

for the

Marion County Board of Education

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p 270-692-3721

The logo for Rosstarrant Architects features a stylized, bold, black 'R' icon on the left. To the right of the icon, the words 'rosstarrant' and 'architects' are stacked vertically in a lowercase, sans-serif typeface.

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enhancing education through great design

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COVER SHEET

MARION COUNTY MIDDLE SCHOOL ADDITION & REVNOATION

FOR:

MARION COUNTY BOARD OF EDUCATION

LEBANON, KENTUCKY

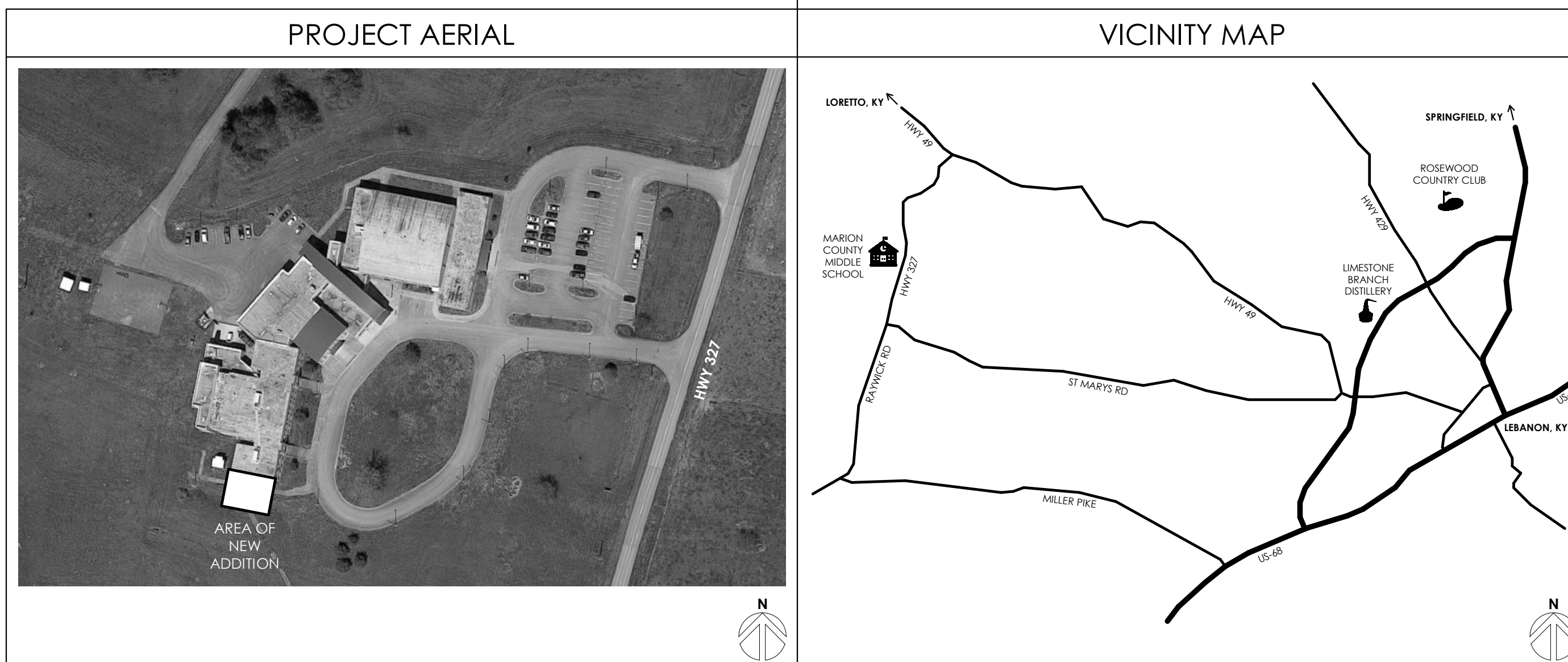
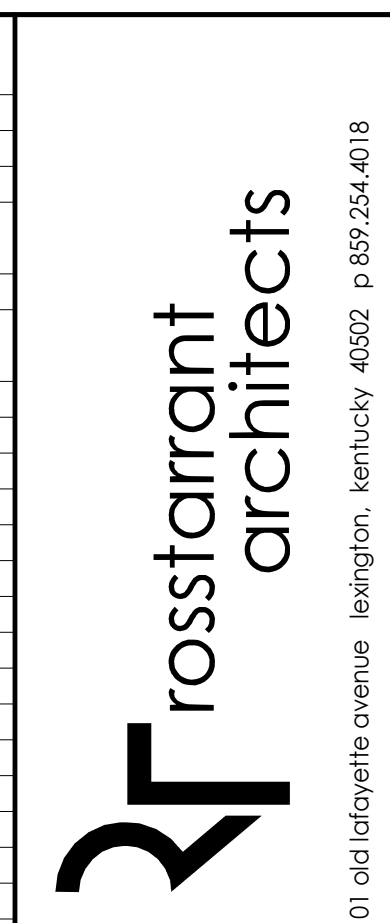
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BG#	
Project No:	1928
Drawn By:	RB
Rev'd By:	RM

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COVER SHEET
DATE ISSUED:
AUGUST 01, 2019





NOTE:
ALL DIMENSIONS PROVIDED
ARE ESTIMATES AND ARE NOT
FOR USE IN CONSTRUCTION.

DATE ISSUED:
AUGUST 01, 2019



GENERAL SITE NOTES

1. THE SITE PLANS WERE PREPARED BASED UPON TOPOGRAPHIC SURVEYS BY ENDRIS ENGINEERING, P.S.C., 771 ENTERPRISE DRIVE, LEXINGTON, KY 40510. REFER TO SITE SURVEY SHEETS.

2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE FEATURES AND CONDITIONS. REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION.

3. THE ARCHITECT AND ARCHITECTS CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO HAZARDOUS MATERIALS IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.

4. THE CONTRACTOR SHALL USE EXTREME CARE IN WORKING AROUND EXISTING OVERHEAD AND UNDERGROUND UTILITIES. MEASURES SHOULD BE TAKEN TO PROTECT ALL UTILITIES FROM DAMAGE DURING CONSTRUCTION.

5. SEE EROSION POLLUTION AND SEDIMENT CONTROL PLAN FOR RECOMMENDED BEST MANAGEMENT PRACTICES INFORMATION AND SEDIMENT CONTROLS.

SITE DEVELOPMENT TAGS

0 EXISTING TO REMAIN. PROTECT THROUGHOUT CONSTRUCTION.
[a] BUILDING TO REMAIN. NO UTILITIES TO THESE FACILITIES ARE TO BE REMOVED UNLESS NEW PERMANENT UTILITY IS PROVIDED PRIOR TO DEMOLITION.
[b] PAVEMENT TO REMAIN - PATCH/REPAIR WHERE DAMAGED BY CONSTRUCTION. SAW-CUT TO PROVIDE CLEAN EDGE. CONCRETE PAVING TO BE SAW-CUT BACK TO NEAREST UNDAMAGED CONTROL OR ISOLATION JOINT. MATCH NEW ADJACENT PAVEMENT TO EXISTING PAVEMENT ELEVATIONS.
[c] TREE/VEGETATION TO REMAIN.
[d] UTILITY TO REMAIN.
[e] DENOTES FENCING TO REMAIN.
[f] DENOTES STORM LINE/STRUCTURE TO REMAIN.

1 ASPHALT PAVEMENT (321214)
[a] LIGHT DUTY ASPHALT PAVING. SEE DETAIL A/SD4.2.

2 CONCRETE PAVEMENT (321313, 321373)
[a] 4" DEPTH CONCRETE PAVEMENT- SEE DETAIL, B/SD4.2.

3 CONCRETE CURB (321313, 321613, 321726)
[a] CURB AND GUTTER. SEE DETAIL E/SD4.2.

4 UTILITY STRUCTURE. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
[a] NEW UTILITY.
[b] SITE LIGHTING.

5 STRUCTURE. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
[a] BUILDING CANOPY.

LEGEND

CONCRETE PAVEMENT

SODDED AREA

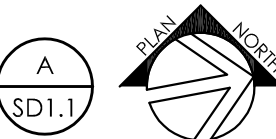
ASPHALT PAVEMENT

SEDIMENT CONTROL FENCE. ADDITIONAL FENCE MAY BE REQUIRED AT OTHER AREAS DURING CONSTRUCTION. SEE DETAIL X/SD3.X

LIMITS OF CONSTRUCTION

TREE PROTECTION FENCE. INSTALLED PER SPECIFICATIONS

SITE DEVELOPMENT PLAN
SCALE: 1"=20'-0"



rosstarant architects

101 old boyette avenue lexington, kentucky 40502 p 859.254.4018

SITE DEVELOPMENT PLAN

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION

LEBANON, KENTUCKY

M.E.&P Engineer:
CMTA, Inc.
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Lexington, KY 40504
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Structural Engineer:
Structural Design Group, Inc.
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BG#

Project No: 1928
Drawn By: KAM
Rev'd By: DS/LMR
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DESIGN DEVELOPMENT

SD1.1

SITE LAYOUT PLAN

DATE ISSUED:
AUGUST 01, 2019

STRUCTURAL NOTES

THE STRUCTURAL NOTES DEFINE GENERAL DESIGN AND MATERIAL REQUIREMENTS AND ARE INTENDED TO SUPPLEMENT, BUT NOT REPLACE, THE PROJECT SPECIFICATIONS

DESIGN CRITERIA

- Building Code: 2018 Kentucky Building Code and ASCE 7-10 (except Chapter 14 and Appendix 11A)
 - Building Risk Category: III
- Design Loads
 - Uniform Floor Live Loads (reduced per Building Code, UNO)

Partitions	20 psf (except when live load > 80 psf)
General Ground Floor Areas	100 psf
Corridors:	
- Lobbies/1st Floor Corridors	100 psf
- Corridors Above 1st Floor	80 psf
Stairs	100 psf
Mechanical Rooms	125 psf
 - Concentrated Floor Live Loads (distributed over 2.5 ft x 2.5 ft, UNO)

Schools	1,000 lbs
---------	-----------
 - Roof Loads
 - Uniform Roof Live Load 20 psf (reduced per Bldg. Code)
Concentrated Roof Live Load 300 lbs
 - Snow Loads: Ground Snow = 15 psf (with drift loads per Code)

Terrain Category = C
Snow Exposure Factor, Ce = 1.0
Snow Load Importance Factor, I = 1.1
Thermal Factor: Heated Spaces, Ct = 1.0
Unheated Spaces, Ct = 1.2
Flat-roof Snow Load: Heated Spaces, Pf = 16.6 psf
Unheated Spaces, Pf = 18.9 psf
Rain-on-Snow Surcharge: 5 psf (where applicable)
- Wind Loads
 - Basic Wind Speed V(ult)=120 mph; V(asd)= 93 mph
 - Wind Exposure C
 - Internal Pressure Coefficient = +/-0.18 (Enclosed Building)
 - Directionality Factor, kd = 0.85
- Earthquake Loads
 - Seismic Importance Factor, I = 1.25
 - Mapped Spectral Response Accelerations, Ss and S1 = 0.197 and 0.107
 - Site Class: D
 - Spectral Response Coefficients, Sds and Sd1 = 0.210 and 0.169
 - Seismic Design Category: C
- Structural Engineer is not responsible for the design of steel stairs, handrails, curtain wall/window wall systems, cold-formed steel framing, or other systems not shown in the Structural Documents. Such systems shall be designed, furnished, and installed as required by other portions of the Construction Documents.
- No explicit provisions have been made for future building expansion.

GENERAL

- Reference to standards or specifications of technical societies, organizations, or associations means the standard or specification referenced by the governing Building Code shown on the Drawings, unless specifically noted otherwise.
- Material, workmanship, and design shall conform to the referenced Building Code.
- For dimensions not shown in the Structural Drawings, see the Architectural Drawings.
- Contractor responsibilities include, but are not limited to, the following:
 - Structural Documents are being released prior to Documents by other disciplines (Architectural, Mechanical, etc.) coordinate Structural Documents with other portions of the Construction Documents as they are released. Architect/Structural Engineer shall be notified of any discrepancy or omission.
 - Coordinate Structural Documents with Architectural and MPE Documents for location and quantity of miscellaneous framing for items such as roof drains, suspended or supported mechanical units, window washing davits, etc. Refer to Architectural and MPE Documents for additional miscellaneous structural elements that may not appear in the Structural Documents.
 - Equipment/Framing Verification
 - Mechanical Equipment: Submit actual weights of equipment to be used for review at least 3 weeks prior to fabrication and construction. Coordinate opening sizes and locations with Mechanical Contractor.
 - Elevator Loads: Submit elevator shop drawings and loads (machine beam/slab, and guide rails) for review prior to detailing, fabrication and installation of elevator system.
 - Miscellaneous Framing: Verify framing shown on the Structural Drawings for mechanical equipment, Owner-furnished items, partitions, etc. is consistent with the requirements of such items.
 - The structure is stable only in its completed form. Temporary supports required for stability during all intermediate stages of construction shall be designed, furnished, and installed by the Contractor.
 - Contractor has sole responsibility for jobsite safety and complying with all health and safety precautions as required by any regulatory agency. In performing construction observation visits to the jobsite, the Structural Engineer will have no control over, nor responsibility for, the Contractor's means, methods, sequences, techniques, or procedures in performing the work.
 - Contractor is responsible for locating concrete reinforcement prior to installation of post-installed anchors, through bolts, or other post-installed items in concrete. Existing reinforcement including post-tensioning tendons shall not be cut or otherwise damaged while installing post-installed anchors.

GENERAL (cont.)

- Existing and Unforeseen Conditions
 - Contractor shall field verify all existing conditions, elevations, and site conditions prior to construction and fabrication. Contractor shall immediately notify Structural Engineer of any existing conditions that are in conflict with the Structural Documents.
 - Shop drawing submittals shall be based on field verified dimensions and conditions only. Contractor shall clearly show actual field dimensions on shop drawings.
 - Existing dimensions, elevations, and other information shown in the Structural Drawings are based on the following Documents:

SUBMITTALS

- Shop Drawings and Submittals
 - Reproduction of Structural Drawings for shop drawings is not permitted.
 - Electronic drawing files will not be provided to the Contractor.
 - Review of shop drawings will be for conformance with the Construction Documents regarding arrangement and sizes of members and the Contractor's interpretation of the design loads, if applicable, and Construction document details. Such review shall not relieve the Contractor of the full responsibility to comply with the Construction Documents.
- Submittals
 - The Structural Quality Assurance Plan and Specifications identify the required submittals. Prior to (or with) the first submittal, Contractor shall submit a list of all required submittals for Engineer's review.
- Deferred Submittals
 - Deferred Submittals include those portions of the project that are furnished by the Contractor and designed by someone other than the Engineer of Record and are submitted at the time of the application. Deferred Submittals shall be submitted to the Building Official prior to fabrication and installation.
 - Submittal documents for Deferred Submittals:
 - 3.2.1 Shall be included in the Contractor's scope of services and shall be sealed by an Engineer licensed in the project state. Design of Deferred Submittals shall be in accordance with the governing Building Code indicated above.
 - 3.2.2 Shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building Official with a notation indicating the deferred submittal documents have been reviewed and that they have been found in general conformance with the design of the building. Deferred submittal items shall not be installed until the design and submittal documents have been approved by the Building Official.
 - The following shall be considered Deferred Submittals:

Steel Connections - See "Structural Steel" Section
Steel Joists
Cold-formed Exterior Steel Stud Framing
Rooftop Unit Anchorage
Steel Stairs and Handrails
Slotted Channel Strut Framing (e.g. Unistrut)

FOUNDATION

- Geotechnical Report: xxxx Dated:
 - It is the responsibility of the contractor to obtain a copy of the geotechnical report and comply with the recommendations found therein.
- Building Pad Preparation
 - Strip vegetation and topsoil.
 - Proofroll building areas with a minimum of two complete coverages of a loaded dump-truck or scraper in each of two perpendicular directions. Replace soft areas with compacted structural fill.
- Soil Bearing Capacity: Isolated Footings 2,000 psf
Continuous Footings 2,000 psf
- Foundation walls
 - Lateral Pressures:

walls supported at top	(at-rest): xx pcF Equivalent Fluid Density
walls free to displace at top	(active): xx pcF Equivalent Fluid Density
 - walls shall be backfilled with granular materials (See Specification)
 - walls supported at top by concrete slabs are not to be backfilled higher than 4 feet above the footing until concrete slabs are placed and have obtained 75% of the specified 28-day strength.
 - Provide continuous shear keys and waterstops at the base of concrete stems of foundation walls within the building footprint. See Specifications for additional information.
 - Foundation drains shall be provided behind all retaining walls and basement walls. Coordinate with plumbing drawings.

REINFORCEMENT

- Reinforcing Bars: ASTM A615, Grade 60
 - Reinforcing bars are not to be welded.
- Welded Wire Reinforcement (WWR): ASTM A1064, 8" minimum side and end laps
- Reinforcement Placement (UNO)
 - Concrete Reinforcement Cover
Below Grade: Unformed 3" clear
Formed 2" clear
 - Masonry reinforcing steel: Place in the center of CMU cells.
- Reinforcement Splices
 - Reinforcement marked "Continuous" can be spliced at locations determined by contractor. All other reinforcement shall be spliced only at locations shown or noted, unless approved in writing by Structural Engineer.
 - Splice Lengths (UNO)

Concrete Reinforcement:	See Concrete Lap Splice Tables in Drawings
Masonry Reinforcement:	See CMU Lap Splice Tables in Drawings
- Deformed Bar Anchors (DBA): ASTM A496
 - Deformed Bar Anchors shall conform to AWS D1.1, Type C studs with a minimum yield strength of 70 ksi and minimum tensile strength of 80 ksi.
 - Deformed Bar Anchors shall be stud welded

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STRUCTURAL NOTES

MARION COUNTY MIDDLE SCHOOL ADDITION & REYNOATION
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

BG#

Project No: 1928
Drawn By: CCA
Rev'd By: CH

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S0.1

STRUCTURAL NOTES

DATE ISSUED:
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STRUCTURAL NOTES CONTINUED

CAST-IN-PLACE CONCRETE

1. Concrete Properties

1.1 Normal Weight Structural Concrete

	28-Day, F'c (min)	w/cm Ratio (max.)	Entrained Air
Footings (Isolated/Continuous)	4,500 psi	0.45	None Required
Drilled Piers	4,500 psi	0.45	None Required
Pier/Pile Caps	4,500 psi	0.45	None Required
Grade Beams	4,500 psi	0.45	None Required
Foundation Walls, Pedestals	4,500 psi	0.45	None Required
Slabs on Grade	3,500 psi	0.48	None Required
Slabs on Steel Forms	3,000 psi	0.48	None Required
Mechanical Equipment Pads:			
Interior	3,000 psi	----	None Required
Exterior	3,000 psi	----	5.0 +/- 1.5%
FILL Concrete	4,000 psi	0.50	None Required
All Other Concrete	5,000 psi	0.40	5.0 +/- 1.5%
Aggressive Environment:			
Loading Dock Walls	5,000 psi	0.40	6.0 +/- 1.5%
Retaining Walls	5,000 psi	0.40	6.0 +/- 1.5%
Pedway Beams	5,000 psi	0.40	6.0 +/- 1.5%
Pedway Columns	5,000 psi	0.40	6.0 +/- 1.5%

Note: All concrete shall be assigned the exposure classes F0, S2, W0, and C0; except concrete in Aggressive Environment shall be assigned the exposure classes F3, S2, W1, and C2 (see ACI 318).

2. Construction Joint Locations: No horizontal construction joints are permitted except as shown on the Structural Drawings. Obtain written consent for additional joints.
3. Pipes or ducts shall not exceed one-third the slab or wall thickness unless specifically detailed. See mechanical and electrical drawings for location of sleeves, accessories, etc.
- 3.1 Conduit shall not be placed within the slab on grade. Conduit shall be installed below the slab on grade within the granular subbase.
- 3.2 Conduit shall not be installed within elevated slabs.
4. Special Finishes: Refer to Architectural Drawings for molds, grooves, ornaments, clips or grounds required to be encased in concrete and for location of floor finishes and slab depressions.
5. Defect Repair: Honey-combing, spalls, cracks, etc. shall be repaired. Extent of defective area to be determined by the Structural Engineer.
6. Curing
- 6.1 Begin curing procedures immediately following commencement of the finishing operation.
- 6.2 Concrete shall be moist cured in accordance with ACI 308. See Specification for additional information.
- 6.3 All concrete slabs that are to have exposed stained or polished concrete finish shall be wet cured a minimum of 7 days in strict accordance with ACI 301. The acceptable methods of wet curing are ponding, continuous fogging, continuous sprinkling; or application of mats or fabric kept continuously wet.

NON-SHRINK GROUTING

1. Non-shrink grout under steel base plates shall be non-metallic with minimum compressive strength of 5000 psi at 28 days.
2. Non-shrink grout used for patching, repair, and other specific applications shall be submitted for review and approval by engineer.

CONCRETE MASONRY

1. Specified Compressive Strength, f'm = 2,000 psi
Minimum Net Area Compressive Strength of Masonry Unit: 2,000 psi
(ASTM C90 w/ Type M or S Mortar)
2. Mortar: walls below grade Type M
 bearing walls Type M or S
 partition walls Type N
3. Coarse Grout: 2,500 psi min. compressive strength conforming to ASTM C476.
- 3.1 Grout solid bond beams, reinforced CMU cores, and CMU cores and wall cavities below grade.
- 3.2 Masonry webs on each side of grouted cells shall be fully mortared.
Exterior Single wythe CMU walls shall have head joints fully mortared.
4. Horizontal Joint Reinforcement: Two (2) No. 9 gage longitudinal wires at 16" vertically, UNO. Lap wire 6 inches minimum. Provide accessories for corners, intersections, etc. Use ladder type for walls with vertical reinforcing.
5. Provide open bottom beam block units with 3" deep minimum web openings at horizontal reinforcement locations not located over an opening. A minimum clear space of one bar diameter shall be provided between the reinforcing bars and the face of masonry units.
6. CMU has been designed assuming "running bond" placement. Do not use "stack bond" unless approved by Structural Engineer.
7. Contraction joints: Unless noted otherwise on the Plans, maximum spacing of 1 1/2 times of wall height or 24 feet (whichever is less) in all concrete masonry walls (including partitions) above grade.
8. Submit written construction procedures prior to the start of masonry construction.

STRUCTURAL STEEL

1. Steel Shapes

1.1 W-Shapes: ASTM A992 (Grade 50)

1.2 Angles, Channels, Plates, UNO: ASTM A36

1.3 Square/Rectangular/Round Hollow Structural Sections (HSS): ASTM A500, Grade B

1.4 Pipe Structural Sections: ASTM A53, Grade B

1.5 Structural steel exposed to weather shall be galvanized.

2. Anchor Rods, Bolts, and Studs

2.1 Anchor Rods: ASTM F1554, Grade 36. Headed Rods or threaded rods with plate washer and heavy hex nut.

2.2 Bolts: 3/4" Diameter A325 minimum. All connections may be bearing type, UNO. Design bearing type connections for load values with threads included in the shear plane. Submit proposed bolt tightening procedure for review.

2.3 Headed Studs: ASTM A108. See Details for Diameter, Length and Spacing. Length given is in-place length after burn-off.

3. Structural steel shall be fabricated and erected according to the "Specification for Structural Steel Buildings" dated June 22, 2010 and the AISC "Code of Standard Practice for Steel Buildings and Bridges" dated April 14, 2010.

4. Connections shall be detailed based on the design information provided in the Structural Documents.

4.1 Standard Shear Connections: Detail as bolted or welded double-angle, single-plate, single-angle, or tee connections in accordance with the connection tables in the "Manual of Steel Construction", Fourteenth Edition.

4.1.1 Shear connections not defined in the AISC Manual shall be designed by an Engineer licensed in the project state. This design service shall be included in the Contractor's scope of services. Shop drawings of such connections shall be sealed by the Engineer.

4.2 Welded Connections: Prequalified welded joints in accordance with AISC and the Structural Welding Code of the American Welding Society; "Non-prequalified joints" shall be qualified prior to fabrication.

4.3 Factored Design Forces/Reactions: As shown on the Structural Drawings or, if not shown, the factored design reaction shall be half of the "Maximum Total Uniform Load (LRFD)" tabulated in the "Manual of Steel Construction", Fourteenth Edition.

4.4 Steel connections not specifically detailed in the Structural Drawings shall be designed by the Contractor. This design service shall be included in the Contractor's scope of services. Shop drawings of such connections shall be sealed by an Engineer licensed in the project state.

5. Shop Drawings: Submittal shall adequately depict structural members and connections.
6. Welders shall be qualified for the work performed in accordance with AWS D1.1. Welder qualifications shall be certified by the local building authority and verified by the Contractor and the Special Inspector.
7. Galvanizing

9.1 Galvanize environmentally exposed steel, for example mechanical equipment supports and screenwalls.

9.2 Galvanize shelf angles that support the exterior building veneer, for example brick shelf angles.

9.3 Touch-up welds and abrasions in galvanized members in accordance with ASTM A780.

STEEL JOISTS

1. Steel Joists, Bridging, and Connections: Designed, fabricated, and erected according to Specifications of the Steel Joist Institute (SJI).

1.1 Net Uniform Uplift Design Load for Roof Joists = 8 psf (service load)

1.2 Top chord extensions or extended ends are to be designed for the same tabulated uniform loads used in the design of the associated joists plus a concentrated load of 300 pounds at the end of the of the extension or extended end, unless noted otherwise on the Drawings.

2. Design of steel joists, bridging, and their connections shall be the sole responsibility of the Contractor. Submit shop drawings sealed by an Engineer licensed in the project state.

3. Contractor shall coordinate the construction and erection of walls, beam framing, steel decking, etc. to ensure compatibility of roof and wall systems considering pitch and camber of steel joists.

STEEL DECK

1. Non-Composite Steel Form Floor Deck: For gage see plan, galvanized

2. Steel Roof Deck: For gage see plan, galvanized

3. Submit shop drawings with the manufacturer's catalog demonstrating compliance with the Contract Documents and the Steel Deck Institute.

COLD-FORMED NON-LOAD BEARING EXTERIOR STEEL STUD FRAMING

1. Design of cold-formed exterior steel non-load bearing studs and their connections shall be the sole responsibility of the Contractor. Design and shop drawing submittals shall comply with the specifications. Shop drawings shall be sealed by an Engineer licensed in the Project state.

2. Cold-Formed Steel Design, Fabrication and Erection: Conform to AISI S100-07, "North American Specification for Design of Cold-Formed Steel Structural Members".

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Project No: 1928
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STRUCTURAL QUALITY ASSURANCE PLAN

GENERAL

This Structural Quality Assurance Plan includes:

- The Statement of Special Inspections which defines the scope of testing and inspection that is required for this project.
- The responsibilities of the Contractor.
- Structural Observations

Refer to other portions of the Construction Documents for Special Inspections required of architectural, mechanical, electrical, or other building components.

Special Inspector will be hired by the Owner.

Special Inspector shall maintain records of inspections in accordance with Chapter 17 of the Building Code and shall distribute these records to the Building Official, Architect, and Structural Engineer on a weekly basis, unless noted otherwise below. Reports shall indicate that work inspected/tested was done in conformance to the Construction Documents. Discrepancies shall be brought to the immediate attention of the Contractor for correction. If the discrepancies are not corrected, they shall be brought to the attention of the Building Official, Architect, and Structural Engineer prior to completion of that phase of the work.

At the conclusion of the project, the Special Inspector shall submit a final report documenting required special inspections and correction of any discrepancies noted in the inspections.

STATEMENT OF SPECIAL INSPECTIONS

Special Inspector shall perform the following tests and inspections of all structural elements included within this Statement of Special Inspections.

- The following tables contain material, components and work that require special inspection or testing:
 - Inspection Frequency, C - Continuous special inspection. Special inspection by the special inspector who is present when and where the work to be inspected is being performed.
 - Inspection Frequency, P - Periodic special inspection. Special inspection by the special inspector who is intermittently present where the work to be inspected has been or is being performed. For structural steel observe the items on a random basis.
 - See Steel section for additional information for inspection tasks.

SOILS	Inspection Frequency		Remarks
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	---	P	---
2. Verify excavations are extended to proper depth and have reached proper material.	---	P	Inspection is required after excavation is complete and prior to placement of structural fills.
3. Perform classification and testing of controlled fill materials.	---	P	Perform laboratory tests of field samples provided by contractor for verification of in place densities.
4. Verify use of proper materials, densities, and lift thickness during placement and compaction of controlled fill. a. As a minimum, perform one test per lift for every 2500 square feet of fill placed.	C	---	Refer to specification for lift thicknesses and compaction.
5. Prior to placement of controlled fill, observe subgrade and verify that the site has been prepared properly (e.g. proofrolling, etc.).	---	P	---
6. Determine quantities of material removed and quantities of material placed where Unit Prices are involved.	---	P	---

DRILLED PIERS	Inspection Frequency		Remarks
1. Concrete inspections in accordance with Concrete construction section.	---	---	---
2. Monitor the load test.	C	---	---
3. Observe drilling operations and maintain complete and accurate records of each drilled pier including: a. Drilled pier placement location. b. Plumbness. c. Diameter (including bell if applicable). d. Elevation of initial contact with rock. e. Embedment into bearing strata. f. Elevation and adequacy of end-bearing strata capacity. g. Concrete placement. h. Record concrete volumes.	C	---	---
4. Verify grade, quantity, location, and placement of reinforcing steel prior to concrete placement.	---	P	---
5. Use of specified mix designs.	---	P	---

NON-SHRINK GROUTING	Inspection Frequency		Remarks
1. Compressive strength tests per ASTM C1107: a. Number of Tests: One test for each ten bags of grout used or minimum of one test for each day of grouting. b. Cube Size: 2-inch x 2-inch c. Test Schedule: (1) cube at 3-days, (2) cubes at 7-days, (3) cubes at 28-days.	C	---	---
2. Perform one performance evaluation test prior placing grout under base plates. Test shall be performed as outlined in ACI 351.1R-99	---	P	One test shall be performed at the beginning job prior to placement of grout under base plates.

CONCRETE CONSTRUCTION	Inspection Frequency		Remarks
1. Inspection of reinforcing steel placement and installation. Grade, size, quantity, quality, location, spacing, clearances.	---	P	ACI 318: 3.5, 7.1 – 7.7 / IBC 1910.4
2. Inspection of anchors cast in concrete. Verify compliance of the following: diameter, grade, type, length, number, placement, and embedment depth.	C	---	ACI 318: 1.3.2, 8.1.3, 21.1.8 / IBC 1908.5, 1909.1, AISC 360-10 N5.7
3. Inspection of post-installed mechanical anchors installed in hardened concrete members: verify anchor type, anchor dimensions, hole diameter and cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment, and tightening torque.	C	---	ACI 318: 3.8.6, 8.1.3, 21.1.8 / IBC 1909.1 Use of post installed anchors must be approved by Structural Engineer
4. Inspection of post-installed adhesive anchors and reinforcing steel installed in hardened concrete members: . Verify adhesive type, anchor rod dimensions, hole diameter and cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque.	C	---	ACI App. D9.2.4
5. Verify use of required design mix.	---	P	ACI 318: Ch. 4, 5.2 – 5.4, IBC 1904.2, 1910.2, 1910.3
6. Sampling fresh concrete from concrete discharge. Mold one set of specimens for compressive strength testing for each 150 cubic yards or each 5,000 square feet of slab or wall surface area for each mix design placed in any one day. No fewer than five tests for a given class of concrete for the entire project. a. Mold (5) 4x8-inch compressive strength cylinders, break and report (1) at 7-days, (3) at 28-days, or mold (4) 6x12-inch compressive strength cylinders, break and report (1) at 7-days, (2) at 28-days. b. Remaining specimen(s) shall be broken as directed by the Structural Engineer if compressive strengths do not appear adequate. c. For each set molded, record: i. Slump ii. Air Content iii. Unit Weight iv. Temperature, ambient and concrete v. Batch and discharge times vi. Location and placement vii. Any pertinent information, such as addition of water, addition of admixtures, etc. d. Verify compliance with construction documents	C	---	ACI 318: 5.6, 5.8 ACI (5.6, 5.9, i, ii, iii, iv, v, vi), SDG (5b-vii, 5.c, 5.d) ASTM C 172, ASTM C 31 ACI 318: 5.6.1 Report in writing on the same day as tests are performed. Reports of compressive strength tests shall contain the project identification name and number, date of concrete placement, name of concrete testing agency, concrete design compressive strength, location of concrete placement in structure, concrete mix proportions and materials, compressive breaking strength and type of break.
7. Inspection of concrete conveying and placement for proper application techniques.	C	---	ACI 318: 5.9, 5.10
8. Inspection for maintenance of specified curing temperature and techniques.	---	P	ACI 318: 5.11 – 5.13
9. Inspection of formwork for shape, location, and dimensions of the concrete member being formed.	---	P	ACI 318: 6.1.1
10. Perform testing of floor Flatness and Levelness of concrete slab placements in accordance with ASTM E1155. See specification	---	P	ACI 117-10

CONCRETE MASONRY LEVEL B (FOR RISK CATEGORY I, II, OR III STRUCTURES using Engineered methods, NON-Empirical)	Inspection Frequency		Remarks
1. Verification of f'm in accordance with Specification TMS 602 Article 1.4 B prior to construction	---	---	TMS 602 - Article 1.4 B
2. Verification of Slump flow and Visual Stability Index (VSI) as delivered to the project site for self-consolidating grout.	---	---	TMS 602 - Article 1.5 B.1.b.3
3. Verify compliance with the following approved submittals	---	---	---
a. Mortar mix designs indicating type and proportions of ingredients in compliance with the proportion specification of ASTM C270	---	P	TMS 602 - Article 2.1 and 2.6 A
b. Mortar mix designs and mortar tests performed in accordance with the property specification of ASTM C270.	---	P	TMS 602 - Article 2.1 and 2.6 A
c. Grout mix designs indicating type and proportions of the ingredients according to the proportion requirements of ASTM C476	---	P	TMS 602 - Article 2.2
d. Grout mix designs and grout strength test performed in accordance with ASTM C476	---	P	TMS 602 - Article 2.2
e. Grout compressive strength tests performed in accordance with ASTM C-1019 and slump flow and Visual Stability Index (VSI) as determined by ASTM C1611/C1611M.	---	P	TMS 602 - Article 2.2
f. Construction procedures cold weather (temperature below 40°F) or hot weather (temperature above 90°F)	---	P	TMS 602 - Article 1.8 C and 1.8 D
4. As masonry construction begins, verify that the following are in compliance: a. Proportions of site-prepared mortar b. Construction of mortar joints c. Location of reinforcement and connectors	---	---	---
5. Prior to grouting, verify that the following are in compliance: a. Grout space. b. Grade, type, and size of reinforcement and anchor bolts c. Placement of reinforcement and connectors (including horizontal joint reinforcement) d. Proportions of site-prepared grout e. Construction of mortar joints	---	---	---
6. Verify during construction: a. Size and location of structural elements b. Type, size, and location of anchors, including other details of anchorage of masonry to structural members, frames, or other construction c. Preparation, construction, and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F) d. Placement of grout is in compliance	---	---	---
7. Observe preparation of grout specimens, mortar specimens, and/or prisms	---	P	TMS 602 - Article 1.4 B.2.b.3, 1.4 B.3, 1.4 B.4

NOT FOR
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STRUCTURAL QUALITY ASSURANCE PLAN
MARION COUNTY MIDDLE SCHOOL ADDITION & REYNOLSON
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

BG#

Project No: 1928
Drawn By: CCA
Rev'd By: CH

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DESIGN DEVELOPMENT

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STRUCTURAL QUALITY
ASSURANCE PLAN
DATE ISSUED:
AUGUST 01, 2019

STRUCTURAL QUALITY ASSURANCE PLAN CONTINUED

STRUCTURAL STEEL	Inspection Frequency	Remarks
Where the following tasks have been performed by the fabricator's or erector's quality control program in accordance to Chapter N of AISC 360-10, it is permitted that this task be coordinated with the Special Inspector so that the inspection functions are performed by only one party. The Special Inspector shall review records of tasks performed by the erector's and fabricator's quality control program to verify completeness.	Obs. -- Obs.erve these items on a random basis. Operations need not be delayed pending these inspections.	
1. Inspection of steel framing to verify compliance with details shown on the approved construction documents including member locations, bracing, stiffening application of joint details at each connection, proper fasteners, etc.	Perf. -- Perform these tasks for each welded joint or member.	AISC 360-10 N5.7
2. Review the material test reports and certifications as listed below for compliance with the construction documents. a. Main structural steel material test reports b. Anchor rods and threaded rods test reports c. Headed stud anchors - manufacturer's certifications	Perf. --	AISC 360-10 N5.2 & N3.2
3. Visual Inspection Tasks Prior to Welding	---	AISC 360-10 Table N5.4-1
a. Welding procedure specifications (WPSs) available	Perf. --	AWS D1.1/D1.1M 6.3
b. Manufacturer certifications for welding consumables available.	Perf. --	
c. Material identification (type/grade)	---	Obs.
d. Welder identification system The fabricator or erector, as applicable, shall maintain a system by which a welder who has welded a joint or member can be identified. Stamps, if used, shall be the low-stress type.	---	Obs.
e. Fit-up of groove welds (including joint geometry) i. Joint preparation ii. Dimensions (alignment, root opening, root face, bevel) iii. Cleanliness (condition of steel surfaces) iv. Tacking (tack weld quality and location) v. Backing type and fit (if applicable)	---	Obs.
f. Configuration and finish of access holes	---	Obs.
g. Fit-up of fillet welds i. Dimensions (alignment, gaps at root) ii. Cleanliness (condition of steel surfaces) iii. Tacking (tack weld quality and location)	---	Obs.
h. Check welding equipment	---	Obs.
4. Visual Inspection Tasks During Welding	---	AISC 360-10 Table N5.4-2
a. Use of qualified welders	---	Obs.
b. Control and handling of welding consumables i. Packaging ii. Exposure control	---	Obs.
c. No welding over cracked tack welds	---	Obs.
d. Environmental conditions i. Wind speed within limits ii. Precipitation and temperature	---	Obs.
e. WPS followed i. Settings on welding equipment ii. Travel speed iii. Selected welding materials iv. Shielding gas type/flow rate v. Preheat applied vi. Interpass temperature maintained (min./max.) vii. Proper position (F, V, H, OH)	---	Obs.
f. Welding techniques i. Interpass and final cleaning ii. Each pass within profile limitations iii. Each pass meets quality requirements	---	Obs.
5. Visual Inspection Tasks After Welding	---	AISC 360-10 Table N5.4-3
a. Welds cleaned	---	Obs.
b. Size, length and location of welds	Perf. --	AWS D1.1/D1.1M 6.5.1
c. Welds meet visual acceptance criteria i. Crack prohibition ii. Weld/besse-metal fusion iii. Crater cross section iv. Weld profiles v. Weld size vi. Undercut vii. Porosity	Perf. --	AWS D1.1/D1.1M 6.5.3
d. Arc strikes	Perf. --	AWS D1.1/D1.1M 5.29
e. K-area. When welding of doubler plates, continuity plates or stiffeners has been performed in the k-area, visually inspect the web k-area for cracks within 3 in. (75mm) of the weld.	Perf. --	Not addressed in AWS but see AISC (1997b). See Commentary Section A3.1c and Section J10.8.
f. Repair activities	Perf. --	AWS D1.1/D1.1M 6.5.3, 5.26
g. Document acceptance or rejection of welded joint or member	Perf. --	AWS D1.1/D1.1M 6.5.4, 6.5.5
6. Nondestructive Testing (NDT) of Welded Joints		Ultrasonic testing (UT), magnetic particle testing (MT), penetrant testing (PT) and radiographic testing (RT), where required, shall be performed by Special Inspector in accordance with AWS D1.1/D1.1M. NDT of welds completed in a fabricator's shop may be performed by that fabricator when fabricator is AISC Certified or approved by the Building Official where applicable. When the fabricator performs the NDT, the Special inspection agency shall review the fabricator's NDT reports. All NDT of welds completed in the field shall be performed by the Special Inspector. Acceptance criteria shall be in accordance with AWS D1.1/D1.1M for statically loaded structures, unless otherwise designated in the design drawings or project specifications.
a. UT all complete penetration groove welds subject to transversely applied tension loading in a butt, T- and corner joints in material 5/16" thick or greater.	Perf. --	AISC 360-10 N5.5b
b. Document all NDT performed, identifying tested weld by location in the structure, piece mark and location. Concurrent to submitting NDT reports to EOR or owner submit to contractor	Perf. --	AISC 360-10 N5.5g
c. Review NDT test reports performed by fabricator	---	AISC 360-10 N7

STRUCTURAL STEEL CONT.	Inspection Frequency	Remarks
7. Inspection Tasks Prior to Bolting		Perform for 10% of all Snug tight joints if task is applicable and all pretension and slip critical joints. AISC 360-10 Table N5.6-1 RCSC 2.1 & 9.1
a. Manufacturer's certifications available for fastener materials	Perf. --	
b. Fasteners marked in accordance with ASTM requirements	Perf. --	RCSC Figure C-2.1 & 9.1 (Also See ASTM Standards)
c. Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)	---	Obs.
d. Proper bolting procedure selected for joint detail	---	Obs.
e. Connecting elements, including the appropriate laying surface condition and hole preparation, if specified, meet applicable requirements	---	Obs.
f. Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used, not required for Snug tight bolts	---	Obs.
g. Proper storage provided for bolts, nuts, washers and other fastener components	---	Obs.
8. Inspection Tasks During Bolting		Perform for 10% of all Snug tight joints if task is applicable and all pretension and slip critical joints. Special Inspector need not be present during bolt pretensioning procedures. AISC 360-10 Table N5.6-2
a. Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required	---	Obs.
b. Joint brought to the snug-tight condition prior to the pretensioning operation	---	Obs.
c. Fastener component not turned by the wrench prevented from rotating	---	Obs.
d. Fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges	---	Obs.
9. Inspection Tasks After Bolting	---	AISC 360-10 Table N5.6-3
a. Document acceptance or rejection of bolted connections	Perf. --	

STEEL JOISTS	Inspection Frequency	Remarks
1. Visual inspection of bolted and welded connections.	---	P
2. Verify installation of bridging or braces.	---	P
3. Verify connections for top and bottom chords.	---	P
4. Verify reinforcement of members for concentrated loads.	---	P
5. Verify proper bearing.	---	P

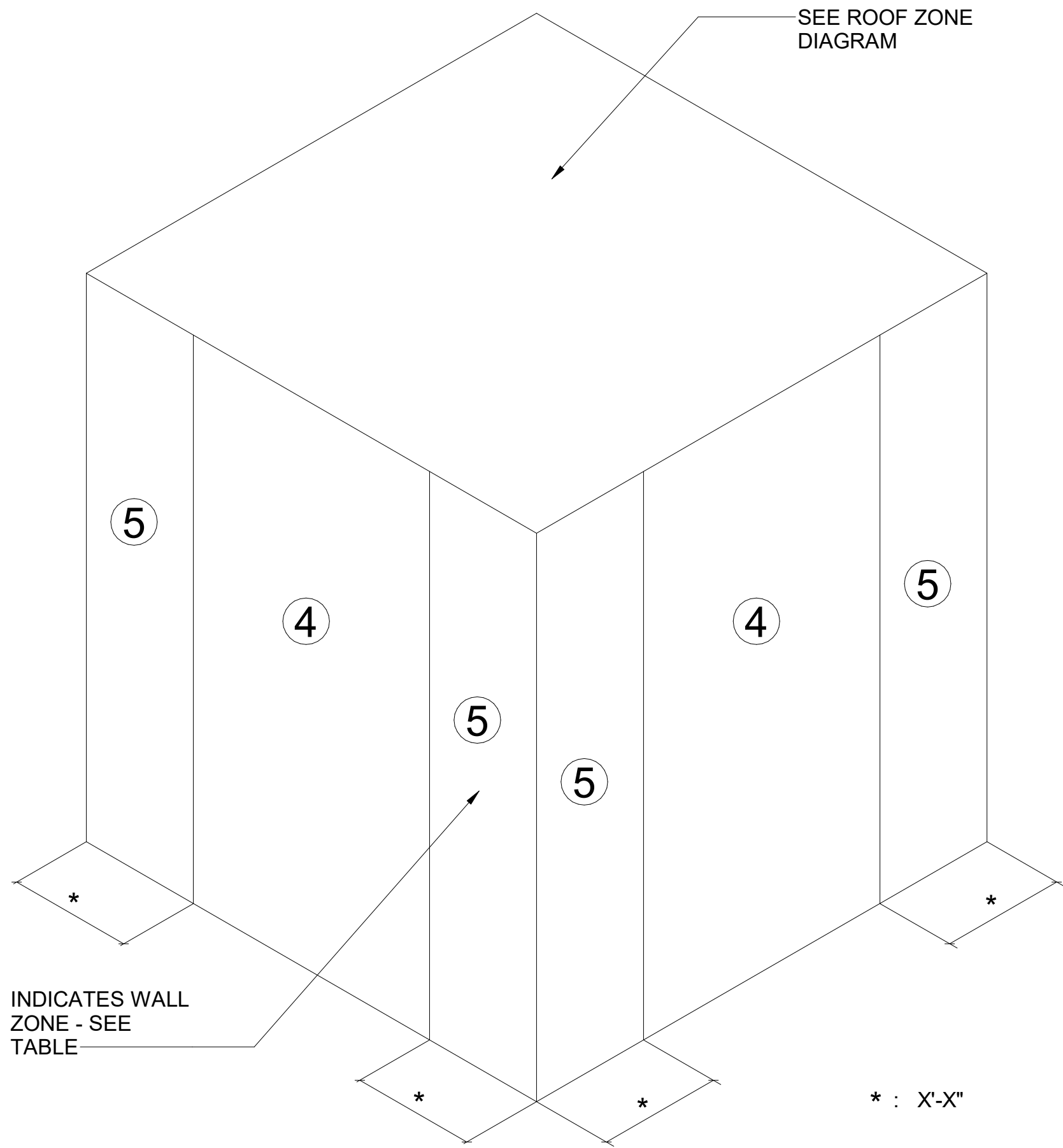
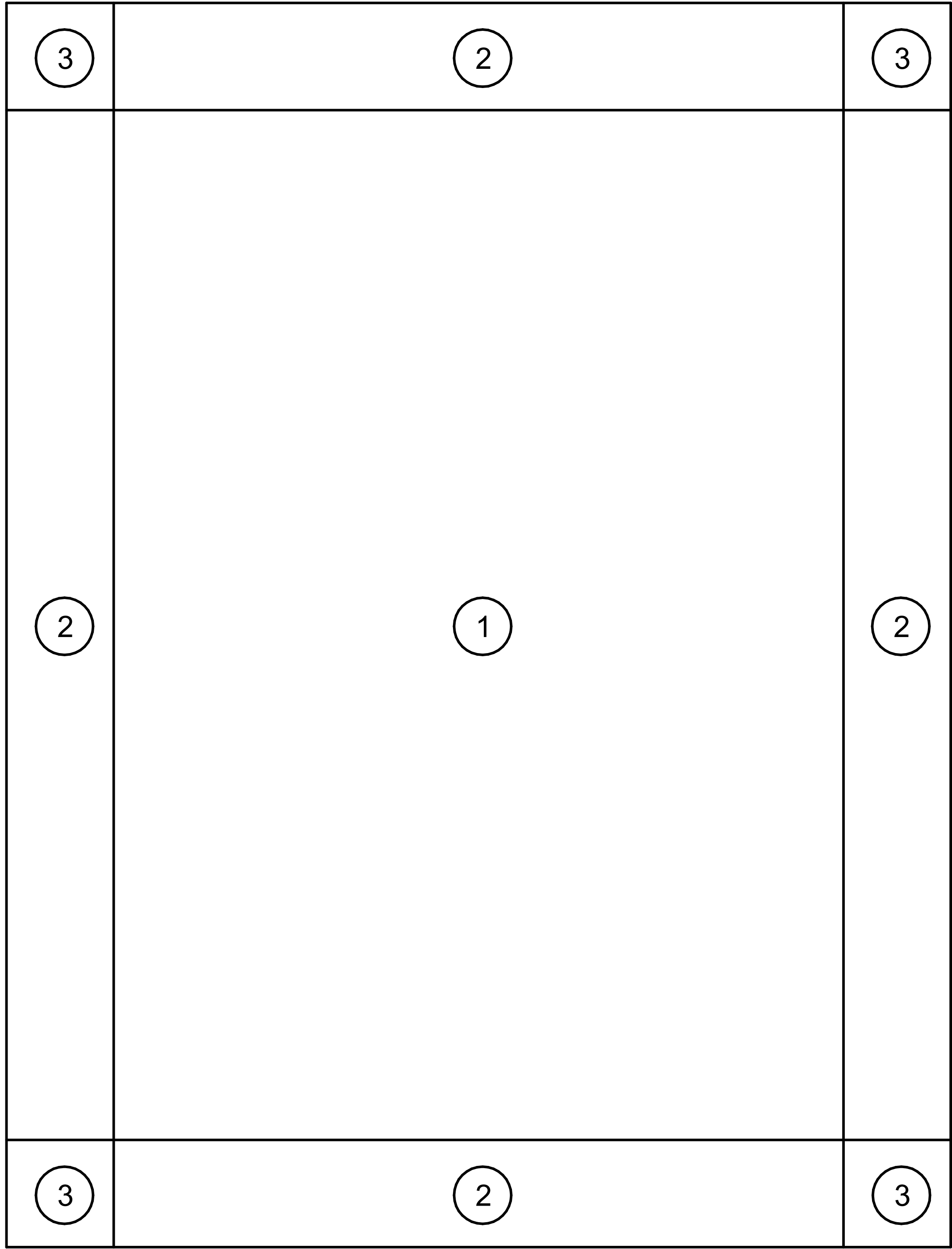
STEEL DECK	Inspection Frequency	Remarks
1. Material verification of steel deck. a. Identification markings to conform to ASTM standards specified in the approved construction documents b. Manufacturer's certified test reports.	---	P
2. Verify general alignment and deck lap.	---	P
3. Verify welds for size and pattern.	---	P
4. Inspection of welding at floor and roof deck	---	P
5. Verify spacing and type of sidelap attachments.	---	P
6. Verify installation of deck closures.	---	P
7. Inspect welding operations, screw attachment, bolting, anchoring, and other fastening of components within the lateral force resisting system along including shear walls, braces, diaphragms, collectors (drag struts) and hold downs.	---	P

COLD-FORMED EXTERIOR STEEL (CFS) FRAMING	Inspection Frequency	Remarks
1. Verify that installation of cold-formed members complies with the Construction Documents and the approved shop drawings	---	P

CONTRACTOR RESPONSIBILITIES

- Contractor shall pay for any additional structural testing/inspection required for work or materials not complying with the Construction Documents due to negligence or nonconformance and shall pay for any additional structural testing/inspection required for his convenience.
- Contractor is responsible to ensure that the Special Inspector is on site as required to perform all tasks required by Statement of Special Inspection. Any work that requires special inspection and is performed without the Special Inspector being present is subject to being demolished and reconstructed.
- Contractor has the following responsibilities to the Special Inspector:
 - Provide copy of Construction Documents to Special Inspector and latest addenda (include change orders and field orders prior to inspection of work contained therein).
 - Notify Special Inspector sufficiently in advance of operations to allow assignment of personnel and scheduling of tests.
 - Cooperate with Special Inspector and provide access to work.
 - Provide samples of materials to be tested in required quantities.
 - Provide storage space for Special Inspector's exclusive use, such as for storing and curing concrete testing samples.
 - Provide labor to assist Special Inspector in performing tests/inspections.
- Contractor shall perform the following:
 - SOILS
 - Identify soils to be used as structural fill.
 - DRILLED PIERS
 - Submit reinforcing and concrete material verifications in accordance with Cast-in-Place Concrete requirements below.
 - CAST-IN-PLACE CONCRETE
 - Establish concrete mix design proportions in accordance with the specifications and ACI 318.
 - Submit manufacturer's certification that concrete materials meet the requirements of the Construction Documents.
 - Submit manufacturer's data for tension and compression splicers.
 - NON-SHRINK GROUTING
 - Submit product data sheets for non-shrink grout that shows compliance with the Construction Documents and with ASTM C1107 for fluid or flowable grouts, prior to placement of grout.
 - CONCRETE MASONRY
 - Submit a certification from each manufacturer or supplier stating that the following materials comply with the Construction Documents:
 - Concrete masonry units.
 - Mortar materials: Portland cement, hydrated lime, and aggregates.
 - Grout materials: Portland cement and aggregates.
 - Joint reinforcement steel.
 - Reinforcing steel.
- STRUCTURAL STEEL
 - If fabricator or erector is NOT AISC certified, the fabricator and/or erector shall establish and maintain *quality control* procedures and perform inspections to ensure that their work is performed in accordance with the Section N of the Specification for Structural Steel Building, AISC 360-10 and the *construction documents*. Payment of these Quality control tests and inspections, except for all NDT of welds completed in the field by the Special Inspector, shall be by the fabricator and Erector.
 - Make available the documents listed in AISC 360-10 N3.2 in electronic or printed form for review by the EOR of the EOR's Designee prior to fabrication or erection unless otherwise required by the contract documents to be submitted;
 - Provide non-destructive test (NDT) reports performed in shop by fabricator. Fabricator is responsible for cost of NDT performed in shop. Reports shall identify the tested weld by piece mark and location in the piece.
- POST-INSTALLED ANCHORS
 - Contractor shall contact manufacturer's representative for product installation training. Submit a letter indicating that training has taken place.
- STEEL JOISTS
 - Submit manufacturer's certificate of compliance that the steel joists comply with the Construction Documents.
- STEEL DECK
 - Submit manufacturer's certificate of compliance that the supplied steel deck complies with the Construction Documents.
- COLD-FORMED EXTERIOR STEEL STUDS
 - Submit manufacturer's certification that the supplied cold-formed members comply with the Construction Documents.

WIND PRESSURE DIAGRAM



WALL ZONE DIAGRAM

WIND PRESSURE DIAGRAM NOTES:

- 1. DESIGN WIND PRESSURES WERE CALCULATED IN ACCORDANCE WITH ASCE 7-10 BASED ON AN EFFECTIVE WIND AREA AND WITH Kd= 0.85 MULTIPLY BY 0.6 FOR ASD
- 2. ROOF UPLIFT WIND PRESSURES IN ZONES 1, 2, AND 3 ARE GROSS UPLIFT VALUES. NET UPLIFT PRESSURES SHALL BE CONSIDERED EQUAL TO GROSS PRESSURES.
- 3. TABULATED WIND PRESSURES SHALL BE USED IN THE DESIGN OF EXTERIOR COMPONENT AND CLADDING MATERIALS. INTERPRETATION AND APPLICATION OF THESE PRESSURES TO SPECIFIC PORTIONS OF THE BUILDING AREAS SHALL BE THE RESPONSIBILITY OF THE EXTERIOR COMPONENT AND CLADDING MATERIAL SUPPLIER.
- 4. WHERE PARAPET HEIGHT EXCEEDS 3' - 0", CORNER ZONES (ZONE 3), MAY BE TREATED AS PERIMETER ZONES (ZONE 2).
- 5. SEE STRUCTURAL NOTES FOR FACTORY MUTUAL REQUIREMENTS.

EXTERIOR WALL PRESSURES		
AREA (SQ. FT)	ZONE 4 (PSF)	ZONE 5 (PSF)
10		
50		
100		
200		
≥ 500		

ROOF UPLIFT PRESSURES			
AREA (SQ. FT)	ZONE 1 (PSF)	ZONE 2 (PSF)	ZONE 3 (PSF)
10	-38		
20	-36		
50	-33		
100	-31		
200	-29		
2500	-26		

WIND PRESSURE DIAGRAM PLAN
MARION COUNTY MIDDLE SCHOOL ADDITION & REYNOATION
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

BG#

Project No: 1928
Drawn By: CCA
Rev'd By: CH

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WIND PRESSURE DIAGRAM
PLAN
DATE ISSUED:
AUGUST 01, 2019

Structural Design Group
101 Old Lafayette Avenue
Lebanon, Kentucky 40502
P: 606.338.1000
F: 606.338.1001
BSC Project No. 2019-17700

NOT FOR
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NOTES & SCHEDULES

Concrete Minimum 28 Day Compressive Strength, f _c = 3000 psi				
Bar Size	Case 1		Case 2	
	Top Bars	Other Bars	Top Bars	Other Bars
#3	2'-6"	2'-0"	3'-9"	3'-0"
#4	3'-3"	2'-9"	5'-0"	3'-9"
#5	4'-3"	3'-3"	6'-0"	4'-9"
#6	5'-0"	3'-9"	7'-3"	5'-6"
#7	7'-0"	5'-6"	10'-6"	8'-0"
#8	8'-0"	6'-3"	11'-9"	9'-3"
#9	9'-0"	7'-0"	13'-3"	10'-3"
#10	10'-0"	7'-9"	15'-0"	11'-6"
#11	11'-3"	8'-9"	16'-6"	12'-9"

Concrete Minimum 28 Day Compressive Strength, f _c = 4000 psi				
Bar Size	Case 1		Case 2	
	Top Bars	Other Bars	Top Bars	Other Bars
#3	2'-3"	1'-9"	3'-3"	2'-6"
#4	3'-0"	2'-3"	4'-3"	3'-3"
#5	3'-6"	2'-9"	5'-3"	4'-3"
#6	5'-3"	4'-0"	7'-9"	6'-0"
#7	7'-6"	5'-9"	11'-3"	8'-9"
#8	8'-6"	6'-6"	12'-9"	9'-9"
#9	9'-6"	7'-6"	14'-3"	11'-0"
#10	10'-9"	8'-3"	16'-0"	12'-6"
#11	12'-0"	9'-3"	17'-9"	13'-9"

SPLICE LENGTH NOTES:

Case #1: For beams and columns, concrete cover greater than or equal to bar diameter, bar spacing greater than or equal to 2 times bar diameter, and lies as specified on the drawings. For other members, concrete cover greater than or equal to bar diameter and bar spacing greater than or equal to 3 times bar diameter.

Case #2: For beams and columns, concrete cover less than bar diameter and bar spacing less than 2 bar diameters. For other members, concrete cover less than bar diameter and bar spacing less than 3 times bar diameter.

CONCRETE REINFORCEMENT CLASS "B" SPLICE LENGTHS (UNO)

Concrete Minimum 28 Day Compressive Strength, f _c = 5000 psi				
Bar Size	Case 1		Case 2	
	Top Bars	Other Bars	Top Bars	Other Bars
#3	2'-0"	1'-9"	3'-0"	2'-3"
#4	2'-9"	2'-3"	3'-9"	3'-0"
#5	3'-3"	2'-6"	4'-9"	3'-9"
#6	4'-9"	3'-9"	7'-0"	5'-6"
#7	6'-9"	5'-3"	10'-0"	7'-9"
#8	7'-9"	6'-0"	11'-6"	8'-9"
#9	8'-9"	6'-9"	12'-9"	10'-0"
#10	9'-9"	7'-6"	14'-6"	11'-3"
#11	10'-9"	8'-3"	16'-0"	12'-3"

Concrete Minimum 28 Day Compressive Strength, f _c = 6000 psi				
Bar Size	Case 1		Case 2	
	Top Bars	Other Bars	Top Bars	Other Bars
#3	2'-0"	1'-6"	2'-9"	2'-3"
#4	2'-6"	2'-0"	3'-6"	2'-9"
#5	3'-0"	2'-3"	4'-3"	3'-6"
#6	3'-6"	2'-9"	5'-3"	4'-0"
#7	5'-0"	4'-0"	8'-6"	6'-6"
#8	5'-9"	4'-6"	8'-6"	6'-6"
#9	6'-6"	5'-0"	9'-6"	7'-3"
#10	7'-3"	5'-6"	10'-9"	8'-3"
#11	8'-0"	6'-3"	11'-9"	9'-3"

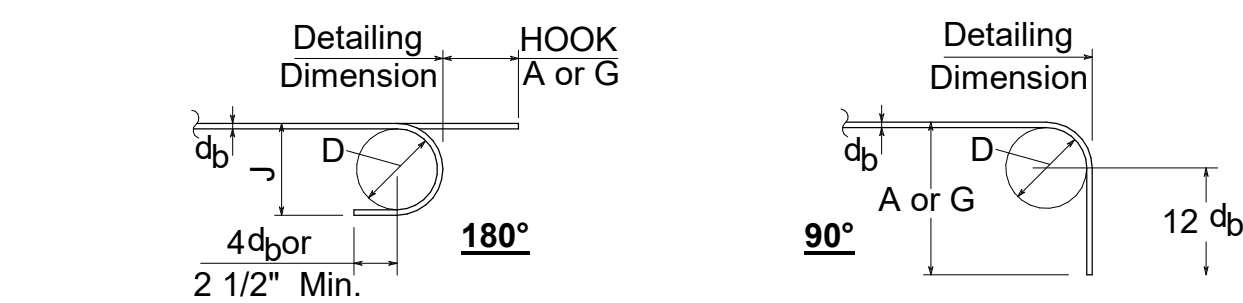
Top bars are horizontal reinforcement with more than 12" of fresh concrete placed below the splice.

Where indicated on the drawings, class "A" lap splice lengths may be calculated by dividing tabulated values by 1.3.

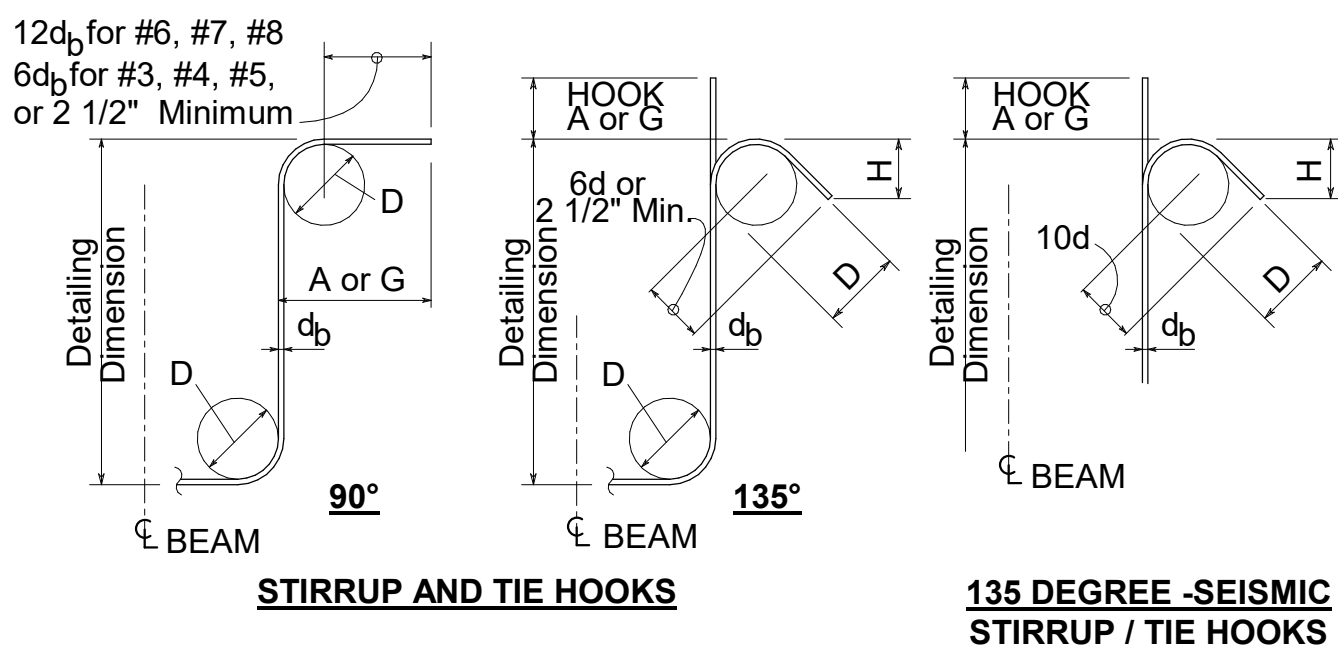
As contractor's alternate, class "B" splice lengths may be calculated by the steel reinforcement detailer in accordance with ACI 318 and submitted for review.

Tension couplers may be used and installed in accordance with manufacturer's recommendations and shall be capable of developing 125% of the reinforcing steel ASTM specified minimum yield strength.

For lightweight structural concrete, multiply lap splice lengths by 1.3



RECOMMENDED END HOOKS , ALL GRADES				
BAR SIZE	FINISHED BEND DIAMETER D, in.	180 DEG. HOOKS		90 DEG HOOKS A or G, in.
		A or G, in.	J, in.	
#3	2 1/4"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3 3/4"	7"	5"	10"
#6	4 1/2"	8"	6"	1'-0"
#7	5 1/4"	10"	7"	1'-2"
#8	6"	11"	8"	1'-4"
#9	9 1/2"	1'-3"	11 3/4"	1'-7"
#10	10 3/4"	1'-5"	1'-1 1/4"	1'-10"
#11	12"	1'-7"	1'-2 3/4"	2'-0"
#14	18 1/4"	2'-3"	1'-9 3/4"	2'-7"
#18	24"	3'-0"	2'-4 1/2"	3'-5"



BAR SIZE	D, in*	STIRRUP & TIE HOOK DIMENSIONS, in.*			135° STIRRUP - TIE HOOK DIMENSIONS, in.*	
		135° HOOKS			135° HOOKS	
		A or G	A or G	H APPROX.	A or G	H APPROX.
#3	1 1/2"	4"	4"	2 1/2"	4 1/4"	3"
#4	2"	4 1/2"	4 1/2"	3"	4 1/2"	3"
#5	2 1/2"	6"	5 1/2"	3 3/4"	5 1/2"	3 3/4"
#6	4 1/2"	1'-0"	8"	4 1/2"	8"	4 1/2"
#7	5 1/4"	1'-2"	9"	5 1/4"	9"	5 1/4"
#8	6"	1'-4"	10 1/2"	6"	10 1/2"	6"

* GRADES 40, 50 and 60

TYPICAL BAR HOOK DETAILS

DRILLED PIER LEGEND

DRILLED PIER MARK - SEE 1/S3.00

DP48
T= 1024.35'
B= 944.00'

T/DRILLED PIER ELEVATION
B/DRILLED PIER ELEVATION

NOTES:

- WHERE T/DRILLED PIER ELEVATION IS NOT SPECIFIED COORDINATE ELEVATION W/ CIVIL DWGS AND FOUNDATION SECTIONS.
- BEARING ELEVATION PROVIDED IS THE MINIMUM BOTTOM OF PIER ELEVATION. TESTING AGENCY MUST BE PRESENT AT TIME OF CONSTRUCTION TO VERIFY CONDITIONS ARE SIMILAR TO THOSE ENCOUNTERED IN GEOTECH BORING AND THAT SUFFICIENT PENETRATION INTO THE BEDROCK IS ACHIEVED. SHAFTS MUST BE EXTENDED TO DEVELOP THE REQUIRED SIDE SHEAR RESISTANCE IF SOFTER CLAY SEAMS ARE ENCOUNTERED WITHIN THE MARK.

DRILLED PIER LEGEND

DP24 (10')

Rock penetration depth.
Drilled Pier mark.

NOTES:

- SEE DETAIL 1/S-201 FOR DRILLED PIER SCHEDULE AND DETAILS.
- ROCK PENETRATION SHALL BE 10'-0" MINIMUM.

FOOTING LEGEND

F5
488.00

FOOTING- SEE 1/S-201
TOP OF FOOTING ELEVATION

STRUCTURAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
ALT.	ALTERNATE
ARCH.	ARCHITECT/ARCHITECTURE
BLDG.	BUILDING
BRG.	BEARING
B or BOT.	BOTTOM
B/xxx	BOTTOM OF SOMETHING
CJ	CONTRACTION/CONSTRUCTION JOINT
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS/CONTINUED
COORD.	COORDINATE
DBL	DOUBLE
DIA.	DIAMETER
DL	DEAD LOAD
DP	DRILLED PIER
DWG, DWGS	DRAWING(S)
EA.	EACH
EE	EACH END
EF	EACH FACE
EW	EACH WAY
EJ	EXPANSION JOINT
EL.	ELEVATION
EQ.	EQUAL
ELEV.	ELEVATOR
EMBED.	EMBEDMENT/EMBEDDED
EOS	EDGE OF SLAB
EQUIP.	EQUIPMENT
EXIST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
F/xxx	FACE OF SOMETHING
FD	FIELD DETERMINED
FDN	FOUNDATION
FIN	FINISHED
FLG	FLANGE
FLR or FL.	FLOOR
FS	FAR SIDE
FT	FEET
FTG	FOOTING
FV	FIELD VERIFY
G.A.	GAGE
GALV.	GALVANIZED
HDD	HEADED
HORIZ.	HORIZONTAL
ICF	INSULATED CONCRETE FORM
INFO.	INFORMATION
INT.	INTERIOR
JT	JOINT
JST	JOIST
K	KIPS
KSI	KIPS PER SQUARE INCH
KSF	KIPS PER SQUARE FOOT
LBS or #	POUNDS
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLO	LONG LEG OUTSTANDING
LLV	LONG LEG VERTICAL
MPE	MECHANICAL, PLUMBING AND ELECTRICAL
MFR	MANUFACTURER
MATL	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
No. or #	NUMBER
NS	NEAR SIDE
N/A	NOT APPLICABLE
NTS	NOT TO SCALE
OH	OPPOSITE HAND
OPP.	OPPOSITE
PART.	PARTIAL, OR PARTITION
PL	PLATE
PH	PENTHOUSE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
R	REACTION
RAD.	RADIUS
RD	ROOF DRAIN
REINF.	REINFORCING/REINFORCEMENT
REOD	REQUIRED
REV.	REVISION/REVISED
RTU	ROOF TOP UNIT
SDS	SELF-DRILLING SCREWS
SECT.	SECTION
SIM.	SIMILAR
SPECS	SPECIFICATIONS
SQ.	SQUARE
STD	STANDARD
STIFF.	STIFFENER
STL	STEEL
SYM.	SYMMETRICAL
T	TOP
T/xxx	THICKNESS
THK	TOP OF SOMETHING
TYP.	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
w/	WITH
w/o	WITHOUT
WP	WORK POINT
WT	WEIGHT
WWR	WELDED WIRE REINFORCEMENT

NOTES & SCHEDULES

MARION COUNTY MIDDLE SCHOOL ADDITION & REVENOATION
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

BG#

Project No: 1928
Drawn By: CCA
Rev'd By: CH

SHEET RELEASE

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DESIGN DEVELOPMENT

S0.6
NOTES & SCHEDULES

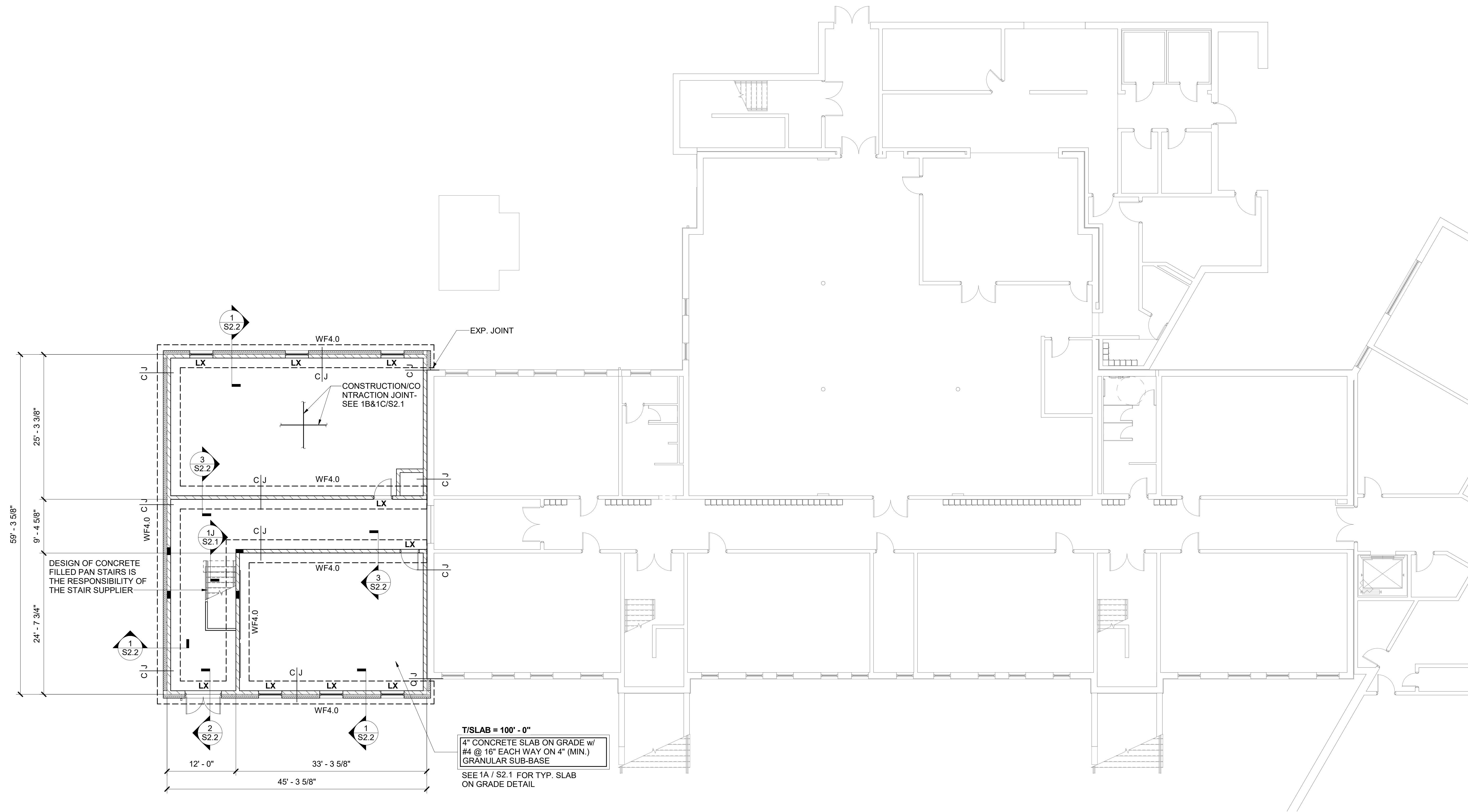
DATE ISSUED:
AUGUST 01, 2019

Structural Design Group
101 Old Layette Avenue
Lebanon, Kentucky 4002
P: 502.339.1000
F: 502.339.1001
SSC Project No. 2019-17400

NOT FOR
CONSTRUCTION

rosarrant
architects

101 old layette avenue lebanon, kentucky 4002 p 502.339.1000



FOUNDATION PLAN

1/8" = 1'-0"

NOT FOR
CONSTRUCTION

Structural Design Group
315 East Clark Road
Lebanon, Kentucky 40502
7/10/2019
DSC Project No. 2019-17700

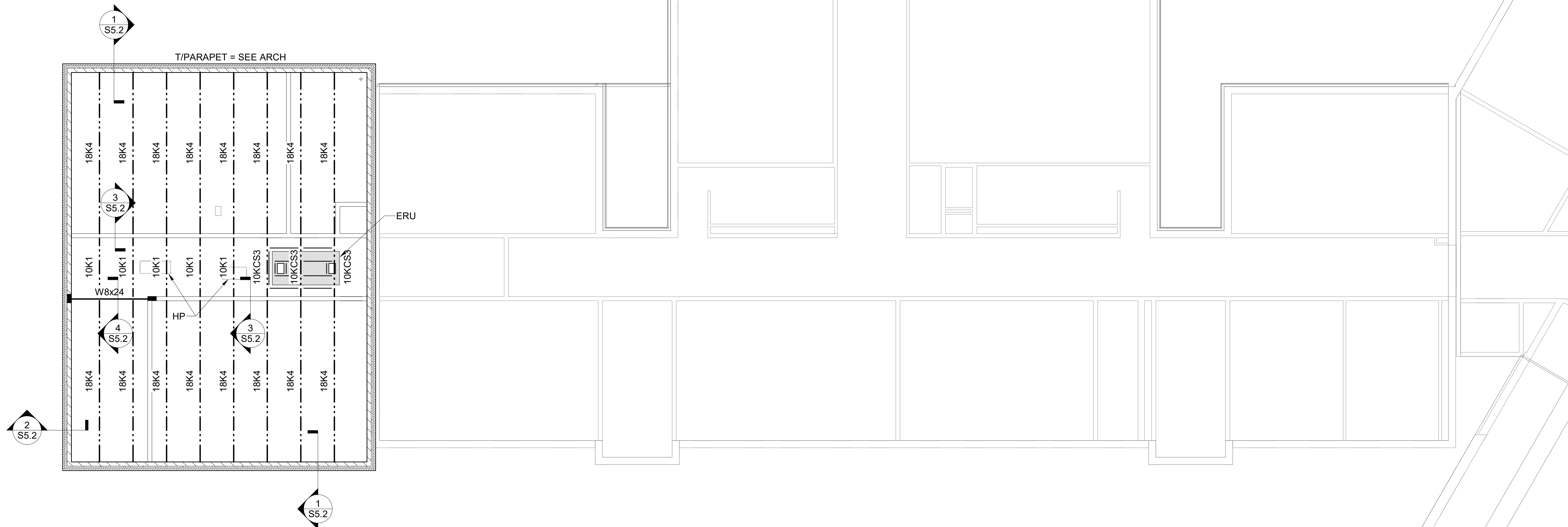
FOUNDATION PLAN
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

BG#
Project No: 1928
Drawn By: CCA
Rev'd By: CH

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S1.1
FOUNDATION PLAN
DATE ISSUED:
AUGUST 01, 2019



ROOF FRAMING PLAN

1/8" = 1'-0"

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Structural Design Group
220 Great Circle Road
Suite 100
Nashville, Tennessee 37223
p. 615.255.3337
f. 615.255.1466
SDG Project No. 2019-173.00

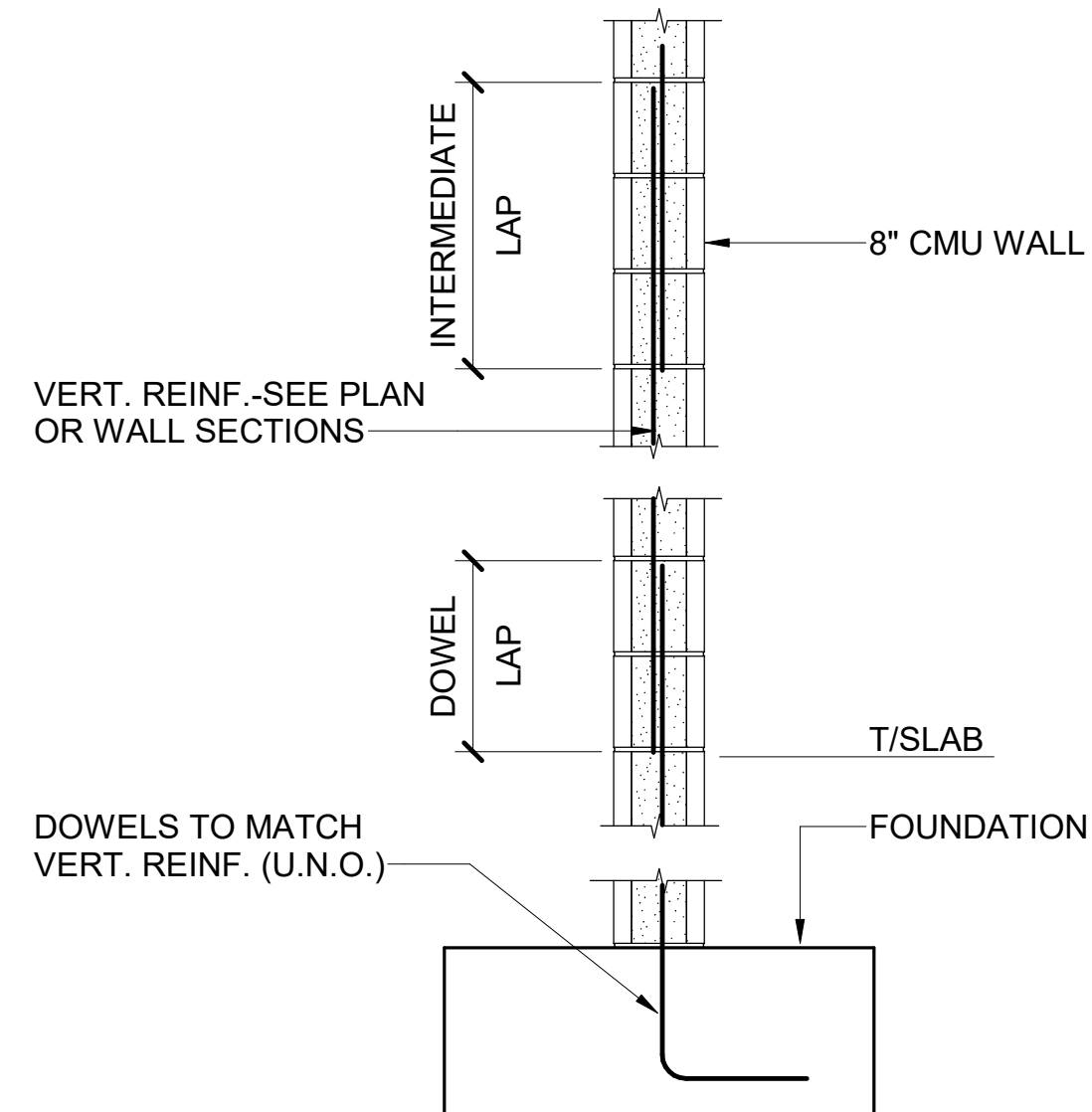
FOR:

SHEET RELEASE



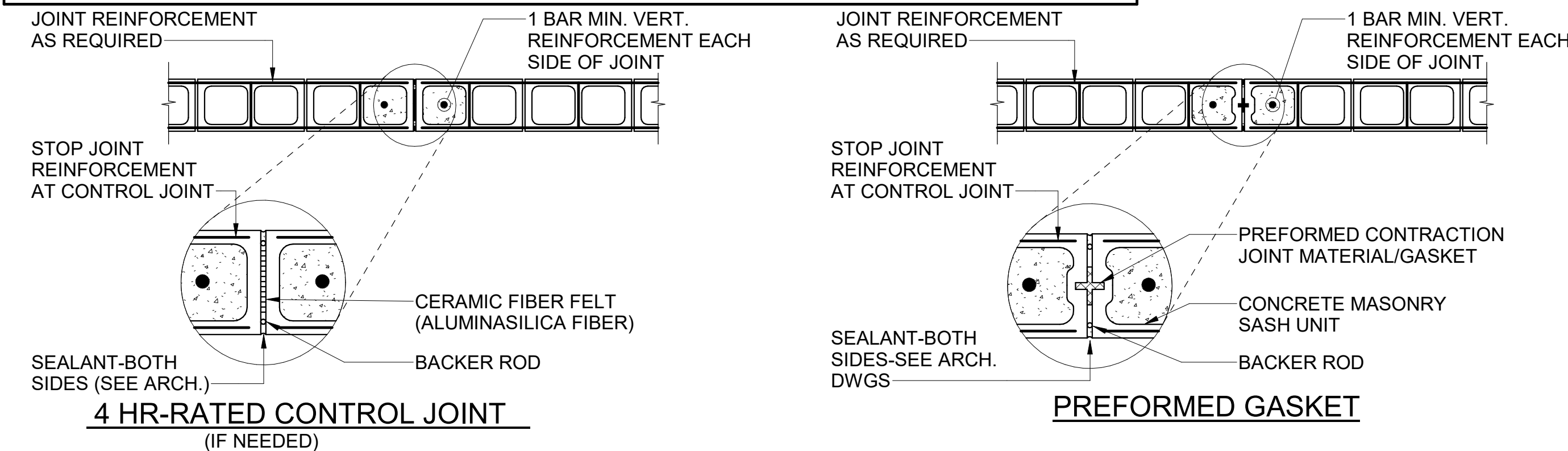
CMU LAP SPLICE SCHEDULE		
BAR SIZE	LAP LENGTH	
	DOWEL	INTERMEDIATE
#4	16"	16"
#5	16"	24"
#6	24"	40"
#7	24"	54"
#8	32"	80"
#9	32"	104"
F'm = 2,000 psi (MINIMUM)		

ENGINEER NOTE: CHECK DOWEL AND LAP REQUIREMENTS IF WALL IS SHEARWALL

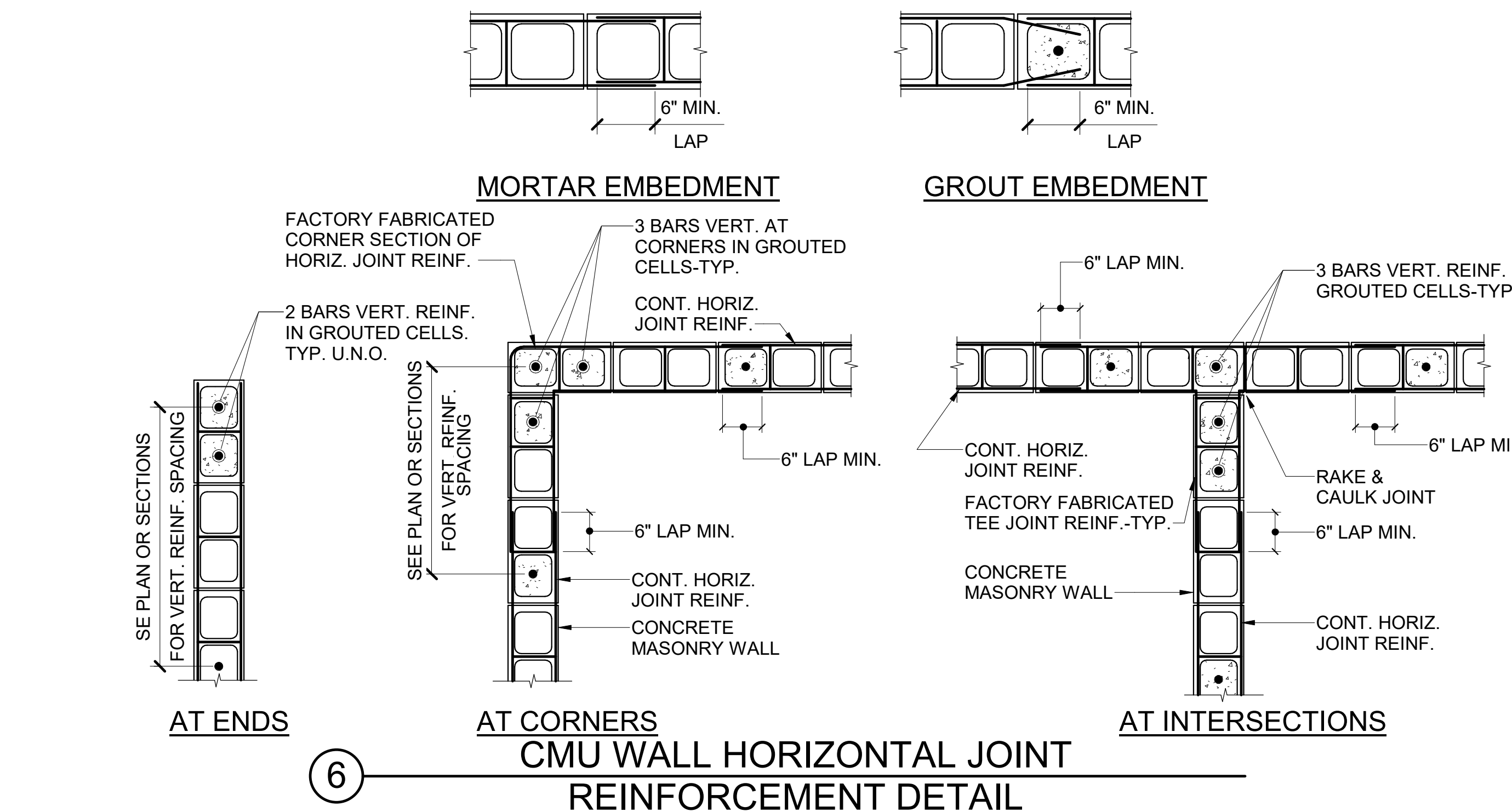


8 CMU REINFORCEMENT LAP SPLICE SCHEDULE

- NOTE:**
- SEE PLANS FOR LOCATION OF CONTRACTION JOINTS AND STRUCTURAL NOTES FOR MAX. SPACING.
 - LOCATE CONTRACTION JOINTS 2'-0" MINIMUM FROM SIDES OF OPENINGS.
 - CJ (CMU CONTRACTION JOINT) SHOWN ON PLANS INDICATES APPROXIMATE LOCATIONS OF CONTRACTION JOINTS. LOCATIONS ARE INTENDED TO COINCIDE WITH CMU COURSING. COORDINATE LOCATION OF JOINTS WITH ARCH. DWGS. SEE ARCH. DWGS FOR LOCATIONS OF BRICK JOINTS.
 - COORDINATE LOCATIONS W/ARCH. DWGS.
 - DO NOT CONSTRUCT CONTRACTION JOINT THROUGH BOND BEAM.

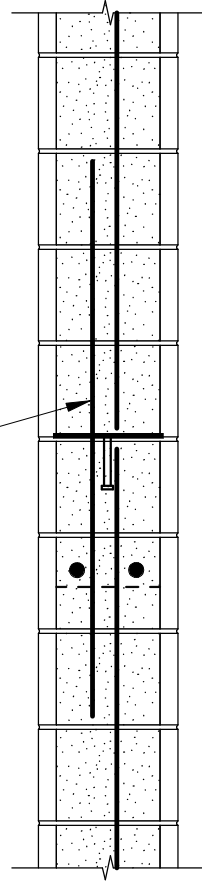


7 CMU WALL CONTRACTION/CONTROL JOINT DETAIL

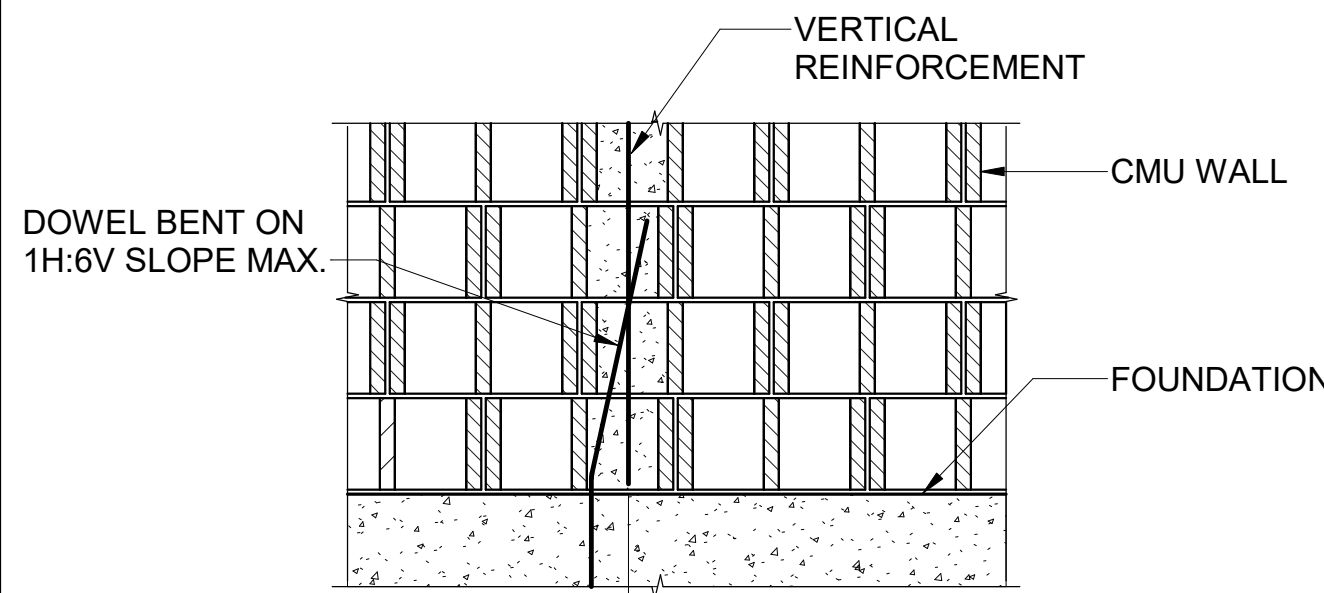


6 CMU WALL HORIZONTAL JOINT REINFORCEMENT DETAIL

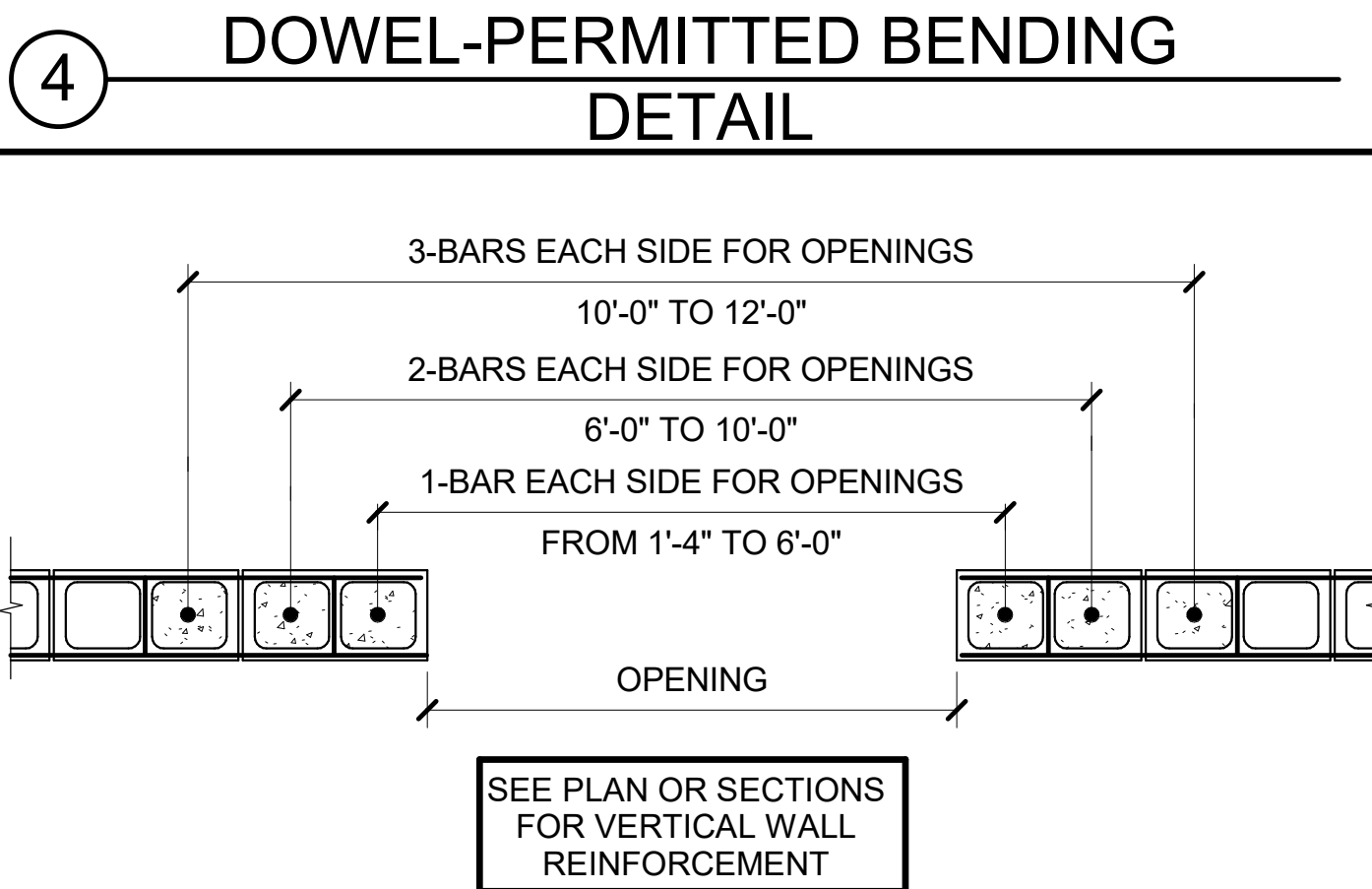
WHERE VERTICAL BAR HITS BEARING PLATE, OR OTHER OBSTRUCTION, PROVIDE DOWEL TO MATCH VERTICAL REINF. w/ 8" MAX. OFFSET IN GROUTED CELL.



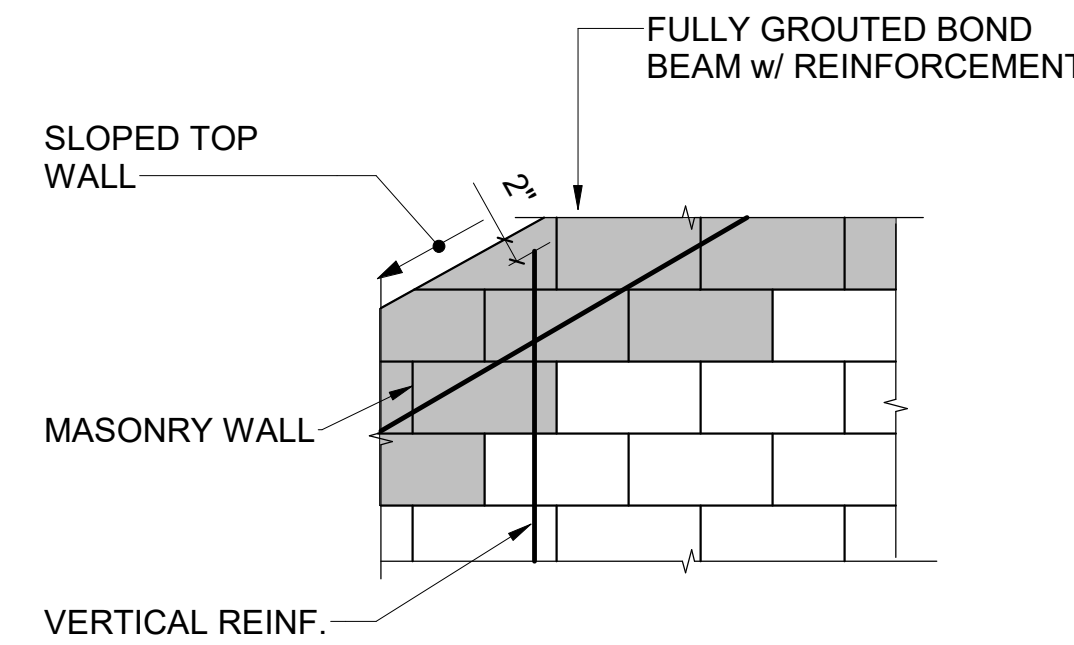
5 NON-CONTACT LAP SPLICE DETAIL



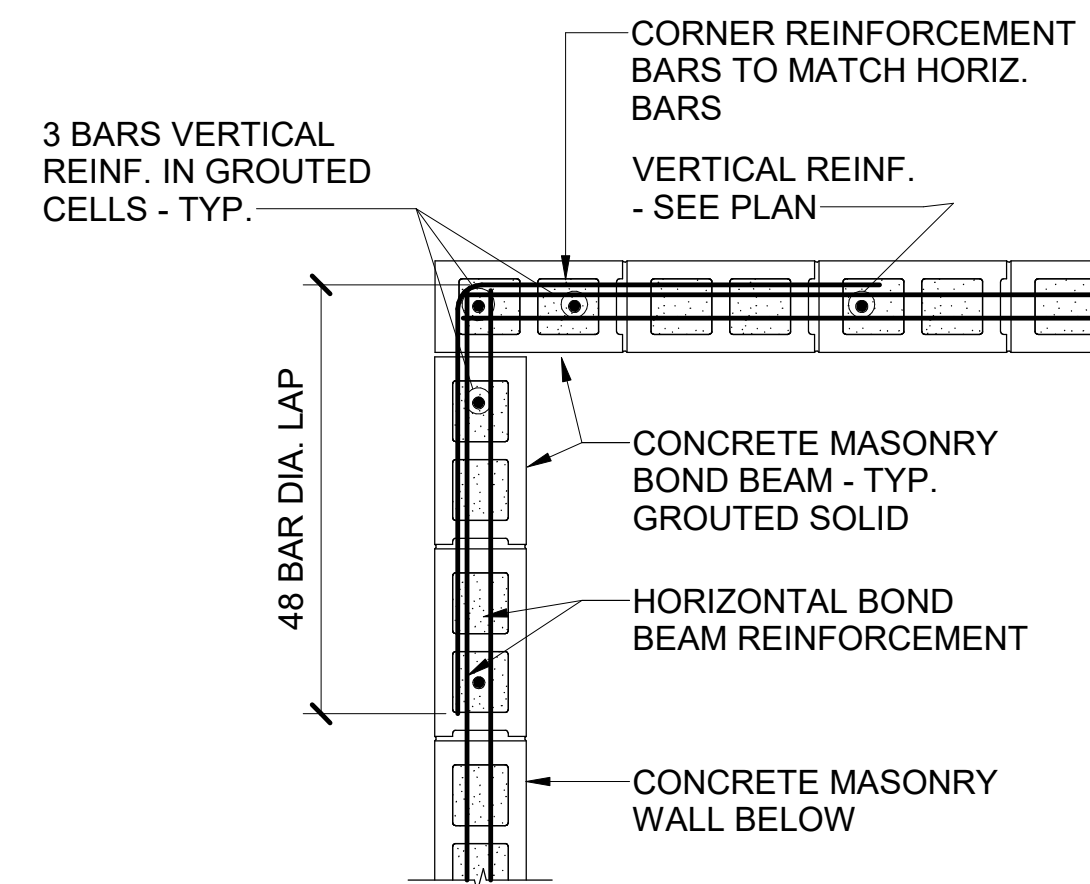
ELEVATION VIEW TOLERANCE



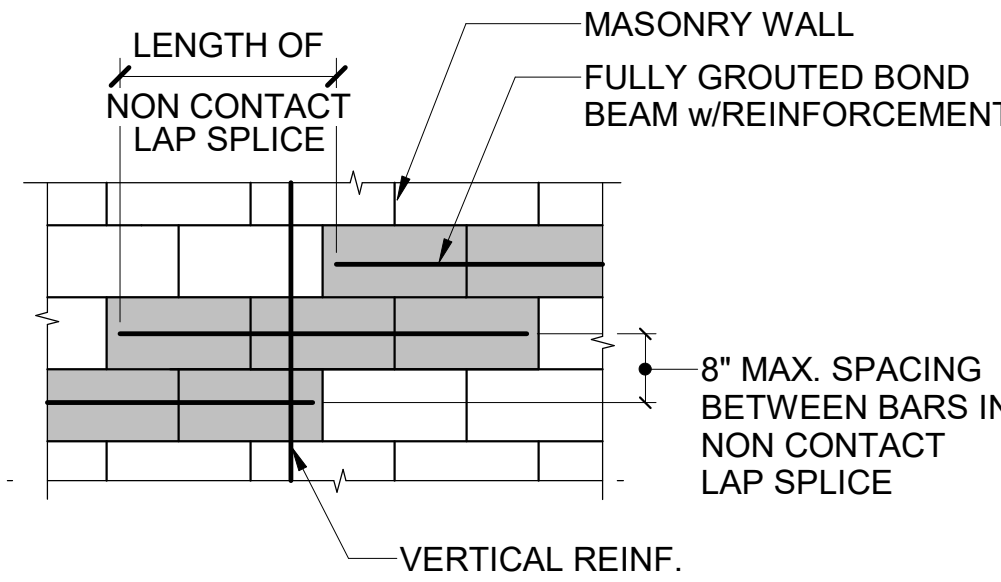
3 CMU WALL OPENING DETAIL



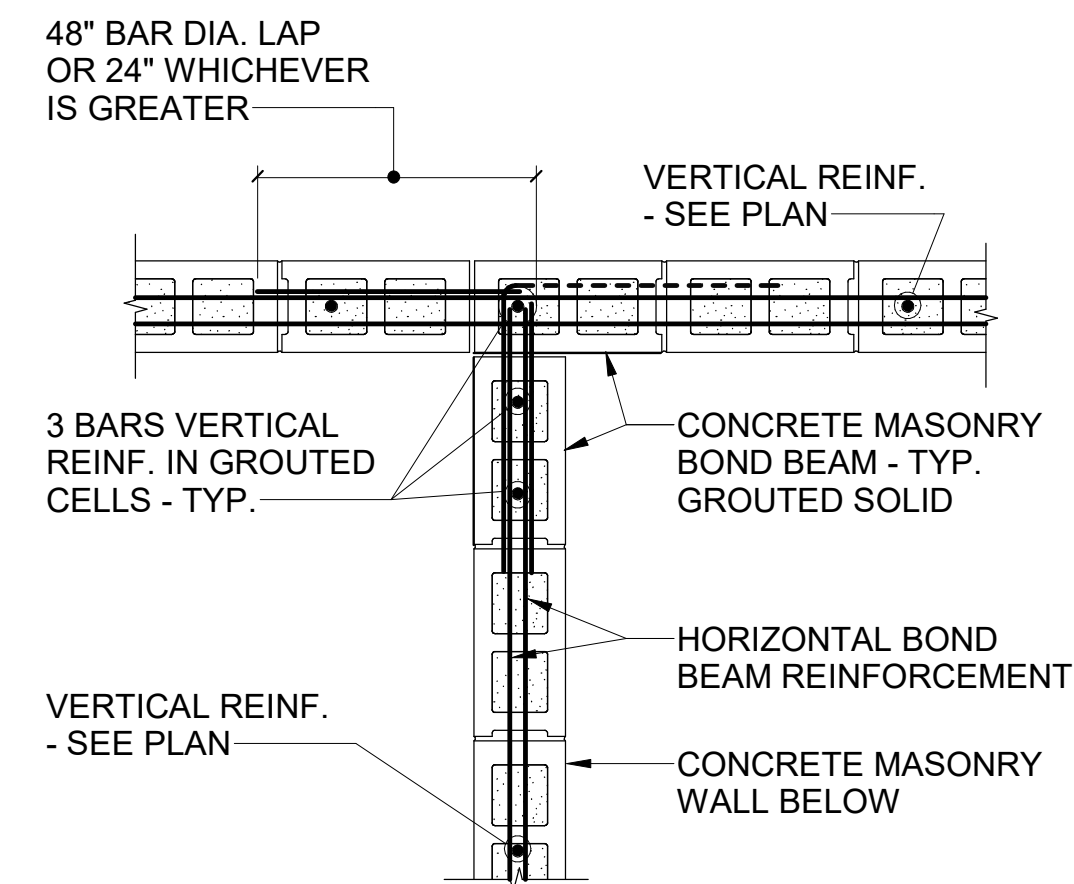
SLOPED BOND BEAM



AT CORNERS

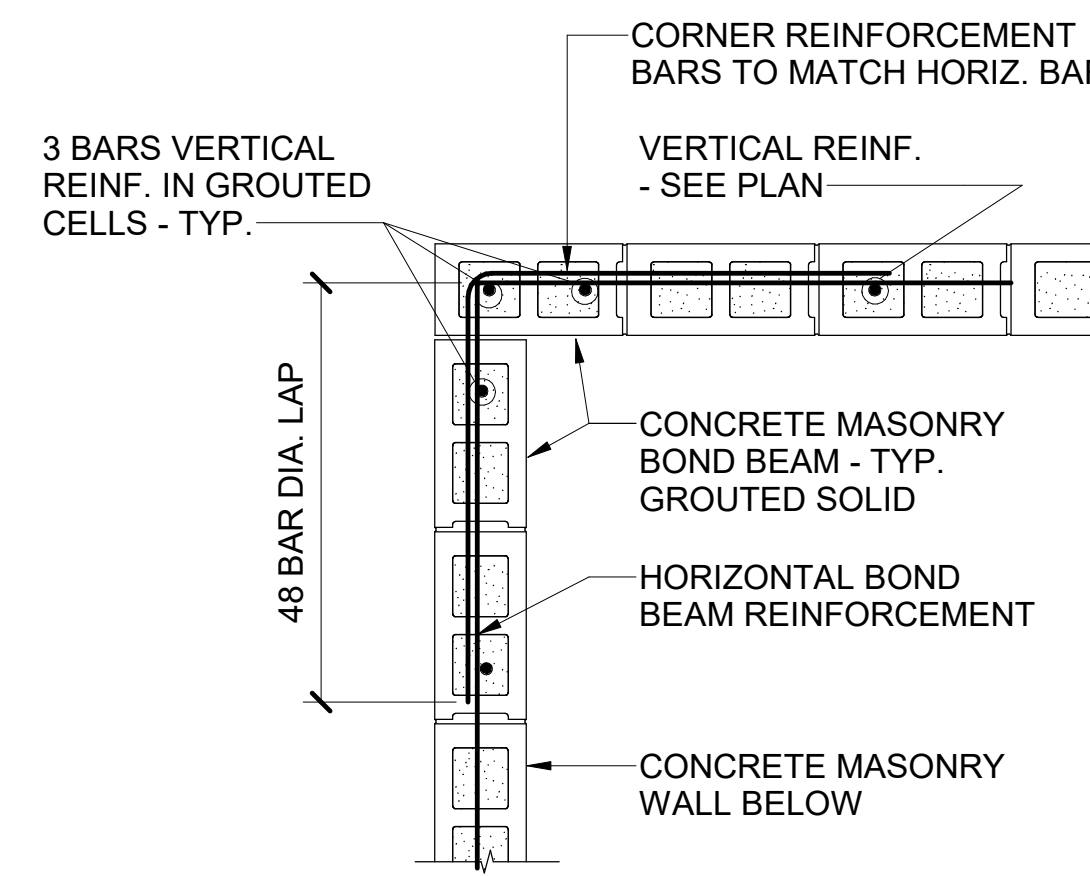


STEPPED BOND BEAM

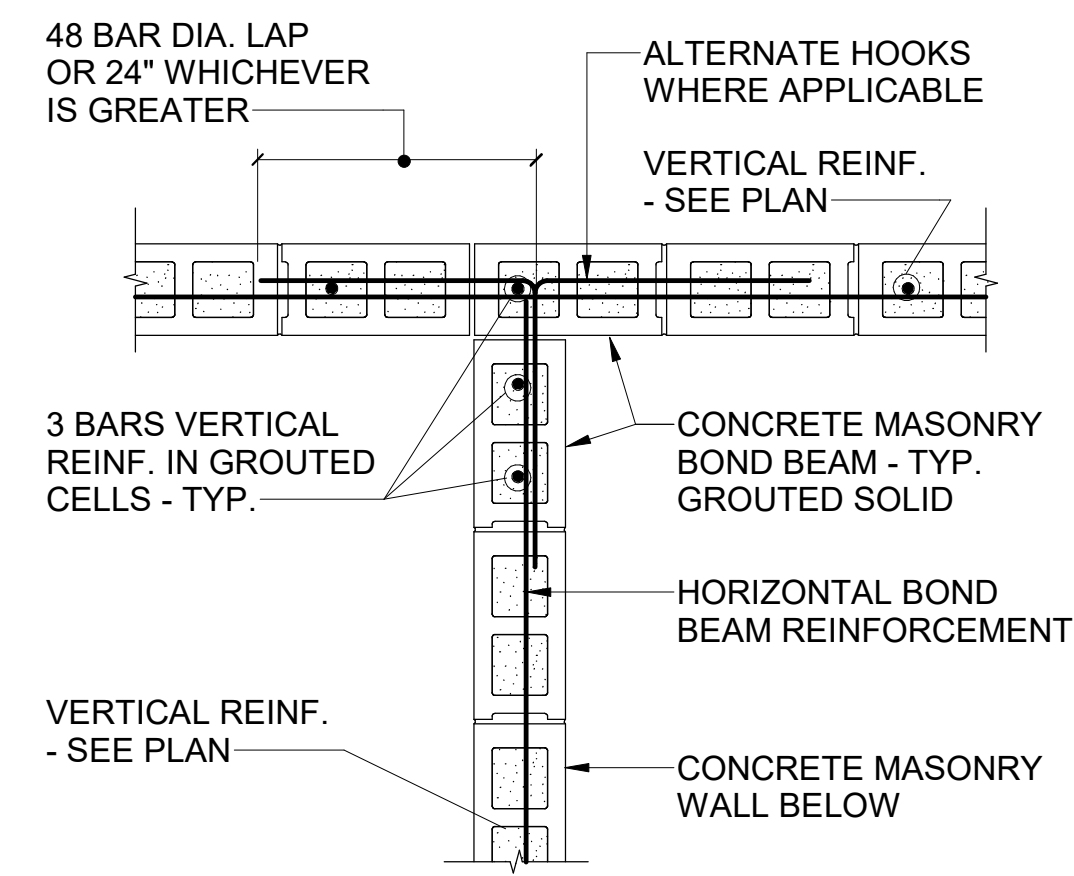


AT INTERSECTIONS

DOUBLE ROW REINFORCEMENT



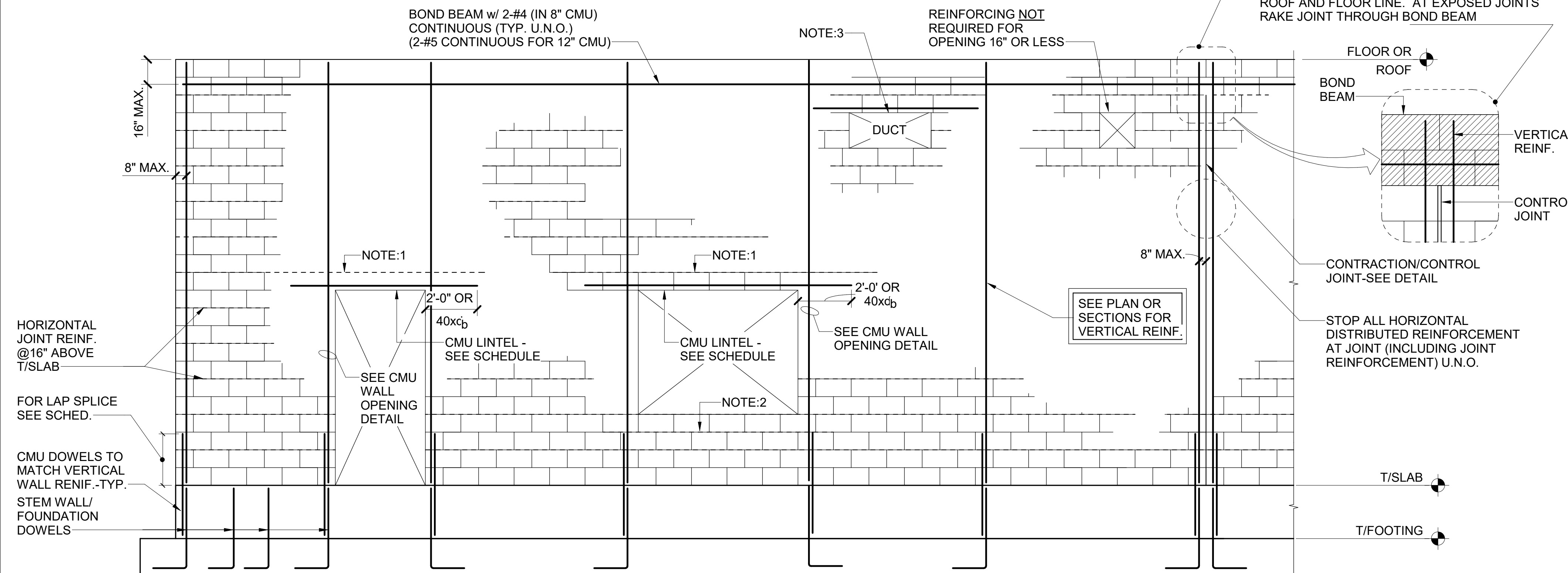
AT CORNERS



AT INTERSECTIONS

SINGLE ROW REINFORCEMENT

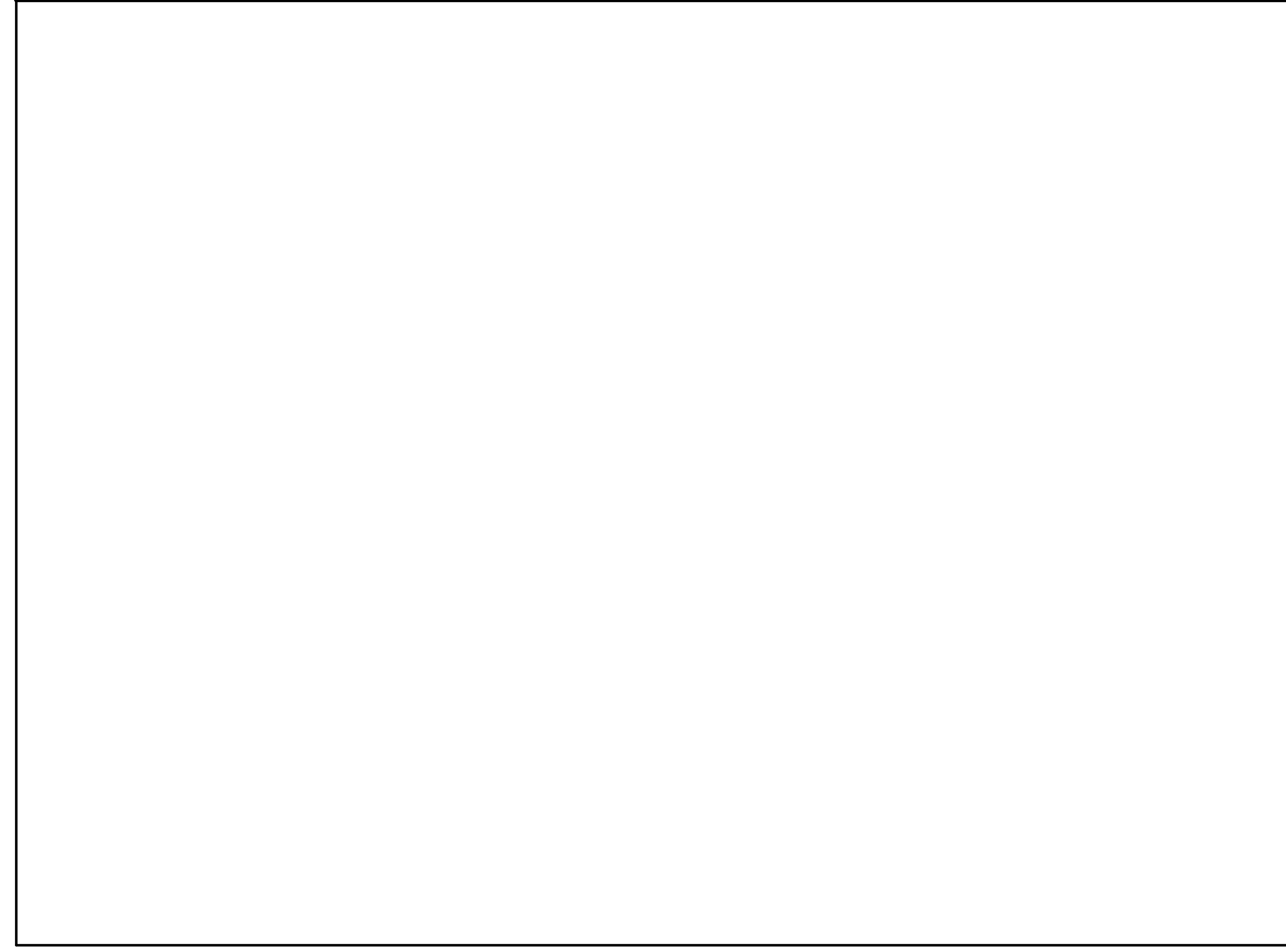
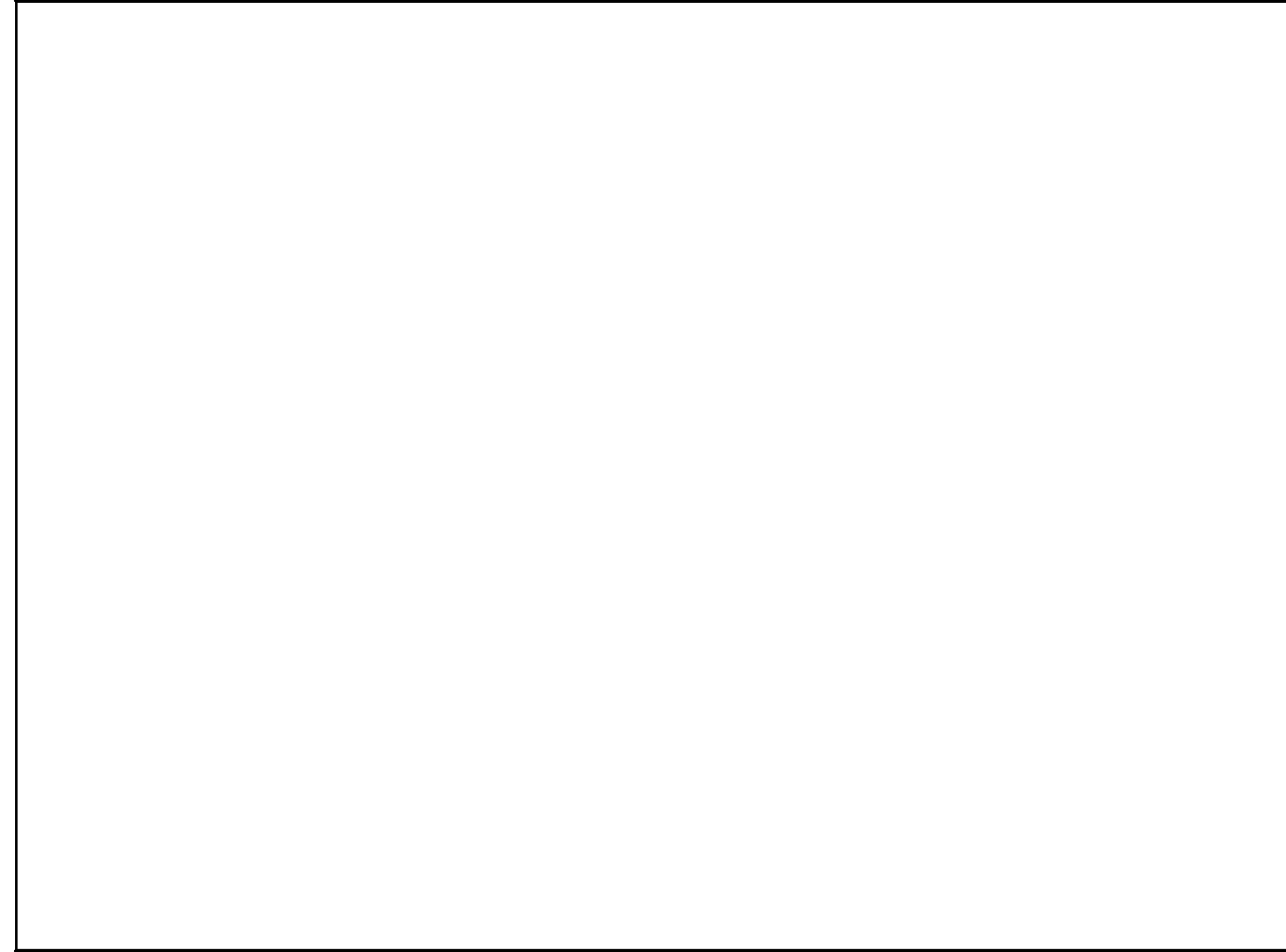
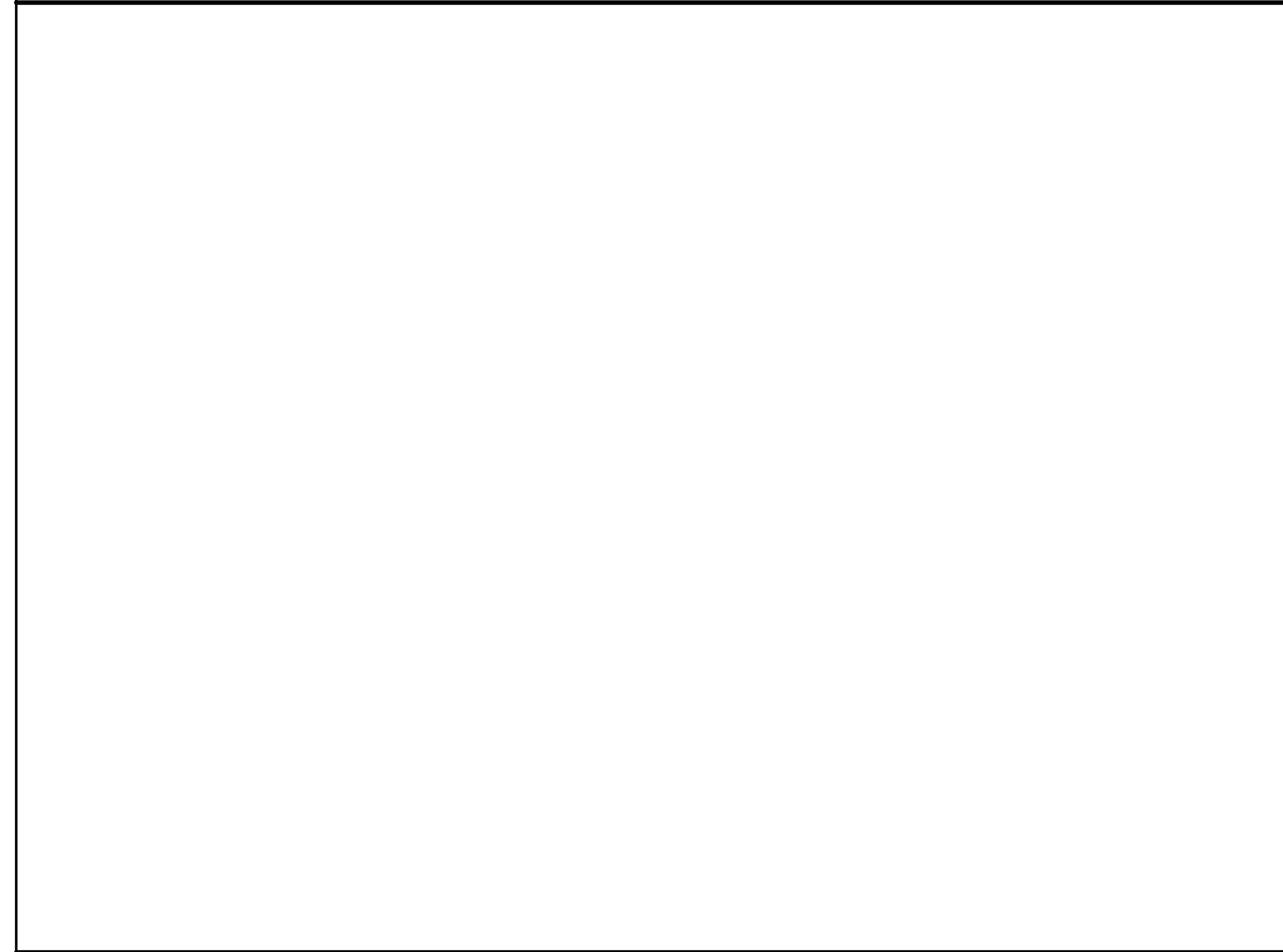
CMU BOND BEAM DETAILS



- NOTE:**
- ADD HORIZONTAL JOINT REINFORCEMENT ABOVE LINTEL. EXTEND 4'-0" EACH SIDE OF OPENING.
 - ADD HORIZONTAL JOINT REINFORCEMENT BELOW CMU SILL. EXTEND 4'-0" EACH SIDE OF OPENING.
 - FOR MECHANICAL/PLUMBING PENETRATIONS, PROVIDE LINTEL OVER CMU OPENING PER UNMARKED CMU LINTEL SCHEDULE.

ENGINEER NOTE:
BASE OF WALL CONDITION MAY VARY - EDIT AS REQD
DETAIL SHOWN IS FOR NON-SEISMIC PROJECTS

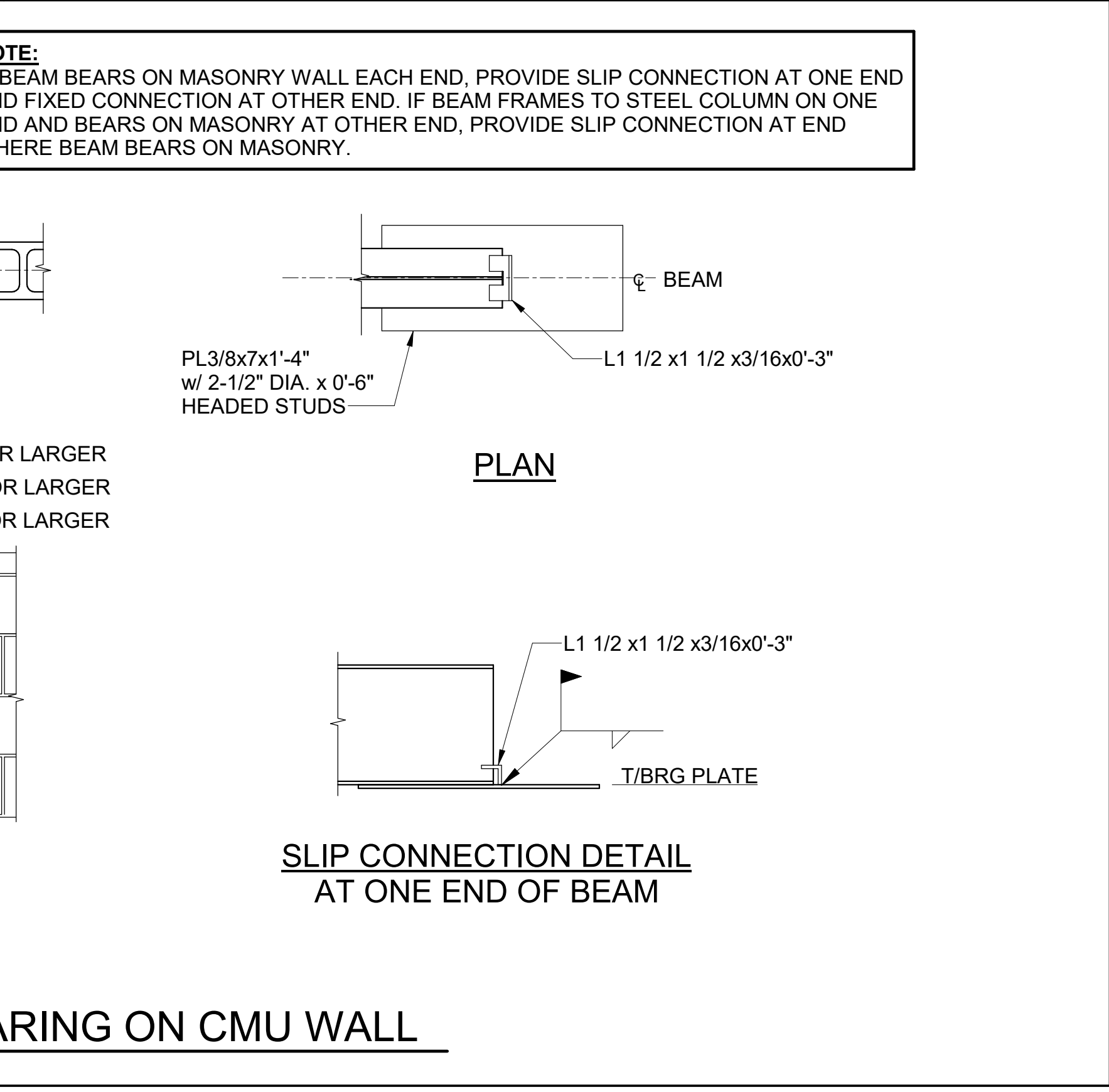
1 TYPICAL CMU WALL REINFORCING ELEVATION



6 TYPICAL STEEL LINTEL DETAIL AT INTERIOR AT INTERIOR WALL

4 TYPICAL STEEL BEAM BEARING ON CMU WALL

5 TYPICAL STEEL LINTEL DETAIL AT EXTERIOR WALL



3 TYPICAL LINTEL DETAIL FOR OPENING IN EXISTING CMU WALL

NOTE:
DETAILS IS PROVIDED FOR LINTELS INSTALLED AFTER WALL IS BUILT. COORDINATE LINTEL LOCATIONS w/ MECH./ELEC./PLUMBING OPENINGS.

WIDTH OF OPENING "W"	STEEL LINTEL
TO 1'-0"	NONE
1'-1" TO 3'-4"	L5x3x5/16 (LLV) BOTH SIDES
OVER 3'-4" TO 6'-0"	USE BEAM-W8x24

NOTE:
IF LINTEL IS EXPOSED TO VIEW, USE BEAM IN LIEU OF ANGLE.

2 VENEER LINTEL SCHEDULE WITH CMU

OPENING WIDTH	ANGLE SIZE	REMARKS
0'-0" TO 4'-0"	L5x3 1/2x 5/16 (LLH)	LOOSE
4'-1" TO 8'-0"	L5x5x 5/16	LOOSE
OVER 8'-0"	L7x4x 5/16	BOLTED w/ 5/8" DIA. SCREW ANCHORS @ 2'-0" (5" EMBED)

NOTE: 8" MIN. BEARING EACH END-TYP. STEEL EXPOSED TO ELEMENTS SHALL BE GALVANIZED.

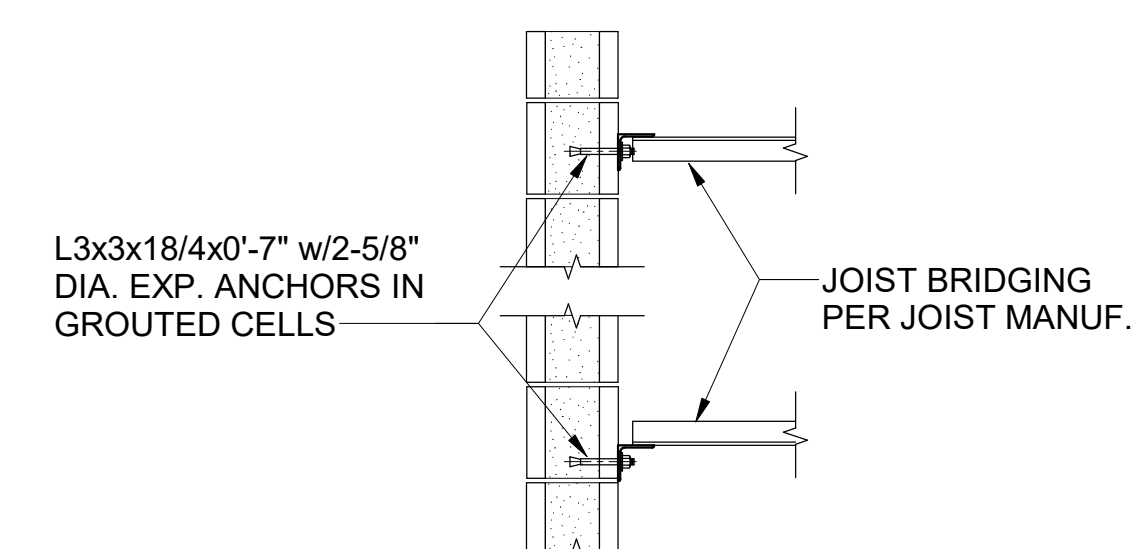
1 CMU LINTEL SCHEDULES AND DETAILS

MARKED "LX" CMU LINTEL SCHEDULE						
MARK	WALL THICK'S	LINTEL DEPTH	REINFORCEMENT			
			BOTTOM	TOP	VERTICAL	BEARING AND LENGTH
L1	8	8	2-#5	-	-	8"
L2	8	16	2-#5	-	-	8"
L3	8	24	2-#5	-	-	16"
L4	12	16	2-#5	-	-	16"

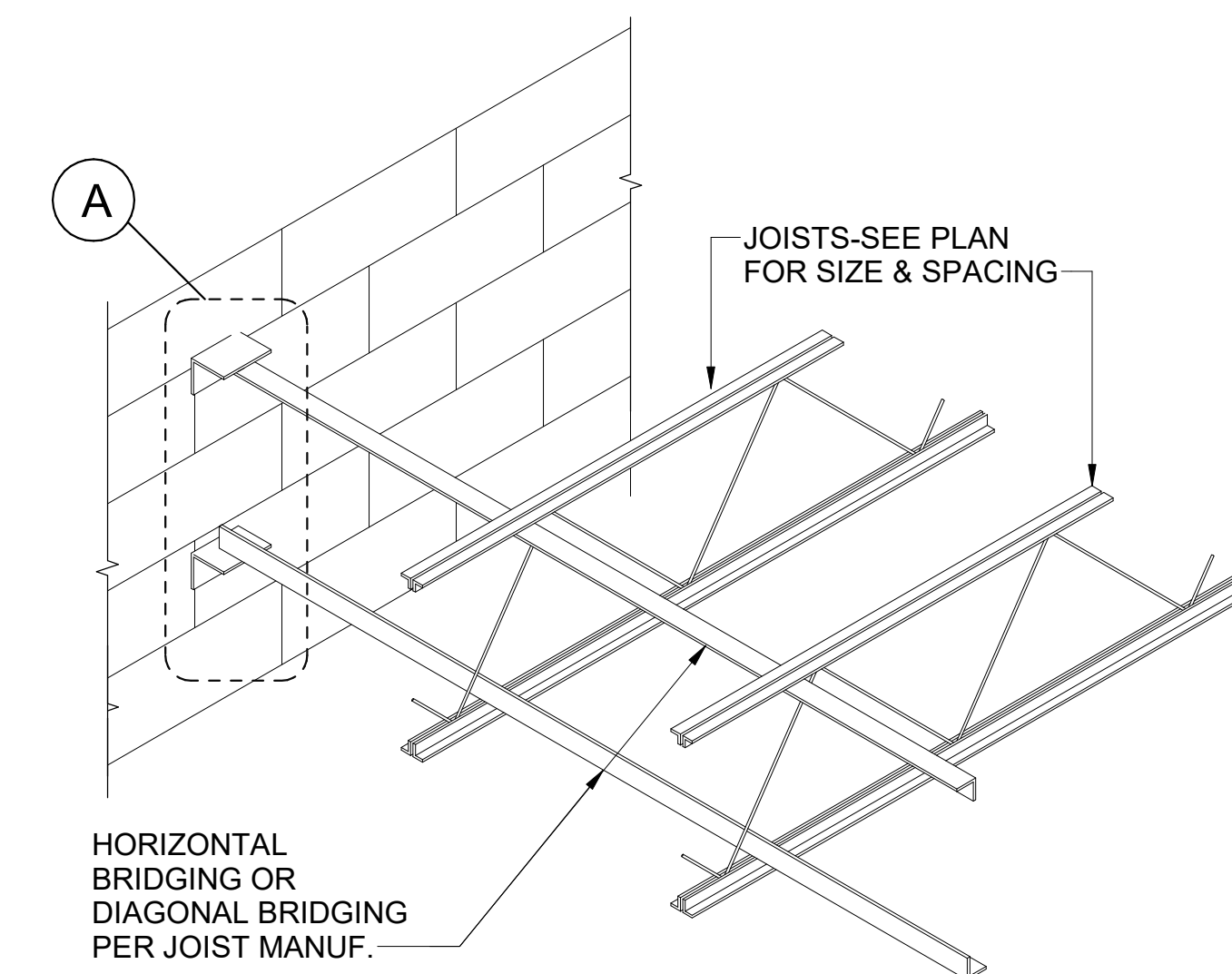
NOTE:
1. FILL CMU CORES AT LINTEL BEARING w/ 2500 psi COARSE GROUT. REINFORCE JAMBS w/ FULL HEIGHT REINFORCING PER CMU WALL OPENING DETAIL.

UNMARKED CMU LINTEL SCHEDULE			
WALL OPENING	LINTEL DEPTH	REINFORCING	BEARING AND LENGTH
UP TO 4'-0"	8"	2-#4 BOTTOM	8"
4'-1" TO 6'-0"	8"	2-#5 BOTTOM	8"
6'-1" TO 8'-0"	16"	2-#5 BOTTOM	16"
8'-1" TO 10'-0"	16"	2-#6 BOTTOM	16"

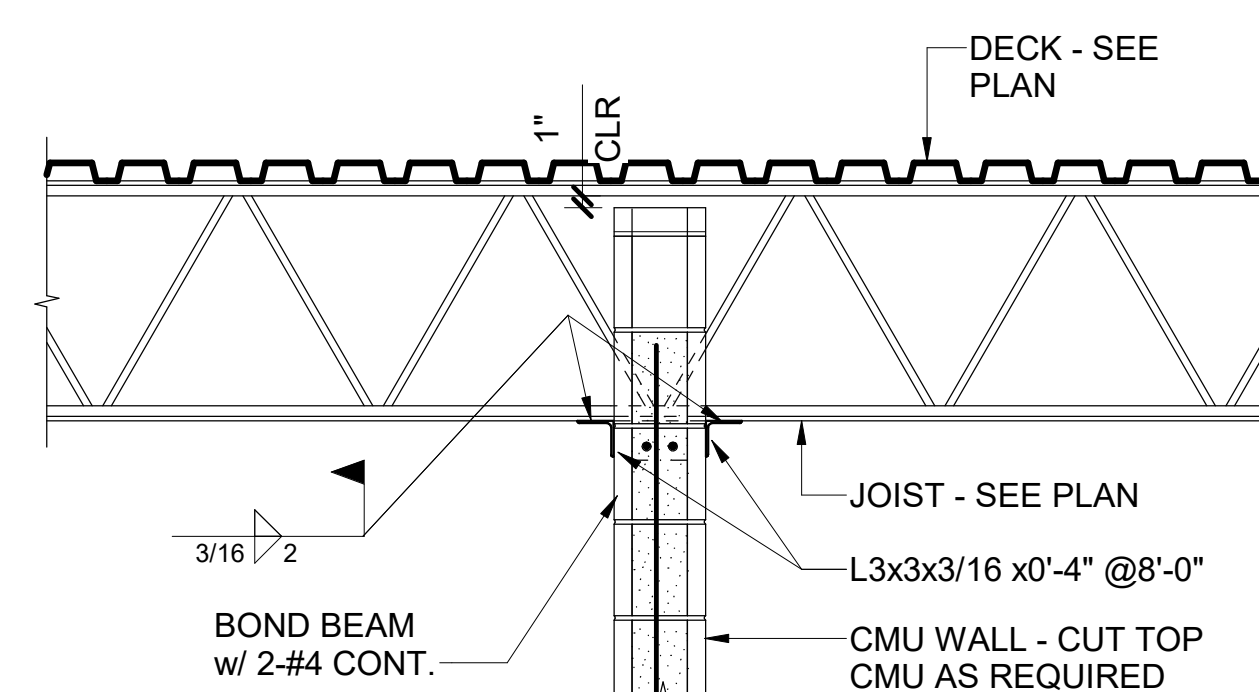
NOTE: 8" MIN. BEARING EACH END-TYP.



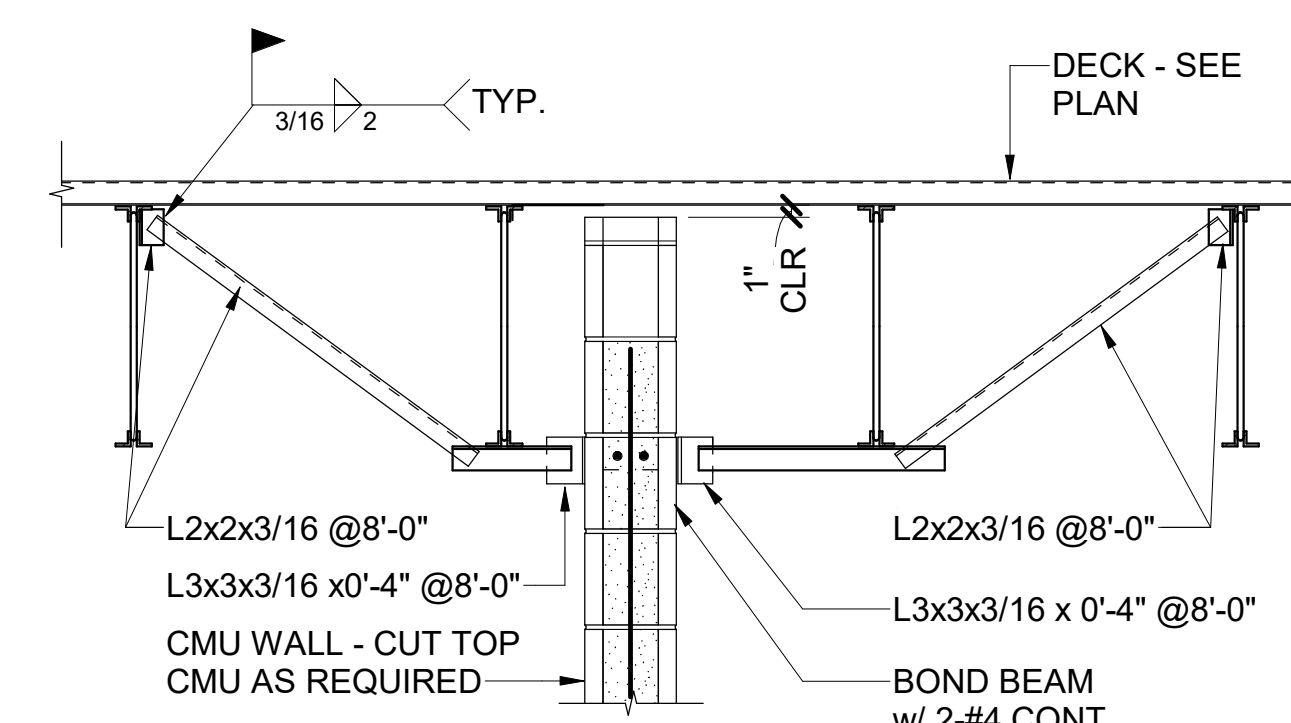
2A ————— DETAIL



② JOIST BRIDGING DETAIL

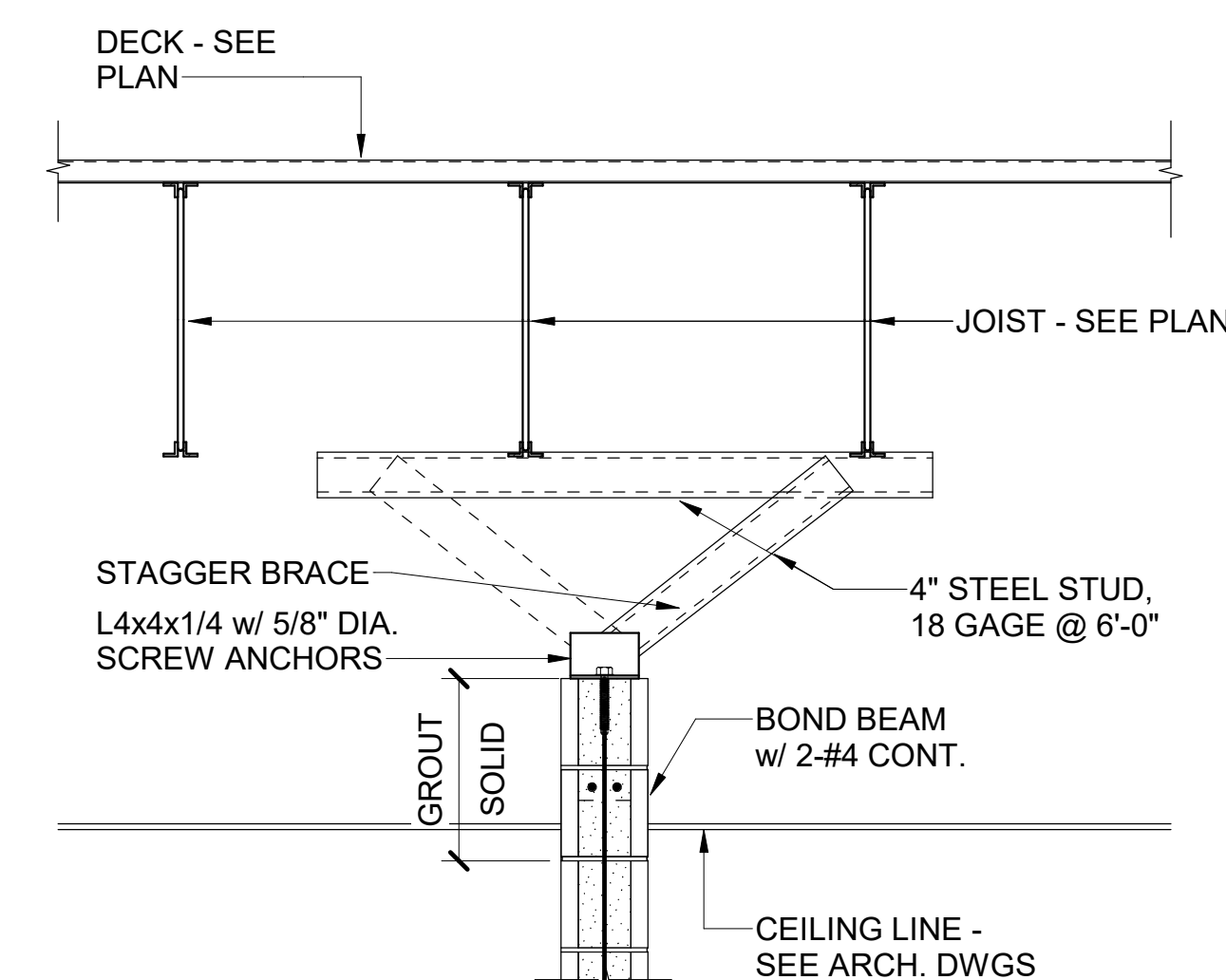


①D CMU PERPENDICULAR TO JOIST

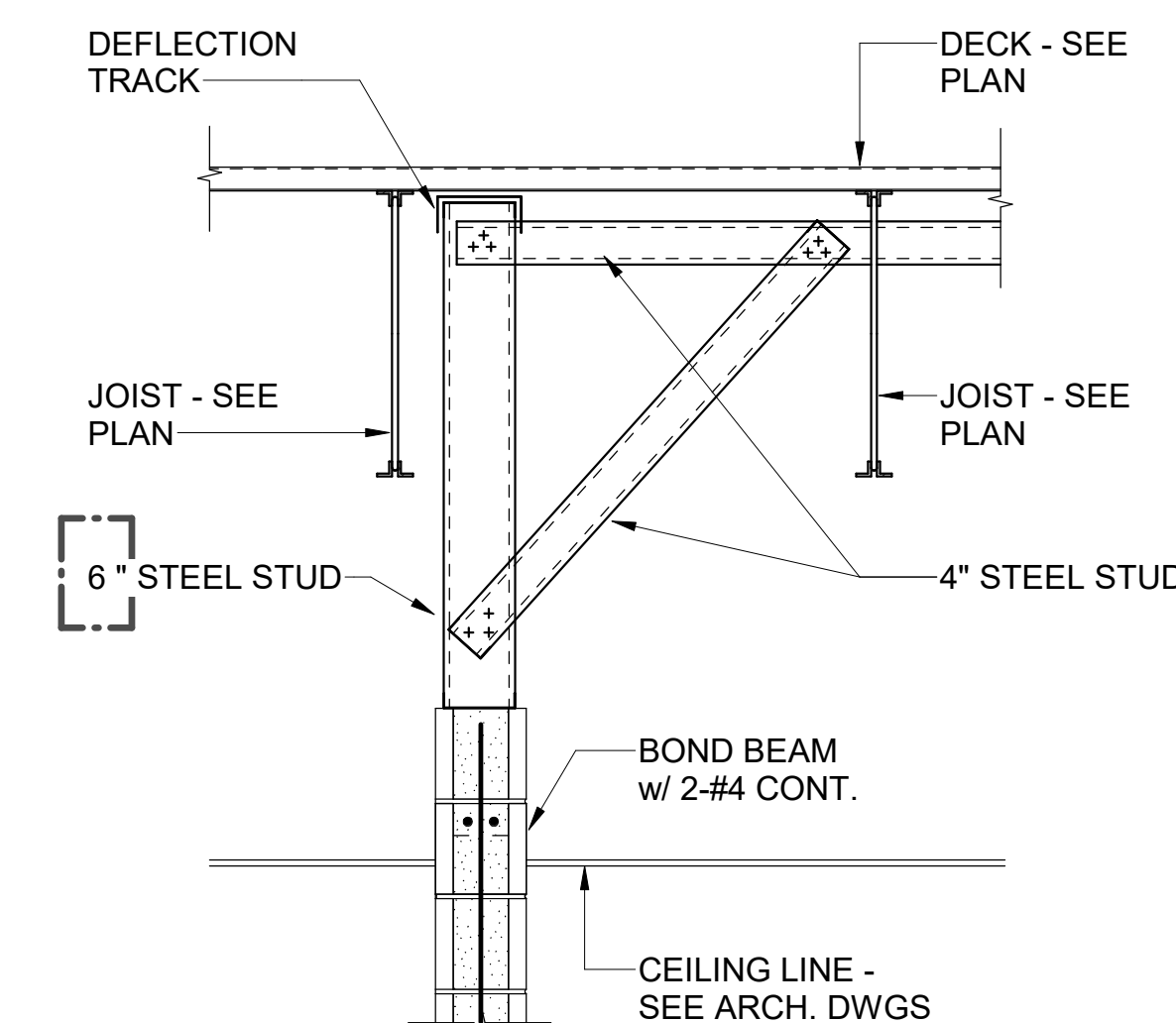


1B CMU PARALLEL TO JOIST

WALLS EXTEND TO UNDERSIDE OF DECK



① CMU PARALLEL TO DECK



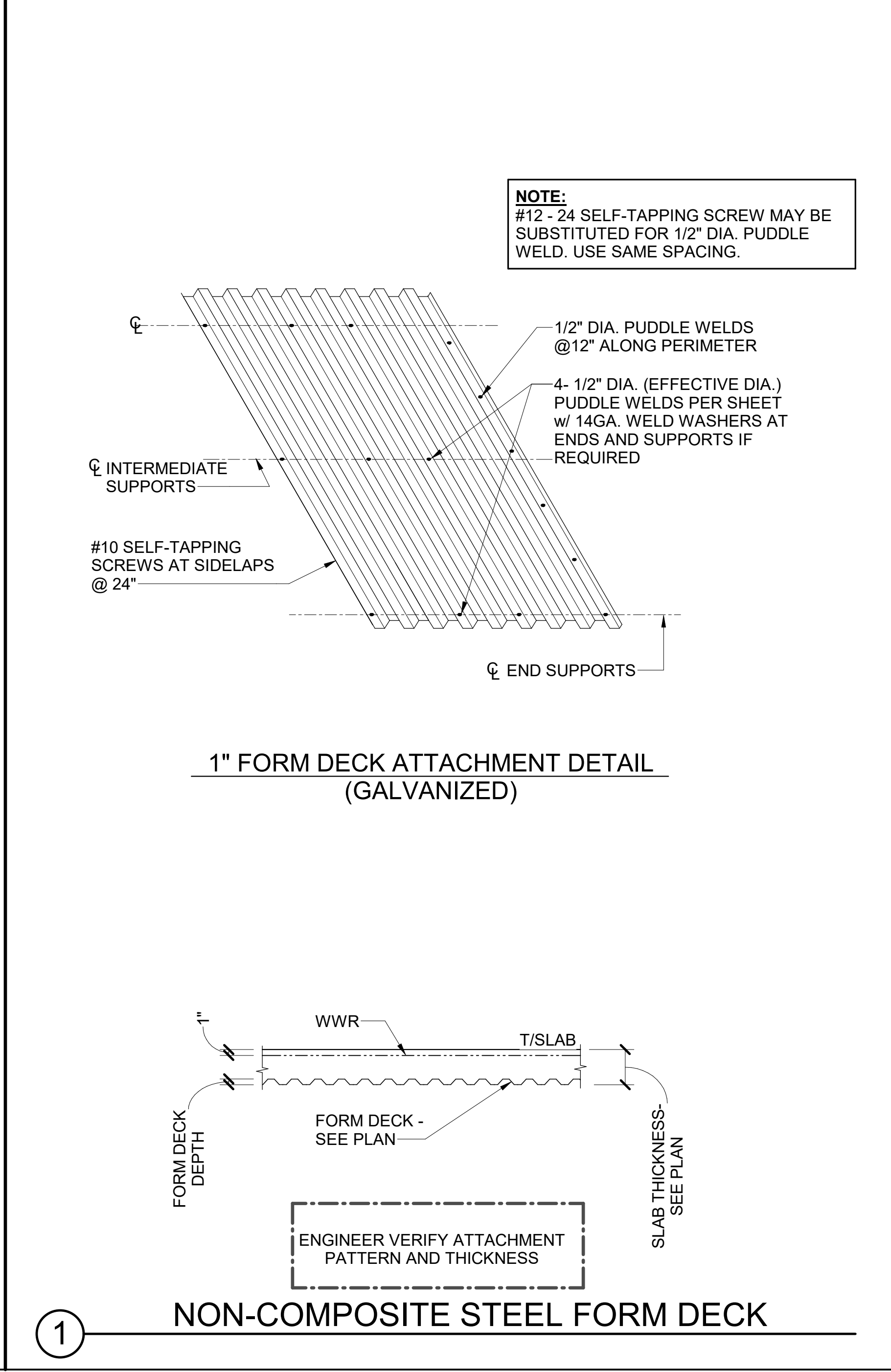
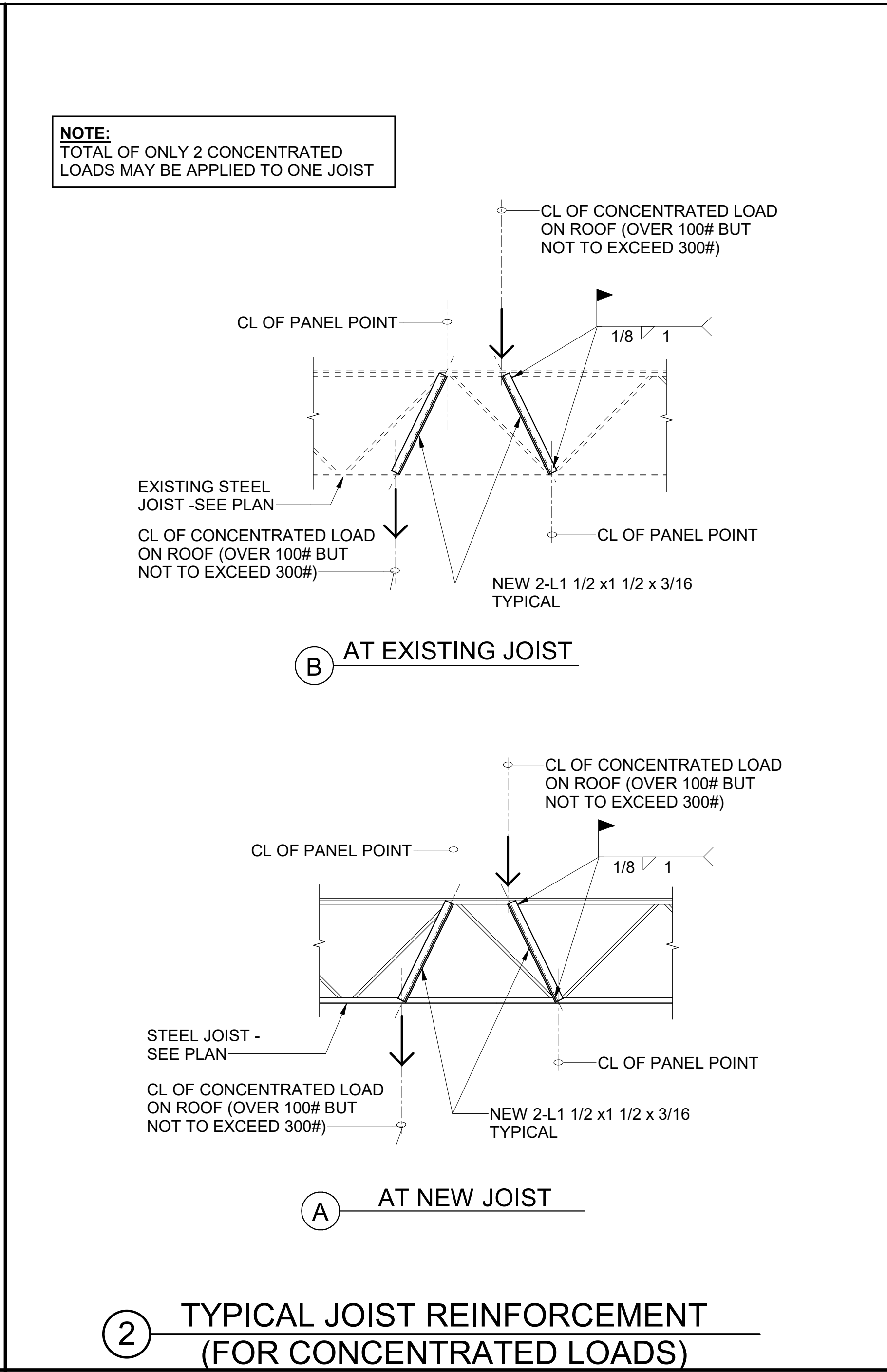
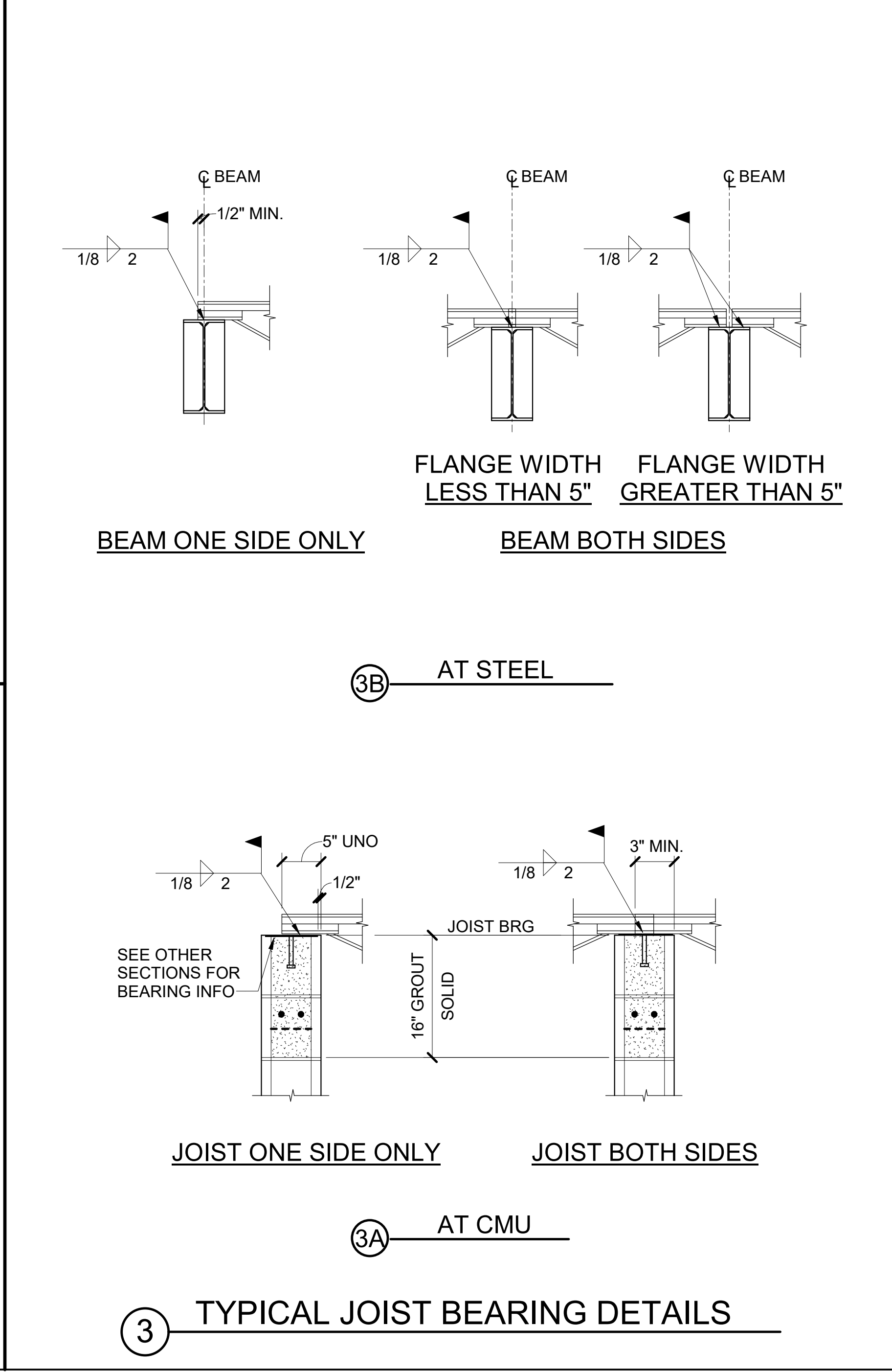
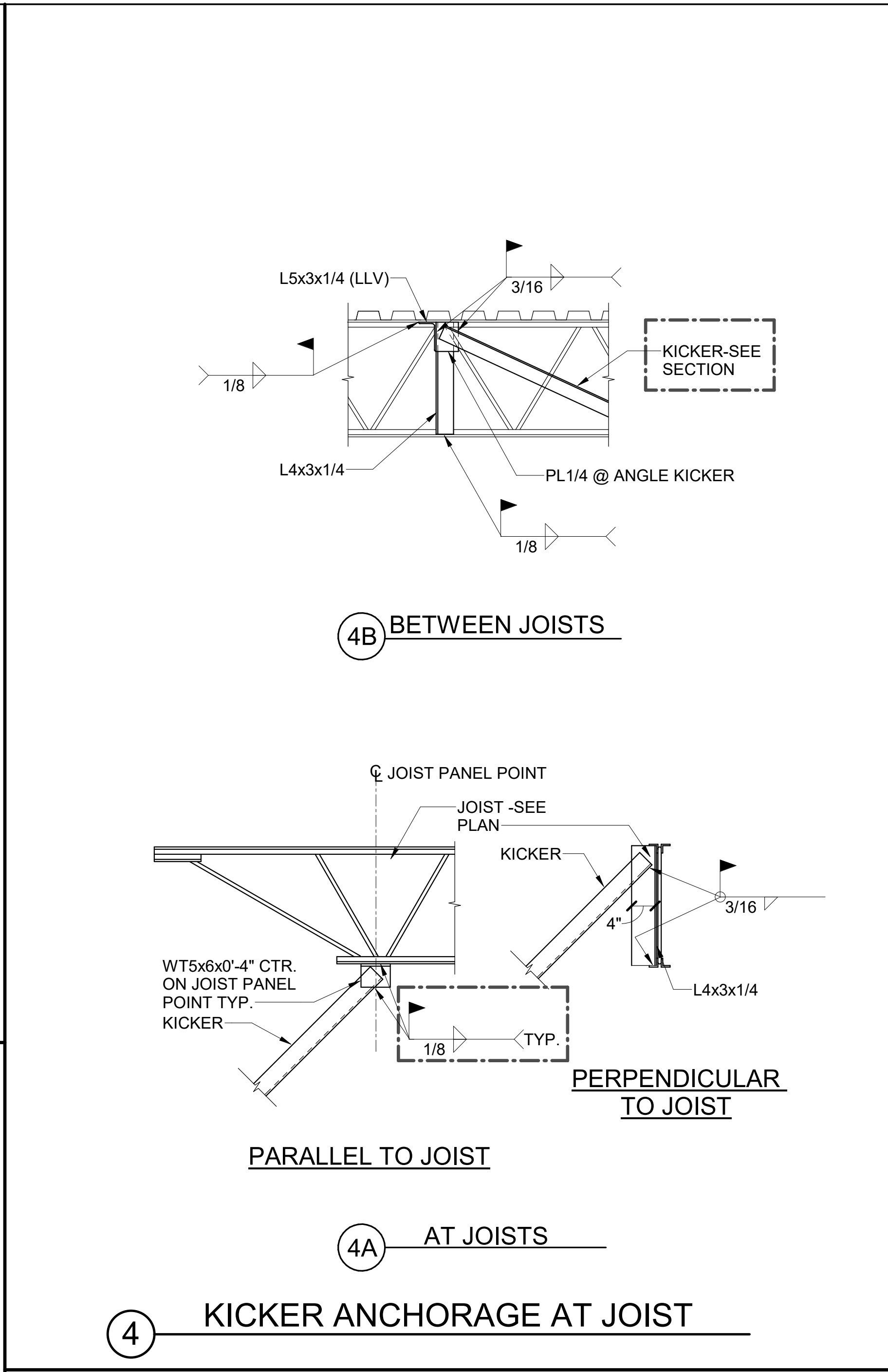
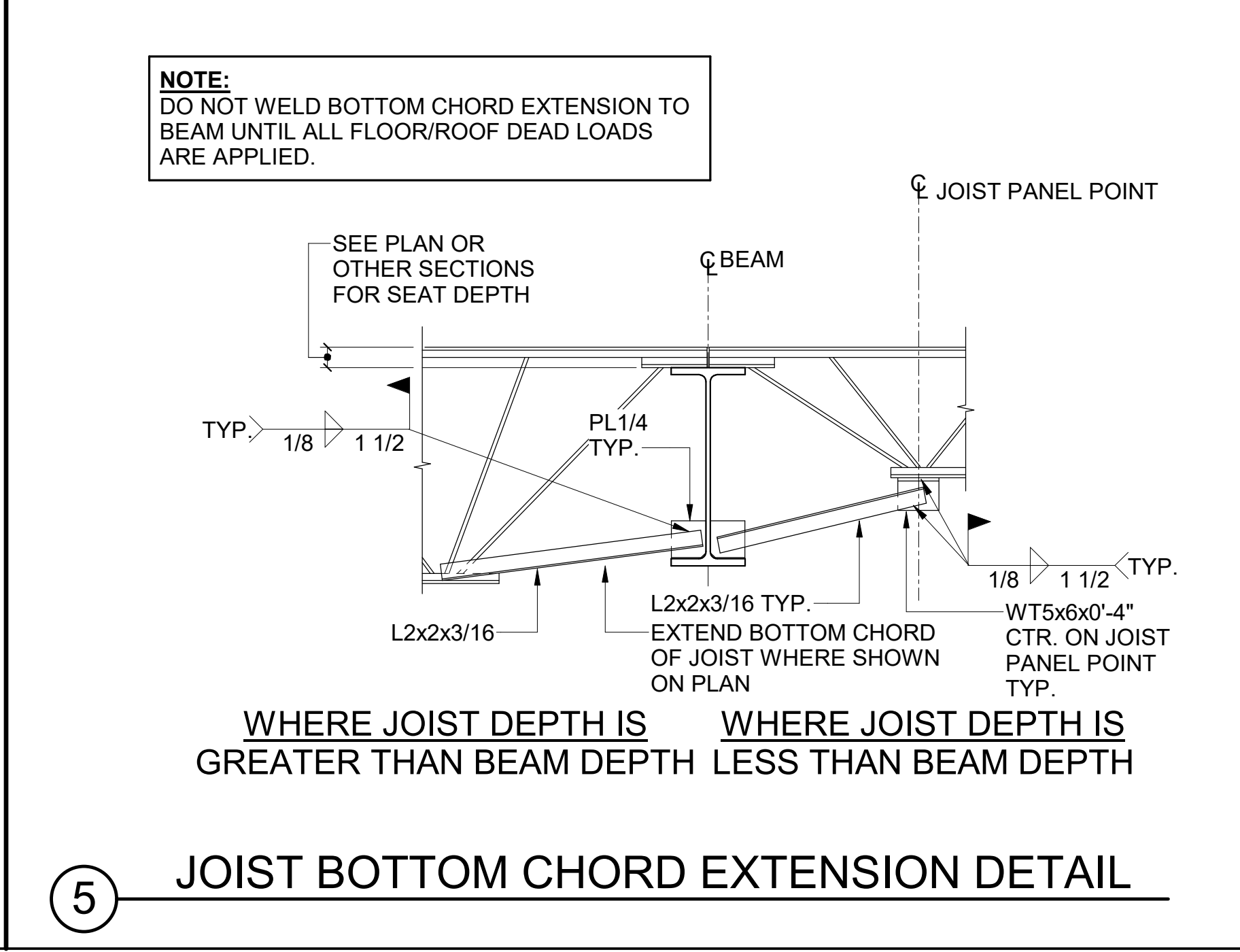
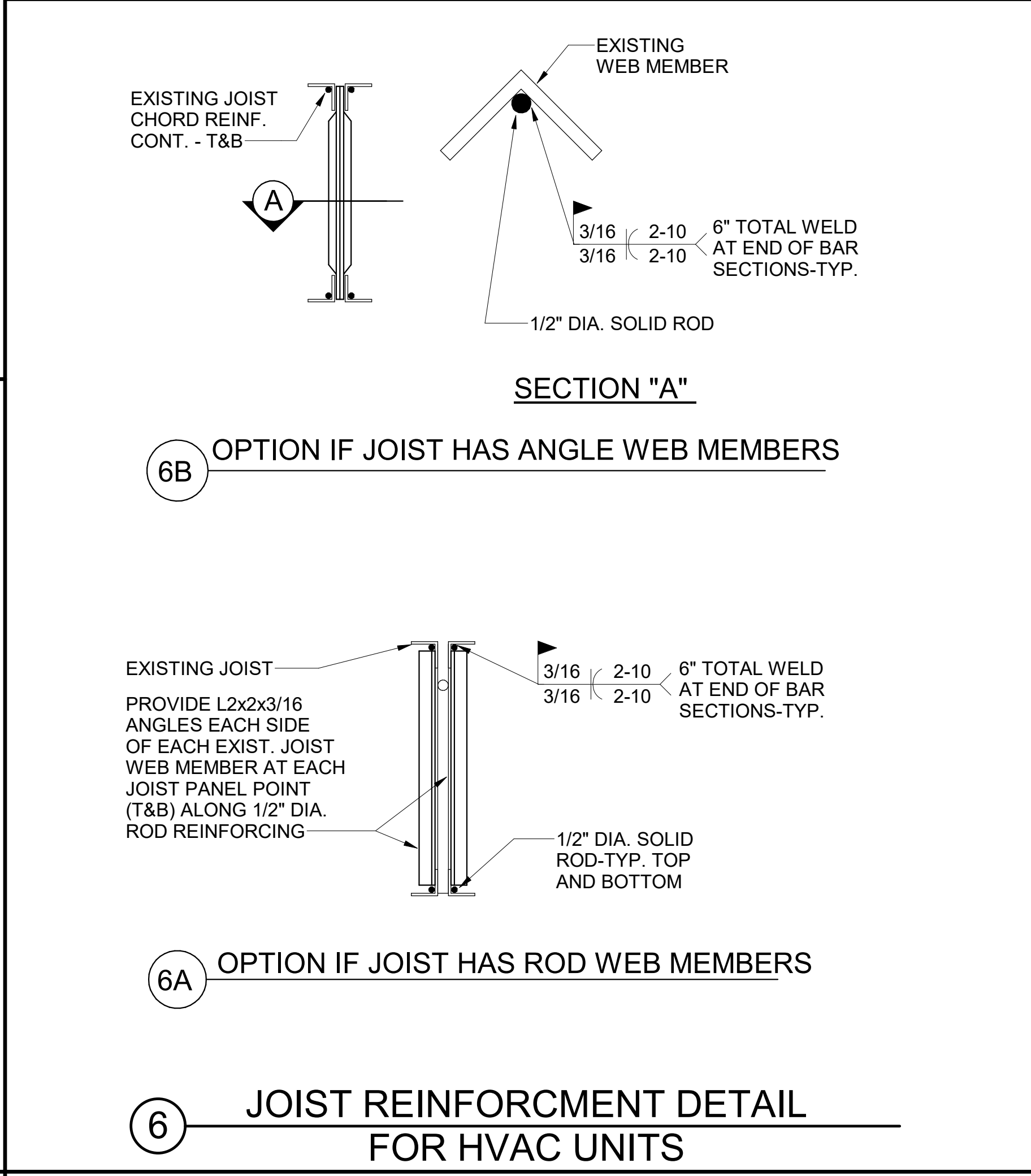
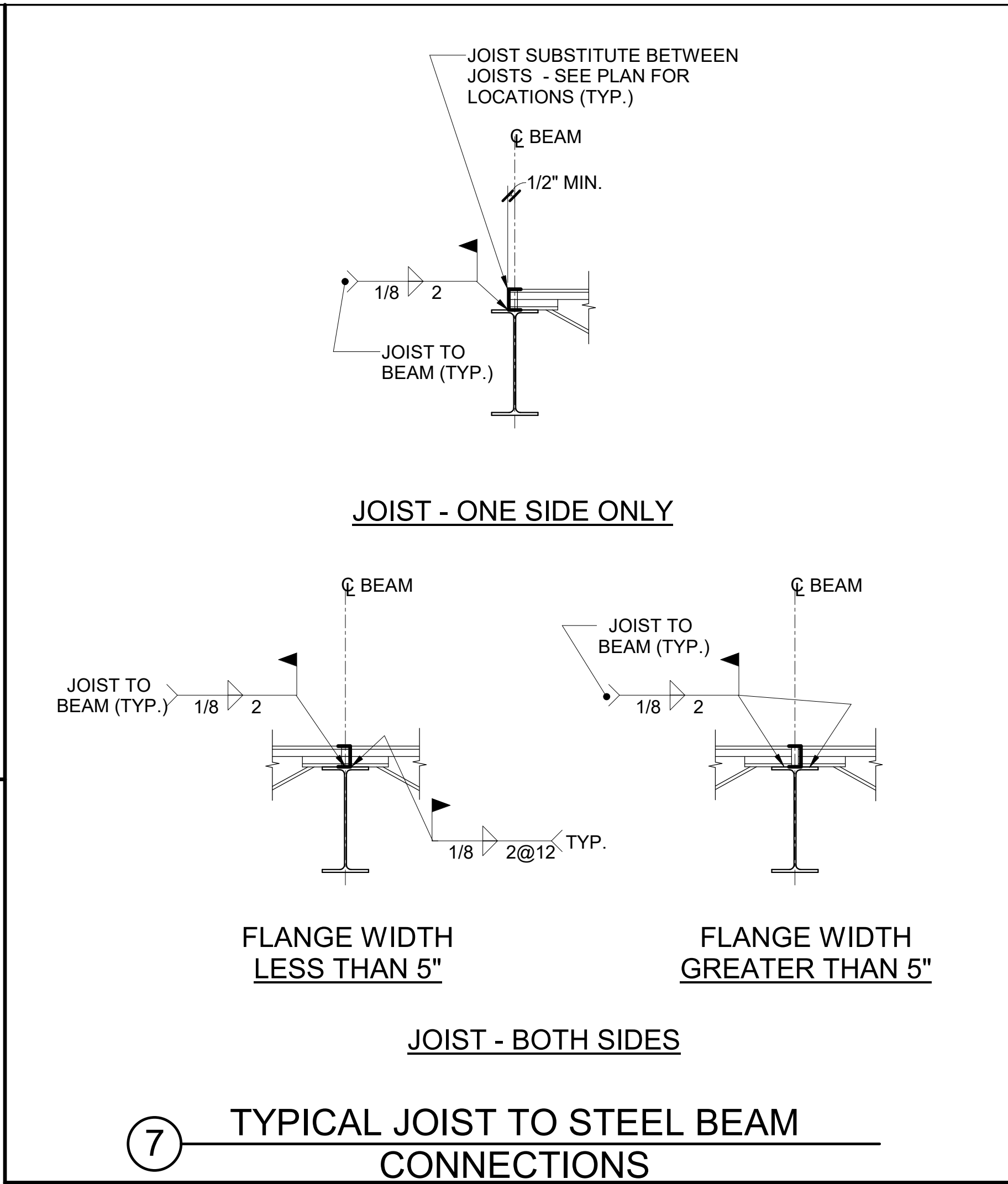
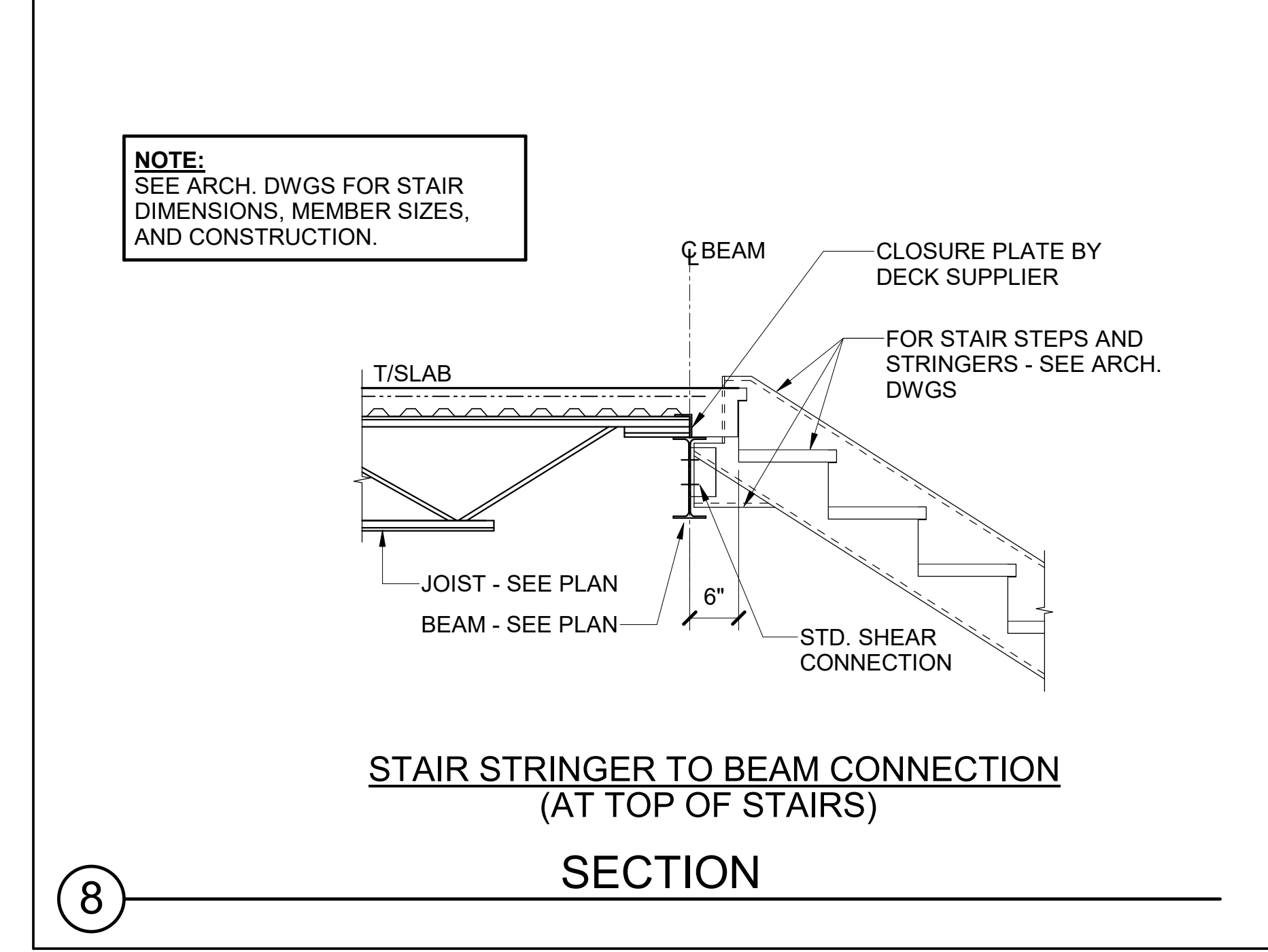
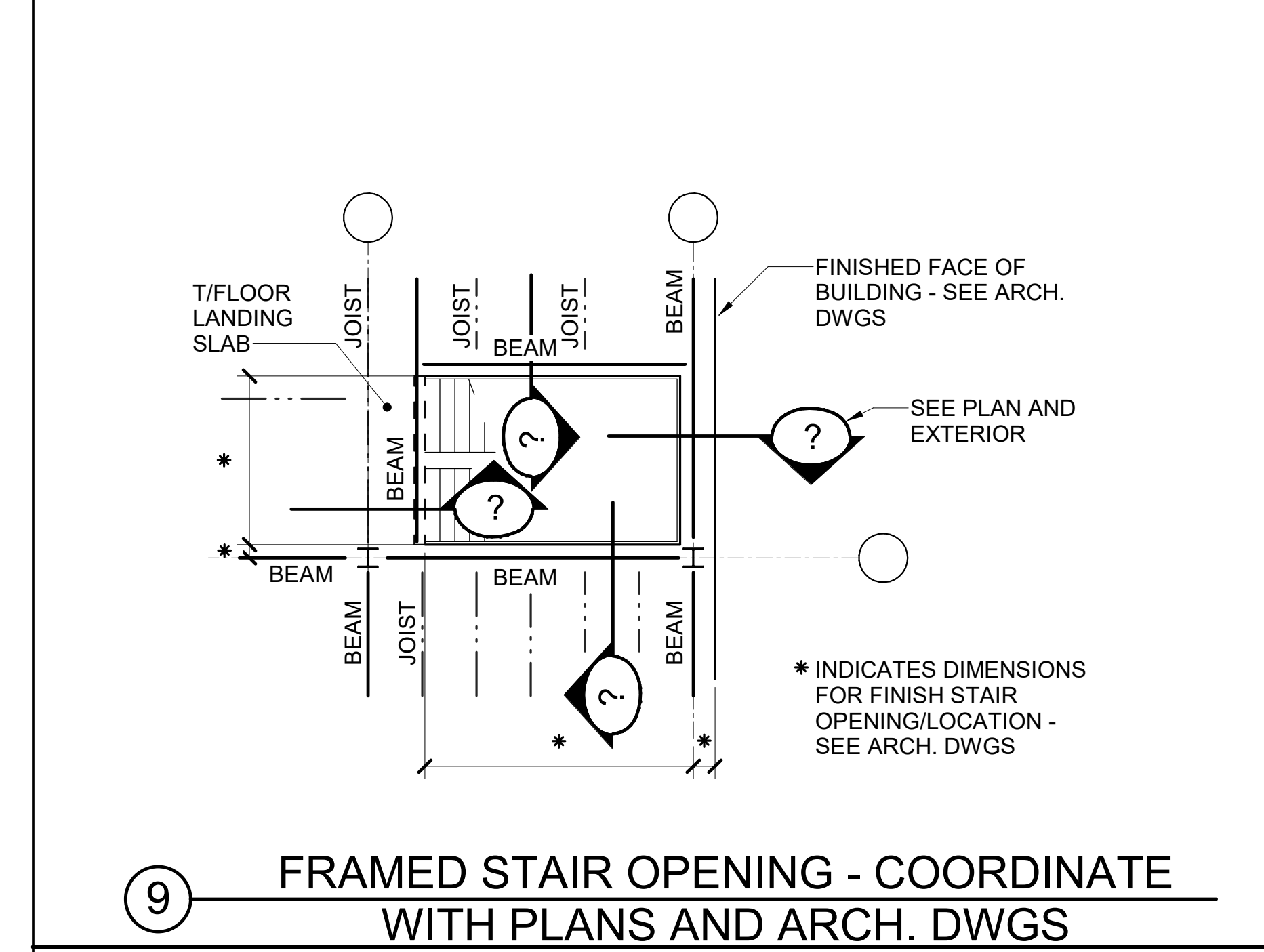
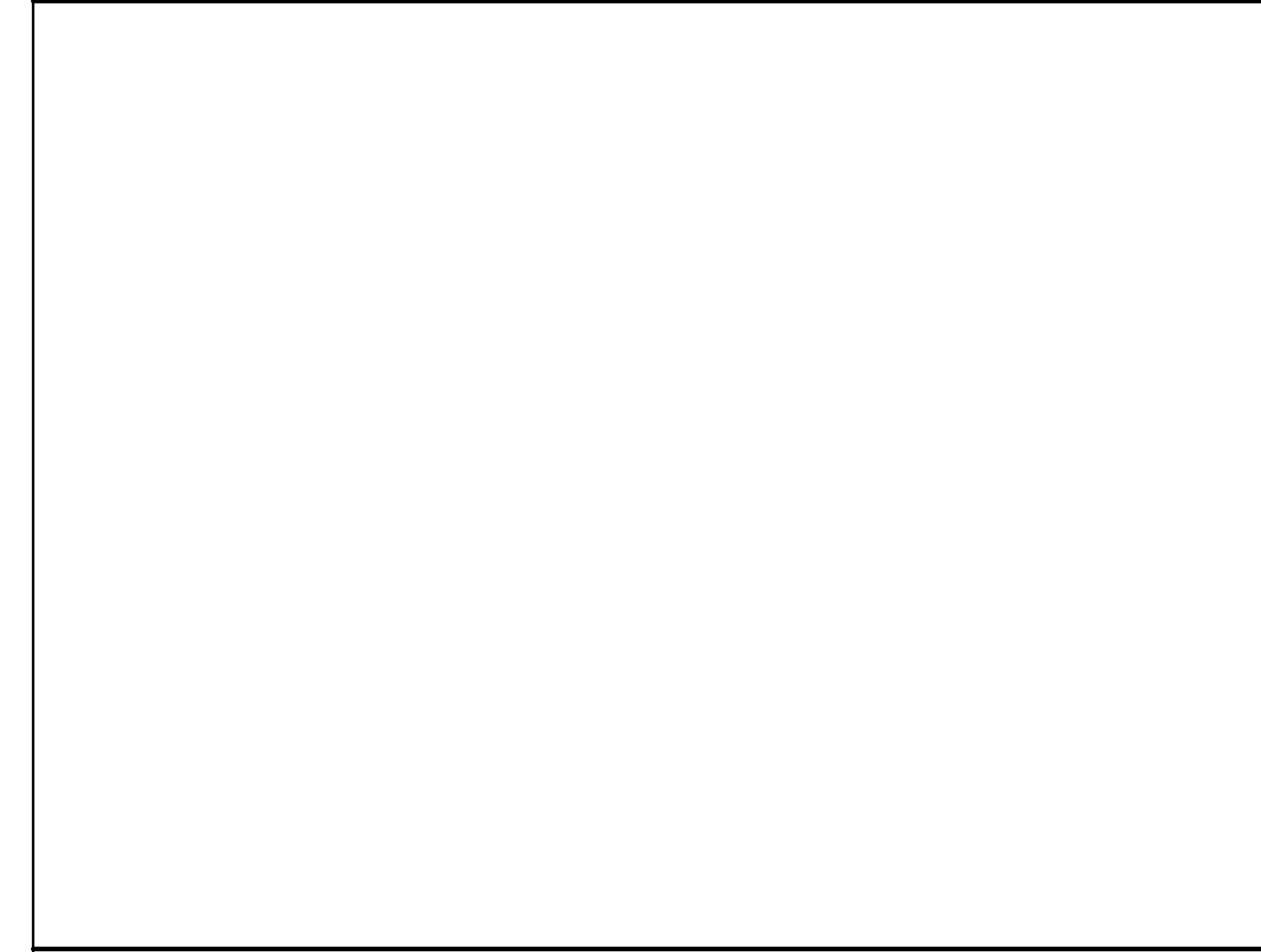
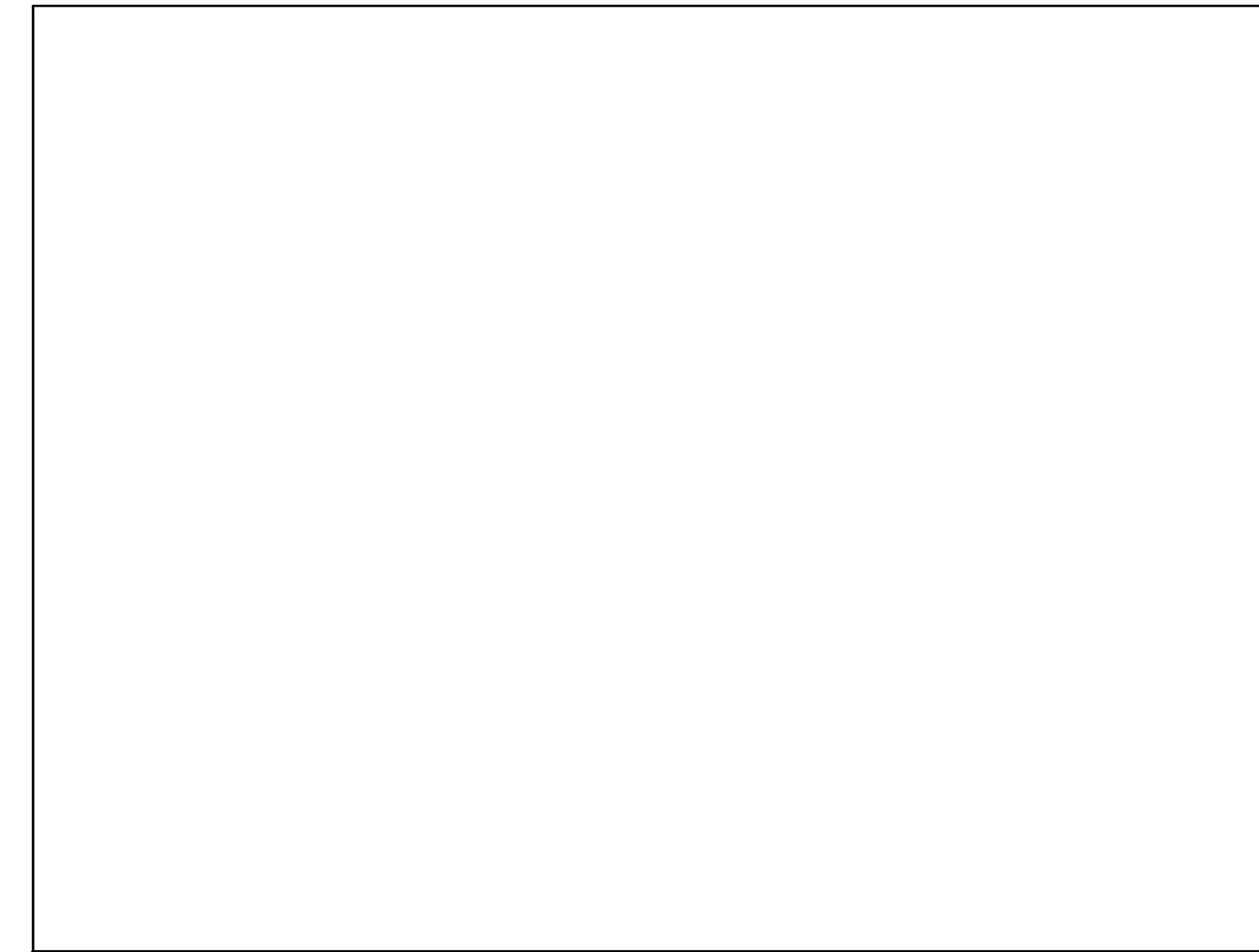
1A CMU PARALLEL TO DECK

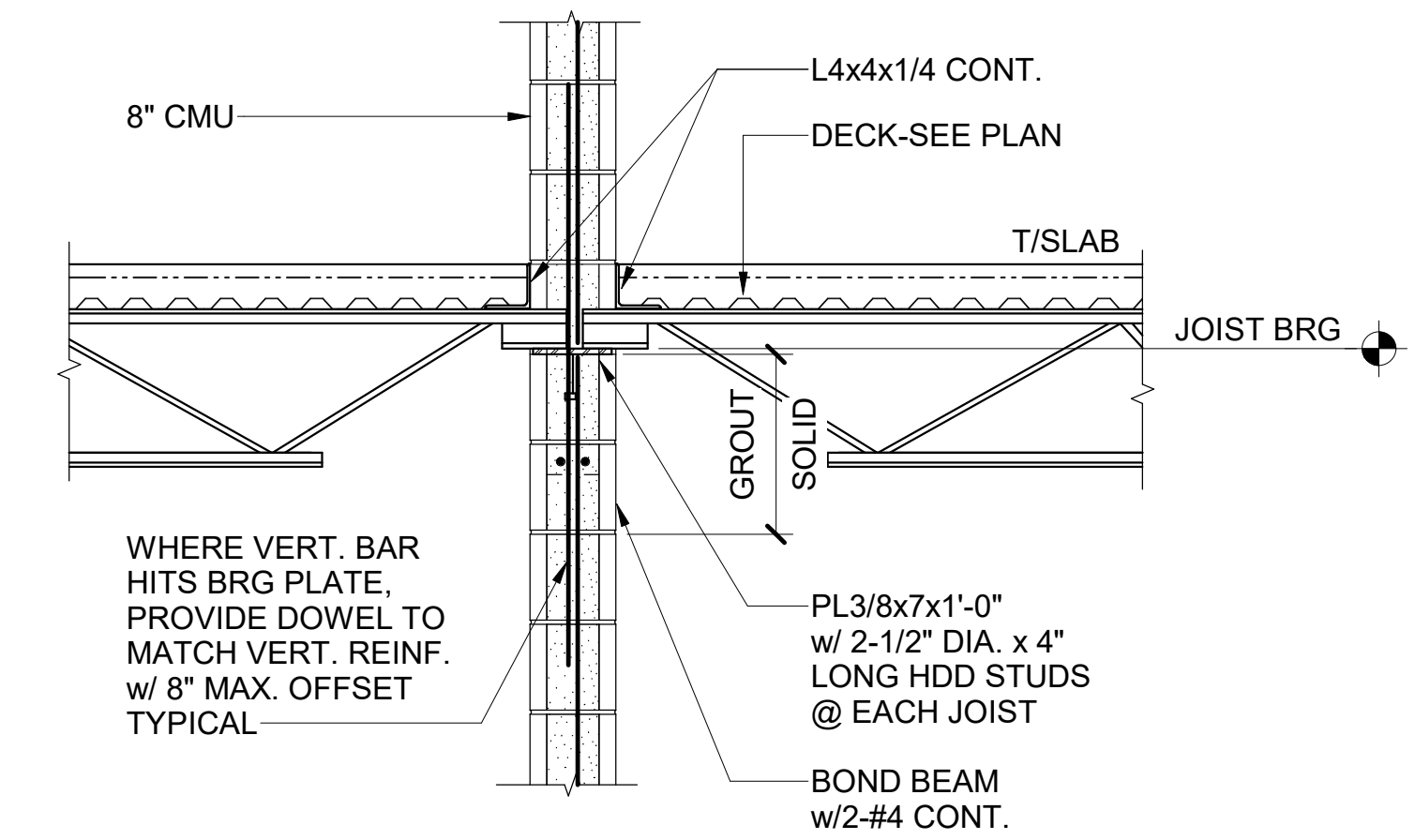
WALLS NOT TO EXTEND TO UNDERSIDE OF DECK

NOTE:

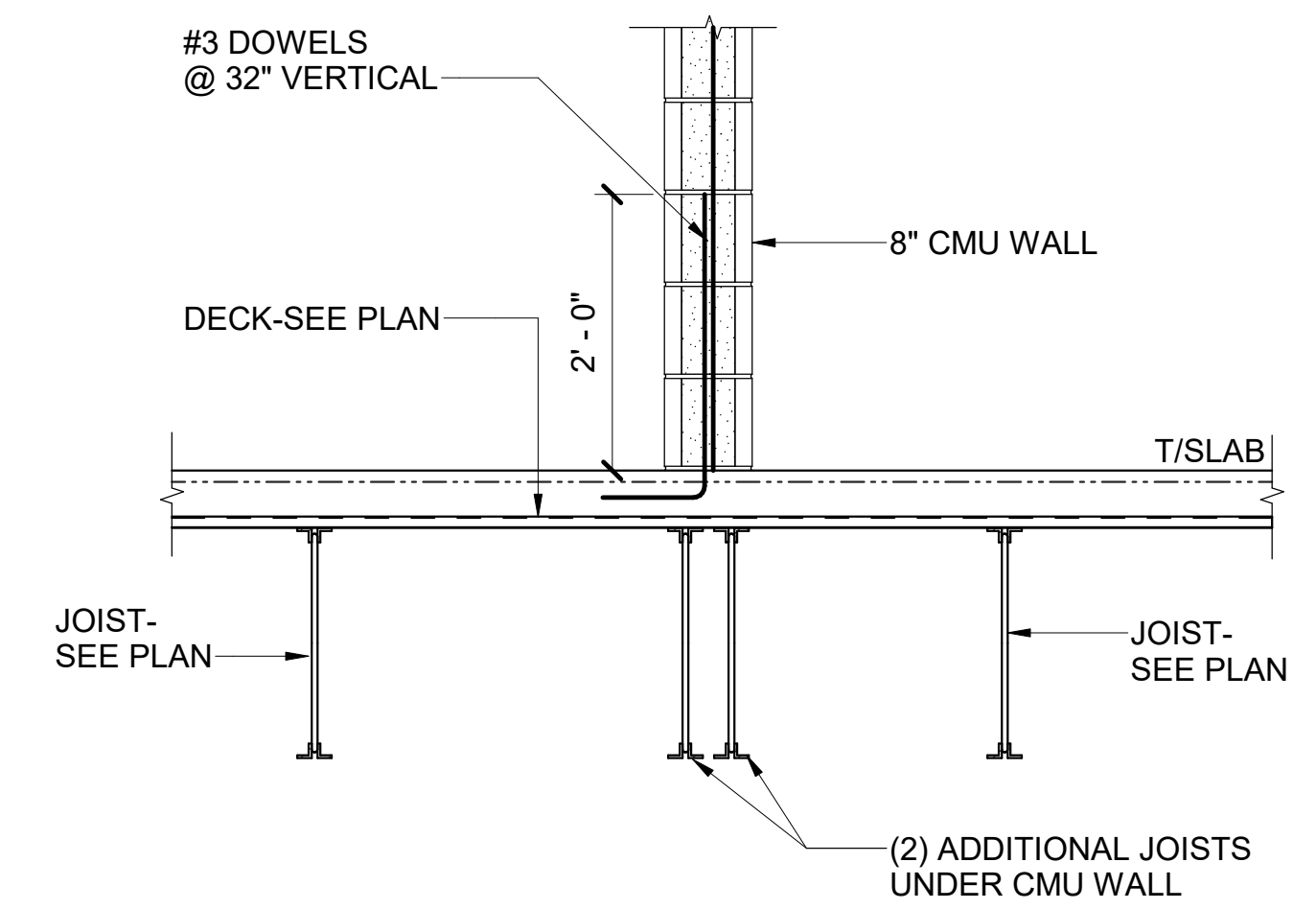
1. REFER TO ARCH. DRAWINGS FOR HEIGHT OF WALL.
2. PROVIDE BRACING AT TOP OF ANY WALL WHEN THE LENGTH OF THE WALL BETWEEN INTERSECTING WALLS EXCEEDS 30 FEET.

1 TYPICAL CMU PARTITION BRACING DETAILS WITH STEEL JOISTS

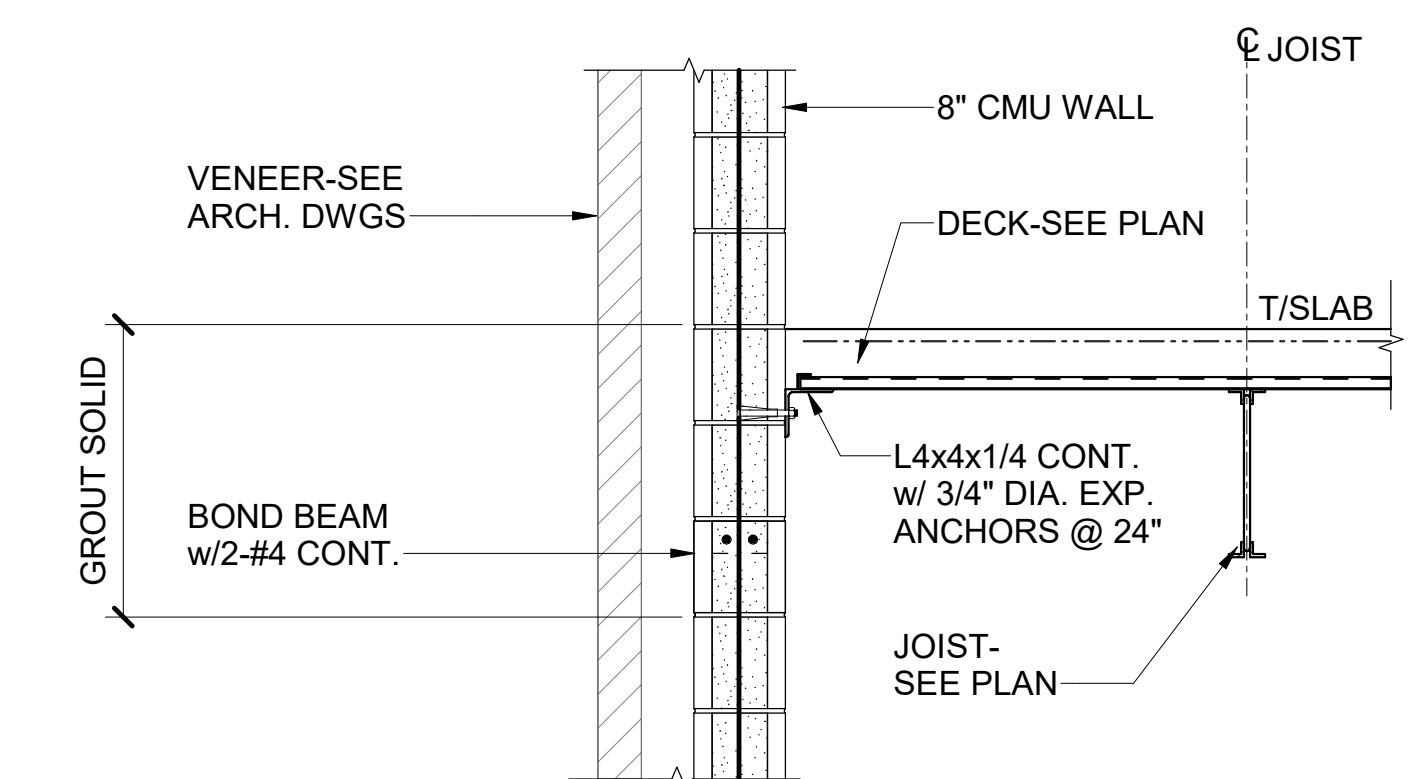




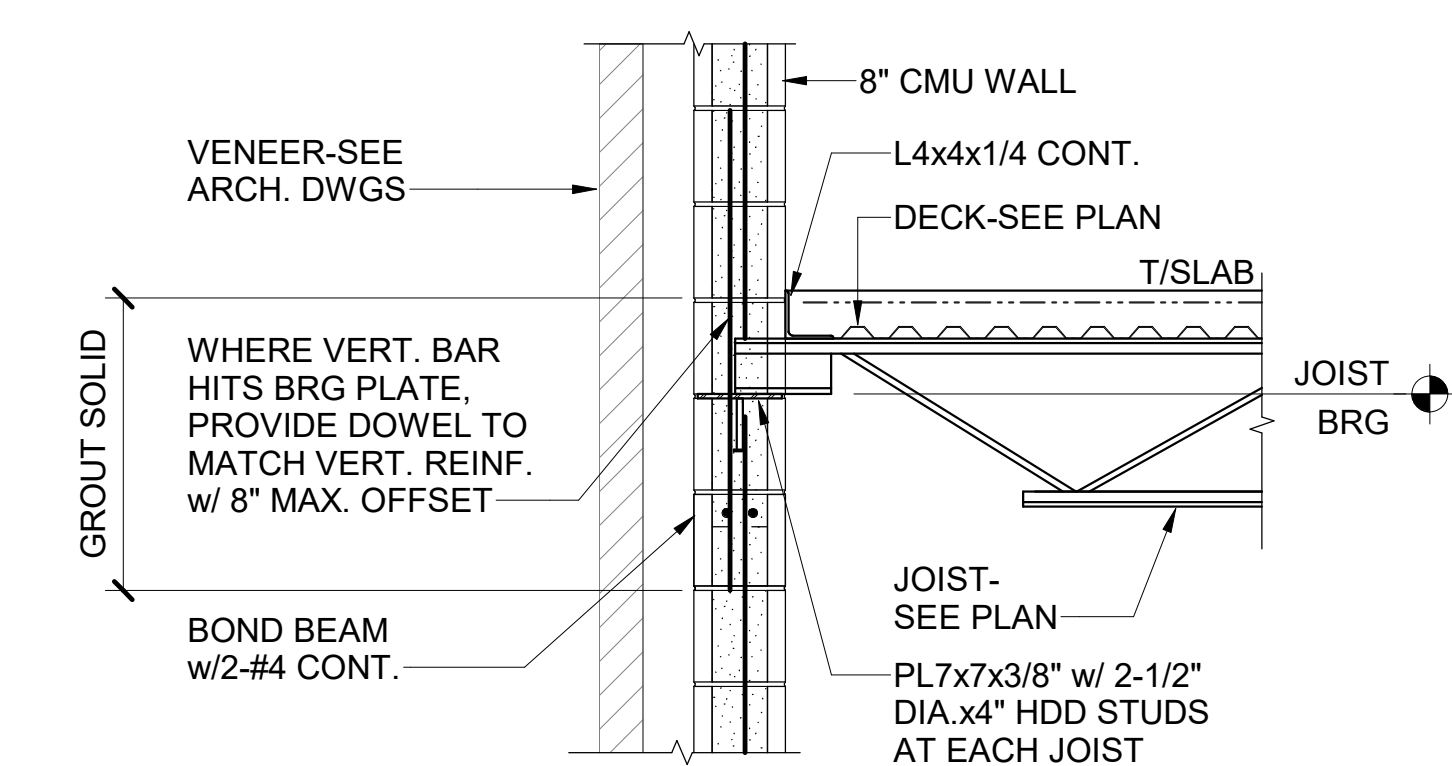
4 _____ SECTION _____



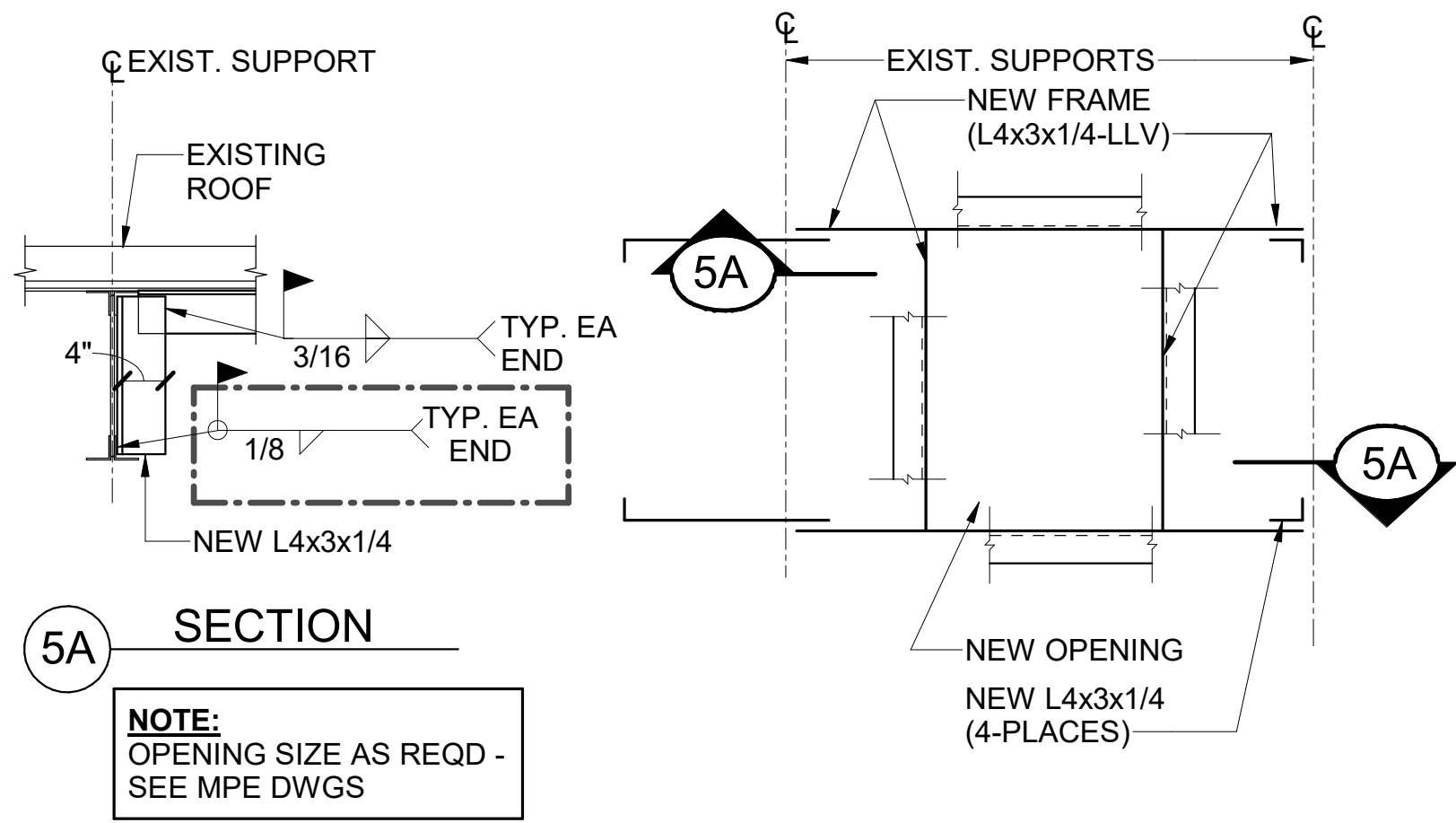
3 SECTION



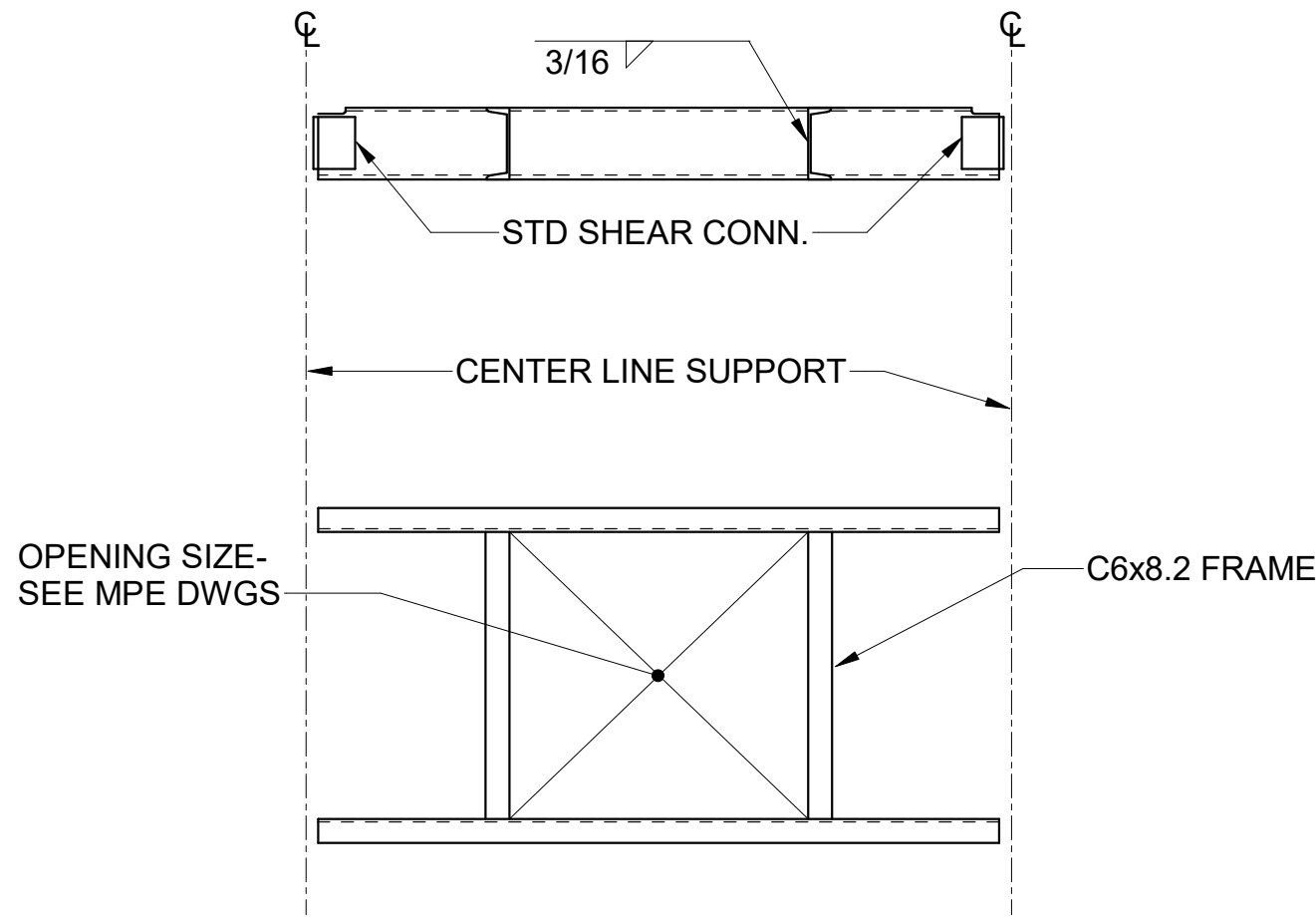
2 SECTION



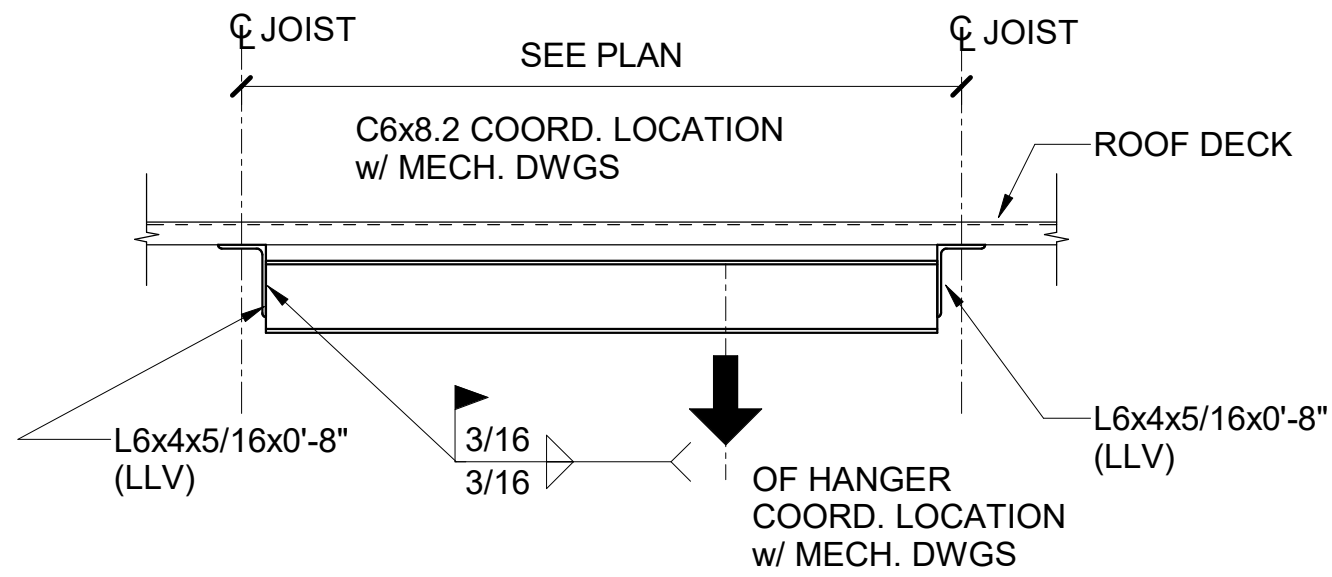
1 SECTION



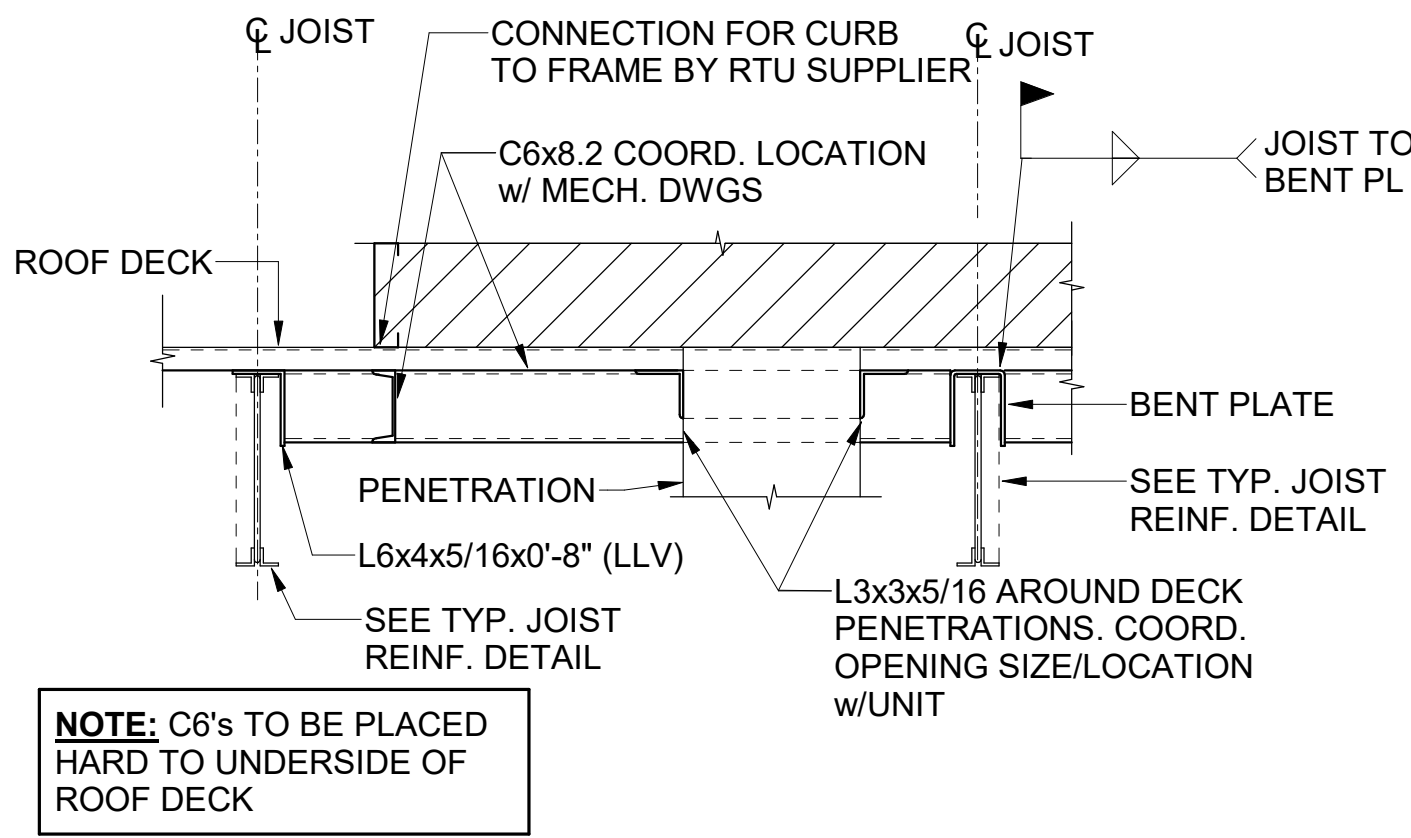
5 NEW OPENING FRAME DETAIL FOR EXISTING ROOF



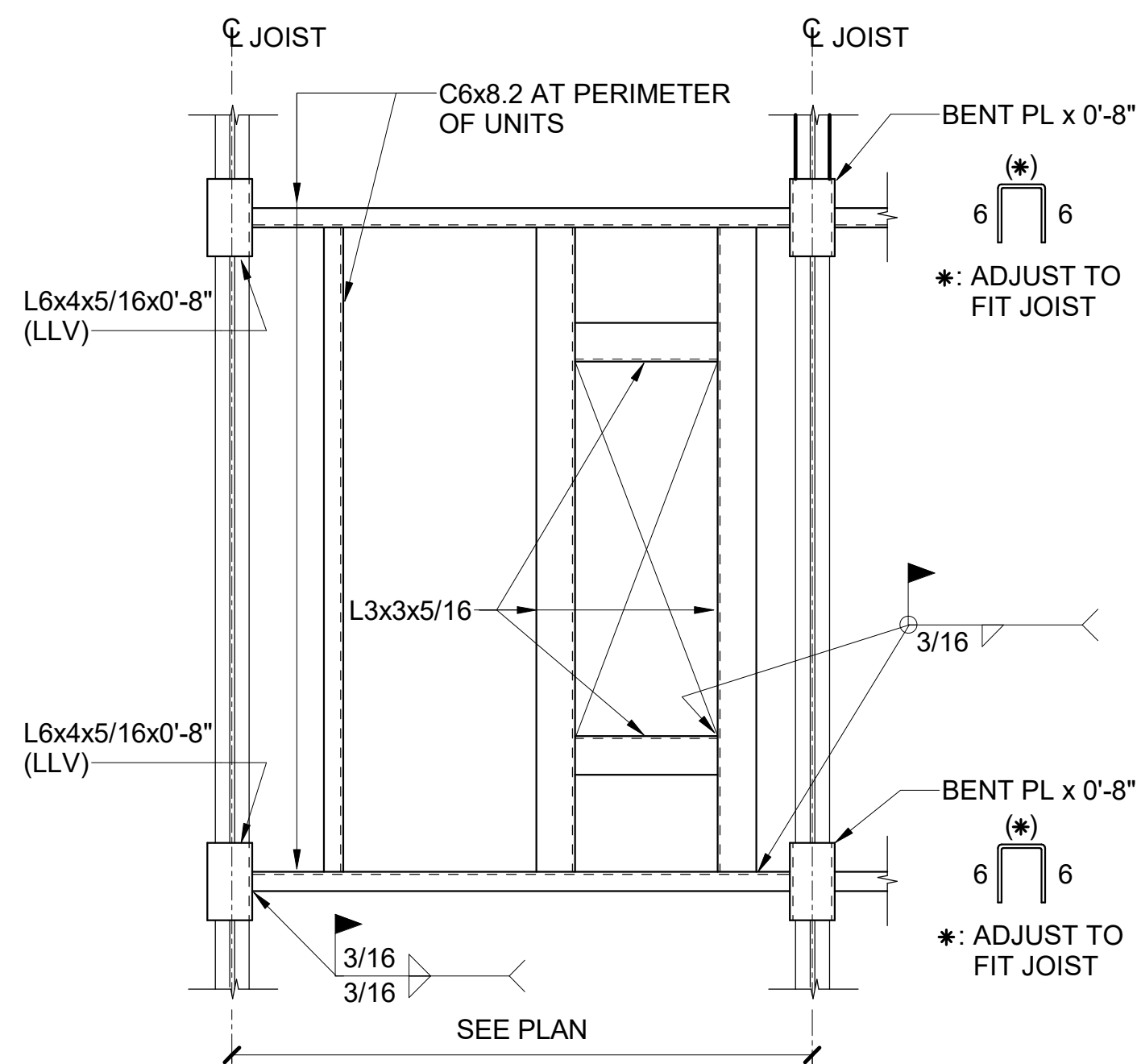
3 CHANNEL ROOF OPENING FRAME



TYP. SECTION AT SUSPENDED MECHANICAL UNITS

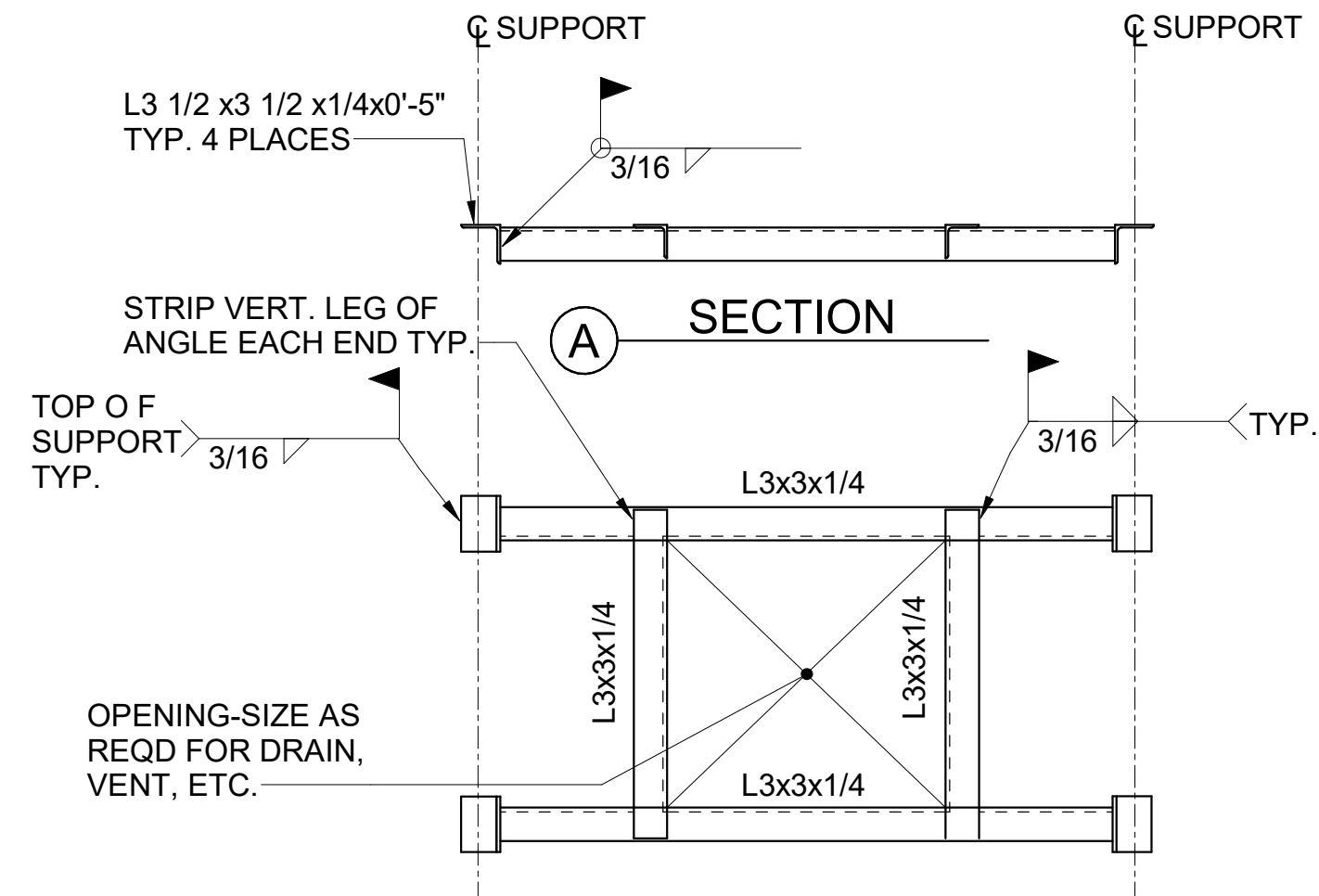


4A SECTION

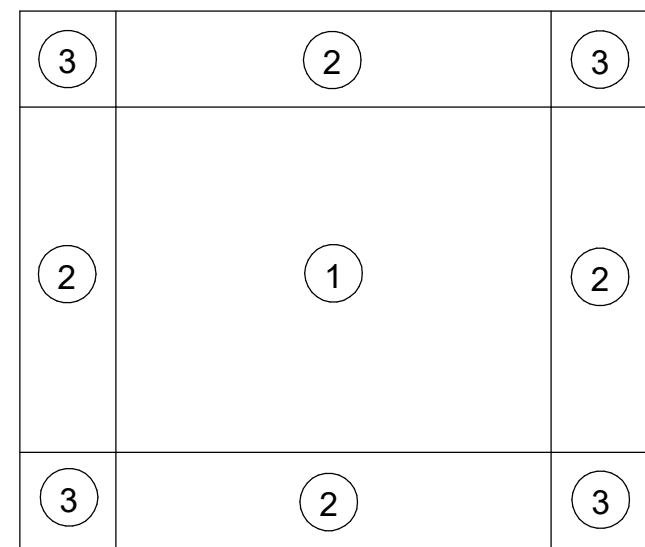


TYPICAL DETAILS AT ROOF TOP UNITS

4 ROOF FRAMING DETAILS AT MECHANICAL UNITS



2 ROOF OPENING FRAME DETAIL OPENINGS UP TO 14" AS NOTED

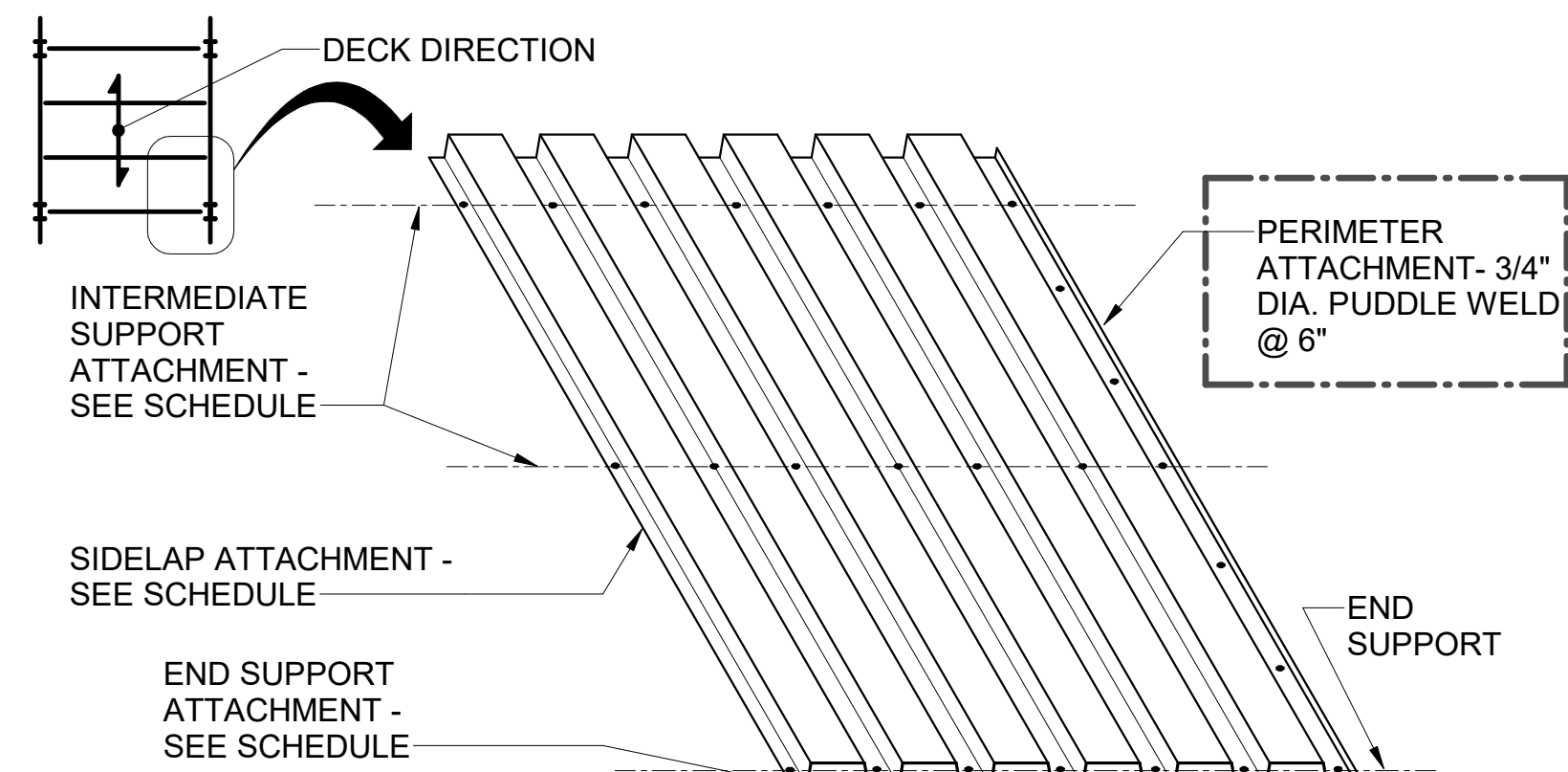


ROOF PLAN

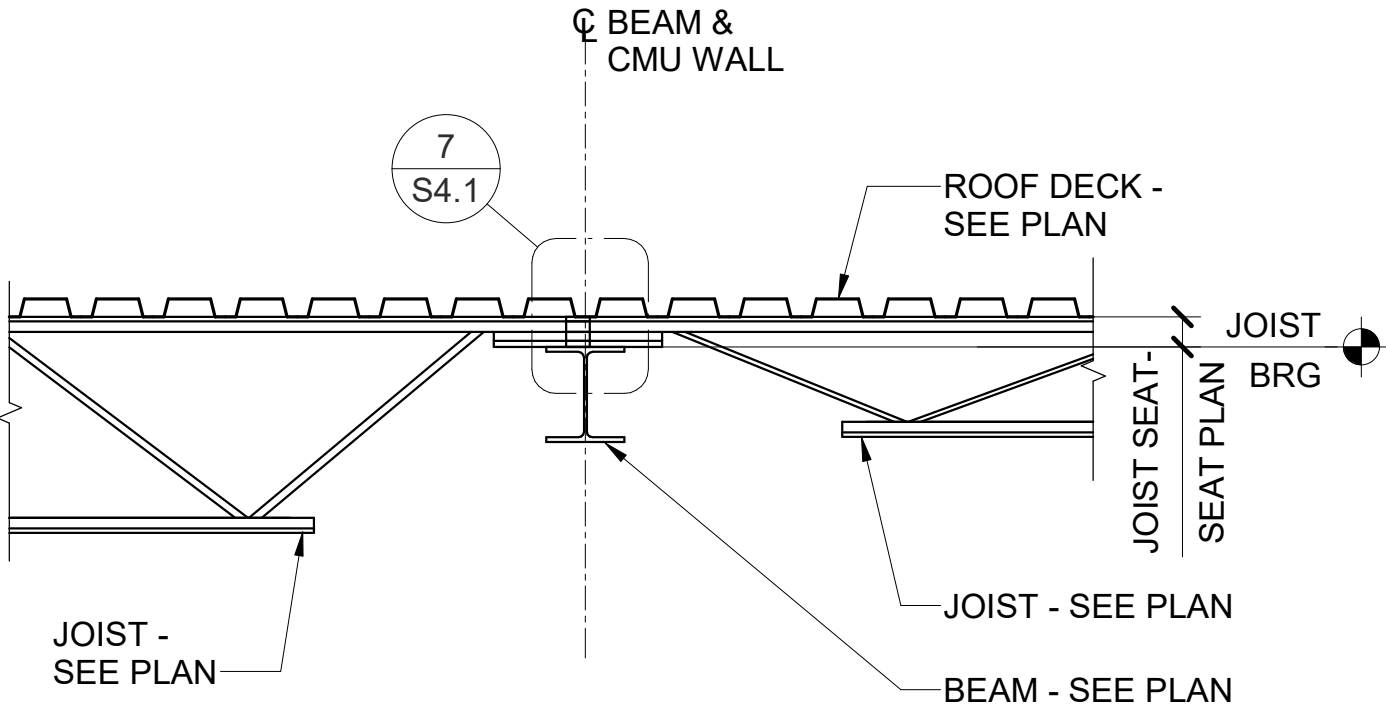
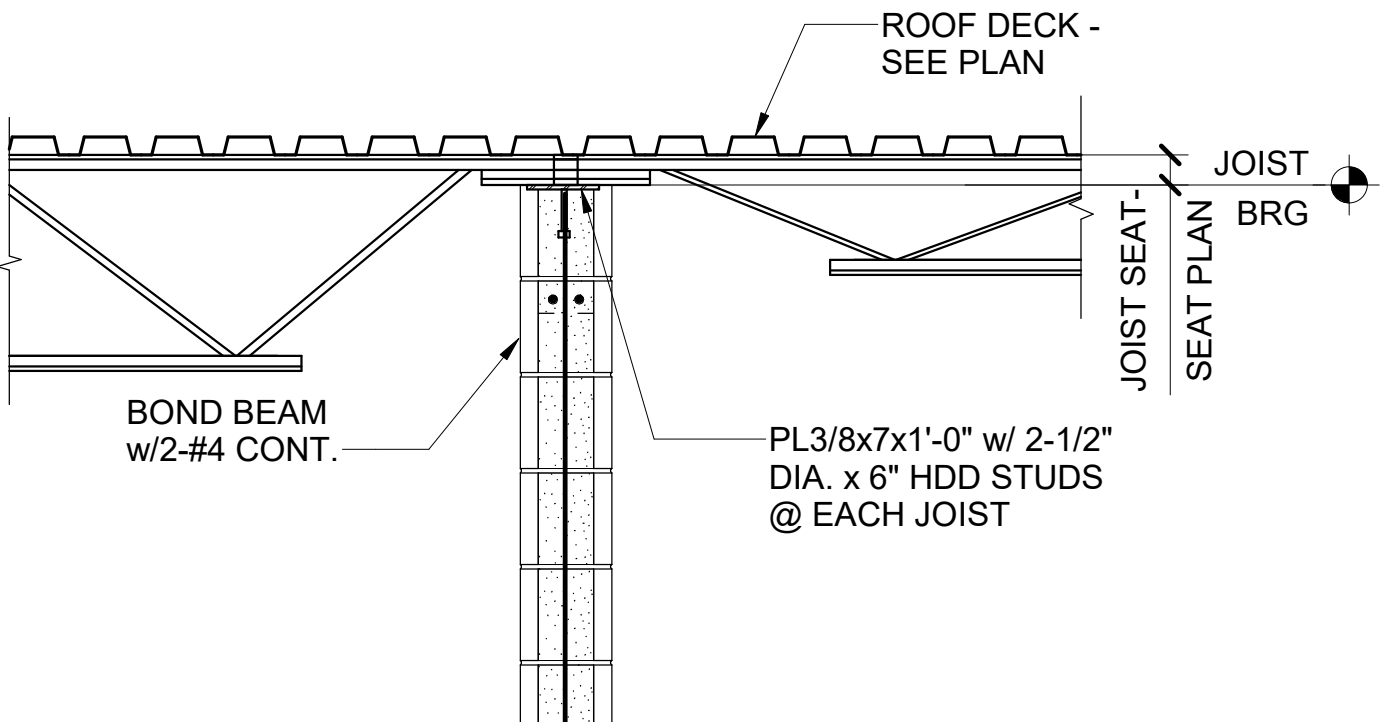
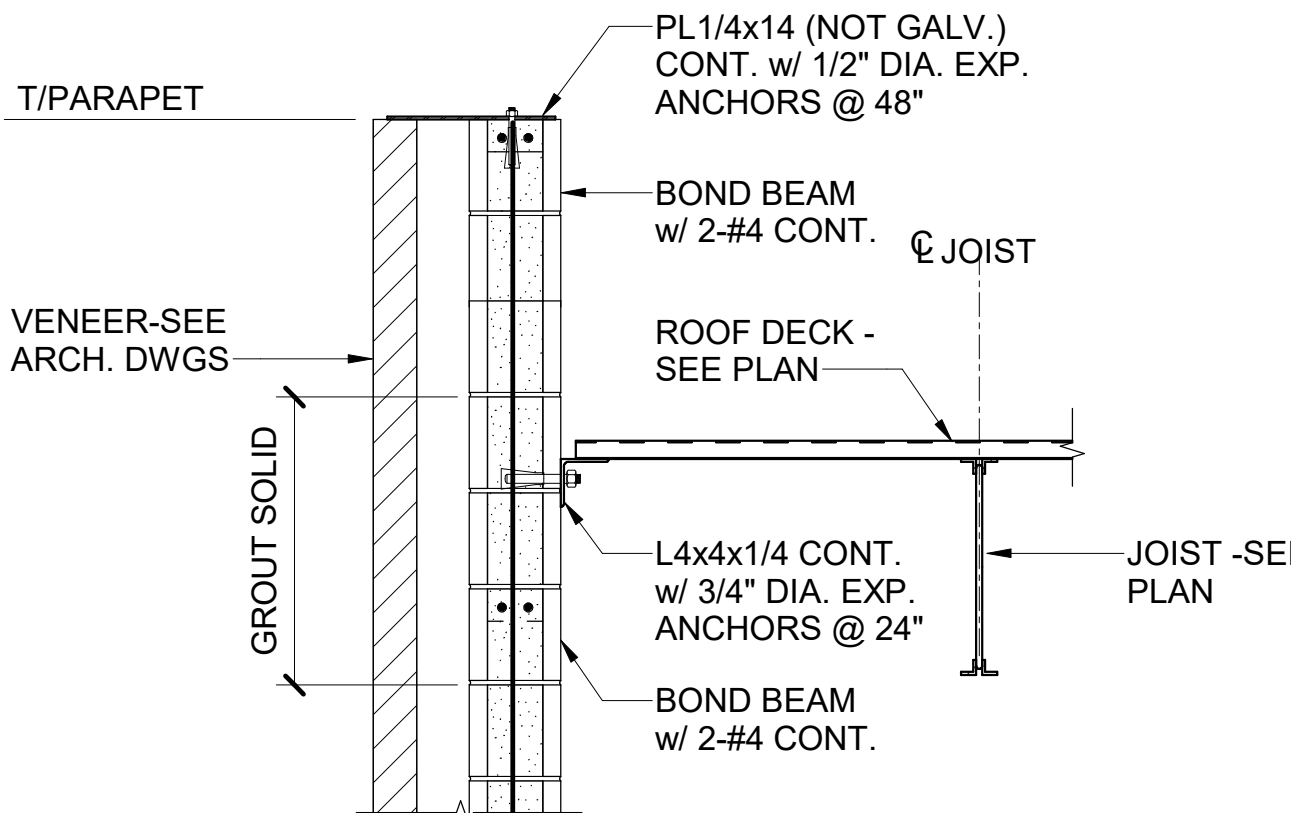
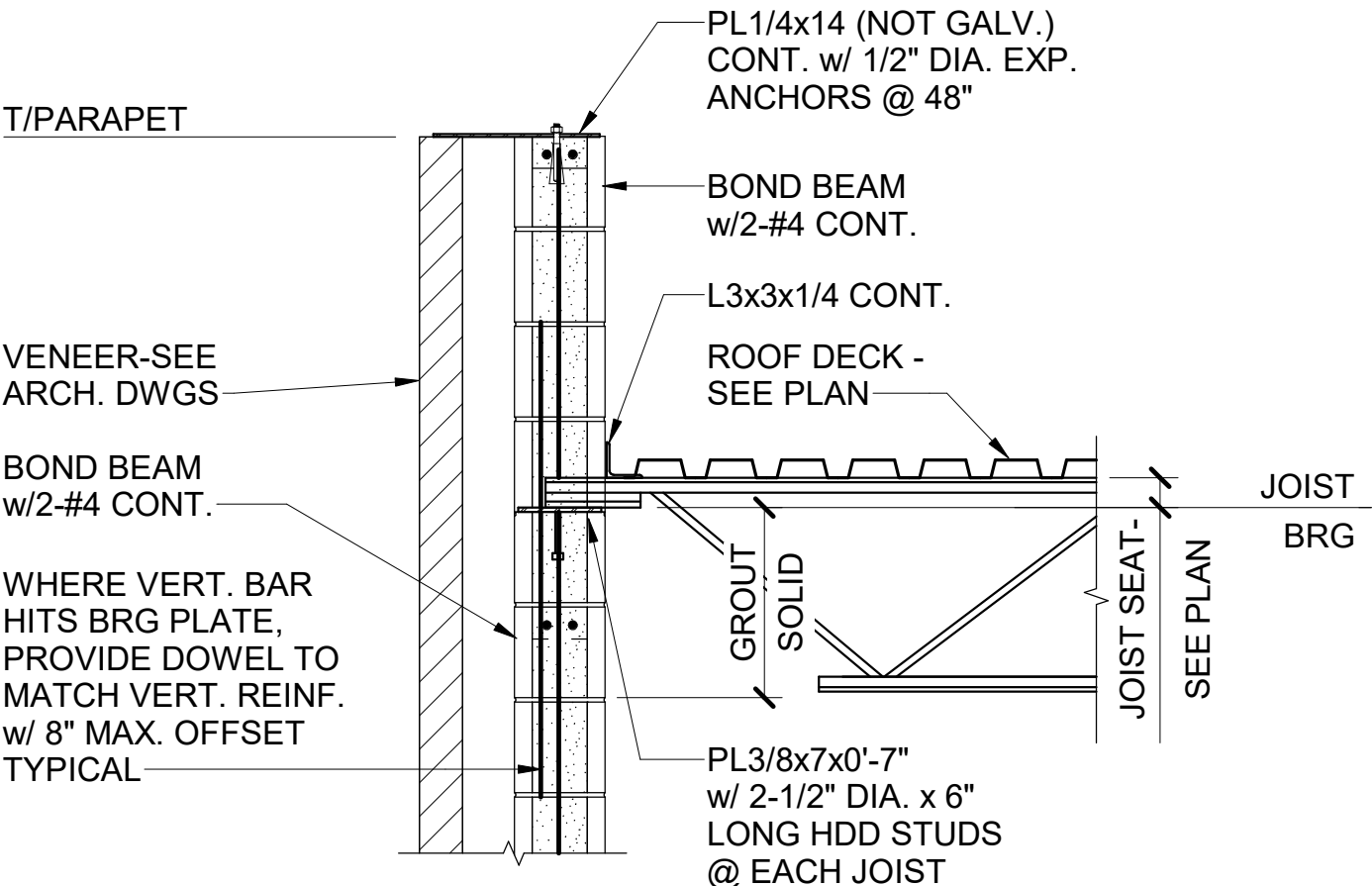
ZONE LEGEND	
1	INTERIOR ZONE
2	PERIMETER ZONE
3	CORNER ZONE

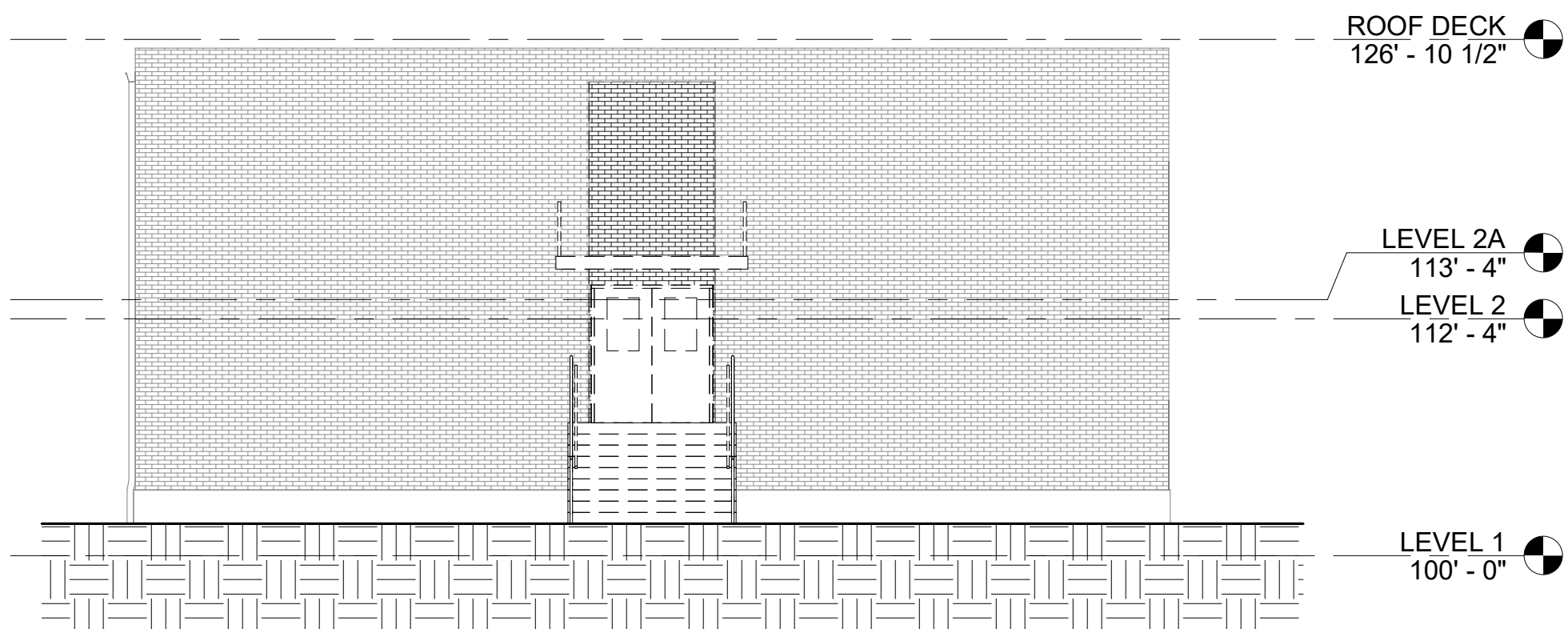
NOTE: SEE WIND PRESSURE DIAGRAMS FOR DETAILED INFORMATION ON WIND ZONE LOCATIONS

ROOF DECK ATTACHMENT SCHEDULE			
ZONE	SIDLAP	INTERMEDIATE SUPPORT	END SUPPORT
1	#10 SELF-TAPPING SCREWS @ 12"	36/4 PATTERN w/ 3/4" DIA. PUDDLE WELDS	
2	#10 SELF-TAPPING SCREWS @ 12"	36/4 PATTERN w/ 3/4" DIA. PUDDLE WELDS	36/7 PATTERN w/ 3/4" DIA. PUDDLE WELDS
3	#10 SELF-TAPPING SCREWS @ 12"	36/7 PATTERN w/ 3/4" DIA. PUDDLE WELDS	36/7 PATTERN w/ 3/4" DIA. PUDDLE WELDS

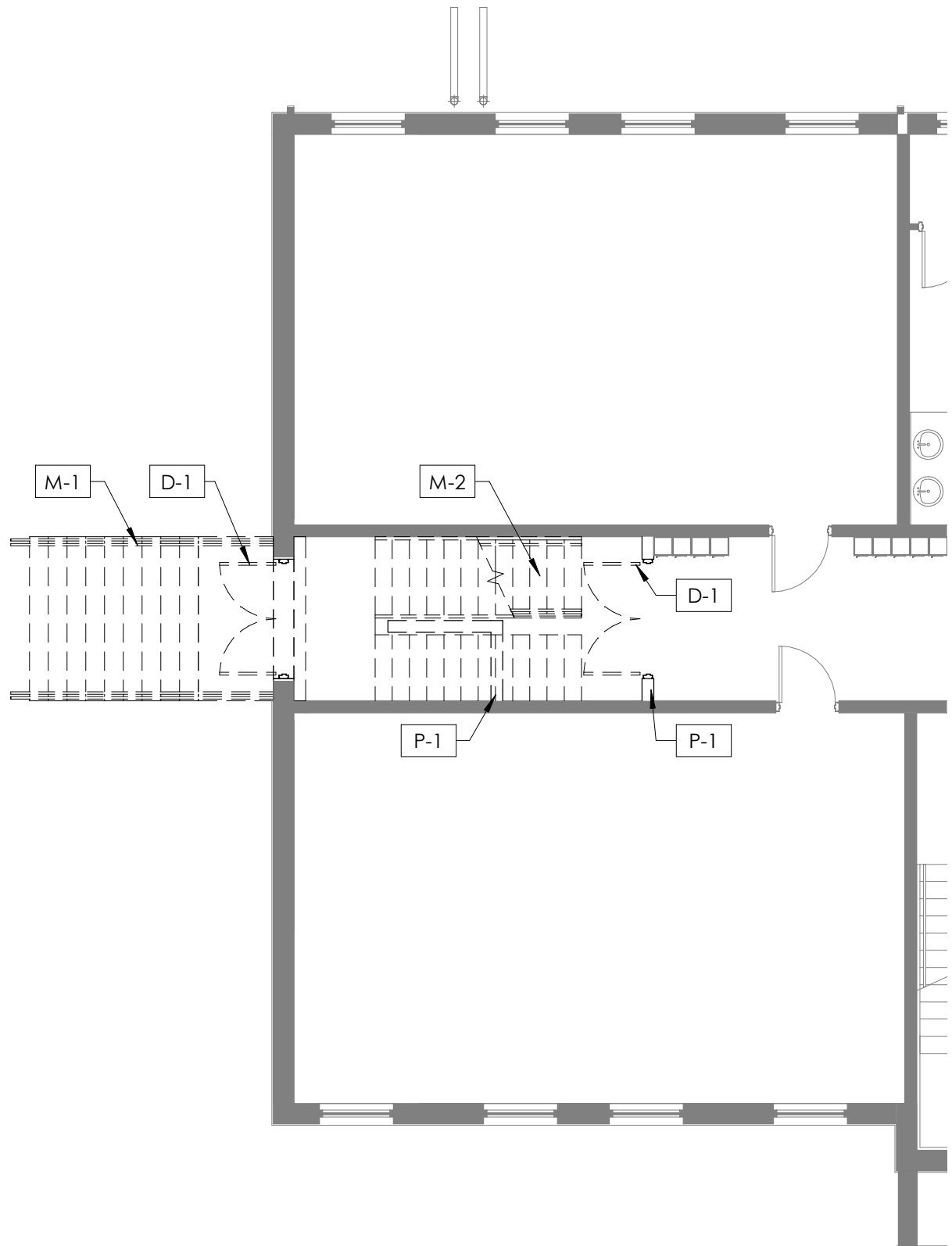


1 ROOF DECK ATTACHMENT DETAIL 1 1/2" TYPE B DECK

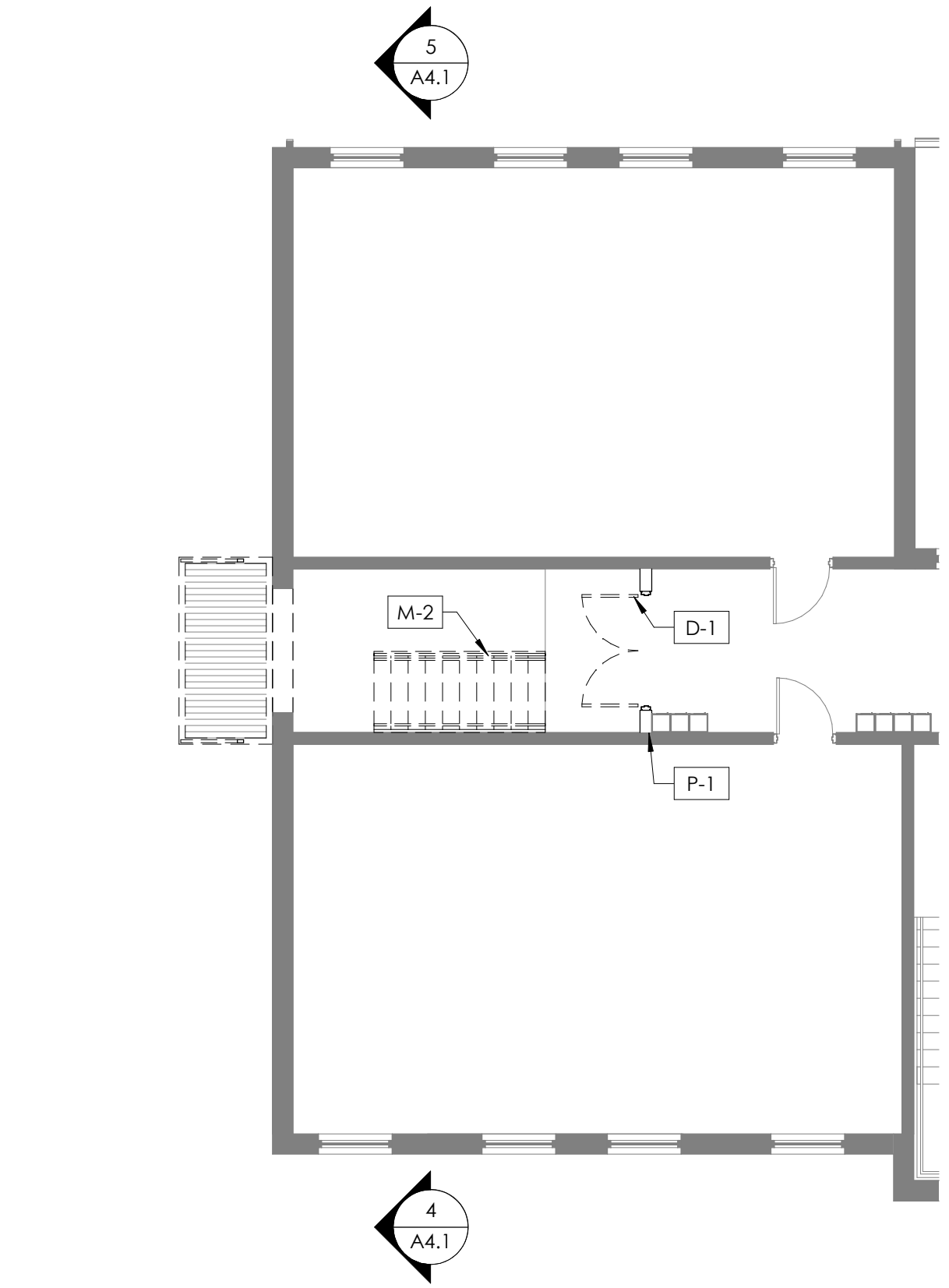
			 <p>SECTION 4</p>	<div>rosARRANT architects</div> <div>NOT FOR CONSTRUCTION</div> <div><div>Structural Design Group</div><div>101 old layette avenue lebanon, kentucky 40502 p 859.254.4018</div></div>
			 <p>SECTION 3</p>	<div>FOR: MARION COUNTY BOARD OF EDUCATION LEBANON, KENTUCKY</div> <div><div>Structural Design Group</div><div>101 old layette avenue lebanon, kentucky 40502 p 859.254.4018</div></div>
			 <p>SECTION 2</p>	
			 <p>SECTION 1</p>	<div>BG#</div> <div>Project No: 1928 Drawn By: CCA Rev'd By: CH</div> <div><div>1</div><div>2</div><div>3</div><div>4</div><div>5</div><div>6</div><div>7</div><div>8</div></div> <div><div>COPYRIGHT © 2019</div><div>DESIGN DEVELOPMENT</div><div>S5.2</div><div>ROOF FRAMING SECTIONS AND DETAILS DATE ISSUED: AUGUST 01, 2019</div></div>



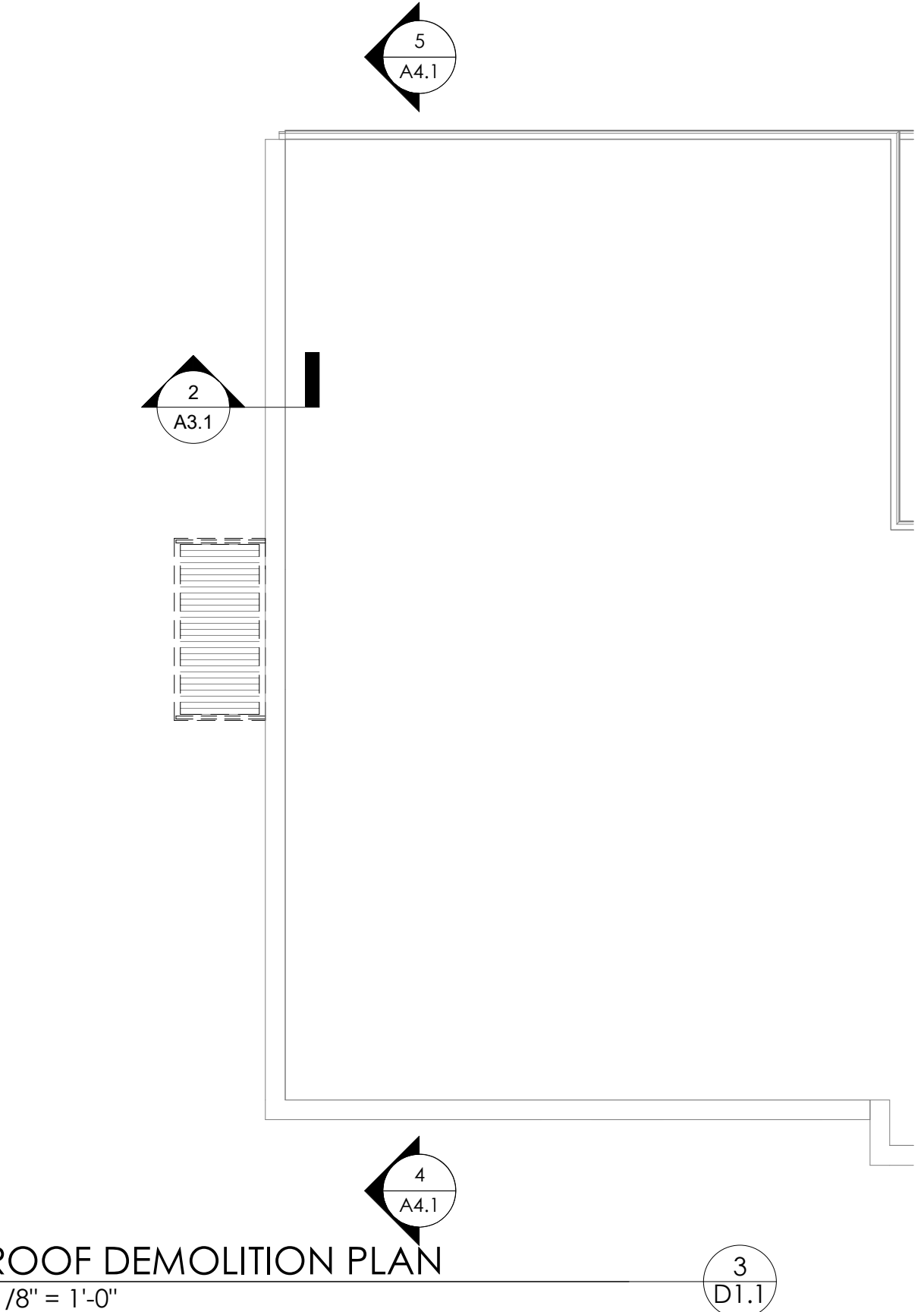
SOUTH ELEVATION DEMOLITION
1/8" = 1'-0"



FIRST FLOOR PLAN
1/8" = 1'-0"



SECOND FLOOR DEMOLITION PLAN
1/8" = 1'-0"



ROOF DEMOLITION PLAN
1/8" = 1'-0"

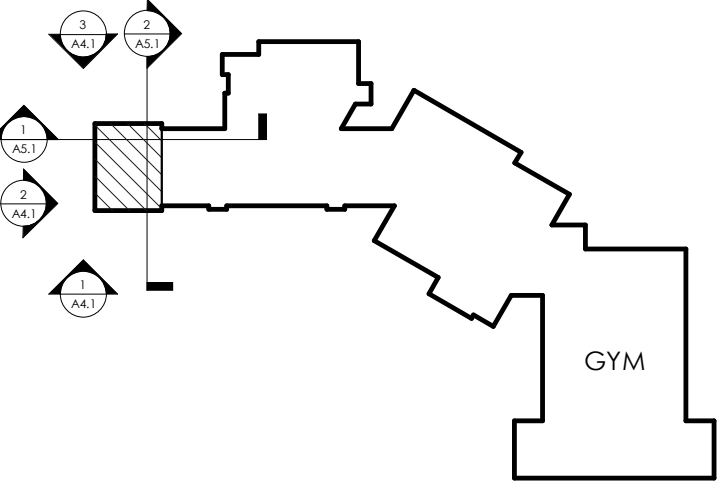
GENERAL DEMOLITION NOTES

1. THESE DEMOLITION PLANS ARE MEANT TO BE A CONVENIENCE TO THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY FOR INSTALLATION OF NEW WORK WHETHER SHOWN HERE OR NOT. REFER TO SECTIONS AND DETAILS FOR ADDITIONAL DEMOLITION WORK REQUIRED IN SPECIFIC AREAS OF WORK.
2. REFER TO THE PHASING DRAWING FOR SEQUENCE OF DEMOLITION AND NEW WORK.
3. CONTRACTOR SHALL VERIFY LOAD BEARING CONDITIONS OF WALLS PRIOR TO THEIR DEMOLITION. ANY WALL FOUND TO BE LOAD BEARING WHICH IS NOT SO NOTED SHALL PROMPTLY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO ITS DEMOLITION.
4. WHERE WALLS OR OTHER ITEMS ARE REMOVED, CLEAN AND REPAIR FLOORS TO FLUSH CONDITION SUITABLE TO RECEIVE FLOOR FINISH. WHERE MASONRY WALLS EXTEND THROUGH SLAB AND REST ON FOOTING, REMOVE BLOCK TO MINIMUM OF 4" BELOW FINISH FLOOR. FILL FLUSH WITH CONCRETE. PROVIDE MIN 4" CONCRETE FILL AT ABANDONED PIPES OR OTHER OPENINGS IN THE FLOOR SLABS WHICH ARE EXPOSED OR CREATED BY OTHER DEMOLITION. GRIND TO FLUSH AS REQUIRED.
5. ALL CONCRETE BLOCK, AND/OR BRICK VENEER INFILL OR PATCHES IN EXISTING MASONRY SHALL BE TOOTHED INTO ADJACENT SOUND MASONRY IN FULL UNITS UNLESS OTHERWISE INDICATED. PARTIAL MASONRY UNITS ADJACENT TO OPENINGS SHALL BE REMOVED AS REQUIRED TO ALLOW TOOTHING.
6. WHERE NEW MASONRY CONSTRUCTION JOINS EXISTING MASONRY WALLS, REMOVE MASONRY UNITS AT CONNECTIONS AS NECESSARY TO PERMIT TOOTHING OF NEW CONSTRUCTION WHETHER OR NOT SUCH DEMOLITION IS SPECIFICALLY SHOWN ON DEMOLITION PLANS. OVER-DEMOLISH NEW MASONRY UNITS TO PROVIDE FINISHED OPENING. PROVIDE NEW MASONRY TIES AND HORIZONTAL JOINT REINFORCING PER SPECIFICATIONS. NEW MASONRY CONSTRUCTION SHALL PRECISELY MATCH ADJACENT EXISTING MASONRY IN COLOR, TEXTURE, PATTERN AND FINISH, UNLESS NOTED OTHERWISE.
7. ALL HVAC GRILLES, LOUVERS AND OTHER MECHANICAL/ELECTRICAL AND PLUMBING EQUIPMENT WHICH ARE ABANDONED AND/OR CALLED OUT TO BE REMOVED SHALL BE COMPLETELY REMOVED AND OPENINGS SHALL BE INFILLED WITH NEW CONSTRUCTION MATCHING EXISTING ADJACENT CONSTRUCTION. REFER TO NOTE 1 ABOVE, AND M/E DRAWINGS OF RELATED ITEMS.
8. EXISTING DOORS AND FRAMES SHOWN IN WALL TO BE DEMOLISHED SHALL BE REMOVED. PATCH AS NOTED. REMOVE ALL OTHER MATERIALS ASSOCIATED WITH DOOR THAT WILL NOT BE USED.
9. REMOVE ALL WALL MOUNTED ITEMS WHICH ARE NOT SPECIFICALLY INDICATED TO BE REMOVED BUT WHICH INTERFERE WITH, OR ARE NOT PART OF FINISHED CONSTRUCTION. OTHER SALVAGED ITEMS WHICH ARE NOT INDICATED TO BE REUSED IN THE RENOVATION OR RETURNED TO THE OWNER MAY BE SALVAGED BY THE CONTRACTOR AND REMOVED FROM THE SITE.
10. WHERE EXISTING EQUIPMENT OR CASEWORK IS REMOVED, REMOVE ALL ASSOCIATED ATTACHMENT DEVICES, ANCHORS ETC. PATCH AND REPAIR EXISTING FINISHES.
11. SEE NEW WORK PLANS FOR NEW WORK TO BE INSTALLED.

DEMOLITION NOTES

- DOOR DEMOLITION NOTES:
- D-1 REMOVE EXISTING METAL FRAME, DOOR(S), AND GLAZING IN ENTIRETY. REFER TO PLANS FOR NEW WORK.
- MISCELLANEOUS DEMOLITION:
- M-1 REMOVE EXISTING EXTERIOR RAMP/STAIR/SLAB IN ENTIRETY. COORDINATE WITH NEW WORK. REFER TO SITE FOR MORE INFORMATION
- M-2 REMOVE EXISTING STAIR IN ITS ENTIRETY. COORDINATE WITH NEW WORK.
- PARTITION DEMOLITION NOTES:
- P-1 REMOVE PORTION OF EXISTING WALL. EXISTING WALL MAY BE A BEARING WALL. SHORE AND BRACE AS NECESSARY PRIOR TO DEMOLITION.

KEY PLAN



SCALE: NTS

DEMOLITION PLANS

MARION COUNTY MIDDLE SCHOOL ADDITION & REYNOATION
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

M.E.&P Engineer:
CMI&A, Inc.
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Lexington, KY 40504
p 859.253.0892

Structural Engineer:
Structural Design Group, Inc.
220 Great Circle Rd., Suite 106
Nashville, TN 37228
p 615.255.5537

BG#

Project No: 1928
Drawn By: RB
Rev'd By: RM

SHEET RELEASE

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DESIGN DEVELOPMENT

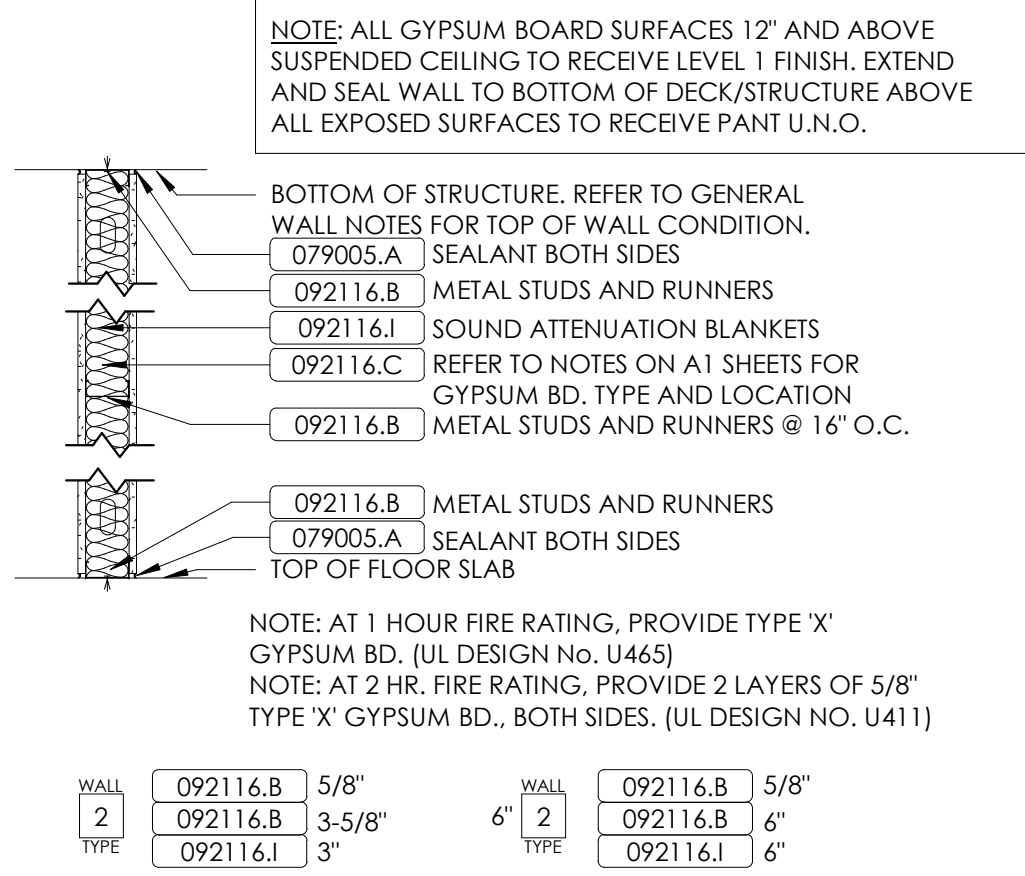
D1.1

DEMOLITION PLANS

DATE ISSUED:
AUGUST 01, 2019

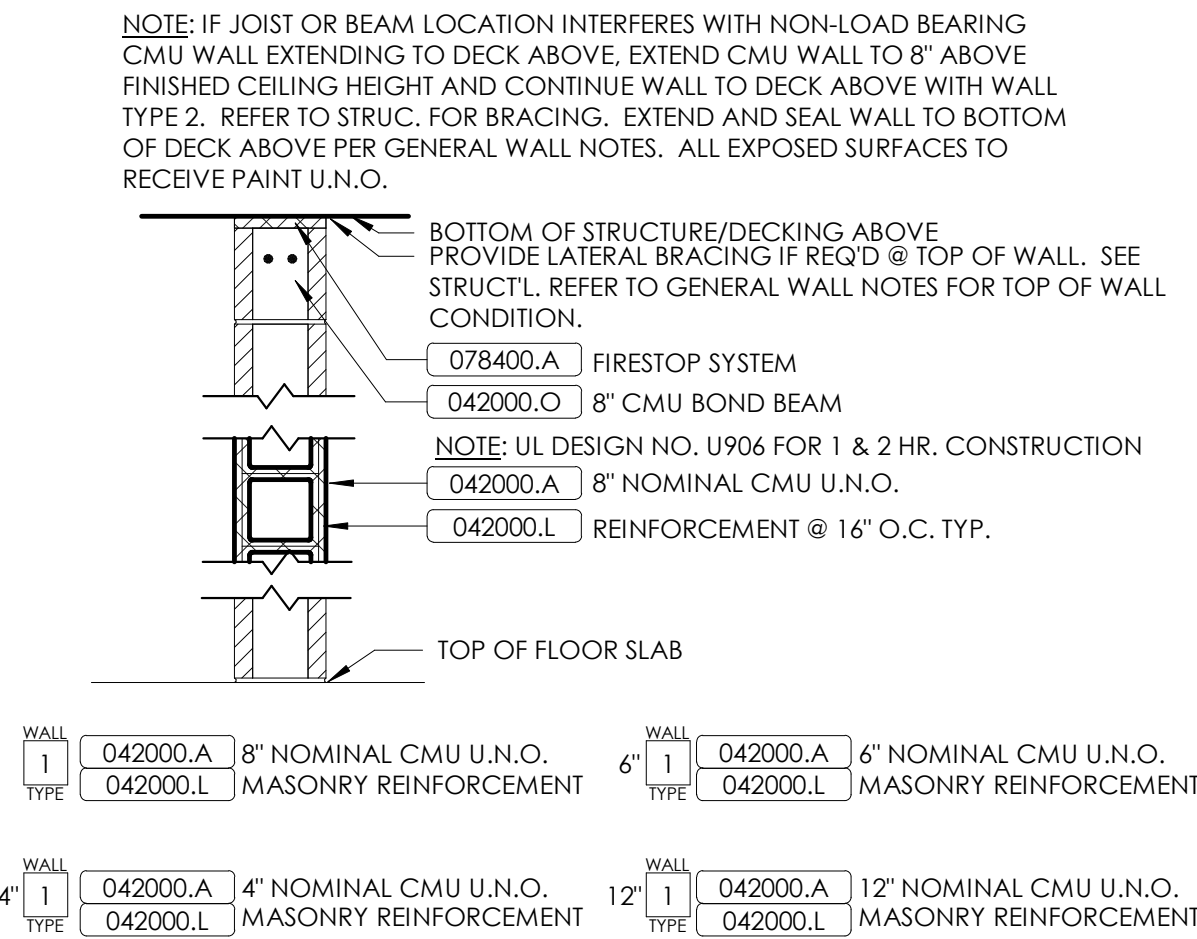
rosarrant
architects

101 old layette avenue leangton, kentucky 40502 p 859.254.4018



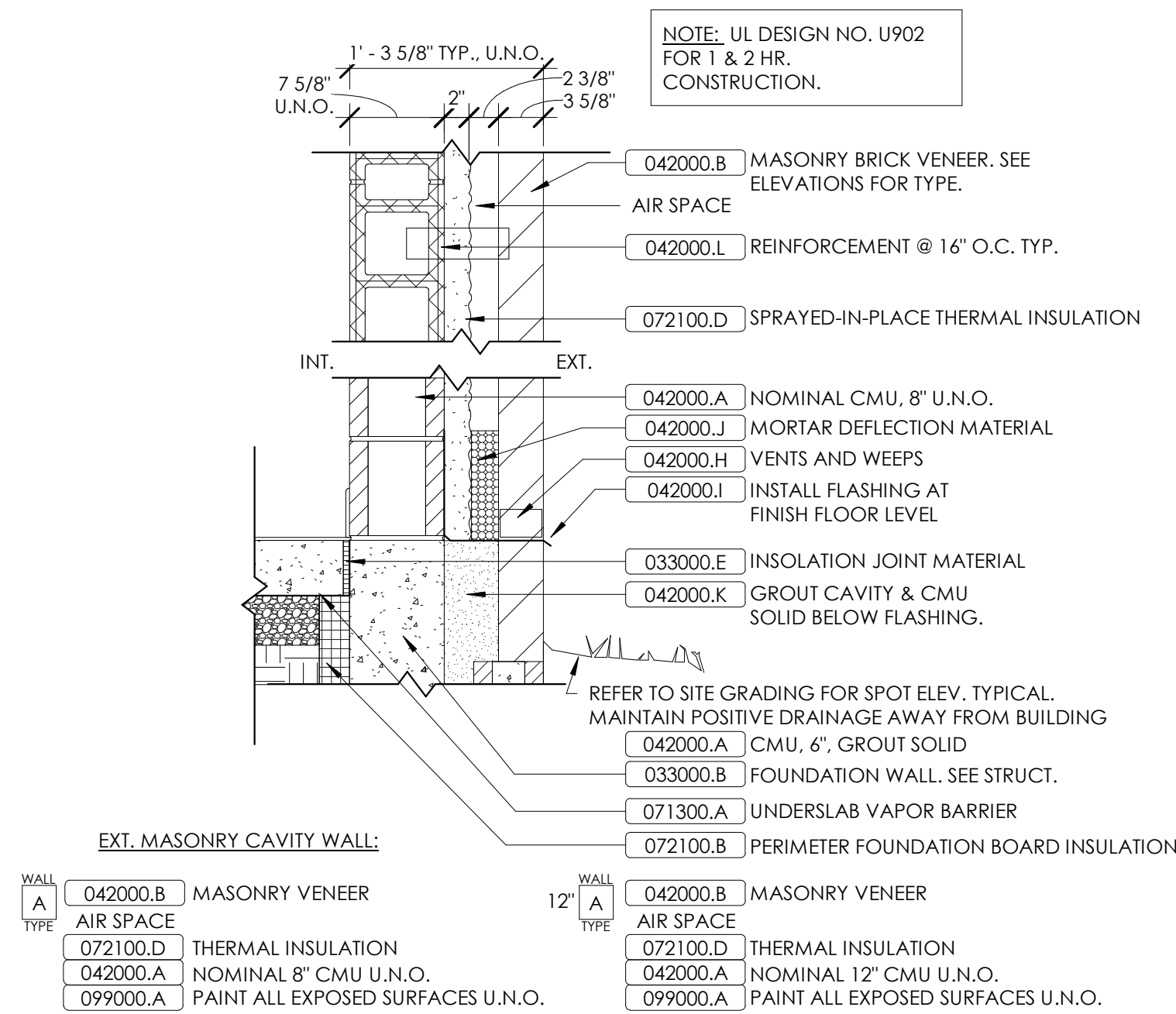
INTERIOR GYPSUM BOARD PARTITION TYPE '2'

SCALE: N.T.S.



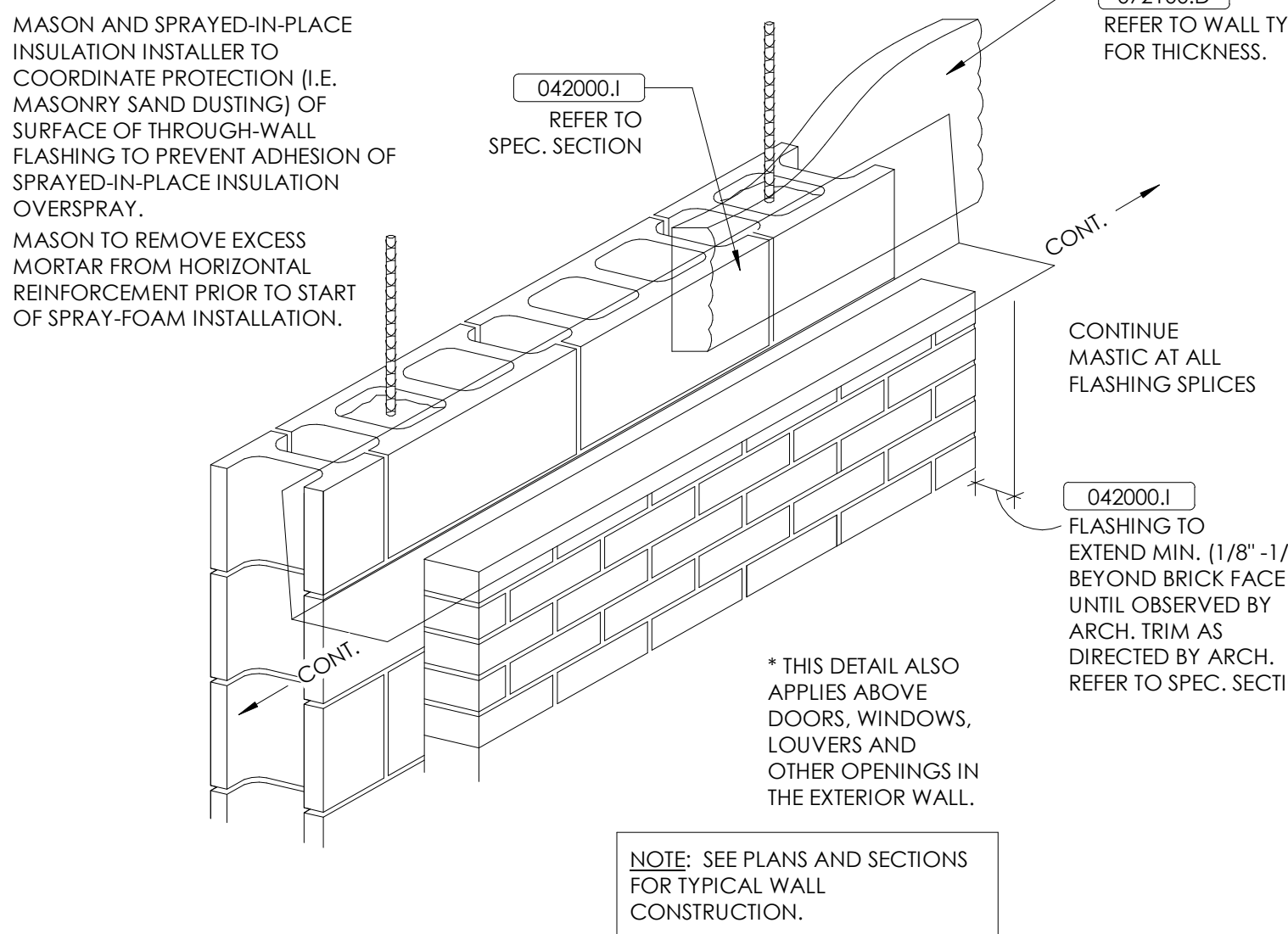
INTERIOR CMU PARTITION TYPE '1'

SCALE: N.T.S.



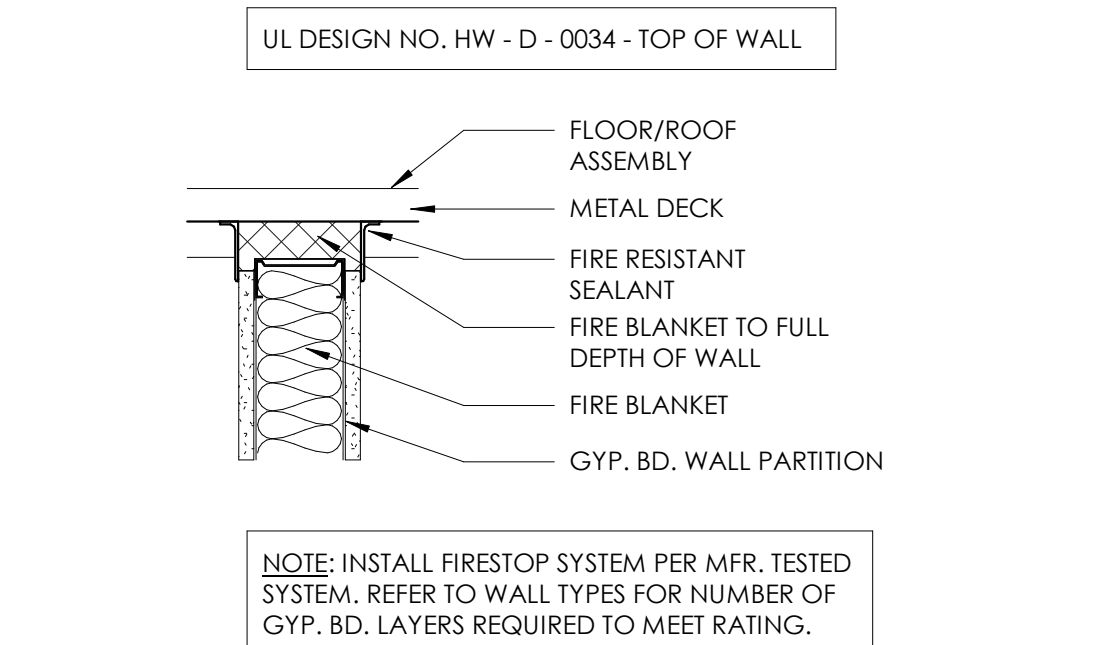
EXTERIOR WALL TYPE 'A'

SCALE: N.T.S.

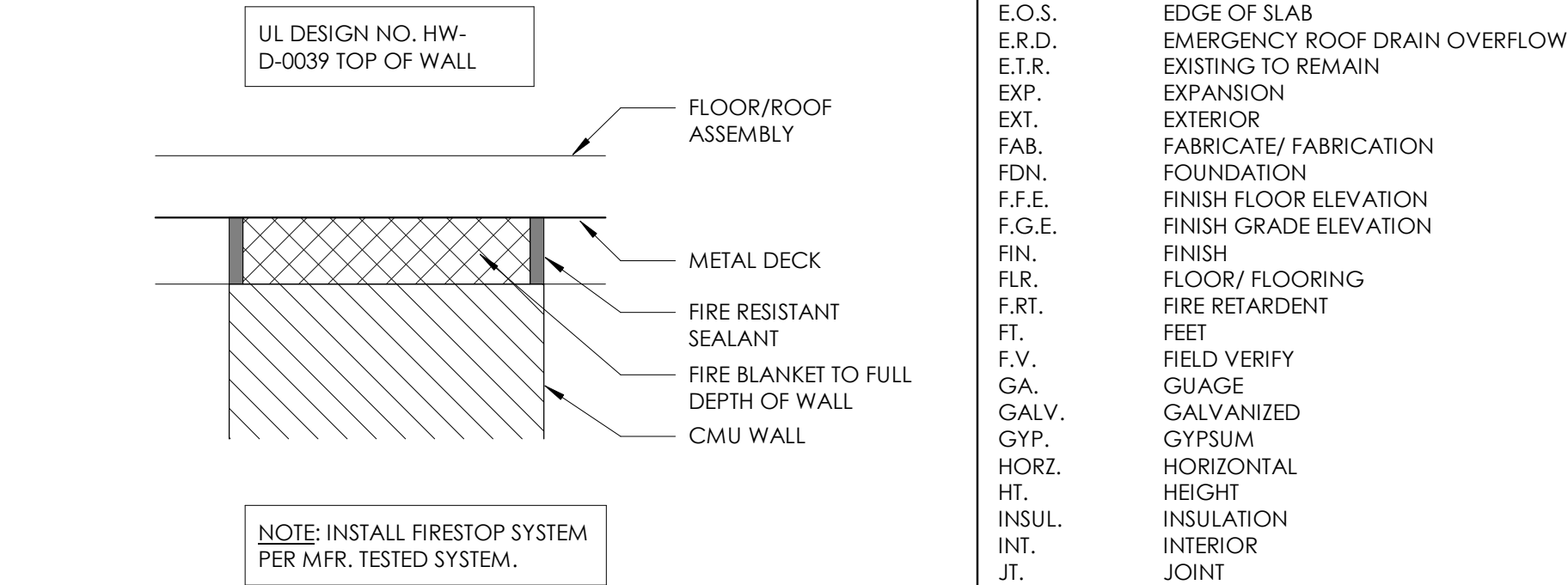


TYP. WALL FLASHING DETAIL (CMU-SPRAY-IN-PLACE)

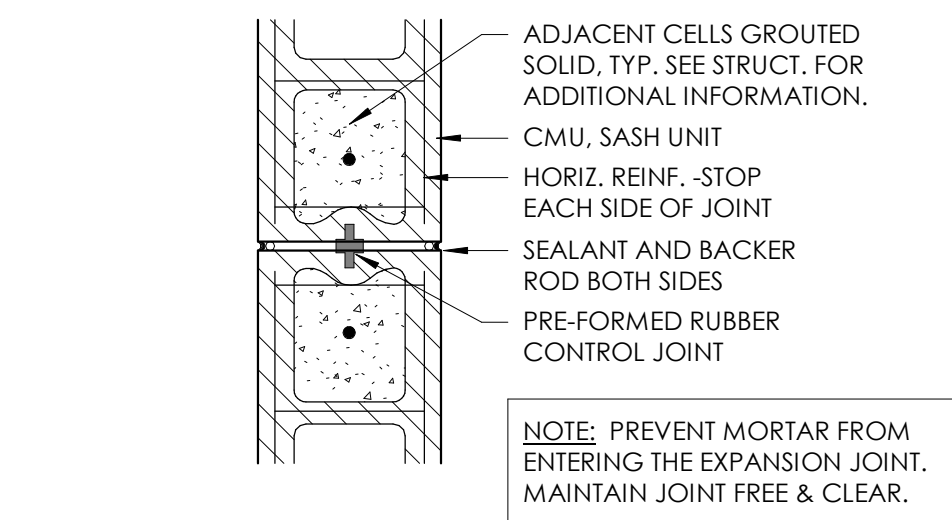
SCALE: N.T.S.



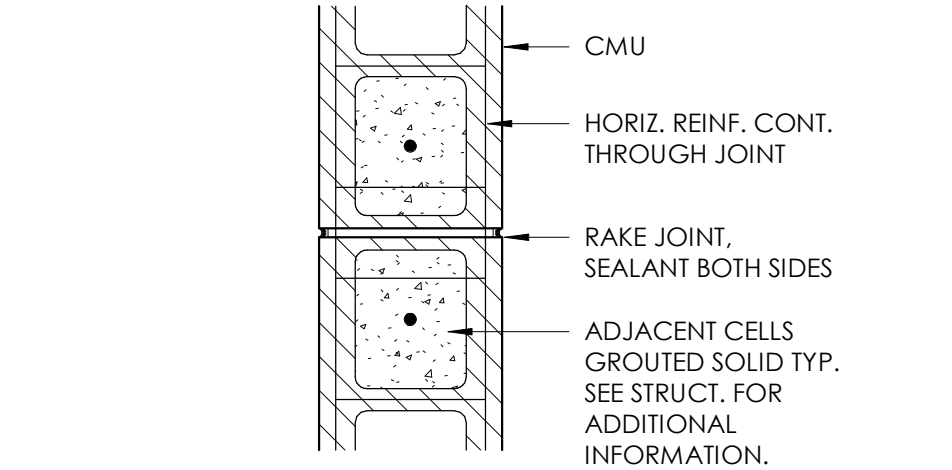
SMOKE PARTITION, 1HR/2HR FIRESTOP @ GWB N.T.S.



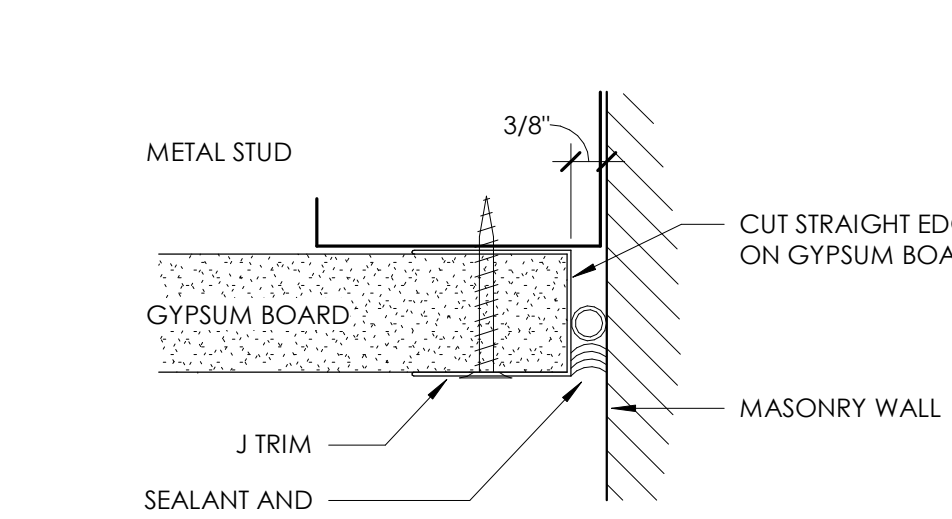
SMOKE PARTITION, 1HR/2HR FIRESTOP @ CMU N.T.S.



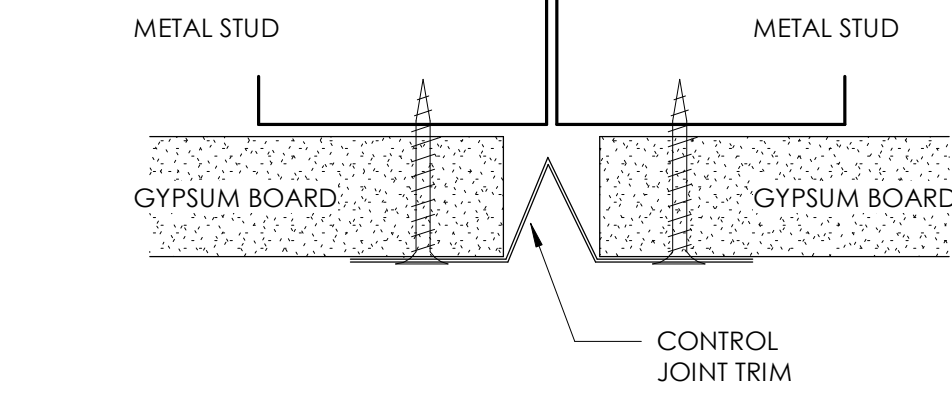
TYP. CMU EXPANSION JOINT DETAIL N.T.S.



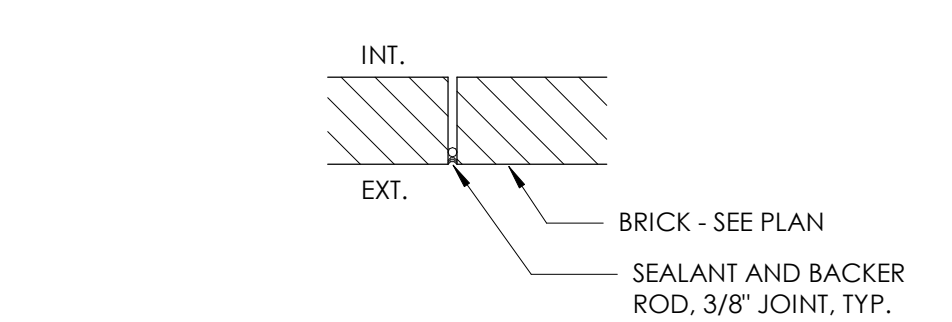
TYP. CMU CONTROL JOINT DETAIL N.T.S.



TYP. REVEAL @ GWB/MASONRY INTERSECTION N.T.S.



TYP. REVEAL/EXPANSION JOINT DETAIL N.T.S.



TYP. BRICK EXPANSION JOINT DETAIL N.T.S.

ABBREVIATIONS	GENERAL PLAN NOTES	MASTER MATERIAL REFERENCE
A.F.F. ABOVE FINISH FLOOR ALT. ALTERNATE AL/ALUM. ALUMINUM ARCH. ARCHITECT/ ARCHITECTURAL BD. BOARD BIT. BITUMINOUS BLKG. BLOCKING BLDG. BUILDING B.O. BOTTOM OF SOMETHING BRG. BEARING C.J. CONTRACTION/ CONSTRUCTION JOINT CL. CENTERLINE CLR. CLEAR C.M.U. CONCRETE MASONRY UNIT COL. COLUMN CONC. CONCRETE CONT. CONTINUOUS DBL. DOUBLE DIA. DIAMETER DOWNSPOUT DWG. DRAWING E.I.F.S. EXTERIOR INSULATION FINISH SYSTEM EXP. EXPANSION JOINT EQ. EQUAL ELEV. ELEVATOR E.O.S. EDGE OF SLAB E.R.D. EMERGENCY ROOF DRAIN OVERFLOW E.T.R. EXISTING TO REMAIN EXP. EXPANSION EXT. EXTERIOR FAB. FABRICATE/ FABRICATION FDN. FOUNDATION F.F.E. FINISH FLOOR ELEVATION F.G.E. FINISH GRADE ELEVATION FIN. FINISH FLR. FLOOR/ FLOORING FIRE RETARDANT FEET F.V. FIELD VERIFY GA. GAUGE GALV. GALVANIZED GYPSUM GYPSUM HORIZ. HORIZONTAL HEIGHT INSUL. INSULATION INT. INTERIOR JOINT J.T. JOINT LAM. LAMINATE MASON. MASONRY M.E.P. MECHANICAL ELECTRICAL PLUMBING MFR. MANUFACTURER MAT. MATERIAL MAX. MAXIMUM MECH. MECHANICAL MEM. MEMBRANE MIN. MINIMUM MISC. MISCELLANEOUS M.O. MASONRY OPENING NOT APPLICABLE N.C. NOT IN CONTRACT N.T.S. NOT TO SCALE O.H. OVERHEAD OPP. OPPOSITE ORN. ORNAMENTAL PEN. PENETRATION PLATE POLYISO. POLYISOCYANURATE P.S.F. POUNDS PER SQUARE FOOT P.S.I. POUNDS PER SQUARE INCH PRESS. TREATED RADIUS RAD. RADIUS R.D. ROOF DRAIN REINFORC. REINFORCEMENT REQD. REQUIRED REV. REVISION/ REVISED SECT. SECTION SIM. SIMILAR SPEC. SPECIFICATIONS S.S. STAINLESS STEEL SQ. SQUARE STD. STANDARD STL. STEEL STRUCT. STRUCTURE/ STRUCTURAL SYM. SYMMETRICAL SYS. SYSTEM T.O. TOP OF SOMETHING THK. THICK TYP. TYPICAL U.N.O. UNLESS NOTED OTHERWISE VERT. VERTICAL V.I.F. VERIFY IN FIELD W/ WITH W/O WITHOUT W.P. WORK POINT WT. WEIGHT	1. (NIC) NOT IN CONTRACT, PROVIDED BY OWNER AND INSTALLED BY OTHERS DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE. 2. ALL DIMENSIONS ARE TO FACE OF STUDS, MASONRY OR TO CENTERLINE OF STRUCT. STEEL UNLESS OTHERWISE NOTED. CONTACT ARCHITECT WITH ANY QUESTIONS REGARDING DIMENSIONS. 3. MASONRY DIMENSIONS ARE ACTUAL. EXTERIOR WALL DIMENSIONS ARE TO EXTERIOR FACE OF VENEER. 4. REFER TO ENLARGED PLANS FOR DIMENSIONS NOT SHOWN ON 1/8" PLANS 5. ALL EXTERIOR WALLS ARE WALL TYPE 'A' UNLESS INDICATED OTHERWISE. 6. ALL INTERIOR PARTITIONS ARE WALL TYPE '1' UNLESS INDICATED OTHERWISE. 7. PROVIDE BULLNOSE UNITS AT ALL VERTICAL OUTSIDE CONCRETE BLOCK CORNERS UNLESS OTHERWISE NOTED. 8. PARTITION TYPES SHALL MAINTAIN THEIR CONSTRUCTION AND RESPECTIVE SEPARATION RATING (IF ANY) FOR FULL HEIGHT. ALL MECH., ELEC., AND PLUMBING PENETRATIONS SHALL BE SEALED / SAFED / DAMPERED AS REQD TO COMPLY WITH APPLICABLE CODES. 9. REFER TO STRUCTURAL DRAWINGS FOR TYPES, SIZES, LOCATIONS, CONNECTIONS, REINFORCEMENT AND OTHER REQ. PERTAINING TO STRUCTURAL COMPONENTS INDICATED. 10. REFER TO STRUCTURAL DRAWINGS FOR UNTEL SCHEDULE. ALL EXTERIOR UNTELS ARE TO BE GALVANIZED AND PAINTED. 11. VERIFY REQD DEPTH OF ALL RECESSED SLABS w/ APPROPRIATE FINISH FLOORING MANUFACTURER PRIOR TO PLACEMENT OF SLAB. 12. MASONRY OPENINGS IN CMU WALLS FOR DOORS ARE TYPICALLY LOCATED 8" FROM THE JAMB OPENING TO THE ADJACENT WALL UNLESS NOTED OTHERWISE. 13. DOORS IN GYPSUM BOARD WALLS ARE TYPICALLY LOCATED 6" FROM THE DOOR JAMB OPENING TO THE ADJACENT WALL UNLESS NOTED OTHERWISE, WHERE DOORS HAVE 180 DEGREE SWING IN CMU WALL, PROVIDE 3/4" SET BACK FROM FACE OF WALL OF SWING SIDE. COORDINATE WITH MASON. 14. 15.	033000.B Foundation Wall 033000.D Slop-on-Deck 033000.E Isolation Joint Material 042000.A Concrete Masonry Unit 042000.B Face Brick 042000.H Vents and Weeps 042000.I Through Wall Flashing 042000.J Mortar Deflection Material 042000.K Grout 042000.L Masonry Reinforcement 042000.O Bond Beam 051200.A Structural Steel Member 051200.B Architectural Exposed Structural Steel 052100.A Steel Joists 053100.A Roof Deck 055100.B Metal Stringer 055100.D Miscellaneous Metal Stair Components 055213.A Steel Component Railing 061000.A Wood Blocking 061000.B Plywood Sheathing 064100.A Custom Casework 064100.A13 Plastic Laminated Enclosure Panel 064100.C6 Solid Surface Countertop 064100.C8 Solid Surface Countertop & Backsplash 071300.A Underslab Vapor Barrier 072100.B Perimeter Foundation Board Insulation 072100.F Sprayed-In-Place Thermal Insulation 072100.J Transition Membrane 075200.A SBS-Modified Bituminous Membrane Roofing System 077100.B Coping 077100.D Reglet/Counter Flashing 077100.E Expansion Joint 078400.A Through-Penetration Fire Stop System 079005.A Joint Sealant 081113.A Steel Doors & Frames 081113.C Steel Frame 084313.C Aluminum Door 085113.A Aluminum Window 092116.A Gypsum Board Assemblies 092116.B Metal Studs and Runners 092116.C Gypsum Board-Regular/Type 'X' 092116.I Sound Attenuation Blankets 095113.A Acoustical Panel Ceiling System 096513.A Resilient Wall Base & Accessories 099000.A Paint 102800.A Toilet & Bath Accessories 107300.B Wall Hung Metal Canopy 123450.A Wood Laboratory Casework 123450.A1 Wood Base Cabinet 123450.A2 Wood Accessible Sink Base Cabinet & Slant Enclosure Panel 123450.A4 Wood Wall Cabinet 123450.A7 Wood Full-Height Wardrobe Cabinet w/ Lock 123450.A11 Wood Demo Desk 123450.B1 Epoxy Countertop w/ Backsplash 123450.B4 Epoxy Under-mount Sink 123450.C11 Eyewash 123450.D1 Finished End 123450.E2 Peg Board with Drip Trough & Hose - Resin
GENERAL WALL NOTES	1. REFER TO FLOOR PLANS FOR LOCATION OF PARTITION AND WALL TYPES DESCRIBED ON THIS DRAWING. 2. REFER TO STRUCTURAL DRAWINGS FOR OTHER REQUIREMENTS PERTAINING TO REINFORCED UNIT MASONRY. 3. CONTRACTOR SHALL INSTITUTE ALL MEASURES NECESSARY TO ACHIEVE WEATHERTIGHTNESS OF EXTERIOR WALLS BY ALLOWING POSITIVE DRAINAGE OF WATER TO THE EXTERIOR TO OCCUR WHERE THROUGH-WALL FLASHING IS INDICATED OR REQUIRED. A) KEEP ALL DRAINAGE CAVITIES IN CAVITY WALLS FREE OF MORTAR. B) PAN-UP THROUGH-WALL FLASHING AT BACK EDGES AND ENDS MINIMUM 6 INCHES. EXTEND THROUGH-WALL FLASHING TO THE FACE OF MASONRY VENEER FOR OBSERVATION BY THE ARCHITECT. C) AT MASONRY WALLS, PROVIDE WEEPS AND CAVITY VENTS AT 24" O.C. HORIZONTALLY. ALTERNATE LOCATIONS OF WEEPS WITH CAVITY VENTS. DO NOT ALLOW WEEPS OR CAVITY VENTS TO BECOME CLOSED OFF. D) REFER TO THE SPECIFICATIONS FOR ADDITIONAL INFORMATION ON PLACEMENT AND INSTALLATION OF THROUGH-WALL FLASHING, WEEPS AND CAVITY VENTS. 4. AT MASONRY VENEER/METAL STUD WALL ASSEMBLIES AND MASONRY VENEER/CMU WALLS PROVIDE THROUGH-WALL FLASHING WITH WEEPS AND CAVITY VENTS AT 24" O.C. - ALTERNATING LOCATIONS. ADHESIVE INSTALL THROUGH-WALL FLASHING ON SHEATHING ON STUDS, OR CMU, UPWARD MIN. 6" AND PAN-UP THROUGH-WALL FLASHING AT ENDS MINIMUM 6". DO NOT MECHANICALLY FASTEN, PENETRATE, OR PUNCTURE THROUGH-WALL FLASHING. THROUGH-WALL FLASHING TO DIRECT ALL MOISTURE TO EXTERIOR FACE OF WALL. KEEP ALL DRAINAGE CAVITIES FREE OF MORTAR. 5. UNLESS NOTED OTHERWISE, ALL EXTERIOR AND INTERIOR MASONRY AND/OR MTL. STUD WALLS SHALL EXTEND FULL HEIGHT TO BOTTOM OF DECK AND BE SEALED. REFER TO REFLECTED CEILING PLAN, PROVIDE THE FOLLOWING CLOSURE MATERIALS AT TOP OF EXTERIOR AND INTERIOR MASONRY AND METAL STUD WALLS AND PARTITIONS. A) FULL HEIGHT, NON-RATED MTL STUD/GYP PARTITION RUNNING PERPENDICULAR TO METAL DECK. FLUTE/STRUCTURE: CORE GYP TO WITHIN 1/2" OF METAL DECK FLUTE. FILL METAL DECK FLUTE VOID COMPLETELY WITH SOUND ATTENUATION BLANKET MATERIAL. INSTALL CONTINUOUS ACOUSTICAL SEALANT BOTH SIDES OR PROVIDE COMPRESSIBLE NEOPRENE FILLER. B) FULL HEIGHT, NON-RATED MTL STUD/GYP PARTITION RUNNING PARALLEL TO METAL DECK FLUTES/STRUCTURE: STOP GYP TO WITHIN 1/2" OF METAL DECK. INSTALL CONTINUOUS ACOUSTICAL SEALANT BOTH SIDES OR PROVIDE COMPRESSIBLE NEOPRENE FILLER. C) FULL HEIGHT, NON-RATED CMU WALL RUNNING PERPENDICULAR OR PARALLEL TO METAL DECK FLUTES/STRUCTURE: LAY CMU TO WITHIN 1" OF METAL DECK. FILL METAL DECK FLUTE VOID COMPLETELY WITH CUT TO FIT COMPRESSIBLE NEOPRENE FILLER OR SOUND ATTENUATION BLANKET MATERIAL, AND CONTINUOUS ACOUSTICAL SEALANT BOTH SIDES. D) FIRE RATED FULL HEIGHT WALLS: FILL ALL VOIDS, AT METAL DECK/STRUCTURE ABOVE, WITH FIRE BLANKETS AND INTUMESCENT SEALANT PER SECTION 078400. REFER TO DETAILS ON THIS SHEET. E) CMU & GYP. BD. COLUMN SURROUNDS MAY BE STOPPED 12" ABOVE CEILING UNLESS PART OF A FIRE OR SOUND-RATED WALL CONSTRUCTION. PROVIDE CAULKED CONTROL JOINTS WHERE LOAD BEARING CMU ABUTS NON-LOAD BEARING CMU OR WHERE WALLS OF DIFFERENT HEIGHTS ABUT.	
GENERAL WALL NOTES		
MATERIALS LEGEND:	CONCRETE FINISHED WOOD CONCRETE MASONRY UNIT PLYWOOD CLAY MASONRY UNIT WOOD BLOCKING SPILT-FACE CONCRETE MASONRY UNIT CAVITY WALL INSULATION/PERI TE ROOFING INSULATION GROUND-FACE CONCRETE MASONRY UNIT POLYISO. ROOFING INSULATION CUT STONE THERMAL, SOUND, OR FIRE BATT- INSULATION STEEL GYPSUM BOARD ALUMINUM SPRAY-IN-PLACE THERMAL INSULATION	
FIRE BARRIER TYPES:	3P SMOKE TIGHT PARTITION: EXTEND PARTITION WALL TO DECK ABOVE, SEAL PERIMETER TO PROVIDE "SMOKE TIGHT INSTALLATION". SEAL ALL PENETRATIONS 1HR 1 HOUR RATING: PROVIDE FIRE SAFING AT VOIDS AT THE TOP PERIMETER OF THE PARTITION AND FIRESAFE ALL PENETRATIONS. VERIFY WITH STRUCTURAL DRAWINGS AND COORDINATE WITH WALL SECTIONS. 2HR 2 HOUR RATING: PROVIDE FIRE SAFING AT VOIDS AT THE TOP PERIMETER OF THE PARTITION AND FIRESAFE ALL PENETRATIONS. VERIFY WITH STRUCTURAL DRAWINGS AND COORDINATE WITH WALL SECTIONS.	

GENERAL ARCHITECTURAL DETAILS

MARION COUNTY MIDDLE SCHOOL ADDITION & REYNOATION

FOR:
MARION COUNTY BOARD OF EDUCATION

LEBANON, KENTUCKY

M.E.&P Engineer:
CM&A, Inc.
2429 Members Way
Lexington, KY 40304
p 859.253.0892
Structural Engineer:
Structural Design Group, Inc.
220 Great Circle Rd., Suite 106
Nashville, TN 37228
p 615.255.5537

BG#

Project No.: 1928
Drawn By: RB
Rev'd By: RM

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A0.1
GENERAL ARCHITECTURAL
DETAILS
DATE ISSUED:
AUGUST 01, 2019

rosstant
architects

101 old laybette avenue lebanon, kentucky 40302 p 859.254.4018



<div style="display: inline-block; border: 1px solid black; border-radius: 50%; width: 30px; height: 30px; text-align: center; line-height: 30px;">#</div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">PLAN NOTES</div>	
1	PROVIDE ABUSE RESISTANT GYP. BD. (092116.G) TO 8'-0" A.F.F. IN ROOM # ____.
2	PROVIDE CEMENT BOARD (092116.L) AT WALLS WITH TILE, AND MOLD/MOISTURE GYP. BD. (092116.H) ABOVE AND ON OTHER WALLS IN ROOM # ____.
3	PROVIDE MOLD/MOISTURE GYP. BD. (092116.H) IN ROOM # ____.
4	PROVIDE IMPACT RESISTANT GYP. BD. (092116.F) IN ROOM # ____.

FLOOR PLANS

MARION COUNTY MIDDLE SCHOOL ADDITION & REVNOATION

FOR:

MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

M, E & P Engineer:
CMTA, Inc.
2429 Members Way
Lexington, KY 40504
p 859.253.0892

Structural Engineer:
Structural Design Group, Inc.
220 Great Circle Rd. Suite 106
Nashville, TN 37228
p 615.255.5537

BG#

Project No:	1928
Drawn By:	RB
Rev'd By:	RM

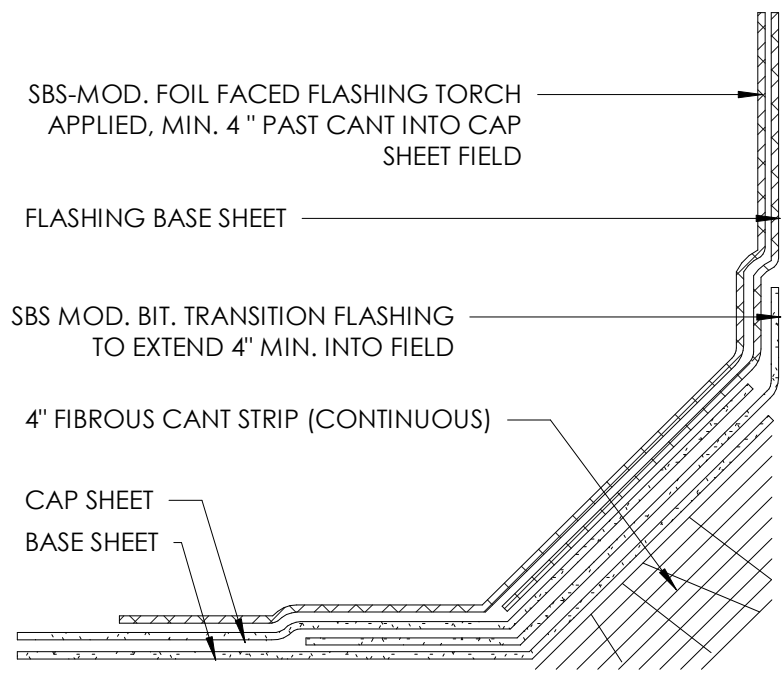
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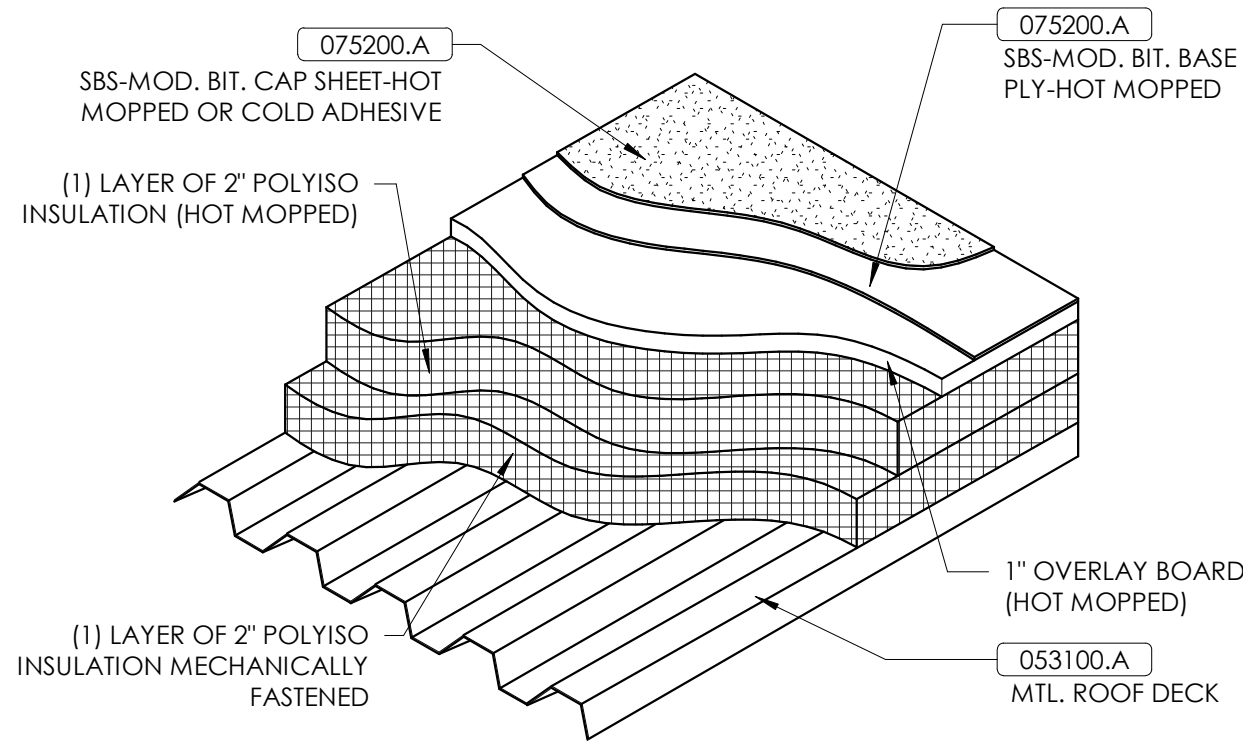
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DATE ISSUED:
AUGUST 01, 2019

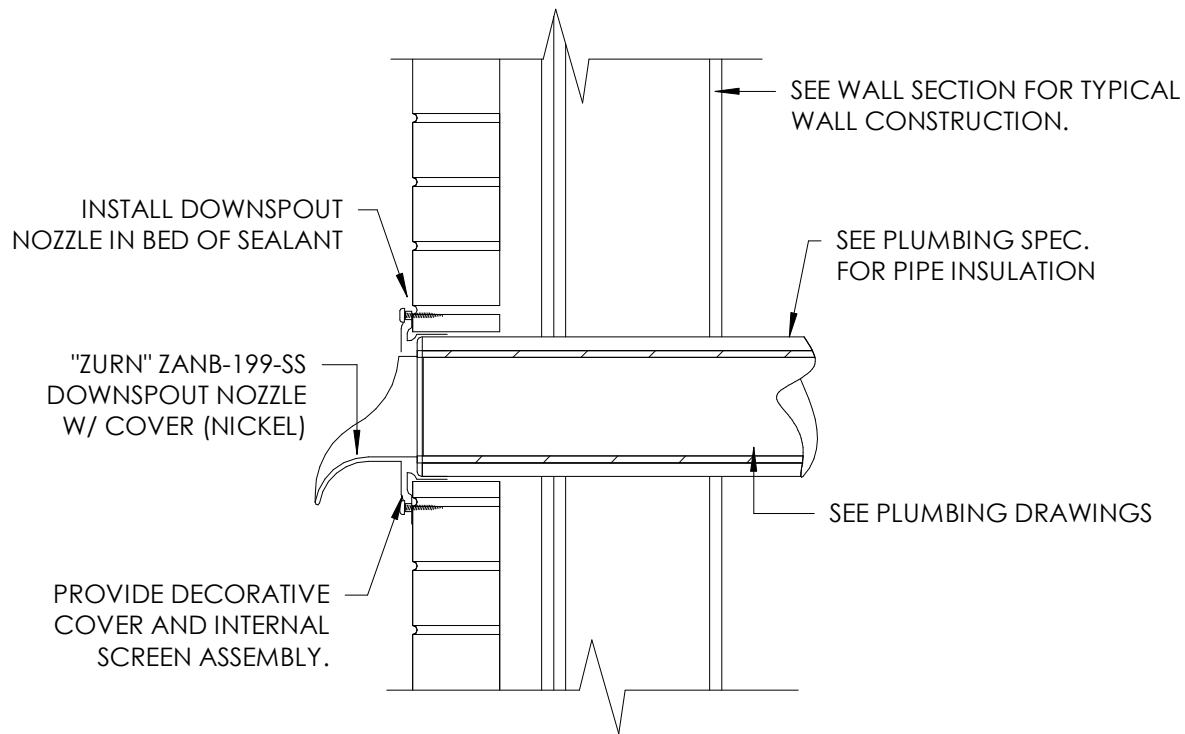


CANT DETAIL
N.T.S.

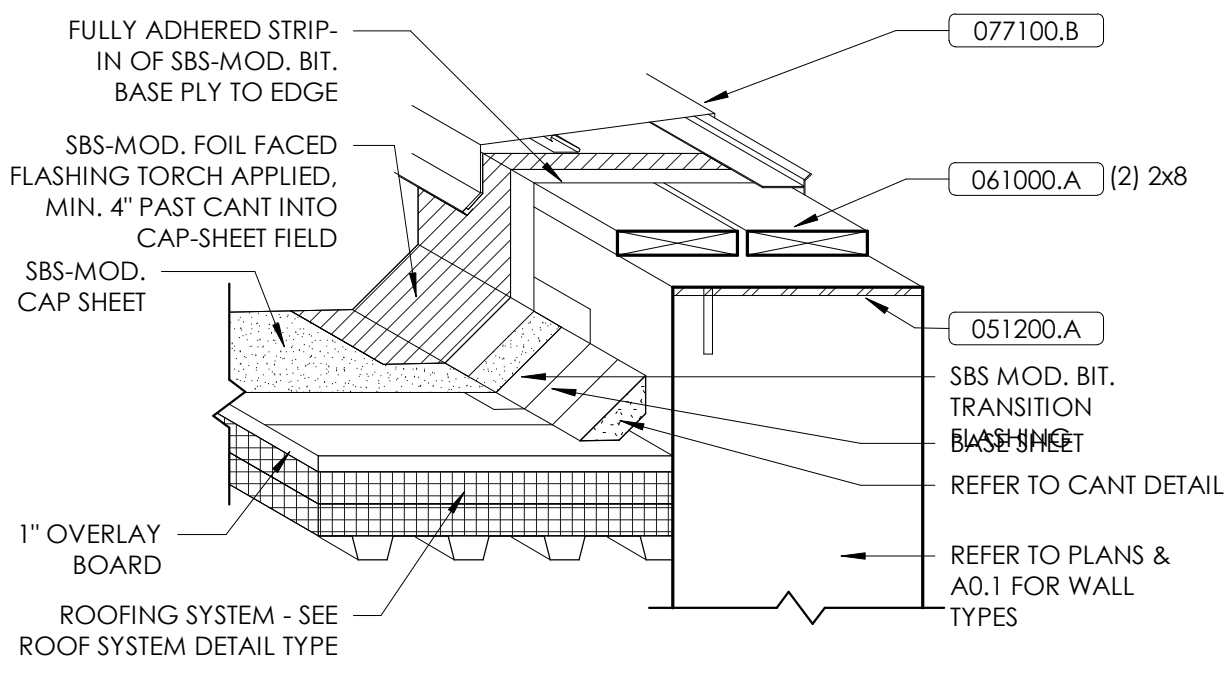


SYSTEM - 2-PLY SBS W/ GRANULAR CAP SHEET (075200.A) OVER 1\"/>

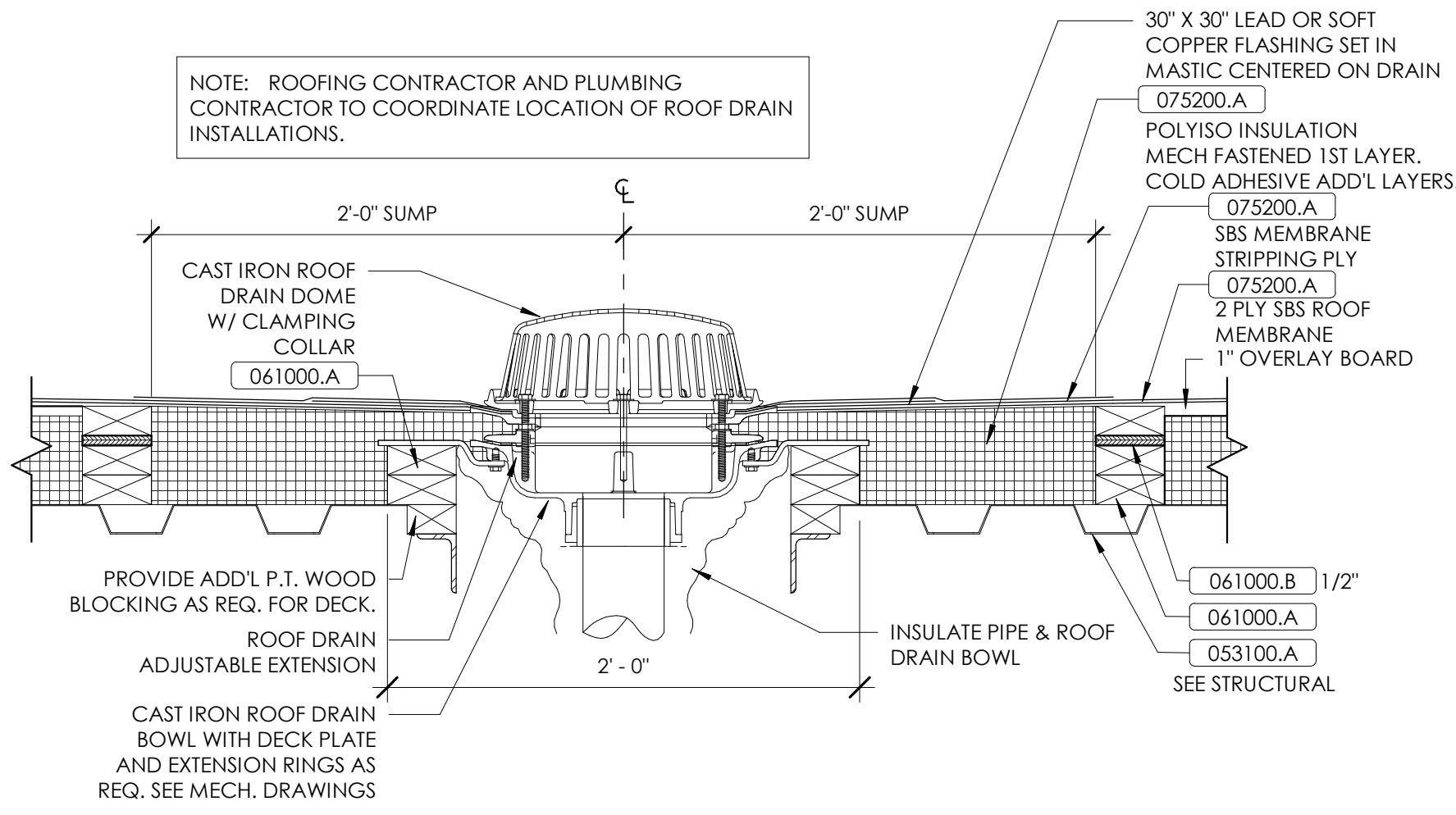
SBS ROOF TYPE
N.T.S.



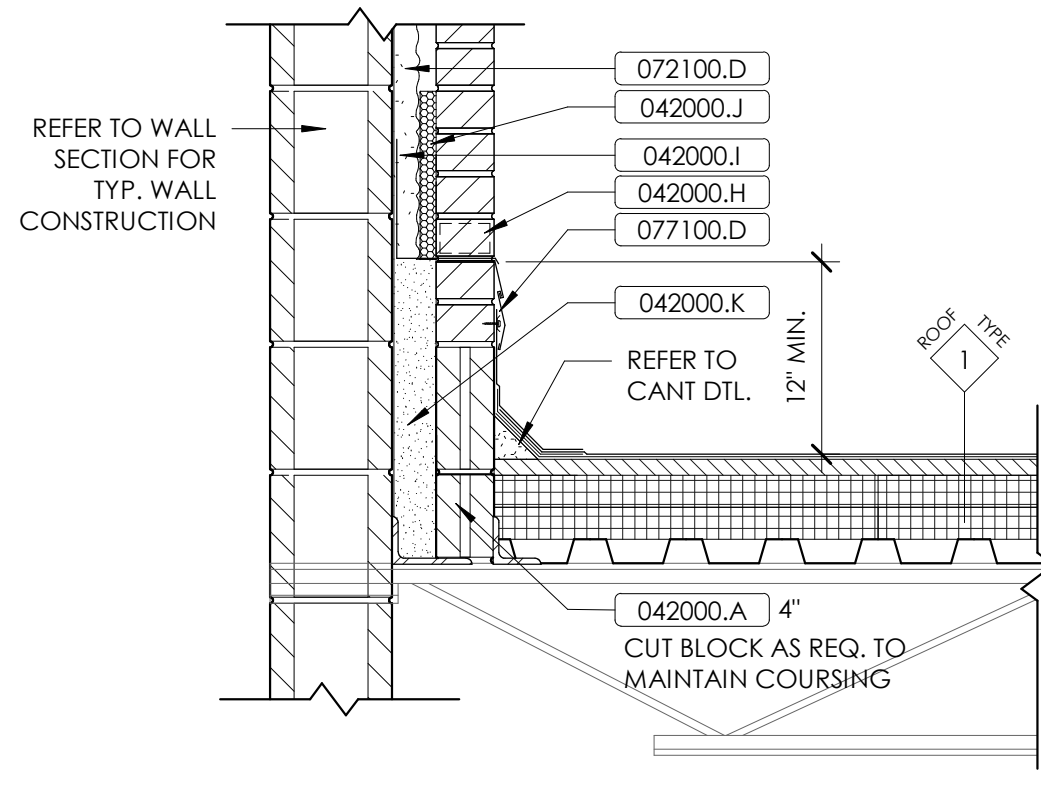
EMERGENCY OVERFLOW DETAIL
N.T.S.



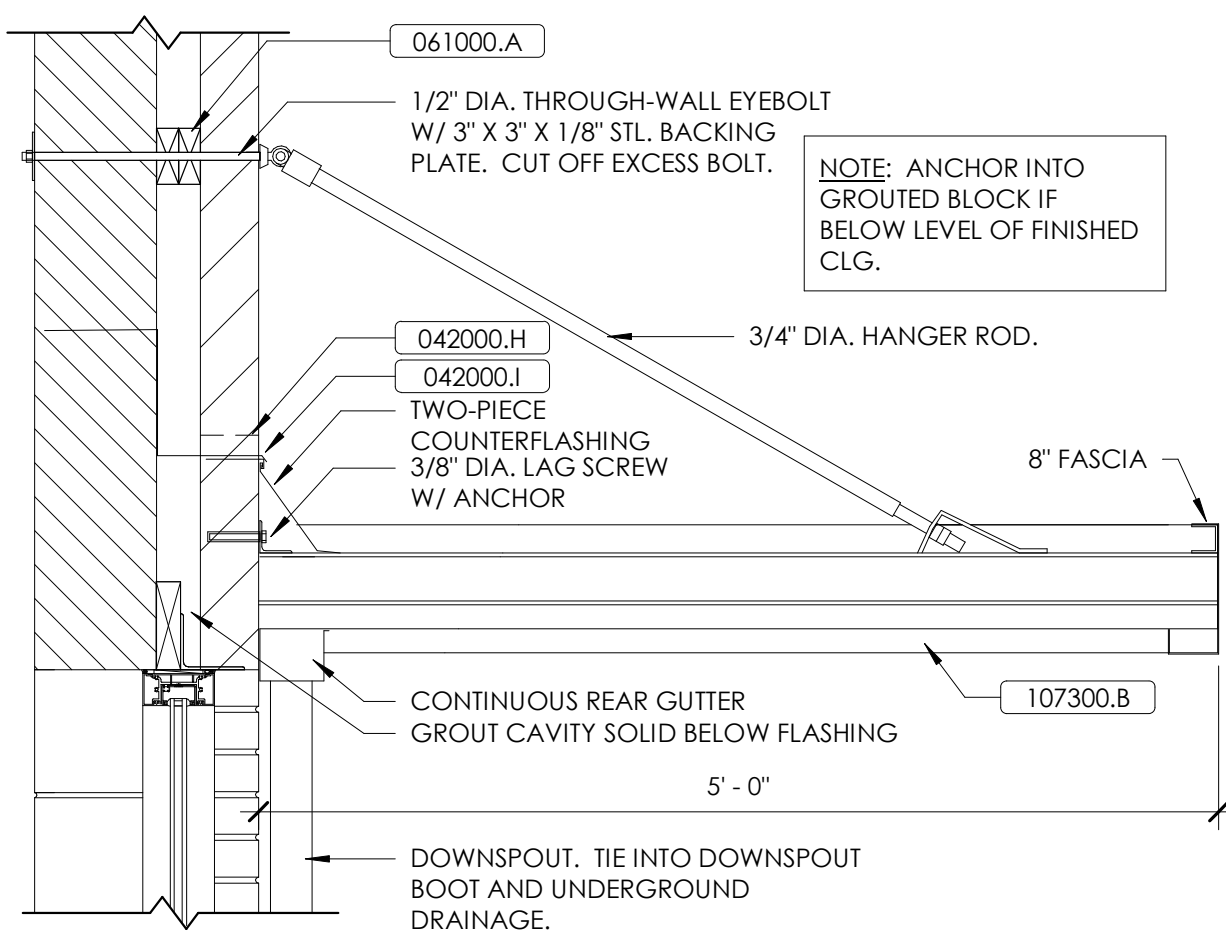
PARAPET DETAIL SBS AND COPING
N.T.S.



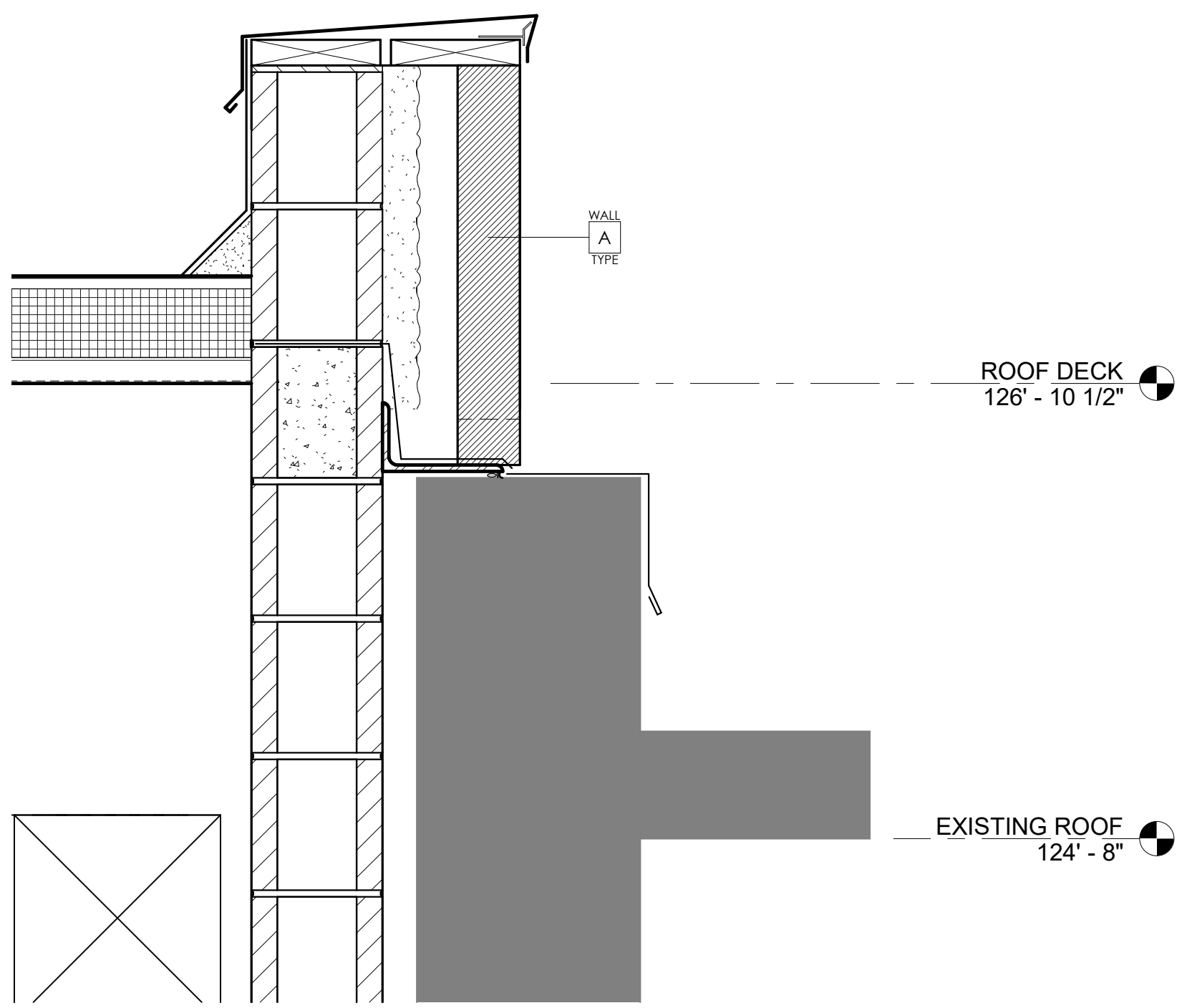
ROOF DRAIN DETAIL
N.T.S.



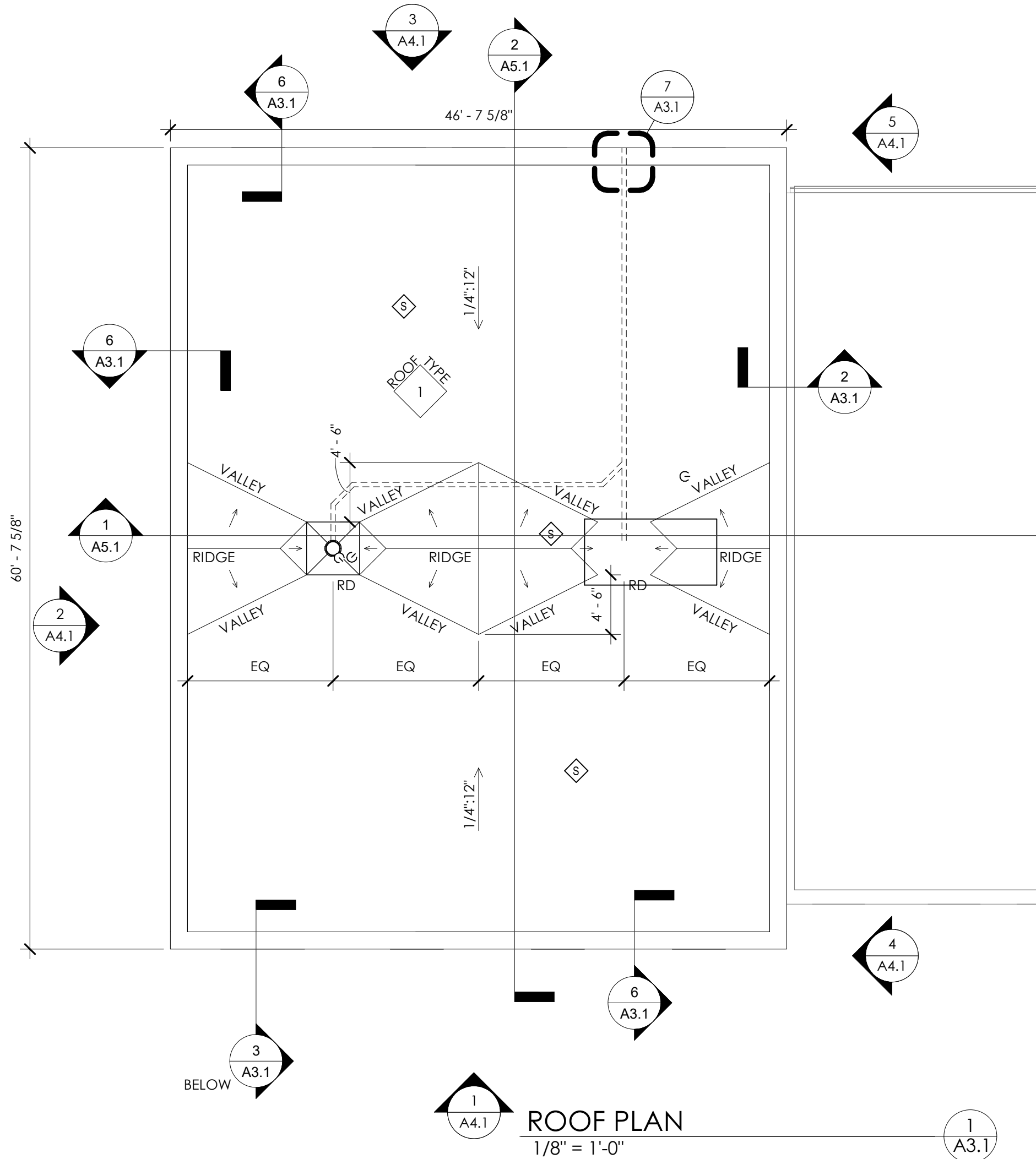
ROOF TO WALL TRANSITION
N.T.S.



ALUMINUM CANOPY DETAIL
N.T.S.



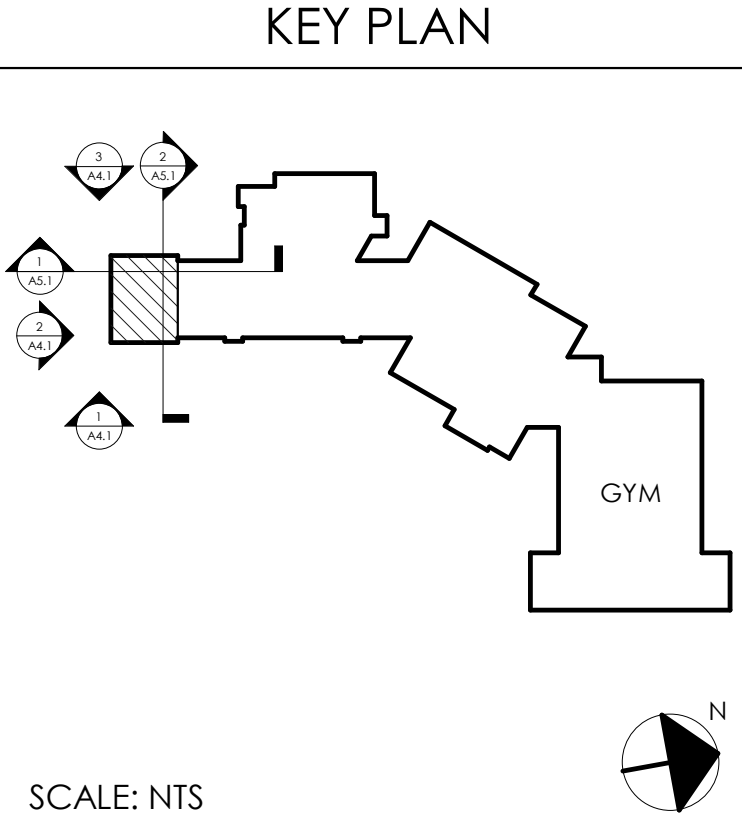
PARAPET @ EXIST BLDG.
1 1/2" = 1'-0"



MATERIAL REFERENCE	
042000.A	Concrete Masonry Unit
042000.H	Vents and Weeps
042000.I	Through Wall Flashing
042000.J	Mortar Deflection Material
042000.K	Grout
051200.A	Structural Steel Member
053100.A	Roof Deck
061000.A	Wood Blocking
061000.B	Plywood Sheathing
072100.D	Sprayed-In-Place Thermal Insulation
075200.A	SBS-Modified Bituminous Membrane Roofing System
077100.B	Coping
077100.D	Reglet/Counter Flashing
107300.B	Wall Hung Metal Canopy

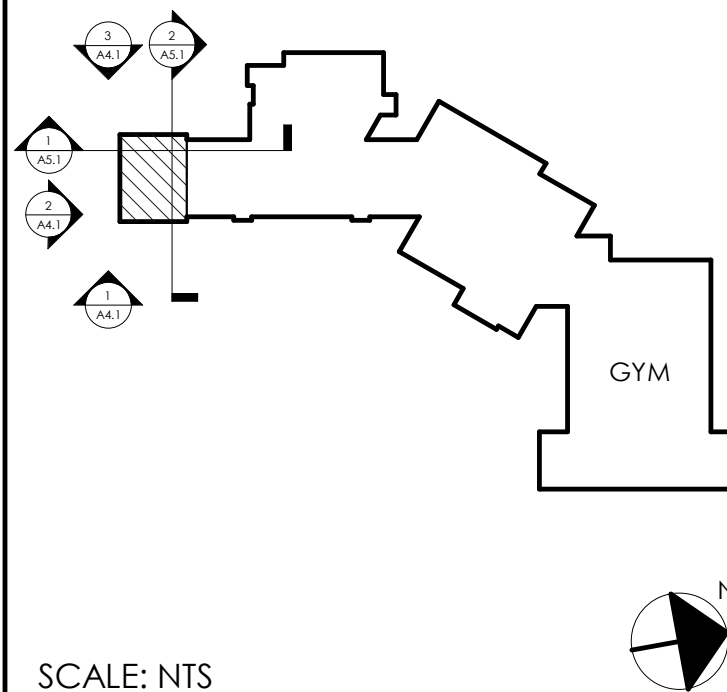
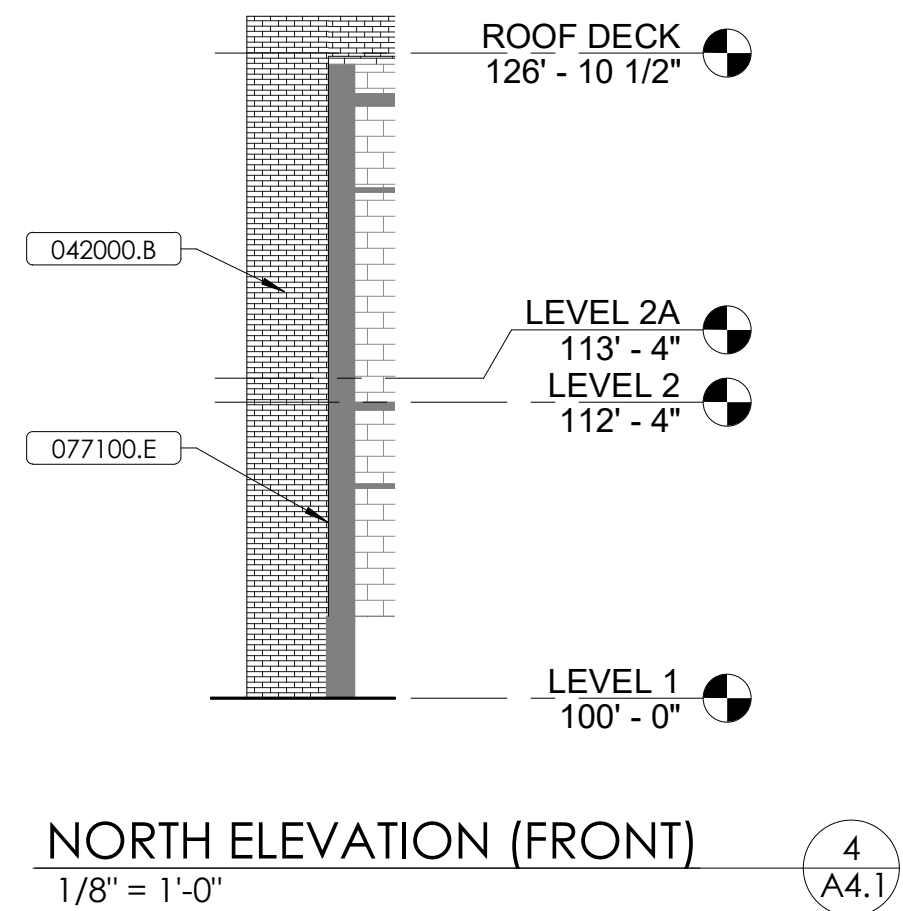
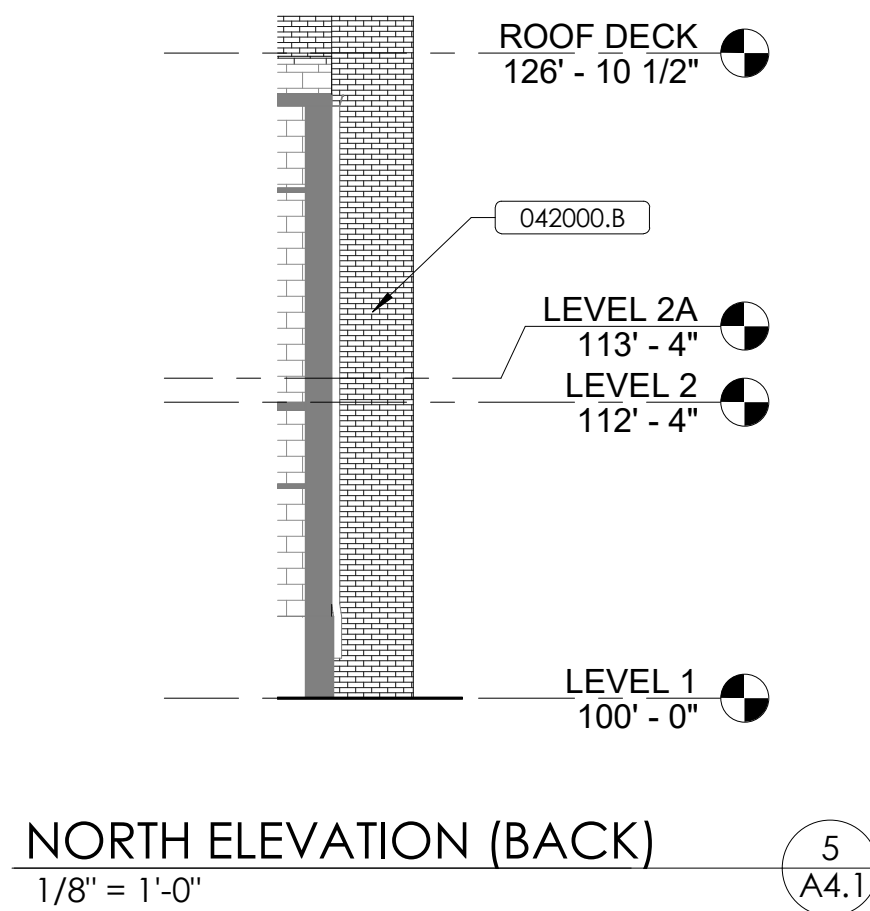
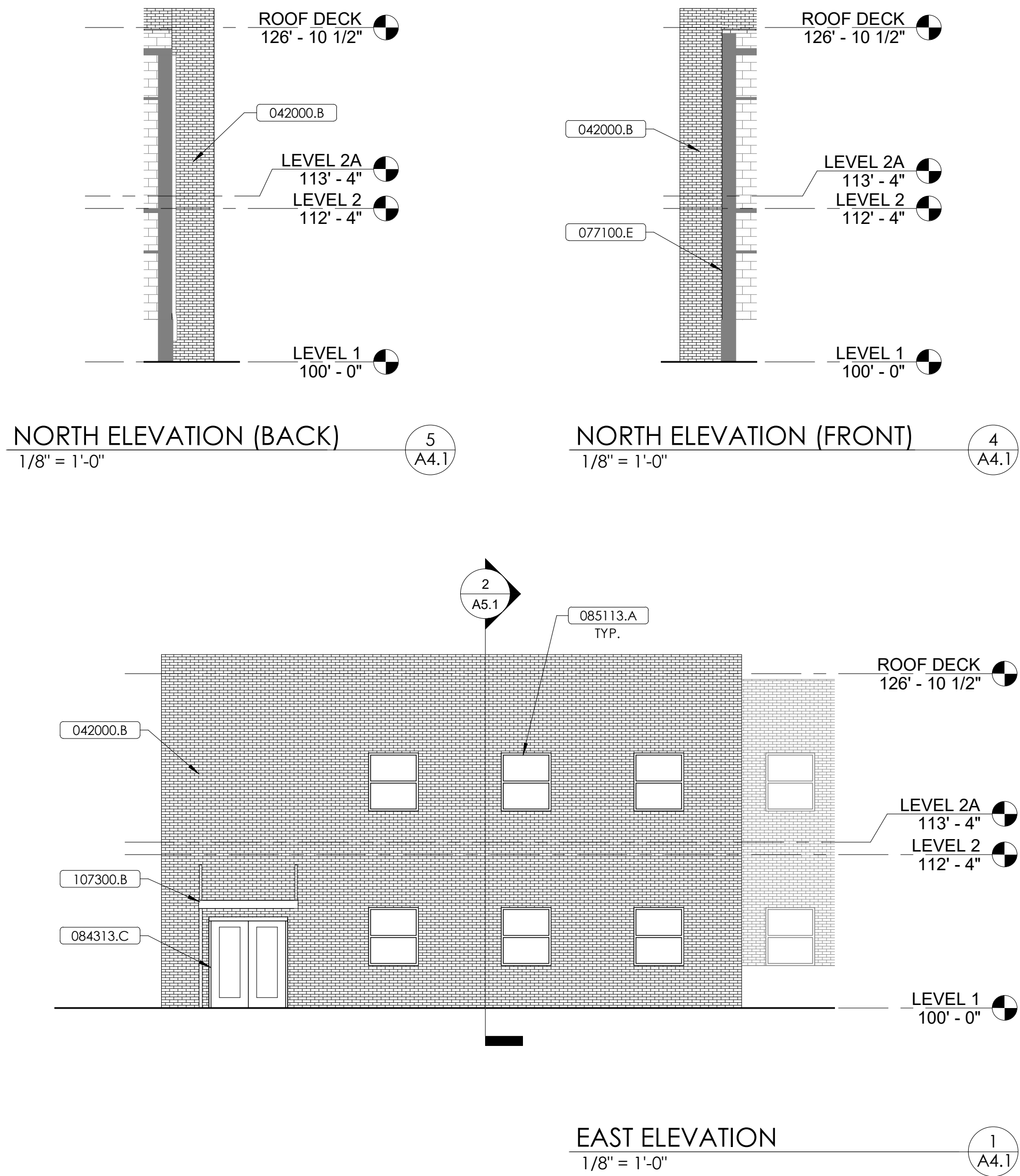
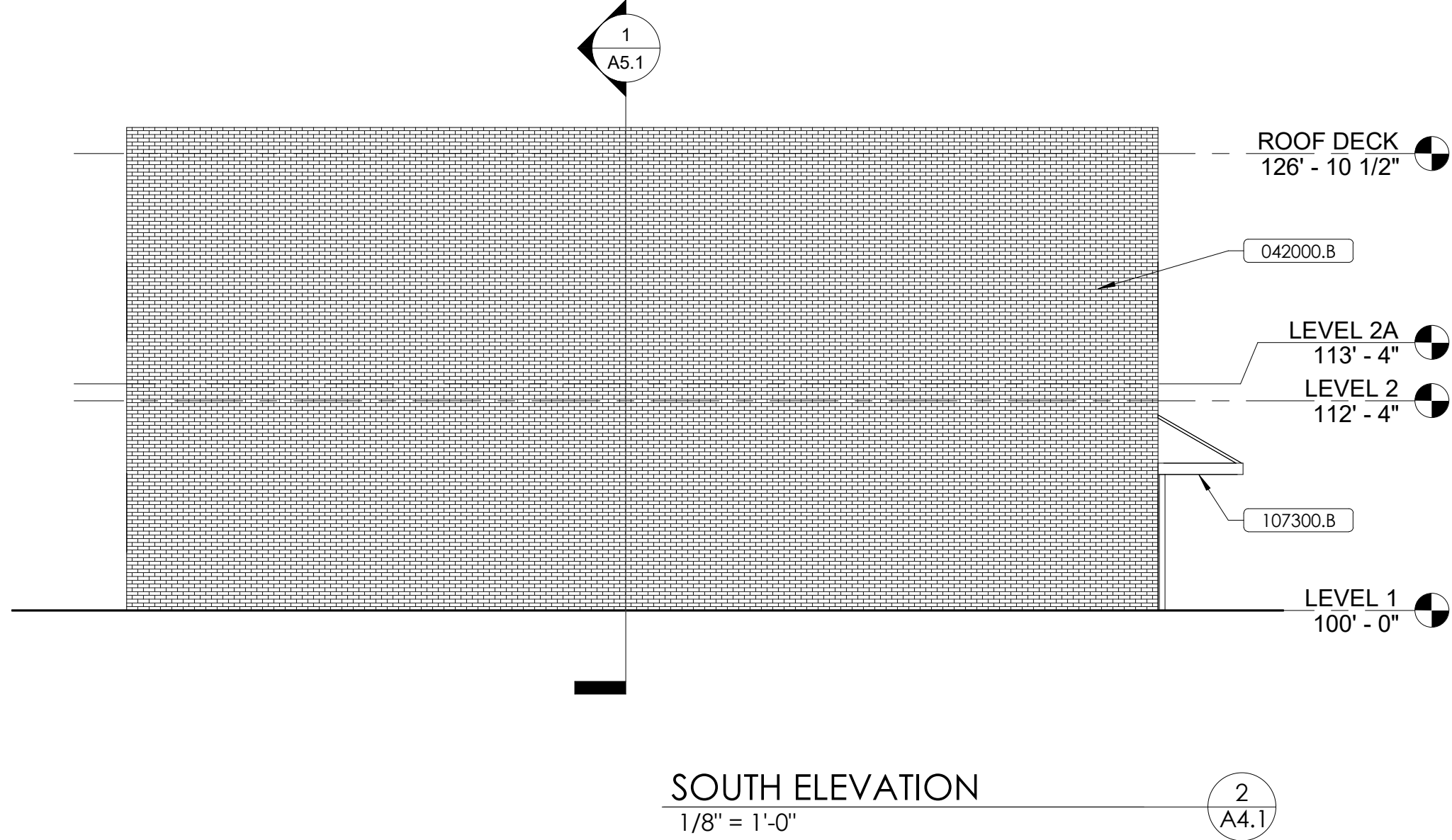
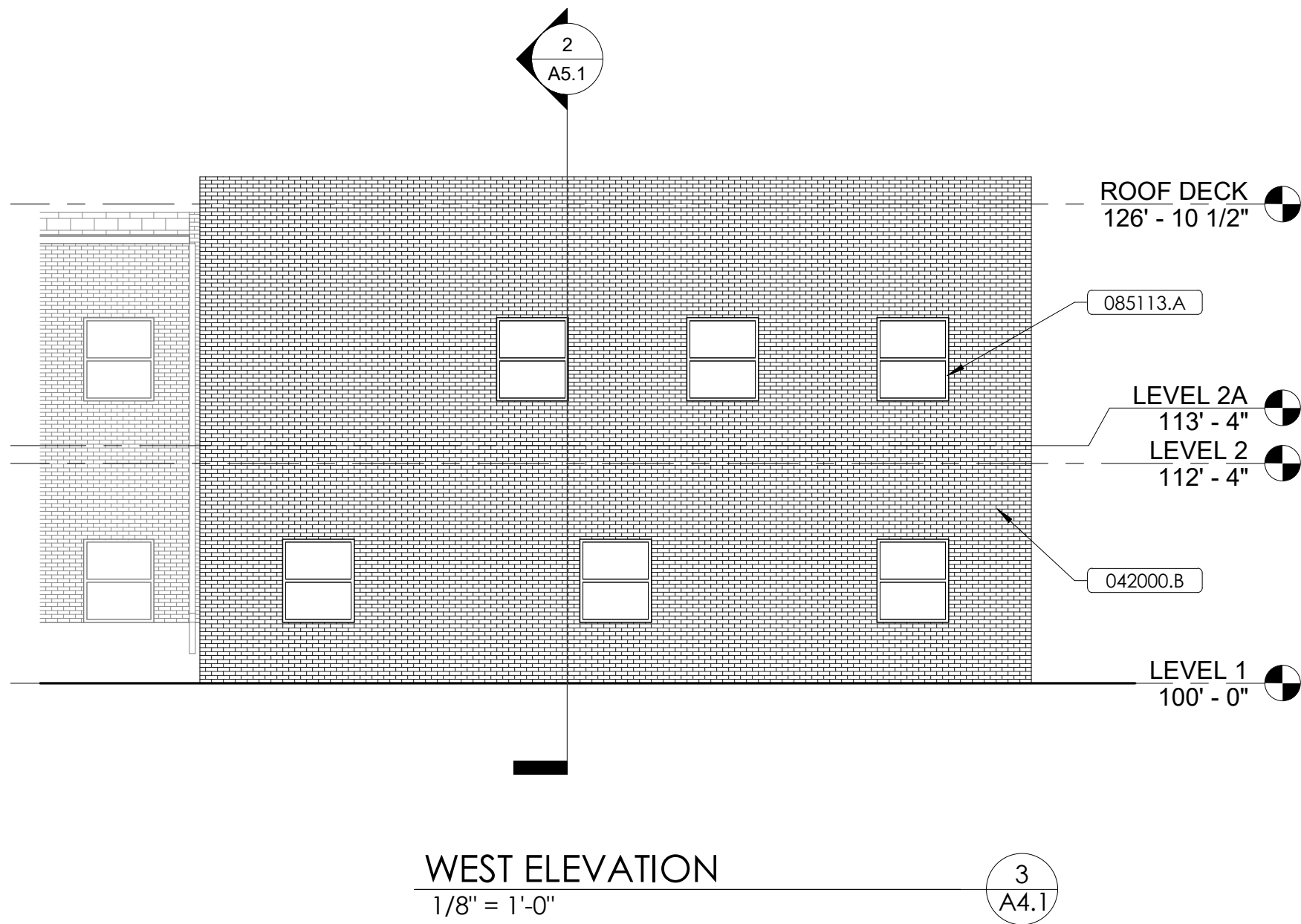
#	ROOF NOTES
1	GUTTER. SEE DETAIL x/Axx. (074113) (076200) (077123)
2	DOWNSPOUT. SEE DETAIL x/Axx. (074113) (076200) (077123)
3	SPLASH PAD. SEE DETAIL x/Axx.
4	ROOFTOP MECHANICAL EQUIPMENT CURB. SEE DETAIL x/Axx.
5	CRICKET(SADDLE SLOPED TO 1/4" PER 1'-0" FOR POSITIVE DRAINAGE.
6	FASCIA. SEE DETAIL x/Axx.
7	COPING. SEE DETAIL x/Axx.
8	VENTED RIDGE. SEE DETAIL x/Axx.
9	VALLEY FLASHING. SEE DETAIL x/Axx.
10	ICE AND WATER SHIELD. (073113) (074113)
11	DRIP EDGE. SEE DETAIL x/Axx.
12	REGLET AND COUNTERFLASHING. SEE DETAIL x/Axx.
13	ACCESS HUB. REFER TO MEP.
14	EMERGENCY OVERFLOW OUTLET MOUNTED IN EXTERIOR WALL. SEE BUILDING ELEVATIONS FOR LOCATIONS. OUTLET TO BE CENTERED OVER WINDOW/DOOR OR BETWEEN OPENINGS U.N.O. SEE DETAIL x/Axx.
15	SCUPPER AND COLLECTOR BOX. SEE DETAIL x/Axx. (076200) (077100) (077123)
16	EXPANSION JOINT. SEE DETAIL x/Axx.
17	SNOWGUARDS. (074113)
18	ALUMINUM ROOF-MOUNTED GUARDRAIL. SEE DETAIL x/Axx.
19	TUBULAR SKYLIGHT. COORDINATE SKYLIGHT LOCATION ON ROOF WITH ROOF JOIST LOCATION AND CEILING GRID ORIENTATION. SEE DETAIL x/Axx.
20	UNIT SKYLIGHT. COORDINATE SKYLIGHT LOCATION ON ROOF WITH ROOF JOIST LOCATION. SEE DETAIL x/Axx.
21	SUNSHADE. SEE DETAIL x/Axx. REFER TO STOREFRONT/CURTAINWALL SPECIFICATION.
22	PREMANUFACTURED WALL HUNG CANOPY. SEE DETAIL x/Axx. 3x5' OVER SINGLE DOORS; 3x8' OVER DOUBLE DOORS U.N.O.
23	PREMANUFACTURED COLUMN SUPPORTED CANOPY. SEE DETAIL x/Axx.
24	PIPE SUPPORTS. SEE DETAIL x/Axx.
25	ROOF PAVERS. SEE DETAIL x/Axx.
26	POLYCARBONATE CANOPY SYSTEM. SEE DETAIL x/Axx.
27	TRANSLUCENT ROOF SYSTEM. SEE DETAIL x/Axx.
28	VEGETATED ROOF SYSTEM. (073363) (075200) (075400)
29	RAIN COLLECTION SYSTEM. SEE DETAIL x/Axx.
30	ROOF SMOKE HATCH. SEE DETAIL x/Axx.
31	STONE COPING. SEE DETAIL x/Axx.

ROOF LEGEND	
RD	ROOF DRAIN. SEE ROOF DRAIN DETAIL A3.2.
ERD	EMERGENCY ROOF DRAIN. SEE EMERGENCY ROOF DRAIN DETAIL A3.2.
RL	ROOF LADDER. SEE ROOF LADDER DETAIL A3.2.
RH	ROOF HATCH. SEE ROOF HATCH DETAIL A3.2.
WP	WALKWAY PAD.
VTR	VENT THROUGH ROOF. SEE DETAIL A3.2. COORDINATE WITH MECHANICAL DWGS.
RTU	ROOF TOP UNIT. SEE MECHANICAL ELECTRICAL, & FOOD SERVICE DRAWINGS.



ROOF PLAN
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

M.E.&P. Engineer: CMI.A, Inc. 2429 Members Way Lexington, KY 40304 p 859.253.0892	
Structural Engineer: Structural Design Group, Inc. 220 Great Circle Rd., Suite 106 Nashville, TN 37228 p 615.255.5537	
BG#	Project No: 1928
Drawn By: RB	Rev'd By: RM
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ROOF PLAN	
DATE ISSUED: AUGUST 01, 2019	



MATERIAL REFERENCE	
042000.B	Face Brick
077100.E	Expansion Joint
084313.C	Aluminum Door
085113.A	Aluminum Window
107300.B	Wall Hung Metal Canopy

BUILDING ELEVATIONS

MARION COUNTY MIDDLE SCHOOL ADDITION & REYNOATON

FOR:

MARION COUNTY BOARD OF EDUCATION

LEBANON, KENTUCKY

M.E.&P. Engineer:
CMLA, Inc.
2429 Members Way
Lexington, KY 40504
p 859.253.0892

Structural Engineer:
Structural Design Group, Inc.
220 Great Circle Rd. Suite 106
Nashville, TN 37228
p 615.255.5537

BG#

Project No: 1928
Drawn By: RB
Rev'd By: RM

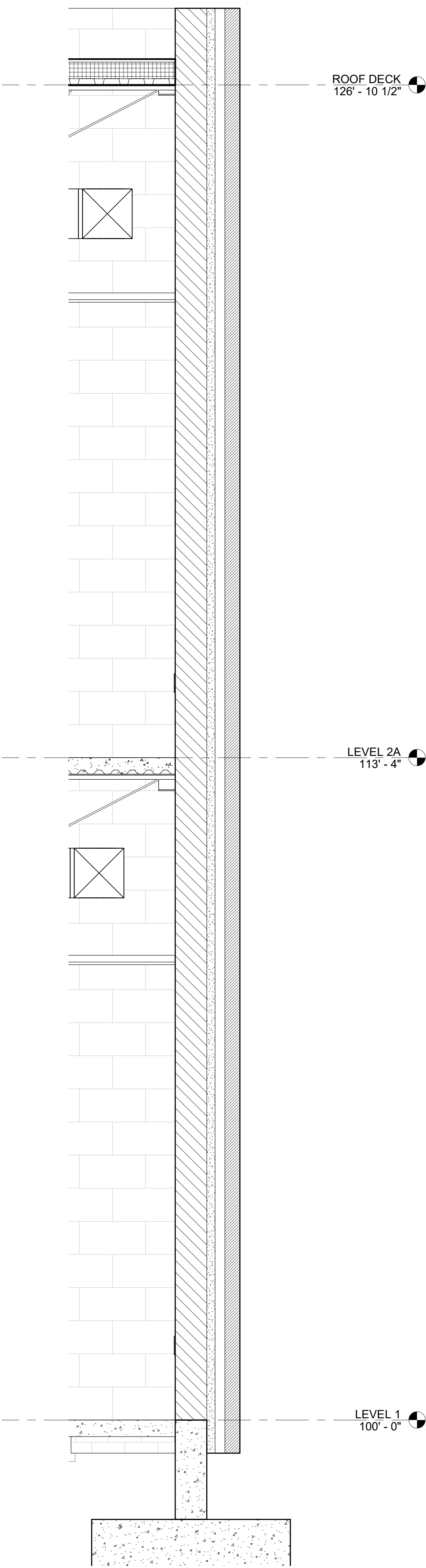
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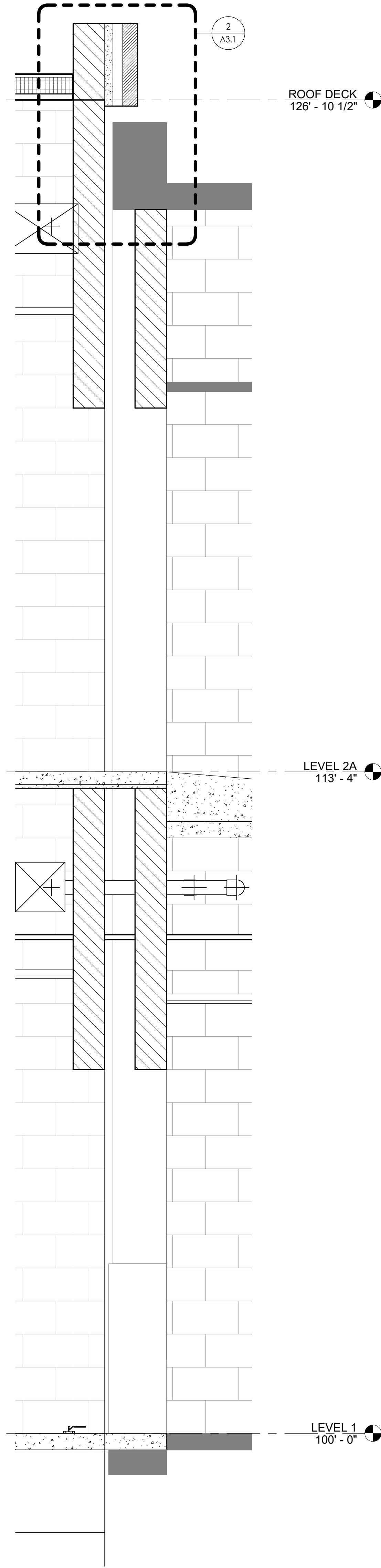
BUILDING ELEVATIONS

DATE ISSUED:
AUGUST 01, 2019



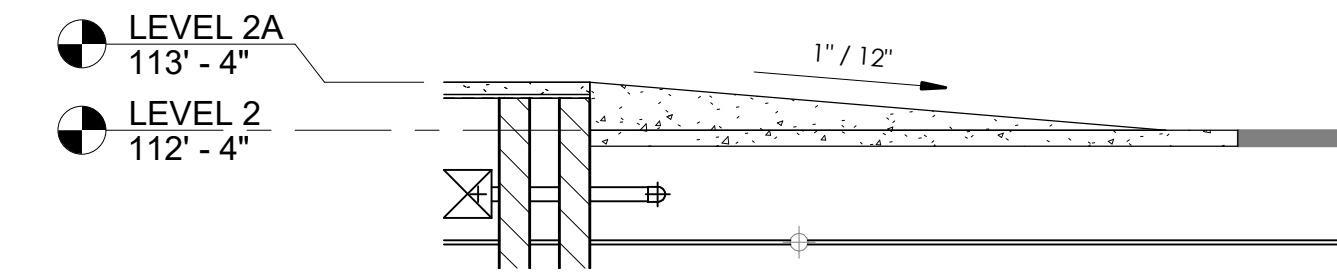
TYP. WALL SECTION
3/4" = 1'-0"

4
A5.1



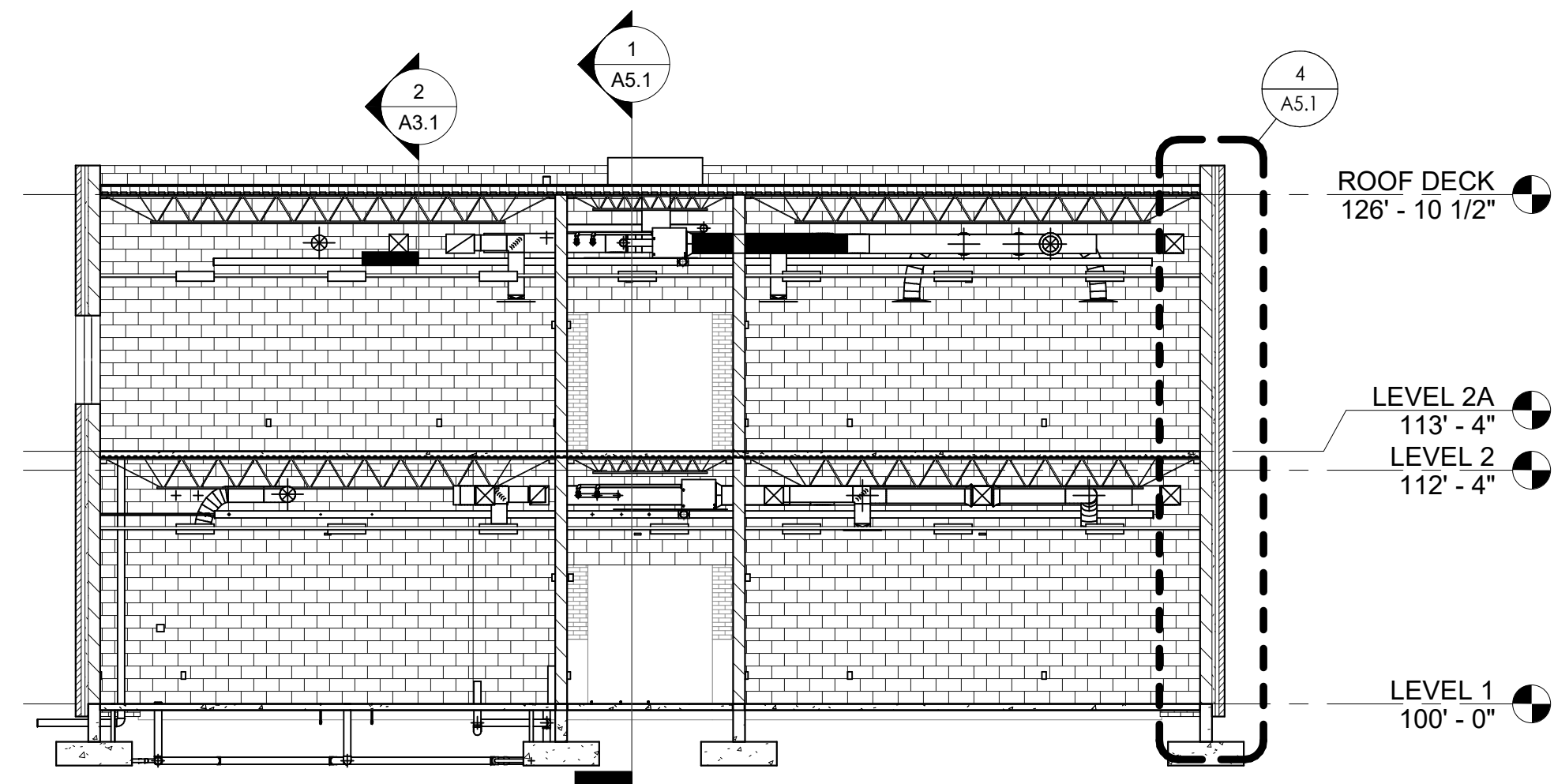
WALL SECTION @ EXIST BLDG
3/4" = 1'-0"

5
A5.1



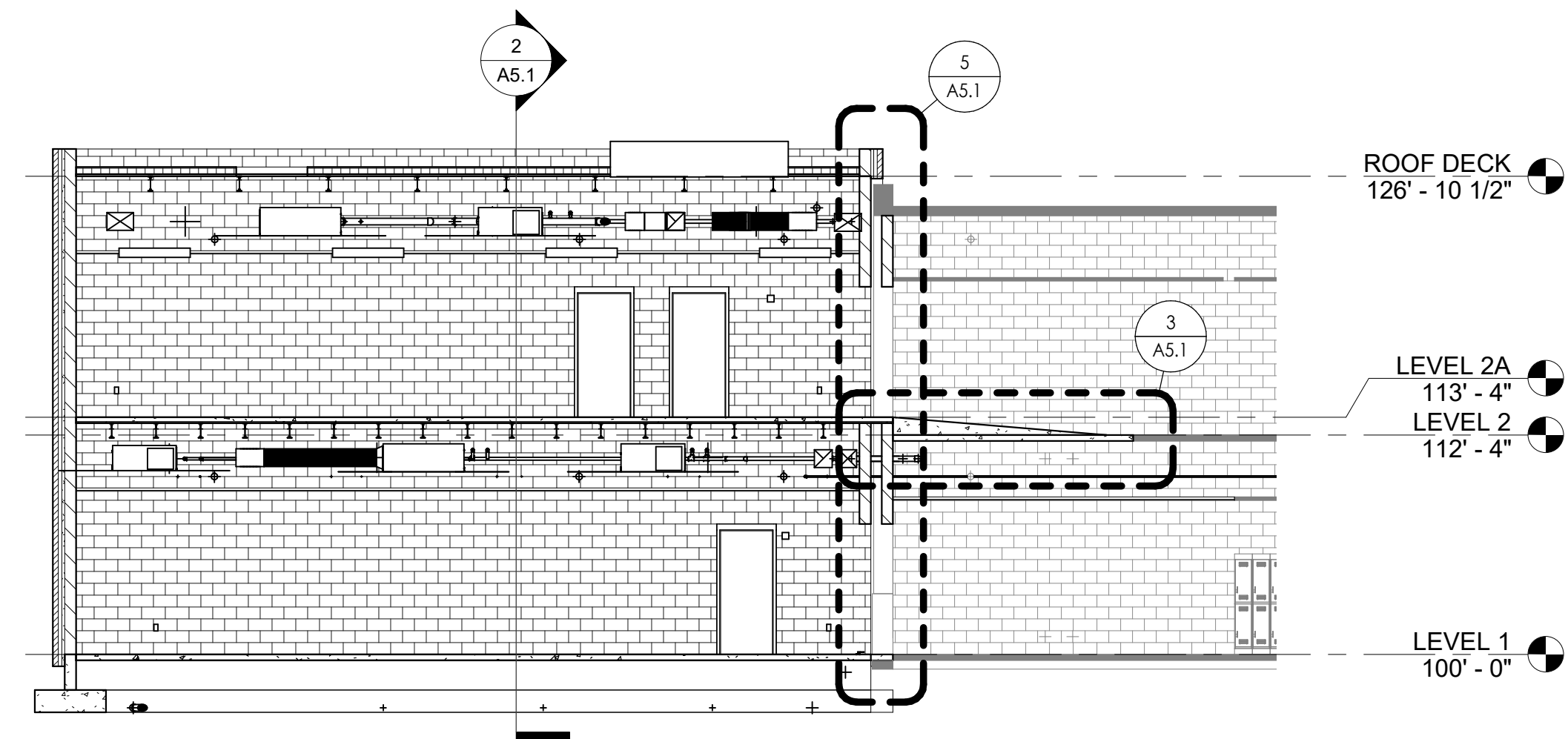
ENLARGED SECTION THRU RAMP
1/4" = 1'-0"

3
A5.1



BUILDING SECTION THRU CLASSROOMS
1/8" = 1'-0"

2
A5.1



BUILDING SECTION THRU CORRIDOR
1/8" = 1'-0"

1
A5.1

MATERIAL REFERENCE

BUILDING & WALL SECTIONS
MARION COUNTY MIDDLE SCHOOL ADDITION & REVENOATION
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

M.E.&P. Engineer:
CMLA, Inc.
2429 Members Way
Lexington, KY 40504
p 859.253.0892
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220 Great Circle Rd. Suite 106
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BG#

Project No.: 1928
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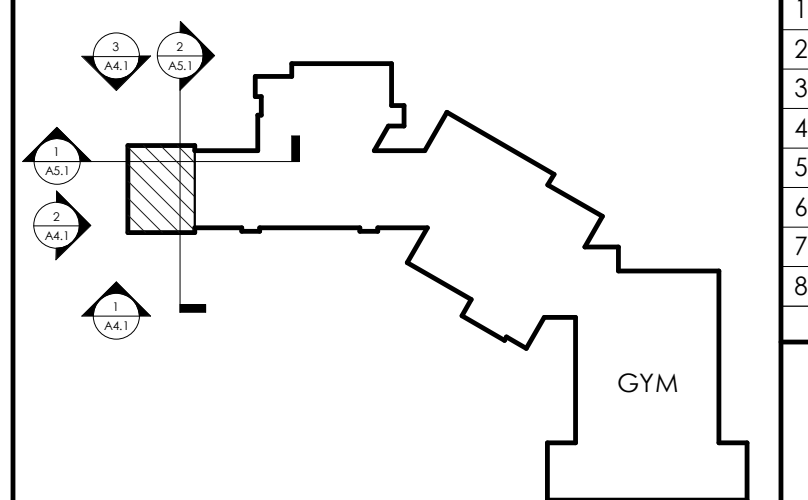
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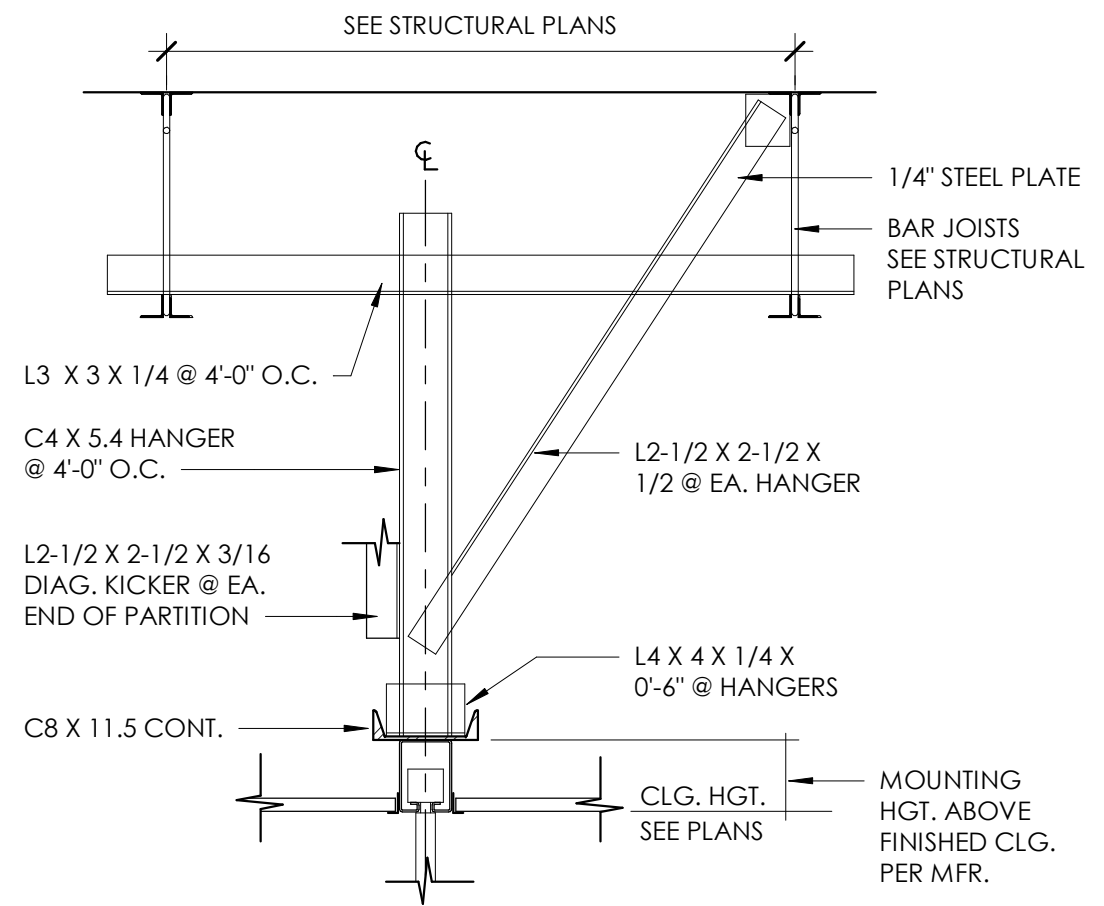
BUILDING & WALL SECTIONS

DATE ISSUED:
AUGUST 01, 2019

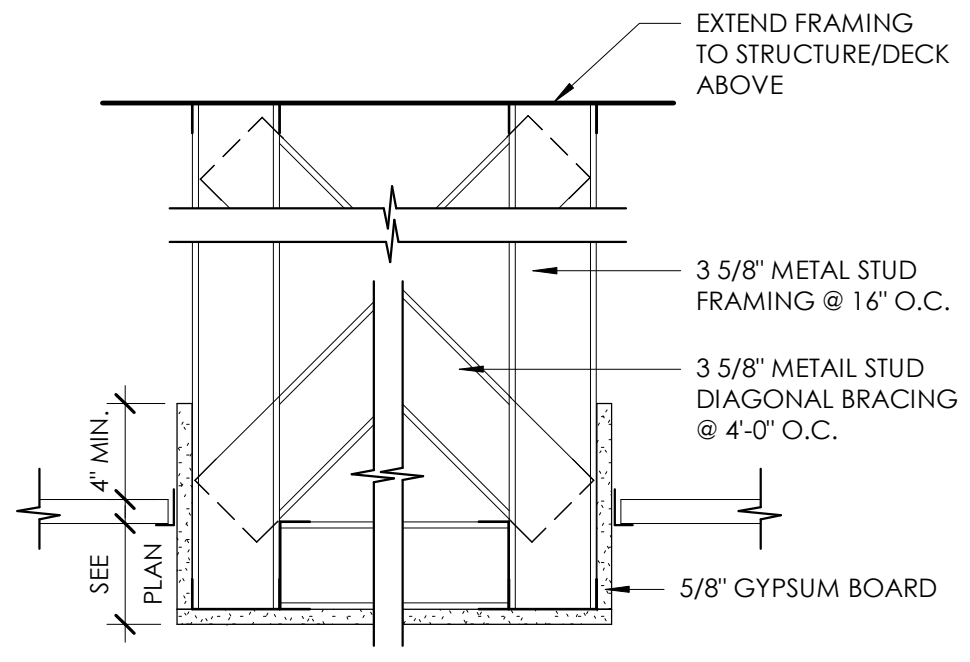
KEY PLAN



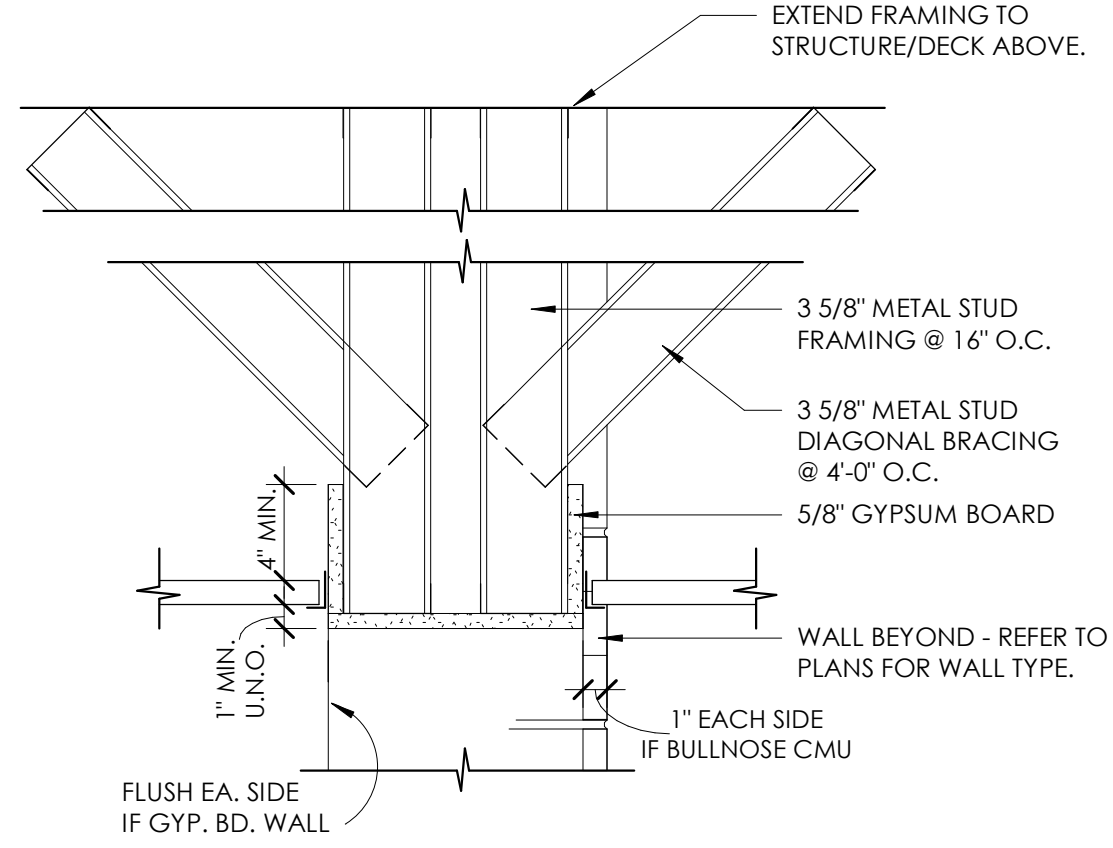
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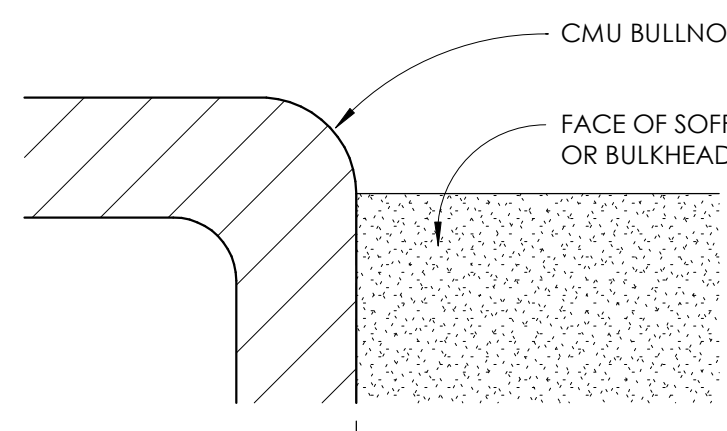
TYPICAL PARTITION TRACK DETAIL
3/4" = 1'-0"



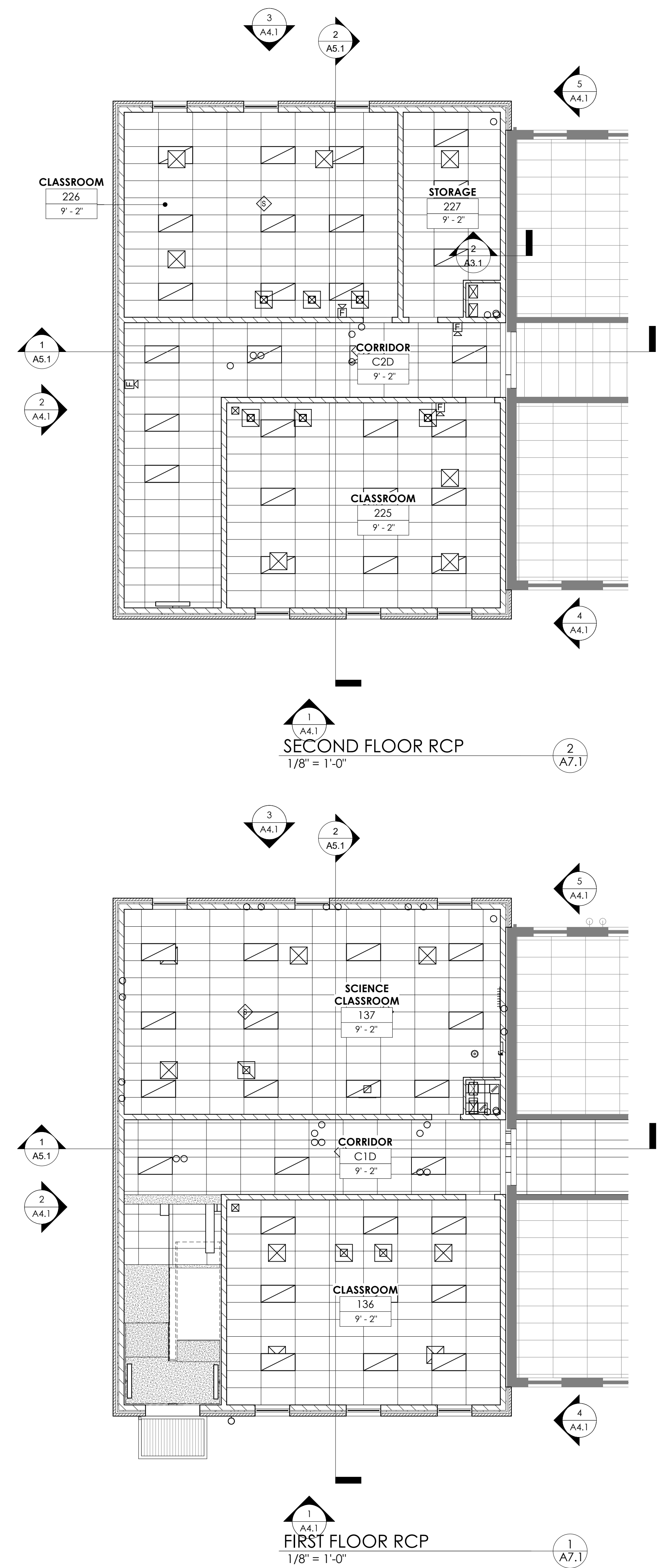
TYPICAL SOFFIT DETAIL
1 1/2" = 1'-0"



TYPICAL BULKHEAD DETAIL
1 1/2" = 1'-0"



PLAN VIEW
TYPICAL SOFFIT DETAIL
N.T.S.



SECOND FLOOR RCP
1/8" = 1'-0"

FIRST FLOOR RCP
1/8" = 1'-0"

MATERIAL REFERENCE

GENERAL RCP NOTES

- 1. LIGHT FIXTURES AND HVAC ITEMS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE ALL DIFFUSERS, SPRINKLER HEADS AND LIGHTING FIXTURES WITH MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND SPECIFICATIONS.
- 2. SOFFITS AND BULKHEADS WILL RECEIVE ACCENT PAINT COLOR(S) TBD. HORIZONTAL AND VERTICAL SURFACES OF SOFFITS AND BULKHEADS WILL BE PAINTED AN ACCENT COLOR.
- 3. ALL GYPSUM BOARD CEILINGS, SOFFITS, METAL DECKING, STRUCTURAL ELEMENTS, CONDUIT, AND ETC. REMAINING EXPOSED AFTER CONSTRUCTION IS COMPLETE WILL RECEIVE A FINISH SYSTEM U.N.O. REFER TO THE SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL INFORMATION.
- 4. REFER TO THE A1 DRAWINGS FOR REQUIRED FIRE RATINGS OF WALLS AND CEILINGS.
- 5. DIMENSIONS OF SOFFITS ARE TO THE FACE OF FINISHED GYPSUM BOARD.
- 6. ELEVATIONS INDICATED ARE TO THE BOTTOM OF FINISH MATERIAL FROM ABOVE FINISH FLOOR.
- 7. GYPSUM BOARD IS TO BE EXTENDED FOUR INCHES MINIMUM ABOVE FINISHED CEILINGS AT SOFFITS AND BULKHEADS THAT ARE NOT REQUIRED TO MAINTAIN A FIRE RATING OR ACOUSTIC SEPARATION.
- 8. RECESS FACE OF GYPSUM BOARD INTERIOR SOFFITS AND BULKHEADS ONE INCH FROM FACE OF BULLNOSE CMU.

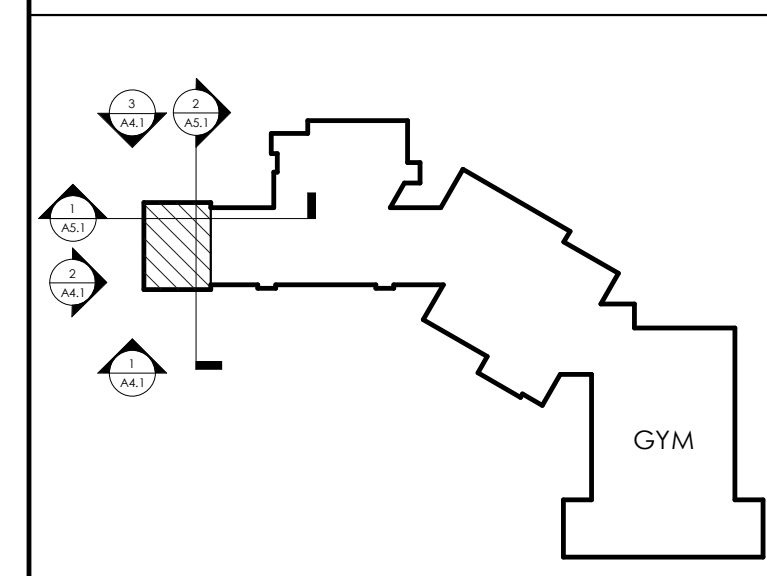
RCP NOTES

- 1 GYPSUM BOARD SOFFIT/BULKHEAD. REFER TO TYPICAL DETAILS. (092116).
- 2 GYPSUM BOARD CEILING. PROVIDE FRAMING AND SUPPORTS AS REQUIRED. (092116).
- 3 1-HR RATED GYPSUM BOARD CEILING PER UL DESIGN NO. P922.
- 4 SPECIALTY LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 5 UTILITY CHASE.
- 6 OVERHEAD PROJECTOR MOUNT. SEE ELECTRICAL DRAWINGS FOR POWER AND DATA. (111330).
- 7 RECESSED PROJECTION SCREEN. (115213).
- 8 MOVABLE PARTITION TRACK. REFER TO TYPICAL PARTITION TRACK DETAIL.
- 9 OPEN TO ABOVE: EXPOSED STRUCTURE. REFER TO ROOM FINISH SCHEDULE FOR MORE INFORMATION.
- 10 SPRAYED-ON ACOUSTICAL INSULATION (072129). REFER TO ROOM FINISH SCHEDULE FOR MORE INFORMATION.
- 11 ROOF ACCESS LADDER AND HATCH. (035000).
- 12 EXISTING CEILING TO REMAIN.
- 13 PROVIDE GYPSUM BOARD BULKHEAD AT COOLER/FREEZER ENCLOSURE. COORDINATE HEIGHT AND LOCATION WITH COOLER/FREEZER SUPPLIER. (092116).
- 14 COOLER/FREEZER ENCLOSURE PANEL. COORDINATE HEIGHT AND LOCATION WITH COOLER/FREEZER SUPPLIER.
- 15 KITCHEN EQUIPMENT PENETRATIONS. REFER TO FOOD SERVICE DRAWINGS FOR MORE INFORMATION.
- 16 LINEAR METAL CEILING SYSTEM. (095423.A).
- 17 MANUAL ROLLERSHADE (122413).
- 18 MOTORIZED ROLLERSHADE (124930).

RCP LEGEND

ROOM NAME ROOM NUMBER CLG. HGT.	ROOM TAG W/ CEILING HEIGHT ELEVATION ABOVE FINISHED FLOOR
X'-X"	ACOUSTICAL CEILING TILE & GRID. REFER TO A2 SHEETS FOR SIZES & TYPES
	GYPSUM BOARD BULKHEAD/SOFFIT/CEILING
	CROWN MOULDING
	HVAC DIFFUSER
	LIGHT FIXTURE IN ACOUSTICAL CEILING GRID
	LIGHT FIXTURE
	PENDANT LIGHT FIXTURE
	RECESSED LIGHT FIXTURE
	EXIT LIGHT FIXTURE
	EMERGENCY LIGHT FIXTURE
	TUBULAR SKYLIGHT

KEY PLAN



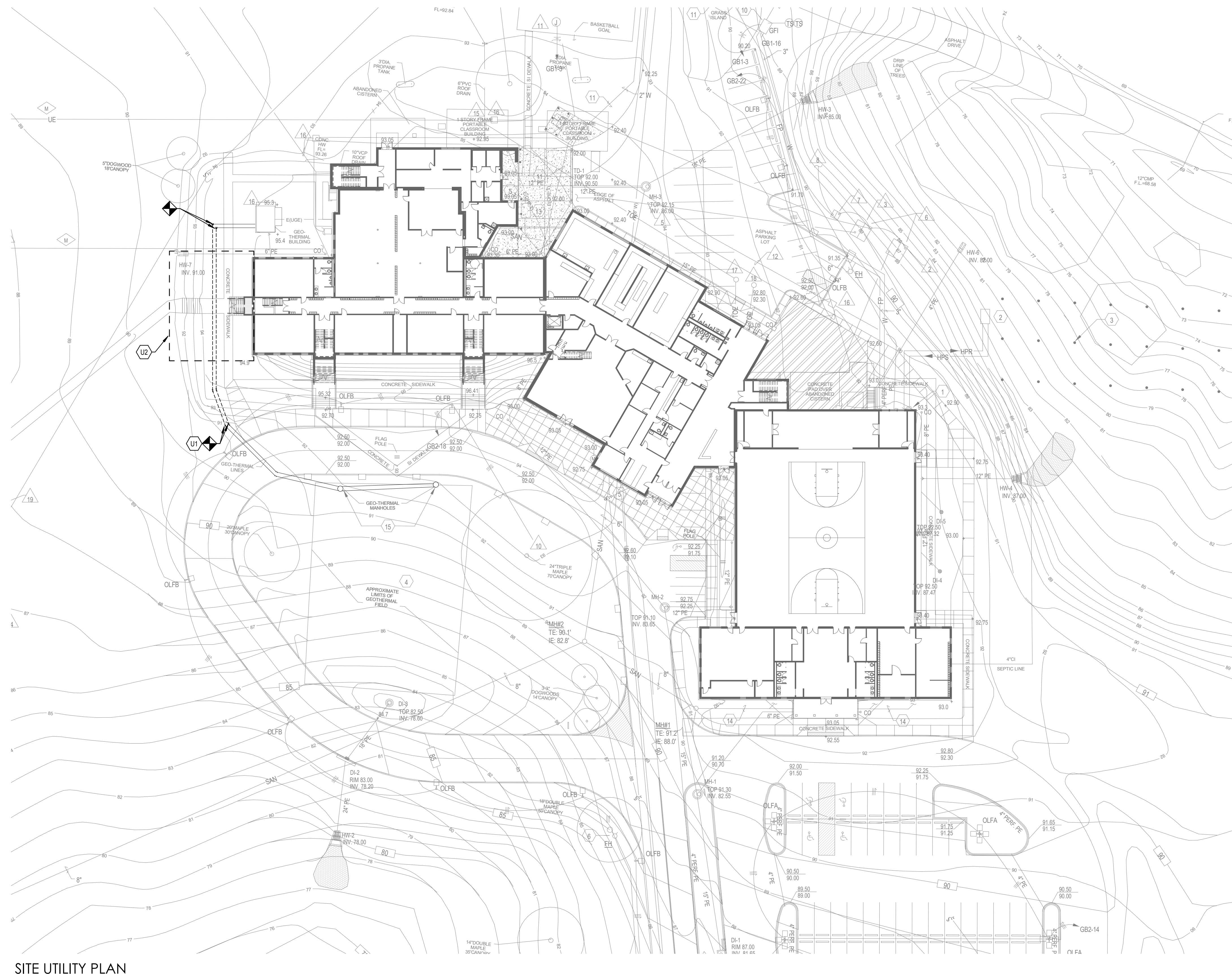
SCALE: NTS

REFLECTED CEILING PLAN(S)
FOR:
MARION COUNTY MIDDLE SCHOOL ADDITION & REVENOATION
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY

M.E.&P. Engineer:
CMI/A, Inc.
2429 Members Way
Lexington, KY 40504
p 859.253.0892
Structural Engineer:
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220 Great Circle Rd., Suite 106
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REFLECTED CEILING PLAN(S)	
DATE ISSUED: AUGUST 01, 2019	

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SITE UTILITY PLAN
1" = 30'-0"

S SITE UTILITY GENERAL NOTES - MECHANICAL

A DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS.

B CONTRACTOR SHALL CUT ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR EXISTING UTILITIES. CONTRACTOR SHALL REFER TO CM SCOPING DOCUMENTS FOR PATCH AND REPAIR OF CONCRETE/ASPHALT/GRADE. ANY SUCH WORK NOT EXPLICITLY MENTIONED UNDER A SEPARATE CONTRACT IS TO BE INCLUDED IN THE CONTRACTOR'S BID.

C FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS SPECIFICATION. ANY VIOLATION OF ANY SUCH CODES, RULES, REGULATIONS OR REQUIREMENTS OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME TO PREVIOUS PREMIUM TIME AS NEEDED AT AN ADDITIONAL COST TO THE CONTRACTOR.

D PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT AND THE OWNER. OPERATIONS SHALL BE CONDUCTED IN THE ADVANCE OF THE DATE ESTABLISHED IN THE SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES INTENDED TO AVOID UNNECESSARY DISRUPTION TO THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE OF THE DATE WHEN SUCH SERVICES ARE REQUIRED TO BE DELAYED WORK.

E LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO CHANGE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SUCH LOCATIONS MAY VARY (CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE FIELD TO AVOID ANY DAMAGE TO ANY SUCH LOCATIONS THAT DO NOT INTERRUPT ANY EXISTING SERVICE, FOR A SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL, GAS AND WATER LINES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SUCH LOCATIONS, FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL ALSO BE INSTALLED IN ACCORD WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT AND THE OWNER. THE MOST STRINGENT REQUIREMENT SHALL APPLY, IF ANY VARIATION OCCURS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL SUCH LOCATIONS. REPRESENTATIVE CONTRACTOR SHALL VISIT SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. NO INTERRUPTION OF BID OR CONSTRUCTION SHALL BE REQUIRED. CONTRACTOR SHALL BE AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.

G CONTRACTOR SHALL REFER TO CM SCOPING DOCUMENT FOR PATCH AND REPAIR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF THE PROJECT. ANY SUCH PATCH AND REPAIR NOT EXPLICITLY COVERED UNDER A SEPARATE CONTRACT SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

H LOCATIONS OF UTILITIES SHOWN WITH THESE DRAWINGS ARE APPROXIMATE ONLY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO VERIFY THE EXISTING UTILITIES. CONTRACTOR SHALL ALSO BE RESPONSIBLE TO NOTIFY ANY OTHER AFFECTED UTILITY OWNERS PRIOR TO DIGGING. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY STOP WORK AND REPORT TO THE DISTRICT ENGINEER.

J THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD OTHER EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WORK AREAS AND AROUND THE OTHER UTILITIES. THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.

K CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES, METERS, FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

L CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND UTILITIES, GAS LINES, SANITARY LINES, SEWER LINES, VAULTS, ETC., WITH ELECTRICAL, PUMP BOXES, CONDENSERS, POLE BASIS, ETC. SPECIFICALLY COORDINATE THE PROTECTION OF ALL UTILITIES WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY AND NOTIFY A/E IF ANY CONFLICTS ARISE.
















M ALL PIPING TO BE ABANDONED SHALL BE CAPPED WATERWY. NO PIPING SHALL BE REMOVED FROM THE PROJECT.

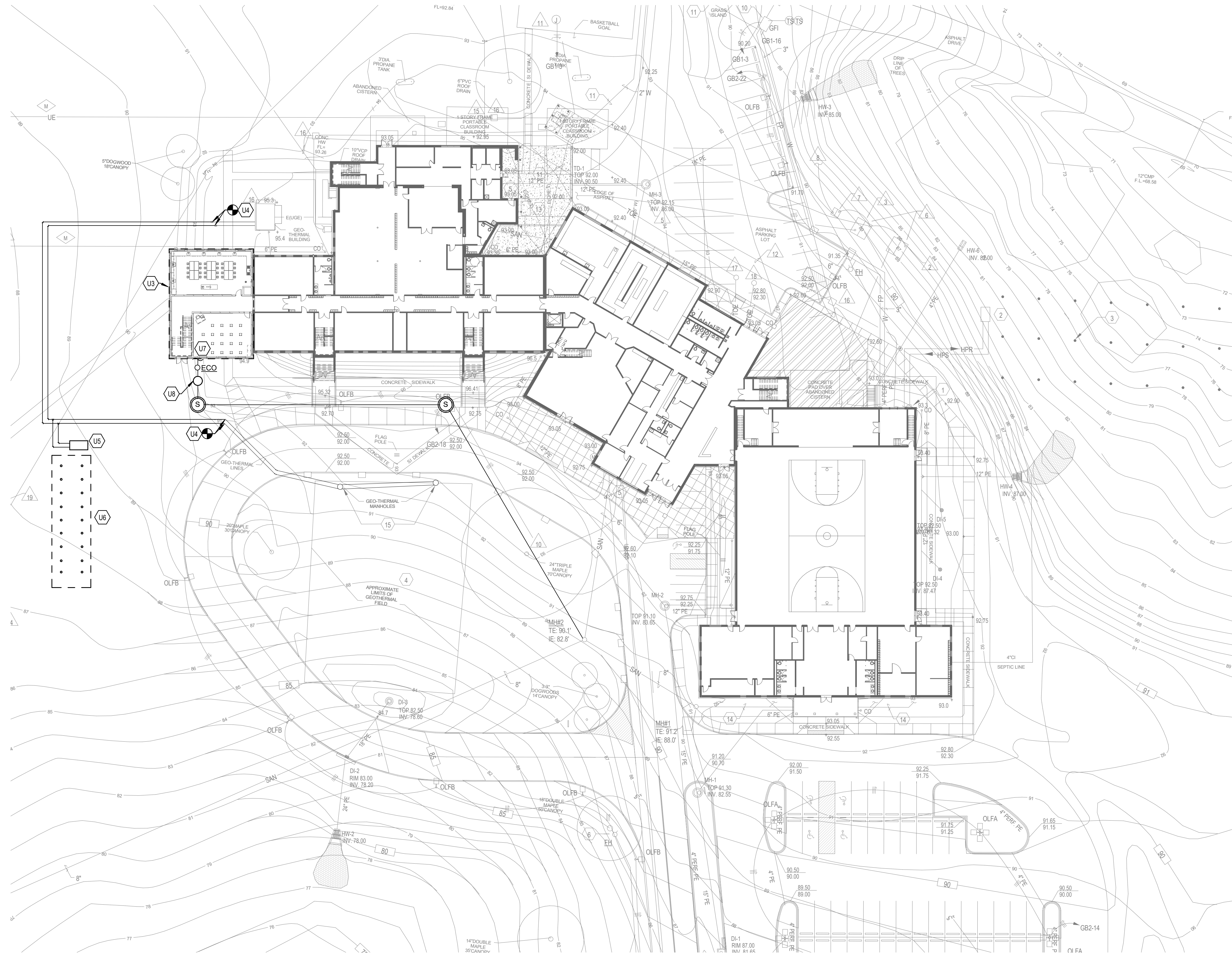
N REFER TO SITE DEMOLITION PLAN FOR TREES TO BE REMOVED. IF TREES ARE TO REMAIN, CONTRACTOR SHALL TAKE CARE TO INSTALL PIPING AND LIMIT EXCAVATING ACTIVITIES TO OUTSIDE THE DRIP-LINE OF EXISTING TREES. REMAIN.

TAGGED NOTES		#
U1	DEMOLISH GEOTHERMAL PIPING BETWEEN POINTS INDICATED TO ACCOMMODATE BUILDING ADDITION. REFER TO SITE UTILITY PLAN FOR NEW WORK. DEMOLITION OF GEOTHERMAL PIPING MAINS MUST BE PHASED TO MINIMIZE DOWNTIME OF GEOTHERMAL SYSTEM. REPLACEMENT MAINS MUST FIRST BE INSTALLED TO NEW LIE IN POINTS BEFORE GEOTHERMAL PIPING IS DEMOLISHED.	
U2	AREA OF PROPOSED ADDITION. REFER TO SITE UTILITY DRAWING FOR NEW WORK.	

BEFORE YOU DIG

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SITE UTILITIES LEGEND			
	EXISTING	DEMOLITION	NEW
OVERHEAD PRIMARY	EOP	---DOP---	OP
OVERHEAD SECONDARY	EOS	---DOS---	OS
OVERHEAD STREET LIGHTING	EOSL	---DOSL---	OSL
OVERHEAD TRAFFIC SIGNAL	EOTS	---DOTS---	OTS
OVERHEAD TELECOMMUNICATIONS	EOT	---DOT---	OT
OVERHEAD FIBER OPTIC	EOF	---DOF---	OF
OVERHEAD CATV	EOTV	---DOTV---	OTV
UNDERGROUND PRIMARY	EUP	---DUP---	UP
UNDERGROUND SECONDARY	EUS	---DUS---	US
UNDERGROUND STREET LIGHTING	EUSL	---DUSL---	USL
UNDERGROUND TRAFFIC SIGNAL	EUTS	---DUTS---	UTS
UNDERGROUND TELECOMMUNICATIONS	EUT	---DUT---	UT
UNDERGROUND FIBER OPTIC	EUF	---DUF---	UF
UNDERGROUND CATV	EUTV	---DUTV---	UTV
CHILLED WATER	CW	---CW---	CW
DOMESTIC WATER	W	---W---	W
GAS	GAS	---GAS---	GAS
HIGH PRESSURE SUPPLY	HPS	---HPS---	HPS
HIGH PRESSURE RETURN	HPR	---HPR---	HPR
PUMP DISCHARGE RETURN	PDR	---PDR---	PDR
SANITARY SEWER	SS	---SS---	SS
STORM	STORM	---STORM---	STORM
FIRE HYDRANT	F.H. 	D(F.H.) 	F.H. 
WATER VALVE	WV 	D(WV) 	WV 
EXTERIOR CLEANOUT	ECCO 	D(ECCO) 	ECCO 
SANITARY MANHOLE			
THRUST BLOCK	T.B. 	D(T.B.) 	T.B. 

[illegible]

SITE UTILITY PLAN
1" = 30'-0"

S SITE UTILITY GENERAL NOTES - MECHANICAL

A DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS.

B CONTRACTOR SHALL CUT ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REFER TO SC SCOPING DOCUMENTS FOR PATCH AND REPAIR OF OR CORRECTING DEFECTS TO EXISTING PAVEMENT. ANY PATCHING OR CORRECTING DEFECTS TO EXISTING PAVEMENT SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

C FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.

D WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICES IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS REQUIRED TO AVOID OR MINIMIZE PRELIMINE TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.

E PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL ADVISE THE AGENCIES OF ANY BUILDING OPERATORS AT LEAST TWO WEEKS IN ADVANCE OF THE ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND PROVIDED TO THE AGENCIES AND BUILDING OPERATORS TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE TO AVOID DELAYS. THE CONTRACTOR SHALL NOT DELAY WORK.

F LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPEARANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE FIELD VERIFIED BY THE DESIGNER. THE CONTRACTOR SHALL BE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THIS COURSE. THE CONTRACTOR SHALL INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL SERVICES. THE CONTRACTOR SHALL BE SUBJECT TO ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL ALSO BE INSTALLED IN ACCORD WITH THE REPRESENTATIVE OF THE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MOST STRINGENT REQUIREMENT SHALL APPLY IF ANY VARIATION OCCURS. CONSULT THE BUILDING ENGINEER AND THE MECHANICAL ENGINEERS REPRESENTATIVE FOR THE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE AWARE OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE AWARE OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.

G CONTRACTOR SHALL REFER TO SC SCOPING DOCUMENT FOR PATCH AND REPAIR OF LANDSCAPING THAT IS DISTURBED BY WORK OCCURRING IN THIS PROJECT. ANY SUCH PATCH REPAIR SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

H THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE DRAWINGS ARE APPROXIMATE AND NOT GUARANTEED.

I THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO LOCATE UNDERGROUND UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO LOCATE UNDERGROUND UTILITIES PRIOR TO ANY EXCAVATION WORK. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY NOTIFY THE OTHER UTILITY OWNERS.

J THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO PROTECT EXISTING UTILITIES AND OTHER UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK IN CLOSE PROXIMITY TO EXISTING UTILITIES, THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.

K CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE CONTRACTOR'S BIDDING DOCUMENTS FOR FURTHER INFORMATION.

L CONTRACTOR SHALL COORDINATE LOCATION OF ALL UNDERGROUND WATER LINES, GAS LINES, SANITARY LINES, SEWER LINES, VAULTS, ETC. WITH ELECTRICAL, MECHANICAL, AND/OR OTHER UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF CHILLED WATER PIPING IN PARKING LOTS WITH POLE BASE LOCATIONS AND NOTIFY A/E IF CONFLICTS ARISE.
















M ALL PIPING TO BE ABANDONED SHALL BE CAPPED WATERWATER. NO PIPING SHALL BE OPEN ENDED.

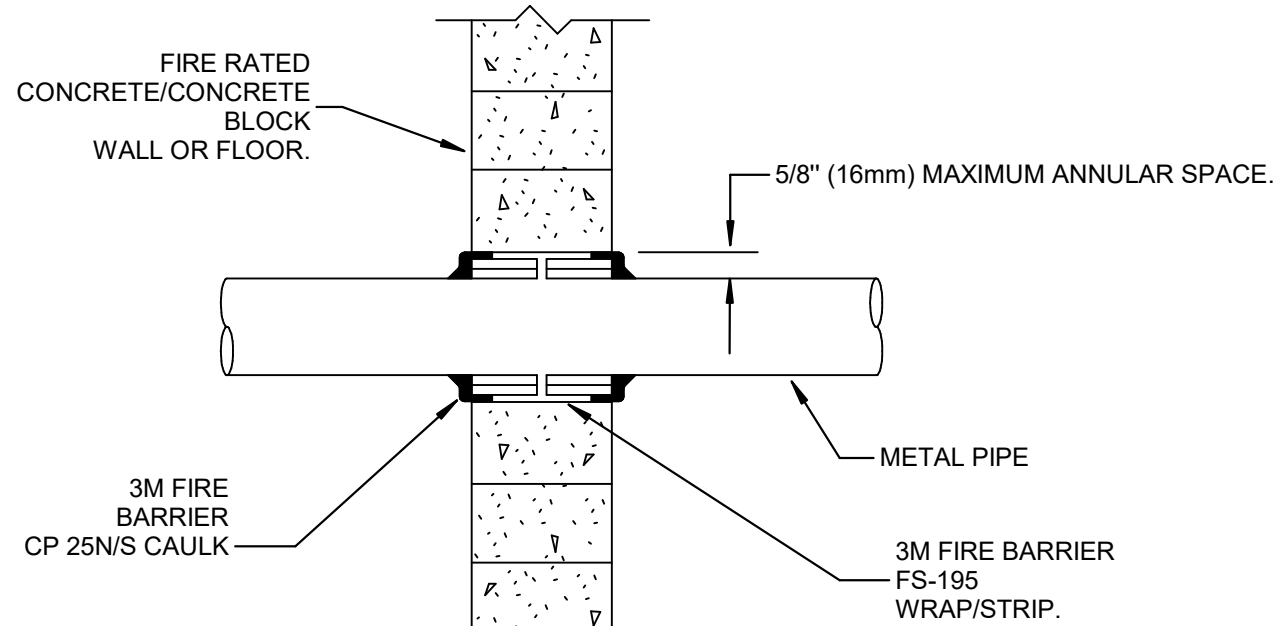
N REFER TO SITE DEMOLITION PLAN FOR TREES TO BE REMOVED. IF TREES ARE TO REMAIN, CONTRACTOR SHALL TAKE CARE TO INSTALL PIPING AND INSTALL EXCAVATING UTILITIES TO AVOID DAMAGE TO EXISTING TREES TO BE REMAIN.

TAGGED NOTES		REV
U3	AREA OF NEW ADDITION.	
U4	CONNECT NEW GEOTHERMAL PIPING MAINS TO EXISTING MAINS AT POINTS INDICATED. NEW MAINS MUST BE INSTALLED AND READY FOR TIE-IN PRIOR TO COMPLETION OF EXISTING GEOTHERMAL PIPING.	
U5	NEW GEOTHERMAL PIPING VAULT. REFER TO GEOTHERMAL VAULT DETAIL.	
U6	NEW GEOTHERMAL WELLFIELD SERVING FOUR CLASSROOM ADDITION. 18 WELLS, 200FT DEEP. 20 FT ON CENTER.	
U7	REFER TO PLUMBING PLANS FOR CONTINUATION.	
U8	ACID DILUTION PIT. REFER TO DETAIL.	

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SITE UTILITIES LEGEND			
	EXISTING	DEMOLITION	NEW
OVERHEAD PRIMARY	—EOP—	----DOP----	—OP—
OVERHEAD SECONDARY	—EOS—	----DOS----	—OS—
OVERHEAD STREET LIGHTING	—EOL—	----DOSL----	—OSL—
OVERHEAD TRAFFIC SIGNAL	—EOTS—	----DOTS----	—OTS—
OVERHEAD TELECOMMUNICATIONS	—EOT—	----DOT----	—OT—
OVERHEAD FIBER OPTIC	—EOF—	----DOF----	—OF—
OVERHEAD CATV	—EOTV—	----DOTV----	—OTV—
UNDERGROUND PRIMARY	—EUP—	----DUP----	—UP—
UNDERGROUND SECONDARY	—EUS—	----DUS----	—US—
UNDERGROUND STREET LIGHTING	—EUSL—	----DUSL----	—USL—
UNDERGROUND TRAFFIC SIGNAL	—EUTS—	----DUTS----	—UTS—
UNDERGROUND TELECOMMUNICATIONS	—EUT—	----DUT----	—UT—
UNDERGROUND FIBER OPTIC	—EUF—	----DUF----	—UF—
UNDERGROUND CATV	—EUTV—	----DUTV----	—UTV—
CHILLED WATER	—CW—	----CW----	—CW—
DOMESTIC WATER	—W—	----W----	—W—
GAS	—GAS—	----GAS----	—GAS—
HIGH PRESSURE SUPPLY	—HPS—	----HPS----	—HPS—
HIGH PRESSURE RETURN	—HPR—	----HPR----	—HPR—
PUMP DISCHARGE RETURN	—PDR—	----PDR----	—PDR—
SANITARY SEWER	—SS—	----SS----	—SS—
STORM	—STORM—	----STORM----	—STORM—
FIRE HYDRANT	F.H. 	D(F.H.) 	F.H. 
WATER VALVE	WV 	D(WV) 	WV 
EXTERIOR CLEANOUT	ECCO 	D(ECCO) 	ECCO 
SANITARY MANHOLE			
THRUST BLOCK	T.B. 	D(T.B.) 	T.B. 

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NOTES:

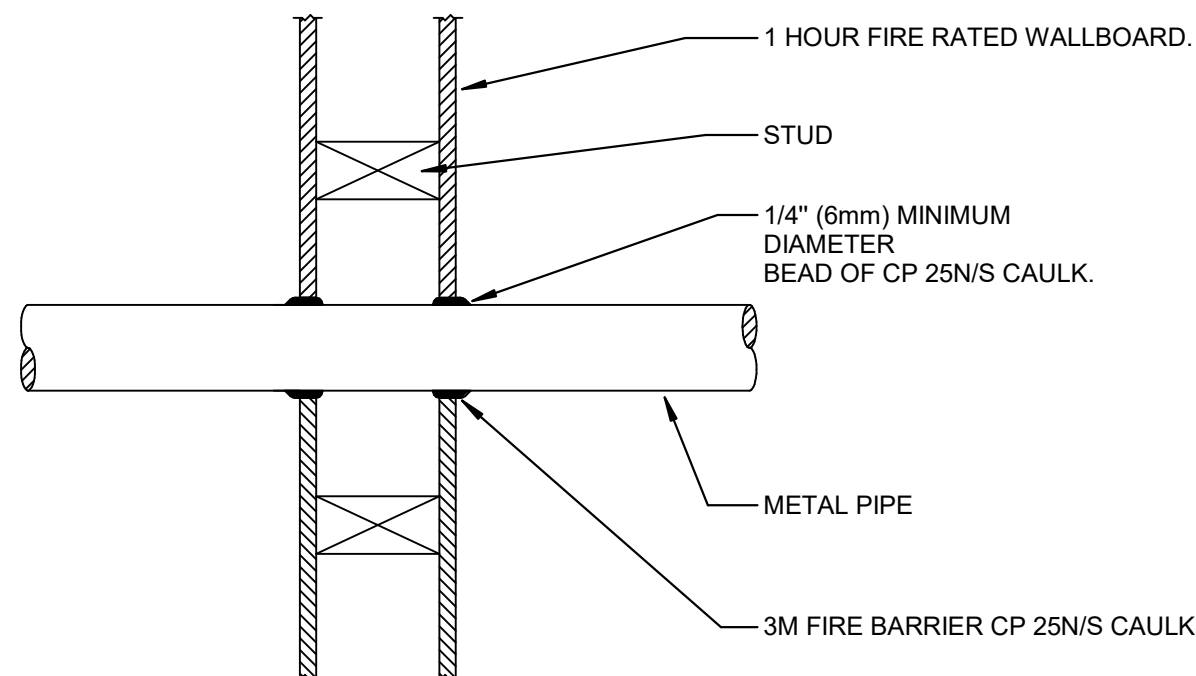
1. THE MAXIMUM ANNULAR SPACE AROUND THE METAL PIPE OR CONDUIT IS 5/8" (16mm). (IF THE ANNULAR SPACE EXCEEDS 5/8" PATCH THE WALL AND PENETRATE WALL AT ANOTHER LOCATION).
2. WRAP THE 3M MODEL# FS-195 WRAP/STRIP AROUND THE PIPE/CONDUIT, FOL SIDE OUT, TO FILL THE SPACE BETWEEN THE PIPE/CONDUIT AND THE WALL OPENING. THE 3M MODEL# FS-195 WRAP/STRIP SHOULD BE TIGHTLY SECURED WITH ALUMINUM FOIL TAPE OR STEEL TIE WIRE AND PUSHED INTO THE OPENING UNTIL THE TOP EDGE OF THE WRAP IS FLUSH WITH THE WALL SURFACE. THE IDENTICAL INSTALLATION SHOULD BE INSTALLED ON THE OTHER SIDE OF THE WALL.
3. USE 3M MODEL# CP 25N(S)NO SAG CAULK TO FILL THE AREA BETWEEN THE FS-195 WRAP/STRIP AND THE EDGES OF THE OPENING AND ANY VOIDS IN THE 3M MODEL# FS-195 WRAP/STRIP. A FILL OF CP 25 CAULK SHOULD COAT ALL EXPOSED EDGES OF THE FS-195 WRAP/STRIP AND COMPLETELY SEAL THE AREA BETWEEN THE CP 25N(S)NO SAG CAULK, THE PIPE/CONDUIT AND THE WALL SURFACE.

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH A CONCRETE WALL

NOT TO SCALE

FIRE STOPPING NOTES

1. FIRE STOPPING IS CRITICAL AND MUST BE ACCOMPLISHED. ALL PIPES MUST BE FIRESTOPPED WHERE THEY PENETRATE FIRE RESISTIVE, FIRE RATED, AND SMOKE RESISTANT WALLS OR PARTITIONS. ALL FLOORS, CORRIDOR WALLS, STAIR WALLS, MECHANICAL ROOM WALLS, STORAGE ROOM WALLS AND OTHER HAZARDOUS ROOM WALLS ARE ONE HOUR RATED.
2. A FOUR-HOUR TRAINING SESSION SHALL BE CONDUCTED BY MANUFACTURER OF THE FIRESTOPPING MATERIAL. THIS SHALL BE DONE PRIOR TO THE INSTALLATION OF THE MATERIAL. CONTACT HOSPITAL ENGINEER AND CMTA TO ADVISE OF DATE AND TIME OF THIS MEETING.
3. ALL PENETRATIONS WILL BE REVIEWED BY THE HOSPITAL ENGINEER OR CMTA PRIOR TO INSPECTION. CEILING TILES BENEATH THE PENETRATIONS SHALL BE REMOVED BY THE CONTRACTOR.

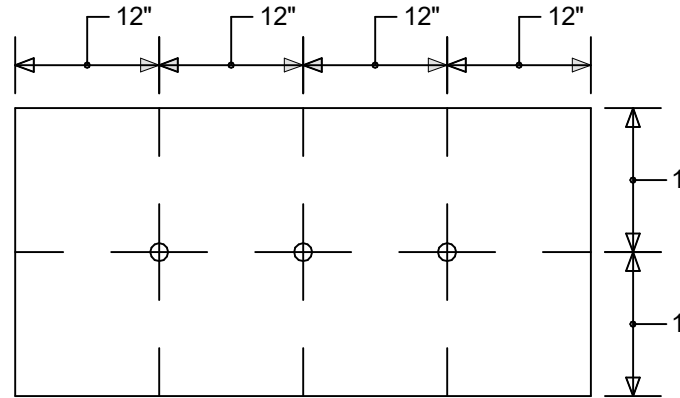


NOTES:

1. FORCE THE 3M MODEL CP 25N'S CAULK INTO THE ANNULAR SPACE TO THE MAXIMUM EXTENT POSSIBLE, FLUSH WITH THE EXTERIOR OF THE PENETRATION SURFACE.
2. FINISH CAULKING WITH A 1/4" (6mm) MINIMUM BEAD OF CP 25N'S CAULK APPLIED TO THE PERIMETER OF THE CONDUIT/PIPE AT ITS EGRESS FROM THE WALL.
3. THE MAXIMUM ANNULAR SPACE IS NOT TO EXCEED 3/16" (5mm). (IF IT DOES PATCH WALL AND PENETRATE WALL AT ANOTHER LOCATION).
4. INSTALL THE 3M FIRESTOP ON BOTH SIDES OF THE WALL.

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH ONE HOUR WALL

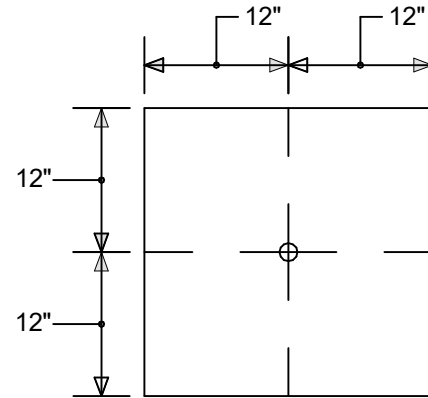
NOT TO SCALE



SPRINKLER HEADS MAY BE INSTALLED IN 2x4 CEILING TILES IN ANY OF THE THREE LOCATIONS INDICATED ABOVE. NO EXCEPTIONS!

2x4 CEILING TILE DETAIL

SCALE: NONE



SPRINKLER HEADS TO BE INSTALLED IN
CENTER OF 2x2 CEILING TILES.

2x2 CEILING TILE DETAIL

SCALE: NONE

GENERAL NOTES - FIRE PROTECTION

- A. ALL AREAS SHALL BE PROTECTED BY A 100% WET PIPE FIRE SUPPRESSION SYSTEM IN ACCORDANCE WITH NFPA 13, THE KENTUCKY BUILDING CODES AND THE PROJECT SPECIFICATIONS.
- B. THE SUCCESSFUL FIRE PROTECTION CONTRACTOR SHALL OBTAIN AND MAINTAIN ACCESS TO ALL AREAS OF THE PROJECT FOR LAYING OUT THE SPRINKLER HEADS, THE REFLECTED CEILING PLANS SHOWN ARE TO ELECTRICATE DRAWINGS TYPES AND LOCATIONS, REFER TO THE MECHANICAL AND PLUMBING CONTRACTORS FOR CEILING DEPENDENT LOCATIONS, REFER TO THE MECHANICAL CONTRACTORS FOR CEILING DEPENDENT LOCATIONS.
- C. INSTALL HEADS IN CENTER OF 2'X2' TILES. INSTALL HEADS ON 1/4 INCH OF THE D- DIMENSION AND CENTER OF THE Z- DIMENSION IN 2'X4' TILES. SPRINKLER HEADS IN CENTER OF 2'X2' TILE IF IT IS QUOTED TO LOOK LIKE TWO 2'X2' TILES.
- D. ALL SPRINKLER HEADS SHALL BE "SEMI-RECESSED," QUICK RESPONSE SPRINKLER HEADS. THE CONTRACTOR SHALL NOT INTERPRET ANY HEADS SHALL BE FED FROM A RETURN BEND ARRANGEMENT.
- E. UTILIZE UPRIGHT AND/OR WALL-MOUNTED TYPE SPRINKLER HEADS IN ALL AREAS.
- F. THE FIRE PROTECTION CONTRACTOR SHALL PERFORM HIS OWN FLOW TEST PRIOR TO SUBMITTING SHOP DRAWINGS.
- G. REFER TO A COMPLETE SET OF DOCUMENTS (ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND PLANT) AND SPECIFICATIONS FOR COORDINATION OF TRADES, ROOMS, STRUCTURE AND EQUIPMENT. HVAC DUCTWORK MAINS SHALL BE INSTALLED PRIOR TO FIRE PROTECTION CONTRACTOR'S SUBMITTAL OF THE FIRE PROTECTION SYSTEM WHERE REQUIRED TO COMPLETELY INSTALL THE SYSTEM.
- H. REFER TO THE SPECIFICATIONS FOR SPRINKLER HEAD TYPES.
- I. PROVIDE DRAIN PIPING TO EXISTING VENT SYSTEMS, EXISTING DISCHARGE DRAIN PIPING TO OUTDOORS OR A FLOOR DRAIN.
- J. SIZE ALL FIRE PROTECTION PIPING IN ACCORDANCE WITH NFPA 13, PIPE SIZES SHALL BE DETERMINED USING HYDRAULIC CALCULATION AND APPROVED BY THE ENGINEER.
- K. SUBMIT HYDRAULIC CALCULATION AND SYSTEM DESIGN TO THE M/E ENGINEER.
- L. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK AS TO NOT INTERFERE WITH OR INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SPECIFICATIONS.
- M. WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL EXISTING LAY-IN AND AREAS AND REPAIRS TO MATCH THE EXISTING WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- N. WHERE THE WORK SHALL EXIST UNDER EXISTING WORK, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
- O. COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.
- P. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE OWNER'S STANDARDS' EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION, REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- Q. WHERE APPLICABLE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLY TO THE WORK UNDER THIS CONTRACT, (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMUNITY, COMMONWEALTH OF KENTUCKY) ORDINANCES, RULES, REGULATIONS, STANDARD AND SPECIFICATIONS.
- R. CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING, HVAC AND ELECTRICAL WORK DURING DEMOLITION, IF ITEMS ARE UNCOVERED DURING DEMOLITION, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY AND PLAN AN ALTERNATE ROUTE TO RUN THE ITEMS, THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.
- S. ALL PENETRATIONS OF APPROVED TYPE THROUGH RATED ASSEMBLIES SHALL BE MADE PRIOR TO THE START OF THE WORK. IF THE CONTRACTOR SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.
- T. WHERE THE CONTRACTOR HAS INDICATED ALL SPRINKLER PIPING MUST BE INSTALLED ABOVE CEILINGS, SPRINKLER PIPING MUST BE COORDINATED WITH OTHER TRADES. PIPING MUST BE OFFSET TO AVOID CONFLICTS WITH OTHER WORK, DUCTS AND EQUIPMENT. LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
- U. ALL WORK IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- V. COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT.
- W. SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH RATED ASSEMBLIES.
- X. THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.
- Y. VALVES, BALANCING DAMPERS OR AN APPROPRIATELY SIZED ELECTRICAL ITEM REQUIRED FOR ACCESS SHALL BE INSTALLED IN THE FIELD CEILING. IF THIS IS NOT POSSIBLE, THEN AN MECHANICALLY SEPARATED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND REPAIR. DO NOT LOCATE ACCESS DOORS OR OTHER ACCESS DOORS AT AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.

PHASING NOTES

- A. THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND MAKE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PRIME TIME WORK, AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

HAZARDOUS MATERIALS NOTES

- A. THE CONTRACTOR IT IS HEREBY ADVISED THAT IT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN OR ON OR UNDER THE PROJECT. THE CONTRACTOR SHALL, PRIOR TO ENCOUNTERING ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN, SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL, PRIOR TO OR DURING THE REMOVAL OF ANY SUCH MATERIAL, OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CHTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THAT THE WORK WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C. IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES TO ANY OF THE FOLLOWING COMPONENTS: (1) COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONFIRM THE OWNERS' RECORDS AND/OR TO OBTAIN THE NECESSARY PERMITS FROM THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO ASSUME THE RELATIVE LIABILITY OF THE CONTRACTOR IN THE EVENT OF BREACH OF CONTRACT, INDEMNIFY, OR ANY OTHER SUCH TIEH AGAINST CHTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CHTA AND ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
- D. THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.






ABBREVIATIONS

ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
CLG	CEILING
CLR	CLEAR
DN	DOWN
ENGR	ENGINEER
EQ	EQUAL
ETR	EXISTING TO REMAIN
EXT	EXTERIOR
PVC	FIRE VALVE CABINET
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
PPC	FIRE PROTECTION CONTRACTOR
FT	FEET OR FOOT
FUT	FUTURE
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
ID	I (-IDENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
LBS	POUNDS
LF	LINEAR FEET/FOOT
MAX	MAXIMUM
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA OR NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
PC	PLUMBING CONTRACTOR
PLBG	PLUMBING
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
SQ FT	SQUARE FEET OR FOOT
TBD	TO BE DETERMINED


























ABBREVIATIONS (CONTINUED)

TE	TOP ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
⏟	CENTERLINE

GENERAL SYMBOLS

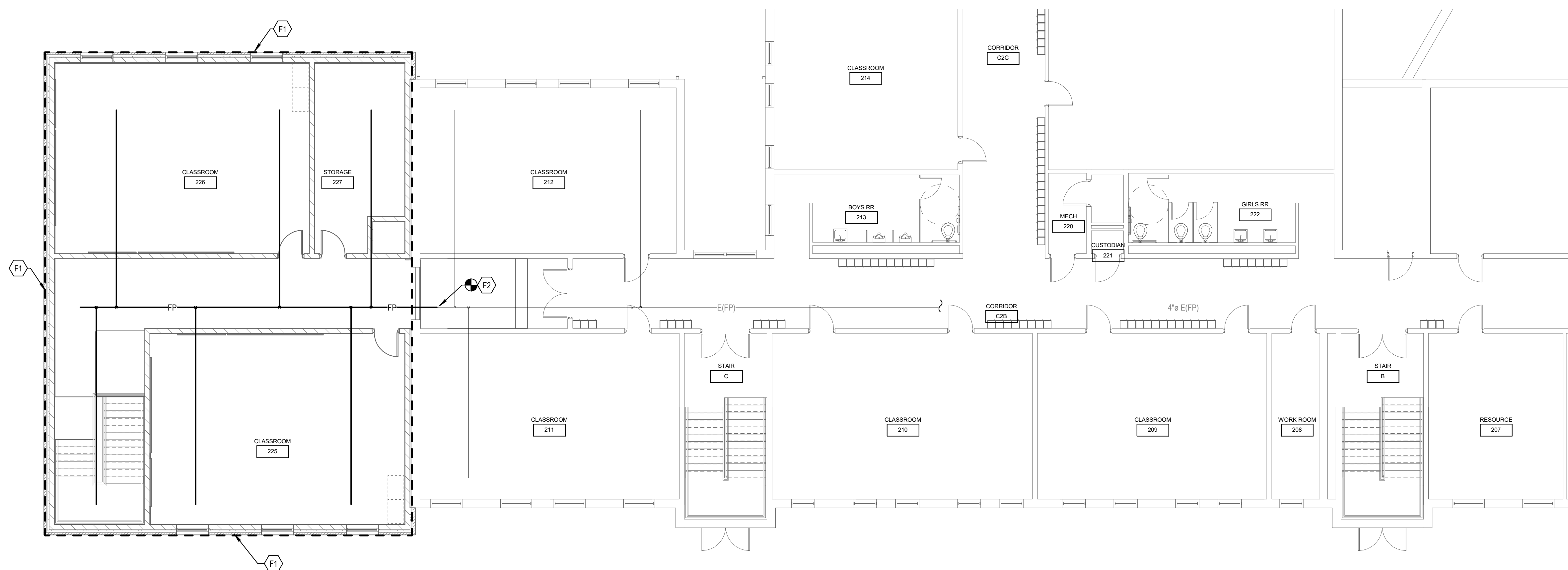
	TAGGED NOTE DESIGNATOR
	REVISION TRIANGLE
ROOMS NAME 	ROOM TAG
TAG XXX-B INSTANCE 0001	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION

MECHANICAL PIPING LEGEND

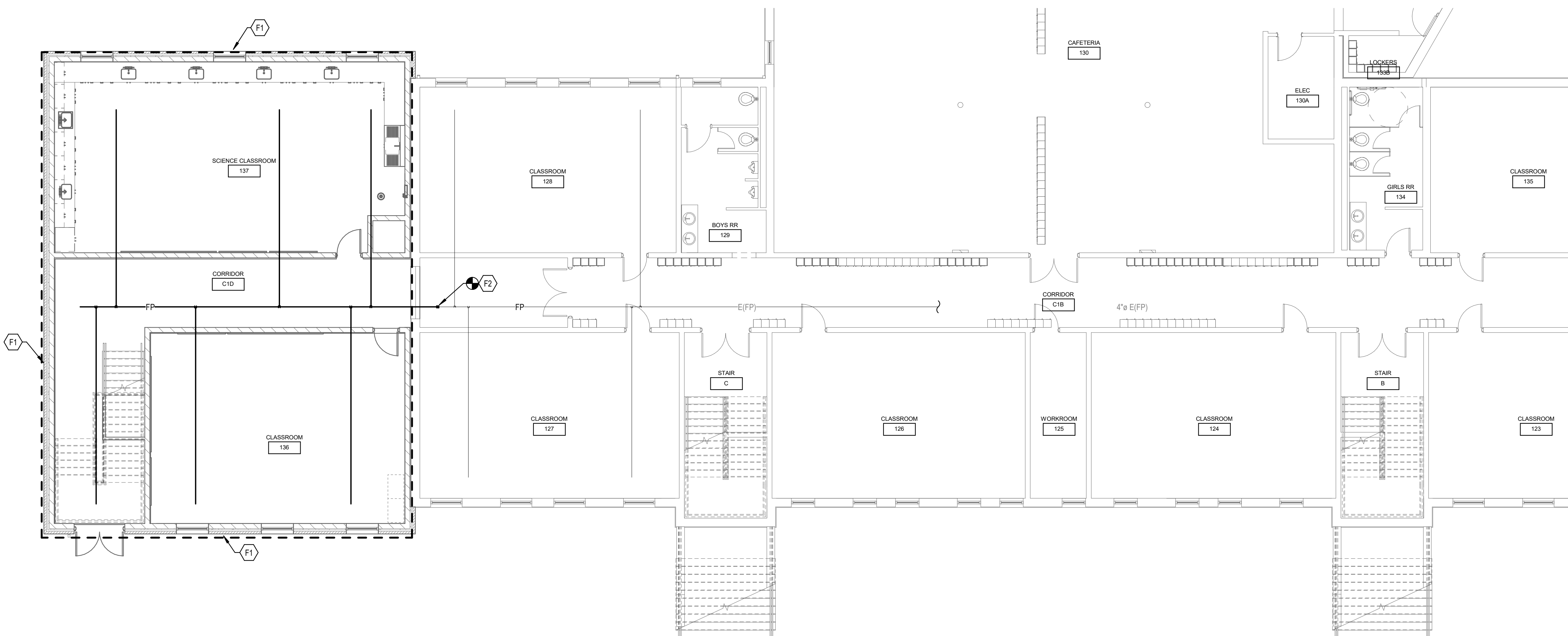
	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
	FIRE PROTECTION PIPING
	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
	EXISTING PIPING - (XXX) DENOTES SYSTEM
	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	PIPING UNION
	FLOW SWITCH
	PRESSURE SWITCH
	TAMPER SWITCH
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT
	SEMI-RECESSED SPRINKLER HEAD WITH REMOVABLE ESCUTCHEON PLATE
	UPRIGHT TYPE SPRINKLER HEAD
	SIDEWALL TYPE SPRINKLER HEAD

APPLICABLE BUILDING CODES		
APPLICABLE BUILDING CODES	DOCUMENT	YEAR
FIRE SPRINKLER CODE	NFPA 13	2018
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2018
INTERNATION FIRE CODE (IFC)	STATE EDITION	2018
INTERNATION MECHANICAL CODE (IMC)	STATE EDITION	2018
KENTUCKY PLUMBING CODE (KSPC)	STATE EDITION	2018
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2010

<u>FLOW DATA</u>	
STATIC PSI:	121
RESIDUAL PSI:	112
FLOW:	1150 GPM
DURATION:	CONTINUOUS
DATE & TIME:	1/9/2014
SOURCE OF WATER:	CITY SUPPLY
SOURCE OF DATA:	BROWN SPRINKLER CORP.
HAZARD:	LIGHT & ORDINARY
OCCUPANCY OF BUILDING:	BANK

[illegible]

SECOND FLOOR FIRE PROTECTION PLAN
1/8" = 1'-0"



FIRST FLOOR FIRE PROTECTION PLAN
1/8" = 1'-0"

FIRE PROTECTION GENERAL NOTES	
A	REFER TO STRUCTURAL DRAWINGS, DETAIL FOR REQUIREMENTS OF HANGING FROM JOISTS.
<div> <div> TAGGED NOTES </div> <div> <div></div> <div>#</div> </div> </div>	
F1	THE ENTIRE OUTLINED AREA SHALL BE PROTECTED BY A 100% WET PIPE FIRE SUPPRESSION SYSTEM INSTALLED IN STRICT ACCORDANCE WITH NFPA-13, THE KENTUCKY BUILDING CODES, AND THE PROJECT SPECIFICATIONS.
F2	CONNECT TO EXISTING SPRINKLER MAIN AND EXTEND PIPING TO NEW ADDITION.

2r rosARRANT
architects

101 old laybelle avenue lexington, kentucky 40302 p 859.254.4018 f 859.231.3046

NOT FOR
CONSTRUCTION

FIRE PROTECTION PLAN

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION

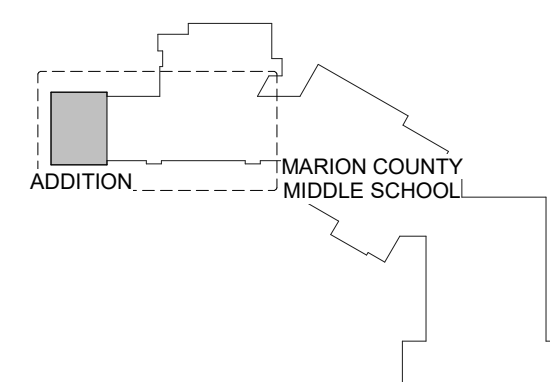
LEBANON, KENTUCKY

 **CMTA**
2020 Main Street, Lexington, KY 40504
859.253.0802 www.cmta.org

Structural Engineer:
Structural Design Group, Inc.
220 Great Circle Rd. Suite 106
Nashville, TN 37228
p 615.255.5537

BG#	
Project No:	1928/XMCM19
Drawn By:	JEA

KEY PLAN



SCALE: NTS



FIRE PROTECTION PLAN

DATE ISSUED:
JULY 31, 2019

[illegible]

PLUMBING FIXTURE SCHEDULE						
TAG	DESCRIPTION	CW	HW	VENT	WASTE	VOLTAGE
FD-1	FLOOR DRAIN, 6" DIA., ZURN UN4-15 OR EQUAL FLOOR DRAIN WITH 6" DIAMETER TUB, TYPE "B" NICKEL BRONZE STRAINER, 4" DRAIN OUTLET AND TRAP PRIMER CONNECTION.	-	-	2"	4"	Yes
P-1	ENEMYER SHOWERYE WASH: GARDEN EQUIPMENT G1980 OR EQUAL, COMBINATION EYE WASH AND SHOWER STATION WITH 10" DIAMETER SHOWER ARM, ABS PLASTIC SHOWER HEAD, 1" STAY OPEN BALL VALVE WITH STAINLESS STEEL ACTUATING ARM AND PULL ROD, 11-1/2" STAINLESS STEEL EYE WASH NOZZLE WITH SPRAY HEADS UP, TOP 2" DIA. FLOWS.	1-1/4"	1-1/4"			Yes
	PROVIDE WITH LEONARD TM-5100-STRL-REC OR EQUAL, EMERGENCY MIXING VALVE WITH 14" RECESSED STAINLESS STEEL CABINET.					
P-2A	SINGLE COMPARTMENT SINK: SINGLE COMPARTMENT STAINLESS STEEL SINK, 19"X21" O.D., "14"X18" I.D., 61/2" DEEP, 18 GAUGE, WITH 8" CENTERS. PROVIDE WITH 8" RIGID SPOUT GOOSENECK FAUCET WITH 4" WIRST BLADE CONTROL, HANDLES, RARE CENTERED CRUMB CUP STRAINER DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, KENTUCKY CUP FROET, TAILPIECE AND ESCUTCHEONS.	1-1/2"	1-1/2"	2"	2"	Yes
	SINGLE COMPARTMENT SINK: SINGLE COMPARTMENT STAINLESS STEEL SINK, 19"X21" O.D., "14"X18" I.D., 61/2" DEEP, 18 GAUGE, WITH 8" CENTERS. PROVIDE WITH 8" RIGID SPOUT GOOSENECK FAUCET WITH 4" WIRST BLADE CONTROL, HANDLES, RARE CENTERED CRUMB CUP STRAINER DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, KENTUCKY CUP FROET, TAILPIECE AND ESCUTCHEONS.	1-1/2"	1-1/2"	2"	2"	Yes
RD-1	ROOF DRAIN - COMBINATION DRAIN: F-PTR 106C4-0FS BIFUNCTIONAL ROOF DRAIN, CAST IRON BODY WITH STAINLESS STEEL OVERFLOW RISER PIPE, 4" HIGH CAST IRON PRIMARY DOWNER, 4" DIA. OVERFLOW RISER, 13" DIA. CAST IRON OVERFLOW STRAINER, MEMBRANE CLAMP RING WITH INTEGRAL GRATE VALVE AND 4" DRAIN OUTLETS. PROVIDE WITH DECK CLAMP, EXTENSION OR ANY OTHER ACCESSORIES NEEDED FOR INSTALLATION ON ROOF SPECIFIED BY ARCHITECT. NOT RECOMMENDED BY THE ROOF MANUFACTURER.				4"	Yes
TP-1	TRAP PRIMER TYPE 1: PRECISIONS PLUMBING PRODUCTS PRIME-TIME OR EQUAL ELECTRONIC TRAP PRIMING MANIFOLD, 1/2" METRIC VACUUM BREAKER, PRE-SET 24 HOUR CLOCK, MANUAL OVERRIDE SWITCH, 120 VOLT SOLENOID VALVE WITH 120V/3WIRE CONNECTION. PROVIDE IN 12" X 12" X 5" SURFACE MOUNTED METAL CABINET. PROVIDE WITH 10 OPENING 1/2" DIA. UN-USED MANIFOLD OPENING SHALL BE CAPPED. INSTALLED UNLESS AS REQUIRED BY MANUFACTURER.					

HAZARDOUS MATERIAL NOTE:

A. THE CONTRACTOR IT IS HEREBY ADVISED THAT IT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN OR ON BUILDINGS, EQUIPMENT, OR MATERIALS, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF SUCH MATERIAL TO CMTA. CMTA WILL ADVISE THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH SUCH MATERIAL UNTIL CMTA HAS BEEN ADVISED. THE CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.

B. CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE EXISTENCE OR LOCATION OF SUCH MATERIALS. IF AN ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL, FURTHERMORE, CMTA NOR ANY OF ITS EMPLOYEES OR AGENTS WILL MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING, LOCATING, AND/OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS OR MATERIALS WHICH MAY BE CONTAMINATED BY ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM/HER IMMEDIATELY.

D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO HOLD CMTA, INC. HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH TYPE AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR SUBCONTRACTORS, INCLUDING REASONABLE ATTORNEY'S FEES, DEFENSE, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR SUBCONTRACTORS HARMLESS FROM AND AGAINST ALL SUCH CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.

E. THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

PHASING NOTE:

A. THIS PROJECT INTERFERES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL UTILITIES AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, SEWER SERVICE, AND TELEPHONE SYSTEM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND REPAIRS TO BE TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ANY AND ALL NECESSARY ASSURANCES TO THE OWNER INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE AND MAKE WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

PLUMBING DEMOLITION NOTES:

THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF THE CEILING IN AREAS WHERE REINSTATEMENT, TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO THE OWNER.

ALL OUTAGES SHALL BE SCHEDULED THROUGH THE PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE MUST BE SUBMITTED TO THE PROJECT REPRESENTATIVE IN ADVANCE OF THE WORK AT A MINIMUM OF TWO WEEKS IN ADVANCE.

DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.

D. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL PATED WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING.

E. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.

F. ALL ITEMS INDICATED IN THE SCHEDULE SHALL BE REMOVED (U/N) AND LIGHT SLOTTED LINES INDICATE EXISTING ITEMS TO REMAIN.

G. COORDINATE THE REMOVAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED DEMOLITION) WITH THE OWNER.

PLUMBING GENERAL NOTES:

[illegible]

SYMBOLS & ABBREVIATIONS

AIR	MEDICAL AIR		POINT OF CONNECTION
AFF	ABOVE FINISHED FLOOR		LIMIT OF DEMOLITION
AFR	ABOVE FINISHED ROOF		PIPE ELBOW TURNING UP/TURNING DOWN
C.I.	CAST IRON		PIPE TEE TURNING UP/TURNING DOWN
CO2	CARBON DIOXIDE		MEDICAL AIR
CW	DOMESTIC COLD WATER		COMPRESSED AIR
DN	DOWN		FORCED MAIN
EV	EVACUATION (WASTE ANESTHETIC GAS DISPOSAL)		FIRE PROTECTION LINE
FHV	FIRE HOSE VALVE WITH CABINET		GAS LINE
FPWH	FREEZE PROOF WALL HYDRANT		SANITARY WASTE PIPING TO GREASE TRAP
HB	HOSE BIBB		OXYGEN PIPING
HW	DOMESTIC HOT WATER		OVERFLOW ROOF LEADER PIPING
IAW	IN ACCORDANCE WITH		ROOF LEADER PIPING
ID	INSIDE DIMENSION		SANITARY WASTE PIPING
IE	INVERT ELEVATION		STORM SEWER PIPING
LPA	LINE PRESSURE ALARM (MEDICAL GAS AREA ALARM)		VACUUM PIPING
MH	MANHOLE		VENT PIPING
MSA	MULTI-SINGLE ALARM (MEDICAL GAS MASTER ALARM)		EXISTING PIPING (THIN LINE)
NTS	NOT TO SCALE		ABANDONED EXISTING PIPING (THIN LINE)
NIC	NOT IN CONTRACT		DOMESTIC COLD WATER PIPING
NO	NORMALLY OPEN		DOMESTIC HOT WATER SUPPLY
NC	NORMALLY CLOSED		DOMESTIC RECIRCULATING HOT WATER
O, OX	OXYGEN		CLEANOUT IN CEILING SPACE
OD	OUTSIDE DIMENSION		FLOOR CLEANOUT
OFCl	OWNER FURNISHED, CONTRACTOR INSTALLED		EXTERIOR CLEANOUT
OFOL	OWNER FURNISHED, OWNER INSTALLED		BALANCING VALVE
CFCl	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED		BALL VALVE
OR	OPEN RECEPTACLE		SAFETY RELIEF VALVE
ORL	OVERFLOW ROOF LEADER		SAFETY RELIEF VALVE
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, OR GAS)		OS&Y (GATE) VALVE
PSI	POUNDS PER SQUARE INCH		PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
RHW	DOMESTIC RECIRCULATING HOT WATER		STRAINER
RL	ROOF LEADER		CHECK VALVE
SCW	SOFT DOMESTIC COLD WATER		DOUBLE CHECK VALVE ASSEMBLY
SR	SANITARY RISER		PIPING UNION
TB	THRUST BLOCK		FLOW SWITCH
TE	TOP ELEVATION		PRESSURE SWITCH
TP	TRAP PRIMER		TAMPER SWITCH
TYP	TYPICAL		THERMOMETER
UON	UNLESS OTHERWISE NOTED		VACUUM BREAKER
V, VAC	VACUUM		LIMITED AREA SPRINKLER HEAD
VTR	VENT THRU ROOF		PETE'S PLUG
			FLOOR DRAIN DESIGNATOR
			ROOF DRAIN DESIGNATOR
			PLUMBING FIXTURE DESIGNATOR
			EQUIPMENT TAG DESIGNATOR
			TAGGED NOTE DESIGNATOR
			REVISION DESIGNATOR
			TEMPERATURE SENSOR
			HOSE BIBB

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101 old latayette avenue

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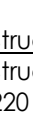
PLUMBING LEGEND

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION

LEBANON, KENTUCKY



CMTA

2025 Plumbing, Heating, and Air Conditioning
Contractors Association

Structural Engineer:
 Structural Design Group, Inc.,
 220 Great Circle Rd., Suite 106
 Nashville, TN 37228
 p 615.255.5537

BG#

Project No: 1928/MMCM19

Drawn By: JEK

Rev'd By: MCW

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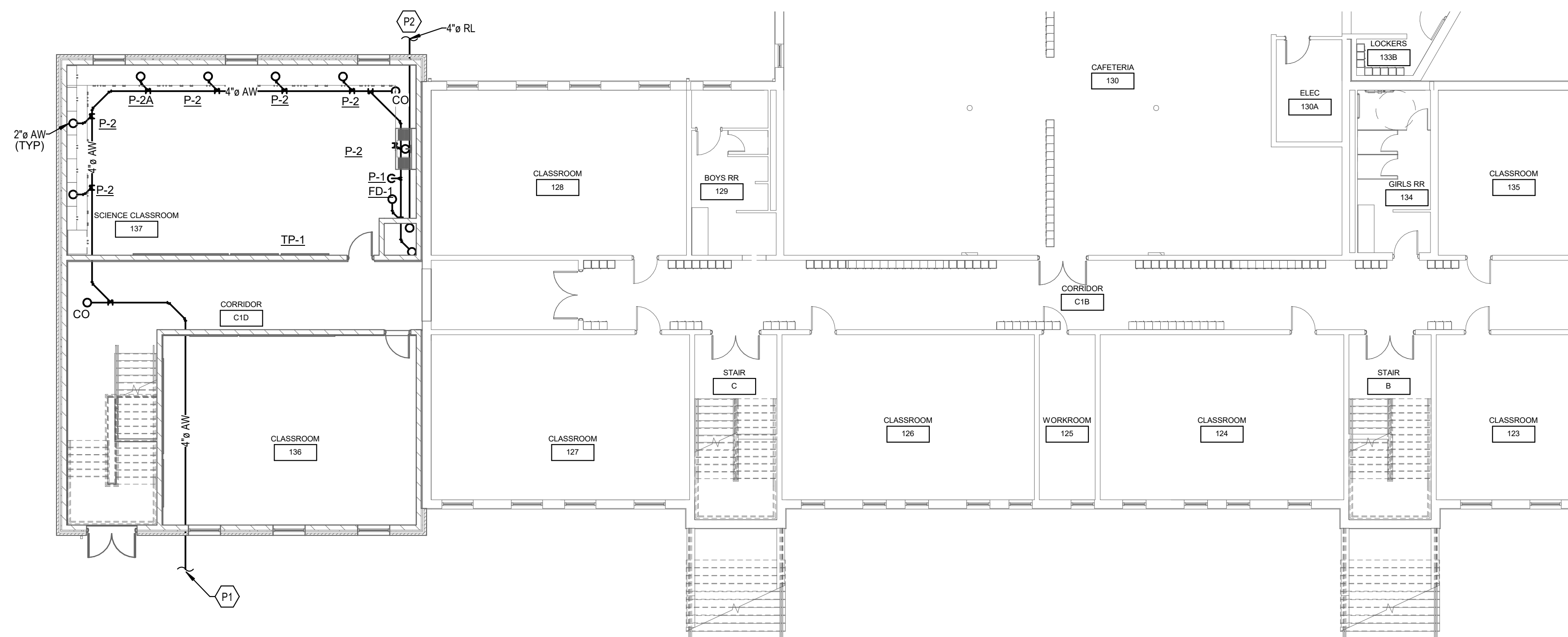
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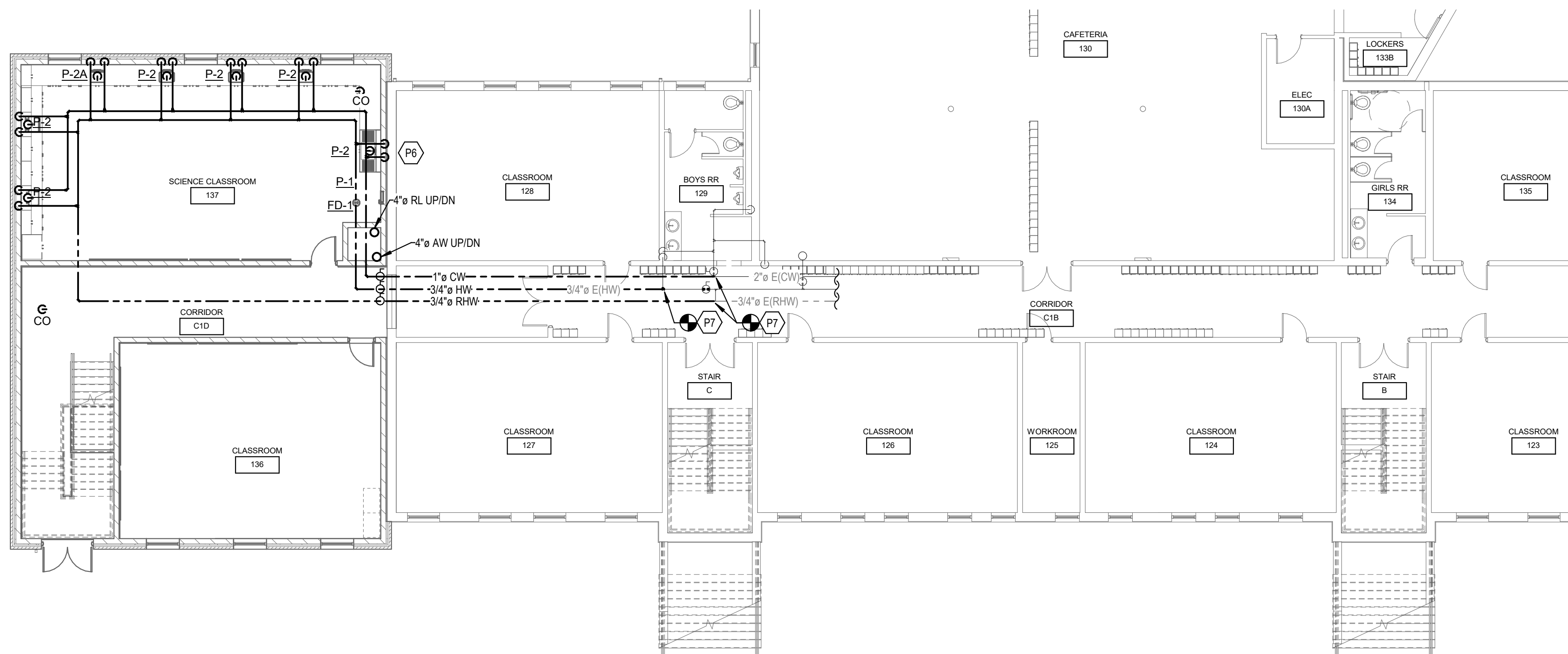
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PLUMBING LEGEND

DATE ISSUED:
 July 31, 2019

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UNDERSLAB PLUMBING PLAN
3/32" = 1'-0"



FIRST FLOOR PLUMBING PLAN
3/32" = 1'-0"

GENERAL NOTES - PLUMBING	
1	REFER TO STRUCTURAL DRAWINGS SHEET S2.1 FOR REQUIREMENTS OF UNDERSLAB PIPING ROUTED NEAR FOOTER ZONE OF INFLUENCE. PIPING SHALL BE INSTALLED IN A MANNER WHICH DOES NOT UNDERMINE FOOTINGS.
2	PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INSTALLATION OF UNDERSLAB SANITARY, ROOF LEADER, FORCED MAIN, AND ACID WASTE PIPING WITH THE BUILDING FOOTINGS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION PLAN.
3	REFER TO P4 SERIES SHEETS FOR FIXTURE TYPES.
TAGGED NOTES	
P1	REFER TO SITE UTILITY PLAN FOR CONTINUATION.
P2	REFER TO SITE DEVELOPMENT DRAWINGS FOR CONTINUATION.
P3	1/2" DHW/CWD PIPING DOWN BELOW SLAB TO FEED SINK IN EXISTING HALL.
P7	CONNECT EXISTING PIPING AT POINT INDICATED AND EXTEND 1' BUILDING ADJACENT.

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FIRST FLOOR PLUMBING PLAN

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION

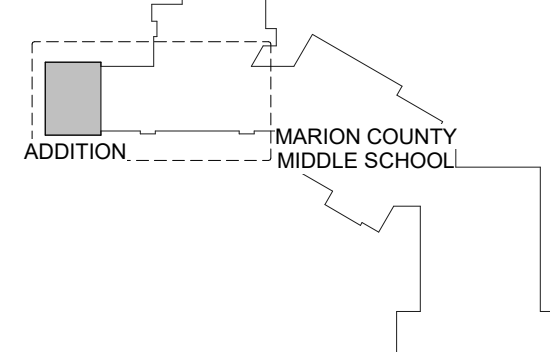
LEBANON, KENTUCKY

 **CMTA**
2020 Main Street, Lexington, KY 40504
859.253.0802 www.cmta.org

Structural Engineer:
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BG#	
Project No:	1928/XMCM19
Drawn By:	JEA
Rev'd By:	MCW

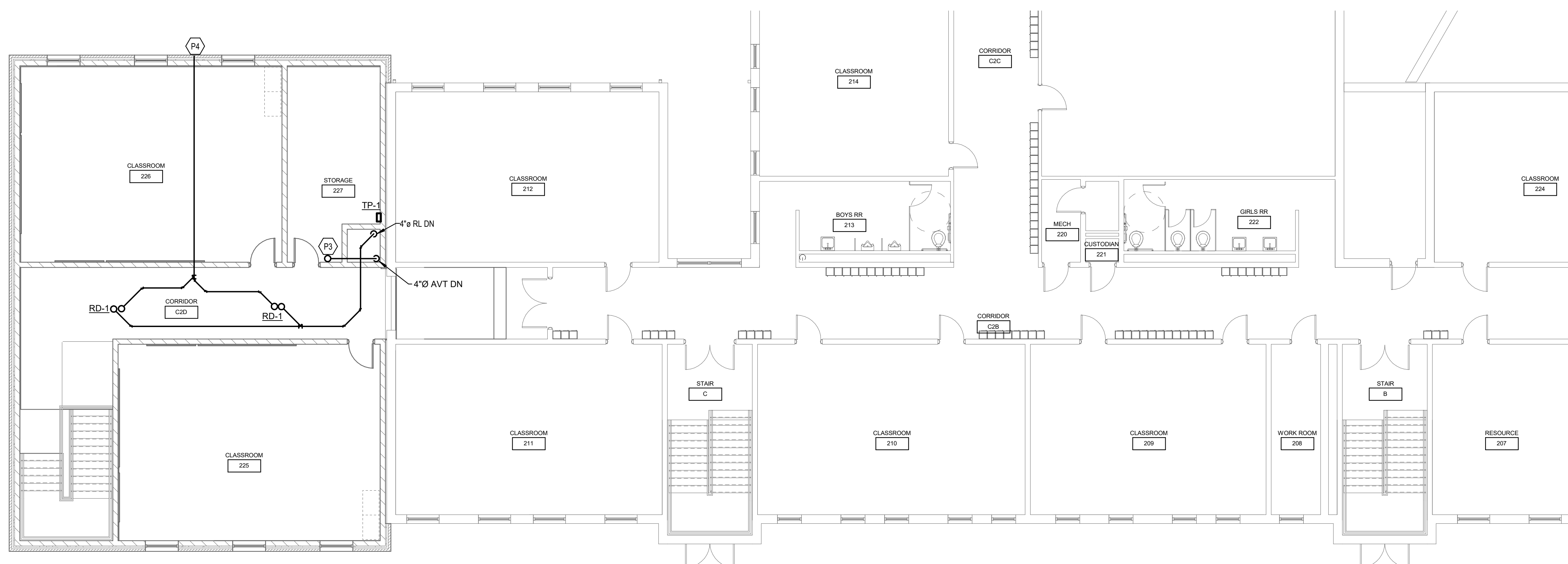
KEY PLAN



SCALE: NTS



DATE ISSUED:
JULY 31, 2019

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SECOND FLOOR PLUMBING PLAN
1/8" = 1'-0"

	GENERAL NOTES - PLUMBING	
1	REFER TO STRUCTURAL DRAWINGS SHEET S2.1 FOR REQUIREMENTS OF THE PLUMBING. PROVIDE NEAR POORTEER ZONE OF INFLUENCE. PIPING SHALL BE INSTALLED IN A MANNER WHICH DOES NOT UNDERMINE FOOTINGS.	
2	PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INSTALLATION OF UNDERSLAB SANITARY, ROOF LEADER, FORCED MAIN, AND ACID WASTE PIPING WITH THE BUILDING FOOTINGS. REFER TO STRUCTURAL DRAWINGS FOR FOOTING AND FOUNDATION PLAN.	
3	REFER TO P4 SERIES SHEETS FOR FIXTURE TYPES.	
TAGGED NOTES		#
P3	1" ACID WASTE PIPING THROUGH ROOF	
P4	PROVIDE 1/2" MIN. MODEL 218 DOWNSPOUT NOZZLE MATCHING PIPE CONNECTION SIZE. PROVIDE WITH STAINLESS STEEL SCREEN. LOCATION SHALL BE COORDINATED WITH ARCHITECTURAL ELEVATION PLANS.	

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SECOND FLOOR PLUMBING PLAN

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY



BG#

Project No:	1928/XMCM19
Drawn By:	JEA
Rev'd By:	MCW

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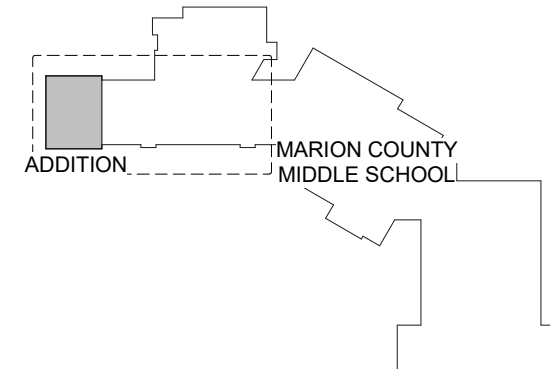
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SECOND FLOOR PLUMBING

PLAN
DATE ISSUED:

DATE ISSUED:
JULY 31, 2019



SCALE: NTS



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GENERAL NOTES - MECHANICAL

- COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC. PROVIDE PROTECTIVE COVERINGS FOR ALL CASEWORK EQUIPMENT. COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
- B. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. COORDINATE WITH THE ELECTRICAL CONTRACTOR TO LOCATE ALL OVER-HEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD CODES AND REQUIREMENTS. THE CONTRACTOR SHALL BE IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF GLYPHOL-BASED CEILINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL GLYPHOL-BASED CEILINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- D. ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHERS.
- E. COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.
- F. PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S SATISFACTION) ALL DAMAGE TO WALLS, CEILING, FLOOR, ETC., IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMUNITY/LOCAL GOVERNMENT, ETC.)
- H. CONTRACTOR SHALL BE AWARE OF UNSEEN PIPING, HVAC AND ELECTRICAL WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND OBTAIN AN APPROPRIATE RATED APPROVAL. IF NECESSARY, THEN CONTACT THE ENGINEERS TO REVIEW THE REVISION.
- I. IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.
- J. ALL FLOOR PENETRATIONS OF FIRE AND SMOKE RATED APPROVED SHALL BE APPROPRIATELY FIRE STOPPED PER AN ASSUMED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.
- K. ALL WORK DURING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.
- L. ALL PIPING, DRAIN, PIPES, CONDUITS, ETC. IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.
- M. INSTALL AIR VENTS AT HIGH POINTS IN PIPING AND DRAINAGE IN LOW POINTS.
- N. LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DIMENSIONS.
- O. ALL OFFSETS IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- P. COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT.
- Q. INSTALL ALL PIPING, DUCTWORK AND EQUIPMENT IN STRICT ACCORDANCE WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS. ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECORD DRAWINGS OF ALL PIPING, DUCTWORK, AND EQUIPMENT. SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND JOINTS. PROVIDE FIRE STOPPING IN FIRE PARTITION SEAL ALL NEW DUCTWORK ROOFS WITH UNITED METAL, IRONPROM GFI, ETC.
- R. ALL MOTOR DRIVEN EQUIPMENT SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS TO PIPING, PIPING, ETC., UNLESS OTHERWISE NOTED.
- S. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF APPLIANCES, ETC., THAT CONFLICT WITH NEW WORK.
- T. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH THE EXISTING BUILDING STRUCTURE, THE CONTRACTOR SHALL INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING WALLS AND OTHER DETAIL OF THE DRAWINGS.
- U. DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS.
- X. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EXCESSIVE VIBRATION OR EQUAL OR GREATER VIBRATION IN ANY APPROVED MECHANICAL NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
- Y. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE EXISTING SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO PROTECT OR DEMOLISH OR EQUAL OR GREATER VIBRATION IN ANY APPROVED MECHANICAL NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- Z. VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS THE CASE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCESS SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNDESIRABLE DISTANCE FROM THE CEILING. IF THE CONTRACTOR HAS ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLATION.
- AA. WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS CONCRETE PER THE DESIGN INDICATED IN CONTRACT DOCUMENTS. THE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.
- BB. THE CONTRACTOR SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

PHASING NOTES

- A. THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, THE EXISTING HOT WATER PIPING MAINS, WILL BE AFFECTED, REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PROJECT, INCLUDING BUT NOT LIMITED TO, DELAYS, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
ATU	AIR TERMINAL UNIT
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA

HAZARDOUS MATERIALS NOTES

- A. THE CONTRACTOR IT IS HEREBY ADVISED THAT IT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ANY ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREOF UNTIL ITS' CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CM/TA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH MATERIALS. THEREFORE, THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT NO ONE WILL NOT OPEN OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C. IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES TO PREVIOUS OR EXISTING WORK OR TO OTHER COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT AN ENVIRONMENTAL CONSULTANT FOR ADVICE.
- D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO WAIVE ANY RIGHT TO RECOVER FROM THE OWNER ANY DAMAGES, LOSSES, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CM/TA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CM/TA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
- E. THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.





ABBREVIATIONS (CONTINUED)

FD	FIRE DAMPER
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET OR FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (-ORSEPOWER, -EAT PUMP)
HR	HOURL (-S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INSUL	INSULAT (-ED, -ION)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
kW	KILOWATT
kWh	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BTU PER HOUR [THOUSANDS]
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA OR NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT

ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
OCFI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OR	OPEN RECEPTACLE
OZ	OUNCE (-S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE [ELECTRICAL]
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
RH	RELATIVE HUMIDITY [%]
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SQ	SQUARE
SQ FT	SQUARE FEET OR FOOT
SQ IN	SQUARE INCH OR INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (-AGE, -S)
VAR	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FEQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WPD	WATER PRESSURE DROP
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
℄	CENTERLINE





































GENERAL SYMBOLS

	TAGGED NOTE DESIGNATOR
	REVISION TRIANGLE
SECOND NAME (SEE 2.)	ROOM TAG
TAG: XXXX-# INSTANCE: XXXXX	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION

HVAC LEGEND

	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	TRANSFER AIR DIFFUSER W/ SOUND ATTENUATING BOOT
	SIDEWALL DIFFUSER/GRILLE
	SIDEWALL DIFFUSER/GRILLE
	AIR DEVICE TAG (REGISTER, GRILLE, DIFFUSER, LOUVER)
	RECTANGULAR DUCT
	ROUND/SPIRAL DUCT
	FLAT OVAL DUCT
	SUPPLY AIR DUCT
	RETURN AIR DUCT
	EXHAUST AIR DUCT
	OUTSIDE AIR DUCT
	TRANSFER AIR DUCT
	SA AIR DUCT TURNING UP
	SA AIR DUCT TURNING DOWN
	RA AIR DUCT TURNING UP
	RA AIR DUCT TURNING DOWN
	EA AIR DUCT TURNING UP
	EA AIR DUCT TURNING DOWN
	EXISTING DUCT - (XXX) DENOTES SYSTEM
	DUCT TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
	DUCT TO BE ABANDONED IN PLACE - (XXX) DENOTES SYSTEM
	MITERED ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
	THERMOSTAT
	TEMPERATURE SENSOR
	HUMIDITY SENSOR
	CARBON DIOXIDE SENSOR
	TEMPERATURE & CARBON DIOXIDE SENSOR
	MANUAL BALANCING/VOLUME DAMPER
	MOTORIZED DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION FIRE & SMOKE DAMPER

MECHANICAL PIPING LEGEND

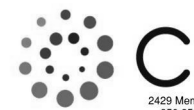
	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE: CONNECTION ON TOP
	PIPE TEE: CONNECTION ON BOTTOM
	PIPE CAP
	CONDENSATE DRAIN
	CHILLED WATER SUPPLY/RETURN
	GEOTHERMAL WATER SUPPLY/RETURN
	STEAM VENT PIPING
	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
	EXISTING PIPING - (XXX) DENOTES SYSTEM
	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
	FLOW SWITCH
	PRESSURE SWITCH
	TAMPER SWITCH
	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

MECHANICAL LEGEND

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR: ☐ Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☐ Dr. ☐ Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☐ Dr. ☐ Mr. ☐ Mrs. ☐ Miss ☐ Ms. ☐ Dr.

IFRANON, KENTUCKY



Structural Engineer:
Structural Design Group, Inc.
220 Great Circle Rd. Suite 106
Nashville, TN 37228
p 615.255.5537

BG#

Project No: 1928/XMCM19
Drawn By: JEA
Revised By: MCW

SHEET RELEASE

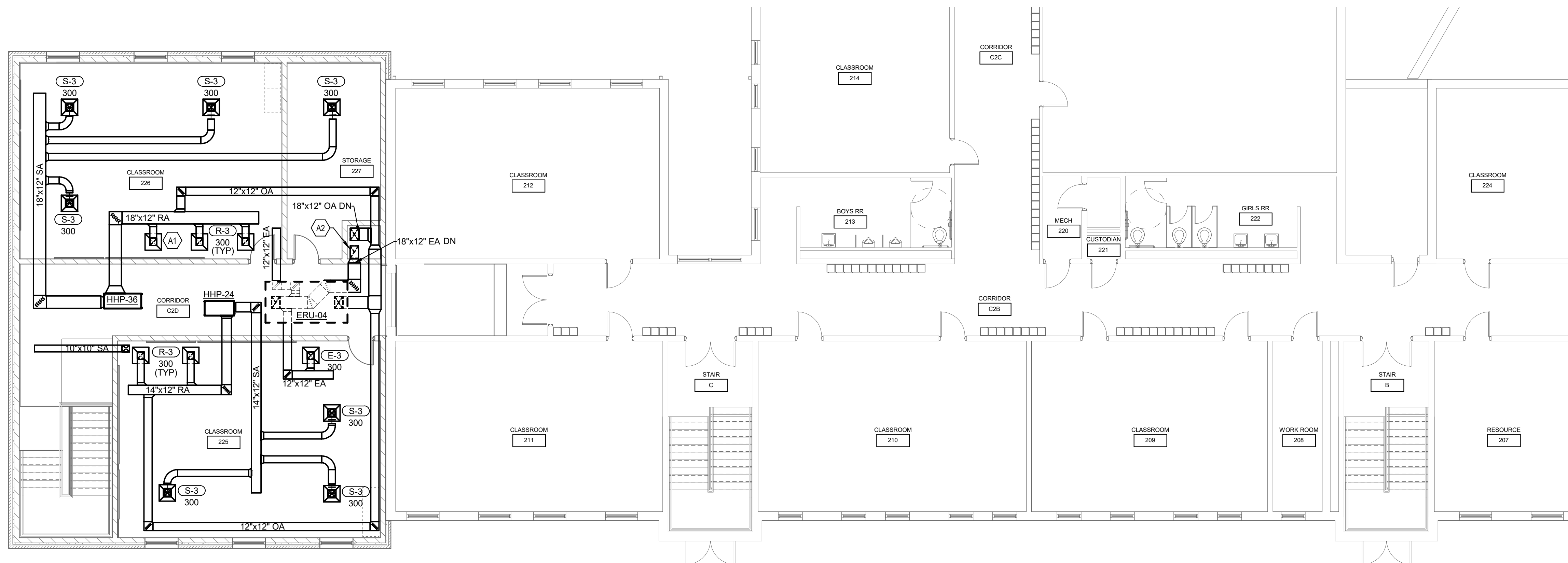
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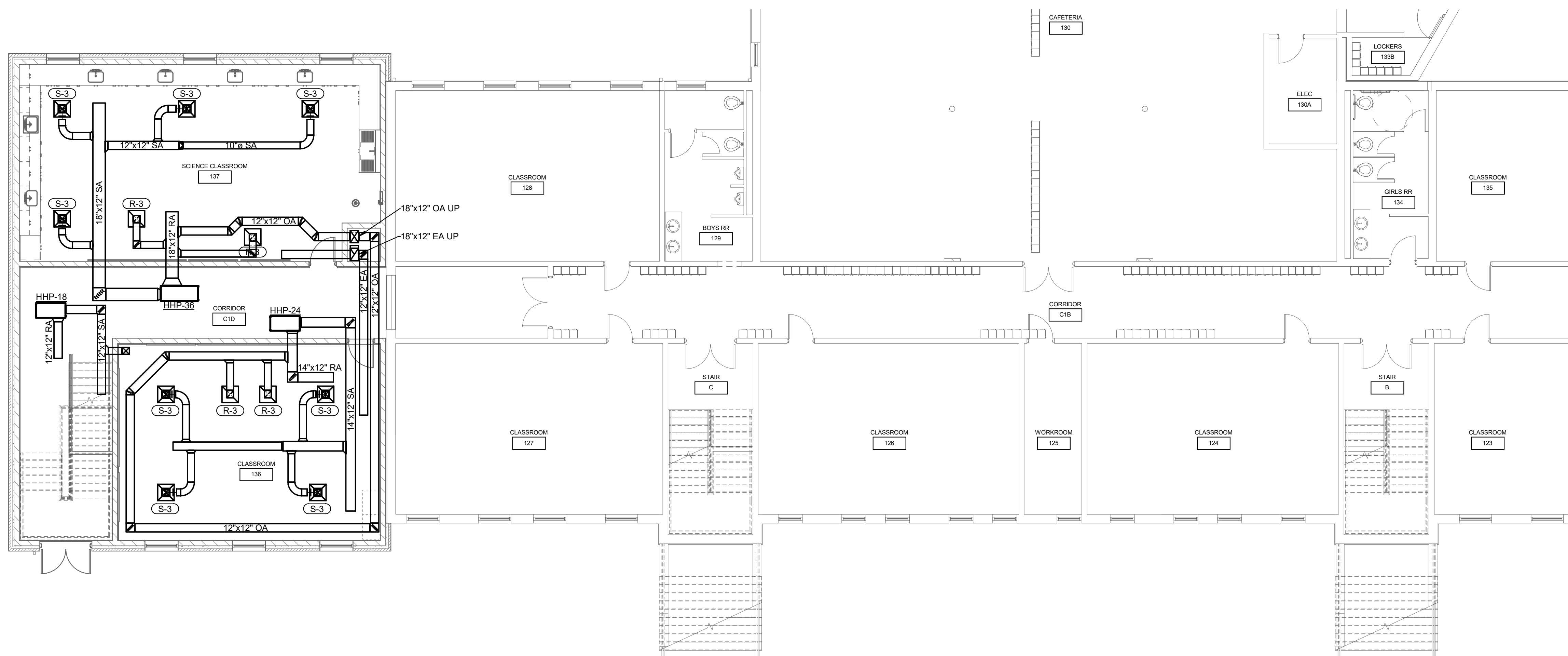
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DATE ISSUED:
JULY 31, 2019

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED ON THIS PROJECT

[illegible]

SECOND FLOOR AIR DISTRIBUTION PLAN
1/8" = 1'-0"



FIRST FLOOR AIR DISTRIBUTION PLAN
1/8" = 1'-0"

GENERAL NOTES - AIR DISTRIBUTION	
1	IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO INSTALL MANUAL BALANCING DAMPERS IN THE DUCTWORK PER RUNOUT DETAIL FOR ALL GRILLS, REGISTERS, AND DIFFUSERS WHICH LIST A CFM. IN ALL CASES DAMPERS ARE TO BE INSTALLED IN AN ACCESSIBLE LOCATION.
2	REFER TO STRUCTURAL DRAWINGS. DETAIL ON SHEET S4.2 FOR REQUIREMENTS OF HANGING FROM JOISTS.
3	ELECTRICAL PANELS SHOWN FOR REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS AND DUCT OR PIPING SHALL BE ROUTED OVER ELECTRICAL PANELS.
TAGGED NOTES <div style="float: right; border: 1px solid black; border-radius: 50%; padding: 2px 5px;">#6</div>	
A1	PROVIDE FILTER IN RETURN GRILL. TYPICAL
A2	DUCT DOWN IN CHASE. REFER TO FIRST FLOOR PLAN FOR CONTINUATION.

TAGGED NOTES		##
A1	PROVIDE FILTER IN RETURN GRILLE. TYPICAL	
A2	DUCT DOWN IN CHASE. REFER TO FIRST FLOOR PLAN FOR CONTINUATION.	

2r rosARRANT
architects

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NOT FOR
CONSTRUCTION

AIR DISTRIBUTION PLAN

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION

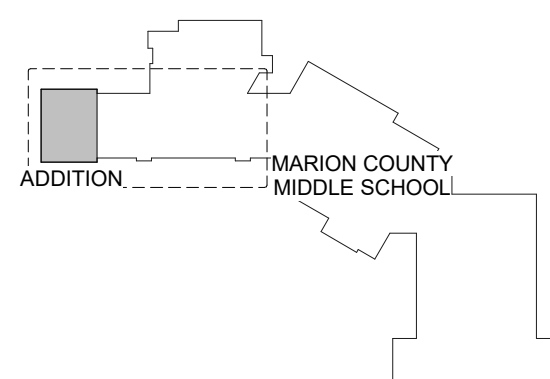
LEBANON, KENTUCKY

 **CMTA**
2020 Standish Way, Lexington, KY 40504
858.253.0002 www.cmtaorg.com

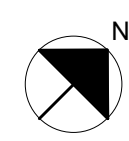
Structural Engineer:
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BG#	
Project No:	1928/XMCM19
Drawn By:	JEA
Rev'd By:	MCW

KEY PLAN

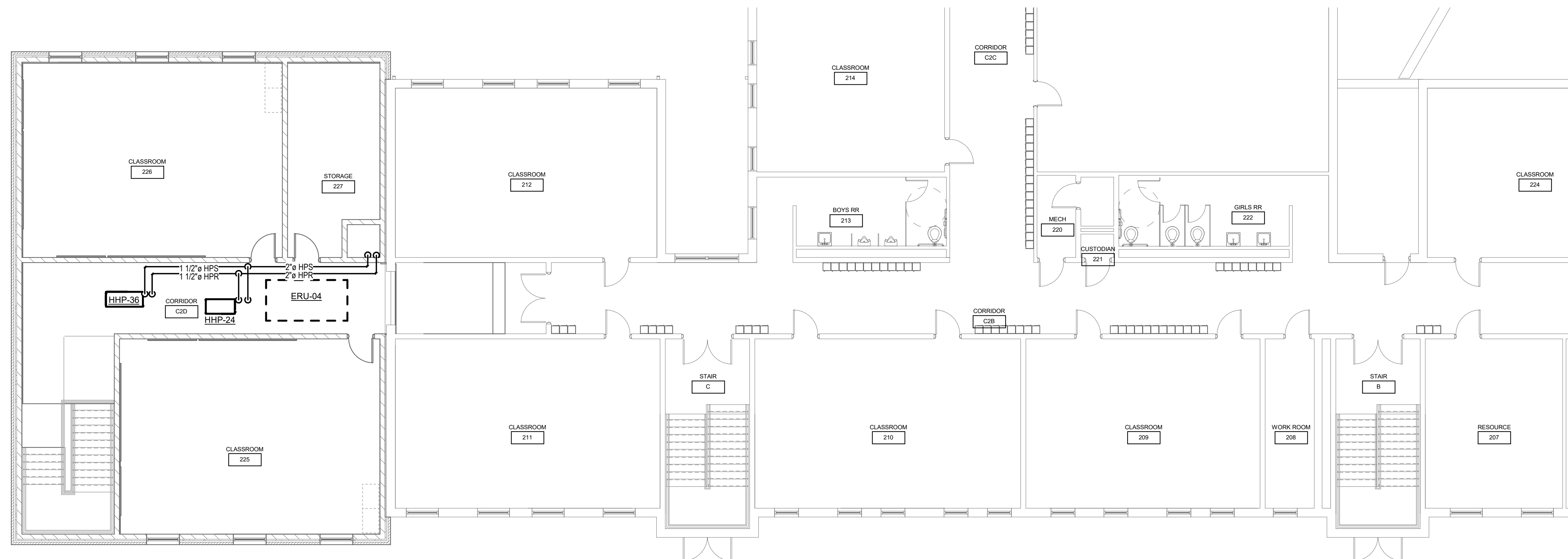


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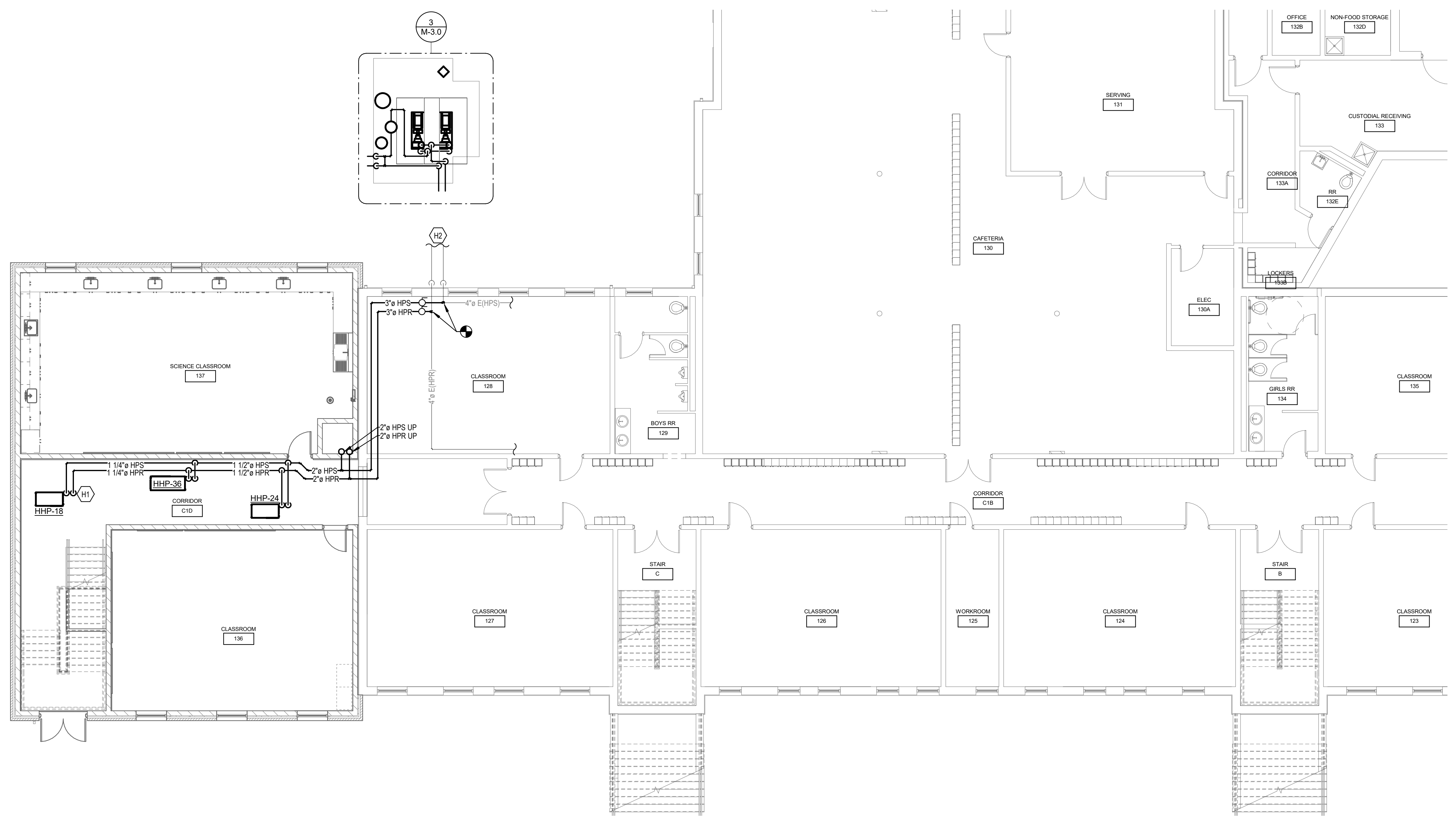


AIR DISTRIBUTION PLAN

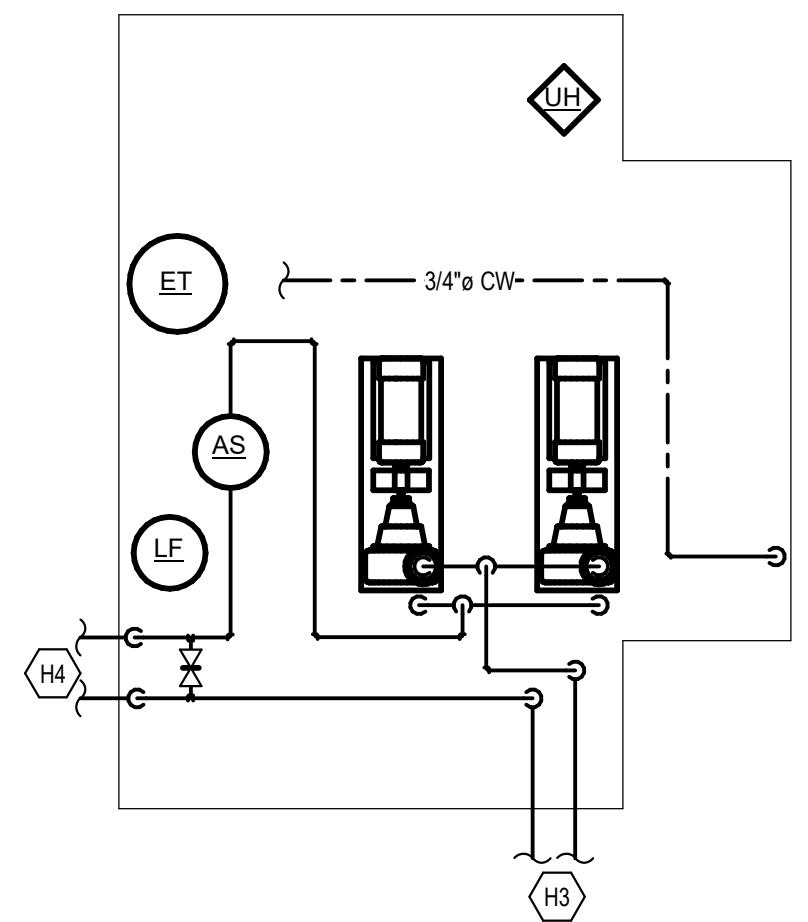
DATE ISSUED:
JULY 31, 2019

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SECOND FLOOR HYDRONICS PIPING PLAN
1/8" = 1'-0"



FIRST FLOOR HYDRONICS PIPING PLAN
1/8" = 1'-0"



ENLARGED PUMP ROOM HYDRONICS PIPING PLAN
1/4" = 1'-0"

GENERAL NOTES - HYDRONICS PIPING	
1	ELECTRICAL PANELS SHOWN FOR REFERENCE ONLY. REFER TO ELECTRICAL DRAWINGS. NO DUCT OR PIPING SHALL BE ROUTED OVER ELECTRICAL PANELS.
TAGGED NOTES <div style="float: right; border: 1px solid black; border-radius: 50%; padding: 5px;"> # </div>	
H1	PIPING TO HEAT PUMP UNIT. REFER TO PIPING SCHEMATIC FOR CONNECTION REQUIREMENTS. TYPICAL
H2	EXISTING PIPING TO PUMP BUILDING. REFER TO ENLARGED PUMP BUILDING PLAN FOR CONTINUATION.
H3	PIPING TO MIDDLE SCHOOL. REFER TO FIRST FLOOR HYDRONICS PIPING PLAN FOR CONTINUATION.
H4	PIPING TO GEOTHERMAL WELLFIELD. REFER TO SITE UTILITY PLAN FOR CONTINUATION.

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NOT FOR
CONSTRUCTION

HYDRONICS PLAN

MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION

FOR:

MARION COUNTY BOARD OF EDUCATION

LEBANON, KENTUCKY

 **CMTA**
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BG#	
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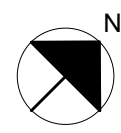
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HYDRONICS PLAN

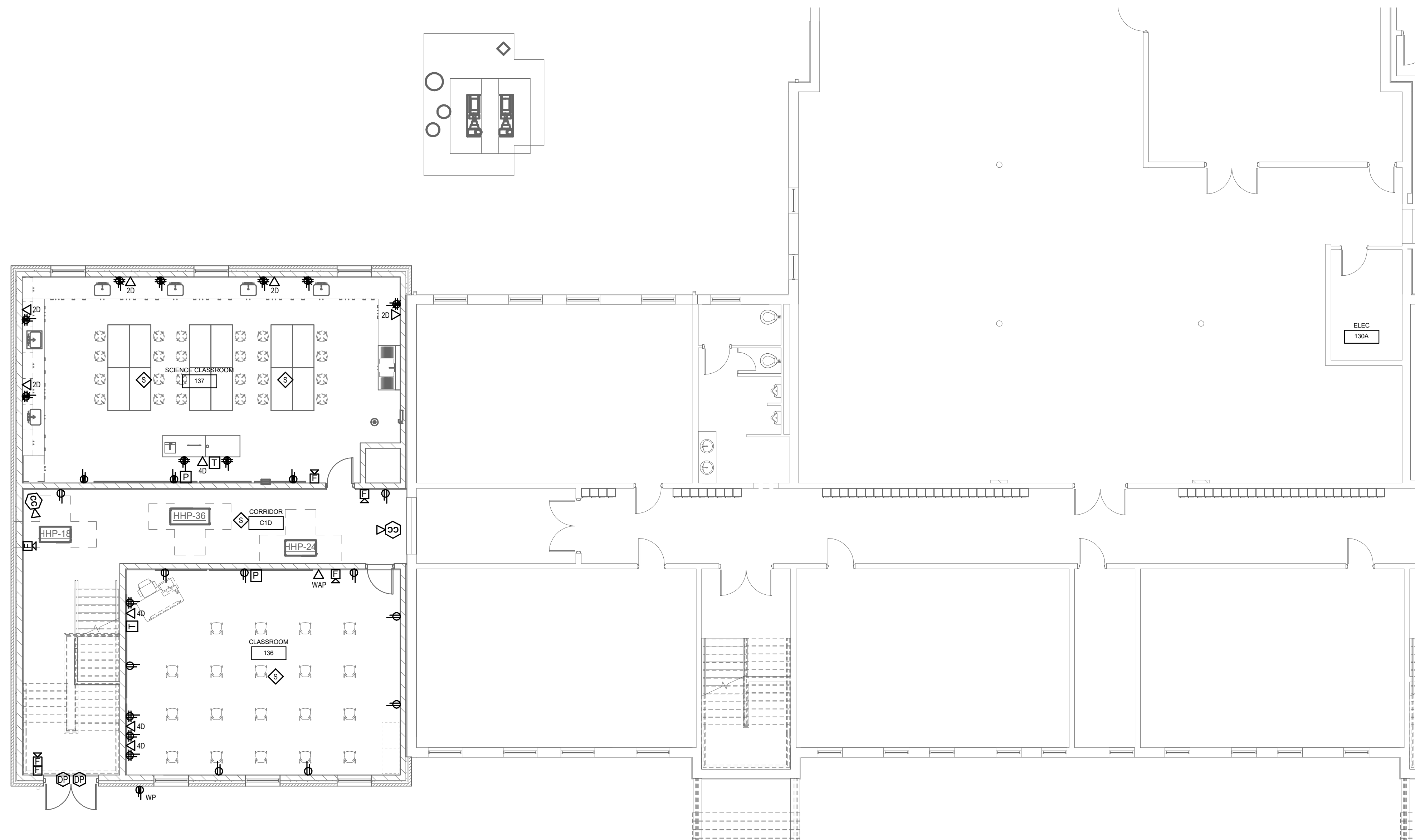
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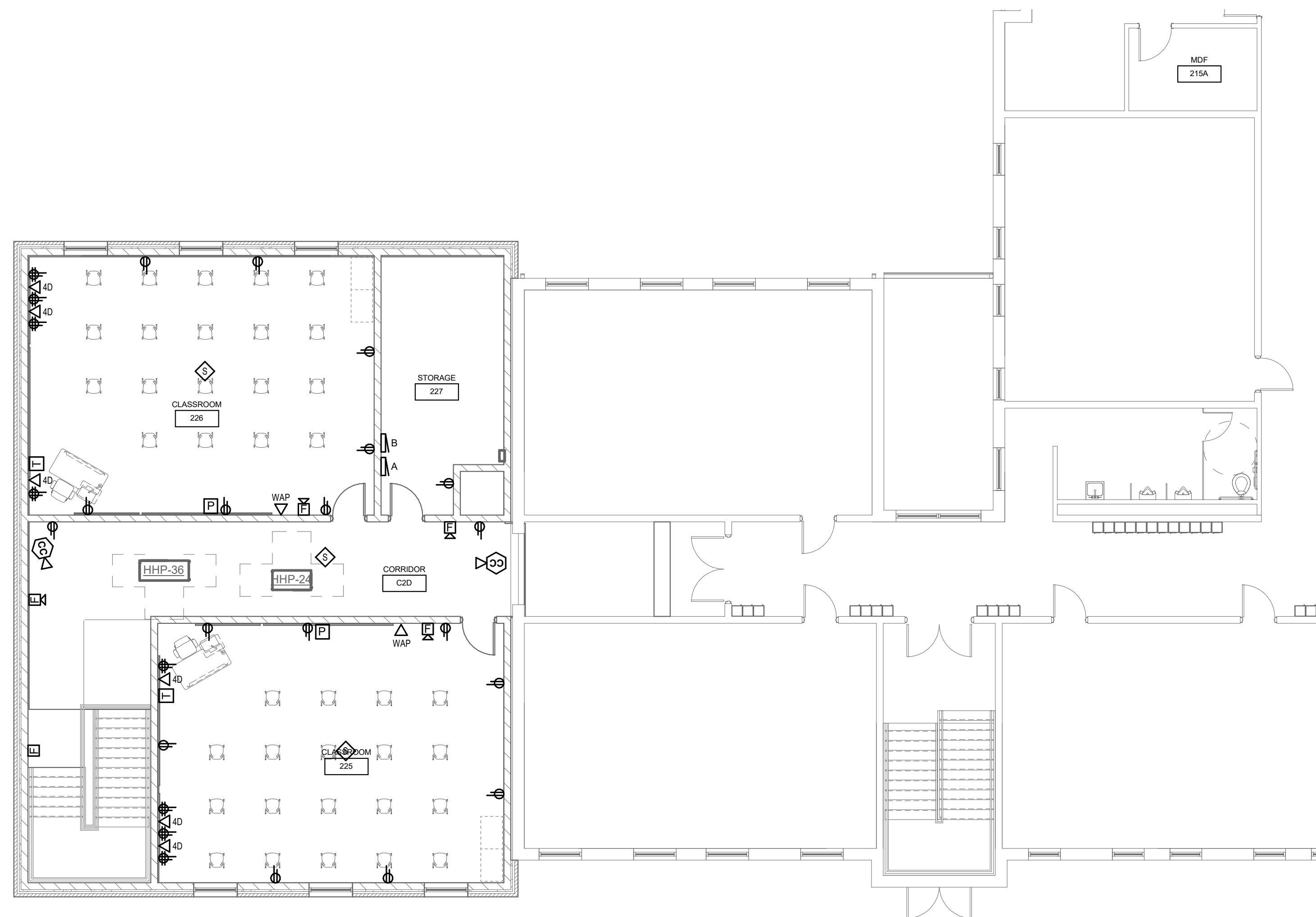


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DESCRIPTION				MONITORING POINT TO CENTER OF BOX	DRAWING SYMBOL	DESCRIPTION				MONITORING POINT TO CENTER OF BOX	DRAWING SYMBOL	DESCRIPTION				MONITORING POINT TO CENTER OF BOX	DRAWING SYMBOL	DESCRIPTION				MONITORING POINT TO CENTER OF BOX	DRAWING SYMBOL						
LIGHTING CONTROL SWITCHES						LIGHTING						ABBREVIATIONS						SECURITY PANIC ALARM						SECURITY					
LIGHT SWITCH: LOW VOLTAGE				46"	\$	REFER TO LUMINAIRE SCHEDULE FOR EXACT FIXTURE SPECIFICATIONS, MOUNTING HEIGHTS, ETC.						UNLESS OTHERWISE NOTED					UCN	PANIC ALARM BUTTON				46"	PB	NOTE:					
EXAM LIGHT SWITCH				46"	\$	SURFACE OR SUSPENDED CEILING FIXTURE (SLASH INDICATES RECESSED)						OWNER FURNISHED CONTRACTOR INSTALLED					OFCI	PANIC ALARM ANNUNCIATOR				46"	PA	ALL INTRUSION SYSTEM DEVICES SHALL BE ROUTED IN SURFACE BACKWAY WHERE EXPOSED OR ON EXISTING WALL TO ABOVE CEILING. (U.O.N.) CONTRACTOR SHALL PROVIDE 2" BRINDLE RING PATH OR 3/4" CONDUIT FOR ROUTING ALL CABLE CONCEALED TO EXPANSION MODULE OR MAIN CONTROL PANEL. FIELD VERIFY BEST ROUTING PATH. ALL EXIST. DEVICE LOCATIONS SHALL BE ESTABLISHED PRIOR TO INSTALLATION AT "PRE-SECURITY INSTALLATION MEETING".					
NIGHT LIGHT SWITCH WITH CONSTANTLY ILLUMINATED HANDLE				46"	\$	POLE MOUNTED AREA LIGHT						CONTRACTOR FURNISHED CONTRACTOR INSTALLED					OFCI	AMBER STROBE				80"							
SURGICAL LIGHT INTENSITY CONTROL				46"	\$	SURFACE MOUNTED AREA LIGHT						CONTRACTOR FURNISHED OWNER INSTALLED					CFCI	PANIC ALARM POWER SUPPLY CABINET				46"	SEC-P						
LOW VOLTAGE DIMMER SWITCH				46"	\$	EMERGENCY BATTERY WALL-PACK						INDICATES EMERGENCY POWER					E, EM												
LINE VOLTAGE SWITCH				46"	\$	WALL MOUNT FIXTURE						SPECIAL OUTLETS						AUDIO/VIDEO INTERCOM STATION: MASTER WITH SELECTIVE DOOR CONTROLS, POWER SUPPLIES & DOOR RELAY CONTACTS AS REQUIRED FOR OPERATION OF ANY DOOR IN THE SYSTEM AND VIEWING OF ANY AUDIO/VIDEO INTERCOM REMOTE ON THE SYSTEM. APHONE/AX-HV WIDESPREAD - COLOR BY ARCHITECT.				18"	IM	NEW CEILING MOUNTED INTRUSION DETECTOR. LOCATED AT LEAST 24" AWAY FROM ANY AIR DIFFUSER. (TYPE BOSCH 059373)					9370
LINE VOLTAGE THREE-WAY SWITCH				46"	\$	FLOOR/LIGHT						FLOORBOX, POWER ONLY, AS SCHEDULED				FLOOR		SAME AS "IM" EXCEPT WALL MOUNTED				46"	IM-W						
LINE VOLTAGE FOUR-WAY SWITCH				46"	\$	SURGICAL/EXAM LIGHT						FLOORBOX, COMBINATION POWER AND LOW VOLTAGE, REFER TO FLOORBOX SCHEDULE				FLOOR		AUDIO/VIDEO INTERCOM STATION: REMOTE WITH FLUSH-MTD S.S. ENCLOSURE. APHONE AX-HV-OF.				46"	IR	NEW CORNER MOUNTED INTRUSION DETECTOR (TYPE INTERLOCK 6550)					6157
KEYED SWITCH				46"	\$	EXIT LIGHT (CEILING, END, WALL MOUNT)						AUDIO/VISUAL SYSTEM OUTLET WITH DUPLEX RECEPTACLE, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION				1'-6"		SECURITY ACCESS CONTROL											
OCCUPANCY OR VACANCY SENSOR SWITCH				46"	\$	STRIP FIXTURE						COMBINATION POWER AND DATA OUTLET LOCATION, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION				1'-6"		DOOR ALARM/POSITION SWITCH				DOOR FRAME	DA	NEW WALL MOUNTED INTRUSION DETECTOR. USED IN UNHEATED AREAS. (TYPE SENTRY 615703)					CTX
LIGHT SWITCH FOR UNDER-CABINET LIGHTS				46"	\$	CROSS-HATCHING INDICATES HOME RUN N.# OF CIRCUITS; HASHMARKS INDICATE # OF CONDUCTORS; DASHED LINE INDICATES CONDUIT BELOW FLOOR.						COMBINATION POWER AND DATA OUTLET LOCATION, GFCI DUPLEX RECEPTACLE, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION				1'-6"		MAGNETIC LOCKS				ABV DOOR	DP	NEW WALL MOUNTED INTRUSION DETECTOR. USED OUTDOORS. (TYPE PROTEC SDI-7742L)					EX
ILLUMINATED HANDLE LIGHT SWITCH (ILLUMINATED WHEN LOAD IS OFF)				46"	\$	PARALLEL-HATCHING INDICATES LIGHT IS POWERED FROM THE EMERGENCY-LIFE SAFETY BRANCH						OVERHEAD PROJECTOR: PROVIDE DUPLEX RECEPTACLE, ONE DATA, HOMI, 3.5mm AUDIO, AND VGA OUTLET ON (3) PANELS				CLG		DOOR DELAYED EGRESS/ELECTRIFIED PANIC MECHANISM				ABV DOOR	DS						
PILOT LIGHT SWITCH (ILLUMINATED WHEN LOAD IS ON)				46"	\$	MISCELLANEOUS						SPECIAL VIDEO SYSTEM SIGNAL INPUT						ELECTRIC STRIKE				AT LATCH	ES	MAIN CONTROL PANEL, SURFACE-MOUNTED WITH BOTTOM ON 67" AFF. - (SEE SPECIFICATIONS)					MP
NON-REVERSING MOTOR STARTER SNAP SWITCH				AS NOTED	\$	CONDUIT CONCEALED IN WALLS OR IN CEILING (SPACE, ARROWS) INDICATES HOME RUN N.# OF CIRCUITS; HASHMARKS INDICATE # OF CONDUCTORS; DASHED LINE INDICATES CONDUIT BELOW FLOOR.						SURFACE PLUG-MOLD						AUTOMATIC DOOR CONNECTION (MAY ALSO HAVE ELECTRIC STRIKE/MAG-LOCK/ELECTRIFIED PANIC CONNECTION - SEE ARCHITECTURAL HARDWARE SPECIFICATIONS)				CLG	AD	SECONDARY CONTROL PANEL, SURFACE-MOUNTED WITH BOTTOM AT 60" AFF. - (SEE SPECIFICATIONS)					MP
MOMENTARY CONTACT SWITCH				46"	\$	DISCONNECT SWITCH				5'-0"		SURFACE PLUG-MOLD						DOOR RELEASE PUSH-PLATE / INFRARED OPERATOR STATION. PROVIDE ANY ADDITIONAL ROUGH-IN FOR "EMERGENCY RELEASE" OPERATOR STATIONS AS REQUIRED.				46"	PP	KEYPAD STATION, SURFACE-MOUNTED BOTTOM AT 60" AFF. - (SEE SPECIFICATIONS)					RP
HAND-OFF AUTO 3-POSITION SWITCH				46"	\$	MAGNETIC STARTER				5'-0"		POWER POLE AS NOTED						DOOR RELEASE KEYSWITCH STATION				6'-0"	KS	EXPANSION MODULE PANEL, SURFACE-MOUNTED WITH CENTERLINE AT 54" AFF. - (SEE SPECIFICATIONS)					EP
TIMER SWITCH				46"	\$	MAGNETIC COMBINATION STARTER				5'-0"		TELEVISION						DOOR RELEASE KEYPAD STATION				46"	KP	FIRE ALARM. PROVIDE CONNECTION TO FIRE ALARM CONTROL PANEL AS REQUIRED BY OWNER.					FA
OCCUPANCY OR VACANCY SENSOR, CEILING MOUNT				CLG	\$	VARIABLE FREQUENCY DRIVE				5'-0"		TELEVISION SPLITTERS/AMPLIFIERS/DISTRIBUTION				46"	TV-HI	DOOR RELEASE CARD READER STATION. PROVIDE ANY ADDITIONAL ROUGH-IN FOR "EMERGENCY RELEASE" OPERATOR STATIONS AS REQUIRED.				46"	CR	BOILER ALARM. FROM PANEL TO N.O. CONTACTS WITH E.O.L. RESISTOR AT FAULT RELAY IN THE LV BOX LOCATED IN THE BOILER.					B
PHOTO-CELL AS NOTED				AS NOTED	\$	ENCLOSED FLUSH MTD. CIRCUIT BREAKER				5'-0"		TELEVISION SYSTEM OUTLET WITH DUPLEX RECEPTACLE, COORDINATE LOCATION WITH WALL BRACKET WHERE APPLICABLE				7'-0"		DOOR RELEASE KEYPAD STATION				46"	PE	SPARE SECURITY SYSTEM CABLE. INSTALL 1/2" BOX AT POINT INDICATED. COLL UP 30 AT 3" BOX AND 10 AT PANEL TROUBLE LABEL EACH END AND IDENTIFY WITH WIRE MARKERS.					S
EMERGENCY AUTOMATIC TRANSFER SWITCH FOR LIGHTING CONTROLS (REFER TO DETAIL)				CLG	\$	GROUND NEUTRAL PHASE						OVERHEAD PAGING						ACCESS CONTROL POWER SUPPLIES/CONTROL PANEL				46"	SEC-A	WALK-IN REFRIGERATION ALARM. CONNECT TO EQUIPMENT AND COLL UP 3 AT ASSIGNED SECURITY PANEL FOR FINAL CONNECTION BY OTHERS. LABEL CABLE END, JUNCTION BOX, AND IDENTIFY WITH WIRE MARKERS.					WR
POWER OUTLETS						WIRERAY WITH REMOVABLE COVER (SIZE AS NOTED)				AS SHOWN		PAGING SPEAKER: CEILING				CLG		SECURITY CCTV VIDEO SURVEILLANCE											
SIMPLEX RECEPTACLE				1'-6"		TRENCH DUCT (SIZE AS NOTED)				AS SHOWN		PAGING SPEAKER W/ VOLUME CONTROL				CLG		REMOTE DOOR RELEASE PUSH-BUTTON				8"-ACT	RR	REGRIGERANT MONITOR. FROM PANEL TO N.O. CONTACTS WITH E.O.L. RESISTOR AT FAULT RELAY OF THE MONITORING EQUIPMENT					RM
DUPLEX RECEPTACLE-SAFETY TYPE, TAMPER-RESISTANT				1'-6"		PUSHBUTTON STATION				46"		PAGING SPEAKER: WALL				8'-0"		CTV CAMERA. CEILING MOUNT DOME				CLG	CC	SNIP PUMP. FROM PANEL TO SNIP PUMP FLUIT SWITCH (PROVIDE FLOAT SWITCH WITH 20 FT MECH. BULB AND CORD WEIGHT)					SP
DUPLEX RECEPTACLE				1'-6"		FLEXIBLE CONDUIT				46"		RECESSED WALL MOUNTED PAGING SPEAKER DUXANE 5606. SPEAKER, ALIAS 412-8WD				8'-0"		CTV CAMERA. WALL MOUNT DOME				WALL	CC	BOILER MANAGEMENT ALARM. FROM SECURITY PANEL TO SUBSEQUENT PANEL AS REQUIRED BY OWNER.					BR
SLASH THROUGH ANY DEVICE INDICATES MOUNTING ABOVE COUNTERTOP 4" ABOVE BACKSLASH						PANELBOARD, SURFACE OR FLUSH MOUNTED, MATCHING INDICATES EMERGENCY				6'-6" TO TOP		VANDAL PROOF / WEATHERPROOF WALL MOUNTED PAGING SPEAKER, QUAM VP6				SEE FLOOR PLANS		INDICATES NUMBER OF DATA VOICES				1'-6"		LOW PRESSURE CONTROL SWITCH FOR BY COOLING UNITS AND CHILLER'S REFRIGERANT PRESSURE MONITOR SWITCH.					LP
FILLED CENTER BAR INDICATES INTEGRAL GROUND FAULT PROTECTION (GFCI)				1'-6"		TRANSFORMER				AS NOTED		WALL MOUNTED PAGING HORN				9'-0"		COMBINATION OUTLET: NUMBER BESIDE OUTLET INDICATES NUMBER OF VOICE JACKS				1'-6"		AMBER HIGH POWER WEATHERPROOF XENON STROBE LIGHT / 12VDC 140 mA SMT 911-9631 PROTECTIVE CAGE.					AS
DEAD FRONT GFCI DEVICE, LABEL AND INSTALL IN READILY ACCESSIBLE LOCATION				1'-6"		EQUIP-1						EXTERIOR VANDAL PROOF / WEATHERPROOF WALL MOUNTED PAGING SPEAKER. SHALL BE PAINTED COLOR DESIRED BY ARCHITECT/OWNER, QUAM VP6				SEE FLOOR PLANS		VOICE OUTLET: NUMBER BESIDE OUTLET INDICATES NUMBER OF VOICE JACKS				1'-6"		INDOOR 105 db STEADY AND VARIABLE TONES / 12VDC 140ma mounted on CONCRETE OR BRICK WALL. (DO NOT MOUNT IN CEILING TILE)					PS
FILLED OUTLET BASIS INDICATES INTEGRAL INTEGRAL SURGE OUTLETS IN ADDITION TO POWER RECEPTACLES				46"		TAGGED NOTE				AS NOTED		CALL INITIATION STATION				46"		COMBINATION OUTLET: NUMBER BESIDE OUTLET INDICATES NUMBER OF VOICE JACKS				1'-6"		MORTISE KEYSWITCH / ALTERNATE (MAINTAINED STOP/GREEN AND RED BICOLOR LED 12 OR 24 VOLT STAINLESS STEEL SINGLE GANG FACE PLATE.					RS
GFCI RECEPTACLE IN CONGENERATION WITH SWITCH (PROVIDE DIVIDER IF LIGHTING CIRCUIT IS 277V)				CLG		REVISION TAG				AS NOTED		LCD WALL DISPLAY				1'-6"		TELEMETRY ANTENNA				CLG		(2) OMRON LY2F 12VDC RELAYS, (2) OMRON PF19BA RELAY SOCKETS (SEE DETAIL FOR MOUNTING LOCATION)					RS
DUPLEX RECEPTACLE, CEILING MOUNTED				CLG		REVISION TAG				AS NOTED		PAGING MICROPHONE				1'-6"		OUTLET (VOICE ONLY): PAYPHONE TYPE				AS REQ'D	PAY	DOC INTERLOCK, HOLDS HEATING AND AIR OFF UNTIL SECURITY SYSTEM HAS BEEN DISARMED.					BI
QUADRIPLX RECEPTACLE				1'-6"		EQUIP-1						PAGING SYSTEM AMPLIFIER/TUNER CABINET				46"								ALL SECURITY DEVICES INDICATED WITH "W6" SHALL BE PROVIDED WITH WIREGUARD FOR PROTECTION.					WG
JUNCTION BOX, CEILING OR WALL				AS NOTED		EQUIP-1						CLOCKS												CLASSROOM A / EQUIPMENT					
VOLTAGE/1PH RECEPTACLE, AS NOTED				AS NOTED		EQUIP-1						ANALOG CLOCK				84"								CEILING MOUNTED PROJECTOR					CG
VOLTAGE/3PH RECEPTACLE, AS NOTED				1'-6"		EQUIP-1						ELAPSED TIMER				84"								AV SYSTEM CABLEING TERMINATIONS / WALLPLATE					AV
"DOO-HOUSE" TYPE TWIN DUPLEX RECEPTACLE WITH ONE DUPLEX RECEPTACLE ON BOTH SIDES				ON CNTR.		EQUIP-1						DIGITAL CLOCK: SINGLE FACE				84"								CLASSROOM PROJECTOR SPEAKER					SE
SS INDICATES SURGE SUPPRESSION TYPE OUTLETS(S)				SS		EQUIP-1						DIGITAL CLOCK: DUAL FACE				84"								SMARTBOARD					SB
GROUND FAULT PROTECTED DUPLEX WITH WEATHER-PROOF "WHILE IN USE" TYPE DIE-CAST OR CONDUIT PLATE WITH LOCKABLE ENCLOSURE AT OUTLET - SEE SPECIFICATIONS.				2'-2"		EQUIP-1						CLOCK SYSTEM HEAD END				84"								SMARTBOARD WITH INTEGRAL PROJECTOR					P SB
DUPLEX FOR ELECTRIC WATER COOLER: COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR TO CONCEAL OUTLET BEHIND COOLER, PROVIDE READILY ACCESSIBLE GFI DEVICE AT 18" ADJACENT TO WATER COOLER.						EQUIP-1																		CART / CEILING / WALL PROJECTOR (AS NOTED)					P
FIRE ALARM						EQUIP-1																		LOCAL / SOUND					
MAIN CONTROL PANEL CENTRAL PROCESSING UNIT (CPU)				6'-6" TO TOP	FACP	KITCHEN EQUIPMENT OUTLET COUPLING CONNECTION (SEE DETAIL)						PANEL FURNITURE DUPLEX RECEPTACLE. PROVIDE ALL WIRING AS REQUIRED, COORDINATE EXACT INSTALLATION REQUIREMENTS AND LOCATIONS WITH OWNER'S PANEL FURNITURE VENDOR						MAIN DISTRIBUTION FRAME - REFERENCE DATA SYSTEM SCHEMATICS AND DETAILS FOR ADDITIONAL REQUIREMENTS						WALL MICRO-PHONE OUTLET: SINGLE				1'-4"	MO
PULL STATION : DOUBLE ACTION				46" TO LEVER	F	MOTOR CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE						PAGING MICROPHONE				1'-6"		INTERMEDIATE DISTRIBUTION FRAME - REFERENCE DATA SYSTEM SCHEMATICS AND DETAILS FOR ADDITIONAL REQUIREMENTS						WALL MICRO-PHONE OUTLET(S) (AS NOTED)				1'-4"	MO 2, 3 4
KEYED, LOCKED PULL STATION : DOUBLE ACTION. STATION SHALL BE IN BE OPERABLE VIA KEY IN POSSESSION OF STAFF.				46" TO LEVER	F	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						PAGING SYSTEM AMPLIFIER/TUNER CABINET				46"		TELECOMMUNICATIONS SYSTEM BACKBOARD, PROVIDE 96"X 3/4" FIRE RETARDANT PLYWOOD BACKBOARD WITH TWO (2) COATS OF NON-CONDUCTIVE, FIRE RETARDANT LIGHT GRAY PAINT, #30 TO GROUND BAR AT MAIN SERVICE SWITCHBOARD, 30-PT GROUND BAR AND A 6'-0", #3 AWG PIGTAIL AT BACKBOARD. INSTALL BOARD AT 2' AFF. (LENGTH OF BOARD AS INDICATED ON FLOOR PLAN)						FLOOR MICRO-PHONE OUTLET : SINGLE				FLOOR	M
AUDIO/VISUAL NOTIFICATION APPLIANCE				WALL, CLG	F	WEATHERPROOF - NEMA-3R, WET LOCATION LISTED. PROVIDE COVERS, RATINGS, ETC. AS SUITABLE FOR OUTDOORS.						CLOCKS						WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						FLOOR MICRO-PHONE OUTLET(S) (AS NOTED)				FLOOR	M2,M3,M4
AUDIO/VISUAL NOTIFICATION APPLIANCE				WALL, CLG	F	EXPLOSION PROOF - PROVIDE WIRING METHODS, ENCLOSURES, RATINGS, ETC. AS SUITABLE FOR HAZARDOUS LOCATION.						ANALOG CLOCK				84"		TELECOMMUNICATIONS SYSTEM BACKBOARD, PROVIDE 96"X 3/4" FIRE RETARDANT PLYWOOD BACKBOARD WITH TWO (2) COATS OF NON-CONDUCTIVE, FIRE RETARDANT LIGHT GRAY PAINT, #30 TO GROUND BAR AT MAIN SERVICE SWITCHBOARD, 30-PT GROUND BAR AND A 6'-0", #3 AWG PIGTAIL AT BACKBOARD. INSTALL BOARD AT 2' AFF. (LENGTH OF BOARD AS INDICATED ON FLOOR PLAN)						AUDITORIUM SYSTEM SOUND SPEAKER				SEE SPECS	AS
BELL / LIGHT				80"	BL	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						ELAPSED TIMER				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						CAFETERIA SYSTEM SOUND SPEAKER				SEE SPECS	CS
BELL ONLY				80"	BL	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						DIGITAL CLOCK: SINGLE FACE				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						AUDITORIUM SYSTEM SYSTEM AMPLIFIER				5'-0" TO CENTER	SA
PHOTO-ELECTRIC SMOKE DETECTOR				CLG	SD	MOTOR CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE						DIGITAL CLOCK: DUAL FACE				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						CAFETERIA SYSTEM SYSTEM AMPLIFIER				5'-9" TO CENTER	SS-C
PHOTO-ELECTRIC SMOKE DETECTOR FOR PATIENT ROOM MONITORING (SEE RISER)				CLG	SD	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						LECTURE HALL SOUND SYSTEM SPEAKER				5'-0" TO CENTER	SS-L
PROJECTED BEAM SMOKE DETECTOR; (EMITTER (BE) AND RECEIVER (BR))				CLG	BE	EXPLOSION PROOF - PROVIDE WIRING METHODS, ENCLOSURES, RATINGS, ETC. AS SUITABLE FOR HAZARDOUS LOCATION.						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						LECTURE HALL SOUND SYSTEM SPEAKER				5'-0" TO CENTER	SS-L
HEAT DETECTOR				CLG	HD	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						CLASSROOM SOUND SYSTEM SPEAKER				SEE SPECS	CS
CARBON MONOXIDE DUCT DETECTOR				ABV CLG	CD	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.						BAND SOUND SYSTEM SPEAKER				SEE DWGS	BS
CARBON MONOXIDE ALARM: SINGLE STATION W/SOUNDER BASE				CLG	CH	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
CARBON MONOXIDE AUDIO/VISUAL NOTIFICATION APPLIANCE				WALL	F	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
DOOR HOLDER : WALL TYPE				WALL	DH	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
DOOR HOLDER : CLOSURE TYPE				ABV DOOR	DH	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
DUCT SMOKE DETECTOR				ABV CLG	DH	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
CONNECTION TO SPRINKLER FLOW SWITCH WITH ADDRESSABLE MODULE					PS	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
CONNECTION TO SPRINKLER TAMPER SWITCH WITH ADDRESSABLE MODULE					PS	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
PRESSURE SWITCH					PS	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
REMOTE L.C.D. FIRE ALARM ANNUNCIATOR				54"	FABA	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
REMOTE FIRE ALARM ANNUNCIATOR W/ MICROPHONE				54"	FAXM	WIRINGGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED						CLOCK SYSTEM HEAD END				84"		WIRELESS ACCESS POINT OUTLET WITH PROVISIONS FOR (1) DATA OUTLET FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH FACETRACE ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE 30' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS WITH THE OWNER AND ADJUST OUTLET LOCATIONS AT SUBSTANTIAL COMPLETION TO ACCOMMODATE OWNER'S WAP LOCATIONS.											
POST																													

[illegible]

FIRST FLOOR POWER AND SYSTEMS PLAN
1/8" = 1'-0"



SECOND FLOOR POWER AND SYSTEMS PLAN
1/8" = 1'-0"

ELECTRICAL POWER NOTES

- REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR THE LOCATION OF ALL ELECTRICAL AND TELEPHONE MOUNTED ELECTRICAL DEVICES.
- CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE SEPARATELY IDENTIFIED BY A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF THE SAME NEUTRAL CONDUCTOR IS USED FOR THE SAME CONDUCTOR FOR THOSE INDICATED, CONTRACTOR SHALL IDENTIFY ALL DEPENDENT NEUTRAL CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUCTOR AS REQUIRED PER NEC 300.17 AND ANNEX D. CONTRACTOR SHALL IDENTIFY ALL DEPENDENT NEUTRAL 100 / 210 (4) CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL ELECTRICAL DEVICES TO BE INSTALLED DURING CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING IN HEALTHCARE FACILITY. PROVIDE CLEAR ADHESIVE LABELS TO COVERPLATES IN PATIENT CARE AREAS. MARK IDENTIFICATION OF SERVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- RECEPTACLES THAT ARE CONTROLLED BY AN AUTOMATIC MEANS SUCH AS OCCUPANCY SENSOR OR PHOTOEYE SHALL BE IDENTIFIED AND MARKED IN ACCORDANCE WITH NEC 406.3(E).
- LOCATIONS OF ELECTRICAL CONNECTIONS AND ELECTRICAL DEVICES TO BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC 110.26. CONTRACTOR SHALL MAINTAIN REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL DEVICES IN THESE AREAS. NAMEPLATES OR ACCESS PANELS OR THROUGH THE CEILING SHALL BE USED TO ACCESS DEVICES OR EQUIPMENT BY OTHER TRADES.

TAGGED NOTES



NOT FOR
CONSTRUCTION

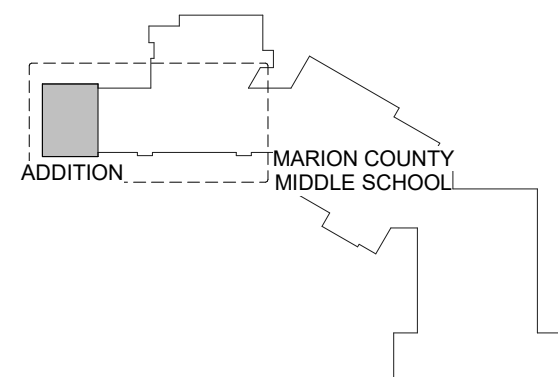
POWER AND SYSTEMS PLANS
MARION COUNTY MIDDLE SCHOOL ADDITION & RENOVATION
FOR:
MARION COUNTY BOARD OF EDUCATION
LEBANON, KENTUCKY



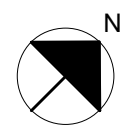
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Project No:	1928/XMCM19
Drawn By:	Author
Rev'd By:	Checker

KEY PLAN



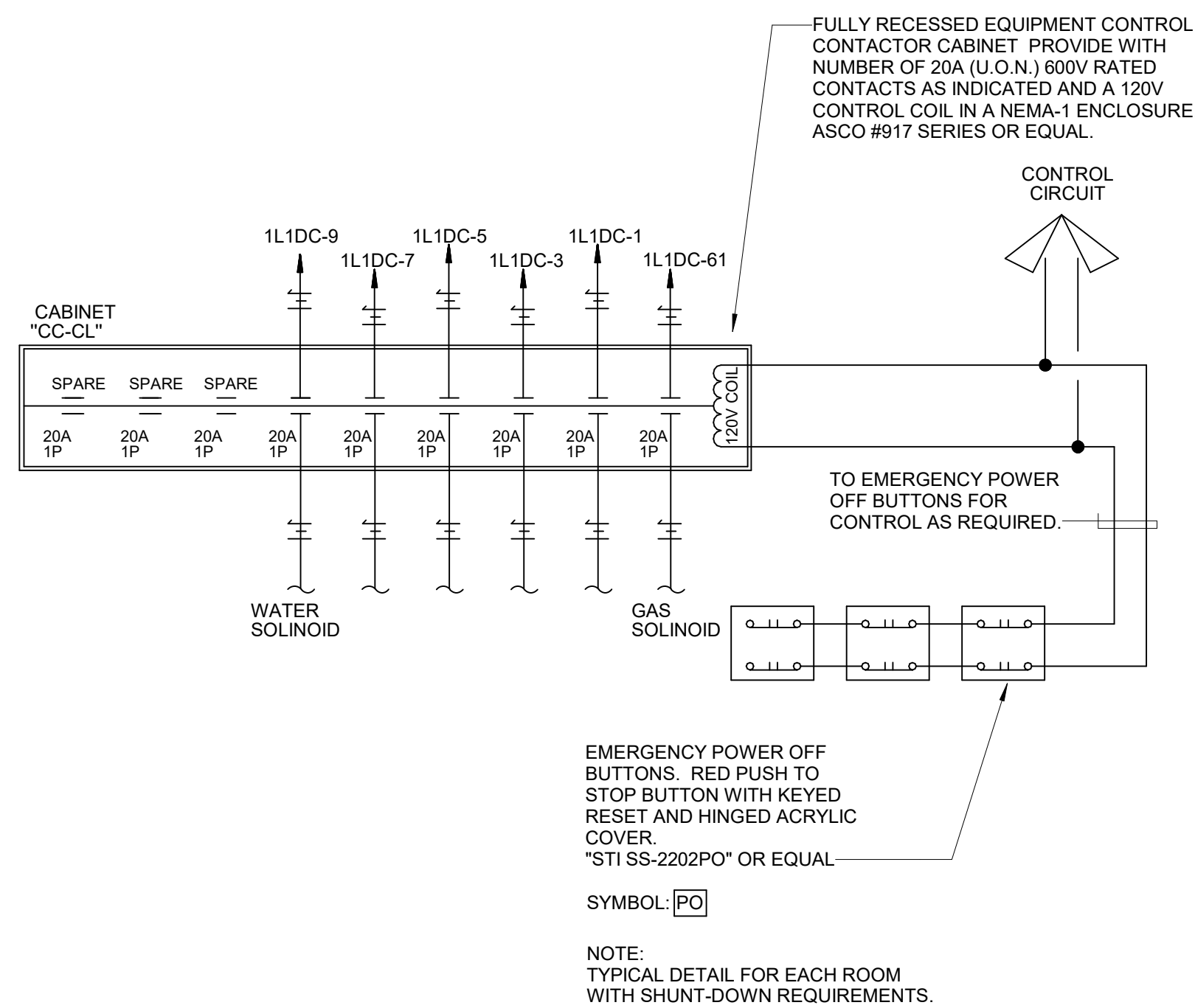
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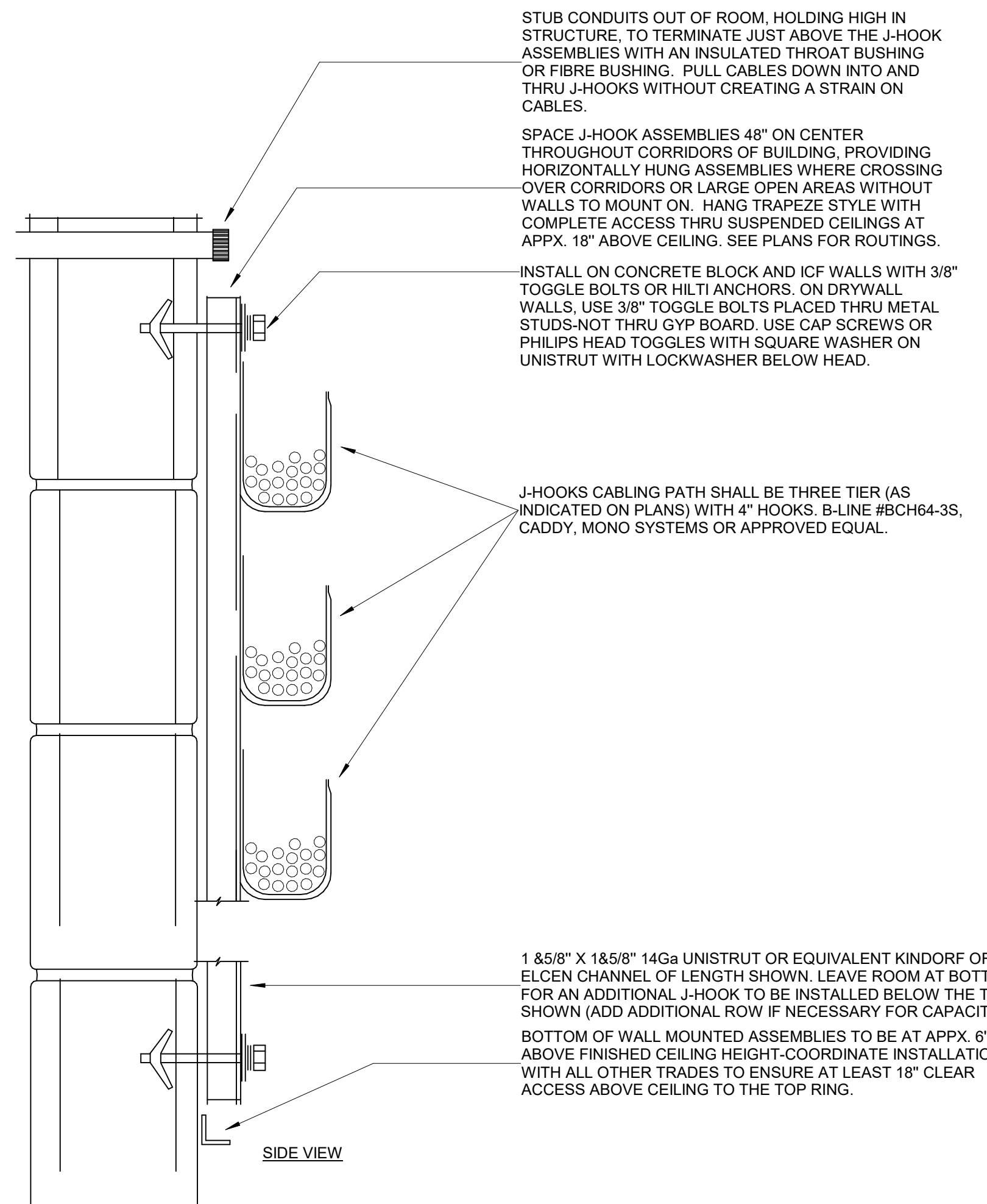
POWER AND SYSTEMS PLANS

DATE ISSUED:
JULY 31, 2019

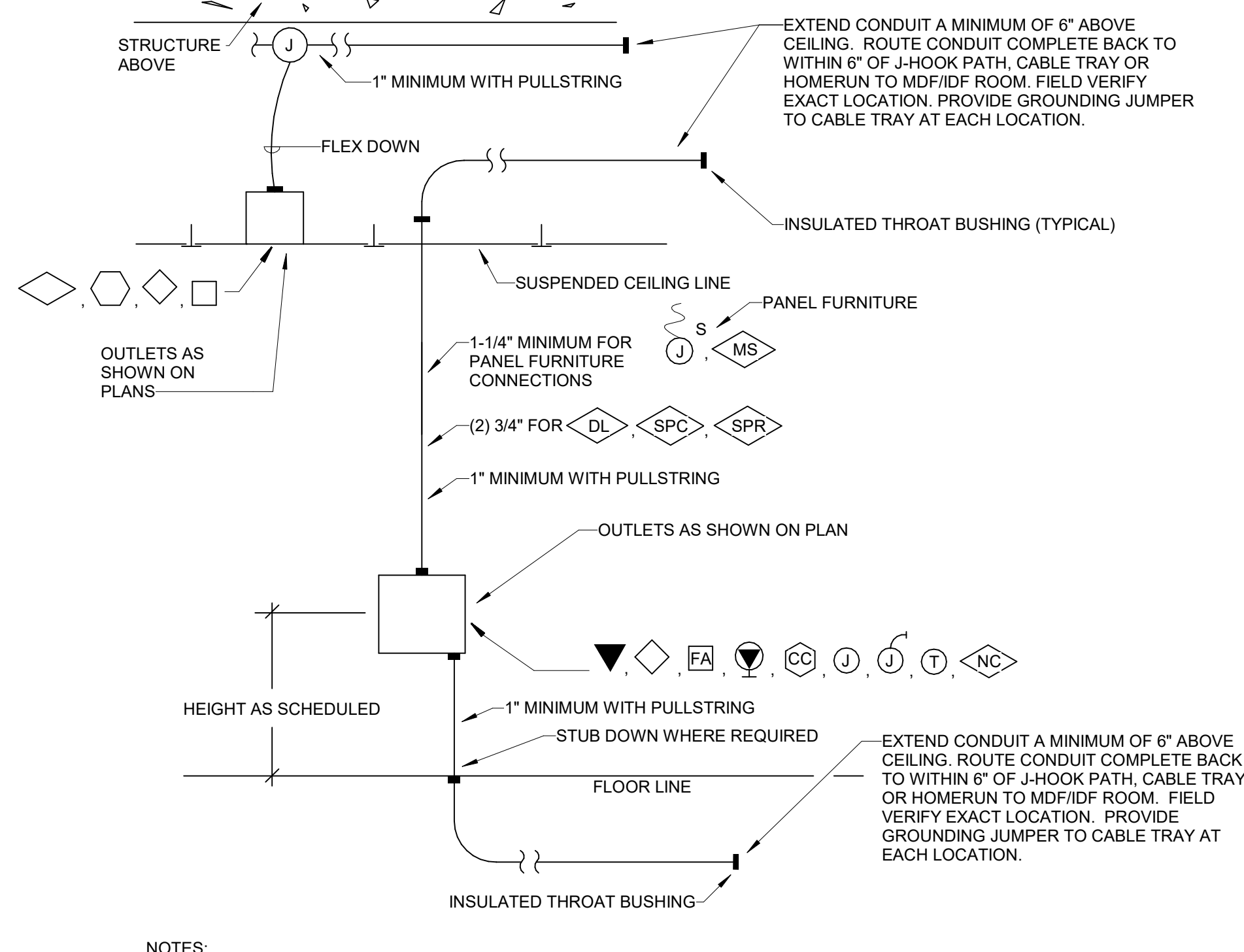
E-2.1

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3 CHEMISTRY LAB CONTROL CONTACTOR
"CC-CL"
SCALE: NONE

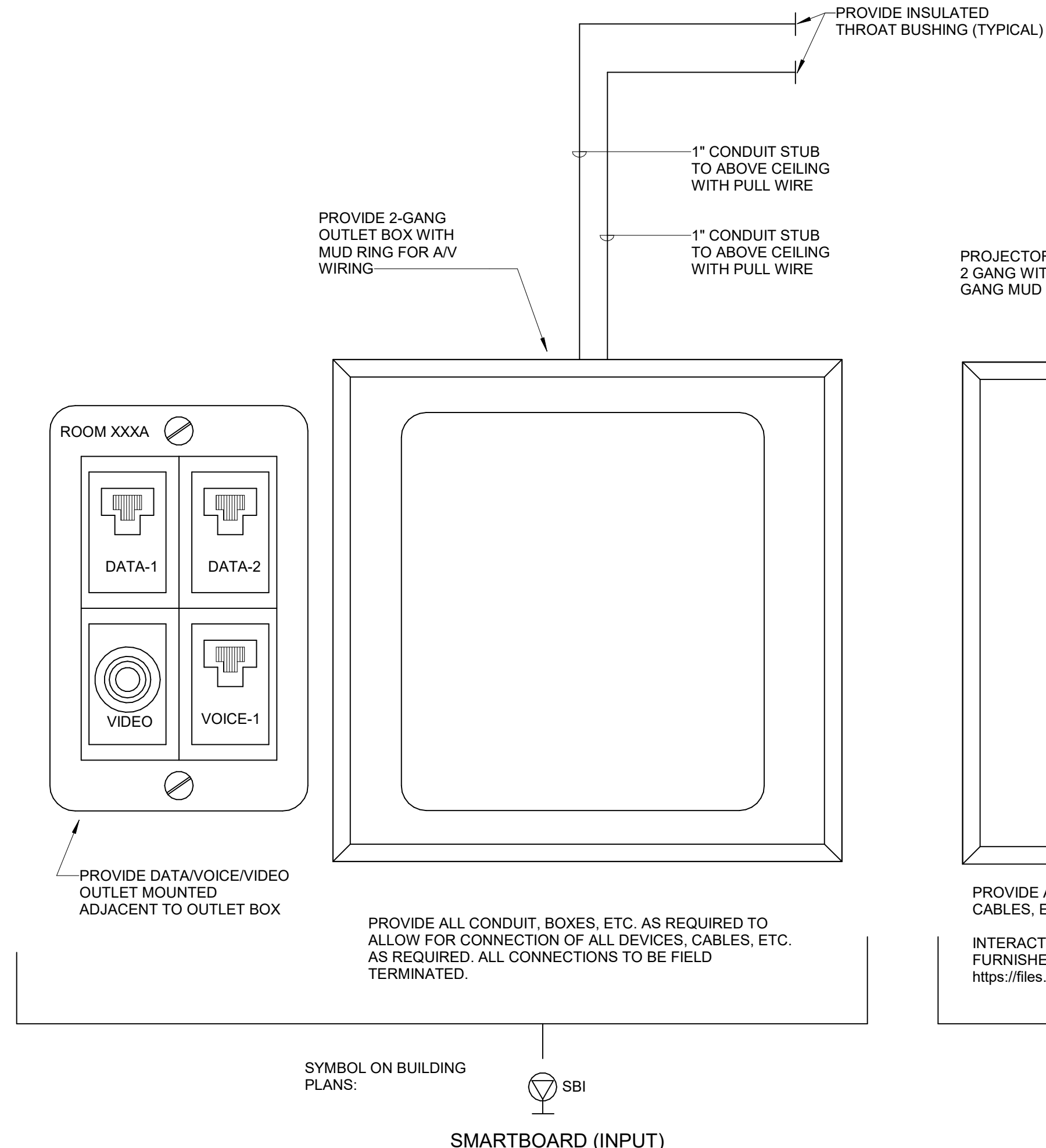


4 J HOOK INSTALLATION DETAIL

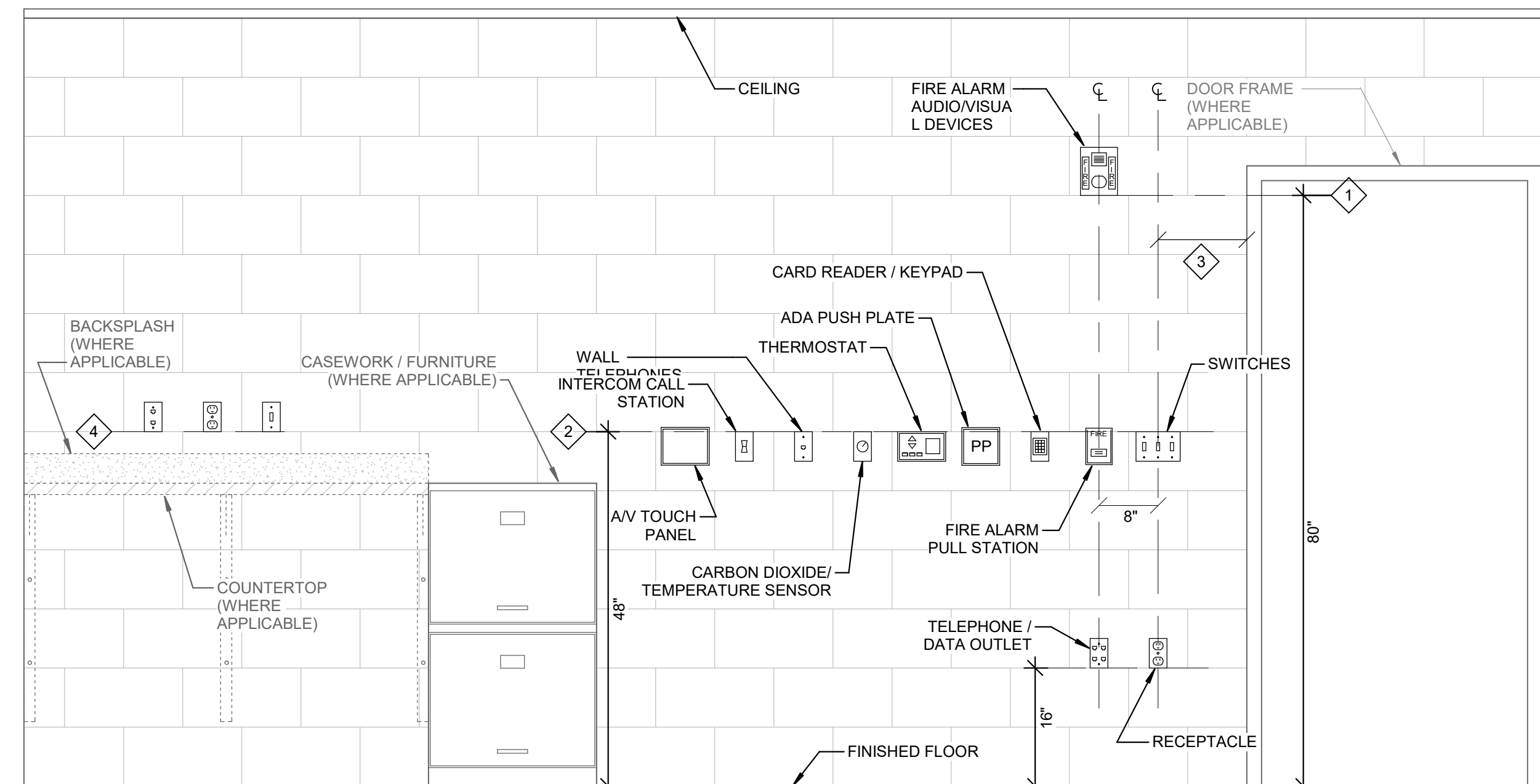


1. EXTEND CONDUIT TO NEAREST WIRING PATH UNLESS CABLING TERMINATES AT ANOTHER OUTLET IN THE SAME ROOM (IN WHICH CASE, STUB CONDUIT OUT ABOVE THE ROOM'S CEILING). WHEN THE WIRING PATH IS THROUGH A WALL OR CEILING, PROVIDE A DRUGS ACCESS CONTROL. CONDUITS SHALL STUB ABOVE ACCESSIBLE CEILING FOR VENDOR FURNISHED ACCESS CONTROL CABLING, ETC.
2. WHEN OPEN CABLING IS INSTALLED WITH ENVIRONMENT AIR PLenums, SUCH CABLING SHALL MEET NEC REQUIREMENTS FOR INSTALLATIONS.
3. LABEL BACK OF OUTLET BOXES AND ENDS OF CONDUIT WITH UNIQUE NUMBER TO IDENTIFY EACH STUB-UP. USE PERMANENT MARKER PEN, 3/4" HIGH LETTERS. MATCH NUMBER ON OUTLET BACK TO END OF CONDUIT.
4. WHEN TELEPHONE CABLE AND CABLE TV OUTLETS WITHIN 6" OF POWER RECEPTACLE, WIRE POWER RECEPTACLE IS SHOWN ON POWER PLANS IN SAME GENERAL LOCATION.

5 ROUGHING-IN DETAIL FOR STUB-OUTS
SCALE: NONE



1 SMARTBOARD OUTLET INSTALLATION DETAIL

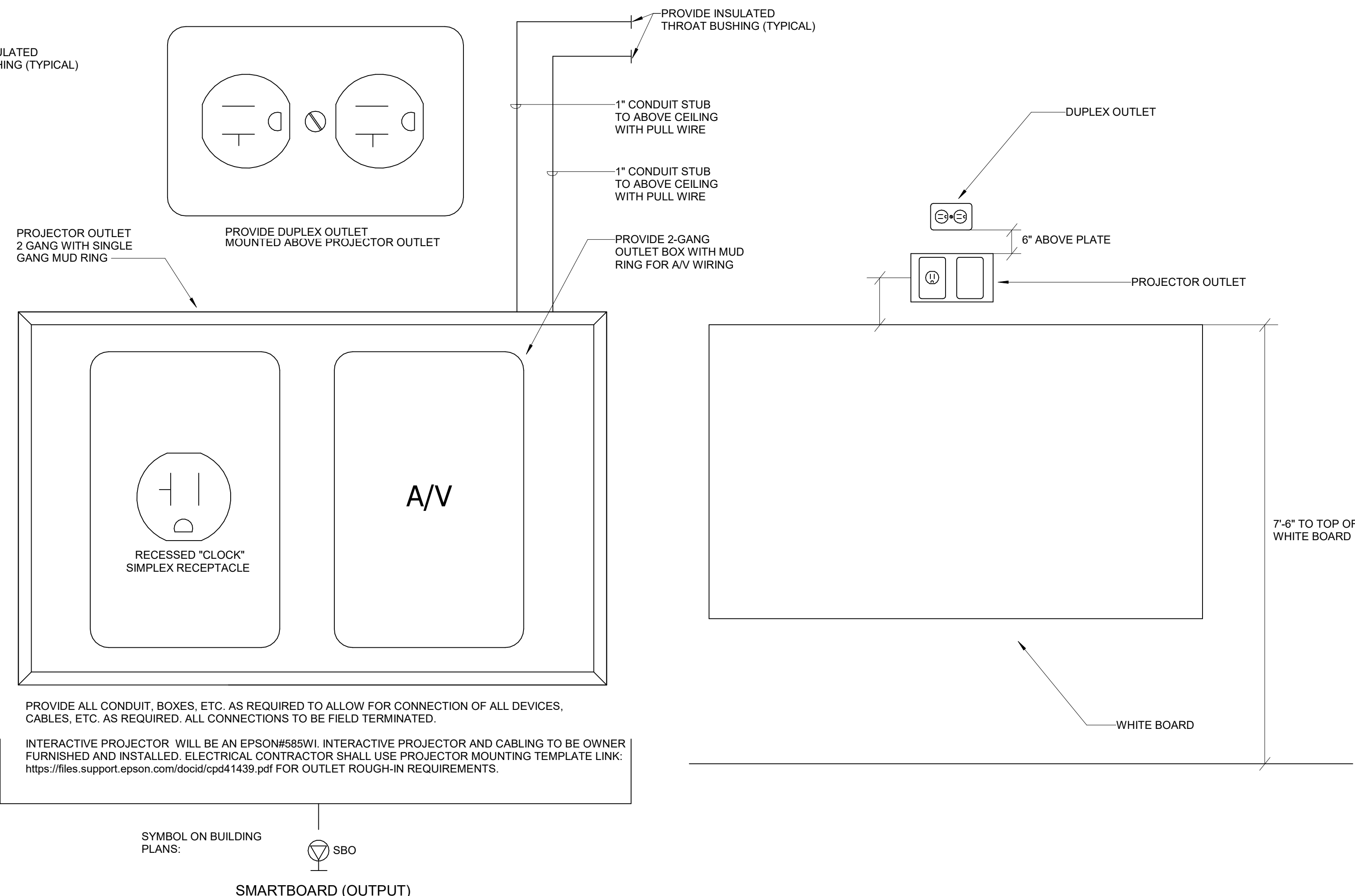


- DEVICE MOUNTING DETAIL - GENERAL NOTES:
- A. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN TO BE MOUNTED AT A SIMILAR HEIGHT, ALIGN HORIZONTALLY ALONG TOP OF DEVICE BACKBOX (AS SHOWN IN DETAIL AND DESCRIBED IN KEY NOTE #2).
- B. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN MOUNTED AT DIFFERENT HEIGHTS, ALIGN VERTICALLY ALONG THE CENTERLINE OF THE DEVICE BACKBOX (AS SHOWN IN DETAIL).
- C. FOR ANY WALL OTHER THAN PAINTED GYPSUM BOARD OR CMU, DEVICE LOCATIONS MUST BE FIELD APPROVED BY ENGINEER OR ARCHITECT PRIOR TO INSTALLATION OF FINISHES.

- DEVICE MOUNTING DETAIL - KEY NOTES:

- [illegible]

2 TYPICAL WALL DEVICE MOUNTING DETAIL
SCALE: NONE



INTERACTIVE PROJECTOR WILL BE AN EPSON#585WI. INTERACTIVE PROJECTOR AND CABLING TO BE OWNER FURNISHED AND INSTALLED. ELECTRICAL CONTRACTOR SHALL USE PROJECTOR MOUNTING TEMPLATE LINK: <https://files.support.epson.com/docid/cpd41439.pdf> FOR OUTLET ROUGH-IN REQUIREMENTS.

INTERACTIVE PROJECTOR WILL BE AN EPSON#585WI. INTERACTIVE PROJECTOR AND CABLING TO BE OWNER FURNISHED AND INSTALLED. ELECTRICAL CONTRACTOR SHALL USE PROJECTOR MOUNTING TEMPLATE LINK: <https://files.support.epson.com/docid/cpd41439.pdf> FOR OUTLET ROUGH-IN REQUIREMENTS.

PROVIDE ALL CONDUIT, BOXES, ETC. AS REQUIRED TO ALLOW FOR CONNECTION OF ALL DEVICES, CABLES, ETC. AS REQUIRED. ALL CONNECTIONS TO BE FIELD TERMINATED.

INTERACTIVE PROJECTOR WILL BE AN EPSON#585WI. INTERACTIVE PROJECTOR AND CABLING TO BE OWNER FURNISHED AND INSTALLED. ELECTRICAL CONTRACTOR SHALL USE PROJECTOR MOUNTING TEMPLATE LINK: <https://files.support.epson.com/docid/cpd41439.pdf> FOR OUTLET ROUGH-IN REQUIREMENTS.

[illegible]

ELEC - LUMINAIRE SCHEDULE									
TYPE	DESCRIPTION	BASIS OF DESIGN	EQUAL MANUFACTURERS	MOUNTING	LAMPS / CCT	MINIMUM LUMENS	MAXIMUM WATTAGE	VOLTAGE	REMARKS
A2							59	277	
A4							59	277	
B							59	277	
OA1							37	277	

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PANELBOARD AND WIRING SCHEDULE

PANEL: A

VOLTAGE: 208Y/120V, 3P, 4W

AMPERES: 225 A

MAIN TYPE: SPD:

MOUNTING: SURFACE

AVAILABLE FAULT CURRENT:

PANEL INTERRUPTING RATING:

LOCATION: STORAGE 227

SUPPLY FROM:

CIRCUIT DESCRIPTION										CIRCUIT DESCRIPTION					
WIRE	GND	C	OC	P	CKT	A	B	C		CKT	P	OC	C	GND	WIRE
					1					2					
					3					4					
					5					6					
					7					8					
					9					10					
					11					12					
					13					14					
					15					16					
					17					18					
					19					20					
					21					22					
					23					24					
					25					26					
					27					28					
					29					30					
					31					32					
					33					34					
					35					36					
					37					38					
					39					40					
					41					42					
					43					44					
					45					46					
					47					48					
					49					50					
					51					52					
					53					54					
TOTAL LOAD (KVA):						0.0 KVA	0.0 KVA	0.0 KVA							
TOTAL CURRENT (A):						0 A	0 A	0 A							
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS							
								TOTAL CONNECTED LOAD: 0 VA							
								TOTAL ESTIMATED DEMAND: 0 VA							
								TOTAL CONNECTED CURRENT: 0 A							
								TOTAL ESTIMATED DEMAND CURRENT: 0 A							

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.