

UPLANDS TOWNHOMES

DEVELOPED BY THE HOUSING AUTHORITY OF PUEBLO

PROJECT No.: I.F.B 17-524-RAD

ACERO AVE. and SPRAGUE AVE., PUEBLO, COLORADO 81004

BLDG. B CODE STUDY SUMMARY

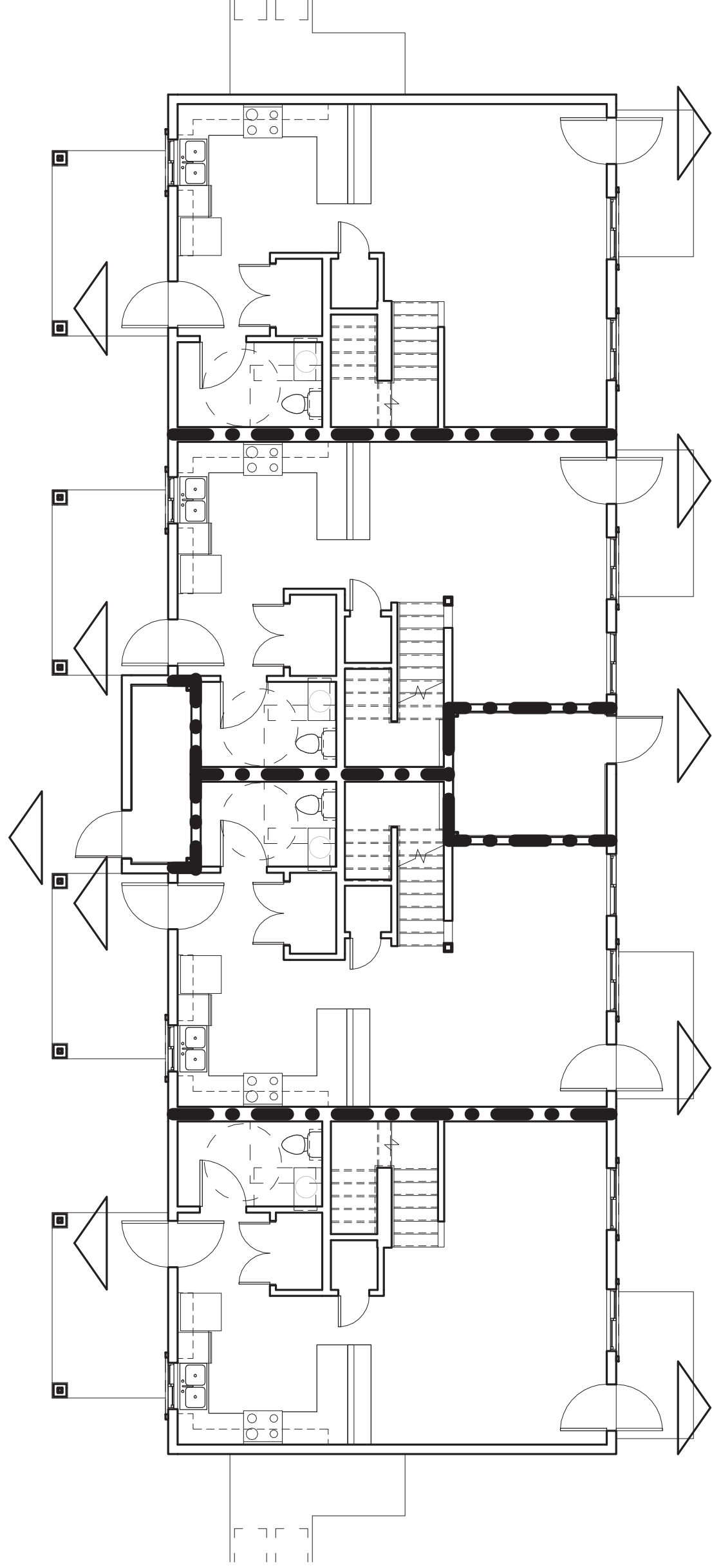
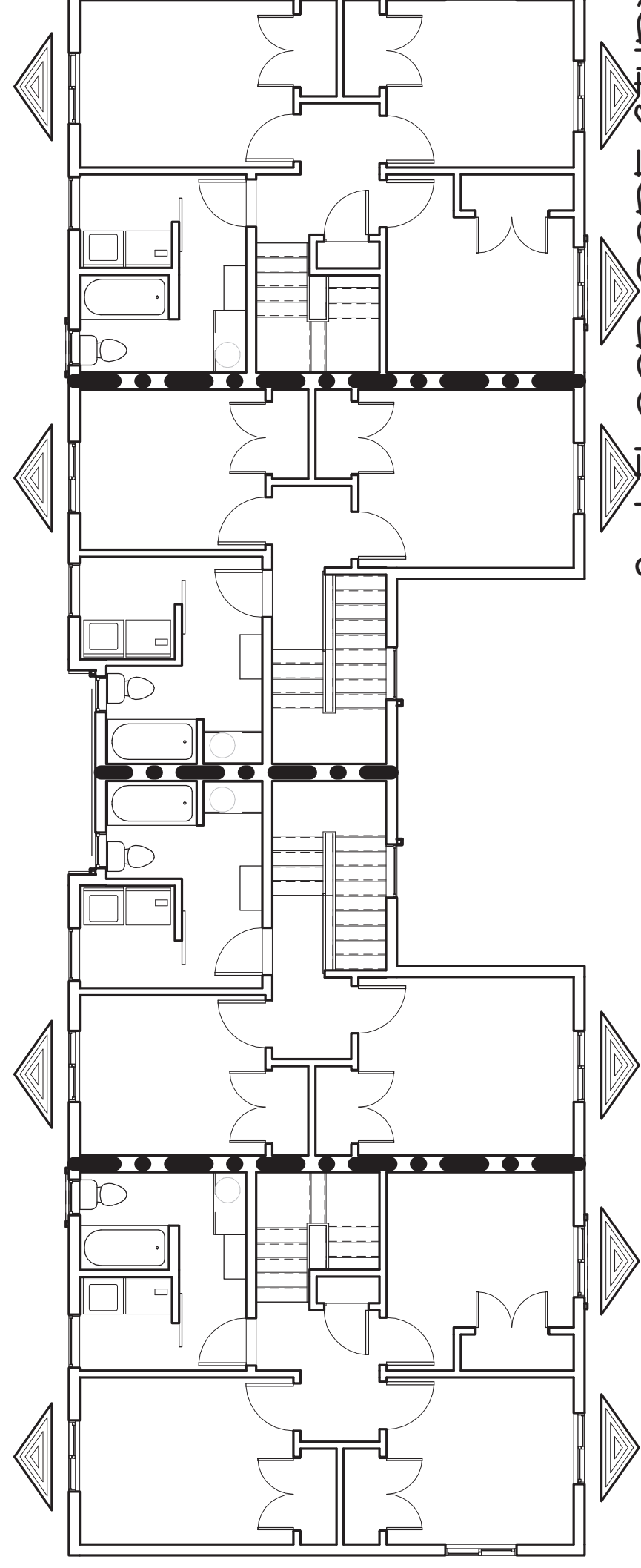
APPLICABLE CODES:	206 INTERNATIONAL BUILDING CODE UNIFORM FEDERAL ACCESSIBILITY STANDARDS	
PROJECT DESCRIPTION:	NBS CONSTRUCTION - APARTMENT BUILDING	
OCCUPANCY CLASSIFICATION:	R-2 RESIDENTIAL - APARTMENT HOMES	
206 IBC CHAPTER 3:	TYPE V-B WITH 4 FTN. FIRE SEPARATION DISTANCE OF 10'-0"	
206 IBC TABLE 601:	PRIMARY STRUCTURAL FRAME: 0 BEARING WALLS EXTERIOR: 0 NON-BEARING EXTERIOR WALLS: 0 INTERIOR NON-BEARING WALLS: 0 ROOF CONSTRUCTION: 0	
206 IBC TABLE 602:	R-2 BSR: 7, 7000	R-2 ACTUAL AREA: 2993 SQ. FT. 154K (IN FL.)
206 IBC TABLE 603.1:	R-2, 20K, 60 FEET, 3 STORY	R-2 ACTUAL HEIGHT: 2 STORY, 26 FEET
206 IBC TABLE 603.2:	FIRST FLOOR: 2993 SQ. FT.	
206 IBC TABLE 603.3:	SECOND FLOOR: 2993 SQ. FT.	
OCCUPANT LOAD:	206 IBC TABLE 1004.3	
OCCUPANT:		
FUNCTION OF SPACE:	LOAD FACTOR(per occ.)	GROSS NET
STORAGE - 1st FL.	300 SQ. FT.	48
RESIDENTIAL - 1st FL.	2467 SQ. FT.	1229
RESIDENTIAL - 2nd FL.	2009 SQ. FT.	1133
TOTAL:	24,27	ROUNDED: 12
OCCUPANT SEPARATION:	WALLS SEPARATING DWELLING UNITS FROM EACH OTHER AND WALLS SEPARATING DWELLING UNITS FROM OTHER OCCUPANCIES SHALL BE FIRE PARTITIONS.	
INCIDENTAL USE SEPARATION:	N/A	
CONDORES:	N/A	
NUMBERS OF EXITS:	2 EXITS REQUIRED	
TRAVEL DISTANCE:	R-2 WITH SPRINKLER SYSTEM: 200 FEET. ACTUAL MAX. TRAVEL DISTANCE: 56 FEET.	
AUTOMATIC SPRINKLER SYSTEM:	REQUIRED - GROUP R OCCUPANCIES SHALL BE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 98.	
FIRE ALARM SYSTEM:	R-2, 2 STORY WITH 4 DWELLING UNITS, NOT REQUIRED	
ACCESSIBILITY:	R-2 PER IBC TYPE A UNITS: 3% OF TOTAL UNITS ON SITE REQUIRED TO BE TYPE A ACCESSIBLE. PER IBC TYPE B UNITS: 2% OF TOTAL UNITS ON SITE REQUIRED TO BE TYPE B ACCESSIBLE. TOTAL UNITS ON SITE: 72. 4% OF TOTAL UNITS ON SITE REQUIRED TO BE ACCESSIBLE (28). TO TYPE A, & IN IBC TYPE B UNITS ON SITE: 12. 2% OF TOTAL UNITS ON SITE REQUIRED TO BE ACCESSIBLE (5) IN FLOOR OF ALL UNITS IN TYPE B ACCESSIBLE.	
PLUMBING FIXTURES:	206 IBC TABLE 2902.1 AND 206 IBC TABLE 403.1 AND SECT. 403.2	PROVIDED
OCCUPANCY TYPE:	R-2 RESIDENTIAL	
	REQUIRED	* OF FIXTURES PROVIDED
TOILETS		4
LAVATORIES	1 PER DWELLING UNIT	8
BATHROOMS	1 PER DWELLING UNIT	8
OTHER FIXTURES	1 KIT, SINK PER DWELLING UNIT. 1 CLOTHES WASHER CONNECTION PER 20 UNITS	4 KIT, SINKS 4 CLOTHES WASHER CONNECTIONS

CODE STUDY LEGEND

- ● ● ● ● IRRATED FIRE PARTITION - SEPARATION
- △ BUILDING EXIT
- ▽ EGRESS/ESCAPE WINDOW

GENERAL NOTES

- THIS PROJECT SHALL MEET THE 206 ENTERPRISE GREEN COMMUNITIES CRITERIA.
- COORDINATE ALL WORK WITH ALL DISCIPLINES INCLUDING, BUT NOT LIMITED TO STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND CIVIL.
- PROVIDE AND INSTALL 2X6 W/D. BLOCKING BETWEEN STUDS AND BEHIND GYP. BD. AS REQUIRED FOR ALL WALL POINTED DOOR, HUR, CLOSET SHELVES, TOILET ACCESSORIES, GRAB BARS, VANITY COUNTERTOPS, WALL, AND BASE CABINETS, AND REFRIG. AND A/C CONDENSATION DRAINAGE.
- PROVIDE 3/4" RADIUS BULLNOSE CORNER BEAD AT ALL EXPOSED GYP. BD. OUTSIDE WALL CORNERS ON INTERIOR OF BUILDING.
- BUILDINGS SHALL BE PROVIDED WITH AUTOMATIC FIRE SUPPRESSION SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13R. EACH UNIT SHALL HAVE A FIRE EXTINGUISHER INSTALLED ON THE FIRST FLOOR. EACH STORAGE ROOM AND WATER ENTRY ROOM SHALL HAVE A FIRE EXTINGUISHER INSTALLED IN THE ROOM.
- NORTH ARROW NOT SHOWN ON FLOOR PLANS.
- THE PORCH ELEVATIONS OF ALL BUILDINGS SHALL BE ORIENTED TO FACE THE STREET.



BUILDING B COVER CODE STUDY INDEX	
GI:OB	BUILDING B COVER, CODE STUDY, INDEX
A1:B	BUILDING B FLOOR PLANS
A1:Z	BUILDING B REFLECTED CEILING AND ROOF PLANS
A2:B	BUILDING B ELEVATIONS
A3:B	BUILDING B EXTERIOR ELEVATIONS
A3:Z	BUILDING B EXTERIOR ELEVATIONS, STAIR WALL, INT. ELEVATION, and REASON VENT DETAIL
A4:B	BUILDING B WALL SECTIONS
A4:Z	BUILDING B DOOR AND WINDOW SCHEDULES, ELEVATIONS and DETAILS
A5:B	BUILDING B FINISH SCHEDULE and INTERIOR ELEVATIONS
S:1B	FOUNDATION AND MAIN FLOOR FRAMING PLANS
S:2B	UPPER LEVEL AND ROOF FRAMING PLANS
S:3B	DETAILS AND GENERAL NOTES
M:1B	DRAWING INDEX, GENERAL NOTES, LEGENDS AND SCHEDULES
M:1:Z	FIRST AND SECOND FLOOR - HYAC
P:1B	DRAWING INDEX, GENERAL NOTES AND LEGENDS
P:1:Z	SCHEDULES AND DIAGRAMS
P:1:ZB	CREUL SPACE FLOOR - BUILDING B - PLUMBING
P:1:ZB	FIRST AND SECOND FLOOR PLANS - BUILDING B - PLUMBING
E:1B	BLDG B - ELECTRICAL LEGENDS AND SERVICE DIAGRAMS
E:1:Z	BLDG B - ELECTRICAL PLANS

PROJECT TEAM

OWNER:
THE HOUSING AUTHORITY OF PUEBLO
201 S. VICTORIA
PUEBLO, CO 81003
PH: 719-546-8976

ARCHITECT:
HGF ARCHITECTS, INC.
2602 N. ELIZABETH ST
PUEBLO, COLORADO 81003
PH: 719-543-7600
FX: 719-546-2930

ELECTRICAL ENGINEER:
KONNERT ELECTRICAL ENGINEERS
911 S. 8TH ST., SUITE 200
COLORADO SPRINGS, CO 80906
PH: 719-633-2637

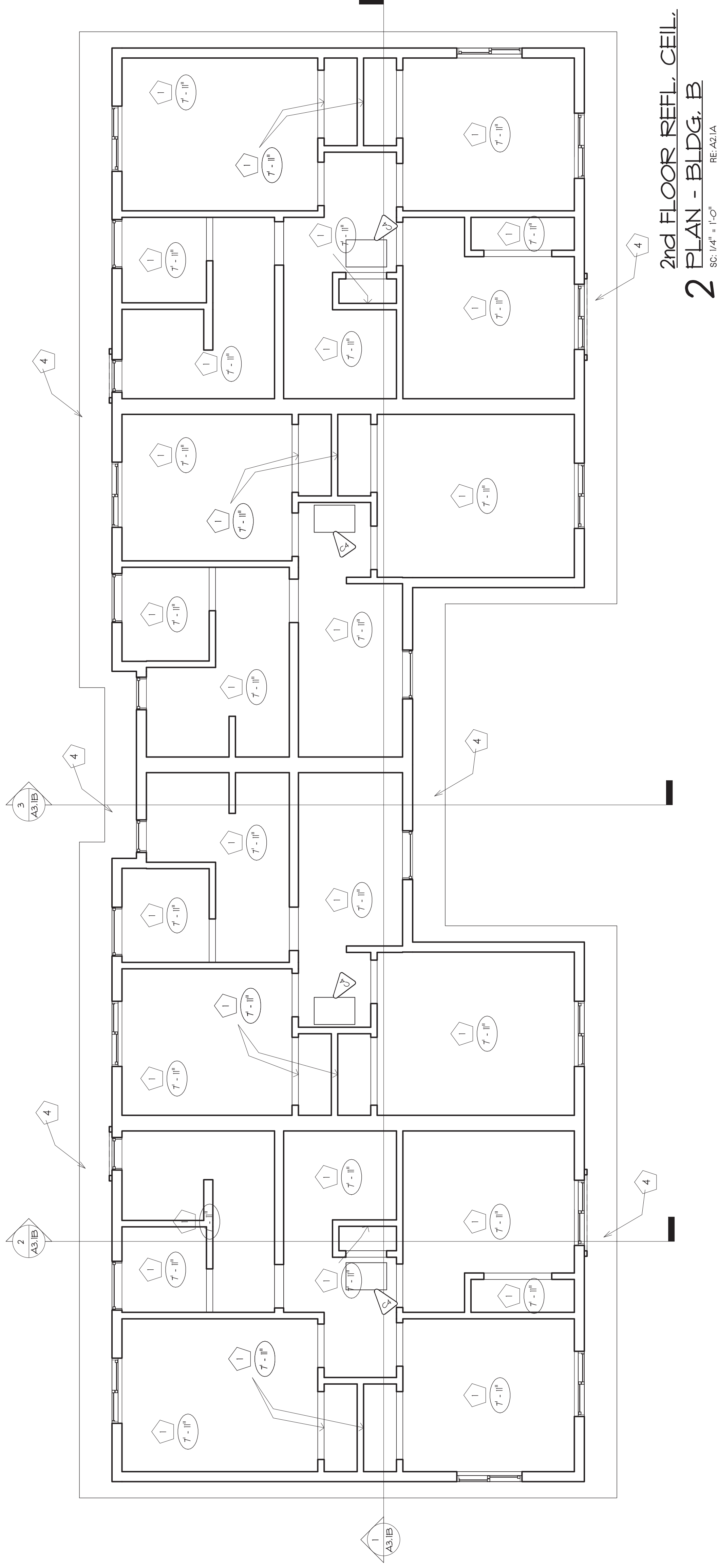
MECHANICAL ENGINEER:
KONNERT ELECTRICAL ENGINEERS
308 FULLER SUITE 200
COLORADO SPRINGS, CO 80907
PH: 719-262-9430

STRUCTURAL ENGINEER:
VALENTINE ENGINEERING
415 N. GREENWOOD
PUEBLO, CO 81003
PH: 719-542-9230

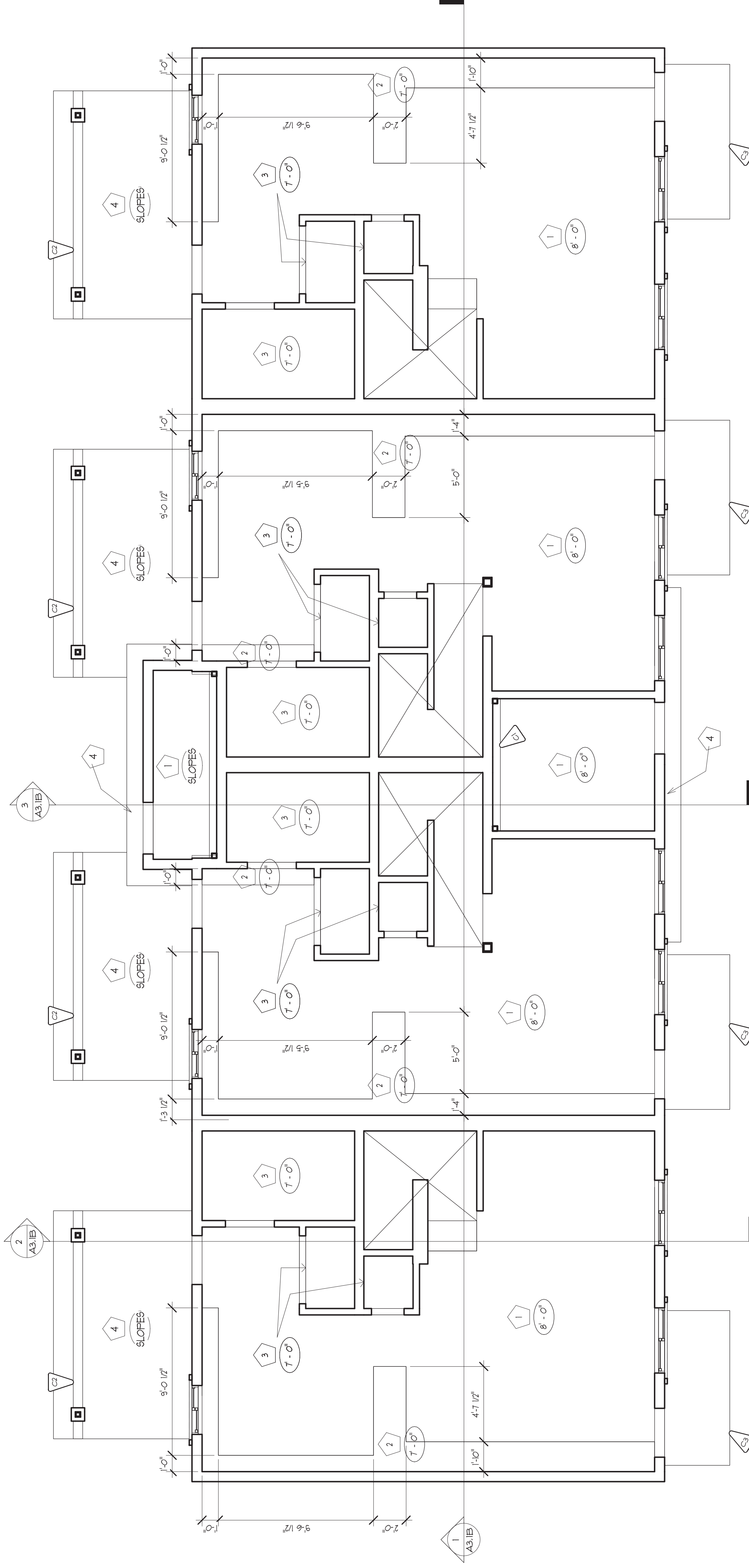
CIVIL ENGINEER:
ALTITUDE LAND CONSULTANTS
201 E. LAS ANITAS #113
COLORADO SPRINGS, CO 80903
PH: 719-231-9999

DRAWING LEGEND

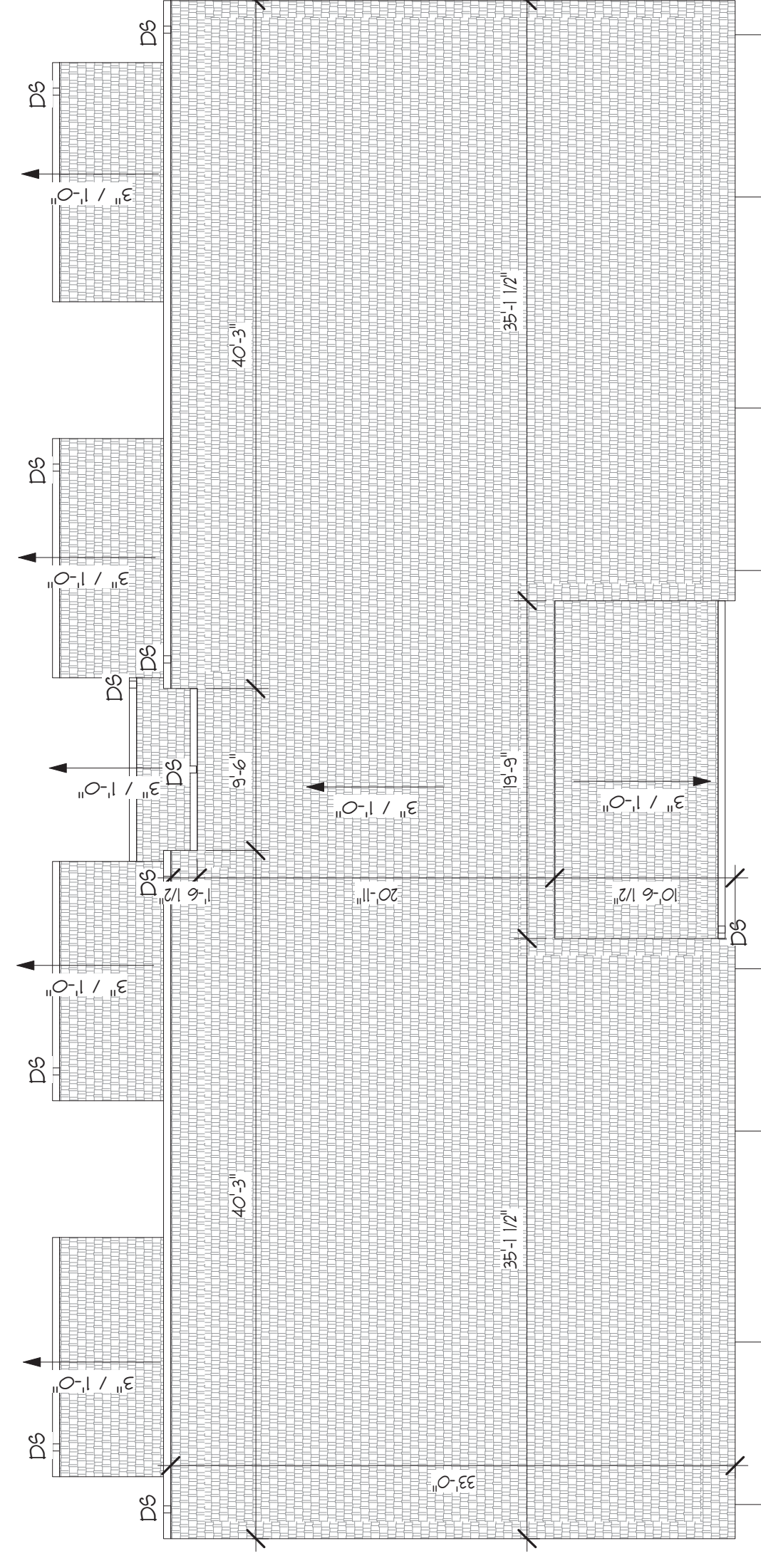
- DOOR TAG
- WINDOW TAG
- WALL TYPE TAG
- FLAG NOTE
- Room name
- ROOM NAME and NUMBER TAG
- CEILING TYPE TAG
- CEILING HEIGHT TAG



2nd FLOOR REFL. CEIL.
PLAN - BLDG. B
80:1/4" = 1'-0"
RE:A21A



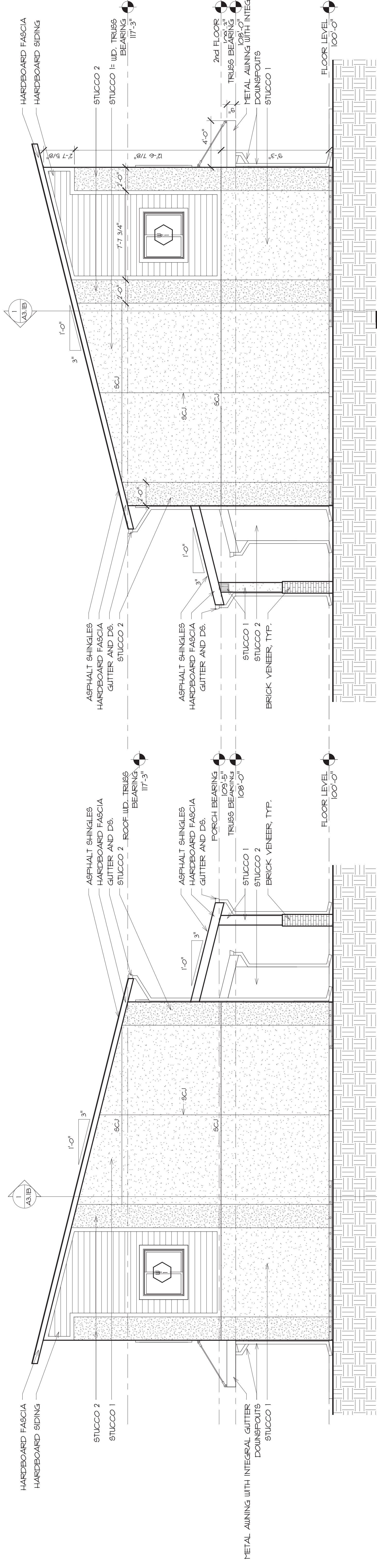
1st FLOOR REFL. CEIL.
PLAN - BLDG. B
80:1/4" = 1'-0"
RE:A21A



3 ROOF PLAN - BLDG. B
80:1/4" = 1'-0"
RE:A21A

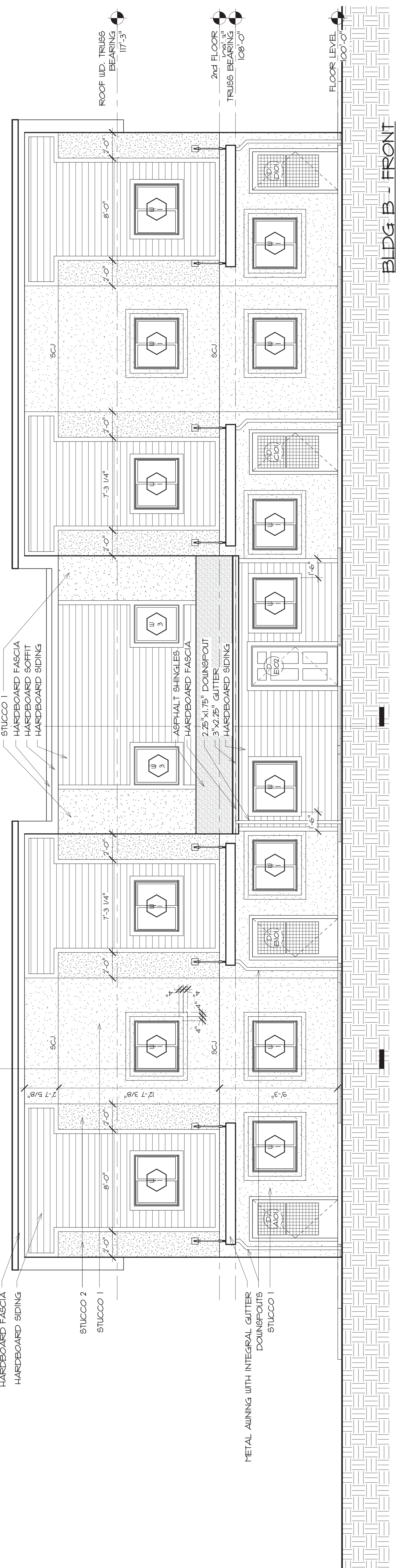
Flag Number	Description
1	5/8" TYPE 'X' GYP. BD. ON ATTACHED TO UNDERSIDE OF FLOOR/ROOF FRG.
2	INTERIOR SOFTEN 5/8" TYPE 'X' GYP. BD. ATTACHED TO SUSPENDED GYP. BD. CEILING 5/8" TYPE 'X' GYP. BD. ATTACHED TO 2x4 WD. FRG'S @ 16" O.C., HANG FROM STRUCTURE ABOVE. XXXXXX.
3	5/8" TYPE 'X' GYP. BD. ON ATTACHED TO UNDERSIDE OF ROOF FRAMING.
4	SOFTEN ATTACHED TO UNDERSIDE OF ROOF FRAMING.

Flag Number	Note
C1	WRAP BEAT with 5/8" TYPE 'X' GYP. BD. WRAP BEAT at PORCH with PORTLAND CEMENT PLASTER/BEAT (3) COAT STUCCO SYSTEM on HTL DIAMOND MESH.
C2	WRAP BEAT with 5/8" TYPE 'X' GYP. BD. WRAP BEAT at PORCH with PORTLAND CEMENT PLASTER/BEAT (3) COAT STUCCO SYSTEM on HTL DIAMOND MESH.
C3	PREFABRICATED METAL RAINING.
C4	1"X1" 20"x30" ATTIC ACCESS HATCH

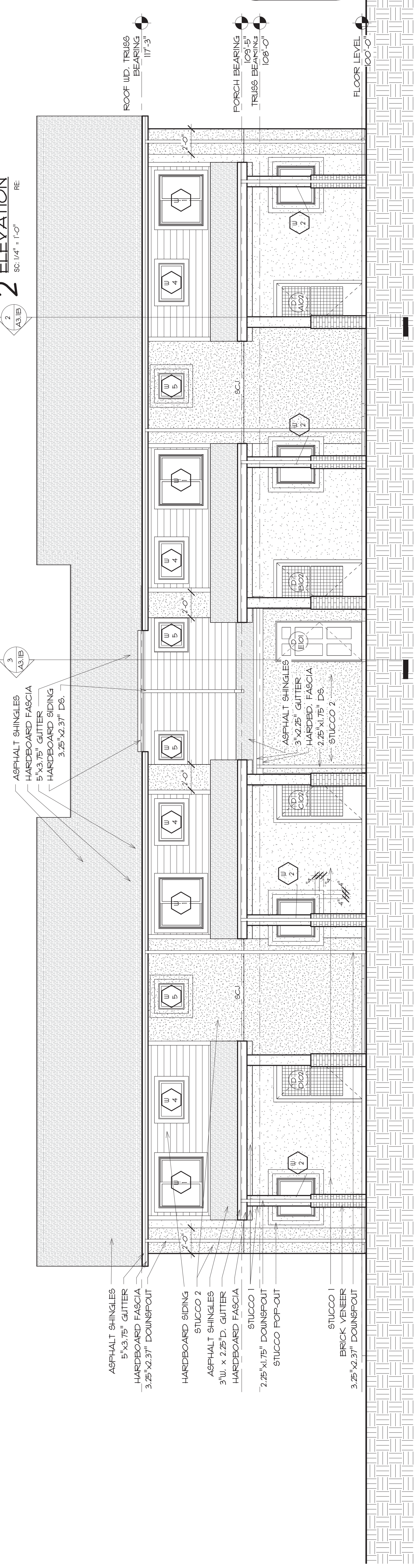


BLDG B - LEFT SIDE
3 ELEVATION
 RE. SC: 1/4" = 1'-0"

BLDG B - RIGHT SIDE
4 ELEVATION
 RE. SC: 1/4" = 1'-0"



BLDG B - FRONT
2 ELEVATION
 RE. SC: 1/4" = 1'-0"

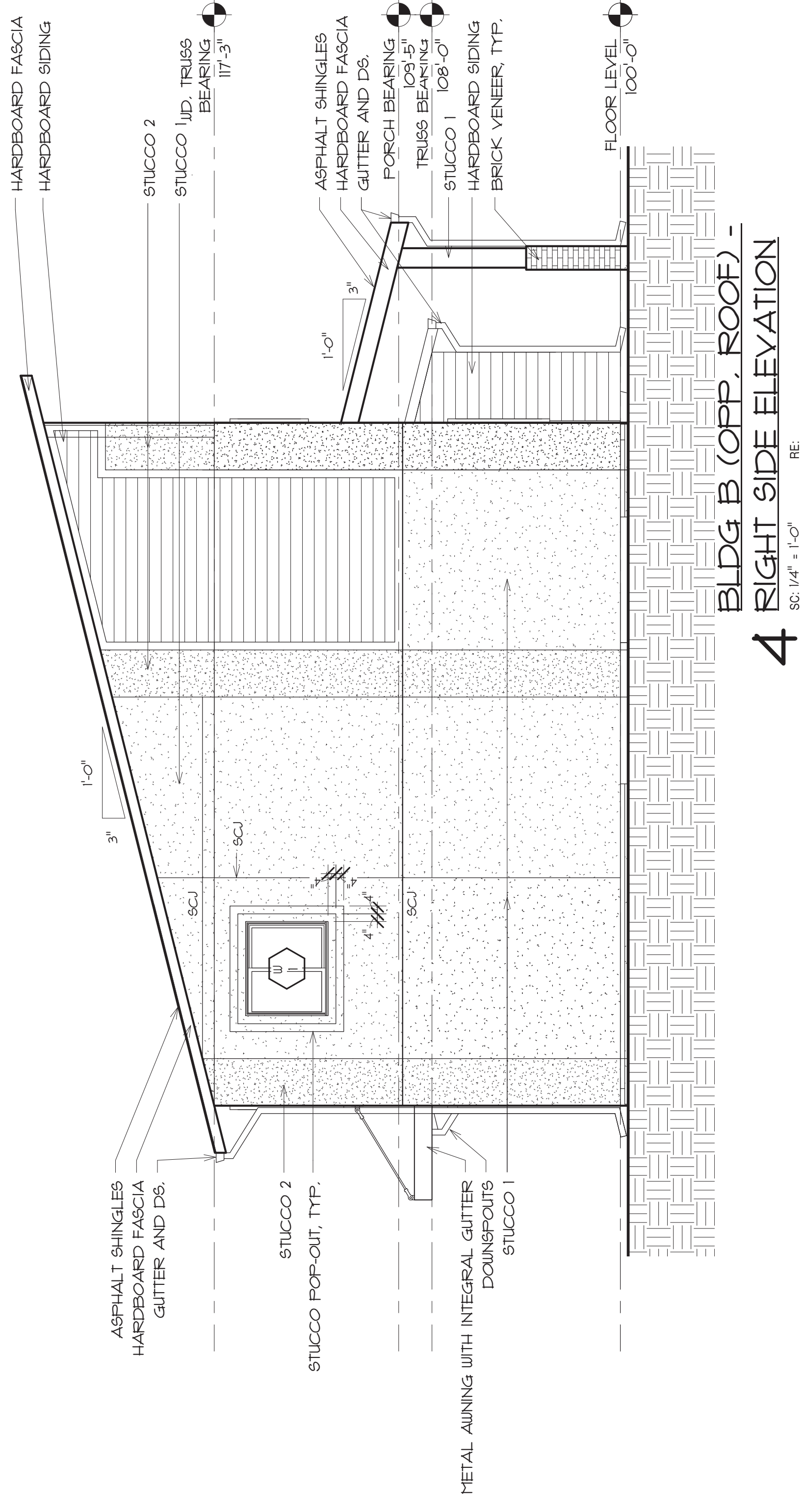


BLDG B - BACK
1 ELEVATION
 RE. SC: 1/4" = 1'-0"

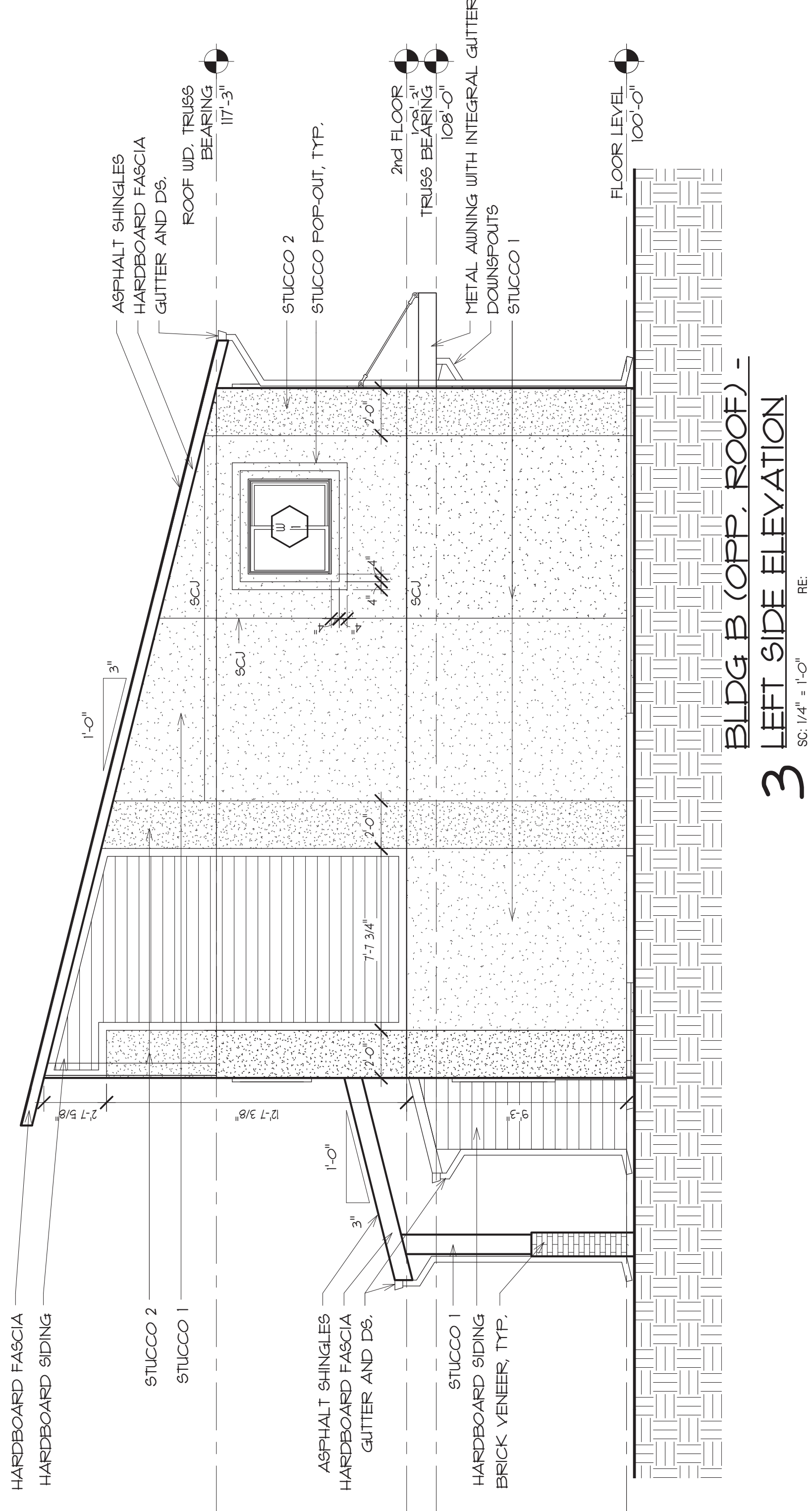
ELEVATION GENERAL NOTES:

1. PROVIDE AND INSTALL EXPANSION JOINT AND CALK CONTINUOUSLY AT ALL STUCCO TO HARDBOARD SIDING JOINTS. RE: SPECIFICATIONS.
2. PROVIDE AND INSTALL STUCCO CONTROL JOINT (SCJ) EVERY 8'-0" VERTICALLY AND INDICATED. RE: SPECIFICATIONS.

NOTE: REFER TO THIS SHEET FOR BUILDING B3 FOR ELEVATIONS. RE: SITE PLAN



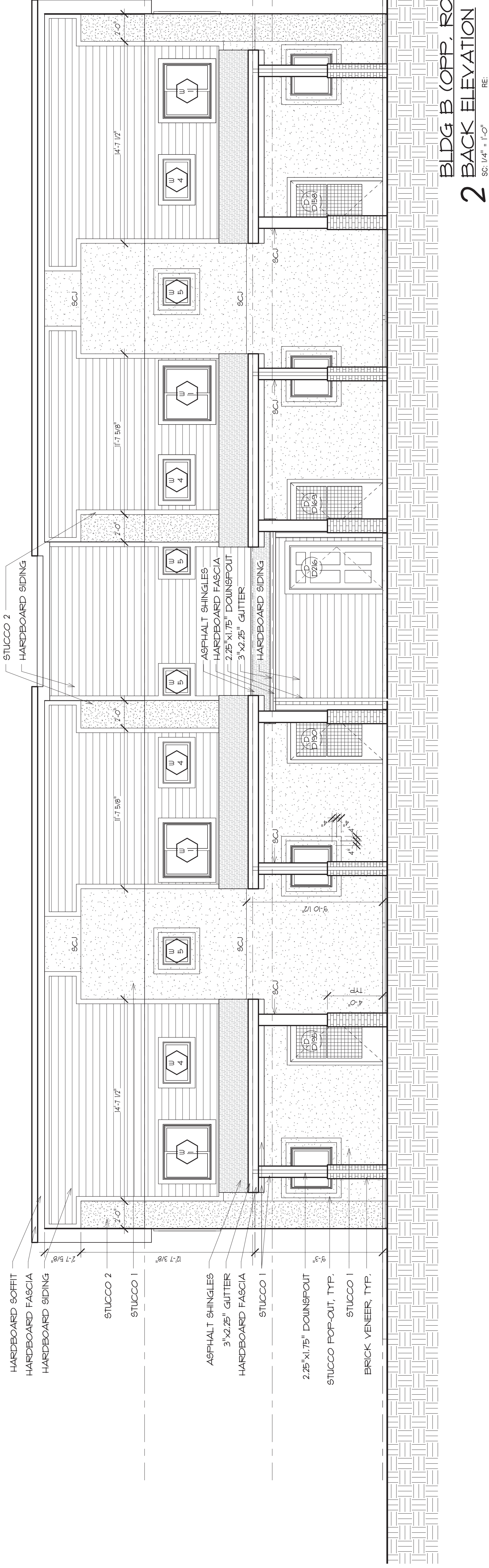
4 RIGHT SIDE ELEVATION
SC: 1/4" = 1'-0"
RE



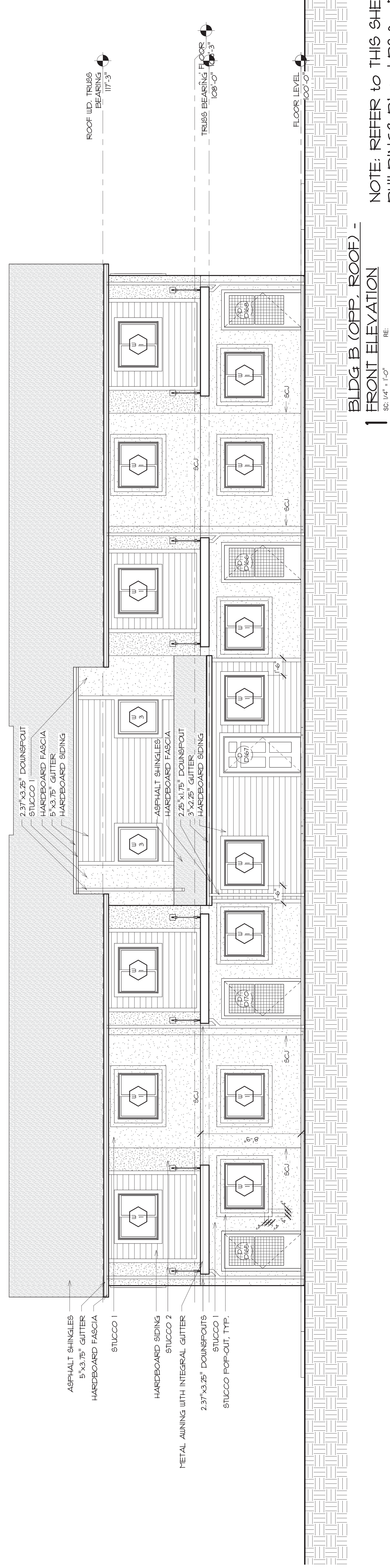
3 LEFT SIDE ELEVATION
SC: 1/4" = 1'-0"
RE

ELEVATION GENERAL NOTES:

1. PROVIDE AND INSTALL EXPANSION JOINT AND CAULK CONTINUOUSLY AT ALL STUCCO 1^o HARDBOARD SIDING JOINTS. RE SPECIFICATIONS.
2. PROVIDE AND INSTALL STUCCO CONTROL JOINT (SCJ) EVERY 12'-0" VERTICALLY AND HORIZONTALLY BETWEEN STUCCO COLOR CHANGES, AND AT EVERY OTHER LOCATION INDICATED. RE SPECIFICATIONS.

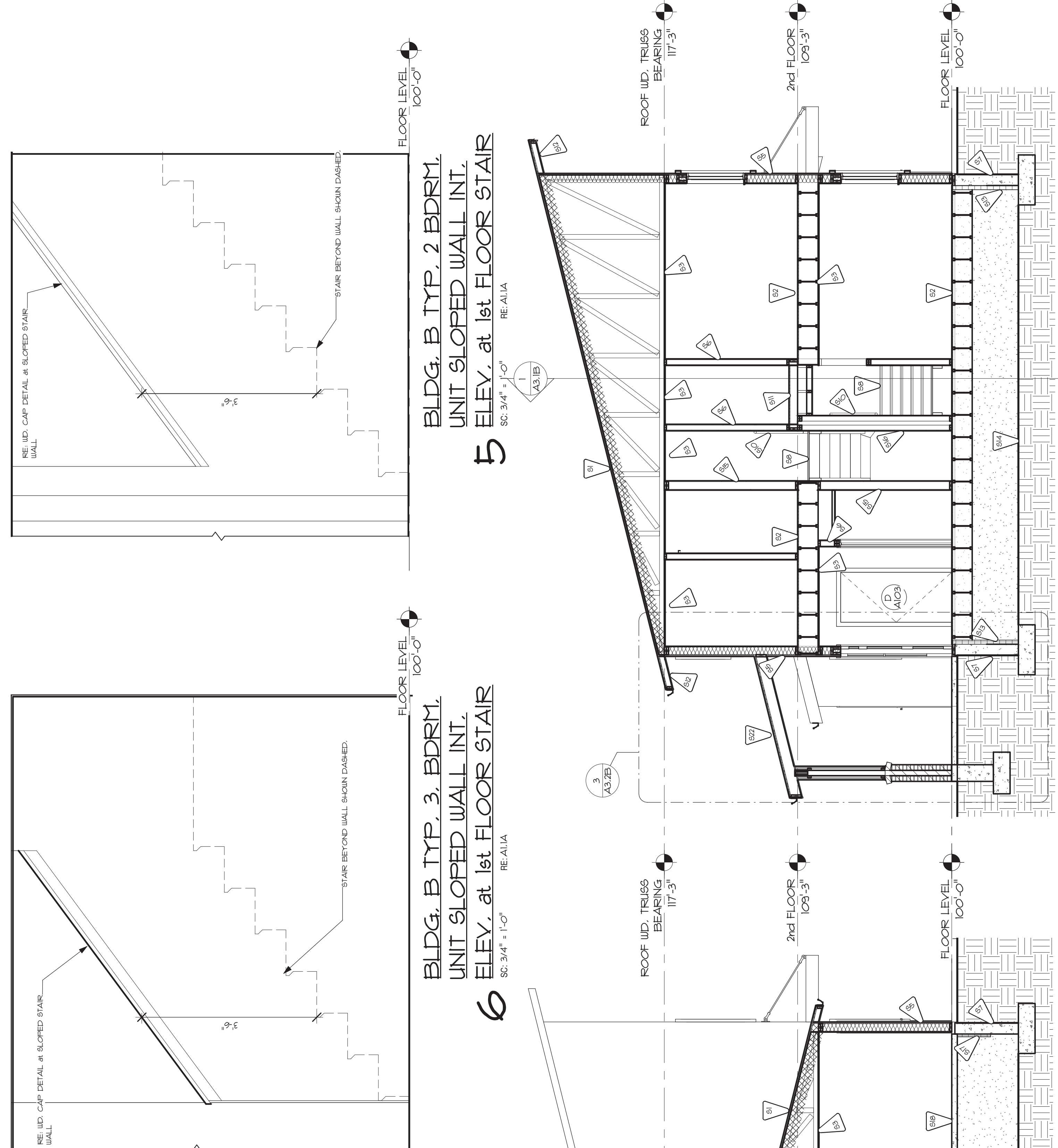
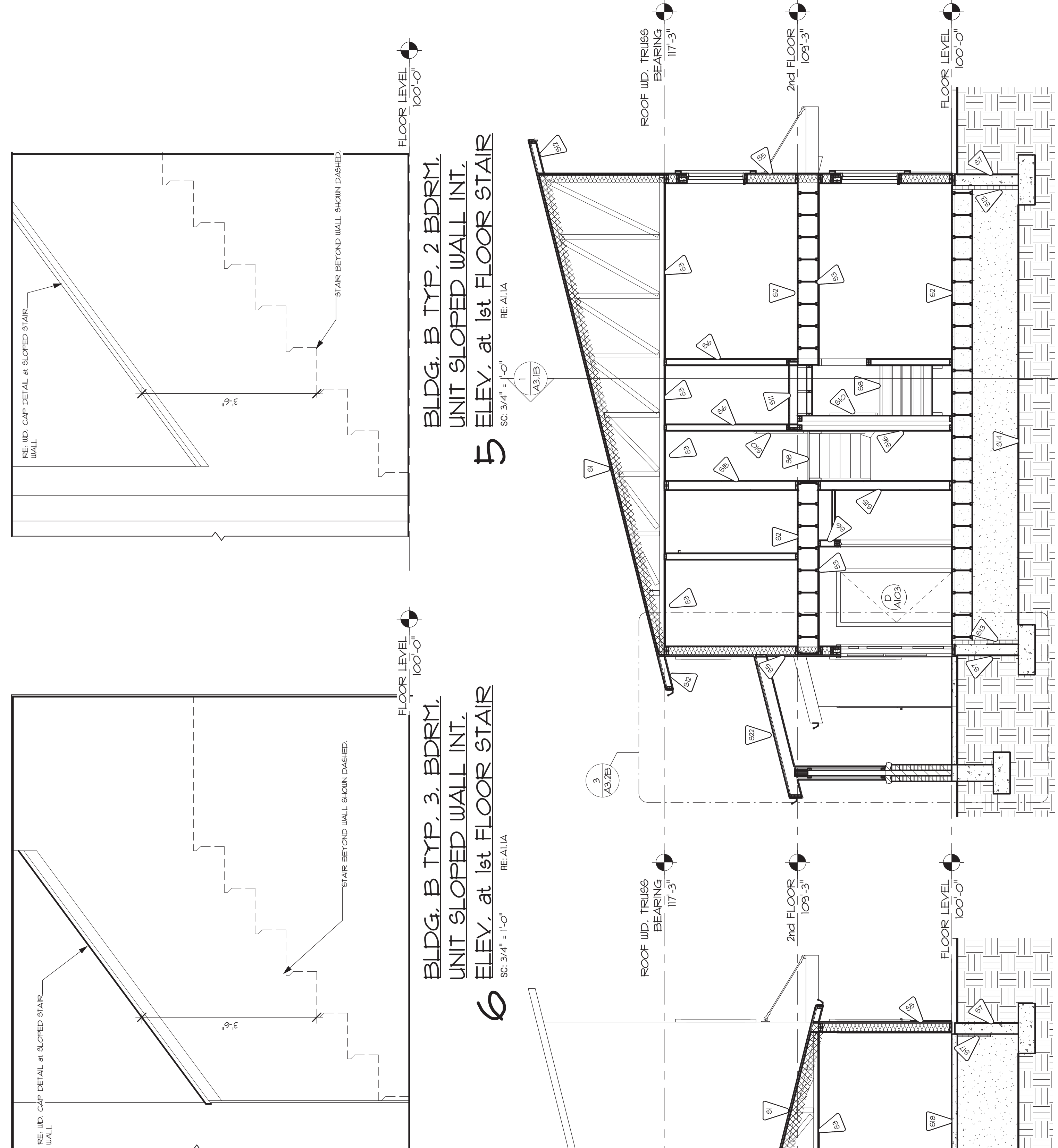
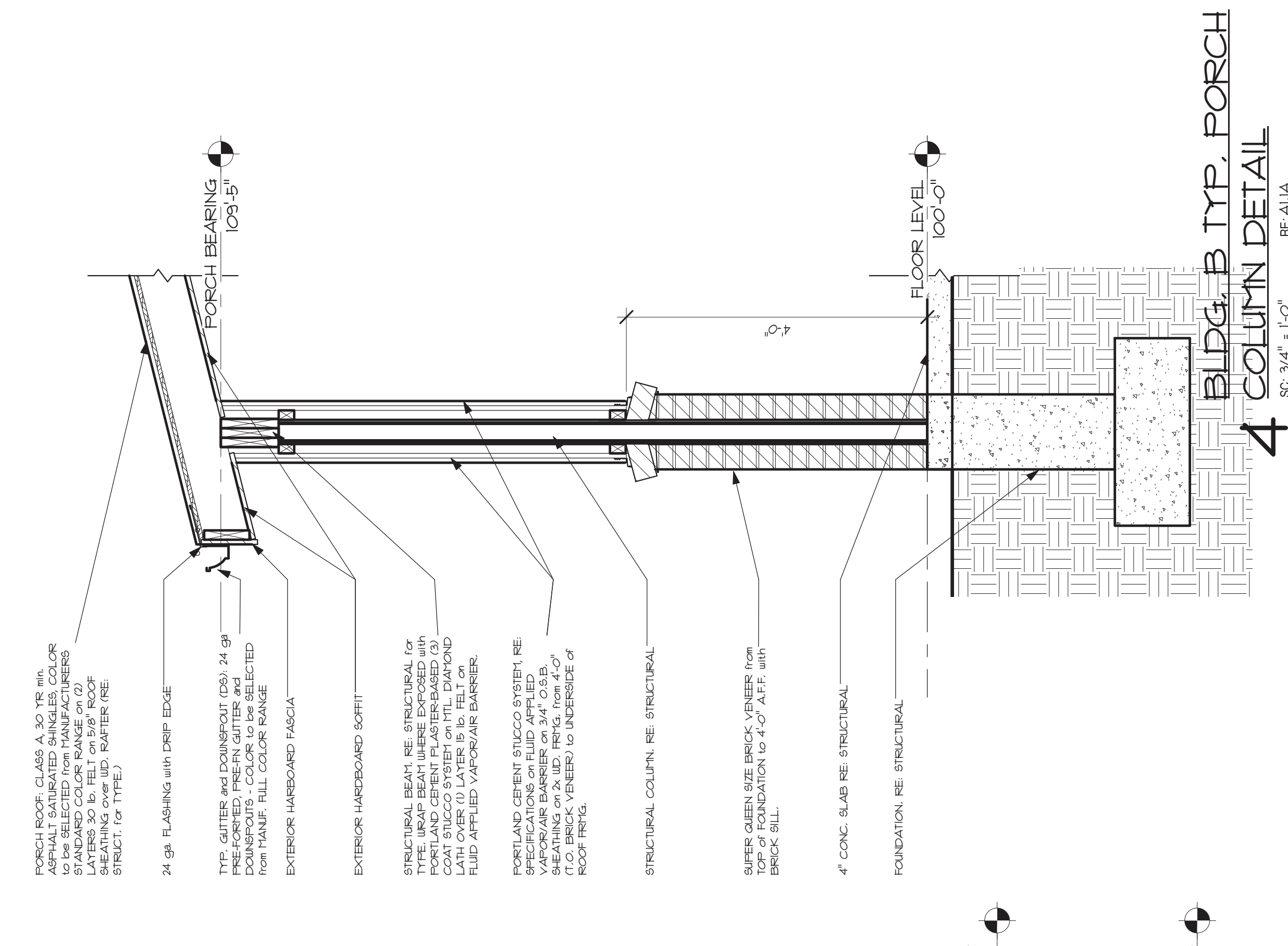
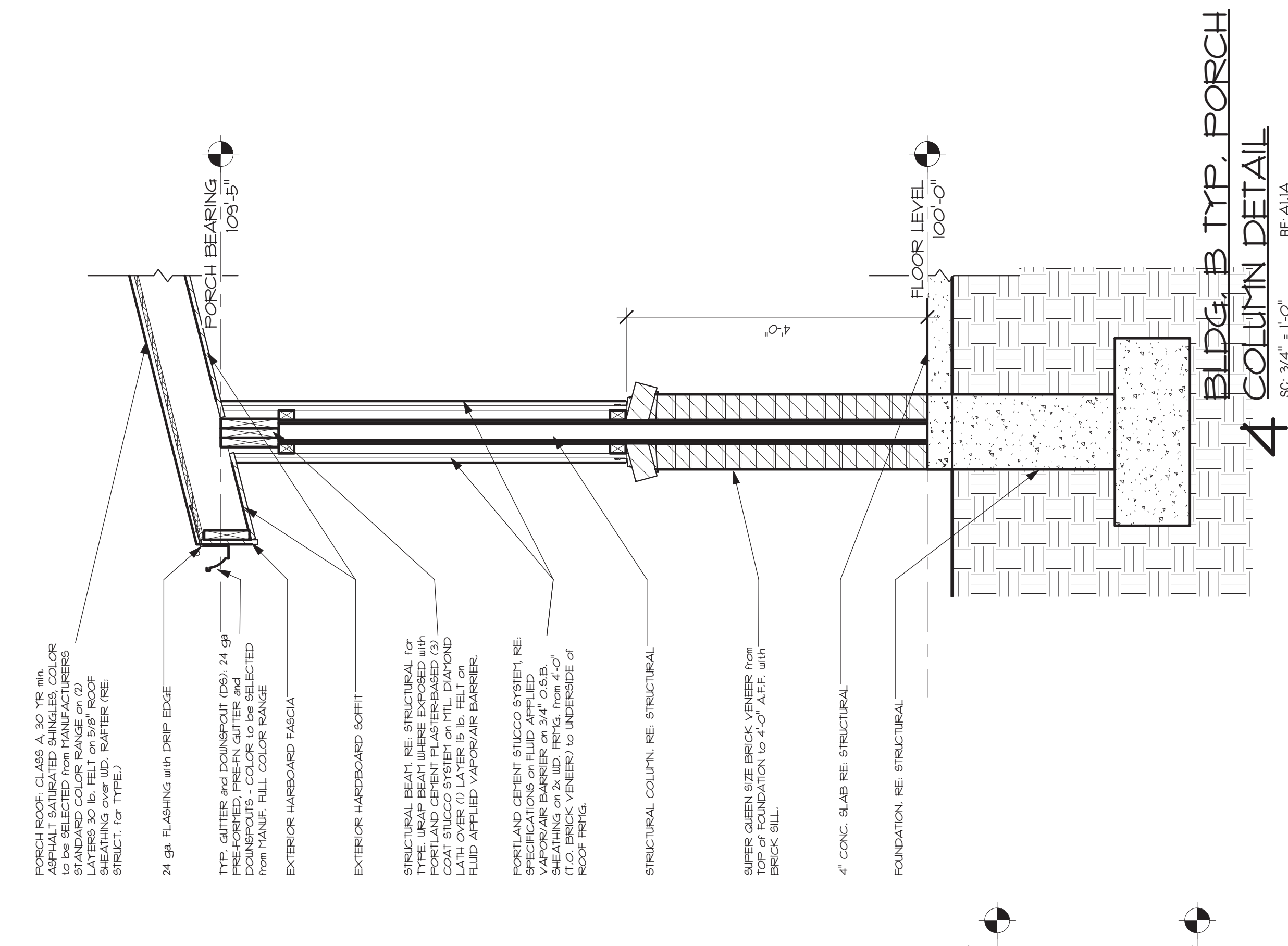
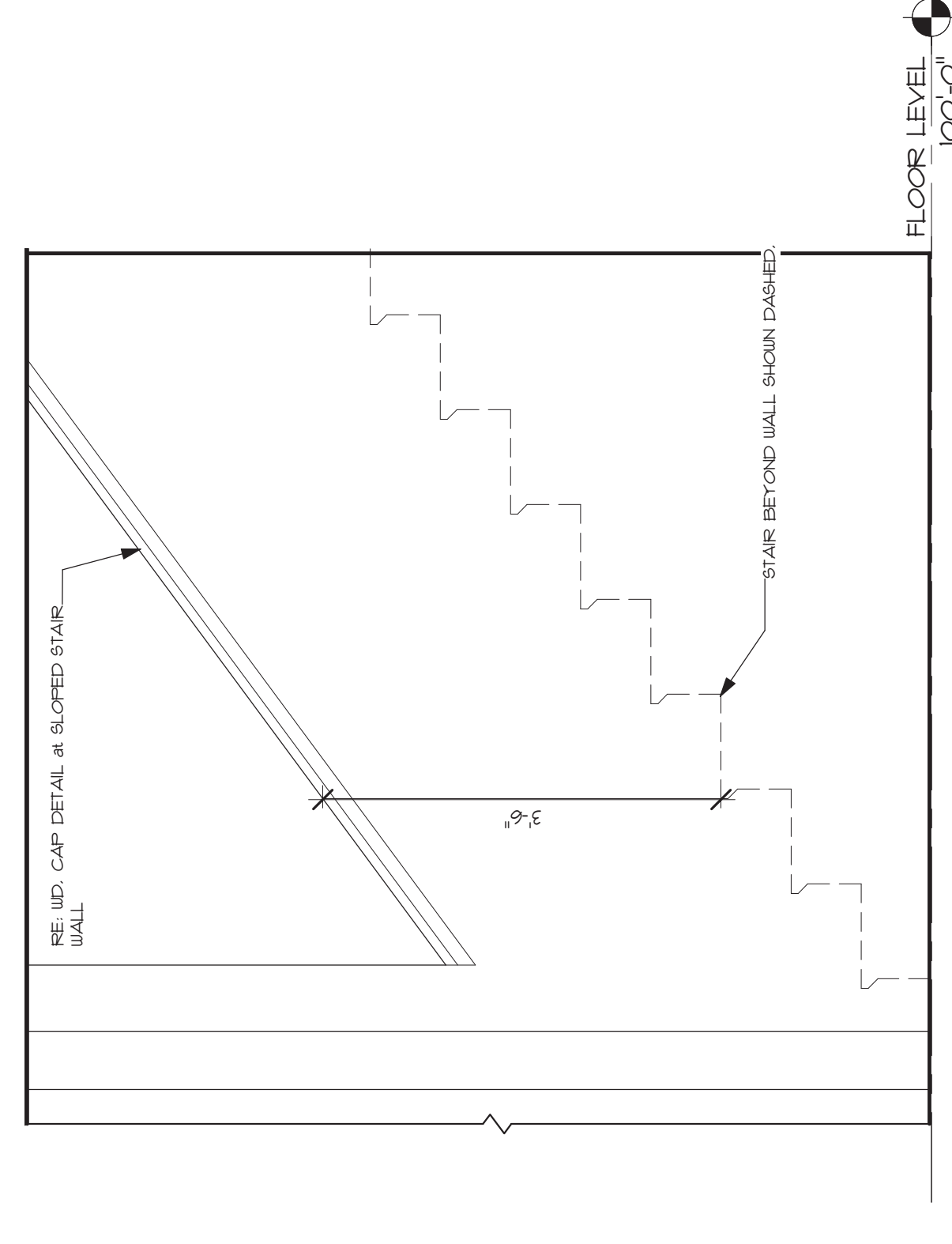
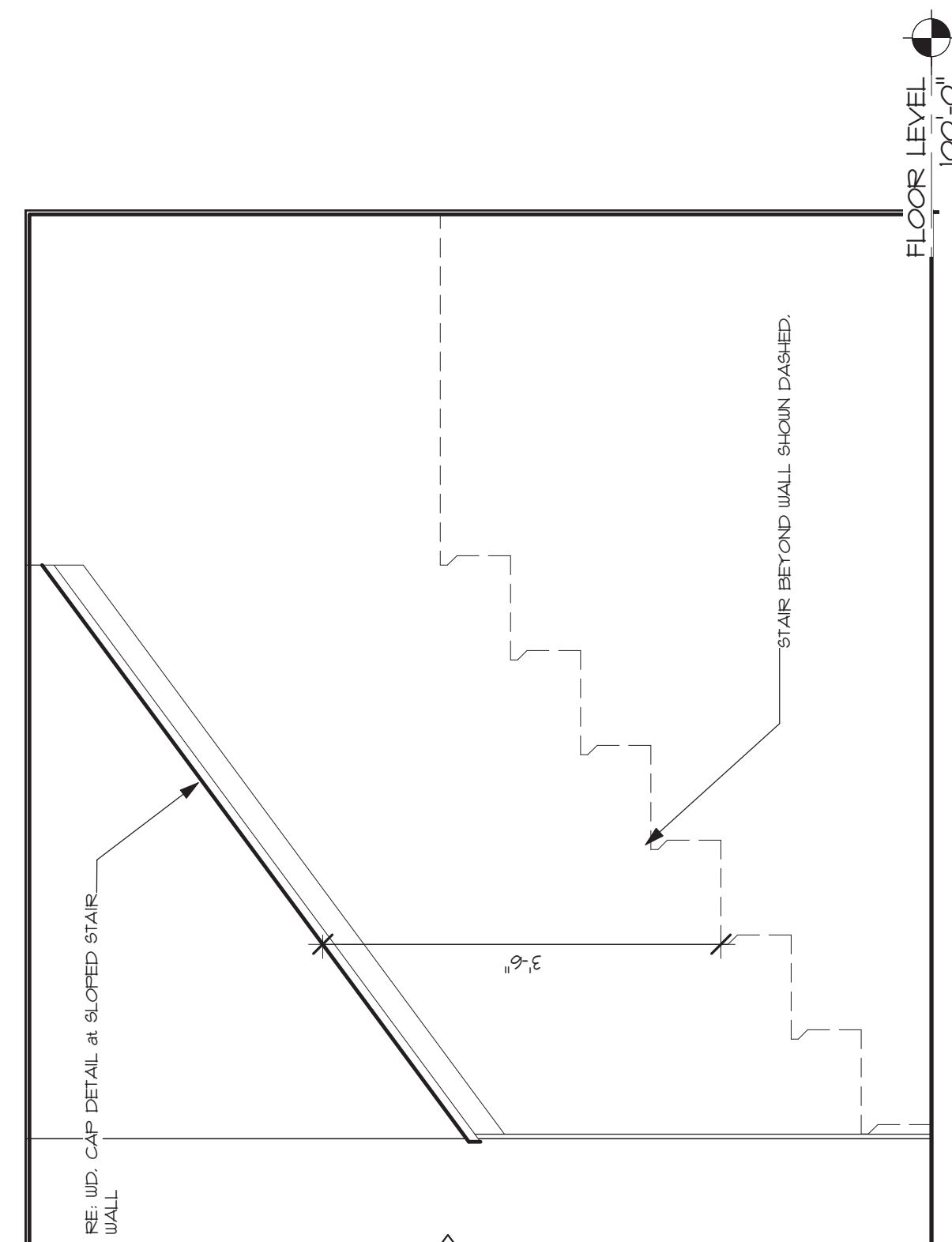
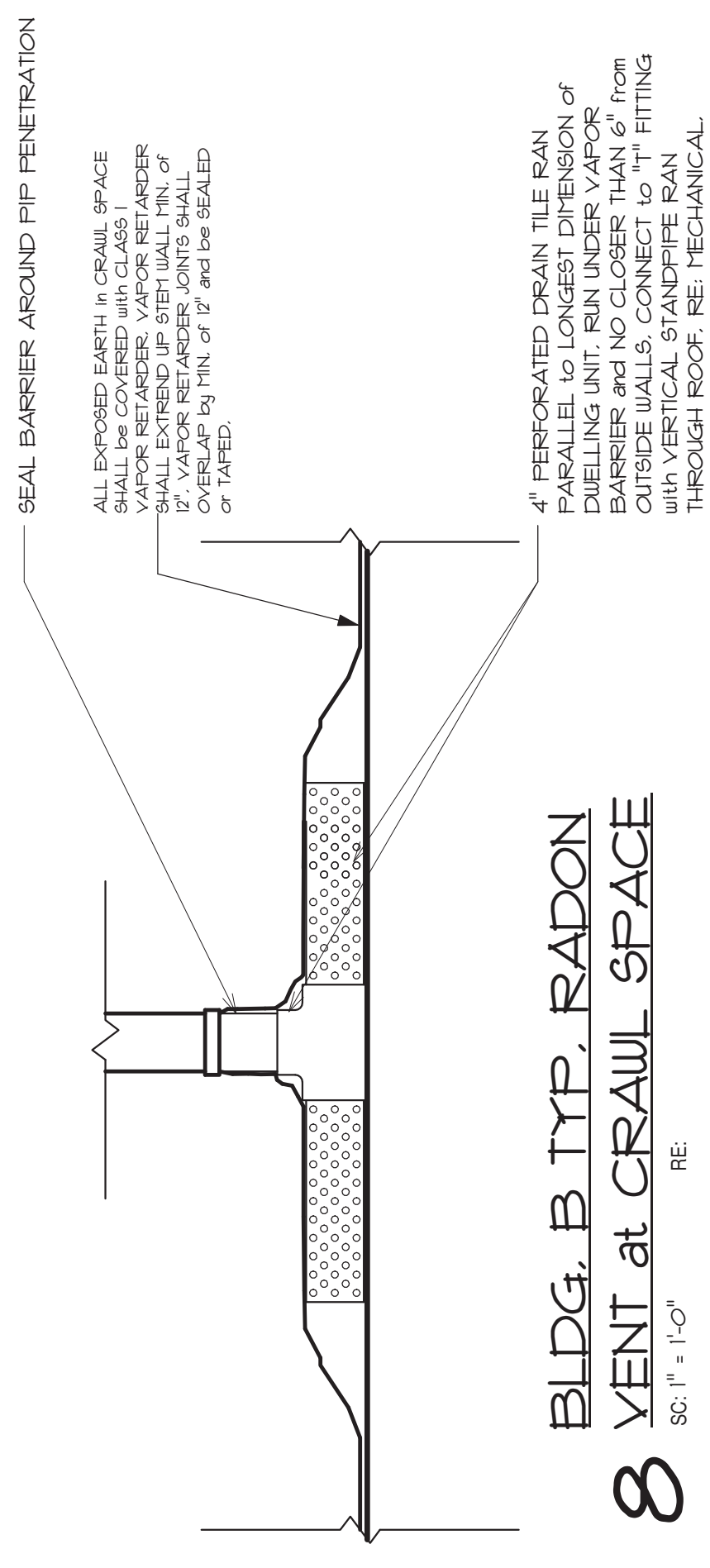


2 BACK ELEVATION
SC: 1/4" = 1'-0"
RE



1 FRONT ELEVATION
SC: 1/4" = 1'-0"
RE

NOTE: REFER TO THIS SHEET FOR BUILDINGS B1 and B2 for ELEVATIONS.
RE: SITE PLAN



SECTION FLAG NOTES

FLAG Number	NOTE
51	CLASS A 30' MIN. ASPHALT SATURATED SHINGLES. COLOR RANGE ON (2) TWO LAYERS 5/8" FELT ON 5/8" ROOF SHEATHING (RE: STRUCTURAL FOR TYPE) over FIBERS. WOOD TRUSS. PROVIDE R4S BREADED ON SHEATHING. (NOT INCL. TO UNDERSIDE OF ROOF)
52	FLOOR: 3/4" T&G FLYTD. over W.D. 1-DOBT. at 18' O.C.
53	FINISH CEILING 5/8" TYPE "X" GYP. BD. ON UNDERSIDE OF BEARING FIRE PARTITION SEPARATION WALL. (2) LAYERS 1/2" GYP. BD. FRAMED INSIDE OF 7" H.L. C-BRUNNERS WITH 3/4" AIR SPACE and 2x6 W.D. FRG. at 16' O.C. and 5/8" TYPE "X" BAIT. INSULATION IN CAVITY OF FRG. PROVIDE AIR JOOL BARRIER/HOUSEWRAP between FRG. and 5/8" TYPE "X" BAIT. INSULATION. (NOT INCL. TO UNDERSIDE OF GYP. BD. FOUNDATION TO UNDERSIDE OF ROOF SHEATHING ABOVE RE: WALL SECTIONS II DESIGN NO. 1536)
54	SHEE. BRICK LAP SIDING/STUCCO WALL. RE: WALL TYPES
55	INTERIOR 2x4 W.D. FRAMED WALL. RE: WALL TYPES.
56	FOUNDATION. RE: STRUCTURAL.
57	WOOD STAIR RISERS AND TREAD. DO NOT PENETRATE GYP. BD. SOFFIT 5/8" TYPE "X" GYP. BD. ON ONE SIDE OF W.D. FRG. BOTTOM OF SOFFIT SHALL BE AT 7'-0" A.F.F. WIDTH VARIES. RE: REFLECTED CEILING PLANS.
58	RAISED FLOOR/CEILING at STAIRS. 2x W.D. FRG. at CLOSEST FLOOR with 2x FRG. at SLOPED CEILING with 5/8" EXTERIOR NON-PERFORATED HARDBOARD SOFFIT INSULATION EXTEND FROM THE FLOOR ABOVE DOWN THE ALL EXPOSED PARTS IN CRAWL SPACE SHALL BE COVERED WITH CLASS 1 VAPOR RETARDER. VAPOR RETARDER SHALL EXTEND UP 8" MIN. W.D. FRG. at 2' and be SEALED or TAPED. SHALL OVERLAP BY 1" IN 1/2"
59	INTERIOR 2x6 W.D. FRAMED WALL. RE: WALL TYPES.
60	INTERIOR DOUBLE 2x4 STUD WALL. RE: WALL TYPES.
61	MIN. R-5 CONTINUOUS INSULATION RUN DOWN FROM 4" THK. CONCRETE SLAB. RE: STRUCTURAL.
62	FIRE PARTITION SEPARATION WALL. RE: WALL TYPES
63	SLOPED STAIR WALL. WOOD WALL CAP. RE: W.D. CAP
64	FIRE PARTITION SEPARATION WALL with SOUNDBOARD. RE: WALL TYPES
65	CLASS A 30' MIN. ASPHALT SATURATED SHINGLES. COLOR RANGE ON (2) TWO LAYERS 5/8" FELT ON 5/8" ROOF SHEATHING (RE: STRUCTURAL FOR TYPE) over FIBERS. WOOD TRUSS. PROVIDE R4S BREADED ON ROOF SHEATHING (RE: STRUCTURAL FOR TYPE) over 2x W.D. RAFTER (RE: STRUCTURAL)
66	PORTLAND CEMENT STUCCO SYSTEM RE: SPECIFICATIONS VAPOR BARRIER ON 3/4" G.S.B. SHEATHING ON ROOF FRG. PROVIDE MIN. R-20 CLOSED CELL SPRAYED ON INSULATION ON INSIDE OF EXTERIOR SHEATHING IN ATTIC
67	STAIR POINT WALL. 2x4 W.D. FRG. at 24" O.C. FROM TOP OF FLOOR TO UNDERSIDE OF STAIR LANDING. SET NEXT TO SINGLE 2x6 STUD FIRE RATED WALL.
68	GENERAL: ALL EXTERIOR SLABS LOCATED DIRECTLY ADJACENT TO BUILDING FOUNDATIONS. THE CONC. PAD TO FOUNDATION WITH 4" REBAR. DETAIL # 240-C. TYP.

1 BLDG. B SECTION
SC: 1/4" = 1'-0"
RE: A1/B
NOTE: CASEWORK/EQUIPMENT NOT SHOWN. REFER TO INTERIOR ELEVATIONS FOR CASEWORK/EQUIPMENT

2 BLDG. B CROSS SECTION 1
SC: 1/4" = 1'-0"
RE: A1/B
NOTE: CASEWORK/EQUIPMENT NOT SHOWN. REFER TO INTERIOR ELEVATIONS FOR CASEWORK/EQUIPMENT

3 BLDG. B CROSS SECTION 2
SC: 1/4" = 1'-0"
RE: A1/B
NOTE: CASEWORK/EQUIPMENT NOT SHOWN. REFER TO INTERIOR ELEVATIONS FOR CASEWORK/EQUIPMENT

4 BLDG. B TYP. PORCH COLUMN DETAIL
SC: 3/4" = 1'-0"
RE: A1/A

5 BLDG. B TYP. 2. BDRM. UNIT SLOPED WALL INT. ELEV. at 1st FLOOR STAIR
SC: 3/4" = 1'-0"
RE: A1/A

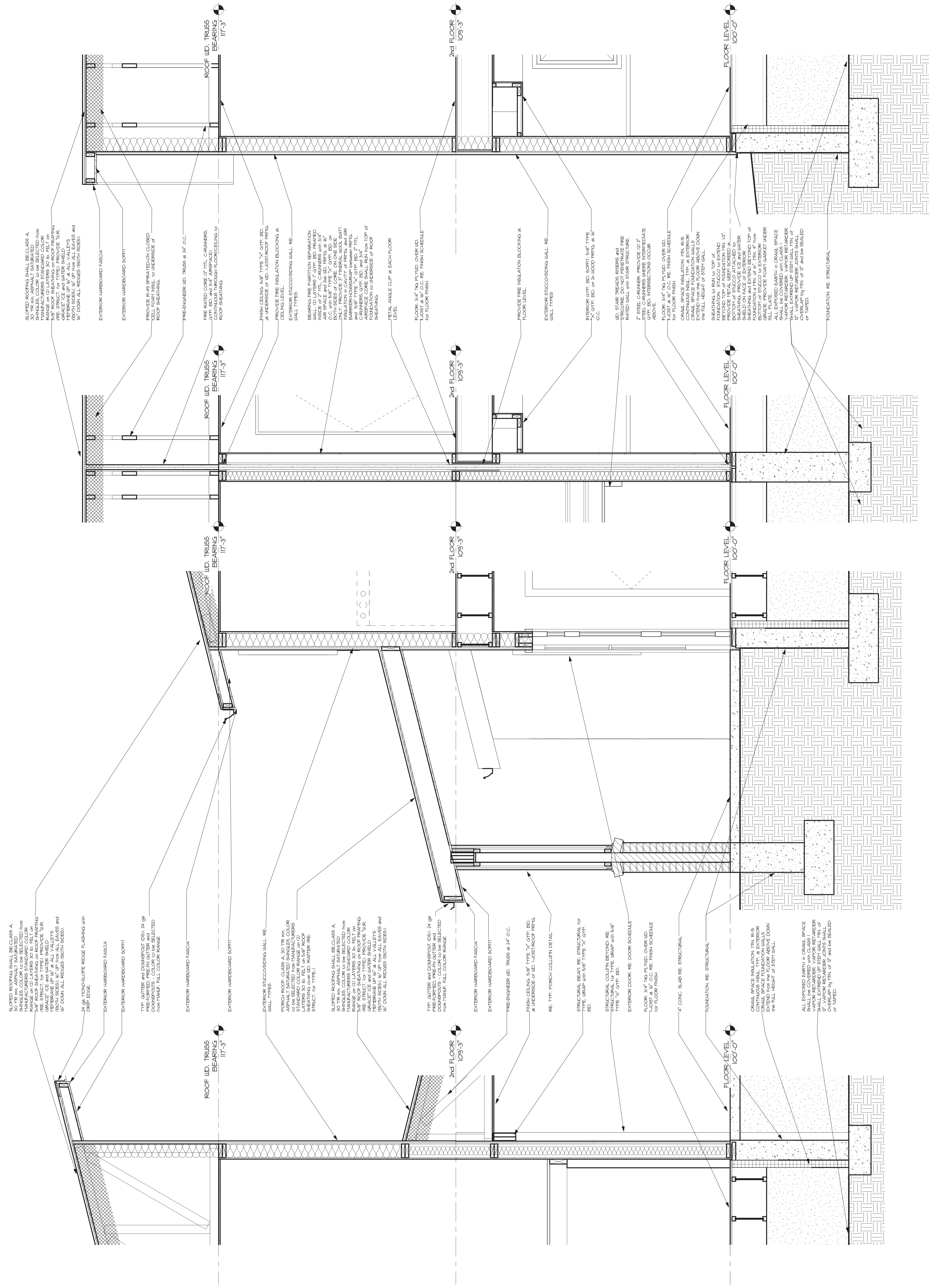
6 BLDG. B TYP. 3. BDRM. UNIT SLOPED WALL INT. ELEV. at 1st FLOOR STAIR
SC: 3/4" = 1'-0"
RE: A1/A

7 BLDG. B W.D. CAP DETAIL at SLOPED STAIR WALL
SC: 1/2" = 1'-0"
RE: A1/B

8 BLDG. B TYP. RADON VENT at CRAWL SPACE
SC: 1' = 1'-0"
RE: A1/B

NOTE: SECTIONS THIS SHEET are SHOWN THROUGH BUILDING B3, 2nd STORY ROOF SLOPES OPPOSITE IN BUILDINGS B1 and B2. RE: ELEVATIONS and SITE PLAN.

NOTE: WALL SECTIONS THIS SHEET are SHOWN THROUGH BUILDING B3, 2nd STORY ROOF SLOPES OPPOSITE in BUILDINGS B1 and B2. RE: ELEVATIONS and SITE PLAN.

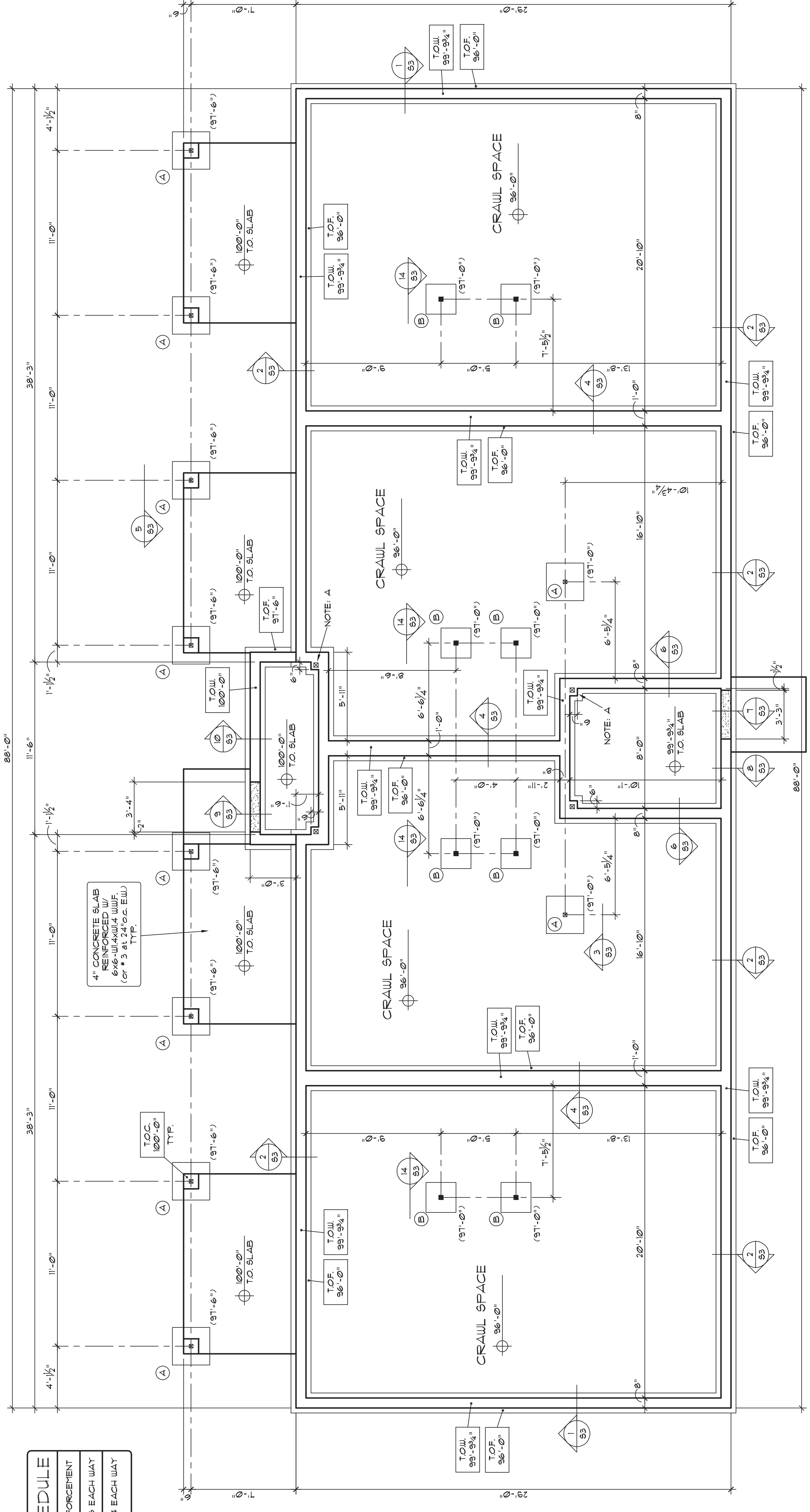


1 BLDG B WALL SECTION 1
SC: 3/4" = 1'-0"
RE: A3.1B

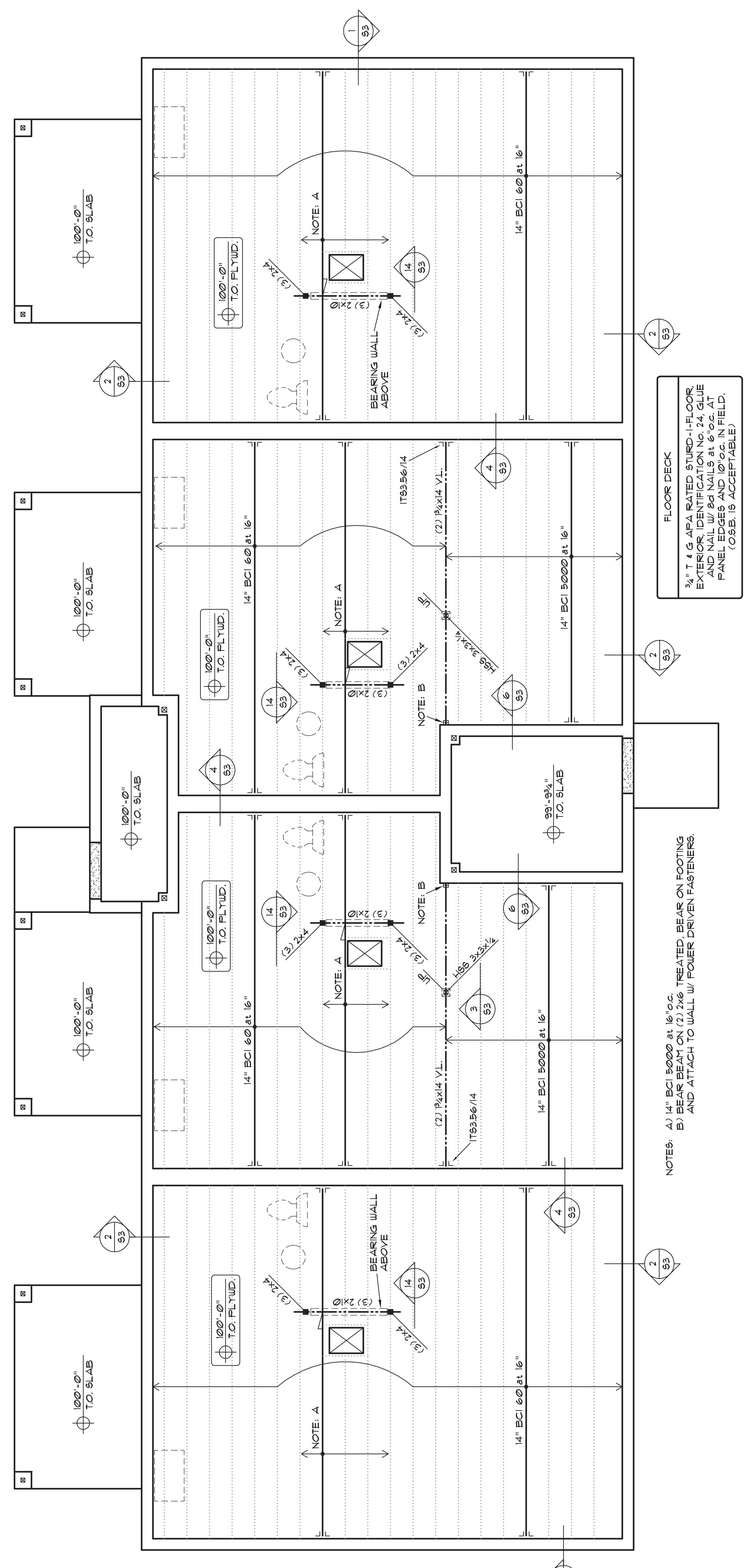
2 BLDG B WALL SECTION 2
SC: 3/4" = 1'-0"
RE: A3.1B

3 BLDG B WALL SECTION 3
SC: 3/4" = 1'-0"
RE: A3.1B

4 BLDG B WALL SECTION 4
SC: 3/4" = 1'-0"
RE: A3.1B



FOUNDATION PLAN
 SCALE: 1/4"=1'-0"
 NOTES: A) SIMPSON U.S. 44Z - ANCHOR WITH 1/2" EXP. BOLT
 (4 LOCATIONS)

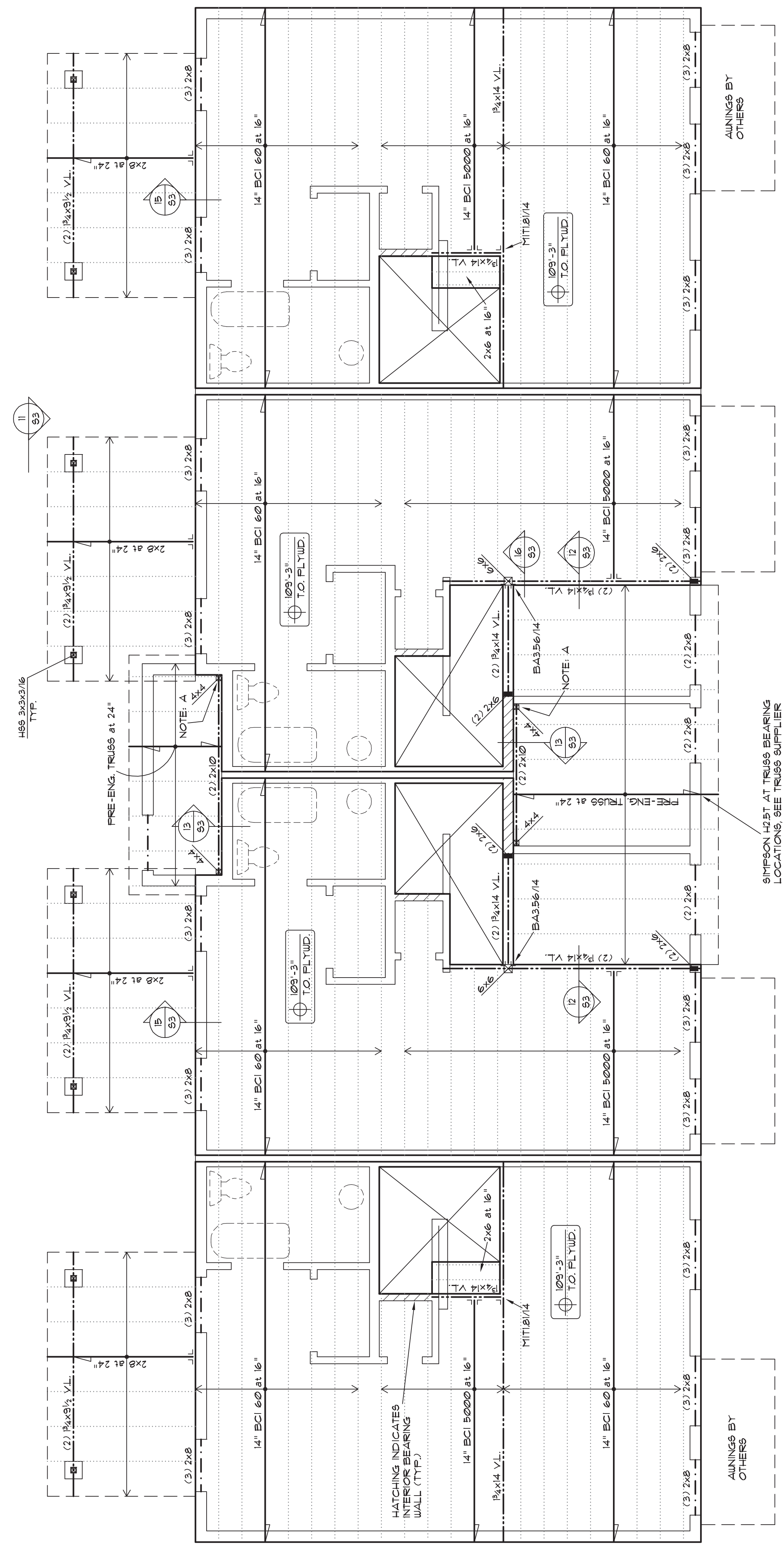


MAIN FLOOR FRAMING PLAN
 SCALE: 1/4"=1'-0"

PAD FOOTING SCHEDULE	
MARK	SIZE
A	2'-6" x 2'-6" x 1'-0"
B	2'-0" x 2'-0" x 1'-0"

REINFORCEMENT	
(3) #5 EACH WAY	(3) #4 EACH WAY

NOTES: A) 14" BCI 6000 at 16" O.C. TREATED BEAS ON FOOTING AND ATTACH TO WALL W/ FOUR DRIVEN FASTENERS.
 B) 1" x 4" AFA RATED STUDB-FLOOR EXTERIOR IDENTIFICATION NO. 24, GUE PANEL EDGES AND 10" O.C. IN FIELD. (0.9B IS ACCEPTABLE)



NOTES: A) SIMPSON I-25 AT TRUSS BEARING LOCATIONS SEE TRUSS SUPPLIER SHOP DRAWINGS FOR POSSIBLE ADD'L HOLD-DOWN REQUIREMENTS (TYP.)

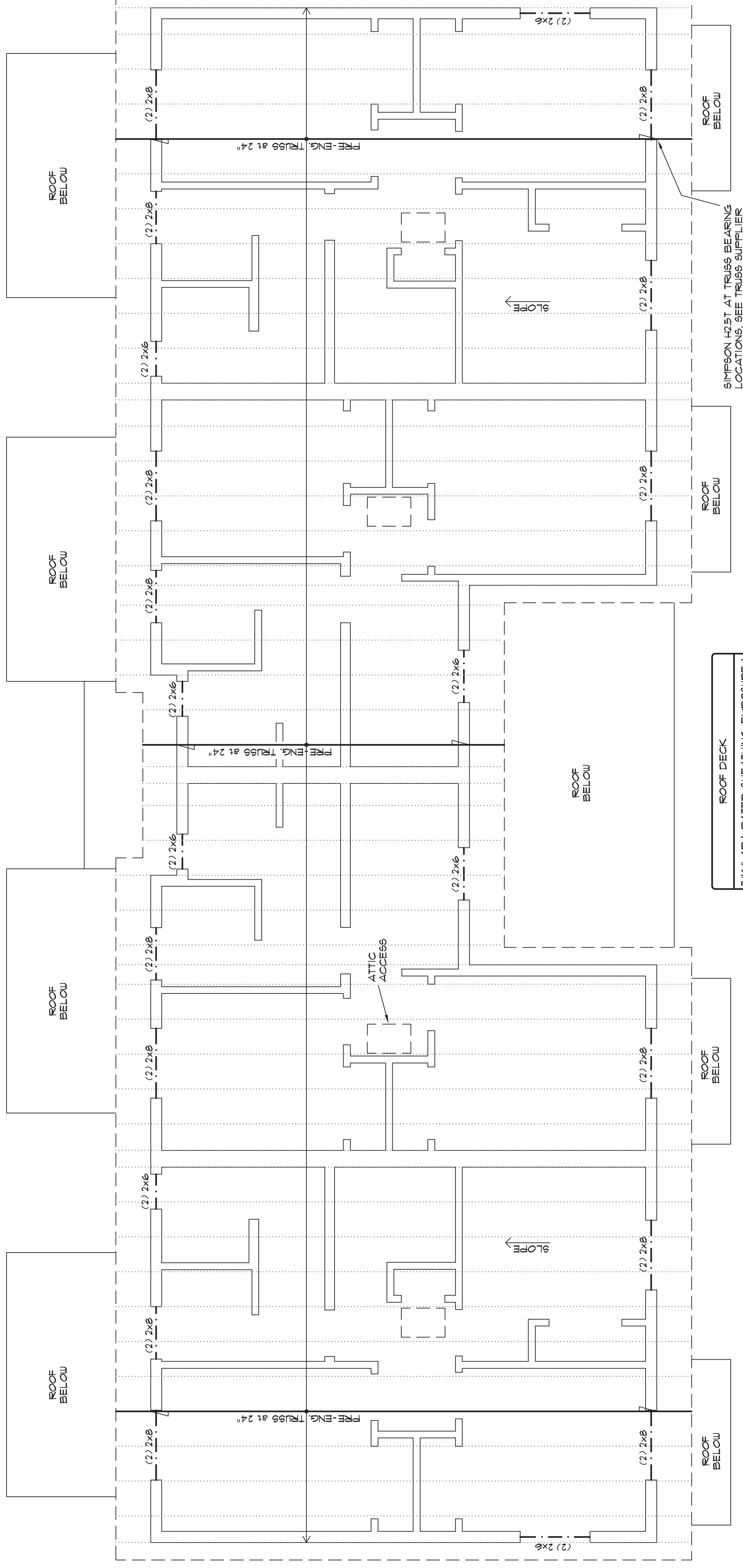
SIMPSON I-25 AT TRUSS BEARING LOCATIONS SEE TRUSS SUPPLIER SHOP DRAWINGS FOR POSSIBLE ADD'L HOLD-DOWN REQUIREMENTS (TYP.)

FLOOR DECK
 3/4" G AFA RATED STUDS - FLOOR EXTERIOR IDENTIFICATION NO. 24, GLUE NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD (O.S.B. IS ACCEPTABLE)

ROOF DECK
 1/2" G AFA RATED SHEATHING EXPOSURE 1 IDENTIFICATION NO. 24, 1/2" NAIL W/ 8D NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD.

UPPER FLOOR / LOW ROOF FRAMING PLAN

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



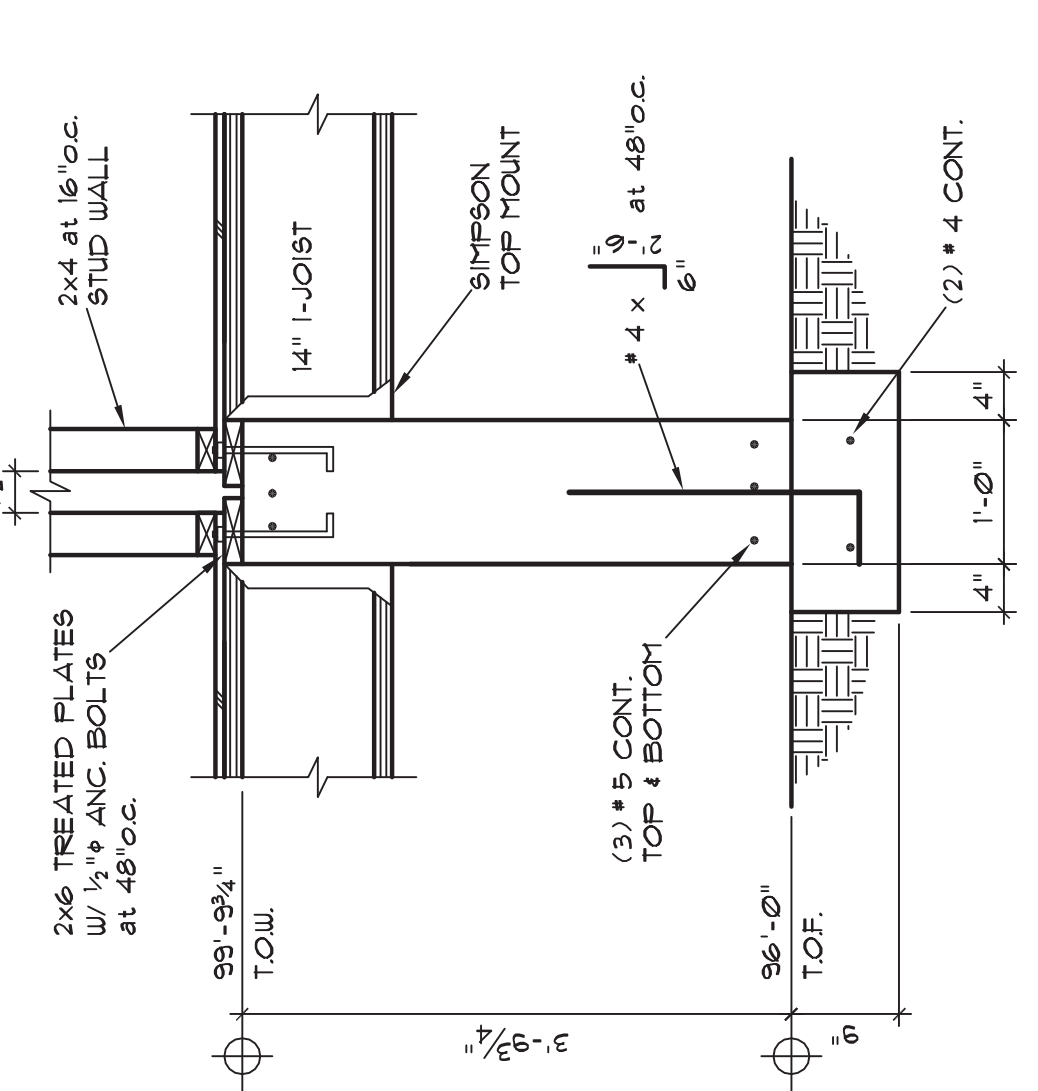
ROOF DECK
 1/2" G AFA RATED SHEATHING EXPOSURE 1 IDENTIFICATION NO. 24, 1/2" NAIL W/ 8D NAILS AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN FIELD.

HIGH ROOF FRAMING PLAN

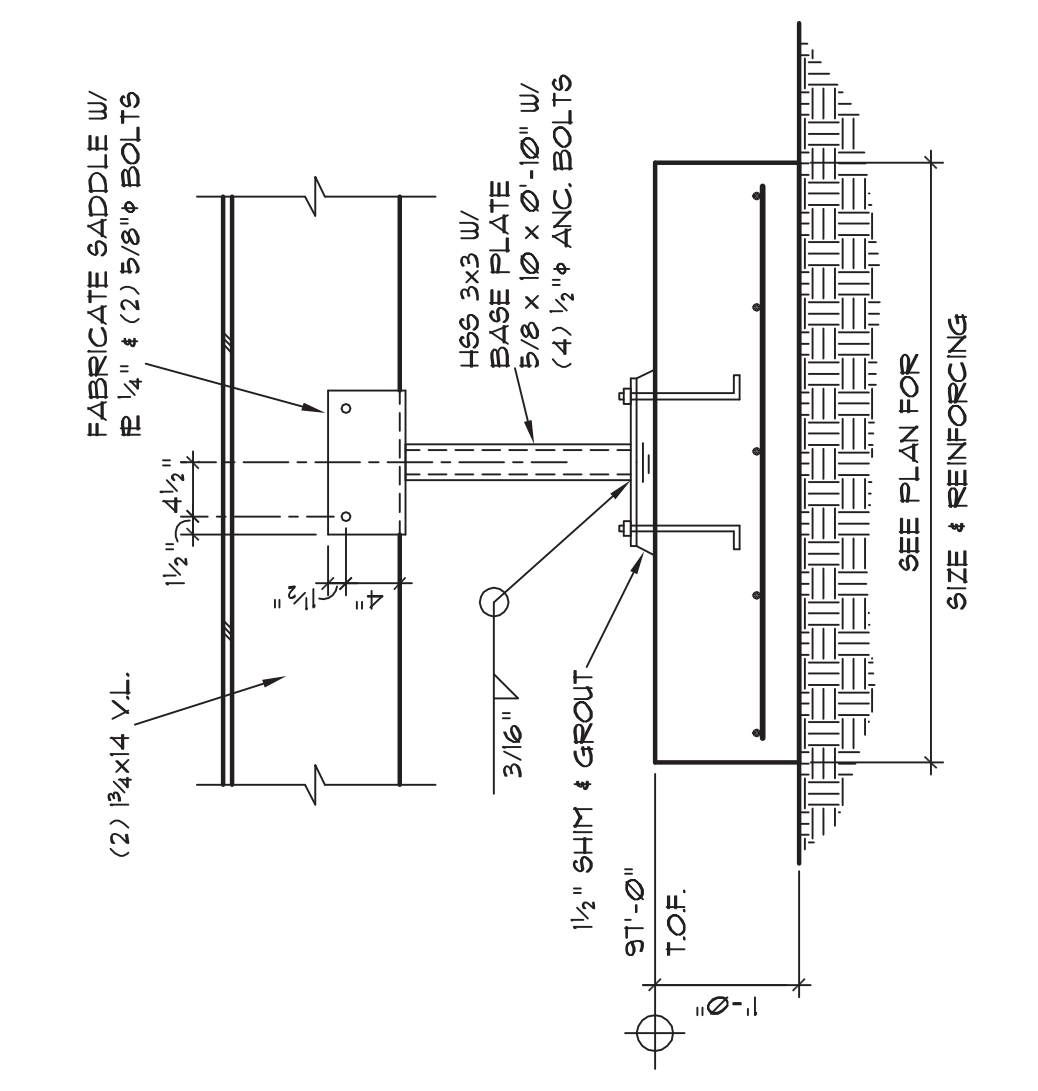
SCALE: 1/4"=1'-0"

GENERAL NOTES

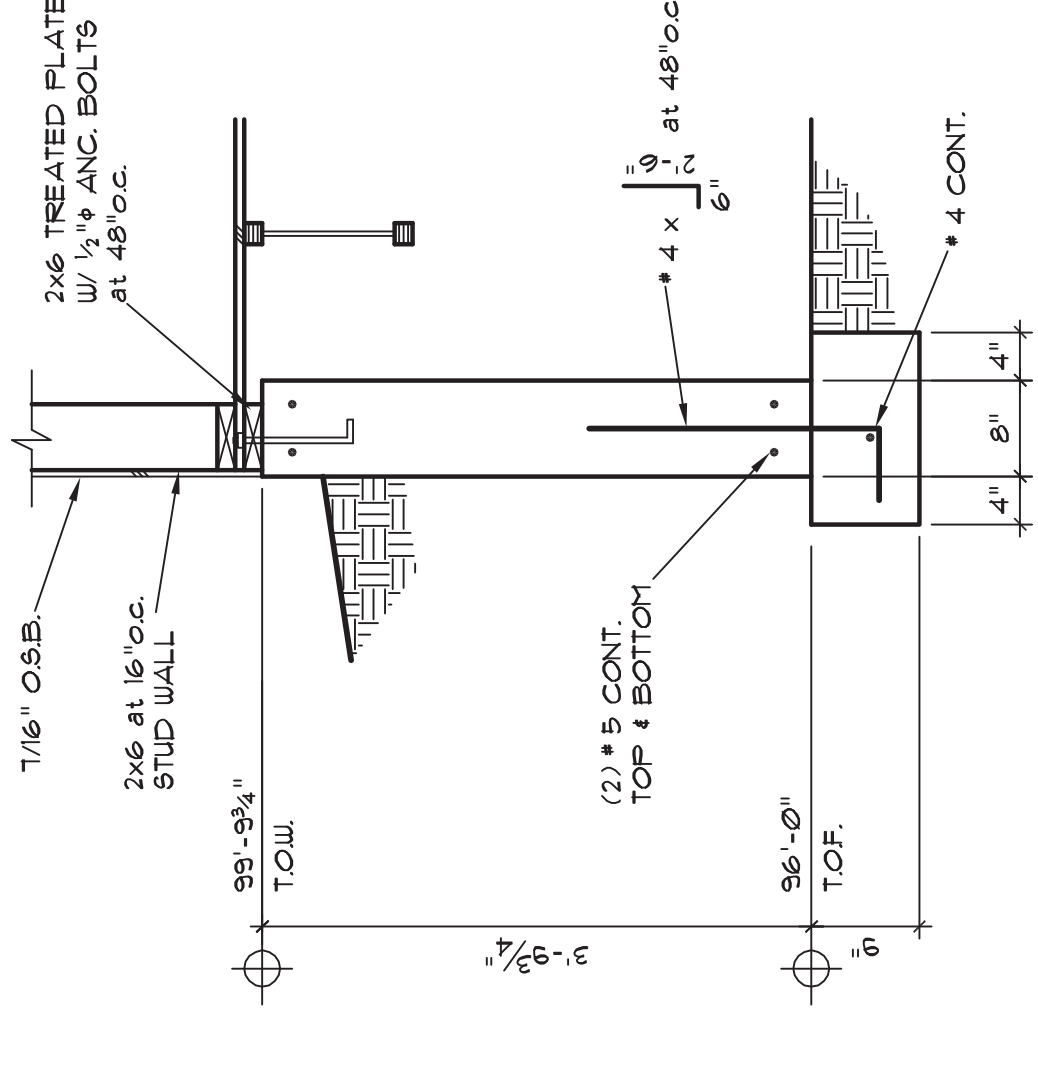
- This project is designed in accordance with the following:
 - Floor Loads: Building Code (IBC) 2015 Edition.
 - Dead Loads: 15 psf
 - Live Loads: 30 psf
 - Wind: 115 mph, Exposure 'C'
- The structure shall be founded on spread footings placed on undisturbed soil. The bearing capacity of the soil shall be determined by a geotechnical engineer. The minimum frost depth of footings shall be 30" top of grade (unless otherwise noted). Field verify all top of footing elevations.
- Refer to soil report # SC03225-125, dated June 1, 2016 prepared by CTL Thompson for additional information.
- Concrete:
 - Concrete has been designed and shall be constructed in accordance with ACI 308.1R-11, "Concrete for Structural Concrete" (ACI 318). All concrete shall be of stone aggregate, unless noted otherwise.
 - Concrete shall be tested for compressive strength shall be with cement that meets ASTM C150 Type I, 20% fly ash and a minimum 28 day compressive strength of 4,000 psi. The concrete shall be tested for air content and total air content of 6 percent +/- 1.5 percent. The concrete shall be tested for water-cement ratio of 0.45 to be maintained.
 - Slabs: 4000 psi
 - Reinforcing steel shall meet ASTM A615, grade 60, except stirrups, ties and bars to be welded shall be grade 40. Provide corner bars to match all horizontal reinforcing.
 - Use 24" past edges of openings.
 - Lap Splices shall be Class B. Use the following lap lengths, UNLESS OTHERWISE NOTED:
 - 57 bar diameters for 3,000 psi concrete.
 - 50 bar diameters for 4,000 psi concrete.
 - Reinforcing steel shall be lap spliced in accordance with the American Institute of Steel Construction Specifications (AISC 360) for square/rectangular RFS (ASTM A500, GR. C) 36 ksi for all other members (ASTM A36).
 - Use standard framed beam connections meeting the requirements of the "Manual of Steel Construction-ASD", 10th Edition, published by American Institute of Steel Construction, Inc. or approved by the Structural Engineer.
 - Minimum welds per AISC Specification and AWS D1.1, not less than continuous 3/16" fillet, E70XX electrode, unless otherwise noted. All welds shall be done to develop 1.5 times the yield strength of the reinforcing.
 - Wood:
 - Shrink gROUT: Joints that require gROUT shall bear on non-shrink gROUT.
 - Headers: Hem-# Stud grade
 - Joists: Hem-# 2
 - Wood connections shall be in accordance with the National Design Specification for Stress Grade Lumber and its Supplement.
 - Fastenings: (nail or galvanized) connectors, fasteners and anchors shall be used with preservative-treated woods.
 - Exterior walls shall be fully sheathed with 7/16" oriented strand board (OSB) sheathing.
 - Plywood web joists and Versaplan LVL (2.EE - noted V.L. on plans) shall be manufactured by Boise Cascade, or approved in writing by the Structural Engineer.
 - Locate floor joists so that they do not interfere with plumbing, electrical, or other mechanical systems.
 - Roof trusses shall be designed by a registered professional engineer. The design shall include all loads, including wind, sea and signature of the design engineer shall be reviewed and approved by the Structural Engineer. All roof truss drawings shall show location of all trusses, connection plate capacity, and the size and grade of lumber used. Truss drawings shall include all hangers and connectors needed for stability, and bearing blocks if needed. Truss regularity shall be maintained for future solar panels, verify locations, and weights with Owner.
- Drawing Coordination:
 - Dimensions on these Structural drawings shall be verified with the Architect's drawings. Discrepancies shall be brought to the Architect's attention. Written dimensions shall take precedence.
 - DRAWINGS SHALL NOT BE SCALED. Written dimensions shall take precedence.
 - Stop drawings shall be prepared and drawn by the fabricator. Copying these drawings for shop drawing use will not be permitted.
 - Any and all material substitutions shall be approved by the Structural Engineer prior to construction.



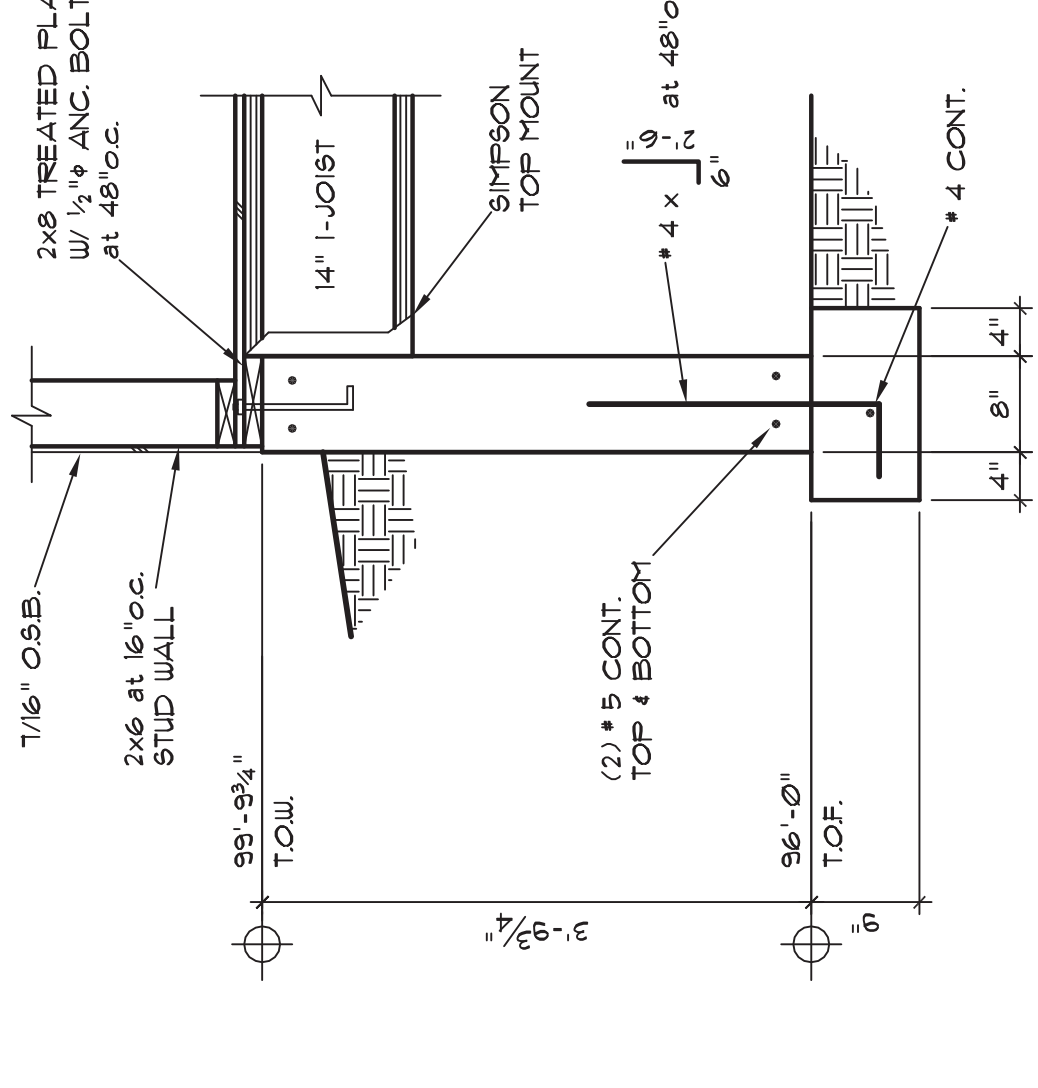
1 SCALE: 3/4"=1'-0"



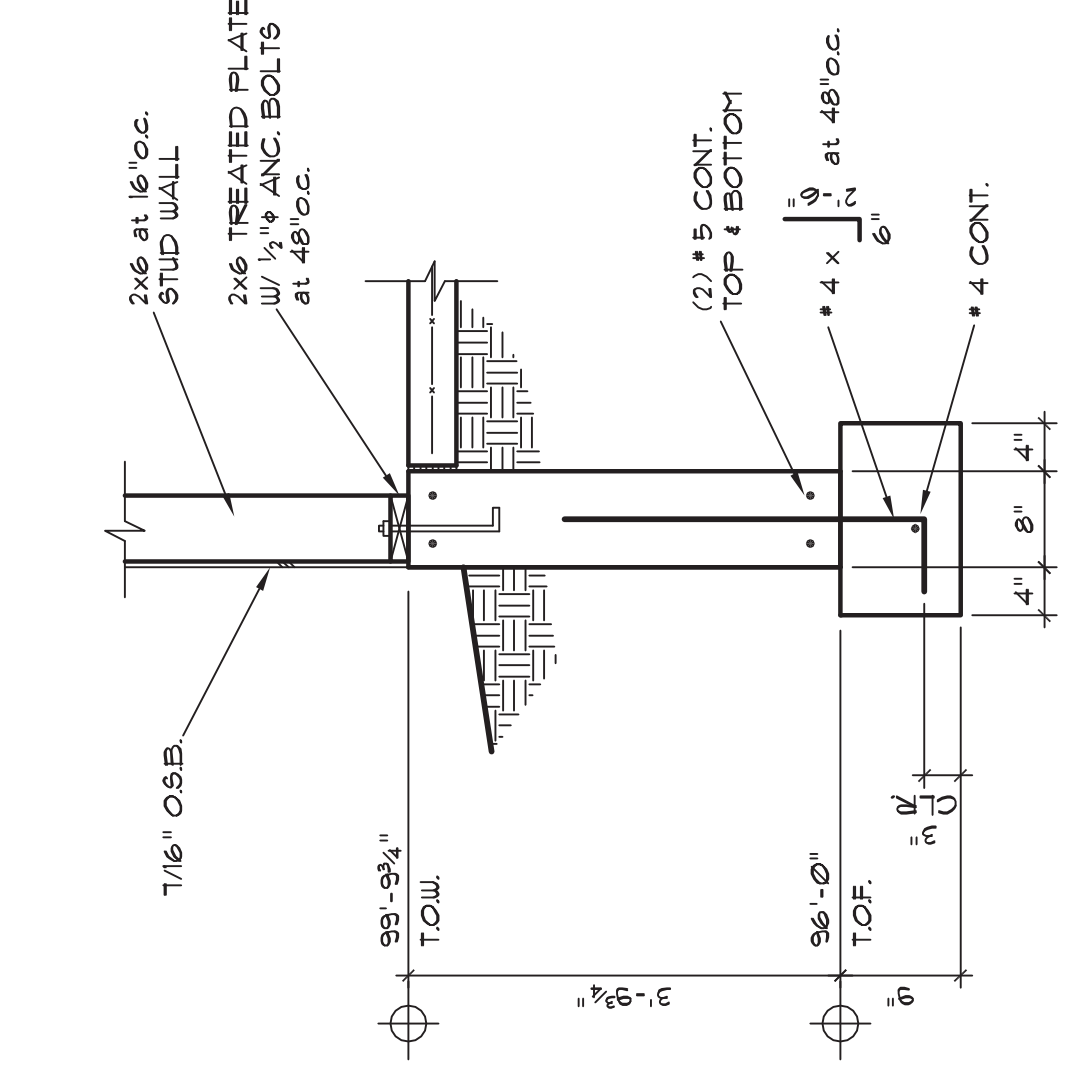
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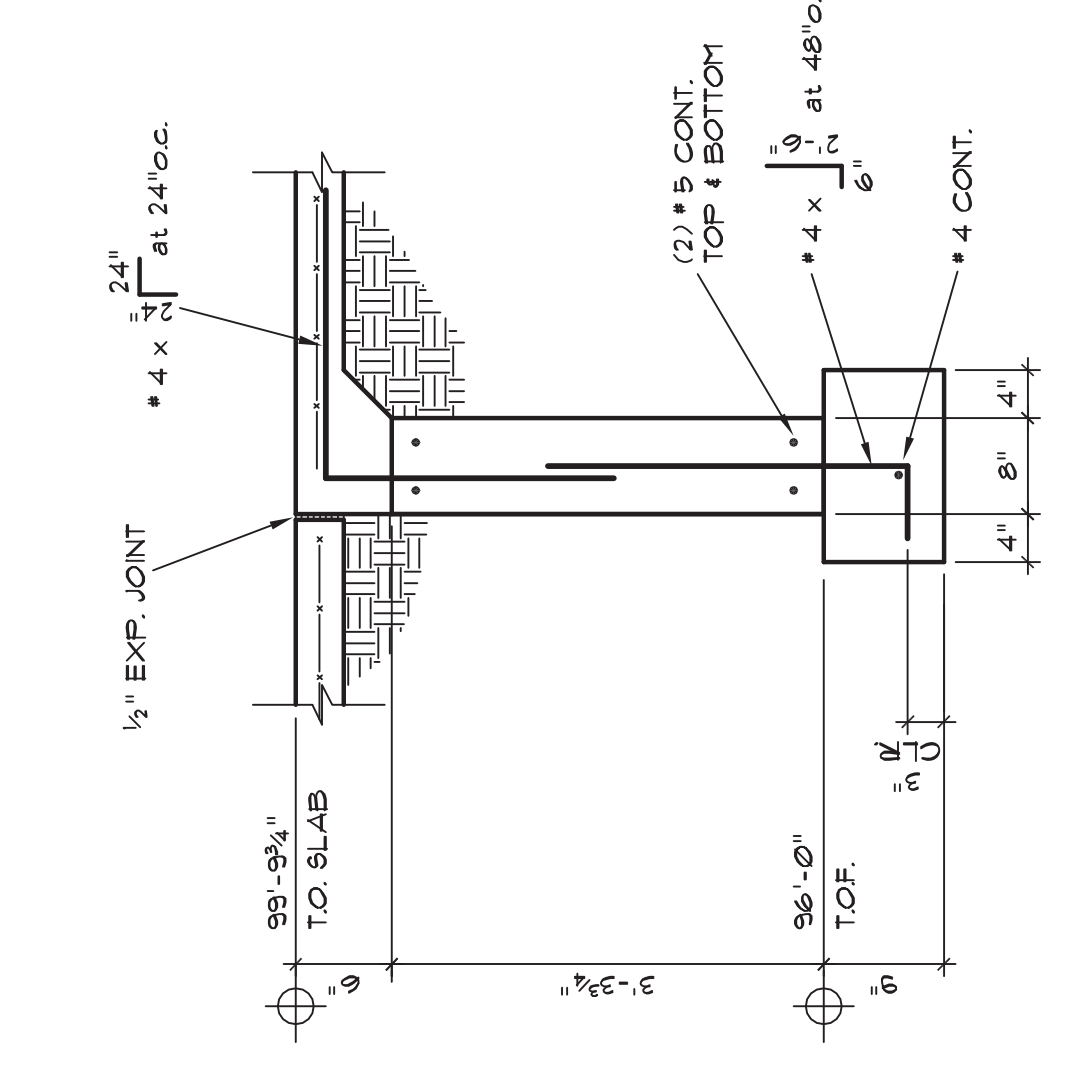
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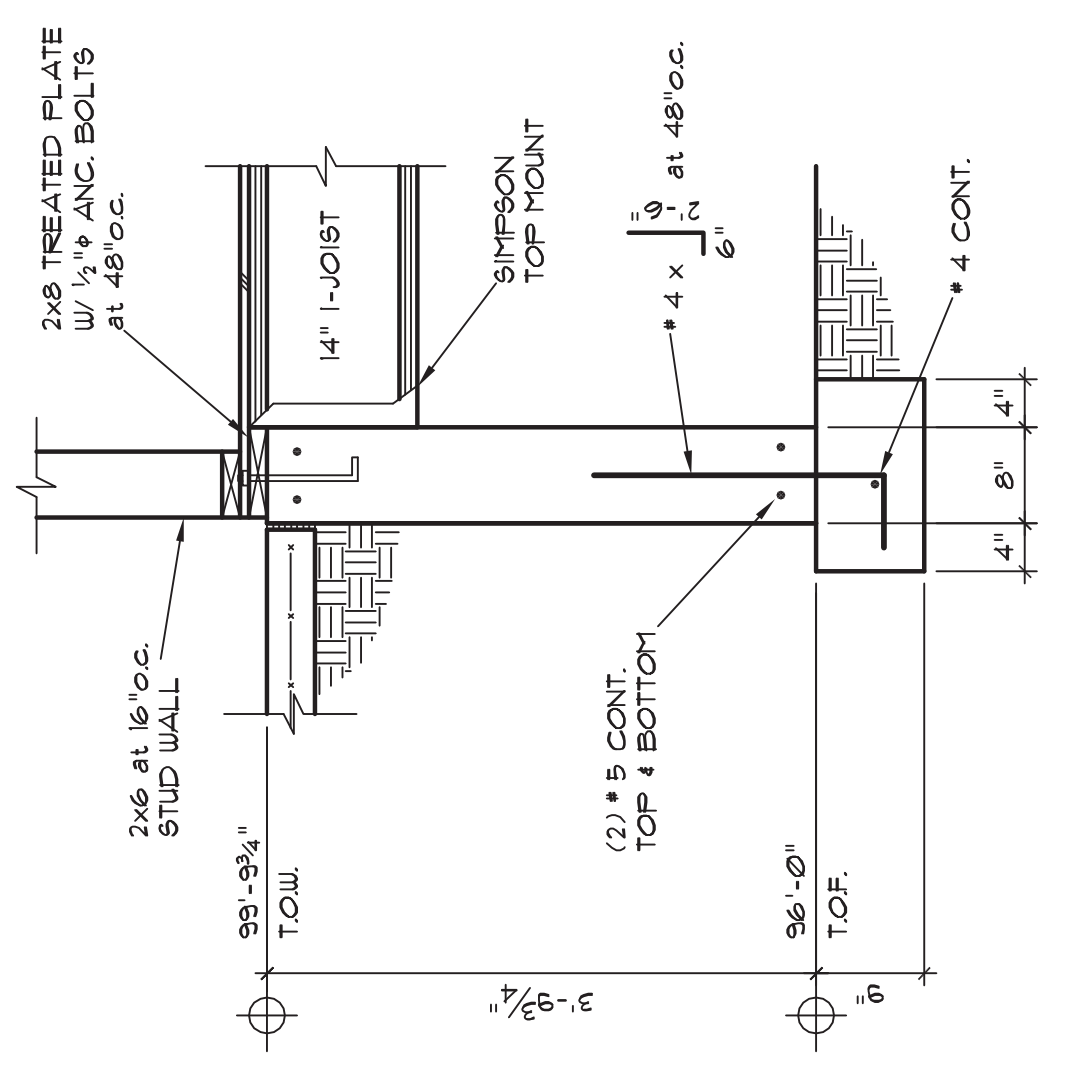
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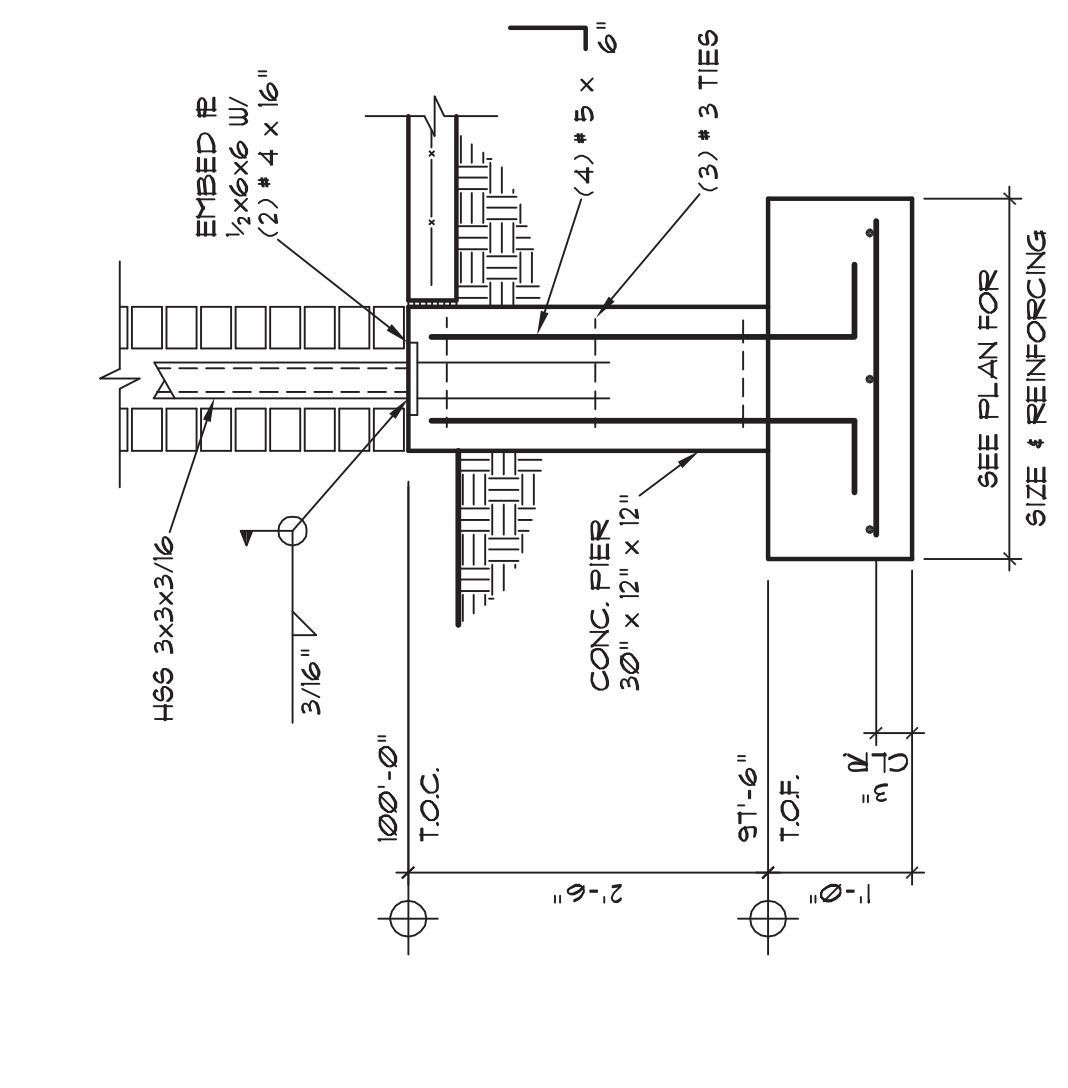
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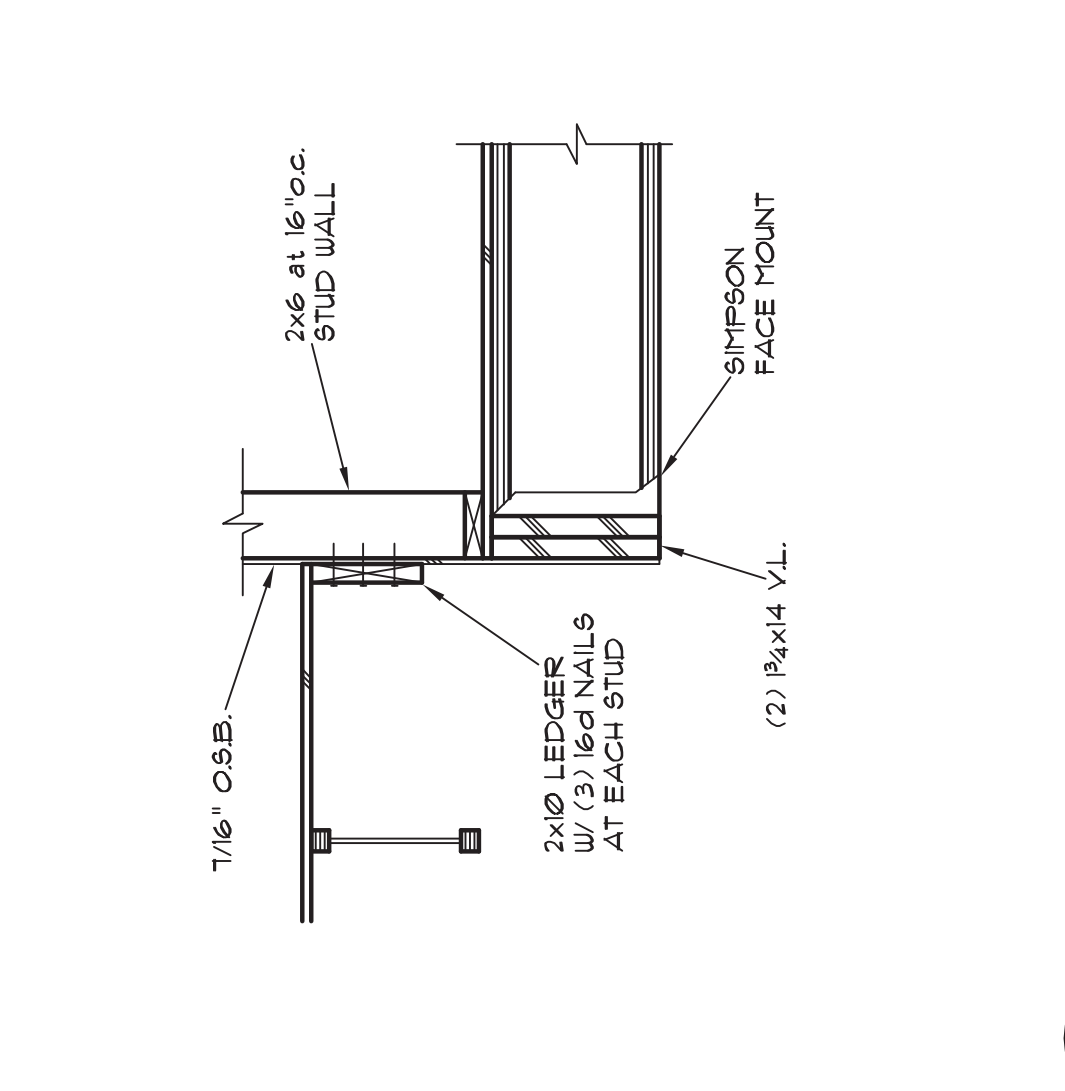
6 SCALE: 3/4"=1'-0"



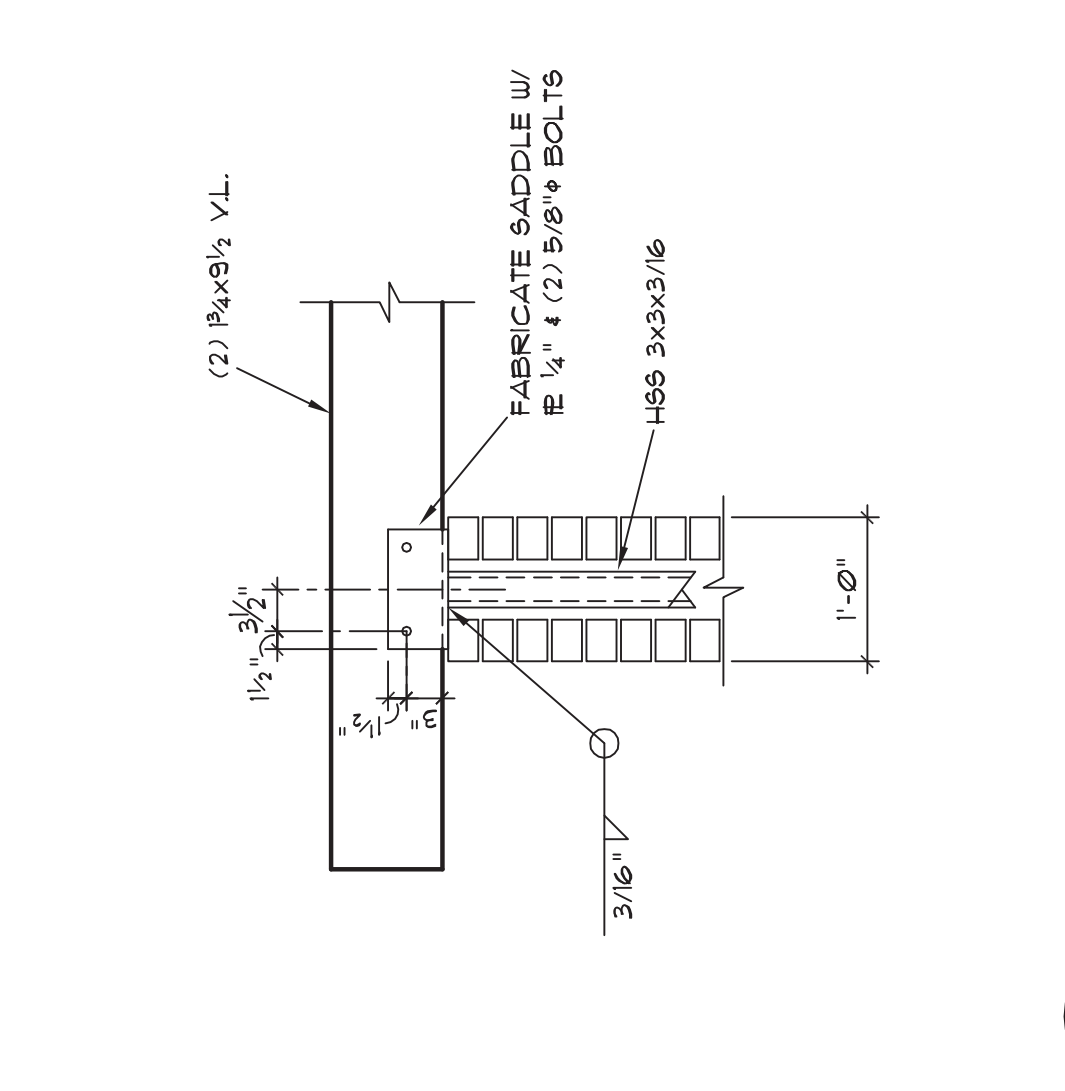
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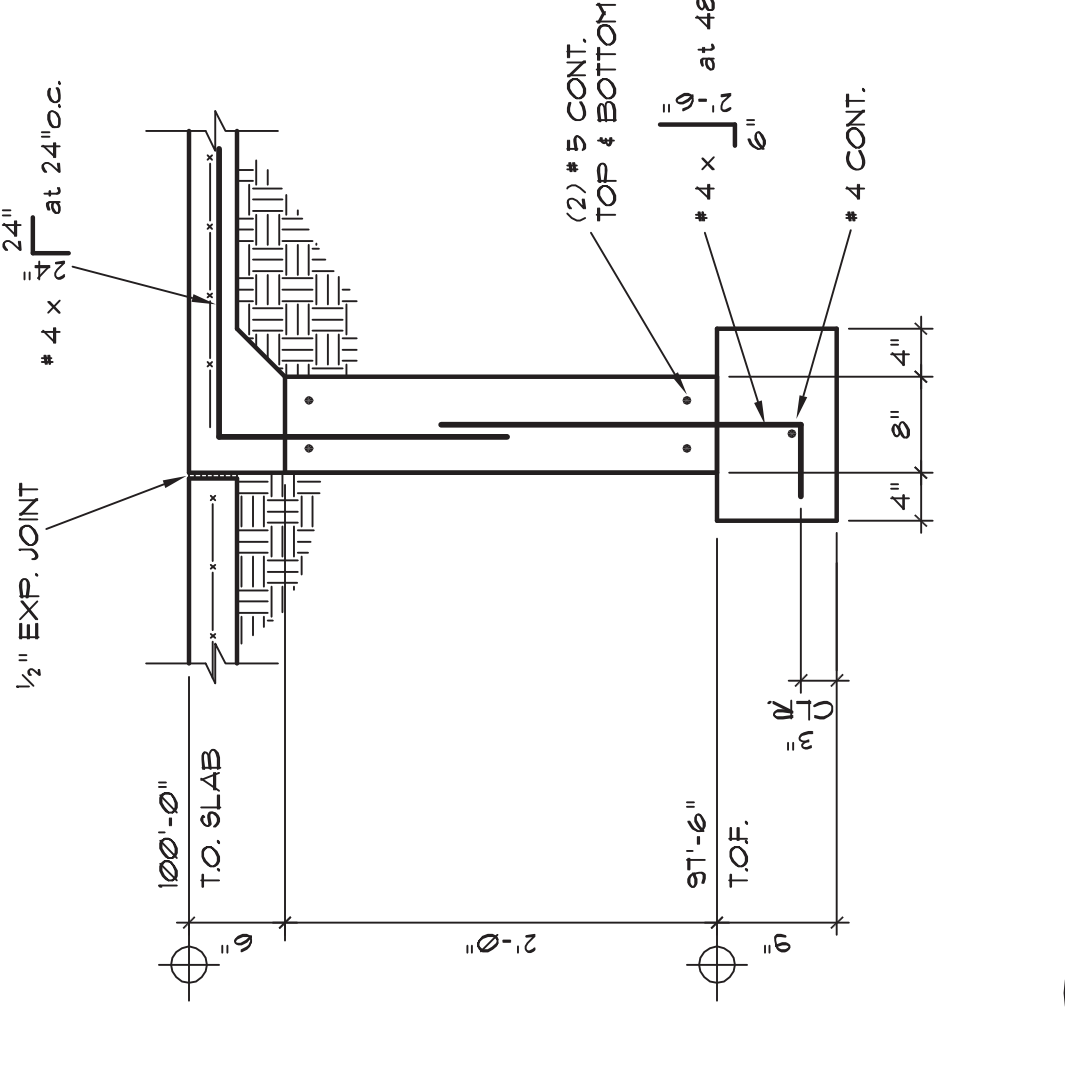
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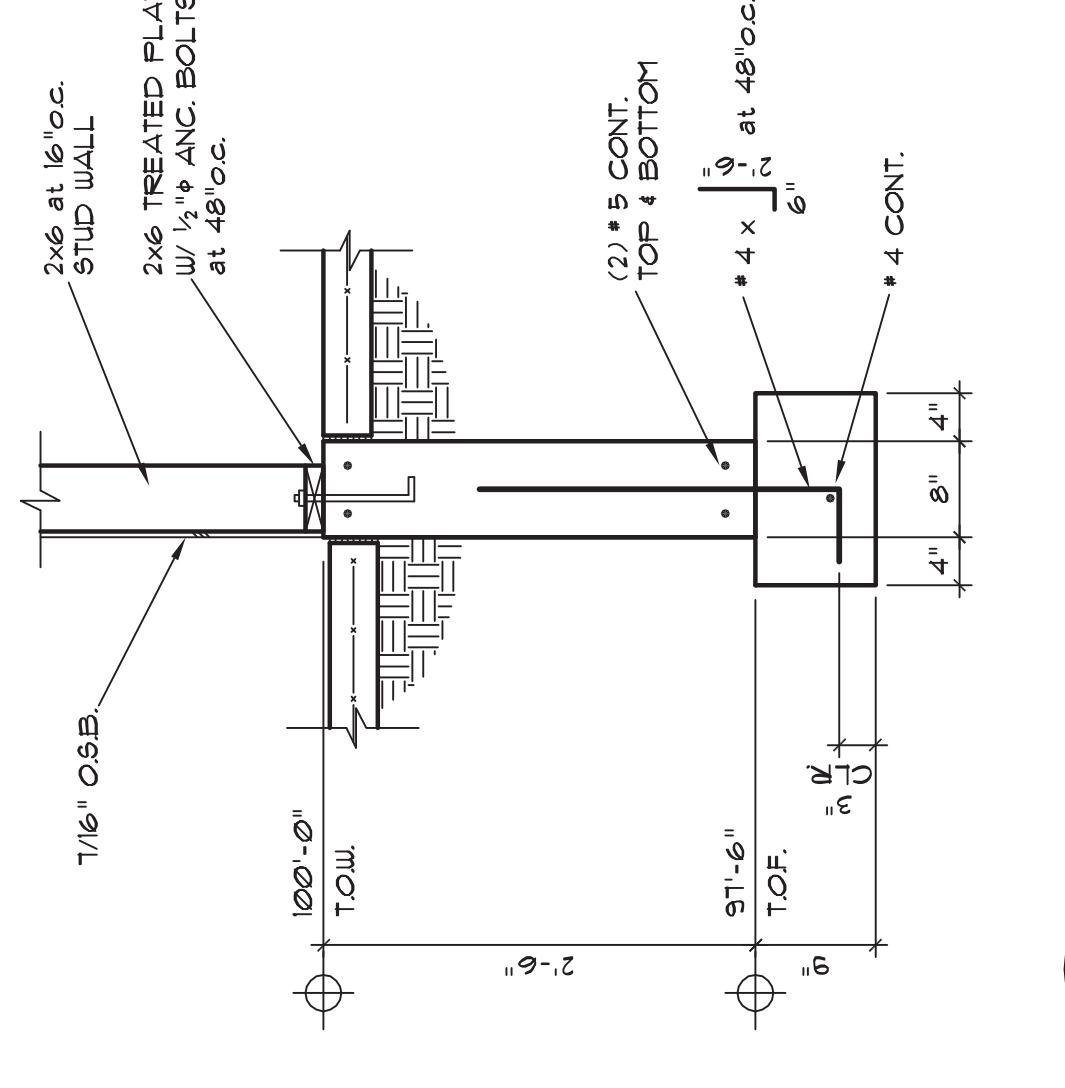
9 SCALE: 3/4"=1'-0"



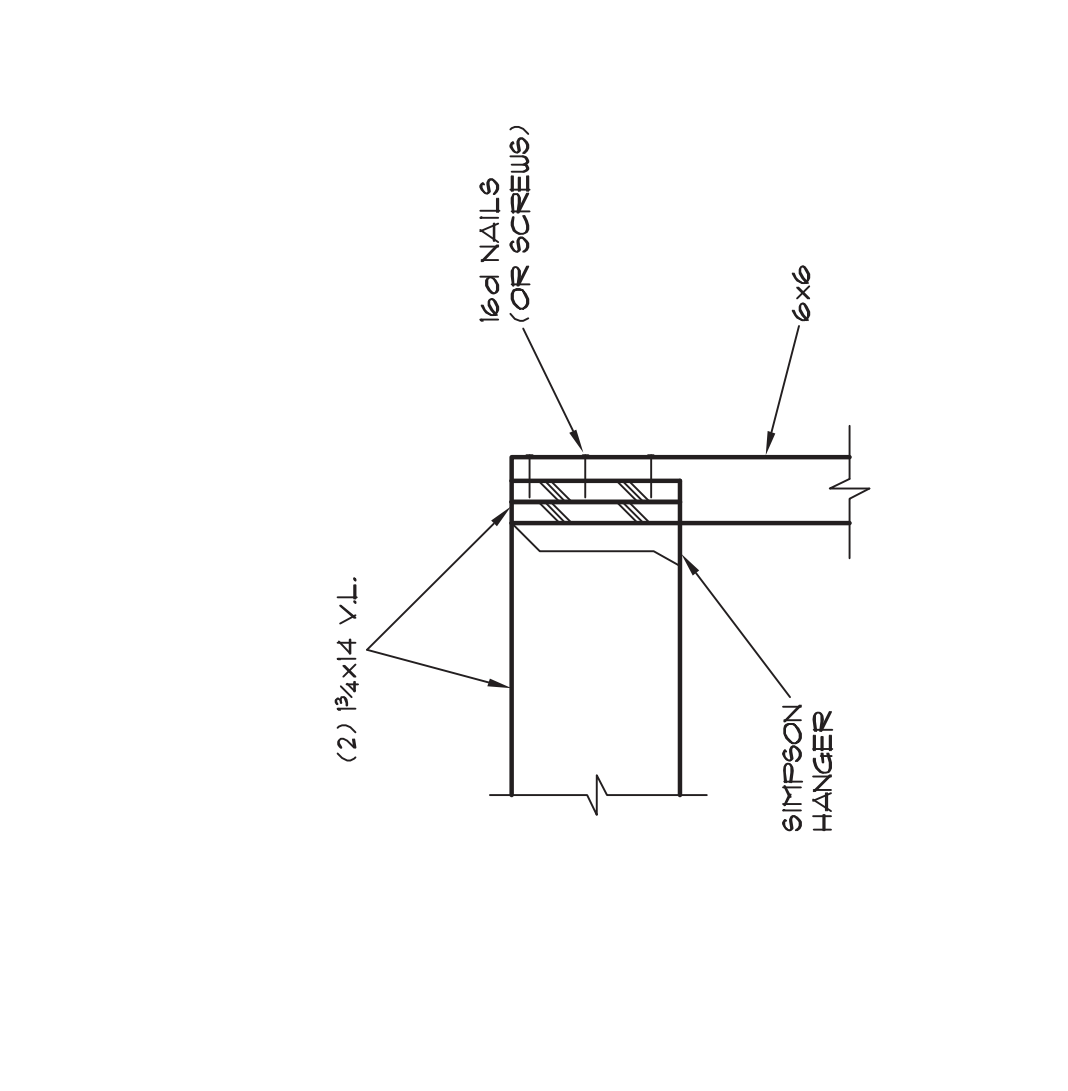
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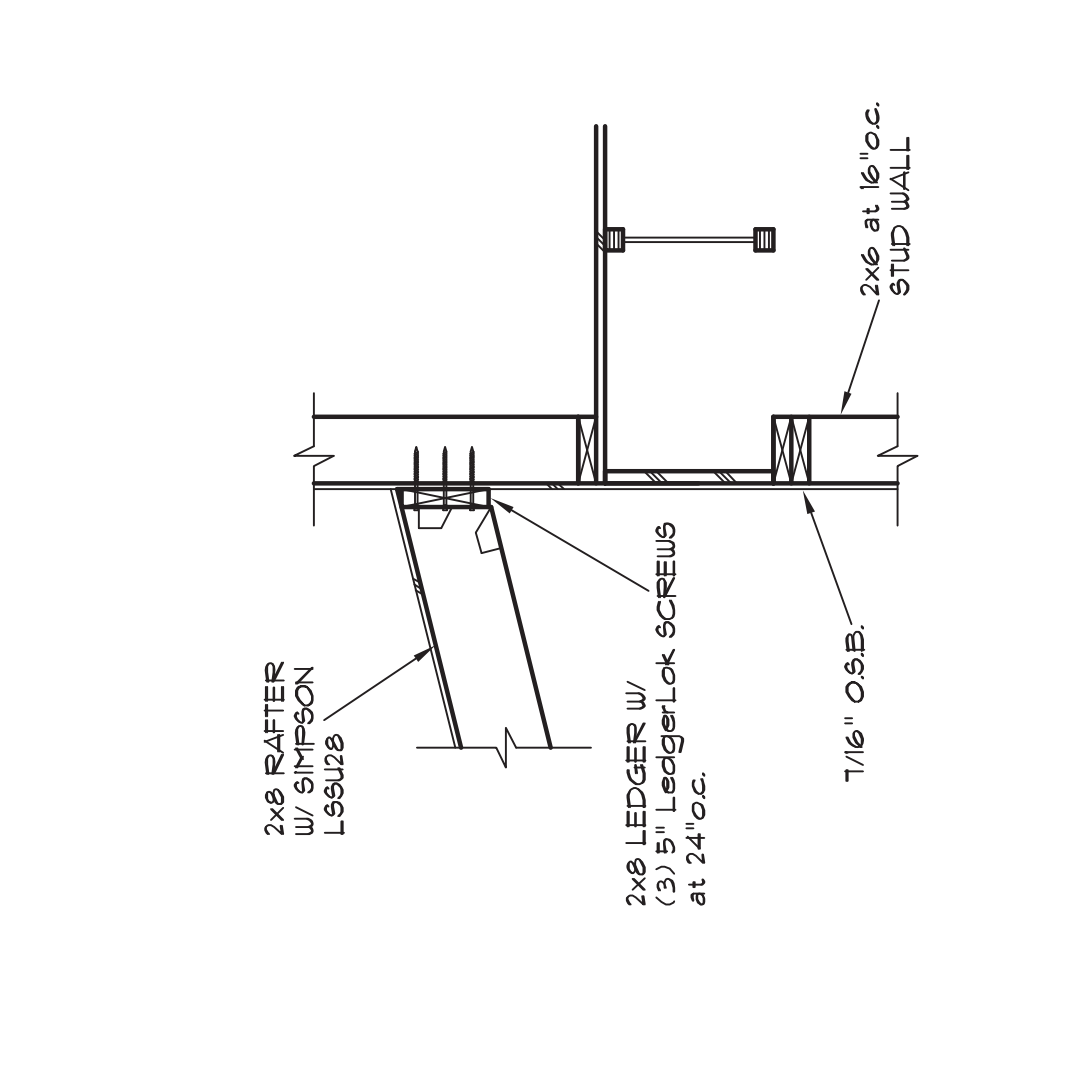
11 SCALE: 3/4"=1'-0"



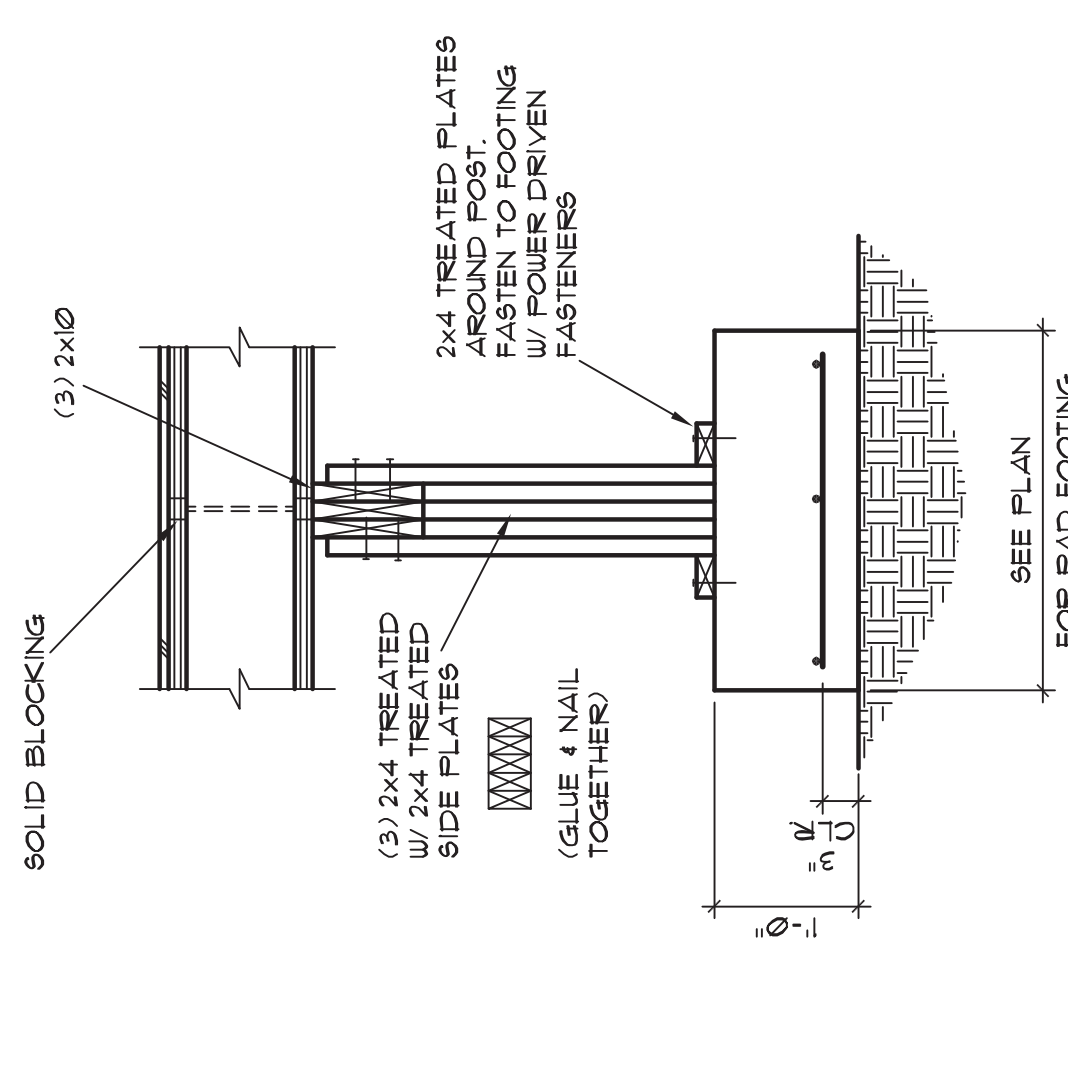
12 SCALE: 3/4"=1'-0"



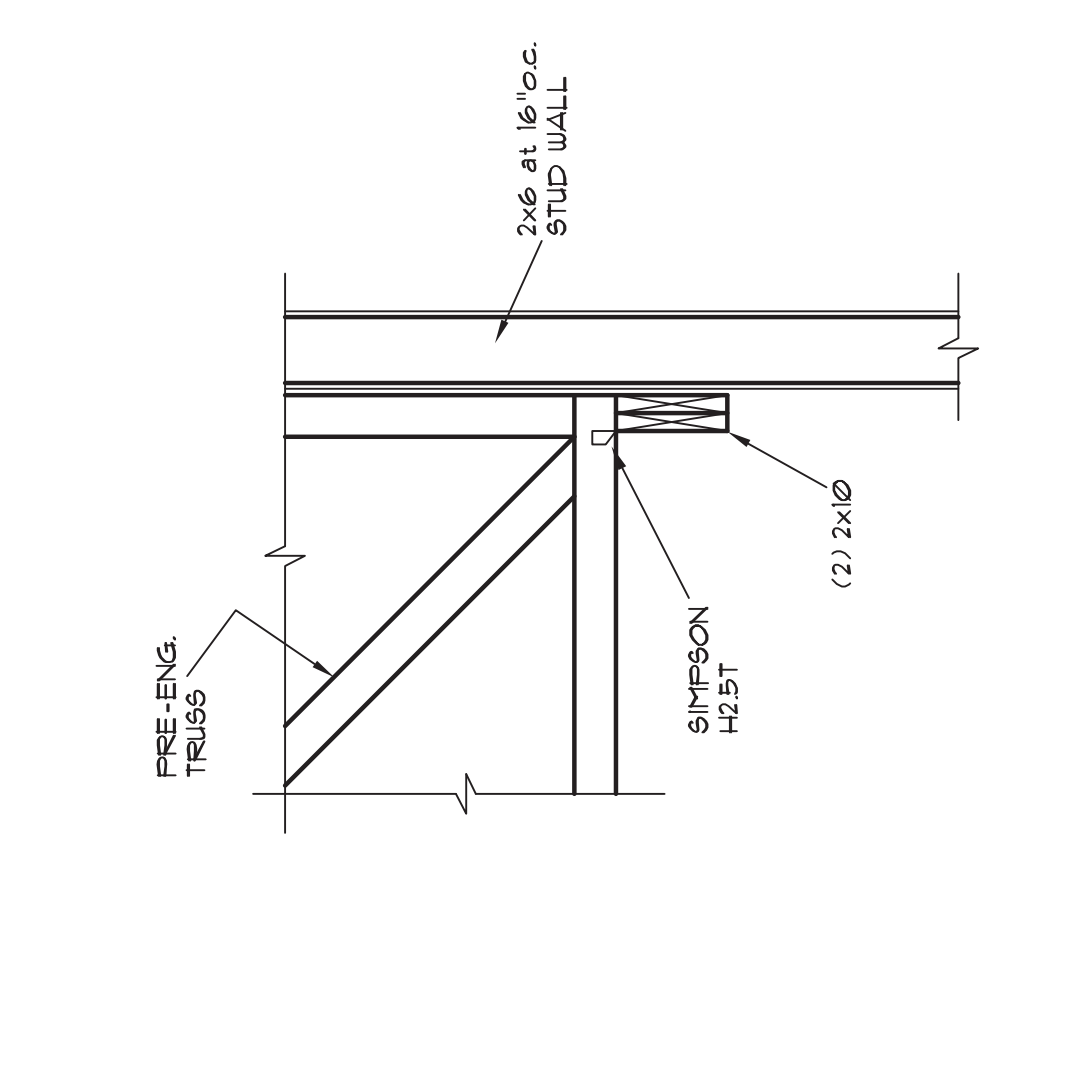
13 SCALE: 3/4"=1'-0"



14 SCALE: 3/4"=1'-0"

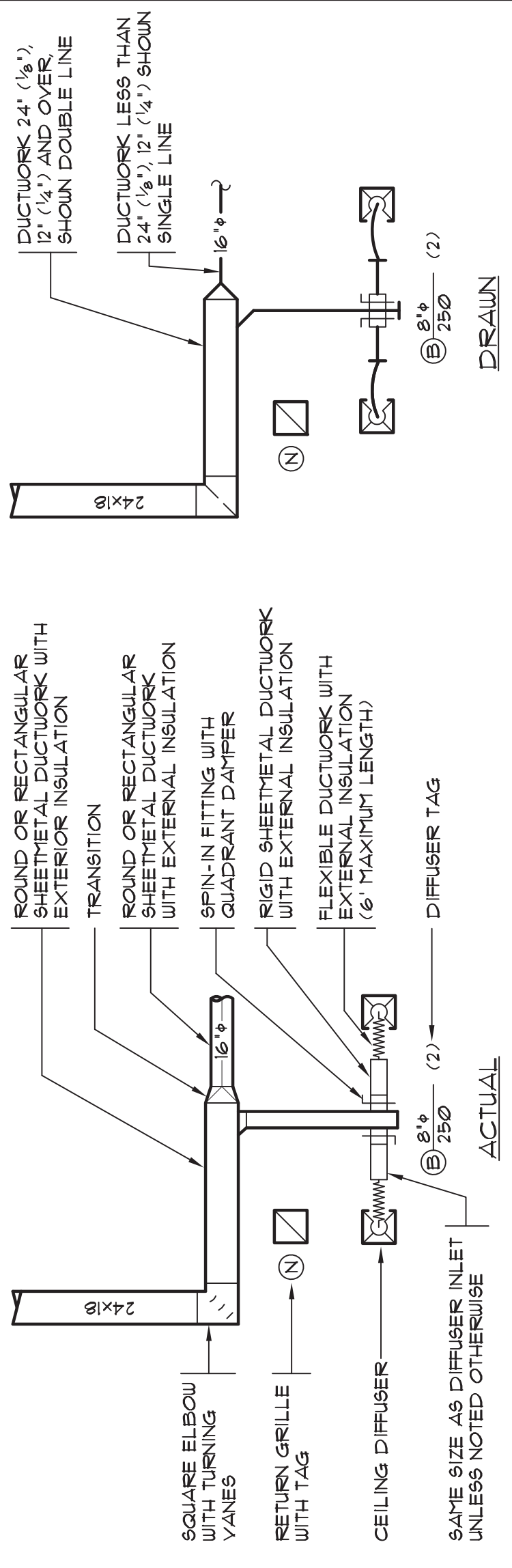


15 SCALE: 3/4"=1'-0"



16 SCALE: 3/4"=1'-0"

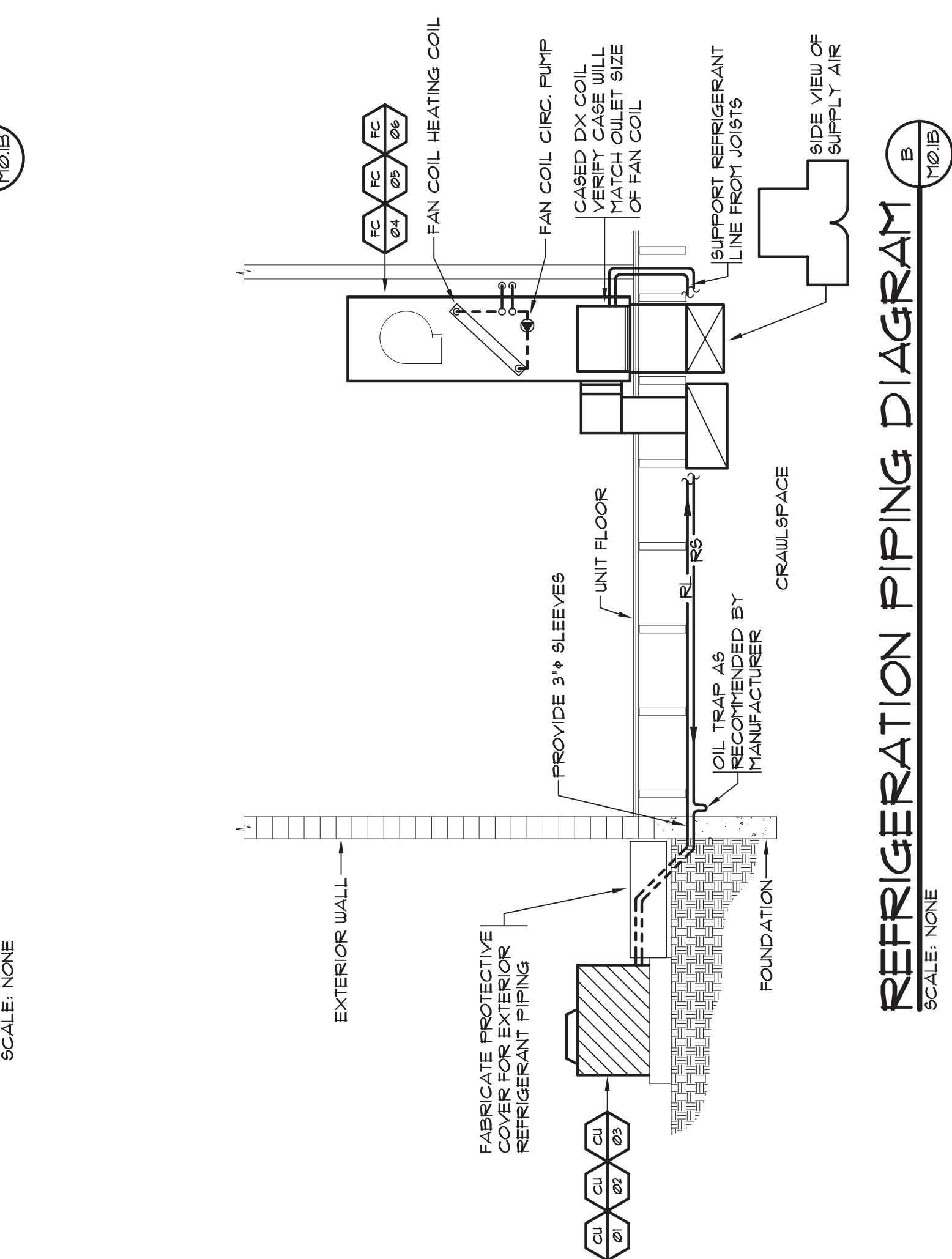
DUCTWORK LEGEND - CONSTANT VOLUME SYSTEMS



LEGEND (NOT ALL ITEMS WILL BE USED)

SYMBOL	DESCRIPTION
HUB	HOT WATER SUPPLY AND RETURN PIPING
CHUB	CHILLED WATER SUPPLY AND RETURN PIPING
CHS, CHR	UNION FLANGE BLIND FLANGE
SOV	SOV GATE VALVE BALL VALVE GLOBE VALVE BUTTERFLY VALVE
STR	CHECK VALVE STRAINER
PLV	LUBRICATED PLUS VALVE BALANCING VALVE
PEE	PIPE ELBOW DOWN PIPE TEE DOWN PIPE TEE UP PIPE ELBOW UP
PSL	PIPE ANCHOR PIPE GUIDE PIPE SLEEVE
FEJ	FLEX CONNECTION PIPE EXPANSION JOINT
SQD	SQUARE DUCT ELBOW WITH TURNING VANES
DOB	DOWN AND BACK UP UNDER BEAM OR OBSTACLE
SUA	SUPPLY AIR RETURN/OUTSIDE AIR AND EXHAUST AIR
ULN	DUCTWORK UNLINED AND DUCTWORK LINED
FLX	FLEXIBLE AND RIGID ROUND DUCT
DRD	DUCTWORK TO BE REMOVED
FRS	FIRE SMOKE COMBINATION FIRE AND SMOKE RADIATION SMOKE AND RADIATION DAMPERS
BAZ	BAZOMETRIC MOTORIZED AND MANUAL DAMPERS SMOKE DETECTOR
PSW	PRESSURE DIFFERENTIAL SWITCH
THS	THERMOSTAT HUMIDISTAT TEMPERATURE TRANSMITTER CARBON MONOXIDE OR CARBON DIOXIDE SENSOR
CON	WORK NOTE 1. REVISION NO. 1. DEPOLITON NOTE 1. POINT OF CONNECTION
SA, RA, EA, OA	SUPPLY AIR RETURN AIR EXHAUST AIR FLOW ARROWS
SECT	SECTION A ON SHEET M-1 DIAGRAM 1 ON SHEET M-1 RISER R-1 ON SHEET M-1
EQUIP	EQUIPMENT TAG

REFRIGERATION PIPING DIAGRAM



REFRIGERATION PIPING DIAGRAM



DRAWING INDEX

NUMBER	DRAWING TITLE	DATE	BY	CHKD	APP'D
MIB	DRAWING INDEX, GENERAL NOTES, LEGENDS AND SCHEDULES	02/23/2011	MM	MM	MM
MIB	FIRST AND SECOND FLOOR - BUILDING B - HVAC	02/23/2011	MM	MM	MM

DUCT SYSTEM NOTES

- ALL DUCTWORK UNLESS SPECIFICALLY INDICATED SHALL BE GALVANIZED SHEET METAL INSTALLED IN ACCORDANCE WITH THE SHADNA DUCT CONSTRUCTION STANDARDS. SEAL CLASS B. PRESURE SHOW ARE NET CLEAR INSIDE DIMENSIONS. ALLOWANCES MUST BE MADE FOR DUCT LINER WHERE CALLED FOR. DIMENSIONS SHOWN ARE NET CLEAR INSIDE DIMENSIONS.
- ALL SUPPLY DUCTWORK SHALL HAVE ALL JOINTS SEALED WITH "HARDCAST" OR EQUAL DUCT SEALER/MASTIC.
- ALL CONCEALED ROUND SUPPLY AIR DUCTS 12" AND SMALLER SHALL BE GALVANIZED SHEET METAL SNAP-LOCK. ROUND SUPPLY DUCT GREATER THAN 12" SHALL BE GALVANIZED SHEET METAL SPIRAL. PROVIDE 1" FIBERGLASS INSULATION UNLESS OTHERWISE SPECIFIED. INSULATED FLEXIBLE DUCT MAY BE USED FOR THE CONNECTION TO THE AIR OUTLET PROVIDED THE LENGTH OF THE FLEXIBLE DUCT DOES NOT EXCEED 6' LINEAR FEET.
- FACTORY MADE AIR DUCTS SHALL CONFORM TO UL 181 AND INCLUDE APPROPRIATE LABEL. FLEXIBLE DUCTWORK SHALL BE APPROVED CLASS 0 OR CLASS 1. LENGTH NOT TO EXCEED 6'-0".
- ALL BRANCH DUCT CONNECTIONS TO AIR OUTLETS AND AIR INLETS SHALL BE THE SAME SIZE AS THE DEVICE NECK UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- ALL ENVIRONMENTAL AIR EXHAUST DUCTS SHALL BE SEALED WITH "HARDCAST" OR EQUAL.
- DUCT HANGERS SHALL BE A MINIMUM 1/2" X 26 GAUGE GALVANIZED STEEL.
- PROVIDE SINGLE THICKNESS TURNING VANES IN ALL SQUARE AND RECTANGULAR ELBOWS IN SUPPLY, RETURN SYSTEMS.
- ALL FIRE DAMPERS SHALL BE LABELED FOR USE IN DYNAMIC SYSTEMS UNLESS OTHERWISE SPECIFIED.

GENERAL NOTES - HVAC

- RESOLVE ALL QUESTIONS OR CONFLICTS WITH ENGINEERS BEFORE ANY EQUIPMENT IS ORDERED. MATERIALS FABRICATED OR SYSTEMS INSTALLED.
- COORDINATE THE INSTALLATION OF MECHANICAL SYSTEMS WITH OTHER TRADES ESPECIALLY STRUCTURAL, PLUMBING, ELECTRICAL AND ARCHITECTURAL CEILING HEIGHTS.
- COORDINATE ALL PENETRATIONS THROUGH STRUCTURAL MEMBERS WITH THE GENERAL CONTRACTOR.
- COORDINATE AND VERIFY THAT ALL OPENINGS IN WALLS ABOVE CEILING / DOOR LOUVERS / DOOR UNDERCUTS ARE PROVIDED AS INDICATED ON THESE DRAWINGS.
- LEVEL ALL EQUIPMENT CURBS / BASES PRIOR TO INSTALLATION OF ANY EQUIPMENT. INSTALL FULL SIZE CONDENSATE DRAIN WITH TRAP SEAL ABOVE THE EQUIPMENT. PROVIDE THE REQUIRED PRESSURE FOR EACH COOLING COIL. ENSURE THAT THE TOP OF GROUND MOUNTED EQUIPMENT FADS ARE AT LEAST 3" ABOVE FINAL GRADE.
- ALL BUILDING EXHAUSTS VENTS TO BE MINIMUM 10'-0" FROM BUILDING VENTILATION INTAKES.
- SEAL ALL ROOF PENETRATIONS WATER TIGHT WITH SEALANT/CALKING OR SYSTEM COMPATIBLE WITH ROOFING.
- ALL PIPING PENETRATIONS THROUGH FLOORS SHALL BE SEALED WATER TIGHT BY GROUTING FEMTER GAP BETWEEN PIPE AND FLOOR APPROVED SEALANT.
- MATERIALS EXPOSED IN FLENUMS SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 100.
- BIRD SCREEN UNLESS OTHERWISE SPECIFIED SHALL BE 1/4" STEEL MESH.
- INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2005 INTERNATIONAL MECHANICAL CODE APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE AND APPLICABLE SECTIONS OF THE PUEBLO BUILDING CODE.

CONDENSING UNIT AND DX COOLING COIL SCHEDULE

NOTES: 1) PROVIDE REFRIGERATION PIPING ACCORDING TO MANUFACTURERS RECOMMENDATIONS. 2) SCROLL COMPRESSOR. 3) 1/8" BEER. 4) R-410A REFRIGERANT. 5) CURVED LOUVER PANELS. 6) LIQUID LINE 3/8". SUCTION LINE 3/4".

TAG	MANUFACTURER	CU MODEL	NOMINAL TONS	ELECTRICAL VOLTS/PH	MCA	MOP	WEIGHT (LBS)	SERVES	NOTES
CU-01	CARRIER	24ANB630A0003	15	230/1	11.1	20	84	FC-01, 04	1, 2, 3, 4, 5, 6, 7
CU-02	CARRIER	24ANB644A0003	2.0	230/1	11.5	25	86	FC-02, 05	1, 2, 3, 4, 5, 6, 7
CU-03	CARRIER	24ANB630A0003	2.5	230/1	18	25	83	FC-03, 06	1, 2, 3, 4, 5, 6, 7

EXHAUST FAN SCHEDULE

NOTES: 1) INCLUDES WHITE PLASTIC GRILLE. 2) MEETS ENERGY STAR RATINGS AND ASHRAE STD 62.2. 3) BACKDRAFT DAMPER. 4) INCLUDE MULTI-SPEED MODULE. 5) SWITCH WITH LIGHT SWITCH. 6) CONTINUOUS VENTILATION.

TAG	MANUF.	MODEL	CFM	ESP INCH WC	TYPE	DRIVE	BORES	WATTS	NOTES
EF-01	PANASONIC	FV-05-TV1K1	30/80	0.40	CEILING	DIRECT	5	25	1, 2, 3, 4, 5, 6

RANGE HOOD SCHEDULE

NOTES: 1) INCLUDE BACKDRAFT DAMPER. 2) 30" WIDTH. 3) 75 WATT LIGHT. 4) 2-SPEED. 5) OWNER TO CHOOSE COLOR.

TAG	MANUFACTURER	MODEL	TYPE	CFM	BORES	VOLTS/PH	MCA	NOTES
RH-01	BROAN	413000	TVA VENTED	150	6.0	120/1	2.5	1, 2, 3, 4, 5

FAN COIL SCHEDULE

NOTES: 1) LIFE FLOW CONFIGURATION. 2) DOWN FLOW CONFIGURATION. 3) DISPOSABLE FILTER. 4) 1/2" EC MOTOR ON BLOWER. 5) MICRO-PROCESSOR CIRCUIT BOARD. 6) FACTORY TESTED AND CALIBRATED. 7) FAN COILS TO BE INSTALLED IN ACCORDANCE WITH THE PUEBLO BUILDING CODE. 8) PROVIDE 1" FIBERGLASS INSULATION UNLESS OTHERWISE SPECIFIED. 9) PROGRAMMABLE THERMOSTAT. 10) PROVIDE 1" FIBERGLASS INSULATION UNLESS OTHERWISE SPECIFIED. 11) PROVIDE 1" FIBERGLASS INSULATION UNLESS OTHERWISE SPECIFIED. 12) REARRANGEMENT OF DX COIL REQUIRED. 13) INTEGRAL PUMP OPERATES FOR 60 SECONDS EVERY 6 HOURS.

TAG	MANUF.	MODEL	CFM	ESP INCH WC	HYDRONIC HEAT COIL MBH/OUT	BLOWER HP	CIRC. PUMP HP	INLET WATER TEMP	MCA	VOLTS/PH	MAX RISE	WEIGHT LBS	NOTES
FC-01	AIRMARK	GPT 18/15	650	0.3	30.5	3.5	1/2	1/40	14.0	4.1	18/1	15	100
FC-02	AIRMARK	GPT 24/25	800	0.3	35.3	3.5	1/2	1/40	14.0	4.1	18/1	15	100
FC-03	AIRMARK	GPT 30/31	1050	0.3	39.1	3.5	1/2	1/40	14.0	4.1	18/1	20	120
FC-04	AIRMARK	GPT 18/15	650	0.3	30.5	3.5	1/2	1/40	14.0	4.1	18/1	15	100
FC-05	AIRMARK	GPT 24/25	800	0.3	35.3	3.5	1/2	1/40	14.0	4.1	18/1	15	100
FC-06	AIRMARK	GPT 30/31	1050	0.3	39.1	3.5	1/2	1/40	14.0	4.1	18/1	20	120

ELECTRIC HEATER SCHEDULE

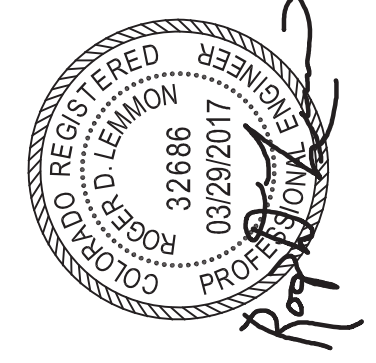
NOTES: 1) INTEGRAL THERMOSTAT. 2) 80% RECESSED MOUNT. 3) DISCONNECT SWITCH. 4) MOUNT 12" AFF. 5) HEAVY DUTY GRILLE.

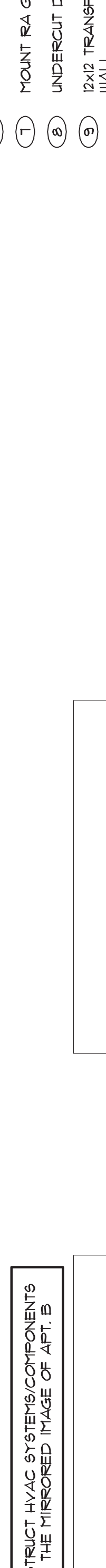
TAG	MANUFACTURER	MODEL	KW	BTU	VOLTS/PH	NOTES
EH-01	RATWALL	E3327D-RP	15	5100	120/1	1, 2, 3, 4

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

NOTES: 1) STANDARD FACTORY BROUN FINISH. 2) VOLUME DAMPER. 3) SEE DRAWINGS FOR NECK SIZE AND AIR QUANTITY.

TAG	MANUF.	MODEL	DESCRIPTION	NOTES
A	HART & COOLEY	4120/41	SUPPLY DIFFUSER, 9" STEEL CONSTRUCTION, FLOOR MOUNT	1, 2, 3
B	HART & COOLEY	650	RETURN GRILLE, 30" DEFLECTION, 1/2" SPACING, STEEL CONSTRUCTION, SIDEWALL MOUNT	1, 3





2nd FLOOR - BLDG B - HVAC
 SCALE: 1/4" = 1'-0"



1st FLOOR - BLDG B - HVAC
 SCALE: 1/4" = 1'-0"

CONSTRUCT HVAC SYSTEMS/COMPONENTS AS THE MIRRORRED IMAGE OF APT. B

CONSTRUCT HVAC SYSTEMS/COMPONENTS AS THE MIRRORRED IMAGE OF APT. D

CONSTRUCT HVAC SYSTEMS/COMPONENTS AS THE MIRRORRED IMAGE OF APT. B

CONSTRUCT HVAC SYSTEMS/COMPONENTS AS THE MIRRORRED IMAGE OF APT. D

LEGEND (NOT ALL ITEMS WILL BE USED)

ABBRS	SYMBOL	DESCRIPTION
SU, CU, NP	—SU— — — — — NP—	SOFT, COLD AND NON-POTABLE WATER PIPING
F	—F—	FIRE PROTECTION PIPING
HJ, HJC	—(HJPF)— — — — — (HJPF)—	HOT WATER AND HOT WATER CIRCULATING PIPING
G	—G (5 PSIG)—	PRESSURE GAS PIPING
V, FOV	—V— — — — — FOV—	VENT AND FUEL OIL VENT PIPING
SS, GSS	—SS— — — — — GSS—	SANITARY SEWER AND GREASE SANITARY SEWER PIPING
SD, OSD	—SD— — — — — OSD—	STORM DRAIN AND OVERFLOW STORM DRAIN PIPING
RD, ORD	—RD— — — — — ORD—	ROOF DRAIN LEADER, OVERFLOW DRAIN LEADER
FCO, WCO, COTG	—FCO— — — — — WCO— — — — — COTG—	FLOOR CLEANOUT, WALL CLEANOUT AND CLEANOUT TO GRADE PIPING TO BE REMOVED
	—U—	UNION FLANGE BLIND FLANGE
	—G—	BOY GATE VALVE BALL VALVE, GLOBE VALVE, BUTTERFLY VALVE
	—S—	CHECK VALVE STRAINER
	—C—	PLUG VALVE CALIBRATED AND DYNAMIC BALANCING VALVES
	—P—	LUBRICATED PLUG VALVE
FRV	—FRV—	PRESSURE REDUCING VALVE
	—T—	THREE WAY CONTROL VALVE, SOLENOID AND TWO-WAY / MOTORIZED CONTROL VALVE
RFBP	—RFBP—	REDUCED PRESSURE BACKFLOW PREVENTER
	—A—	ANGLE RELIEF VALVE, GAUGE AND COOK THERMOMETER
	—T—	TEST PLUG
AAV / MAV, HEV	—AAV / MAV, HEV—	HOSE END DRAIN VALVE, AUTOMATIC AIR / MANUAL AIR VENT
HB, UH	—HB, UH—	HOSE/BIBB FROSTPROOF WALL HYDRANT, DOWN SPROUT NOZZLE
	—E—	PIPE ELBOW DOWN, PIPE TEE DOWN, PIPE TEE UP, PIPE ELBOW UP
	—X—	PIPE ANCHOR, PIPE GUIDE, PIPE SLEEVE
VTR	—VTR—	FLEX CONNECTION, PIPE EXPANSION JOINT
I.E.	—I.E.—	VENT THRU ROOF
E, R, N	—E, R, N—	INVERT ELEVATION
	—(E), (R), (N)—	EXISTING, RELOCATED AND NEW
	—(E), (R), (N)—	WORK NOTE 1, REVISION NO. 1, DEMOLITION NOTE 1, POINT OF CONNECTION
	—(E), (R), (N)—	SECTION A ON SHEET H-1 DIAGRAM 1 ON SHEET H-1 RISER R-1 ON SHEET H-1
	—(E), (R), (N)—	FIXTURE/EQUIPMENT TYPE
	—(E), (R), (N)—	FIXTURE/EQUIPMENT NUMBER

DRAWING INDEX

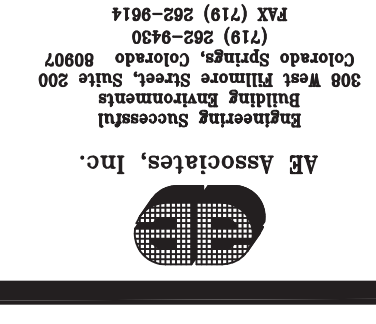
NUMBER	DRAWING TITLE	DATE	BY	CHK	REV	REVISIONS
P01B	DRAWING INDEX, GENERAL NOTES AND LEGENDS	02/23/2011				● ISSUED FOR CONSTRUCTION ○ ISSUED FOR REFERENCE ONLY, NOT FOR CONSTRUCTION
P02B	SCHEDULES AND DIAGRAMS	02/23/2011				
P1B	CRAILL SPACE FLOOR - BUILDING B - PLUMBING	02/23/2011				
P2B	FIRST AND SECOND FLOORS - BUILDING B - PLUMBING	02/23/2011				

GENERAL NOTES - PLUMBING

- COORDINATE THE INSTALLATION OF PLUMBING SYSTEMS WITH OTHER TRADES. OFFSET PIPING AS NECESSARY TO AVOID CONFLICTS WITH OTHER WORK AND STRUCTURAL ABOVE CEILING AND/OR BELOW FLOOR.
- VERIFY EXACT LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES AT SITE PRIOR TO INSTALLATION OF ANY PIPING SYSTEMS.
- RESOLVE ALL QUESTIONS OR CONFLICTS WITH THE ENGINEER BEFORE ANY EQUIPMENT IS ORDERED. MATERIALS FABRICATED OR SYSTEMS INSTALLED, REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION OF THE PLUMBING FIXTURES.
- SEAL ROOF PENETRATIONS WATER-TIGHT WITH ROOF SYSTEM COMPATIBLE WITH ROOFING.
- ALL PIPING PENETRATIONS THROUGH FLOORS SHALL BE SEALED WATER TIGHT BY GROUTING PERIMETER GAP BETWEEN PIPE AND FLOOR STRUCTURE, OR BY USING APPROVED UL SLEEVE AND SEALER SYSTEM. PENETRATIONS OF RATED WALLS SHALL USE SLEEVE WITH UL APPROVED FIRE SEALANT. DOMESTIC WATER PIPING LOCATED IN CRAWL SPACE OF BUILDINGS SHALL BE TYPE "L" HARD COPPER WITH UROUGHT COPPER FITTINGS. NO LEAD SOLDER OR PROGRESS TO BE USED FOR FITTINGS THROUGHOUT.
- PIPING WITHIN UNIT CONNECTING FIXTURES FROM POINT IN MECHANICAL CLOSETS INDICATED ON PLANS, SHALL BE CROSS LINKED FLEX PIPING WITH SPECIFIC MANUFACTURER FITTINGS.
- INSULATE ALL DOMESTIC WATER PIPING PER INSULATION SCHEDULES SHOWN IN PROJECT SPECIFICATIONS.
- WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC DWV WITH SOLVENT CEMENTED FITTINGS. SLOPE ALL WASTE PIPING AT 1/4" PER FOOT MINIMUM UNLESS OTHERWISE NOTED. PVC PIPING SHALL NOT BE USED IN RETURN AIR PLUMBING.
- MAINTAIN THE UNIFORM SLOPE SHOWN ON THE PLANS FOR THE SANITARY SEWER, STORM DRAIN AND CONDENSATE DRAIN PIPING SYSTEMS.
- SUPPORT ALL CAST IRON SOIL PIPE, PVC PIPING, COPPER PIPE AND STEEL PIPE RISERS AT EVERY STORY MINIMUM.
- ALL SANITARY VENTS SHALL BE LOCATED MINIMUM 10'-0" FROM BUILDING OUTSIDE AIR INTAKES.
- INSTALLATION SHALL CONFORM TO 2009 INTERNATIONAL PLUMBING CODE, APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE AND APPLICABLE SECTIONS OF THE PUEBLO BUILDING CODE.

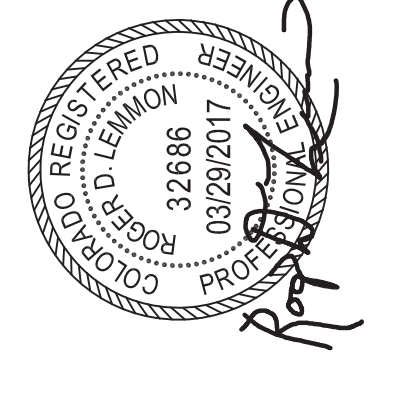
FIRE PROTECTION NOTES

- PROVIDE A NEW HYDRAULICALLY CALCULATED FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH THE LATEST EDITIONS OF UBC, IFC, AND NFPA 13. COVERAGES WILL INCLUDE LIVING SPACES, MECHANICAL SPACES AND ATTIC SPACES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE SYSTEM AND SHALL FURNISH TO THE ARCHITECT ALL DESIGN CALCULATIONS, HYDRAULIC ANALYSIS, AND SCHEDULES FOR THE SYSTEM, AND CATALOG DATA OF ALL EQUIPMENT AS PART OF REQUIRED SUBMITTAL DATA IN SPECIFICATIONS. REFER TO SHEETS P3 AND P4.
- SHOP DRAWINGS SHALL INDICATE THE LOCATION OF ALL SPRINKLER HEADS AND PIPING COORDINATED WITH THE LOCATION OF ALL STRUCTURAL MEMBERS. HVAC EQUIPMENT, LIGHT FIXTURES, CEILING DIFFUSERS, REGISTERS AND PIPING.
- THE LAYOUT, SUPERVISION AND INSTALLATION OF FIRE PROTECTION SYSTEMS IS A TRADE IN ITSELF AND SHALL BE PERFORMED ONLY BY FULLY SKILLED EXPERIENCED AND RESPONSIBLE PARTIES. THE PROJECTIVE FIRE PROTECTION CONTRACTOR SHALL BE REQUIRED TO SHOW TO THE SATISFACTION OF THE ARCHITECT, SUCH SKILL, EXPERIENCE AND RESPONSIBILITY.
- PERFORM WORK IN STRICT COMPLIANCE WITH THESE SPECIFICATIONS AND DRAWINGS. THE REQUIREMENTS OF THE STATE CERTIFIED SUPPRESSION INSPECTOR AND ALL APPLICABLE CODES, ORDINANCES, STANDARDS, AND STATUTES IN EFFECT AT THE BUILDING SITE.
- ADHERE TO THE MOST RECENT EDITION OF THE FOLLOWING PUBLICATIONS, TOGETHER WITH THE LATEST REVISIONS, SUPPLEMENTS, AND AMENDMENTS THERETO:
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARD 13.
 - INTERNATIONAL FIRE CODE (IFC).
 - CITY OF PUEBLO FIRE AUTHORITY.
- OBTAIN AND PAY FOR ALL NECESSARY PERMITS PRIOR TO STARTING WORK. OBTAIN CERTIFICATES, APPROVALS, AND/OR ACCEPTANCES OF ALL INTERESTED PARTIES AND AUTHORITIES HAVING JURISDICTION.
- PIPINGS TO BE IRON, STEEL OR CPVC. IN SIZES AND GAUGES APPROVED BY NFPA. FOR USE IN FIRE PROTECTION SYSTEMS. FITTINGS SHALL BE APPROVED FOR USE WITH THE INSTALLED SPRINKLER PIPING WITH A MINIMUM WORKING PRESSURE OF THE PSI.
- NEVER OVERTIGHTEN AS ALL AUTHORITIES HAVING JURISDICTION, NO LESS THAN SEVEN (7) HOURS PRIOR TO FINAL TESTING. DO NOT COMPLETE CONNECTIONS IN AN ATTEMPT TO MEET A SCHEDULE. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES. PROVIDE ALL NECESSARY PERSONNEL, CORRECT ALL DEFECTS, DEFICIENCIES, REPAIR ALL LEAKS AND RE-TEST AS REQUIRED.



DEVELOPED BY THE HOUSING AUTHORITY OF PUEBLO
 PROJECT No. FB-7-524-PA0
 ACERO AVE. and SPRAGUE AVE., PUEBLO, COLORADO 81004

DATE	02/23/2011
DRAWN	
CAD	
PROJECT	HOUSING AUTHORITY OF PUEBLO
NO. OF SHEETS	82/82
REVISIONS:	



PLUMBING EQUIPMENT SCHEDULE

TAG	EQUIPMENT DESCRIPTION
PLUMBING	
FCO	FLOOR CLEAN OUT. 8" WITH FIGURE 4021 STANDARD FLOOR CLEANOUT WITH SCORATED ROUND NICKEL BRONZE TOP.
WCO	WALL CLEAN OUT. 8" WITH FIGURE 4132 WITH CLEANOUT TEE. BRONZE THREADED PLUG, STAINLESS STEEL WALL COVER AND CENTER SCREW.
CO	PLUG CLEAN OUT. END OF LINE OR TURN WITH CLEANOUT ADAPTER AND CLEANOUT PLUG WITH RAISED NUT.
DW-1	DISHWASHER. ADA ACCESSIBLE GE BUILT-IN DISHWASHER MODEL NUMBER GSDT690JWW. 24" WHITE COLOR ENERGY STAR COMPLIANT. DISHWASHER WITH DRAIN HOSE AND ELECTRICAL CONNECTION. WATER SUPPLY BY CONTRACTOR (ALTERNATE SUBSTITUTES TO BE APPROVED BY OWNERS).
DW-2	DISHWASHER. GE BUILT-IN DISHWASHER MODEL NUMBER GSDT690JWW. 24" WHITE COLOR ENERGY STAR COMPLIANT. DISHWASHER WITH DRAIN HOSE AND ELECTRICAL CONNECTION. WATER SUPPLY BY CONTRACTOR (ALTERNATE SUBSTITUTES TO BE APPROVED BY OWNERS).
FD-1	EQUIPMENT ROOM DRAIN. 8" WITH FIGURE 2109 WITH SEDIMENT BUCKET. SQUARE NICKEL BRONZE 1/2" GATE TOP. PROVIDE WITH TRAP SEAL.
FS-1	FLOOR SINK. 8" WITH FIGURE 3190 CAST IRON FLANGED RECEPTOR WITH ACID RESISTANT INTERIOR WITH SEDIMENT BUCKET. 1/2" NICKEL BRONZE GRATE. 1/2" TOP WITH DEEP SEAL TRAP (WATER ENTRY ROOMS). PROVIDE WITH TRAP SEAL.
FUH-1	WALL HYDRANT. WOODFORD MODEL 61. FREEZELESS WALL HYDRANT, AUTOMATIC DRAWING WITH HYDRANT, AUTOMATIC DRAWING WITH NOZZLE AND LOOSE TEE KEY.
FUH-2	WALL HYDRANT. WOODFORD MODEL 32. FREEZELESS WALL HYDRANT, AUTOMATIC DRAWING WITH HYDRANT, AUTOMATIC DRAWING WITH VACUUM BREAKER. 1" HOSE THREAD AND LOOSE TEE KEY.
FET-1	POTABLE EXPANSION TANK. ANTROL THER-X-TROL 87-12. 4.5 GALLON ACCEPTANCE FACTOR. 4.4 GALLON TOTAL VOLUME. 50 PSIG MIN. AND 150 PSIG MAX. OPERATING PRESSURE. FDA APPROVED. OPERATING WEIGHT 19 LB. 3/4" CW.
BA-1	SHOCK ABSORBER. 8" WITH FIGURE 8009. PROVIDE WITH ISOLATION VALVE.
WB-1	WALL BOX FOR WASHING MACHINE WATER/DRAIN CONNECTIONS. GATNEY MODEL 38959. 1/4" WITH WATTS 2" SINGLE LEVER SUPPLY VALVES. 2" DRAIN.
GD-1	FOOD WASTE DISPOSER. IN-SINK-ERATOR BADGER 5. CONTINUOUS FEED. GALVANIZED STEEL. 1/2 HP. 18 V.
WDF-1	WASHER SAFETY DRAIN PAN. CAMCO MODEL 20792. 20"x32". WHITE PLASTIC PAN 2 1/2" DEEP WITH 1" BOTTOM DRAIN CONNECTION. DRAIN CONNECTION IS FIELD CUT/INSTALLED.

TANKLESS WATER HEATER SCHEDULE

NOTES: 1) CONDENSING. 2) PROVIDE WITH HEAT TRAP SETTINGS AND VALVES. 3) PROVIDE VENTING SYSTEM AND CONCENTRIC VENT ADAPTOR WITH TERMINATION. 4) PROVIDE PRIORITY DRAIN TO DOMESTIC HOT WATER SYSTEM.

TAG	SERIES	MANUF.	MODEL	MIN/MAX INPUT MBH	EFFICIENCY	OUTLET TEMP-F	GPM @ 120°F	ELECTRICAL VOLTS/PH	WEIGHT LBS	NOTES
WH-1	1 BR UNIT	RUC601	RUC601	19.2 / 19.2	96%	120	4.2	120/1	8	1, 2, 3, 4
WH-2	2 BR UNIT	RUC901	RUC901	19.2 / 19.0	96%	120	9.0	120/1	8	1, 2, 3, 4
WH-3	3 BR UNIT	RUC361	RUC361	19.2 / 19.0	98%	120	9.5	120/1	8	1, 2, 3, 4

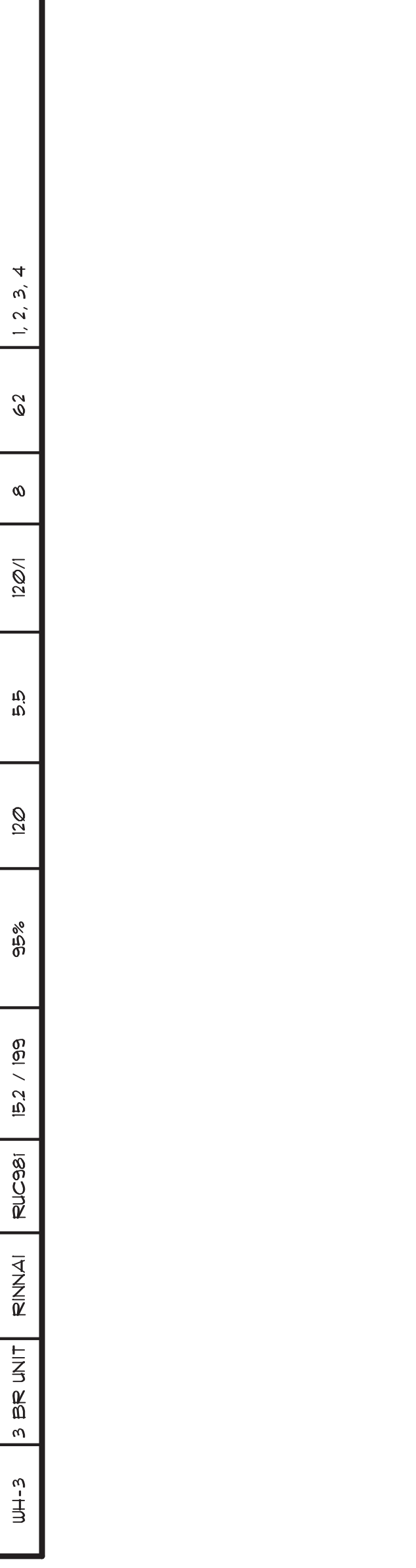
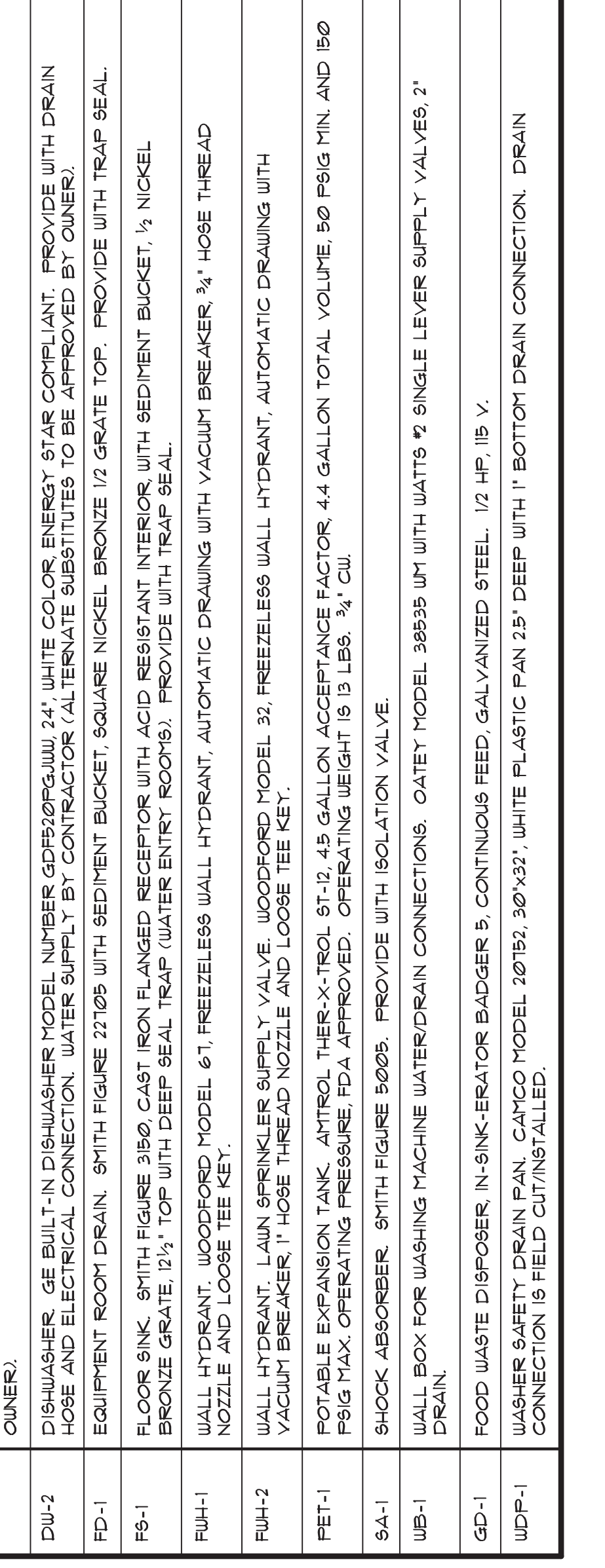
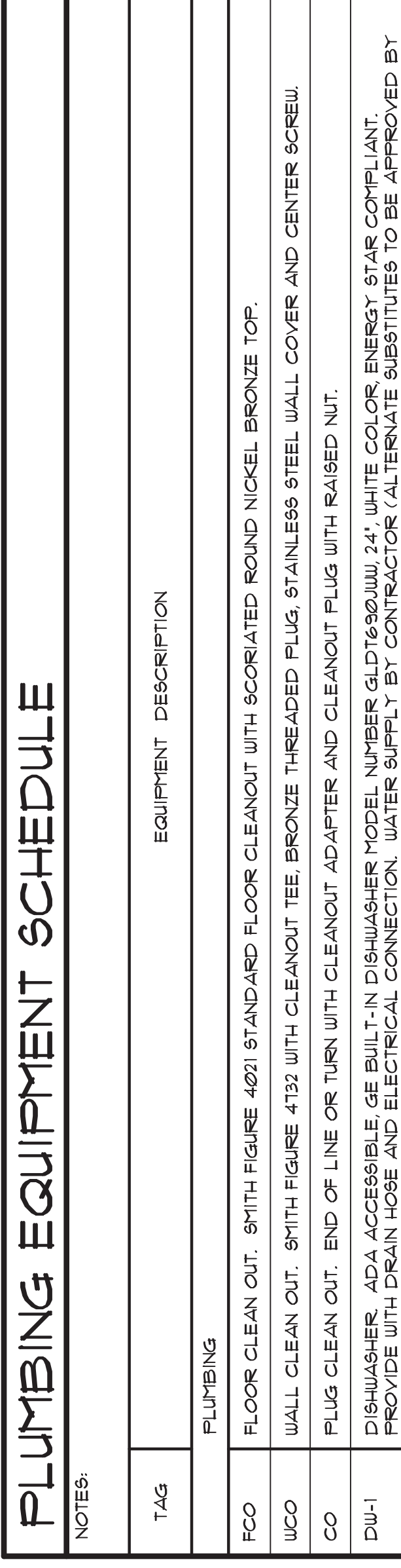
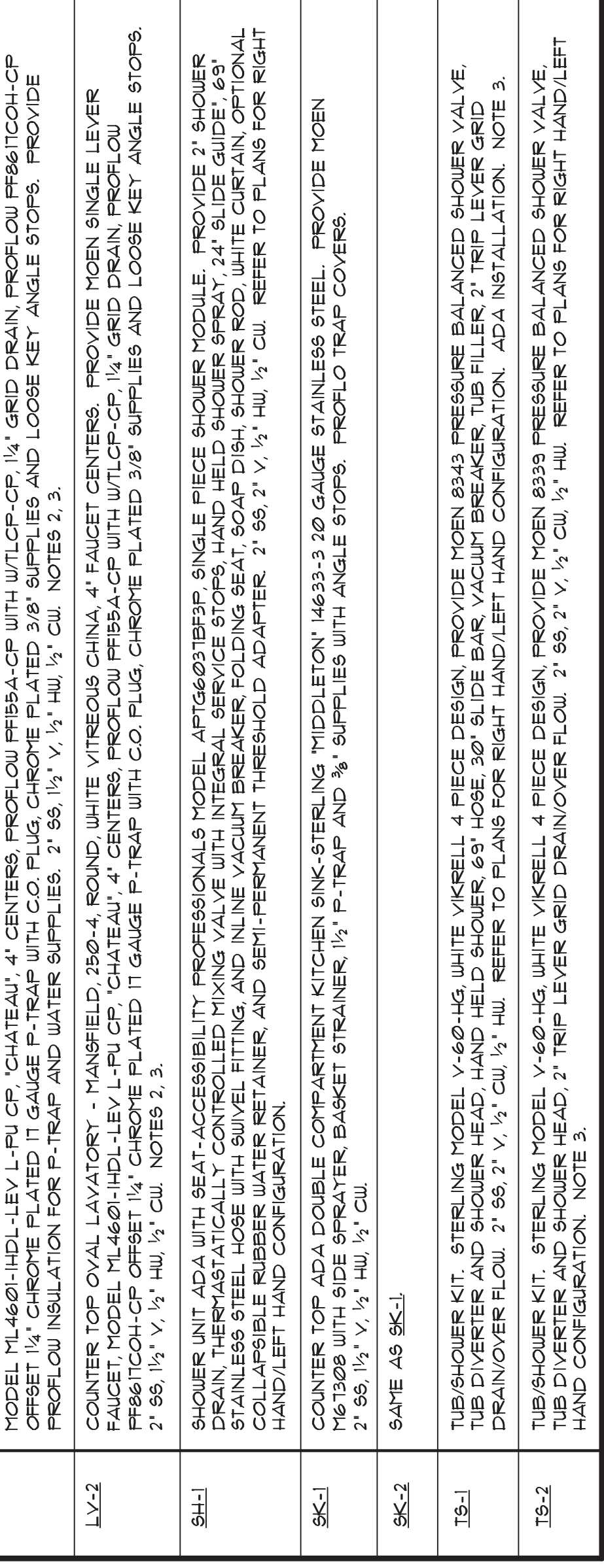
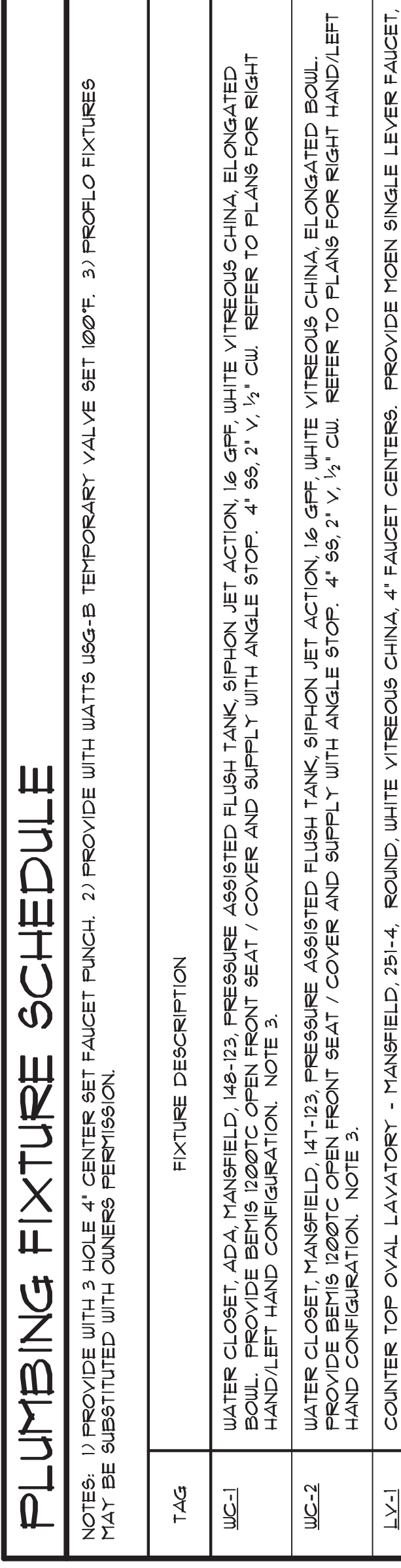
PLUMBING FIXTURE SCHEDULE

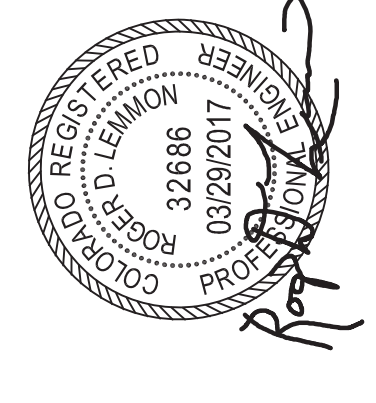
NOTES: 1) PROVIDE WITH 3/4" HOLE 4" CENTER SET FAUCET PUNCH. 2) PROVIDE WITH WATTS USG-B TEMPORARY VALVE SET 100°F. 3) PROFLO FIXTURES MAY BE SUBSTITUTED WITH OWNERS PERMISSION.

TAG	FIXTURE DESCRIPTION
WC-1	WATER CLOSET. ADA. MANFIELD. 148-123. PRESSURE ASSISTED FLUSH TANK. SIFON JET ACTION. 1/6 GPF. WHITE VITREOUS CHINA. ELONGATED BOWL. PROVIDE BEHNS 10207C OPEN FRONT SEAT / COVER AND SUPPLY WITH ANGLE STOP. 2" 85.2" V. 1/2" CW. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION. NOTE 3.
WC-2	WATER CLOSET. MANFIELD. 147-123. PRESSURE ASSISTED FLUSH TANK. SIFON JET ACTION. 1/6 GPF. WHITE VITREOUS CHINA. ELONGATED BOWL. PROVIDE BEHNS 10207C OPEN FRONT SEAT / COVER AND SUPPLY WITH ANGLE STOP. 2" 85.2" V. 1/2" CW. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION. NOTE 3.
LV-1	CONVERTER FOR OVAL LAVATORY. MANFIELD. 291-1. ROUND. WHITE VITREOUS CHINA. 4" FAUCET CENTERS. PROVIDE MOEN SINGLE LEVER FAUCET. MODEL M4460-1HD-LV-L-PL-CP. "CHATEAU". 4" CENTERS. PROFLO PFB3A-CP WITH W/PLCP-CP. 1/4" GRID DRAIN. PROFLO PFB3A-CP. PROFLO INSULATION FOR P-TRAP AND WATER SUPPLIES. 2" 85.1/2" V. 1/2" CW. NOTES 2, 3.
LV-2	COUNTER TOP OVAL LAVATORY. MANFIELD. 290-4. ROUND. WHITE VITREOUS CHINA. 4" FAUCET CENTERS. PROVIDE MOEN SINGLE LEVER FAUCET. MODEL M4460-1HD-LV-L-PL-CP. "CHATEAU". 4" CENTERS. PROFLO PFB3A-CP WITH W/PLCP-CP. 1/4" GRID DRAIN. PROFLO PFB3A-CP. PROFLO INSULATION FOR P-TRAP AND WATER SUPPLIES. 2" 85.1/2" V. 1/2" CW. NOTES 2, 3.
SH-1	SHOWER UNIT ADA WITH SEAT-ACCESSIBILITY. PROFESSIONALS MODEL APT6602103P. SINGLE PIECE SHOWER MODULE. PROVIDE 2" SHOWER TUB DIVIDER AND SHOWER HEAD. 1/4" W/1/2" CW. 1/2" HUI. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION. ADA INSTALLATION. NOTE 3. STAINLESS STEEL HOSE WITH SWIVEL FITTING AND IN LINE VACUUM BREAKER. FOLD AS SEAT. SOAP DISP. SHOWER ROD. WHITE CURTAIN. OPTIONAL COLLAPSIBLE RUBBER WATER RETAINER. AND BEHI-PERMANENT THRESHOLD ADAPTER. 2" 85.2" V. 1/2" HUI. 1/2" CW. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION.
SK-1	COUNTER TOP ADA DOUBLE COMPARTMENT KITCHEN SINK-STERLING MIDDLETON 14633-3. 20 GAUGE STAINLESS STEEL. PROVIDE MOEN M612068 WITH SIDE SPRAYER. BASKET STRAINER. 1/2" P-TRAP AND 1/4" SUPPLIES WITH ANGLE STOP. PROFLO TRAP COVERS. 2" 85.1/2" V. 1/2" HUI. 1/2" CW.
SK-2	SAITE AS SK-1.
TS-1	TUB/SHOWER KIT. STERLING MODEL V-60-HG. WHITE VIKRELL. 4" PIECE DESIGN. PROVIDE MOEN 8343 PRESSURE BALANCED SHOWER VALVE. TUB DIVIDER AND SHOWER HEAD. 1/4" W/1/2" CW. 1/2" HUI. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION. ADA INSTALLATION. NOTE 3. DRAINOUT PANEL. 2" 85.2" V. 1/2" CW. 1/2" HUI. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION. ADA INSTALLATION. NOTE 3.
TS-2	TUB/SHOWER KIT. STERLING MODEL V-60-HG. WHITE VIKRELL. 4" PIECE DESIGN. PROVIDE MOEN 8333 PRESSURE BALANCED SHOWER VALVE. TUB DIVIDER AND SHOWER HEAD. 1/4" W/1/2" CW. 1/2" HUI. REFER TO PLANS FOR RIGHT HAND/LEFT HAND CONFIGURATION. ADA INSTALLATION. NOTE 3.

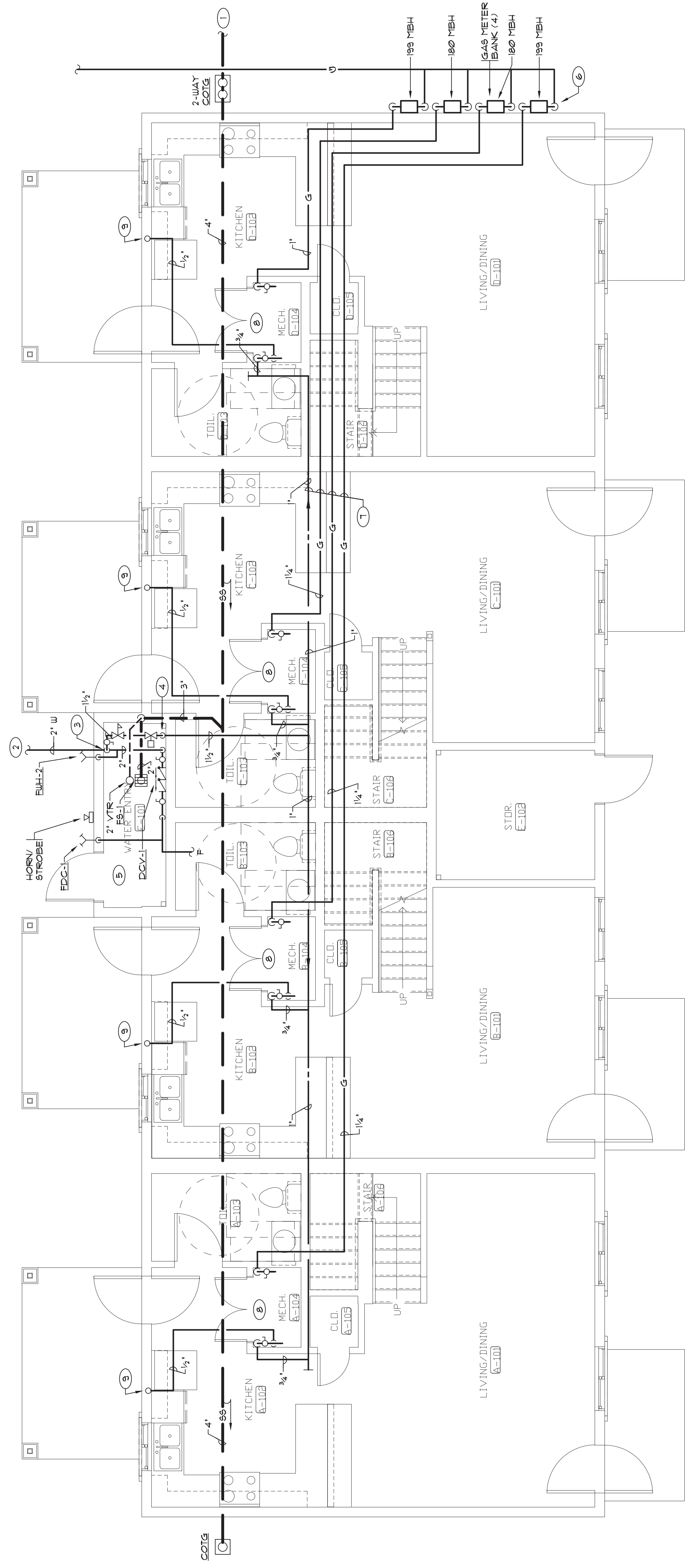
FIRE PROTECTION EQUIPMENT SCHEDULE

TAG	FIXTURE DESCRIPTION
FDC-1	FIRE DEPT. CONNECTION. CROKER 2 1/2" x 2 1/2" CAST BRASS 2-WAY INLET BODY WITH DOUBLE CLAMPERS AND PIN LUG SUIVELS. FLUGS AUTO SPRINKLER BRANDING. THREADED TO MATCH PUEBLO FIRE DEPT. REQUIREMENTS.
DCV-1	DOUBLE CHECK VALVE ASSEMBLY. TERC0 MODEL 890 7" BRONZE BODY. UL LISTED COMPLETE WITH BALL VALVES AND CHECK VALVE ASSEMBLY WITH FOUR VANDAL RESISTANT FULL PORT VALVE TESTCOCKS. FACTORY TESTED ASSEMBLED AND TESTED.

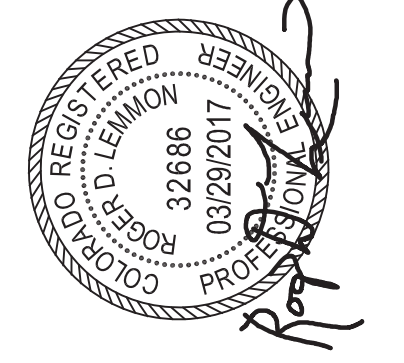




- WORK NOTES (THIS SHEET ONLY)**
- REFER TO CIVIL PLANS TO COORDINATE THE ACTUAL LOCATION OF THE SANITARY FLOOR DRAINAGE IN THIS BUILDING. THE SANITARY FLOOR DRAINAGE LOCATION MAY NOT BE THE SAME FOR EACH OF THIS BUILDING TYPE.
 - REFER TO CIVIL FOR CONTINUATION.
 - FIRE/DEBASTIC WATER ENTRIES WATER ENTRY ROOF FROST BELOW GRADE.
 - DOMESTIC WATER SERVICE DOWN AND INTO CRAWL SPACE. DOMESTIC WATER PIPING IN CRAWL SPACE TO BE TYPE "L" COPPER.
 - WATER AND FIRE RISERS LOCATED IN WATER ENTRY ROOM. SEE RISER DIAGRAMS ON SHEET P02.1B.
 - INDIVIDUAL GAS METERS FOR EACH UNIT. SERVICE TO METERS BY UTILITY CONTRACTOR.
 - GAS AND WATER BRINGS IN CRAWL SPACE. COORDINATE WITH HVAC CONTRACTOR.
 - GAS AND WATER TO BE RUN INTO UNIT MECHANICAL ROOM. GAS TO BE RUN INTO UNIT MECHANICAL ROOM. GAS TO BE RUN BACK TO CRAWL SPACE FOR WALL HYDRANT.
 - 1/2" UP TO RHH-1.

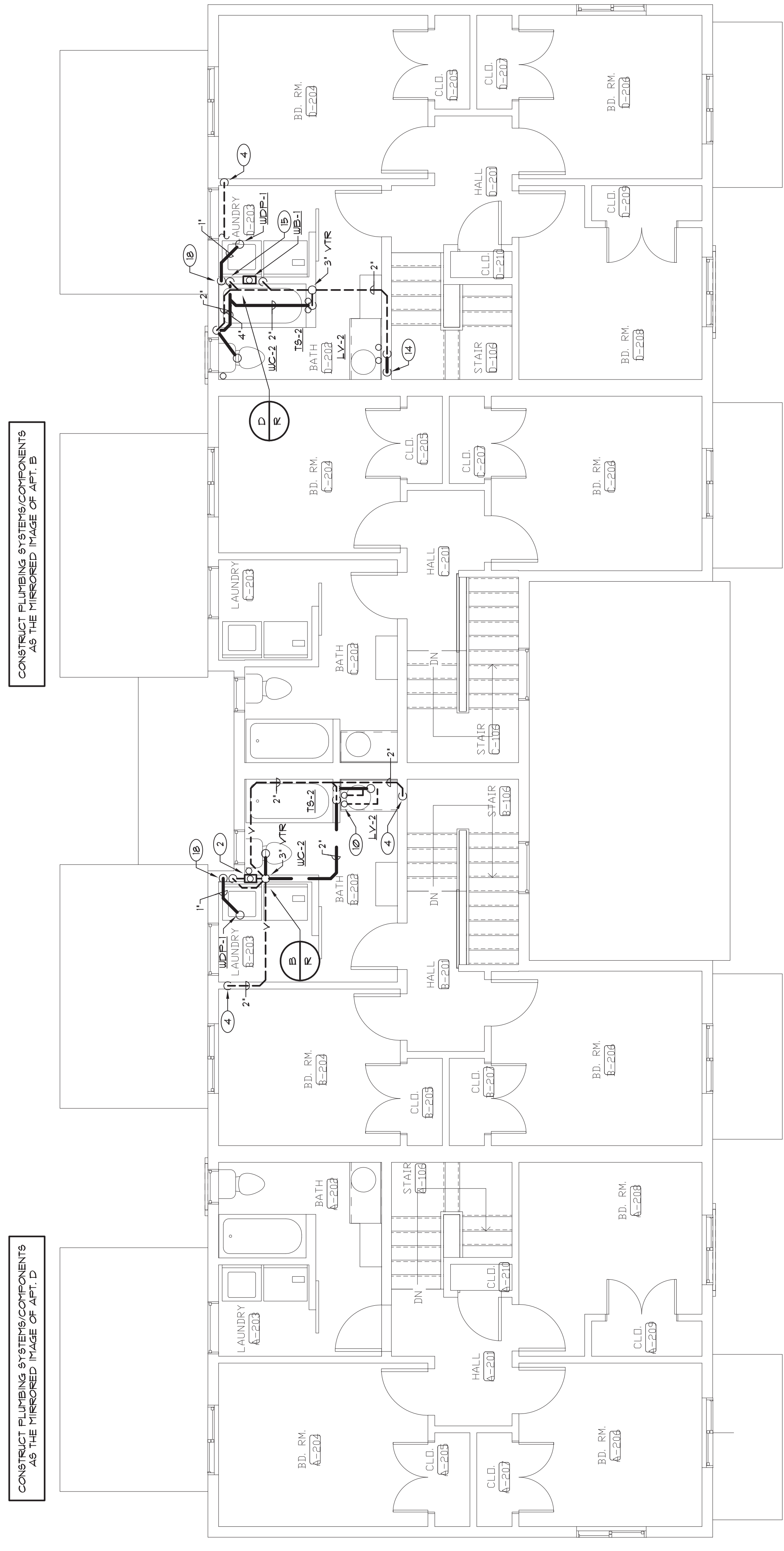


CRAWL SPACE FLOOR - BLDG B - PLUMBING
SCALE: 1/4" = 1'-0"

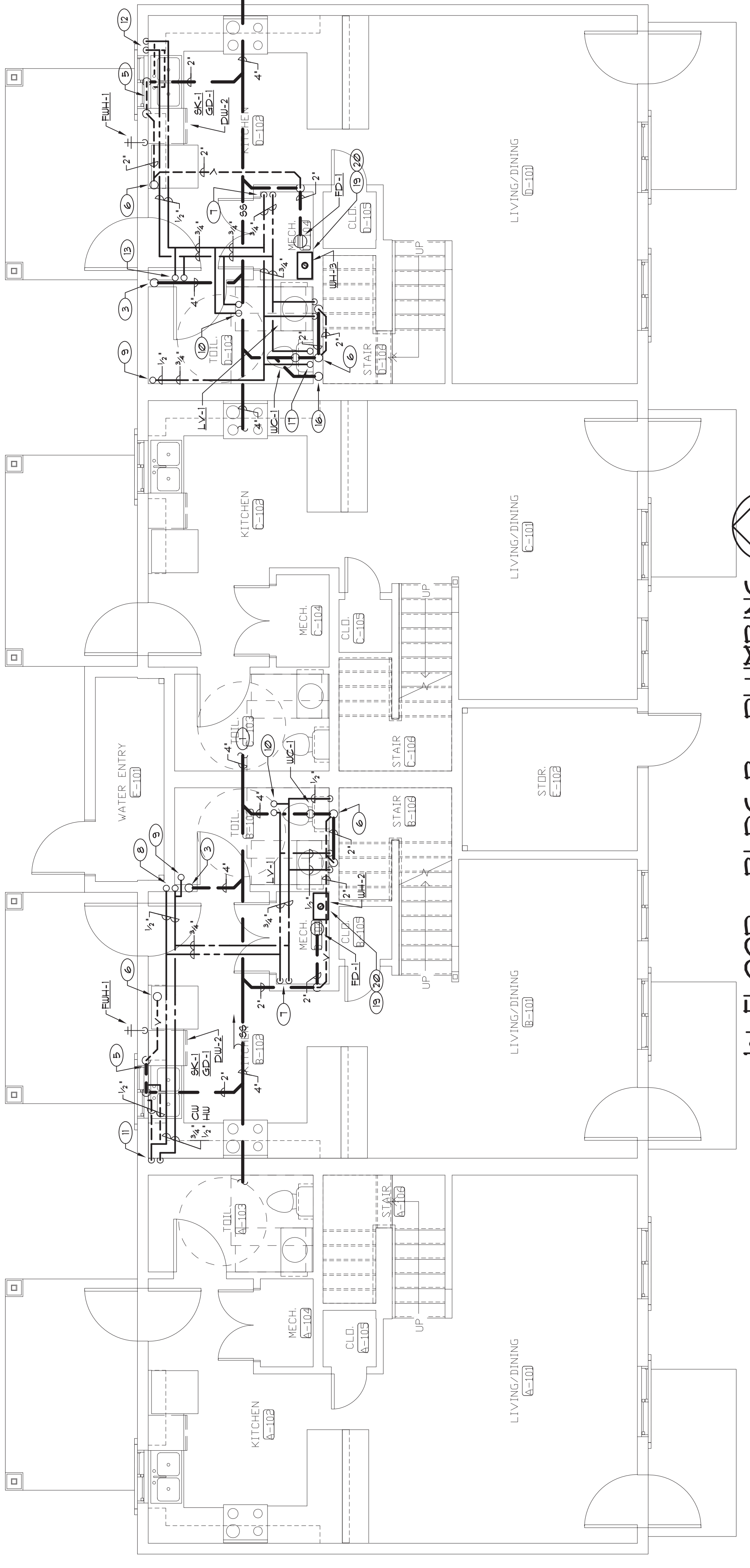


WORK NOTES (THIS SHEET ONLY)

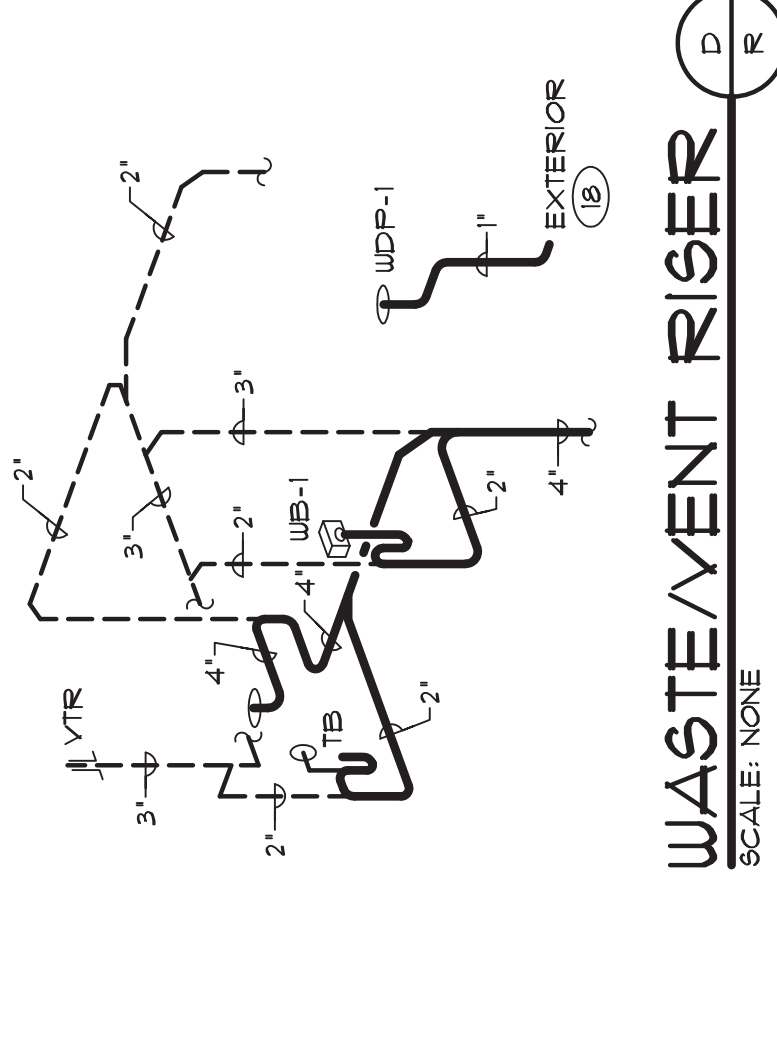
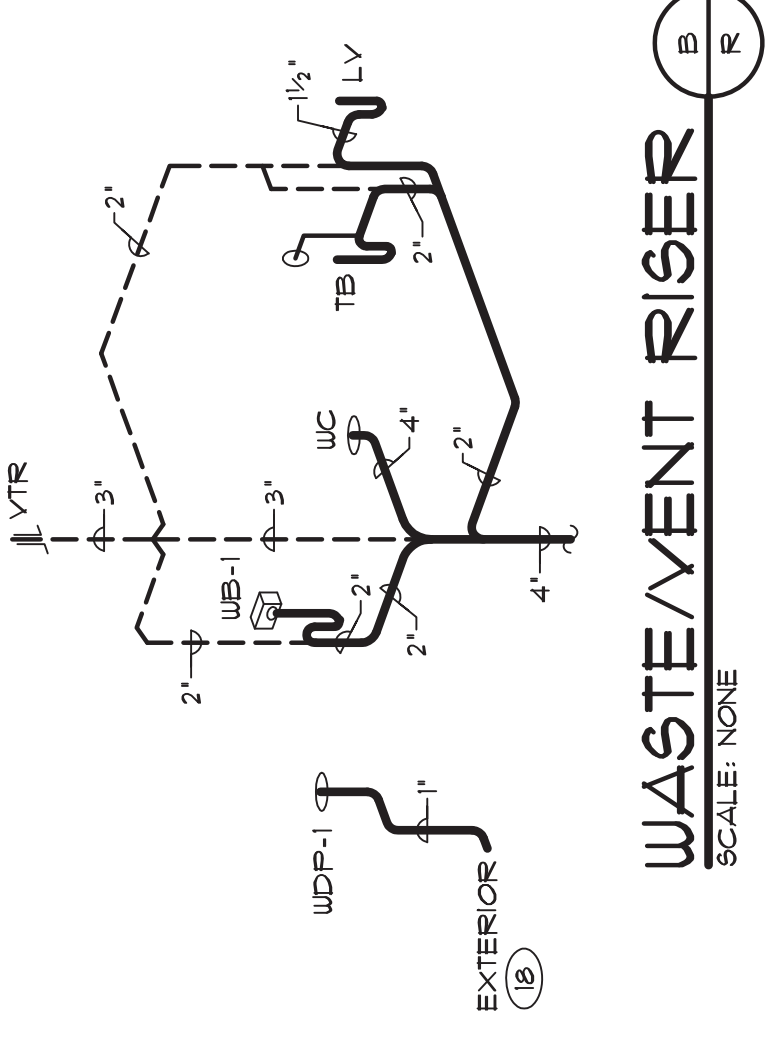
1. SANITARY: REFER TO CRAWL SPACE PLUMBING SHEETS FOR DIRECTION OF ACTUAL BUILDING DIRECTION OF FLOW.
2. WASHER STAND PIPE. SEE RISER B.
3. WASTE FROM BATHROOM/WASHER ABOVE.
4. WASTE FROM BATHROOM/WASHER ABOVE.
5. WASTE FROM BATHROOM/WASHER ABOVE.
6. WASTE FROM BATHROOM/WASHER ABOVE.
7. WASTE FROM BATHROOM/WASHER ABOVE.
8. WASTE FROM BATHROOM/WASHER ABOVE.
9. WASTE FROM BATHROOM/WASHER ABOVE.
10. WASTE FROM BATHROOM/WASHER ABOVE.
11. WASTE FROM BATHROOM/WASHER ABOVE.
12. WASTE FROM BATHROOM/WASHER ABOVE.
13. WASTE FROM BATHROOM/WASHER ABOVE.
14. WASTE FROM BATHROOM/WASHER ABOVE.
15. WASTE FROM BATHROOM/WASHER ABOVE.
16. WASTE FROM BATHROOM/WASHER ABOVE.
17. WASTE FROM BATHROOM/WASHER ABOVE.
18. WASTE FROM BATHROOM/WASHER ABOVE.
19. WASTE FROM BATHROOM/WASHER ABOVE.
20. WASTE FROM BATHROOM/WASHER ABOVE.



2nd FLOOR - BLDG B - PLUMBING
SCALE: 1/4" = 1'-0"



1st FLOOR - BLDG B - PLUMBING
SCALE: 1/4" = 1'-0"



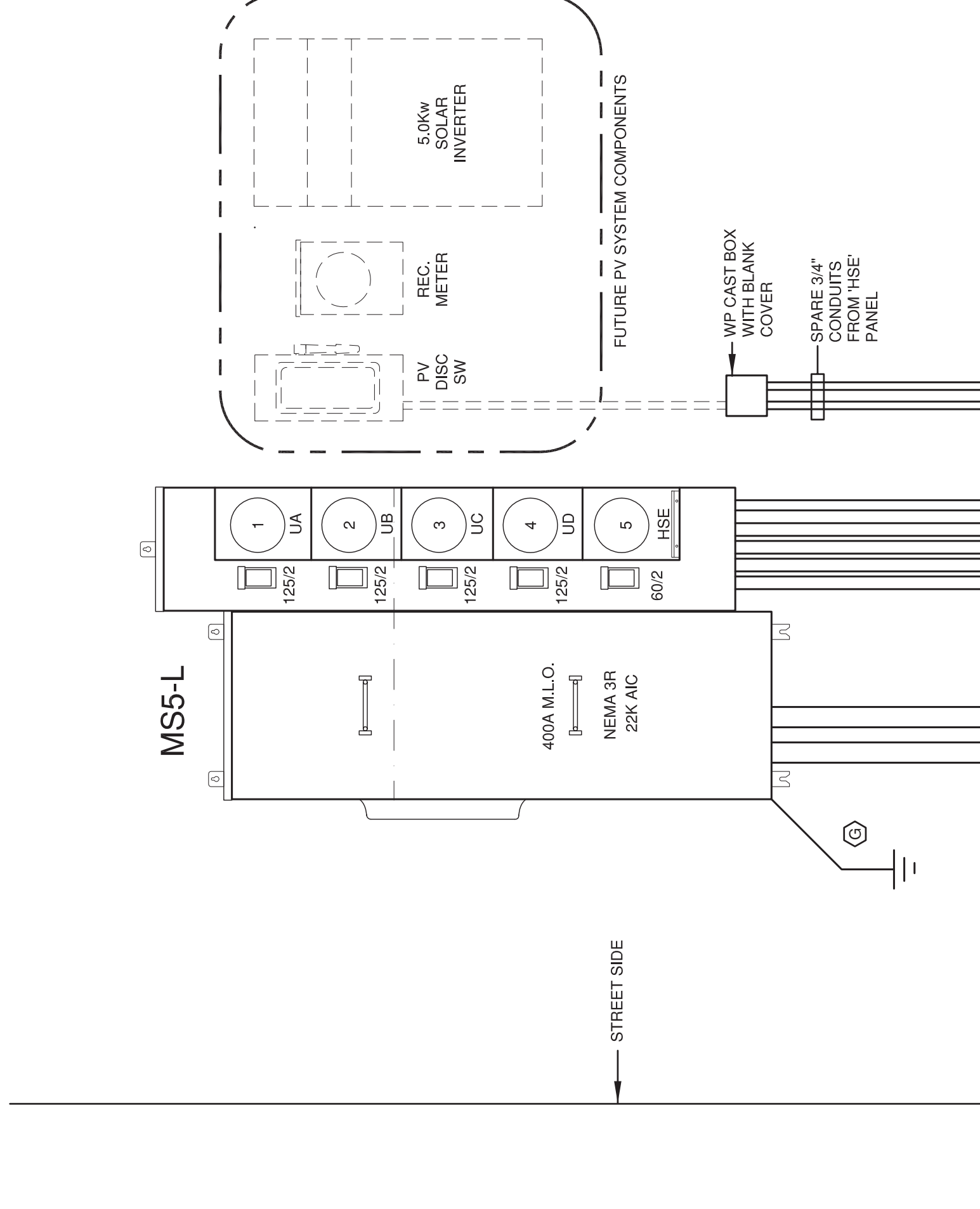
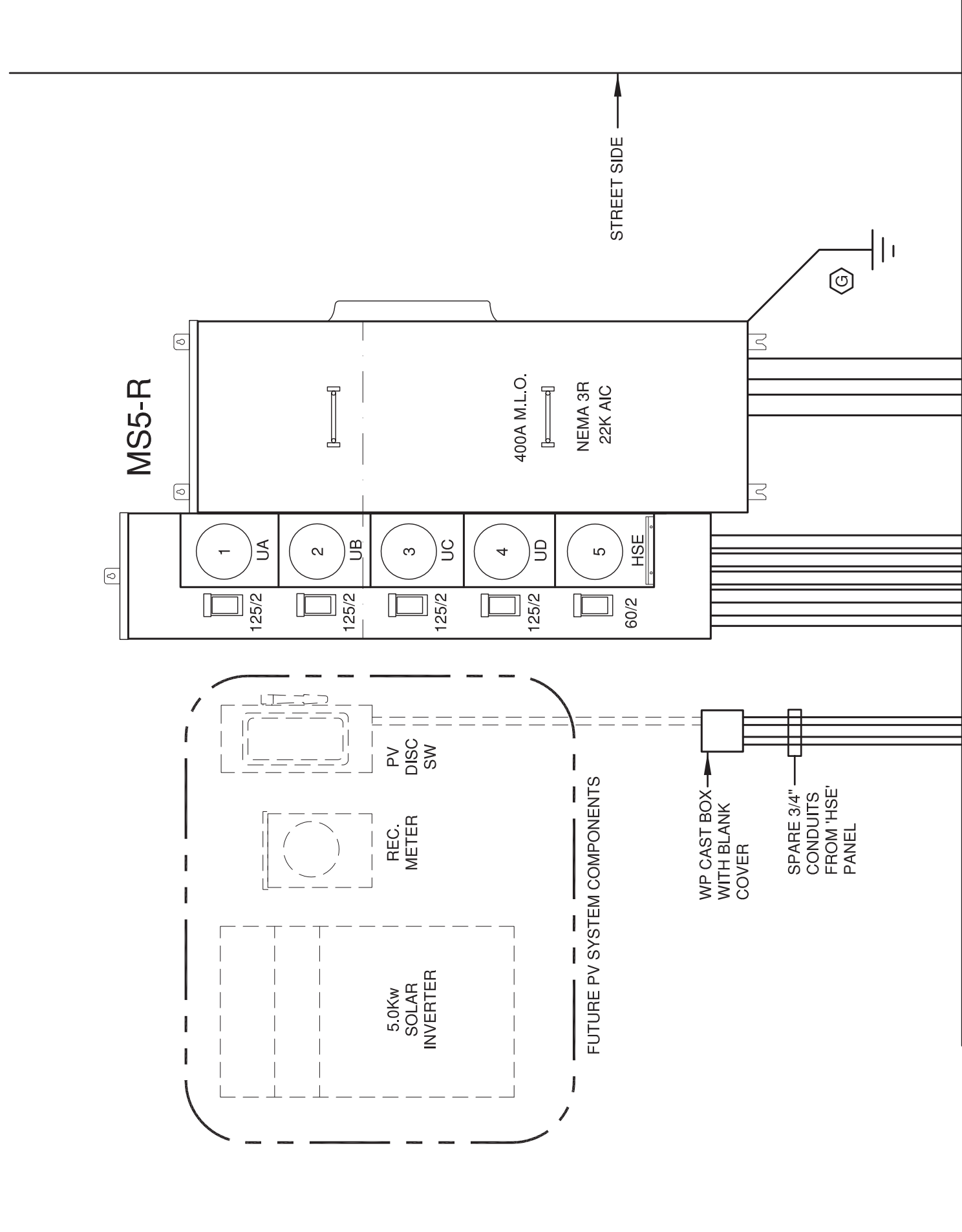
Meterstacks MS5 Style

SOUNDING ELECTRODE SYSTEM
 PROVIDE A 1/8" GROUNDING
 WIRE FROM EACH SOUNDING
 ELECTRODE TO GROUND.
 FINAL CONNECTION TO COLD WATER
 ENTRY.

FEEDER SCHEDULE:
 SERVICE LATERAL METERS TO XFMR
 2 SETS PARALLEL (9550JUL 2.12°C.)
 TYPICAL UNIT PANEL
 9F10JUL-Hg, 1.12°C.
 TYPICAL HOUSE PANEL
 9F6C-Hg, 1°C.

GENERAL NOTE:
 LABEL BREAKERS AS SERVICE
 DISCONNECTS 1, 2, 3, 4, 5

SCHEDULE FOR PANEL HSE					
VOLTS/PHASE/WIRE	120/240/1PH-3W				
MOUNTING	—SUBRACE—				
MAIN DEVICE	600A MLO				
S.C. RATING	10000 AIC				
NOTES: * Indicates Circuit may be used for Site Lighting Re: ES13 for Building's Used. Max. 350Vg					
Duty/Demand Load is Calculated Per NEC - 1.4b, Cmp. Hg. Air & C at 125% Req. 0 + 50% and 0th 0100x					
CONNECTED KVA 3.28					
LOAD FACTOR 1.16					
PHASE A (KVA) 0.9					
PHASE B (KVA) 0.9					
PHASE C (KVA) 0.9					
DUTY/DEMAND KVA 3.79					
AVERAGE AMPS/LEG BASED ON DUTY/DEMAND KVA 15.8					
#	DESCRIPTION	UNIT	DESCRIPTION	#	
1	1000 Break Panel Breaker	1000	1000 Break Panel Breaker	1	
2	1000 Break Panel Breaker	20/1	1000 Break Panel Breaker	2	
3	1000 Break Panel Breaker	20/1	1000 Break Panel Breaker	3	
4	1000 Break Panel Breaker	20/1	1000 Break Panel Breaker	4	
5	1000 Break Panel Breaker	20/1	1000 Break Panel Breaker	5	
6	Mech: Wtr Entry	1.500	20/1 A	20/1	
7	Space	20/1 B	20/1	20/1	
8	Space	20/1 C	20/1	20/1	
9	Space	20/1 D	20/1	20/1	
10	Space	20/1 E	20/1	20/1	
11	Space	20/1 F	20/1	20/1	
12	Space	20/1 G	20/1	20/1	
ENCLOSURE TYPE: NEMA 1		BREAKER TYPE: PLUG ON		NO. CIRCUITS: 12	
CLASS OF EQUIPMENT: LOADCENTER					



Building B : Load Summary : 400a Service

Load Type	Load Code	Demand Kva	Factor	Dmd Kva
Lighting	Ltg	0.5	125%	0.6
Gen Use Rec	Rec	0.5	10-50%	0.5
Mechanical Equip	Mech	1.5	125%	1.9
General Lighting	GL	56.8	3-35%	21.8
Dryer	D	20.0	100%	20.0
Range	RG	32.0	50%	16.0
Other	Ohtr	23.3	100%	23.3
Demand Kva				84.1
Demand Amps				350.5

Notes:
 1. HOUSE LOADS Ltg, Rec, Mech
 2. UNIT LOADS GL, D, RG, Ohtr

TYPE	DESCRIPTION & MANUFACTURE CATALOGUE NUMBERS ALL BALLASTS ARE 120V	NOTES	FINISH	LOCATION	LAMP(S)	
					NO.	TYPE
A	NOMINAL 18" x 24" x 4" LENS FLUORESCENT FIXTURE WITH MEDIUM OAK FINISH, FROSTED WHITE ACRYLIC LENS AND 120V ELECTRONIC BALLAST. LIGHTING #55361LE-15 OR APPROVED EQUIVALENT.	1	WHITE	KITCHEN	4	82 CRI F32T8/530 3000 Deg K
B	6" ROUND IC RATED LED CAN LIGHT WITH 30K LAMP COLOR AND WHITE TRIM RING. LIGHTING #55361LE-15 OR APPROVED EQUIVALENT.	1	WHITE	VARIOUS	-	15W/100B/LM/3000 Deg K
C	NOMINAL 8" DIAMETER SURFACE MOUNTED (ROUND) LED NOMINAL 5" STANDARD HIGH IMPACT POLYCARBONATE COLUMBA #RESLEDA18L-30K-9-WH OR APPROVED EQUIVALENT.	1	WHITE	VARIOUS	-	18W/940LUM/3000 Deg K
D	SURFACE MOUNTED NOMINAL 15"DIA. x 5.5" HIGH FLUORESCENT FIXTURE WITH BRUSHED NICKEL TRIM AND SEA GULL LIGHTING #7594ABLE-982 OR APPROVED EQUIVALENT.	1	NICKEL	VARIOUS	3	80 CRI 13W-CU24 3000 Deg K
E	6" LAMP WALL MOUNTED OPEN FLUORESCENT STRIP WITH NICKEL FINISH. LIGHTING #77286-30EB OR APPROVED EQUIVALENT.	1	B.W.E.	LAUNDRY	2	82 CRI F32T8 3000 Deg K
F	SURFACE MOUNTED NOMINAL 17"DIA. x 5" HIGH FLUORESCENT FIXTURE WITH BRUSHED NICKEL TRIM AND STORED ALUMINUM STYLE GLASS. LIGHTING #7594ABLE-982 OR APPROVED EQUIVALENT.	1	NICKEL	DINING	2	80 CRI 13W-CU24 3000 Deg K
G	SURFACE MOUNTED 18" DIA. SEILING CAN (W/LS) BRUSHED NICKEL FINISH. LIGHTING #7594ABLE-982 OR APPROVED EQUIVALENT.	1	WHITE	LIVING	2	80 CRI 13W-CU24 3000 Deg K
H	24" WIDE OVER MIRROR LIGHT WITH BRUSHED NICKEL FINISH AND WHITE TEXTURED POLYCARB. KICHLER #8300K-11142NLED OR APPROVED EQUIV.	1	NICKEL	RESTROOMS	-	20W/141LUM 3000 Deg K
J	1. LIGHT DECORATIVE SCENCE WITH FLUOR. BULB, NICKEL FINISH AND WHITE GLASS. LIGHTING #49038BLE-999 OR APPROVED EQUIVALENT.	1	NICKEL	HALL	1	80 CRI 13W-CU24 3000 Deg K
K	SMALL LED EXTERIOR WALL SCENCE OPERATED VIA ASTRONOMICAL TIME SWITCH.	1	BY ARCH	EXTERIOR	-	8W/720LUM/3000 Deg K
L	DARK SKY COMPLIANT LED ADDRESS LIGHT OPERATED VIA ASTRONOMICAL TIME SWITCH. MOUNT LV TRANSFORMER IN ACCESSIBLE SPACE. LIGHTING #8300K-49278XLED OR APPROVED EQUIV.	1	BY ARCH	EXTERIOR	-	4W/40LUM/3000 Deg K
AA	EXTERIOR LED WALL SCENCE WITH TYPE III HUBBEL #TRP-12L-15-367-3-U-XX-POU OR APPROVED EQUIVALENT.	1	BY ARCH	EXTERIOR	-	15W/1477LUM/3000 Deg K
BB	EXTERIOR SMALL LED WALL SCENCE OPERATED VIA ASTRONOMICAL TIME SWITCH. MOUNT LV TRANSFORMER IN ACCESSIBLE SPACE. LIGHTING #8300K-49278XLED OR APPROVED EQUIV.	1	BY ARCH	EXTERIOR	-	8W/492LUM/3000 Deg K

NOTES:
 1. SUBSTITUTIONS PRIOR TO BID REQUIRED. ENGINEERS MUST RECEIVE PRODUCT DATA 10 DAYS PRIOR TO BID - ONLY PRODUCT LISTED IN AN ADDENDUM WILL BE ACCEPTED.
 FIXTURES TO BE ENERGY STAR RATED OR UTILIZE ENERGY EFFICIENT LAMPS AS LISTED IN ADDENDUM.

SYMBOL LEGEND	
20A-1P LIGHT SWITCH MOUNTED AT +45" A.F.F.	20A, 3 WAY SWITCH MOUNTED AT +45" A.F.F.
WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR MOUNTED AT +45" A.F.F.	WATSTOPPER #D5W-301 OR APPROVED EQUIVALENT.
WALL MOUNTED FAN SWITCH MOUNTED AT +45" A.F.F.	WALL MOUNTED ASTRONOMICAL TIME CLOCK ON/OFF FUNCTION MOUNTED AT +45" A.F.F.
WATSTOPPER #RT-200 OR APPROVED EQUIVALENT.	20A TAMPER RESISTANT DUPLEX RECEPTACLE WITH ONE-HALF SWITCHED FOR DISPOSER & DISHWASHER. MOUNT BELOW COUNTER.
15A TAMPER RESISTANT GROUND FAULT CIRCUIT INTERRUPT TYPE DUPLEX RECEPTACLE MOUNT AT +45" A.F.F. UNLESS INDICATED OTHERWISE ON DRAWINGS.	15A TAMPER RESISTANT AFCI BREAKER PROTECTED (GENERAL USE) DUPLEX RECEPTACLE. MOUNTED AT +18".
30A-120/250V OUTLET FOR DRYER. GROUND PER NEC.	50A-120/250V OUTLET FOR RANGE. GROUND PER NEC. MOUNTING HEIGHT TO BE COORDINATED WITH EQUIPMENT INSTALLED.
CONNECTION FOR EXHAUST FAN. PROVIDE SNAP SWITCH NO THERMAL OVERLOAD MOUNT 6" MTR.	CONNECTION FOR FAN COIL UNIT. PROVIDE SNAP SWITCH WITH THERMAL OVERLOAD MOUNT 6" MTR.
CONNECTION FOR WATERHEATER. RE: MECHANICAL	HEAVY DUTY MOTOR DISCONNECT SWITCH FOR UNIT AIR CONDITIONING UNIT.
TELEPHONE OUTLET MOUNTED. PROVIDE A SINGLE GANG BACKBOX, BLANK PLATE AND 3/4" x 1" INTO ACCESSIBLE CRAWLSPACE OR AS OTHERWISE DIRECTED BY ARCHITECT.	CABLE TELEVISION OUTLET - PROVIDE SINGLE GANG BACKBOX, BLANK PLATE AND 3/4" x 1" INTO ACCESSIBLE CRAWLSPACE OR AS OTHERWISE DIRECTED BY ARCHITECT.
120V WIRE WOUND COMPANION RESERVUAL SUPPLY DETECTOR/CARBON MONOXIDE DETECTOR WITH 9V BATTERY BACKUP AND ALARM. UNITS TO BE TANGEM WIRE WITHIN APT. UNIT TO SOUND ALARM'S SIMULTANEOUSLY.	120V HARD WIRED STROBE LIGHT WITH 9V BATTERY BACK UP. UNITS TO BE INTERCONNECTED WITH THE SMOKE/CARBON DETECTORS IN UNIT.
SYSTEM EXTERIOR WEATHER PROOF HORN/STROBE PROVIDED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND TIED INTO FIRE SPRINKLER SYSTEM. CONDUIT AND BOXES BY ELEC CONTRACTOR.	SYSTEM SMOKE DETECTOR PROVIDED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR. CONDUIT AND BOXES BY ELEC CONTRACTOR.
WATERFLOW SWITCH/ES PROVIDED AND INSTALLED BY FIRE PROTECTION CONTRACTOR.	TAMPER SWITCH/ES PROVIDED AND INSTALLED BY FIRE PROTECTION CONTRACTOR.
SYMBOL ATTRIBUTES - 'A' = MOUNTED ABOVE COUNTER. RE: ARCHITECTURAL CASEWORK.	

SCHEDULE FOR PANEL U1

VOLTS/PHASE/WIRE: 120/240/1ph-3w MAIN DEVICE: 1250 MLO
 MOUNTING: FLUSH S.C. RATING: 10,000 AIC
 NOTES: Provide with (2) each Spare 3/4" into Attic & Crawlspace
 'A' Indicates Arc Fault Circuit Interrupt Type Breaker.

Duty/Demand Load is Calculated Per NEC: 146, 199, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

#	DESCRIPTION	LOAD	BRKR	PH	BRKR	LOAD	DESCRIPTION	#
1	GL: 1st Flr Toilet	1,500	A207/1	A	A207/1	1,500	GL: 1st Flr Toilet	1
2	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
3	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
4	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
5	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
6	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
7	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
8	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
9	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
10	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
11	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
12	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
13	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
14	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
15	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
16	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
17	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
18	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
19	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
20	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
21	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
22	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
23	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
24	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2

ENCLOSURE TYPE: NEMA 1 BREAKER TYPE: PLUG ON
 CLASS OF EQUIPMENT: LOADCENTER NO. CIRCUITS: 24

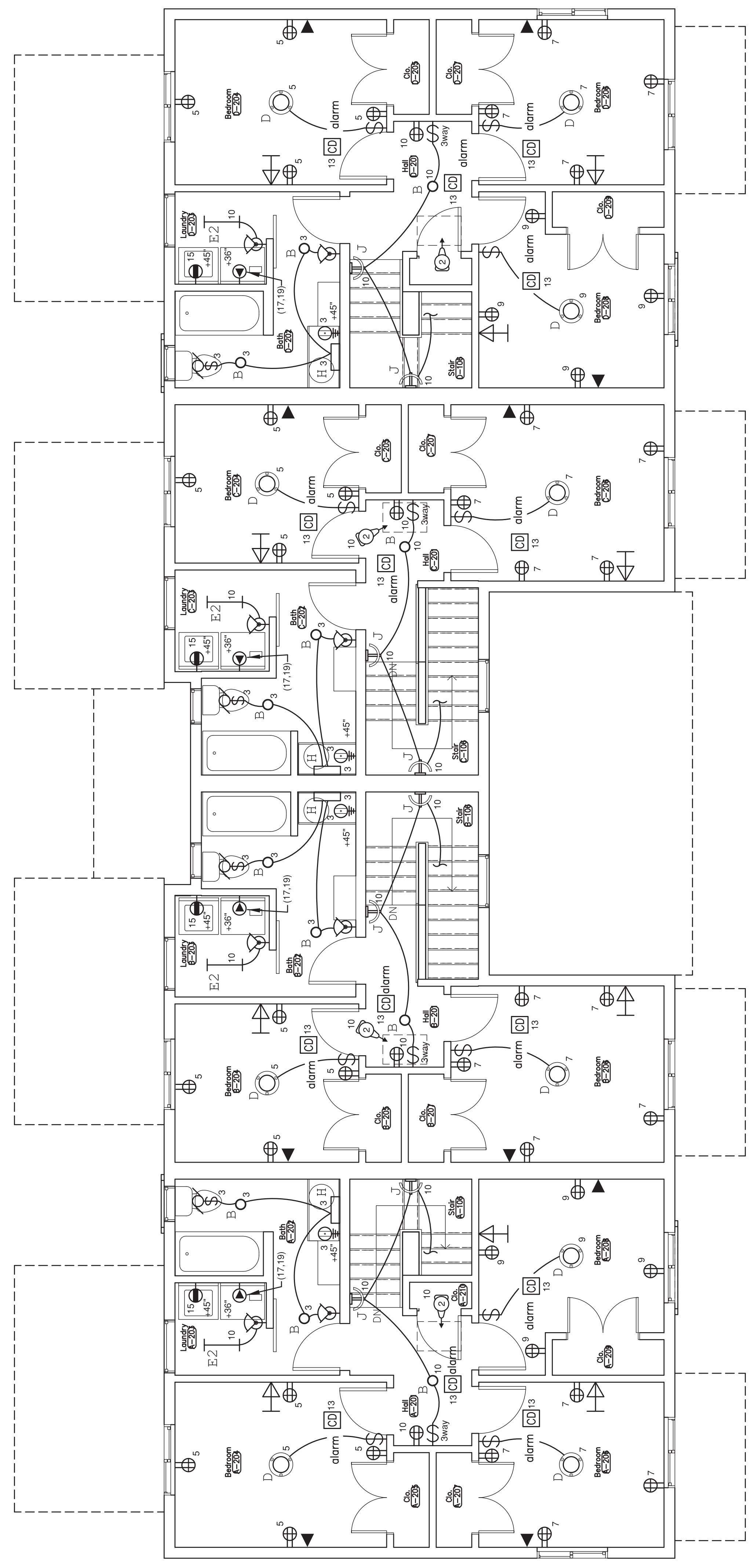
SCHEDULE FOR PANEL U2

VOLTS/PHASE/WIRE: 120/240/1ph-3w MAIN DEVICE: 1250 MLO
 MOUNTING: FLUSH S.C. RATING: 10,000 AIC
 NOTES: Provide with (2) each Spare 3/4" into Attic & Crawlspace
 'A' Indicates Arc Fault Circuit Interrupt Type Breaker.

Duty/Demand Load is Calculated Per NEC: 146, 199, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

#	DESCRIPTION	LOAD	BRKR	PH	BRKR	LOAD	DESCRIPTION	#
1	GL: 1st Flr Toilet	1,500	A207/1	A	A207/1	1,500	GL: 1st Flr Toilet	1
2	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
3	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
4	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
5	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
6	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
7	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
8	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
9	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
10	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
11	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
12	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
13	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
14	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
15	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
16	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
17	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
18	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
19	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
20	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
21	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
22	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
23	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2
24	GL: 2nd Flr Bath	1,500	A207/1	B	A207/1	1,500	GL: 1st Flr Appliances	2

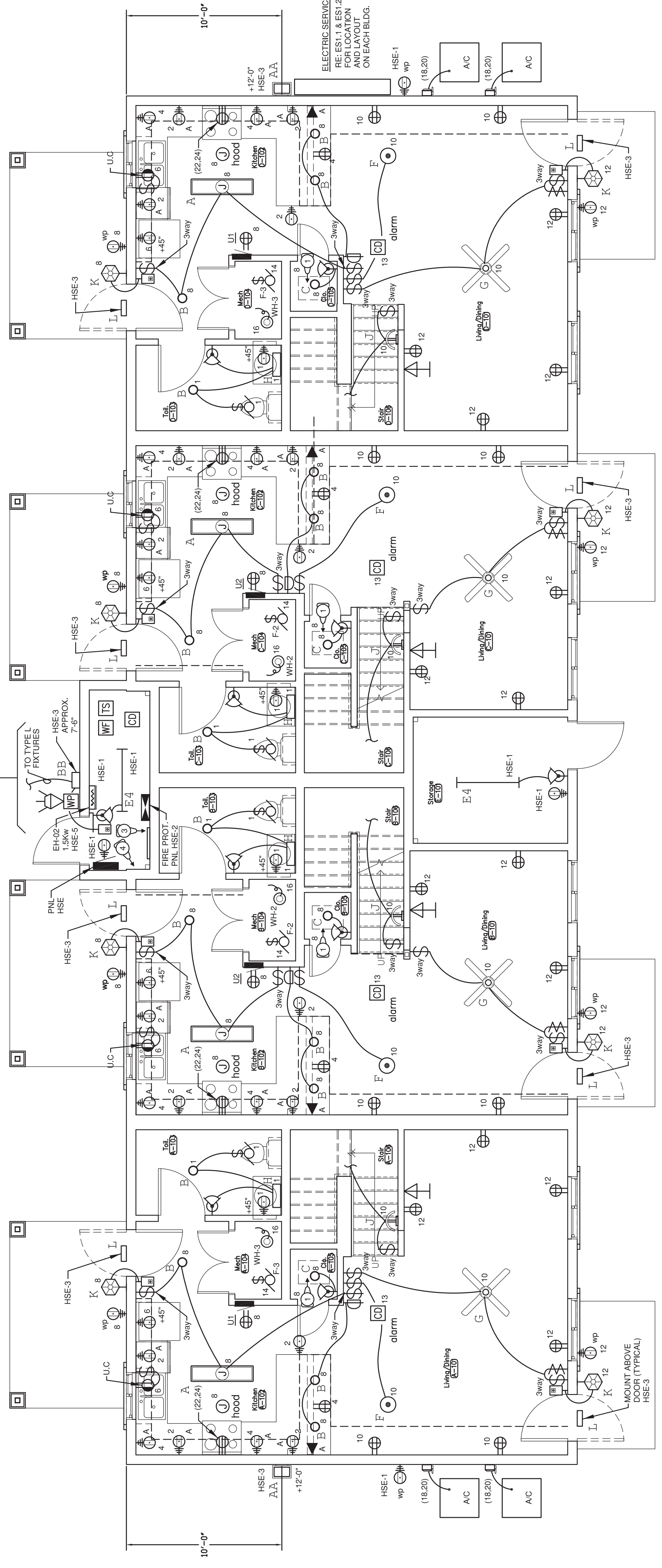
ENCLOSURE TYPE: NEMA 1 BREAKER TYPE: PLUG ON
 CLASS OF EQUIPMENT: LOADCENTER NO. CIRCUITS: 24



BLDG B - SECOND FLOOR - ELECTRICAL PLANS

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

FINAL LAYOUT OF ROOM TO BE COORDINATED WITH EQUIPMENT, WATER LINES, GAS, POWER PANEL.
 ROUGH IN FOR FIRE PROTECTION SYSTEM CONTRACTOR.
 EXACT REQUIREMENT WITH FIRE PROTECTION SYSTEM CONTRACTOR.



BLDG B - FIRST FLOOR - ELECTRICAL PLANS

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

- GENERAL NOTES:**
- ONLY APPROVED PRODUCTS LISTED ON DRAWINGS OR IN AN ADDENDUM WILL BE ACCEPTED.
 - REFER TO MECHANICAL DRAWINGS AND APPENDICES FOR EXACT LOCATION OF ALL MECHANICAL EQUIPMENT.
 - ELECTRICAL CONTRACTOR TO CONFIRM ALL MECHANICAL EQUIPMENT CONNECTIONS PRIOR TO RO