

GENERAL STRUCTURAL NOTES

- submitted to the structural engineer prior to use.
- c. Follow all the manufacturer's recommendations and certification testing reports for anchor installation. See specific anchors below for more information.
 - d. No anchor shall be installed within 1.5 anchor rod diameters of an abandoned hole that has been filled with non-shrink grout; increase distance to 3 anchor rod diameters when the abandoned hole has not been filled.
2. Adhesive Anchors
 - a. For anchors in concrete, the adhesives shall be divided into two groups: Standard Adhesives and High Strength Adhesives. Standard adhesives can be used in general applications when details reference the "Standard Adhesive Embedment Schedule" in drawings. High Strength adhesive groups will be specified for the particular application in the drawings and details. When a High Strength Adhesive is specified, the contractor has the option to use any of the adhesives in the High Strength group. When a Standard Adhesive is specified, the contractor has the option to use any of the adhesives in either group. See below for the acceptable adhesives in each group.
 - i. Standard Adhesive Group for anchors in concrete includes the following adhesives:
 1. SET-XP (ICC-ES ESR-2508) by Simpson Strong-Tie
 2. Pure 50+ (ICC-ES ESR-3576) by Dewart
 3. AC100+ Gold (ICC-ES ESR-2582) by Dewart
 4. HIT-RE 100 (ICC-ES ESR-3829) by Hilti, Inc.
 - ii. High Strength Adhesive Group for anchors in concrete includes the following adhesives:
 1. SET-3G (ICC-ES ESR-4057) by Simpson Strong-Tie
 2. Pure 110+ (ICC-ES ESR-3298) by Dewart
 3. AC200+ (ICC-ES ESR-4027) by Dewart
 4. HIT-RE 500-V3 (ICC-ES ESR-3814) by Hilti Inc.
 5. HIT-HY 200 (ICC-ES ESR-3187) by Hilti Inc.
 - b. Adhesive shall be within the manufacturer's recommended lifetime and prior to expiration date. Do not use adhesive that has not been stored per manufacturer's recommendations or may have experienced freeze thaw cycles or extreme heat.
 - c. Do not install adhesive anchor in wet or damp hole unless product is approved for such conditions without strength reduction. Do not install adhesive anchors if concrete temperature is below 50-degree F unless adhesive is approved for lower temperature without strength reduction. Refer to manufacturer's published installation instructions.
 - d. Follow all the manufacturer's recommendations and certification testing reports regarding hole cleaning prior to adhesive installation. All holes shall be drilled with ANSI standard bits designed for concrete. Diamond core drilled holes are not allowed unless indicated in specific details or approved by the structural engineer prior to use.
 3. Mechanical Anchors
 - a. For concrete, the mechanical anchor shall be Kwik Bolt TZ2 (ICC-ES ESR-4266) by Hilti Inc., Strong-Bolt 2 (ICC-ES ESR-3037) by Simpson Strong-Tie Inc. or Power-Stud+ SD2 (ICC-ES ESR-2502) by Dewart.
 4. Screw Anchors
 - a. For concrete, the screw anchors shall be Titen HD (ICC-ES ESR-2713 for concrete only) by Simpson Strong-Tie, or Screw-Bolt + (ICC-ER ESR-3889 for concrete only) by Dewart or Kwik HUS-EZ (ICC-ES ESR-3027 for concrete only) by Hilti Inc.
 5. Powder Actuated Fasteners
 - a. For fasteners driven into steel (except at metal decks), concrete, or concrete over metal deck, the fastener shall be X-U P8 TH Universal Knurled Shank Fastener (ICC-ES ESR-2269) by Hilti Inc., PDPA (ICC-ES ESR-2138) by Simpson Strong-Tie Inc. or 8mm Head Spiral CSI Drive Pin (ICC-ES ESR-2024) by Dewart.

WOOD

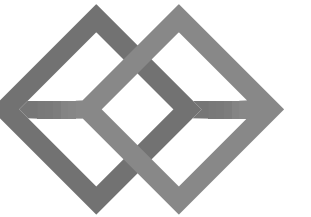
1. Materials:
 - a. Dimensional Lumber
 - i. All dimensional lumber shall be #2 Douglas Fir-Larch or better unless noted otherwise.
 - b. Engineered Lumber
 - i. Engineered lumber shall be provided by manufacturer of the products specified on these structural drawings. If an alternative manufacturer is proposed, the contractor shall submit a revised engineered lumber list, prior to construction, that includes the following information:
 1. Specified lumber product as indicated on these structural drawings
 2. Proposed substitution lumber product
 3. Documentation that includes a comparison of the section properties and material strengths of the proposed substitution lumber product compared to that of the specified lumber product.
 - ii. Laminated Veneer Lumber (LVL) shall be Micro-Lam 1.9E by Trus-Joist Corporation, Versa-Lam 2.0E Boise Cascade Corporation, RedLam 2.0E by RedBuilt, SolidStart LVL 2.0E by LP Corporation or RigidLam 2.0E by Roseburg or an approved equal.
 - iii. Rimboard shall be TimberStrand LSL Rim Board by Trus-Joist Corporation, Versa-Rim by Boise Cascade Corporation, SolidStart LSL by LP Corporation, LSL or LVL Rim Board by RedBuilt or OSB RigidRim RimBoard by Roseburg (Rimboard shall be 1.1/8" thick, minimum), Rimboard LSL by RedBuilt or an approved equal.
 - iv. All required blocking, bridging, and bracing shall be provided by joist manufacturer and installed by contractor. All penetrations through the joists shall be done per manufacturers' recommendations and requirements.
 - c. Sheathing
 - i. Wood sheathing shall meet the minimum performance criteria given in APA PRP-108, Performance Standards and Policies for Structural-Use Panels, Form E445, Voluntary Product Standard PS 1 & PS 2 and Performance Standard for Wood-Based Structural-Use Panels, Form S350, and Structural Plywood, Form H860. Panels shall be unsanded plywood or oriented strand board (OSB) and shall be interior grade with exterior glue and have the minimum following thickness and span rating indicated in the "Sheathing Schedule at Roof and Floor" in drawings.
 - d. Fasteners
 - i. General framing and carpentry shall be connected as per "Minimum Nailing Schedule" in drawings unless noted otherwise.
 - ii. All fasteners, including nails, for preservative-treated shall be hot-dipped zinc-coated galvanized steel or stainless steel.
 - iii. Bolts for general wood to wood connections shall be ASTM A307A or A36 with ASTM A563A hex nuts and ATSM F844 washers, Grade A, unless noted otherwise.
 - e. Framing connectors:
 - i. All framing anchors, connectors, post caps, hold downs, column bases, joist hangers, etc. shall be provided by Simpson Strong-Tie as indicated on these plans. If the contractor elects to substitute for another manufacturer, the contractor shall submit a revised connector list, prior to construction, that includes the following information:
 1. Specified connector indicated on these plans
 2. Requested substitution connector
 3. Allowable capacity of the requested substitution connector
2. All wood (with the exception of engineered lumber) in contact with concrete, masonry or soil shall be pressure treated.
3. At floor framing, provide approved bridging at 8'-0" o.c. maximum between joist end supports for dimensional lumber members with a nominal depth-to-thickness ratio exceeding 6 to 1. Bridging shall consist of not less than full-depth solid blocking, 1" x 3" diagonal lumber with double nailing at each end, equivalent metal bracing or equal rigidity, or other approved bridging.
4. Built-up beams and columns shall be constructed as per "Built-up Wood Member Detail" in drawings unless noted otherwise.
5. All walls shall have a minimum of two top plates. Splices in top plates shall be staggered a minimum of 4 ft from the nearest splice in adjoining top plate.

PREFABRICATED METAL PLATE WOOD TRUSSES

1. The Prefabricated metal plate wood trusses shall be designed, signed, and sealed by a Professional Engineer registered in the same state as the project location. They shall be designed to support the concentrated and other distributed loads as shown on the framing plans in addition to the following uniform loads:

a. Dead Load (Top Chord) =	10 psf
b. Dead Load (Bottom Chord) =	10 psf
c. Snow Load (Top Chord) =	28 psf
	48 psf Total Load

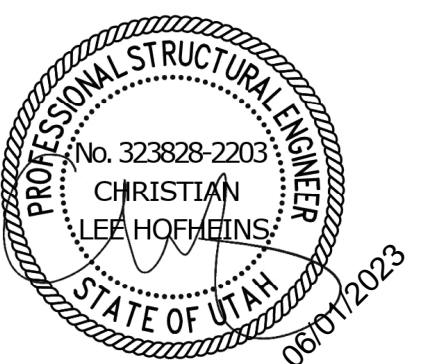
Coordinate the design with all mechanical equipment, fire sprinkling systems and hanging walls supported by the trusses. Provide extra trusses where required.
2. Design all wood trusses and bearing attachments for wind uplift. Assume a dead load of 8 psf to resist uplift.
3. Where the parapet is required to be built into the truss profile, design the parapet for an ultimate wind load of 50 psf in either direction.
4. Refer to architectural drawings for truss profile. Detailing and shop drawing production for prefab metal plate wood trusses will require information (including dimensions) contained in the architectural, structural and/or other consultants' drawings. The structural drawings shall be used in conjunction with the architectural and other consultant's drawings. Some dimensions and elements such as elevation and slopes are not shown in the structural drawings. All dimensions shown on structural drawings shall be verified by contractor with architectural drawings. Coordinate roof slope with architectural roof plan, sections, and elevations.
5. All truss-to-truss connections shall be designed and provided by the truss manufacturer.
6. Design, handling, erection, and permanent bracing of metal plate connected wood trusses shall be in accordance with ANSI/TPI-1, National Design Standard for Metal Plated Connected Wood Truss Construction.
7. Steel Connector Plates: All steel gusset plates shall be galvanized and shall be approved by the "Research Committee for the International Code Council". Submit a copy of the ICC Report for the connector plate used. Values established by this committee must be indicated on the shop drawings.
 - a. Stress increases for steel connector plate values for duration of load are not allowed.
 - b. The minimum size for any connector shall be 8 square inches (not required at truss blocking).
 - c. All steel gusset plates shall be located on the joint as the stresses require and shall provide a minimum bite of 2.1/2" length on all tension members (not required at truss blocking).
 - d. All steel plate dimensions shall be increased by 10% above that required by analysis.
 - e. Plates shall be pressed or rolled into member to obtain full penetration without crushing the outer surfaces of wood.
8. No wane, knots, skips, or other defects shall occur in the plated contact area or scarfed area of web members. Plates shall be centered with one required each side of wood truss
9. The trusses shall be handled and stored in a manner to prevent moisture from being absorbed by the wood.
10. Requirements for truss stability and erection shall comply with the Truss Plate Institute publications entitled "Commentary and Recommendations for Bracing Wood Trusses" and "Commentary and Recommendations for Handling and Erecting Wood Trusses." The contractor shall have copies of these publications on site and shall be familiar with their contents.
11. Shop Drawings: Complete calculations and shop drawings indicating all member forces, stresses, duration factors, lumber grades, dimensions, truss to truss connections, steel truss plate sizes and locations shall be submitted and reviewed by the engineer before fabrication. Each connector shall be dimensioned on the shop drawings as to its exact location at the joint.



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Revision Schedule

#	Description	Date
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Project for:

**THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS**

**West Haven
Seminary**

2535 West Wilson Lane
West Haven, Utah

Project Number: 230089

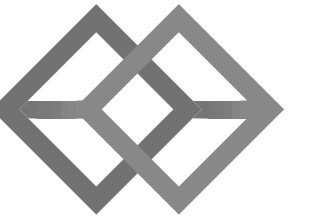
Property Number: 501-8963

05/01/2023

GENERAL STRUCTURAL NOTES

S-002

REQUIREMENTS FOR SPECIAL INSPECTION, MATERIAL TESTING, AND STRUCTURAL OBSERVATION



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STATEMENT OF SPECIAL INSPECTION AND QUALITY ASSURANCE

Special inspection and quality assurance (including structural testing), as required by section 1704 and 1705 of the 2018 IBC, shall be provided by an independent agency employed by the owner for the items in this section and other areas of the approved construction documents, unless waived by the building official.	
The names and credentials of the Special Inspectors to be used shall be submitted to the Building Official for approval.	
Responsibilities of the Special Inspector	
Special Inspector shall review all work listed in the special inspection schedules herein for conformance with the approved construction plans, specifications and 2018 IBC.	Testing and inspection reports shall be sent on a weekly basis to the architect, engineer, building official and contractor for review. All items not in compliance shall be brought to the immediate attention of the contractor for correction, and if uncorrected, to the architect, engineer and building official.
Once corrections have been made by the contractor, the special inspector shall submit a final signed report to the building official stating that the work requiring special inspection was, to the best of the special inspector's knowledge, in conformance with the approved construction plans, specifications and 2018 IBC.	
Responsibilities of the Contractor	
The contractor shall submit a written statement of responsibility to the owner and the building official prior to the commencement of work in accordance with 2018 IBC section 1704.4. This statement shall indicate that the contractor will coordinate and cooperate with the required inspections contained herein.	
The contractor shall notify the designated special inspector that work is ready for inspection at least 24 hours before said inspection is required.	
All work requiring special inspection shall remain open and accessible until it has been observed by the special inspector and deemed acceptable through inspection report.	
Special inspection during fabrication is not required if the fabricator is registered and approved by the authority having jurisdiction to perform such work without special inspection. Upon completion of fabrication, the approved fabricator shall submit a certificate of compliance for submittal to the building official.	
The contractor shall be responsible for their own quality control including materials, fabrication, erection, etc.	

SOILS CONSTRUCTION INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Site Preparation	-	X	Verify that the site has been prepared in accordance with the soils report prior to placement of prepared fill.
Fill Material	X	-	Verify that the material being used, the maximum lift thickness and the in-place dry density of the compacted fill material comply with the soils report during placement and compaction of the fill material during placement and compaction.
Continuous Footing Backfill: at least one test for each 40 linear feet or less of wall length, but no fewer than 2 tests.	-	X	At each compacted backfill layer.
Spot Footing Backfill: Minimum of one compaction test for each lift for each spot footing.	-	X	At each compacted backfill layer.
See specifications for further requirements.	-	-	

CONCRETE CONSTRUCTION INSPECTIONS

Concrete (2018 IBC Section 1705.3, Table 1705.3, and Section 1705.12) The following concrete elements require special inspection:
All concrete footings, Exterior concrete footings only, All concrete walls, including foundation walls, Concrete shear walls, Interior concrete slab-on-grade, Concrete fill over metal deck, Concrete tilt-up panels, Concrete grade beams, Concrete columns/piers, ICF Walls.

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Protection of concrete during cold and hot weather	-	X	
Verify materials used including use of the required mix design	-	X	Verify mix design meets strength and exposure requirements listed on General Structural Notes
Formwork	-	X	Verify shape, location and member dimensions
Bolts installed in concrete	X	-	Inspection of anchors or embeds cast in concrete is required when allowable loads have been increased or where strength design is used. Prior to and during concrete placement.
Embeds and Inserts installed in concrete	X	-	Prior to and during concrete placement.
Concrete reinforcing steel placement	-	X	Verify that reinforcing is of specified type, grade and size; that it is free of oil, dirt and rust; that it is located and spaced properly; that hooks, bends, ties, stirrups and supplemental reinforcement are placed correctly; that lap lengths, stagger and offsets are provided; and that all mechanical connections are installed per the manufacturer's instructions and/or evaluation report. Certified mill test reports shall be provided for each shipment of ASTM A 615 prior to concrete placement.
Concrete placement and samples	X	-	Cylinders, slump, temperature and air-entrainment shall be done for every 150 cubic yards or each day's production if the day's production is less than 150 cubic yards nor less than once for each 5000 sq. ft of surface area for slabs and walls.
See specifications for further concrete testing requirements.	-	-	

STEEL BOLTED CONSTRUCTION INSPECTIONS

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on the task listed below.

High Strength bolted connections (2018 IBC section 1705.2.1, section 1705.12.1 and section 1705.13.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION PLAN		COMMENTS
	Every Element	Random Basis	
Inspection Tasks Prior to Bolting			
Manufacturer's certifications available for fastener materials	X	-	
Fasteners	-	X	Marked in accordance with ASTM requirements
Proper fasteners selected for the joint detail	-	X	Including grade, type, bolt length if threads are to be excluded from shear plane.

Proper bolting procedure selected for joint detail	-	X	
Connecting elements	-	X	Including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements
Proper storage	-	X	Storage provided for bolts, nuts, washers and other fastener components
Inspection Tasks During Bolting			
Fastener assemblies, of suitable condition	-	X	Verify that fasteners placed in all holes and washers (if required) are positioned as required.
Joint	-	X	Verify that joint brought to the snug-tight condition (min) unless noted otherwise.
Fastener component	-	X	Verify that fastener component not turned by the wrench prevented from rotating
Pretensioned Fasteners	-	X	Verify that pretensioned fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges (Not required if only snug-tight joints are specified per [Section N5.6(1) of AISC 360-16]. Not required for pretensioned joints using turn-of-the-nut method with match-marking, direct-tension-indicators or twist-off type tension control bolt methods)

STEEL WELDED CONSTRUCTION INSPECTIONS

Definition of Terms

Where special inspections are listed under "Random Basis", special inspection of elements and items shall be performed on a random basis. Operations need not be delayed pending these inspections. Where special inspection items are listed under "Every Element", special inspection shall be performed for each element, joint, or member, as applicable based on the task listed below.

Structural Welding (2018 IBC section 1705.2 and section 1705.12.1 and section 1705.13.1 and AISC 360-16 Chapter N and AISC 341-16 Chapter J)

ITEM FOR VERIFICATION & INSPECTION	INSPECTION PLAN		COMMENTS
	Every Element	Random Basis	
Inspection Tasks Prior to Welding			
Welding procedures specifications and manufacturer certifications for welding consumables shall be available	X	-	Welding procedures shall be submitted to the Engineer of Record for review.
Material identification (type/grade)	-	X	
Welder identification system	-	X	Verify there is a system in place to identify the welder who has welded a joint or member.
Configuration and finish of access holes	-	X	
Check welding equipment	-	X	
Inspection Tasks During Welding			
Use of qualified welders	-	X	
Control and handling of welding consumables	-	X	Including packaging and exposure control
Cracked tack welds	-	X	Verify no welding over cracked tack welds.
Environmental conditions	-	X	Including wind speed within limits and precipitation and temperature
WPS followed	-	X	Including settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature (min./max.) maintained, proper position (F, V, H, OH)
Welding techniques	-	X	Including interpass and final cleaning, each pass within profile limitations, each pass meets quality requirements
Inspection Tasks After Welding			
Welds cleaned	-	X	
Size, length and location of welds	X	-	
Ultrasonic testing (UT) for complete-joint-penetration (CJP) groove welds, partial penetration groove welds when used in column splices, and welds subject to fatigue	-	X	Perform UT on 10% of welds subject to transversely applied tension loading in butt, T- and corner joints, in material 5/16" thick or greater. For materials less than 5/16" thick, ultrasonic testing is not required. The UT rate must be increased to 100% if the rejection rate exceeds 5% of the welds tested. See Sections N5.5d and N5.5f for more information. (Engineers Note: Use this row and delete the next row if you are a Risk Category II building)

WOOD CONSTRUCTION INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Prefabricated metal plate wood trusses (2018 IBC Sections 1704.2.5, 1705.5.2, 1705.11.1, and 1705.12.2)			
Shop fabrication of trusses	-	X	Verify that detailed fabrication and quality control procedures exist that provide a basis of inspection control of the workmanship and the fabricator's ability to conform to approved construction documents and referenced standards.
Wood trusses with overall heights or 60 inches or greater and/or wood trusses clear spanning 60 feet or greater	-	X	Verify temporary (during construction) and permanent restraint/bracing of truss members is in accordance with the approved truss submittal package.
Wood diaphragms and shear walls (2018 IBC Sections 1705.5, 1705.11.1 and 1705.12.2)			
All wood diaphragms and shear walls with sheathing fastener spacing at panel edges is equal to or less than 4" o.c.	-	X	Verify wood panel sheathing, grade, thickness and nominal size of framing members, adjoining panel edges, nailing, bolting, anchoring (including hold downs) and other fastening of components within the lateral force resisting system.

DEEP FOUNDATION CONSTRUCTION INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Aggregate pier construction (2018 IBC Section 1705.6)			
Determine capacities and conduct necessary load tests	X	-	
Observe drilling operation and reporting	X	-	

POST-INSTALLED ANCHOR INSPECTIONS

ITEM FOR VERIFICATION & INSPECTION	INSPECTION FREQUENCY		COMMENTS
	CONTINUOUS	PERIODIC	
Post-Installed Anchors and Reinforcing Bars (2018 IBC Section 1705.1.1)			
Adhesive Anchors and Reinforcing Bars	X	-	Special inspection shall be performed per manufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of epoxy and anchor rod. If the anchor is not installed in a horizontal, upwardly inclined or overhead orientation meant to resist sustained tension loads, special inspection may be reduced to a periodic frequency.
Mechanical Anchors and Screw Anchors	-	X	Special inspection shall be provided per manufacturer's requirements and approved ICC-ES reports noted in POST-INSTALLED ANCHOR section of the General Structural Notes prior to installation of mechanical or screw anchor.

STRUCTURAL OBSERVATION PROGRAM

If structural observations are required, they shall be done by the Engineer of Record or an approved subordinate at the stages of construction listed in the Construction Milestone Schedule section of these notes. At the conclusion of the project, the designated structural observer shall submit to the building official a written statement that the site visits have been made and identify any reported deficiencies that to the best of the structural observer's knowledge have not been resolved (See IBC 2018 1704.6).

STRUCTURAL OBSERVATION PROGRAM REQUIRED BY CODE:	YES	NO
	X	

CONSTRUCTION MILESTONE SCHEDULE

CONTRACTOR TO NOTIFY ENGINEER AT THE FOLLOWING CONSTRUCTION PHASES:		
CONCRETE		
Footings, stem walls and piers	Prior to pouring concrete	
WOOD		
Wood shear walls	After substantial portion of framing is completed and prior to covering either side of shear walls	
Wood roof sheathing	After substantial portion of framing is completed and prior to roofing	

DEFERRED SUBMITTALS

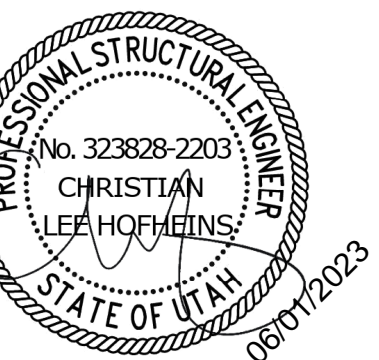
For the purposes of this section, deferred submittals are defined as per section 107.3.4.1 of the IBC 2018. Submittal documents for deferred submittal items shall be submitted to the engineer, architect and building official for their review for general conformance with the design of the building.

DEFERRED STRUCTURAL SUBMITTALS FOR THIS PROJECT ARE

Aggregate piers
Prefabricated Metal Plate Wood Trusses

Revision Schedule

#	Description	Date



Project for:

**THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS**

**West Haven
Seminary**

2535 West Wilson Lane
West Haven, Utah

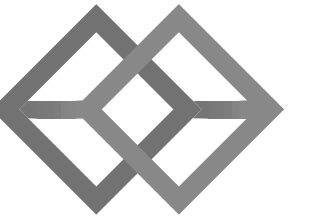
Project Number: 230089

Property Number: 501-8963

05/01/2023

SPECIAL INSTRUCTIONS

S-003



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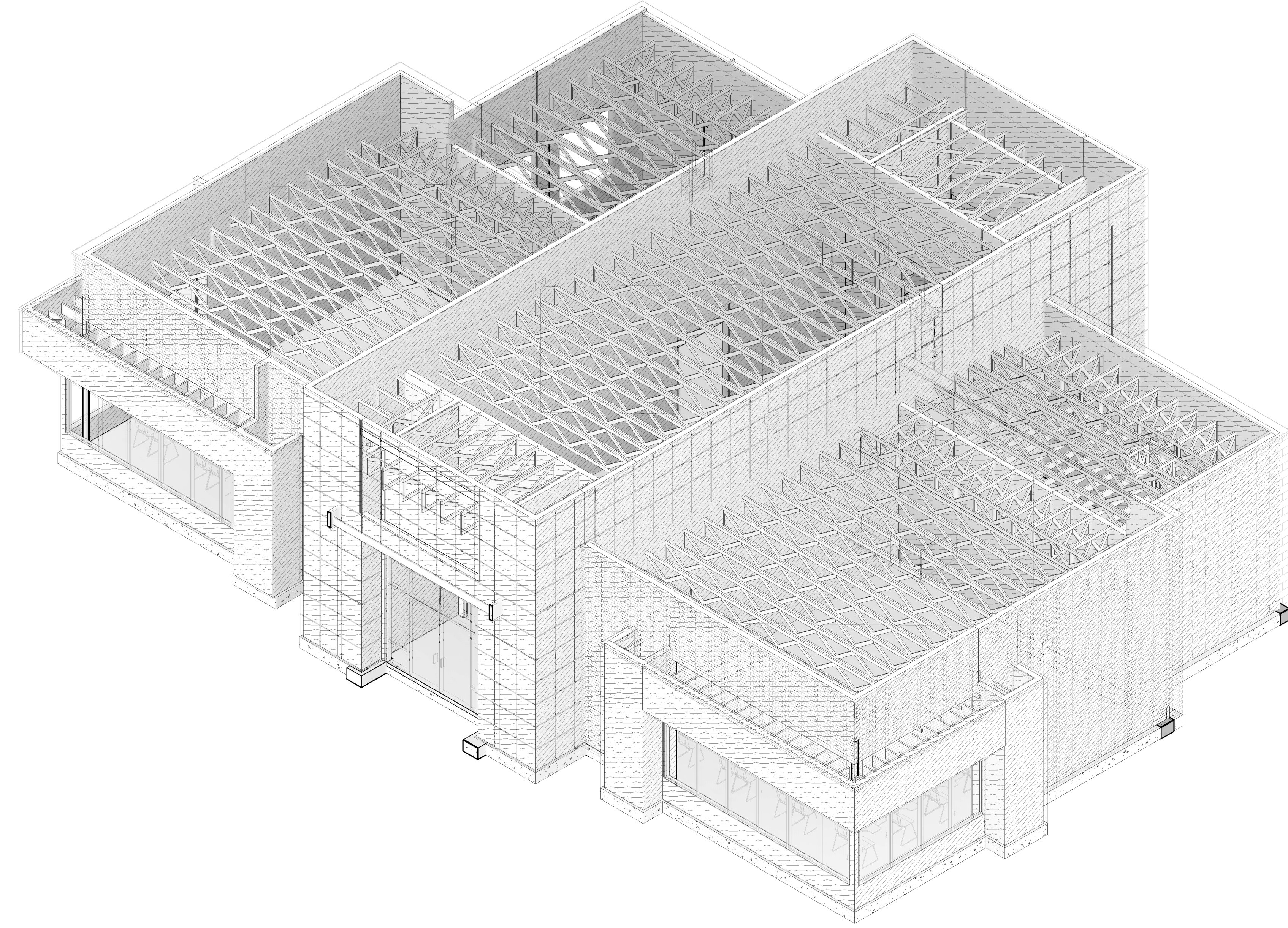
Sheet Number	Sheet Name
S-001	GENERAL STRUCTURAL NOTES
S-002	GENERAL STRUCTURAL NOTES
S-003	SPECIAL INSTRUCTIONS
S-010	LEGENDS AND ABBREVIATIONS
S-101	FOOTING AND FOUNDATION PLANS
S-111	CEILING FRAMING PLAN
S-121	ROOF FRAMING PLAN
S-501	DETAILS
S-521	DETAILS
S-522	DETAILS
S-601	SCHEDULES
S-602	SCHEDULES

SNOW DRIFT LEGEND	
	INDICATES AREA OF SNOW DRIFT. JOIST SUPPLIER TO ADD SNOW DRIFT LOAD TO JOISTS AND GIRDERS
	INDICATES ADDITIONAL LOADING DUE TO SNOW DRIFT (SEE SNOW DRIFT NOTE)
	xx psf INDICATES LOAD AT HIGH POINT
	x psf INDICATES LOAD AT LOW POINT
	x'-x" INDICATES LENGTH OF DRIFT
	INDICATES ADDITIONAL LOADING DUE TO SNOW DRIFT (SEE SNOW DRIFT NOTE)
	xx psf INDICATES LOAD AT HIGH POINT
	x psf INDICATES LOAD AT LOW POINT
	x'-x" INDICATES LENGTH OF DRIFT
	SEE PLAN FOR SNOW DRIFT LOADING. THESE LOADS ARE IN ADDITION TO THE JOIST UNIFORM AND POINT LOADS SHOWN ON PLANS. JOIST SUPPLIER TO ADD SNOW DRIFT LOAD TO BOTH JOISTS AND GIRDERS

MARKS AND SYMBOLS LEGEND			
	SECTION MARK		INDICATES PLYWOOD ROOF SHEATHING. SEE SCHEDULE ON SHEET S-602
	SHEET NUMBER		INDICATES CONCRETE WALL. DASHED WALLS STOP AT DECK
	FOOTING DESIGNATION		INDICATES WOOD STUD WALL. DASHED WALLS STOP AT DECK
	TOP OF FOOTING ELEVATION		INDICATES HOLD DOWN TYPE. SEE SCHEDULE ON SHEET S-602
	INDICATES CONCRETE FOUNDATION WALL TYPE. SEE SCHEDULE ON SHEET S-601		INDICATES WOOD SHEARWALL TYPE. SEE SCHEDULE ON SHEET S-602
	INDICATES WOOD SHEARWALL TYPE. SEE SCHEDULE ON SHEET S-602		INDICATES WOOD HEADER TYPE. SEE SCHEDULE ON SHEET S-602
	INDICATES WOOD SHEARWALL (AND TYPE). SEE SCHEDULES ON SHEET(S) S-601 S-602		INDICATES CONCRETE PIER. SEE SCHEDULE ON SHEET S-601
	INDICATES CONTINUOUS FOOTING. SEE SCHEDULE ON SHEET S-601		INDICATES CONTROL / CONSTRUCTION JOINT. SEE DETAIL(S) S/S-501
	INDICATES SPOT FOOTING. SEE SCHEDULE ON SHEET S-601		INDICATES WOOD POST TYPE. SEE SCHEDULE ON SHEET (WoodSp)
	INDICATES STEEL COLUMN. SEE SCHEDULE ON SHEET S-601		INDICATES FLOOR OFFSET. SEE DETAILS
	INDICATES AGGREGATE PIER. SEE NOTE 9 ON SHEET S-101		INDICATES THICKENED SLAB FOOTING. SEE SCHEDULE ON SHEET S-601
	INDICATES ROOF MECHANICAL UNIT AND WEIGHT OF UNIT		INDICATES FOOTING STEP. SEE DETAIL S/S501

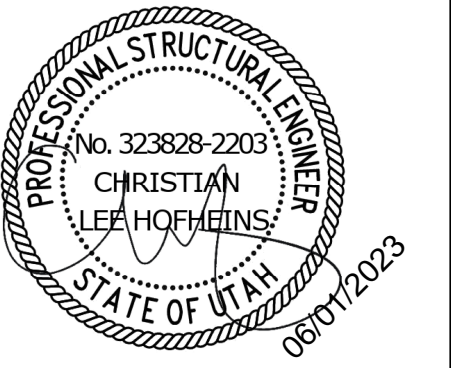
LEGEND OF MARKS AND ABBREVIATIONS

AB	ANCHOR BOLT(S)	k	KIP(S) = 1000 POUNDS
ABV	ABOVE	KLF	KIPS PER LINEAL FOOT
ALT	ALTERNATE	KSF	KIPS PER SQUARE FOOT
APPROX	APPROXIMATE	LBS	POUNDS
ARCH	ARCHITECT(URAL)	LF	LINEAL FOOT
BLDG	BUILDING	LVL	LAMINATED VENEER LUMBER
BLW	BELOW	MAX	MAXIMUM
BM	BEAM	MECH	MECHANICAL
B.N.	BOUNDARY NAILING	MFR	MANUFACTURER
BOT	BOTTOM	MIN	MINIMUM
BRG	BEARING	MISC	MISCELLANEOUS
BTWN	BETWEEN	NIC	NOT IN CONTRACT
CC.	CENTER-TO CENTER	NTS	NOT TO SCALE
CGS	CENTER OF GROSS STEEL	O.C.	ON CENTER
C.J.	CONST/CONTROL JOINT	O.F.	OUTSIDE FACE
COL	COLUMN	OPNG	OPENING
CONC	CONCRETE	OPP	OPPOSITE
CONST	CONSTRUCTION	PAF	POWDER-ACTUATED FASTENER
CTR	CENTER	PCF	POUNDS PER CUBIC FOOT
CW-x	CONCRETE WALL	PL	PLATE
DB	DECK BEARING	PLF	POUNDS PER LINEAL FOOT
DBA	DEFORMED BAR ANCHOR	PSF	POUNDS PER SQUARE FOOT
DBE	DECK BEARING ELEVATION	PSI	POUNDS PER SQUARE INCH
DBL	DOUBLE	PT	POINT
DET	DETAIL	REINF	REINFORCING
DIA	DIAMETER	REQD	REQUIRED
DIM	DIMENSION	R.D.	ROOF DRAIN
DN	DOWN	RTU	ROOF TOP UNITS
DWG	DRAWING	SHT	SHEET
DWL	DOWEL	SI	SPECIAL INSPECTION
EA	EACH	SIM	SIMILAR
E.N.	EDGE NAILING	SMU	SUSPENDED MECHANICAL UNITS
E.F.	EACH FACE	SOG	SLAB-ON-GRADE
E.J.	EXPANSION JOINT	SQ	SQUARE
ELEC	ELECTRICAL	SRE	SEISMIC RESISTING ELEMENT
ELEV	ELEVATION	STAG	STAGGERED
EQUIP	EQUIPMENT	STD	STANDARD
EQ	EQUAL	STL	STEEL
E.W.	EACH WAY	STR	STRUCTURAL
EXT	EXTERIOR	STS	SELF TAPPING SCREWS
FC-x	CONTINUOUS FOOTING MARK	T&B	TOP AND BOTTOM
F.D.	FLOOR DRAIN	TEMP	TEMPERATURE
FDN	FOUNDATION	THDS	THREADS
F.F.	FINISHED FLOOR	T.O.	TOP OF
F.N.	FIELD NAILING	TOC	TOP OF CONCRETE
FR-x	RECTANGULAR FOOTING	TOD	TOP OF DECK
FS-x	SQUARE FOOTING MARK	TOF	TOP OF FOOTING
FT	FOOT	TOS	TOP OF STEEL
FTG	FOOTING	TOW	TOP OF WALL
FTS-x	THICKENED SLAB MARK	TYP	TYPICAL
GA	GAUGE	UNO	UNLESS NOTED OTHERWISE
GALV	GALVANIZED	VERT	VERTICAL
GSN	GENERAL STRUCTURAL NOTES	W/	WITH
HB	HORIZONTAL BRIDGING	WT	WALL THICKNESS
HORIZ	HORIZONTAL	WWF	WELDED WIRE FABRIC
HSA	HEADED STUD ANCHOR	WWM	WELDED WIRE MESH
HT	HEIGHT		
ICC	INTERNATIONAL CODE COUNCIL		
IBC	INTERNATIONAL BUILDING CODE		
I.F.	INSIDE FACE		
IN.	INCH		
INT	INTERIOR		
JT	JOINT		
JST	JOIST		



Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

West Haven Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number: 230089

Property Number: 501-8963

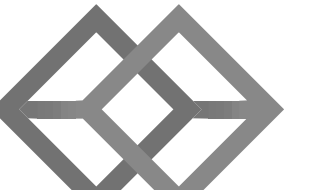
05/01/2023

LEGENDS AND ABBREVIATIONS

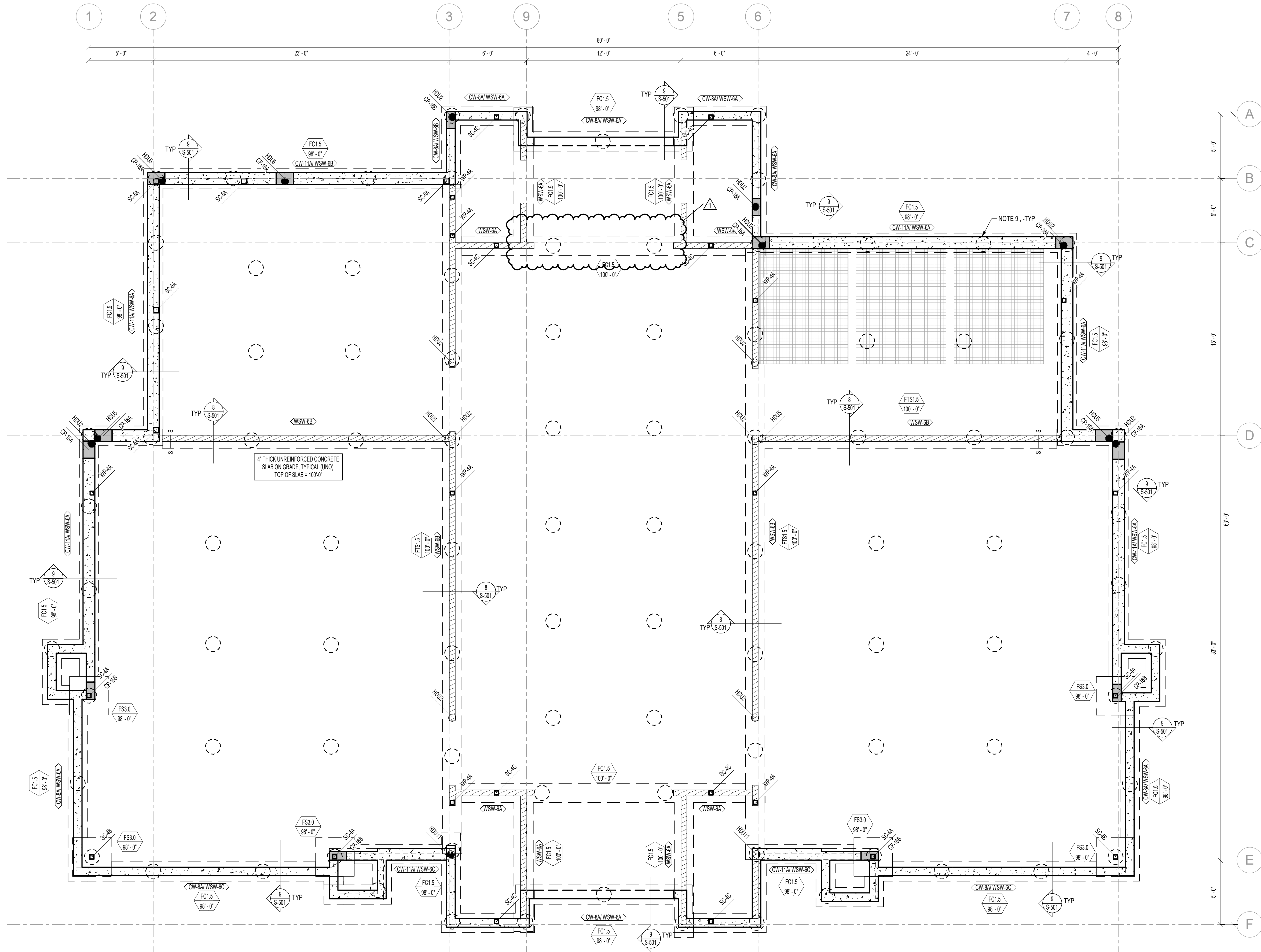
S-010

FOOTING AND FOUNDATION PLAN NOTES

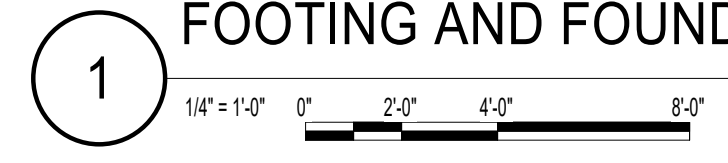
- COORDINATE LOCATION OF DEPRESSED SLABS, SLOPED SLABS, AND FLOOR DRAINS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR CONCRETE WORK AT DOORS, SIDEWALKS, ETC.
- SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
- SEE "EARTHWORK" NOTES ON SHEET S-01 FOR MINIMUM FILL REQUIRED BENEATH FOOTINGS.
- ALL SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (UNO).
- SEE DETAILS 1S-501 AND 2S-501 FOR CONDITION WHERE BURIED PIPES RUN PARALLEL AND PERPENDICULAR TO FOOTINGS.
- SEE DETAIL 5S-501 FOR TYPICAL CONTROL/CONSTRUCTION JOINTS IN CONCRETE SLAB ON GRADE.
- SEE DETAIL 6S-501 FOR SLAB REINFORCING WHERE CONTROL JOINTS ARE DISCONTINUOUS.
- AGGREGATE PIERS INDICATED ARE NOT INTENDED TO BE THE FINAL LOCATIONS AND SHALL BE CONFIRMED OR MODIFIED BY AGGREGATE PIER DESIGNER IN ORDER TO ACHIEVE THE DESIGN CRITERIA LISTED IN THE GEOTECHNICAL REPORT.



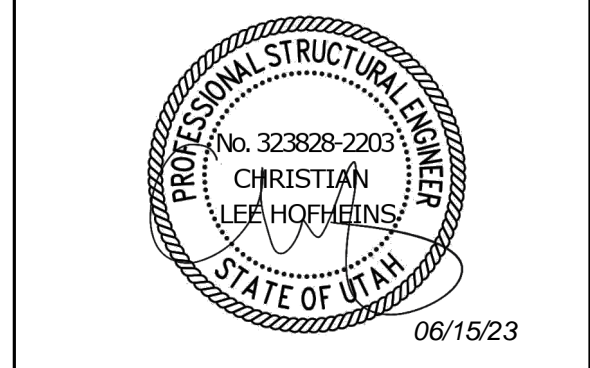
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2766 South Main Street
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FOOTING AND FOUNDATION PLAN



Revision Schedule		
#	Description	Date
1	REVISION 1	06/15/2023



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

West Haven Seminary
2535 West Wilson Lane
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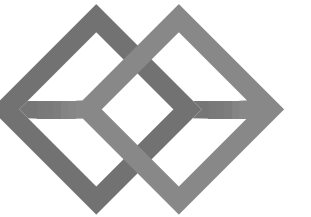
Project Number: 230089

Property Number: 501-8963

05/01/2023

FOOTING AND FOUNDATION PLANS

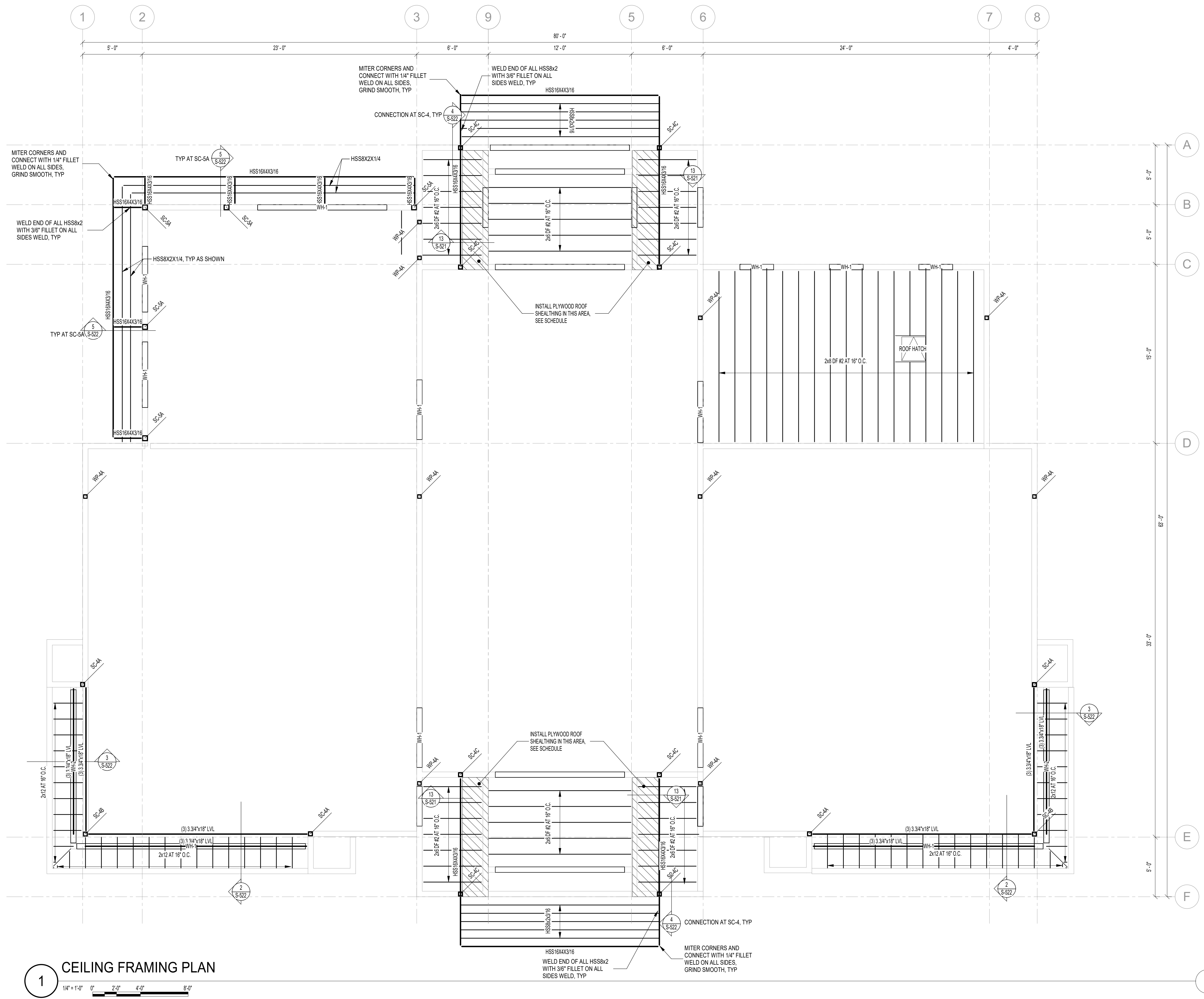
S-101



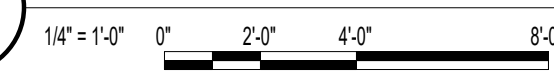
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801-355-5656
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FLOOR FRAMING PLAN NOTES

1. VERIFY ALL FLOOR OPENINGS FOR MECHANICAL SHAFTS, STAIRS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. ALL JOISTS SHALL HAVE 5" DEEP BEARING ENDS (UNO).
3. ALL JOIST ENDERS SHALL HAVE 7 1/2" DEEP BEARING ENDS (UNO).
4. OPEN WEB STEEL JOIST AND JOIST ENDERS SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT THE MECHANICAL AND LATERAL LOADS SHOWN ON THE FLOOR FRAMING PLANS IN ADDITION TO THE UNIFORM AND POINT LOADS SHOWN.
5. COORDINATE SIZE AND LOCATION OF ALL MECHANICAL OPENINGS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
6. WHERE DIAGONAL BRIDGING CONFLICTS WITH MECHANICAL DUCTS, REMOVE DIAGONAL BRIDGING AND REPLACE WITH HORIZONTAL BRIDGING AFTER ROOF DECK IS IN PLACE.
7. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO ALL STEEL COLUMNS.

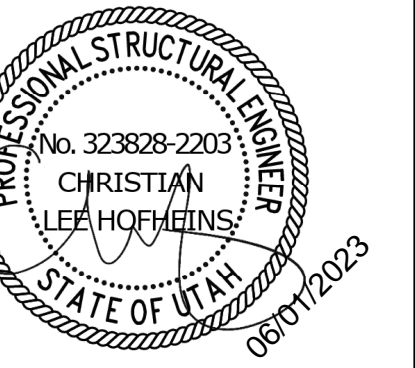


1 CEILING FRAMING PLAN



Revision Schedule

#	Description	Date



Project for:
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West Haven Seminary
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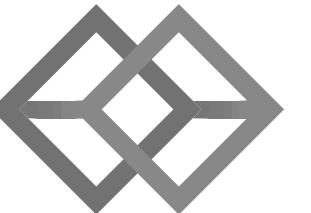
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CEILING FRAMING PLAN

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ROOF FRAMING DESIGN LOADS

ROOF LOADS:

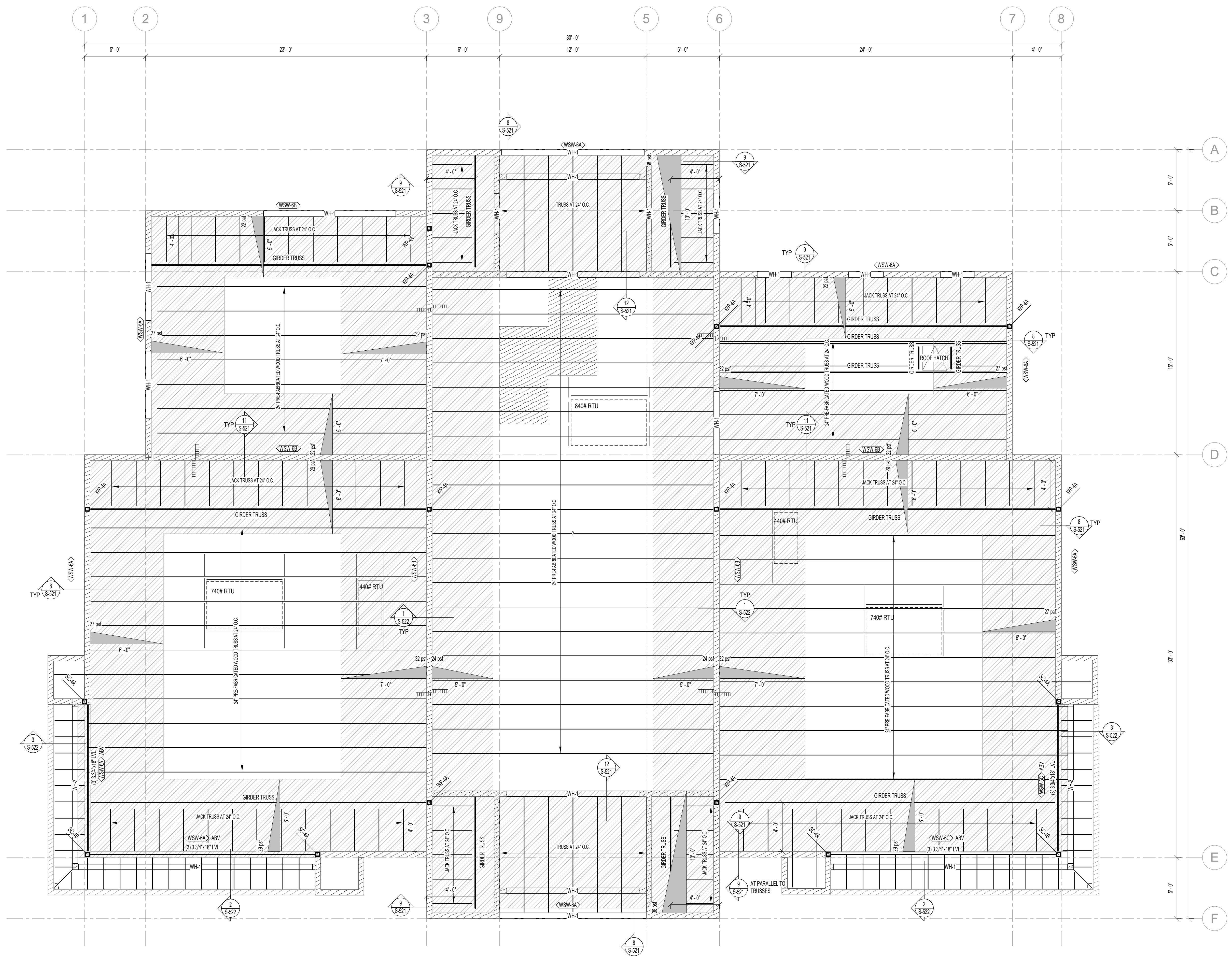
DEAD LOAD	20psf
DECK	3psf
JOIST/GIRDER	3psf
CEILING	3psf
ROOFING	2psf
MECHANICAL	4psf
SOLAR PANEL	5psf
SNOW LOAD	20psf
TOTAL LOAD	68psf

ROOF FRAMING PLAN NOTES

1. VERIFY ALL ROOF OPENINGS FOR MECHANICAL SHAFTS, DRAINS, ETC. WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. SEE DETAIL 1/S-S21 FOR FRAMING AROUND ALL OPENINGS.
3. SEE DETAIL 2/S-S21 FOR TYPICAL TOP PLATE SPLICE DETAIL.
4. SEE DETAIL 3/S-S21 FOR TYPICAL MECHANICAL UNIT SUPPORT DETAIL.
5. SEE DETAIL 4/S-S21 FOR TYPICAL MECHANICAL UNIT SUPPORT DETAIL.
6. SEE DETAIL 6/S-S21 FOR TYPICAL BUILT-UP MEMBER DETAIL.
7. SEE ARCHITECTURAL PLANS FOR DIMENSIONS TO ALL STEEL COLUMNS.

DESIGN ASSUMPTIONS

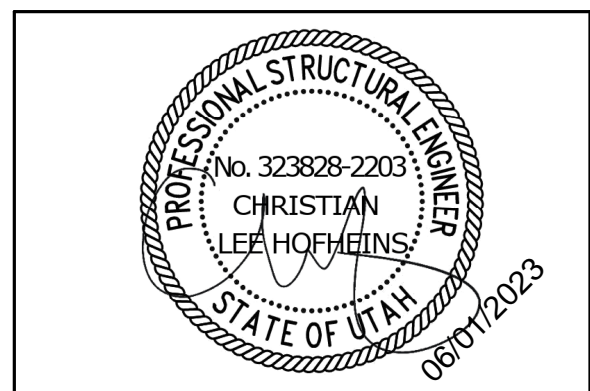
1. ALL ROOF FRAMING TO BE PREFAB WOOD TRUSSES AT 24" O.C. U.N.O.
2. ALL EXTERIOR WOOD WALLS TO BE WSW-6A U.N.O.



1 ROOF FRAMING PLAN
1/4" = 1'-0"
0' 2'-0" 4'-0" 8'-0"

Revision Schedule

#	Description	Date



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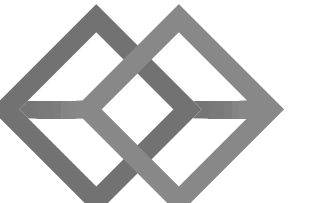
Project Number: 230089

Property Number: 501-8963

05/01/2023

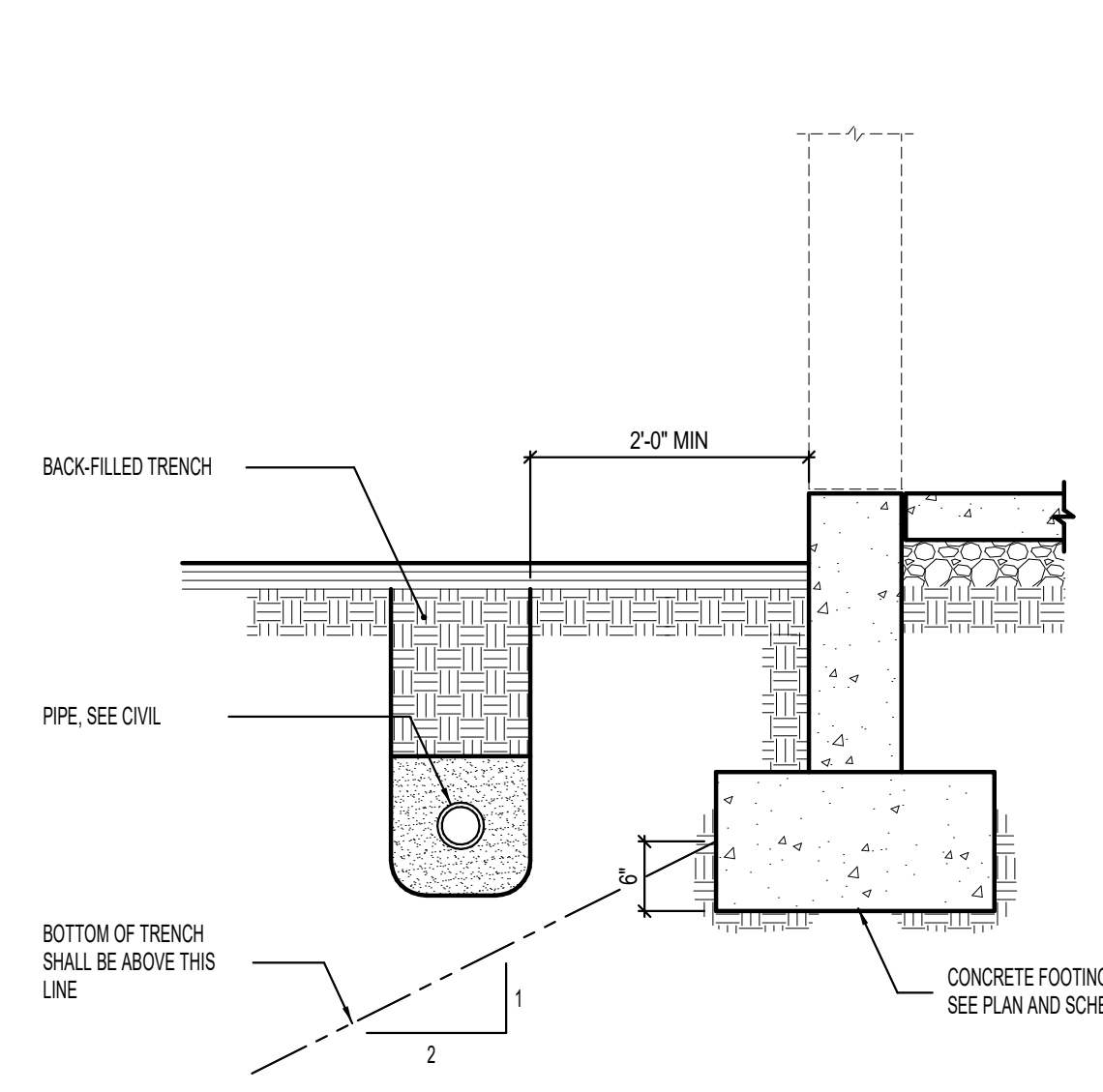
ROOF FRAMING PLAN

S-121

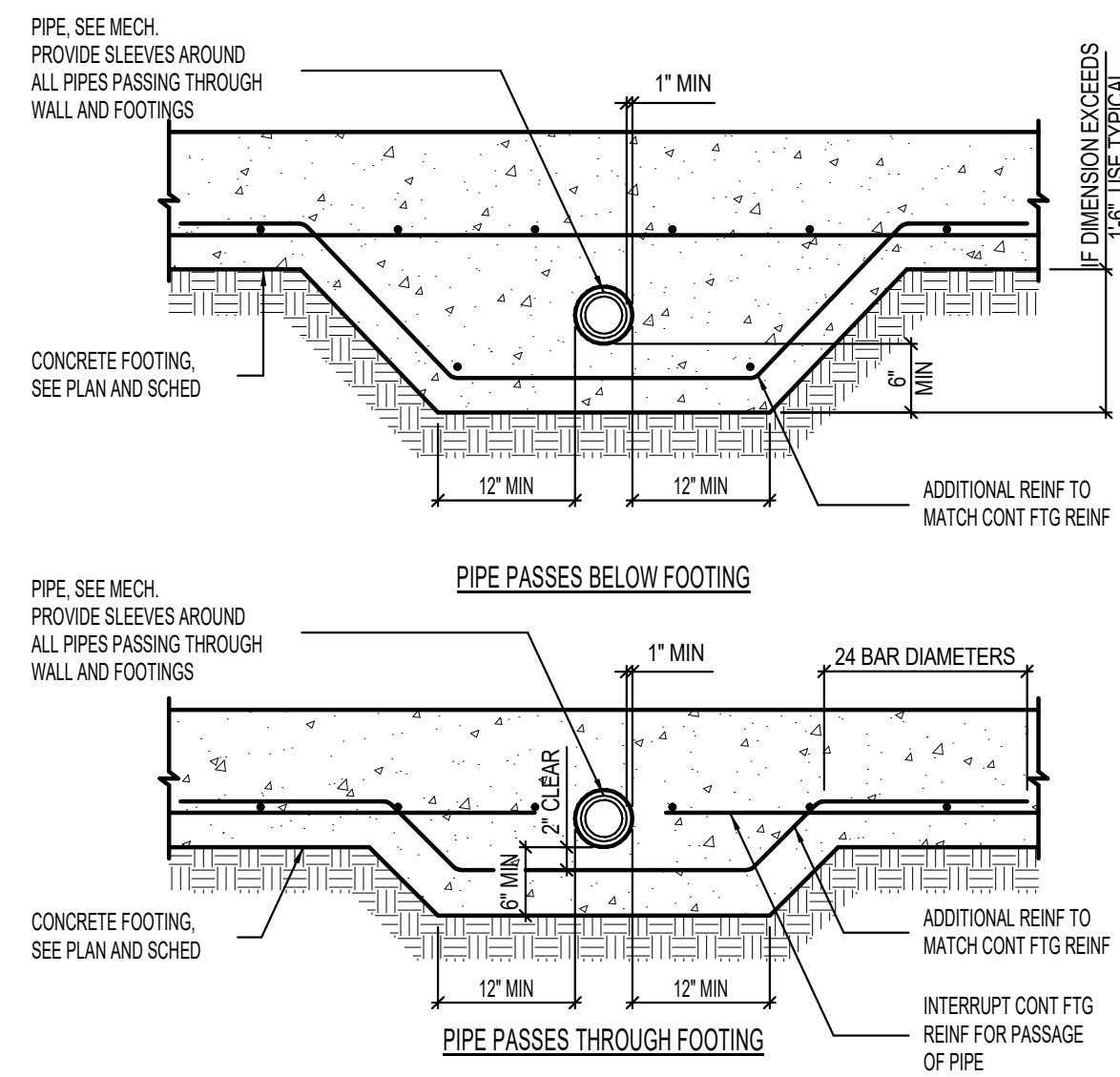


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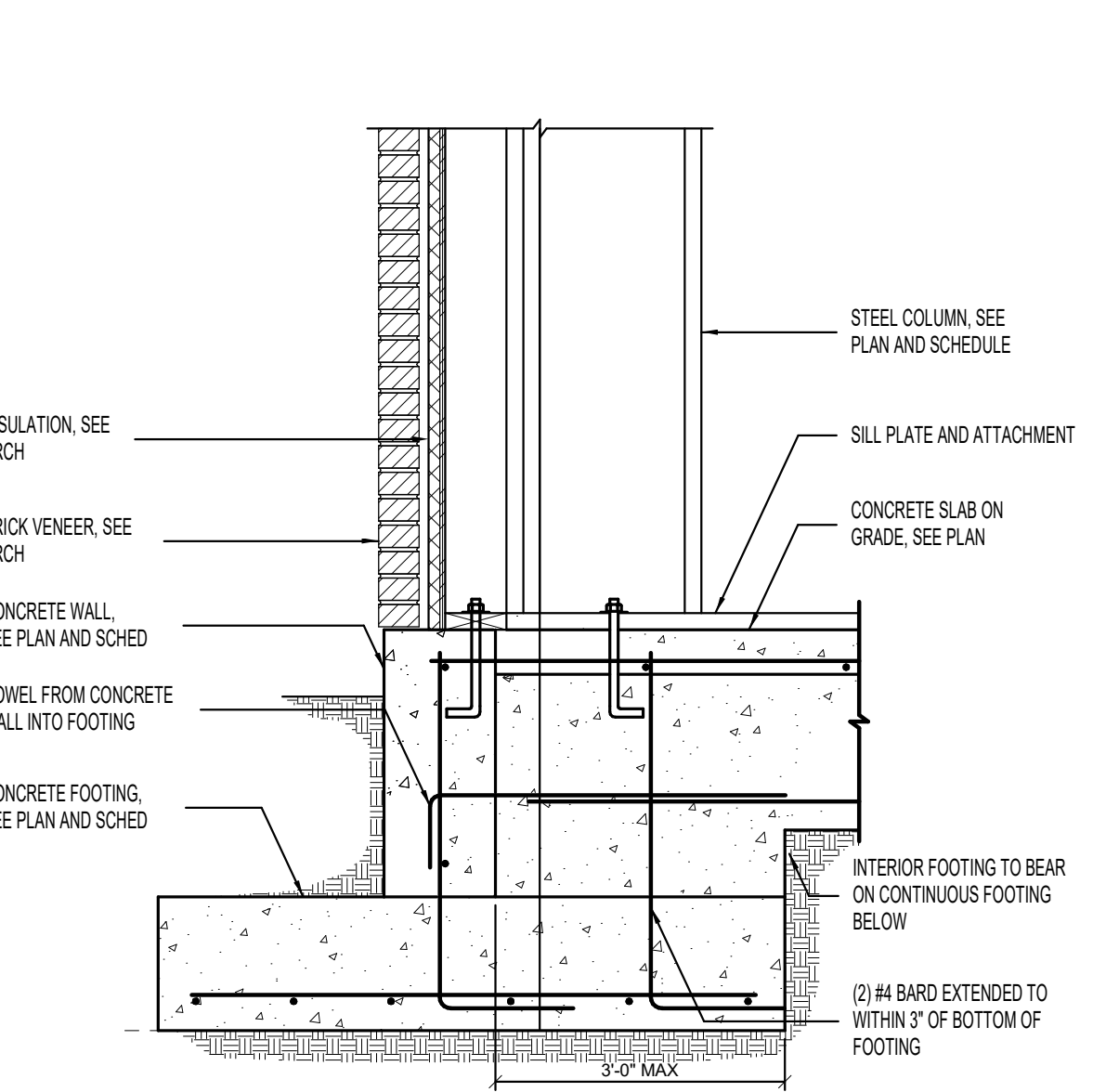
NOT USED



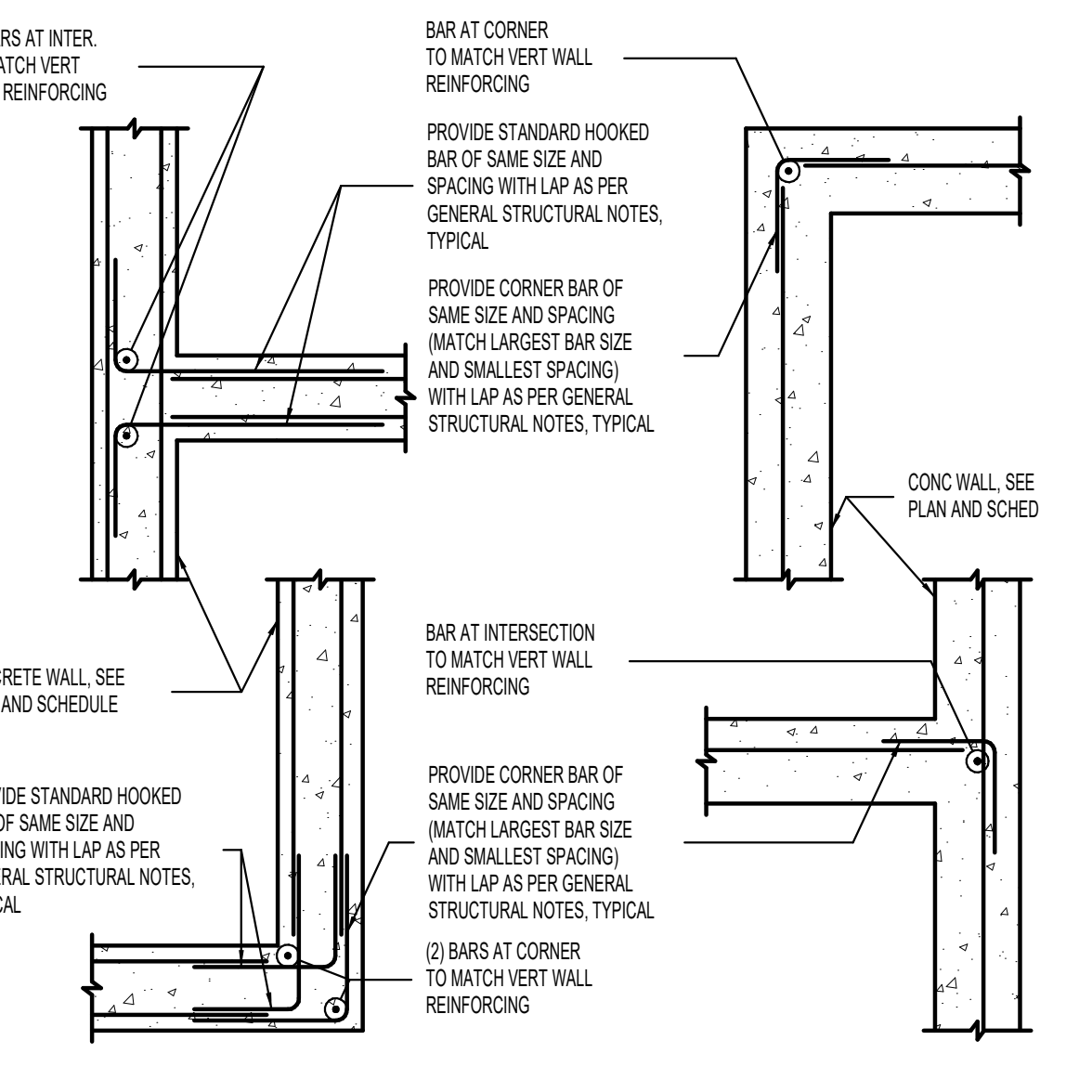
1 CONDITION AT PIPE PARALLEL TO CONCRETE FOOTING
NO SCALE



2 CONDITIONS AT PIPE PERPENDICULAR TO FOOTING
NO SCALE

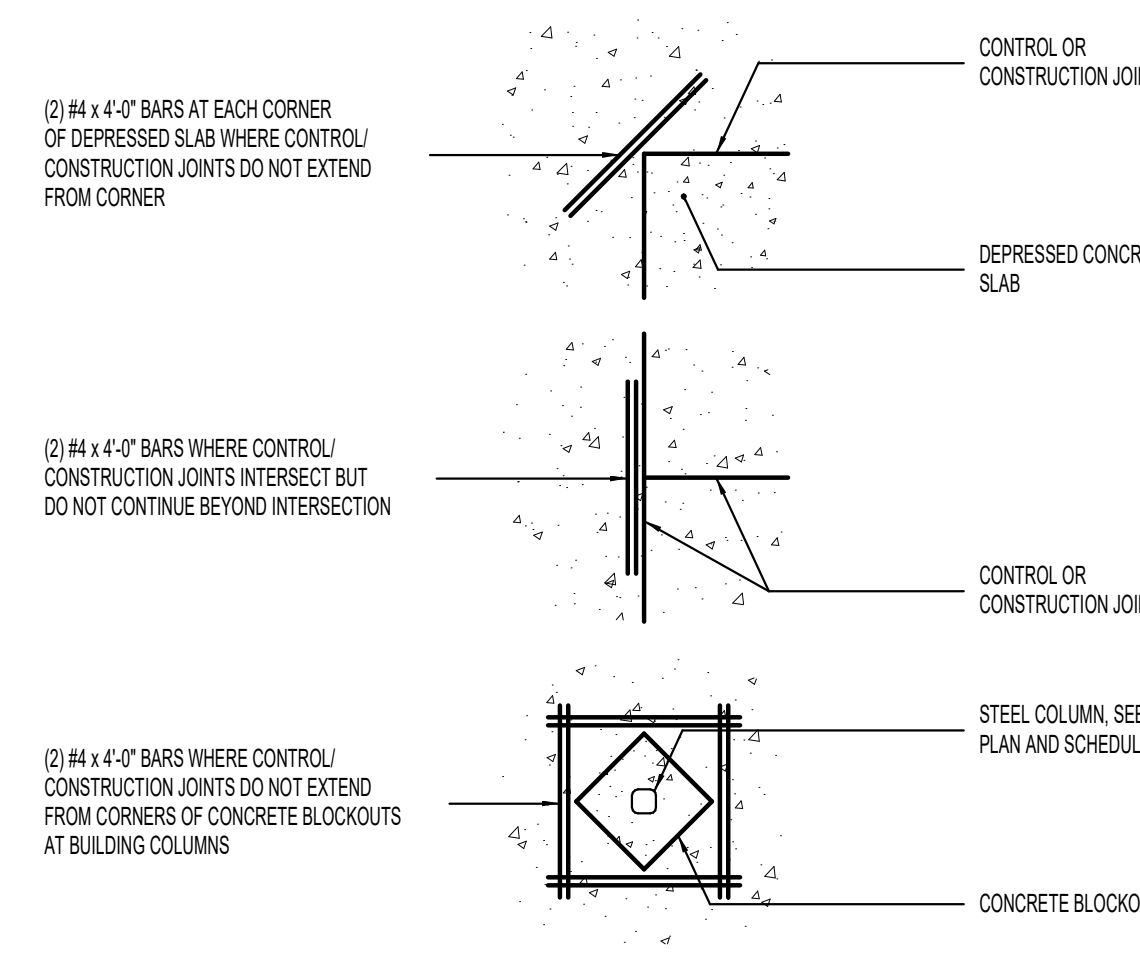


3 TYPICAL FOOTING STEP AT EXTERIOR FOUNDATION WALL
NO SCALE

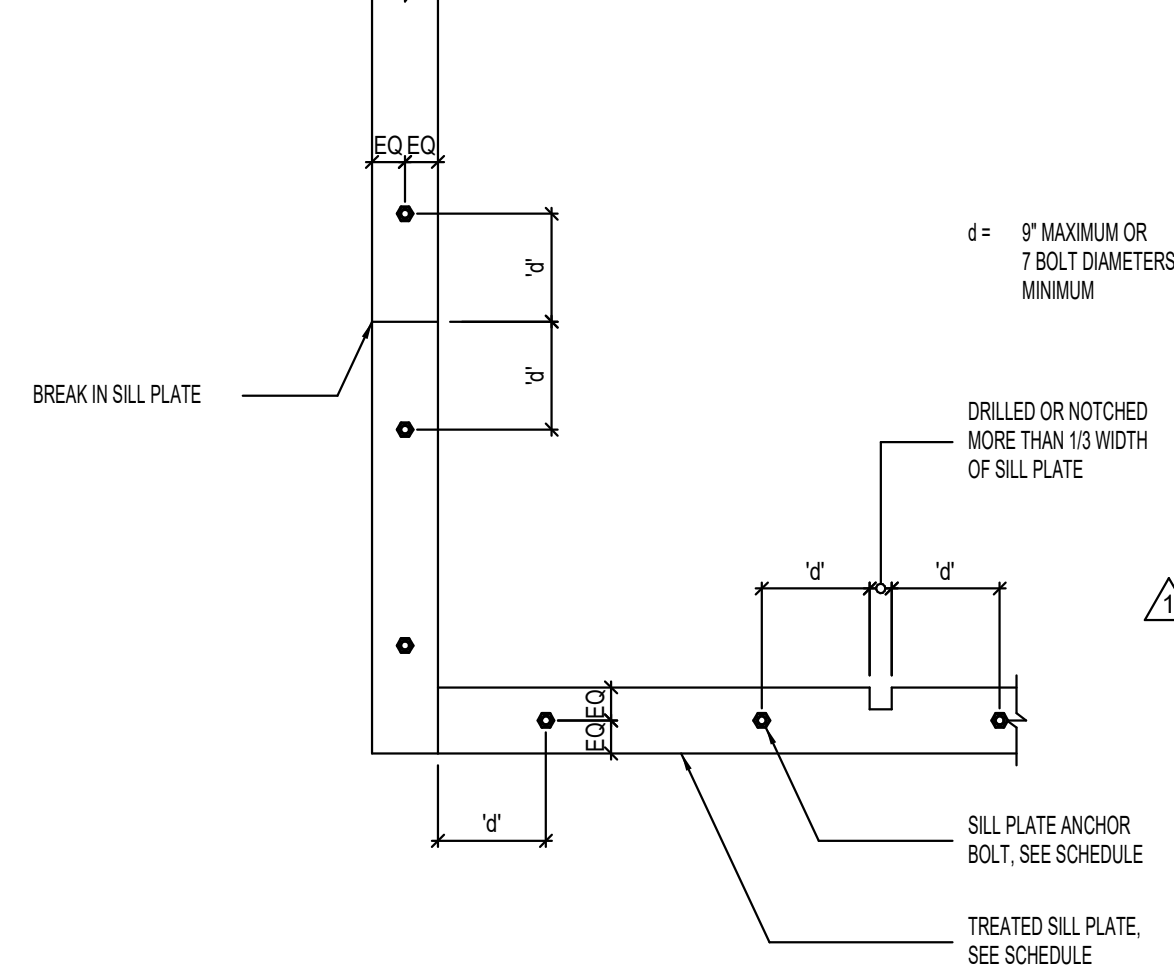


4 TYPICAL CORNER WALL REINFORCING AT CONCRETE WALLS
[PLAN VIEW]
NO SCALE

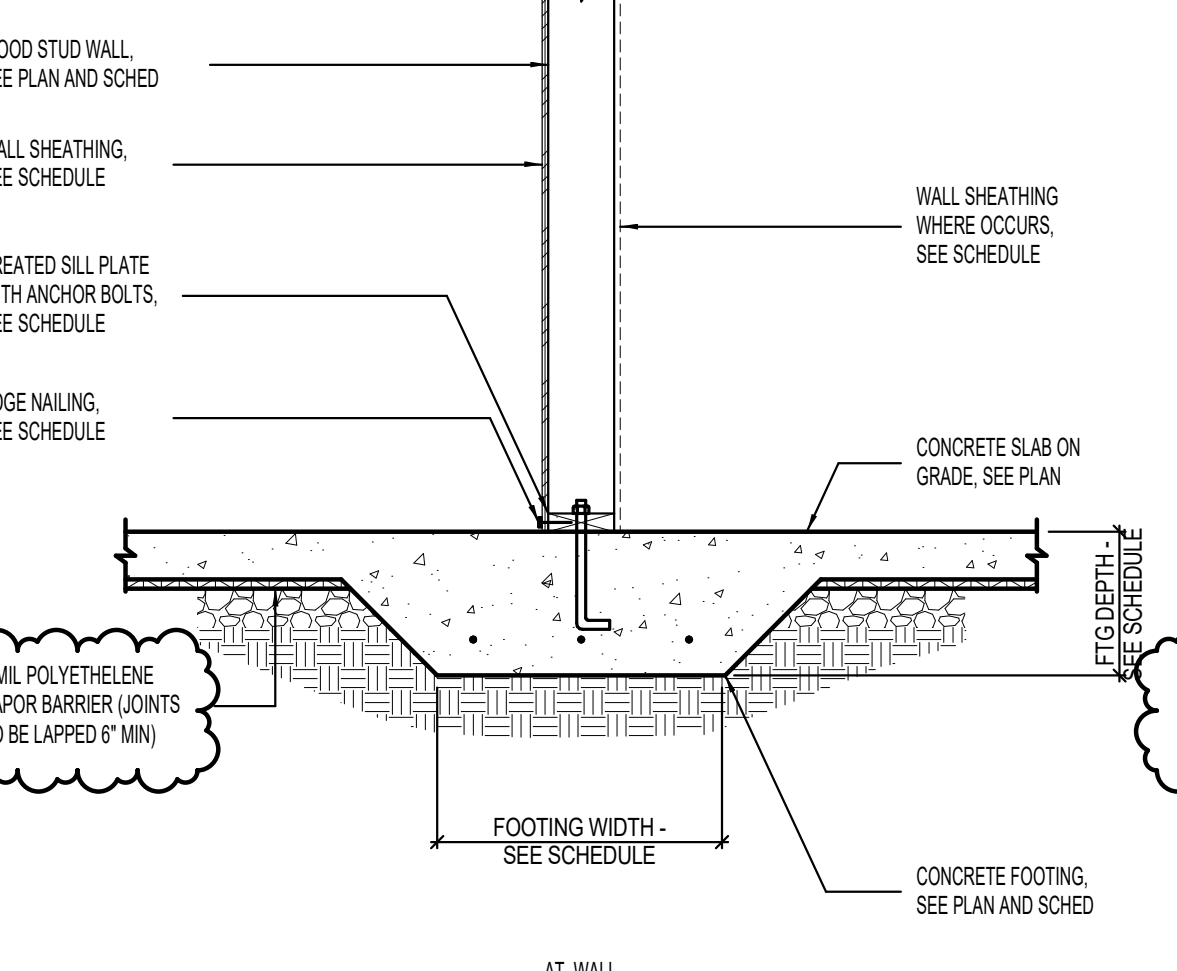
5 NOT USED
NO SCALE



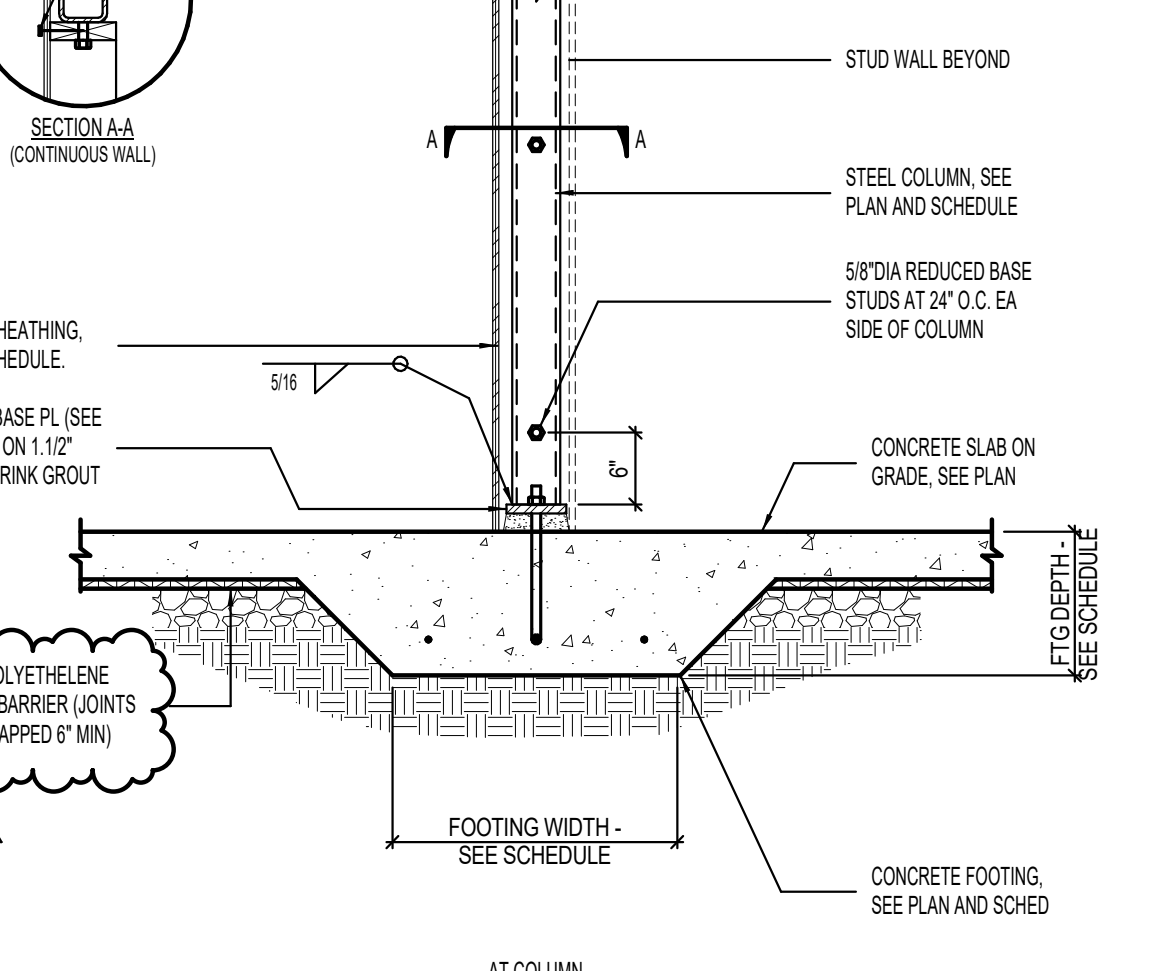
6 LOCATIONS REQUIRING ADDITIONAL SLAB REINFORCING
[PLAN VIEW]
NO SCALE



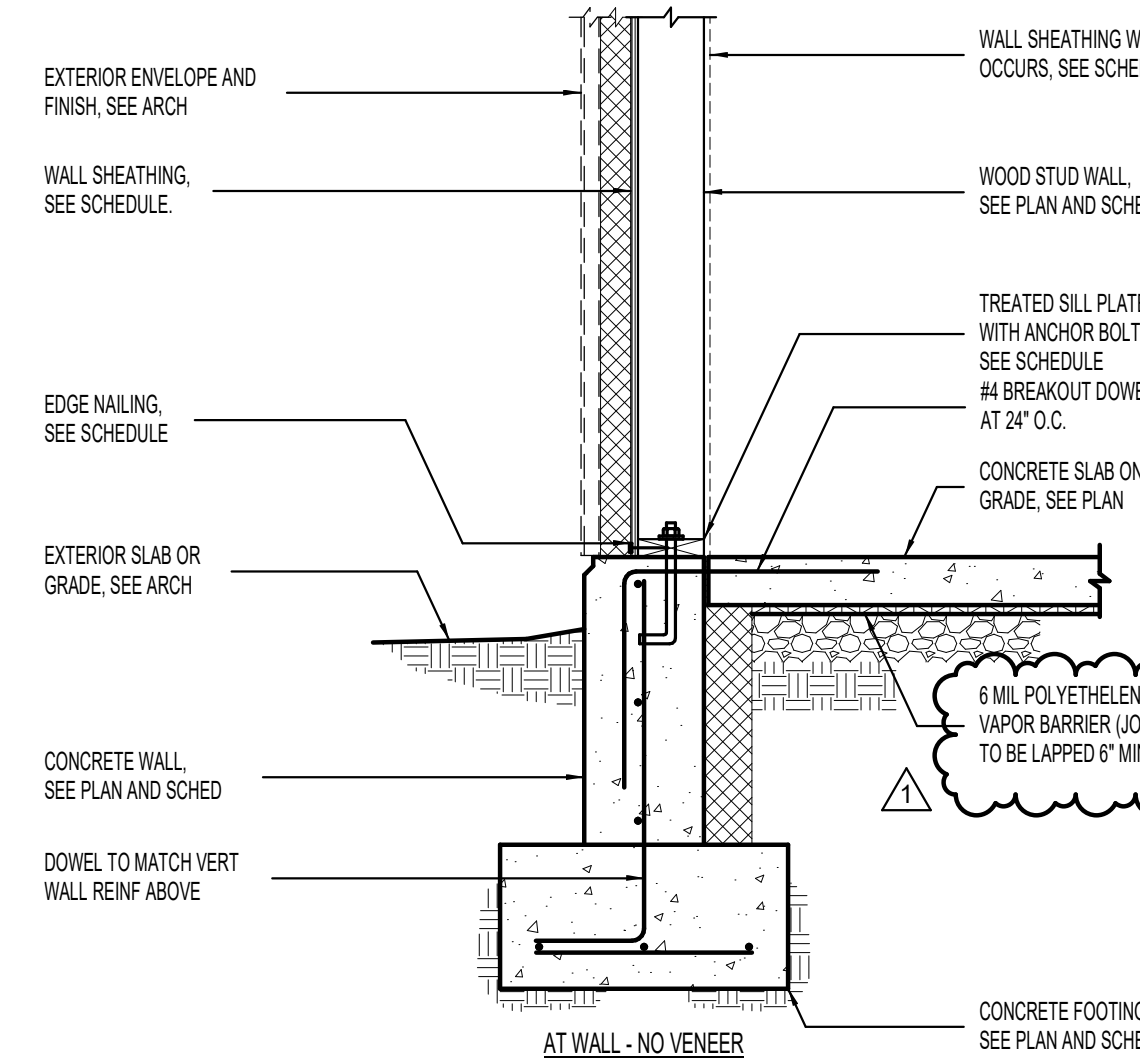
7 SILL PLATE BOLTING DETAIL
[PLAN VIEW]
NO SCALE



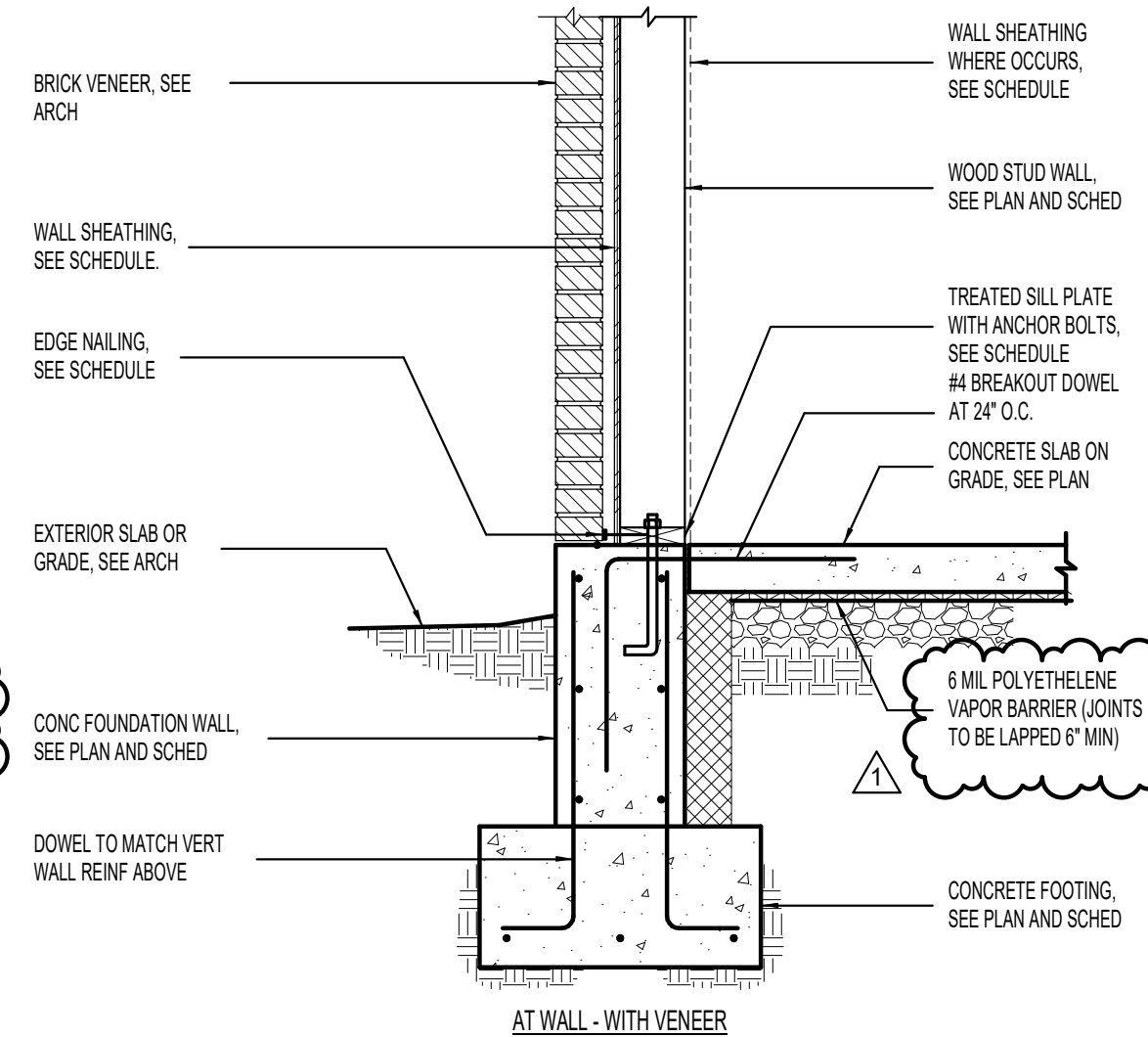
8 INTERIOR WOOD STUD WALL BEARING ON THICKENED SLAB FOOTING
NO SCALE



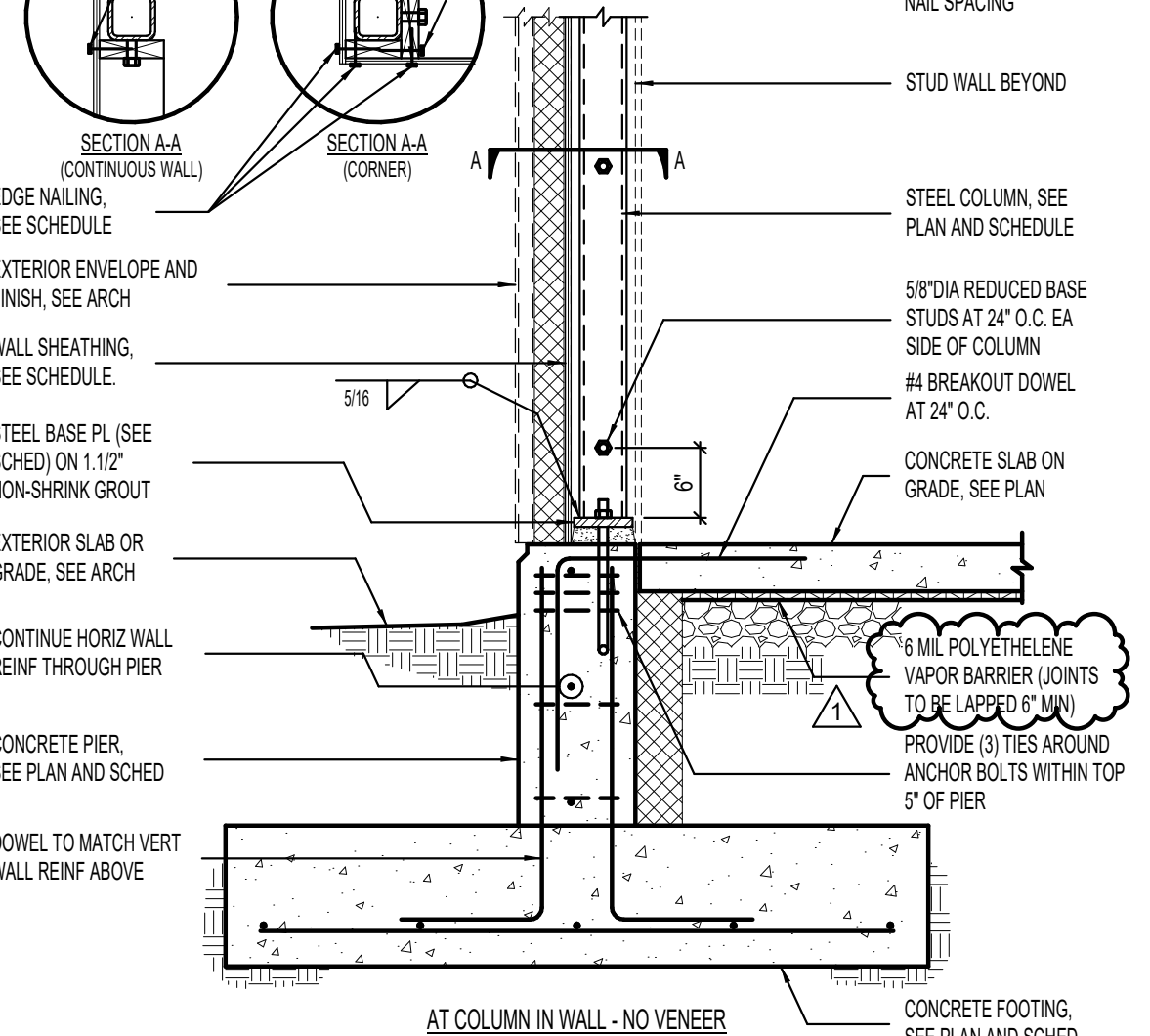
8 INTERIOR WOOD STUD WALL BEARING ON THICKENED SLAB FOOTING
NO SCALE



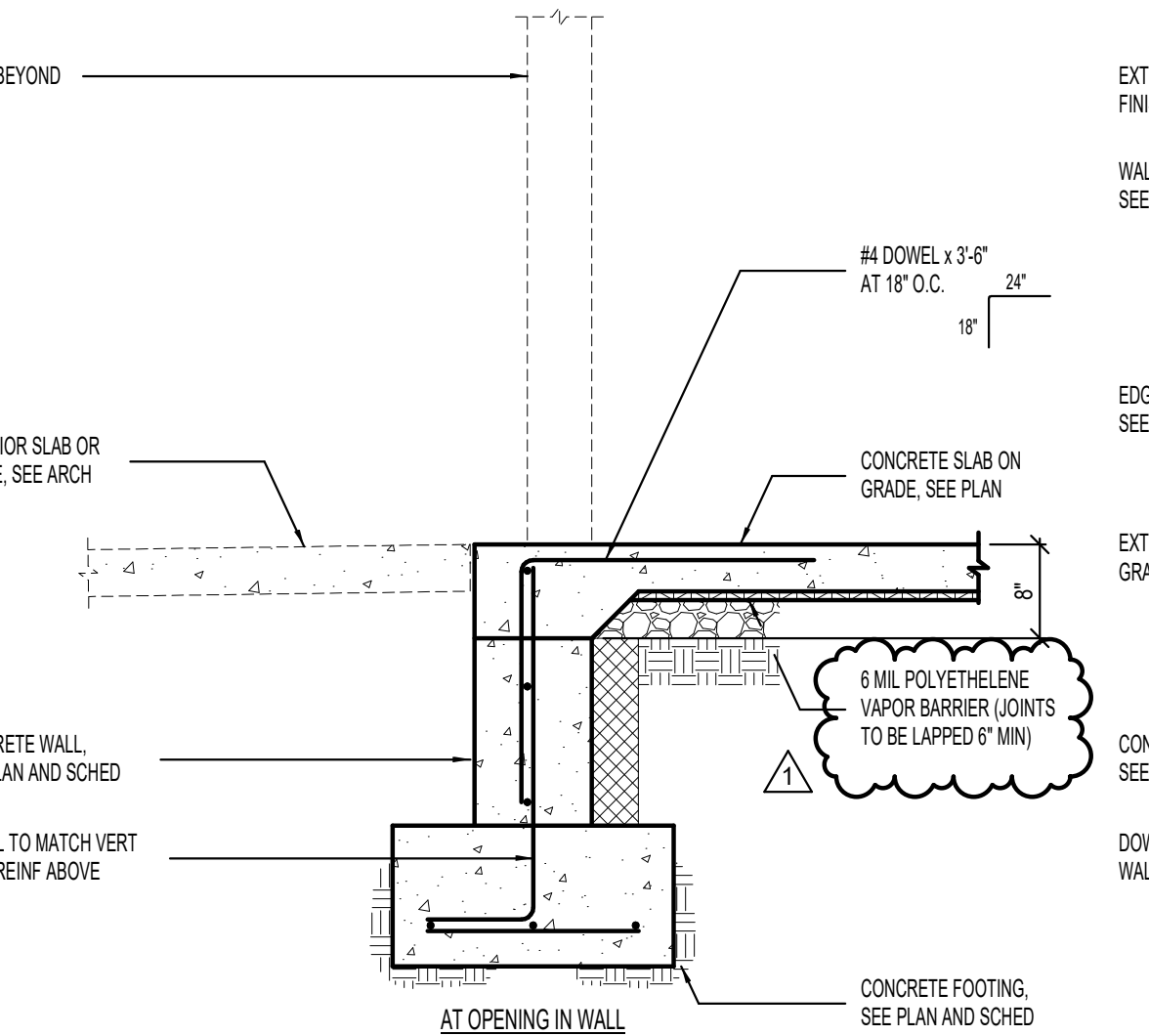
9 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON CONCRETE FOUNDATION WALL
NO SCALE



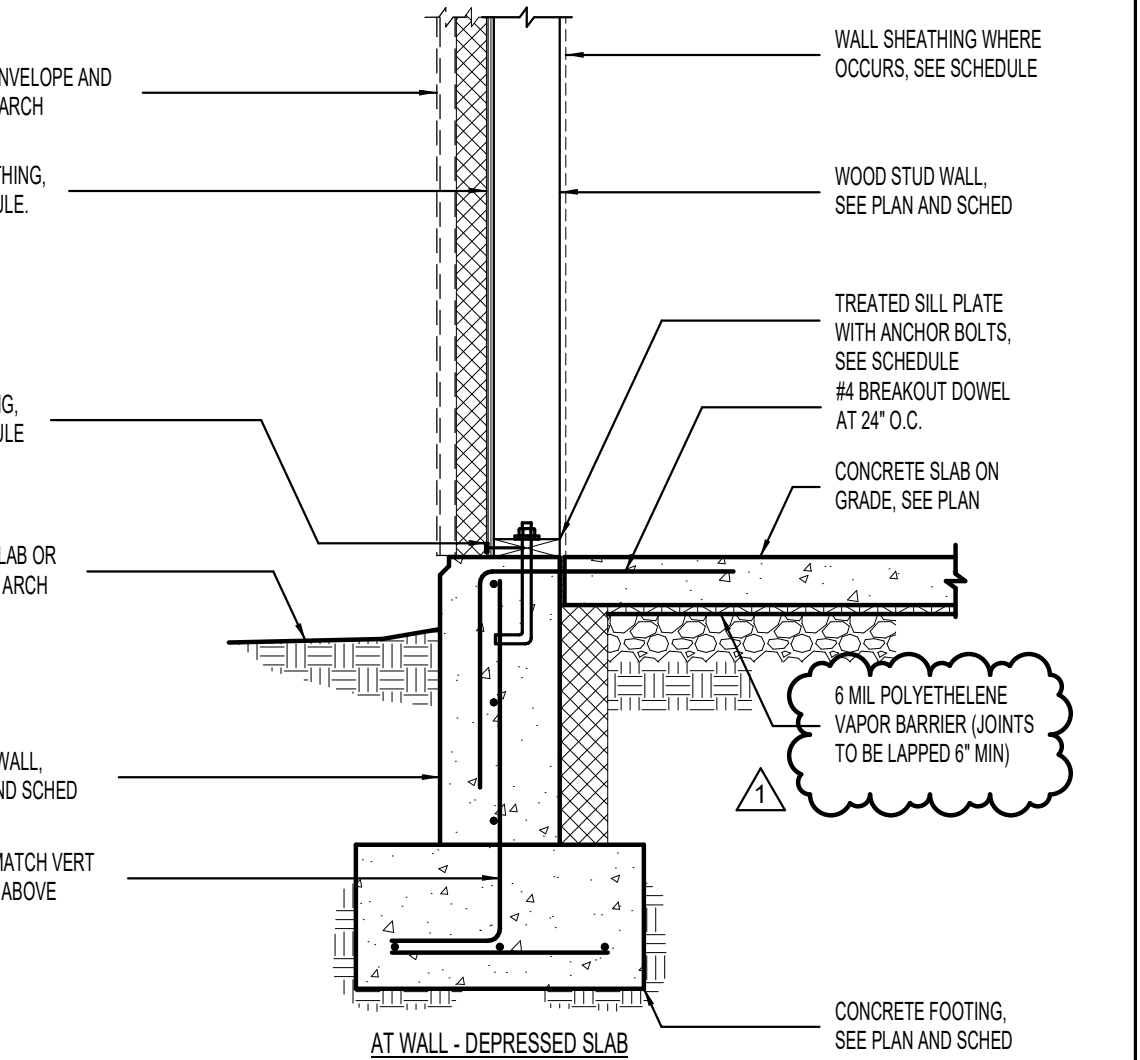
9 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON CONCRETE FOUNDATION WALL
NO SCALE



9 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON CONCRETE FOUNDATION WALL
NO SCALE

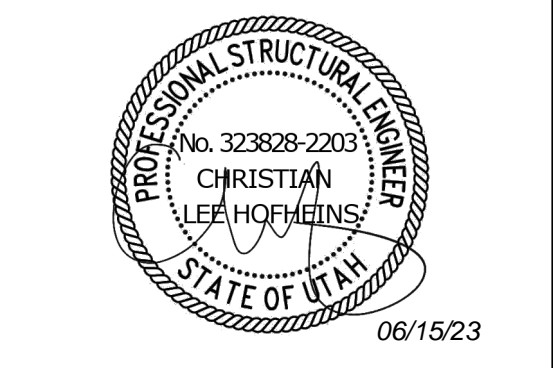


9 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON CONCRETE FOUNDATION WALL
NO SCALE



9 TYPICAL EXTERIOR WOOD STUD WALL BEARING ON CONCRETE FOUNDATION WALL
NO SCALE

Revision Schedule		
#	Description	Date
1	REVISION 1	06/15/2023

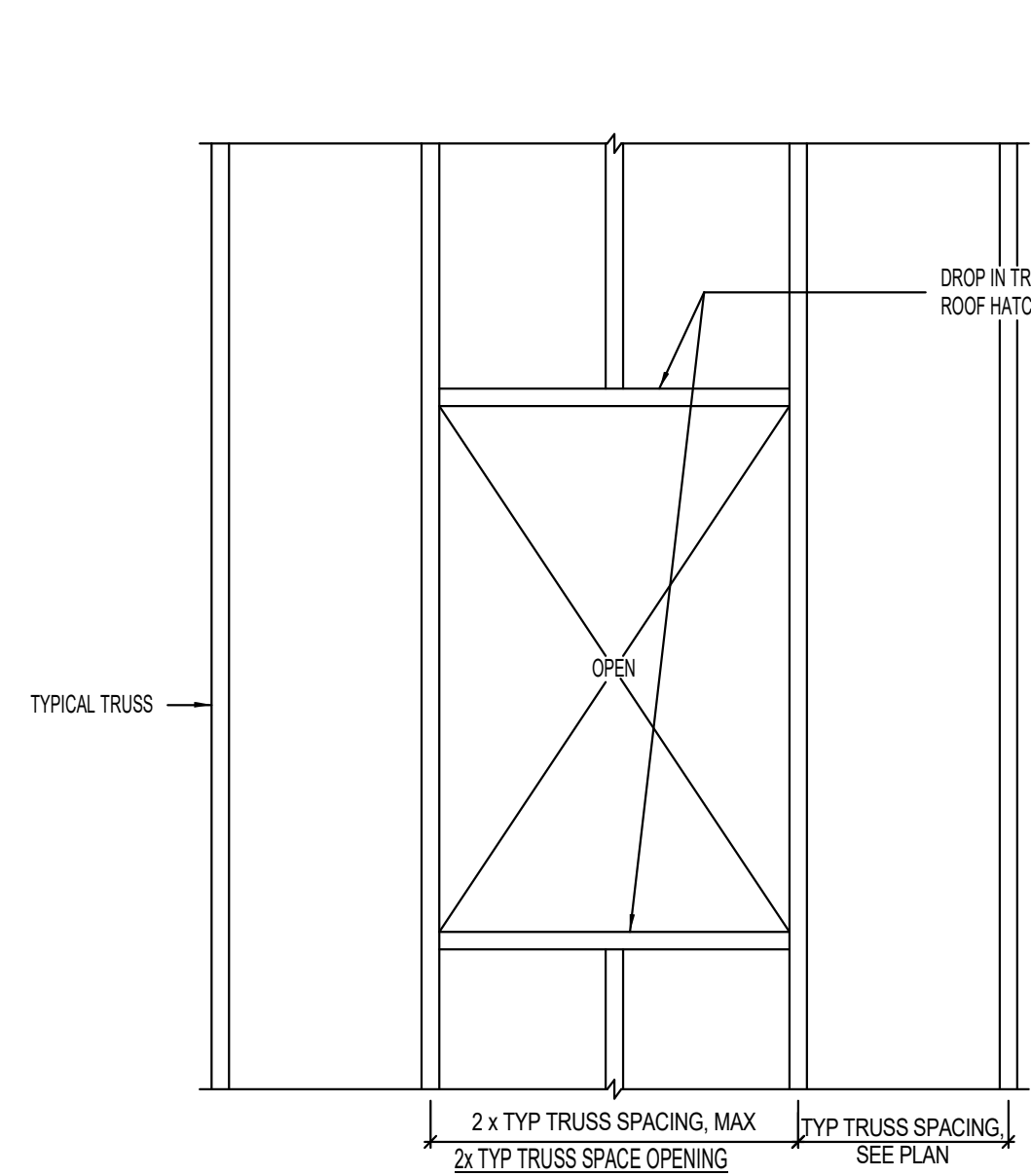


Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

West Haven Seminary
2535 West Wilson Lane
West Haven, Utah

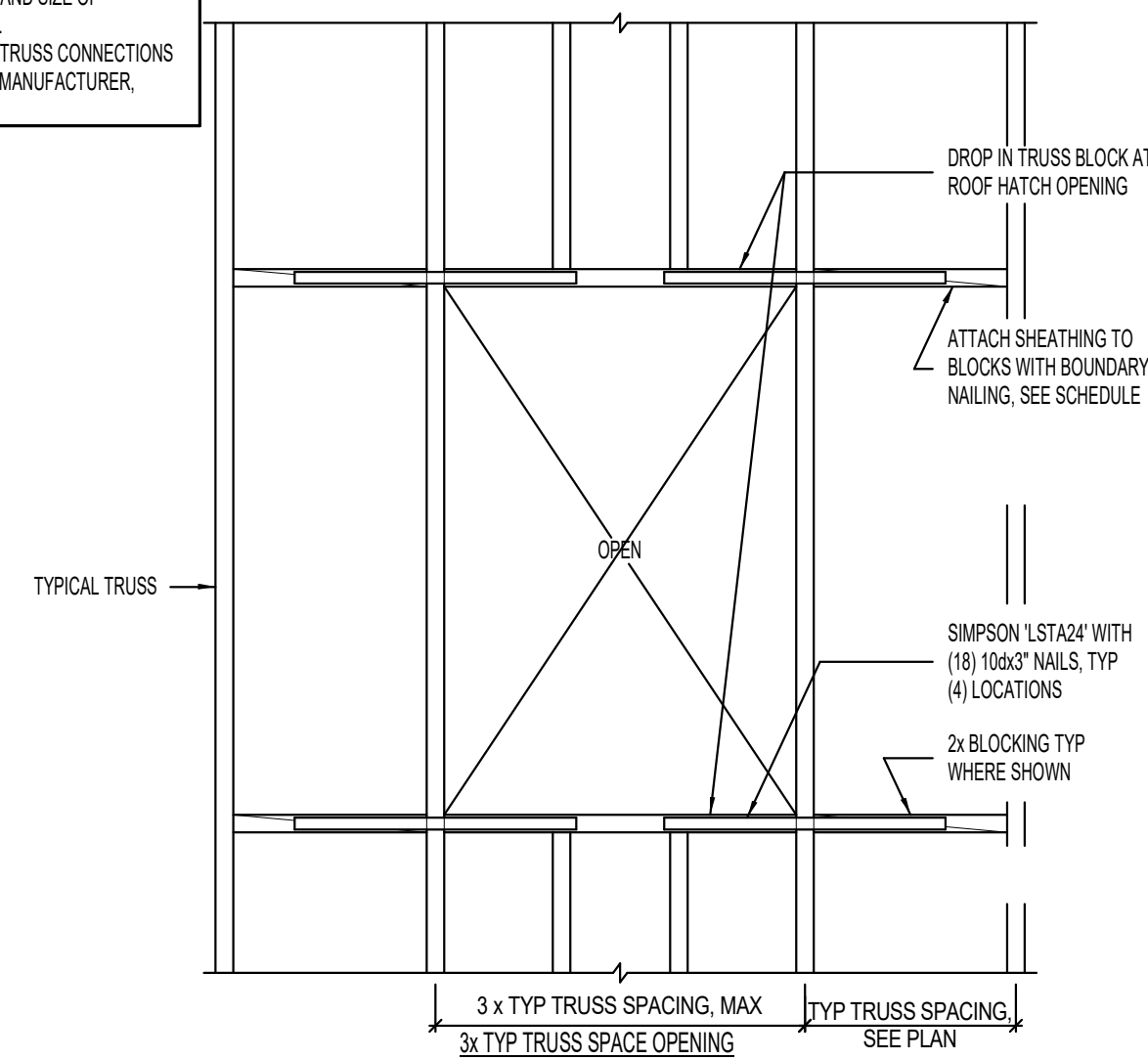
Project Number:	230089
Property Number:	501-8963
05/01/2023	
DETAILS	

S-501



NOTES:
 1. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION AND SIZE OF OPENINGS.
 2. TRUSS TO TRUSS CONNECTIONS BY TRUSS MANUFACTURER, TYPICAL.

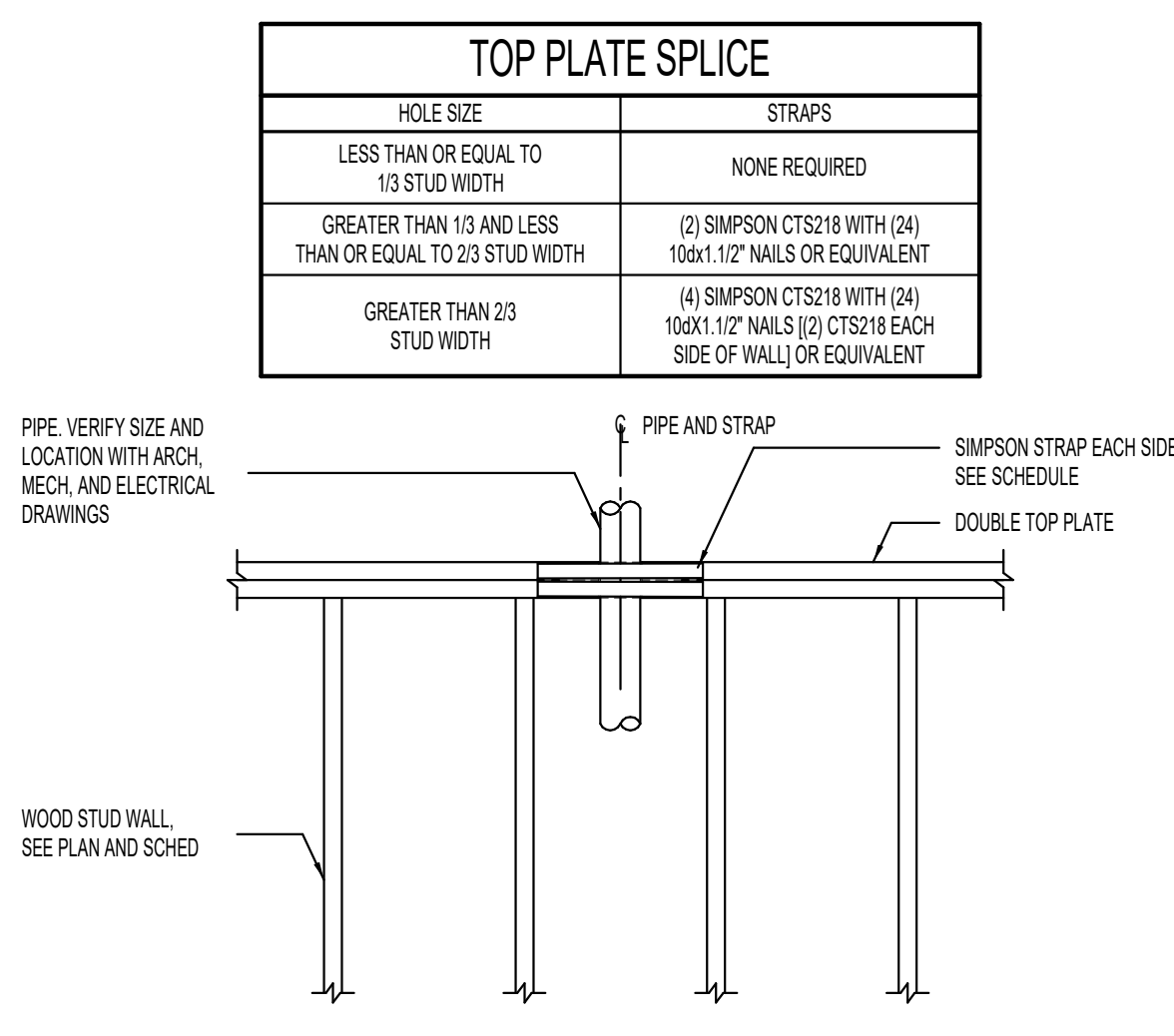
1 TRUSS FRAMING AT ROOF OPENINGS [PLAN VIEW] NO SCALE



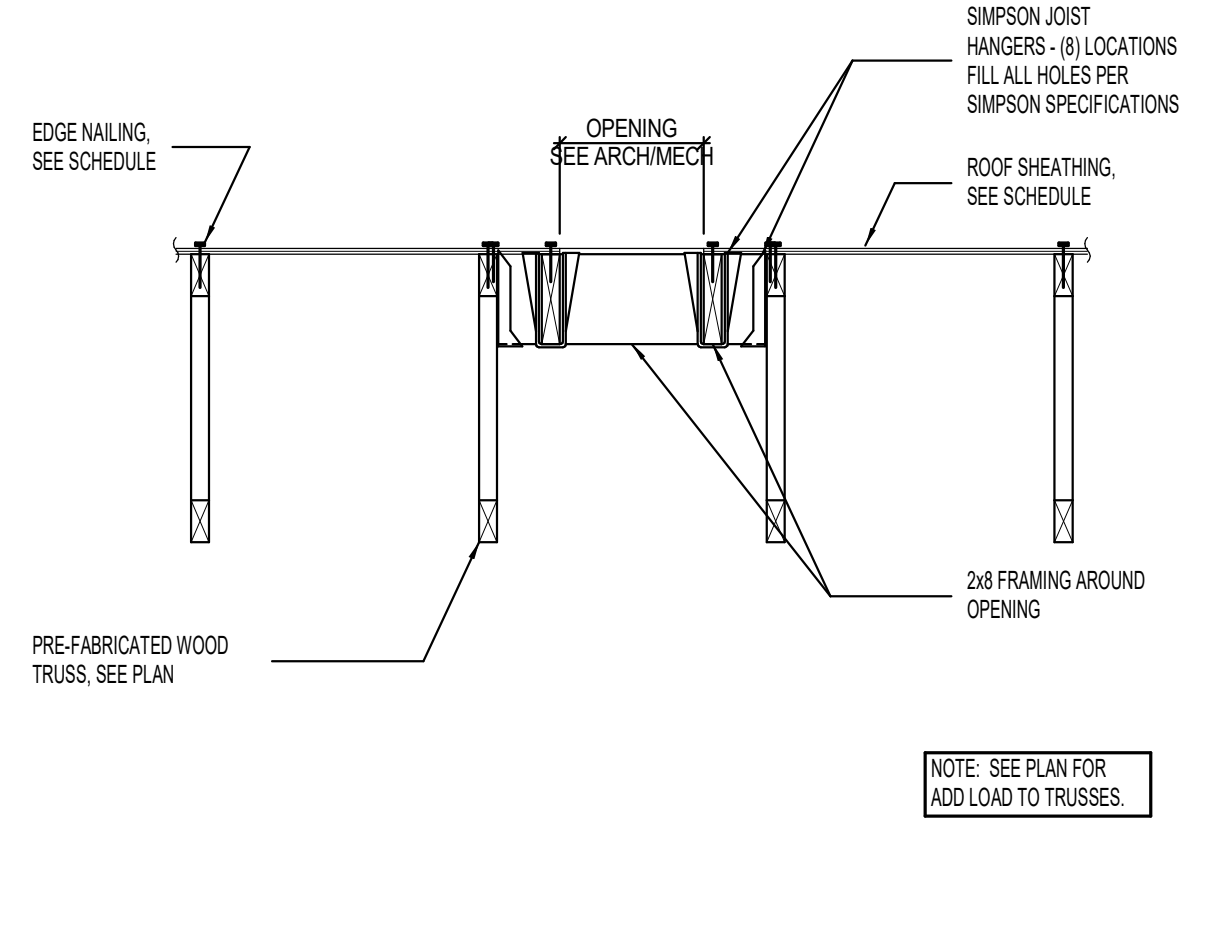
ENG NOTE: top plate splice tension rated for 5410lbs
 common nails 3950lbs box nails

2 TYPICAL TOP PLATE SPLICE DETAIL NO SCALE

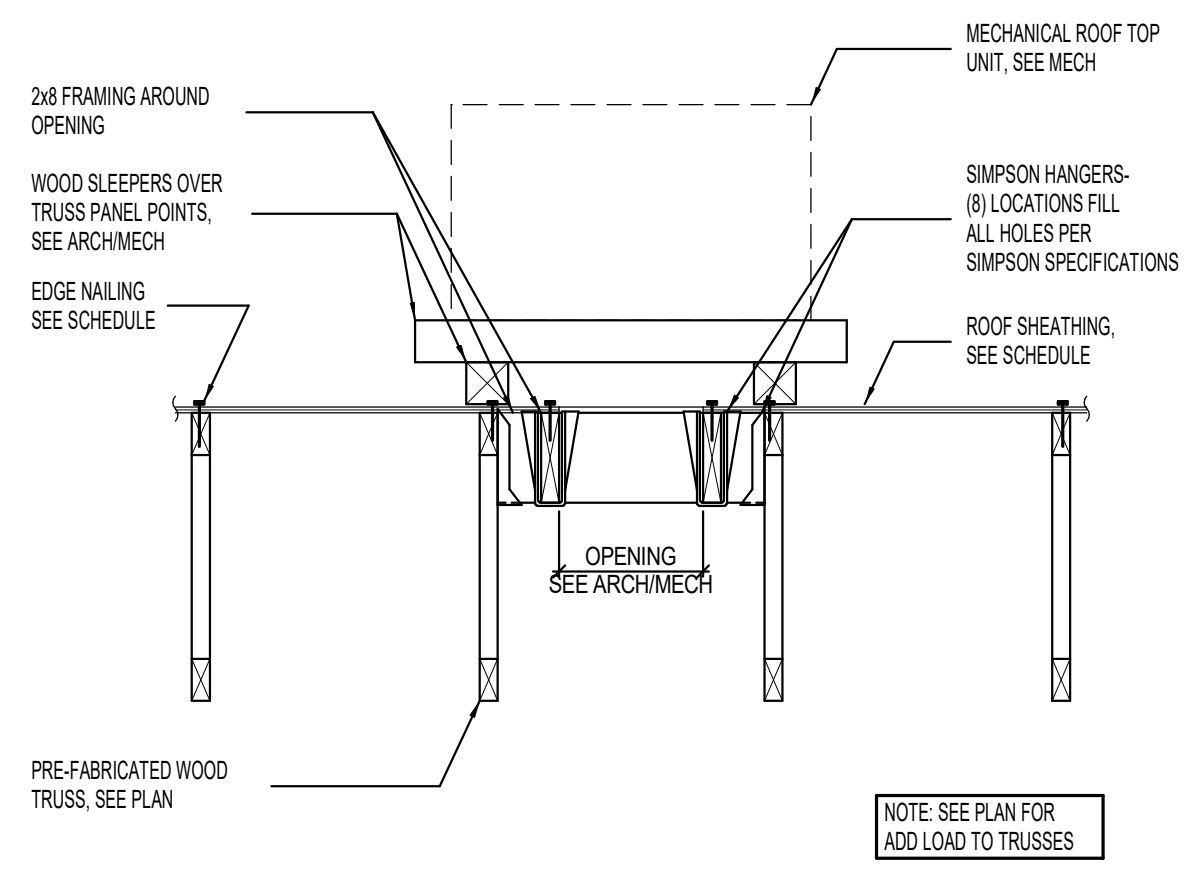
ENG NOTE: G.F. 4740 LBS COMPRESSION AND 4540 LBS TENSION
 HIGHER CAPACITIES MAY BE ACQUIRED BY SUBSTITUTION OF #9 STRAPS. SEE SIMPSON CATALOG



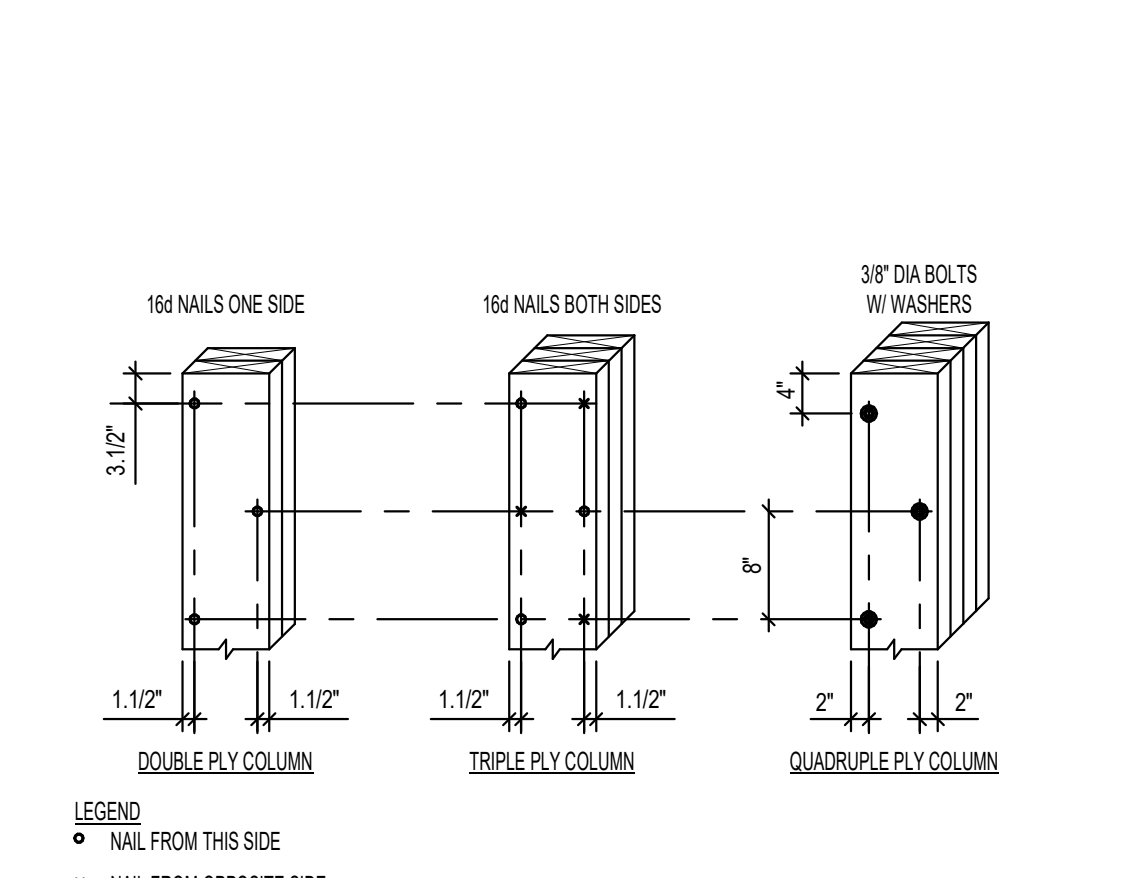
3 TOP PLATE SPLICE SCHEDULE AT PIPE NO SCALE



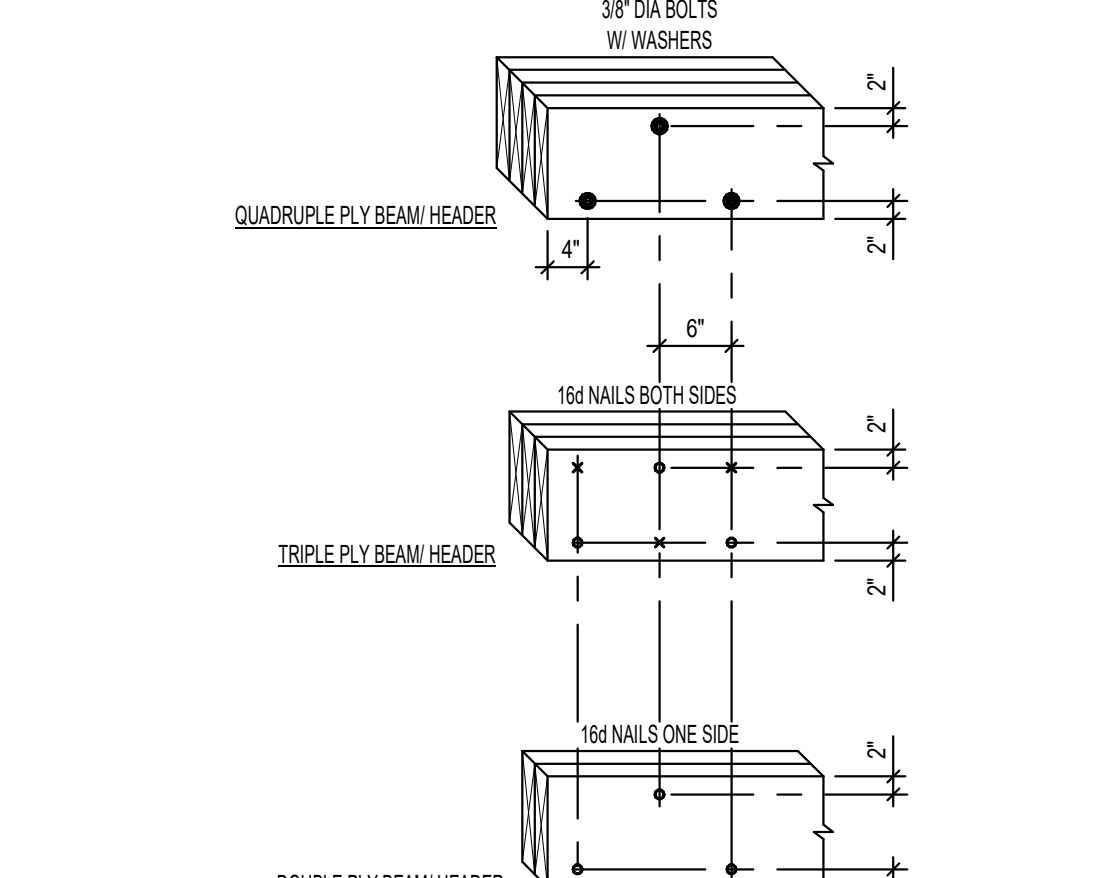
4 TYPICAL ROOF OPENING DETAIL NO SCALE



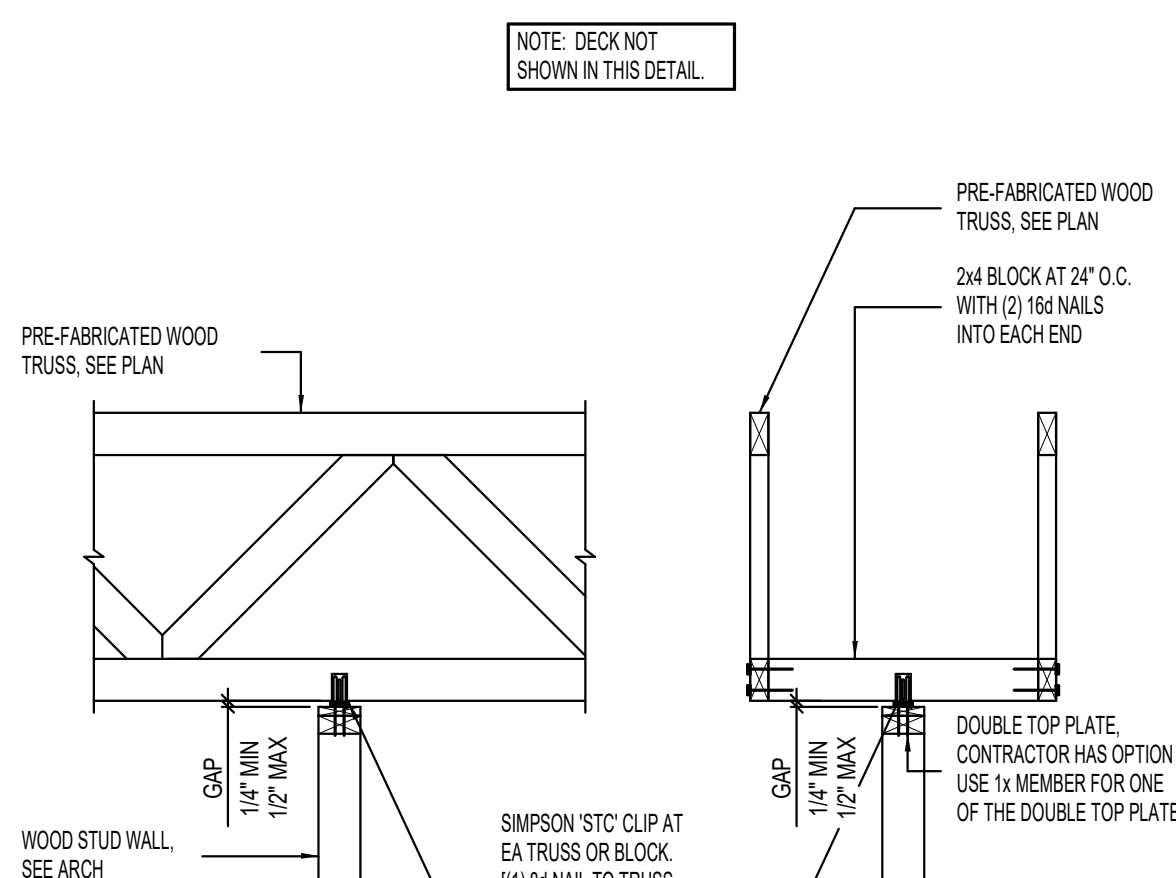
5 TYPICAL MECHANICAL UNIT SUPPORT DETAIL NO SCALE



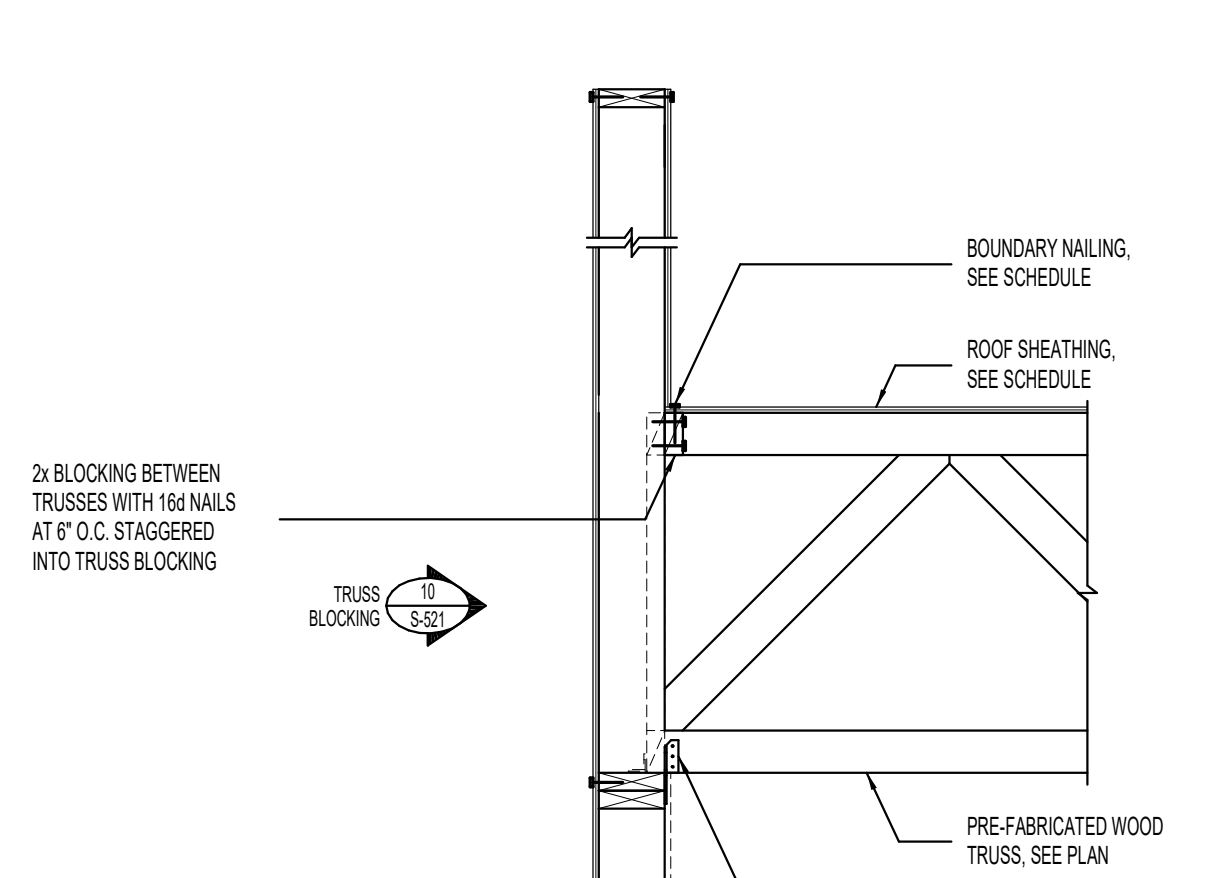
6 TYPICAL BUILT-UP WOOD MEMBER DETAIL NO SCALE



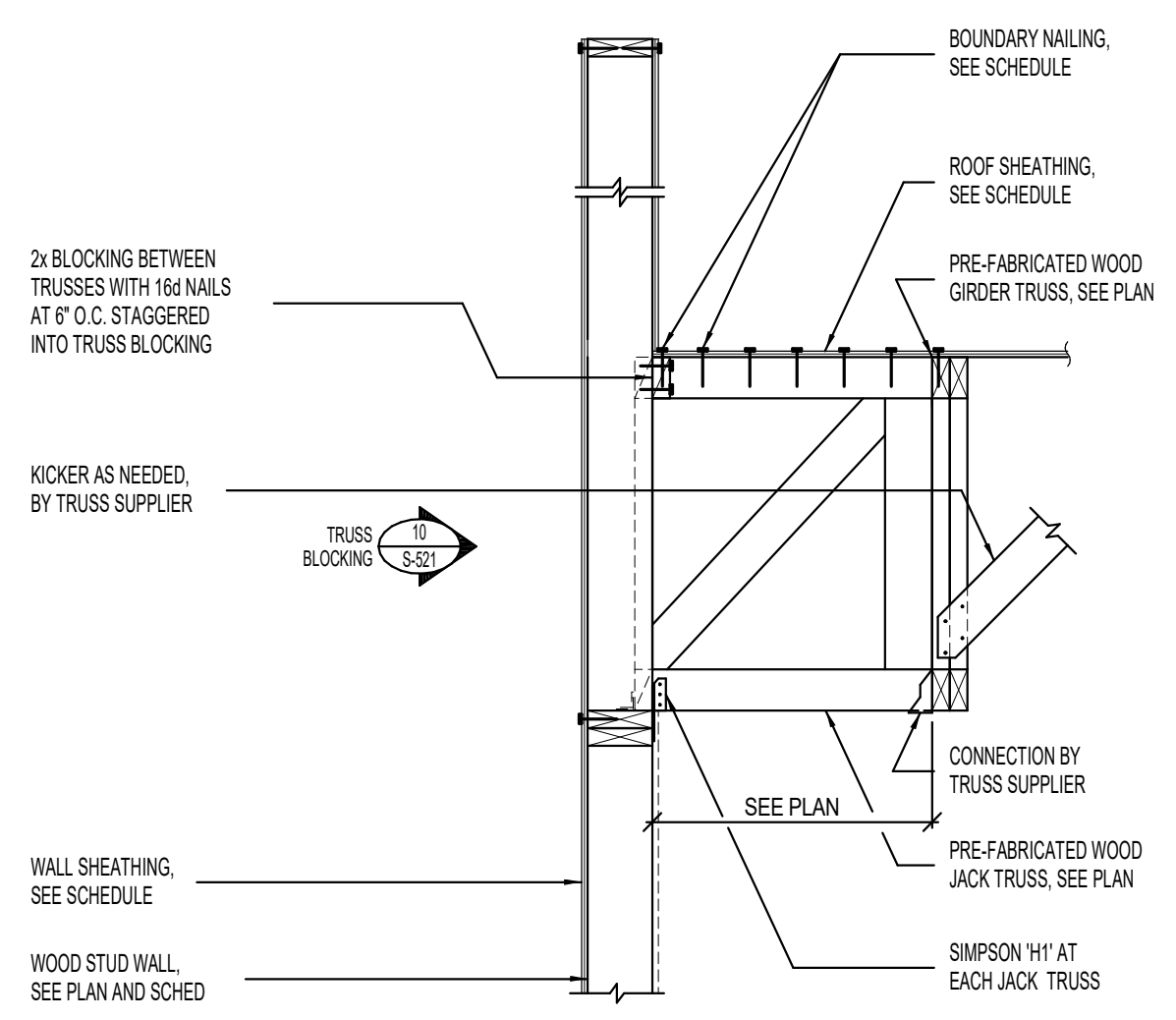
7 TYPICAL INTERIOR NON-BEARING WALL BRACING NO SCALE



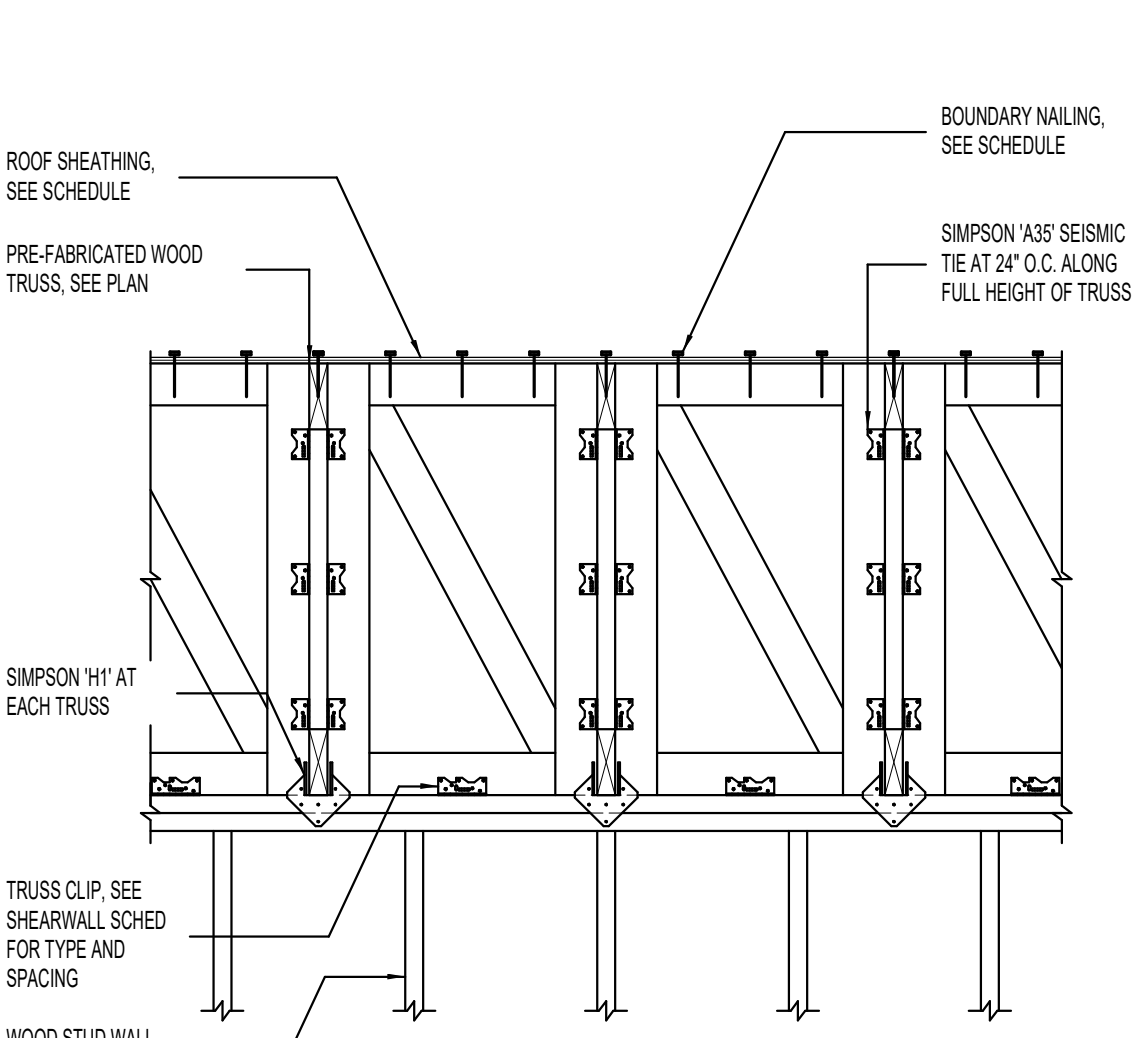
8 TYPICAL TRUSS BEARING ON WOOD STUD WALL [TRUSS PERPENDICULAR TO WALL] NO SCALE



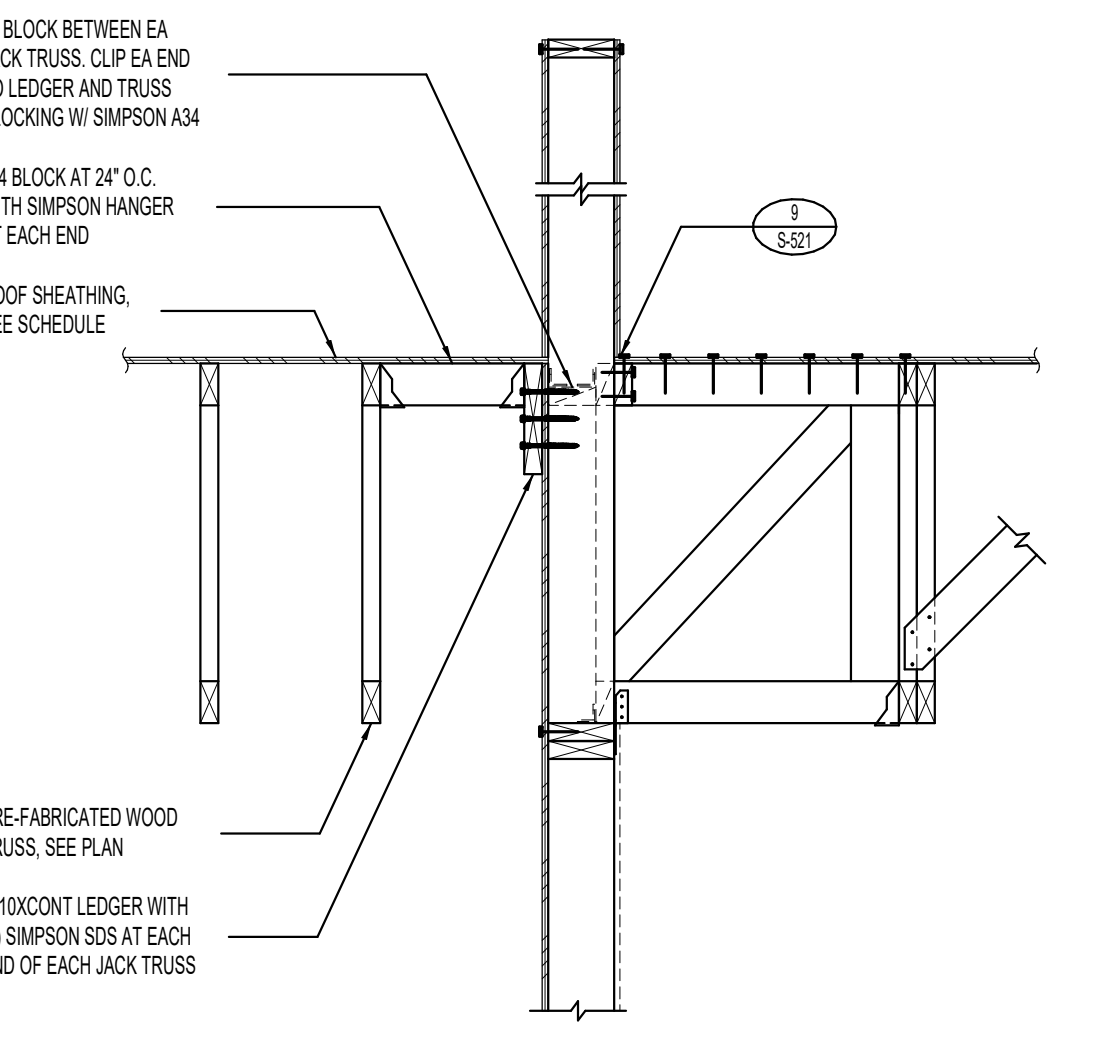
9 TYPICAL TRUSS BEARING ON WOOD STUD WALL [TRUSS PARALLEL TO WALL] NO SCALE



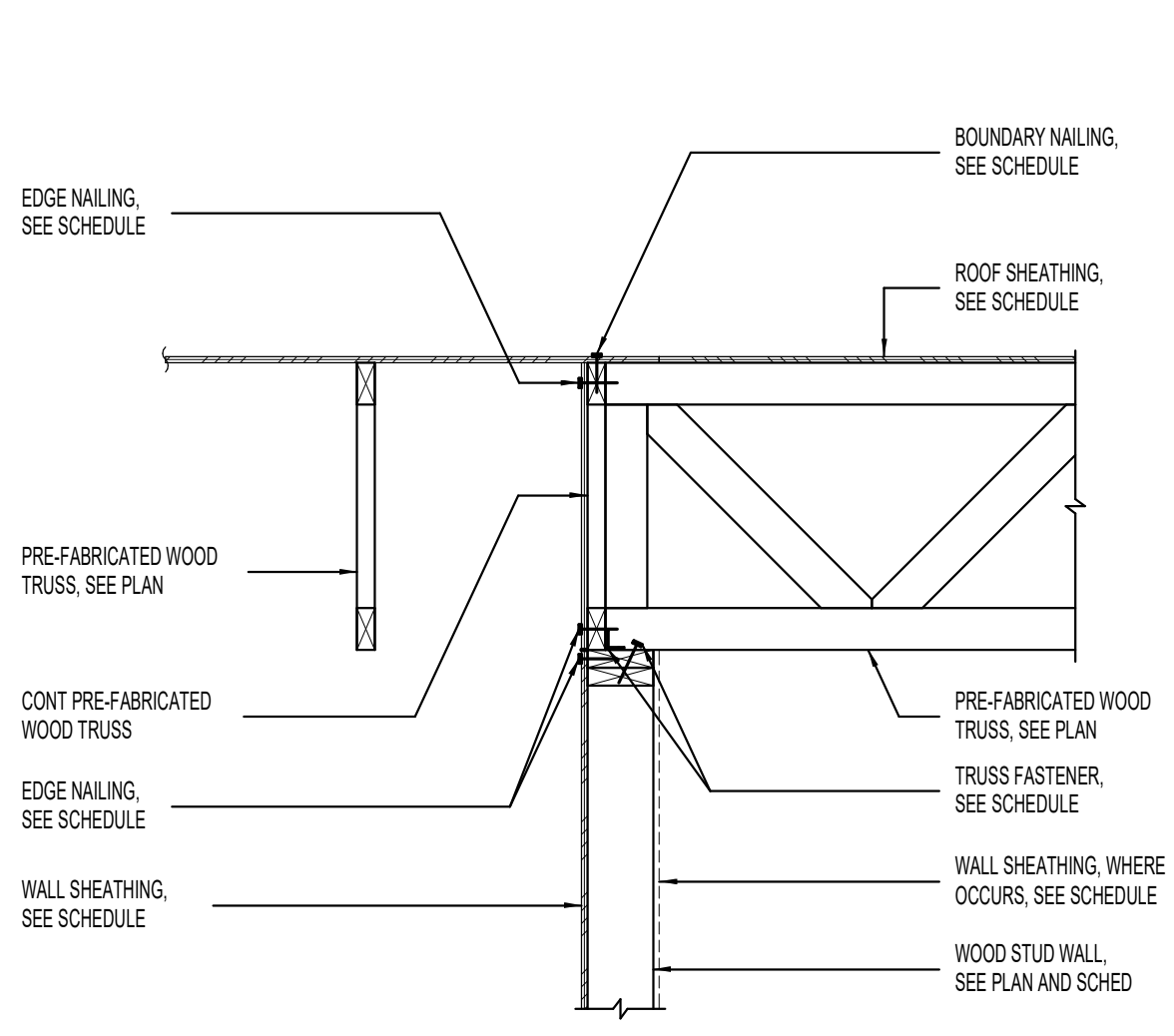
10 TYPICAL TRUSS BLOCKING BEARING ON WOOD STUD WALL [TRUSS PARALLEL TO WALL] NO SCALE



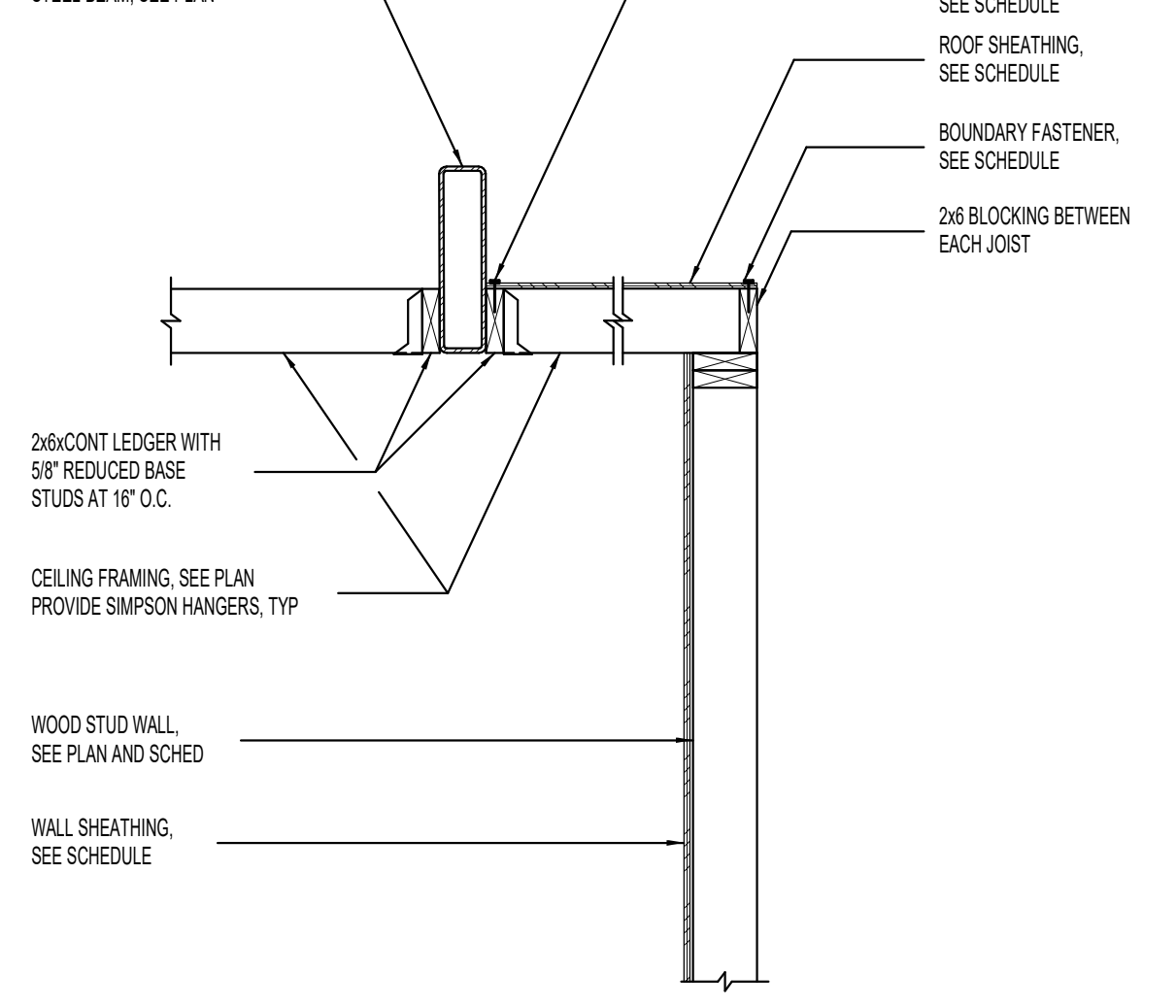
11 TYPICAL TRUSS BLOCKING ELEVATION NO SCALE



12 INTERIOR ROOF DETAIL NO SCALE



13 WOOD TRUSS/ROOF DECK BEARING ON INTERIOR WOOD STUD WALL NO SCALE



14 BEAM TO CEILING DETAIL NO SCALE

Revision Schedule

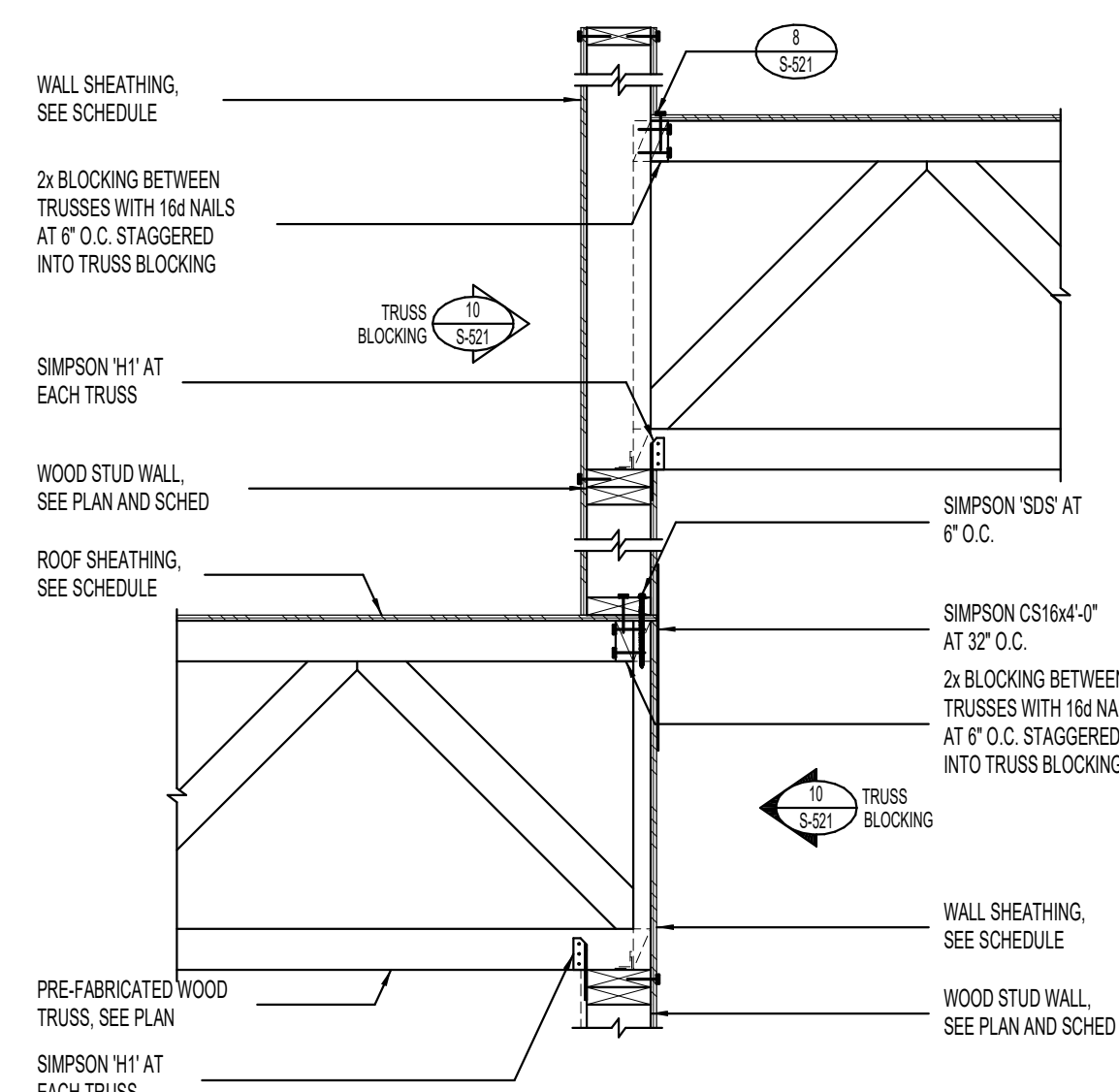
#	Description	Date



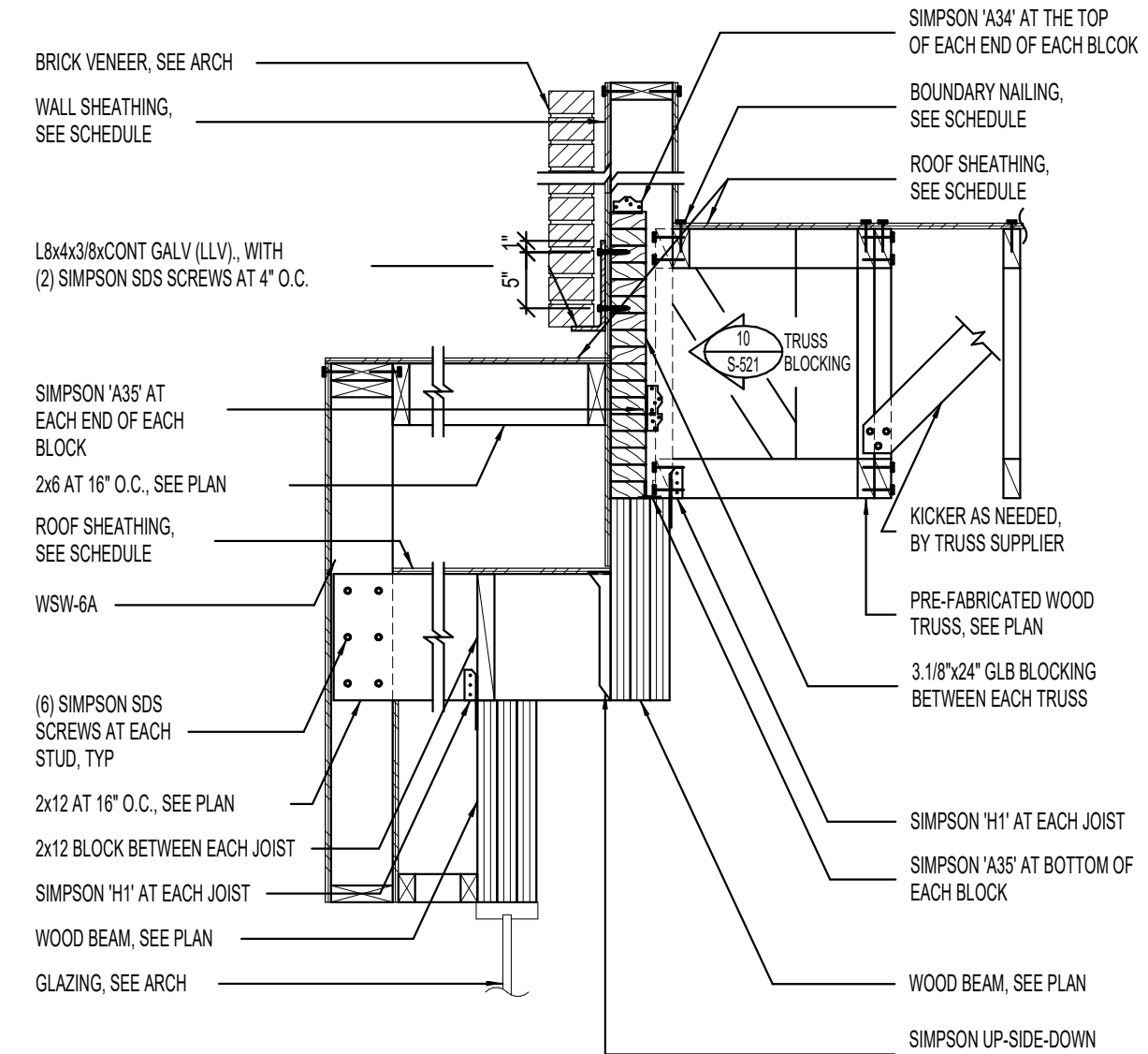
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

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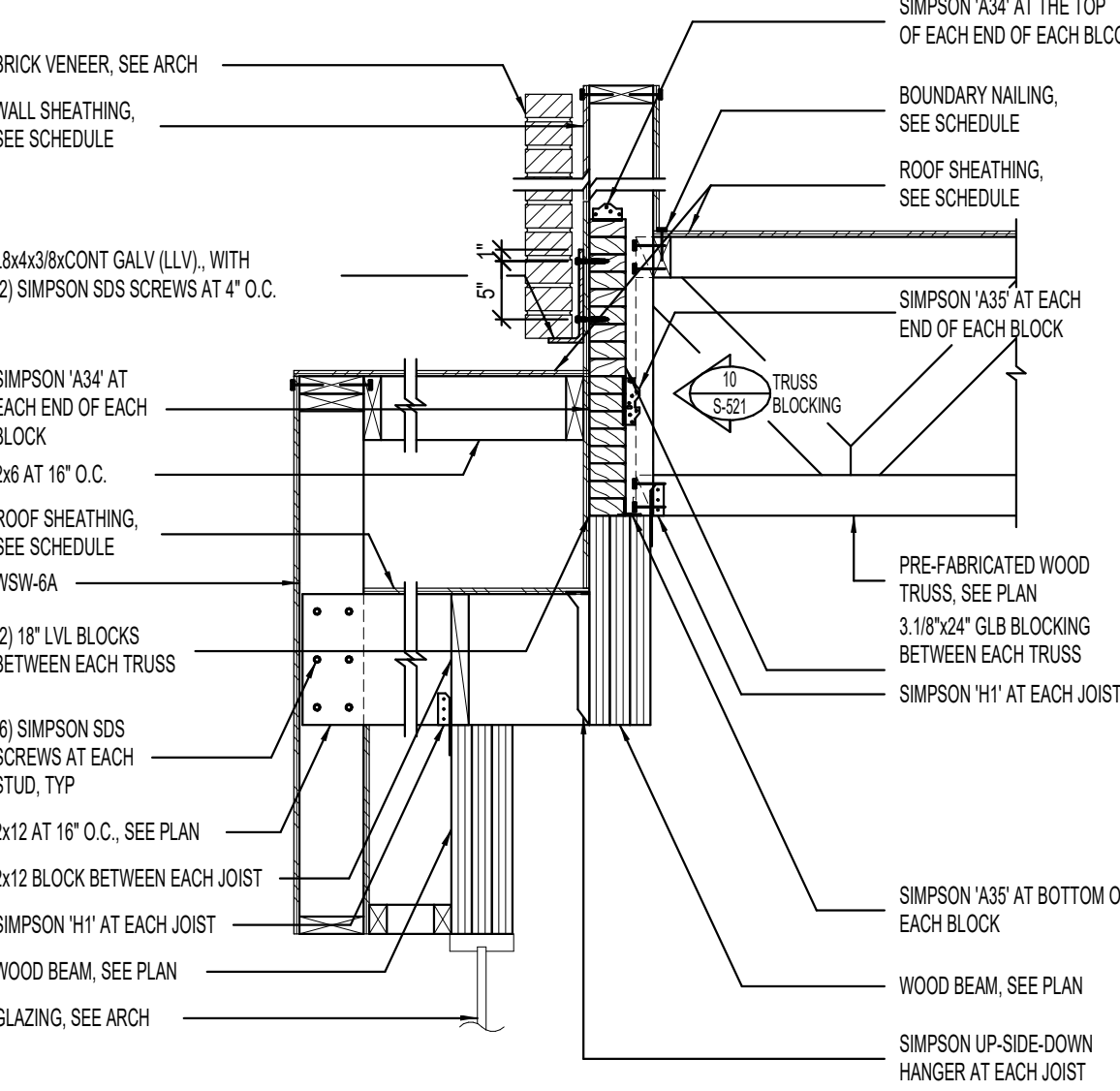
Project Number: 230089
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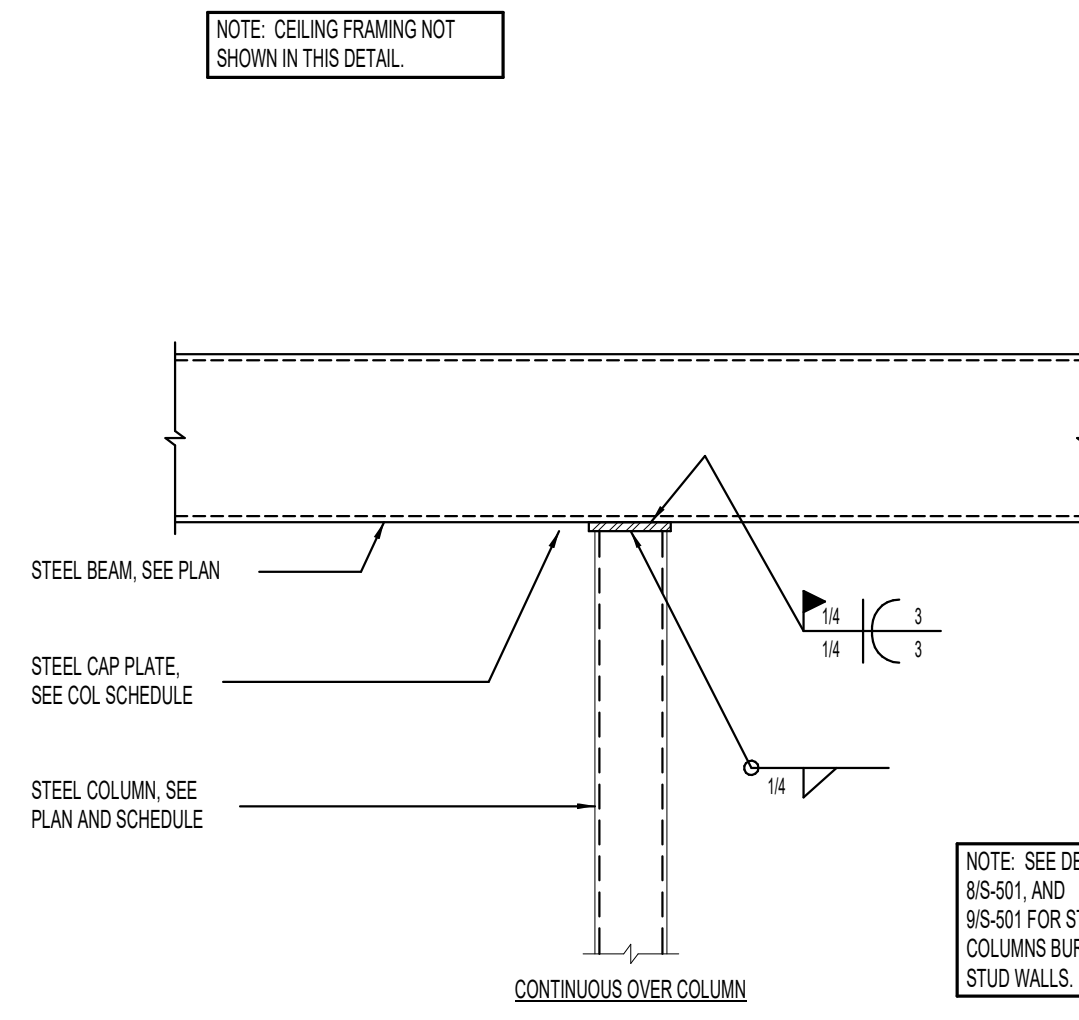
1 ROOF STEP DETAIL NO SCALE



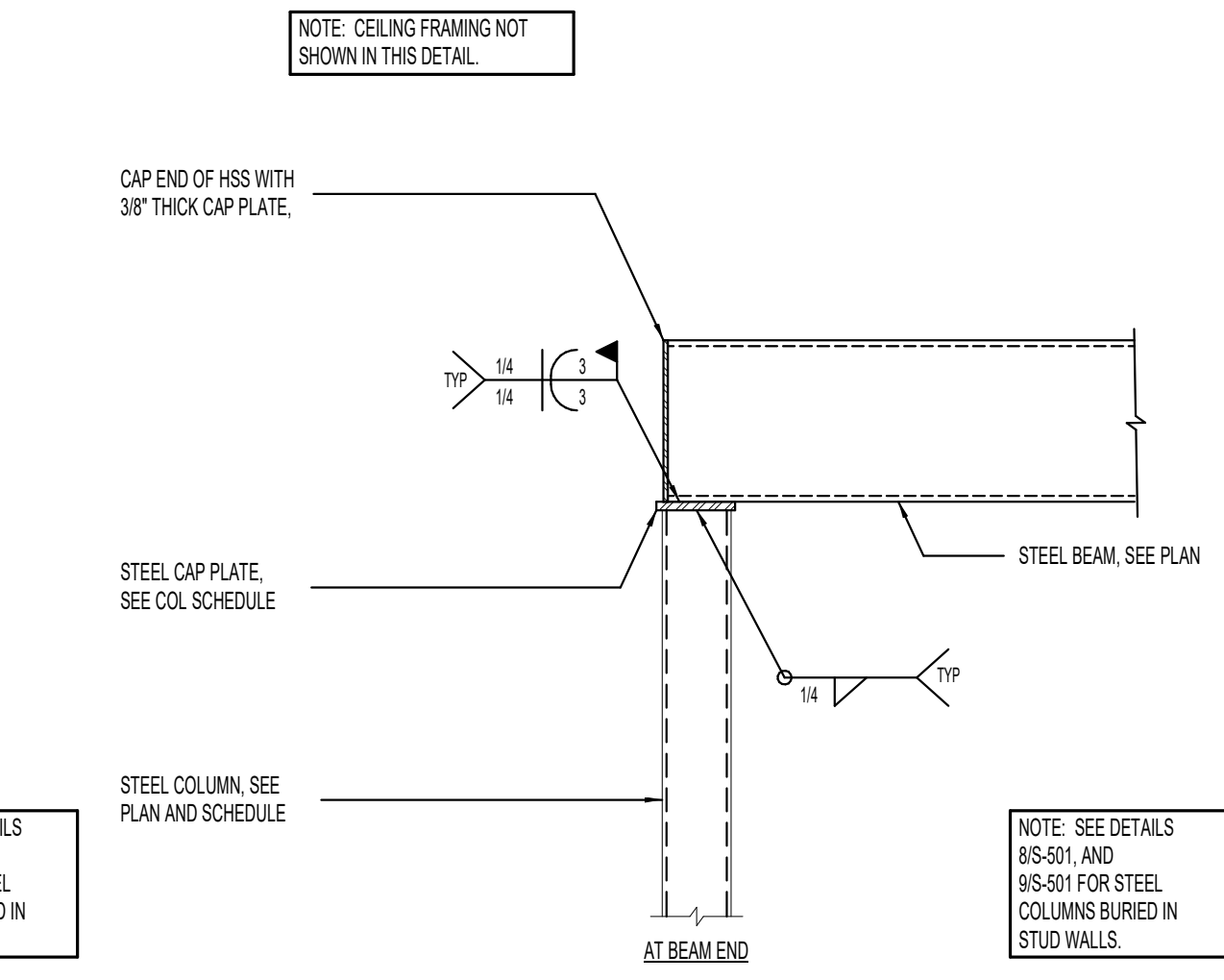
2 ROOF STEP DETAIL NO SCALE



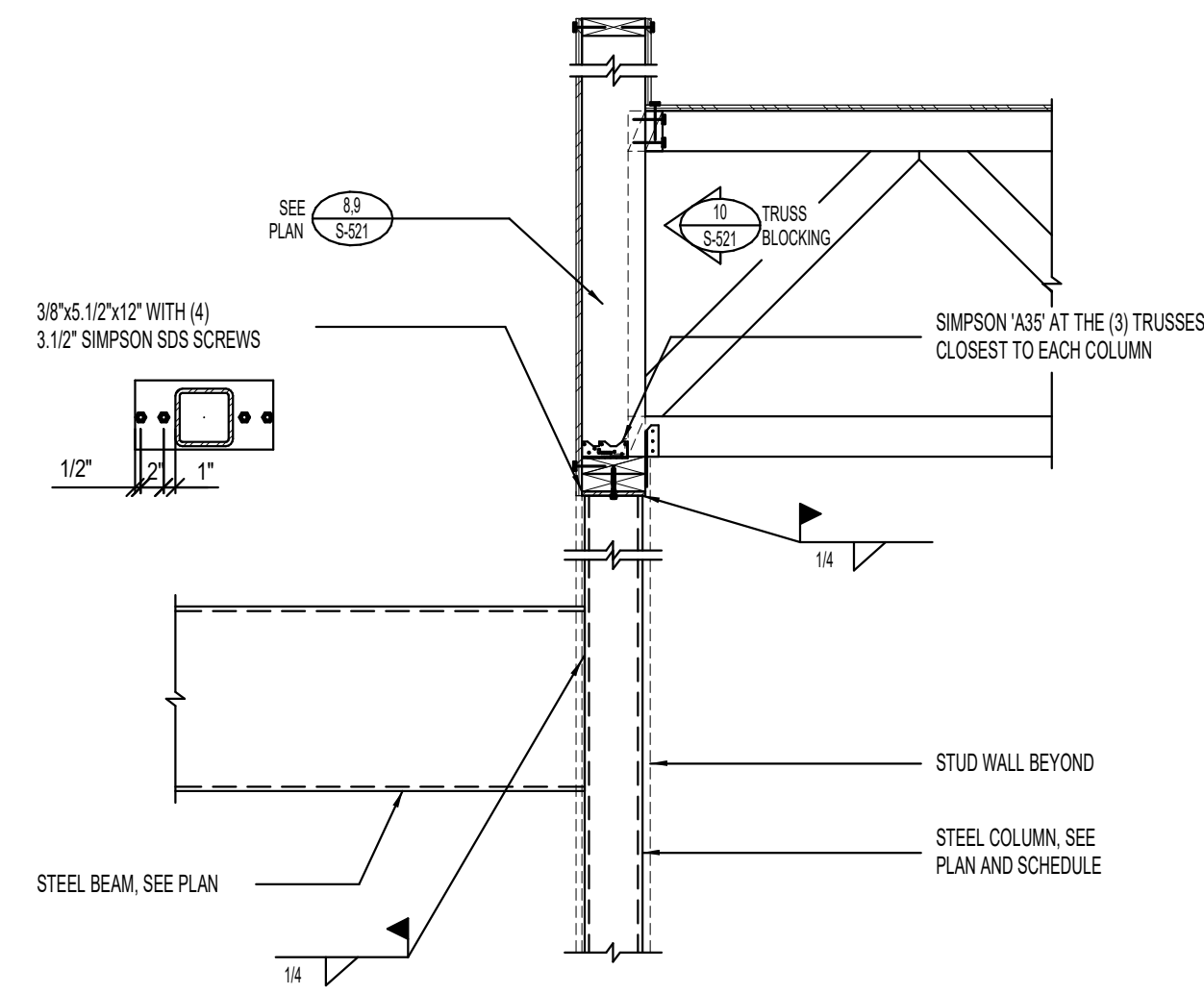
3 ROOF STEP DETAIL NO SCALE



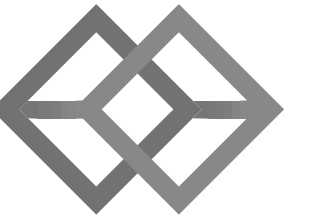
4 CANOPY CANTILEVER BEAM TO COLUMN DETAILS NO SCALE



5 CANOPY CANTILEVER BEAM TO COLUMN DETAIL NO SCALE

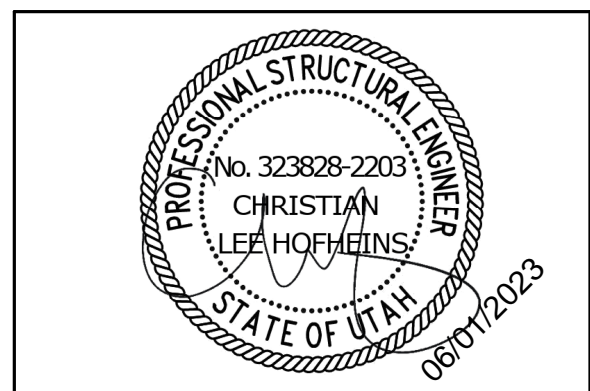


5 CANOPY CANTILEVER BEAM TO COLUMN DETAIL NO SCALE



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Revision Schedule		
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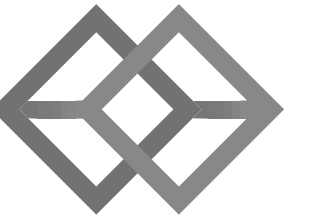


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CONCRETE CONTINUOUS FOOTING SCHEDULE (FC)												
MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				COMMENTS
				No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	
FC1.5	1'-6"		12"	-	#4	1'-0"	48"	2	#5	CONT	EQ	

CONCRETE SPOT FOOTING SCHEDULE (FS)												
MARK	WIDTH	Length	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				COMMENTS
				No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	
FS3.0	3'-0"	3'-0"	12"	3	#5	2'-6"	EQ	3	#5	2'-6"	EQ	

CONCRETE THICKENED SLAB FOOTING SCHEDULE (FTS)												
MARK	WIDTH	LENGTH	DEPTH	REINFORCING CROSSWISE				REINFORCING LENGTHWISE				COMMENTS
				No.	SIZE	LENGTH	SPACING	No.	SIZE	LENGTH	SPACING	
FTS1.5	1'-6"		12"	-	#4	1'-0"	48"	3	#4	CONT	EQ	

- CONCRETE FOOTING NOTES:
1. PLACE ALL FOOTING REINFORCING IN THE BOTTOM OF THE FOOTING WITH 3" CLEAR CONCRETE COVER (UNO).
 2. TOP REINFORCING, WHERE OCCURS, SHALL BE PLACED IN THE TOP OF THE FOOTING WITH 2" MINIMUM CONCRETE COVER.
 3. IF FOOTINGS ARE EARTH-FORMED, FOOTINGS SHALL BE 8" LONGER AND WIDER THAN SCHEDULED.
 4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
 5. SOME SCHEDULED FOOTINGS MAY NOT BE USED, SEE FOOTING AND FOUNDATION PLAN FOR FOOTING MARKS.

1 CONCRETE FOOTING SCHEDULE (C3000-S1500)
12" x 1'-0"

CONCRETE WALL SCHEDULES						
MARK	THICKNESS	REINFORCING			WALL TYPE	COMMENTS
		HORIZONTAL	VERTICAL	TOP AND BOTTOM		
CW-8A	8"	#4 AT 18" O.C.	#4 AT 12" O.C.	(1) #4	A	
CW-11A	11"	#4 AT 18" O.C. E.F.	#4 AT 12" O.C. E.F.	(1) #4 E.F.	C	

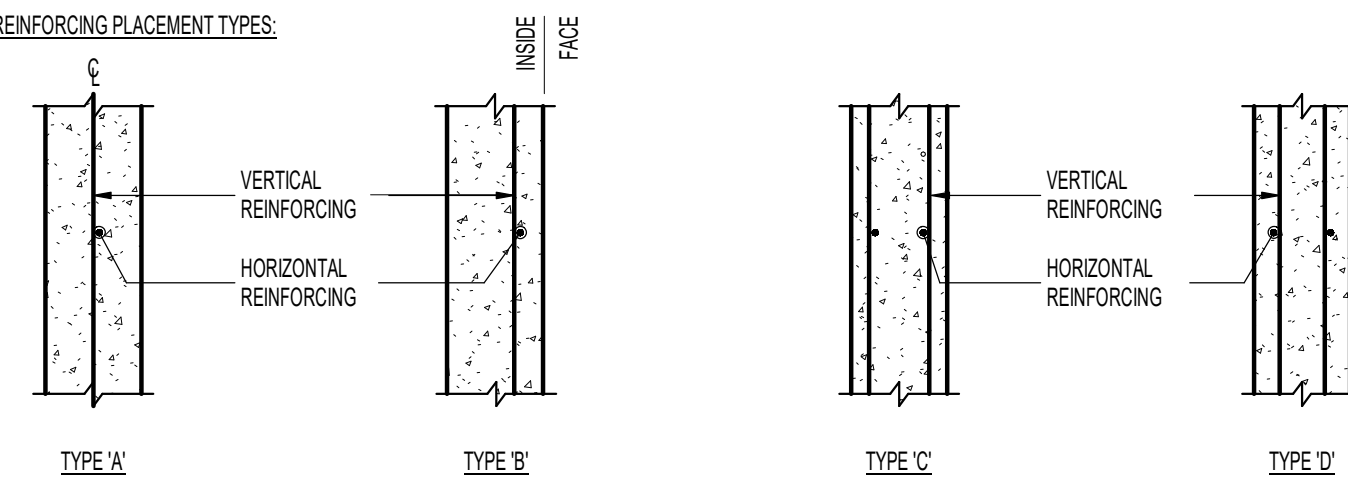
- CONCRETE FOUNDATION WALL NOTES:
1. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

ABBREVIATIONS:
E.F. EACH FACE
I.F. INSIDE FACE
O.F. OUTSIDE FACE

WALLS NOT DESIGNATED IN PLAN

THICKNESS	REINFORCING	
	VERTICAL	HORIZONTAL
8"	#4 BARS AT 18" O.C.	#4 BARS AT 16" O.C.
8"	#4 BARS AT 18" O.C.	#4 BARS AT 12" O.C.
10"	#4 BARS AT 18" O.C.	#5 BARS AT 15" O.C.
12"	#4 BARS AT 18" O.C. E.F.	#4 BARS AT 16" O.C. E.F.

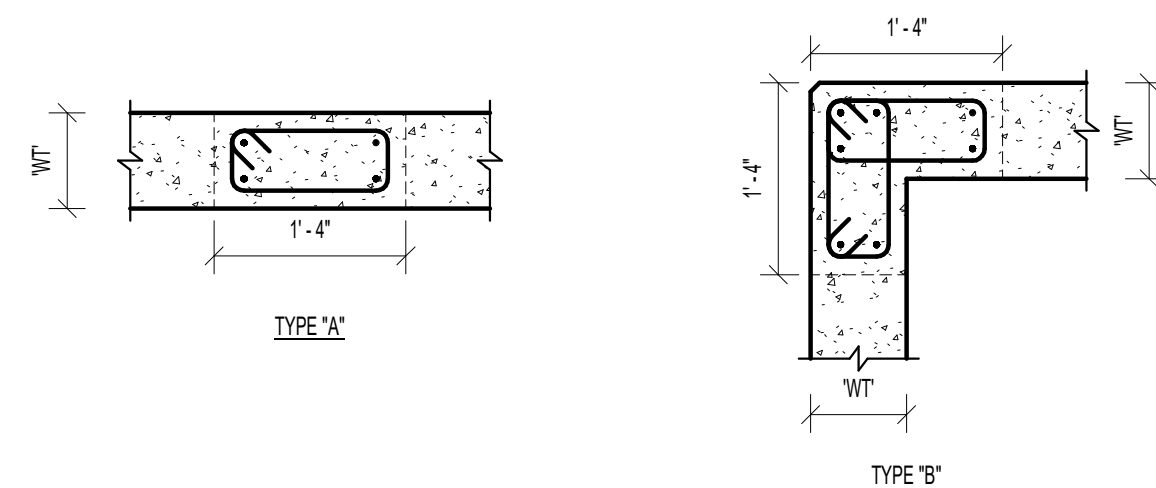
WALL REINFORCING PLACEMENT TYPES:



2 CONCRETE WALL SCHEDULE
3/4" x 1'-0"

CONCRETE PIER SCHEDULE						
MARK	PIER SIZE		REINFORCING		TYPE	COMMENTS
	W	L	VERTICAL	TIES		
CP-16A	8" x 16"		(4) #5	#3 AT 8" O.C.	A	
CP-16A	11" x 16"		(4) #5	#3 AT 8" O.C.	A	
CP-16B	8" x 16"		(7) #5	(2) #3 AT 8" O.C.	B	

- CONCRETE PIER NOTES:
1. INSTALL (3) SETS OF TIES WITHIN TOP 9" OF ALL PIERS (UNO).
 2. RUN HORIZONTAL CONCRETE WALL REINFORCING CONTINUOUS THROUGH PIER WHEN PIER IS POURED MONOLITHICALLY WITH CONCRETE WALL.
 3. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



3 CONCRETE PIER SCHEDULE
3/4" x 1'-0"

STEEL COLUMN SCHEDULE				
MARK	SIZE	STEEL BASE PLATE	STEEL CAP PLATE	COMMENTS
SC-3A	HSS3x3x3/16	3/4" (SBP-1)	1/2" (SCP-1)	NOTE 5
SC-4A	HSS4x4x3/16	3/4" (SBP-2)	SIMPSON ECCO' COLUMN CAP	NOTE 5
SC-4B	HSS4x4x3/16	3/4" (SBP-1)	SIMPSON ECCO' COLUMN CAP	NOTE 5
SC-4C	HSS4x4x3/16	3/4" (SBP-3)	1/2" (SCP-1)	NOTE 5
SC-5A	HSS5x5x3/16	3/4" (SBP-3)	SEE DETAIL 5/S-522	NOTE 5

- STEEL COLUMN NOTES:
1. UNLESS NOTED OTHERWISE, ALL COLUMNS SHALL BE INSTALLED WITH (4) 3/4" DIA ANCHOR RODS WITH 3" MINIMUM HOOKS. PROJECT ANCHOR RODS 3" MINIMUM ABOVE THE TOP OF THE BASE PLATE. EMBEDMENT SHALL BE 9" MINIMUM. ALL RODS SHALL BE INSTALLED WITH HARDENED WASHERS BENEATH THE NUT. ANY BOLT HOLES LARGER THAN THE ROD DIAMETER PLUS 5/16" SHALL HAVE 5/16" PLATE WASHERS INSTALLED BENEATH THE HARDENED WASHERS.
 2. ALL CAP PLATE BOLTS SHALL BE 3/4" DIA A325 BOLTS, TYPICAL UNLESS NOTED OTHERWISE.
 3. ANCHOR RODS SHALL NOT BE WELDED (INCLUDING TACK WELDS).
 4. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
 5. CONNECT COLUMN TO STUDS PER DETAILS 8.9/S501.

STEEL BASE PLATE TYPES:

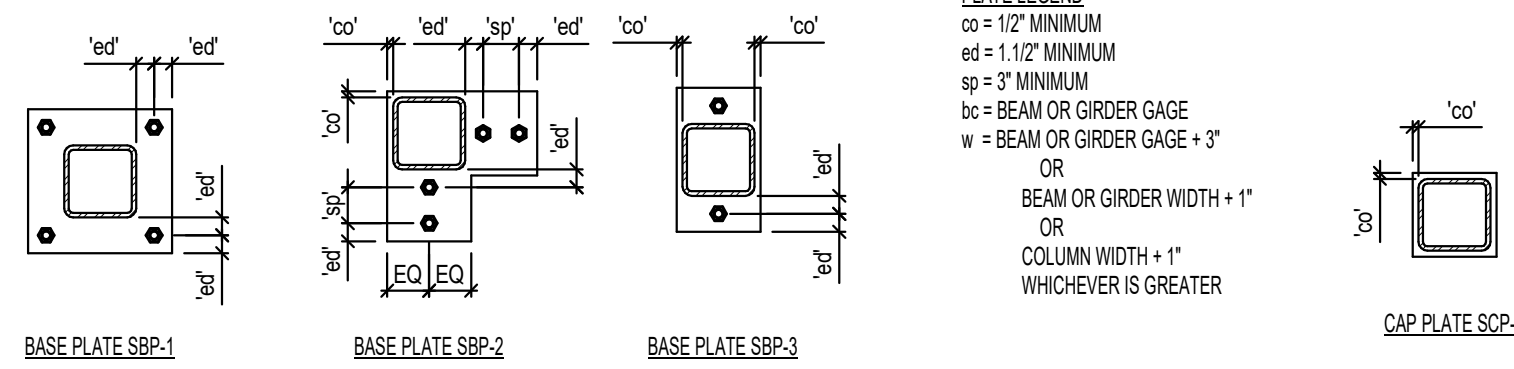


PLATE LEGEND
co = 1/2" MINIMUM
ed = 1 1/2" MINIMUM
sp = 3" MINIMUM
bc = BEAM OR GIRDER GAGE
w = BEAM OR GIRDER GAGE + 3"
OR
BEAM OR GIRDER WIDTH + 1"
OR
COLUMN WIDTH + 1"
WHICHEVER IS GREATER

4 STEEL COLUMN SCHEDULE
NO SCALE

Revision Schedule

#	Description	Date



Project for:

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

West Haven Seminary

2535 West Wilson Lane
West Haven, Utah

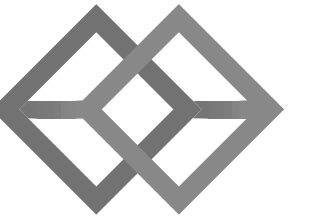
Project Number: 230089

Property Number: 501-8963

05/01/2023

SCHEDULES

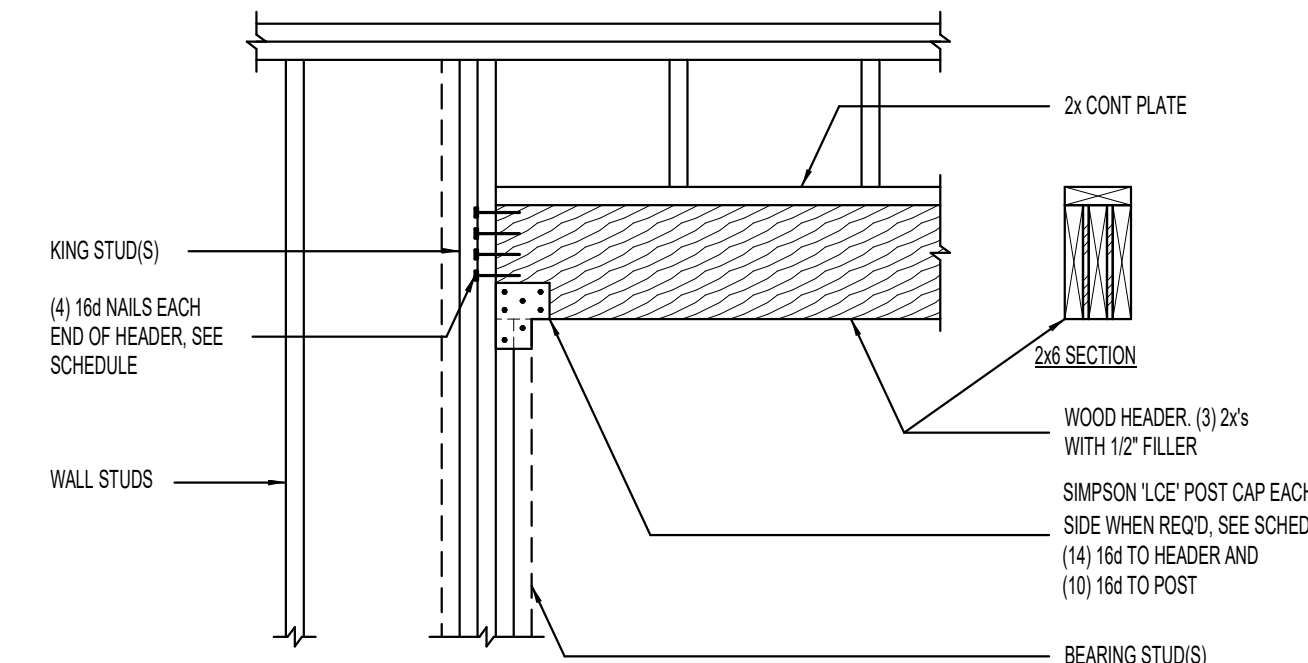
S-601



BHB STRUCTURAL
2766 South Main Street
Salt Lake City, Utah 84115
801-355-5656
bhb@bhengineers.com

HEADER BEARING SCHEDULE FOR WOOD STUD WALL									
MARK	3'-6" MAX		5'-6" MAX		13'-6" MAX		19'-6" MAX		COMMENTS
	HEADER	JAMB	HEADER	JAMB	HEADER	JAMB	HEADER	JAMB	
WH-1	(3) 2x8	1x1b	(3) 2x10	2x1b	(3) 2x12	2x2b	(3) 1.34"x 14" LVL	3x2b	
WH-2					(3) 1.34"x 18" LVL	3x2b			

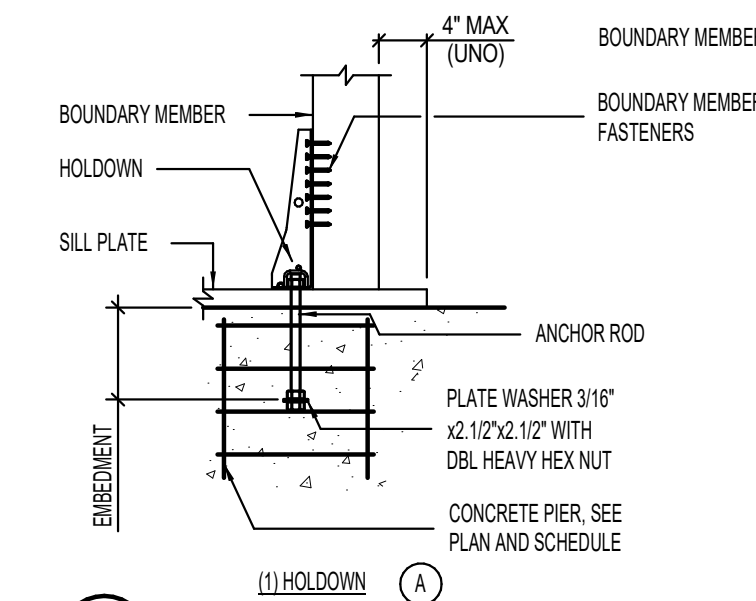
HEADER SCHEDULE NOTES:
1. PROVIDE SIMPSON LCE POST CAP FOR ALL HEADER 6'-0" SPAN OR GREATER.



1 HEADER BEARING SCHEDULE FOR 2x4 OR 2x6 STUD WALL NO SCALE

HOLDOWN SCHEDULE									
SIMPSON HOLDOWN	BOUNDARY MEMBER	BOUNDARY MEMBER FASTENERS	END LENGTH	ANCHOR ROD	EMBEDMENT			DETAIL	COMMENTS
					LOCATION	CAST IN PLACE	EPOXY		
HDU2	(2) 2x6 DF NO 2 MIN	(6) 1/4" DIA x 2 1/2" SDS		5/8" DIA	AT FOOTING AT CONC WALL W/ CONC PIER	9" 18"	11" 18"	A	NOTE 6
HDU5	(2) 2x6 DF NO 2 MIN	(14) 1/4" DIA x 2 1/2" SDS		5/8" DIA	AT FOOTING AT CONC WALL W/ CONC PIER	9" 18"	11" 21"	A	NOTE 6
HDU11	6x6 POST DF NO 2 MIN	(30) 1/4" DIA x 2 1/2" SDS		1" DIA	AT FOOTING AT CONC WALL W/ CONC PIER	15" 18"	N/A N/A	A	NOTE 6

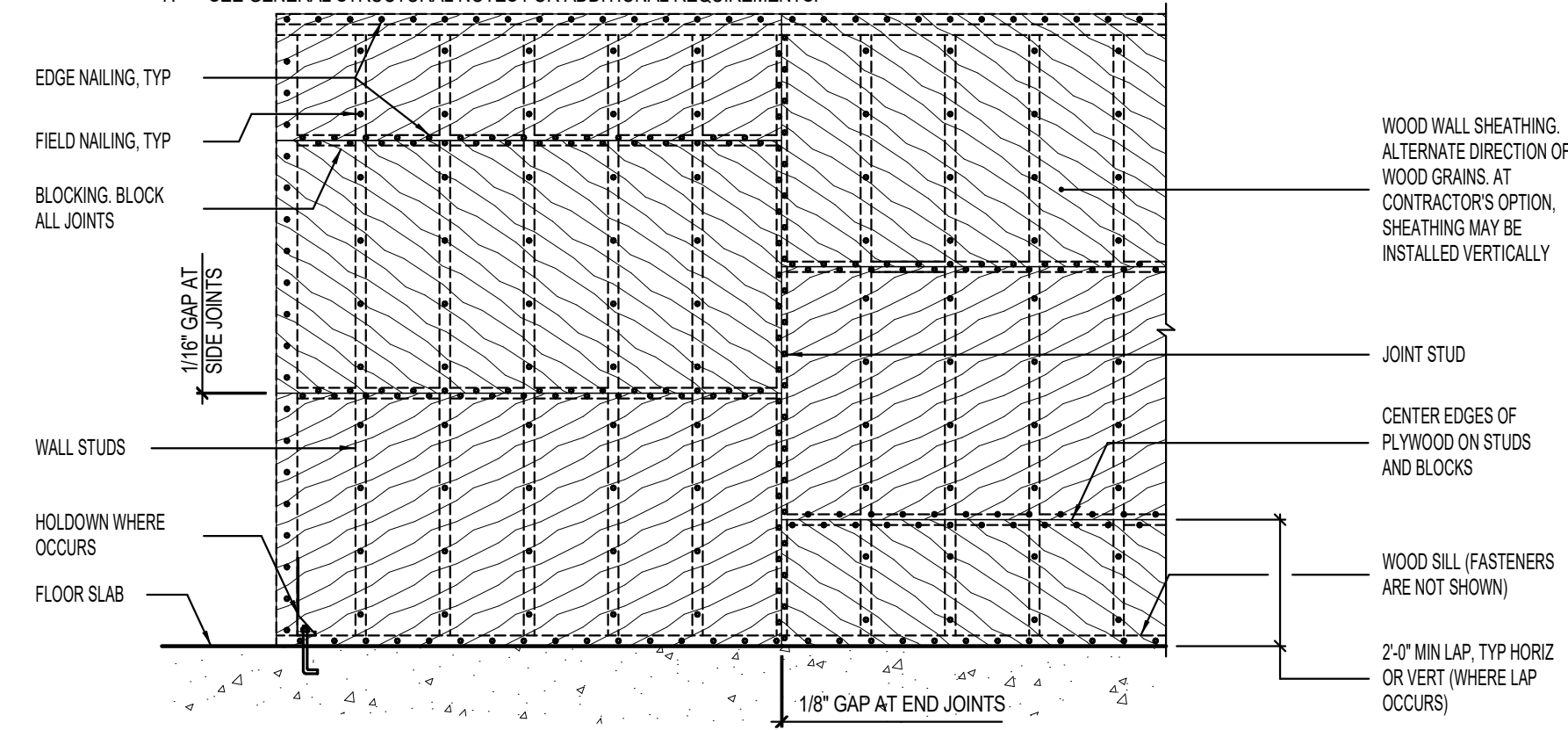
HOLDOWN NOTES:
1. ALL HOLDOWNS SPECIFIED ARE "SIMPSON - STRONG TIE". SEE GENERAL STRUCTURAL NOTES FOR SUBSTITUTIONS.
2. LAG SCREWS SHALL NOT BE USED.
3. DO NOT OVER TORQUE NUTS. SEE MANUFACTURER'S TORQUE REQUIREMENTS.
4. ANCHOR RODS SHALL BE ASTM F1554 Gr. 36 OR A36 THREADED ROD AND SHALL HAVE A 3/16"x2-1/2"x2-1/2" PLATE WASHER WITH DOUBLE HEAVY HEX NUT AT THE EMBEDMENT END INTO THE CONCRETE.
5. INCREASE FOOTING DEPTH WHERE EMBEDMENT LENGTH PLUS 3" IS GREATER THAN FOOTING DEPTH SPECIFIED.
6. WHERE CONCRETE PIER IS PROVIDED IN WALL, ANCHOR BOLT MUST FALL WITHIN THE REINFORCING TIES OF THE PIER.
7. STRAP HOLDOWNS CANNOT BE BENT OUT OF POSITION FOR WALL INSTALLATION.
8. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.



3 (1) HOLDOWN NO SCALE

MARK	WALL FRAMING				WALL SHEATHING				COMMENTS	
	STUDS	TOP PLATE	BOTTOM PLATE	BOTTOM PLATE FASTENERS	STUDS BLOCK AT JOINTS	THICKNESS	NAIL SIZE	EDGE NAIL		FIELD NAIL
WSW-6A	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8" DIA A.B. AT 48" O.C.	2x	7/16"	8d	6" O.C.	12" O.C.	240spf
WSW-6B	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8" DIA A.B. AT 32" O.C.	2x	7/16"	8d	4" O.C.	12" O.C.	350spf
WSW-6C	2x6 AT 16" O.C.	(2) 2x6	2x6	5/8" DIA A.B. AT 16" O.C.	3x	7/16"	8d	3" O.C.	12" O.C.	450spf

WOOD SHEATHING SHEARWALL NOTES:
1. PROVIDE 1/4"x3"x3" WASHER PLATES AT BOLTS. CONTRACTOR HAS OPTION TO PROVIDE A DIAGONAL SLOTTED HOLE WITH A WIDTH OF UP TO 3/16" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH OF UP TO 1.34", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT.
2. USE COMMON NAILS (8d DIAMETER = 0.13). AT SILL PLATE USE HOT-DIPPED OR TUMBLE GALVANIZED NAILS.
3. ANCHOR BOLTS SHALL HAVE A 7" MINIMUM EMBEDMENT INTO CONCRETE AND TERMINATE WITH A STANDARD 90° HOOK OF 3-TIMES THE ANCHOR BOLT DIAMETER AND BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL IN ACCORDANCE WITH IBC 2304.10.
4. WHERE STUDS ARE CUT FOR PLACEMENT OF ANCHOR BOLTS OR OTHER ELEMENTS, AN ADJACENT STUD SHALL BE ADDED.
5. WHERE WOOD SHEATHING IS APPLIED TO BOTH SIDES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS, OR FRAMING MEMBER SHALL BE 3" OR THICKER AND NAILS ON EITHER SIDE SHALL BE STAGGERED. PRE-DRILLED HOLES ARE REQUIRED AT 2x4 NAILS.
6. PRE-DRILLED HOLES ARE REQUIRED AT 2x4 NAILS.
7. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

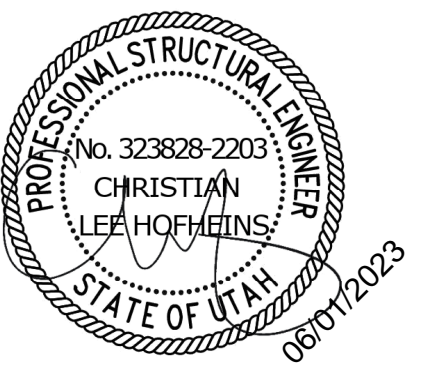


2 WOOD SHEATHING SHEARWALL SCHEDULE [ELEVATION VIEW] NO SCALE

WOOD POST SCHEDULE (WP-x)		
MARK	DESIGNATION	CONNECTION
WP-6A	4x4 DFL NO 2	

4 WOOD POST SCHEDULE (WP-x) NO SCALE

Revision Schedule		
#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

West Haven Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number: 230089

Property Number: 501-8963

05/01/2023

SCHEDULES

S-602

PLUMBING GENERAL NOTES

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS WHICH ARE OBVIOUSLY AND REASONABLY NECESSARY TO COMPLETE THE INSTALLATION. 2. THE CONTRACTOR SHALL TAKE OUT PERMITS, PROCURE CERTIFICATES AND PAY FEES CONNECTED THEREWITH. 3. BIDDERS SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS SURROUNDING THE PROJECT PRIOR TO BIDDING. 4. THE CONTRACTOR IS REFERRED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL PLANS AND SPECIFICATIONS. SUCH PLANS AND SPECIFICATIONS ARE CONTRACT DOCUMENTS. 5. DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW APPROXIMATE LOCATIONS. 6. ALL PLUMBING WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE PREVAILING STATE MECHANICAL/PLUMBING AND BUILDING CODES AS WELL AS ALL REGULATIONS THAT MAY APPLY. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE THE MORE STRINGENT STANDARD SHALL APPLY. 7. NO PIPING SHALL RUN EXPOSED IN FINISHED AREAS UNLESS NOTED OTHERWISE. 8. RUN-OUT SIZES TO INDIVIDUAL PLUMBING FIXTURES TO BE EQUAL TO ROUGH-IN SIZE NOTED IN THE PLUMBING FIXTURE SCHEDULE. | <ol style="list-style-type: none"> 9. PLUMBING/PIPING IS SHOWN SCHEMATICALLY FOR VIEWING PURPOSES ONLY. DURING INSTALLATION FIELD MODIFICATIONS TO ROUTING MAY BE REQUIRED. 10. INSTALL ALL REQUIRED CLEANOUTS TO CLEAR EQUIPMENT AND FIXTURES. 11. ALL WORK SHALL BE PROPERLY TESTED, BALANCED AND CLEANED AND DISINFECTED. PROVIDE A ONE YEAR WARRANTY FROM DATE OF FINAL INSPECTION ON ALL PARTS AND LABOR. 12. TERMINATE PLUMBING VENTS AT A MINIMUM OF 10' FROM ALL AIR HANDLING EQUIPMENT INTAKE VENTS. 13. CONTRACTOR SHALL VERIFY LOCAL CODE REQUIREMENTS FOR INDIRECT CONNECTIONS FOR FOOD PREP AREAS. CONNECTIONS SHALL BE PROVIDED WITH A MINIMUM 1" AIR GAP, UNLESS OTHERWISE NOTED. 14. PRESSURIZED PIPING SHALL NOT BE RUN IN ANY AREA SUBJECT TO FREEZING. 15. PRIOR TO INSTALLING ANY PIPING, VERIFY DEPTH OF CONNECTION POINTS OF GRADE DEPENDENT PIPING AND CONFIRM IN WRITING TO ENGINEER. 16. WHERE RATED ASSEMBLIES ARE PENETRATED BY DUCTS, PIPES OR OTHER ITEMS, THE "F" AND "T" RATING SHALL BE MAINTAINED WITH REQUIRED UL LISTED ASSEMBLIES OR SEALANT AS REQUIRED BY THE APPLICABLE CODE OR AUTHORITY HAVING JURISDICTION. |
|---|---|

PLUMBING ABBREVIATIONS

A	COMPRESSED AIR	EWC	ELECTRIC WATER COOLER	IN	INCH	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
AFF	ABOVE FINISHED FLOOR	EWT	ENTERING WATER TEMPERATURE	INV	INVERT	S	SINK
ALT	ALTERNATE			KW	KILOWATT	SCHED	SCHEDULE
ASL	ABOVE SEA LEVEL	F	FIRE SUPPRESSION	LAV	LAVATORY	SCW	SOFT COLD WATER
AV	ACID VENT	FCO	FLOOR CLEANOUT	LB	POUND	SH	SHOWER
AW	ACID WASTE	FD	FLOOR DRAIN	MAX	MAXIMUM	SL	SEA LEVEL
BFF	BELOW FINISHED FLOOR	FLEX	FLEXIBLE	MBH	THOUSAND BRITISH THERMAL UNITS/HOUR	SPEC	SPECIFICATION
BTU	BRITISH THERMAL UNIT	FLR	FLOOR	MECH	MECHANICAL	SQ FT	SQUARE FEET
CO	CLEANOUT	FS	FLOOR SINK	MECH RM	MECHANICAL ROOM	SRD	SECONDARY ROOF DRAIN
CO2	CARBON DIOXIDE	FT	FEET	MFR	MANUFACTURER	SS	SERVICE SINK
CONTR	CONTRACTOR	G	NATURAL GAS	MIN	MINIMUM	STD	STANDARD
COTG	CLEANOUT TO GRADE	GA	GAUGE	MISC	MISCELLANEOUS	TWS	TEMPERED WATER DOMESTIC
CW	CLOTHES WASHER	GAL	GALLON(S)	N	NITROGEN	TEMP	TEMPERATURE
CW	COLD WATER	GALV	GALVANIZED	NIC	NOT IN CONTRACT	TYP	TYPICAL
D	DRAIN PIPE	GPM	GALLONS PER MINUTE	NO	NITROUSE OXIDE	U	URINAL
DEG F	DEGREE FAHRENHEIT	GW	GREASE WASTE	NTS	NOT TO SCALE	V	VOLT
DEMO	DEMOLITION	HA	HAMMER ARRESTOR	O	OXYGEN	VAC	VACUUM
DET	DETAIL	HB	HOSE BIBB	PH	PHASE	VTR	VENT THRU ROOF
DF	DRINKING FOUNTAIN	HD	HEAD	PPM	PARTS PER MILLION	W/	WITH
DIA	DIAMETER	HORIZ	HORIZONTAL	PRV	PRESSURE REDUCING VALVE	W/O	WITHOUT
DIM	DIMENSION	HP	HORSEPOWER	PSI	POUNDS PER SQUARE INCH	WAG	WASTE ANESTHETIC GAS
DIV	DIVISION	H	HOUR	PW	PROCESS WASTE	WC	WATER CLOSET
DMPR	DAMPER	HW	HOT WATER	QTY	QUANTITY	WCO	WALL CLEANOUT
DN	DOWN	HWR	HOT WATER RETURN	RD	ROOF DRAIN	WH	WATER HEATER
DRN	DRAIN	HZ	HERTZ	REQD	REQUIRED		
DS	DOWNSPOUT	ICW	INDUSTRIAL COLD WATER	REV	REVISION		
ES	EMERGENCY	IE	INVERT ELEVATION	RP	RECIRCULATION PUMP		
EW	EMERGENCY EYE WASH	IHW	INDUSTRIAL HOT WATER				

PLUMBING SHEET INDEX

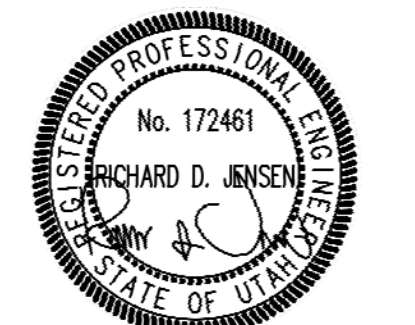
P001	PLUMBING LEGEND AND GENERAL NOTES
PL101	PLUMBING FLOOR PLAN
PL102	ROOF PLUMBING PLAN
P501	PLUMBING DETAILS
P502	PLUMBING DETAILS
P601	PLUMBING SCHEDULES
P901	DVV AND WATER SUPPLY PIPING SCHEMATIC

PLUMBING LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
WALL CLEAN OUT	WCO	DOMESTIC COLD WATER PIPING	
CLEAN OUT	CO	INDUSTRIAL COLD WATER PIPING	ICW
CLEAN OUT TO GRADE	COTG	SOFT COLD WATER PIPING	SCW
FLOOR CLEAN OUT	FCO	DOMESTIC HOT WATER PIPING	
DROP		INDUSTRIAL HOT WATER PIPING	IHW
RISE		SOFT HOT WATER PIPING	SHW
CAPPED PIPE		DOMESTIC HOT WATER RECIRCULATION PIPING	
PIPE REDUCER		DOMESTIC TEMPERED WATER	TWS
BALL VALVE		VENT PIPING	
GATE VALVE		ACID VENT PIPING	AV
AUTOMATIC TWO-WAY VALVE		WASTE PIPING (ABOVE GRADE OR FLOOR)	
AUTOMATIC THREE-WAY VALVE		WASTE PIPING (BELOW GRADE OR FLOOR)	
TEMPERING VALVE	TWS	ACID WASTE PIPING (ABOVE GRADE OR FLOOR)	AW
UNION		ACID WASTE PIPING (BELOW GRADE OR FLOOR)	AW
GAS COCK VALVE		GREASE WASTE PIPING (ABOVE GRADE OR FLOOR)	GW
PRESSURE REGULATOR		GREASE WASTE PIPING (BELOW GRADE OR FLOOR)	GW
STRAINER		PROCESS WASTE PIPING (ABOVE GRADE OR FLOOR)	PW
HAMMER ARRESTOR		PROCESS WASTE PIPING (BELOW GRADE OR FLOOR)	PW
CHECK VALVE		ROOF DRAIN PIPING (ABOVE GRADE OR FLOOR)	RD
CIRCUIT SETTER		ROOF DRAIN PIPING (BELOW GRADE OR FLOOR)	RD
BUTTERFLY VALVE		SECONDARY ROOF DRAIN PIPING	SRD
BACKFLOW PREVENTOR		NATURAL GAS PIPING	G
RELIEF VALVE		LIQUID PROPANE GAS	LPG
MANUAL AIR VENT		COMPRESSED AIR PIPING	A
THERMOMETER		CARBON DIOXIDE PIPING	CO2
FLEXIBLE PIPING		NITROGEN PIPING	N
INLINE PUMP		NITROUS OXIDE PIPING	NO
DIRECTION OF SLOPE		OXYGEN PIPING	O
FLOW DIRECTION		VACUUM PIPING	VAC
ACCESS DOOR		WASTE ANESTHETIC GAS PIPING	WAG
FLOW METER		DEIONIZED WATER PIPING	DIW
WATER METER		DRAIN PIPING	D
DEVICE IN DROP		FIRE SPRINKLER PIPING	F
SECTION LETTER SHEET NUMBER		KEYED NOTE	#
ROOM NAME ROOM NUMBER		PLUMBING FIXTURE CALLOUT	P-??
REVISION DELTA		DETAIL NUMBER SHEET DETAIL APPEARS	X S#
NEW CONNECTION		EQUIPMENT CALLOUT	X-#
		LARGE SCALE NUMBER SHEET LARGE SCALE APPEARS	# S#

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number: 22-59

Property Number: 501-8963

May 1, 2023

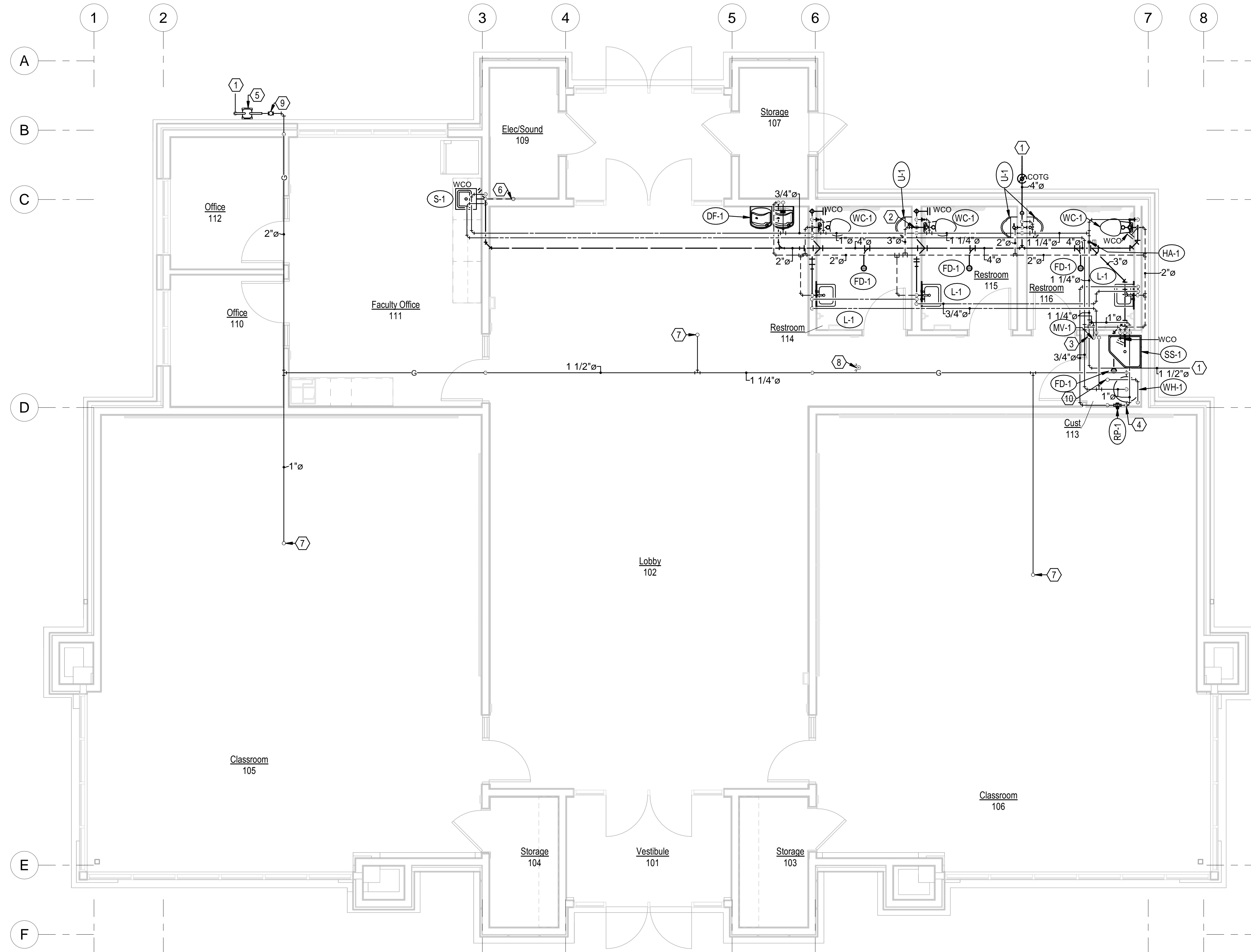
PLUMBING LEGEND AND GENERAL NOTES

P001



Ⓢ SHEET KEYED NOTES

- 1 SEE SITE UTILITY PLAN FOR CONTINUATION.
- 2 3" VTR.
- 3 1-1/2" PRV STATION IN DROP, SEE DETAIL 1/P501.
- 4 CONNECT TO CW PIPING NEAR WH-1 CONNECTION, SEE DETAIL 5/P501.
- 5 GAS METER, BY GAS COMPANY.
- △ 6 3" VTR. TRANSITION FROM 1-1/2" VENT WITHIN 1' OF ROOF DECK.
- 7 GAS LINE UP THRU ROOF TO ROOFTOP UNIT. MOTION SENSOR FOR RP-1 CONTROL.
- 8 SEISMIC GAS VALVE, SEE DETAIL 1/P502.
- 10 FLUE/COMBUSTION AIR UP THRU ROOF, SEE DETAIL 5/P501.

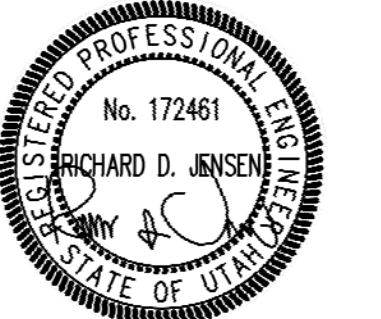


PLUMBING FLOOR PLAN
SCALE: 1/4" = 1'-0"

1

Revision Schedule

#	Description	Date
1	AEC COMMENTS	05-26-23



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary

2535 West Wilson Lane
West Haven, Utah

Project Number: 22-59

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May 1, 2023

PLUMBING FLOOR PLAN

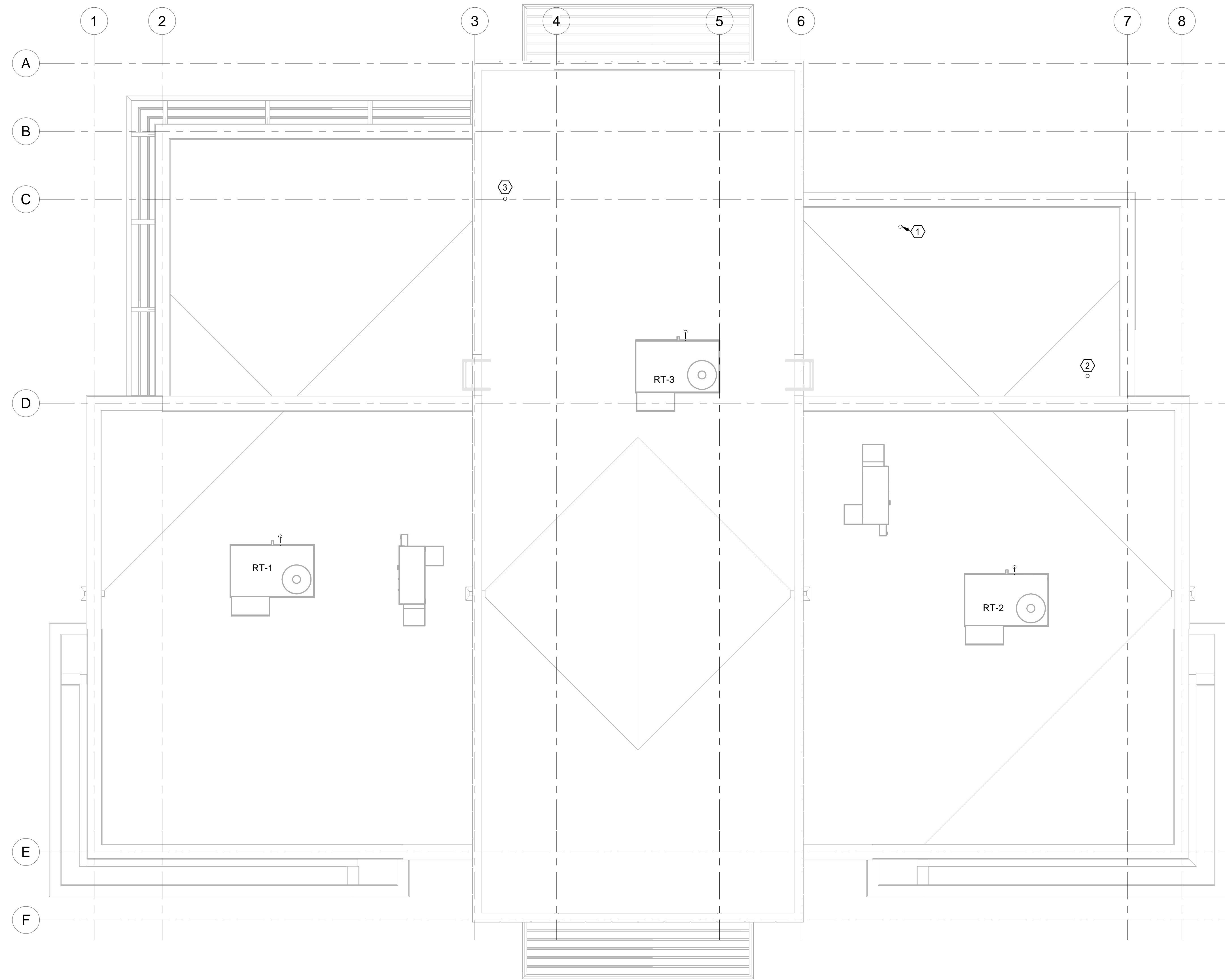
PL101



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Ⓢ SHEET KEYED NOTES

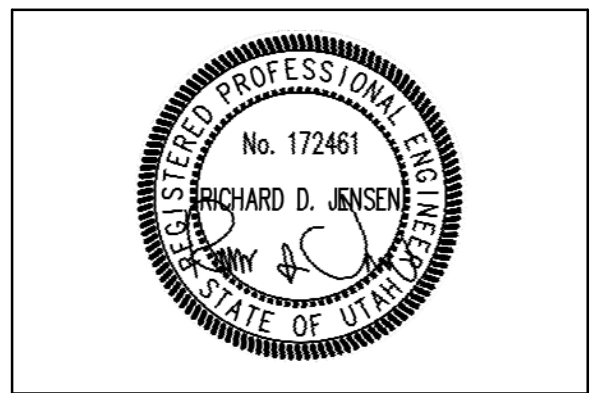
- 1 3" VTR.
- 2 FLUE/COMBUSTION AIR UP THRU ROOF, SEE DETAIL 5/P501.
- ⚠ 3 3" VTR. TRANSITION FROM 1-1/2" VENT WITHIN 1' OF ROOF DECK.



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

1

Revision Schedule		
#	Description	Date
1	AEC COMMENTS	05-26-23



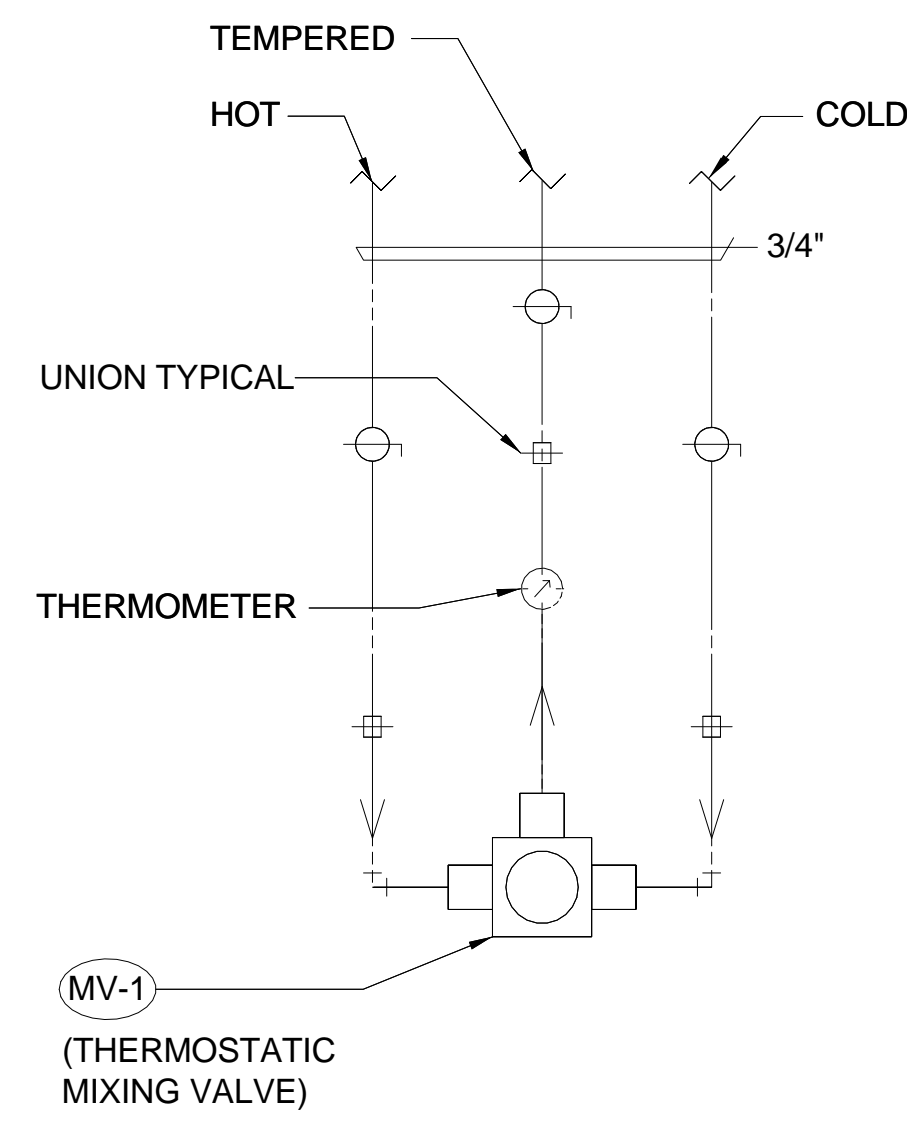
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number:	22-59
Property Number:	501-8963
May 1, 2023	
ROOF PLUMBING PLAN	

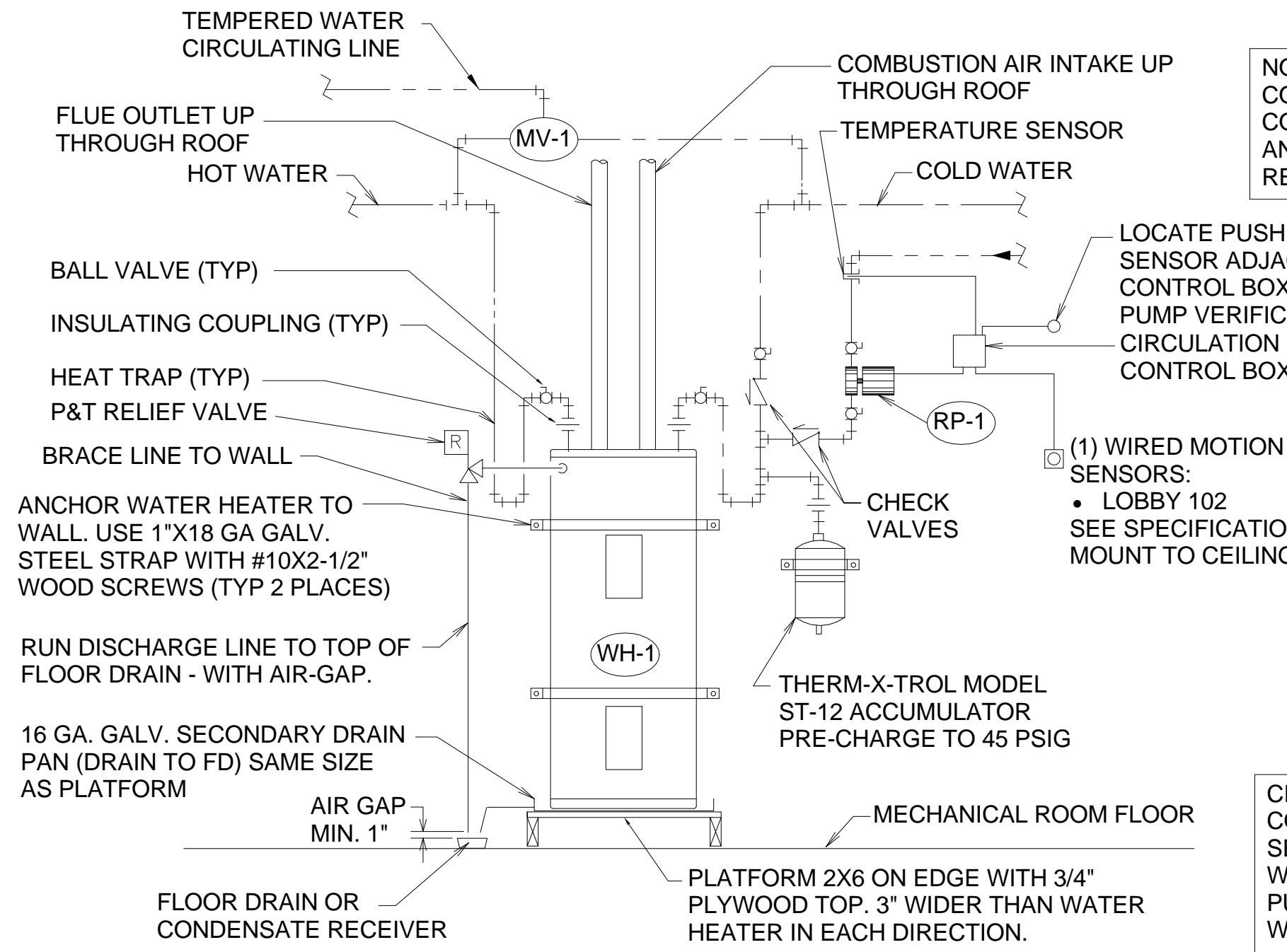


PL102



7 MIIXING VALVE PIPING SCHEME

SCALE: NTS



5 WATER HEATER DETAIL

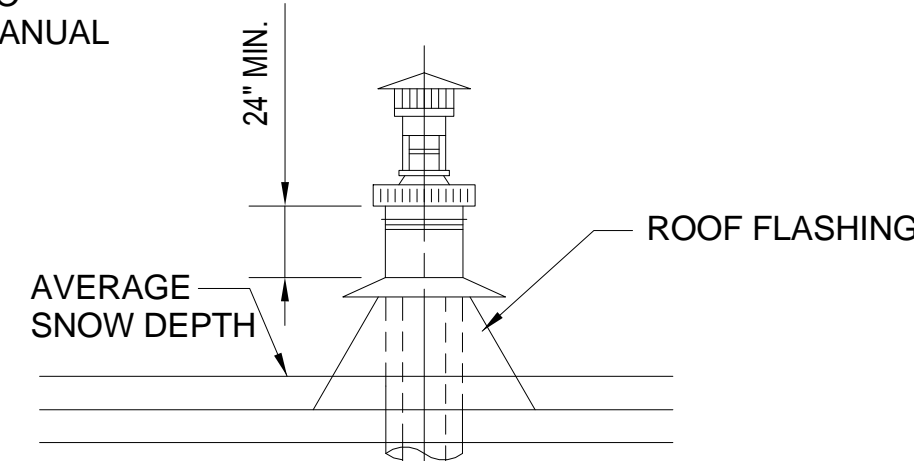
SCALE: NTS

NOTE: COORDINATE EXACT FLUE AND COMBUSTION AIR PIPE SIZING AND CONFIGURATION WITH MFG. RECOMMENDATIONS.

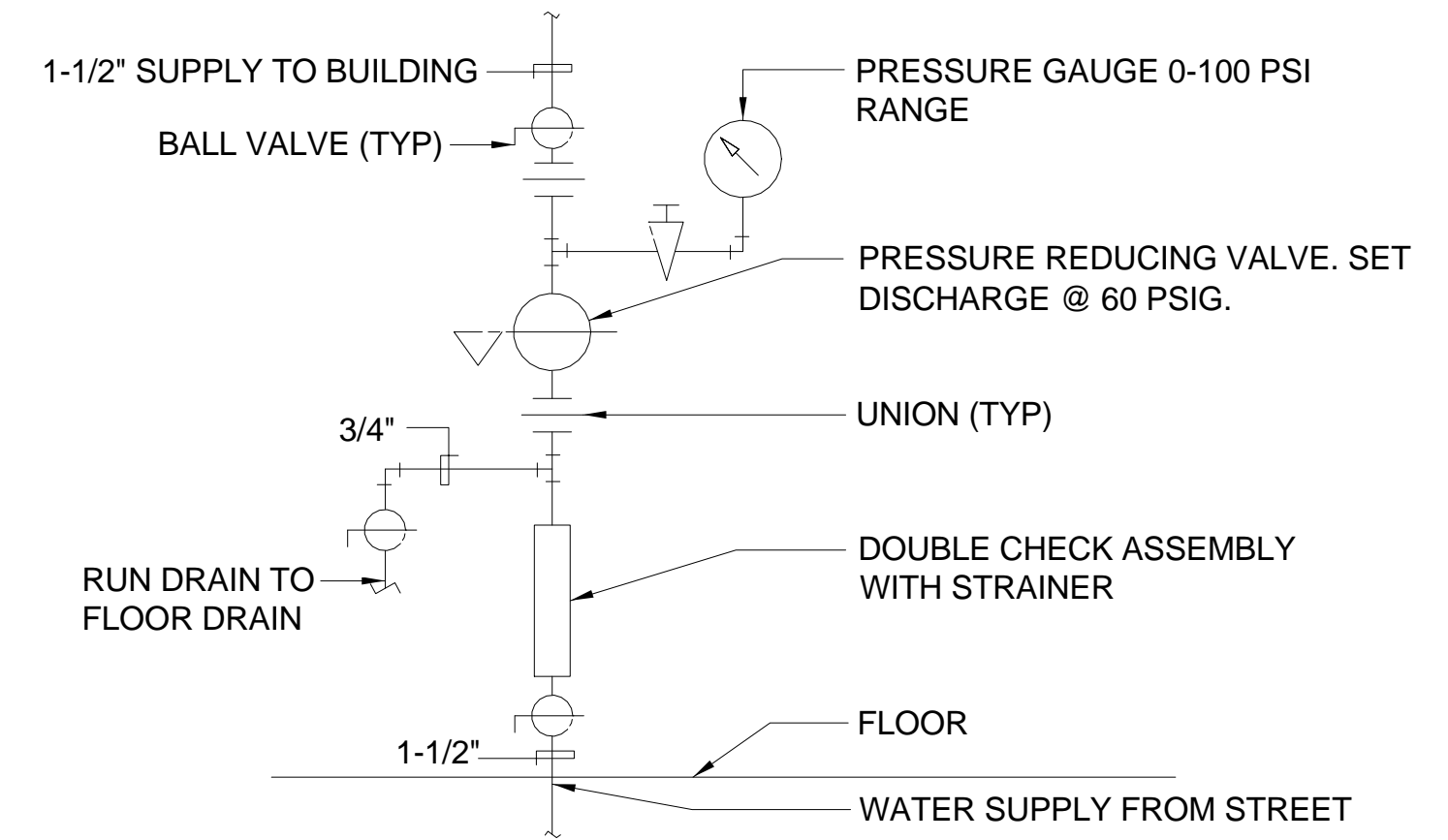
LOCATE PUSH BUTTON SENSOR ADJACENT TO CONTROL BOX FOR MANUAL PUMP VERIFICATION
CIRCULATION PUMP CONTROL BOX

(1) WIRED MOTION SENSORS:
• LOBBY 102
SEE SPECIFICATIONS.
MOUNT TO CEILING

CIRCULATION PUMP AND CONTROL BOX:
SEE SPECIFICATION. COMPLETE WITH TEMPERATURE SENSOR, PUSH BUTTON SENSOR, AND WIRED MOTION SENSORS.

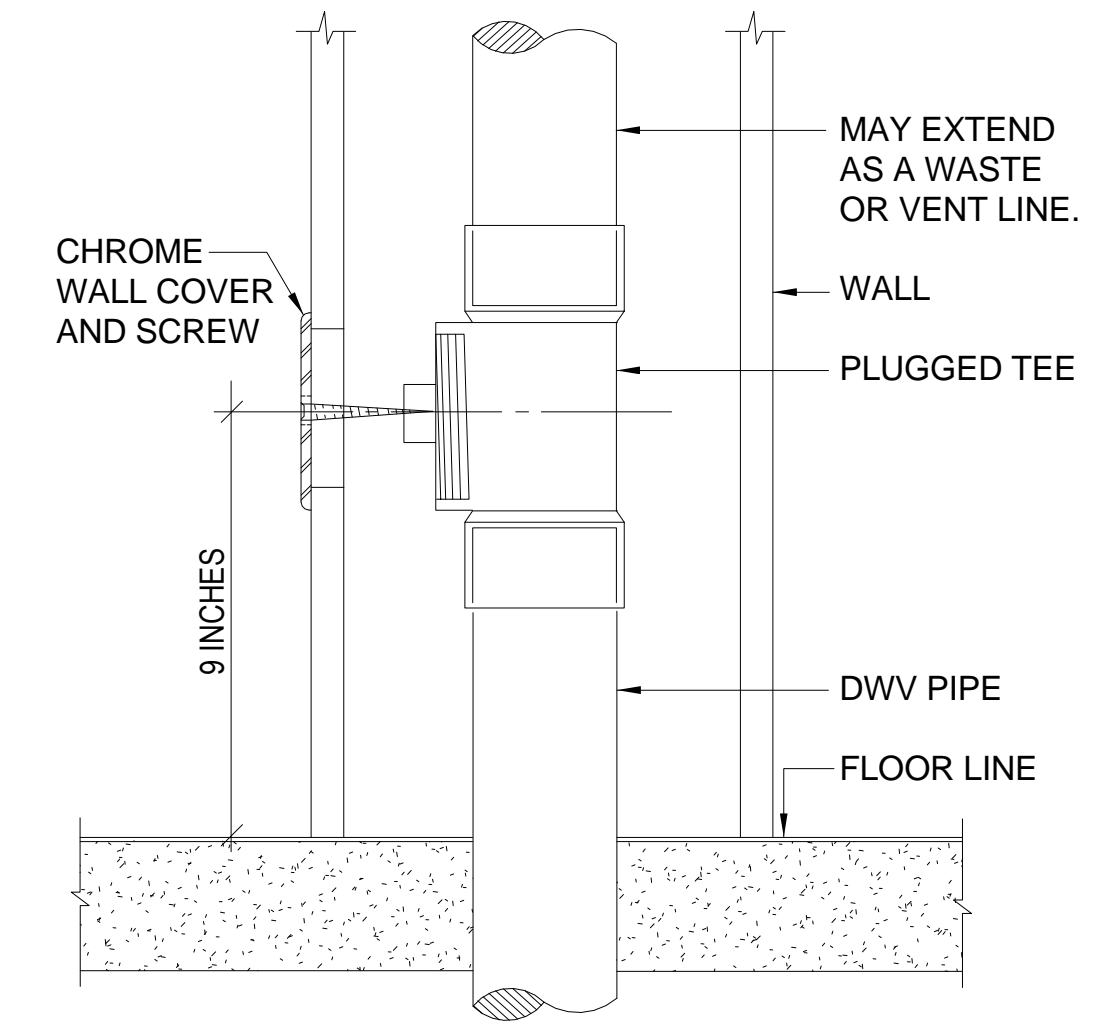


SINGLE ROOF PENETRATION



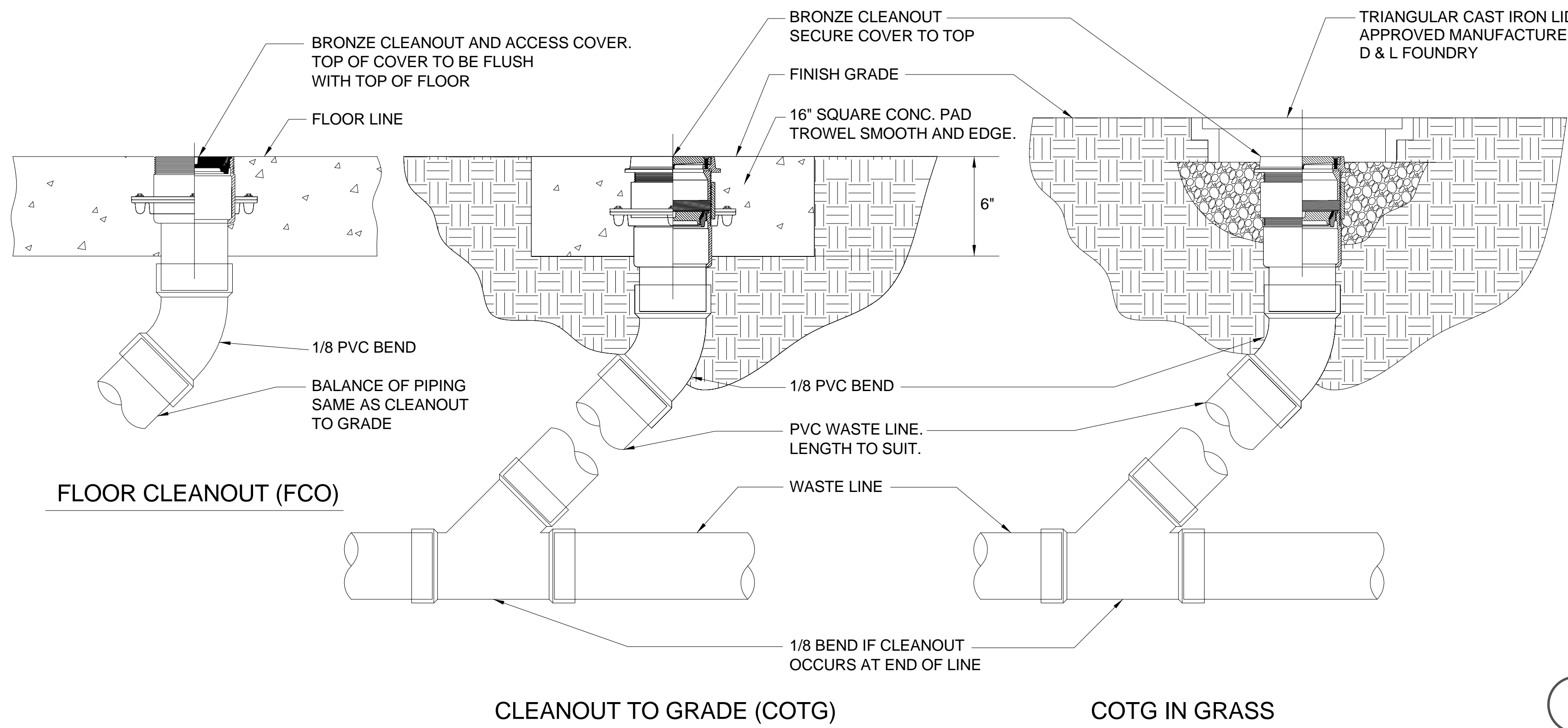
1 VERTICAL WATER PRESSURE REDUCING STATION DETAIL

SCALE: NTS



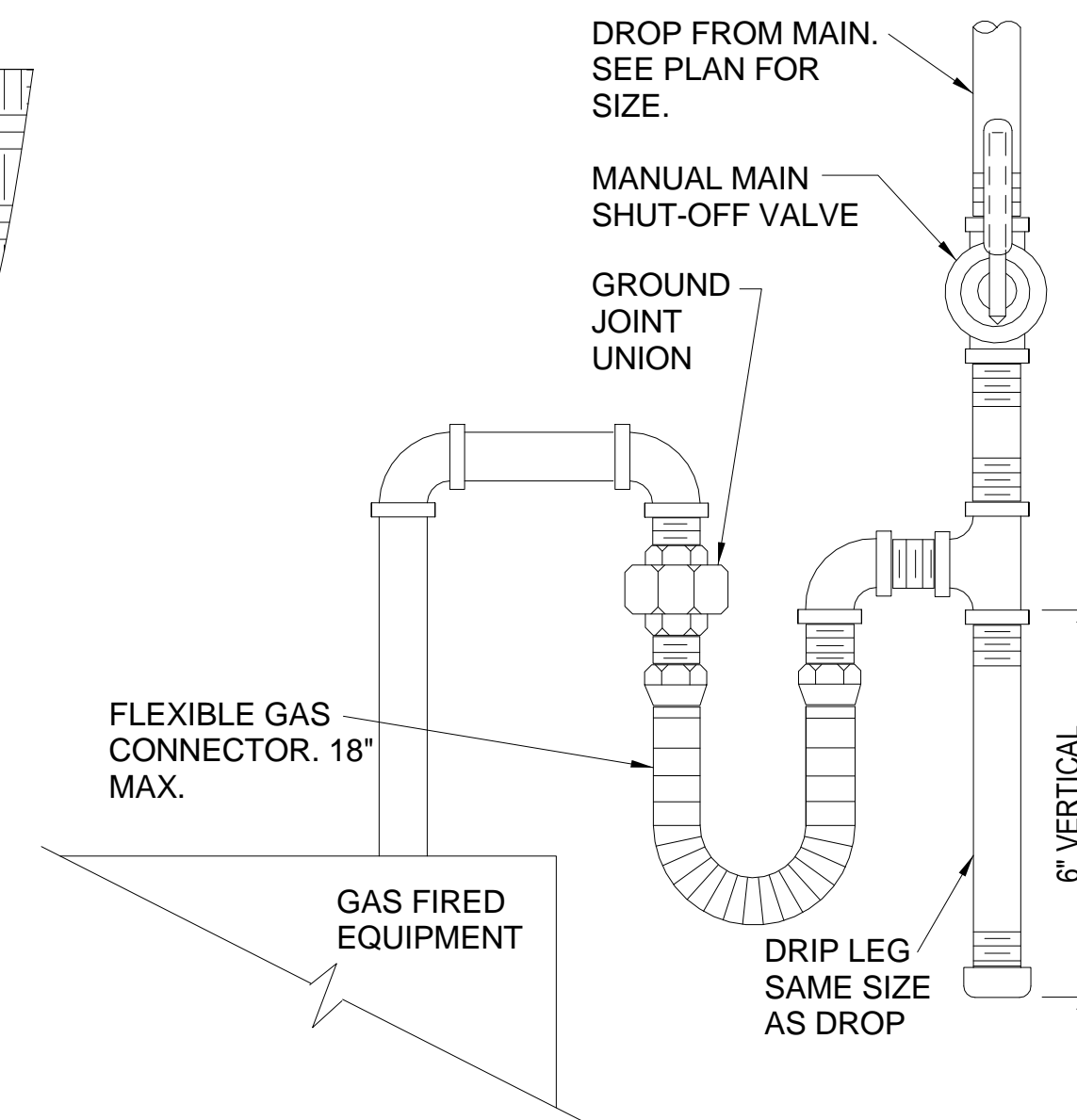
2 WALL CLEANOUT DETAIL

SCALE: NTS



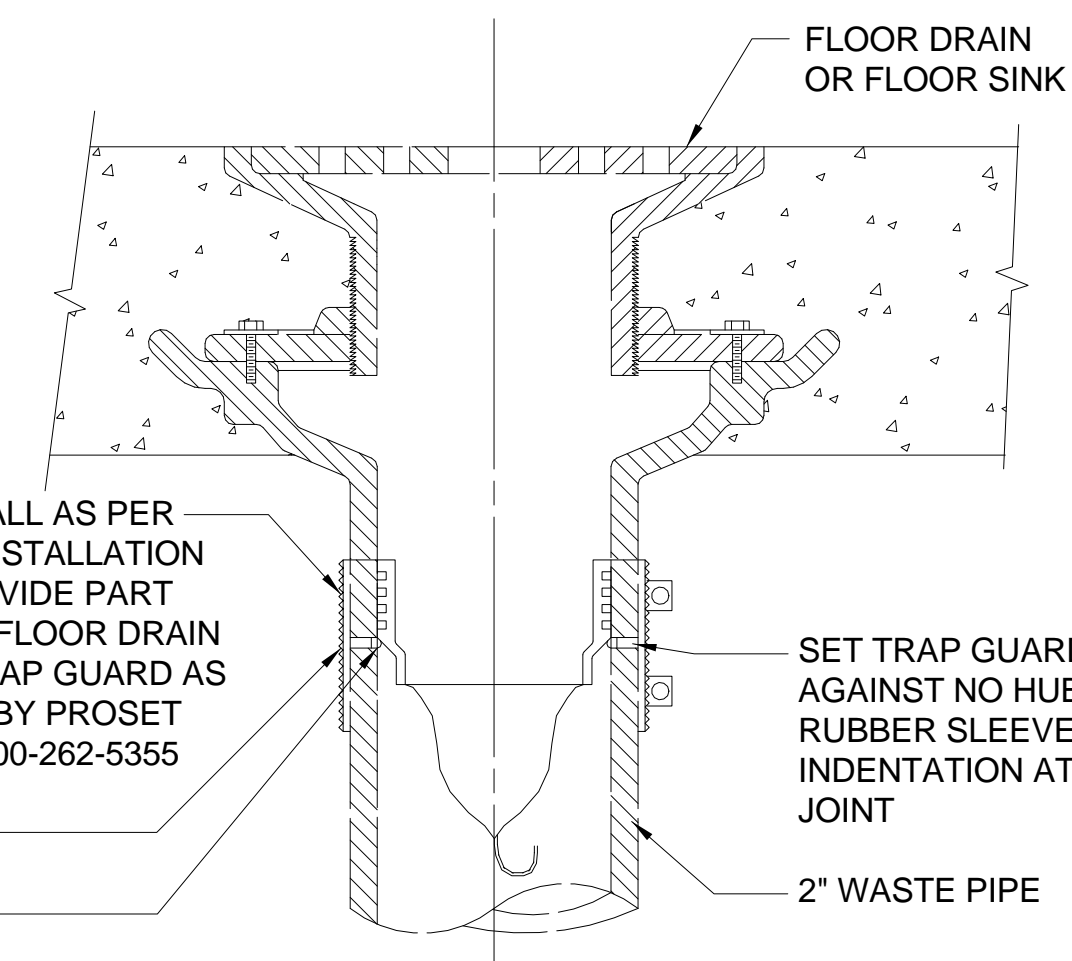
6 CLEANOUT DETAILS

SCALE: NTS



4 GAS LINE CONNECTION DETAIL

SCALE: NTS



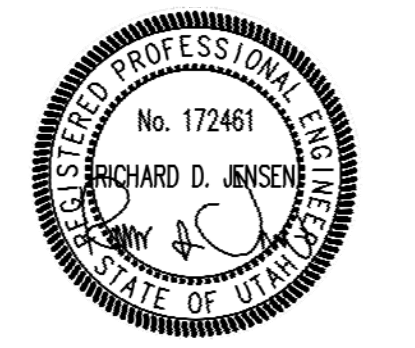
3 TRAP GUARD TRAP SEAL DETAIL

SCALE: NTS

"TRAP GUARD" INSTALL AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS, PROVIDE PART NUMBER TO MATCH FLOOR DRAIN MANUFACTURER. TRAP GUARD AS MANUFACTURED BY PROSET SYSTEMS INC. TEL 800-262-5355

SET TRAP GUARD AGAINST NO HUB RUBBER SLEEVE INDENTATION AT JOINT

Revision Schedule		
#	Description	Date



Project for:
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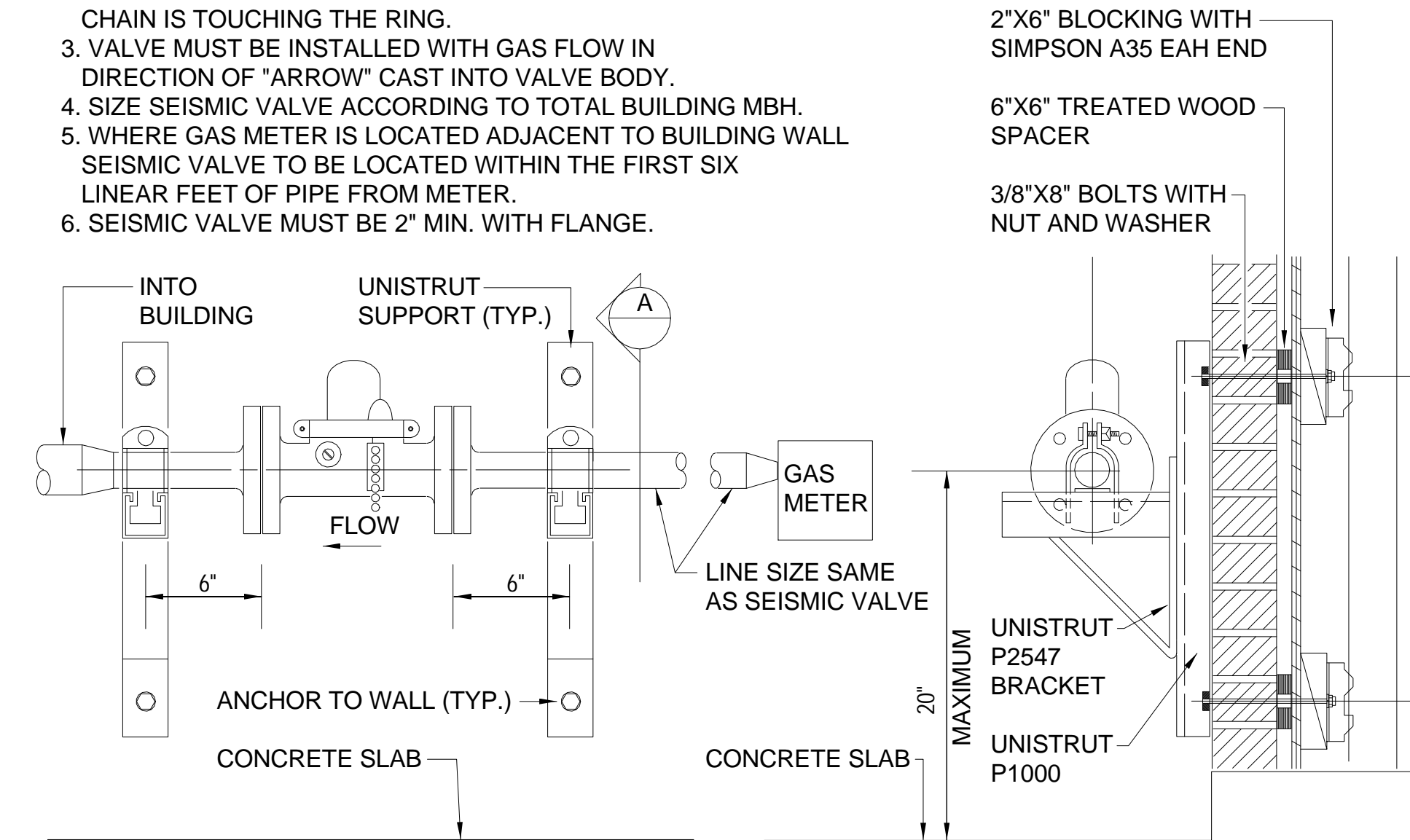
Project Number:	22-59
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May 1, 2023	
PLUMBING DETAILS	

P501

DAVID L. JENSEN & ASSOCIATES
MECHANICAL ENGINEERS
547 WEST 500 SOUTH SUITE #140
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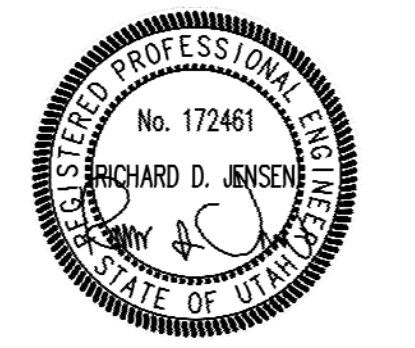
NOTES:

1. VALVE MUST BE INSTALLED WITH THE CHAIN AND RESET BUTTON FACING OUT AND ACCESSIBLE.
2. THE CHAIN IS A PLUMB LINE. MAKE SURE VALVE IS MOUNTED ABSOLUTELY LEVEL AND NO PART OF THE CHAIN IS TOUCHING THE RING.
3. VALVE MUST BE INSTALLED WITH GAS FLOW IN DIRECTION OF "ARROW" CAST INTO VALVE BODY.
4. SIZE SEISMIC VALVE ACCORDING TO TOTAL BUILDING MBH.
5. WHERE GAS METER IS LOCATED ADJACENT TO BUILDING WALL SEISMIC VALVE TO BE LOCATED WITHIN THE FIRST SIX LINEAR FEET OF PIPE FROM METER.
6. SEISMIC VALVE MUST BE 2" MIN. WITH FLANGE.



1 SEISMIC VALVE DETAIL
SCALE: NTS

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PLUMBING DETAILS	

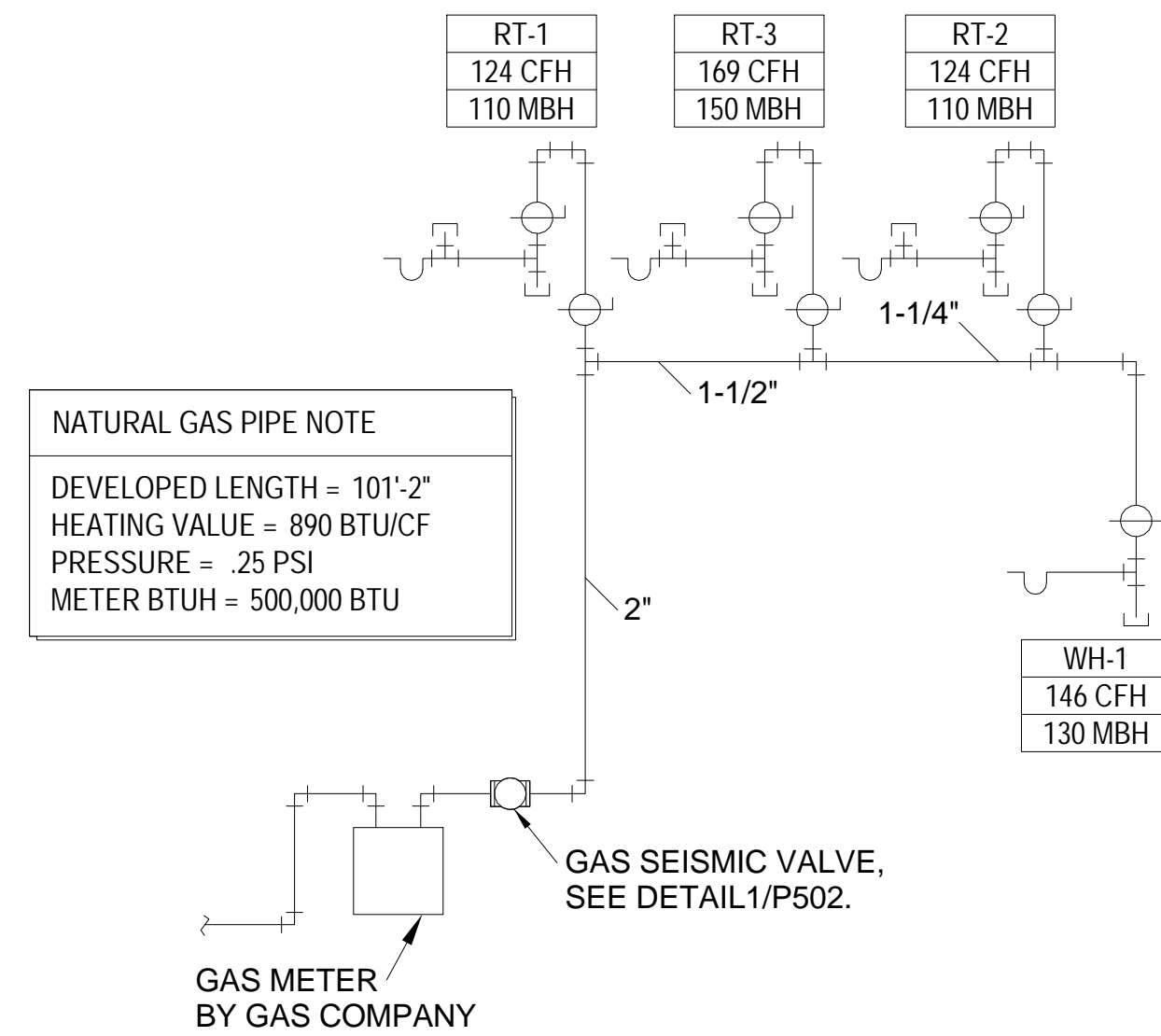


P502

WATER SUPPLY & DRAINAGE FIXTURE UNITS									
FIXTURE UNIT VALUES PER 2018 INTERNATIONAL PLUMBING CODE									
MARK	Count	FIXTURE	CWFU EACH	HWFU EACH	DRAINAGE FU EACH	CWFU TOTAL	HWFU TOTAL	DOMESTIC FU TOTAL	DRAINAGE FU TOTAL
DF-1	1	DRINKING FOUNTAIN	0.25	0	0.5	0.25	0	0.25	0.5
FD-1	4	FLOOR DRAIN	0	0	2	0	0	0	8
HA-1	1	HAMMER ARRESTOR	0	0	0	0	0	0	0
L-1	3	LAVATORY	0	1.5	1	0	4.5	4.5	3
MV-1	1	MIXING VALVE	0	0	0	0	0	0	0
RP-1	1	RECIRCULATION PUMP	0	0	0	0	0	0	0
S-1	1	SINK	3	3	2	3	3	6	2
SS-1	1	SERVICE SINK	2.25	2.25	5	2.25	2.25	4.5	5
U-1	3	URINAL	3	0	2	9	0	9	6
WC-1	3	WATER CLOSET	10	0	4	30	0	30	12
WH-1	1	WATER HEATER	0	0	0	0	0	0	0
Grand total: 20						44.5	9.75	54.25	36.5

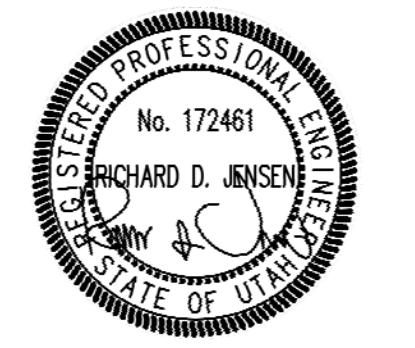
NATURAL GAS LOAD SUMMARY							
NOTES:							
1) PRESSURE = 0.25 PSI.							
2) HEATING VALUE = 890 BTU/CF							
ITEM	MECHANICAL MARK	PLUMBING MARK	COUNT	SERVICE	BTU/H	CFH	PIPE SIZE
ROOFTOP UNIT	RT-1		1	BUILDING HEAT	110,000	124	1"
ROOFTOP UNIT	RT-2		1	BUILDING HEAT	110,000	124	1"
ROOFTOP UNIT	RT-3		1	BUILDING HEAT	150,000	169	1"
WATER HEATER		WH-1	1	WATER HEAT	130,000	146	1"
TOTAL					500,000	562	

PLUMBING FIXTURE SCHEDULE							
NOTES:							
(1) COMBINATION DRAIN AND VENT.							
(2) PROVIDE TMV COMPLYING WITH ASSE 1070. SET DISCHARGE TO 110 DEG F. TEMPERED WATER SERVES ALL LAVATORIES.							
(3) MINIMUM SIZE OF DRAIN/WASTE PIPING UNDERFLOOR IS 2".							
(4) TRAP GUARD COMPLYING WITH ASSE 1072.							
(5) ELONGATED TYPE, OPEN FRONT SEAT.							
(6) INFRARED, HARDWIRED (115V/1PH).							
(7) INFRARED, BATTERY POWERED.							
(8) 115V/1PH.							
(9) WITH BOTTLE FILLER AND FILTER.							
(10) DISTANCE FROM HEATED WATER SOURCE SHALL NOT EXCEED 2' PER IECC C404.5.							
(11) CONTROL WITH STRAP-ON-STAT SET TO 104 DEG F AND FLOW SENSOR PER IECC C404.7.							
(12) 2.5 GPM AT 25 FT WG.							
(13) FURNISH WITH DISPOSER, 0.75 HP, 115V/1PH.							
MARK	FIXTURE	PIPE SIZES, IN.					NOTES
		TRAP	DRAIN/WASTE	VENT	CW	HW	
DF-1	DRINKING FOUNTAIN	1 1/2"	1 1/2"	1 1/2"	1/2"		BI-LEVEL, ADA (8)(9)
FD-1	FLOOR DRAIN	2"	2"				(1)(4)
HA-1	HAMMER ARRESTOR				1 1/4"		
L-1	LAVATORY	1 1/4"	1 1/2"	1 1/2"		1/2"	WALL MTD, ADA, 0.5GPM (6)(10)
MV-1	MIXING VALVE				3/4"	3/4"	(2)
RP-1	RECIRCULATION PUMP				3/4"		.17 HP, 3 SPEED (8)(11)(12)
S-1	SINK	1 1/2"	1 1/2"	1 1/2"	1/2"	1/2"	1 COMP, ADA, SS (13)
SS-1	SERVICE SINK	3"	3"	2"	1/2"	1/2"	
U-1	URINAL		2"	2"	3/4"		WALL MTD, ADA, 0.5GPF (7)
WC-1	WATER CLOSET		4"	2"	1"		FLOOR MTD, FV, ADA, 1.28GPF (5)(7)
WH-1	WATER HEATER				1"	1"	34 GALLON, 130 MBH, 96% T.E (8)



1 NATURAL GAS SCHEMATIC
SCALE: NTS

Revision Schedule		
#	Description	Date



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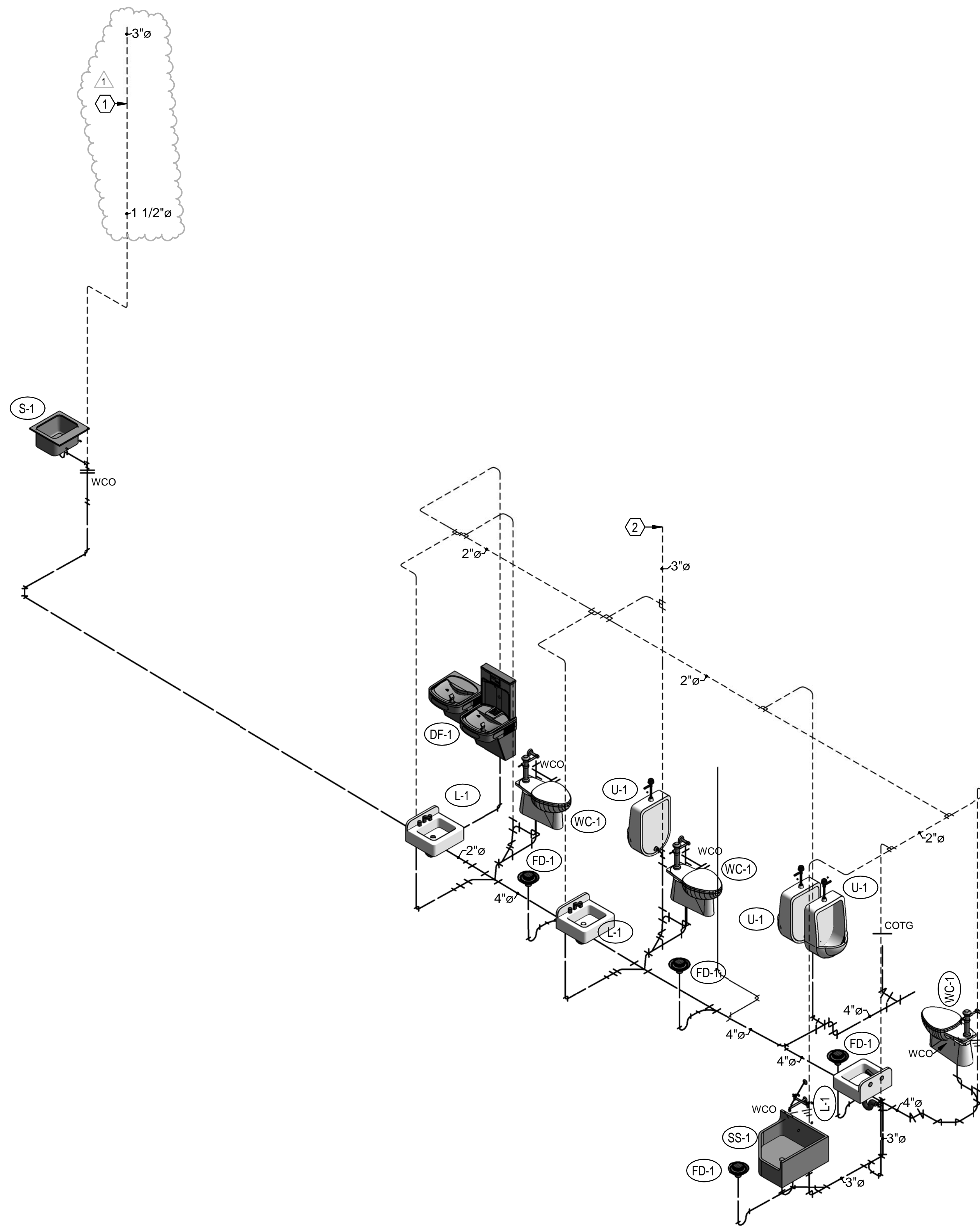
Project Number:	22-59
Property Number:	501-8963
May 1, 2023	
PLUMBING SCHEDULES	

P601

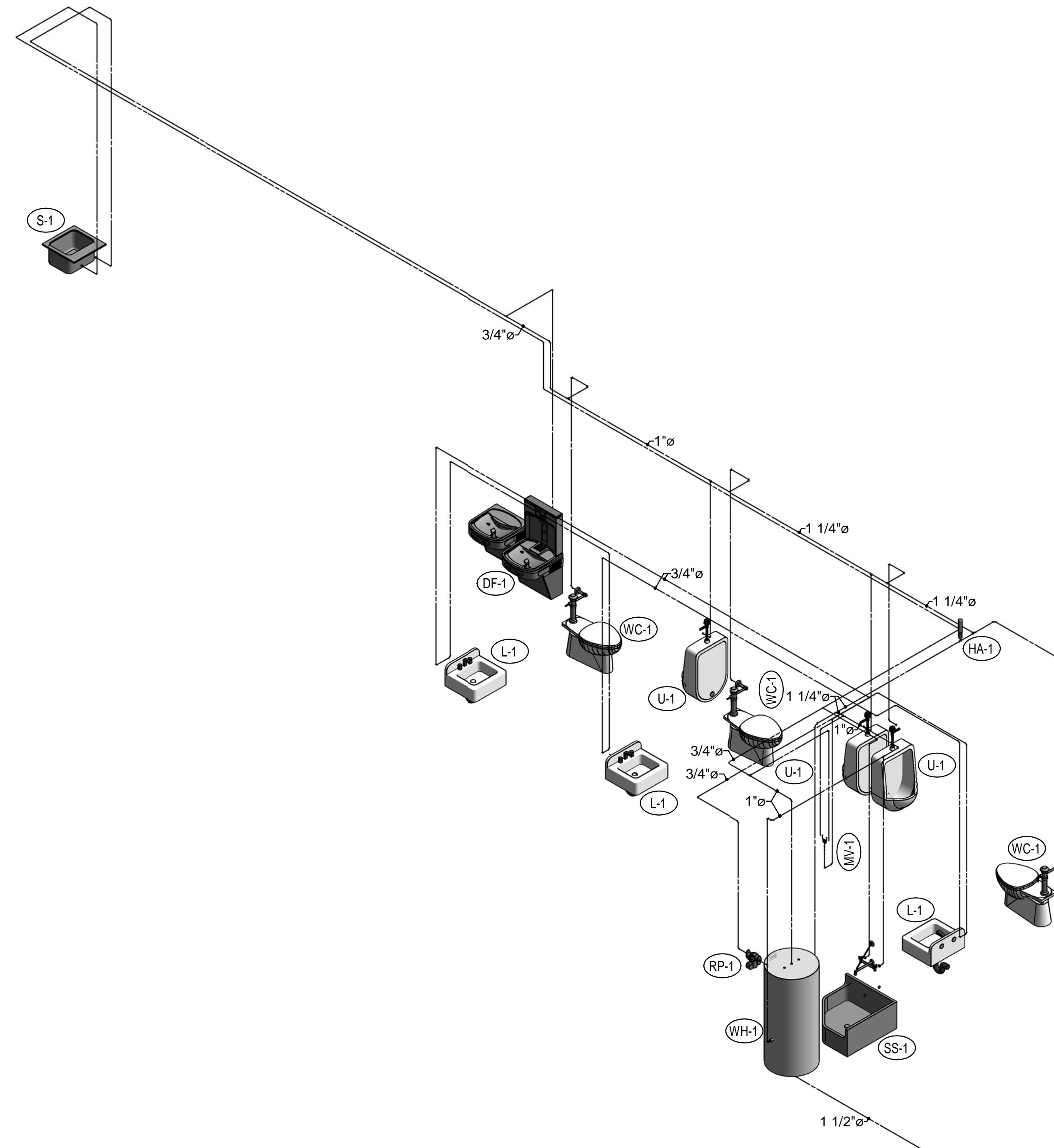
DAVID L. JENSEN & ASSOCIATES
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FAX: (801) 294-9399

⊞ SHEET KEYED NOTES

- ⚠ 1 3" VTR. TRANSITION FROM 1-1/2" VENT WITHIN 1' OF ROOF DECK.
- 2 3" VTR.

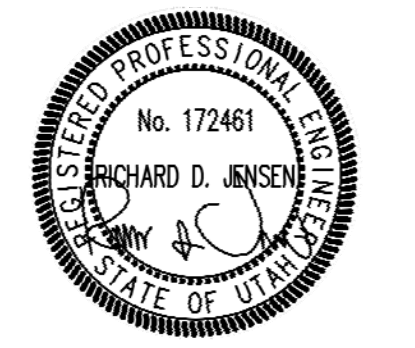


1 DWV SCHEMATIC
P901



2 WATER PIPING SCHEMATIC
P901

Revision Schedule		
#	Description	Date
1	AEC COMMENTS	05-26-23



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number: 22-59

Property Number: 501-8963

May 1, 2023

DWV AND WATER SUPPLY PIPING SCHEMATIC

P901

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HVAC GENERAL NOTES

- CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS WHICH ARE OBVIOUSLY AND REASONABLY NECESSARY TO COMPLETE THE INSTALLATION.
- THE CONTRACTOR SHALL TAKE OUT PERMITS, PROCURE CERTIFICATES AND PAY FEES CONNECTED THEREWITH.
- BIDDERS SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS SURROUNDING THE PROJECT PRIOR TO BIDDING.
- THE CONTRACTOR IS REFERRED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL PLANS AND SPECIFICATIONS. SUCH PLANS AND SPECIFICATIONS ARE CONTRACT DOCUMENTS.
- DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO SHOW APPROXIMATE LOCATIONS.
- ALL MECHANICAL HVAC WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE PREVAILING STATE MECHANICAL/PLUMBING AND BUILDING CODES AS WELL AS ALL REGULATIONS THAT MAY APPLY. IN CASE OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND A GOVERNING CODE OR ORDINANCE THE MORE STRINGENT SHALL APPLY.
- DIFFUSER RUN OUTS SHALL BE THE SAME AS LISTED DIFFUSER NECK SIZE, UNLESS OTHERWISE NOTED.
- COORDINATE EXACT LOCATION OF AIR DISTRIBUTION DEVICES WITH CEILING GRID AND LIGHT FIXTURE LAYOUT.
- ALL RECTANGULAR SUPPLY DUCT ELBOWS SHALL HAVE TURNING VANES.
- RECTANGULAR DUCT SIZES SHOWN INDICATE REQUIRED AIRFLOW SIZES. SHEETMETAL CONTRACTOR SHALL INCREASE SIZES TO ALLOW FOR LINER.
- NO DUCTWORK SHALL BE FABRICATED WITHOUT FIRST FIELD VERIFYING THAT THE AVAILABLE SPACE UNDER ACTUAL JOB CONDITIONS WILL PERMIT INSTALLATION OF THE DUCTWORK WITHOUT STRUCTURAL OR OTHER CONFLICTS. DUCT SIZES THAT REQUIRE ON THE JOB MODIFICATION DUE TO UNFORESEEN OBSTRUCTIONS SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER.
- MAINTAIN A 10'-0" BETWEEN OUTSIDE AIR INTAKES AND PLUMBING/EXHAUST VENTS.
- WHERE RATED ASSEMBLIES ARE PENETRATED BY DUCTS, PIPES OR OTHER ITEMS, THE "F" AND "T" RATING SHALL BE MAINTAINED WITH REQUIRED UL LISTED ASSEMBLIES OR SEALANTS AS REQUIRED BY THE APPLICABLE CODE OR AUTHORITY HAVING JURISDICTION.

MECHANICAL ABBREVIATIONS

AD	ACCESS DOOR	DEG	DEGREE FAHRENHEIT	HPS	HIGH PRESSURE STEAM	PD	PRESSURE DROP
AFF	ABOVE FINISHED FLOOR	DEMO	DEMOLITION	HR	HOUR	PERF	PERFORATE(D)
AHU	AIR HANDLING UNIT	DET	DETAIL	HTG	HEATING	PH	PHASE
AI	ANALOG INPUT	DH	DUCT HEATER	HVAC	HEATING, VENTILATING & AIR CONDITIONING	PLUM	PLUMBING
ALT	ALTERNATE	DI	DIGITAL INPUT	HW	HOT WATER	PPM	PARTS PER MILLION
AMB	AMBIENT	DIA	DIAMETER	HW	HOT WATER	PRV	PRESSURE REDUCING VALVE
AMP	AMPERE	DIM	DIMENSION	HWR	HOT WATER HEATING	PSI	POUNDS PER SQUARE INCH
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	DIV	DIVISION	RA	RETURN AIR	RA	RETURN AIR
AO	ANALOG OUTPUT	DMPR	DAMPER	RAD	RADIATED	RCP	RECIRCULATION PUMP
APD	AIR PRESSURE DROP	DO	DIGITAL OUTPUT	RCP	RECIRCULATION PUMP	REF	ROOFTOP EXHAUST FAN
APPROX	APPROXIMATE	DRN	DRAIN	RCP	RECIRCULATION PUMP	REQD	REQUIRED
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	DS	DOWNSPOUT	HZ	HERTZ	REV	REVISION
ASL	ABOVE SEA LEVEL	EA	EXHAUST AIR	IN	INCHES	RH	RELATIVE HUMIDITY
AVG	AVERAGE	EF	EXHAUST FAN	INWC	INCHES OF WATER COLUMN	RL	REFRIGERANT LIQUID
B	BOILER	EFF	EFFICIENCY	INWG	INCHES OF WATER GAUGE	RL	REFRIGERANT LIQUID
BOD	BOTTOM OF DUCT	EQ	EQUAL	IU	INDOOR UNIT	RBPB	REDUCED PRESSURE BACKFLOW PREVENTER
BOP	BOTTOM OF PIPE	EQUIP	EQUIPMENT	KW	KILOWATT	RPM	REVOLUTIONS PER MINUTE
BTU	BRITISH THERMAL UNIT	ERV	ENERGY RECOVERY VENTILATION	LAT	LEAVING AIR TEMPERATURE	RS	REFRIGERANT SUCTION
BTU	BTU PER HOUR	ESP	EXTERNAL STATIC PRESSURE	LB	POUND	SA	SUPPLY AIR
C	COMMON	ET	EXPANSION TANK	LPC	LOW PRESSURE CONDENSATE	SCHED	SCHEDULE
C	CONVECTOR	ET	ENTERING WATER TEMPERATURE	LPS	LOW PRESSURE STEAM	SEN	SENSIBLE
CA	COMBUSTION AIR	EWT	ENTERING WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE	SL	SEA LEVEL
CAP	CAPACITY	EXH	EXHAUST	MAU	MAKEUP AIR UNIT	SPEC	SPECIFICATION
CC	COOLING COIL	EXT	EXISTING	MAX	MAXIMUM	SSH	SPLIT SYSTEM HEAT PUMP
CEF	CEILING MTD EXHAUST FAN	F	FAHRENHEIT	MBH	THOUSAND BRITISH THERMAL UNITS/HOUR	STD	STANDARD
CFM	CUBIC FEET PER MINUTE	F	FURNACE	MBH	THOUSAND BRITISH THERMAL UNITS/HOUR	TEMP	TEMPERATURE
CHWR	CHILLED WATER RETURN	FCU	FAN COIL UNIT	MECH	MECHANICAL	TSP	TOTAL STATIC PRESSURE
CHWS	CHILLED WATER SUPPLY	FLR	FLOOR	MECH RM	MECHANICAL ROOM	TSTAT	THERMOSTAT
CO2	CARBON DIOXIDE	FLEX	FLEXIBLE	MFR	MANUFACTURER	TW	TEMPERED WATER
COMB	COMBUSTION	FO	FLAT OVAL	MIN	MINIMUM	TYP	TYPICAL
CONTR	CONTRACTOR	FPM	FEET PER MINUTE	MISC	MISCELLANEOUS	UH	UNIT HEATER
CU	CONDENSING UNIT	FPVAV	FAN POWERED VAV	MTD	MOUNTED	V	VOLT
CU FT	CUBIC FEET	FT	FEET	NC	NOISE CRITERIA	VAV	VARIABLE AIR VOLUME
CU YD	CUBIC YARDS	GALV	GALVANIZED	NC	NORMALLY CLOSED	VD	VOLUME DAMPER
CUH	CABINET UNIT HEATER	GPM	GALLONS PER MINUTE	NIC	NOT IN CONTRACT	VERT	VERTICAL
CV	CONSTANT VOLUME	GHR	GLYCOL HEATING RETURN	NOM	NOMINAL	VFD	VARIABLE FREQUENCY DRIVE
CW	COLD WATER	GHS	GLYCOL HEATING SUPPLY	NTS	NOT TO SCALE	VOL	VOLUME DAMPER
CWR	CONDENSOR WATER RETURN	H	FUME HOOD	OA	OUTSIDE AIR	W/	WITH
CWS	CONDENSOR WATER SUPPLY	HORIZ	HORIZONTAL	OBD	OPPOSED BLADE DAMPER	W/O	WITHOUT
DB	DRY BULB	HP	HIGH PRESSURE	OU	OUTDOOR UNIT	WB	WET BULB
DD	DUAL DUCT BOX	HP	HORSEPOWER	P	PUMP	WPD	WATER PRESSURE DROP
		HP	HEAT PUMP	PCF	POUNDS PER CUBIC FEET		

MECHANICAL SHEET INDEX

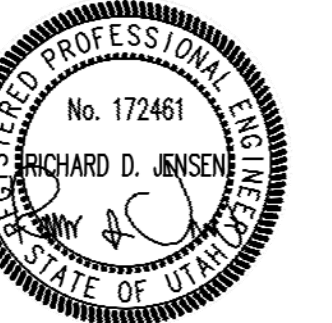
M001	MECHANICAL LEGEND AND GENERAL NOTES
MH101	MECHANICAL FLOOR PLAN
MH102	ROOF MECHANICAL PLAN
M501	MECHANICAL DETAILS
M502	MECHANICAL DETAILS
M601	MECHANICAL SCHEDULES
ME101	MECHANICAL CONTROL PLAN
ME701	AUTOMATIC TEMPERATURE CONTROLS
ME702	AUTOMATIC TEMPERATURE CONTROLS
ME703	AUTOMATIC TEMPERATURE CONTROL WIRING

MECHANICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	AUTOMATIC 2-WAY VALVE		UNION		BRANCH DUCT TAKE-OFF WITH MANUAL DAMPER
	AUTOMATIC 3-WAY VALVE		VENTURI		DUCT FLEXIBLE CONNECTION
	AUTOMATIC BALL FLOAT VENT		WATER FLOW SWITCH		TURNING VANES
	BALL VALVE		CONDENSER WATER SUPPLY		DUCT TEE CONNECTION
	CAPPED END W/BALL VALVE		CONDENSER WATER RETURN		DUCT TRANSITION
	CHECK VALVE		CHILLED WATER SUPPLY		SQUARE TO ROUND DUCT TRANSITION
	COMBINATION BALANCING VALVE/ SHUTOFF		CHILLED WATER RETURN		AUTOMATIC DAMPER
	DEVICE IN DROP		HOT WATER HTG. SUPPLY		VOLUME DAMPER
	DIRECTION OF SLOPE		HOT WATER HTG. RETURN		BACK-DRAFT DAMPER
	FLANGED BUTTERFLY VALVE		HIGH PRESSURE STEAM PIPING		DUCT ACCESS DOOR
	FLANGED ECCENTRIC REDUCER		LOW PRESSURE STEAM PIPING		RETURN AIR, RISE AND DROP
	FLANGED UNION		LOW PRESSURE CONDENSATE PIPING		SUPPLY AIR, RISE AND DROP
	FLEXIBLE CONNECTION		GLYCOL HEATING SUPPLY PIPING		EXHAUST AIR, RISE AND DROP
	FLOW DIRECTION		GLYCOL HEATING RETURN PIPING		OUTSIDE AIR, RISE AND DROP
	FLOW METER		REFRIGERANT PIPING - LIQUID		RELIEF AIR, RISE AND DROP
	GATE VALVE		REFRIGERANT PIPING - SUCTION		COMBUSTION AIR, RISE AND DROP
	GLOBE VALVE		REFRIGERANT SHUT-OFF VALVE		ROUND DUCT, RISE AND DROP
	IMMERSION WELL		EXPANSION VALVE		FLAT OVAL DUCT, RISE AND DROP
	INLINE PUMP		MOISTURE INDICATING SIGHT GLASS		FIRE DAMPER
	MANUAL VENT WITH BALL VALVE		FLEXIBLE CONNECTION		FIRE SMOKE DAMPER
	P & T PLUG IN IMMERSION WELL		FILTER DRIER		FLEXIBLE DUCT
	PIPE DROP		PIPE SUPPORT		AIR DEVICE
	PIPE INLINE DROP		EXTERIOR PIPE SUPPORT		AIR DEVICE CFM
	PIPE INLINE RISE		EXTERIOR PIPE SUPPORT		KEYED NOTE
	PIPE RISER		DIRECTION OF SLOPE DOWN		EQUIPMENT CALLOUT
	PNEUMATIC 2-WAY VALVE		SUCTION LINE		DETAIL NUMBER SHEET DETAIL APPEARS
	PRESSURE GAUGE		LIQUID LINE		LARGE SCALE NUMBER SHEET LARGE SCALE APPEARS
	PRESSURE GAGE W/BALL VALVE		TRAP, ONE PIECE FACTORY FABRICATED		AIR FLOW DIRECTION
	RELIEF VALVE		THERMOSTAT		SECTION LETTER SHEET NUMBER
	SCREWED CONCENTRIC REDUCER		SENSOR		ROOM NAME ROOM NUMBER
	STEAM TRAP		CO2 SENSOR		ACCESS DOOR
	STRAINER		J-BOX		
	THERMOMETER		REVISION DELTA		
	THREADED HOSE CONNECTION		NEW CONNECTION		

Revision Schedule

#	Description	Date



Project for:

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

A New Building for

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2535 West Wilson Lane
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Project Number: 22-59

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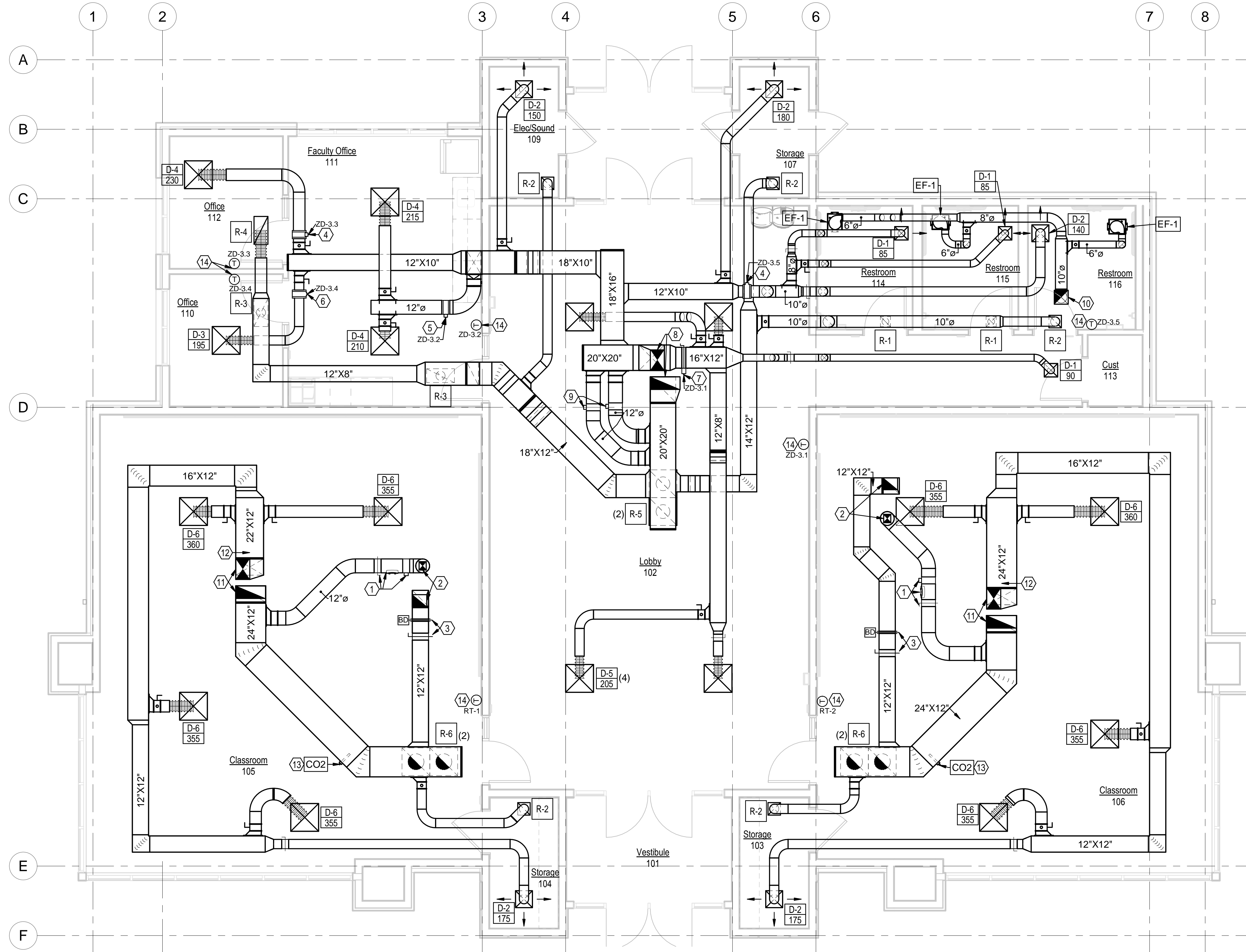
MECHANICAL LEGEND AND GENERAL
NOTES

M001



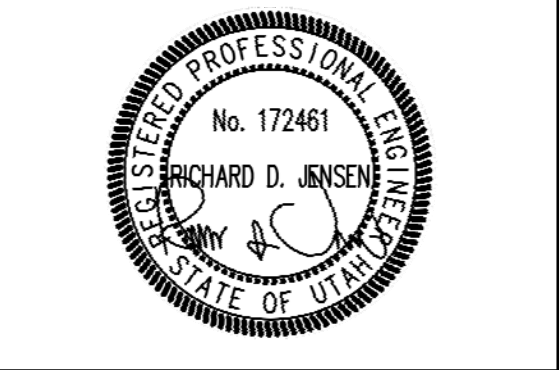
Ⓢ SHEET KEYED NOTES

- 1 12" DIA FA MANUAL AND MOTORIZED DAMPERS, DUCT ACCESS DOOR.
- 2 12"X12" RA, 12" DIA FA DUCT UP TO ERV. TRANSITION TO ERV OPENING SIZES IN RISE.
- 3 12"X12" BACKDRAFT AND BALANCING DAMPERS.
- 4 10" DIA. ZONE DAMPER.
- 5 12" DIA. ZONE DAMPER.
- 6 8" DIA. ZONE DAMPER.
- 7 16"X12" ZONE DAMPER.
- 8 20"X20" SA/RA DUCT UP. TRANSITION TO ROOFTOP OPENING SIZES IN RISE.
- 9 TWO 12" DIA. BYPASS DAMPERS. RELIEF STATIC PRESSURE SETPOINTS TO MATCH.
- 10 12"X12" EA DUCT UP TO PENTHOUSE.
- 11 24"X12" SA/RA DUCT UP. TRANSITION TO ROOFTOP OPENING SIZES IN RISE.
- 12 LOCATE SUPPLY AIR TEMPERATURE SENSOR WITHIN 3'-0" OF DUCT DROP FROM ROOFTOP.
- 13 LOCATE DUCT MOUNTED CO2 SENSOR WITHIN 5'-0" OF NEAREST RETURN GRILLE.
- 14 DDC THERMOSTAT. SEE SPECIFICATION/CONTROL DRAWINGS.



Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
 2535 West Wilson Lane
 West Haven, Utah

Project Number: 22-59

Property Number: 501-8963

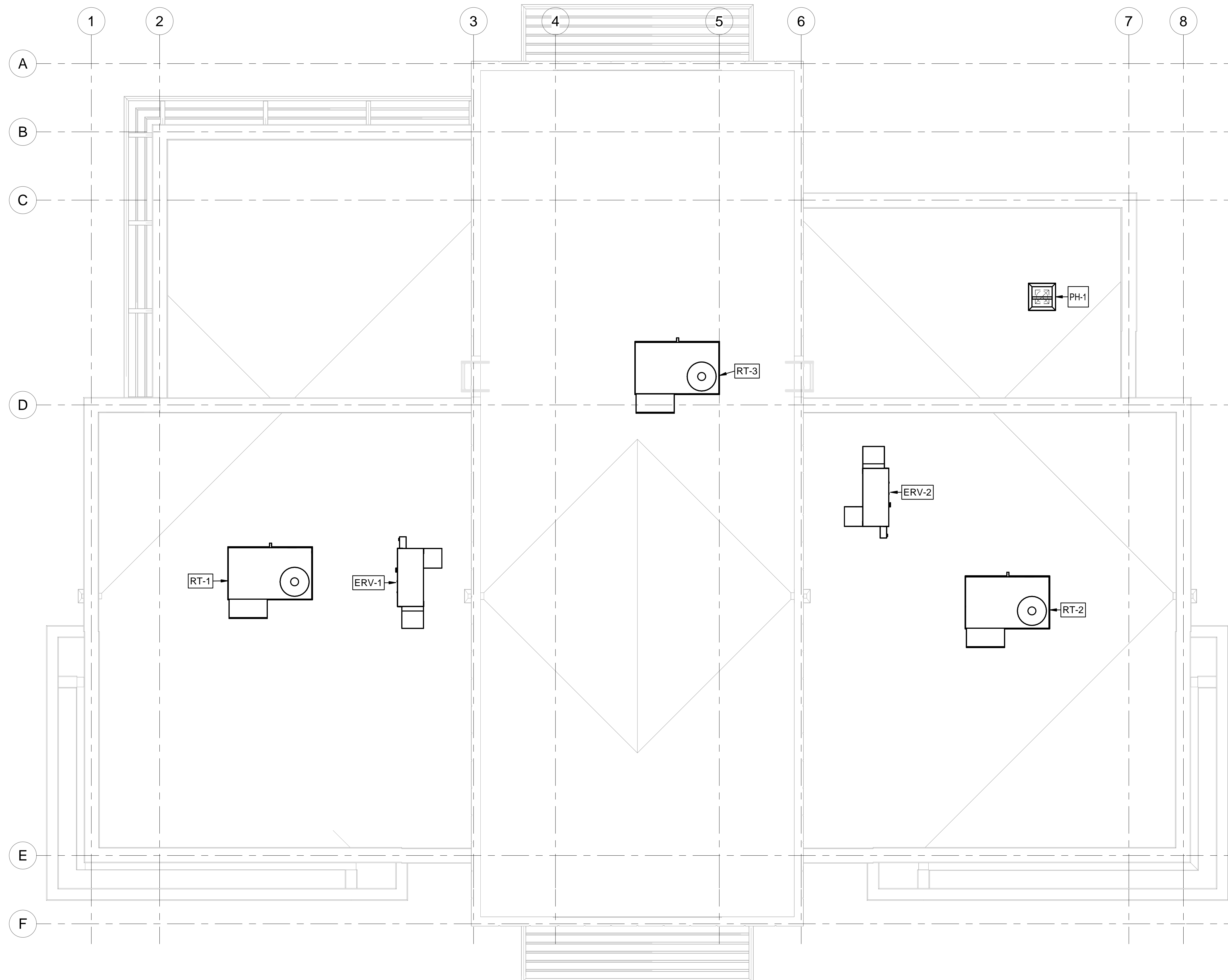
May 1, 2023

MECHANICAL FLOOR PLAN

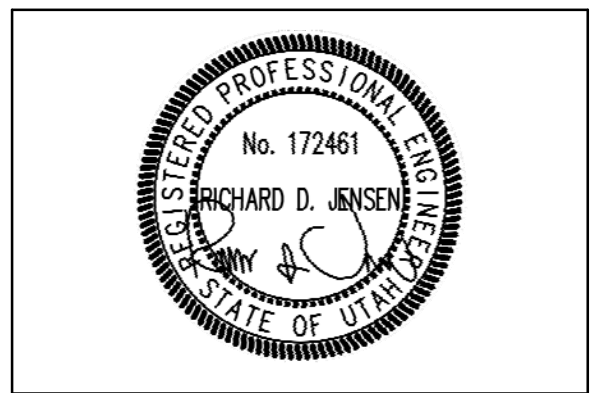
MH101

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





Revision Schedule		
#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

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 West Haven, Utah

Project Number: 22-59

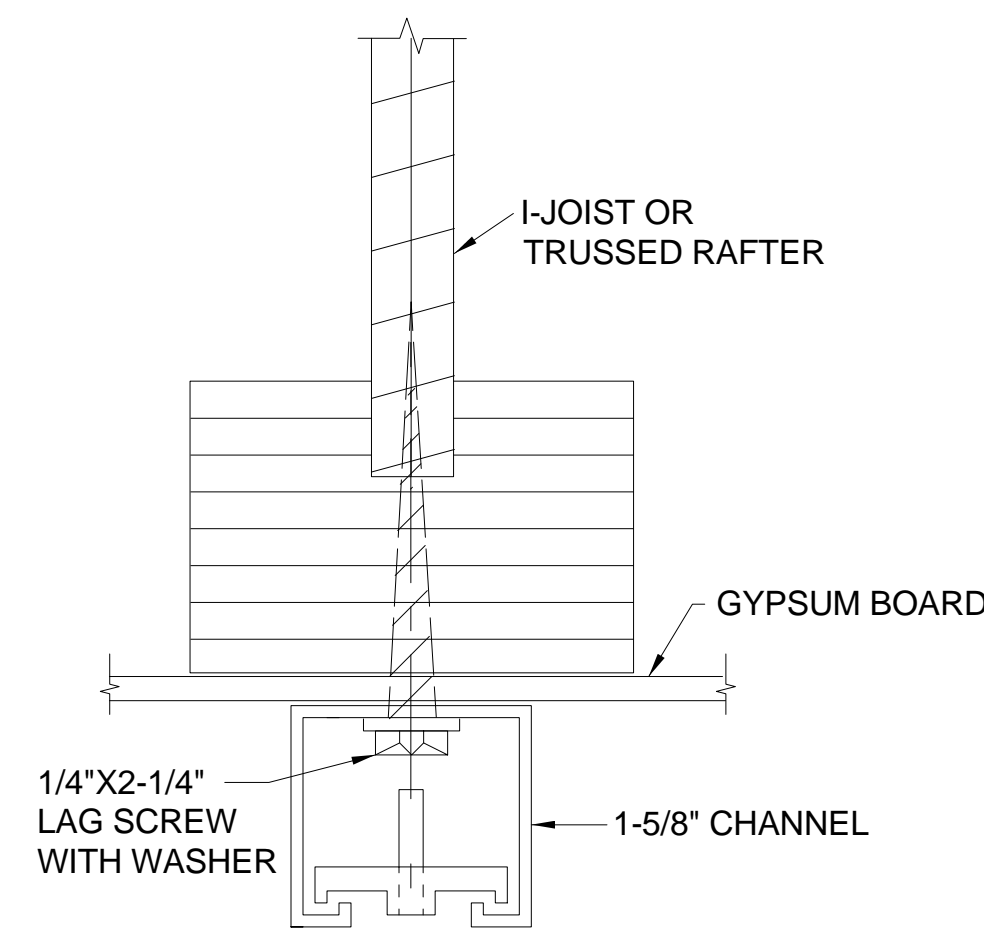
Property Number: 501-8963

May 1, 2023

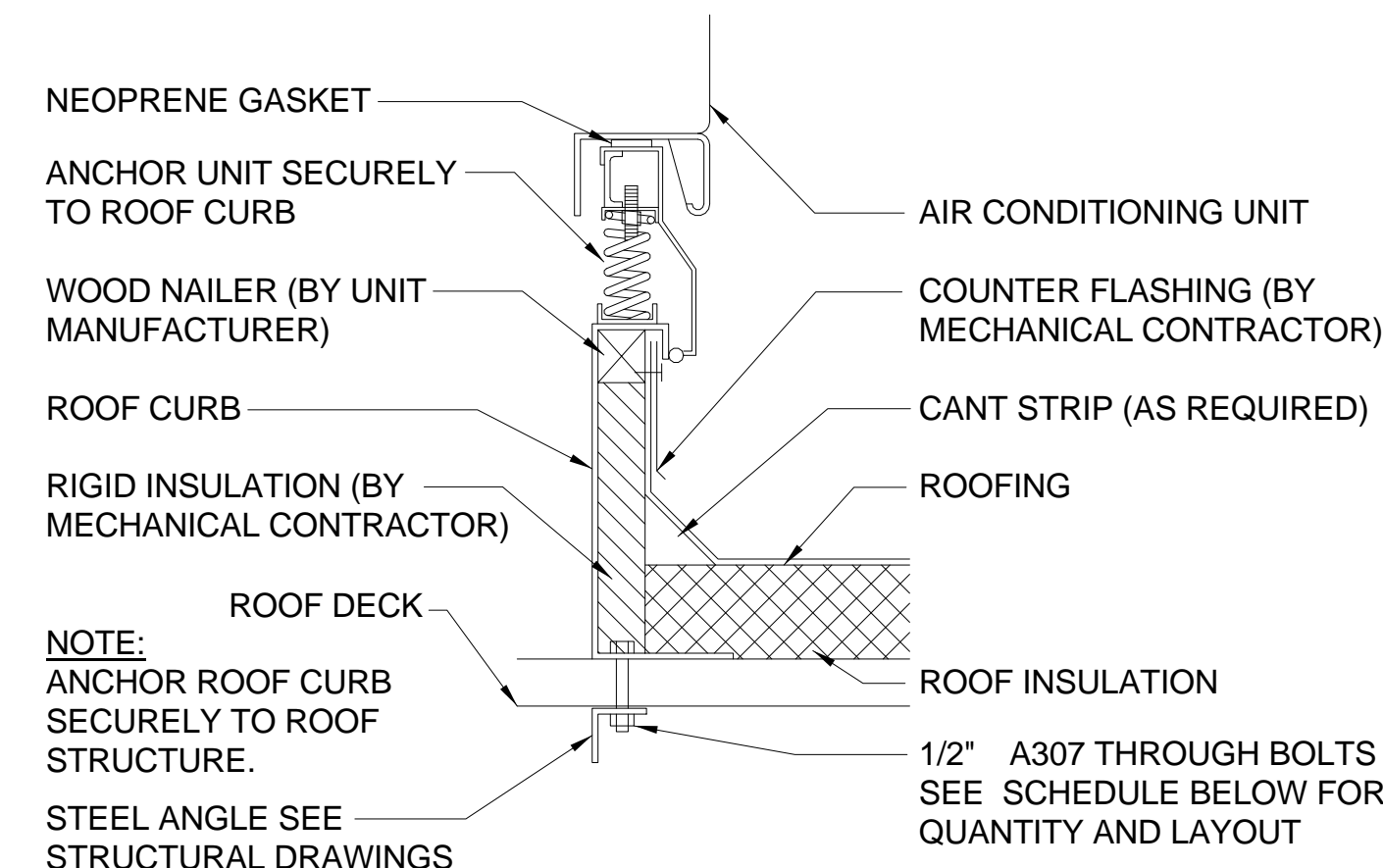
ROOF MECHANICAL PLAN

MH102

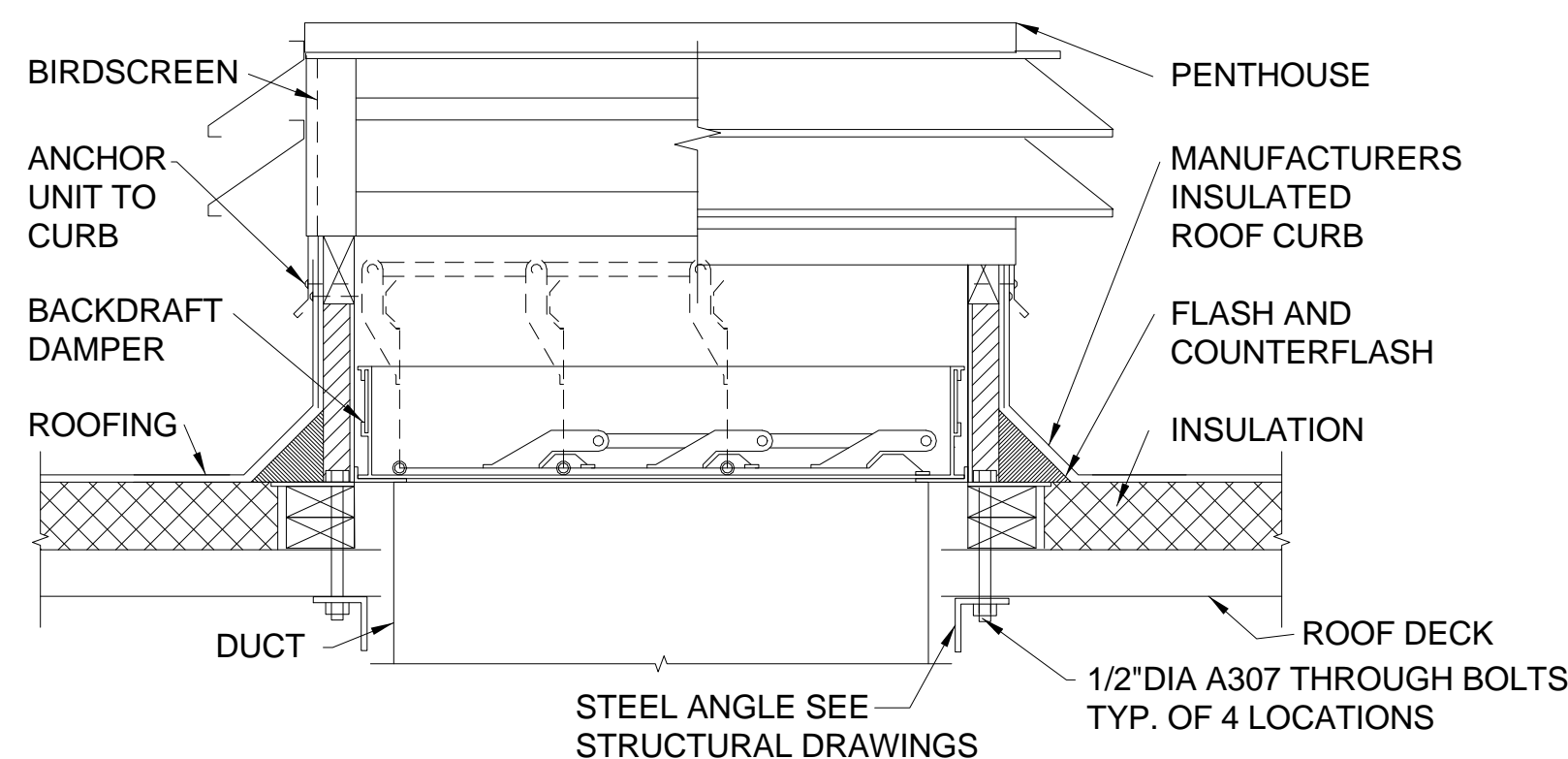




6 UPPER ATTACHMENT DETAIL
SCALE: NTS



7 ROOFTOP UNIT DETAIL
SCALE: NTS

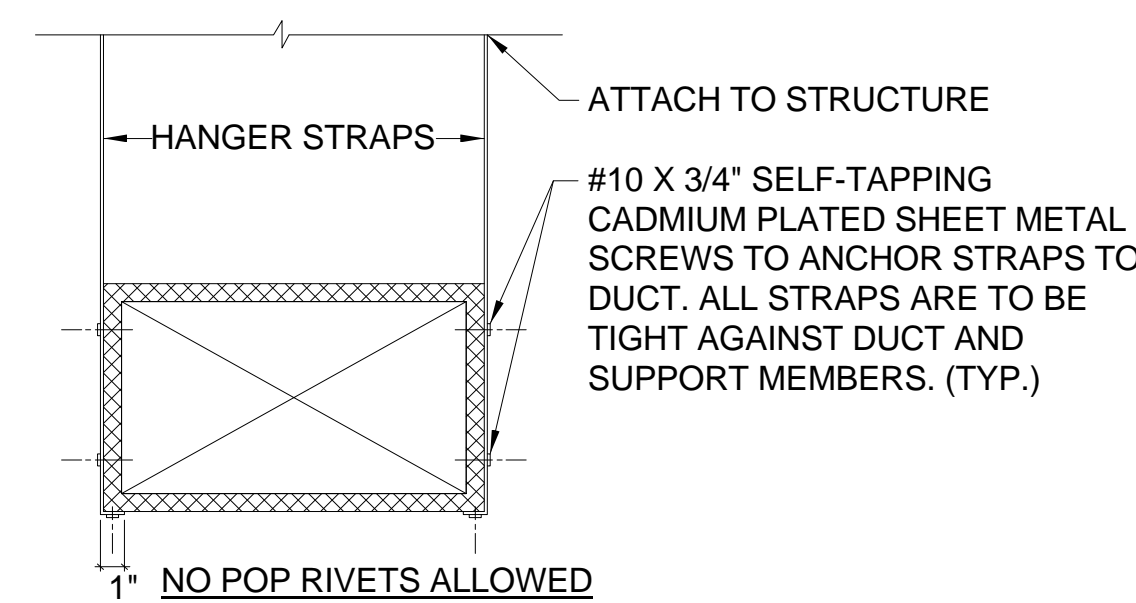


8 EXHAUST PENTHOUSE DETAIL
SCALE: NTS

DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAUGE (ALL FOUR SIDES)	MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	TRANSVERSE REINFORCING (1)				
			AT JOINTS				
			DRIVE SLIP PLAIN S SLIP RECOM- MENDED GAUGE	HEMME D S SLIP RECOM- MENDED GAUGE	ALTERN T BAR SLIP RECOM- MENDED GAUGE	REIN- FORCED BAR SLIP RECOM- MENDED GAUGE	
UP THRU 12	26	NONE REQUIRED	1	26	26	24	24
13 - 18	24	NONE REQUIRED	1	24	24	24	24
19 - 30	24	1\"/>					

- TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLICABLE
- LONGITUDINAL JOINTS TO BE PITTSBURGH OR SNAP LOCK TYPE.
- IF BAR SLIP OR REINFORCED BAR SLIP JOINTS ARE USED, ANGLE IRON REINFORCING SHALL NOT BE REQUIRED.

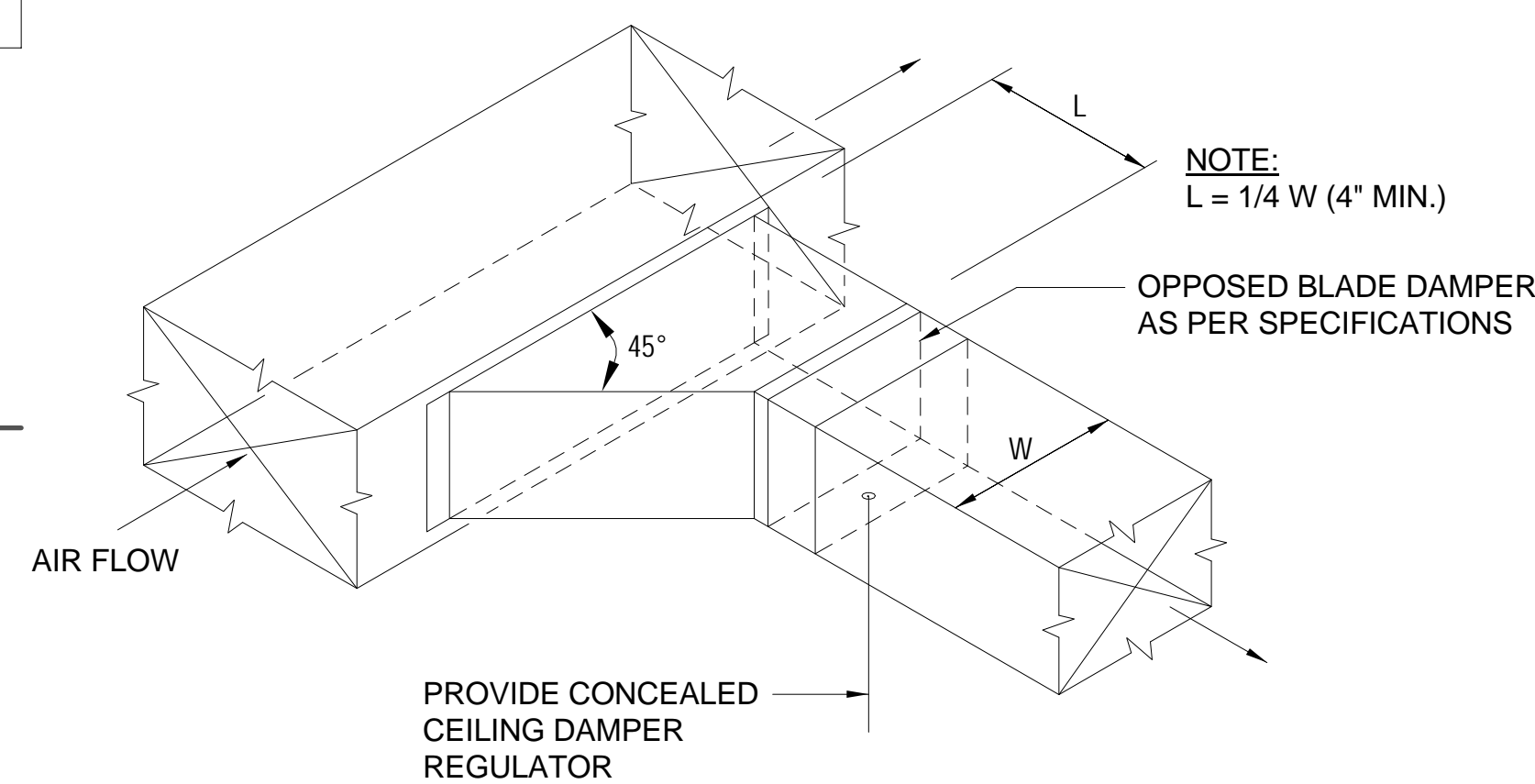
3 DUCT CONSTRUCTION DETAIL
SCALE: NTS



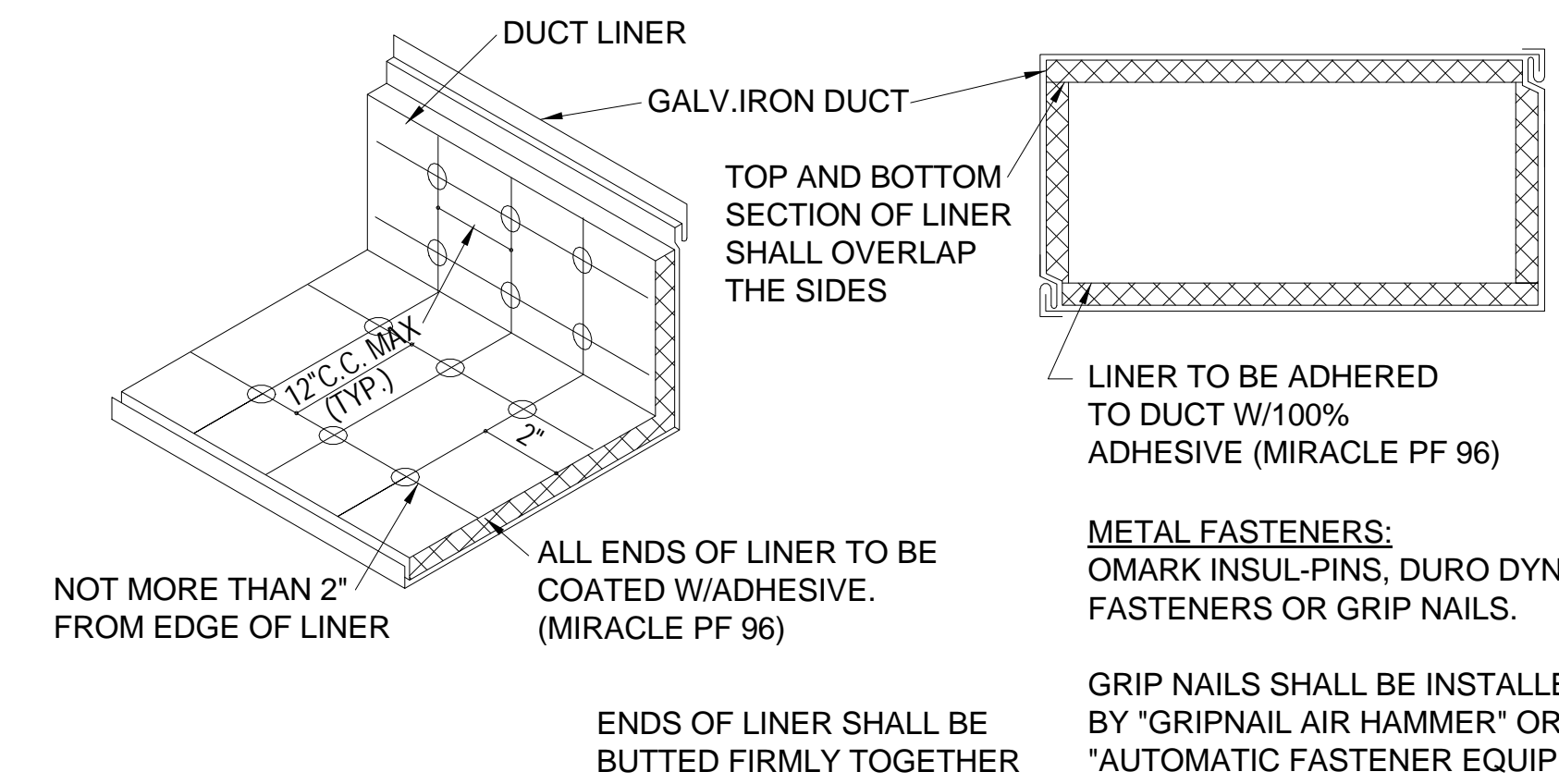
HANGER SIZES FOR RECTANGULAR DUCT

MAX. SIDE	HANGER	HORIZONTAL SUPPORT ANGLE	MAXIMUM SPACING
30"	1\"/>		

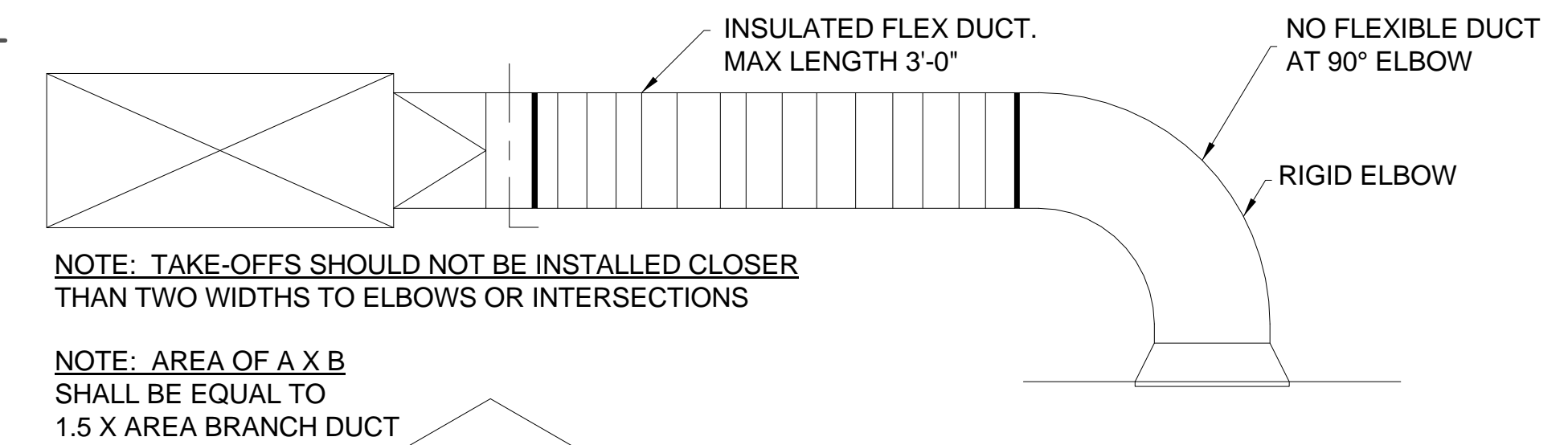
4 DUCT STRAP HANGER DETAIL
SCALE: NTS



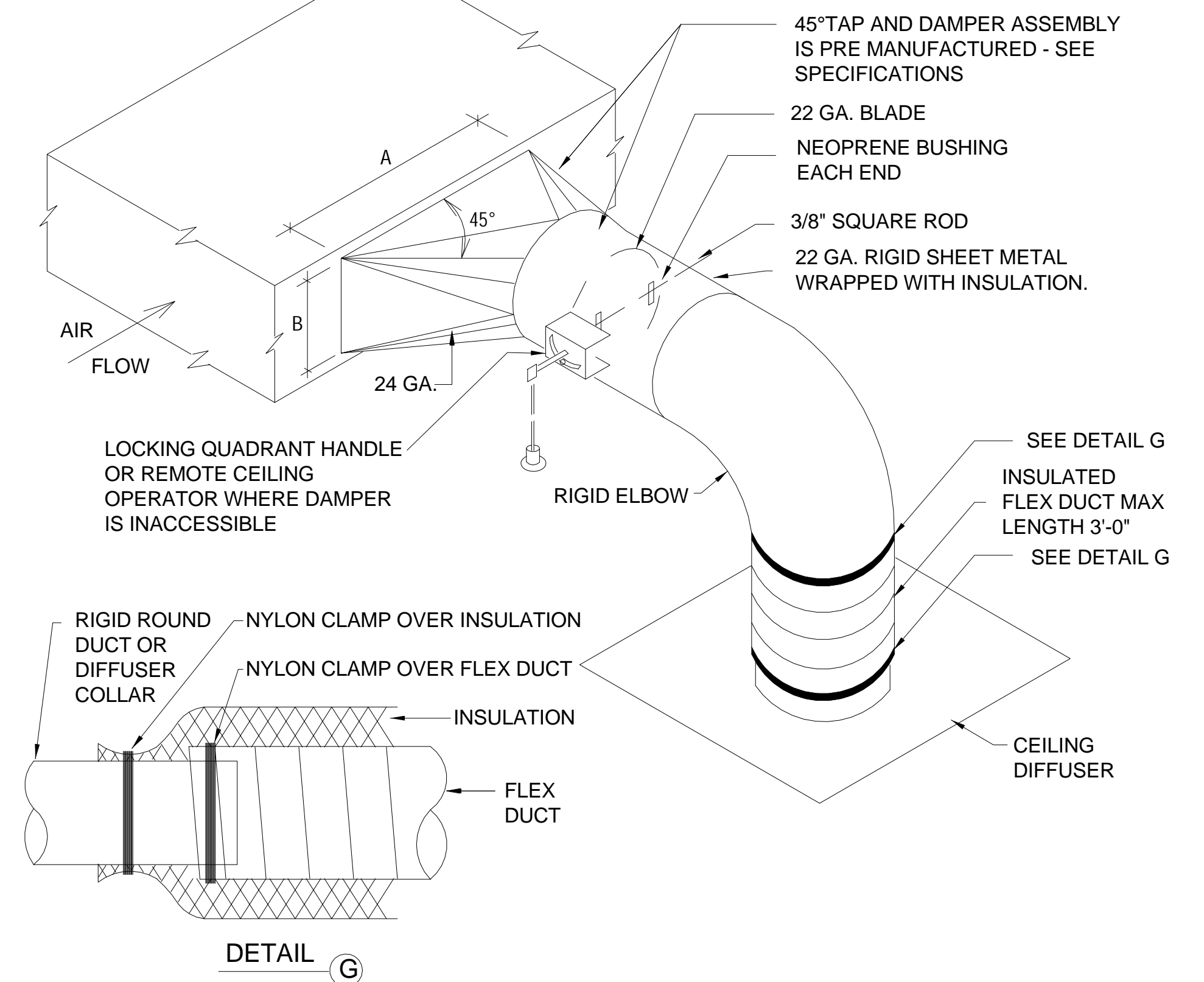
5 BRANCH DUCT TAKE-OFF & DAMPER DETAIL
SCALE: NTS



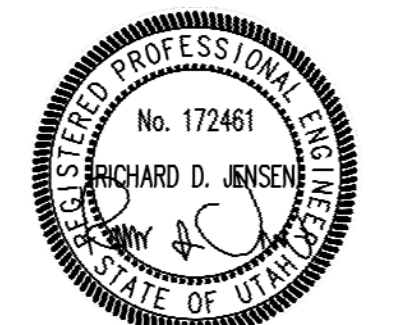
1 DUCT LINER DETAIL
SCALE: NTS



2 SQUARE TO ROUND TAKE-OFF DETAIL
SCALE: NTS



Revision Schedule		
#	Description	Date



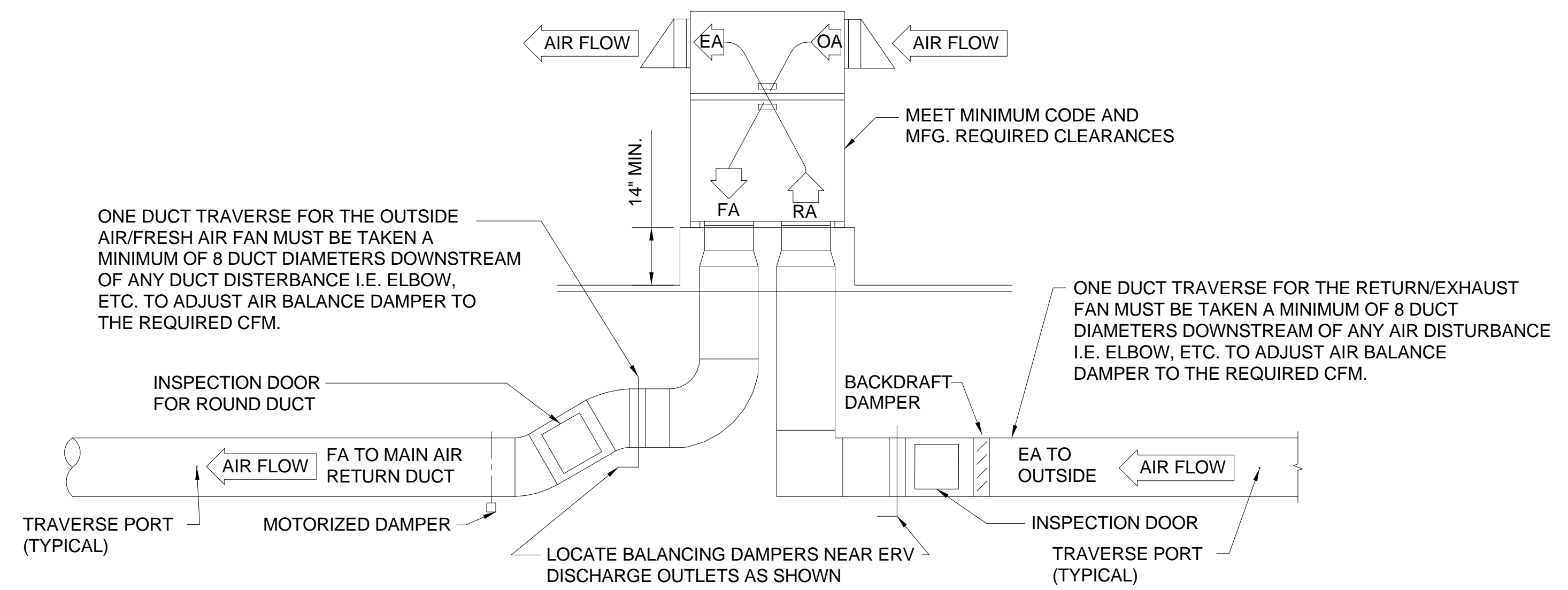
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
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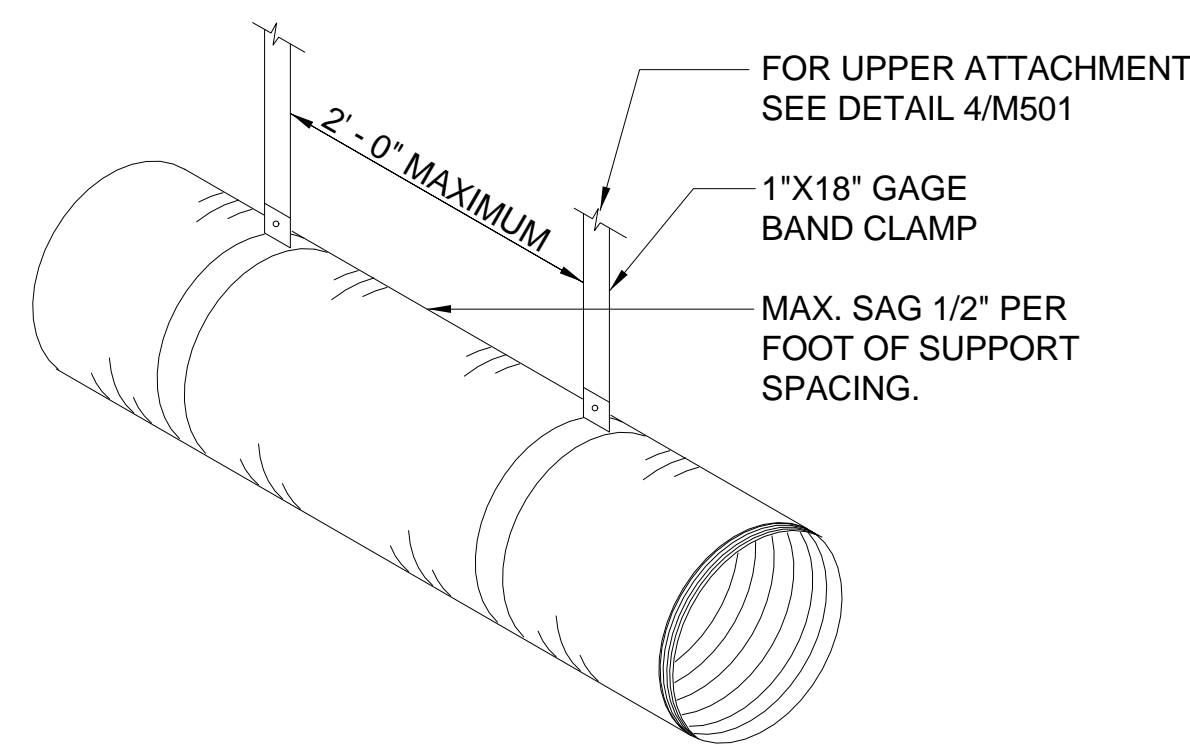
Project Number:	22-59
Property Number:	501-8963
May 1, 2023	
MECHANICAL DETAILS	

M501

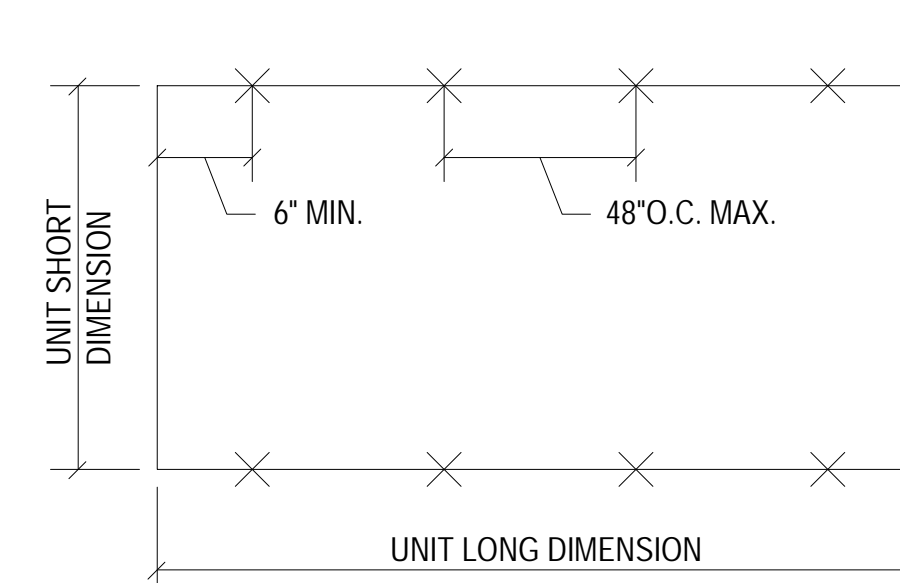
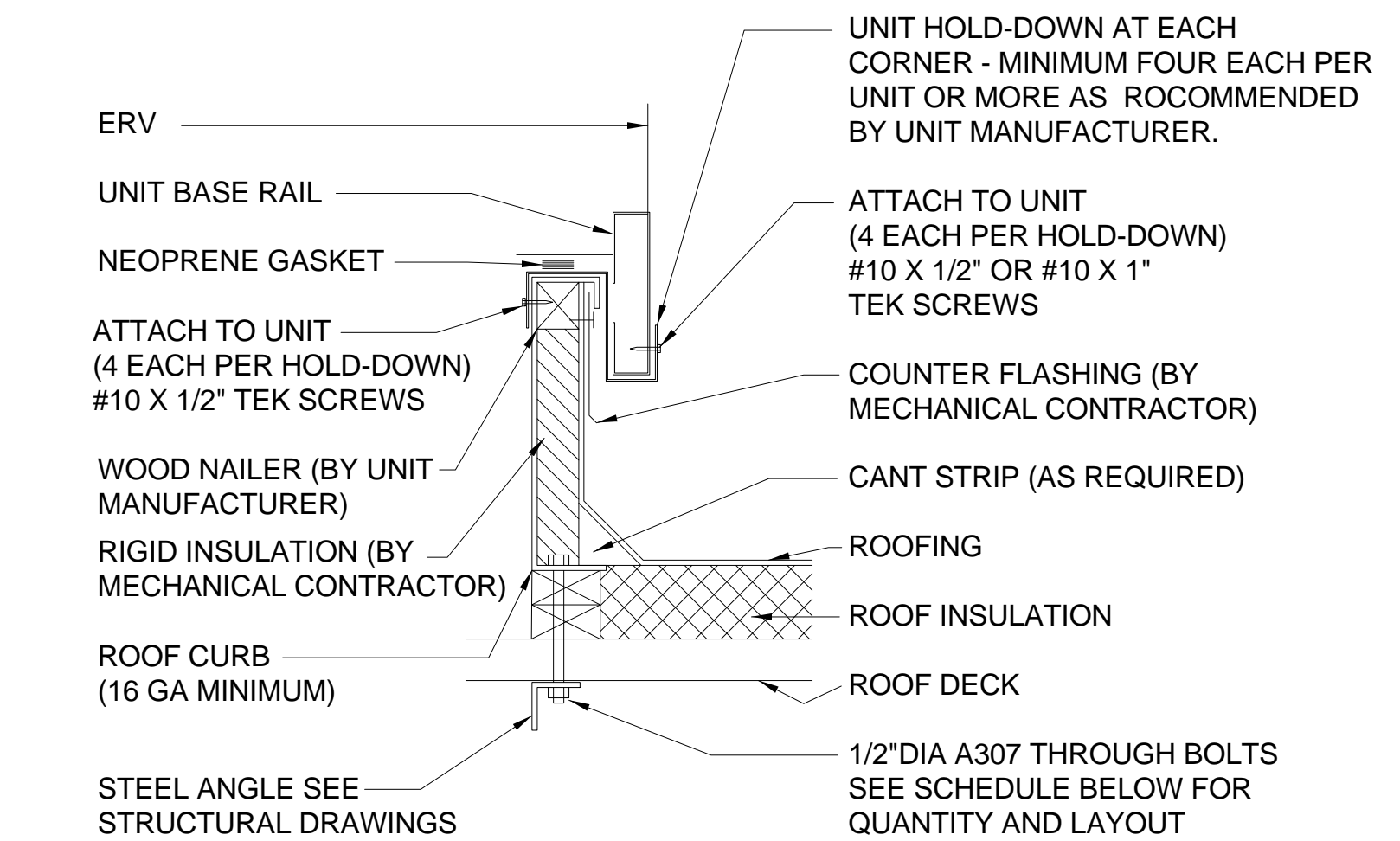




1 ERV DAMPERING DETAIL
SCALE: NTS



3 FLEXIBLE DUCT SUPPORT DETAIL
SCALE: NTS

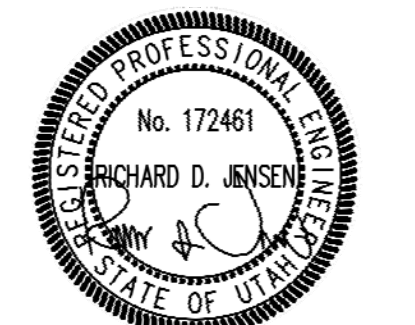


*NOTE: PROVIDE ADDITIONAL BOLTS AS NEEDED TO MEET THE FOLLOWING LAYOUT REQUIREMENTS:
 - (1) BOLT MINIMUM REQUIRED WITHIN 6" OF EACH CORNER
 - MAXIMUM SPACING BETWEEN BOLTS SHALL NOT EXCEED 48"
 - NO BOLTS REQUIRED AT SHORT END OF UNIT

2 ERV CURB DETAIL
SCALE: NTS

ERV BOLT SCHEDULE			
SIZE	TON	WEIGHT LBS	MIN. # BOLTS*
3-6		900	(4) 1/2" DIA
7.5-12.5		1500	(4) 1/2" DIA
15		2880	(4) 1/2" DIA
17.5		2900	(4) 1/2" DIA
20-25		3610	(4) 1/2" DIA

Revision Schedule		
#	Description	Date



Project for:
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A New Building for
Mountain View Jr Seminary
 2535 West Wilson Lane
 West Haven, Utah

Project Number:	22-59
Property Number:	501-8963
May 1, 2023	
MECHANICAL DETAILS	

M502

DAVID L. JENSEN & ASSOCIATES
 MECHANICAL ENGINEERS
 547 WEST 500 SOUTH SUITE #140
 BOUNTIFUL, UTAH 84010
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 FAX: (801) 294-9399

ROOFTOP AIR CONDITIONING UNIT SCHEDULE

NOTES:

- (1) SITE ELEVATION = 4220 FT. ASL.
- (2) SUMMER DESIGN TEMPERATURE= 95 DEG F.
- (3) MINIMUM OUTSIDE AIR HOOD WITH MOTORIZED DAMPER 2-2.5 TONS. INTEGRATED ECONOMIZER AND FDD WITH BAROMETRIC RELIEF 3-6 TONS. INTEGRATED ECONOMIZER AND FDD WITH CENTRIFUGAL MODULATING POWER RELIEF 7.5 TONS AND LARGER.
- (4) SMOKE DETECTOR WITH FAN SHUTDOWN ON SYSTEMS GREATER THAN 2000 CFM BY DIVISION 26, INSTALLATION BY DIVISION 23.
- (5) SEA LEVEL.
- (6) MODULATE SUPPLY AIR AS A FUNCTION OF LOAD PER IECC C403.8.5. APPLIES TO UNITS 6 TONS AND LARGER.
- (7) MINIMUM OUTSIDE AIR TO BE PROVIDED TO RA DUCT BY ERV. SEE MH101. ROOFTOP TO PROVIDE OA IN ECONOMIZING MODE ONLY.

MARK	COUNT	SERVES	CFM	EXTERNAL S.P. IN W.G.	FAN				HEATING				COOLING (2)								ELECTRICAL				MINIMUM O.A., CFM	MANUFACTURER	MODEL	NOTES				
					HP	BHP	TYPE	DRIVE	INPUT, MBH	OUTPUT, MBH (5)	EAT, DEG F	LAT, DEG F	STAGES	COMB EFF %	NOMINAL TONS	CAPACITY, MBH		EAT		STAGES	REFR	(S)EER	MCA	MOCP					VOLTS	PHASE	FILTER MERV	WEIGHT, LBS.
																TOTAL	SENSIBLE	DB, DEG F	WB, DEG F													
RT-1	1	105 CLASSROOM	1,600	0.625	1.06	VANE AXIAL	ECM DIRECT	110	88	62.4	111.7	2	80	4	36.56	33.86	82.1	58.6	2	R-410A	17.4	33	45	200	3	8	750	0	CARRIER	48GC05	(1)(3)(4)(7)	
RT-2	1	106 CLASSROOM	1,600	0.625	1.06	VANE AXIAL	ECM DIRECT	110	88	62.4	111.7	2	80	4	40.906	37.906	81.2	58.3	2	R-410A	17.4	33	45	200	3	8	750	0	CARRIER	48GC05	(1)(3)(4)(7)	
RT-3	1	102 LOBBY	2,400	0.625	1.76	VANE AXIAL	ECM DIRECT	150	120	63.9	108.8	2	80	6	56.6	53.4	78.0	57.0	2	R-410A	11	30	45	200	3	8	840	225	CARRIER	48FC07	(1)(3)(4)	

ENERGY RECOVERY VENTILATOR SCHEDULE

NOTES:

- (1) SITE ELEVATION= 4220 FT ASL.
- (2) PROVIDE WITH 14" ROOF CURB.

MARK	COUNT	SERVES	ASSOCIATED ROOFTOP A/C UNIT	OA/FRESH AIR (FA) CFM	RELIEF AIR/RETURN AIR CFM	EXTERNAL S.P. IN W.G.	FAN MOTOR (EA)					UNIT ELECTRICAL		WEIGHT LBS.	MANUFACTURER	MODEL	NOTES	
							NO	HP	DRIVE	AMPS	VOLTS	PHASE	MCA					MOCP
ERV-1	1	105 CLASSROOM	RT-1	605	530	0.4	2	0.8	DIRECT	4.5	200	1	10.1	15	350	RENEWAIRE	HE1XRTV	(1)(2)
ERV-2	1	106 CLASSROOM	RT-2	605	530	0.4	2	0.8	DIRECT	4.5	200	1	10.1	15	350	RENEWAIRE	HE1XRTV	(1)(2)

EXHAUST FAN SCHEDULE

NOTES:

- (1) SITE ELEVATION= 4220 FT ASL.
- (2) FURNISH WITH BACKDRAFT DAMPER.
- (3) MINIMUM MOTOR EFFICIENCY SHALL BE 70% RATED IN ACCORDANCE WITH DOE 10 CFR 431.
- (4) CONTROL BY DIVISION 26.

MARK	COUNT	SERVES	TYPE	CFM	EXTERNAL S.P. IN W.G.	RPM	FAN MOTOR					WEIGHT LBS.	SONES	MANUFACTURER	MODEL	NOTES	
							HP	DRIVE	AMPS	VOLTS	PHASE						
EF-1	3	RR 114, 115, 116	CEILING	100	0.375	1075			DIRECT	0.5	115	1	20	2.6	COOK	GC-148	(1)(2)(3)(4)

DIFFUSER, REGISTER, LOUVER, AND GRILLE SCHEDULE

NOTES:

- (1) DIFFUSERS ARE 4-WB UNLESS DEFINED OTHERWISE ON THE DRAWINGS.
- (2) DUCT RUNOUT IS THE SAME SIZE AS THE NECK INLET.
- (3) FURNISH WITH BACKDRAFT DAMPER.
- (4) THREE TIER.

MARK	COUNT	SERVICE	TYPE	CFM RANGE		NECK INLET	FRAME	MODULE SIZE	MATERIAL	FINISH	MANUFACTURER	MODEL	NOTES
				MIN	MAX								
D-1	3	SUPPLY	CEILING	0	100	6" DIA.	TYPE 6	6"X6"	STEEL	WHITE	PRICE	SMD	(1)(2)
D-2	5	SUPPLY	CEILING	90	210	8" DIA.	TYPE 6	9"X9"	STEEL	WHITE	PRICE	SMD	(1)(2)
D-3	1	SUPPLY	CEILING	90	210	8" DIA.	TYPE 3P	24"X24"	STEEL	WHITE	PRICE	SMD	(1)(2)
D-4	3	SUPPLY	CEILING	200	360	10" DIA.	TYPE 3P	24"X24"	STEEL	WHITE	PRICE	SMD	(1)(2)
D-5	4	SUPPLY	CEILING	90	210	8" DIA.	TYPE 3P	24"X24"	STEEL	WHITE	PRICE	SMDA	(1)(2)
D-6	8	SUPPLY	CEILING	200	360	10" DIA.	TYPE 3P	24"X24"	STEEL	WHITE	PRICE	SMDA	(1)(2)
PH-1	1	EXHAUST	ROOF	100	400	12"X12"	NA	NA	ALUM	SATIN ALUM	COOK	TRE	(3)(4)
R-1	2	RETURN	CEILING	0	100	6" DIA.	TYPE F	8"X8"	STEEL	WHITE	PRICE	535	(2)
R-2	5	RETURN	CEILING	90	210	8" DIA.	TYPE F	10"X10"	STEEL	WHITE	PRICE	535	(2)
R-3	2	RETURN	CEILING	90	210	8" DIA.	TYPE TB	12"X24"	STEEL	WHITE	PRICE	535	(2)
R-4	1	RETURN	CEILING	200	360	10" DIA.	TYPE TB	12"X24"	STEEL	WHITE	PRICE	535	(2)
R-5	2	RETURN	CEILING	300	600	12" DIA.	TYPE TB	24"X24"	STEEL	WHITE	PRICE	535	(2)
R-6	4	RETURN	CEILING	500	900	14" DIA.	TYPE TB	24"X24"	STEEL	WHITE	PRICE	535	(2)

Revision Schedule

#	Description	Date
1	AEC COMMENTS	05-26-23



Project for:

**THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS**

A New Building for

**Mountain View Jr
Seminary**

2535 West Wilson Lane
West Haven, Utah

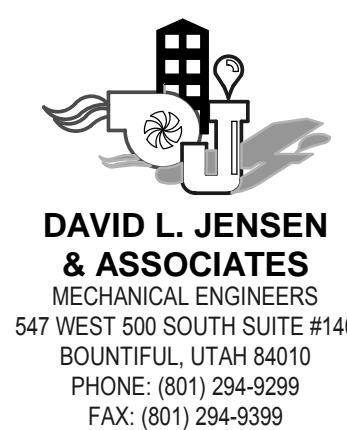
Project Number: 22-59

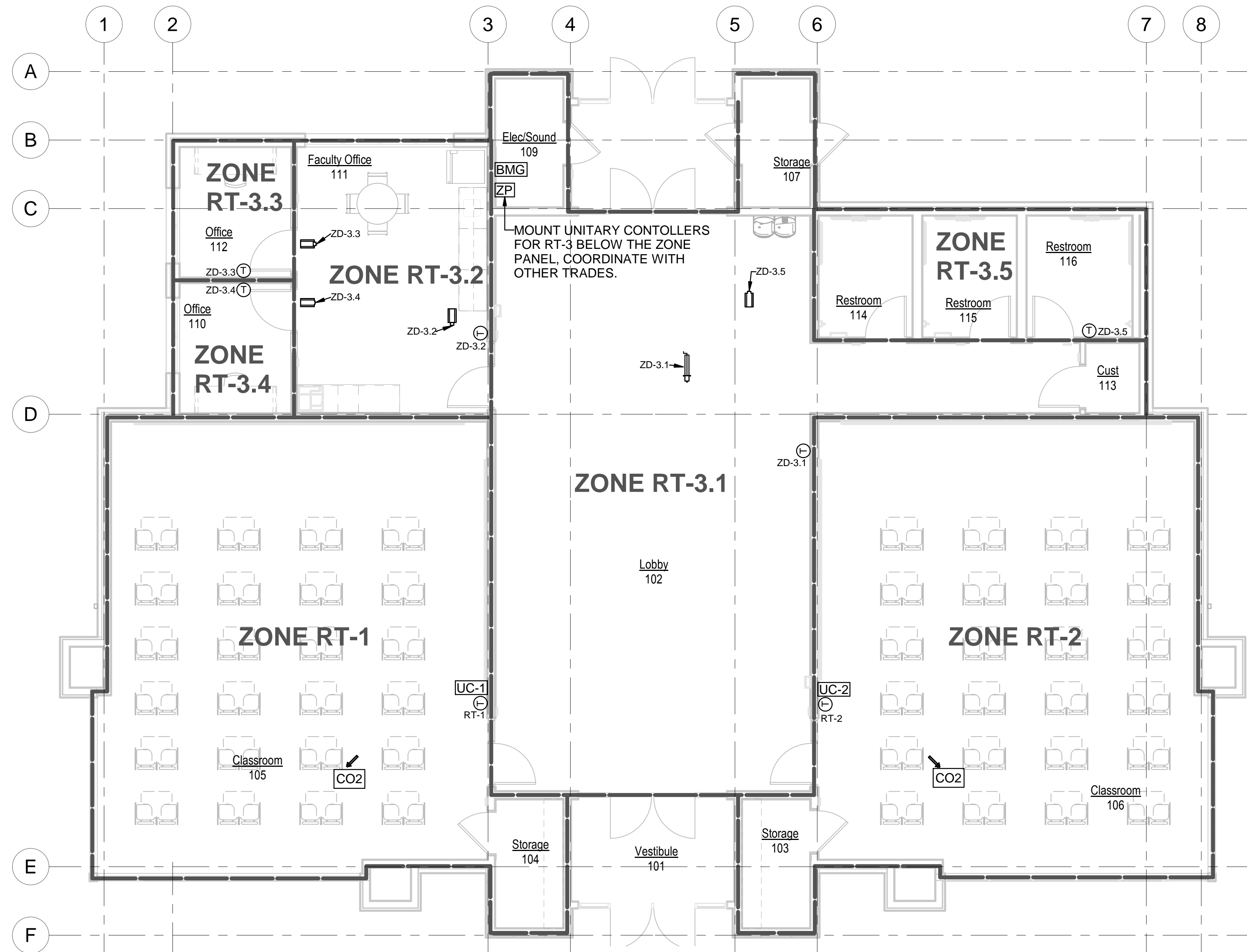
Property Number: 501-8963

May 1, 2023

MECHANICAL SCHEDULES

M601





WIRING/CONDUIT NOTES:

1. BOXES FOR THERMOSTAT OUTLETS SHALL BE 2"x4" WITH LONG DIMENSION VERTICAL. USE METAL BRACKET OF COVER PLATE ASSEMBLY TO MOUNT THERMSTAT HORIZONTAL.
2. CONDUIT TO BE 1/2" UNLESS NOTED OTHERWISE.
3. TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE RUN PARRALLEL AND PERPENDICULAR TO BUILDING CONSTRUCTION LINES. SEE SPECIFICATIONS FOR ACCEPTABLE FASTENING METHODS AND MAXIMUM ALLOWABLE SPACING BETWEEN FASTENERS.
4. TEMPERATURE CONTROL WIRING THAT IS NOT IN CONDUIT SHALL BE LABELED. PROVIDE A LABEL AT ALL POINTS WHERE TMPERATURE CONTROL WIRING ENTERS CONDUIT AND AT CONNECTIONS TO DEVICES.
5. SEAL OPEN END OF CONDUIT AIR-TIGHT AROUND THERMOSTAT WIRE WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
6. SEAL ANNULAR SPACE BETWEEN CONDUIT AND OPENING IN FLOOR OR WALL WITH SEALANT COMPOUND. SEE SPECS FOR APPROVED PRODUCT.
7. SEAL OPEN END OF CONDUIT AT J-BOX AIR TIGHT AROUND THERMOSTAT WIRE. SEAL ALL AIR GAPS AROUND J-BOX TO ISOLATE J-BOX FROM WALL CAVITY. SEAL BACK OF THERMOSTAT AROUND WIRES. PACK J-BOX TIGHT WITH GLASS FIBER BATT INSULATION. USE SEALING COMPOUND SPECIFICALLY MADE FOR REFRIGERATION AND AIR CONDITIONING APPLICATIONS. SEE SPECIFICATIONS FOR APPROVED PRODUCTS.

SYMBOLS

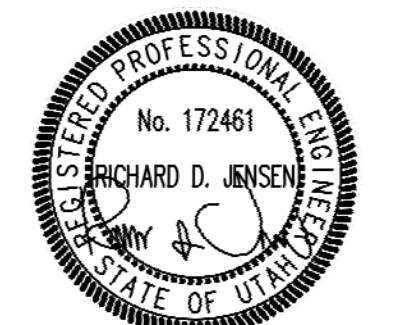
- UNITARY CONTROLLER (DIV 23), MOUNT MODULE ABOVE CEILING IN ACCESSIBLE LOCATION NEAR ASSOCIATED ROOFTOP UNIT.
- THERMOSTAT (LCBS) OUTLET (DIV 26)
- BUILDING MANAGEMENT GATEWAY (DIV 23)
- ZONE PANEL FOR RT-3
- ZONE DAMPER (=ZONE NUMBER)
- CO2 SENSOR (DIV 23)
- GLOBAL OUTDOOR AIR SENSOR (DIV 23)

MECHANICAL CONTROL PLAN

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

1

Revision Schedule		
#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

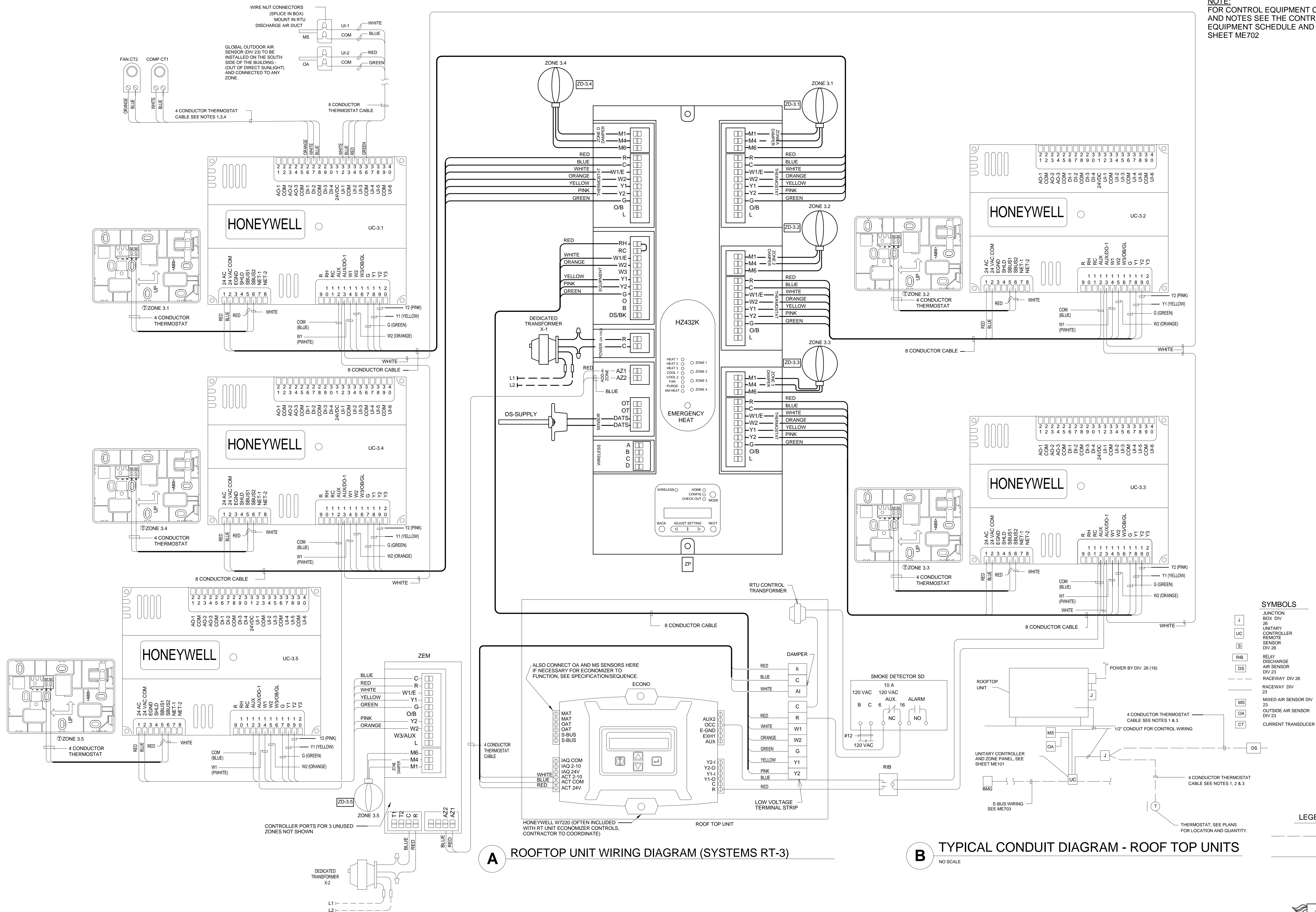
A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
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May 1, 2023	
MECHANICAL CONTROL PLAN	

ME101



NOTE:
FOR CONTROL EQUIPMENT CALLOUTS
AND NOTES SEE THE CONTROL
EQUIPMENT SCHEDULE AND NOTES,
SHEET ME702



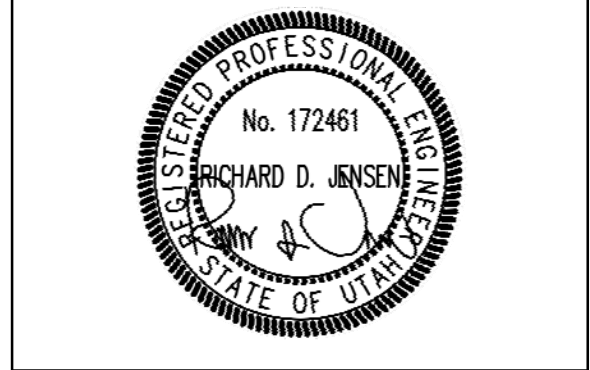
A ROOFTOP UNIT WIRING DIAGRAM (SYSTEMS RT-3)

B TYPICAL CONDUIT DIAGRAM - ROOF TOP UNITS
NO SCALE

1 ROOFTOP UNIT WIRING DIAGRAM (SYSTEM RT-3)
SCALE: NTS

Revision Schedule

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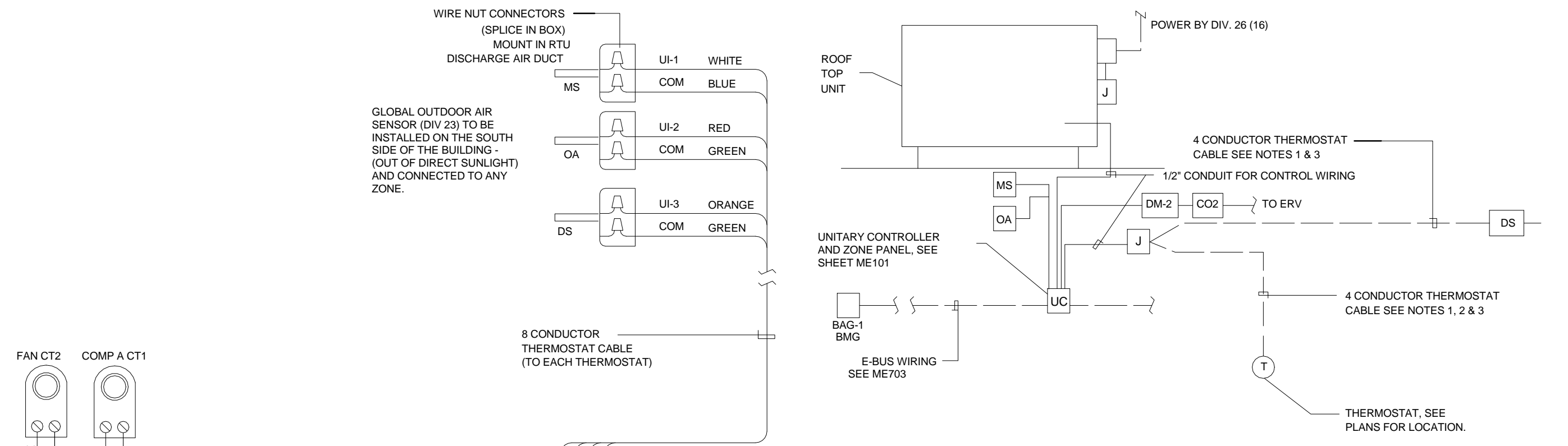
Property Number: 501-8963

May 1, 2023

AUTOMATIC TEMPERATURE CONTROLS

ME701

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TYPICAL CONDUIT DIAGRAM - ROOF TOP UNITS

NO SCALE

- SYMBOLS**
- J JUNCTION BOX DIV 26
 - UC UNITARY CONTROLLER REMOTE SENSOR DIV 26
 - RIB RELAY DISCHARGE AIR SENSOR DIV 23
 - DS RACEWAY DIV 26
 - MS MIXED AIR SENSOR DIV 23
 - OA OUTSIDE AIR SENSOR DIV 23
 - CT CURRENT TRANSDUCER

LEGEND:

- - - DIVISION 26 OR FACTORY PRE-WIRED
- - - DIVISION 23 WIRING

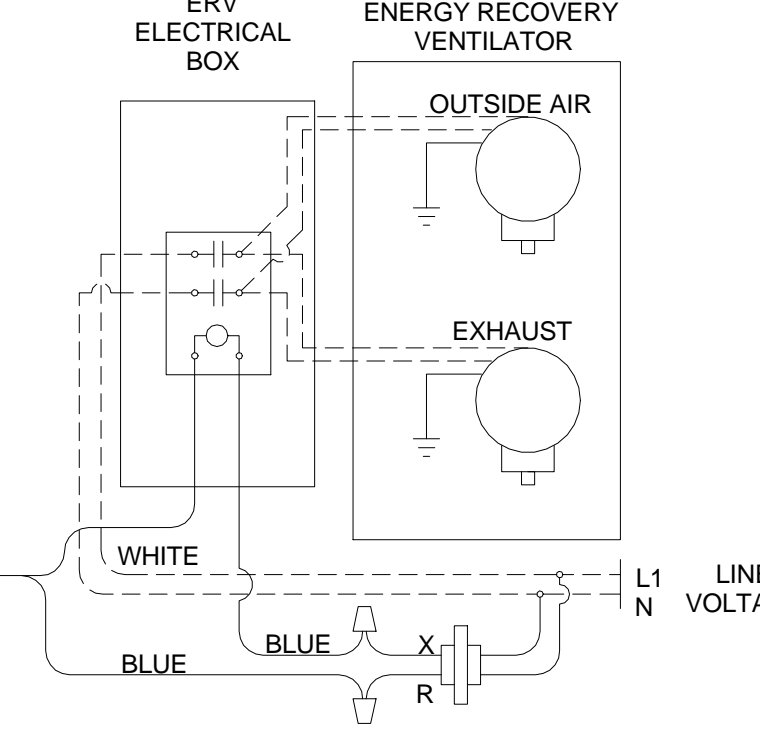
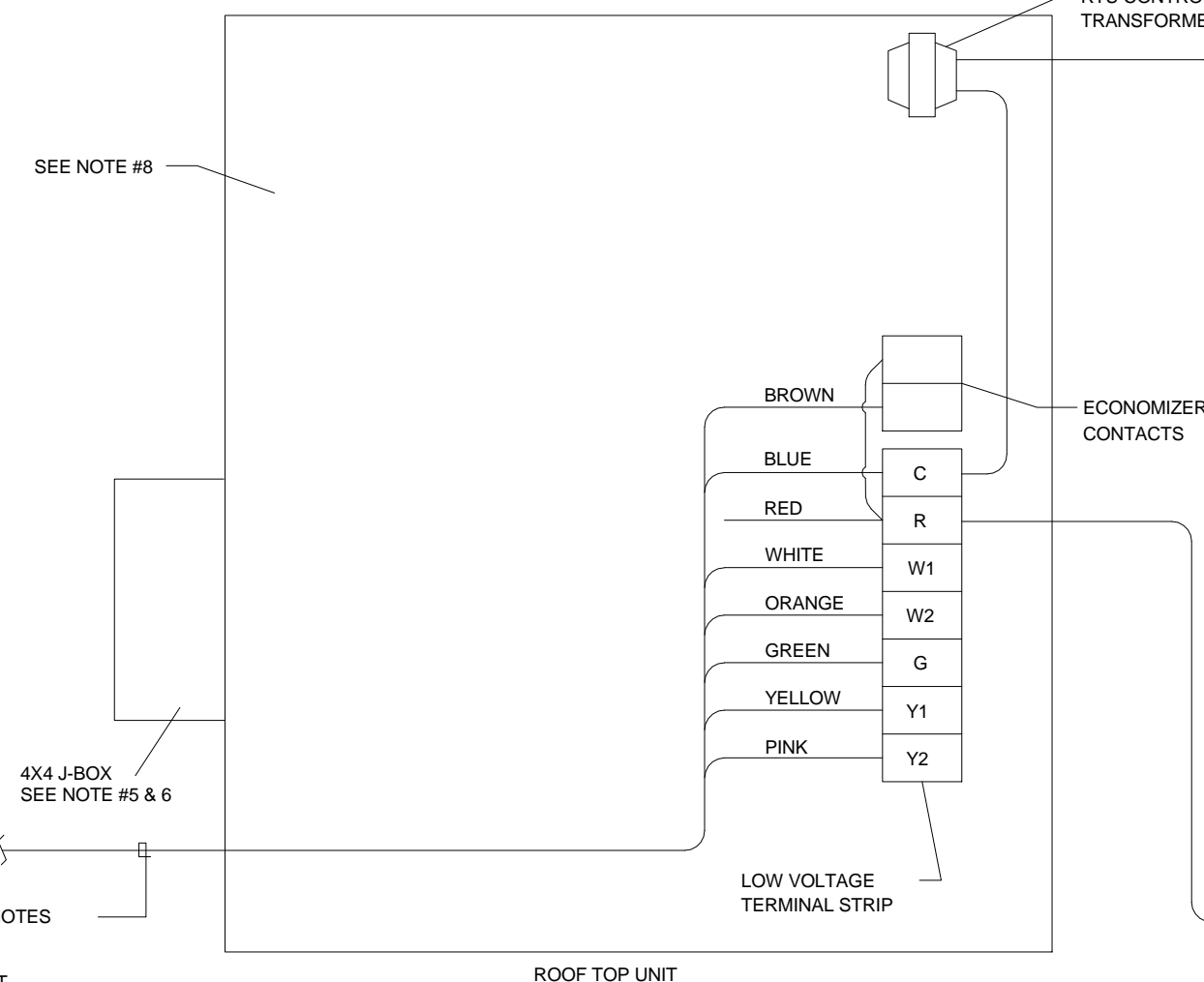
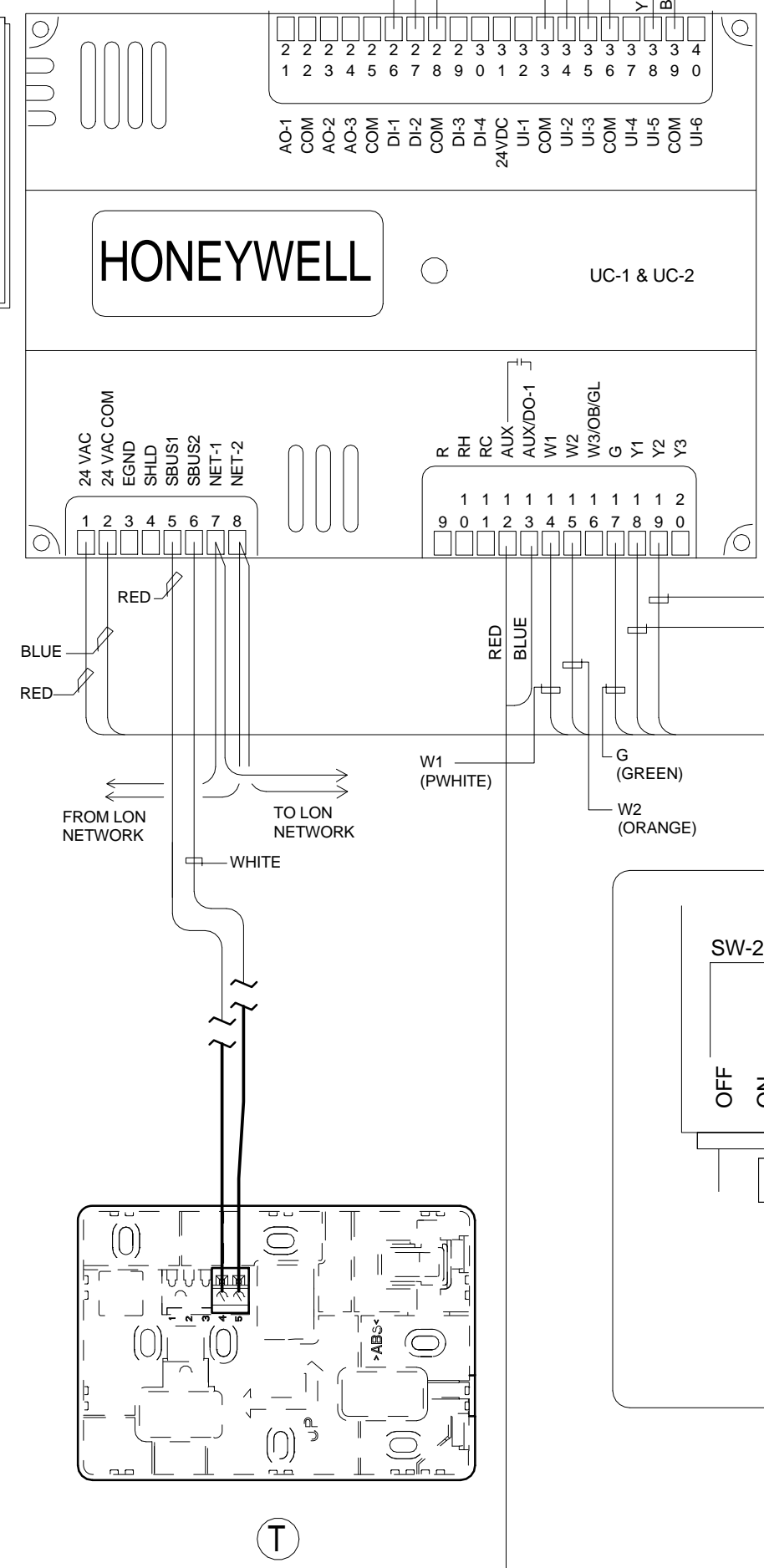
CONTROL EQUIPMENT		
MARK	DESCRIPTION	CAT. NO. (1)
UC	UNITARY CONTROLLER	YCRL64386R1000
T	THERMOSTAT WALL MODULE	LCBS WALL MODULE
DS	DISCHARGE AIR SENSOR	C704182005
RIB	RELAY	FUNCTIONAL DEVICES RIBU1C
SD	DUCT SMOKE DETECTOR	BY DIV. 26
MS	MIXED AIR TEMP SENSOR	C704182005
OA	OUTSIDE AIR TEMP SENSOR	C7041F2006
R1-6	ISOLATION RELAYS	FUNCTIONAL DEVICES R1R2BU24B
BMG	BUILDING MANAGEMENT GATEWAY	LGW1000(GATEWAY) WPM-800 (WALL PLUG)
CT2	CURRENT TRANSMITTER	CS-0-FL
CT1	CURRENT TRANSMITTER	CTP-V50
X-2	TRANSFORMER 120V/24V 50VA	AT150F1022
CO2	CO2 SENSOR	C7262B1006
DM-2	DAMPER MOTOR 2 POS W/END SWITCH	MS8105A1130
ZD	ZONE DAMPER	ZD OR ARD (3)
ZP	ZONE PANEL	H2432K
ZEM	ZONE EXPANSION MODULE	TAZ-4H
X-1	TRANSFORMER 120, 208, 240/24V	AT175F1023
E-BUS	ECHELON NETWORK CABLE	W221P-2001B

- (1) ALL CATALOG NUMBERS SHOWN ARE HONEYWELL UNLESS NOTED OTHERWISE.
- (2) LOCATE AS SHOWN ON MECHANICAL PLANS
- (3) SEE PLAN FOR REQUIRED SIZE AND ZONE NUMBER.

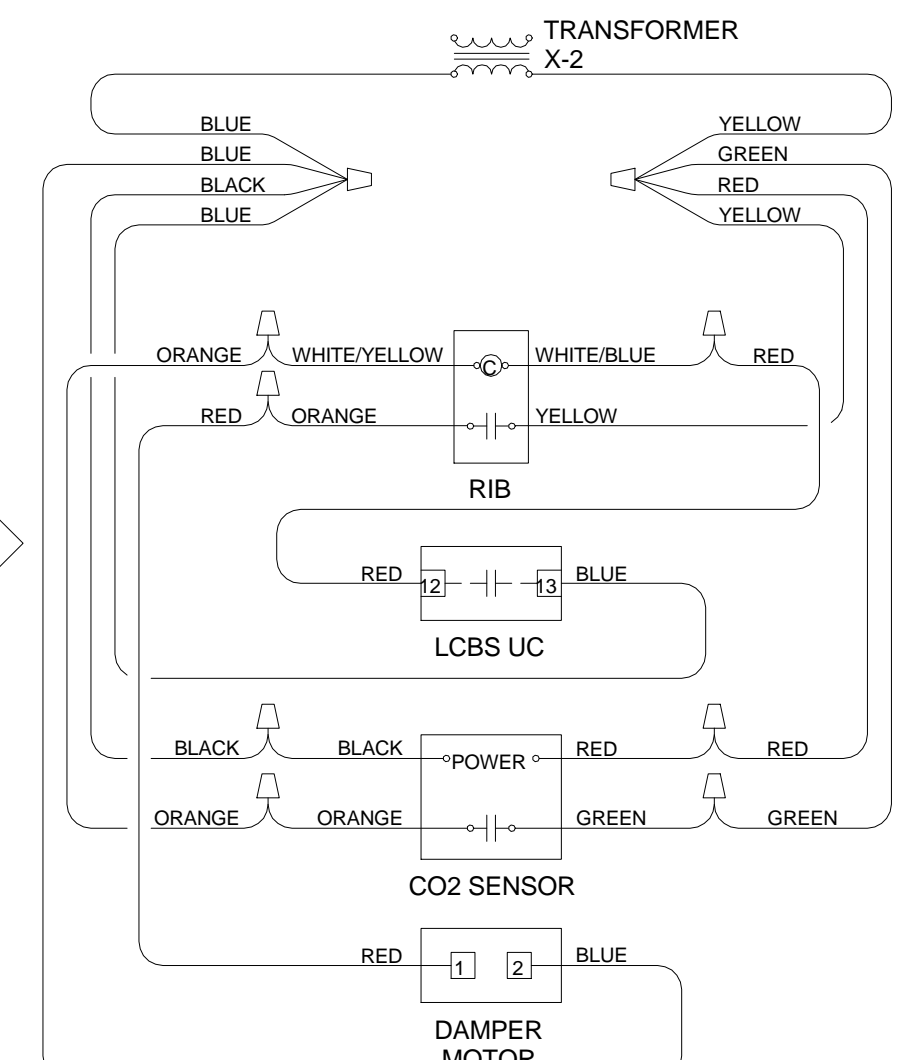
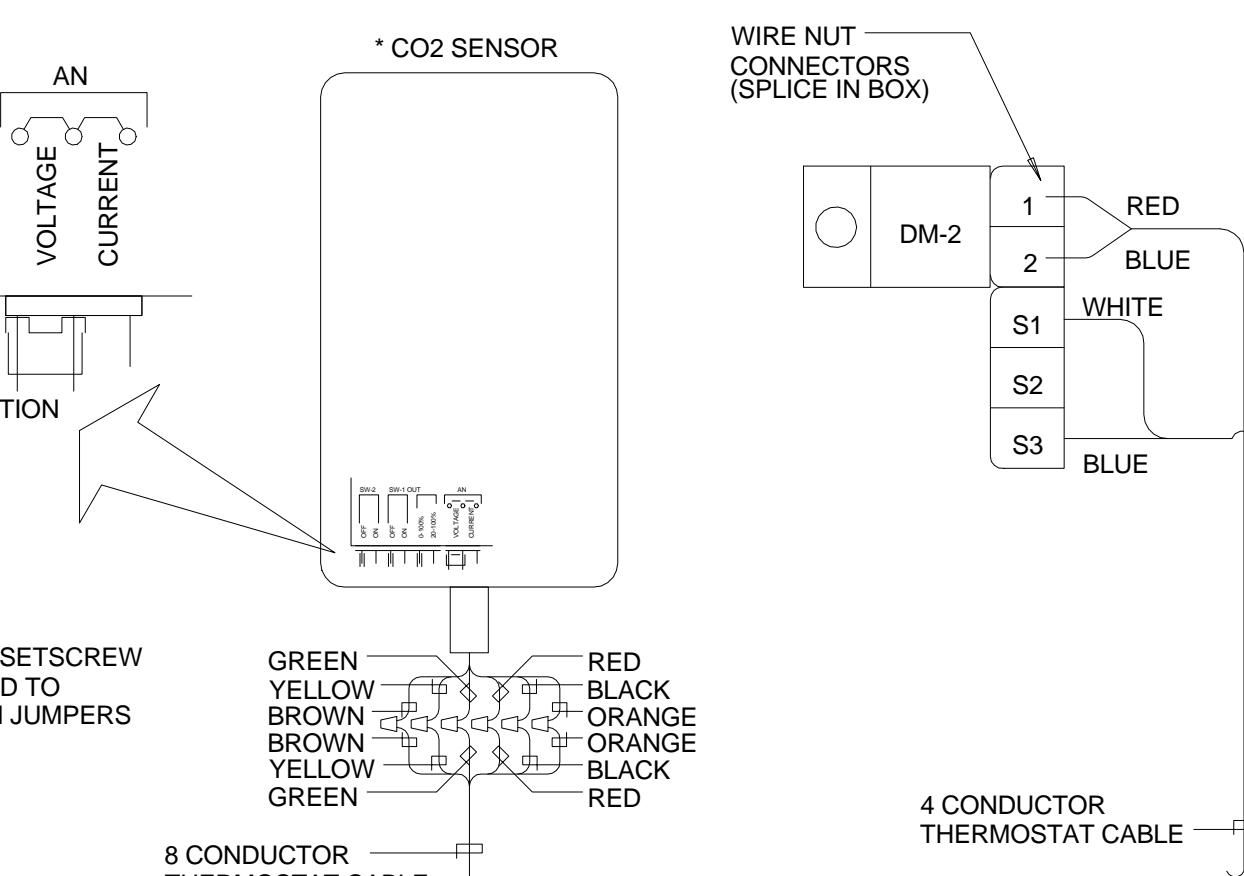
NOTES:

1. THERMOSTAT CABLE- 4 OR 8 CONDUCTOR- 18 AWG SOLID COPPER WIRE INSULATED WITH HIGH DENSITY POLYETHYLENE. CONDUCTORS PARALLEL ENCLOSED IN BROWN PVC JACKET. (22 AWG CABLE NOT ALLOWED).
2. USE WIRE NUT CONNECTORS FOR SPLICING CONDUCTORS IN SPECIFIED LOCATIONS AND TYTON TYPE CRIMP CONNECTORS FOR TERMINAL CONNECTIONS. NO TERMINAL CONNECTORS REQUIRED AT THERMOSTAT OR SENSOR.
3. DO NOT RUN ANY OTHER WIRING IN CONDUIT WITH THERMOSTAT CABLE.
4. DO NOT SPLICE WIRE IN RUNS FROM SENSOR TO THERMOSTAT, THERMOSTAT TO ROOF TOP UNIT AND THERMOSTAT TO DISCHARGE AIR SENSOR.
5. PROVIDE CHASE NIPPLE WITH PLASTIC BUSHING WHEN ATTACHING J-BOX TO EQUIPMENT.
6. PROVIDE CABLE CLAMP SO THAT CABLES CANNOT BE PULLED OUT OF J-BOX.
7. PROVIDE CT FOR ACTUAL NUMBER OF FANS AND COMPRESSORS.
8. ALSO CONNECT OA, MS AND DS SENSORS TO ECONOMIZER CONTROLLER IF NECESSARY FOR ECONOMIZER TO FUNCTION. SEE SPECIFICATION SEQUENCE.

NOTE:
 1. ECHELON BUS (E-BUS) MUST BE INSTALLED AT LEAST 12" AWAY FROM ELECTRICAL DEVICES: I.E. MOTORS, LIGHTS, ETC.
 2. DO NOT USE THERMOSTAT CABLE AS NETWORK CABLE. USE SPECIFIED CABLE.



ENERGY RECOVERY VENTILATOR WIRING (A)



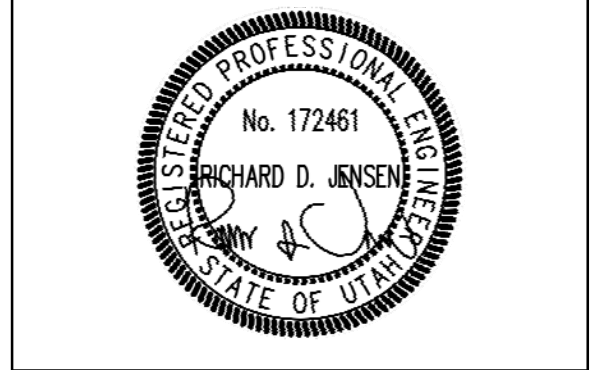
WIRING SCHEMATIC, X-2 (B)

1 ROOFTOP UNIT WIRING DIAGRAM (SYSTEM RT-1, RT-2)

SCALE: NTS

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
 2535 West Wilson Lane
 West Haven, Utah

Project Number: 22-59

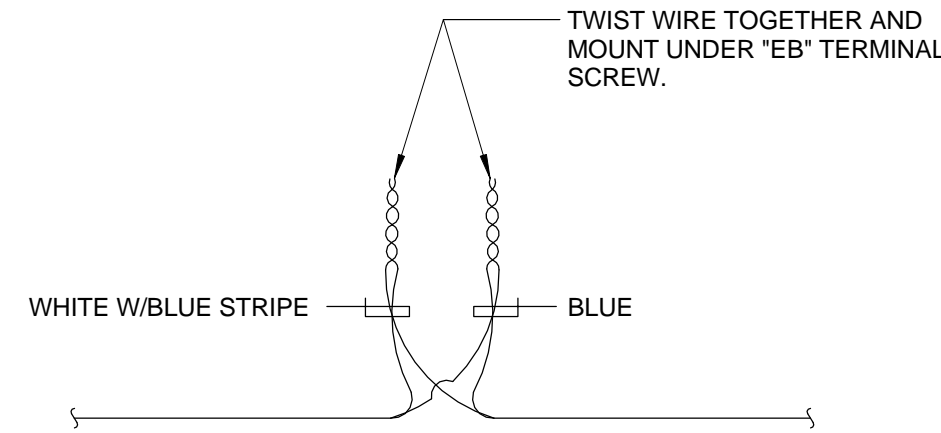
Property Number: 501-8963

May 1, 2023

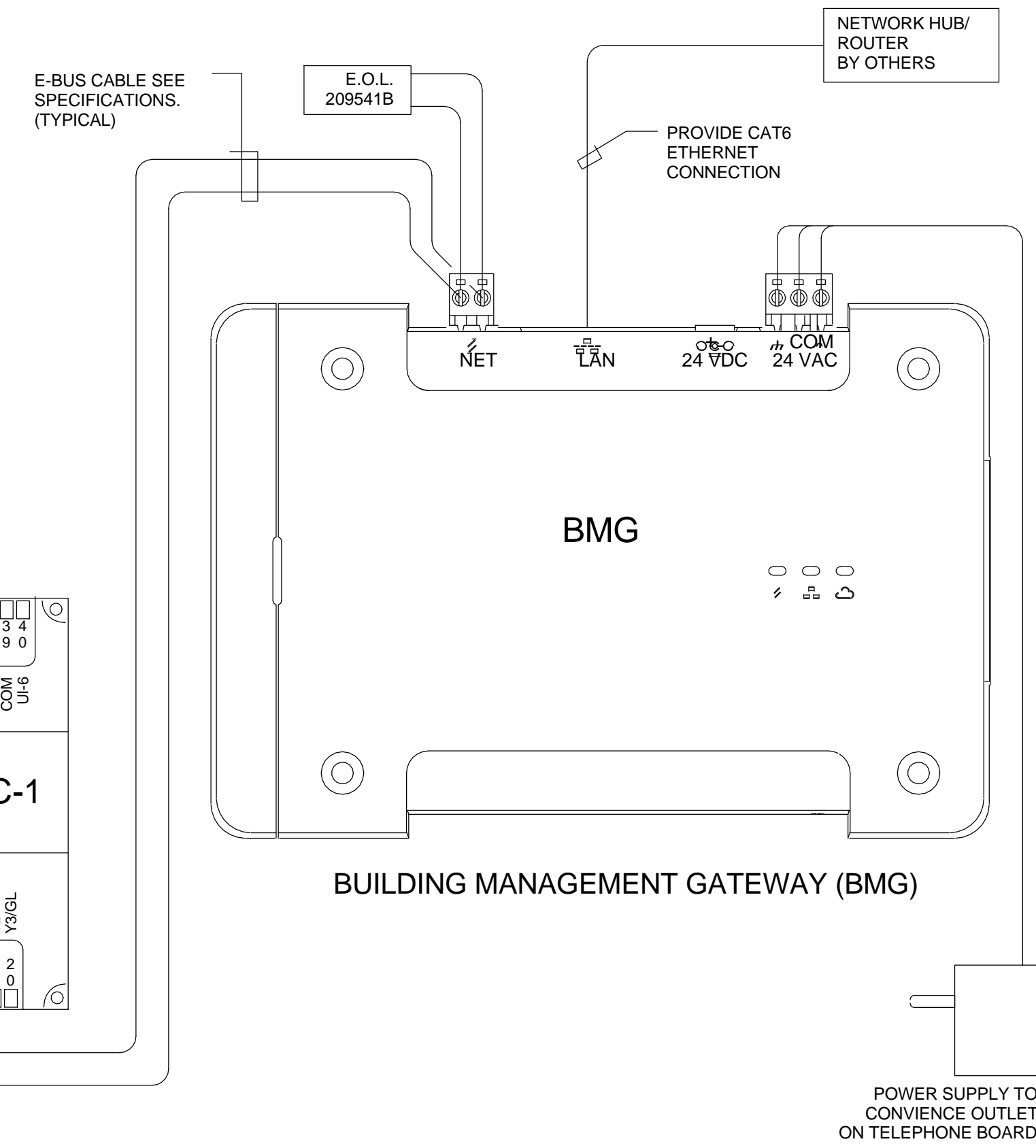
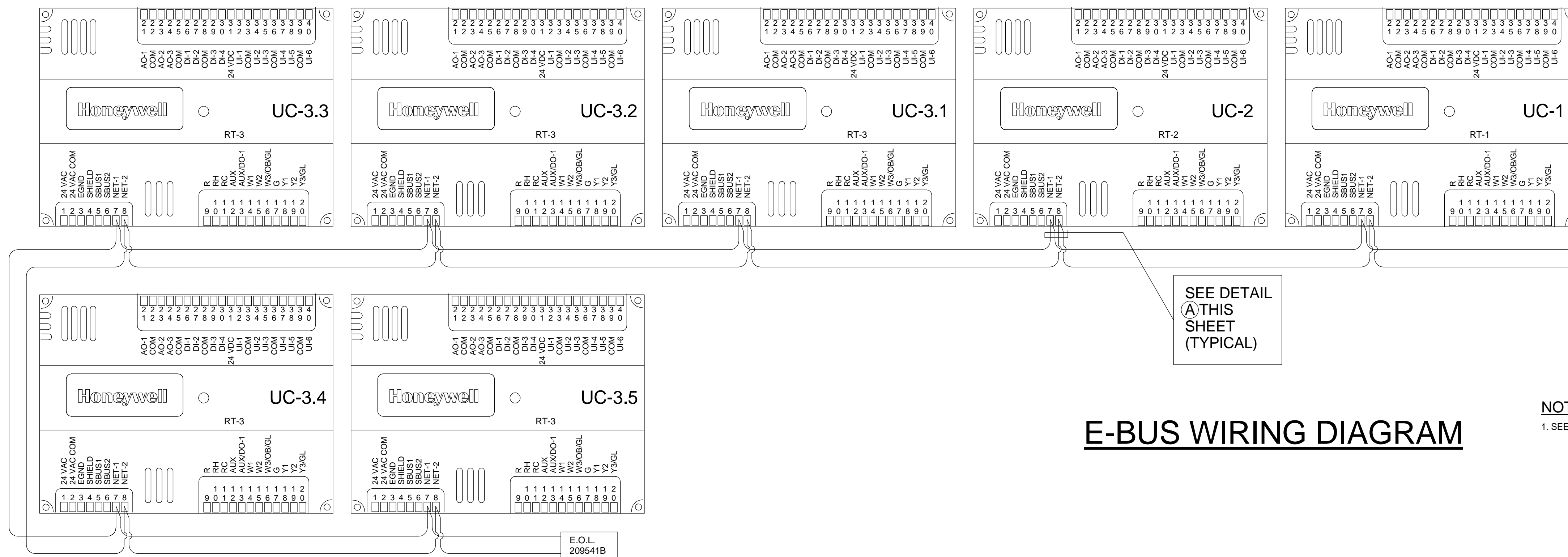
AUTOMATIC TEMPERATURE CONTROLS

ME702





A E-BUS CONNECTION DETAIL
NO SCALE

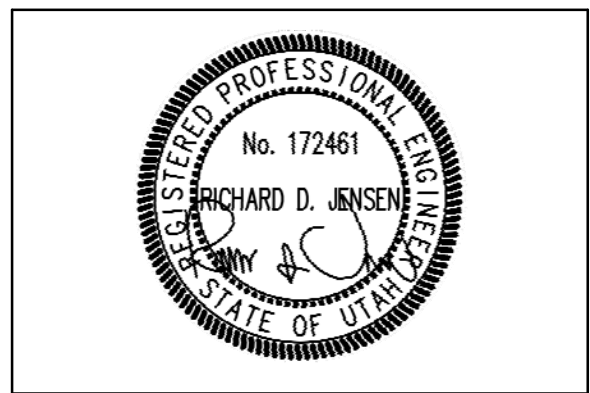


E-BUS WIRING DIAGRAM

NOTES:
1. SEE SHEET ME702 FOR CONTROL EQUIPMENT SCHEDULE.

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number: 22-59

Property Number: 501-8963

May 1, 2023

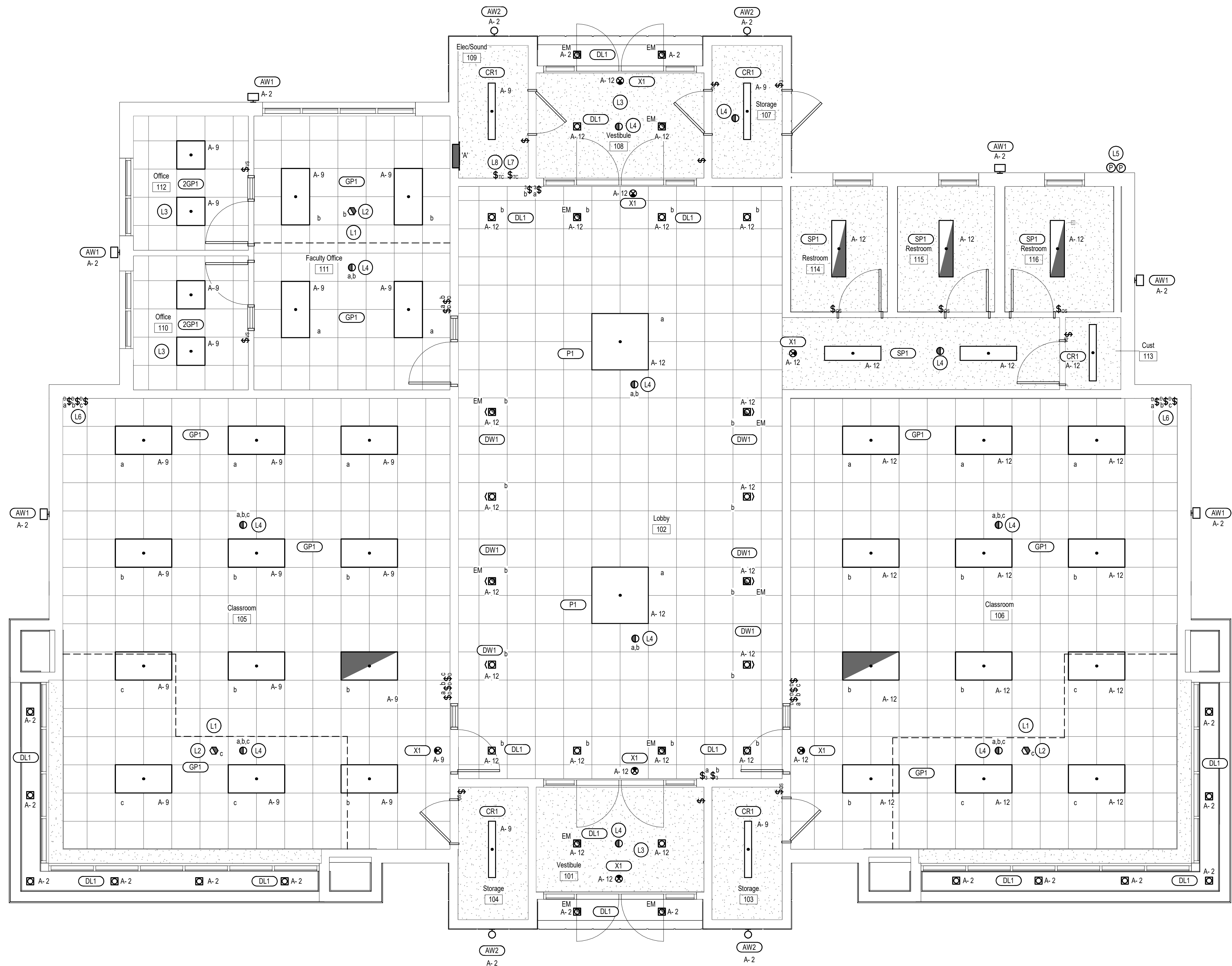
AUTOMATIC TEMPERATURE CONTROL WIRING

ME703



1 2 3 4 5 6 7 8

A B C D E F

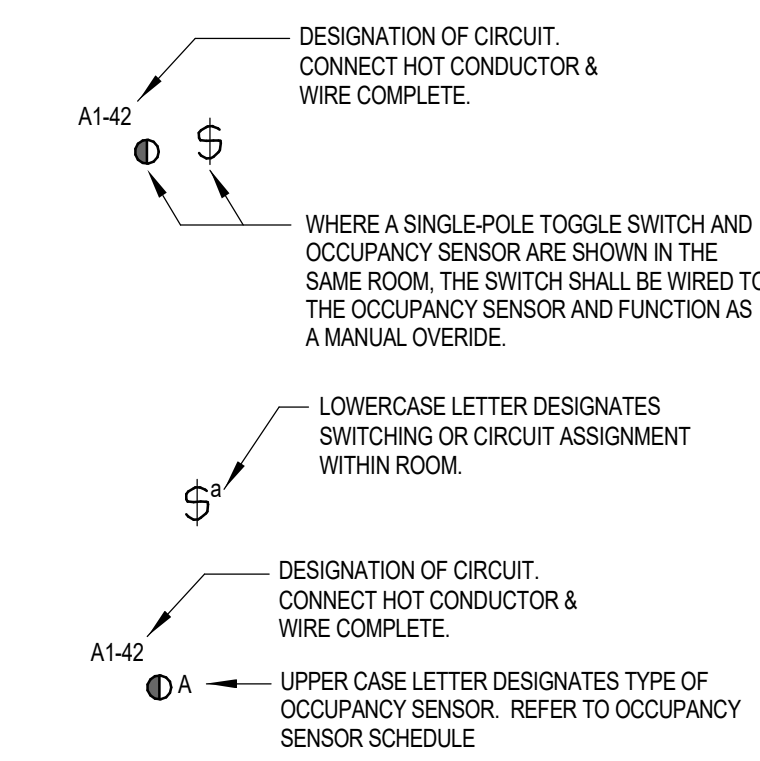


LIGHTING GENERAL NOTES:

- REFER TO LIGHTING DETAILS SHEETS FOR TYPICAL CONTROL WIRING DIAGRAMS. PROVIDE COMPLETE SYSTEM WITH ALL REQUIRED CONDUIT, WIRING, SWITCHES, SENSORS, POWER PACK, ETC.
- LOCATE POWER PACKS AND ROOM CONTROLLERS ABOVE ACCESSIBLE CEILING NEAR ROOM ENTRANCES.
- CONFIRM ALL LOCATIONS OF LIGHT FIXTURES WITH ARCHITECT PRIOR TO INSTALLATION.
- PROVIDE UNSWITCHED HOT CONDUCTOR FOR ALL LIGHT FIXTURES CONTAINING EMERGENCY BATTERY PACKS AND EXIT SIGNS.

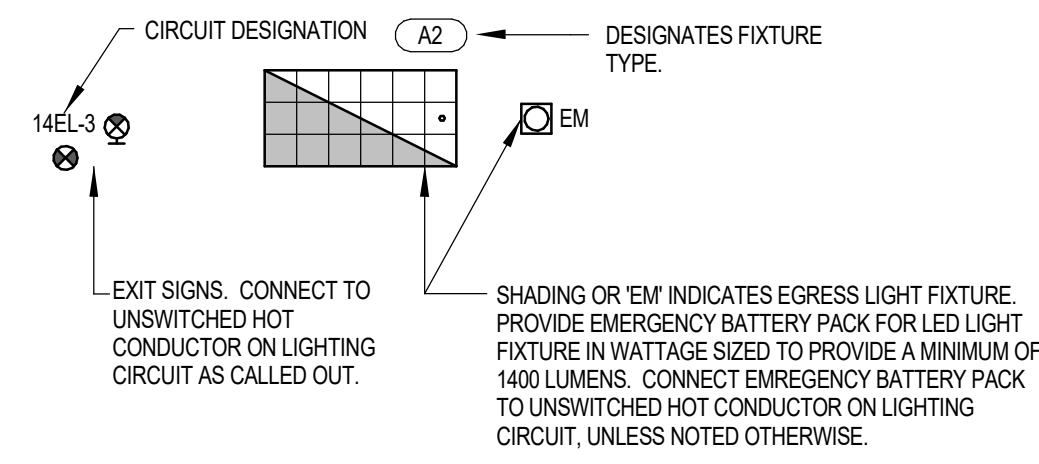
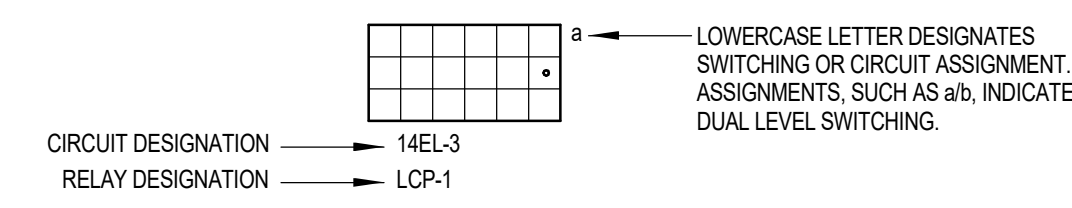
KEYED NOTES #

- DAYLIGHT ZONE DELINEATION LINE. THIS LINE SHALL BE PROJECTED INTO ROOM THE SAME HEIGHT AS THE WINDOW HEAD HEIGHT AND SHALL PROJECT 2' OFF THE EDGE OF THE WINDOW.
- PROVIDE DAYLIGHT SENSOR. REFER TO DETAIL 4 ON SHEET EL601. INSTALL APPROXIMATELY 2' FROM FARTHEST EDGE OF THE DAYLIGHT ZONE AWAY FROM THE WINDOWS AND IN THE APPROXIMATE CENTER OF THE DAYLIGHT ZONE. COORDINATE THE EXACT LOCATION.
- LIGHTING IN THIS DAYLIGHT ZONE IS LESS THAN 150W AND DOES NOT REQUIRE DAYLIGHT HARVESTING.
- PROVIDE DUAL TECHNOLOGY OCCUPANCY/VACANCY SENSOR. REFER TO DETAIL 4 ON SHEET EL601
- CIRCUIT THROUGH TIME CLOCK AND PHOTOCELL. SEE EXTERIOR LIGHTING CONTROLS ON EL601. LOCATE PHOTOCELL ON NORTH SIDE OF BUILDING.
- LOCATE SWITCHES 1'-0" FROM CORNER OF CLASSROOM.
- TIME CLOCK FOR EXTERIOR BUILDING LIGHTS. SEE 5/EL601.
- TIME CLOCK FOR PARKING LOT LIGHTS. SEE 6/EL601.



TYPICAL SWITCHING CONVENTIONS

SCALE: NONE



TYPICAL LIGHT FIXTURE CONVENTION

SCALE: NONE

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary

2535 West Wilson Lane
West Haven, Utah

Project Number: 22-59

Property Number: 502-1091-22020101

May 1, 2023

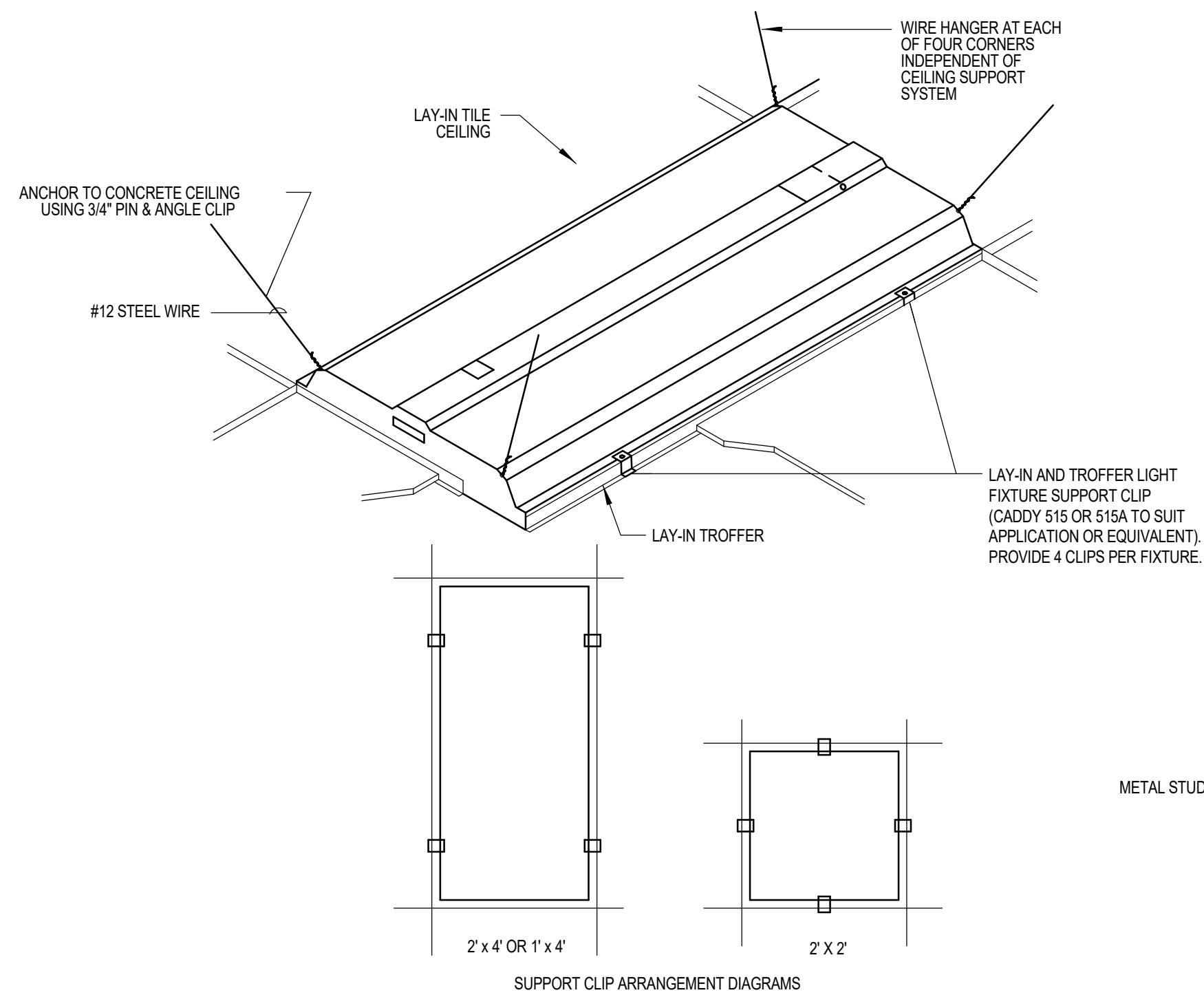
LIGHTING PLAN

EL101

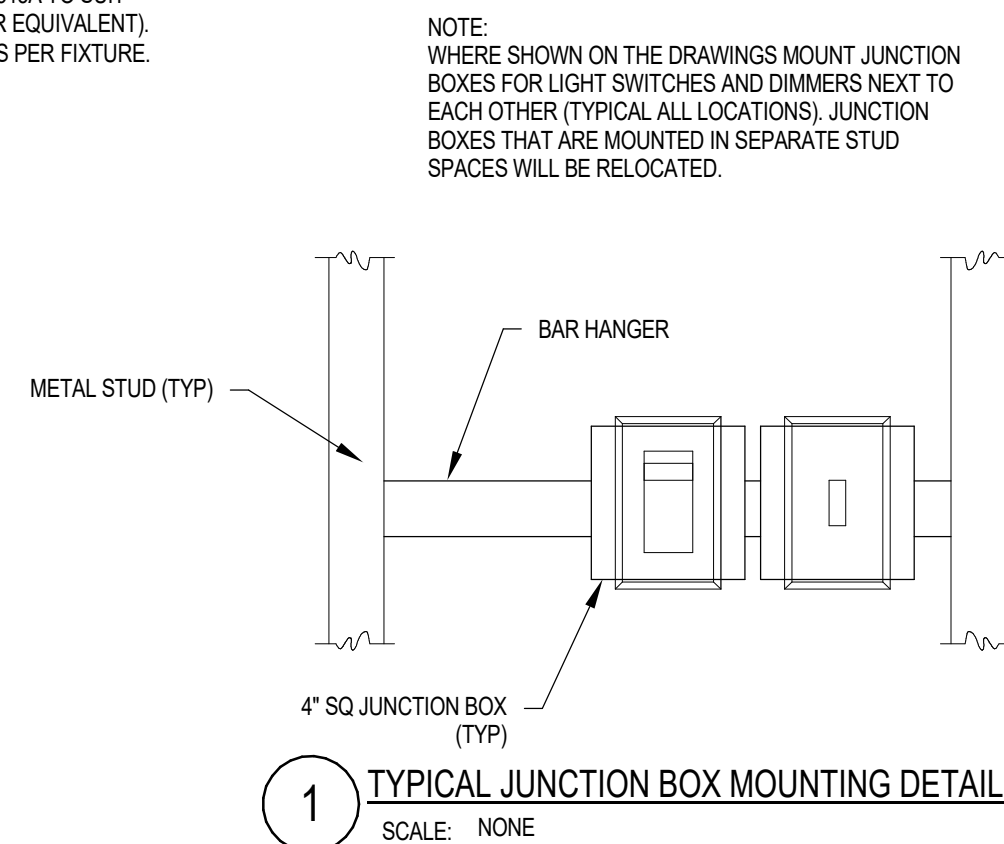
LIGHTING PLAN
SCALE: 1/4" = 1'-0"



ENVS-2023-011



2 LAY-IN LIGHT FIXTURE MOUNTING DETAIL
SCALE: NONE



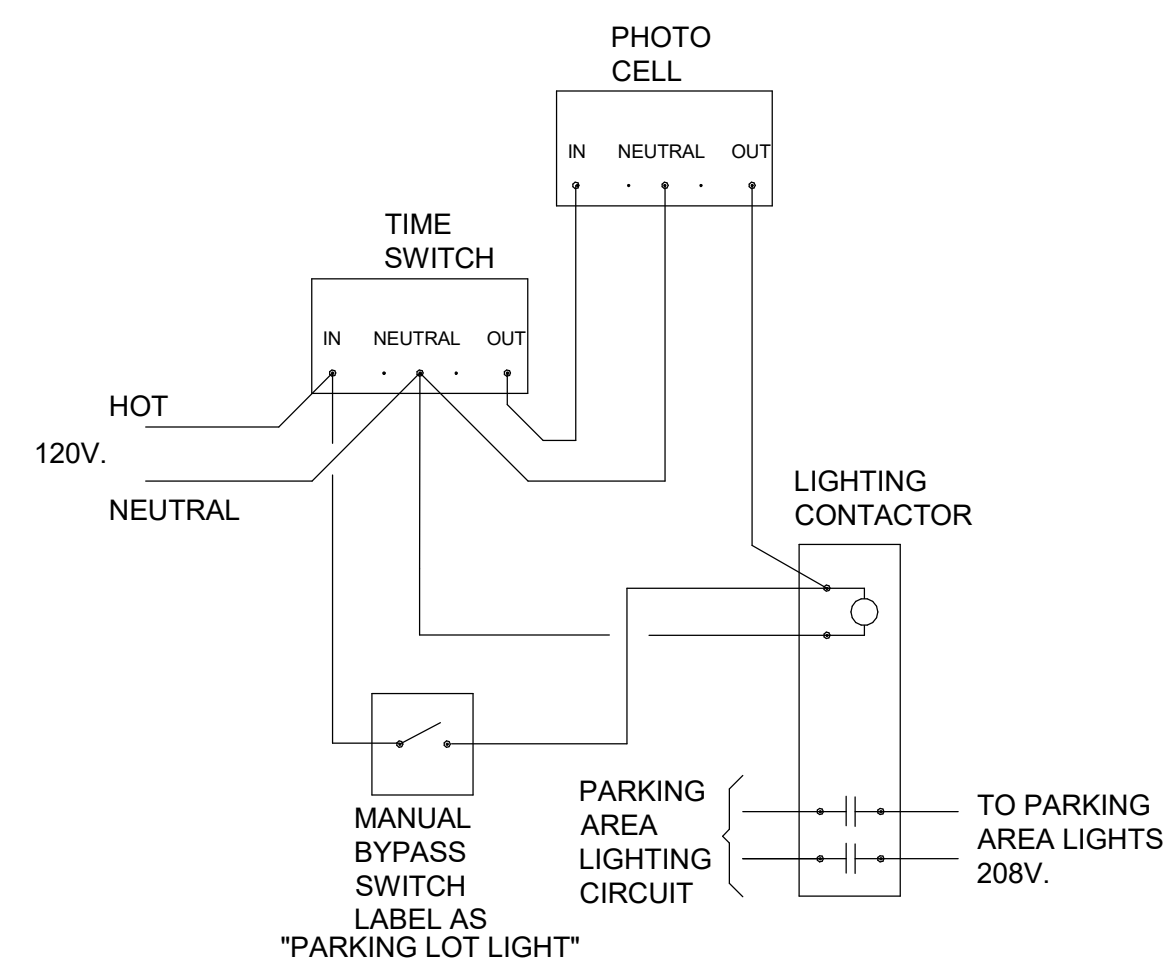
1 TYPICAL JUNCTION BOX MOUNTING DETAIL
SCALE: NONE

LIGHT FIXTURE SCHEDULE												
TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	VOLTAGE	LOAD (VA)	MOUNTING	NUMBER	LAMPS			REMARKS	
								TYPE	WATTS	COLOR (KELVIN)		CRI
AP1	LITHONIA LUMARK BEACON GARDCO	RSX1-LED-P1-40K-R3-MVOLT-SPA-SCBA 1 PREVAL VUPER OPF-S	SINGLE HEADED AREA LIGHT IES TYPE 3 DISTRIBUTION / 7,096 LUMENS STANDARD COLOR BY ARCHITECT 16 ALUMINUM POLE	208	51	18 POLE	AR	LED	51	4000	80	
AB1	LITHONIA	DSXB-LED-12C-700-40K-AST-MVOLT-SCBA 1	LED BOLLARD ASYMMETRIC DISTRIBUTION / 2,335 LUMENS STANDARD COLOR BY ARCHITECT	208	31	CONCRETE BASE	AR	LED	31	4000	80	
AW1	LITHONIA LUMARK WE-EF HE WILLIAMS	WXP-LED-PAL-40K-40V-10VOLT-SCBA 1 ACENT QLS420 VVM	EXTERIOR WALL PACK 1,550 LUMENS STANDARD COLOR BY ARCHITECT	208	31	WALL	AR	LED	31	4000	80	CONFIRM MOUNTING HEIGHT WITH ARCHITECT
AW2	SPECTRUM LIGHTING HE WILLIAMS	CW0812UDPCT6540KWDVDEXCLVM 1 PORTFOLIO FC LIGHTING LER6 FCC612	EXTERIOR DIRECT/INDIRECT WALL SCENE 2,050 LUMENS / 0-10V DIMMING - 10% 52 DEGREE UPLIGHT, 52 DEGREE DOWNLIGHT STANDARD COLOR BY ARCHITECT	120	19	WALL	AR	LED	19	4000	80	CONFIRM MOUNTING HEIGHT WITH ARCHITECT
CR1	LITHONIA METALUX HE WILLIAMS COLUMBIA	CLX-L48-5000LM-SEF-RDL-MVOLT-G210-40K-80CRI 1 4DR 7SR MPS	48" STRIPLIGHT 4SNX 0-10 VOLT DIMMING - 10% / 5,000 LUMENS ROUND LENS	120	32	SURFACE	AR	LED	41	4000	80	
DL1	LITHONIA HE WILLIAMS HALO VANTAGE	LDN4 4005 L04AR TRW LSS MVOLT G210 1 4DR HCA V-CLASS	4" DOWNLIGHT WHITE TRIM / SEMI-SPECULAR FINISH 0-10 VOLT DIMMING - 10% / 500 LUMENS PROVIDE 90 MIN BATTERY BACK UP AS NOTED ON DRAWINGS	120	6	RECESSED	AR	LED	6	4000	80	PROVIDE COLD RATED EMERGENCY BATTERY PACK FOR EXTERIOR FIXTURES
DW1	LITHONIA HE WILLIAMS HALO VANTAGE	LDN4 4005 L14AR TRW LSS MVOLT G210 1 4DR HCA V-CLASS	4" DOWNLIGHT WALL WASH WHITE TRIM / SEMI-SPECULAR FINISH 0-10 VOLT DIMMING - 10% / 500 LUMENS PROVIDE 90 MIN BATTERY BACK UP AS NOTED ON DRAWINGS	120	23	RECESSED	AR	LED	23	4000	80	
GP1	LITHONIA METALUX DAY-BRITE LP	CPX 2X4 3000LM 80CRI 40K SWL MN10 ZT 1 24CGTX 2FRZ VPAN24	2' x 4' TROFFER SATIN WHITE LENS / ALUMINUM FRAME 0-10 VOLT DIMMING - 10% / 3,000 LUMENS PROVIDE 90 MIN BATTERY BACK UP AS NOTED ON DRAWINGS	120	29	LAY-IN	AR	LED	29	4000	80	
2GP1	LITHONIA METALUX DAY-BRITE LP	CPX 2X2 2000LM 80CRI 40K SWL MN10 ZT 1 22CGTX 2FRZ VPAN22	2' x 2' TROFFER SATIN WHITE LENS / ALUMINUM FRAME 0-10 VOLT DIMMING - 10% / 2,000 LUMENS	120	19	LAY-IN	AR	LED	19	4000	80	
P1	MARK ARCHITECTURAL LIGHTING NULITE LUMENWERX LEDALITE	STLUP 4X48 8XC 80CRI 40K 800LMP 1 190CRI 140K 1400LMP MINI SGT 08P1 MVOLT F138A SOCY WHTCY WWC RD RP24 V144 TRUGROOVE	4' x 4' SQUARE PENDANT FIXTURE 800 LUMENS/FT DIRECT WITH 1" DROP LENS 400 LUMENS/FT INDIRECT WITH FLUSH LENS 0-10 VOLT DIMMING - 10% FINISH: STANDARD COLOR BY ARCHITECT	120	44	PENDANT	AR	LED	44	4000	80	CONFIRM PENDANT LENGTH WITH ARCHITECT
SP1	LITHONIA METALUX DAY-BRITE LP	CPX 1X4 4000LM 80CRI 40K SWL MN10 ZT 1X4 SMKSH 1 14CGTX 2FRZ VPAN14	1' x 4' TROFFER SATIN WHITE LENS / ALUMINUM FRAME SURFACE MOUNT KIT 0-10 VOLT DIMMING - 10% / 4,000 LUMENS PROVIDE 90 MIN BATTERY BACK UP AS NOTED ON DRAWINGS	120	37	SURFACE	AR	LED	37	4000	80	
X1	LITHONIA DUAL-LITE SURE-LITE CHLORIDE	LQM-S-W-3-C-120-EL-N-SD 1 EVEUGWEI LPX7SD VEGWEM	THERMOPLASTIC EXIT SIGN SINGLE FACE / GREEN LETTERS NICKLE CADMIUM BATTERY / SELF-DIAGNOSTICS STANDARD COLOR BY ARCHITECT	120	1.5	UNIVERSAL	AR	LED	1.5	N/A	N/A	

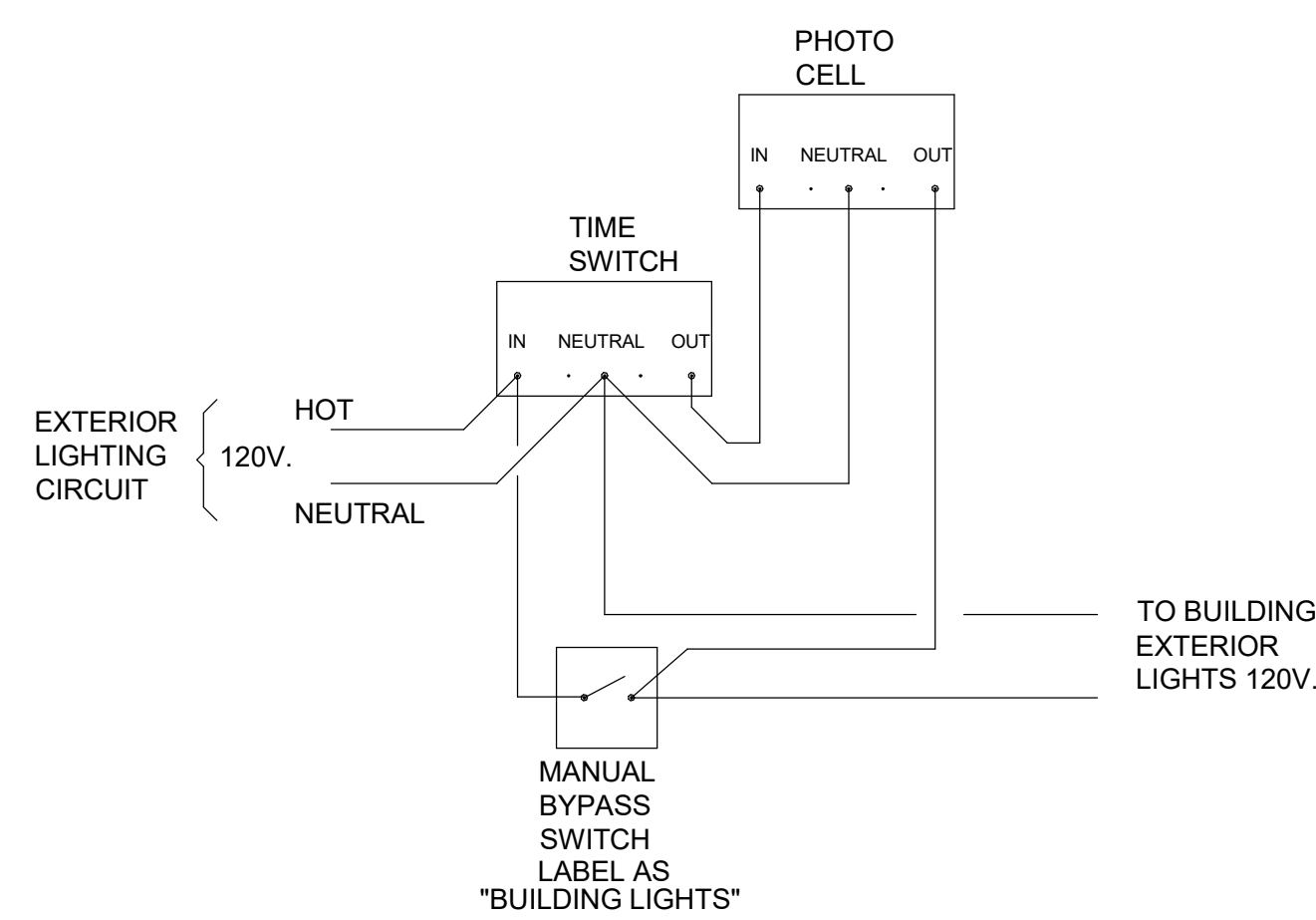
KEYED NOTES: #

- ALL MANUFACTURES LISTED ARE APPROVED TO BID THIS FIXTURE. LIGHT FIXTURE SHALL BE AN EQUIVALENT TO THE SPECIFIED. IF AN EQUIVALENT CAN NOT BE PROVIDED THE SPECIFIED FIXTURE SHALL BE USED.

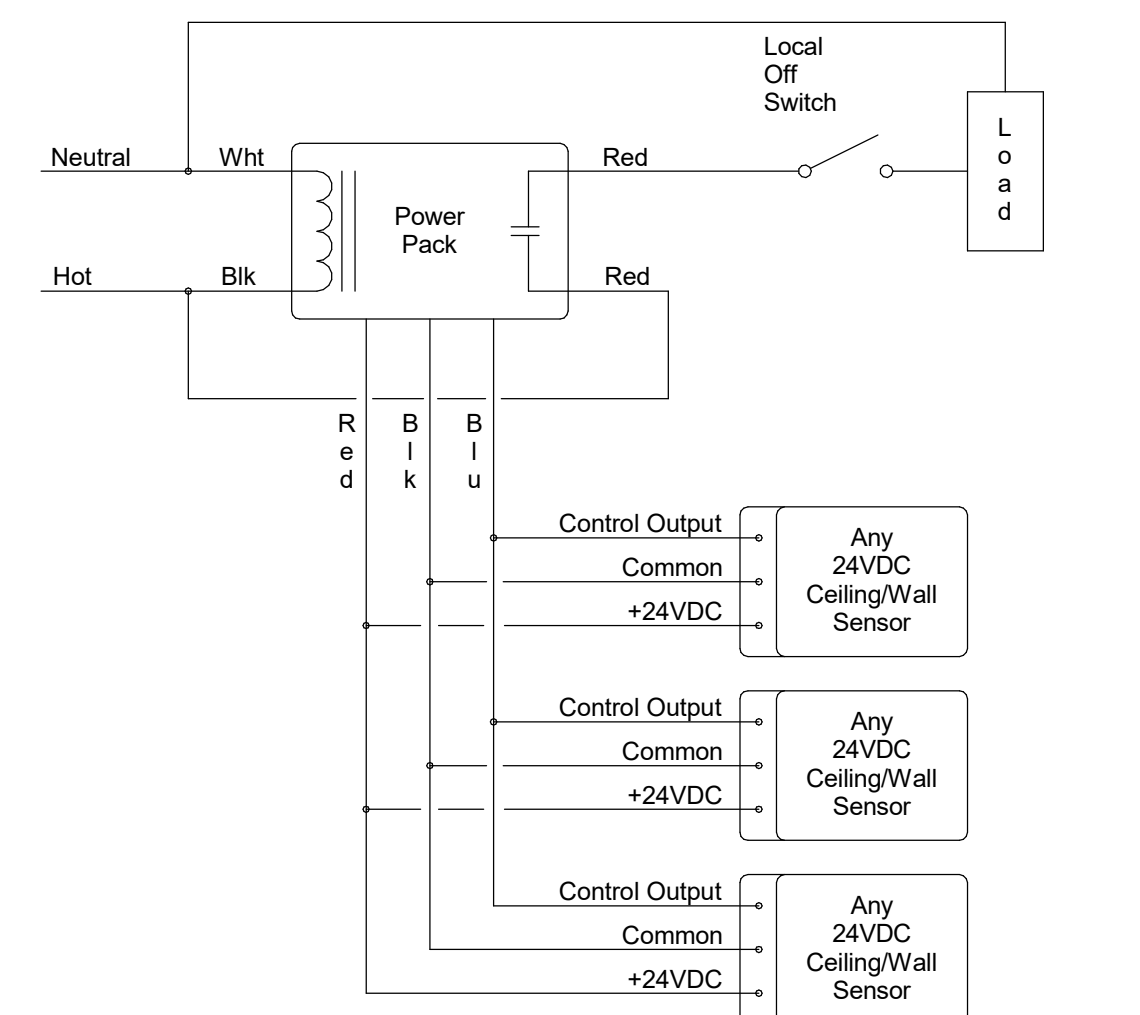
SWITCH SCHEDULE	
SYMBOL	CONFIGURATION
\$	ON/OFF
\$ ₃	3-WAY ON/OFF
\$ _{OS}	WALL MOUNT OCCUPANCY SENSOR SWITCH (AUTO ON/AUTO OFF)
\$ _{OS}	WALL MOUNT VACANCY SENSOR SWITCH (MANUAL ON/AUTO OFF)
\$ ^D _{abc}	DIMMING SWITCH, "a,b,c" INDICATES ZONE CONTROL



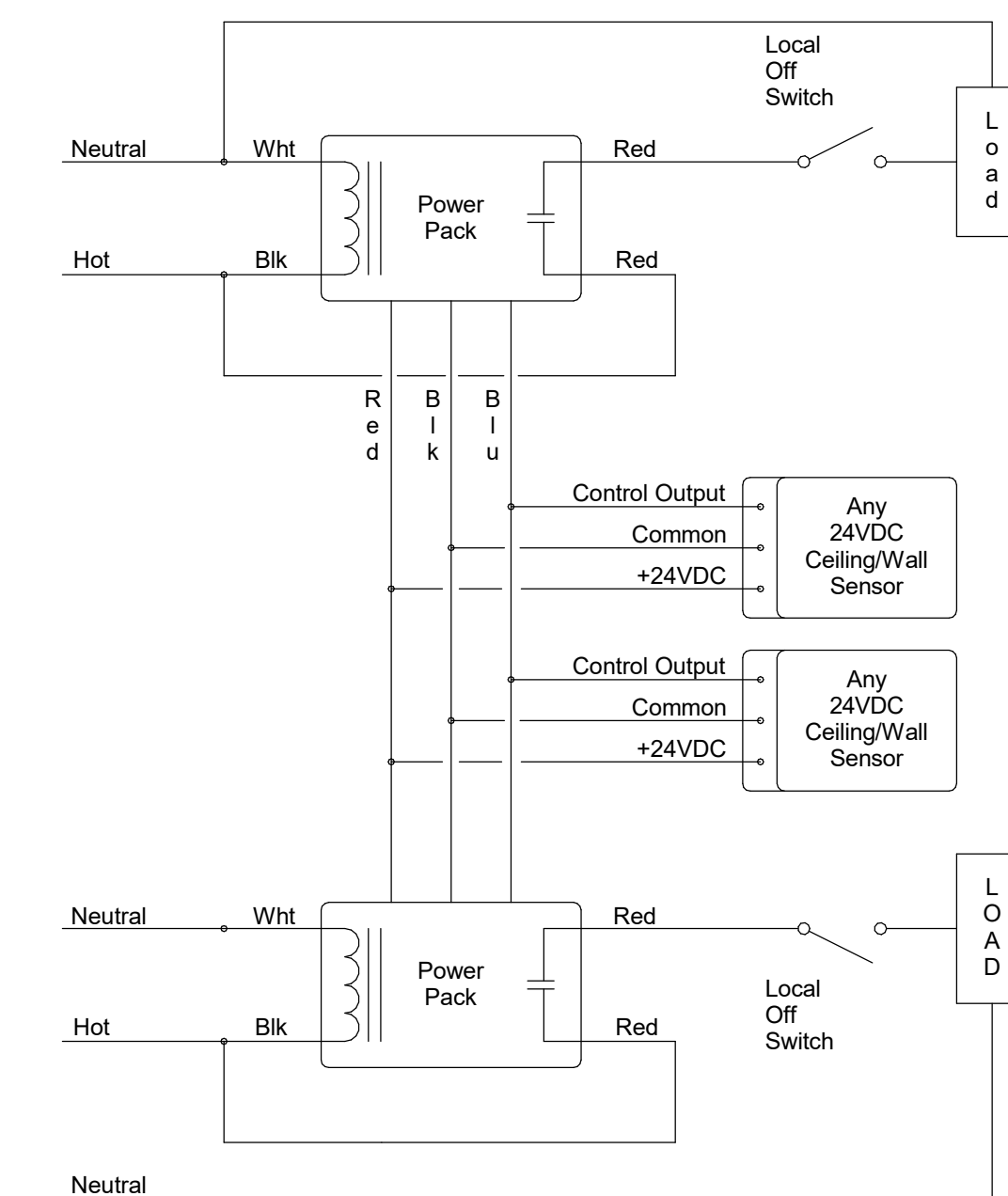
6 PARKING AREA LIGHTING CONTROL DIAGRAM
SCALE: NONE



5 BUILDING EXTERIOR LIGHTING CONTROL DIAGRAM
SCALE: NONE

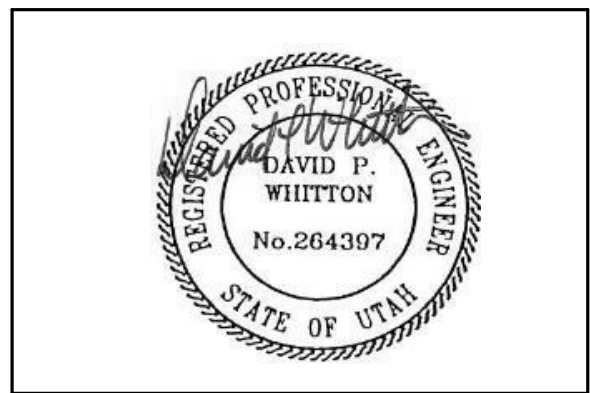


4 MULTIPLE OCCUPANCY SENSORS USING ONE POWER PACK
SCALE: NONE



3 MULTIPLE OCCUPANCY SENSORS CONTROLLING TWO CIRCUITS
SCALE: NONE

Revision Schedule		
#	Description	Date
1	Review Commnets	06/14/23



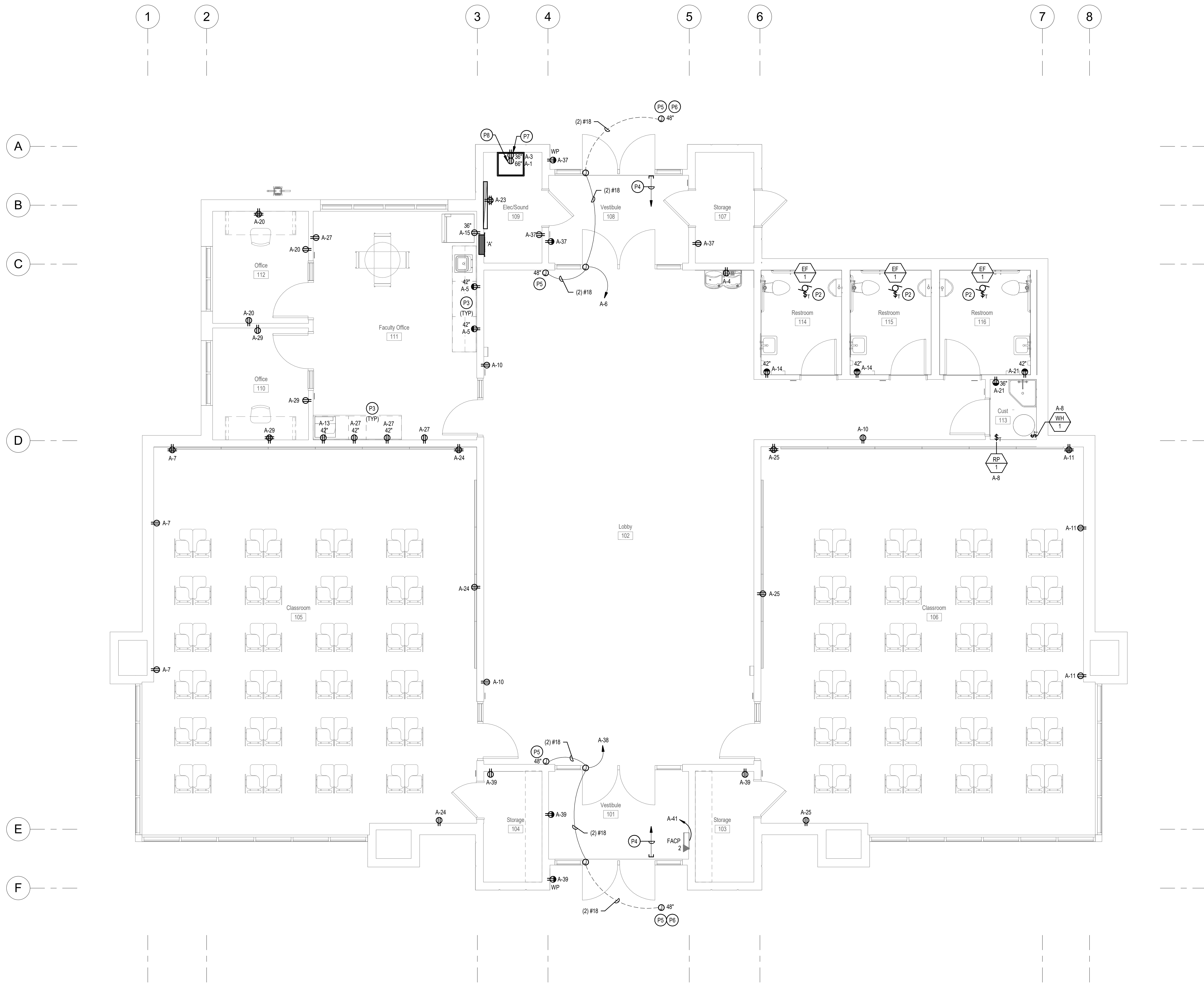
Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah



ENV-2023-011

Project Number:	22-59
Property Number:	502-1091-22020101
May 1, 2023	
LIGHT FIXTURE SCHEDULE	
EL601	

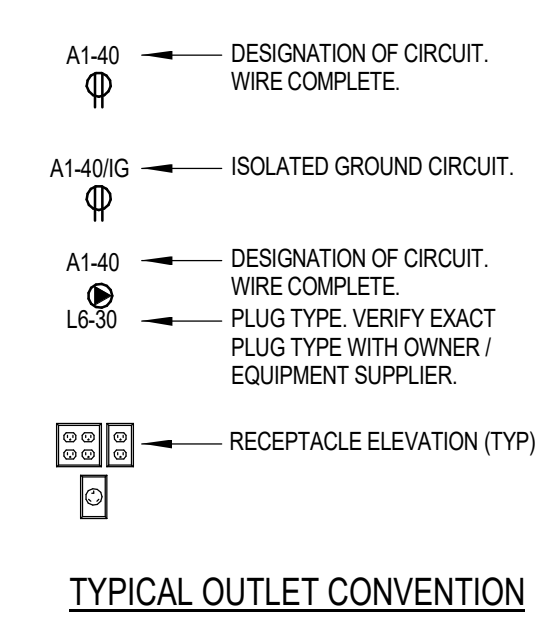


- POWER GENERAL NOTES:**
1. PROVIDE A MINIMUM OF 12" SEPARATION BETWEEN POWER AND COMMUNICATIONS CONDUITS.
 2. ALL CONDUITS THAT EXTEND THROUGH CONCRETE SHALL BE GALVANIZED RIGID CONDUIT AND SHALL BE WRAPPED WITH TWO (2) LAYERS OF PVC TAPE.
 3. ALL ELBOWS THAT EXTEND THROUGH CONCRETE SHALL BE GALVANIZED RIGID CONDUIT AND WRAPPED WITH TWO (2) LAYERS OR PVC TAPE.
 4. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
 5. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD.
 6. CONTRACTOR SHALL PROVIDE ALL RACEWAYS AND JUNCTION BOXES FOR HVAC CONTROLS, THERMOSTATS, ETC. REFER TO THE MECHANICAL DRAWINGS AND SPECIFICATIONS. COORDINATE WORK WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
 7. ROUTE CONDUIT A MINIMUM OF 6" BELOW THE GRAVEL BASE.
 8. CONTRACTOR SHALL COORDINATE ALL WALL MOUNTED DEVICE, FIXTURE AND EQUIPMENT HEIGHTS AND LOCATIONS WITH THE ARCHITECT PRIOR TO ANY ROUGH-IN.

- KEYED NOTES**
- P2 SWITCH WITH LIGHTS. SEE LIGHTING PLAN FOR CIRCUIT AND CONTROLS.
 - P3 COORDINATE INSTALLATION AND LOCATION OF DEVICE(S) WITH MILLWORK, ARCHITECT AND OWNER PRIOR TO ANY ROUGH-IN.
 - P4 EXTEND A 3/4" CONDUIT WITH PULL STRING FROM THE DOOR HEADER TO THE TELEPHONE BOARD FOR FUTURE ACCESS CONTROL SYSTEM. LABEL CONDUITS "ACCESS CONTROL".
 - P5 ADA DOOR CONTROLS ARE FURNISHED BY THE DOOR HARDWARE SUPPLIER AND INSTALLED AND CONNECTED BY THE CONTRACTOR. PROVIDE A 4" SQUARE, 2-1/8" DEEP BOX. SWITCHES TO SIMULTANEOUSLY CONTROL BOTH DOORS.
 - P6 MOUNT ADA CONTROL ON POST IN LOCATION AS DIRECTED BY THE ARCHITECT. CONFIRM ALL REQUIREMENTS AND EXACT LOCATION WITH THE ARCHITECT PRIOR TO ANY ROUGH-IN.
 - P7 MOUNT RECEPTACLE IN JUNCTION BOX FOR DATA RACK. COORDINATE EXACT LOCATION AND ALL REQUIREMENTS WITH THE DATA SYSTEM INSTALLER PRIOR TO ANY ROUGH-IN. SEE SHEET ET101 AND ET501 FOR ADDITIONAL INFORMATION.
 - P8 MOUNT RECEPTACLE IN JUNCTION BOX FOR AV RACK. COORDINATE EXACT LOCATION AND ALL REQUIREMENTS WITH THE AV SYSTEM INSTALLER PRIOR TO ANY ROUGH-IN. SEE SHEET ET101 AND ET501 FOR ADDITIONAL INFORMATION.

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
 2535 West Wilson Lane
 West Haven, Utah

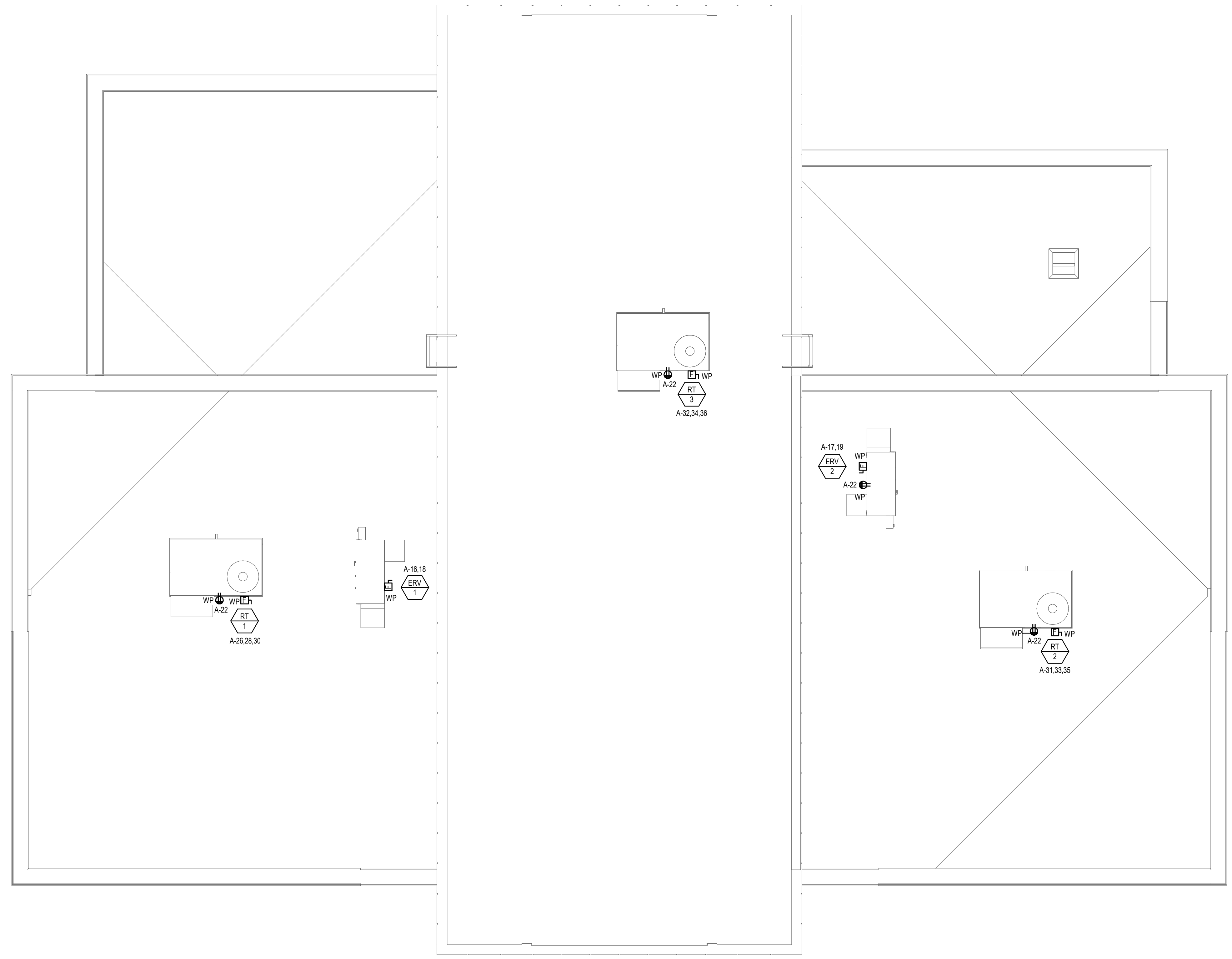
Project Number:	22-59
Property Number:	502-1091-22020101
May 1, 2023	
POWER PLAN	
EP101	

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



1 2 3 4 5 6 7 8

A
B
C
D
E
F



- POWER GENERAL NOTES:**
1. PROVIDE A MINIMUM OF 12" SEPARATION BETWEEN POWER AND COMMUNICATIONS CONDUITS.
 2. ALL CONDUITS THAT EXTEND THROUGH CONCRETE SHALL BE GALVANIZED RIGID CONDUIT AND SHALL BE WRAPPED WITH TWO (2) LAYERS OF PVC TAPE.
 3. ALL ELBOWS THAT EXTEND THROUGH CONCRETE SHALL BE GALVANIZED RIGID CONDUIT AND WRAPPED WITH TWO (2) LAYERS OR PVC TAPE.
 4. ALL 120V, 20AMP OUTLETS THAT ARE WITHIN 6' OF ANY SINK SHALL BE GFCI.
 5. THE DIVISION 26 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD.
 6. CONTRACTOR SHALL PROVIDE ALL RACEWAYS AND JUNCTION BOXES FOR HVAC CONTROLS, THERMOSTATS, ETC. REFER TO THE MECHANICAL DRAWINGS AND SPECIFICATIONS. COORDINATE WORK WITH THE MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
 7. ROUTE CONDUIT A MINIMUM OF 6" BELOW THE GRAVEL BASE.
 8. CONTRACTOR SHALL COORDINATE ALL WALL MOUNTED DEVICE, FIXTURE AND EQUIPMENT HEIGHTS AND LOCATIONS WITH THE ARCHITECT PRIOR TO ANY ROUGH-IN.

- TYPICAL OUTLET CONVENTION**
- A1-40 — DESIGNATION OF CIRCUIT. WIRE COMPLETE.
 - A1-40IG — ISOLATED GROUND CIRCUIT.
 - A1-40 — DESIGNATION OF CIRCUIT. WIRE COMPLETE.
 - L6-30 — PLUG TYPE. VERIFY EXACT PLUG TYPE WITH OWNER / EQUIPMENT SUPPLIER.
 - RECEPTACLE ELEVATION (TYP)

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

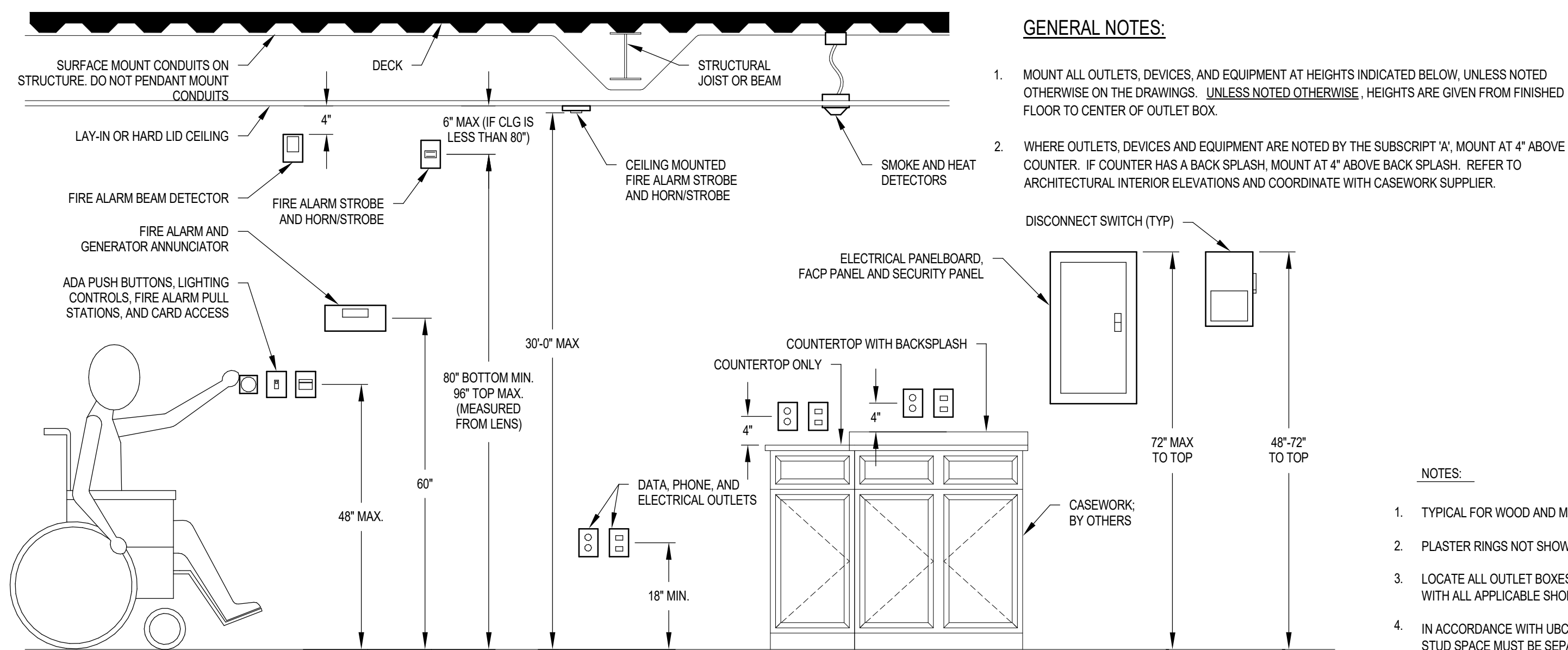
Project Number:	22-59
Property Number:	502-1091-22020101
May 1, 2023	
POWER ROOF PLAN	

EP102

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

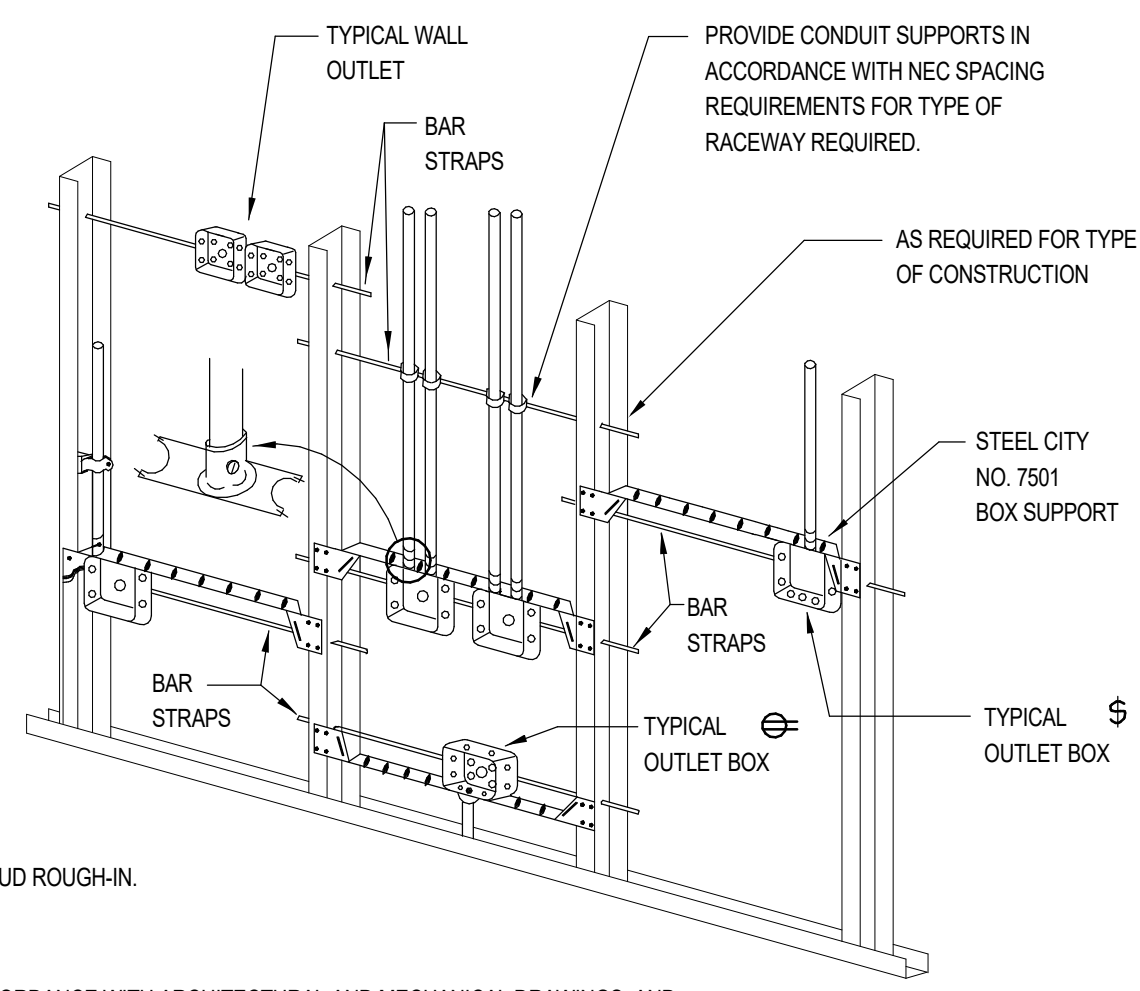


ENV-2023-011



3 ADA AND EQUIPMENT MOUNTING HEIGHT DETAIL
SCALE: NONE

- GENERAL NOTES:**
1. MOUNT ALL OUTLETS, DEVICES, AND EQUIPMENT AT HEIGHTS INDICATED BELOW, UNLESS NOTED OTHERWISE ON THE DRAWINGS. UNLESS NOTED OTHERWISE, HEIGHTS ARE GIVEN FROM FINISHED FLOOR TO CENTER OF OUTLET BOX.
 2. WHERE OUTLETS, DEVICES AND EQUIPMENT ARE NOTED BY THE SUBSCRIPT 'X', MOUNT AT 4" ABOVE COUNTER. IF COUNTER HAS A BACK SPLASH, MOUNT AT 4" ABOVE BACK SPLASH. REFER TO ARCHITECTURAL INTERIOR ELEVATIONS AND COORDINATE WITH CASEWORK SUPPLIER.



- NOTES:**
1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
 2. PLASTER RINGS NOT SHOWN.
 3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.
 4. IN ACCORDANCE WITH UBC 4303 OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE MUST BE SEPARATED BY A MINIMUM OF 24" HORIZONTAL DISTANCE.

2 TYPICAL ROUGH-IN REQUIREMENTS
SCALE: NONE

IF PANEL BOARD IS FEED FROM A TRANSFORMER LOCATED IN THE SAME ROOM AS THE PANEL THE TOTAL LENGTH OF BRANCH CIRCUITS SHALL NOT EXCEED THE FOLLOWING:

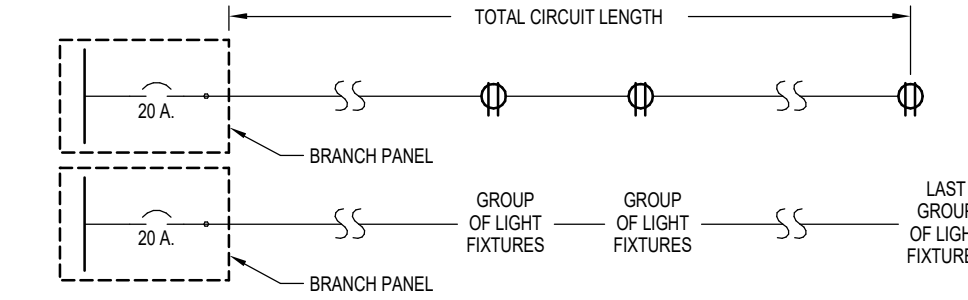
	120 VOLTS	277 VOLTS
a - USING #12 AWG	90 FT.	180 FT.
b - USING #10 AWG	150 FT.	300 FT.
c - USING #8 AWG	250 FT.	450 FT.
d - USING #6 AWG	380 FT.	700 FT.

THE ABOVE CIRCUIT LENGTHS ARE BASED ON 4% VOLTAGE DROP AT 16 AMPS LOAD AT THE END OF THE CIRCUIT. SAME WIRE SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT.

IF PANELBOARD IS FEED FROM A TRANSFORMER LOCATED REMOTELY FROM THE PANEL THE TOTAL LENGTH OF BRANCH CIRCUITS SHALL NOT EXCEED THE FOLLOWING:

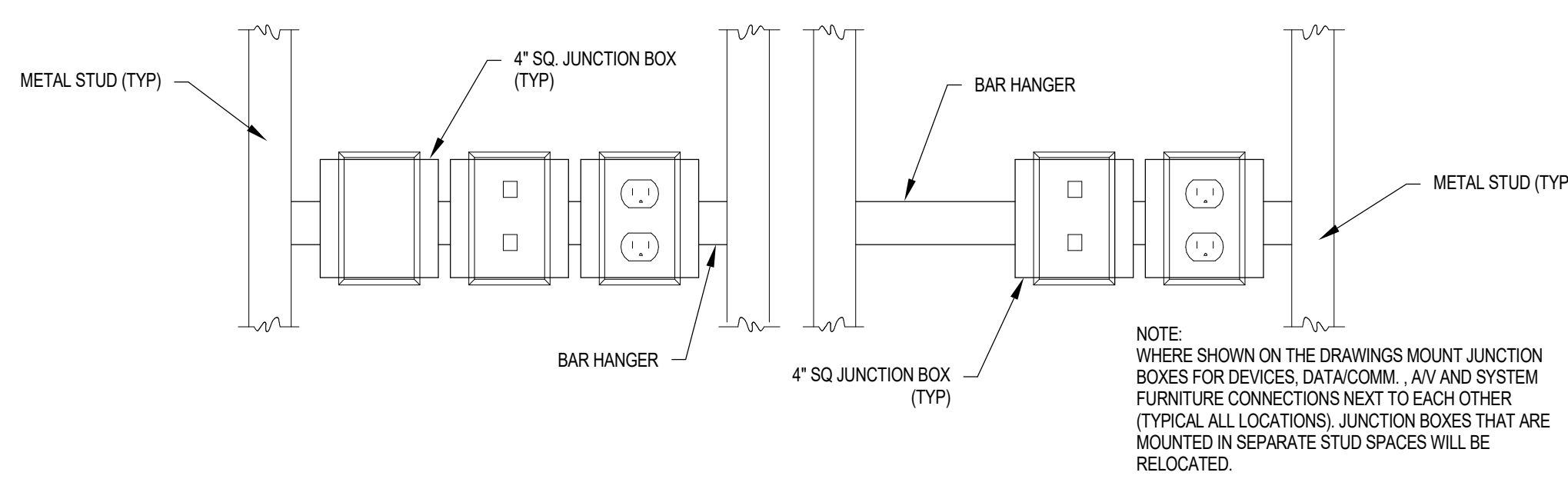
	120 VOLTS	277 VOLTS
a - USING #12 AWG	75 FT.	180 FT.
b - USING #10 AWG	125 FT.	260 FT.
c - USING #8 AWG	205 FT.	420 FT.
d - USING #6 AWG	325 FT.	660 FT.

THE ABOVE CIRCUIT LENGTHS ARE BASED ON 3% VOLTAGE DROP AT 16 AMPS LOAD AT THE END OF THE CIRCUIT. SAME WIRE SIZE SHALL BE USED FOR THE ENTIRE CIRCUIT.



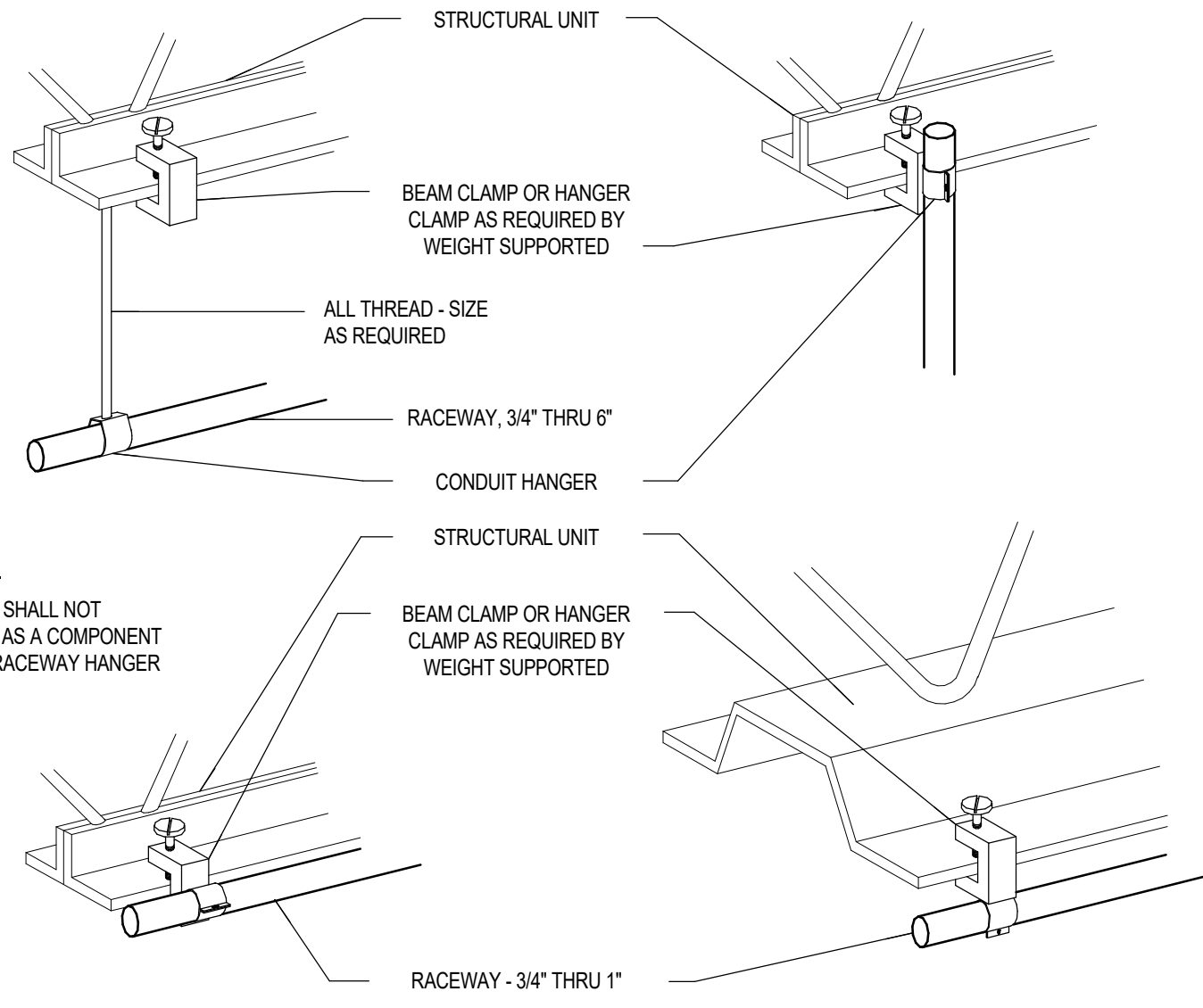
BRANCH CIRCUIT DEFINITION: CIRCUIT ORIGINATING FROM A 20 AMP CIRCUIT BREAKER IN A BRANCH PANEL AND ENDING AT THE LAST DUPLEX OUTLET ON THE CIRCUIT OR ENDS AT THE LAST LIGHT FIXTURE.

1 TYPICAL BRANCH CIRCUIT LENGTH DETAIL
SCALE: SCHEMATIC



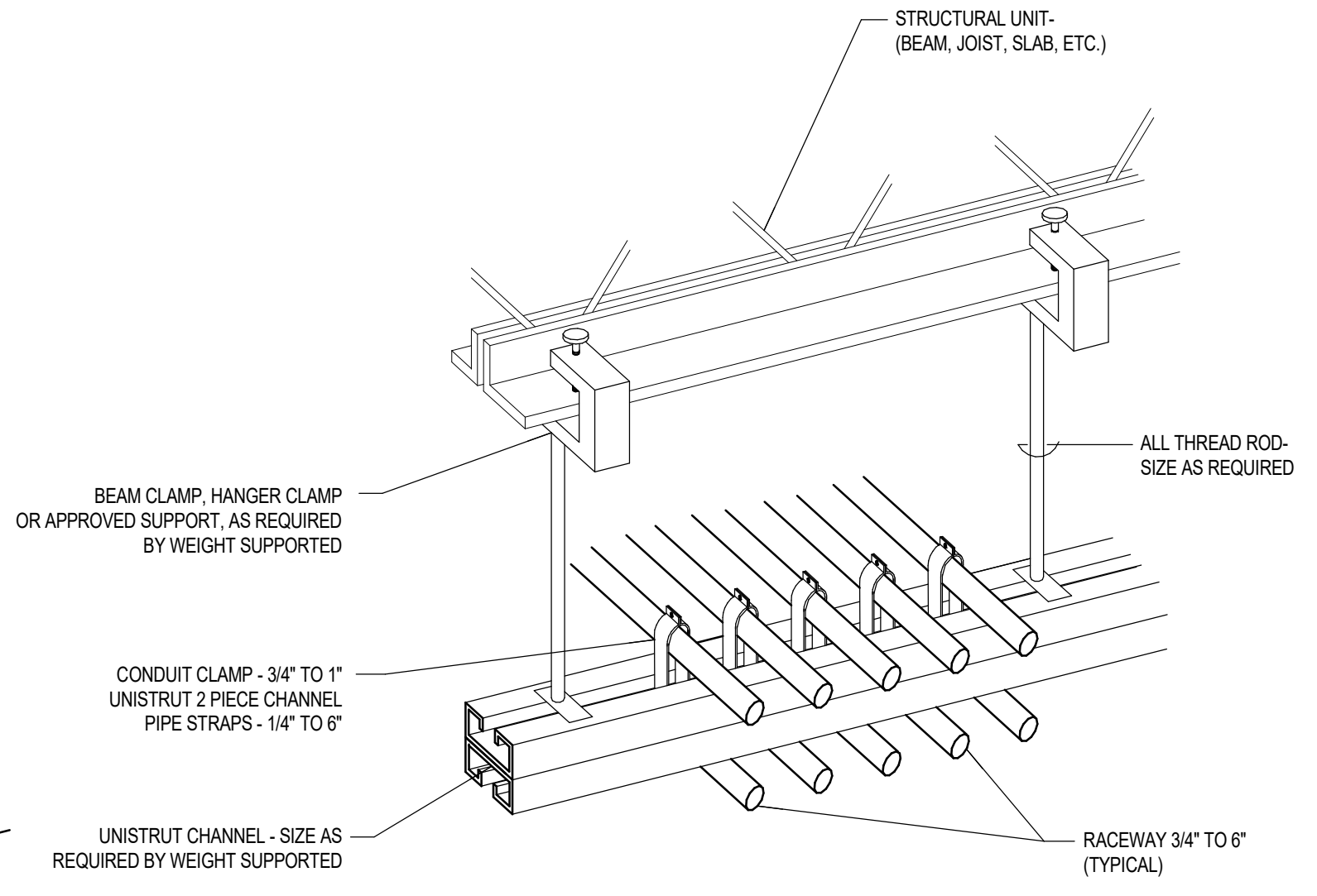
6 TYPICAL JUNCTION BOX MOUNTING DETAIL
SCALE: NONE

NOTE: WHERE SHOWN ON THE DRAWINGS MOUNT JUNCTION BOXES FOR DEVICES, DATA/COMM, AV AND SYSTEM FURNITURE CONNECTIONS NEXT TO EACH OTHER (TYPICAL ALL LOCATIONS). JUNCTION BOXES THAT ARE MOUNTED IN SEPARATE STUD SPACES WILL BE RELOCATED.

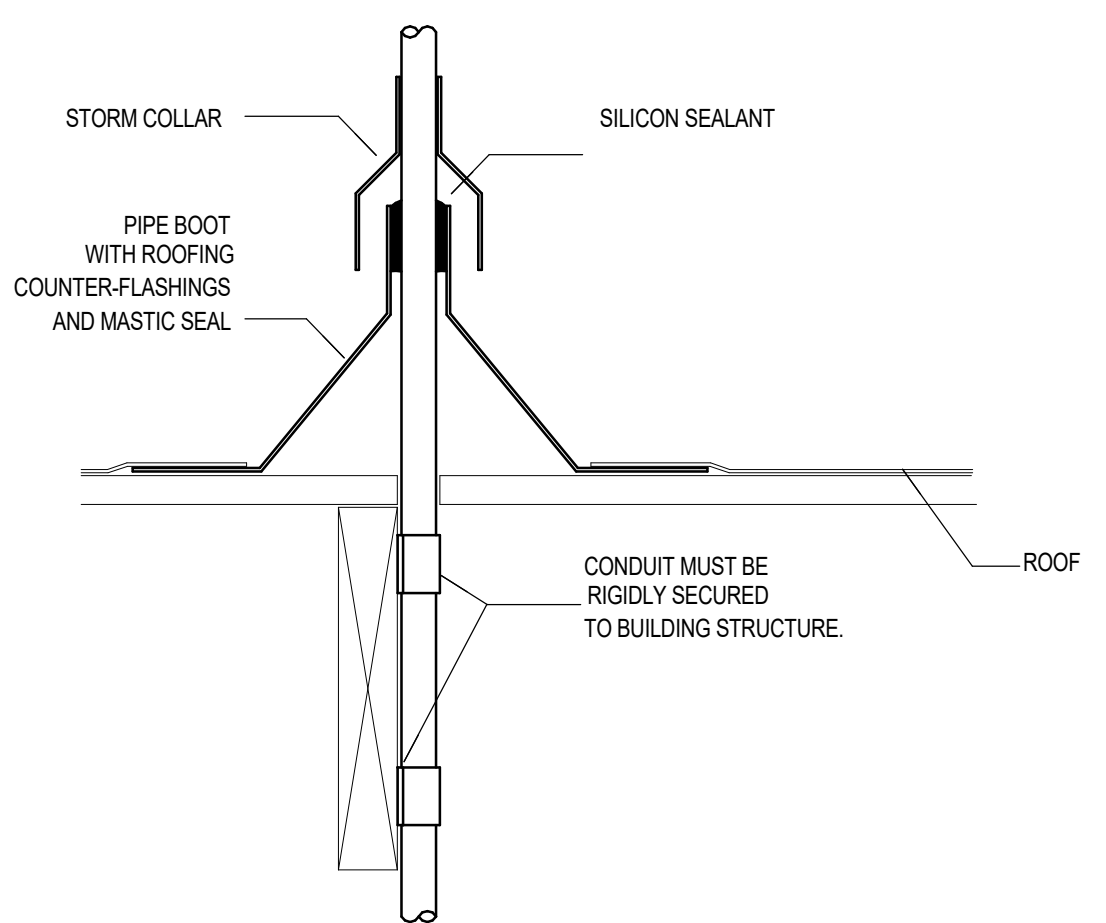


NOTE: TIE WIRE SHALL NOT BE USED AS A COMPONENT OF ANY RACEWAY HANGER SYSTEM.

5 TYPICAL RACEWAY DETAILS
SCALE: NONE



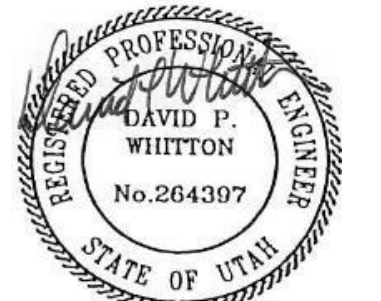
4 MULTIPLE RACEWAY SUPPORT DETAIL
SCALE: NONE



7 CONDUIT THROUGH ROOF FLASHING DETAIL
SCALE: NONE

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

Project Number: 22-59

Property Number: 502-1091-22020101

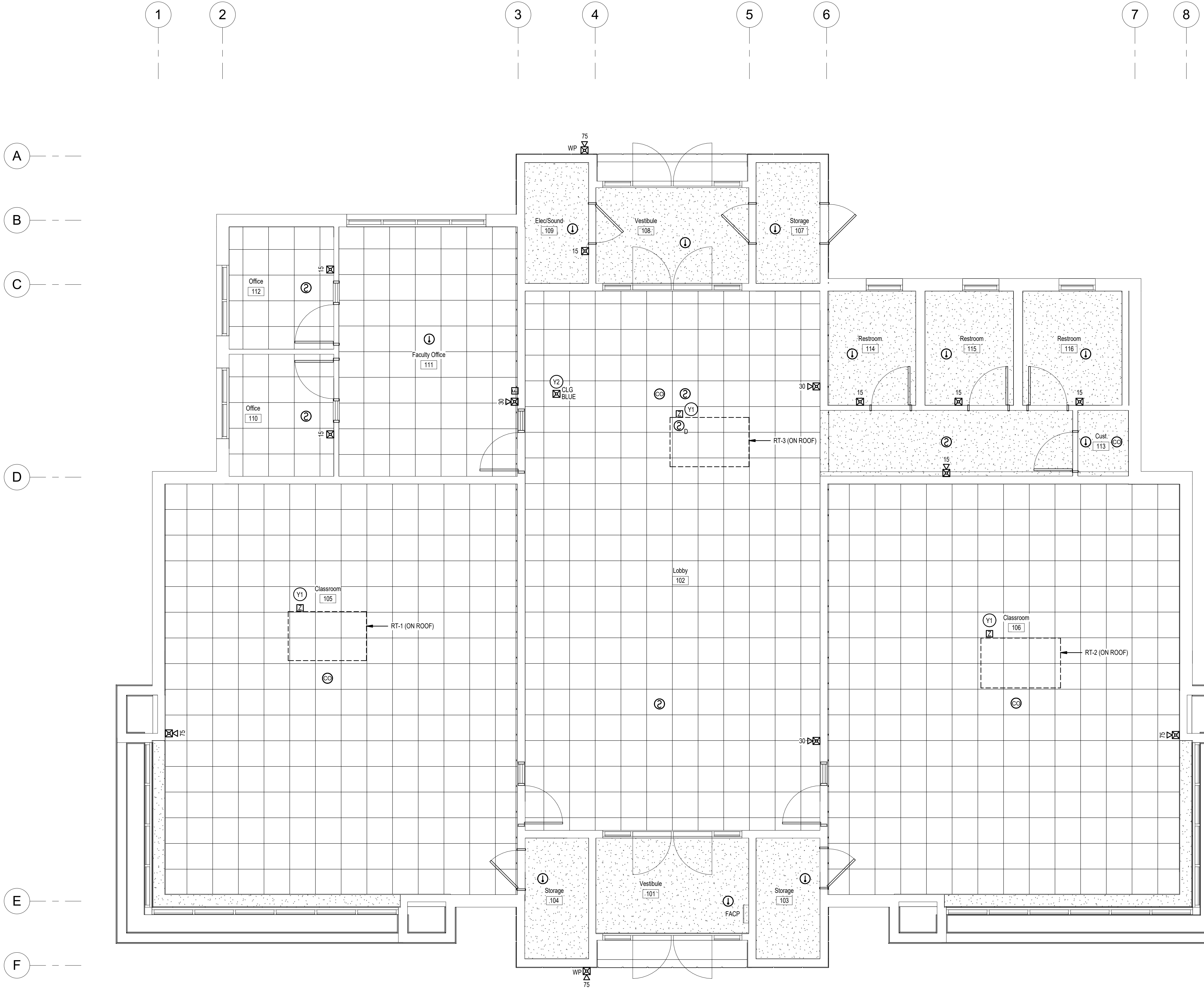
May 1, 2023

POWER DETAILS

EP501



ENV-2023-011



- SYSTEMS GENERAL NOTES:**
- COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
 - DO NOT LOCATE ANY FIRE ALARM DEVICES BEHIND DOORS OR OVER SHELIVING. REFER TO THE ARCHITECTURAL DRAWINGS FOR SHELIVING LOCATIONS.
 - THE DIVISION 28 CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF ALL CONDUITS IN THE FIELD. THIS PLAN REPRESENTS A SCHEMATIC REPRESENTATION OF DEVICE LOCATIONS.
 - ALL CONDUITS THAT TERMINATE ABOVE THE CEILING SHALL TERMINATE WITH NYLON BUSHING.
 - CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE FIRE ALARM DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.
 - ALL FIRE ALARM DEVICE LOCATIONS, EQUIPMENT LOCATIONS, RISER DIAGRAM, ETC., ARE SCHEMATIC IN NATURE AND ARE SHOWN TO PROVIDE INTENT OF THE FIRE ALARM SYSTEM TO BE PROVIDED. FIRE ALARM SYSTEM SUPPLIER SHALL PROVIDE BID AND SHOP DRAWINGS THAT INCLUDE A FULL CODE COMPLIANT DESIGN INCLUDING ALL NOTIFICATION AND INITIATION DEVICES REQUIRED WHETHER SHOWN OR NOT.

- KEYED NOTES**
- Y1 TIE THE ROOF TOP UNITS TO THE FIRE ALARM SYSTEM FOR AUTOMATIC SHUT DOWN UPON ALARM OF DUCT SMOKE DETECTORS AND CO DETECTION.
 - Y2 PROVIDE BLUE STROBE IN THE APPROXIMATE LOCATION SHOWN FOR ALARM UPON CO DETECTION.

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
 2535 West Wilson Lane
 West Haven, Utah



ENV-2023-011

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

Project Number:	22-59
Property Number:	502-1091-2202101
May 1, 2023	
SYSTEMS PLAN	
EY101	

FIRE ALARM SYSTEM GENERAL NOTES:

- PROVIDE ADDRESSABLE FIRE ALARM SYSTEM. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- THE SYSTEM SHALL BE PROGRAMMED SO THAT IF ANY INITIATION DEVICE IS ACTUATED, AN ALARM SIGNAL WHICH IS AUDIBLE THROUGHOUT THE BUILDING ZONES AS REQUIRED BY THE FIRE MARSHAL WILL BE ACTIVATED.
- WIRING SHALL BE CONTINUOUS FROM ONE DEVICE TO ANOTHER. NO SPLICING IS ALLOWED. REFER TO THE SPECIFICATIONS FOR THE OWNER CABLING REQUIREMENTS.
- PROVIDE FIRE ALARM MAP OF THE BUILDING SHOWING ALL FIRE ALARM SYSTEM DEVICES. MAP TO INCLUDE BUT NOT LIMITED TO THE FOLLOWING:
 - EXACT LOCATIONS OF ALL DEVICES, FIRE ALARM CONTROL PANEL AND NAC PANELS.
 - ROOM NAMES
 - ALL DEVICE ADDRESS SHALL BE INDICATED ON THE DRAWINGS.
 - ALL MAPS SHALL BE 11"X17". PROVIDE ONE SET IN A SLEEVED 3 RING BINDER. DELIVER 3 RING BINDER WITH MAPS TO THE ELECTRICAL ENGINEER FOR REVIEW AND APPROVAL AS PART OF THE CLOSE DOCUMENTS. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- FIRE ALARM RISER CABLING SHALL BE RUN IN CONDUIT. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUIT, JUNCTION BOXES AND FITTINGS SHALL BE RED IN COLOR AND LABELED PER ALL OWNER STANDARDS. ALL CABLING SHALL BE RATED FOR USE IN A FIRE ALARM SYSTEM PER ALL NFPA AND NEC REQUIREMENTS.
- THE FIRE ALARM SYSTEM SUPPLIER SHALL PROVIDE COMPUTER DRAFTED SHOP DRAWINGS OF THE ENTIRE FIRE ALARM SYSTEM USING FLOOR PLANS PROVIDED BY THE ENGINEER. SHOP DRAWINGS TO INCLUDE BATTERY CALCULATIONS, VOLTAGE DROP CALCULATIONS, PLANS, SECTIONS, ELEVATIONS, FINAL DEVICE LOCATIONS AND ADDRESS, CONDUIT SIZE AND ROUTING AND ALL CONDUCTOR SIZES (SEE SPEC FOR OWNER STANDARDS). TYPICAL RISERS AND CALCULATIONS WILL NOT BE ACCEPTED. ALL SHOP DRAWINGS SHALL BE PREPARED AND APPROVED BY A NICET CERTIFIED FIRE ALARM TECHNICIAN, LEVEL III OR GREATER.
- ALL NOTIFICATION DEVICE CIRCUIT VOLTAGE DROP CALCULATIONS SHALL BE DONE IN COMPLIANCE WITH NFPA 72. THE FIRE ALARM SYSTEM SUPPLIER TO DETERMINE THE AMOUNT NOTIFICATION DEVICE CIRCUITS THAT ARE REQUIRED BASED ON THE NUMBER OF THE NOTIFICATION DEVICES SHOWN ON THE DRAWINGS. THE FIRE ALARM SUPPLIER SHALL DETERMINE THE AMOUNT OF 'NAC' PANELS THAT WILL BE REQUIRED BASED ON THE QUANTITY OF NOTIFICATION DEVICE CIRCUITS.
- FAN SHUT DOWN RELAY(S) IN THE AIR HANDLING EQUIPMENT SHALL BE NORMALLY ENERGIZED, AND CONNECTED THROUGH AND CONTROLLED BY A NORMALLY CLOSED CONTACT IN THE FIRE ALARM PANEL, OR A NORMALLY CLOSED CONTACT OF A REMOTE RELAY UNDER SUPERVISION BY THE MAIN PANEL. THE RELAYS WILL TRANSFER ON ALARM, AND SHALL NOT RESTORE UNTIL THE PANEL IS RESET.
- AUDIBLE ANNUNCIATION DEVICES SHALL BE SILENCE-ABLE VIA THE FACP FRONT PANEL WHILE ALLOWING VISUAL ANNUNCIATION DEVICES TO REMAIN IN ALARM.
- SUBMIT TO THE LOCAL AUTHORITY HAVING JURISDICTION, A MINIMUM OF TWO SETS OF PLANS, COMPLETE WITH MANUFACTURER CUT SHEETS, AND BATTERY CALCULATIONS AND FIRE COMMAND CENTER LAYOUT. PLANS MUST BE INK SIGNED BY A NICET LEVEL III OR BETTER IN FIRE ALARM SYSTEMS.
- VERIFY AND COMPLY WITH ALL CURRENT STATE, LOCAL AND NATIONAL CODES. COMPLY WITH ALL NEC AND NFPA REQUIREMENTS.
- UPON CLOSE OUT OF THE PROJECT THE FIRE ALARM SYSTEM SUPPLIER TO PROVIDE A CD(S) WITH CAD AND PDF DRAWINGS OF THE BUILDING FIRE ALARM MAP, CAD AND PDF AS-BUILT DRAWINGS, GENERAL PROGRAMMING, SITE SPECIFIC PROGRAMMING, O&M MANUALS FOR THE FIRE ALARM SYSTEM AND A TUTORIAL ON PROGRAMMING THE SYSTEM. REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- CONTRACTOR IS RESPONSIBLE FOR MAKING AND OBTAINING APPROVAL FOR ALL NECESSARY ADJUSTMENTS IN CIRCUITRY AS REQUIRED ACCOMMODATING THE RELOCATION OF EQUIPMENT AND/OR DEVICES WHICH ARE AFFECTED BY ANY AUTHORIZED CHANGE. ALL CHANGES SHALL BE CLEARLY INDICATED ON THE RECORD DRAWINGS.
- FIRE RATINGS SHALL BE MAINTAINED FOR ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION.
- THE POWER CIRCUIT TO THE FACP AND TO THE FIRE ALARM POWER SUPPLIES SHALL BE ON A DEDICATED 120V, 20A BRANCH CIRCUIT BREAKER, AND SHALL HAVE A RED MARKING, LOCK-ON PROVISION AND SHALL BE IDENTIFIED AS FIRE ALARM CIRCUIT CONTROL. THE LOCATION OF THE CIRCUIT DISCONNECT MEANS (CIRCUIT BREAKER) SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
- POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST REMAIN SEPARATED IN CABINET. ALL POWER-LIMITED CIRCUIT WIRING MUST REMAIN AT LEAST 0.25 AWAY FROM ANY NON POWER-LIMITED CIRCUIT WIRING. FURTHERMORE, ALL POWER-LIMITED AND NONPOWER-LIMITED CIRCUIT WIRING MUST ENTER AND EXIT THE CABINET THROUGH DIFFERENT KNOCKOUTS AND/OR SEPARATE CONDUITS.
- MAINTAIN 40 PERCENT CONDUIT FILL RATIO AS PER NEC REGULATIONS.
- WHEN UTILIZING SHIELDED CABLES, THE SHIELDS THROUGH AND INSULATE AT EACH JUNCTION BOX. INSULATE AND TAPE BACK TO BACK END OF JUNCTION BOX.
- WHEN UTILIZING CLASS A CIRCUITS, SEPARATE OUTGOING AND RETURN CONDUCTORS BY A MINIMUM OF 12" WHERE RUN VERTICALLY AND 48" WHERE RUN HORIZONTALLY.
- ALL FIRE ALARM CABLING SHALL BE ACCEPTABLE TO THE FIRE ALARM EQUIPMENT MANUFACTURER FOR THE INTENDED PURPOSE.
- FIRE ALARM CABLE INSTALLED IN DUCTS, PLENUMS, AND OTHER SPACES USED FOR ENVIRONMENTAL AIR SHALL BE TYPE FPLR.
- FIRE ALARM CABLES INSTALLED IN VERTICAL RUNS AND PENETRATE MORE THAN ONE FLOOR OR CABLES INSTALLED IN VERTICAL SHAFTS SHALL BE TYPE FPLR.
- SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED AND FINAL.
- LOCATE SMOKE DETECTORS A MINIMUM OF THREE(3) FEET FROM MECHANICAL DIFFUSERS.
- PROVIDE SYNCHRONIZATION OF ALL VISUAL NOTIFICATION APPLIANCE CIRCUITS.
- UPON COMPLETION OF THE FIRE ALARM SYSTEM INSTALLATION AND PROGRAMMING, THE INSTALLING CONTRACTOR SHALL PERFORM FINAL TESTING OF THE ENTIRE SYSTEM, PER ALL APPLICABLE CODES, AND SHALL COORDINATE AND PERFORM A FINAL FIRE ALARM INSPECTION.
- INSTALLING CONTRACTOR SHALL PHYSICALLY LABEL ALL INITIATING DEVICES. THESE LABELS SHALL BE IN PLACE PRIOR TO START-UP AND TESTING.

SYSTEMS GENERAL NOTES:

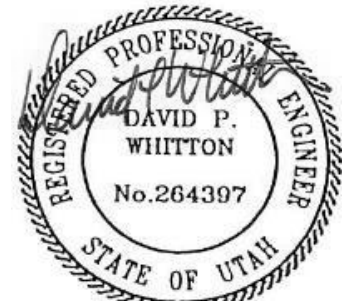
- COORDINATE ALL WALL MOUNTED LOCATIONS WITH THE ARCHITECT.
- DO NOT LOCATE ANY FIRE ALARM DEVICES BEHIND DOORS OR OVER SHELVING. REFER TO THE ARCHITECTURAL DRAWINGS FOR SHELVING LOCATIONS.
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- CONTRACTOR SHALL COORDINATE ALL CEILING MOUNTED DEVICES WITH THE LIGHTING PLANS. RELOCATE FIRE ALARM DEVICES AS NECESSARY. RELOCATED DEVICES SHALL COMPLY WITH ALL NFPA SPACING REQUIREMENTS.
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KEYED NOTES

- | | |
|-----|--|
| FA1 | EXTEND INITIATION CABLES TO ADDRESSABLE FIRE ALARM DEVICES INCLUDING SMOKE AND HEAT DETECTORS, DUCT SMOKE DETECTORS, MONITOR MODULES, CONTROL MODULES, AND MANUAL PULL STATIONS. REFER TO THE FIRE ALARM PLANS FOR QUANTITIES, DEVICE TYPES AND LOCATIONS. INCLUDE 24VDC POWER WIRING AS REQUIRED FOR CONTROL MODULES AND DUCT SMOKE DETECTORS. PROVIDE A MINIMUM OF 20% SPARE CAPACITY, PER ADDRESSABLE LOOP, FOR FUTURE USE. |
| FA2 | EXTEND NOTIFICATION CABLES TO FIRE ALARM HORN/STROBES AND STROBES. REFER TO THE FIRE ALARM PLANS FOR QUANTITIES, DEVICE TYPES AND LOCATIONS. PROVIDE SYNC MODULES FOR STROBES AS REQUIRED TO COMPLY WITH ALL APPLICABLE ADA CODES. CIRCUIT PER ALL MANUFACTURERS RECOMMENDATIONS. PROVIDE A MINIMUM OF 20% SPARE CAPACITY, IN FACP AND EACH NAC PANEL, FOR FUTURE USE. |
| FA4 | EXTEND A 3/4" CONDUIT WITH TWO (2) CAT.6 CABLES TO THE TELEPHONE TERMINAL BOARD. |
| FA7 | EXTEND 3/4" CONDUIT WITH CABLING PER ALL MANUFACTURERS RECOMMENDATIONS. |
| FA8 | PROVIDE LAMINATE LABEL IN FACP WITH PANELBOARD BRANCH CIRCUIT NUMBER AND PANELBOARD ROOM NUMBER. |
| FA9 | EXTEND A 3/4" CONDUIT WITH 2#12 AND 1#12 GND. TO PANEL SHOWN ON PLANS, IDENTIFY BREAKER WITH RED LABEL STATING "FIRE ALARM CIRCUIT". |

Revision Schedule

#	Description	Date



Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary
2535 West Wilson Lane
West Haven, Utah

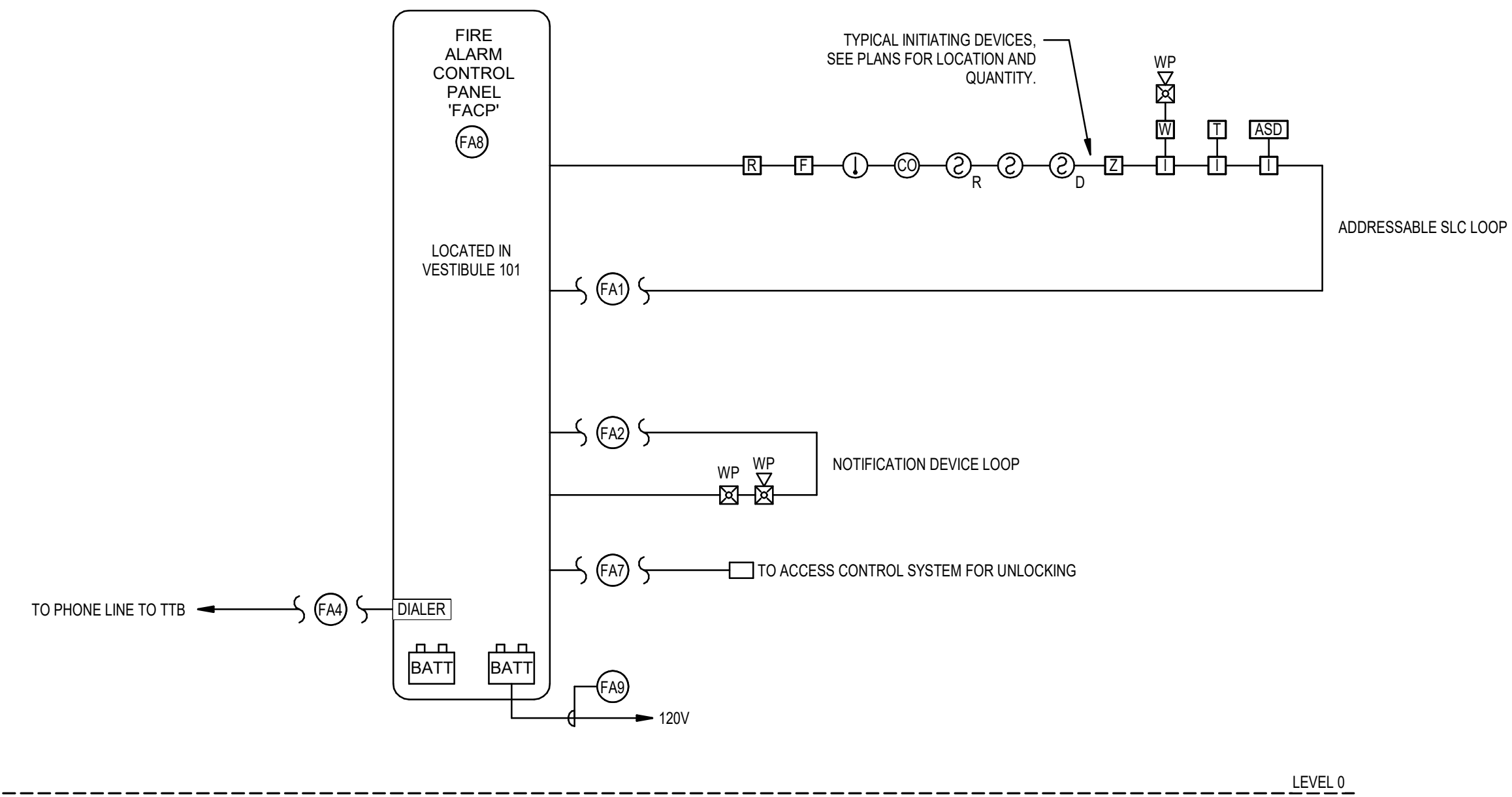
Project Number: 22-59

Property Number: 502-1091-2202101

May 1, 2023

FIRE RISER DIAGRAM

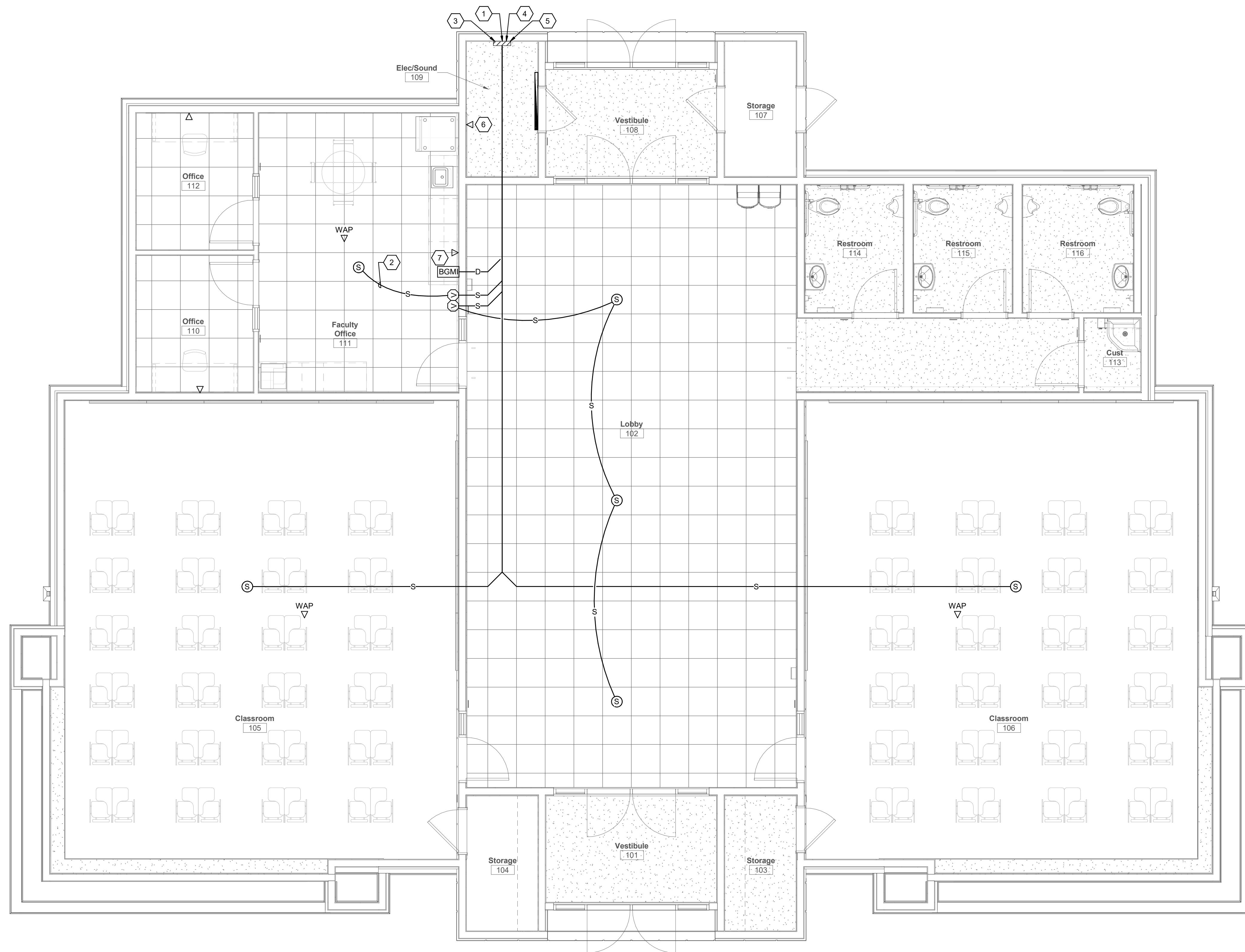
EY701



FIRE RISER DIAGRAM HORN ALARM SYSTEM
SCALE: NTS



ENV-2023-011



GENERAL SHEET NOTES

- NO CHANGES SHALL BE MADE WITHOUT THE PROJECT AV/STRUCTURED CABLING CONSULTANT'S WRITTEN CONSENT.
- REFER TO DRAWINGS FOR EXACT NUMBER OF COMPONENTS USED IF NOT SPECIFIED IN EQUIPMENT LIST.
- DIVISION 26 INSTALLER IS TO PROVIDE ALL ROUGH-IN INDICATED FOR DIVISION 27 INSTALLER. ALL ROUGH-IN SHALL COMPLY WITH ANSI/TIA/EIA 569-B STANDARDS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE LIMITATION OF (2) 90° BEND FOR CONDUIT. IT IS THE DIVISION 26 INSTALLERS RESPONSIBILITY TO ENSURE COMPLIANCE WITH STANDARD. VOICE-DATA CABLE SHALL BE INSTALLED IN MINIMUM 1" CONDUIT.
- RACEWAY SHALL BE INSTALLED BY DIVISION 26. CABLING SHALL BE INSTALLED BY DIVISION 27. VOICE-DATA CABLING AND TERMINATIONS SHALL COMPLY WITH SECTION 27 1501.
- SPEAKER TRIM RINGS ARE FURNISHED BY DIVISION 27 AND INSTALLED BY DIVISION 26.
- ET SHEETS SHOW WORK AND MATERIALS BY DIVISION 26 AND DIVISION 27. SEE SPECIFICATIONS AND DRAWING NOTES FOR RESPONSIBILITY FOR EACH ITEM.
- ALL CONDUIT STUBS SHALL BE LABELED WITH DESTINATION.
- PROVIDE 200# NYLON PULL CORD IN ALL EMPTY CONDUITS AND TAG BOTH ENDS. CONDUITS SHALL COMPLY WITH ANSI/TIA/EIA 569-A STANDARDS.
- WHERE LOCATED IN INACCESSIBLE WALL, CEILING, OR ATTIC SPACES, AUDIO, VIDEO, AND CONTROL CABLE TO BE INSTALLED IN CONDUIT. CONDUIT SHALL BE A MINIMUM OF .75" UNLESS NOTED OTHERWISE.
- INSTALL ALL VOICE-DATA OUTLETS WITHIN 6" OF POWER.
- PROVIDE SEISMIC WIRES SECURED TO STRUCTURE FOR ALL SPEAKER LOCATIONS.

SHEET KEYNOTES

- PROVIDE 1" CONDUIT TO ATTIC SPACE CLOSEST TO SCHOOL FOR ANTENNA LINK TO SCHOOL. ANTENNA EQUIPMENT AT BOTH ENDS OF LINK (SEMINARY AND SCHOOL) TO BE FURNISHED AND INSTALLED BY SEMINARY AV INSTALLER.
- SPEAKER CABLE BY DIVISION 27. CONDUIT NOT REQUIRED IN LAY-IN CEILINGS.
- PROVIDE 3 EACH, 2" CONDUITS TO ACCESSIBLE FACULTY OFFICE 111 CEILING SPACE.
- PROVIDE CONDUIT TO TELCO PROVIDER. VERIFY CONDUIT SIZE WITH PROVIDER.
- PROVIDE CONDUIT TO CABLE PROVIDER. VERIFY CONDUIT SIZE WITH PROVIDER.
- MOUNT NEXT TO 'BGM' BUILDING MANAGEMENT GATEWAY NETWORK INTERFACE. SEE SHEET ME101.
- INSTALL DEVICES ADJACENT TO POWER OUTLET ABOVE COUNTERTOP HEIGHT.

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Revision Schedule

#	Description	Date
1	Bid Documents	8 Nov 2022



Project for:

THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS

A New Building for

**Mountain View Jr
Seminary**

1975 South (Wilson Lane)
West Haven, Utah

Project Number: 22-59

Property Number: 501-8962

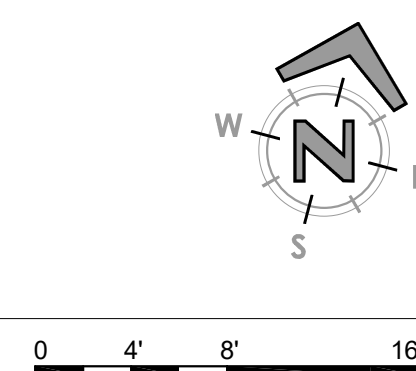
April 14, 2023

AV Rough-in Plan

ET101

1 AV ROUGH-IN PLAN

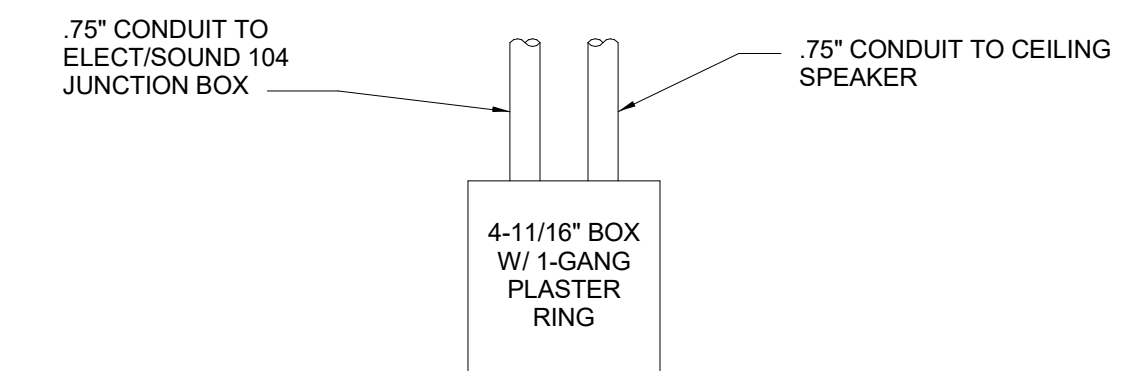
SCALE: 1/4" = 1'-0"



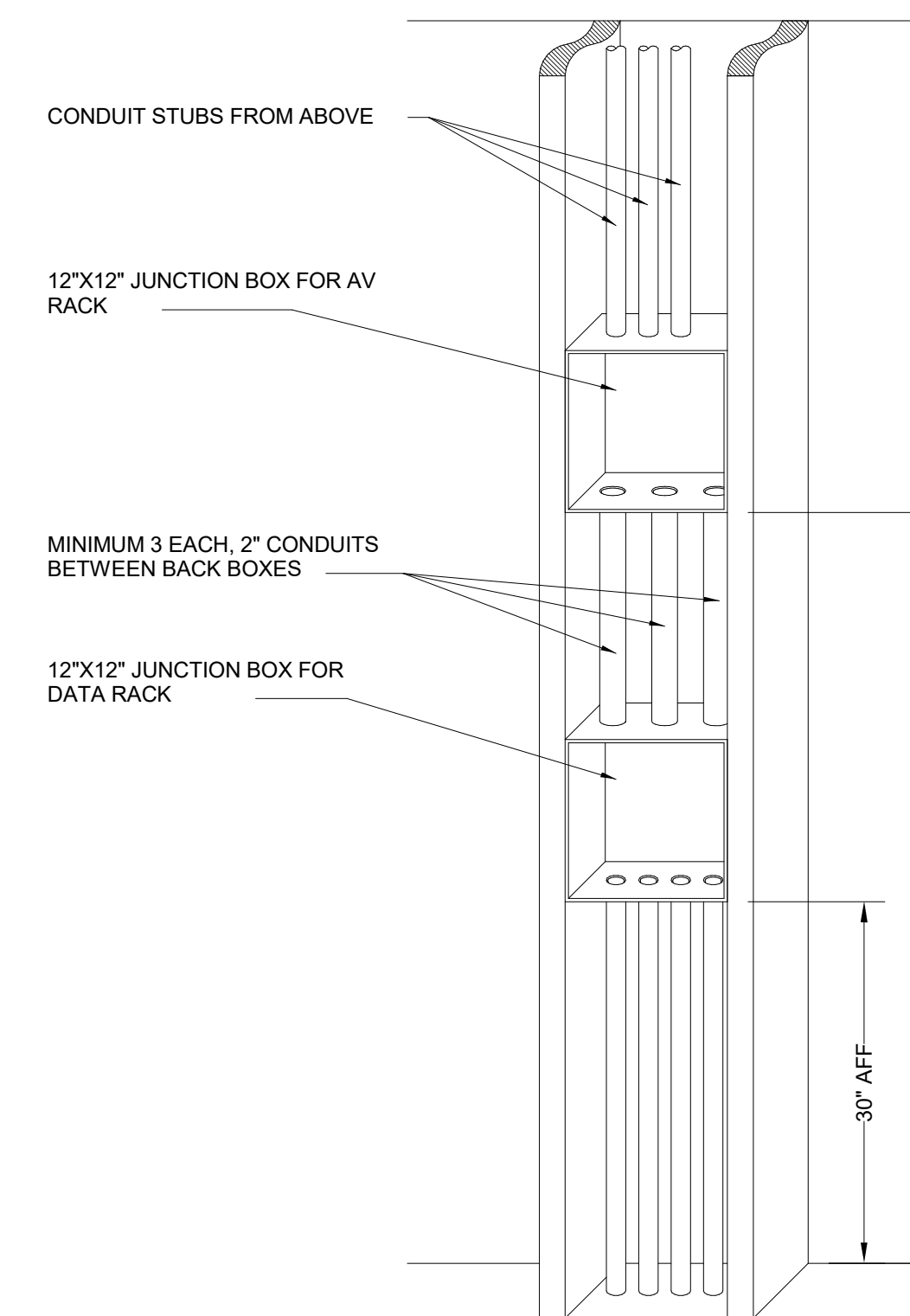
ELECTRICAL EQUIPMENT LIST

SYM	DESCRIPTION	QTY	NOTES
Ⓧ	2-1/8" DEEP, 4-11/16" SQUARE BOX W/ 5/8" DEEP, SINGLE GANG PLASTER RING MOUNTED AT ELECTRICAL SWITCH HEIGHT	OFFP	SEE DETAILS 1/TA602 AND 2/ET501
⊞	12"X12"X4" JUNCTION BOXES MOUNTED PER DETAIL 1/ET501	2	COORDINATE EXACT LOCATION W/ MILLWORK DRAWINGS
Ⓢ	SPEAKER LOCATION, LAY-IN CEILING TILE	OFFP	FURNISHED AND INSTALLED BY DIVISION 27 INSTALLER
BGMI	2-1/8" DEEP, 4-11/16" SQUARE BOX W/ 5/8" DEEP, SINGLE GANG PLASTER RING MOUNTED AT ELECTRICAL SWITCH HEIGHT	OFFP	
▮	PLYWOOD BACKBOARD, .75" FIRE-TREATED, PAINTED WHITE, 2 EACH, 4x8' SHEETS	OFFP	EXTEND TO FINISHED FLOOR
△X	2-1/8" DEEP, 4-11/16" SQUARE BOX W/ 5/8" DEEP, SINGLE GANG PLASTER RING MOUNTED AT ELECTRICAL OUTLET HEIGHT OR AS NOTED, (X) = # OF DATA JACKS IF MORE THAN 1	OFFP	DATA OUTLET SEE DETAIL 4/TT602
△WAP	2-1/8" DEEP, 4-11/16" SQUARE BOX W/ 5/8" DEEP, SINGLE GANG PLASTER RING MOUNTED FLUSH IN FINISHED CEILING	OFFP	DATA OUTLET FOR WIRELESS ACCESS POINT, SEE DETAILS 4/TT602 AND 5/TT602
—	CONDUIT WITH NYLON PULL CORD, SIZED AS NOTED OR .75", WHICHEVER IS GREATER	A/R	
S(X)	SPEAKER CABLE, INSTALL IN CONDUIT IN WALLS AND INACCESSIBLE CEILING. (X) = NUMBER OF CABLES, IF MORE THAN ONE	A/R	CONDUIT INSTALLED BY ELECTRICAL, CABLE FURNISHED AND INSTALLED BY DIVISION 27, SEE SHEET TT601

MANUFACTURER'S NAMES AND TELEPHONE NUMBERS ARE LISTED IN THE SPECIFICATIONS
A/R = AS REQUIRED. OFFP = OBTAIN FROM PLANS



2 VOLUME CONTROL DETAIL
NTS



1 12"x12" IN-WALL J-BOX DETAIL
NTS

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Revision Schedule

#	Description	Date
1	Bid Documents	8 Nov 2022

ea architecture
11576 South State Street, Suite 103b
Draper, Utah 84020

Project for:
THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS

A New Building for
Mountain View Jr Seminary

1975 South (Wilson Lane)
West Haven, Utah

Project Number: 22-59

Property Number: 501-8962

April 14, 2023

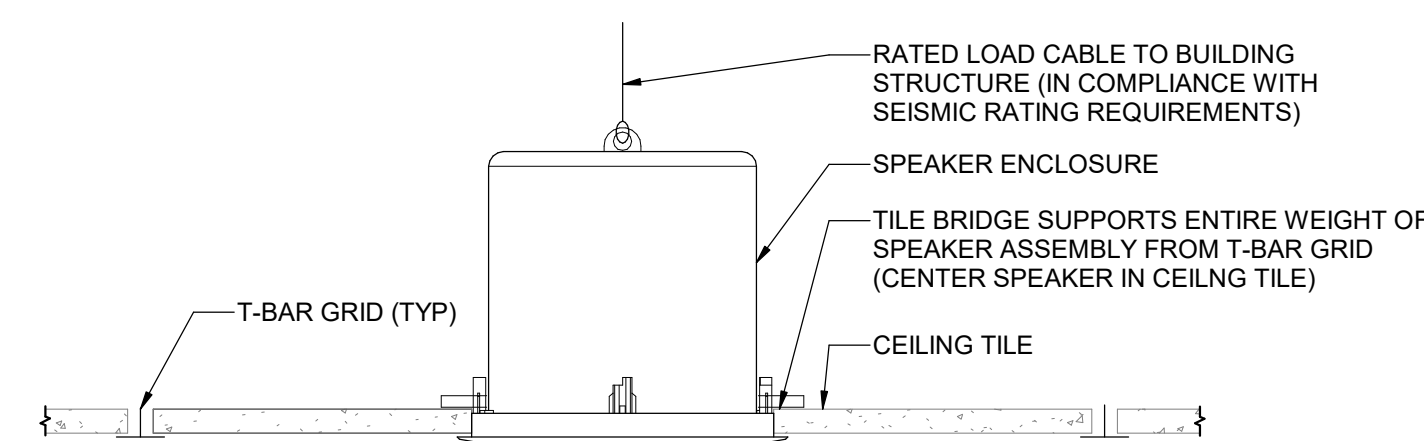
AV Rough-in Details

ET501

AUDIO-VIDEO SYSTEM EQUIPMENT LIST

SYM	DESCRIPTION	QTY	ACCEPTABLE TYPES
1	EQUIPMENT RACK, WALL MOUNTED, 12RU, AND DOOR	2	MIDDLE ATLANTIC DWR-12-22, PFD-12
AI	AUDIO INTERFACE, STEREO UNBALANCED TO MONO BALANCED, PASSIVE	A/R	EXTRON ASA141 RADIO DESIGN LABS TX-J2
MA	MIXER AMPLIFIER, 120 WATT	OFF	TOA A-712 ATLAS SOUND AA120
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR, 15 AMP, IN LECTERN	OFF	TRIPP-LITE ISOBAR 6 ULTRA, OR APPROVED EQUAL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR, 20 AMP, RACK MOUNTED	OFF	TRIPP-LITE IBAR 12-20 ULTRA, OR APPROVED EQUAL
S	SPEAKER, 4" W/ GRILLE, ENCLOSURE, AND TILE BRIDGE, LAY-IN CEILING TILE	OFF	ATLAS SOUND FAP42T COMMUNITY C4
V	VOLUME CONTROL	OFF	EMTECH MSC-V35 ATLAS SOUND AT35D LABEL PER DETAIL
V	NYLON DECORA COVER PLATE, 1-GANG	OFF	HUBBELL OR LEVITON
BGMI	BACKGROUND MUSIC INPUT PLATE	OFF	RCI MI120-PW
BSC	BELL SYSTEM CONTROLLER	OFF	ALGO 8301 PAGING ADAPTER
PR	LINE TRANSFORMER	A/R	RADIO DESIGN LABS TX-1A PRO CO LOT-1
PR	SCHOOL INTERCOM TRANSMITTER, ASSEMBLY TRANSMITTER	1	COMTEK 3ST 75-216
PR	ANTENNA	1	50 OHM, 216MHz, 0db GAIN YAGI-UDA ANTENNA W/ BNC CONNECTION
PR	MOUNT, W/RUBBER PAS AND BALLAST	1	EZ UP EZ-NP-60-200
PR	50 OHM EXTERIOR CABLE AND CONNECTORS	1	TIMES LMR-600 W/ APPROPRIATE CONNECTORS
PR	RECEIVER, WITH MOUNT AND PHANTOM POWER CABLE	1	COMTEK 7R-R16 OPTION 7 RECIEVER W/ MBS-216 AND CB-86 XLM
PR	ANTENNA AND STANDARD CABLE	1	PRA-216 PHASE RIGHT ANTENNA
<p>NOTES:</p> <ol style="list-style-type: none"> MOUNT TRANSMIT ANTENNA ON PUBLIC SCHOOL ROOF, IN LINE OF SIGHT OF SEMINARY BUILDING. USE AN EXISTING ROOF PENETRATION. MOUNT RECEIVE ANTENNA IN SEMINARY ATTIC AT LOCATION CLOSEST TO TRANSMIT ANTENNA. VERTICALLY POLARIZE BOTH ANTENNAS. 			

MANUFACTURER'S NAMES AND TELEPHONE NUMBERS ARE LISTED IN THE SPECIFICATIONS
A/R = AS REQUIRED, OFF = OBTAIN FROM PLANS
OFI = OWNER FURNISHED AND INSTALLED, OFCI = OWNER FURNISHED, CONTRACTOR INSTALLED



LAY-IN CEILING TILE

1 CEILING SPEAKER INSTALLATION DETAIL
SCALE: 1/8" = 1'-0"

GENERAL PROJECT NOTES

1. NO CHANGES SHALL BE MADE WITHOUT THE PROJECT AUDIO-VISUAL/ACOUSTICAL CONSULTANTS WRITTEN CONSENT.
2. REFER TO DRAWINGS FOR EXACT NUMBER OF COMPONENTS USED IF NOT SPECIFIED IN EQUIPMENT LIST.
3. SEE "E" SHEETS FOR DEVICE LOCATIONS AND COORDINATION.
4. SEE "T" SHEETS FOR ADDITIONAL COORDINATION.
5. PROVIDE ALL CONNECTORS, CABLES, POWER SUPPLIES, RACK MOUNT KITS, ETC. AS NECESSARY FOR A COMPLETE SYSTEM.

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", "AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS.

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS. THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

A	-----	AUDIO
A/R	ADJ	AS REQUIRED
C	-----	ADJACENT
CAT	-----	CONDUIT
CFI	-----	CATEGORY
CV	-----	CONTRACTOR FURNISHED AND INSTALLED
DVI	-----	COMPOSITE VIDEO
DVD	-----	DIGITAL VISUAL INTERFACE
E	-----	DIGITAL VERSATILE DISK
EA	-----	ENHANCED
EX	-----	EACH
GR	-----	EXISTING
HDMI	-----	GROUND
I.O.F.	-----	HIGH-DEFINITION DIGITAL MEDIA INTERFACE
L	-----	INSTALLATION OF OWNER FURNISHED EQUIPMENT
MIC	-----	LEFT AUDIO CHANNEL, LINE LEVEL
N/A	-----	MIC LEVEL AUDIO
N.I.C.	-----	NOT APPLICABLE
OFCI	-----	NOT IN CONTRACT
OFI	-----	OWNER FURNISHED AND CONTRACTOR INSTALLED
OFF	-----	OWNER FURNISHED AND INSTALLED
QTY	-----	QUANTITY
OP	-----	OBTAIN FROM PLANS
POE	-----	OWNER PROVIDED
R	-----	POWER OVER ETHERNET
RGBHV	-----	RIGHT AUDIO CHANNEL, LINE LEVEL
RMK	-----	COMPUTER VIDEO
RU	-----	RACK MOUNT KIT
TYP	-----	RACK UNIT, 1.75"
V	-----	TYPICAL
VGA	-----	VOLT
VHS	-----	VIDEO GRAPHICS ARRAY
W/	-----	VIDEO HOME SYSTEM
YC	-----	WITH
YPP	-----	S-VIDEO
-----	-----	COMPONENT VIDEO



Revision Schedule

#	Description	Date
1	Bid Documents	8 Nov 2022



Project for:

**THE CHURCH OF
JESUS CHRIST
OF LATTER-DAY SAINTS**

A New Building for
**Mountain View Jr
Seminary**

1975 South (Wilson Lane)
West Haven, Utah

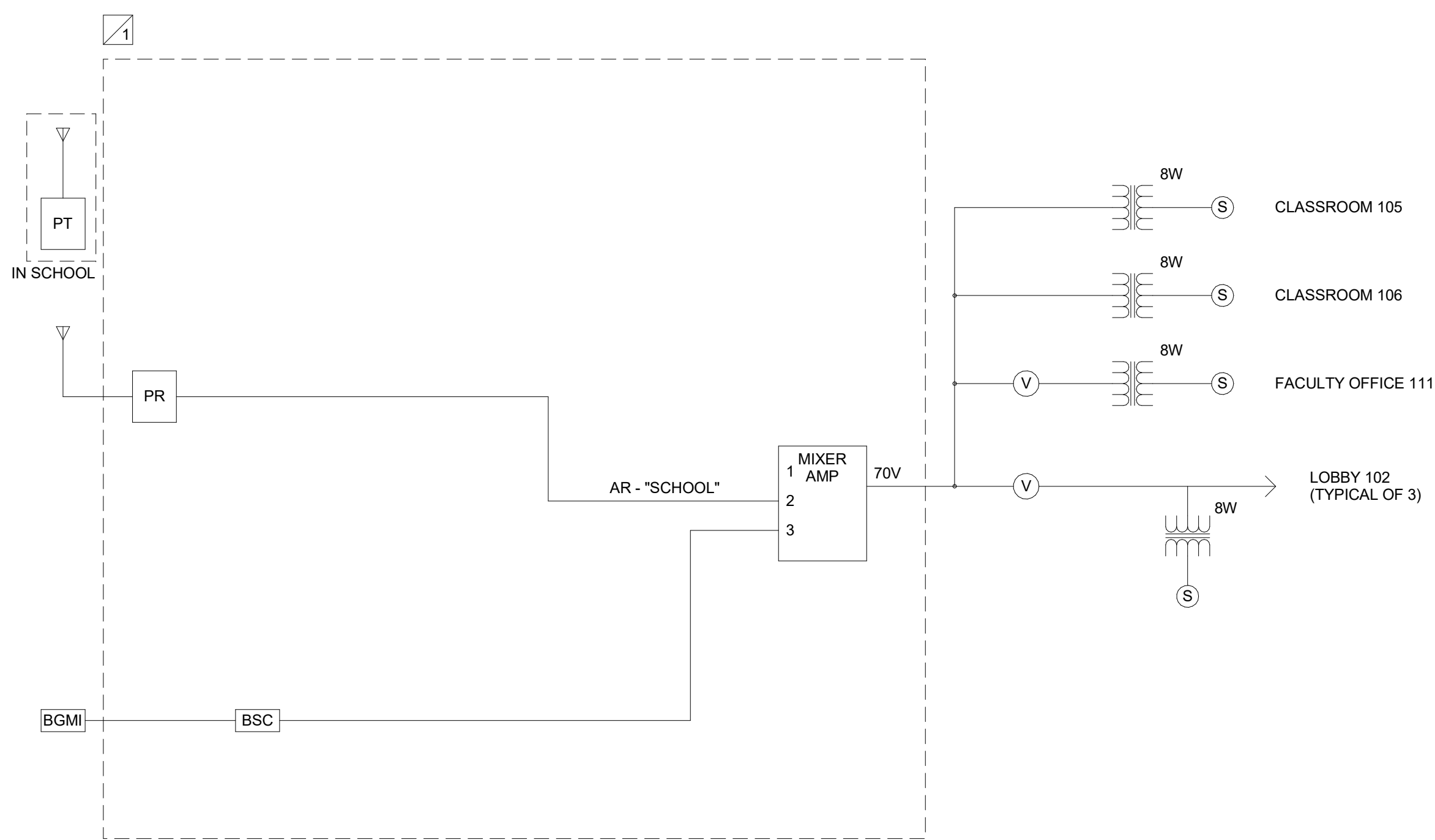
Project Number: 22-59

Property Number: 501-8962

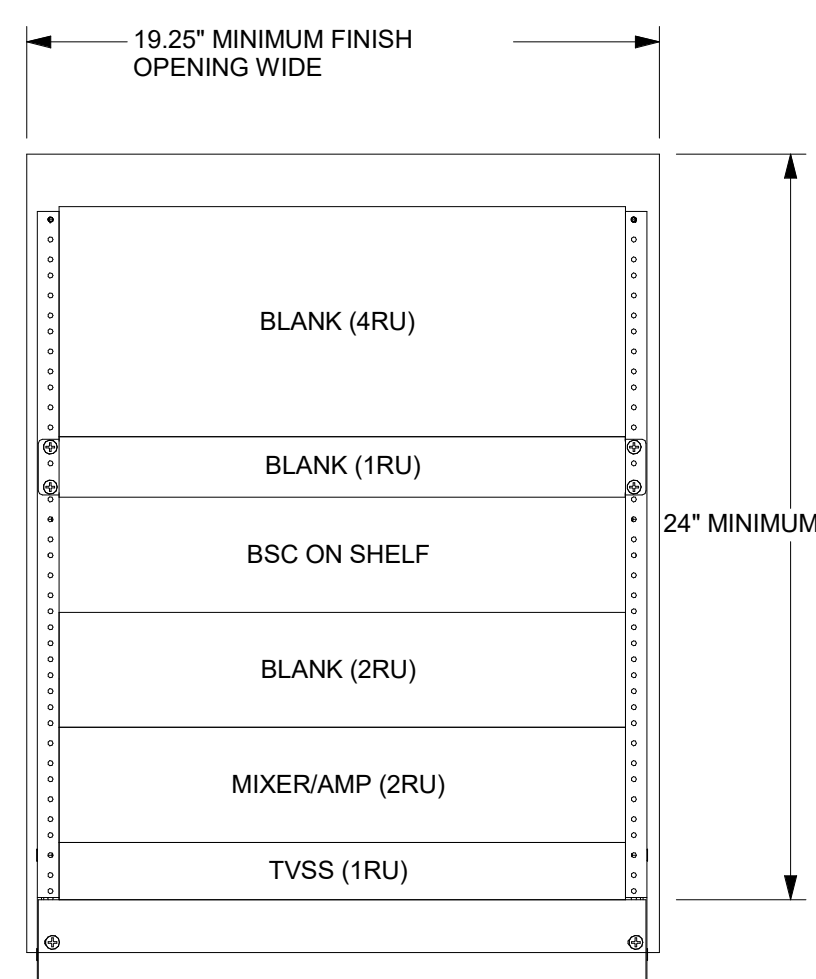
April 14, 2023

AV Rough-in Diagrams and Details

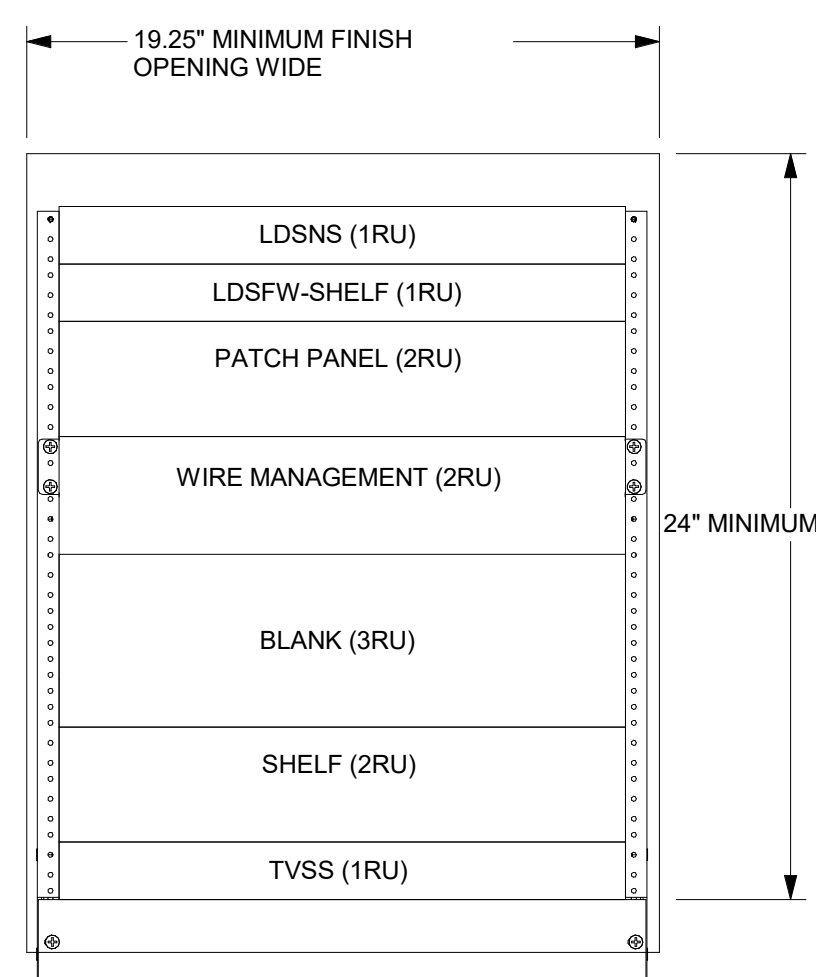
TA601



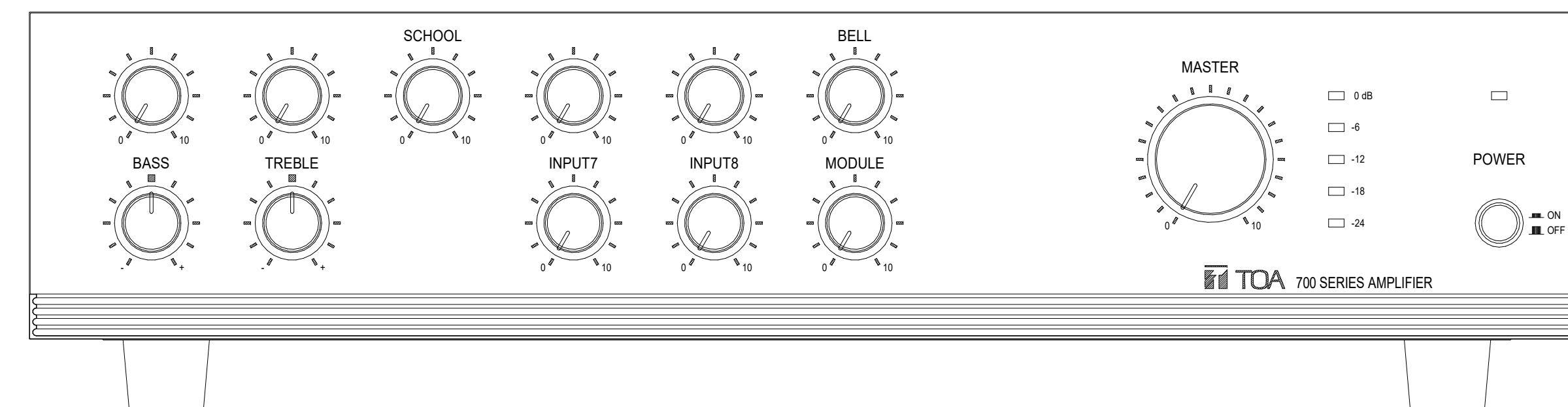
5 SUPPORT SPECIALIST
NTS



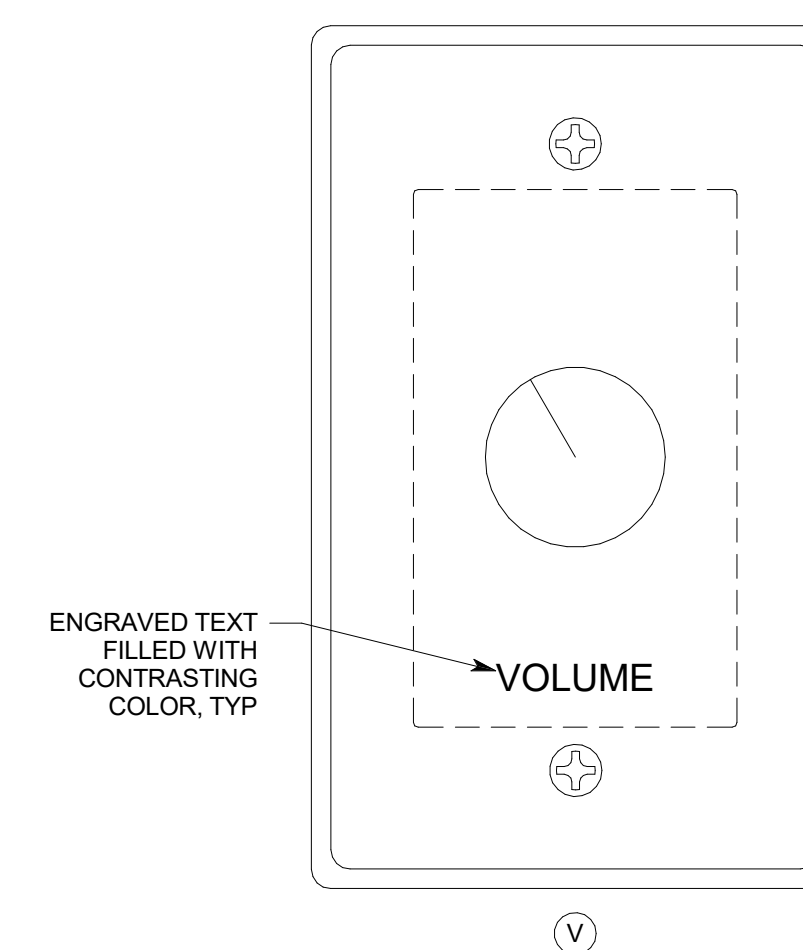
4 AV SUPPORT SPECIALIST
EQUIPMENT RACK DETAIL
NTS



3 IT SUPPORT SPECIALIST
EQUIPMENT RACK DETAIL
NTS



2 MIXER AMPLIFIER LABELS "MA"
NTS



1 VOLUME CONTROLS "V"
NTS

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AV Rough-in Diagrams and Details

TA602

VOICE-DATA SYSTEM EQUIPMENT/CABLE LIST

THE FOLLOWING IS A PARTIAL LIST OF MATERIALS FOR THE DATA/PHONE SYSTEM. REFER TO SPECIFICATION 27 1501 FOR FULL REQUIREMENTS. VERIFY ALL PART NUMBERS WITH MANUFACTURER'S CATALOG NUMBERS AND NOTIFY CONSULTANT OF DISCREPANCIES PRIOR TO BIDDING. FURNISH MISCELLANEOUS HARDWARE NOT LISTED TO PROVIDE A COMPLETE SYSTEM.

SYM	DESCRIPTION	ACCEPTABLE TYPES
TELCO DEMARC	TELECOMMUNICATIONS PROVIDER DEMARCATION POINT	FURNISHED AND INSTALLED BY PROVIDER
ISP DEMARC	INTERNET SERVICE PROVIDER DEMARCATION POINT	FURNISHED AND INSTALLED BY PROVIDER
DPP	PATCH PANEL, DATA, 48-PORT W/ CAT 6 INSERT, BLUE (QUANTITIES OF PORTS AS REQUIRED +25%)	SEE SPECIFICATION 271501
TVSS	SURGE SUPPRESSOR AND SWITCHER W/ UL LISTED PLUG STRIP	FURNISHED AND INSTALLED BY AV INSTALLER
	UL LISTED POWER STRIP	6 OUTLET POWER STRIP OR EQUAL
D(#)	STATION CABLE, DATA-CAT 6, DATA, (#) INDICATES NUMBER OF CABLES IF MORE THAN ONE	SEE SPECIFICATION 271501
WAP	DATA OUTLET, WIRELESS ACCESS POINT SINGLE GANG BEZEL	SEE SPECIFICATION 271501
	BEZEL INSERTS	SEE SPECIFICATION 271501
	CAT 6 JACK-DATA (1)	SEE SPECIFICATION 271501
	DATA OUTLET SINGLE GANG BEZEL	SEE SPECIFICATION 271501
	BEZEL INSERTS	SEE SPECIFICATION 271501
	CAT 6 JACK-DATA (X) INDICATED # OF JACKS, IF MORE THAN ONE	SEE SPECIFICATION 271501
	COPPER CAT 6 PATCH CABLES (1 DROP +25%)	SEE SPECIFICATION 271501
	CAT 6 J-HOOKS	CADDY CAT32Z34
HWM	HORIZONTAL WIRE MANAGER HORIZONTAL WIRE MANAGER SHALL NOT HAVE A DEPTH OF MORE THAN 3"	SEE SPECIFICATION 271501
NS	NETWORK SWITCH, OWNER STANDARD (IEA-IS FOR INTERNET ENABLED APPLIANCES) CONNECT NETWORK DEVICES REQUIRING 'POE' TO 'POE' PORTS ON SWITCH	OWNER FURNISHED-CONTRACTOR INSTALLED
	2 RACK UNIT SHELF FOR 'POE' SWITCH	MIDDLE ATLANTIC USM-11.5
FW	INTERNET FIREWALL, OWNER STANDARD	OWNER FURNISHED-CONTRACTOR INSTALLED
	2 RACK UNIT SHELF	MIDDLE ATLANTIC USM-11.5
ISP MODEM	INTERNET SERVICE MODEM	OWNER FURNISHED-CONTRACTOR INSTALLED
110 BLOCK	110 PUNCH DOWN BLOCK, CAT6	SEE SPECIFICATIONS 271501
WAP	WIRELESS ACCESS POINT, OWNER STANDARD, INSTALL AT EACH 'WAP' LOCATION SHOWN ON ET101.	OWNER FURNISHED-CONTRACTOR INSTALLED

NOTE: ALL PATCH PANELS AND ACCESSORIES SHALL BE BLACK IN COLOR

AUDIO-VIDEO CABLE EQUIPMENT LIST

SYM	DESCRIPTION	QTY	ACCEPTABLE TYPES
L(X)	LINE LEVEL CABLE, (X) INDICATES NUMBER OF CABLES, IF MORE THAN ONE	A/R	BELDEN 9451 WEST PENN 454 LIBERTY 22-1P-EZ OR AS APPROVED BY CONSULTANT
S(X)	SPEAKER CABLE, (X) INDICATES NUMBER OF CABLES, IF MORE THAN ONE	A/R	BELDEN 8471 WEST PENN 225 LIBERTY 16-2C-GRY OR AS APPROVED BY CONSULTANT

MANUFACTURER'S NAMES AND TELEPHONE NUMBERS ARE LISTED IN THE SPECIFICATIONS
A/R = AS REQUIRED

GENERAL PROJECT NOTES

- LABEL ALL CABLE REGARDLESS OF LENGTH.
- THE EQUIPMENT LABELING IDENTIFIED ON DETAILS IN THESE DRAWINGS ARE EXAMPLES ONLY. PRIOR TO FABRICATION, SUBMIT THE NOMENCLATURE FOR ALL CABLING AND EQUIPMENT TO THE CONSULTANT APPROVAL.
- COIL 5 FEET OF EXTRA VOICE-DATA CABLE AT THE TECHNOLOGY ROOM AND 18" AT THE OUTLET FOR EACH CABLE RUN.
- USE CADDY CLIPS FOR ALL CABLE OUTSIDE OF CONDUIT.
- ALL CABLE AND UTP TO TERMINATE ON BOTH ENDS.
- ALL VOICE-DATA OUTLETS ON WALLS SHALL BE MOUNTED WITHIN 6" OF A POWER OUTLET. IF CONTRADICTIONS ARISE ON PLANS, NOTIFY ENGINEER.
- REFER TO SHEET ET101 FOR VOICE-DATA JACK LOCATIONS, AND SHEET TA601 FOR ROUTING OF AV CABLE.
- EQUIPMENT RACK TO BE INSTALLED BY AV INSTALLER.
- ALL VOICE-DATA CABLING AND EQUIPMENT SHALL BE INSTALLED ACCORDING TO DIVISION 27 1501.
- INSTALL OWNER FURNISHED LDS NETWORK EQUIPMENT SHOWN, AS PART OF INSTALLATION SET UP AND CONFIGURE DEVICES IN ACCORDANCE WITH LDS REQUIREMENTS. COORDINATE WITH LOCAL FACILITIES MANAGER.
- COORDINATE WITH FACILITIES MANAGER AND PROJECT MANAGER WELL IN ADVANCE OF PROJECT COMPLETION TO ENSURE INSTALLATION OF ALL OWNER FURNISHED EQUIPMENT IS INSTALLED AND SET UP PROPERLY. IN ADDITION, ENSURE OWNER PROVIDES INTERNET SERVICE TO BUILDING PRIOR TO FINAL INSTALLATION OF AV AND VOICE DATA EQUIPMENT.
- INSTALL A DATA PATCH CABLE TO NS FOR ALL DATA LOCATIONS SHOWN ON PLANS.
- FURNISH AND INSTALL ALL AUDIO-VIDEO CABLE SHOWN. PROVIDE 3 FEET EXTRA CABLE AT OUTLET END AND 15' EXTRA CABLE AT EQUIPMENT RACK, COIL AND LABEL.
- INSTALL PATCH IN AND SET-UP OWNER FURNISHED WIRELESS ACCESS POINTS.
- SEE 'TA' AND 'ET' SHEETS FOR DEVICE LOCATIONS AND ADDITIONAL COORDINATION.

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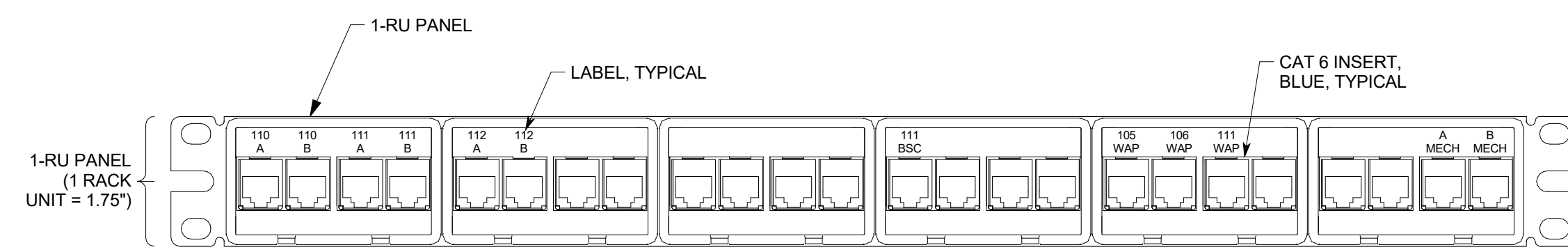
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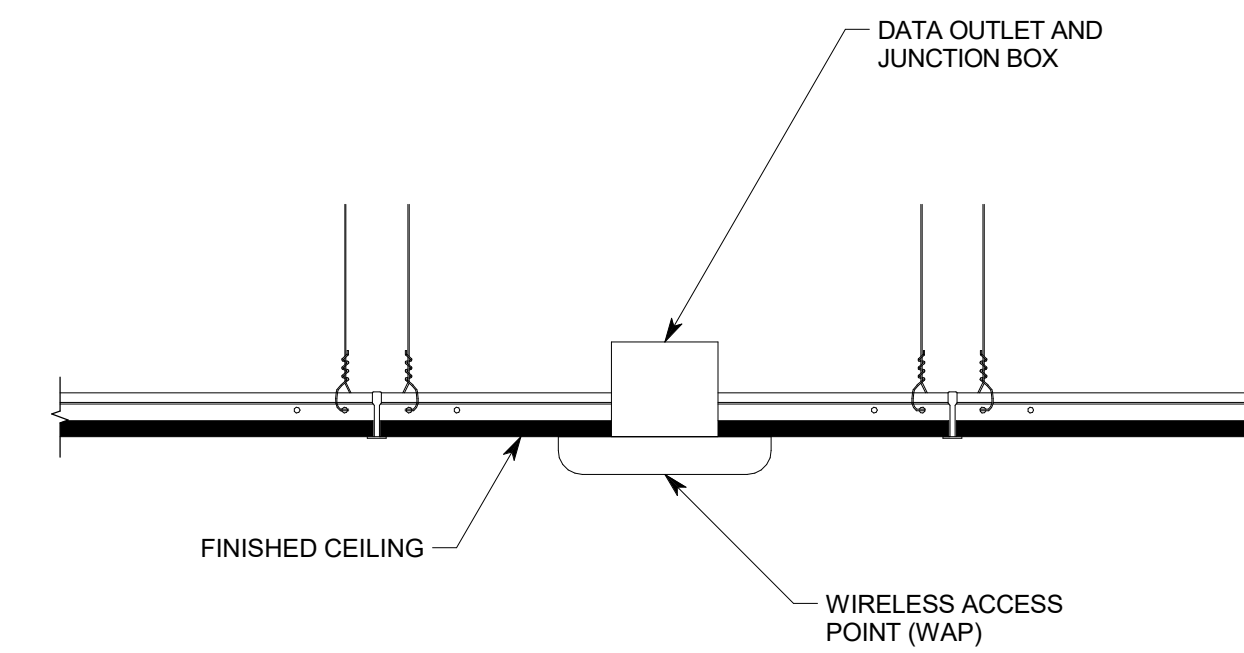
AV Systems Data Schedules

TT601

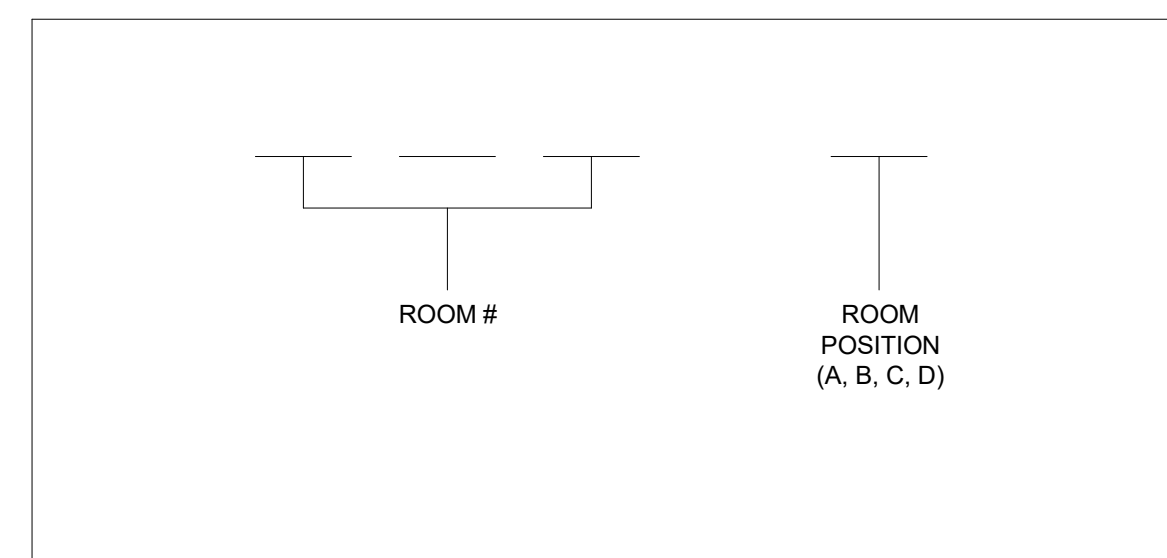


NOTE:
NUMBER SHOWN MATCHES DESIGN ROOM NUMBERS. FINAL LABELING FOR PATCH PANEL AND OUTLETS SHALL MATCH SIGNAGE POSTED FOR ROOMS.

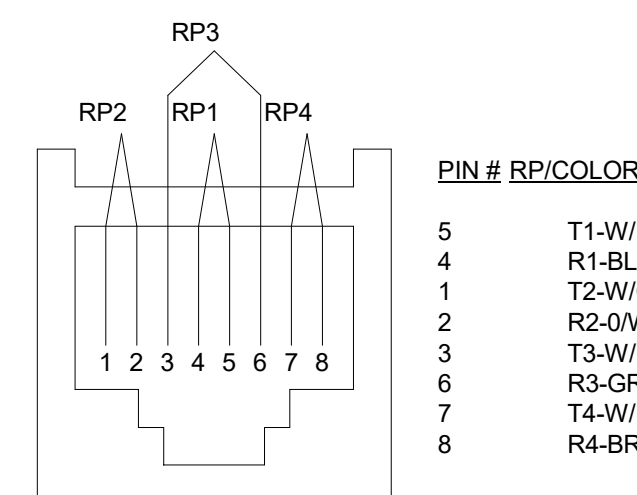
1 PATCH PANEL DETAIL, 24-PORT, TYPICAL
NTS



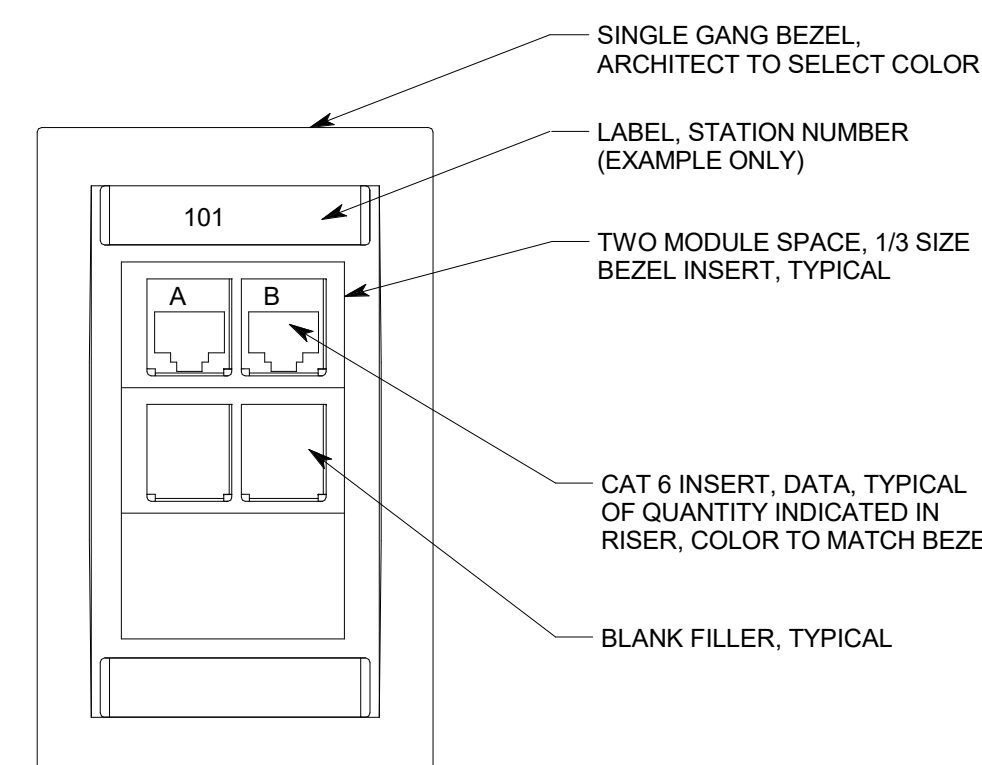
5 WIRELESS ACCESS POINT (WAP)
NTS



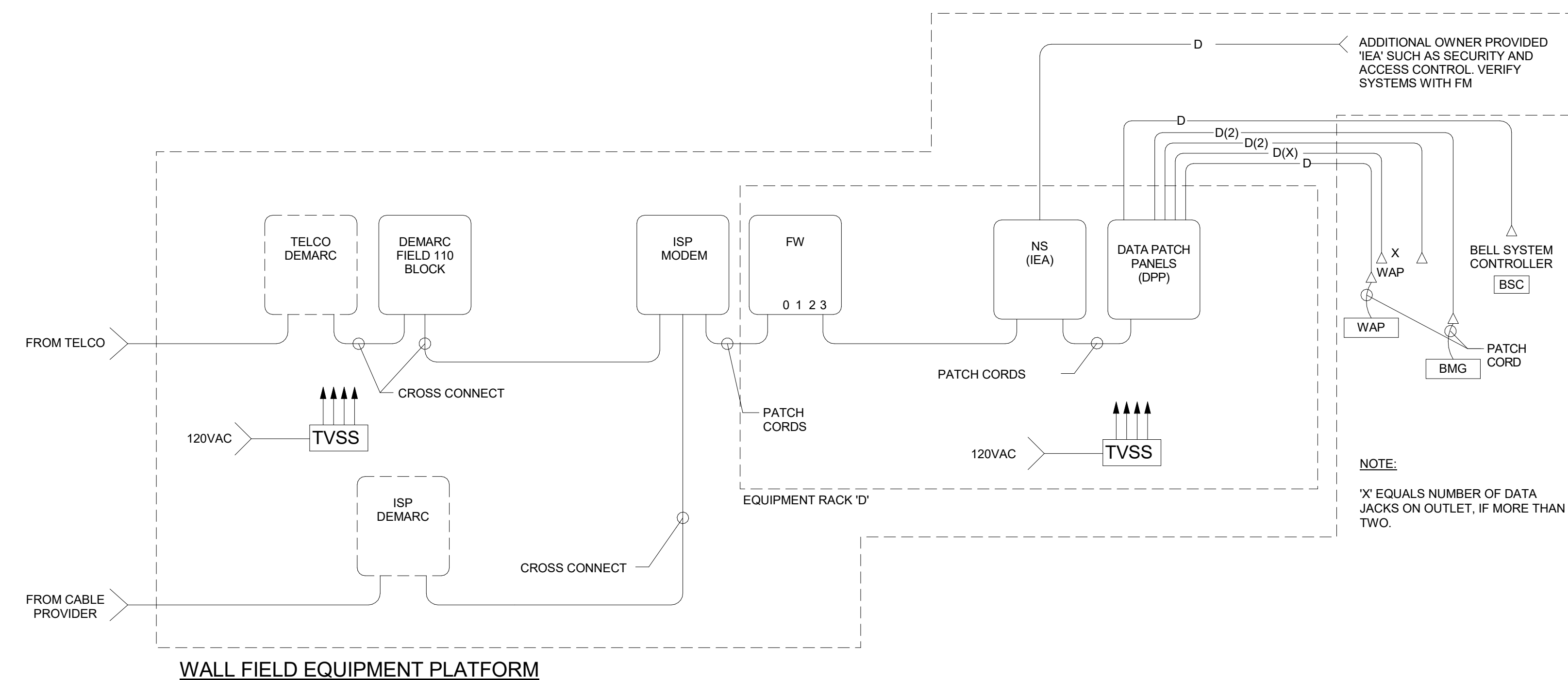
2 CABLE LABEL DETAIL
NTS



3 OUTLET PINNING DETAIL
NTS



4 TYP VOICE-DATA OUTLET
NTS



6 STRUCTURED CABLING RISER DIAGRAM
NTS

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AV Systems Riser Diagrams

TT602