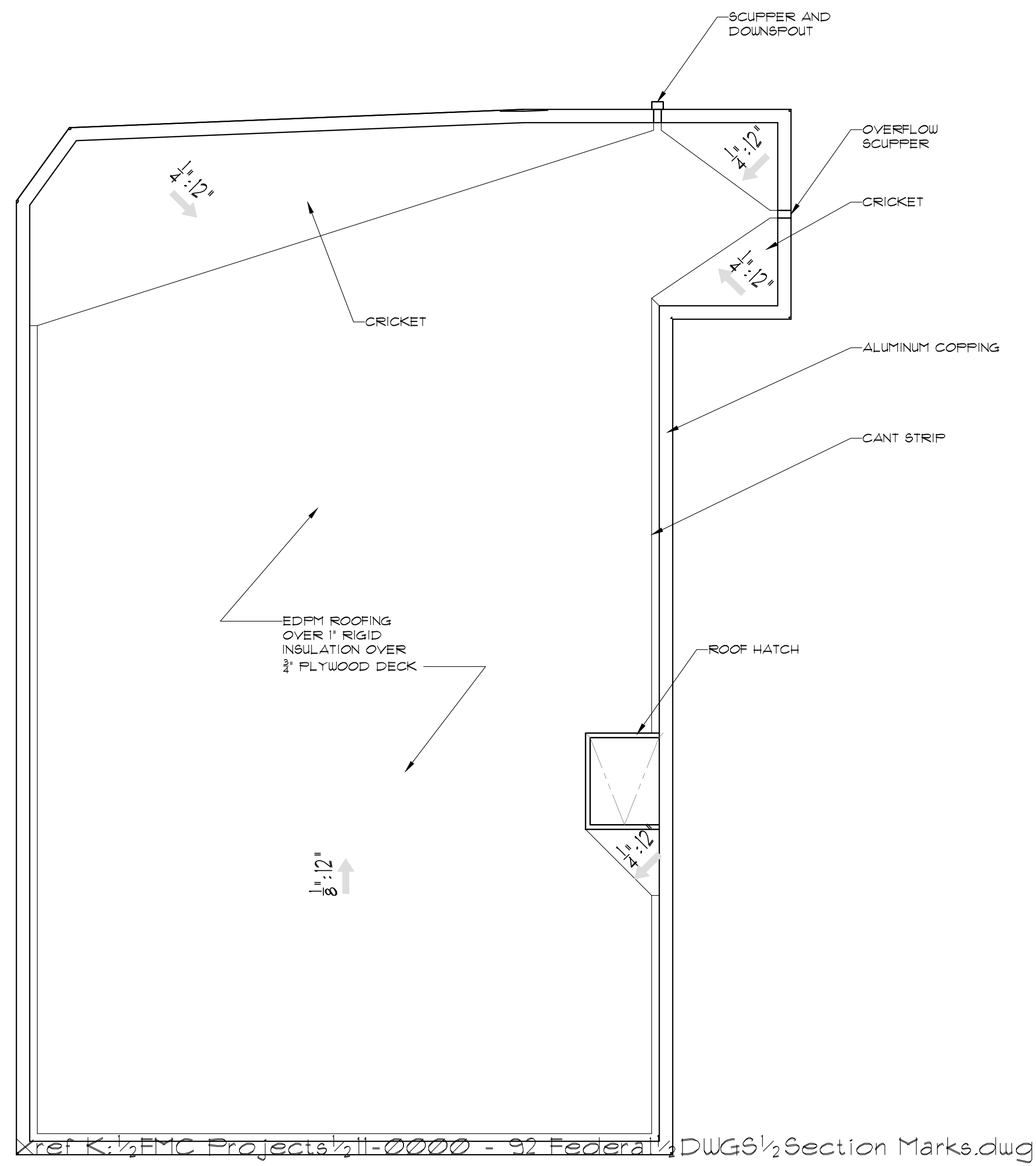
Room No.	Room Name	Floor	Walls				Ceiling		Remarks
			N	S	E	W	Mat'l	Height	
301	Living Room	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
302	Office	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
303	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
304	Kitchen	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
305	Bathroom	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
306	Bedroom	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
307	Bedroom	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
308	Hallway	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
309	Entrance Hall	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
310	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
311	Laundry	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
312	Stairway	VCT	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
313	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	
314	Closet	HW	PGWB	PGWB	PGWB	PGWB	PGWB	8'-0"	

PGWB Painted Gypsum Wall Board
VCT Vinyl Composition Tile
HW Hard Wood
CT Ceramic Tile
Conc Concrete
VST Vinyl Stair Tread

SCHEDULES
NTS

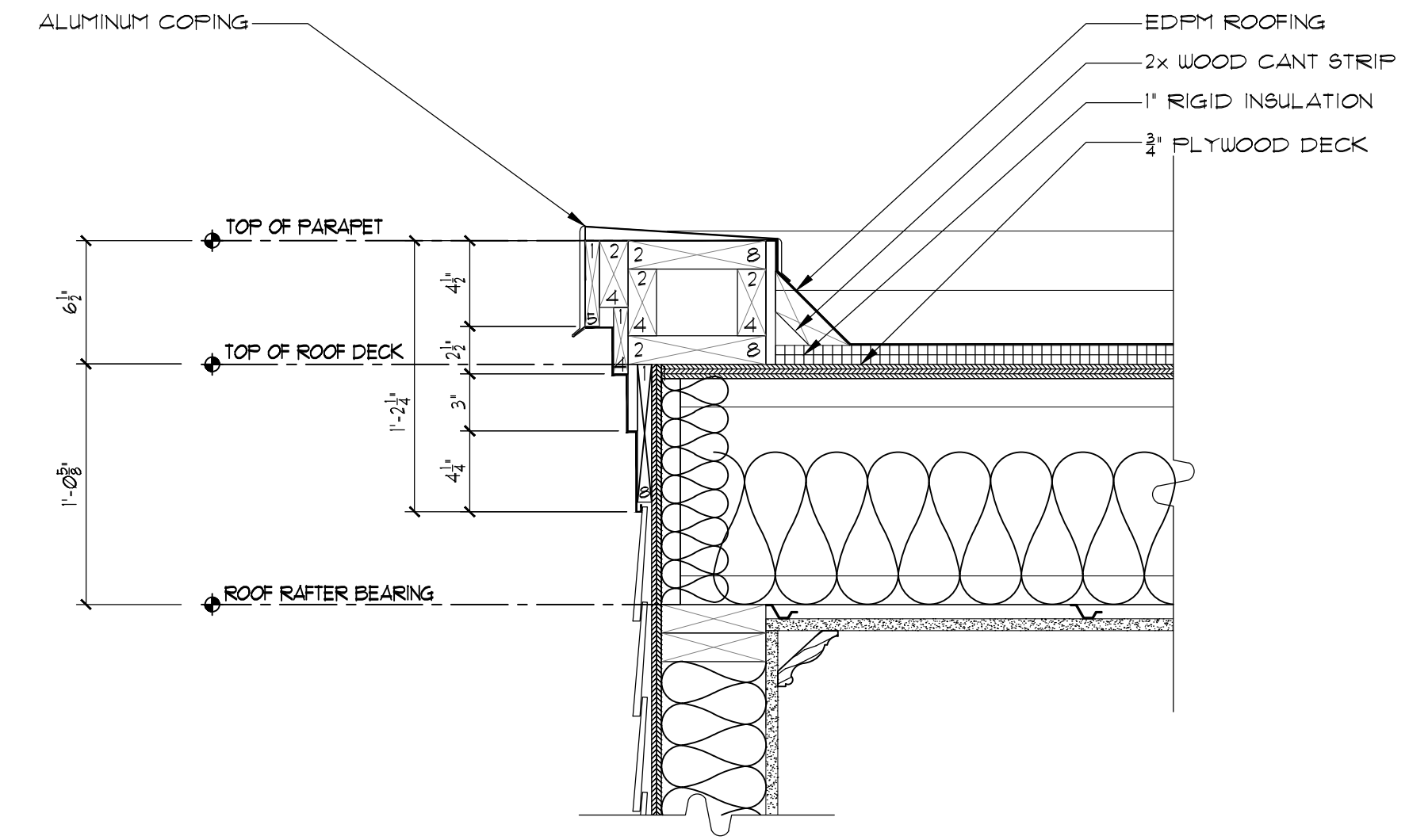


THIRD FLOOR PLAN
SCALE: 1/4" = 1'-0"

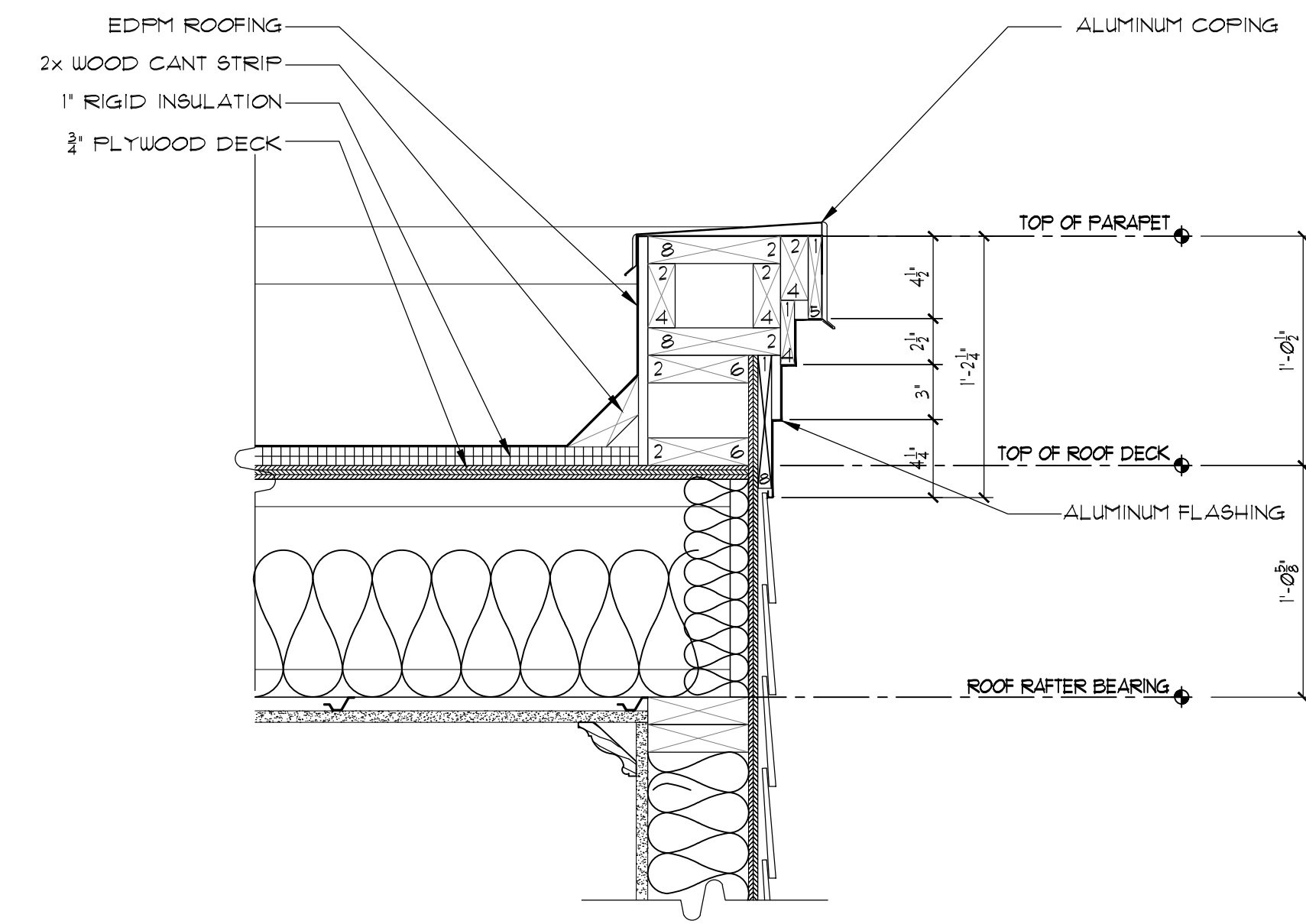


ROOF PLAN
SCALE: 1/4" = 1'-0"

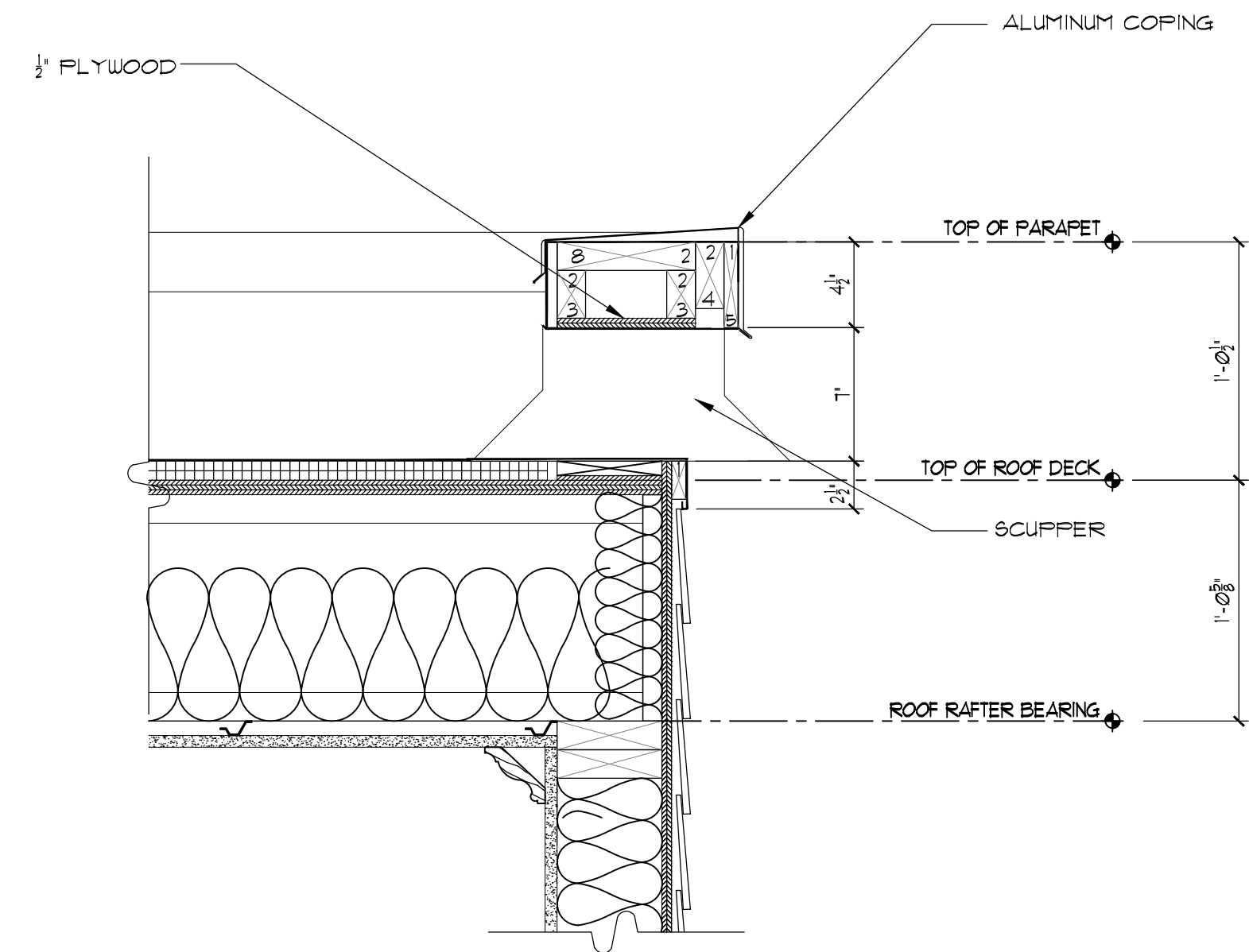
Ref: K:\2\FMC Projects\11-0000 - 92 Federal\2 DWGS\2 Section Marks.dwg



DETAIL AT ROOF PARAPET (HIGH SIDE)
SCALE: 1/2" = 1'-0"



DETAIL AT ROOF PARAPET (LOW SIDE)
SCALE: 1/2" = 1'-0"



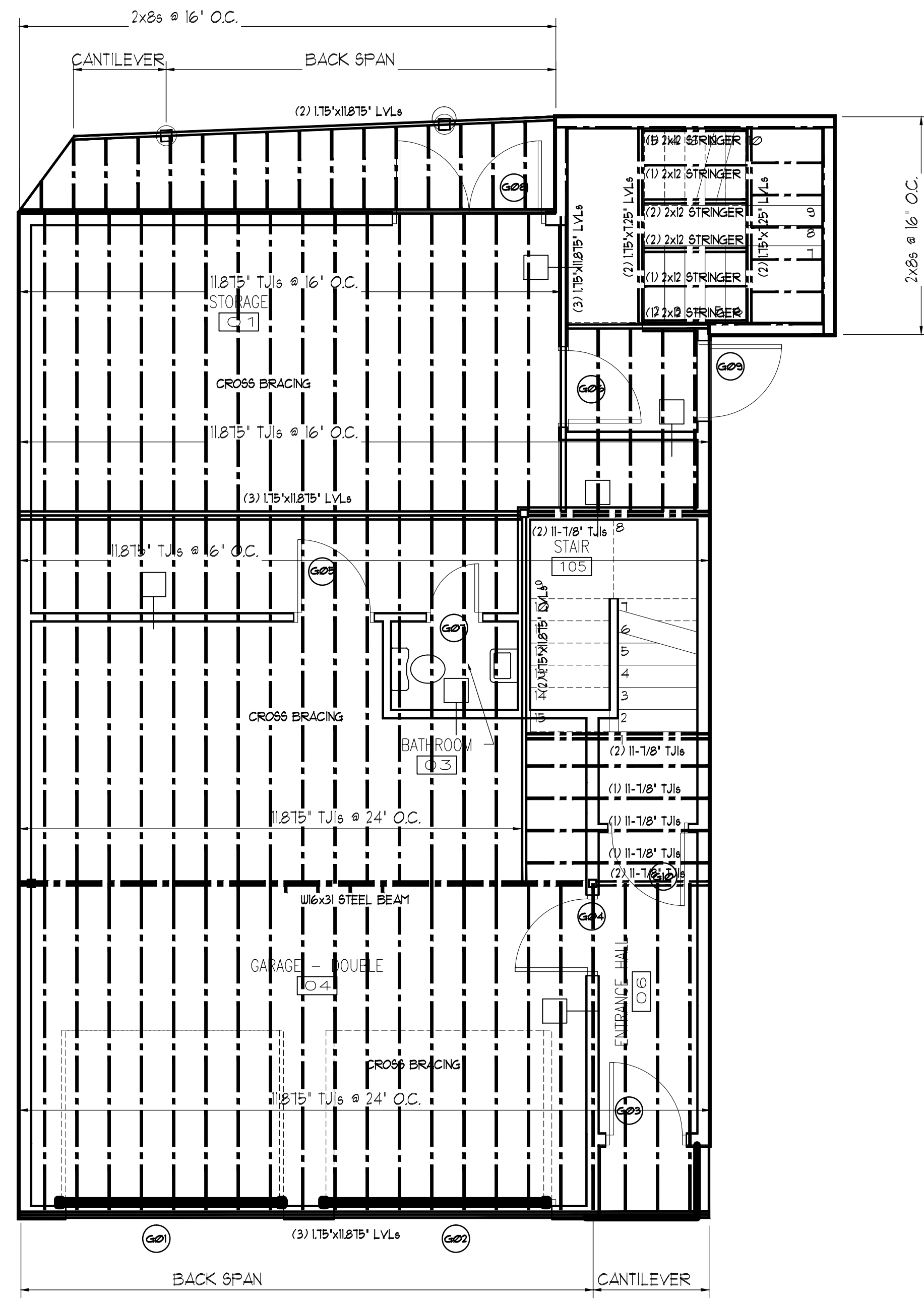
DETAIL AT ROOF PARAPET SCUPPER & OVERFLOW SCUPPER
SCALE: 1/2" = 1'-0"

Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting
D	02-06-12	Re-issued for Permitting

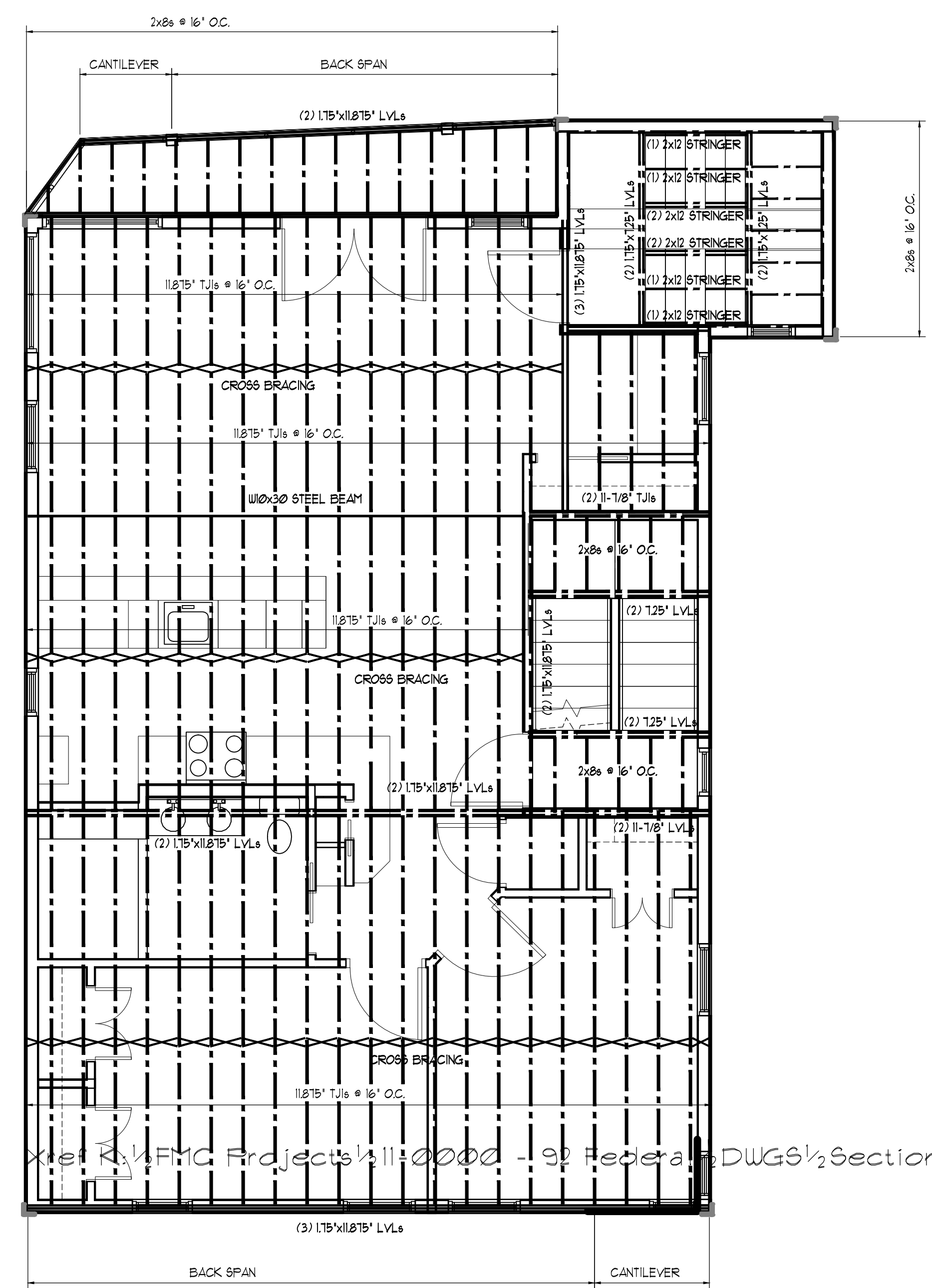
CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO

TITLE:
ROOF PLAN & DETAILS

FILE:
SHEET: A1.05

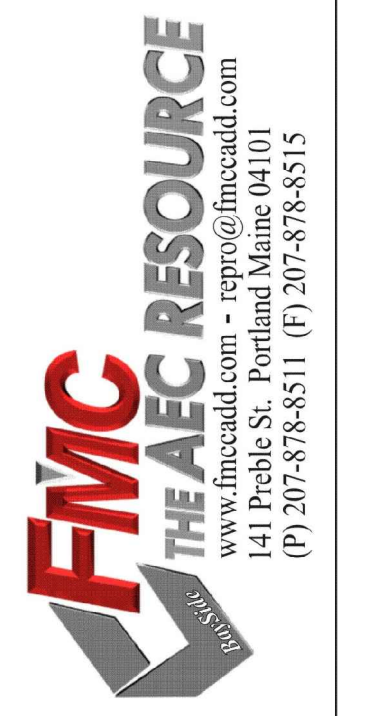


FIRST FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"



SECOND FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"

x:\projects\FMG Projects\11-0000 - 92 Federal St DWG5\2 Section Marks.dwg

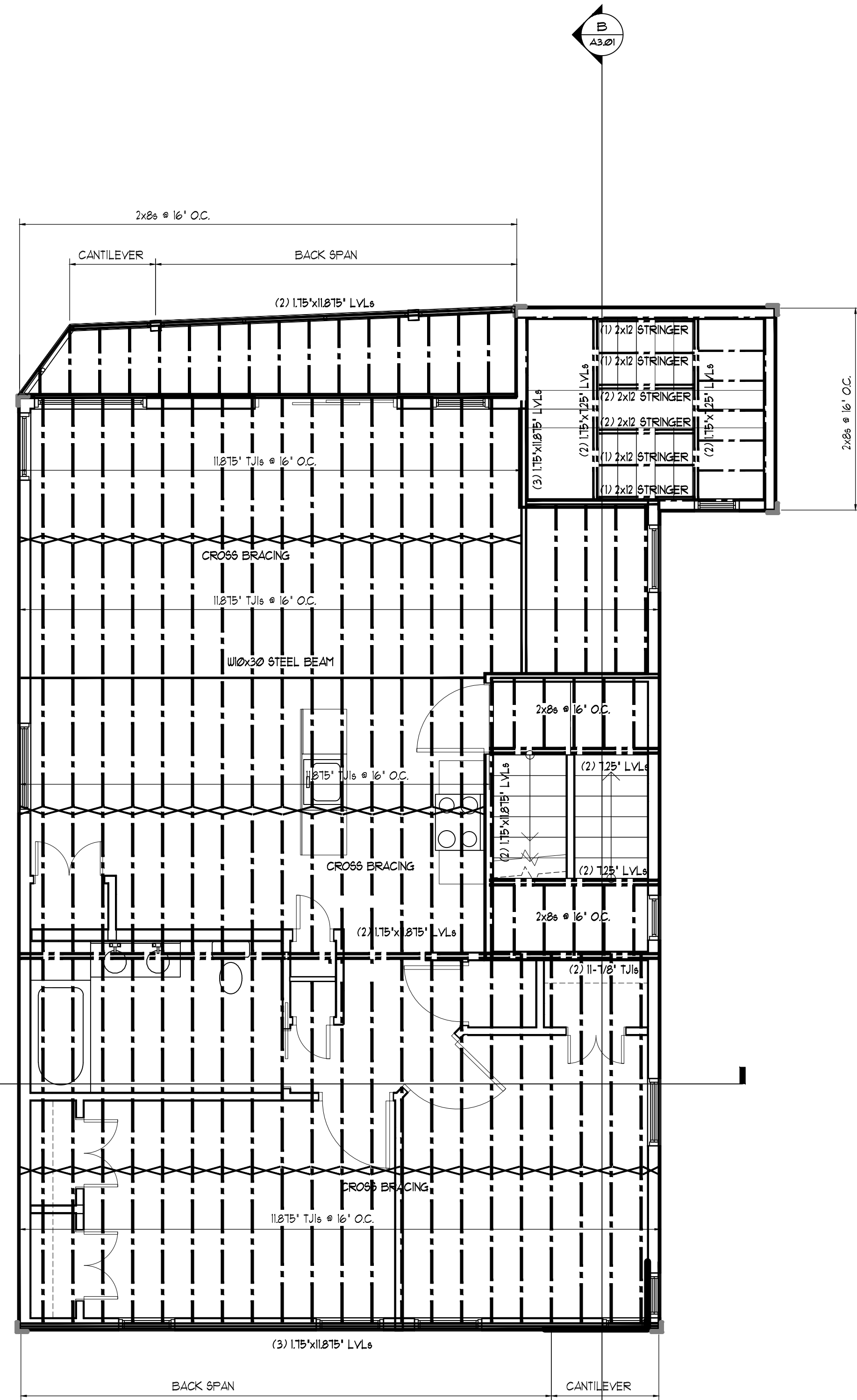


New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

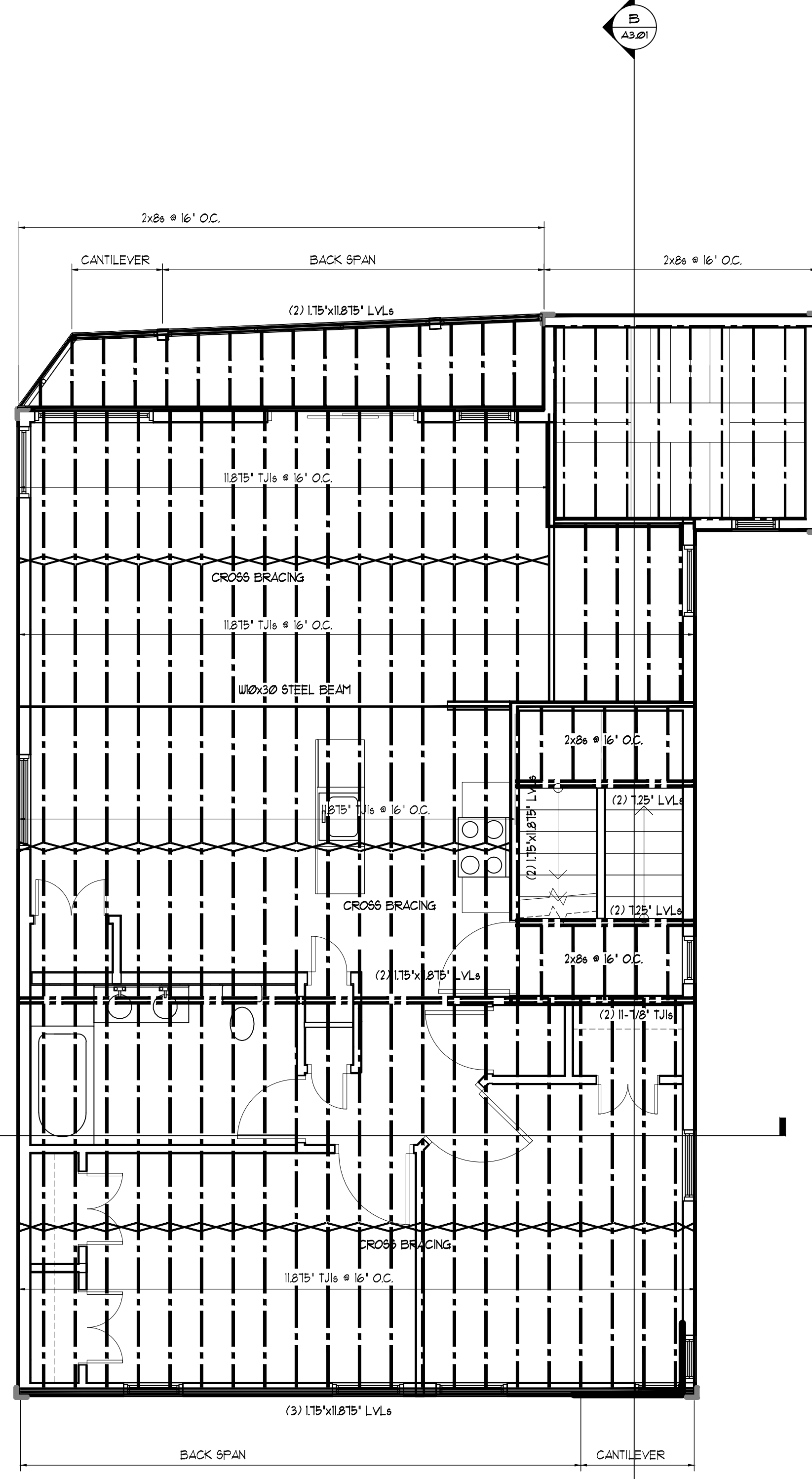
Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting
D	02-06-12	Re-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
TITLE: Framing Plans
FILE:
SHEET: A1.06

New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler



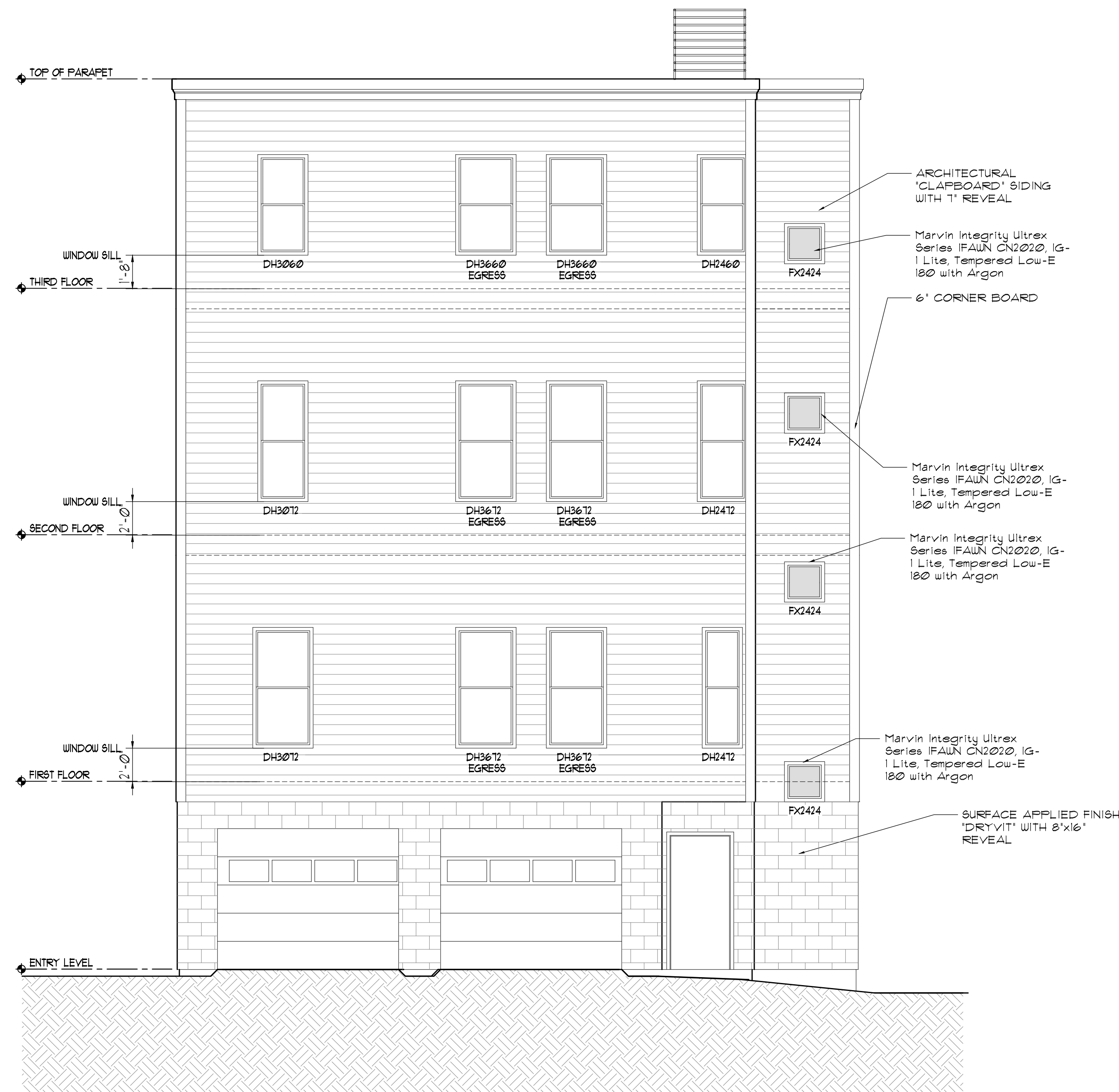
THIRD FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"



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

Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
TITLE: Framing Plans
FILE:
SHEET: A1.07



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

Unprotected Openings Calculation
52 Federal St. Portland, ME

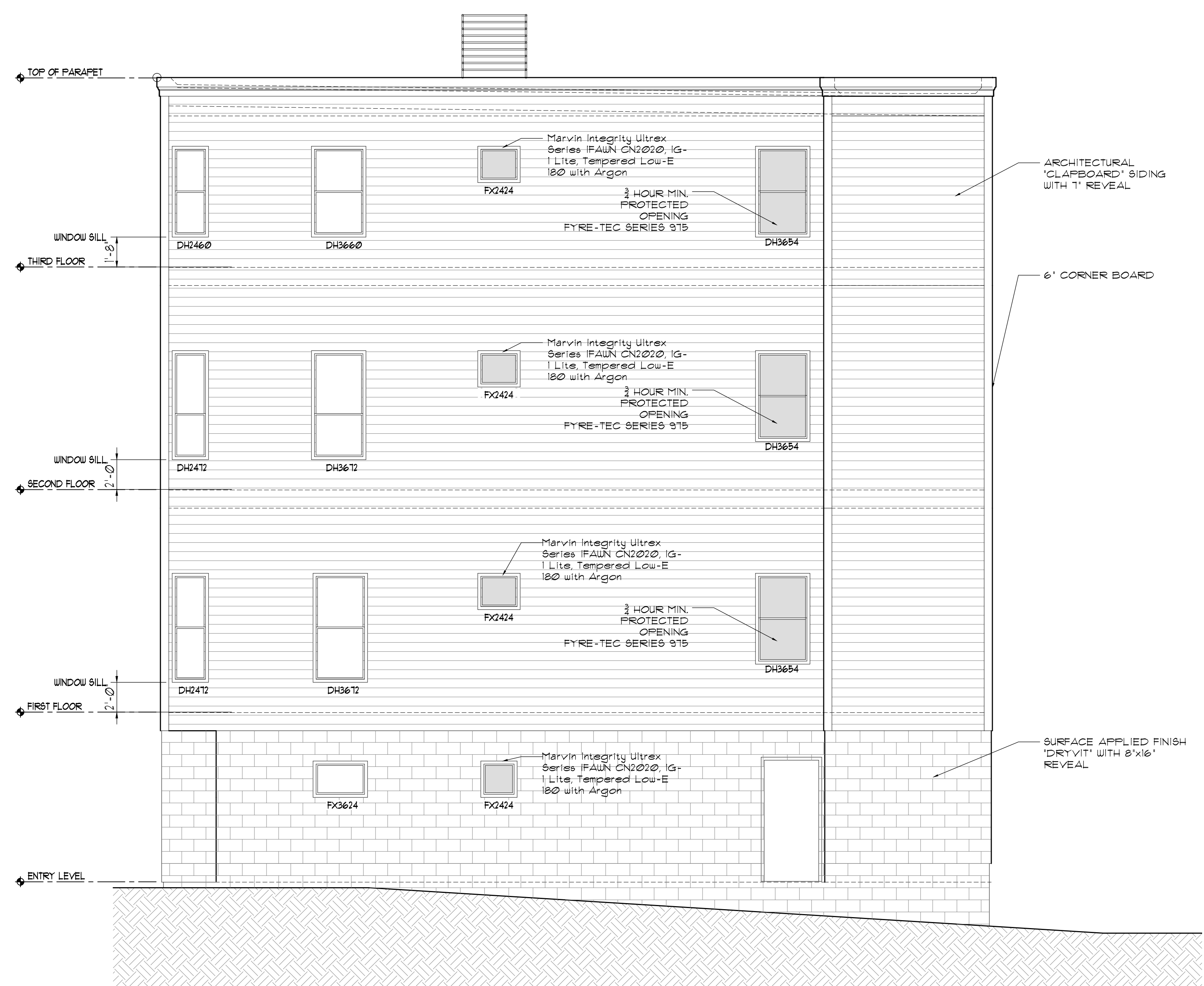
Classifications
Front: Unlimited (street side)
Right: 25% (over 5' from property line)
Left: Existing square footage of openings
Rear: 15% (3'-5' from property line)

Front Side
Area of front side: 1244.1sf
Unlimited = 1244.1sf
Proposed openings: 198.75sf

Right Side
Area of right side: 1587.75
25% = 396.94sf of openings
Proposed openings: 173.75sf

Left Side
Existing square footage of openings: 151sf
Proposed openings: 149.5sf

Rear Side
Area of rear side adjacent to deck: 966.47sf
15% = 144.97sf of openings
Proposed openings: 143.75sf

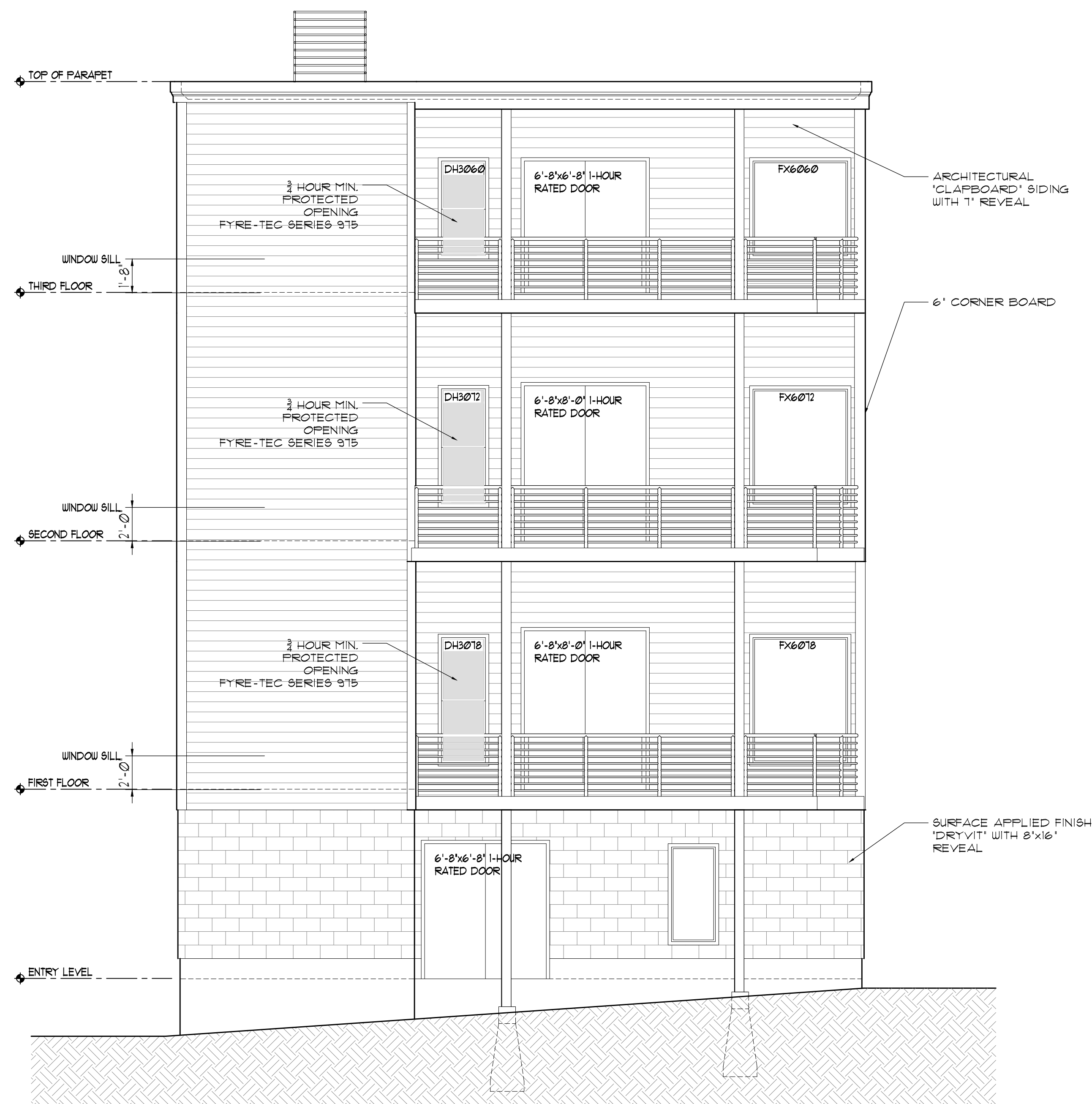


RIGHT SIDE ELEVATION
SCALE: 1/4" = 1'-0"

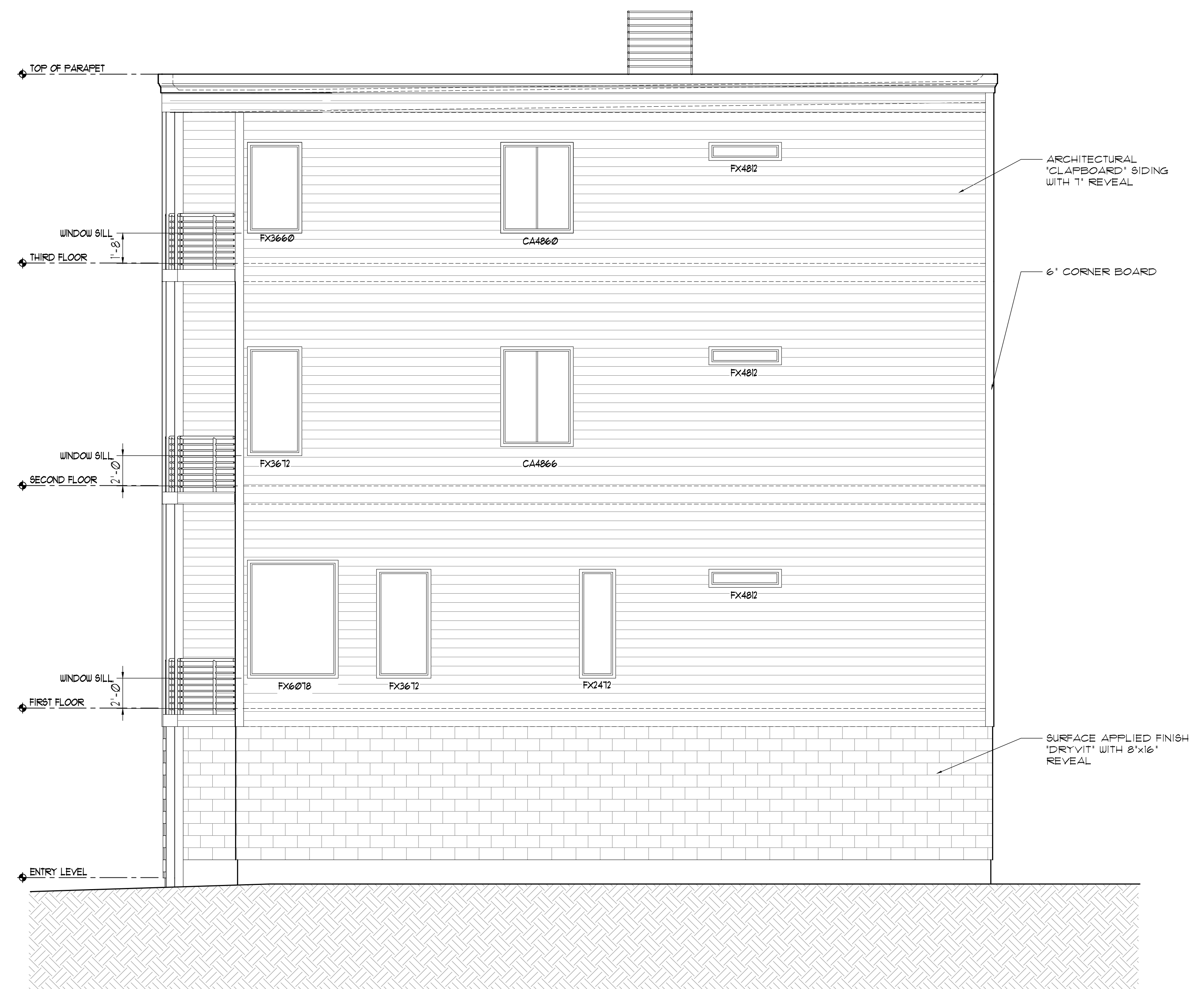
New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
TITLE: ELEVATIONS
FILE:
SHEET: A2.01



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



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

Unprotected Openings Calculation
52 Federal St. Portland, ME

Classifications
Front: Unlimited (street side)
Right: 25% (over 5' from property line)
Left: Existing square footage of openings
Rear: 15% (3'-5" from property line)

Front Side
Area of front side: 1244.1sf
Unlimited = 1244.1sf
Proposed openings: 198.75sf

Right Side
Area of right side: 1587.75
25% = 396.94sf of openings
Proposed openings: 173.75sf

Left Side
Existing square footage of openings: 151sf
Proposed openings: 149.5sf

Rear Side
Area of rear side adjacent to deck: 966.47sf
15% = 144.97sf of openings
Proposed openings: 143.75sf

New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting
D	02-06-12	Re-issued for Permitting

CODE: IBC 2009

TOWN: Portland

DATE: 09-13-11

SCALE: as noted

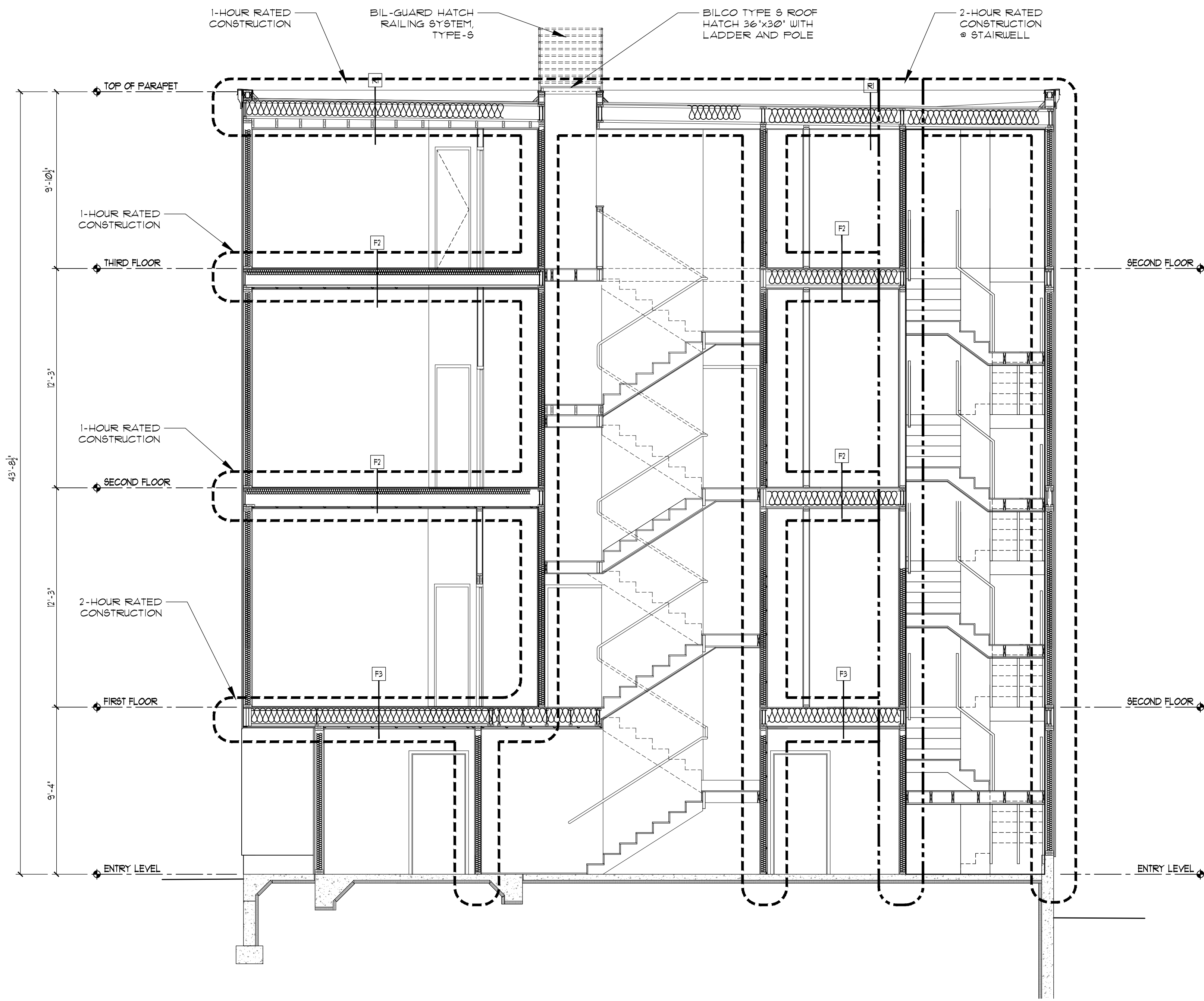
DESIGNED: LC

DRAWN: JJO

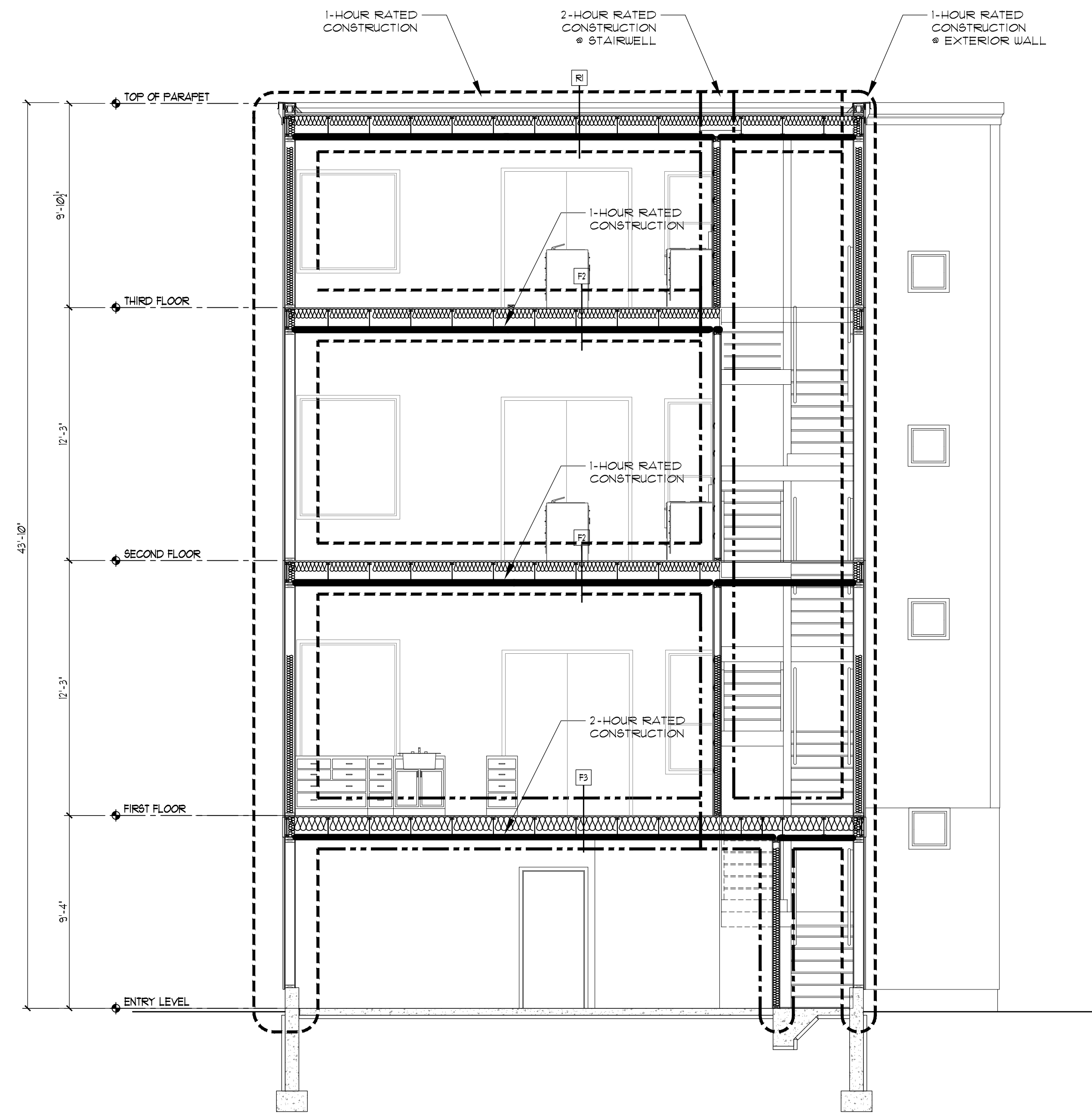
TITLE:
ELEVATIONS

FILE:

SHEET: A2.02



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



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

New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

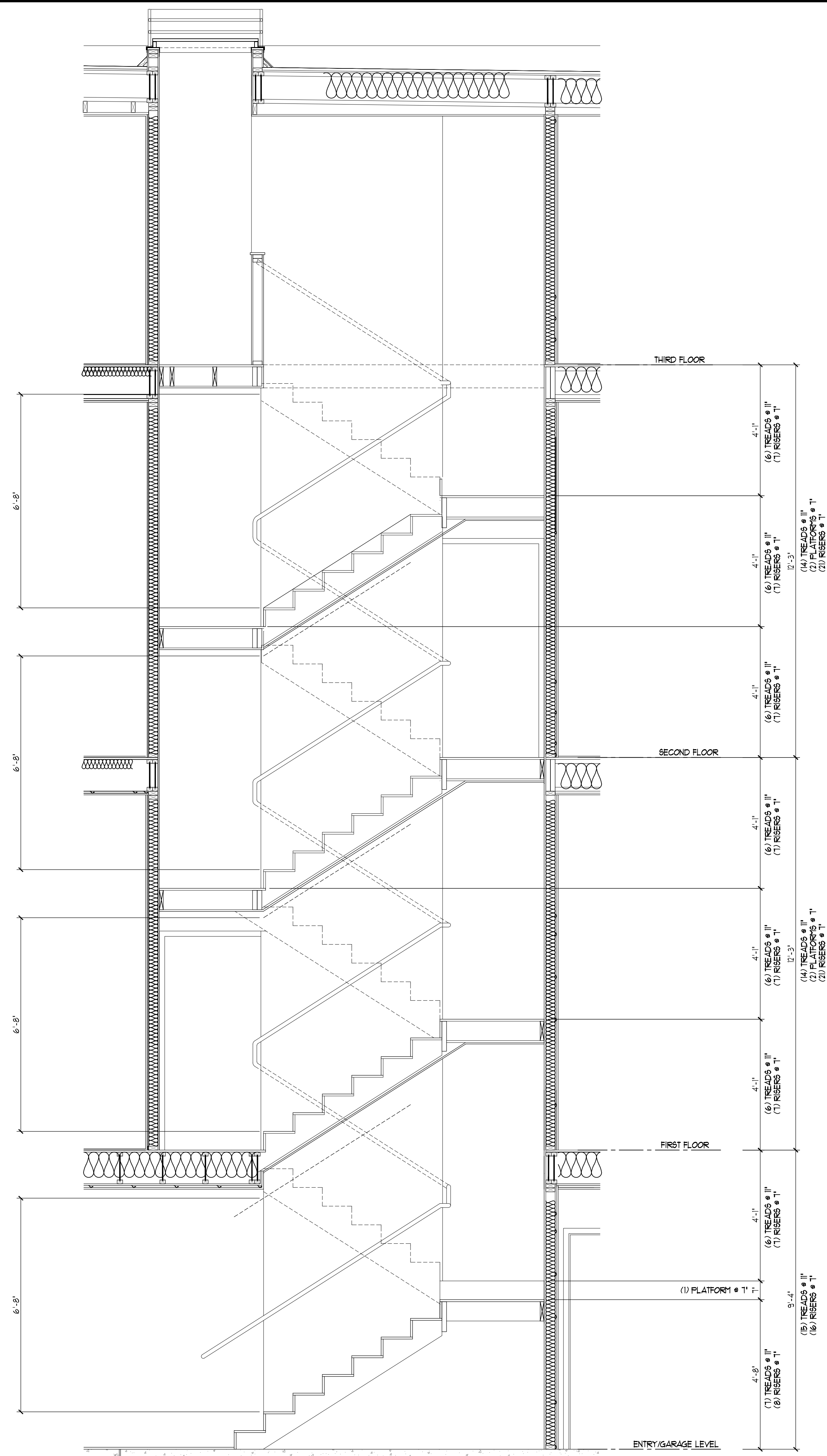
Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO

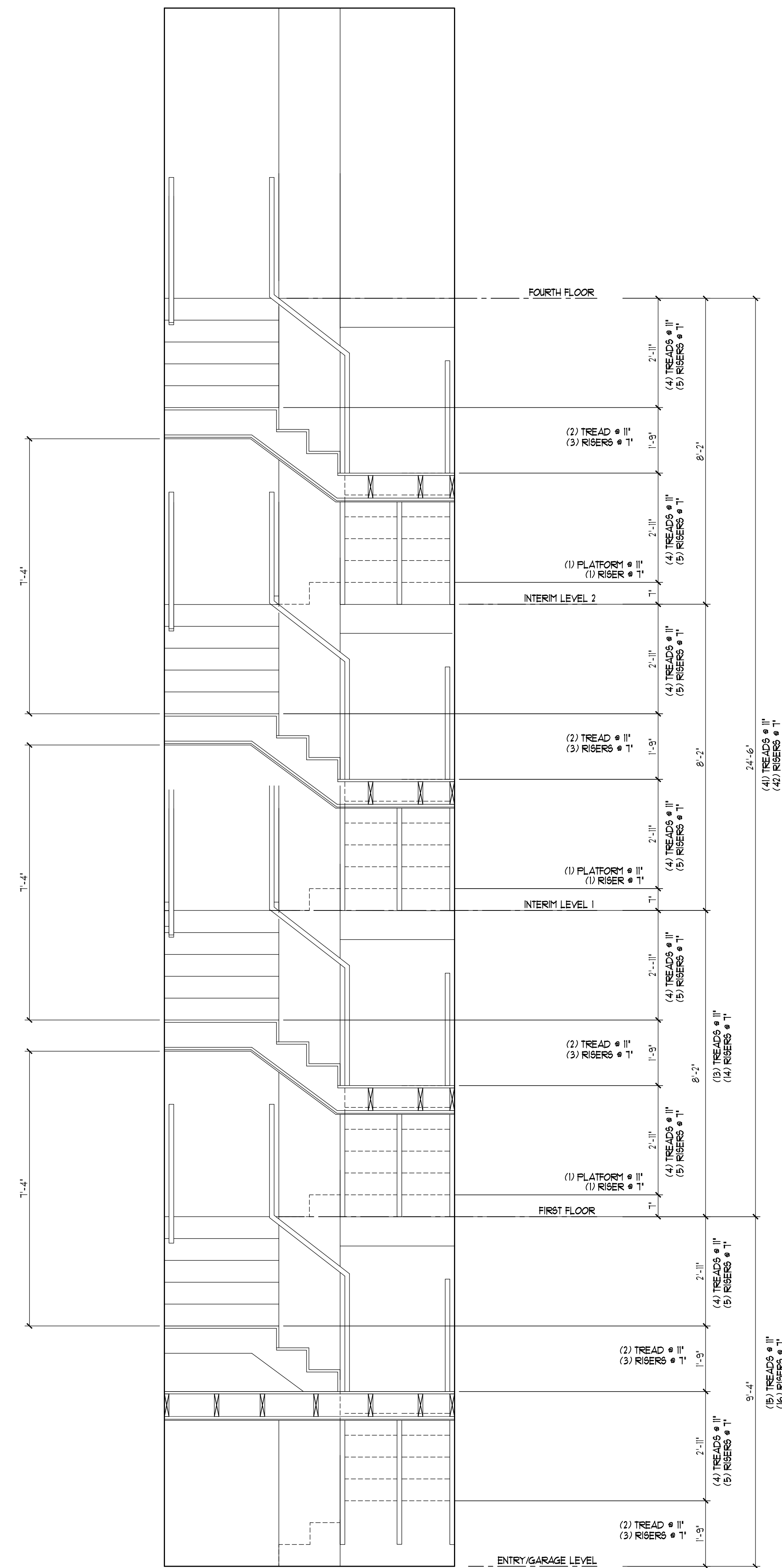
TITLE:
SECTIONS

FILE:
SHEET: A3.01

SECTION THROUGH MAIN STAIR
SCALE: 1/4" = 1'-0"



SECTION THROUGH SECONDARY STAIR
SCALE: 1-1/2" = 1'-0"

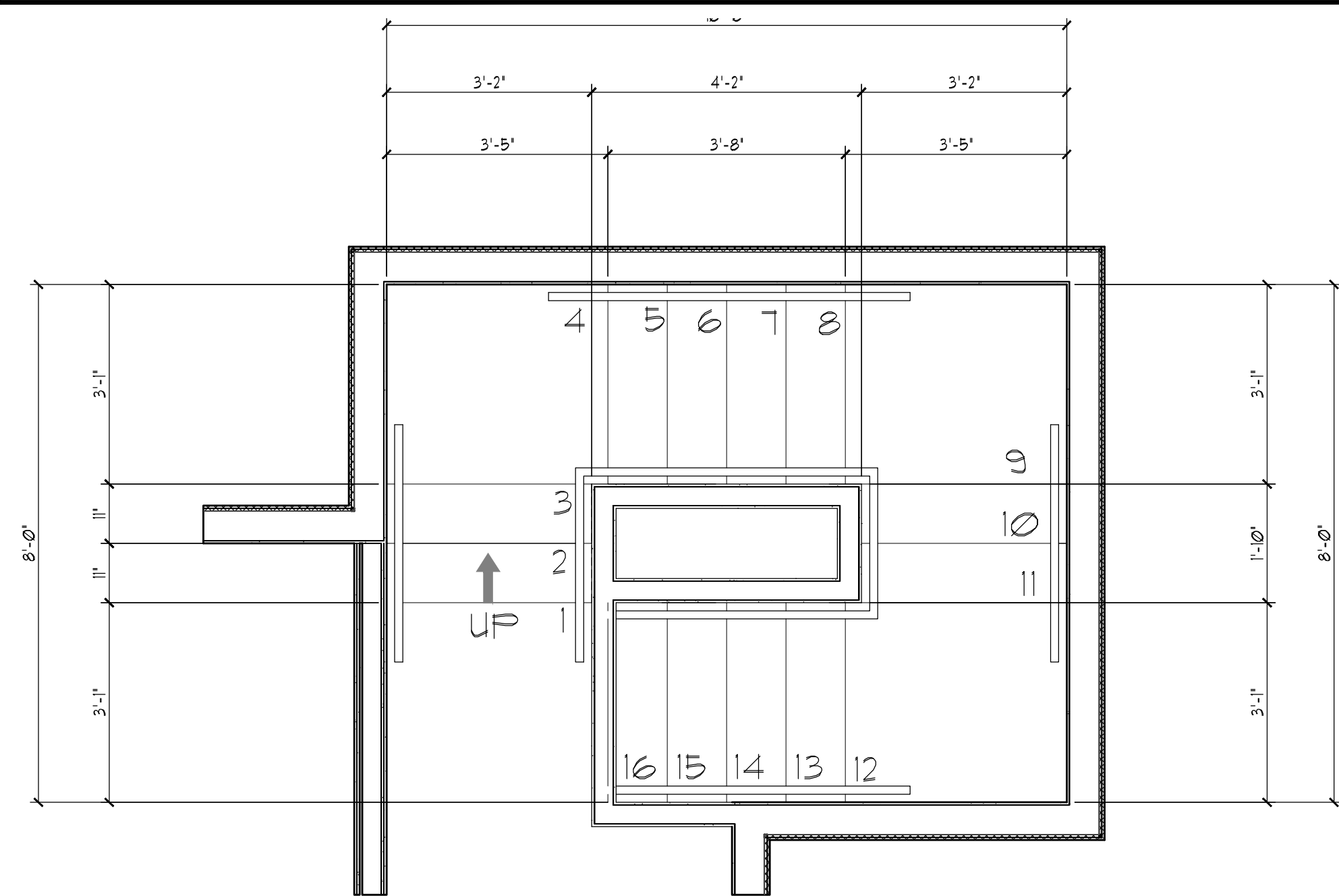


New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

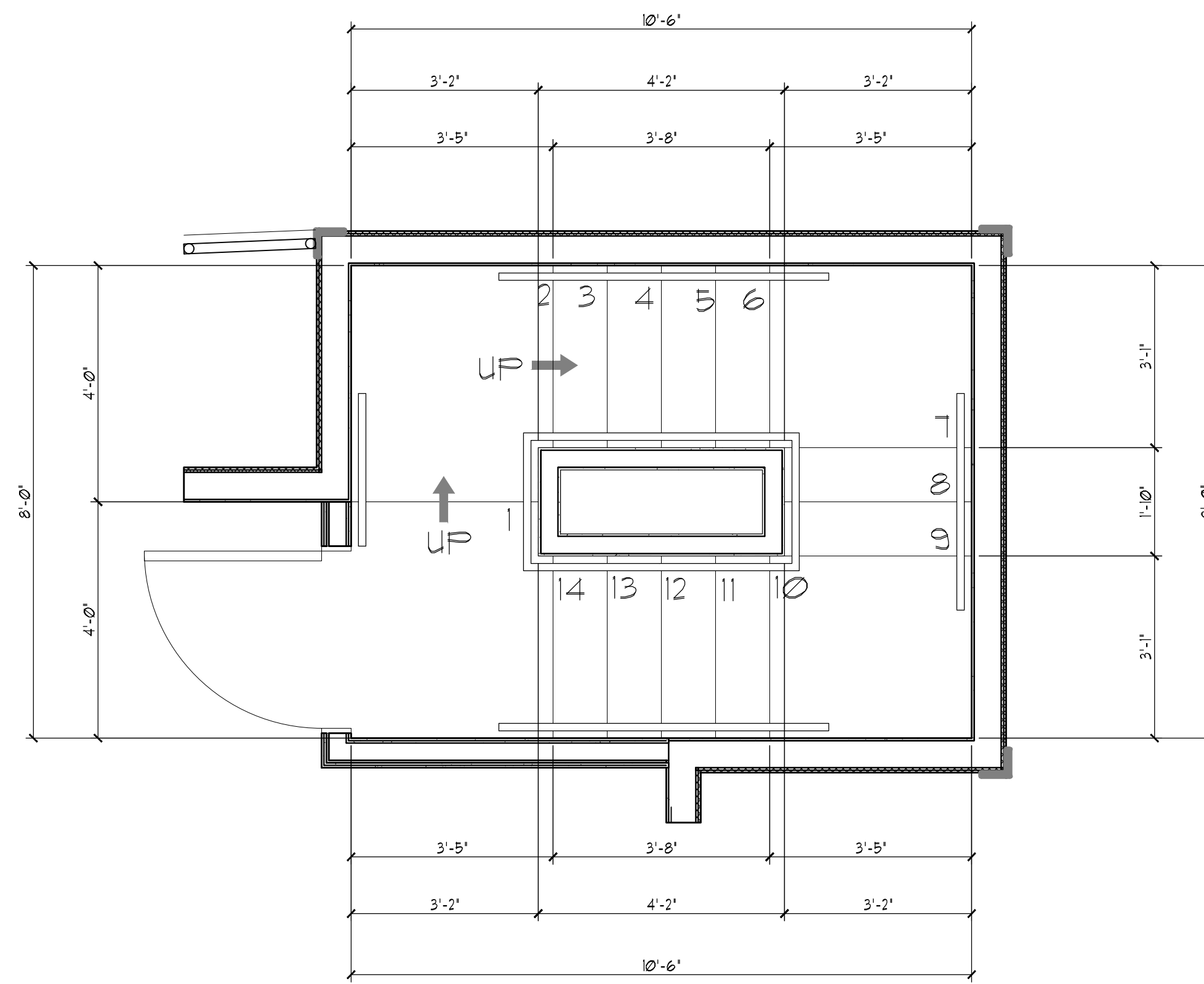
Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
STAIRS

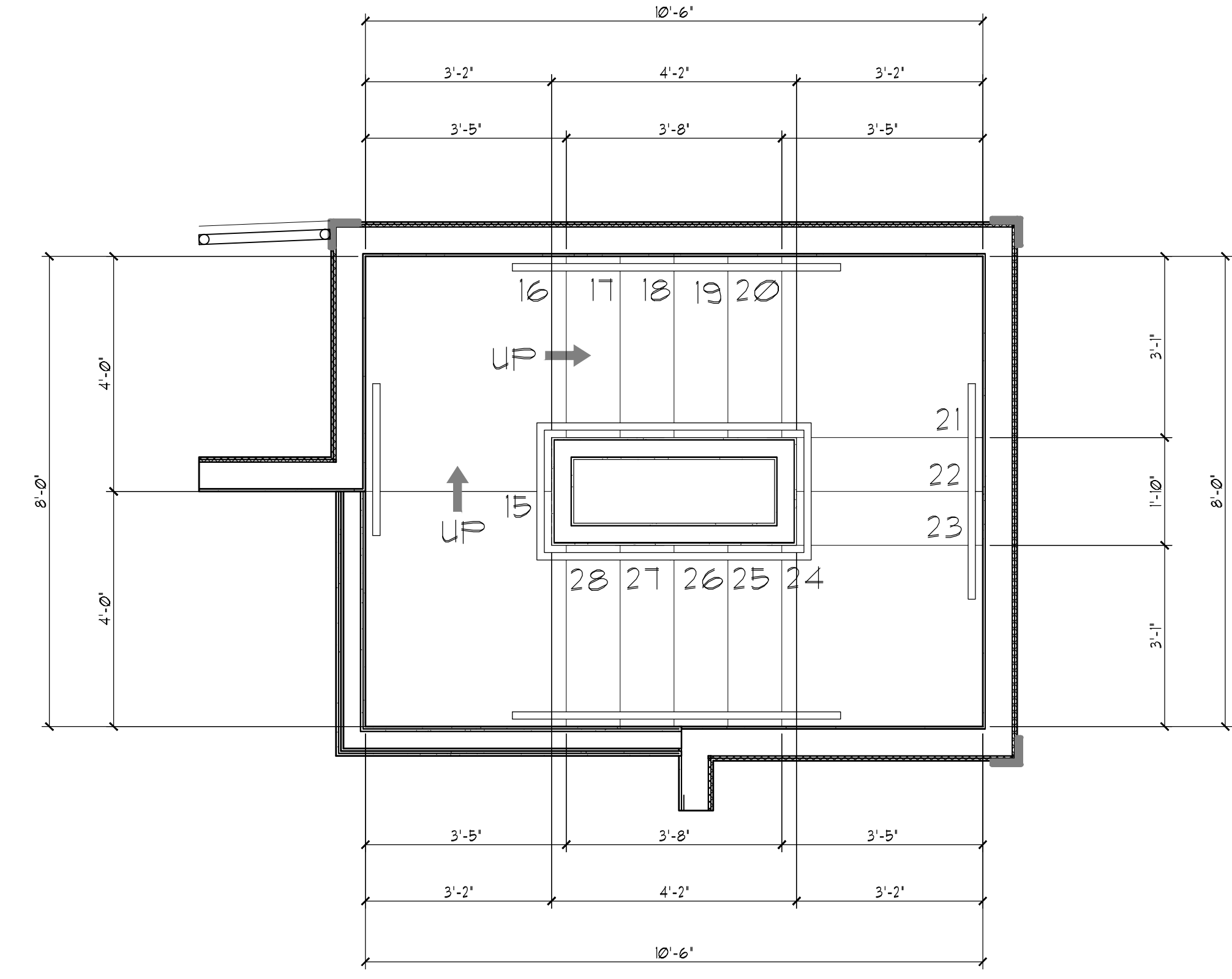
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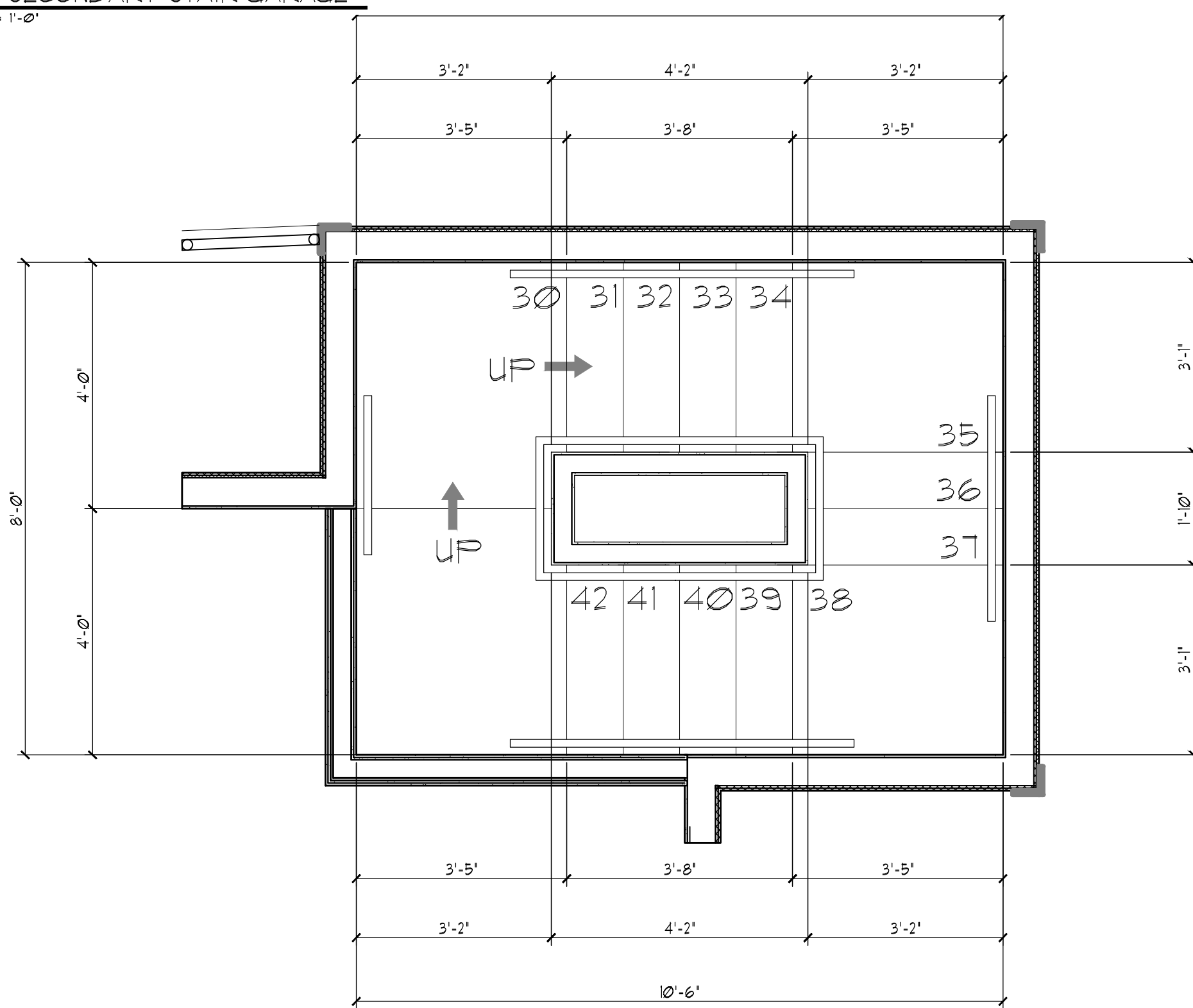
PLAN @ SECONDARY STAIR GARAGE
SCALE: 1/2" = 1'-0"



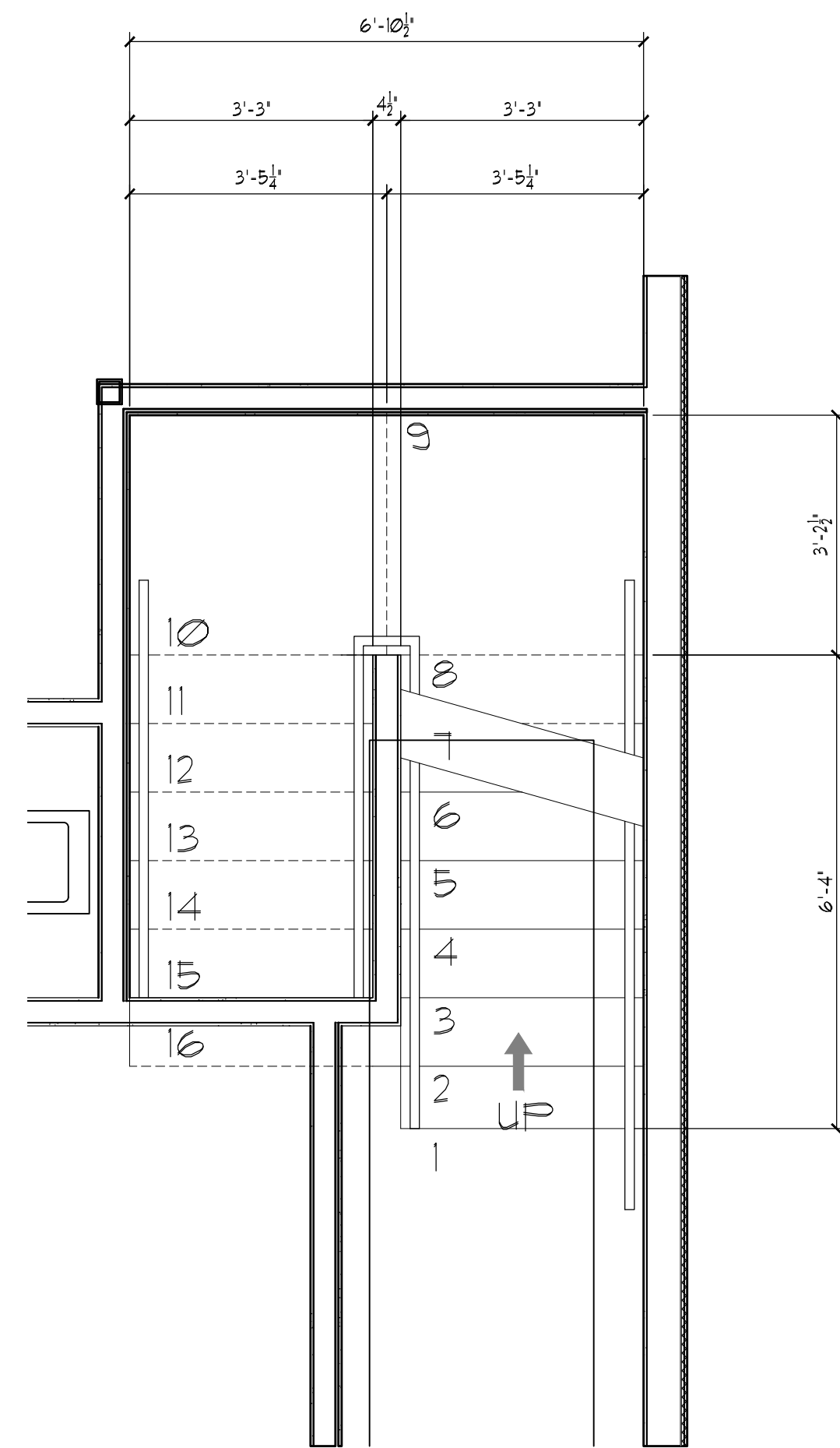
PLAN @ SECONDARY STAIR FIRST FLOOR
SCALE: 1/2" = 1'-0"



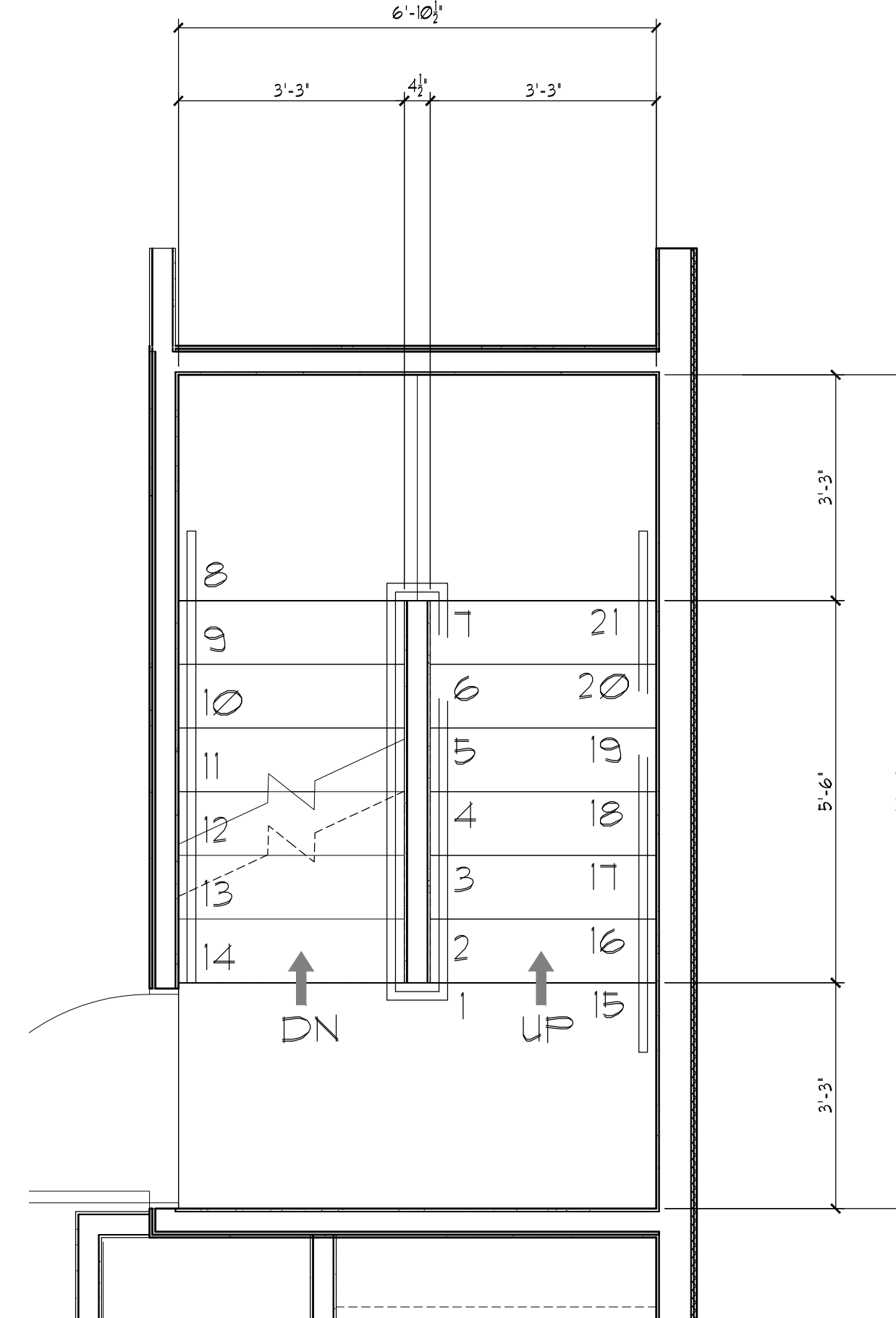
PLAN @ SECONDARY STAIR INTERUM LEVEL
SCALE: 1/2" = 1'-0"



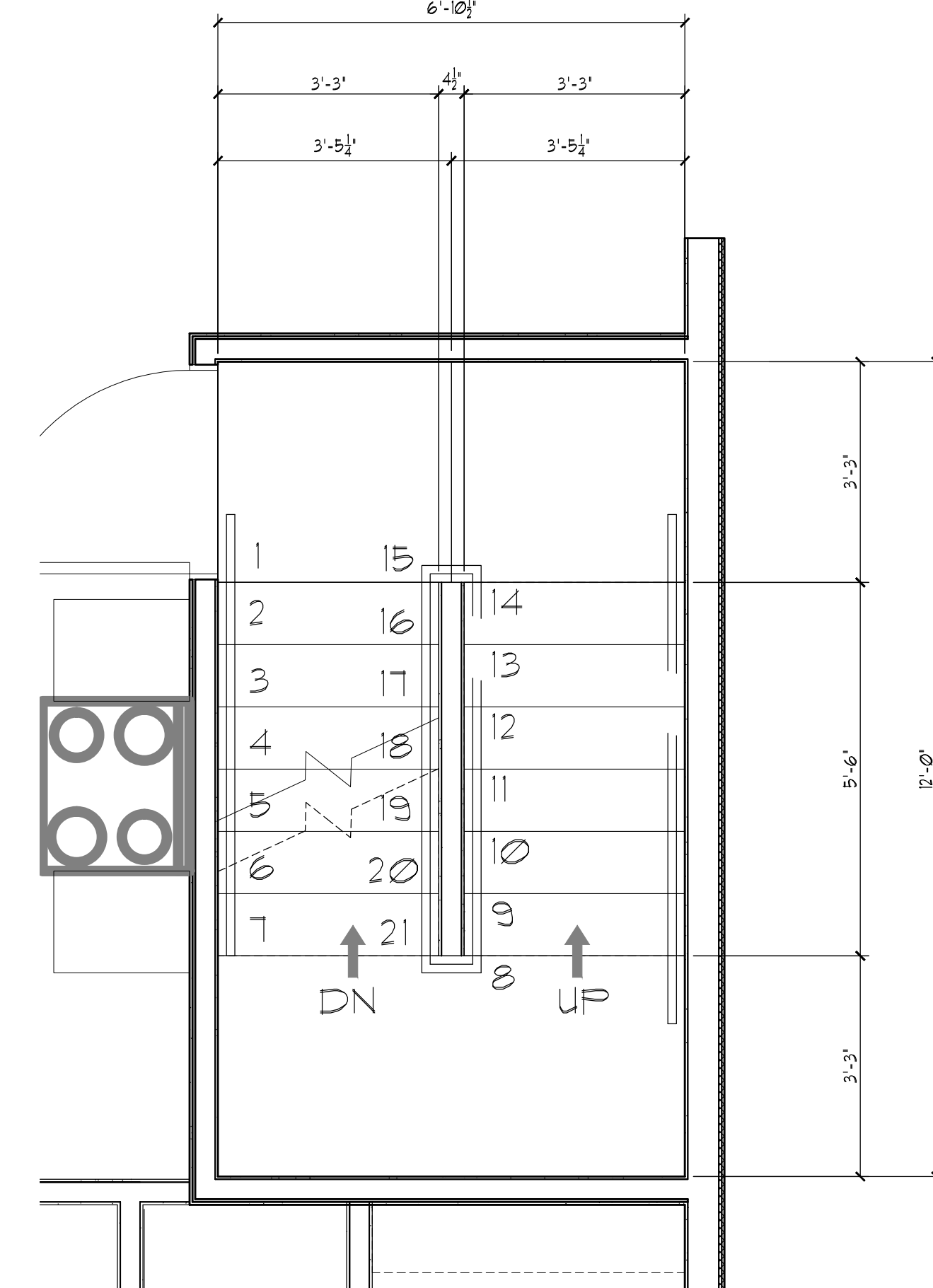
PLAN @ SECONDARY STAIR 4TH FLOOR
SCALE: 1/2" = 1'-0"



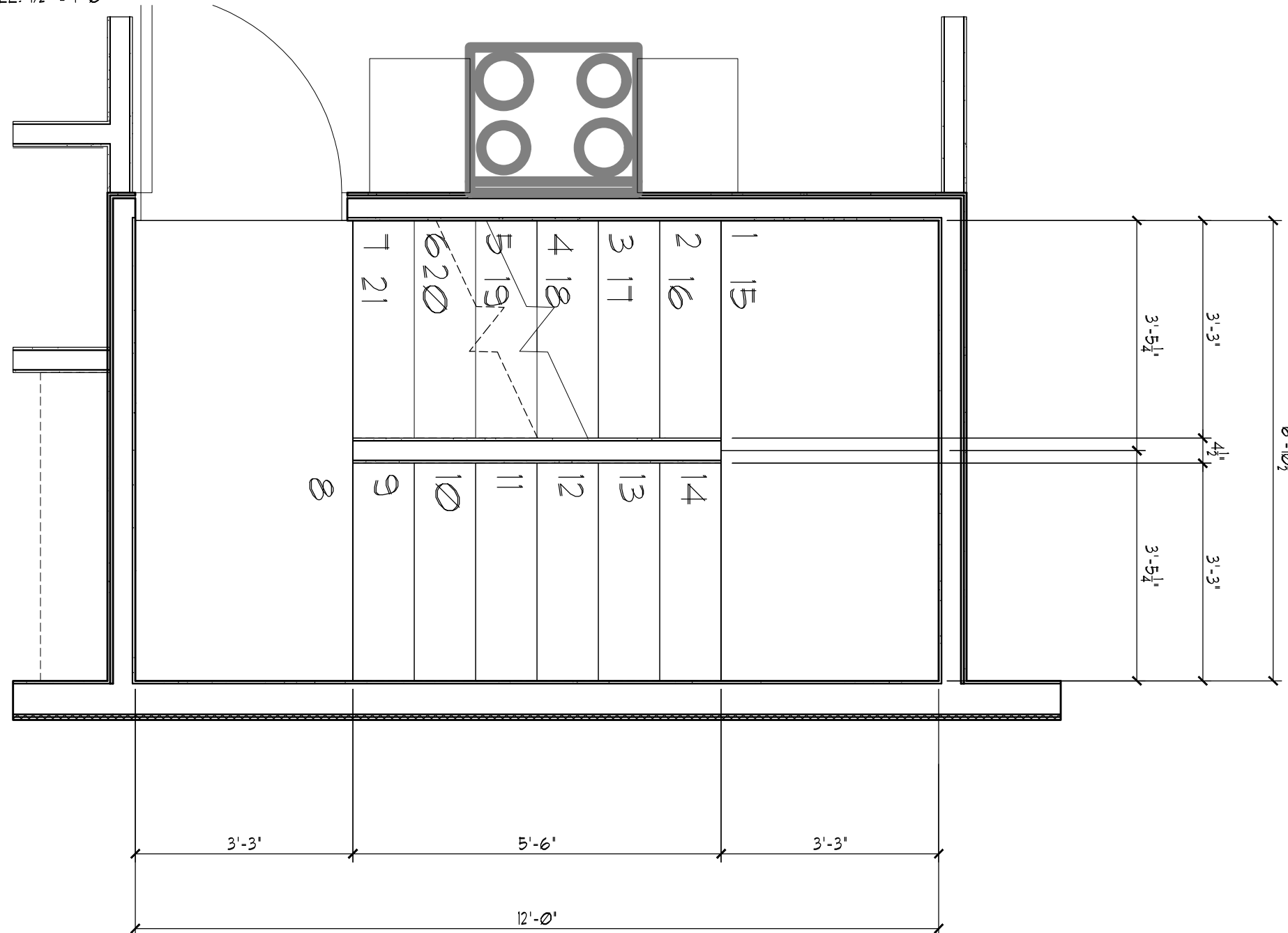
PLAN @ MAIN STAIR GARAGE
SCALE: 1/2" = 1'-0"



PLAN @ MAIN STAIR 1ST FLOOR
SCALE: 1/2" = 1'-0"



PLAN @ MAIN STAIR 2ND FLOOR
SCALE: 1/2" = 1'-0"



PLAN @ MAIN STAIR 3RD FLOOR
SCALE: 1/2" = 1'-0"

PROPERTY OF

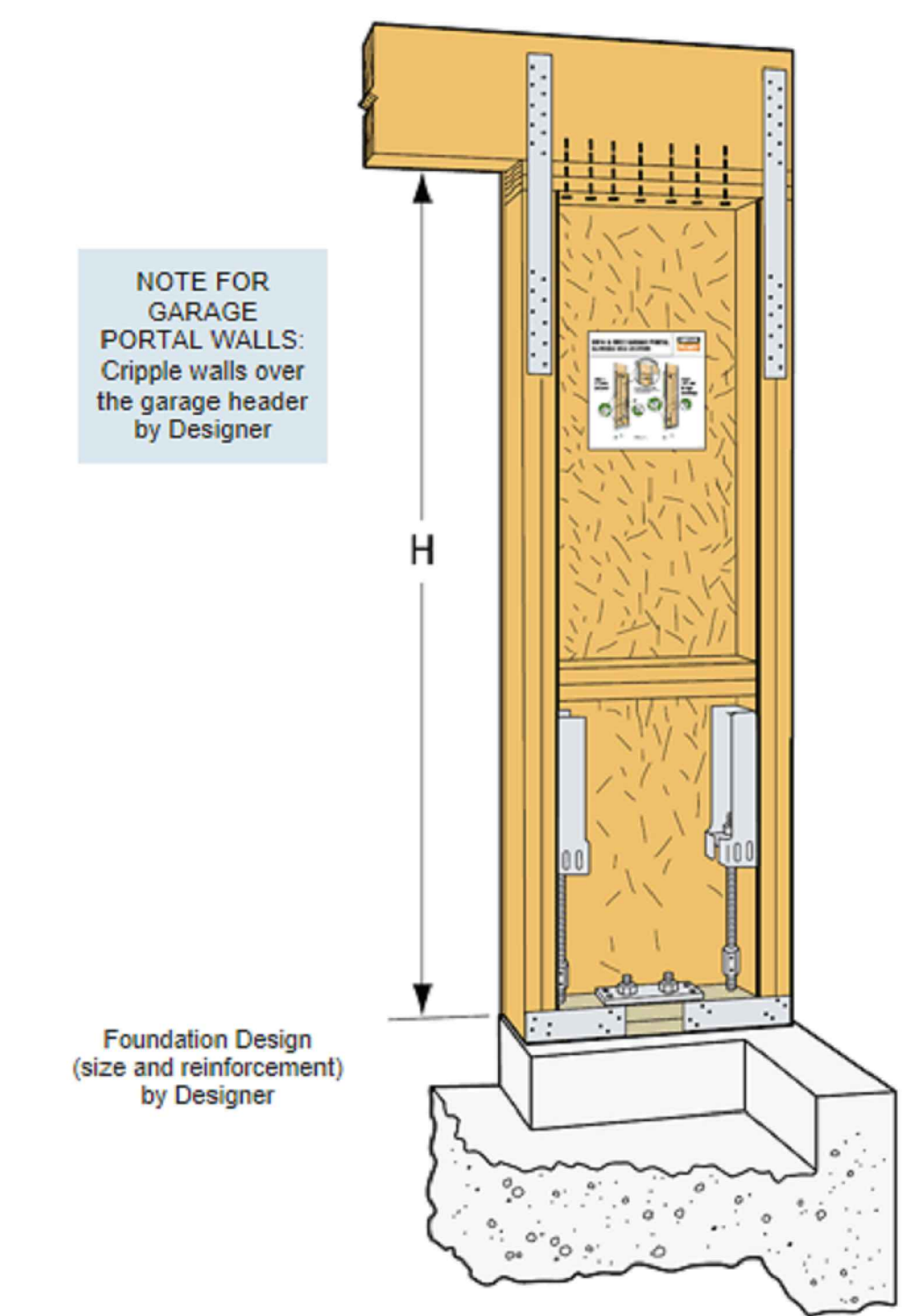
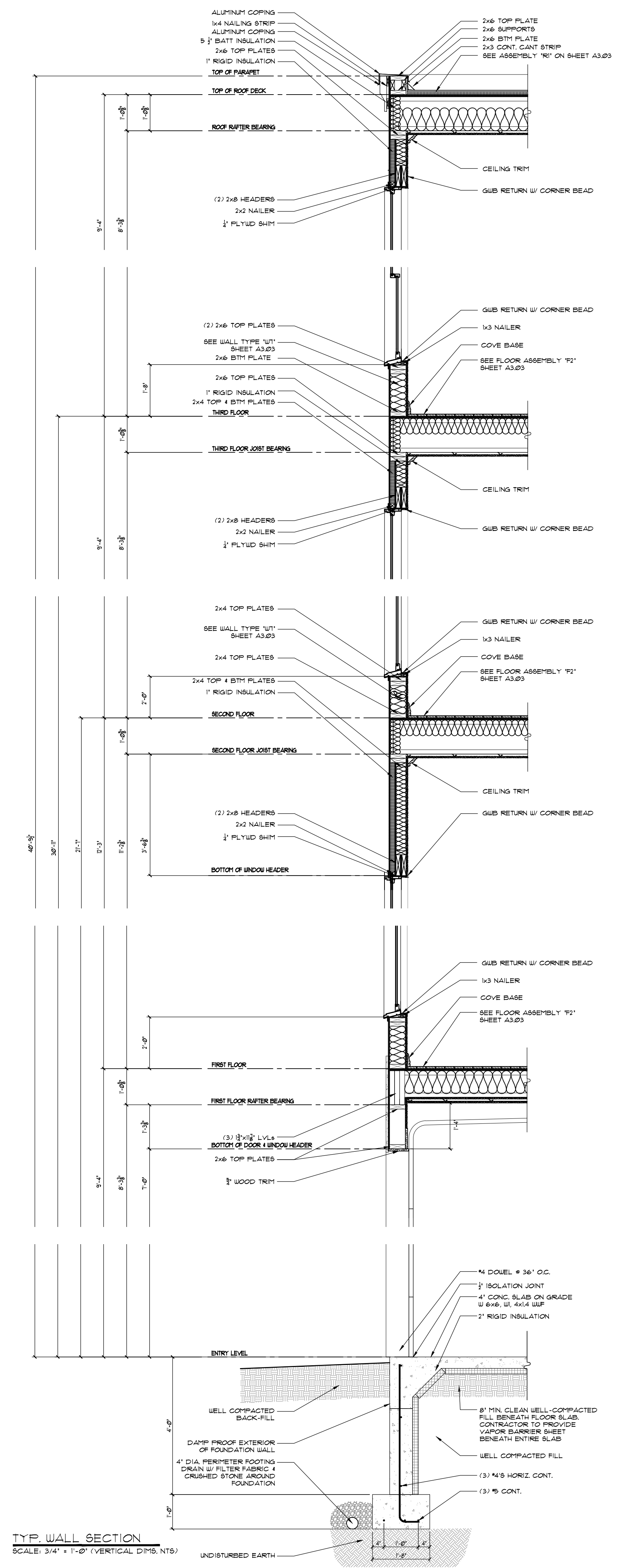
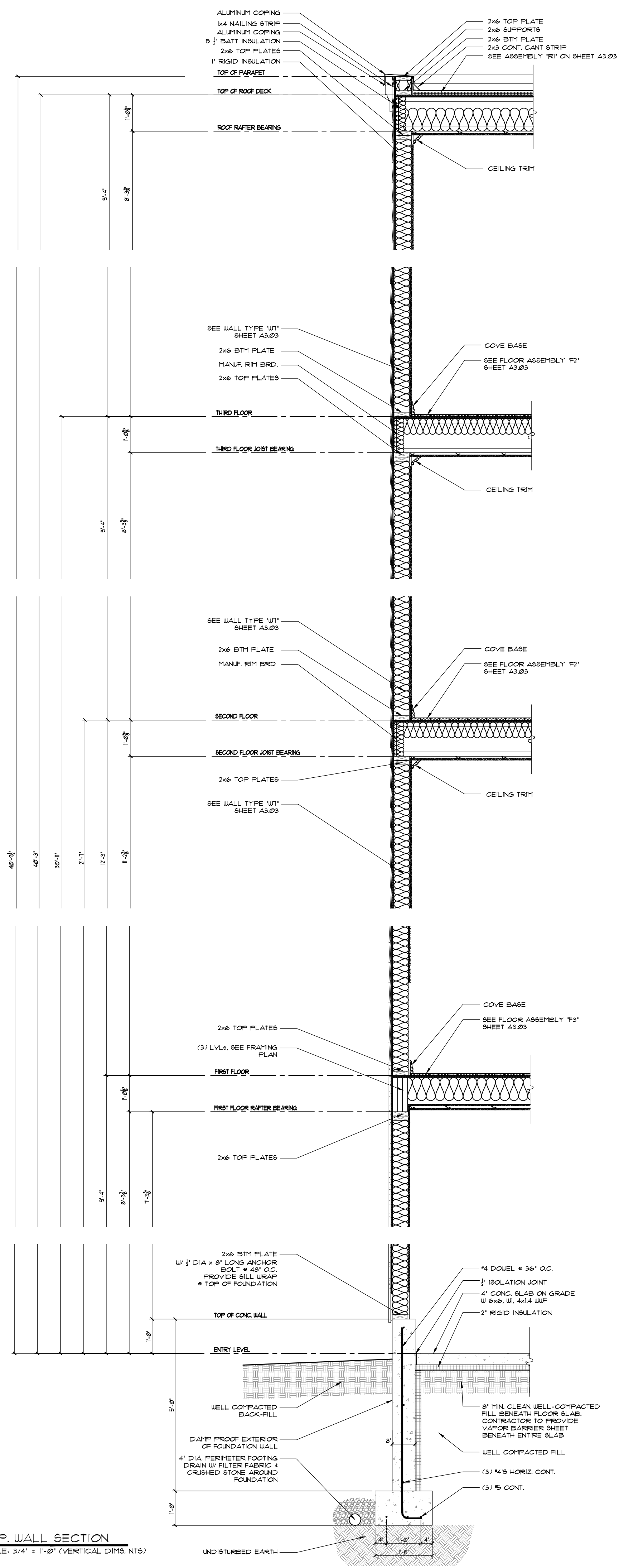


New Three Unit at 52 Federal Street
Portland, Maine
Owners: Liv Chase & Brent Adler

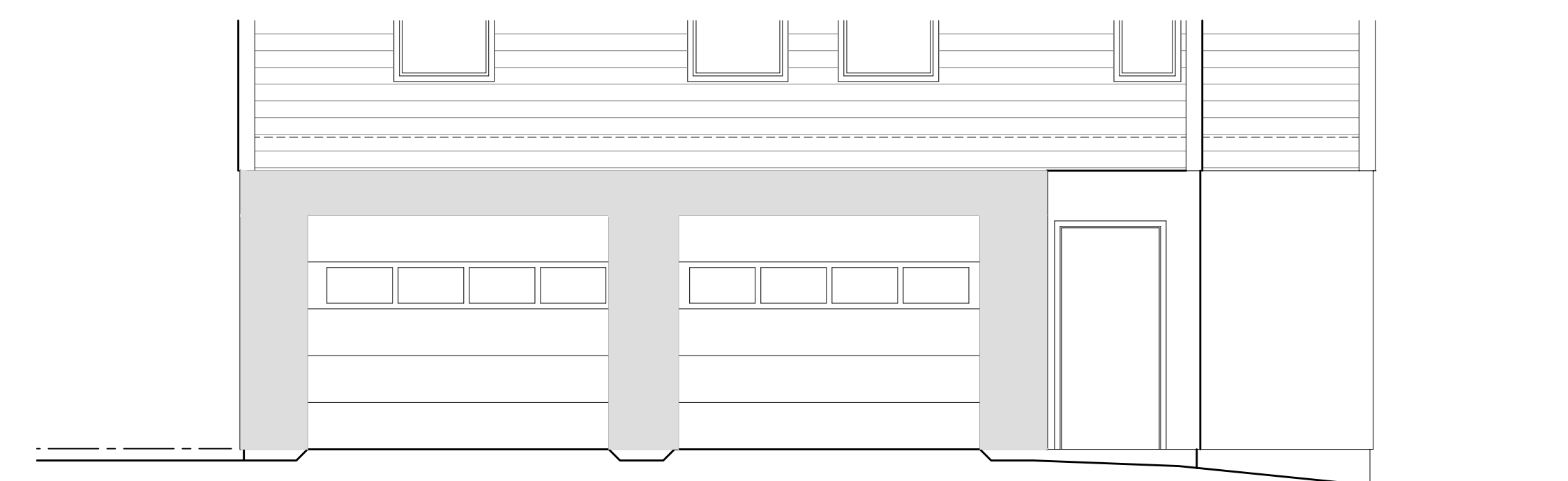
Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	01-23-12	RE-issued for Permitting

CODE: IBC 2009
TOWN: Portland
DATE: 09-13-11
SCALE: as noted
DESIGNED: LC
DRAWN: JJO
STAIRS

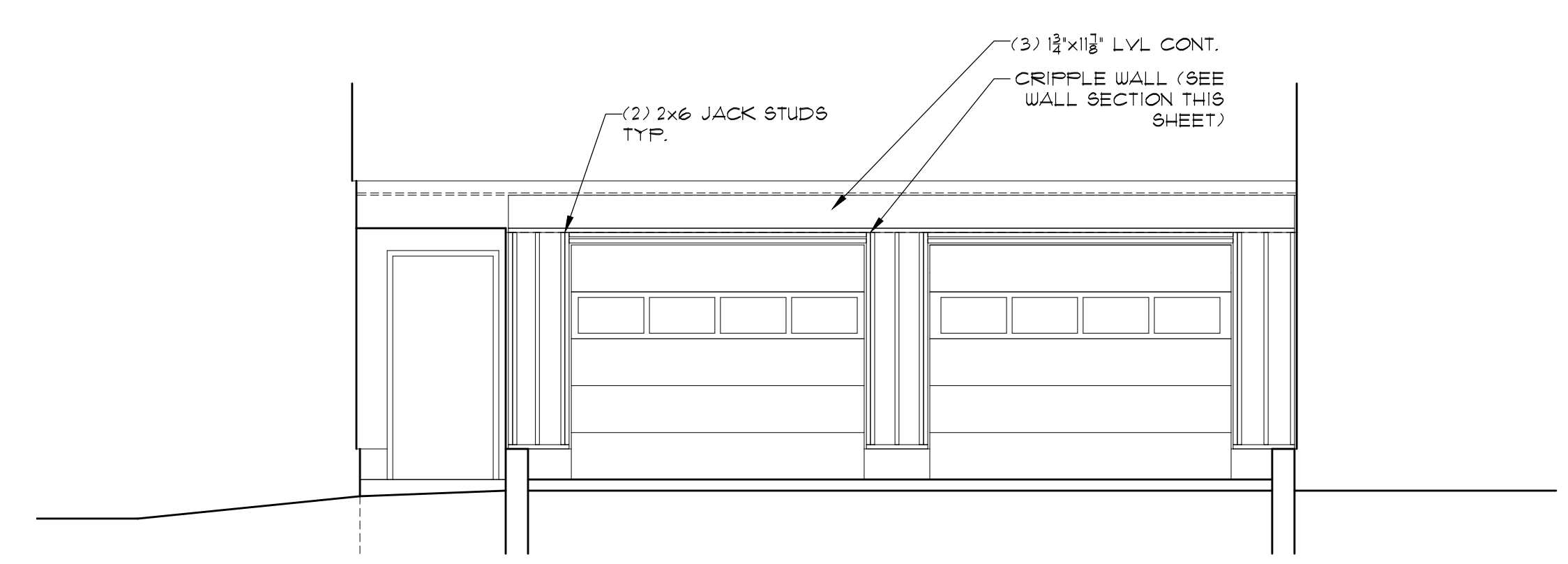
FILE:
SHEET: A3.02A



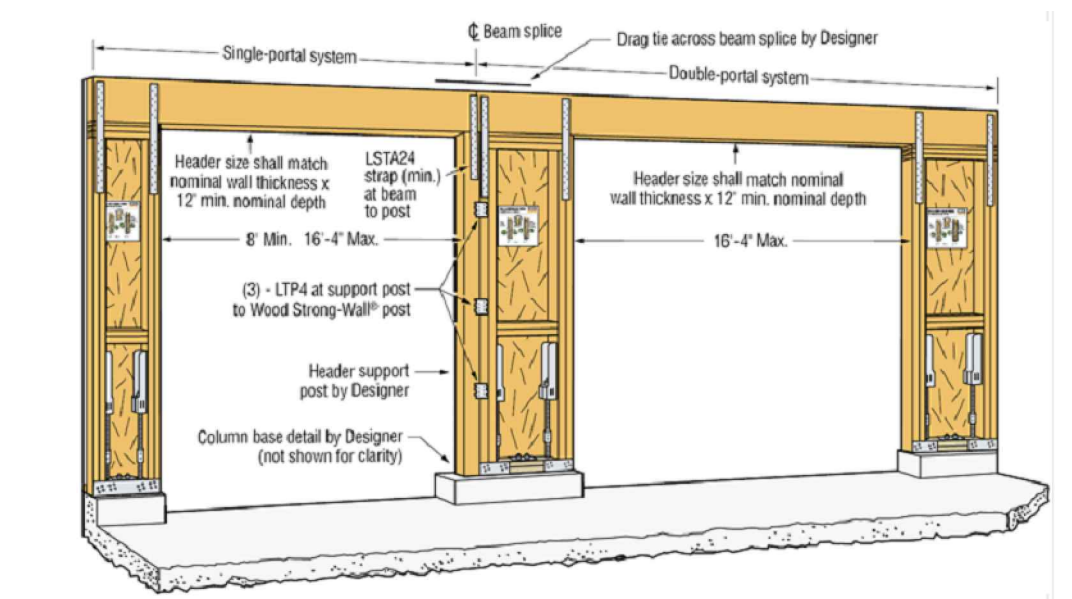
'STRONG' WALL DETAIL (ENLARGED)
 NTS



'STRONG' WALL LOCATION EXTERIOR
 SCALE: 1/4" = 1'-0"



'STRONG' WALL LOCATION INTERIOR
 SCALE: 1/4" = 1'-0"

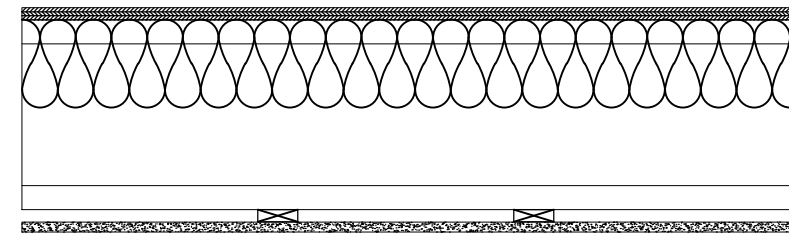


1. Beam to support post and support post to foundation split connectors may be reduced where justified by calculations.
2. This detail reflects lateral load requirements of a Single- and Double-portal system. It is the Designer's responsibility to provide a complete load path for all loads in accordance with the governing codes.
3. System rating equals the sum of the Single- and Double-portal Portal values.
4. Alternate installation: A single-piece header (no cantilever) may be substituted for the two headers shown. The design rating for this condition may then be evaluated as the sum of the individual single-wall ratings.
5. Longer header spans can be accommodated if larger headers are used such that equivalent stiffness is equal to or greater than that provided by the minimum header and maximum length indicated.
6. Simpson Strong-Tie® LTPs and LST242 (by Designer) are minimum requirements to achieve the allowable loads.

'STRONG' WALL DETAIL
 NTS

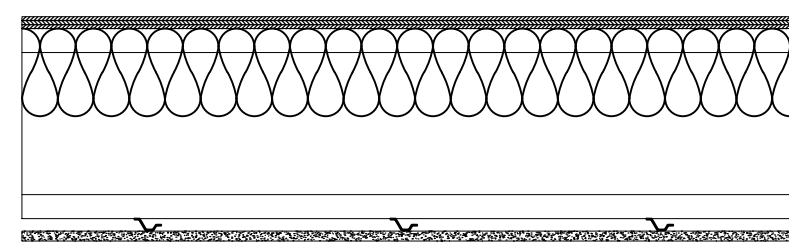
Rev.	Date	Remark
A	09-13-11	Issued for pricing
B	10-13-11	Issued for Permitting
C	11-13-12	RE-issued for

CODE: IE
 TOWN:
 DATE:
 SCALE:
 DESIGNED:
 DRAWN:
 WALL SECTION DETAILS
 FILE:
 SHEET: A3.03



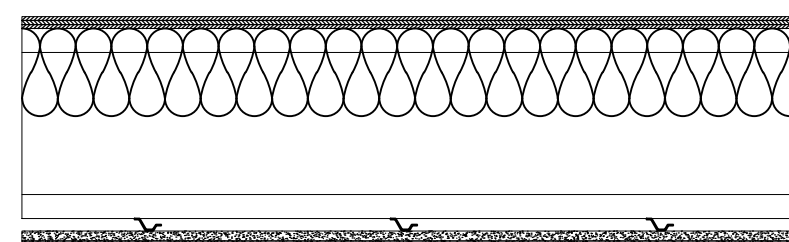
F1 1 Hour Floor/Ceiling Assembly - UL528

1. Wallboard - Base Layer $\frac{5}{8}$ " Type X gypsum wallboard at right angles to joists with $1\frac{1}{4}$ " W or S drywall screws 24" O.C.
2. 4 Wallboard, Gypsum - $\frac{5}{8}$ " thick, 4 ft wide sheets of wallboard installed w/long dimension perpendicular to resilient channels w/1" long wallboard screws spaced 12" O.C. and located a min. $1\frac{1}{2}$ " from side extend a min. 6" beyond both ends of the joint
3. Joists - Solid web TJIs at 24" O.C. max. spacing.
4. Sheathing - $\frac{5}{8}$ " Advantek w/ exterior glue applied at right angles to joists with 8d nails.
5. Insulation - 1" Polyisocyanurate.
6. $\frac{1}{2}$ " thick high density fiber board.
7. Membrane - 0.060 fully adhered class B EDPM membrane.
8. Roxul 'Comfort Batts' min 7.5" R=30



F2 1 Hour Floor/Ceiling Assembly - UL528

1. Flooring: $\frac{3}{4}$ " Advantek w/ exterior glue. Strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Secured to trusses w/ construction adhesive and no 6d ringed shank nails. Adhesive applied as $\frac{3}{8}$ " in dia bead to top chord of trusses and grooved edges of plywood or panels. Nails spaced 12 in O.C. along truss.
2. Floor Joists $1\frac{3}{4}$ " x $11\frac{1}{8}$ " TJIs
3. Resilient Channels - Formed of No. 26 MSG steel spaced 16" O.C. perpendicular to joists. Channels secured to joists w/type S $1\frac{1}{4}$ " long screws spaced 24" O.C. Channels overlapped at splices 4"
4. 4 Wallboard, Gypsum - $\frac{5}{8}$ " thick, 4 ft wide sheets of wallboard installed w/long dimension perpendicular to resilient channels w/1" long wallboard screws spaced 12" O.C. and located a min. $1\frac{1}{2}$ " from side extend a min. 6" beyond both ends of the joint
5. Finish Flooring - $\frac{1}{2}$ " hardwood flooring.
6. Sound batts to provide min. STC rating of 54



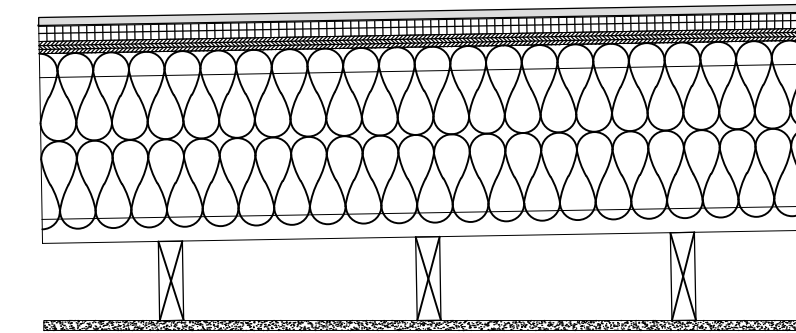
F3 2 Hour Floor/Ceiling Assembly - UL538

1. Flooring: $\frac{3}{4}$ " Advantek w/ exterior glue. Strength axis of panel to be perpendicular to trusses with joints staggered 4 ft. Secured to trusses w/ construction adhesive and no 6d ringed shank nails. Adhesive applied as $\frac{3}{8}$ " in dia bead to top chord of trusses and grooved edges of plywood or panels. Nails spaced 12 in O.C. along truss.
2. Floor Joists $1\frac{3}{4}$ " x $11\frac{1}{8}$ " TJIs
3. Wallboard, Gypsum - $\frac{5}{8}$ " thick, 4 ft wide sheets of wallboard installed w/long dimension perpendicular to floor joists w/1" long wallboard screws spaced 12" O.C. and located a min. $1\frac{1}{2}$ " from side extend a min. 6" beyond both ends of the joint
4. Resilient Channels - Formed of No. 26 MSG steel spaced 16" O.C. perpendicular to joists. Channels secured to joists w/type S $1\frac{1}{4}$ " long screws spaced 24" O.C. Channels overlapped at splices 4"
5. Wallboard, Gypsum - $\frac{5}{8}$ " thick, 4 ft wide sheets of wallboard installed w/long dimension perpendicular to resilient channels w/1" long wallboard screws spaced 12" O.C. and located a min. $1\frac{1}{2}$ " from side extend a min. 6" beyond both ends of the joint
6. Finish Flooring - $\frac{1}{2}$ " hardwood flooring.
7. Sound batts to provide min. STC rating of 54



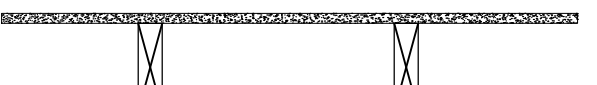
W1 1 Hour Rated Wall Assembly - UL305
Gypsum Board, Wood Studs, Insulation

1. One layer $\frac{5}{8}$ " Type 'x' gypsum board applied parallel or at right angles to studs. 1-1/4" Types W drywall screws 12" O.C. @
2. Roxul 'Comfort Batts' 5-1/2" thick R=23. (where shown)
3. 2X4 wood studs @ 16" O.C.



R1 1 Hour Roof Assembly - GA FILE NO. RC 2601

1. Wallboard - Base Layer $\frac{5}{8}$ " Type X gypsum wallboard at right angles to joists with $1\frac{1}{4}$ " W or S drywall screws 24" O.C.
2. Wallboard, Gypsum - $\frac{5}{8}$ " thick, 4 ft wide sheets of wallboard installed w/long dimension perpendicular to 2x wood furring w/1" long wallboard screws spaced 12" O.C. and located a min. $1\frac{1}{2}$ " from side extend a min. 6" beyond both ends of the joint. 2x furring strips ripped to maintain constant level ceiling height.
3. Joists - Solid web TJIs at 24" O.C. max. spacing.
4. Sheathing - $\frac{5}{8}$ " Advantek w/ exterior glue applied at right angles to joists with 8d nails.
5. Insulation - 1" Polyisocyanurate R=4.5.
6. $\frac{1}{2}$ " thick high density fiber board.
7. Membrane - 0.060 fully adhered class B EDPM membrane.
8. Roxul 'Comfort Batts' min 7.5" R=30
9. Roxul 'Comfort Batts' min 3.5" R=15



W2 1 Hour Rated Wall Assembly - UL304
Gypsum Board, Wood Studs, Insulation

1. One layer $\frac{5}{8}$ " Type 'x' gypsum board applied parallel or at right angles to studs. 1-1/4" Types W drywall screws 12" O.C. @
2. Roxul 'Comfort Batts' 5-1/2" thick R=23. (where shown)
3. 2X4 wood studs @ 16" O.C.



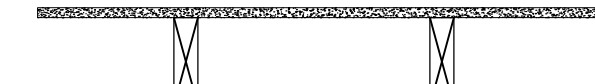
W3 1 Hour Wall Assembly 50-54 STC - UL 334
Gypsum Board, Wood Studs, Resilient Channels, Insulation

1. Two layers $\frac{5}{8}$ " Type 'x' gypsum board applied parallel to resilient channels 1" Types S drywall screws 12" O.C. @ intermediate furring channels and 6" O.C. @ ends.
2. Resilient furring channels applied at right angles to 2x6 wood studs @ 16" O.C. with 6d coated nails, 1-7/8" long, 0.085 shank, $\frac{1}{4}$ " heads, two per joist.
3. Roxul 'Comfort Batts' 5-1/2" thick R=23. (where shown)
4. 2X4 wood studs @ 16" O.C.
5. Two layers $\frac{5}{8}$ " Type 'x' gypsum board applied parallel to wood framing 1" Type S drywall screws 12" O.C. and 6" O.C. @ ends.



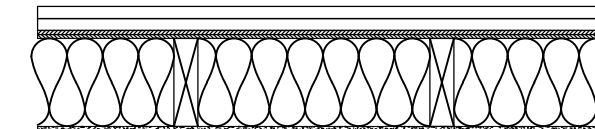
W4 Unrated Wall Assembly
Gypsum Board, Wood Studs, Insulation (where shown)

1. One layer $\frac{5}{8}$ " Type 'x' gypsum board applied parallel to resilient channels 1" Types S drywall screws 12" O.C. @ intermediate furring channels and 6" O.C. @ ends.
2. Roxul 'Comfort Batts' 3-1/2" thick R=15. (where shown)
3. 2X4 wood studs @ 16" O.C.



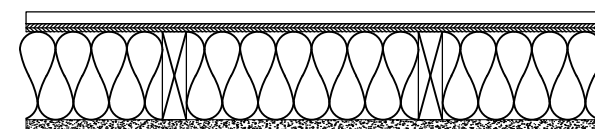
W5 Unrated Wall Assembly
Gypsum Board, Wood Studs, Insulation (where shown)

1. One layer $\frac{5}{8}$ " Type 'x' gypsum board applied parallel to resilient channels 1" Types S drywall screws 12" O.C. @ intermediate furring channels and 6" O.C. @ ends.
2. Roxul 'Comfort Batts' 5-1/2" thick R=23. (where shown)
3. 2X4 wood studs @ 16" O.C.



W7 Exterior Bearing Wall Rating - 1 Hour
Design UL U356

1. Wood studs - Nom 2x6 in. spaced 16 in. O.C. with two 2x6 in. top and one 2x6 in. bottom plates. Studs laterally-braced by wood structural panel sheathing and effectively fire stopped at top and bottom of wall.
2. Wallboard Gypsum - Any UL Classified $\frac{5}{8}$ " thick, 4 ft wide applied vertically and nailed to studs and bearing plates 7 in. O.C. with 6d cement-coated nails, 1-7/8" long by $\frac{1}{4}$ " dia head.
3. Joints and nailheads - Wallboard joints covered with tape and joint compound. Nail heads covered with joint compound. 6 mil poly vapor barrier.
4. Batts and blankets - UL Classified insulation by Roxul 'Comfort Batts'
R15 = 3.5" thick in 2x4 stud walls (where shown)
R23 = 5.5" thick in 2X6 stud walls (Where shown)
R30 = 7.25" thick at roof
5. Wood Structural Panel Sheathing - Min grade 'C-D' or 'Sheathing' installed w/long long dimension of sheet or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2X6 wood blocking. Attached to studs on exterior side of wall w/6d cement coated box nails spaced 6 in O.C. at perimeter of panels and 12" O.C. along interior studs.
6. #15 Felt
7. Exterior facing - Cement board or Vinyl siding.



W6 Exterior Bearing Wall Rating - 1 Hour
Design UL U356

1. Wood studs - Nom 2x6 in. spaced 16 in. O.C. with two 2x6 in. top and one 2x6 in. bottom plates. Studs laterally-braced by wood structural panel sheathing and effectively fire stopped at top and bottom of wall.
2. Wallboard Gypsum - Any UL Classified $\frac{5}{8}$ " thick, 4 ft wide applied vertically and nailed to studs and bearing plates 7 in. O.C. with 6d cement-coated nails, 1-7/8" long by $\frac{1}{4}$ " dia head.
3. Joints and nailheads - Wallboard joints covered with tape and joint compound. Nail heads covered with joint compound. 6 mil poly vapor barrier.
4. Batts and blankets - UL Classified insulation by Roxul 'Comfort Batts'
R15 = 3.5" thick in 2x4 stud walls (where shown)
R23 = 5.5" thick in 2X6 stud walls (Where shown)
R30 = 7.25" thick at roof
5. Wood Structural Panel Sheathing - Min grade 'C-D' or 'Sheathing' installed w/long long dimension of sheet or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2X6 wood blocking. Attached to studs on exterior side of wall w/6d cement coated box nails spaced 6 in O.C. at perimeter of panels and 12" O.C. along interior studs.
6. #15 Felt
7. Exterior facing - Cement board or Vinyl siding.

Rev.	A	B	C
Date	09-13-11	10-13-11	01-23-12
Remark	Issued for pricing	Issued for Permitting	RE-issued for Permitting
CODE:	IBC 2009		
TOWN:	Portland		
DATE:	09-13-11		
SCALE:	as noted		
DESIGNED:	LC		
DRAWN:	JJO		
WALL TYPES			
FILE:			
SHEET:	A3.04		

Standard Features and Benefits

- Now **Miami-Dade County Approved!**
- Engineered with compression spring operators to provide smooth, easy, one-hand operation, regardless of size
- Automatic hold-open arm locks the cover in the open position to ensure safe egress
- Overlapping cover design, full welded corners on cover and curb, EPDM rubber gasket, and fully insulated cover and curb ensure weathertightness and energy efficiency
- Constructed with corrosion resistant materials to provide many years of trouble free, dependable service
- Heavy gauge construction and positive latching mechanism maintain building security
- Curb features the Bil-Clip® flashing system, an innovative method to quickly and easily secure single-ply roofing material to Bilco roof products
- Available in many sizes and curb configurations to satisfy any requirement or installation

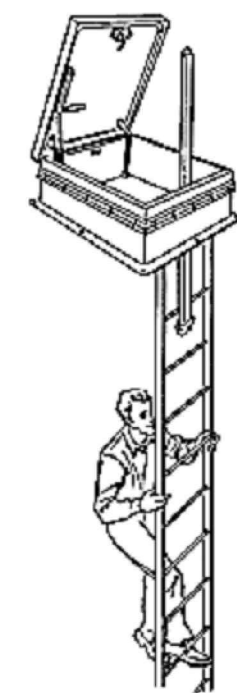


Now Available in Enhanced Performance Design
Our most Energy Efficient Roof Hatch model yet!
[Click here for more information](#)

*Standard Type S-20 and S-50 models are approved

Guide Specifications

- **Material (select one):**
Steel: Cover and frame are 14 gauge (2 mm) G-90 paint bond galvanized steel.
Aluminum: Cover and frame are 11 gauge (2.3 mm) aluminum.
Stainless Steel: Cover and frame are 14 gauge (2 mm) type 304 stainless steel
- **Cover:** Brakeformed, hollow-metal design with 1" (25 mm) concealed fiberglass insulation, 3" (76 mm) beaded, overlapping flange, fully welded at corners, and internally reinforced for 40 psf (195 kg/m²) live load.
- **Curb:** 12" (305 mm) in height with integral capflashing, 1" (25 mm) fiberboard insulation, fully welded at corners, and 3-1/2" (89 mm) mounting flange with 7/16" holes (11 mm) provided for securing frame to the roof deck.
- **Gasket:** Extruded EPDM rubber gasket permanently adhered to cover.
- **Hinges:** Heavy-duty pintle hinges with 3/8" (9 mm) Type 316 stainless steel hinge pins.
- **Latch:** Slam latch with interior and exterior turn handles and padlock hasps.
- **Lift Assistance:** Compression spring operators enclosed in telescopic tubes. Automatic hold-open arm with grip handle release.
- **Performance Ratings:** Complies with UL 790 Class A (burning brand test).
- **Finish:**
Steel: Aikyd base red oxide primer.
Aluminum: Mill Finish.
Stainless Steel: Type 304 stainless steel with sandblast finish
- **Hardware:**
Steel: Engineered composite compression spring tubes and steel compression springs packed in grease. All other hardware is zinc plated/chromate sealed.
Aluminum: Engineered composite compression spring tubes and steel compression springs packed in grease. Type 316 Stainless steel hinges. All other hardware is zinc plated/chromate sealed.
Stainless Steel: Type 316 stainless steel.



Standard Features and Benefits

- Satisfies the requirements of OSHA 29 CFR 1910.23
- Standard self-closing and latching gate feature ensures that the opening is protected at all times
- Non-penetrating attachment attaches directly to the roof hatch capflashing
- Fits all brands of roof hatches with capflashing
- Light-weight design can be easily moved to the roof level
- Available in a variety of sizes to accommodate any roof opening and can be easily installed on new or existing hatches and fire vents
- High visibility safety yellow color
- Corrosion resistant construction carries a 25-year warranty



NEW! Gate lock
Standard on all Bil-Guard Hatch Railing Systems. Automatically latches gate in the closed position

Standard Sizes and Shipping Weights



Type S Roof Hatch



Type NB Roof Hatch



Type L Roof Hatch

Model	Roof Hatch or Fire Vent Size		Model	Bil-Guard® Hatch Rail System Shipping Weight	
	width x length inches	mm		lbs.	kg.
S	36 x 30	914 x 762	RL-S	52	24
E	36 x 36	914 x 914	RL-E	52	24
F	48 x 48	1219 x 1219	RL-F	61	28
NB	30 x 54	762 x 1372	RL-NB	60	27
L	30 x 96	762 x 2438	RL-L	76	35
SS	Specify Size	RL-SSL*	Based on Size		
SS	Specify Size	RL-SSW**	Based on Size		
D	Specify Size	RL-D	Based on Size		
SV	Specify Size	RL-SV	Based on Size		
DSH	Specify Size	RL-DSH	Based on Size		

* Gate on front or latch side of SS Roof Hatch

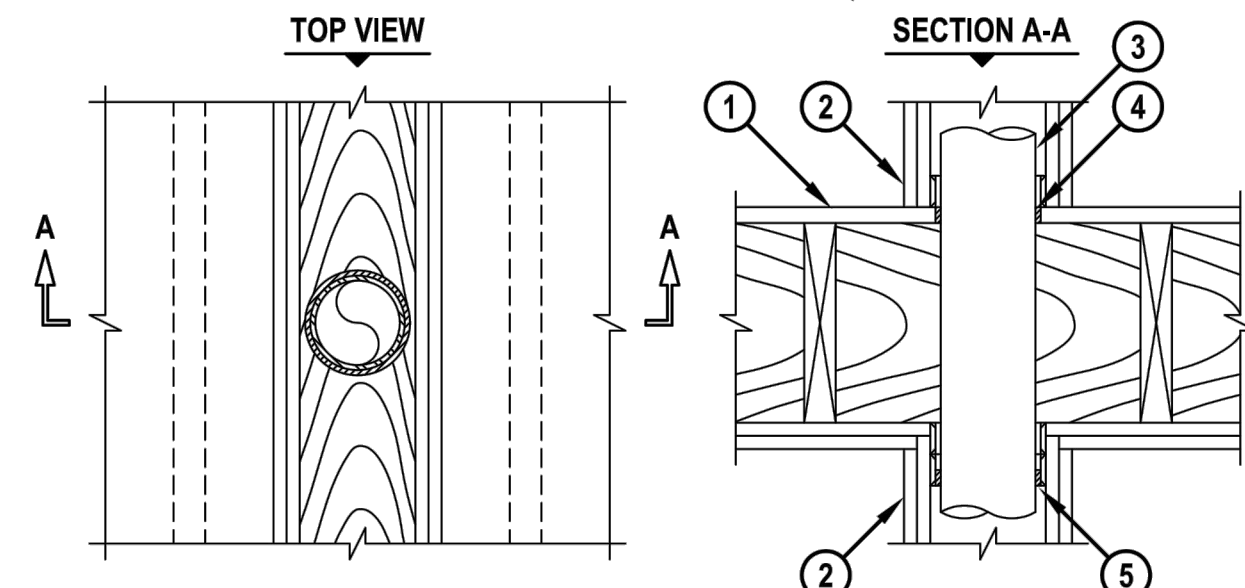
** Gate on width or side of SS Roof Hatch

Specifications

Posts and rails are pultruded from a fire retardant, fiberglass-reinforced polymer (FRP). FRP material has a molded-in, high visibility, safety yellow color and is treated with a UV inhibitor. Mounting brackets are fabricated from 1/4" thick hot dip galvanized steel. Gate hinges and post guides are constructed of 6063-T5 aluminum and torsion rod is type 302 stainless steel. All fasteners are type 316 stainless steel. Hatch rail system satisfies the requirements of OSHA 29 CFR 1910.23 and meets OSHA strength requirements with a safety factor of two. Manufacturer shall provide a 25-year warranty against defects in material and workmanship.

UL/cUL SYSTEM NO. F-C-1009 METAL PIPE THROUGH WOOD FLOOR/CEILING ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
T-RATING = 1/4-HR.
L-RATING AT AMBIENT = LESS THAN 1 CFM/SQ. FT.
L-RATING AT 400° F = 4 CFM/SQ. FT.

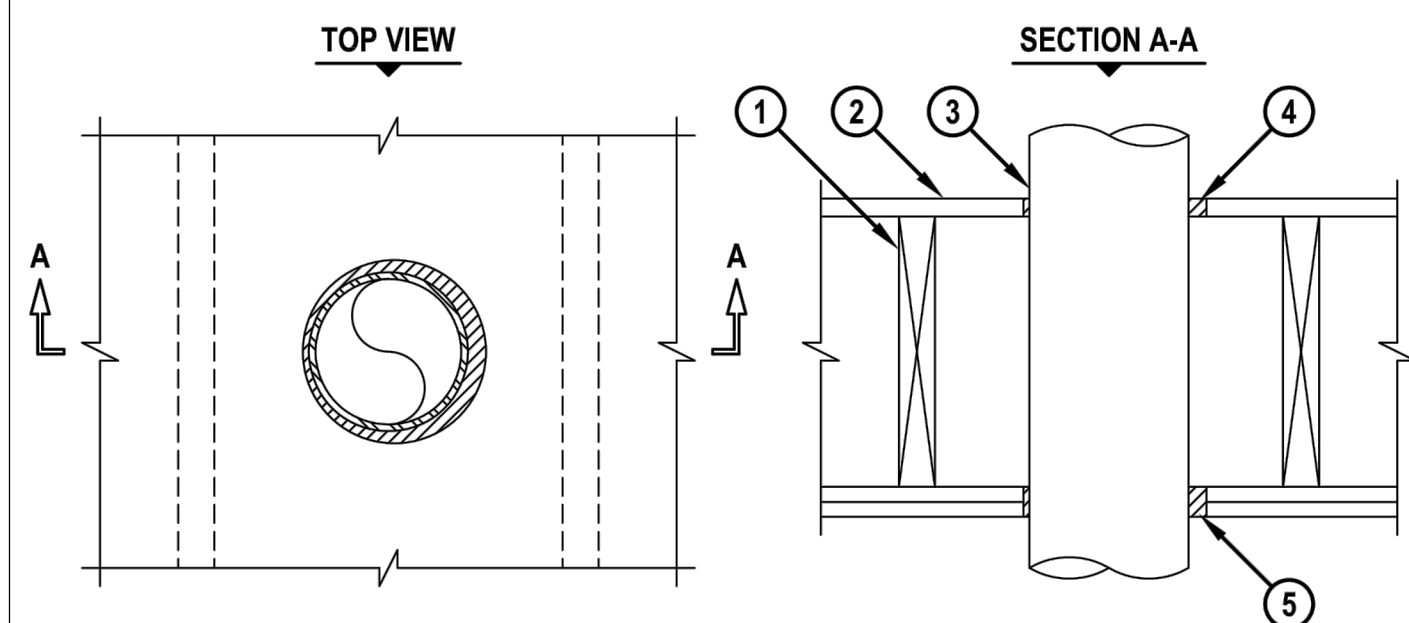


1. WOOD FLOOR/CEILING ASSEMBLY (UL/cUL CLASSIFIED L500 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. (OPTIONAL) GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN) CONSISTING OF NOMINAL 2" x 4", 2" x 6", OR PARALLEL 2" x 4" LUMBER PLATES AND STUDS.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING :
A. MAXIMUM 4" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 10 OR HEAVIER).
B. MAXIMUM 4" NOMINAL DIAMETER CAST OR DUCTILE IRON PIPE.
C. MAXIMUM 4" NOMINAL DIAMETER COPPER PIPE OR TUBING.
D. MAXIMUM 4" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
4. MINIMUM 3/4" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 601S ELASTOMERIC FIRESTOP SEALANT, OR CP 606 FLEXIBLE FIRESTOP SEALANT, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE.
5. MINIMUM 5/8" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT, CP 601S ELASTOMERIC FIRESTOP SEALANT, OR CP 606 FLEXIBLE FIRESTOP SEALANT, FLUSH WITH BOTTOM SURFACE OF CEILING OR LOWER TOP PLATE.

NOTES : 1. DIAMETER OF OPENING TO BE MAXIMUM 1" LARGER THAN DIAMETER OF PIPE OR SQUARE-CUT WITH A MAXIMUM DIMENSION 1" GREATER THAN THE DIAMETER OF PIPE.
2. WHEN LUMBER PLATES ARE DISCONTINUOUS, ATTACH A NOMINAL 1-1/2" WIDE 20 GA. (OR HEAVIER) GALVANIZED STEEL PLATE TO EACH END OF LUMBER PLATE. STEEL PLATES SHOULD OVERLAP 2" ONTO LUMBER, AND SECURED WITH STEEL SCREWS OR NAILS.
3. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1".
4. L-RATINGS APPLY ONLY WHEN HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT IS USED.

UL/cUL SYSTEM NO. F-C-1059 METAL PIPE THROUGH WOOD FLOOR/CEILING ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
T-RATING = 0-HR. OR 1/2-HR.

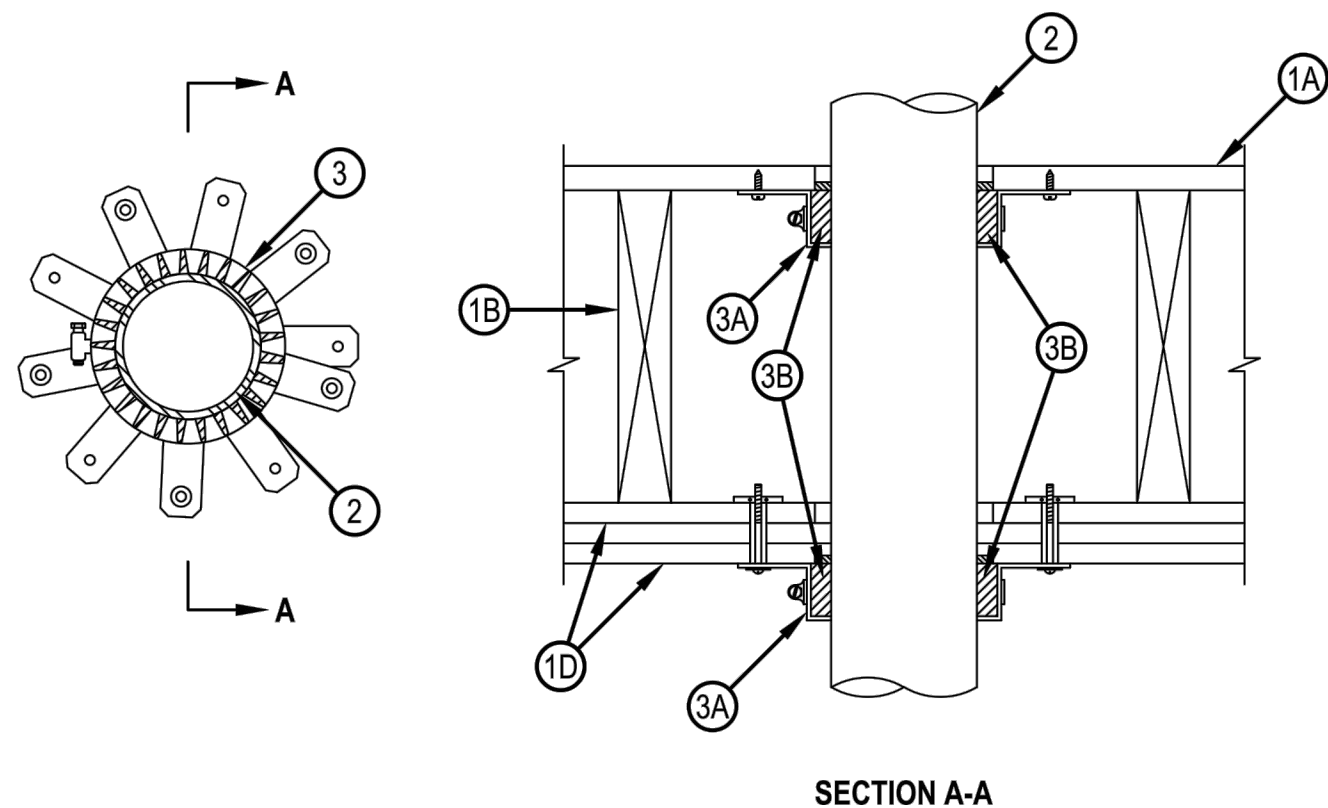


1. WOOD FLOOR/CEILING ASSEMBLY (UL/cUL CLASSIFIED L500 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD, OR FLOOR TOPPING MIXTURE.
3. PENETRATING ITEM TO BE ONE OF THE FOLLOWING:
A. MAXIMUM 6" NOMINAL DIAMETER STEEL PIPE (SCHEDULE 40 OR HEAVIER).
B. MAXIMUM 6" NOMINAL DIAMETER CAST IRON PIPE.
C. MAXIMUM 6" NOMINAL DIAMETER STEEL CONDUIT.
D. MAXIMUM 4" NOMINAL DIAMETER EMT.
E. MAXIMUM 2" NOMINAL DIAMETER FLEXIBLE STEEL CONDUIT.
4. MINIMUM 3/4" DEPTH HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH TOP SURFACE OF SUBFLOOR OR SOLE PLATE.
5. HILTI FS-ONE INTUMESCENT FIRESTOP SEALANT FLUSH WITH BOTTOM SURFACE OF CEILING OR LOWER TOP PLATE :
A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1-HR. FIRE-RATING.
B. MINIMUM 1-1/4" DEPTH OF SEALANT FOR A 2-HR. FIRE-RATING.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 7-5/8".
2. ANNULAR SPACE = MINIMUM 1/4", MAXIMUM 3/4".
3. CHASE WALL (NOT SHOWN, OPTIONAL) - THE THROUGH PENETRANT MAY BE ROUTED THROUGH A 1-HR. OR 2-HR. FIRE-RATED GYPSUM CHASE WALL ASSEMBLY.

System No. F-C-2029

F Rating - 2 Hr
T Rating - 2 Hr



1. Floor-Ceiling Assembly -- The fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L 500 Series Floor-Ceiling Design in the UL Fire Resistance Directory, as summarized below:

- A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design.
- B. Wood Joists -- Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends freestopped.
- C. Furring Channels -- (Not Shown) -- (As required) Resilient galvanized steel furring installed in accordance with the manner specified in the individual L500 Series Designs in the Fire Resistance Directory.
- D. Gypsum Board* -- Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design.

2. Through-Penetrants -- One nonmetallic pipe, conduit or tubing to be installed within the firestop system. Diam of openings hole-sawed through flooring system and through two layers gypsum wallboard ceiling to be 0 to 1/2 in. larger than the outside diam of through-penetrant. Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes may be used:

- A. Polyvinyl Chloride (PVC) Pipe -- Nom 4 in. diam (or smaller) Schedule 40 solid-core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- B. Chlorinated Polyvinyl Chloride (CPVC) Pipe -- Nom 4 in. diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. Firestop System -- The details of the firestop system shall be as follows:

- A. Steel Collar -- Collar fabricated from coils of precut min 0.017 in. thick (No. 28 MSG) galv steel available from the sealant manufacturer. Collar shall be nom 1-3/4 in. deep with 1 in. wide by 2 in. long anchors tabs on 2 in. centers for securement to floor and ceiling surfaces. The anchor tabs shall be bent 90 degree outward for securement to the floor and ceiling surfaces. The opposite side incorporates retainer tabs, 1/2 in. wide by 3/16 in. long, preventing toward the pipe surface. Collar shall be wrapped around pipe maintaining a 1 in. distance between pipe and collar, and overlapping min 1 in at seam. Collar secure to subfloor with wood screws and washers at every other tab. Collar secured to gypsum board ceiling using 3/16 in diam steel toggle bolts in conjunction with 1-1/4 in diam fender washers at every other tab. After sealant is installed (Item 3B), the collars shall be compressed around the pipe using a 1/2 in wide by 0.028 in. thick stainless steel band clamp fastened at the collar mid-height.
- B. Fill, Void or Cavity Material* -- Sealant -- Fill material to be installed to completely fill the collar and provide a min 1/4 in. thickness in the annular spaces at the floor and ceiling.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE Sealant

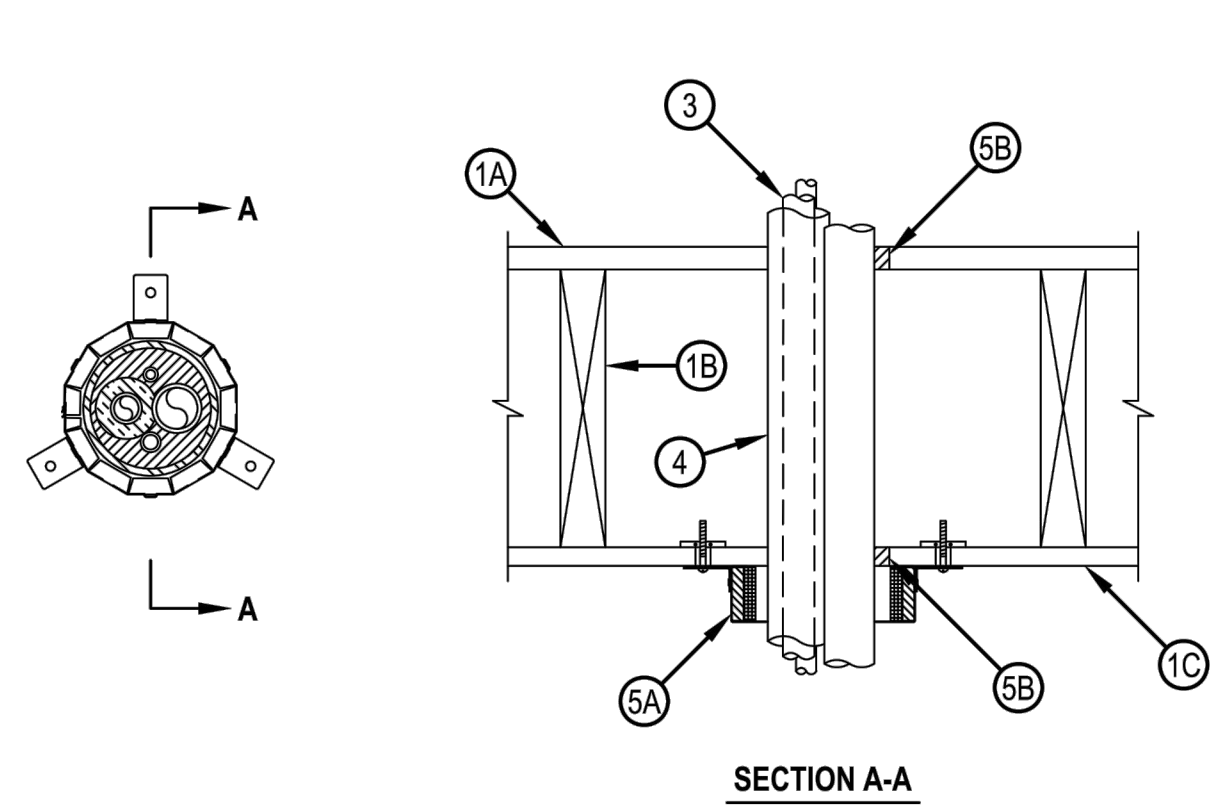
*Bearing the UL Classification Mark

System No. F-C-2029

F Rating - 2 Hr
T Rating - 2 Hr

System No. F-C-8009

F Rating -- 1 Hr
T Rating -- 1 Hr



1. Floor-Ceiling Assembly -- The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:

- A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in. (76 mm).
- B. Wood Joists -- Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends freestopped.
- C. Gypsum Board* -- Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Max diam of opening in ceiling [when chase wall (Item 2) is not provided] is 3 in. (76 mm).

2. Chase Wall -- (Optional, Not Shown) -- The through penetrant (Item 3) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- A. Studs -- Nom 2 by 6 in. (51 by 152 mm) lumber or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
- B. Sole Plate -- Nom 2 by 6 in. (51 by 152 mm) lumber or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening shall be 3 in. (76 mm).
- C. Top Plate -- The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) lumber plates or 2 sets of parallel nom 2 by 4 in. (51 by 102 mm) lumber, tightly butted. Max diam of opening is 3 in. (76 mm).
- D. Gypsum Board* -- Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.

3. Through Penetrants -- Pipe, cable and tubing to be bundled and rigidly supported on both sides of floor assembly. A nom annular space of min 0 in. (point contact) to max 1/2 in. (13 mm) is required within the firestop system. The following types and sizes of pipe, cable and tubing are to be used in the firestop system in sufficient quantities to fill the firestop device:

- A. Type P/T thermostat cable, 5/8 in. 18 AWG copper conductor, plastic insulation and jacket.
- B. Polyvinyl Chloride (PVC) Pipe -- Nom 1-1/2 in. (38 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- C. Copper Tubing -- Nom 3/4 in. (19 mm) diam (or smaller) Type L (or heavier) copper tubing.
- D. Copper Tubing -- Nom 1/2 in. (13 mm) diam (or smaller) Type L (or heavier) copper tubing.
4. Tube Insulation -- Plastics* -- Nom 1/2 in. (13 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. Insulation to be installed only on one through relevant having a max nom diam of 3/4 in. (19 mm).
- See Plastics* (QMFZ2) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.

5. Firestop System -- The firestop system shall consist of the following:

- A. Firestop Device* -- Firestop Collar -- Firestop collar shall be installed in accordance with the accompanying installation instructions. Collar to be installed and latched around the penetrants and secured to underside of gypsum wallboard ceiling using the anchor hooks provided with the collar. The anchor hooks are to be secured to the surface of the ceiling with min 3/16 in. diam min 2-1/2 in. long toggle bolts.
- B. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP 64-3 90/3N, CP 64-3 63/2N, CP 64-3 50/1-1/2N.
- C. Fill, Void or Cavity Material* -- Sealant -- Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with bottom surface of ceiling or lower top plate. Caulk to be forced into interstices of penetration group to max extent possible at top surface of floor or sole plate and bottom surface of ceiling or lower top plate.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS11A or FS-ONE Sealant

*Bearing the UL Recognized Component Mark

*Bearing the UL Classification Marking



New Three Unit at 52 Federal Street
Portland, Maine
Owner: Liv Chase & Brent Adler

Remark
02-06-12 Re-Issued for Permitting

Date
02-06-12

Rev.
D

CODE: IBC 2009

TOWN: Portland

DATE: 09-13-11

SCALE: as noted

DESIGNED: LC

DRAWN: JJO

MISC. DETAILS

FILE:

SHEET: A3.05