

A l t m a n + B a r r e t t A r c h i t e c t s

WHEELER COUNTY MAINTENANCE BUILDING ADDITION

for WHEELER COUNTY SCHOOL SYSTEM

ARCHITECTURAL

ALTMAN + BARRETT ARCHITECTS P.C.
117 WEST MAIN STREET
HAHIRA, GEORGIA 31632
(229) 585-9018

CIVIL/LANDSCAPING

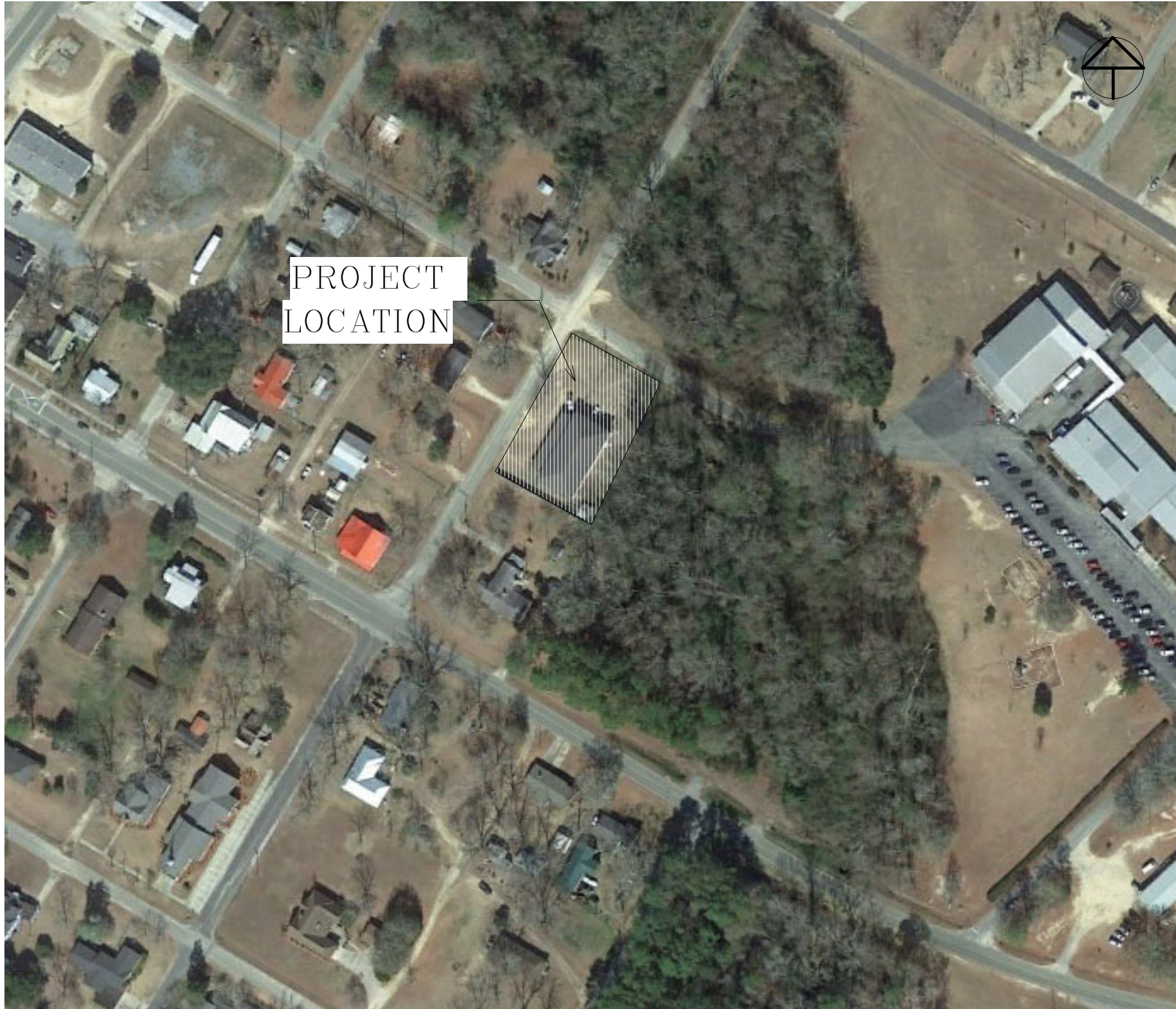
M.E. SACK ENGINEERING
309 NORTH MAIN STREET
HINESVILLE, GEORGIA 31310
(912) 368-5212

STRUCTURAL

LINDSEY & RITTER, INC.
401 EAST JANE STREET
VALDOSTA, GEORGIA 31601
(229) 242-9897

LOCATION MAP

N.T.S.



INDEX TO DRAWINGS

Sheet Number	Sheet Name
--------------	------------

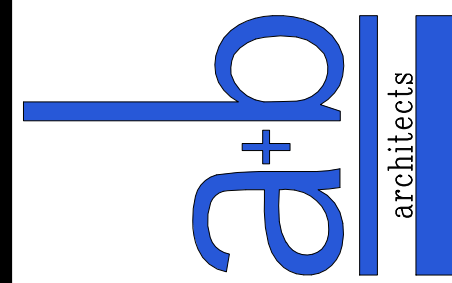
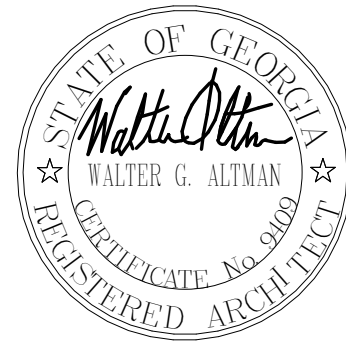
GENERAL	
X1000	COVER SHEET

CIVIL	
C1000	SITE GRADING & EROSION CONTROL

ARCHITECTURE	
A2000	DEMO - LEVEL 1
A2001	LEVEL 1
A2002	ROOF PLAN
A3000	ELEVATIONS
A4000	DOOR SCHEDULE

STRUCTURAL	
S0001	GENERAL STRUCTURAL NOTES
S2000	FOUNDATION PLAN
S5000	TYPICAL FOUNDATION DETAILS
S5100	TYPICAL MASONRY DETAILS
S5101	TYPICAL MASONRY LINTEL DETAILS

Altman + Barrett



Altman + Barrett

a r c h i t e c t s
P.O. BOX 665 – 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

DATE: 08.17.2020

DRAWN: LJ/SB

CHECKED: W. ALTMAN

REVISIONS:

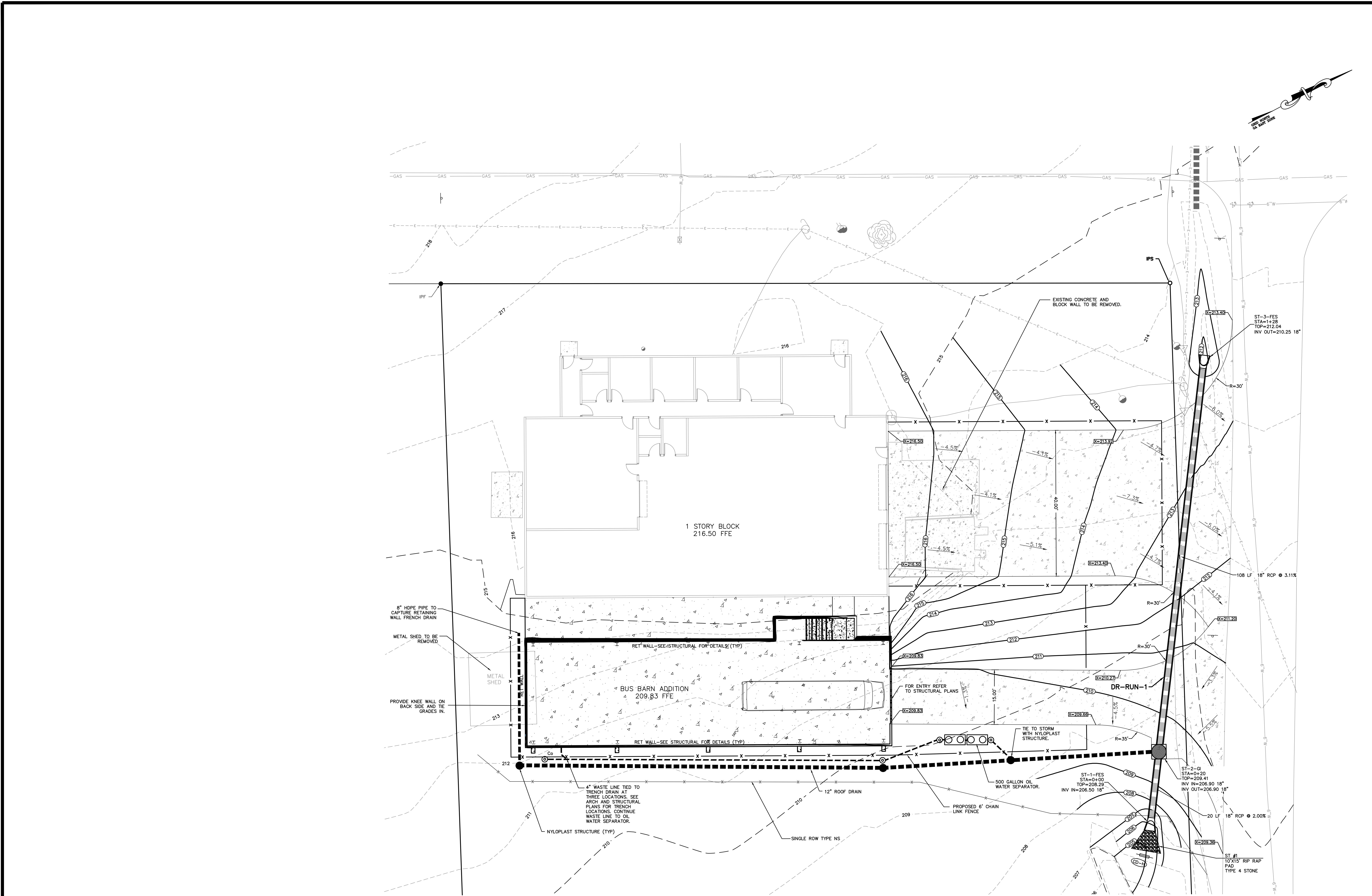
www.altmanbarrettarchitects.com

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

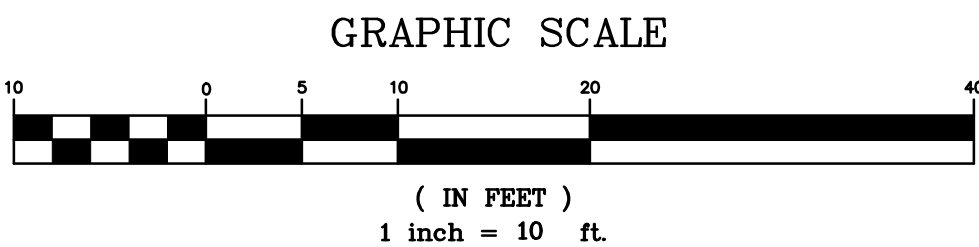
X1000

Drawings are the property of the architect and shall not be reproduced or used without written permission and credit.
© 2020 Altman + Barrett Architects, P.C.

PROJECT NO: 20028



- NOTES:
1. CONTRACTOR TO INSTALL 12" HDPE ROOF DRAINAGE LINE AT MAXIMUM DEPTH WHILE MAINTAINING .5% MINIMUM SLOPE. ALL NYLOPLAST STRUCTURES TO HAVE HEAVY DUTY GRATE OR COVER.
 2. ALL DISTURBED AREAS TO BE REVEGETATED. TEMPORARY GRASSING SHALL BE APPLIED DURING CONSTRUCTION AND ONCE COMPLETE, PERMANENT BERMUDA GRASSING SHALL BE ESTABLISHED. ON SLOPES GREATER THAN 5:1 PROVIDE EROSION MATTING OR SOD.



SITE GRADING AND EROSION CONTROL

MES No. 2019-78

M.E. SACK
ENGINEERING

309 NORTH MAIN STREET
P.O. BOX 649
HINESVILLE, GA 31313
TEL: (912) 368-5212

FACILITY CODE: 753-1053

C1000

DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND SHALL NOT BE REPRODUCED OR USED WITHOUT WRITTEN PERMISSION AND CREDIT
© 2020 ALTMAN + BARRETT ARCHITECTS, P.C.

PROJECT NO: 20028

Altman + Barrett

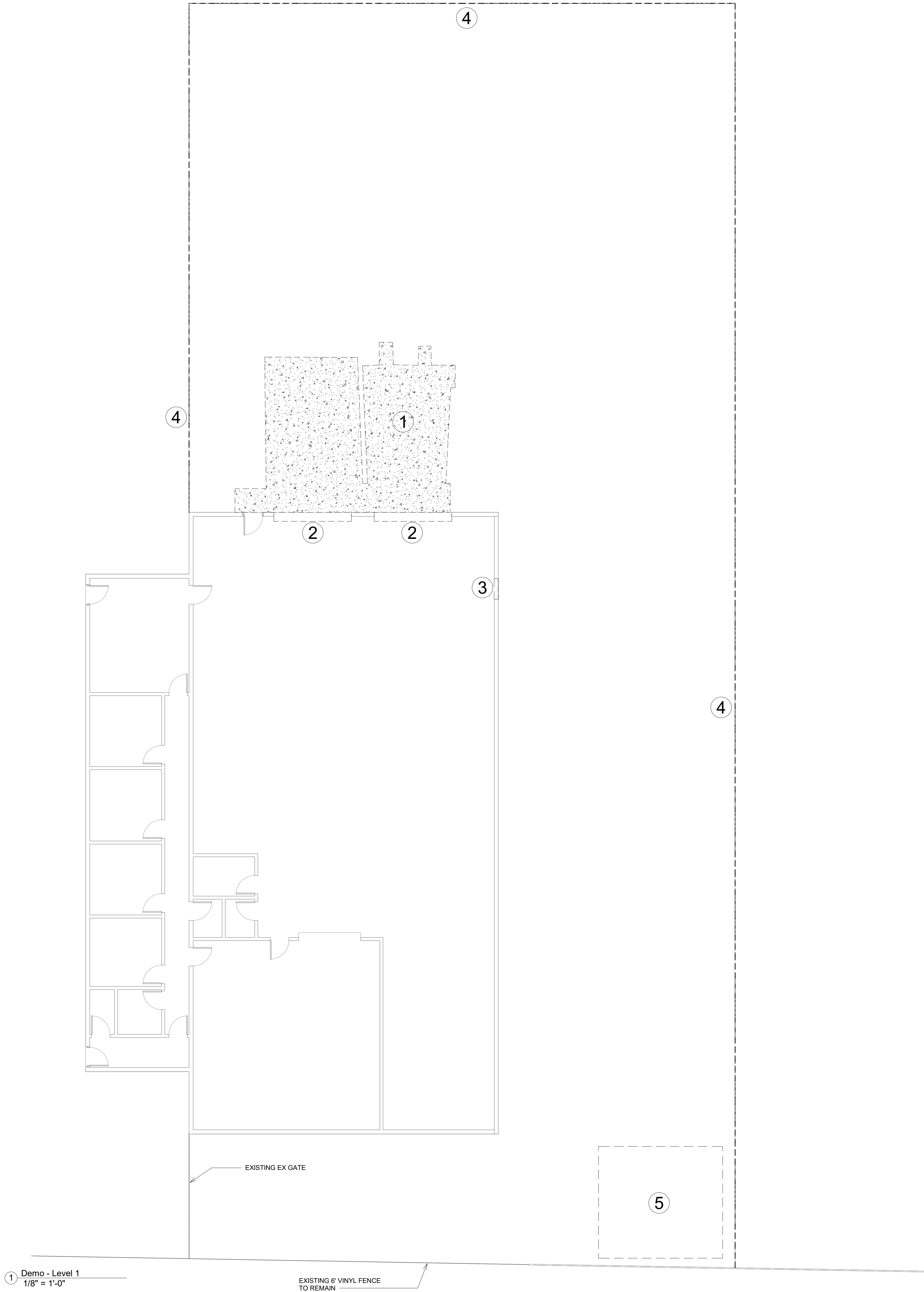


ab
architects

Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

DATE: 09.17.2020
DRAWN: MES
CHECKED: MES
REVISIONS:
www.altmanbarrettarchitects.com

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411



DEMO NOTES	
Note Number	Note Text
1	Demo existing concrete drive
2	Demo existing door and portion of wall for new door
3	Demo portion of wall for new door
4	Demo existing chainlink fence including post foundations
5	Owner to remove metal shed prior to bid

Altman + Barrett

Altman + Barrett

architects

a r c h i t e c t s

P.O. BOX 665 – 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

DATE: 08.17.2020

DRAWN: LJ/SB

CHECKED: W. ALTMAN

REVISIONS:

www.altmanbarrettarchitects.com

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

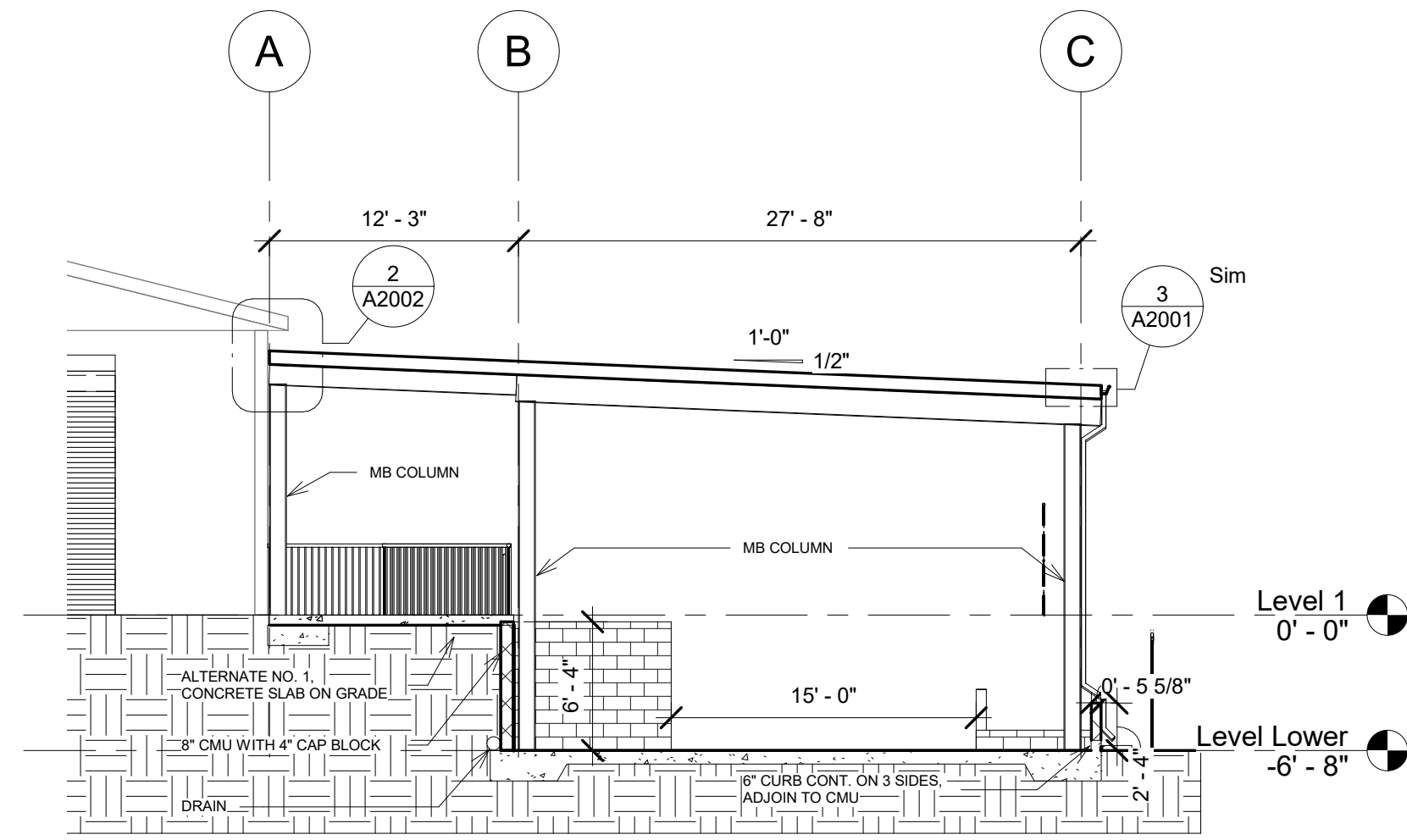
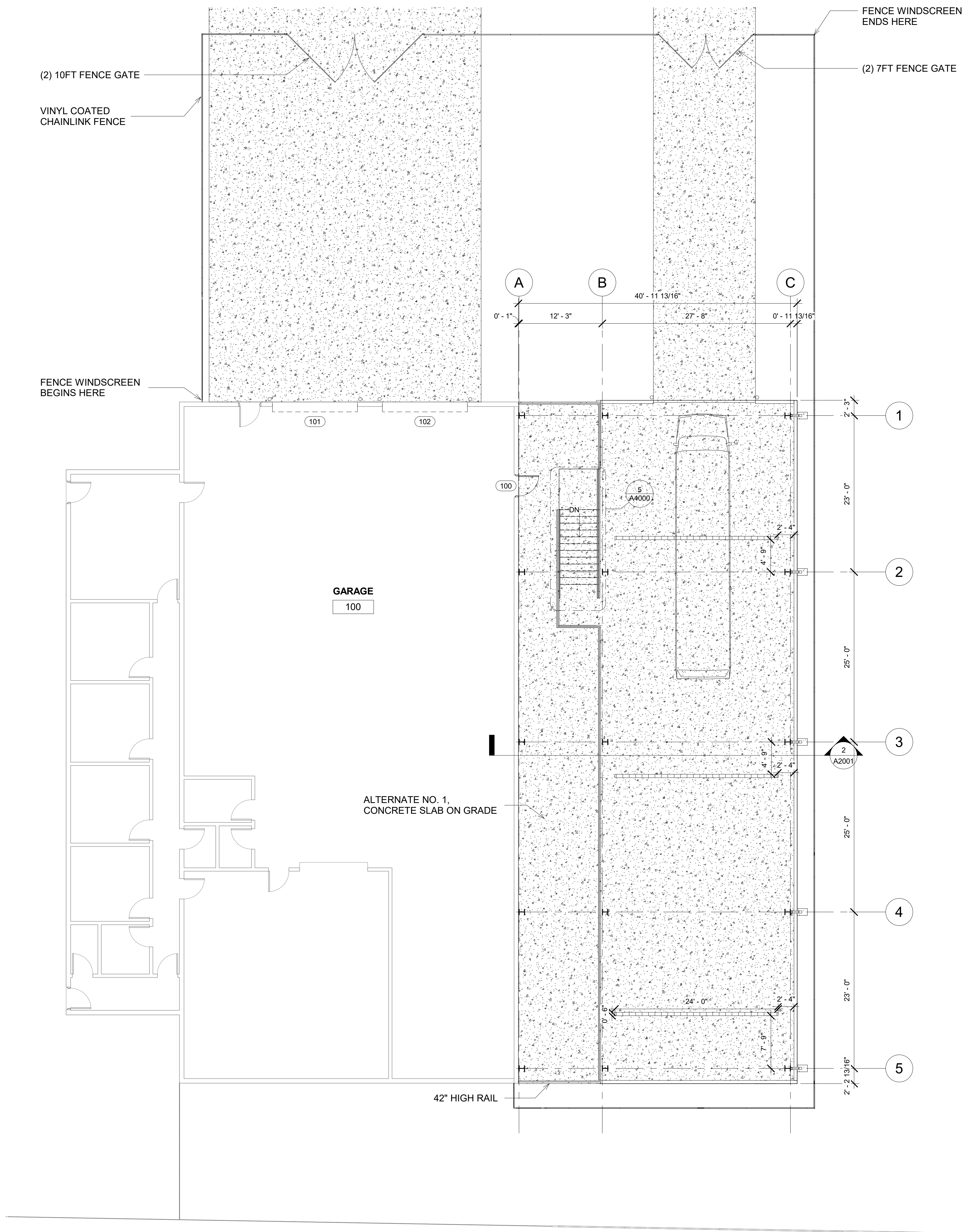
A2000

© 2008 ALTMAN + BARRETT ARCHITECTS, P.C.

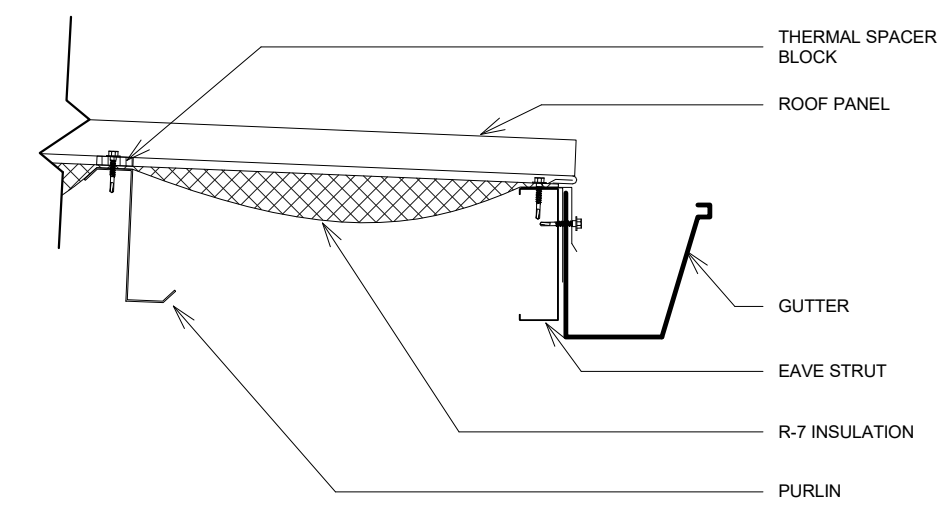
PROJECT NO: 20028



1 Level 1
1/8" = 1'-0"

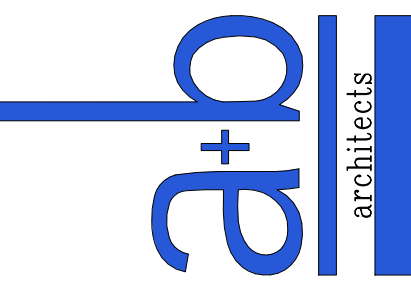


2 Building Section
1/8" = 1'-0"



3 Roof Detail
1 1/2" = 1'-0"

Altman + Barrett



Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

DATE: 08.17.2020
DRAWN: LJ/SB
CHECKED: W. ALTMAN
REVISIONS:
www.altmanbarrettarchitects.com

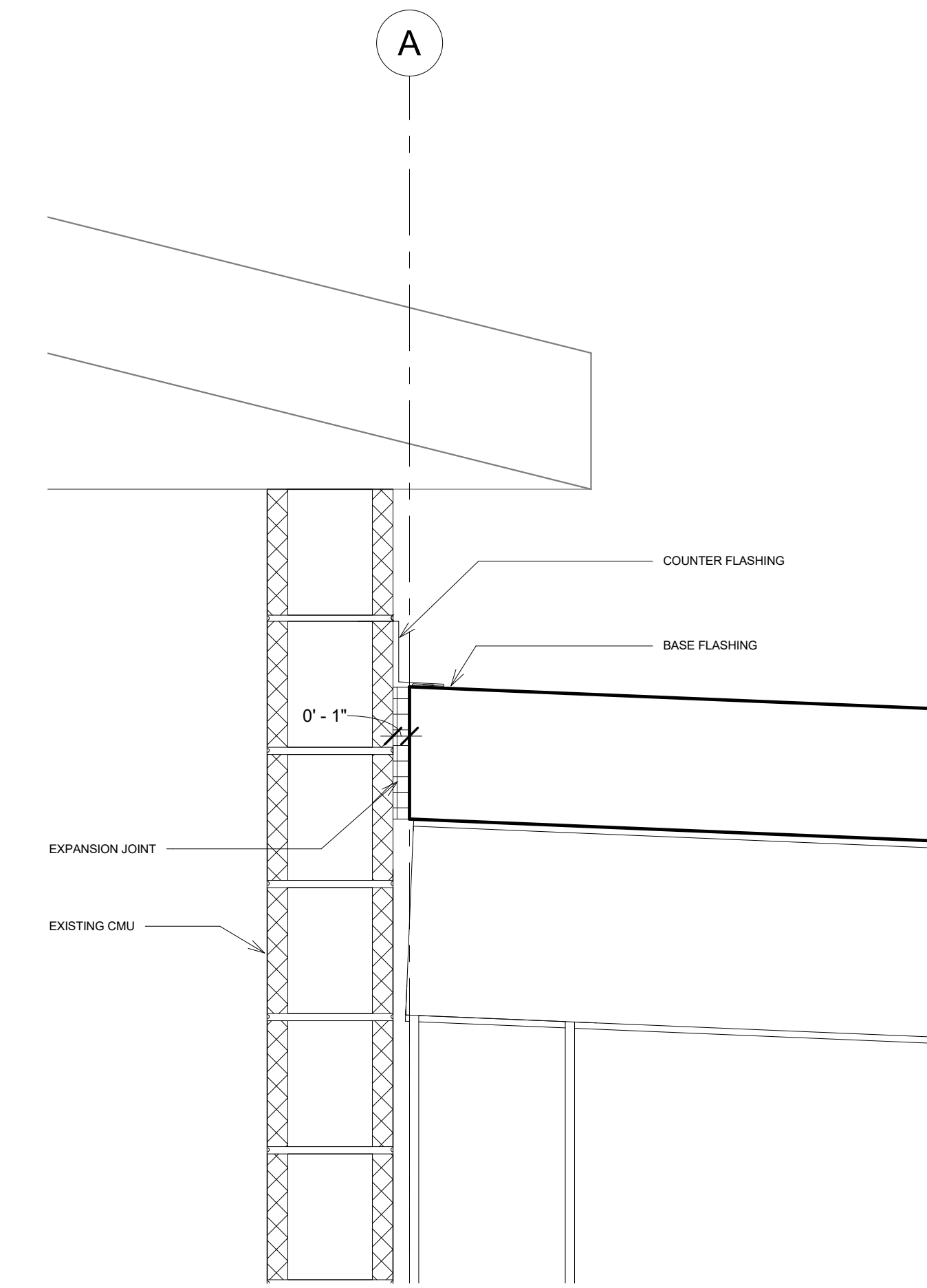
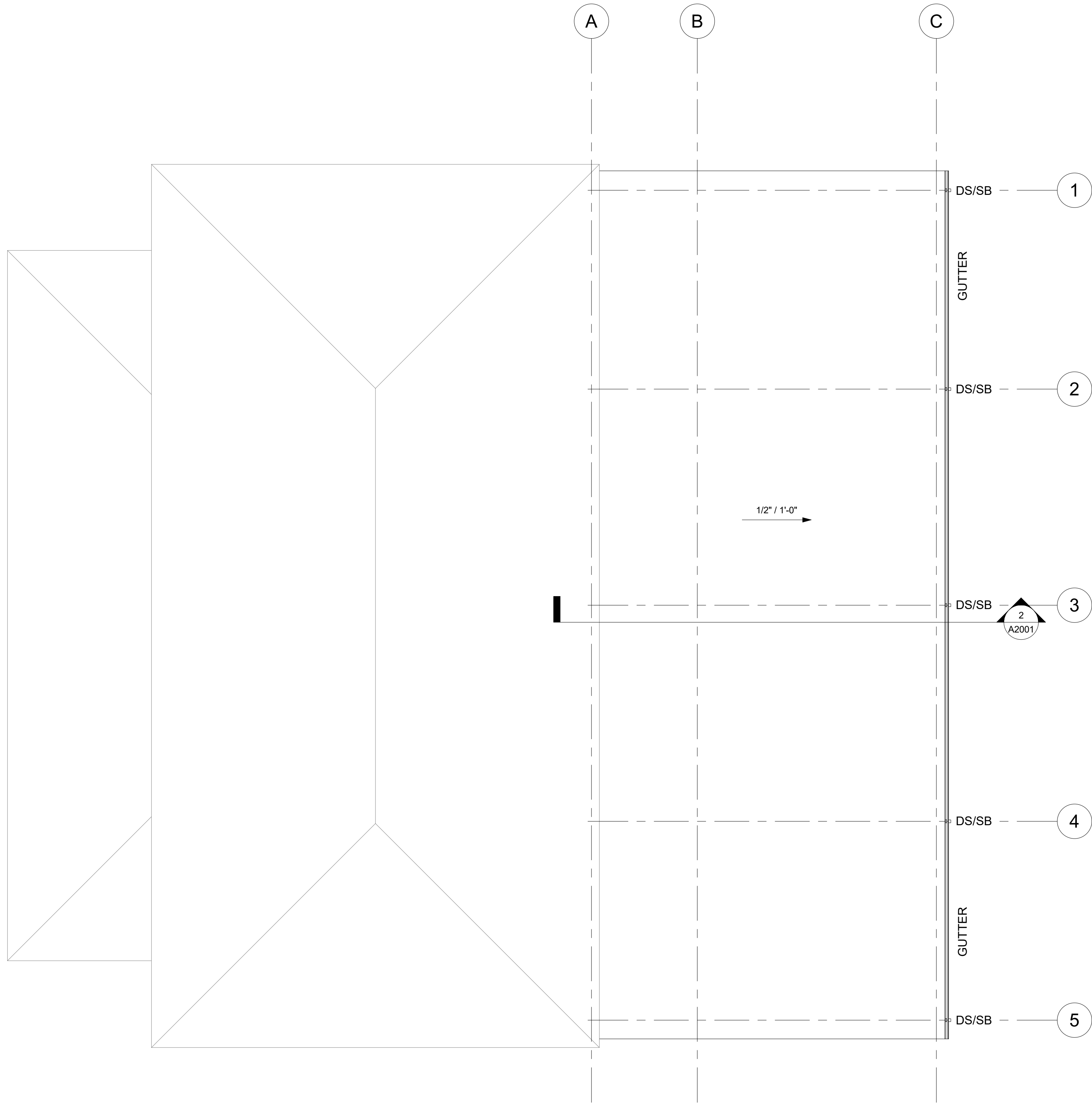
Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

A2001

PROJECT NO: 20028



① Roof
1/8" = 1'-0"



② Roof Expansion JT
1 1/2" = 1'-0"

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

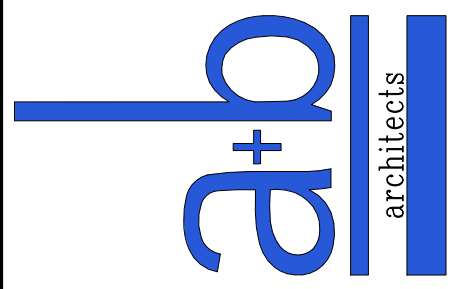
A2002

© 2008 Altman + Barrett Architects, P.C.
ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR USED WITHOUT WRITTEN PERMISSION AND CREDIT.

PROJECT NO: 20028

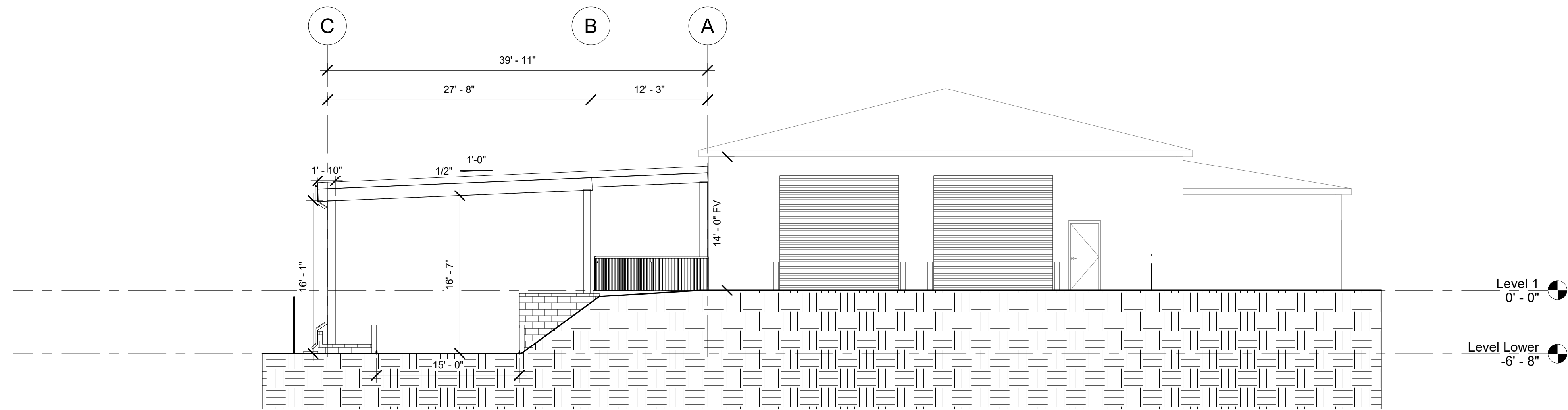
DATE: 08.17.2020
DRAWN: LJ/SB
CHECKED: W. ALTMAN
REVISIONS:
www.altmanbarrettarchitects.com

Altman + Barrett
architects
a r c h i t e c t s
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

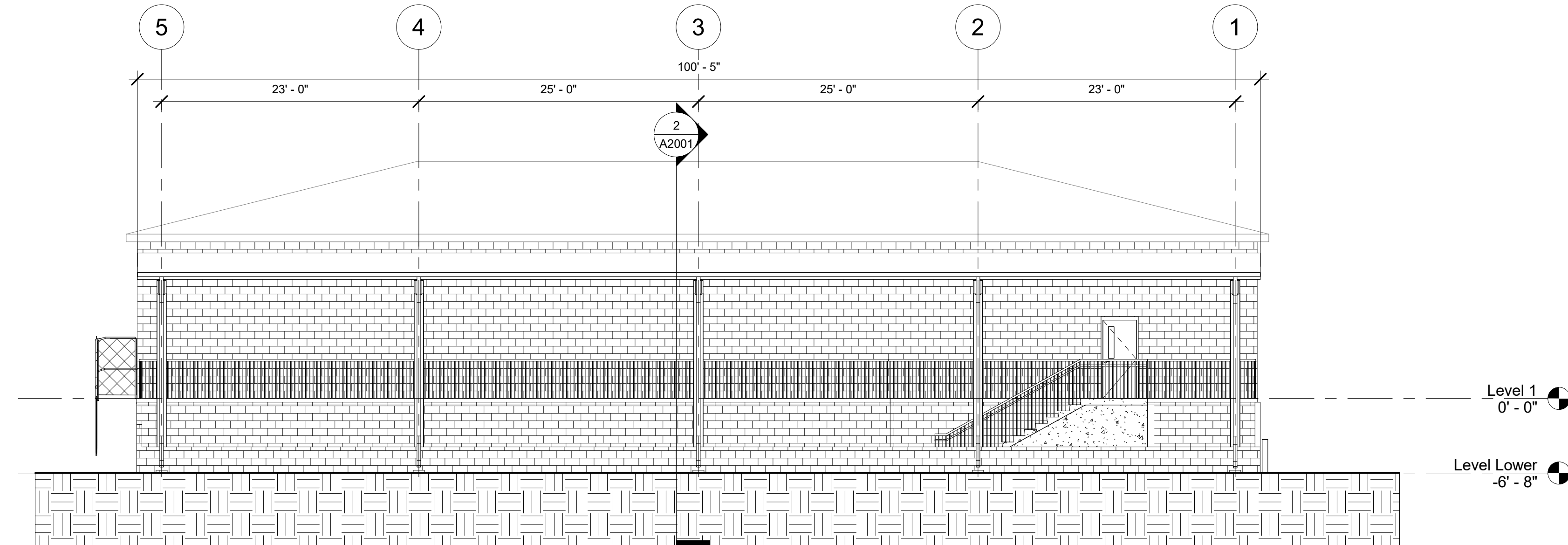


Altman + Barrett

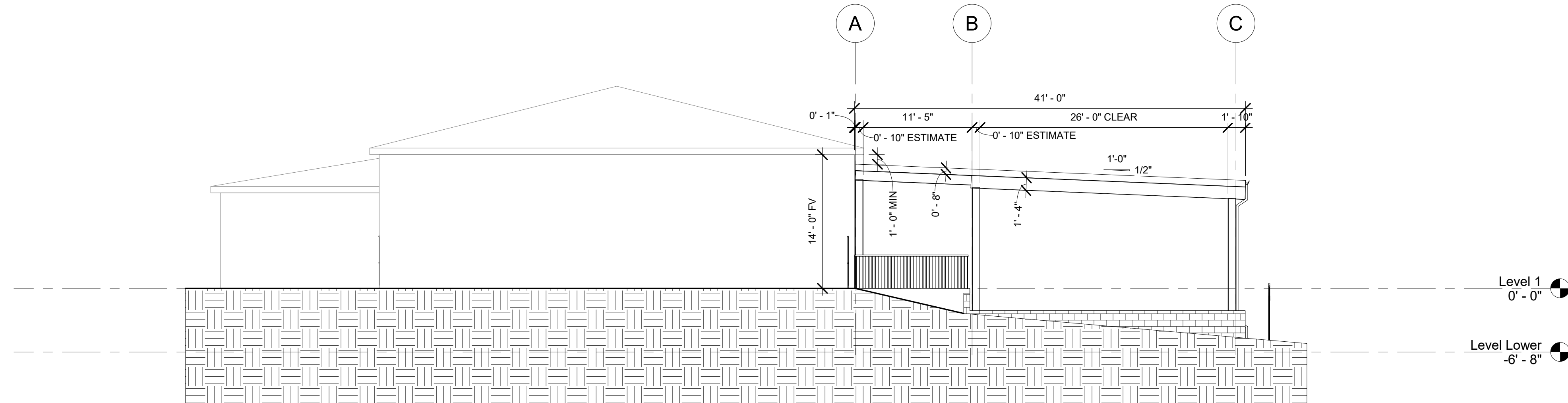
① Elevation
1/8" = 1'-0"



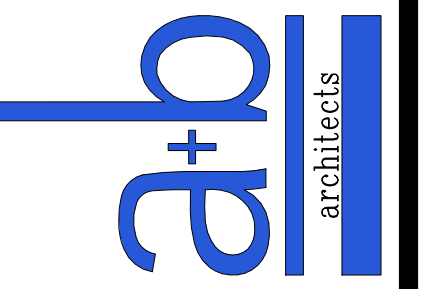
② Elevation
1/8" = 1'-0"



③ Elevation
1/8" = 1'-0"



Altman + Barrett



Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

DATE: 08.17.2020
DRAWN: LJ/SB
CHECKED: W. ALTMAN
REVISIONS:
www.altmanbarrettarchitects.com

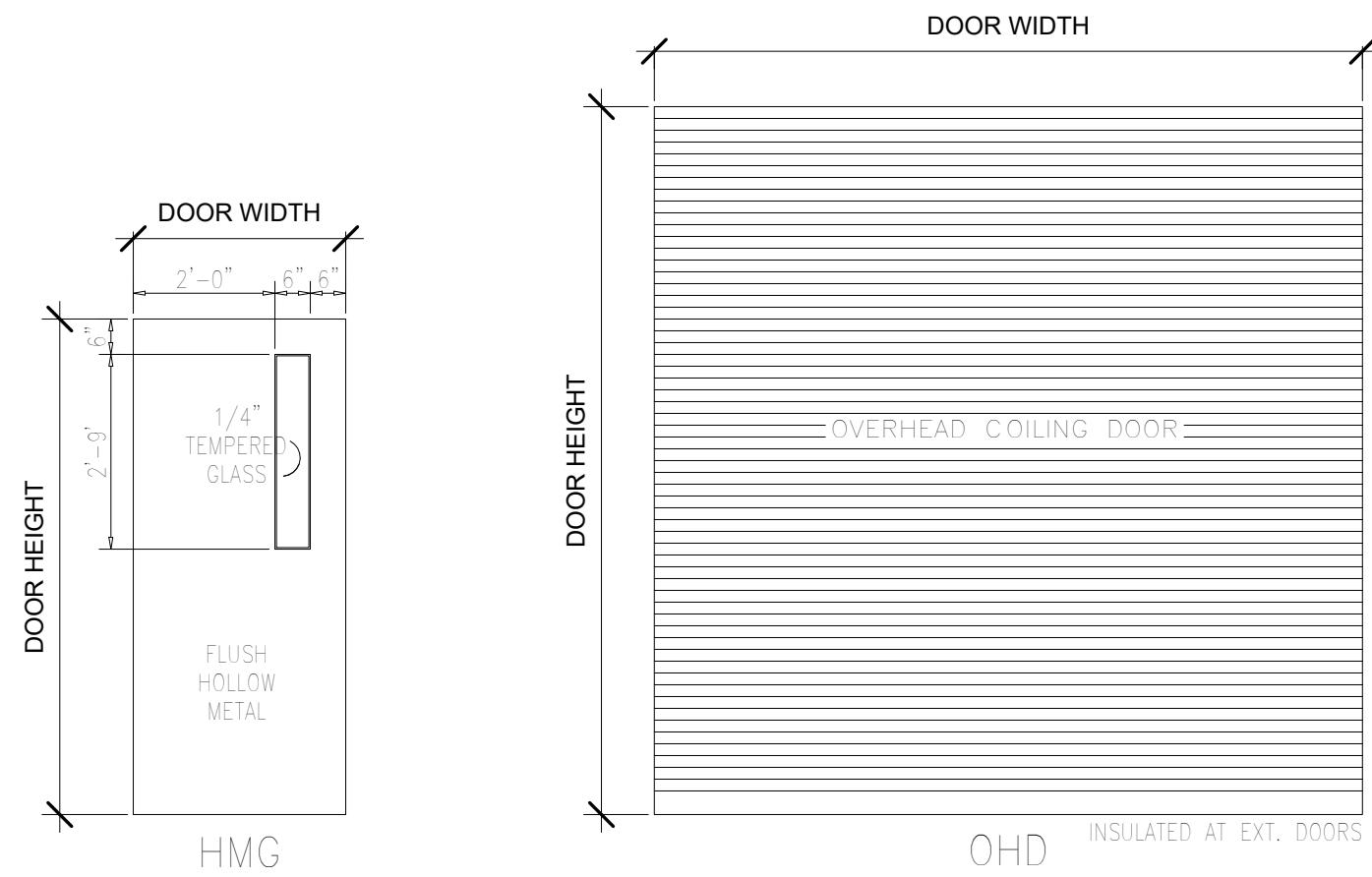
Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

A3000

REVISIONS ARE THE PROPERTY OF THE ARCHITECT.
THEY SHALL NOT BE REPRODUCED OR USED WITHOUT
WRITTEN PERMISSION AND CREDIT.
© 2008 ALTMAN + BARRETT ARCHITECTS, P.C.

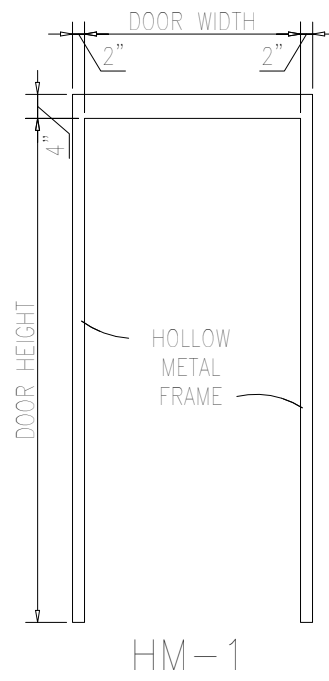
PROJECT NO: 20028

DOOR SCHEDULE										
ROOM NUMBER	DOOR NUMBER	LOCATION	WIDTH	HEIGHT	THICKNESS	DOOR TYPE	FRAME TYPE	DETAILS	COMMENTS	
100	100	GARAGE	3' - 0"	7' - 0"	0' - 1 3/4"	HMG	HM-1			
100	101	GARAGE	12' - 6"	12' - 0"	0' - 0 5/8"	OHD	--		Demo existing door at location	
100	102	GARAGE	12' - 6"	12' - 0"	0' - 0 5/8"	OHD	--		Demo existing door at location	



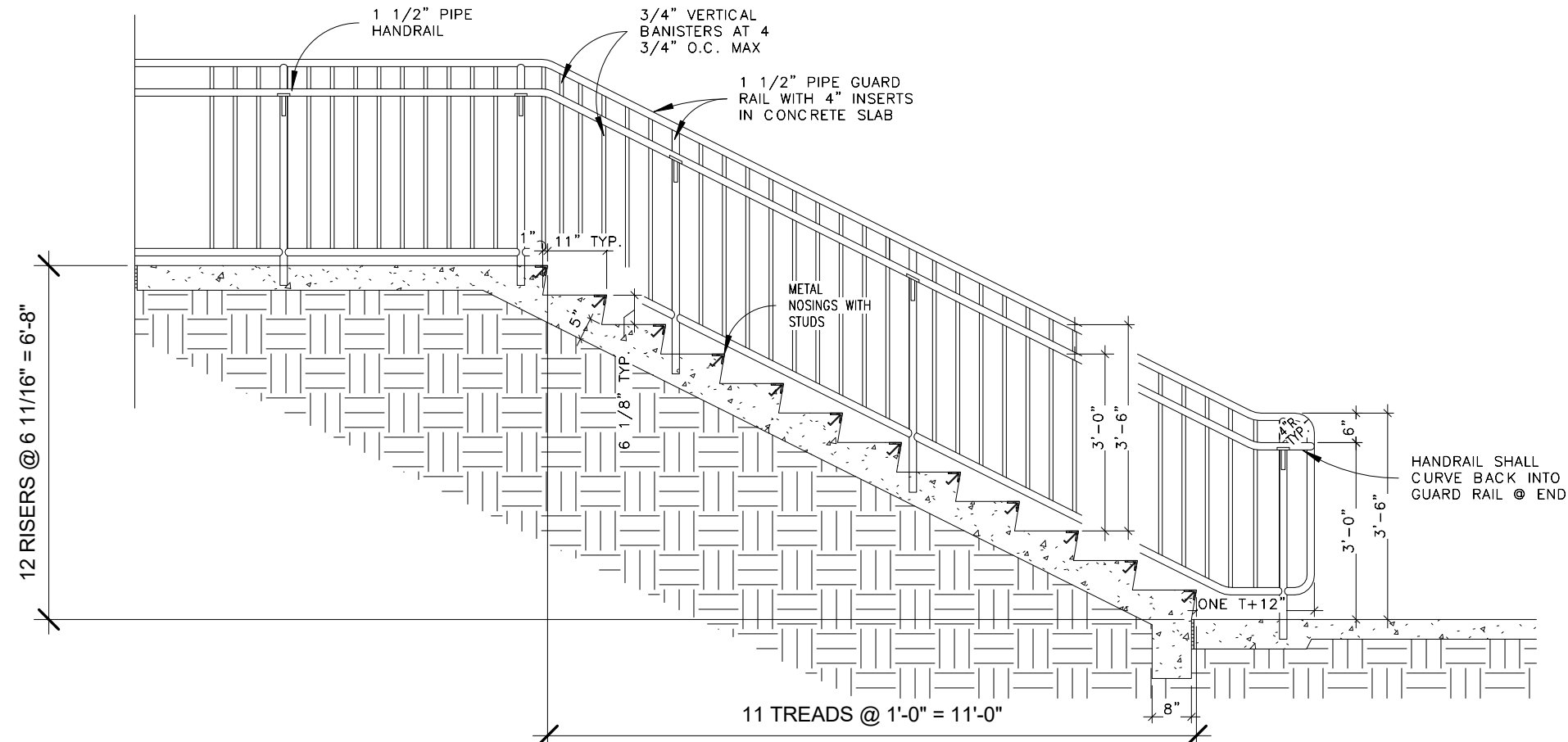
DOOR TYPES

SCALE: 3/8" = 1'-0"

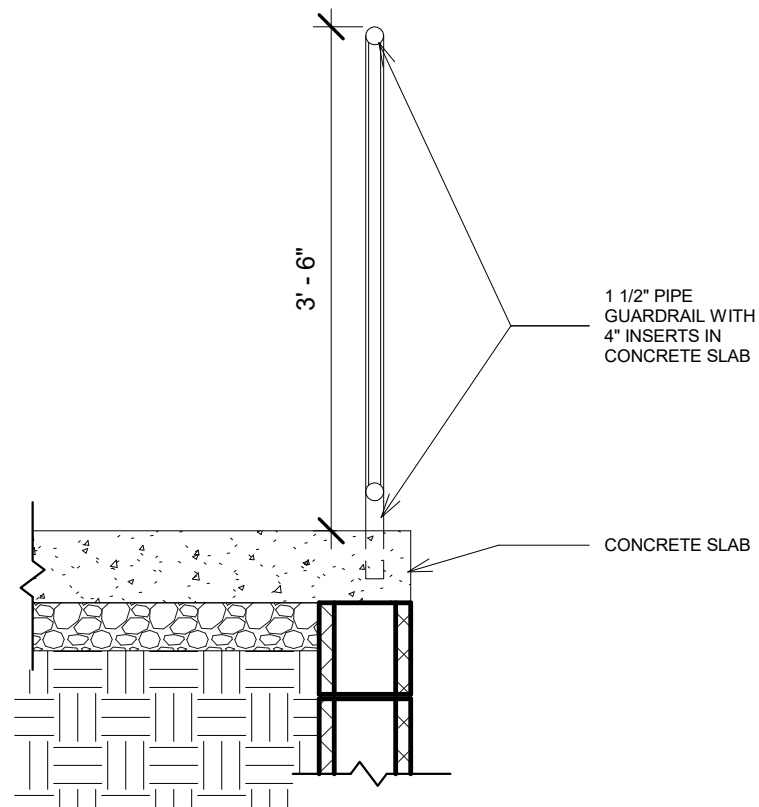


HOLLOW METAL DOOR FRAME TYPE

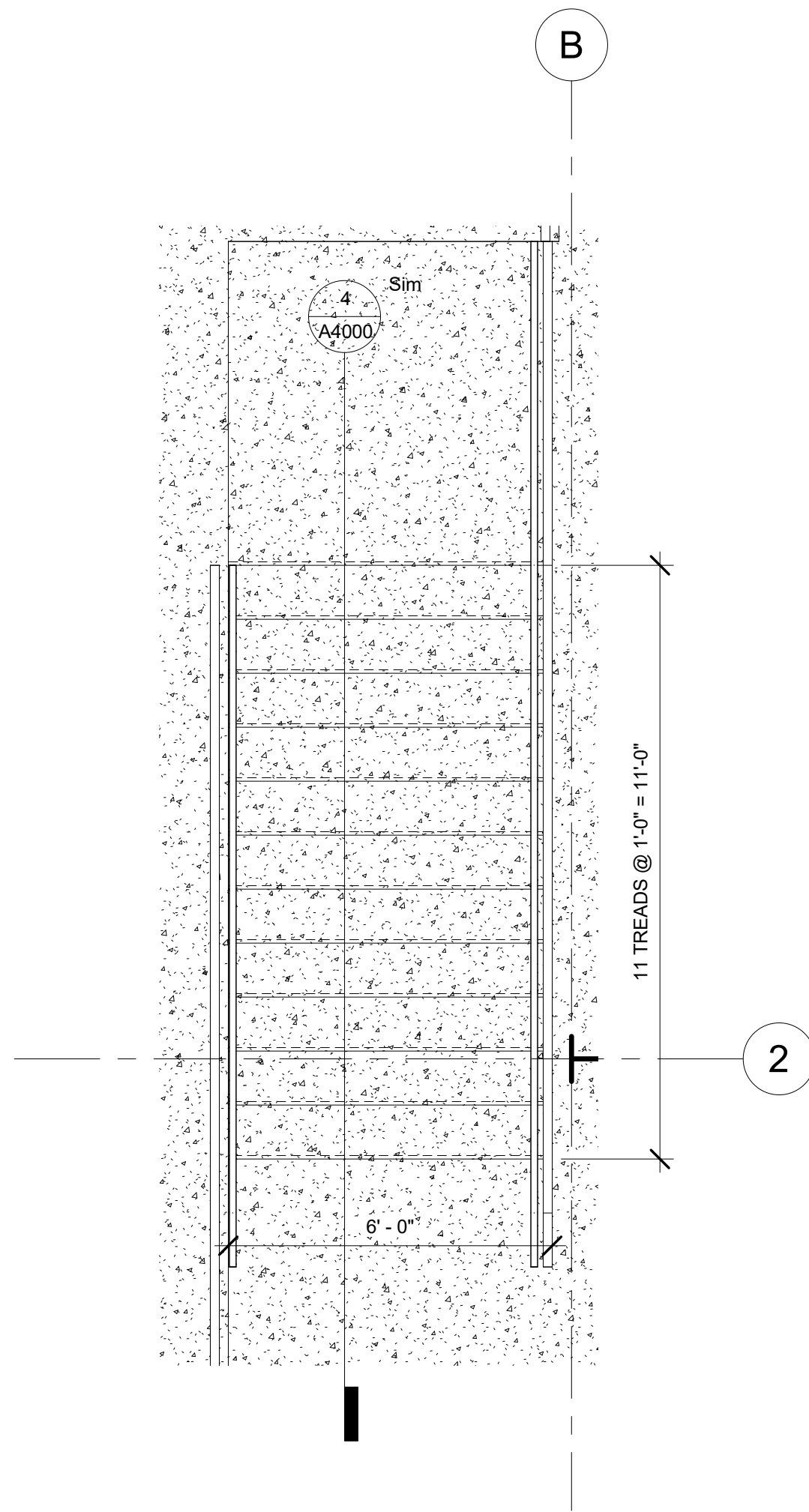
SCALE: 3/8" = 1'-0"



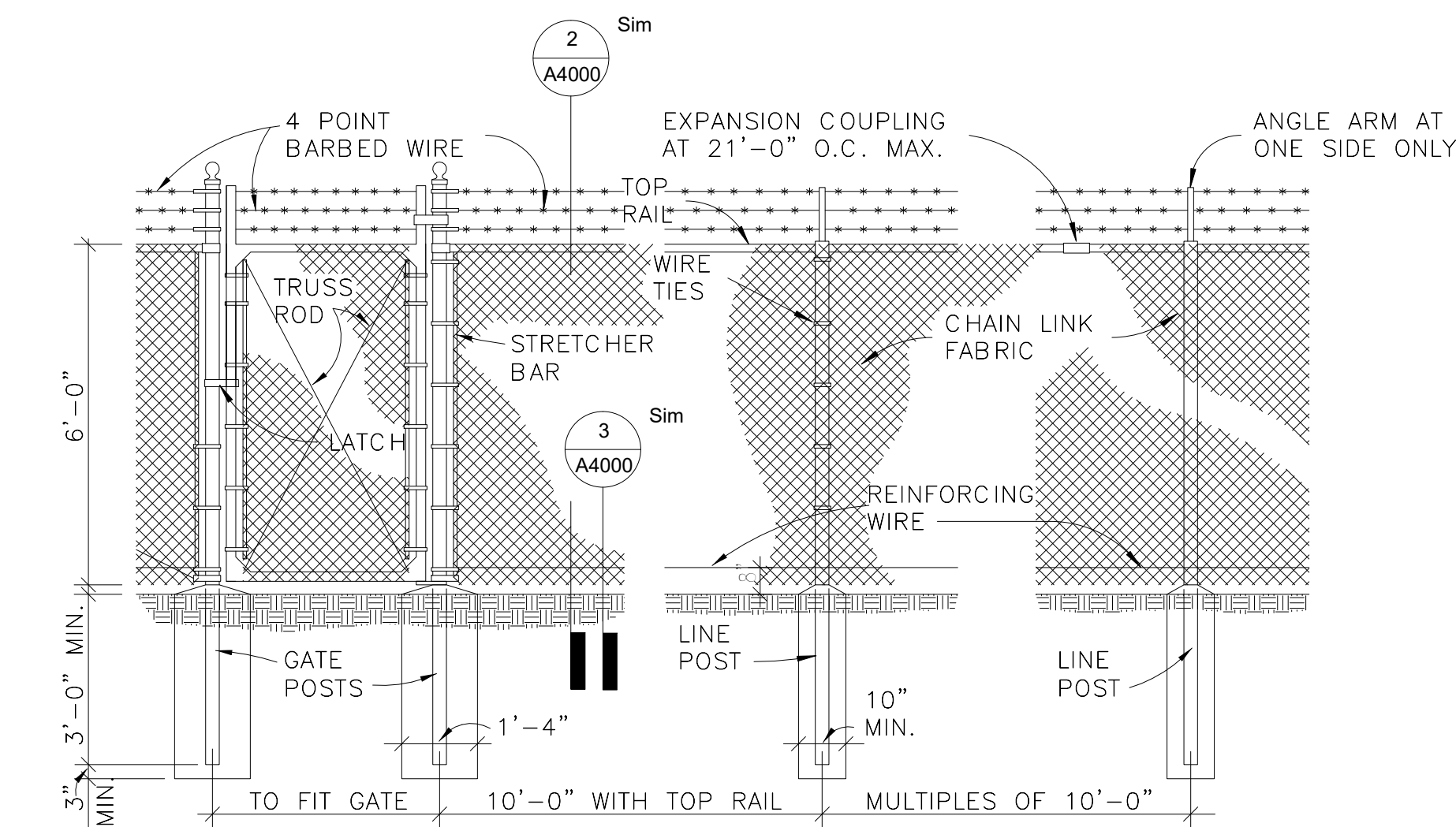
4 TYP. STAIR & RAILING SECTION
3/8" = 1'-0"



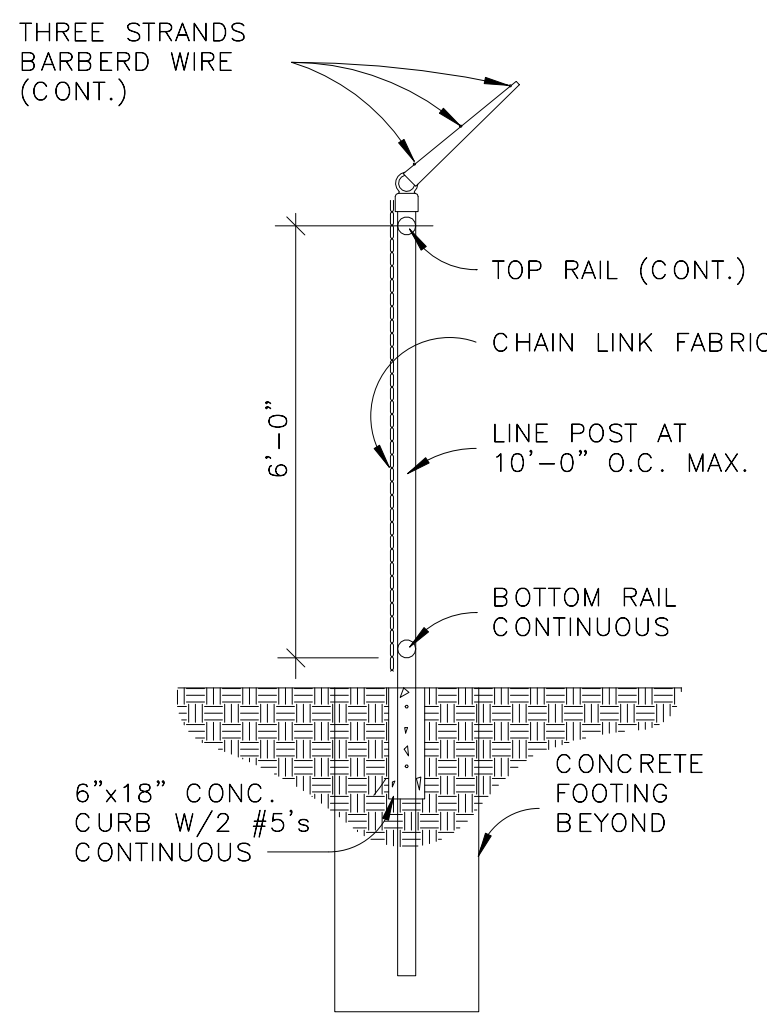
8 Guardrail Detail
3/4" = 1'-0"



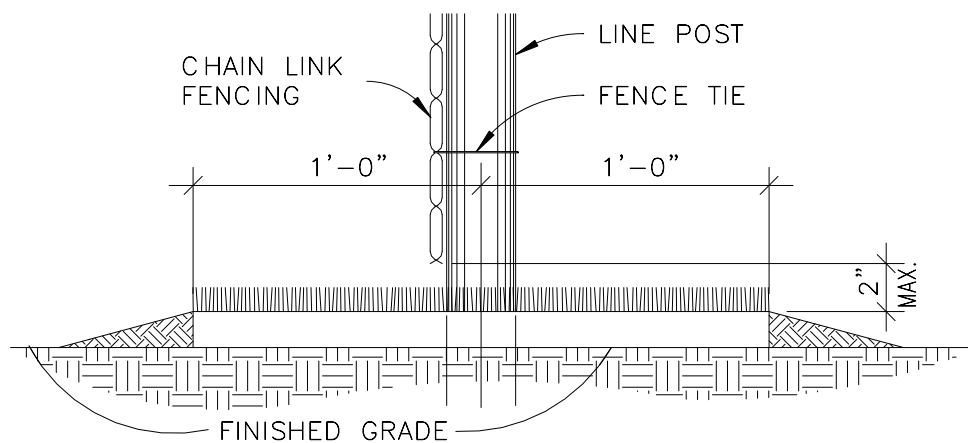
5 Stair Plan Detail
3/8" = 1'-0"



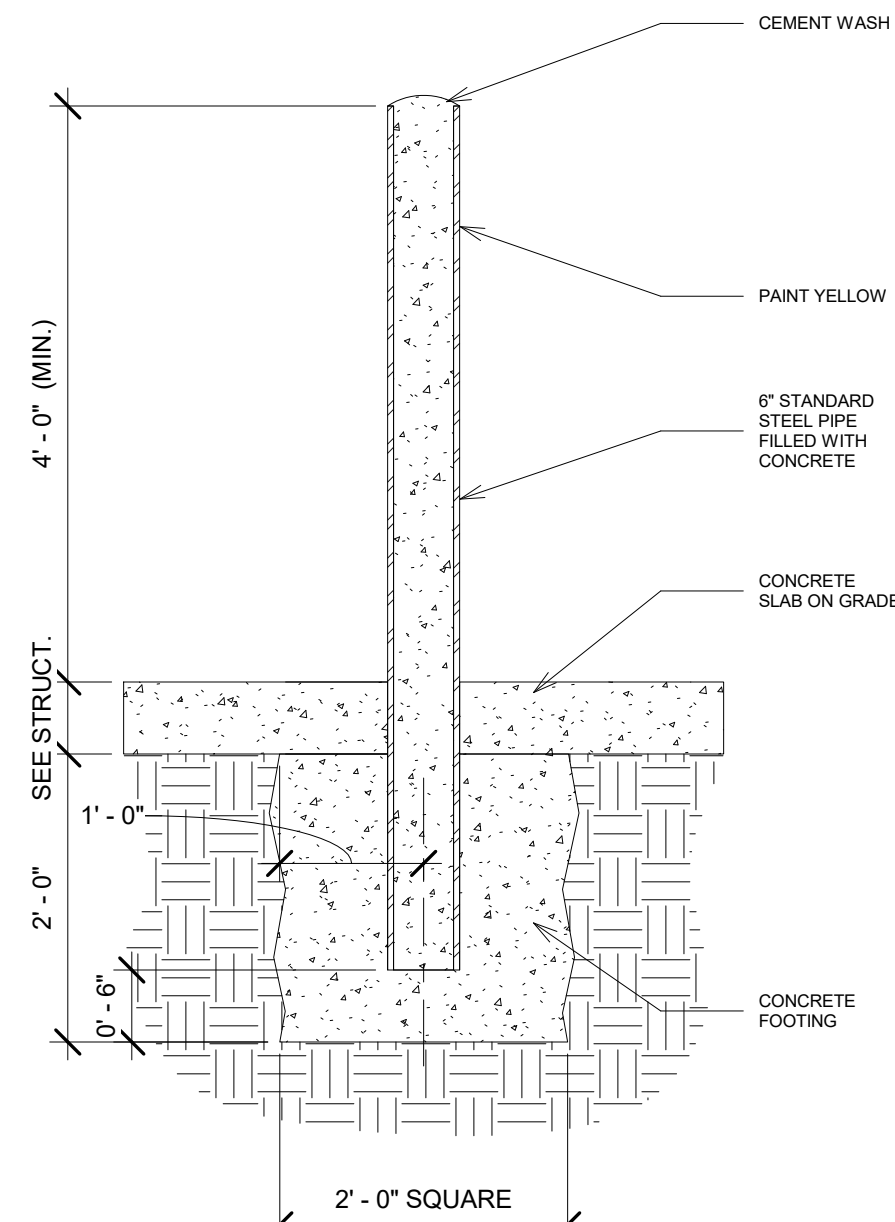
1 CHAIN LINK FENCE DETAIL
3/8" = 1'-0"



2 SECTION AT FENCE
3/8" = 1'-0"

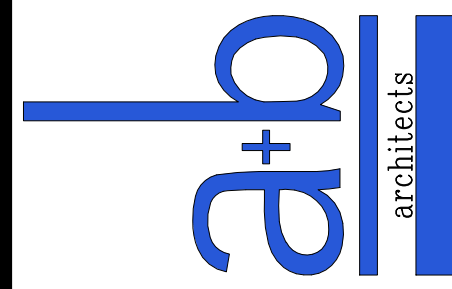
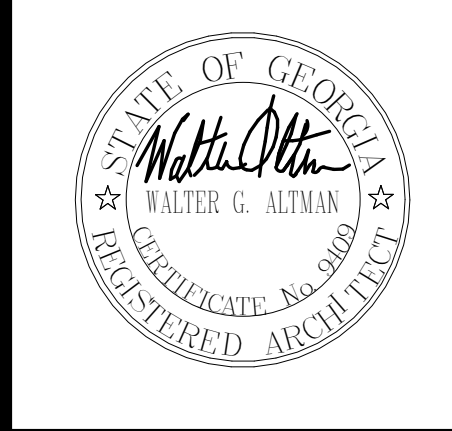


3 SECTION AT BOTTOM OF FENCE
1 1/2" = 1'-0"



6 Bollard Detail
3/4" = 1'-0"

Altman + Barrett



Altman + Barrett
architects
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

DATE: 08.17.2020
DRAWN: LJ/SB
CHECKED: W. ALTMAN
REVISIONS:
www.altmanbarrettarchitects.com

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

A4000

ALL DRAWINGS ARE THE PROPERTY OF THE ARCHITECT.
THEY SHALL NOT BE REPRODUCED OR USED WITHOUT
WRITTEN PERMISSION AND CREDIT.
© 2008 ALTMAN + BARRETT ARCHITECTS, P.C.

PROJECT NO: 20028

GENERAL STRUCTURAL NOTES

Foundations:

A. General:

- The Contractor is responsible for establishing the bearing elevations for footings. The tops of footings indicated on the drawings are based on the finished grade indicated, but do not consider the means and methods of construction which are solely the Contractor's responsibility. The footing is to be lowered at no cost to owner where necessitated by the construction procedures used.
- Where footings bear on any material other than undisturbed natural soil, the specified conditioning and compaction shall extend a minimum of five feet beyond the limits of new construction in all directions. The building pad shall be constructed to the finished subgrade elevation to a minimum.
- Finished grade shall be taken as the lowest adjacent top of slab for interior footings. For perimeter footings, finished grade shall be taken as the lowest adjacent top of slab or the lowest adjacent top of finished grade, whichever is lower.
- Construction grade shall be taken as the lowest adjacent top of subgrade at any time during construction.
- Adjacent for determination of finished or construction grade shall be taken to mean within five feet of the edge of the footing.
- Step footings per typical details in increments of 8" minimum and 2'-0" maximum to maintain the minimum bearing depth indicated. The horizontal distance between any two steps shall be at least twice the vertical height of the larger step.
- Footings are to bear at a minimum depth below finished grade as indicated above except that the top of footing is not to be above construction grade at any time and is not to be less than 8" below finished floor or finished grade, whichever is lower. The top of the footing shall be lowered as necessary to meet these requirements and to prevent footings from bearing on or above utilities. See specific notes on utilities below.
- The thickness of turned down edges of slabs and monolithic footings is based on the finished grades indicated. The perimeter of slabs, including monolithic footings shall be protected throughout construction to prevent the loss of bearing. Where the edge is permitted to be undermined the contractor shall execute remedial work as directed by the Design Professional at no cost to the Owner.
- UTILITY EXCAVATION NOTES:
 - All excavation shall comply with all applicable safety rules and regulations including but not limited to OSHA Construction Standards Part 1926, Subpart P, Excavation, Trenching and Shoring, and Subpart O, Motor Vehicles, Mechanical Equipment, and Marine Operations.
 - Plan the work:
 - All pipes or conduits to be installed below footing elevation must be either installed prior to the installation of the footing or the footing must be stepped down to allow pipe or conduit to be sleeved thru stem wall in accordance with the typical details.
 - Do not excavate, tunnel, mine, drill, bore or in any way cause an opening, void or space below a footing that is already in place.
 - Do not place pipes or conduit under footings except for permitted crossings as shown on these drawings. At all other locations, where a conflict cannot be avoided, lower the footing to avoid conditions indicated as prohibited.
 - Do not sleeve utilities through footings, lower the footing. Utilities may be sleeved through stem walls in accordance with details. Do not sleeve utilities through column piers unless specifically detailed on the drawings.
- Notify the architect immediately should any unauthorized excavation occur.
- Where footings are founded on compacted fill, the limits of compaction and the percent of compaction shall be as specified.

B. Protection of Footing Excavations:

- Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
 - Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
 - Protect footings and slabs that are in place from being undermined by erosion and by excavation by other trades. Repair areas that are undermined as directed by the Architect at no cost to the Owner.
- C. Dewatering Performance:
- Design, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
 - Continuously monitor and maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, prevention of flooding in excavation, and prevention of damage to subgrades and permanent structures.
 - Prevent surface water from entering excavations by grading, dikes, or other means.
 - Accomplish dewatering without damaging existing buildings, structures, and site improvements adjacent to excavation.
 - Remove dewatering system when no longer required for construction.

Excavation:

A. General:

- The Structural construction documents represent the finished structure. They do not indicate the means or methods of construction. The Contractor is solely responsible for planning the work and for the means, methods, techniques, sequences or procedures of construction. The Contractor shall plan and furnish all measures necessary to protect the structure during construction.
 - The Structural drawings are to be taken collectively. Typical details and more specific details complement one another. Every requirement is not repeated at every possible location. Typical requirements are shown on typical details and shall apply to more specific details unless specifically noted to the contrary.
 - Structural details are applicable where indicated by section cut, by note or by detail title. Provide similar details at similar conditions unless noted otherwise.
 - Do not scale drawings, use dimensions and scheduled sizes.
 - Provide all temporary bracing, shoring, guying or other means to avoid excessive stresses and to hold Structural elements in place during construction. Establish and verify all openings and inserts for mechanical, electrical, and plumbing with the appropriate trades, drawings, and subcontractors prior to construction.
 - All items cast into concrete or masonry grout including but not limited to reinforcing, weld plates, anchor bolts, pipe and conduit shall be positively held in place prior to the placement of concrete or grout. Do not weld embedment to reinforcing or to other embedded items without the specific permission of the Design Professional. Tack welds are strictly prohibited except where permitted by AWS D1.1 or where indicated on these drawings.
 - The Contractor shall plan the work and shall establish a sequence of the work so that foundations once in place shall not be undermined by subsequent excavation for utilities or for any other work. See Typical details for additional information. Establish and locate footing steps to insure compliance with the details and with the drawing notes. All footing steps are to be confirmed and located by the contractor on all shop drawings affected.
- Openings through structural elements.
- EXISTING means existing at the time construction commenced. Except for modification under an approved change order, no work put in place under this contract shall be considered existing.
 - All openings required through structural slabs or walls shall be sleeved. Where openings are required through structural slabs over steel deck, the sleeve shall not penetrate the steel deck. The deck shall only be cut after the concrete fill reaches its specified design strength.
 - Additional reinforcing is required at all openings through structural elements which exceed one foot in any dimension and for all openings which require reinforcing to be relocated or cut.
 - DO NOT CUT OR CORE DRILL INTO OR THROUGH ANY STRUCTURAL ELEMENT WITHOUT THE EXPRESS WRITTEN CONSENT OF THE SEOR.

Shop Drawings:

- Unless noted otherwise, the shop drawings shall be construed to include fabrication drawings, bills of material and placing drawings.
- The Contractor shall review and approve all shop drawings prior to submission to the Design Professional. The Contractor's review shall include the coordination of all trades whose work affects the submittal.
- FIELD MEASUREMENTS: Where information from field measurements is required for the completion of shop drawings, this information should be supplied by the Contractor and incorporated into the shop drawings.
- COORDINATION WITH OTHER TRADES: Where information from another trade is required, this information should be supplied by the Contractor and incorporated into the shop drawings.
- Any questions, changes, substitutions, or deviations from the contract documents shall be clouded or flagged by manufacturer or fabricator. Any such items not clouded or flagged shall not be considered approved. Any such item not specifically responded to by the reviewer shall be considered unanswered; the correctness or incorrectness of the item shall not be inferred.
- General notes, typical details, qualifications, or other disclaimers placed on the shop drawings do not modify the requirements of these contract documents.
- Notes, qualifications, or other disclaimers placed on the shop drawings do not modify in any way the responsibilities of the Design Professionals.
- Do not use any form of the contract documents as shop or erection drawings.
- Where the services of a Specialty Design Engineer [SDE] are required for the design of any component, element or system, the SDE shall be a registered engineer in the state in which the building is to be constructed. When the SDE is practicing through a corporation, the corporation shall possess a certificate of authorization to provide engineering services in the state in which the building is to be constructed.
- Where the services of a Specialty Design Engineer [SDE] are required for the design of any component, element or system, shop drawing submittals shall include a statement that the SDE has reviewed the Contract Documents and to the best of his knowledge and belief the submittal reflects the intent of the Contract Documents.
 - Where the shop drawings are prepared under the direct supervision of the SDE, the shop drawings shall be signed, sealed and dated by the SDE.
 - Where the shop drawings are prepared by others, the shop drawings shall bear a stamp or other indication that they have been reviewed by the SDE and that they accurately reflect the design of the SDE.
 - Calculations showing the work designed by the SDE are to accompany the submittal.
 - Incomplete or partial submittals will be returned without review. This includes but is not limited to documents required to be prepared by an SDE that are not signed and sealed.

Deferred Submittal Items (Delegated Design)

- Submit Drawings and calculations for review prior to beginning fabrication for offsite items. For onsite work submit drawings and calculations prior to concealing the work.
- ☐ Design of special foundations and subgrade improvement.
 - ☐ CIP post-tensioned concrete
 - ☐ Precast and prestressed concrete components
 - ☐ Structural steel connection design
 - ☐ Special open web steel joists and joist girders
 - ☐ Prefabricated trusses (CWood, CCold-formed Steel Framing)
 - ☐ Prefabricated truss system (CWood, CCold-formed Steel Framing)
 - ☐ Pre-engineered metal building structures

Demolition/Existing Conditions:

- Contractor shall verify in the field all existing conditions. Any discrepancies between the drawings and the actual field conditions shall be reported to the Design Professional prior to continuing any work.
- Certain dimensions on the plans may be flagged to be field verified. This may mean that there is a conflict ambiguity between existing drawings or an apparent conflict in the field, it does not relieve the Contractor of the responsibility of verifying ALL dimensions relating to existing conditions or that are derived from existing conditions.
- Contractor shall exercise extreme care during demolition to avoid damaging those portions of the structure to remain. The Contractor shall notify the Design Professional immediately of any damage to the structure indicated to remain.
- All methods used shall be carefully planned and shall be appropriate to the work to be done. The existing structure to remain shall not be subjected to any sudden or excessive forces that might adversely affect the integrity of the structure.
- Where existing concrete or masonry is to be removed, saw cut between the structure to remain and that to be removed unless noted otherwise. Where new doors or other openings are to be cut into existing walls or slabs, a minimum 6" diameter core hole shall be drilled into each corner. The saw cut shall be between the core holes. No over-cutting into the structure to remain shall be permitted.

Metal Building Notes

A. Design Loads:

- See Design Criteria for additional loading information.
 - Superimposed Collateral Dead Load
 - Areas without ceilings = 5 psf.
 - Areas with ceilings = 10 psf.
 - Mechanical Loads – See mechanical drawings for location of the mechanical units. Coordinate operating weights for units provided.
 - Special Loads – See architectural drawings for the location of special items including but not limited to basketball goals, hanging screens, and operable partitions.
- B. Deflection:
- Vertical deflection.
 - Roof members
 - Live or wind load = L/240.
 - Dead + live load = L/180.
 - Members supporting gravity loads due to masonry = L/600 or 0.3 inches, whichever is less.
 - Horizontal deflection.
 - Girt and eave struts supporting lateral loads from masonry = L/360.
 - Girt and eave struts not supporting lateral loads from masonry = L/180.
 - Drift = H/200 (Buildings with metal panel siding.)
 - Drift = H/360 (Buildings with masonry exterior walls, including masonry wainscot)
 - Lateral forces used for the calculation of deflection shall be based on a 10-year mean recurrence interval.
- C. Design:
- The structural design of metal building components shall be in accordance with the specified code and with the requirements of the drawings. Where different requirements exist, the more stringent control.
 - The general arrangement of the metal building frame shall be as shown on the drawings. Any deviation shall be submitted as a "Request for Substitution" in accordance with the specifications for approval a minimum of ten days prior to the bid opening.
 - An engineer registered in the State of Georgia shall perform the structural design. The engineer shall affix his seal, his original signature and date to each drawing sheet. The engineer shall affix his seal, his original signature, and date to each calculation sheet or to an index that describes each calculation sheet.
 - The drawings and calculations shall indicate the following:
 - The complete design of each component.
 - The size and dimensions of each component. The designations of components shall conform to a referenced industry standard. Where the standard is not referenced by these drawings and specifications, a copy of the standard must be included as part of the submittal. Designation by manufacturer's part number is unacceptable unless referenced to industry standard designations.
 - The loading used including the self-weight of the metal building components.
 - Foundation reactions.
 - Except where documented by a valid Evaluation Service Report, or by calculations, the standing seam metal roof should not be assumed to provide lateral support to the roof-framing members for either gravity or uplift loads. The metal building engineer shall specify and detail additional bracing and bridging as necessary to laterally brace the roof members.

D. Lateral force resisting system:

- Transverse forces shall be carried by the main moment frames.
- Longitudinal forces shall be carried by portal frames except that cross-bracing is permitted where shown on plans.
- All column bases shall be designed as pinned.
- All cross-bracing, horizontal and vertical, shall be rods or structural shapes. Cable bracing is not permitted.
- Where portal frame columns or beams interfere with masonry linets shown or scheduled on plans, the portal frame shall be designed to replace the masonry lintel and to support the full weight of the masonry with the deflection limits indicated.

E. Additional Requirements:

- All text or graphical information, including, but not limited to, cut-out letters, shapes, or numerals, labels, tags, signs, logos, piece marks, and manufacturer's identification shall be placed to be hidden from view in the completed building or shall be removed by erector. All such text or graphical information remaining when the erection is complete shall be removed at no additional cost to the owner.
- Painted marks on pieces indicated to receive finish paint shall be compatible with the specified primer. Painted marks visible after finish painting shall be removed and repainted by the painting contractor at the no additional cost to the owner.
- For all girts and for purlins installed at a slope exceeding 4 on 12, provide bracing, bridging or other positive means to maintain alignment of the member.

Metal Building Components

- Purlins and Girts are to be minimum Fy=55 ksi , Fu=70 ksi and formed from Structural-Steel Sheet
- Structural Steel Sheet: Hot-rolled, ASTM A 1011, High-Strength Low-Alloy Steel (HSLAS) or High-Strength Low-Alloy Steel with Improved Formability (HSLAS-F), or cold-rolled, ASTM A 1008, Structural Steel (SS), or HSLAS.
- Provide manufacturer's standard clips and accessories.
- Finish: Factory primed. Clean and prepare in accordance with SSPC-SP2. Apply manufacturer's standard primer immediately after cleaning and pretreating to a minimum 1 mil dry film thickness.

Masonry:

A. Masonry Reinforcing:

- Horizontal reinforcing:
 - All CMU walls to have two #5 continuous in a minimum 8" bond beam at all floor and roof levels and at the top of the wall, unless noted otherwise.
 - At interior non-load-bearing walls, place the top of wall bond beam one course below top of wall unless detailed otherwise.
 - All walls except for masonry veneer laid in running bond are to have standard joint reinforcing, minimum two W1.7 wires at 16" on center, unless noted otherwise.
 - Bond beam reinforcing to be continuous through control joints. Discontinue typical joint reinforcing.
 - Vertical reinforcing: CMU walls except for four-inch nominal CMU are to have verticals at the indicated spacing with a vertical at all corners, ends, jamps, intersections and both sides of control joints.
 - Exterior walls are to have #5 verticals at a maximum of 48 inches on center and one #5 vertical at all corners, ends, jamps, intersections and both sides of control joints unless otherwise scheduled or detailed.
 - Interior walls are to have #4 verticals at a maximum of 72 inches on center and one #4 vertical at all corners, ends, jamps, intersections and both sides of control joints unless otherwise scheduled or detailed.
 - Additional vertical reinforcing shown on plan is in lieu of typical reinforcing. Unless noted otherwise, place one bar per cell in solid grout. Extend bars a minimum of 30 bar diameters beyond the floor or roof level above.
 - See schedule for reinforcement laps. Where bars or different sizes are lapped, the length may be based on the smaller of the two bars unless noted otherwise. Where bars are offset, the minimum lap shall be scheduled lap plus the distance offset.
- B. Post-installed Masonry Anchors
- Post-installed anchors shall only be used where shown on the drawings.
 - Contractor shall obtain approval from Engineer of Record prior to using post-installed anchors for missing or misplaced cast-in-place anchors or dowels.
 - Mechanical anchors shall have been tested in accordance with ICC-ES AC01 or ICC-ES AC106. Adhesive anchors shall have been tested in accordance with ICC-ES AC08. Anchors that do not have an Evaluation Service Report [ESR] for the intended application are prohibited.
 - Care shall be given to avoid conflicts with existing rebar. Holes shall be drilled and cleaned per the applicable ESR.
 - Anchors shall be installed per the manufacturer's installation instructions at not less than minimum edge distances and/or spacing indicated per the applicable ESR.
 - All anchor installation shall be inspected as specified in the Schedule of Special Inspections and the applicable ESR. The more stringent requirements shall control.
 - Anchors installed to replace missing or misplaced items shall be continuously inspected. The contractor shall review with the special inspector applicable procedure and inspection requirements. Inspection reports submittal with missing or incomplete information shall be cause for rejection of the work.
 - Basis of Design: where anchors are specified on these drawings the basis of design is as indicated below. Other anchors may be submittal for approval.
 - The use of a different manufacturer's anchor may require additional fasteners, but do not use fewer anchors than indicated.
 - Adhesive Anchors: **SIMPSON STRONG-TIE "SET" (ICC-ES ESR-1772)**
 - Expansion Anchors: **SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAPMO-ES ESR-240)**
 - Concrete Screw Anchor: **SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)**

Cast in Place Concrete:

- All items to be cast into the concrete shall be firmly tied or otherwise positioned using suitable devices so as to prevent displacement during the concrete placement.
- Construction joints:
 - No horizontal construction joints shall be permitted except where shown on the drawings.
 - All construction joints shall be formed with vertical bullheads with keyway. Provide a minimum 1 1/2" x 3 1/2" horizontal keyway at construction joints in beams and continuous footings with a depth of 12" or less. Provide a minimum 1 1/2" x 5 1/2" horizontal keyway, otherwise.
 - Spacing of construction joints or control joints in walls exposed to view shall not exceed 40 feet unless specifically noted otherwise on the drawings.
 - Provide a 3/4" chamfer on all exposed corners of concrete unless noted otherwise.
- Reinforcing:
 - Except as otherwise noted or detailed the spacing of reinforcing and the distance to the first bar shall be detailed to comply with Appendix C of the CRSI Manual of Standard Practice.
 - Provide extra reinforcing around all openings exceeding 24 inches square or round in all slabs and walls equal to two #5 bars on four sides and extend two feet beyond the opening.
 - Lap splice all reinforcing in accordance with schedule unless noted otherwise. Provide Class B splices except that where splices in adjacent bars are staggered a minimum of one lap length, splices may be Class A.
 - Where bars are noted as continuous:
 - Stagger splices in adjacent bars.
 - Provide corner bars at all corners and offsets.
 - Extend bars into intersecting members and provide a standard 90-degree hook at discontinuous end.
 - Mechanical splices may be used in lieu of lap splices in locations approved by the Design Professional. Coupling devices shall be current, valid ICC-ES report and shall be installed in strict accordance with the report. Coupling devices shall meet the requirements of a Type 2 tension-compression splice except that Type 1 splice may be used where a Class A lap splice is permitted or where approved by the design professional.
 - Provide isolation joints around all columns at all exposed slab on grade areas.
 - Concrete cover:
 - Concrete cast against and permanently exposed to earth = 3-inch.
 - Concrete exposed to earth or weather, unless noted otherwise:
 - #6 through #18 = 2-inch
 - #5, W31 or D31 wire and smaller = 1 1/2-inch
 - Detail concrete piers for steel columns for 2-inch cover to the ties.
 - Concrete not exposed to weather or in contact to ground:
 - Slabs, walls, and joists:
 - #14 and #18 = 1 1/2-inch.
 - #11 and smaller = 3/4-inch.
 - Beams and columns = 1 1/2-inch.

D. Conduit and Embedded Pipes in Reinforced Concrete.

- These rules apply to all conduit and pipe to be cast into or through concrete. These rules apply to concrete cast over steel deck except where more stringent requirements are given below.
- All conduit and embedded pipes shall be held in position using suitable devices. No conduit and embedded pipes shall be in contact with or secured to any structural item. Provide chairs, positioners or support bars as necessary to secure these items against movement during concrete placement.
- Aluminum conduit and pipes shall not be embedded in structural concrete unless coated.
- Conduits, pipes and sleeves passing through a slab, wall or beam shall not impair significantly the strength of the construction.
- Conduit and pipes, with their fittings, embedded within a column shall not displace more than 4% of the area of the column.
- Unless shown drawing showing all conduit and pipes to be embedded are submitted for approval, conduit and pipes shall meet the following requirements:
 - The maximum outside diameter of pipe or conduit shall not exceed 1/3 the least thickness of the concrete section. The minimum clear distance between any two pipes or conduit shall be twice the outside diameter of the larger pipe.
 - Conduit and pipes shall be fabricated and installed so that cutting, bending, or displacement of reinforcing from its proper location is not required.
 - In solid slabs, conduit and pipe shall be placed between the top and bottom reinforcing.
 - The minimum thickness of concrete cover for pipes, conduit and fittings shall not be less than 1-1/2" for concrete exposed to earth or weather and 3/4" otherwise.
 - Pipes and fittings shall be designed to resist the effects of the material, pressure, and temperature to which they are subjected. No liquid, gas, or vapor, except water not exceeding 90° F nor 50 psi shall be placed in the pipes until the concrete has attained its designed strength.
- Post-installed Concrete Anchors
 - Post-installed anchors shall only be used where shown on the drawings.
 - Contractor shall obtain approval from Engineer of Record prior to using post-installed anchors for missing or misplaced cast-in-place anchors or dowels.
 - Mechanical anchors shall have been tested in accordance with ACI 355.2 and ICC-ES AC193 for cracked concrete and seismic applications. Adhesive anchors shall have been tested in accordance with ACI 355.4 and ICC-ES AC308 for cracked concrete and seismic applications. Anchors that do not have an Evaluation Service Report [ESR] for the intended application are prohibited.
 - Care shall be given to avoid conflicts with existing rebar. Holes shall be drilled and cleaned per the applicable ESR.
 - Anchors shall be installed per the manufacturer's installation instructions at not less than minimum edge distances and/or spacing indicated per the applicable ESR.
 - All anchor installation shall be inspected as specified in the Schedule of Special Inspections and the applicable ESR. The more stringent requirements shall control.
 - Anchors installed to replace missing or misplaced items shall be continuously inspected. The contractor shall review with the special inspector applicable procedure and inspection requirements. Inspection reports submittal with missing or incomplete information shall be cause for rejection of the work.
 - Basis of Design: where anchors are specified on these drawings the basis of design is as indicated below. Other anchors may be submittal for approval.
 - The use of a different manufacturer's anchor may require additional fasteners, but do not use fewer anchors than indicated.
 - Adhesive Anchors: **SIMPSON STRONG-TIE "AT-XP" (IAPMO-ES ESR-263)**
 - Expansion Anchors: **SIMPSON STRONG-TIE "Torg-Cut" (ICC-ES ESR-2705)**
 - Concrete Screw Anchor: **SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713)**

Design Criteria

Building Code:

- Georgia State Minimum Standard Building Code, IBC, 2018 Edition, As Amended.
- Minimum Design Loads for Buildings and Other Structures, ASCE 7-16.
- Building Code Requirements for Reinforced Concrete, ACI 318-14
- Manual of Standard Practice, CRSI.
- Building Code Requirements for Masonry Structures, TMS 402/602-16.

Loading:

A. Floor

- Slab on Grade = 250 psf.
- Roof
 - Live Load = 20 psf (On Horizontal Projection).
 - Minimum Roof Collateral Dead Load – See Metal Building Structural Notes
 - Reducible for slope and area.
- Snow Load Data, Pg = 0
- Flat-roof snow load, Pf = 5 psf
- Snow exposure factor, Ce = 1.0
- Snow Load Importance Factor, Is = 1.0
- Thermal Factor, Ct = 1.0

D. Wind Data:

- Ultimate Design Wind Speed (Vult): 112 mph (3 Second Gust)
- Nominal Design Wind Speed (Vasd): 87 mph (3 Second Gust)
- Risk Category: II
- Exposure B.
- Seismic Structure, Gpi = 0.18.
- Components and Cladding Pressure - By MBM
- Existing Structure to Remain

E. Seismic Data

- Risk Category: II
- Seismic importance factor, Ie = 1.0
- Ss = 16.50%g
- S1 = 7.50%g
- Site Class D
- Spectral Response Coefficients
- SDS = 0.17g
- SDI = 0.120
- Seismic Design Category B
- Seismic Restisting System - By MBM
- Design Base Shear - By MBM
- Seismic Response Coefficient - By MBM
- Response Modification Factor - By MBM
- Analysis Procedure - By MBM
- Existing Structure to Remain

Soil Bearing Allowable:

- 1500 psf for Type 5 (or better) Soils per Table 1806.2 PRESUMPTIVE LOAD-BEARING VALUES

Special Inspections:

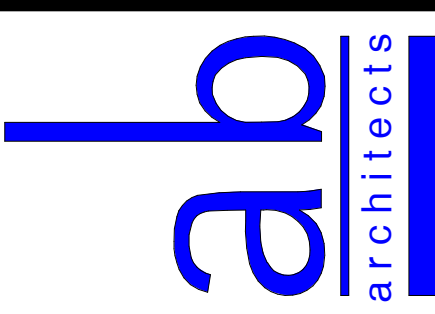
- Special inspections are required for Structural items under Chapter 17 of the Building Code.
- The Building Code places the responsibility for these inspections with the Owner.
- See the Statement of Special Inspection for Structural Tests and Inspections required.
- Requirements for Wind Resistance are included in the Statement of Special Inspection.
- Requirements for Seismic Resistance are included in the Statement of Special Inspection.
- Contractor's Responsibility: Where Requirements for Wind or Seismic Resistance or both are included in the Statement of Special Inspection the Contractor shall submit a statement of responsibility as required by Section 1706 of the Building Code.
- Fabricator's Responsibility: Where fabrication is performed off-site by a fabricator approved to provide inspections of their own work, the fabricator shall submit a certificate of compliance stating that the work was performed in accordance with the approved construction documents.
- ANY ITEM THAT FAILS ITS INITIAL INSPECTION MUST BE REINSPECTED AFTER IT IS CORRECTED AND BEFORE IT IS CONCEALED.
- The Contractor shall review the work with the designated Special Inspector in order to familiarize himself with the inspections require and familiarize the Special Inspector with the proposed work schedule.
- The Contractor shall review all Special Inspection Reports with the Special Inspector at the project site before the Special Inspector leaves the site and shall verify that the report accurately reflects the item inspected and contains all the information necessary to determine that the work was performed in accordance with the contract documents. Where discrepancies are noted, the source of the problem, the location and the extent of the problem shall be clearly defined.
- The Contractor shall notify the Design Professional immediately of any test or inspections which fail to meet the requirements of drawings and specifications and which are not immediately corrected in the normal course of the work and successfully reinspected and retested.
- When the work cannot be brought into compliance with the contract documents for any reason, the Contractor may propose an alternate solution using the Change Order Request Procedure [COR] as deemed by the General Conditions. A proposed solution may be outlined using the Request For Information [RFI] and changes to the contract documents may not be made with the RFI procedure. The COR submittal must include complete engineered documents showing the proposed repair, products to be used, including ICC-ES reports for the products and special inspection requirements specific to the repair procedure.
- It is the responsibility of the Contractor to install the work in accordance with the contract documents. Only the Design Professional [DP] may determine whether a proposed alternate solution is acceptable. The determination of the DP is final.
- Where the deviation between the proposed solution and the contract documents is deemed to be trivial by the DP, the DP may elect to waive the requirement for a COR. Waiving this requirement in one instance places no burden upon the DP to waive the requirement in other instances.
- All repair work shall be inspected and tested in accordance with requirements for the original work and all supplementary requirements shown on the approved repair procedure.
- Each noted discrepancy is an individual event. Only the DP may make a determination that a repair approved for a previous situation is appropriate for a subsequent item.
- Note:** Special inspection reports and a final report in accordance with Section 1704.2.4 shall be submitted to the building official (AHI) prior to the time that phase of the work is approved for occupancy.

Future Expansion: This project is not designed for future expansion.

CONCRETE SCHEDULE					
LOCATION	STRENGTH AT 28 DAYS	SLUMP (+1 INCH)	AIR CONTENT (+1% INCH)	MINIMUM CEMENTIOUS MATERIAL...	REMARKS
ALL CONCRETE UNO	3000 PSI	4 INCH	6%	NA	
SLAB ON GRADE	3000 PSI	4 INCH	6% SEE REM	470 LBS/CYD	ADD 1½ LBS/CYD MICROFIBER. AIR CONTENT SHALL NOT EXCEED 3% FOR CONCRETE SPECIFIED TO RECEIVE A HARD TROWELLED FINISH.
PUMPED CONCRETE		SEE REM			FOR PUMPED CONCRETE, SLUMP SHALL BE 8 INCHES ±1 INCH FOR CONCRETE WITH A VERIFIED SLUMP OF 3 INCHES ±1 INCH PRIOR TO THE ADDITION OF SUPER-PLASTICIER. ALL OTHER...
LOCATION					

Altman + Barrett

Lindsey & Ritter, Inc.
401 East Jane Street, Valdosta, GA 31601
GA COA # PE000015 EXP 6/30/2022



Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 – 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585–9018

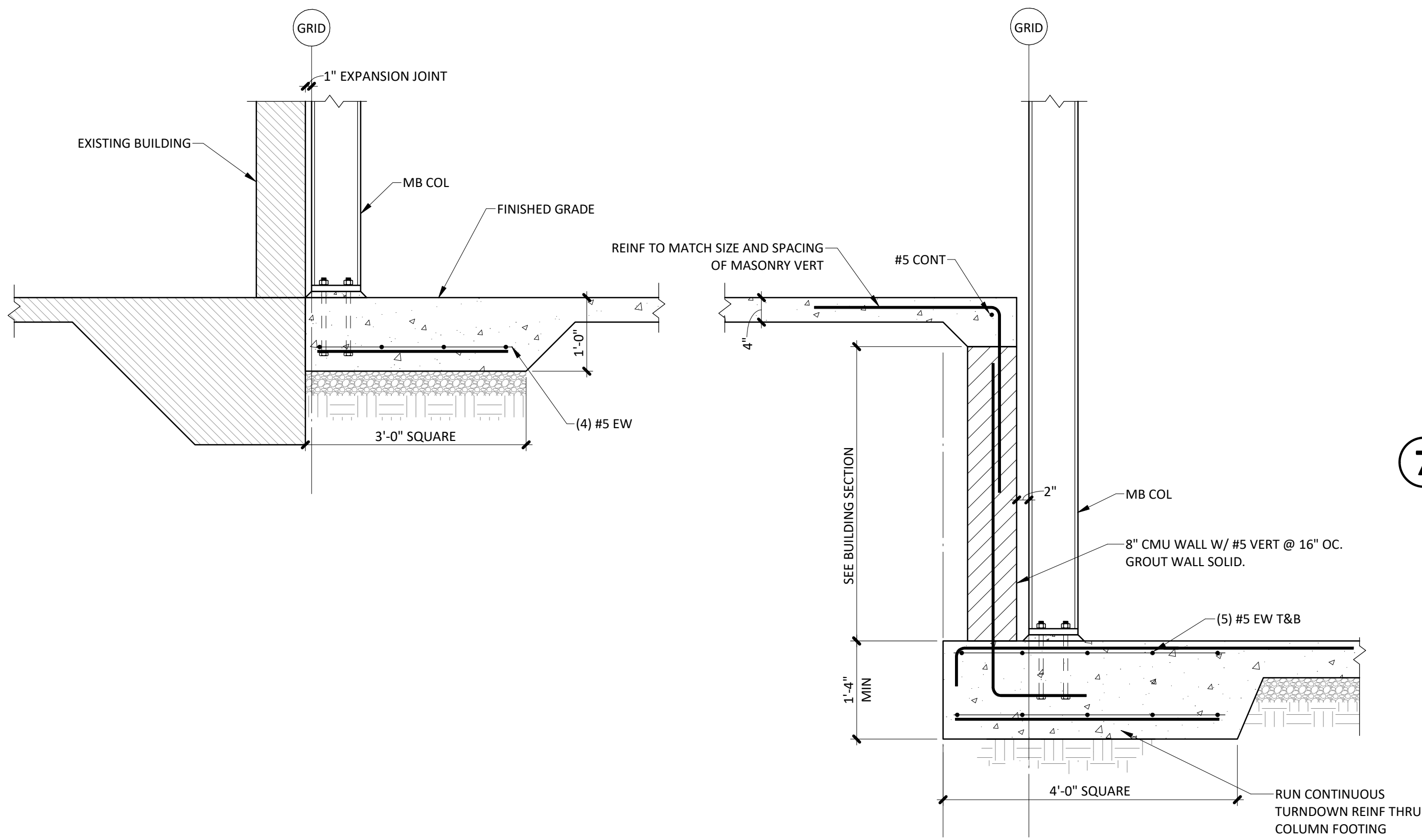
DATE: 09.17.2020
DRAWN: GDP
CHECKED: JLS
REVISIONS:
www.altmanbarrettarchitects.com

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

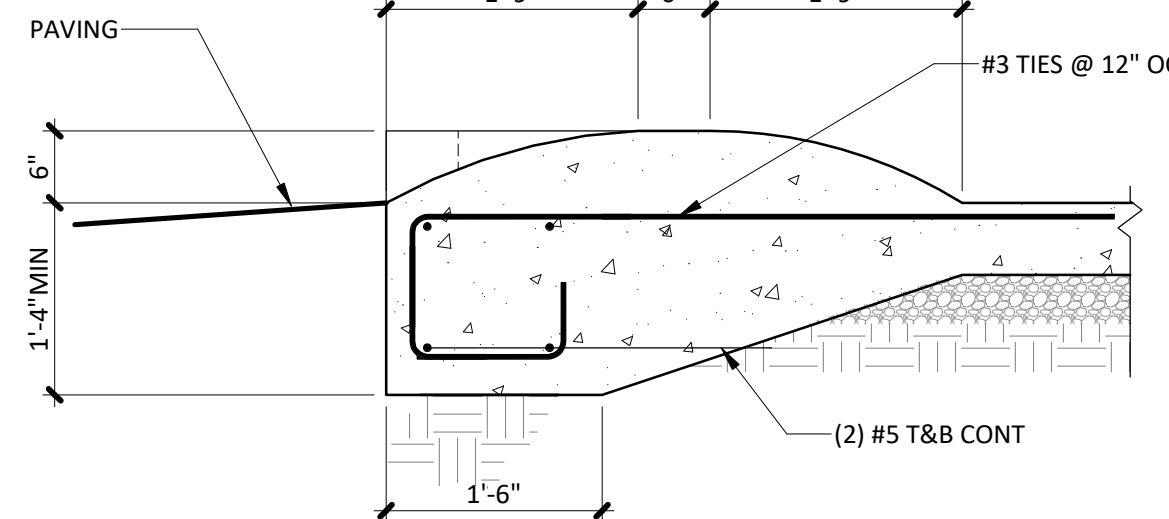
00001

DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND SHALL NOT BE REPRODUCED OR USED WITHOUT WRITTEN PERMISSION AND CREDIT
© 2020 ALTMAN + BARRETT ARCHITECTS P.C.

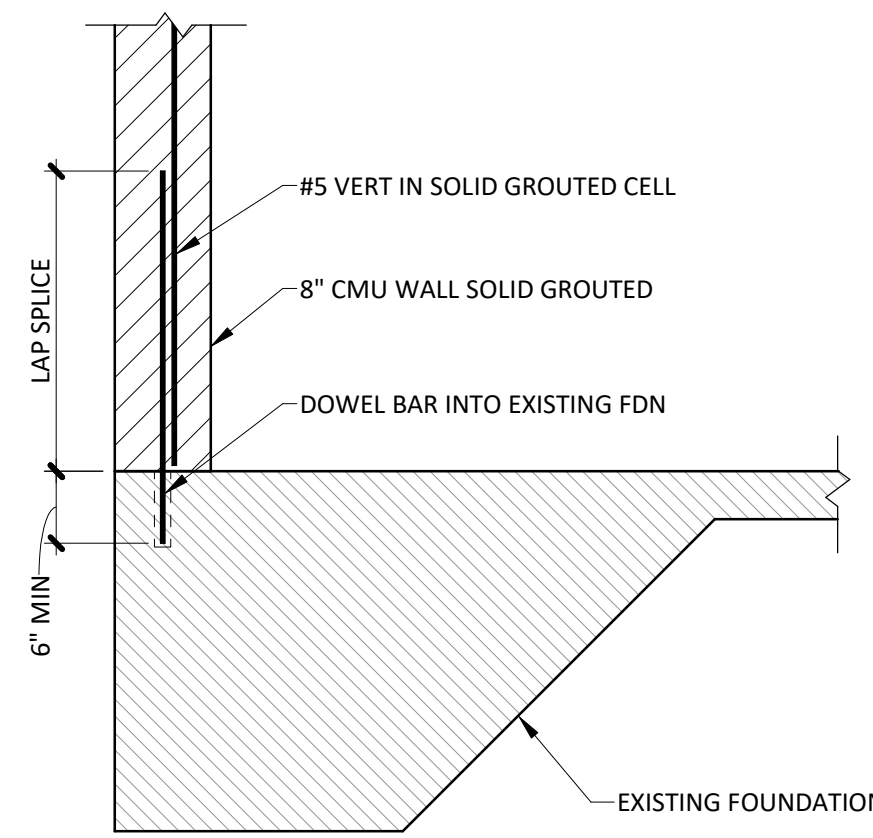
PROJECT NO: 20028



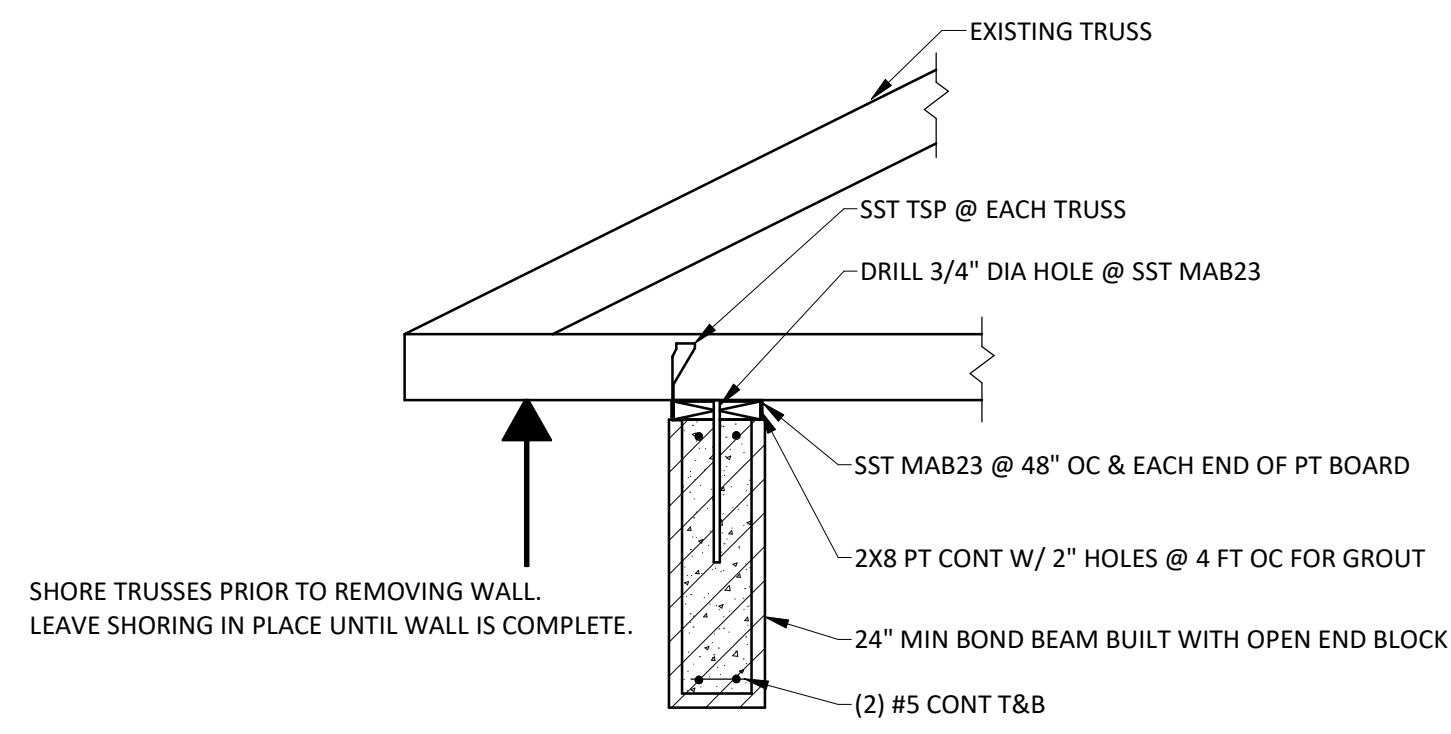
7 SECTION
3/4" = 1'-0"



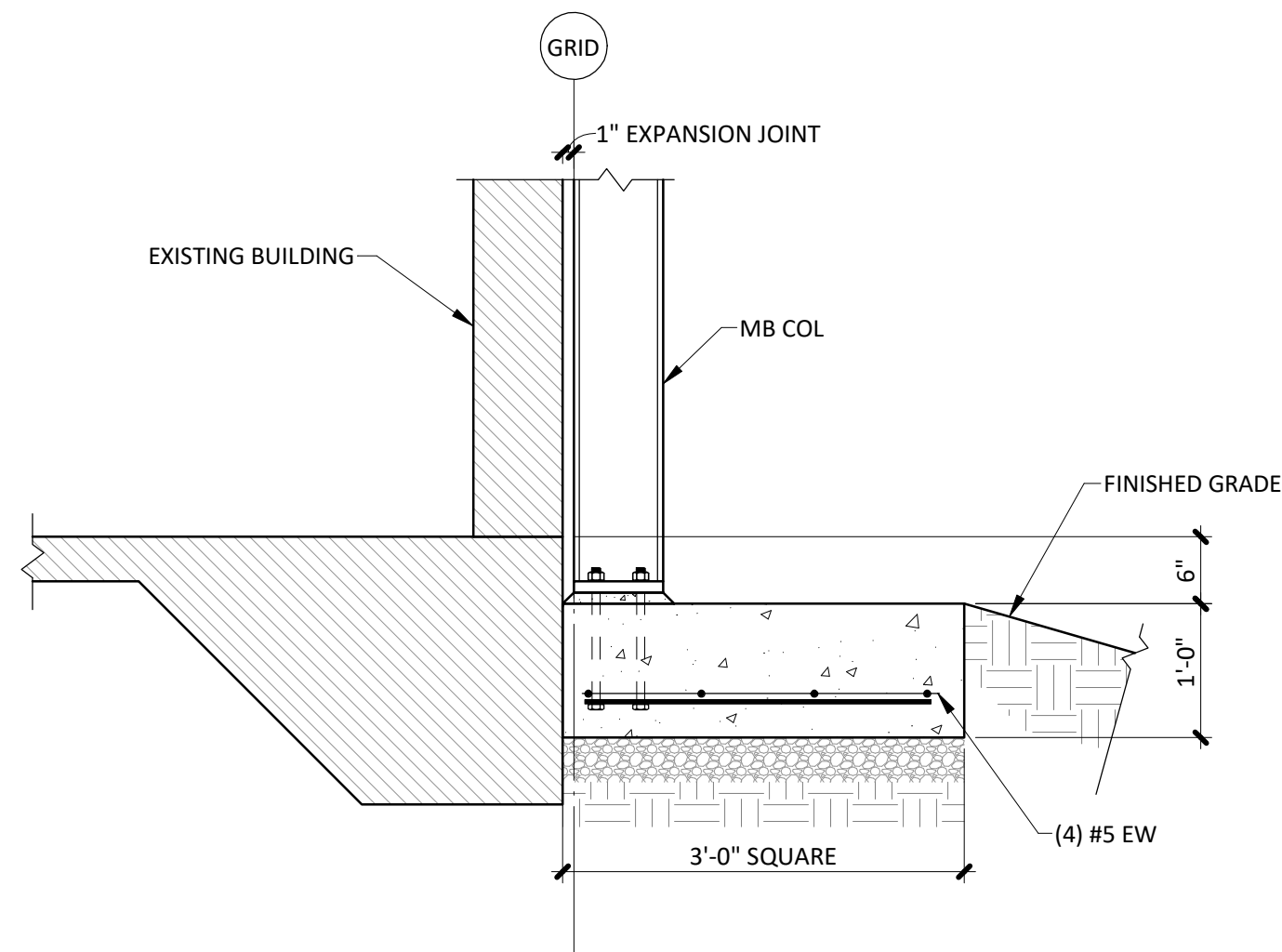
8 EXISTING FOUNDATION
3/4" = 1'-0"



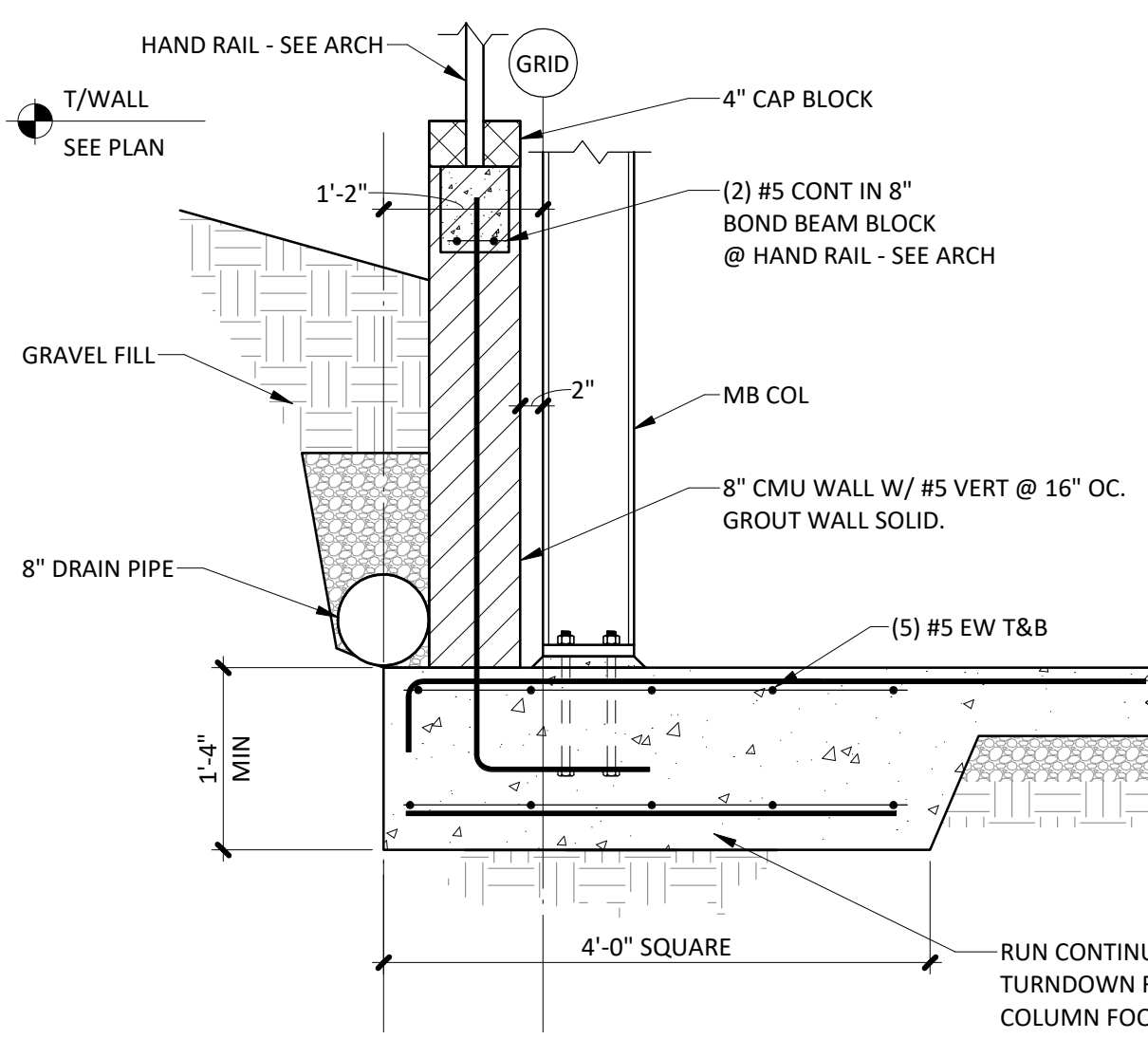
9 TOP OF CMU WALL
3/4" = 1'-0"



10 ALTERNATE SECTION
3/4" = 1'-0"

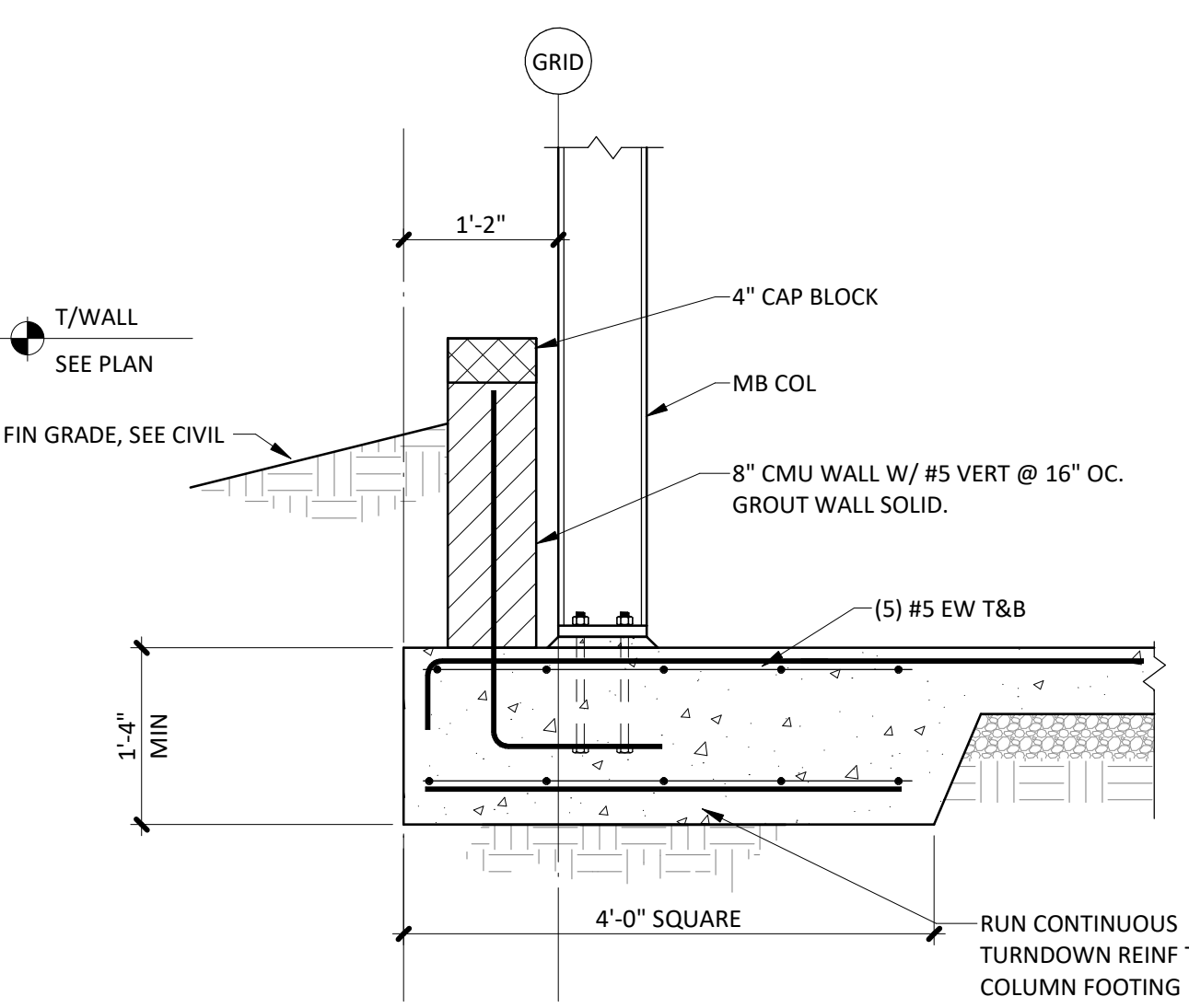


5 SECTION
3/4" = 1'-0"

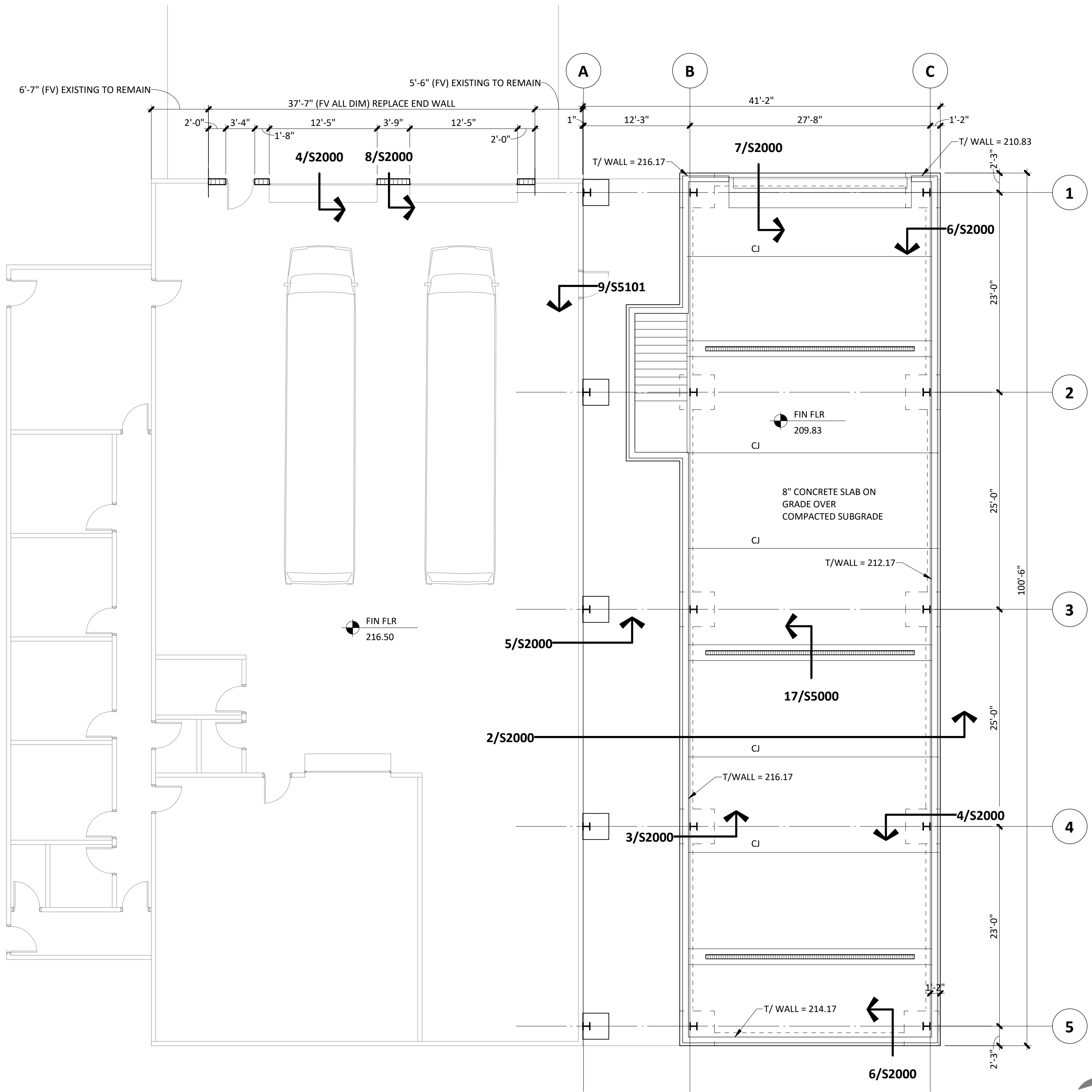


3 SECTION
3/4" = 1'-0"

6 SECTION
3/4" = 1'-0"

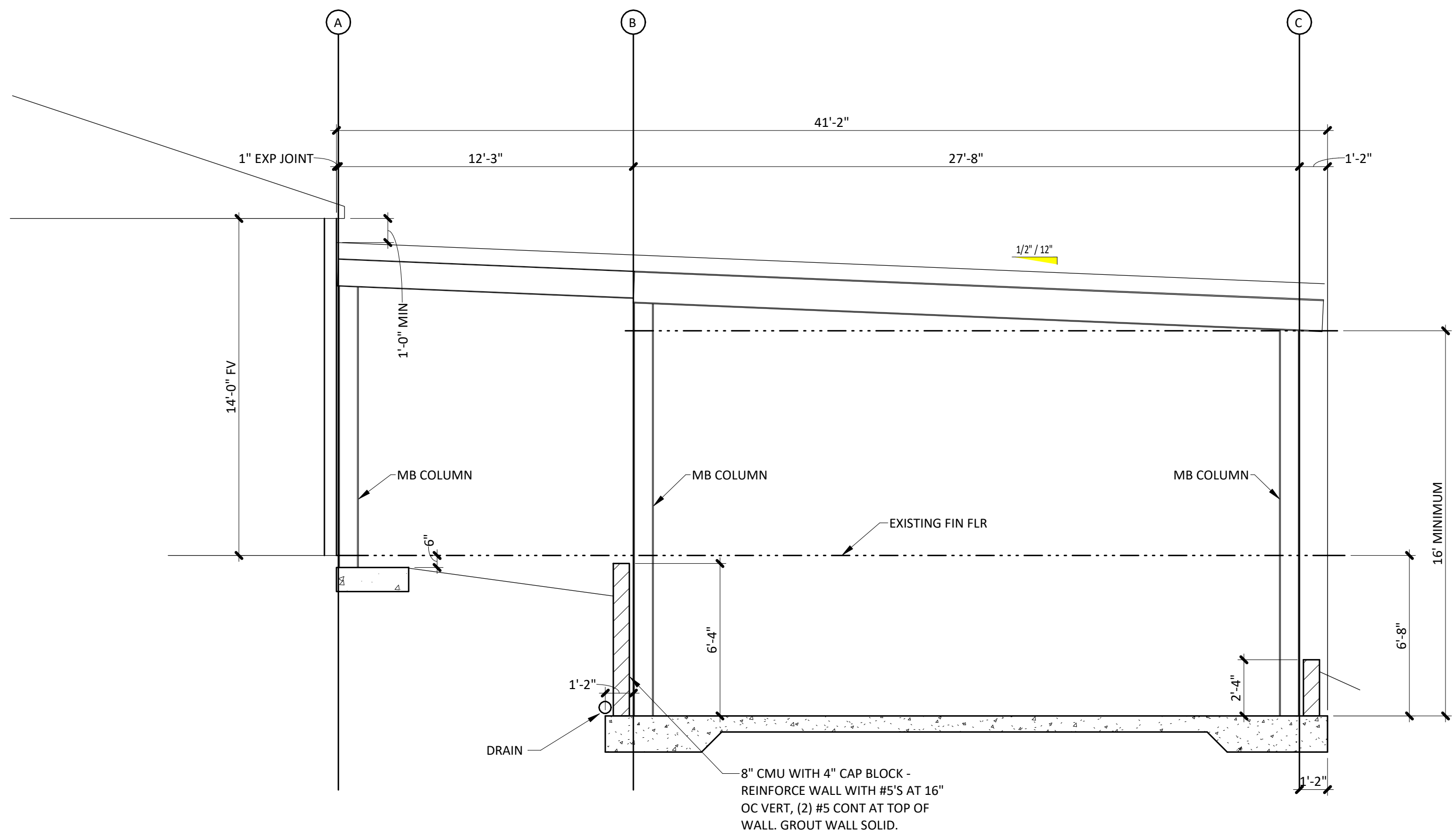


4 SECTION
3/4" = 1'-0"



1 FOUNDATION PLAN
1/8" = 1'-0"

2 BUS BARN SECTION
1/4" = 1'-0"



Altman + Barrett

Lindsey & Ritter, Inc.
401 East Jane Street, Valdosta, GA 31601
GA COA # PE000415 EXP 6/30/2022



ab
architects

Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018
www.altmanbarrettarchitects.com

DATE: 09.17.2020
DRAWN: GDP
CHECKED: JLS
REVISIONS:

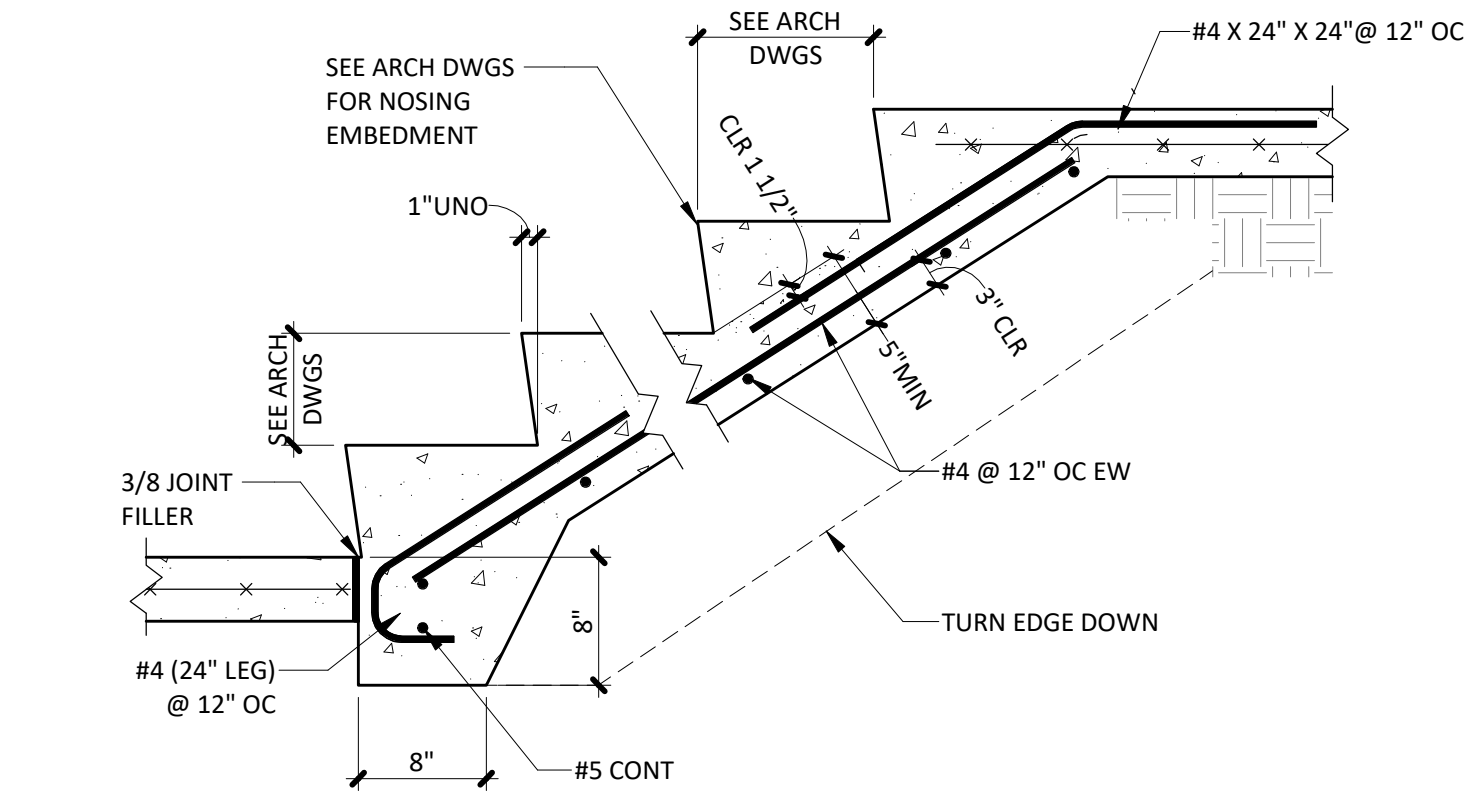
www.altmanbarrettarchitects.com

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

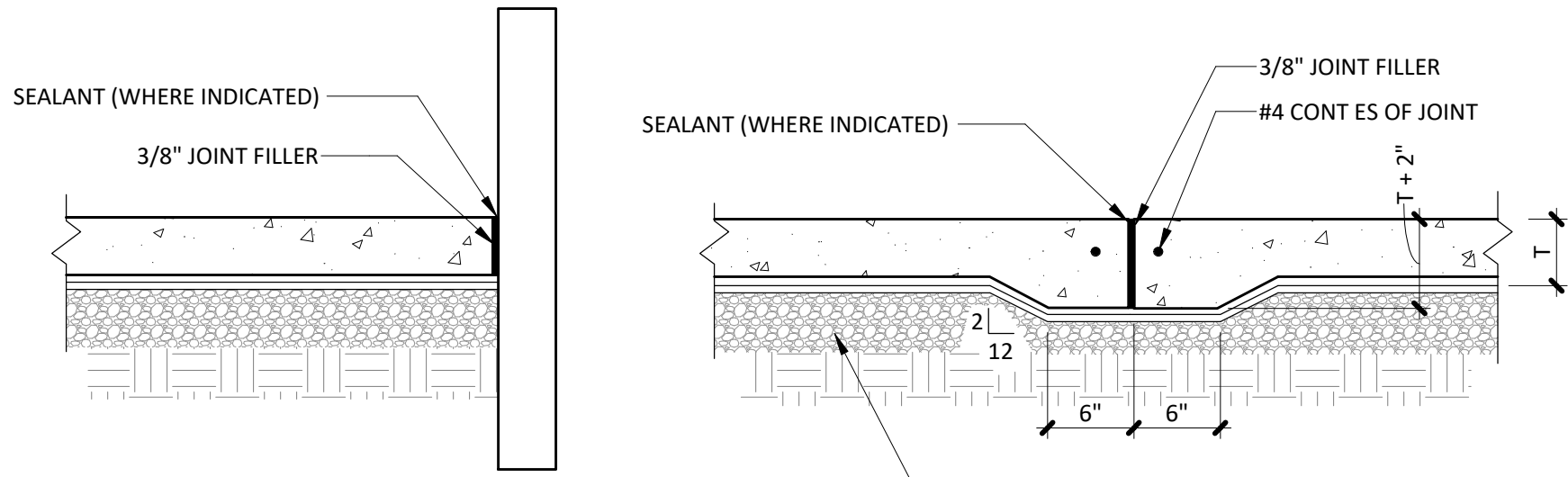
S2000

Drawings are the property of the architect and shall not be reproduced or used without written permission and credit.
© 2020 ALTMAN + BARRETT ARCHITECTS P.C.

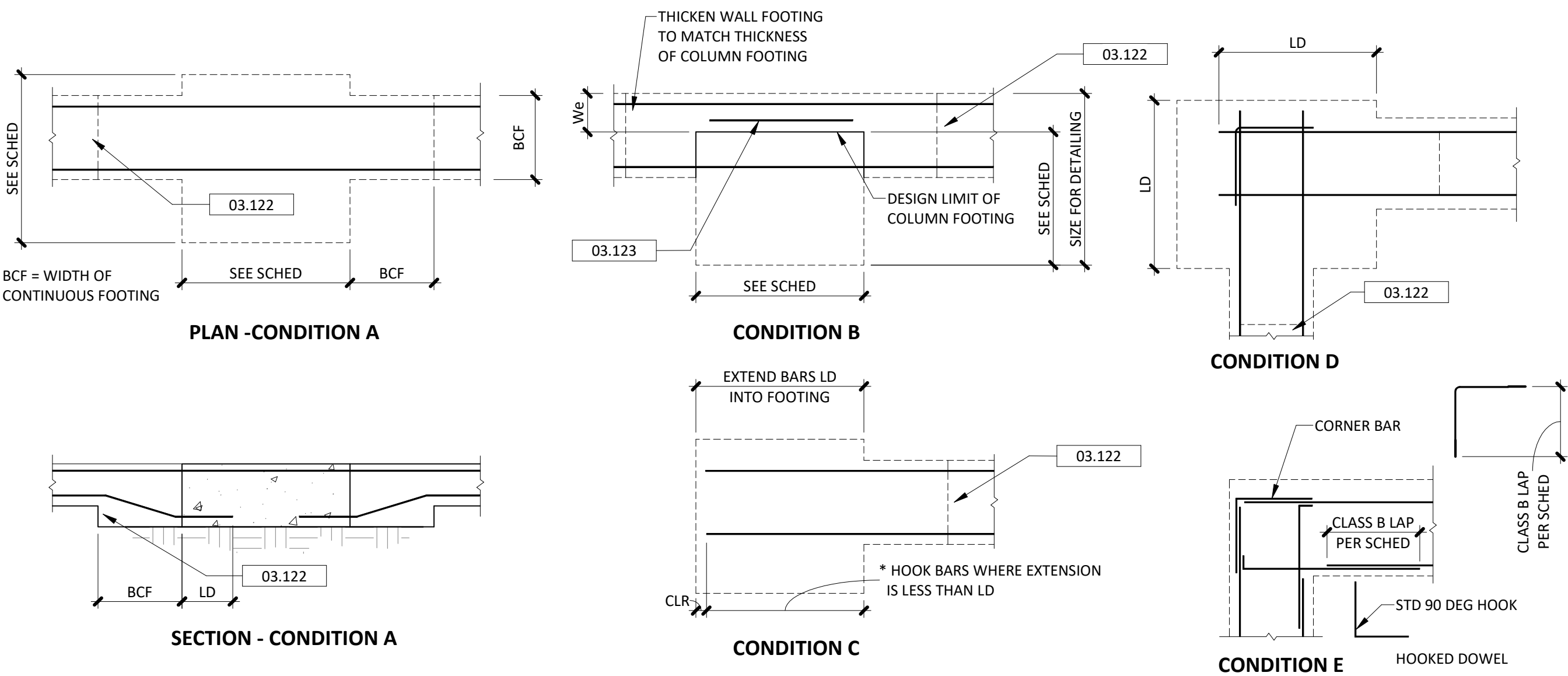
PROJECT NO: 20028



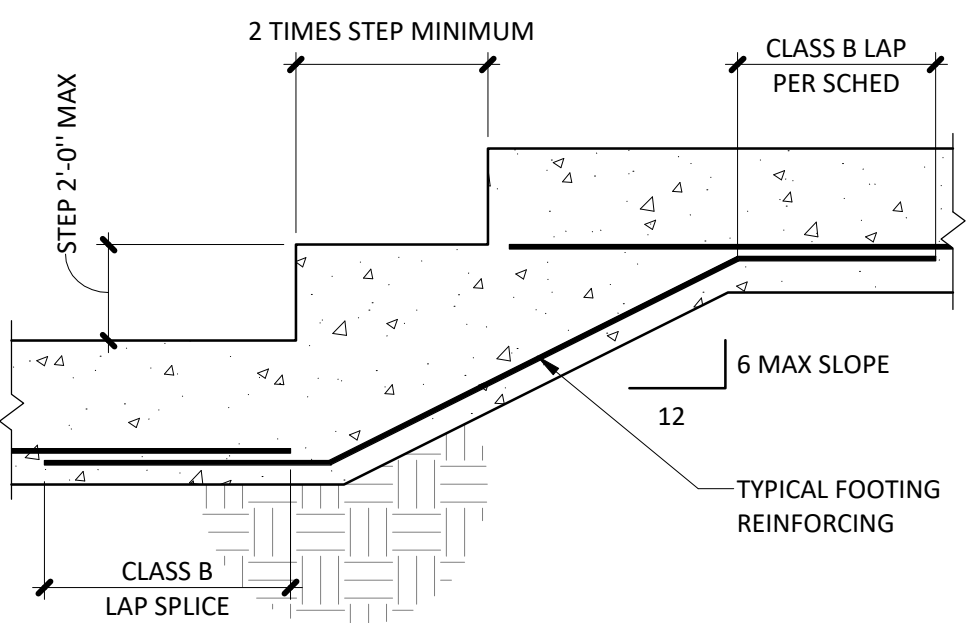
14 TYP STAIR ON GRADE
1" = 1'-0"



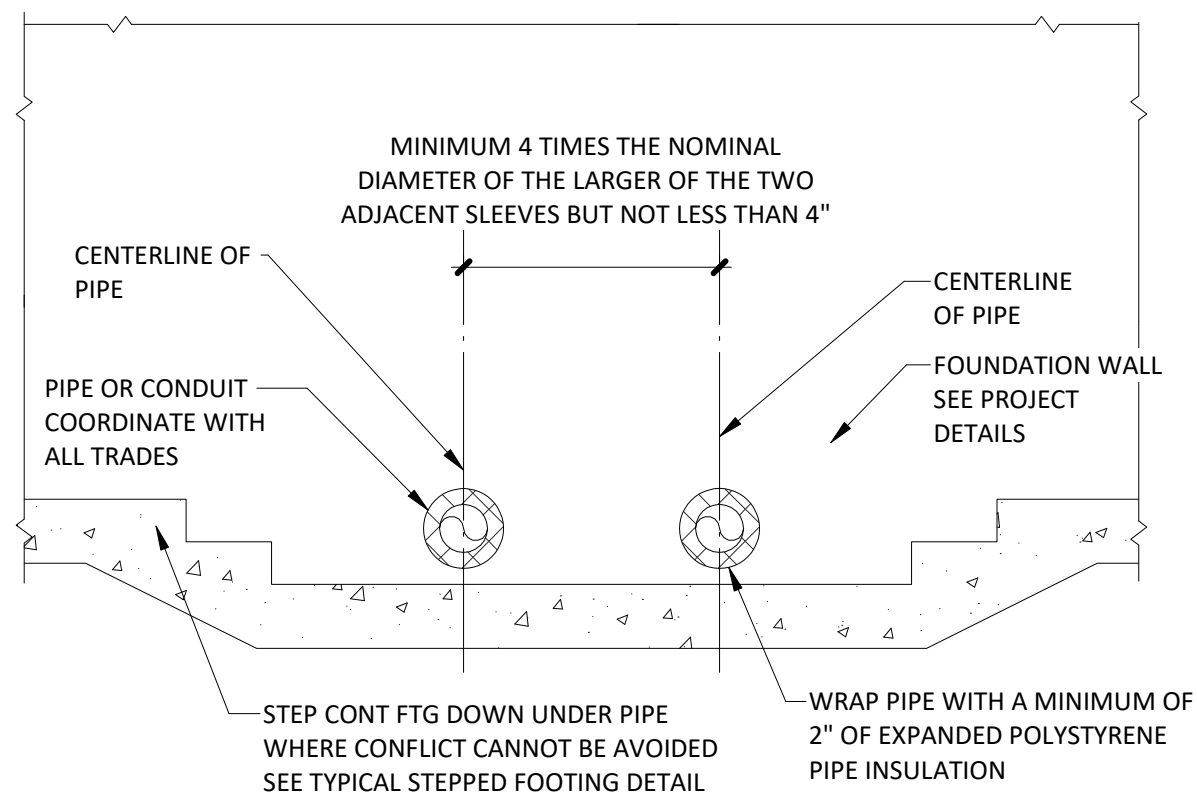
15 TYP EXPANSION JOINT [EJ]
1" = 1'-0"



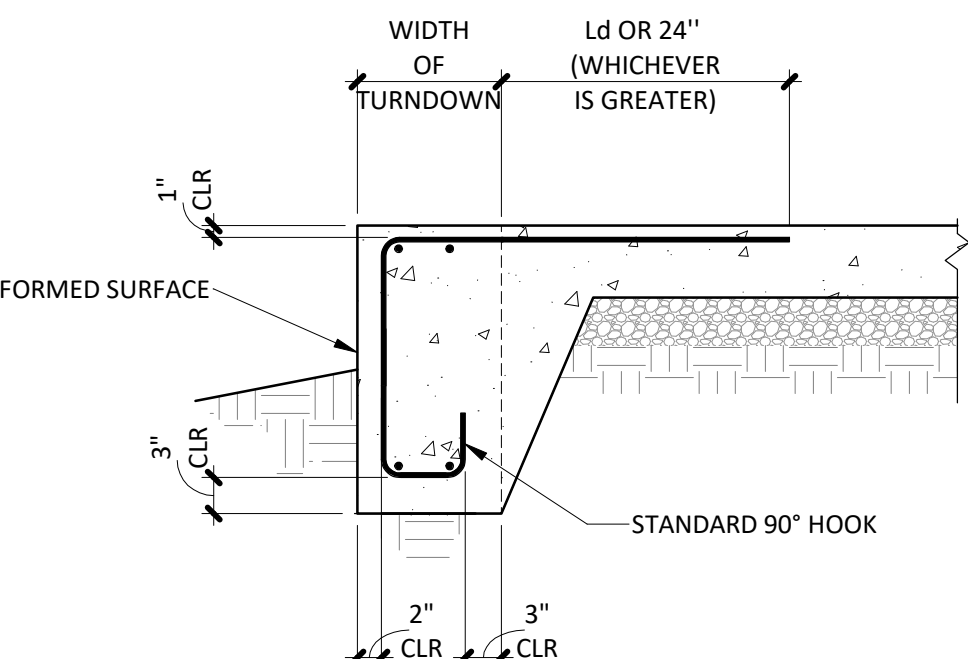
10 CONTINUOUS WALL FOOTING/COLUMN FOOTING INTERSECTIONS
No Scale



5 TYP STEPPED FOOTING
No Scale

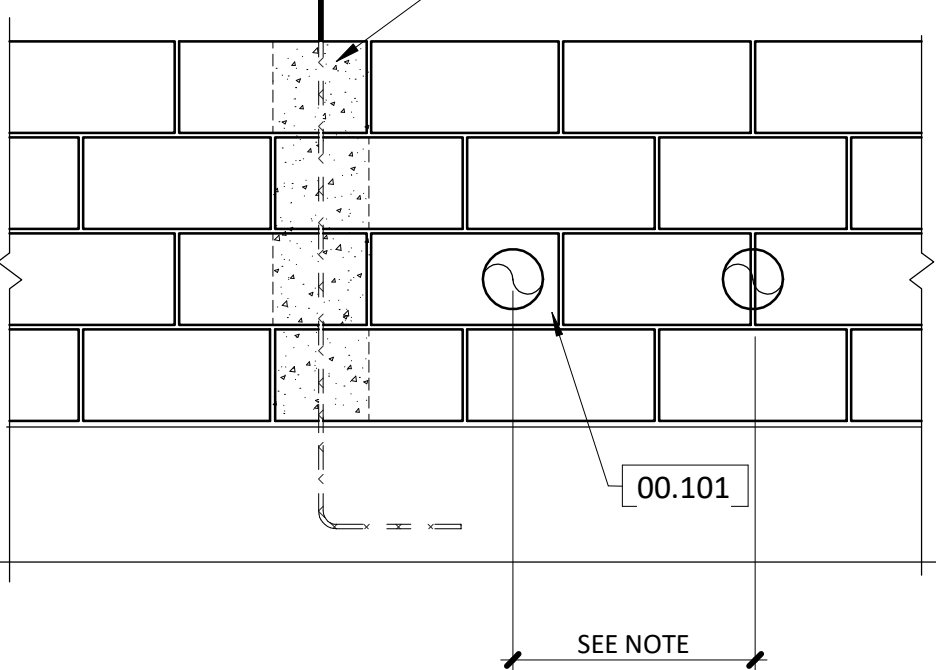


6 TYP FOOTING/UTILITY CONFLICT
No Scale

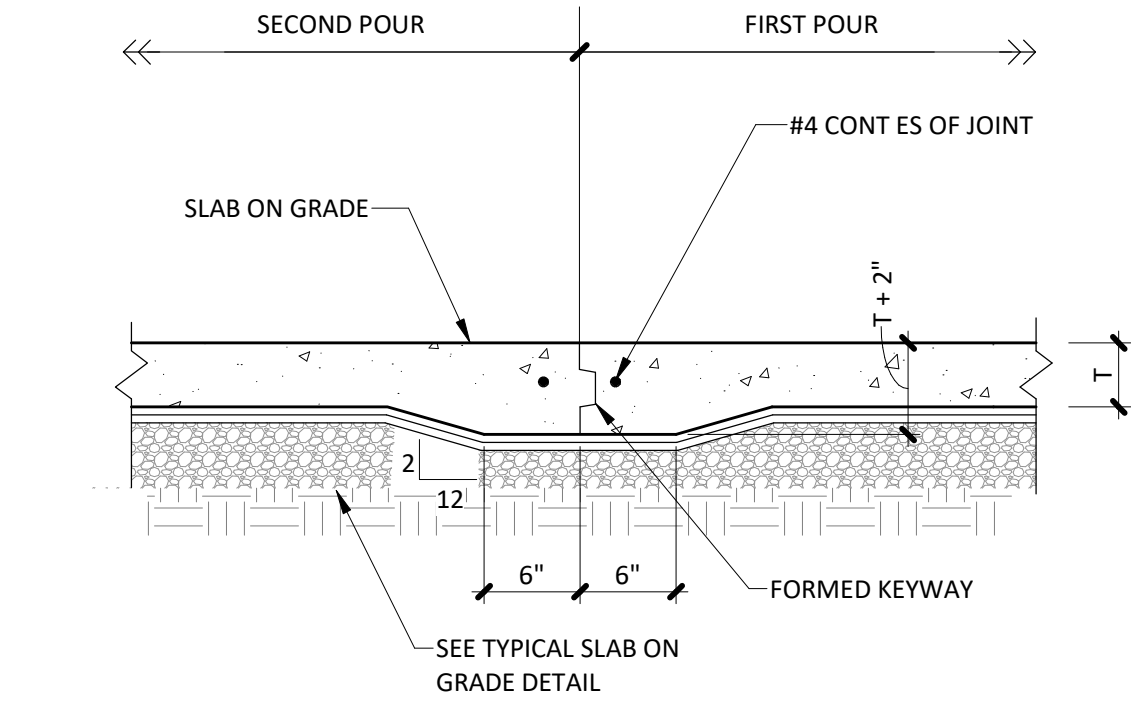


11 SECTION - TYPICAL REINFORCING AT TURN DOWN
3/4" = 1'-0"

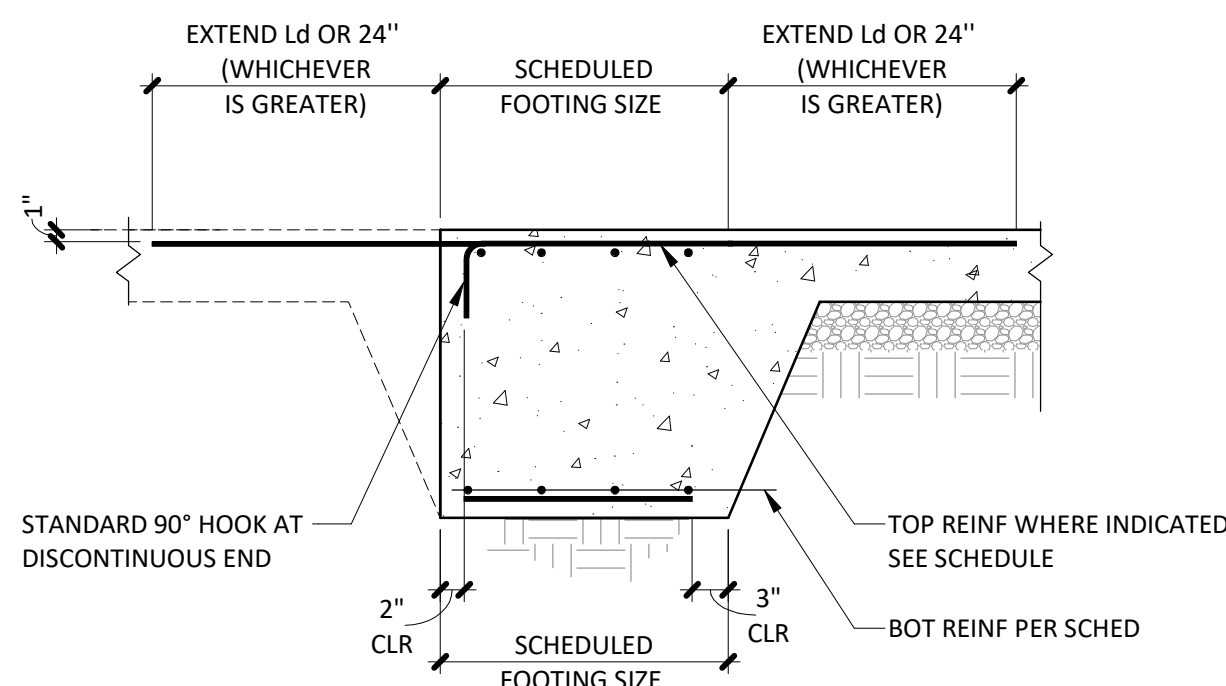
- NOTE:**
- WHERE SLEEVES ARE ACCIDENTALLY OMITTED, WALL MAY BE CORED IF APPROVED BY SEOR.
 - MINIMUM 4 TIMES THE NOMINAL DIAMETER OF THE LARGER OF THE TWO ADJACENT SLEEVES BUT NOT LESS THAN 4".
 - MINIMUM SPACING FOR CORED HOLES IS 8 TIMES THE NOMINAL DIAMETER BUT NOT LESS THAN 16".



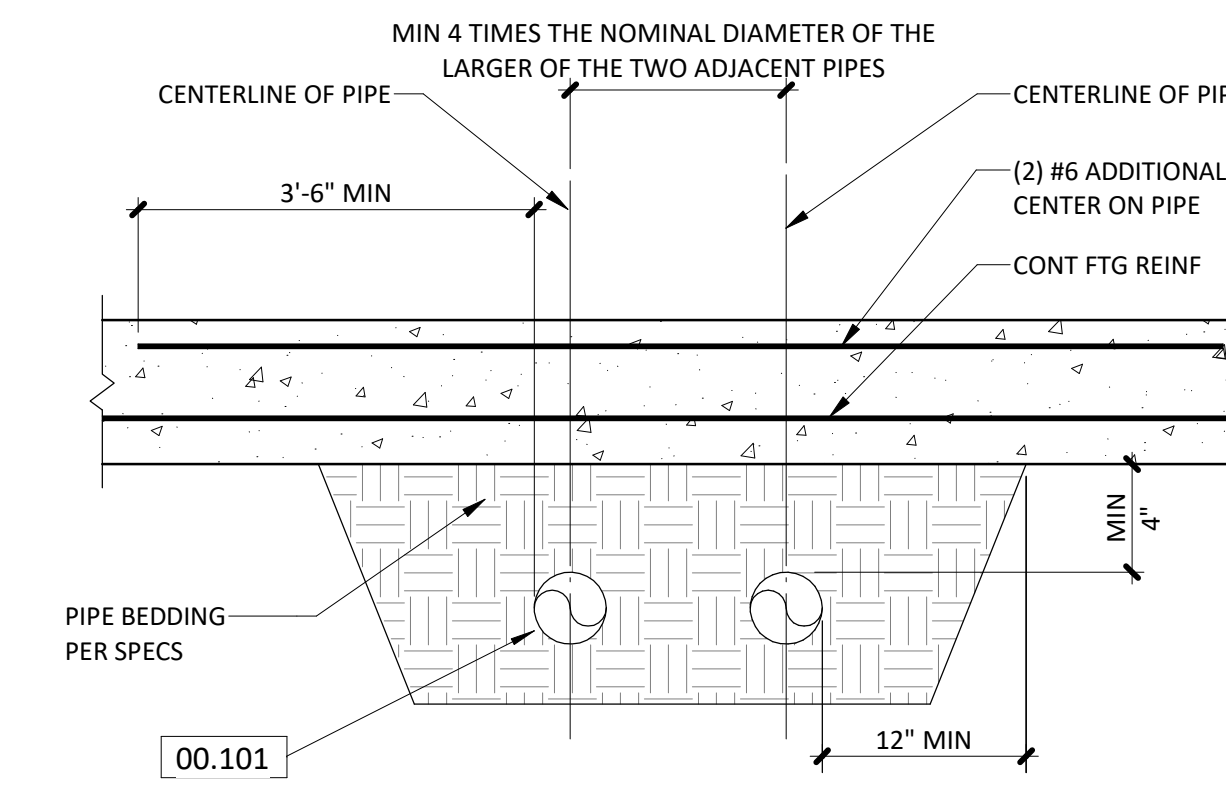
7 TYP UTILITY THROUGH STEM WALL
No Scale



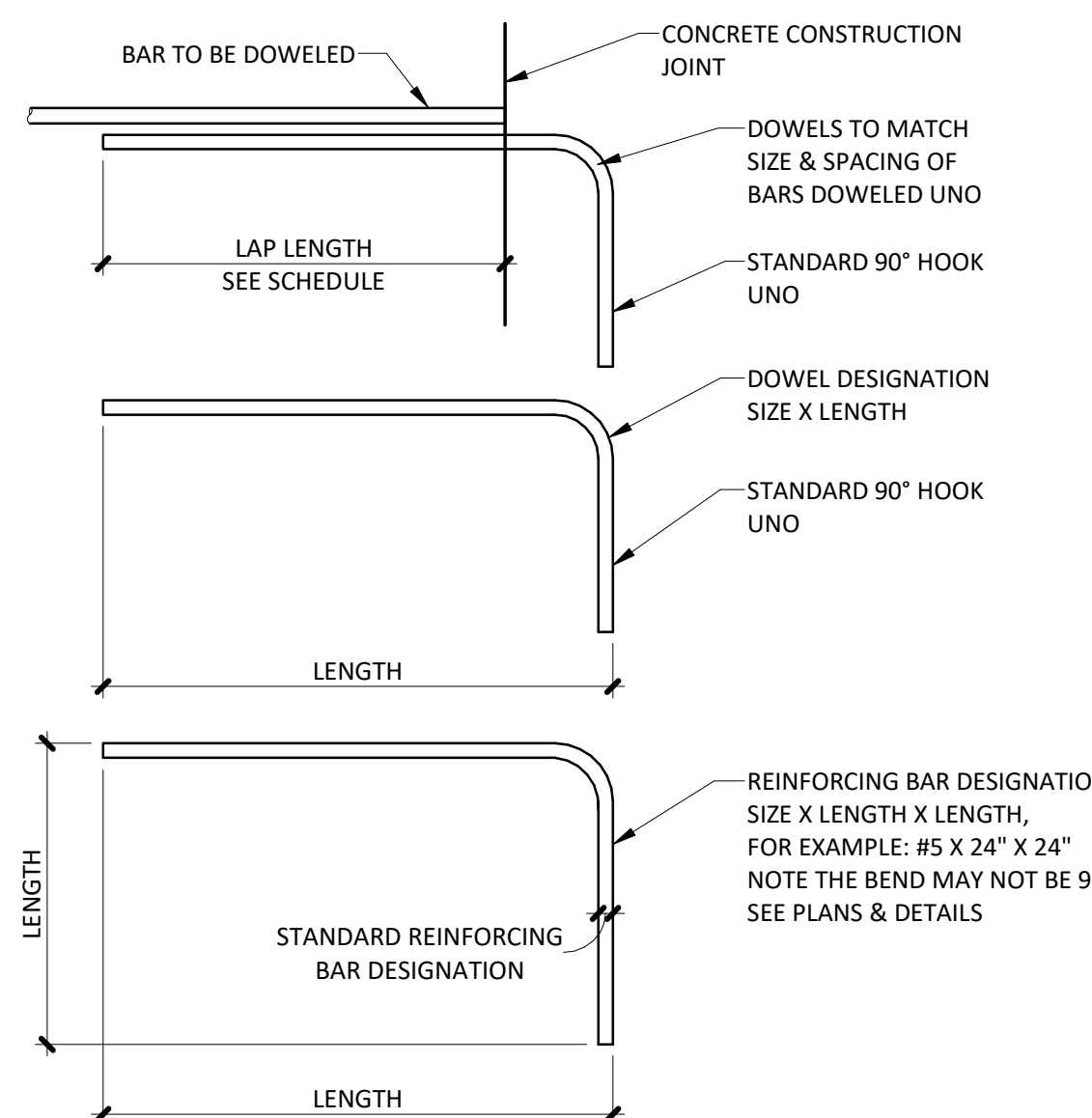
16 TYP KEYED CONSTRUCTION JOINT [KCJ]
1" = 1'-0"



12 SECTION - TYPICAL REINFORCING AT FOOTING
3/4" = 1'-0"

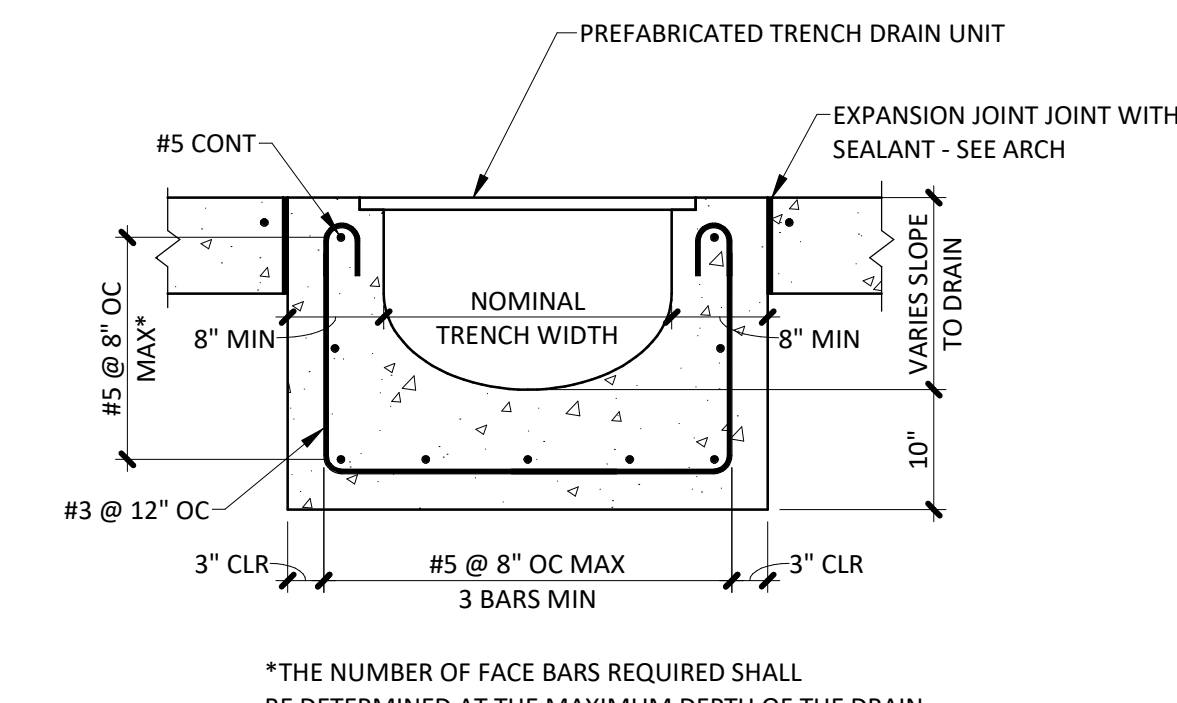


8 TYP UTILITY UNDER FOOTING
No Scale

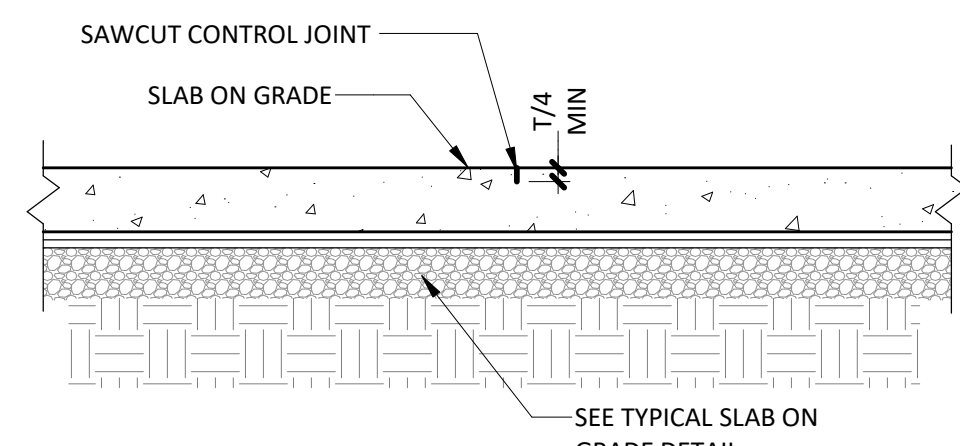


3 TYP DOWEL AND CORNER BARS
No Scale

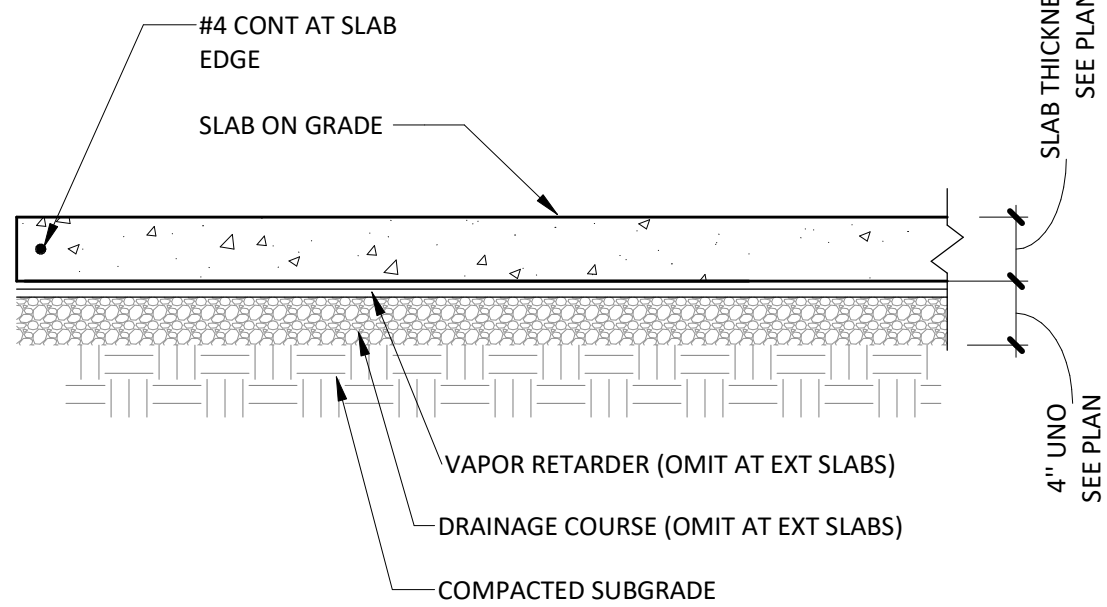
Keynote Legend	
00.101	Coordinate all locations where utilities cross continuous footings. Where utilities pass under the footing, install utilities before compacting and testing subgrade for footing. Where the spacing of pipes or conduit does not allow for specified compaction, use CLSM. Where utilities conflict with the footing location indicated, step footings down to allow utilities to pass through stemwall. Sleeve all utilities through stemwall during the construction of the stemwall.
03.122	Step down the bottom of the continuous wall footing or the column footing, whichever is lower, a distance from the face of the column footing equal to the width of the wall footing.
03.123	Where the width of the continuous wall footing is not wholly within the column footing, effectively enlarging the column footing, lengthen the column footing bars perpendicular to the continuous footing to within three inches of the face of the continuous footing. Parallel to the continuous footing, add one additional column footing bar for each foot or portion of a foot that the footing is enlarged.



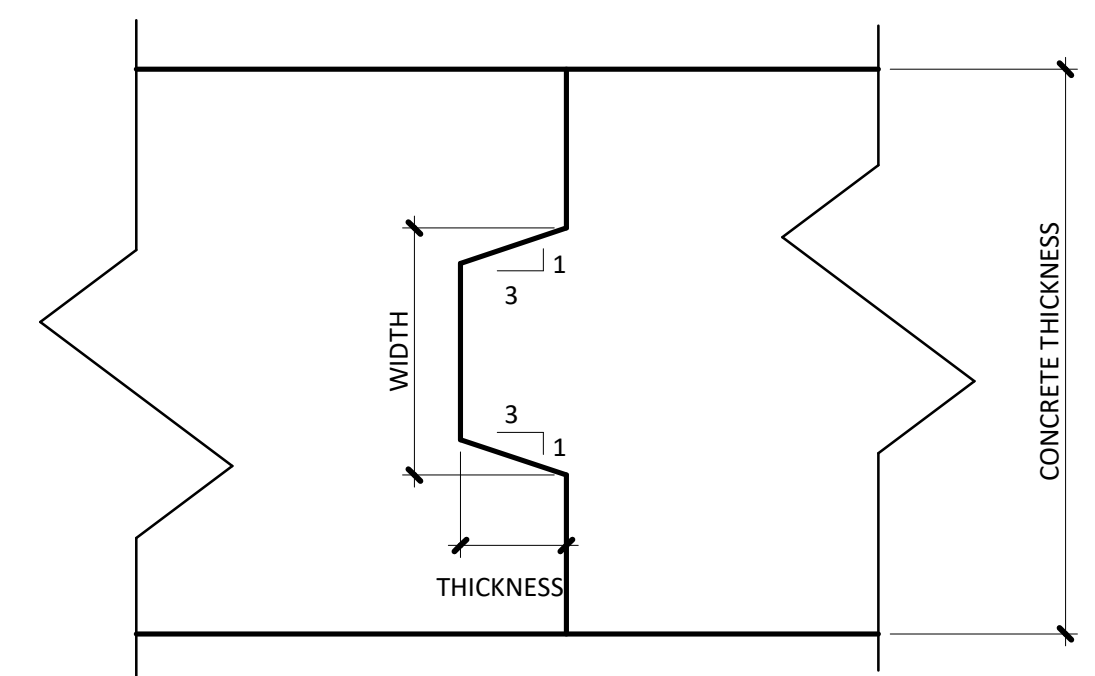
13 TYP CONTROL JOINT [CJ]
1" = 1'-0"



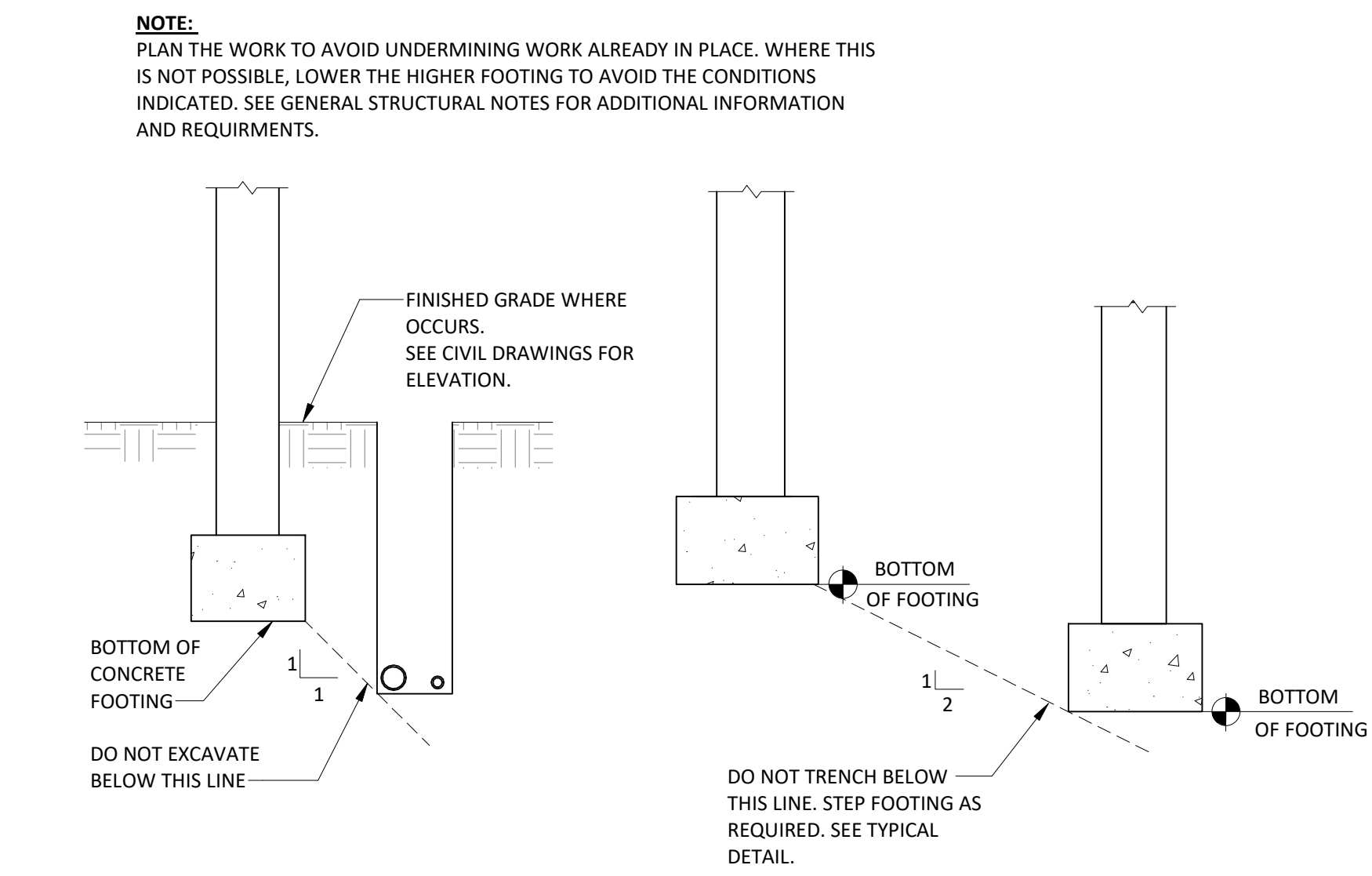
17 TRENCH DRAIN
3/4" = 1'-0"



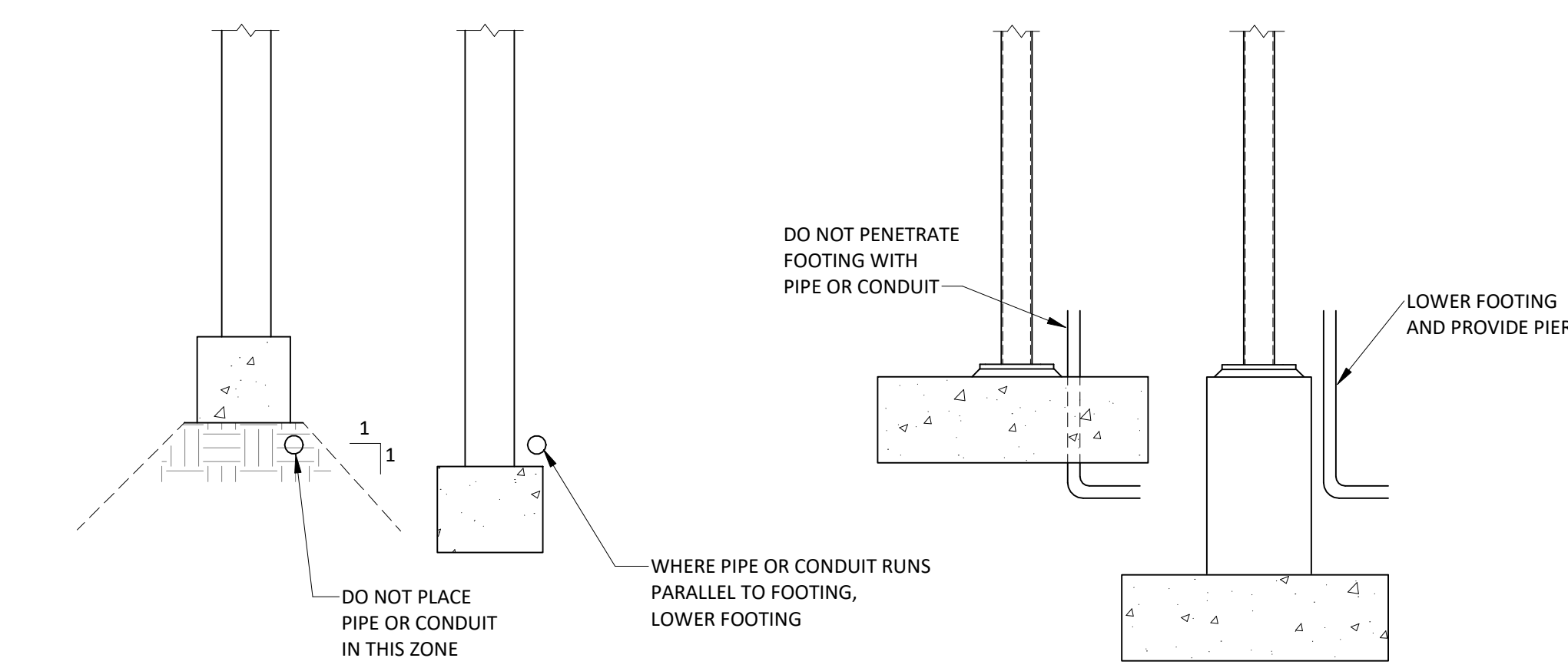
9 TYP SLAB ON GRADE
1" = 1'-0"



4 TYP KEY IN CONCRETE
No Scale



1 TYP EXCAVATION SAFETY
No Scale



2 CONFLICTS WITH FOOTINGS
No Scale

Altman + Barrett

Lindsey & Ritter, Inc.

401 East Jane Street, Valdosta, GA 31601
GA COA # PE000415 EXP 6/30/2022



ab architects

Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 – 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

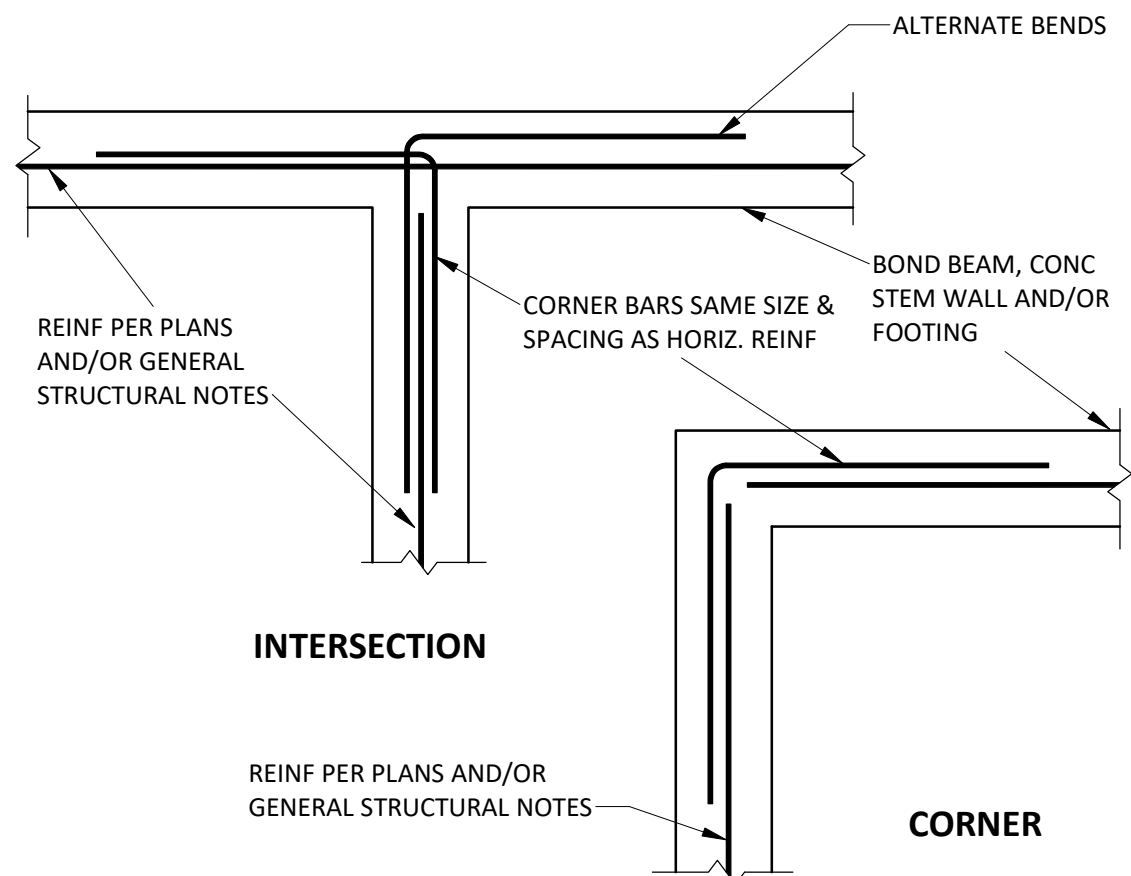
DATE: 09.17.2020	DRAWN: GDP	CHECKED: JLS	REVISIONS:	www.altmanbarrettarchitects.com
------------------	------------	--------------	------------	---------------------------------

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

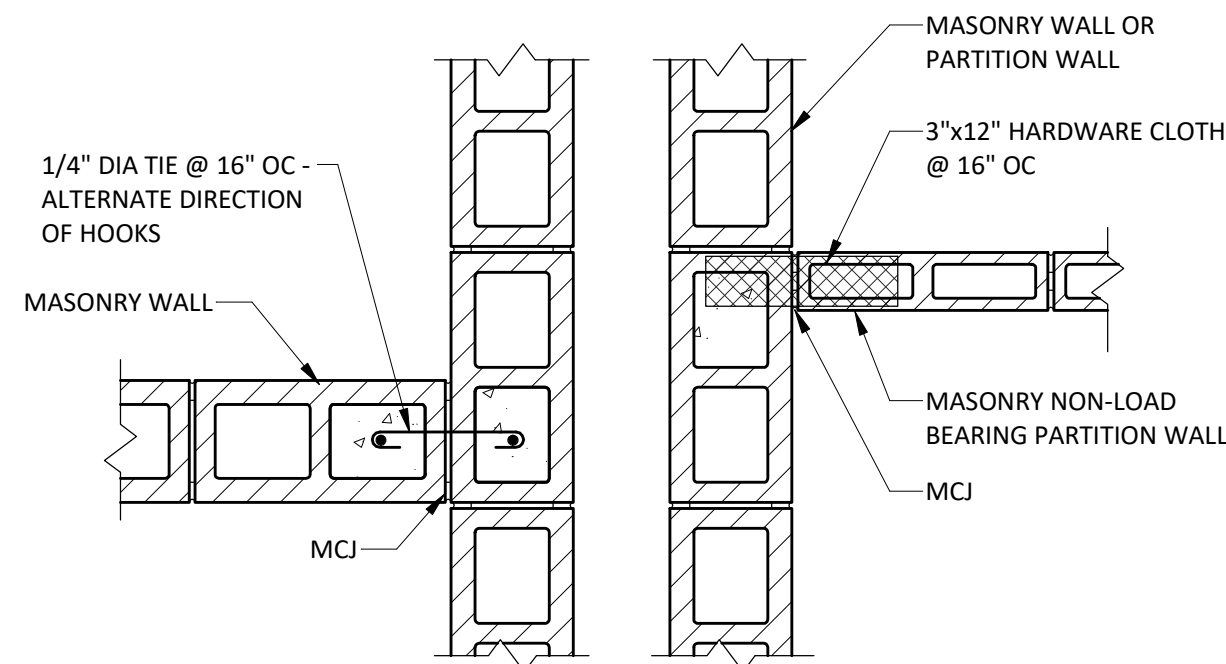
\$5000

DRAWINGS ARE THE PROPERTY OF THE ARCHITECT
AND SHALL NOT BE REPRODUCED OR USED WITHOUT
WRITTEN PERMISSION AND CREDIT
© 2020 ALTMAN + BARRETT ARCHITECTS P.C.

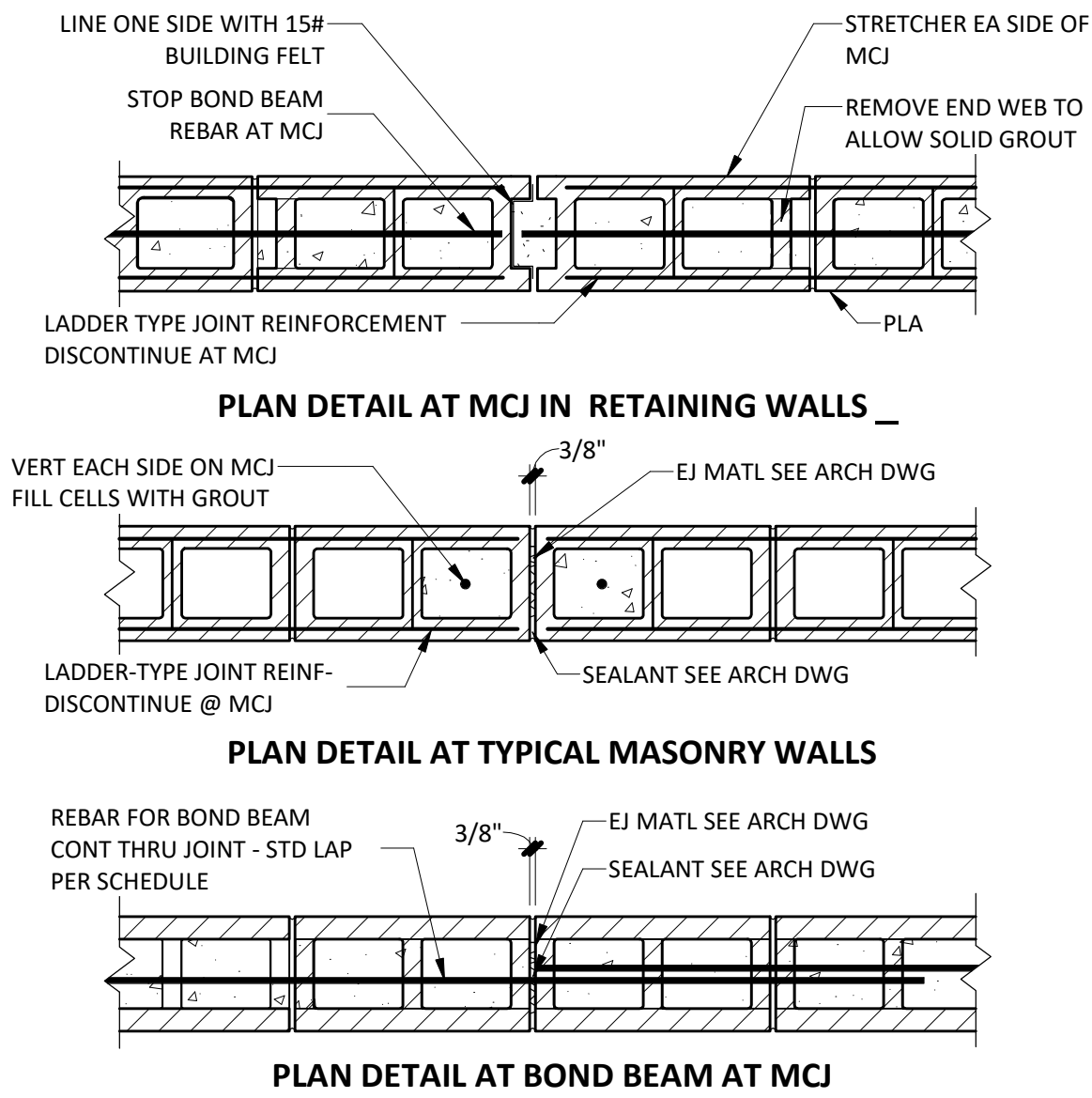
PROJECT NO: 20028



10 TYP PLAN - CORNER REINFORCING
No Scale

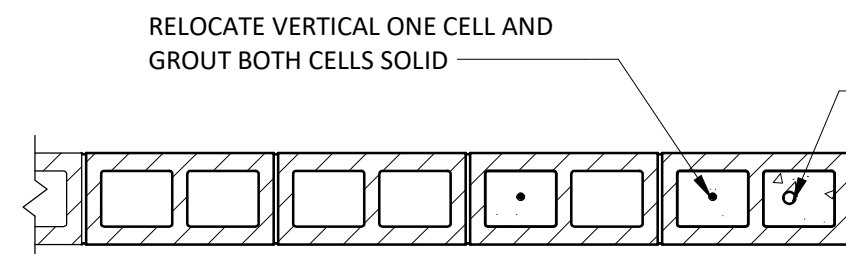


11 TYP PLAN - MASONRY INTERSECTION
No Scale

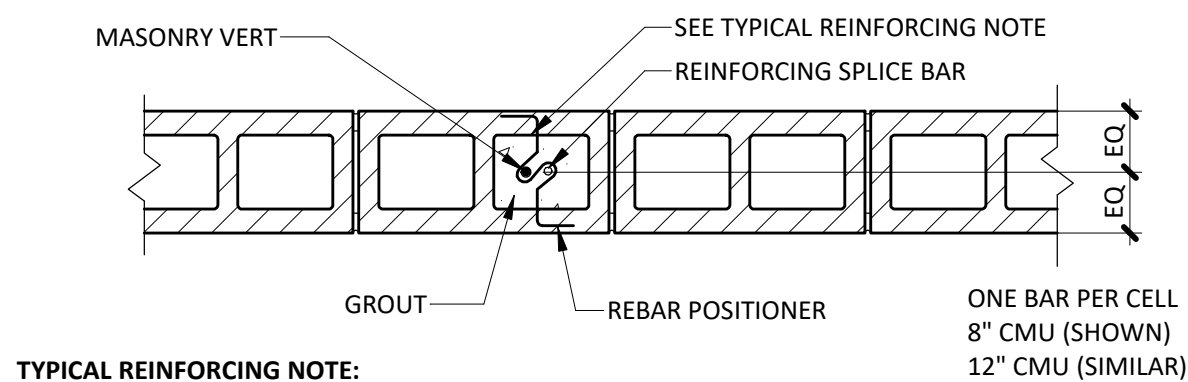
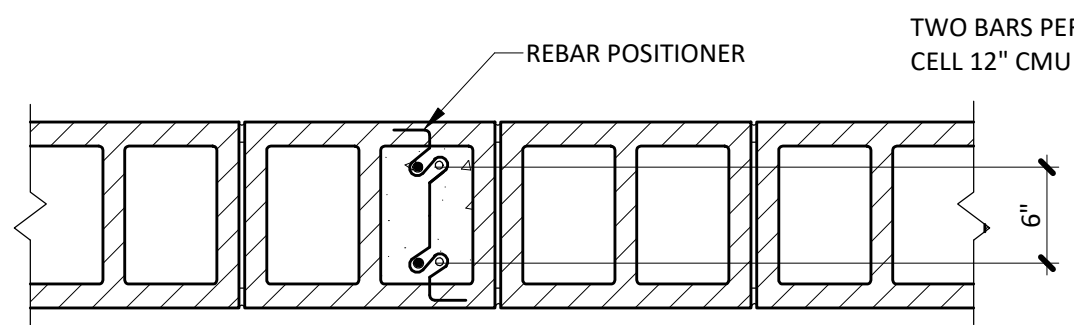


5 TYP CMU HORIZONTAL REINFORCING AT MCJ
No Scale

- NOTE:**
- DO NOT PLACE REINFORCING AND CONDUIT IN THE SAME CELL.
 - CELLS CONTAINING CONDUIT NEED NOT TO BE GROUTED UNLESS WALL IS BELOW GRADE OR INDICATED TO BE SOLID GROUTED.
 - VERTICAL REINFORCING MAY BE RELOCATED AS INDICATED BUT THE TOTAL NUMBER OF BARS SHALL NOT BE REDUCED. PROVIDE THE SAME OR A GREATER NUMBER OF BARS AS WOULD BE REQUIRED IF THE BARS HAD NOT BEEN RELOCATED.

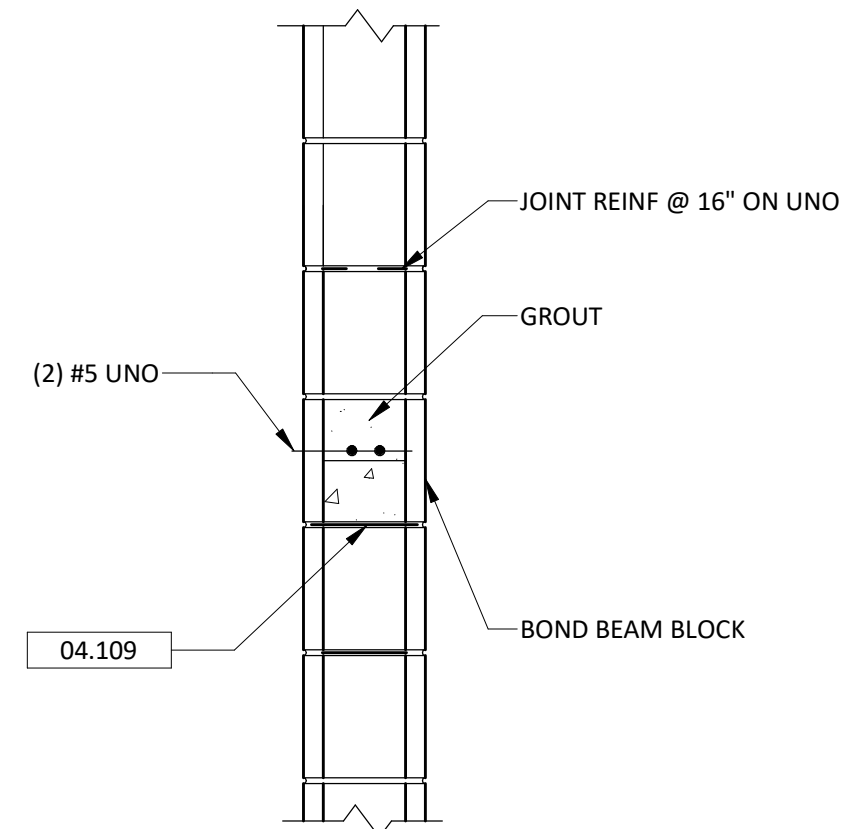


6 TYP PLAN - CONDUIT AT JAMB
No Scale

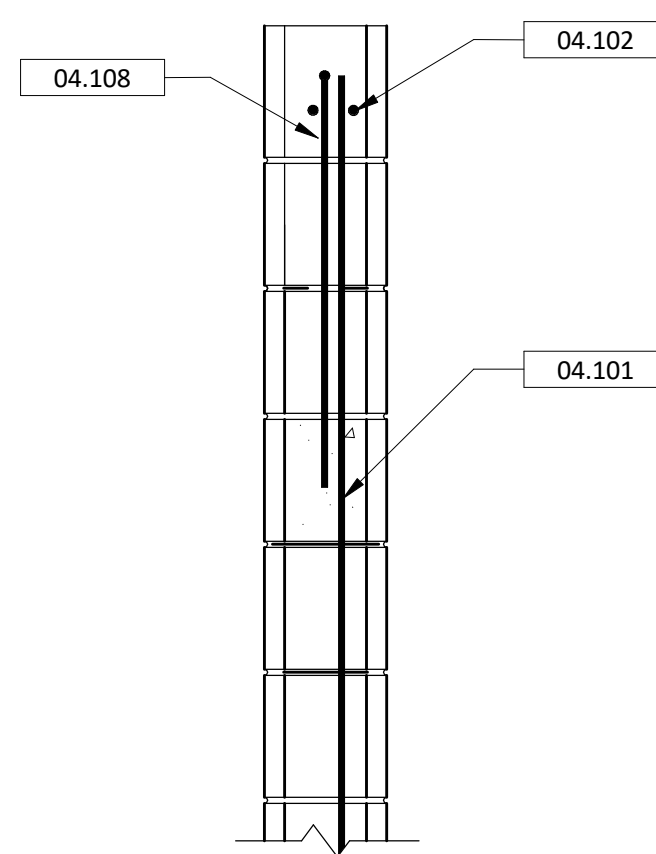


- TYPICAL REINFORCING NOTE:**
- ALL REINFORCING IS TO BE ENCASED IN GROUT.
 - ALL REINFORCING IS TO BE SECURED AGAINST DISPLACEMENT PRIOR TO AND DURING GROUT PLACEMENT.
 - BARS ARE TO BE SECURED AT EACH END AND AT A SPACING NOT TO EXCEED 200 BAR DIAMETERS OR 10'-0" WHICHEVER IS LESS.
 - BARS ARE TO BE SECURED AT EACH END BY WIRE TIES AS SPECIFIED FOR CONCRETE OR BY WIRE POSITIONERS DESIGNED TO HOLD BARS IN THE CORRECT LOCATION.
 - VERTICAL BARS ARE TO BE CONTINUOUS FOR THE FULL HEIGHT OF THE GROUT POUR PLUS REQUIRED LAP ABOVE.

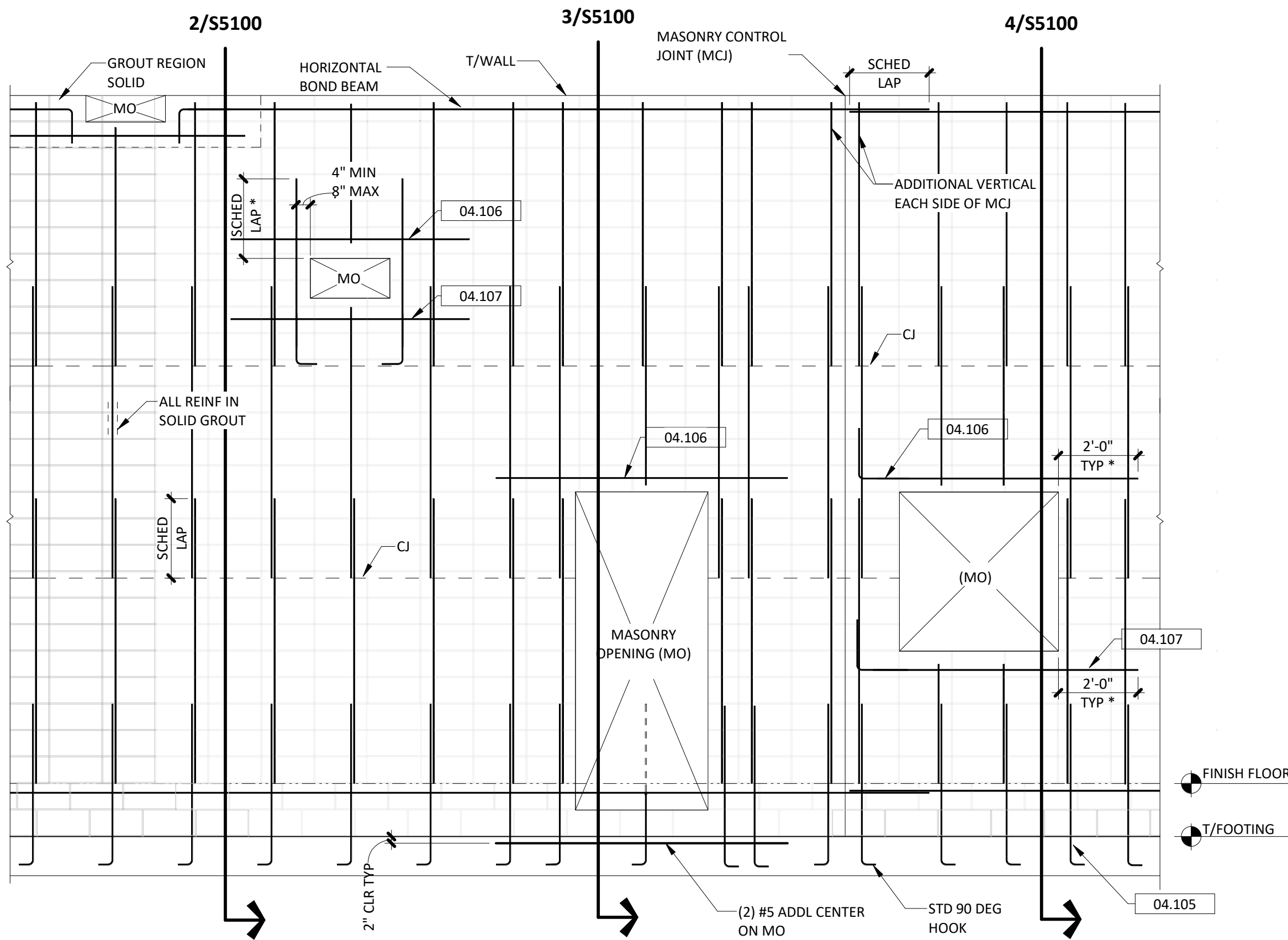
7 TYP CMU VERTICAL REINFORCING
No Scale



8 TYP CMU HORIZONTAL REINFORCING
No Scale



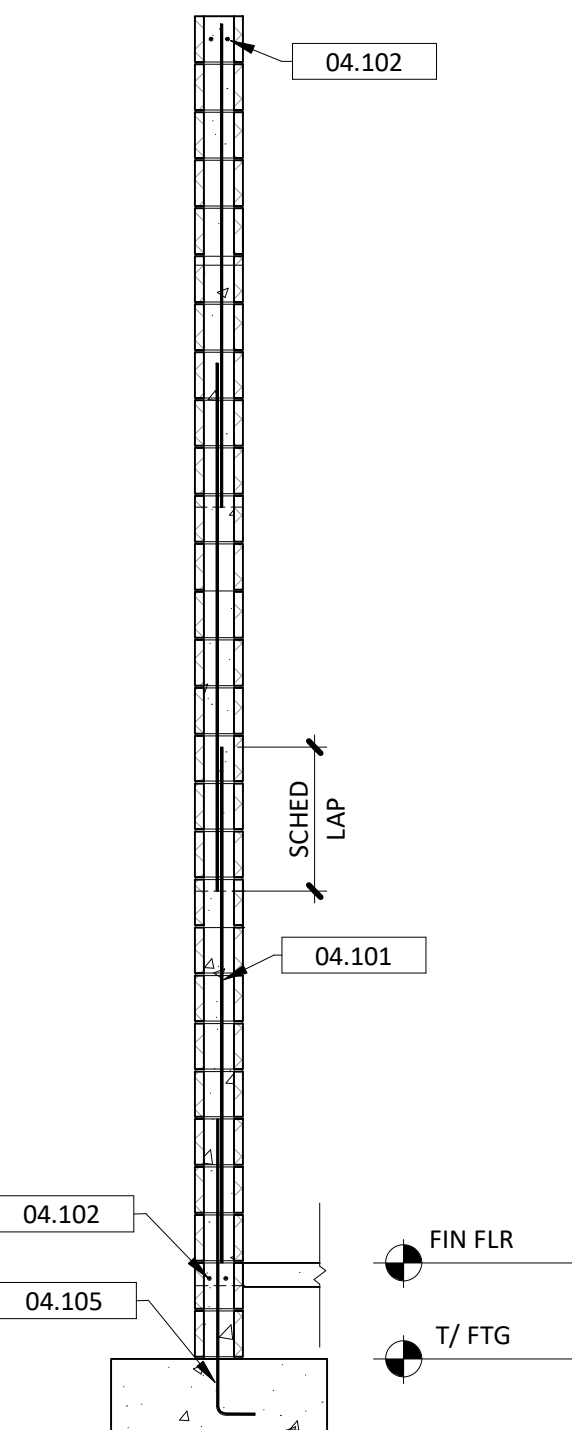
9 TYPICAL TOP OF CMU WALL
No Scale



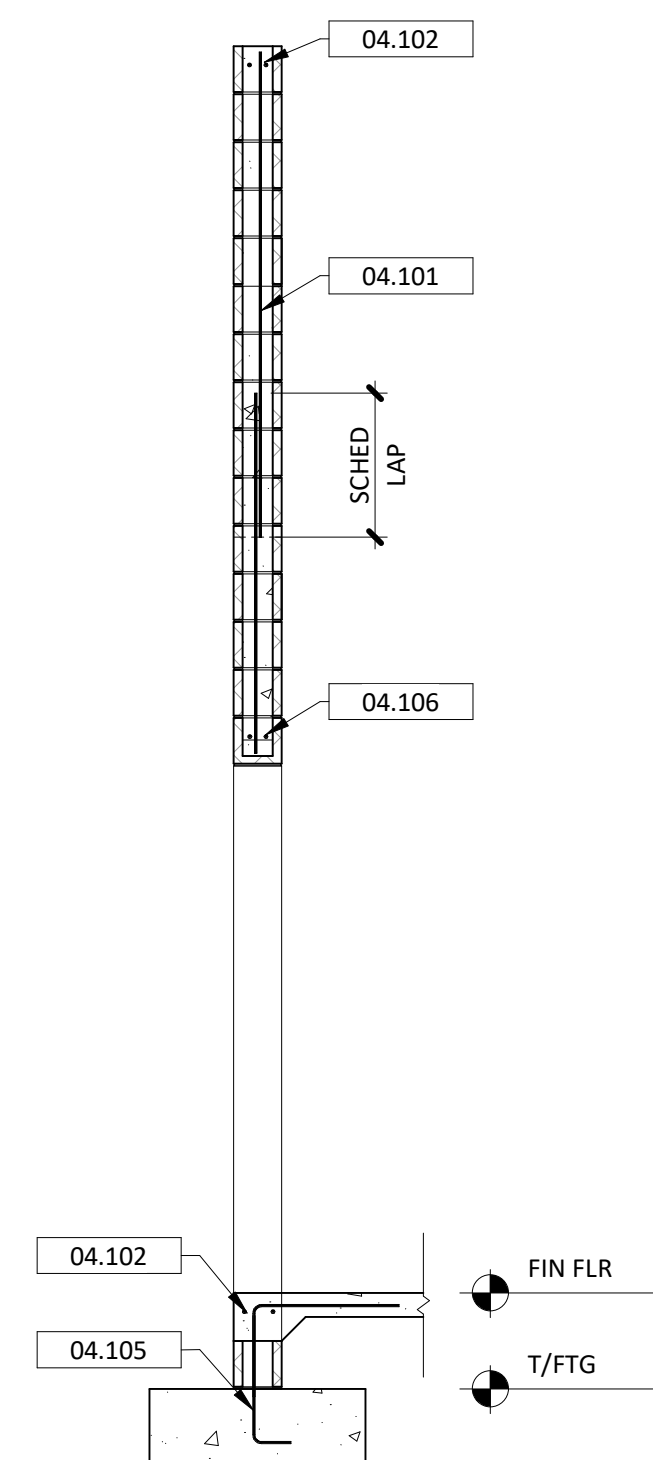
1 TYP ELEVATION AT MASONRY WALL
No Scale

- MASONRY GROUTING PROCEDURES:**
- Grouted masonry shall be constructed in such a manner that all elements of the masonry act together as a structural element.
 - Prior to grouting, the grout space shall be cleaned so that all spaces to be filled with grout do not contain mortar projections greater than 1/2", mortar droppings or other foreign material.
 - Grout materials and water content shall be controlled to provide adequate fluidity for placement without segregation of the constituents and shall be mixed thoroughly. Segregation of the grout materials and damage to the masonry shall be avoided during the grouting process.
 - The grouting of any section of wall shall be completed in one day with no interruptions greater than one hour.
 - Between grout pours, a horizontal construction joint shall be formed by stopping all wythes at the same elevation and with the grout stopping a minimum of 1 1/2 inches below a mortar joint, except at the top of the wall. Where bond beams occur, stop grout pours a minimum of 1/2 inch below the top of the masonry.
 - All cells and spaces containing reinforcing bars shall be filled with grout. Grout shall be placed so that no spaces to be grouted contain voids.
 - Grout shall be consolidated by mechanical vibration during placing before loss of plasticity in a manner to fill the grout space. Grout pours greater than 12 inches shall be mechanically reconsolidated to minimize voids due to water loss. Grout pours 12 inches or less in height shall be mechanically vibrated, or puddled.
 - Where grout pours exceed 5 feet, cleanouts shall be provided in the bottom course at every vertical bar location but shall not be spaced more than 32 inches on center for solid grouted masonry. Grout shall be placed in a continuous pour not to exceed 24 feet in height, and in grout lifts not to exceed 5'-0" or 12'-8" where permitted by code.
 - Grout spilled on the top of the wall may be incorporated into the grout pour prior to the reconsolidation of the grout. Other spilled grout shall not be incorporated into the wall. No grout shall be added to the wall after the final consolidation of the grout. Grout that has lost sufficient water so as to no longer be plastic shall not be incorporated into the wall.
 - Reinforcing shall be continuous the full height of the grout pour plus any required lap above. Secure reinforcement against displacement prior to grouting with wire positioners or other suitable devices at intervals not to exceed the smaller 200 bar diameters or 10 feet. As a minimum, each bar shall be held in place at the bottom of the bar by either tying to the bar below or by use of a positioner and within 8 inches of the top of the masonry for each grout pour.
 - Tolerance for the placement of steel in walls and flexural elements shall be plus or minus 1/2 inch for "d" equal to 8 inches or less, plus or minus one inch for "d" equal to 24 inches or less but greater than 8 inches, and plus or minus 1 1/4 inch for "d" greater than 24 inches.

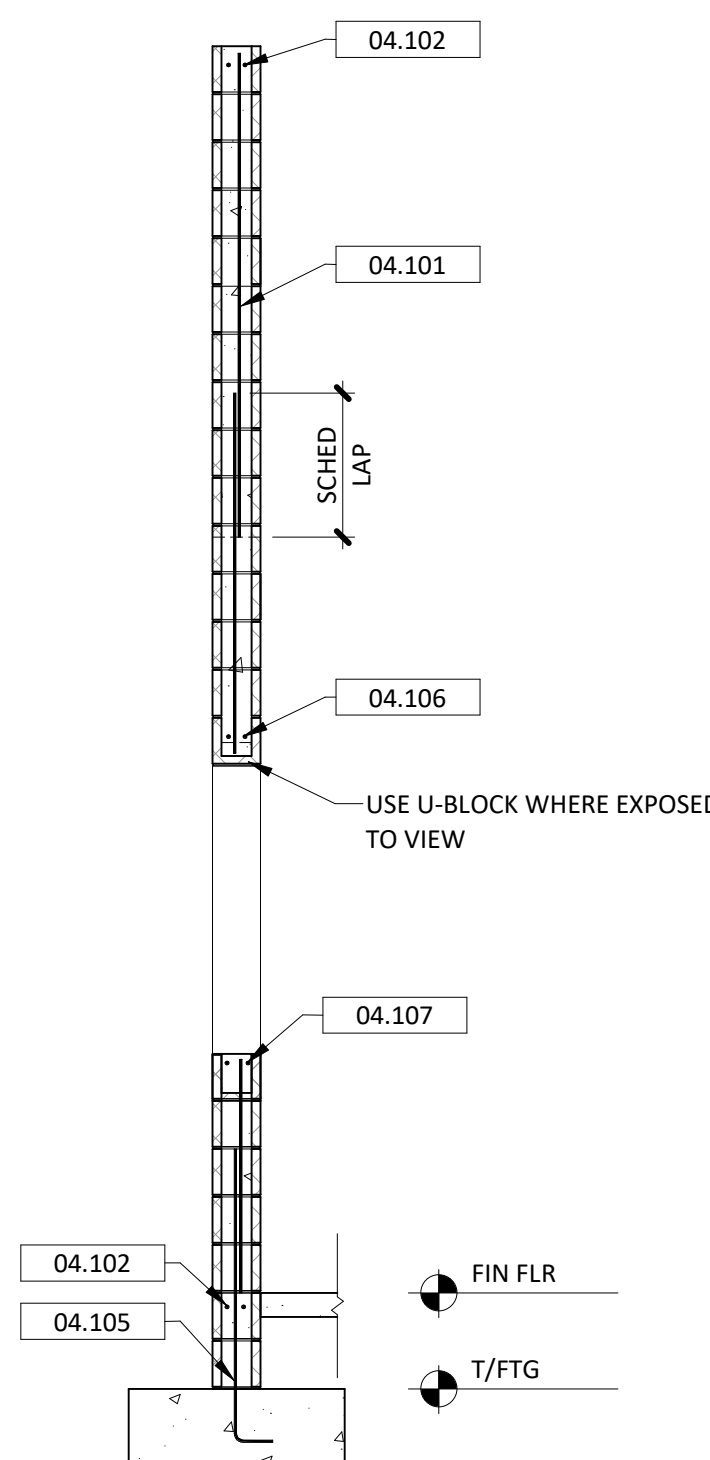
NOTE: HOOK BAR UP INTO GROUTED JAMB CELL WHERE MCJ OR END OF WALL DOES NOT PERMIT EXTENSION



2 TYP WALL
No Scale



3 TYP WALL @ DOOR
No Scale



4 TYP WALL @ WINDOW
No Scale

Keynote Legend

04.101	Vertical Reinforcing in Solid Grout: CMU walls are to have verticals of the size noted at all corners, ends, jambs, intersections, both sides of masonry control joints (MCJ), and at the maximum spacing indicated.
04.102	Horizontal Bond Beam Reinforcing: All CMU walls to have two continuous reinforcing bars in a minimum 8-inch bond beam at all floor and roof levels and at the top of the wall. Unless specifically noted otherwise, bond beam reinforcing is to be continuous through MCJ. At interior walls built tight to underside of structure, the bond beam may be lowered one course to facilitate grouting.
04.105	Dowel to match size and spacing of masonry vertical, lap per schedule.
04.106	Masonry Lintel - See schedule.
04.107	Minimum #4 Sill Bar X (Masonry Opening + 4'-0") in solid grout.
04.108	At all walls designated as shear walls or as load-bearing walls, provide dowel to match size and spacing of masonry vertical. Lap bar per schedule with masonry vertical and with masonry bond beam reinforcing.
04.109	At masonry bond beams, use U-block or where bond beam block is used, provide metal or nylon mesh grout dam. Notch the bottom of U-block or stop grout dam at vertical reinforcing. Where wall is indicated to be grouted solid, do not use U-block or grout dam. Only bond beam block are permitted for bond beams in solid grouted walls.

Altman + Barrett

Lindsey & Ritter, Inc.
401 East Jane Street, Valdosta, GA 31601
GA COA # PELP000415 EXP 6/30/2022



ab architects

Altman + Barrett
a r c h i t e c t s
P.O. BOX 665 - 117 WEST MAIN ST.
HAHIRA, GEORGIA 31632
PHONE # (229) 585-9018

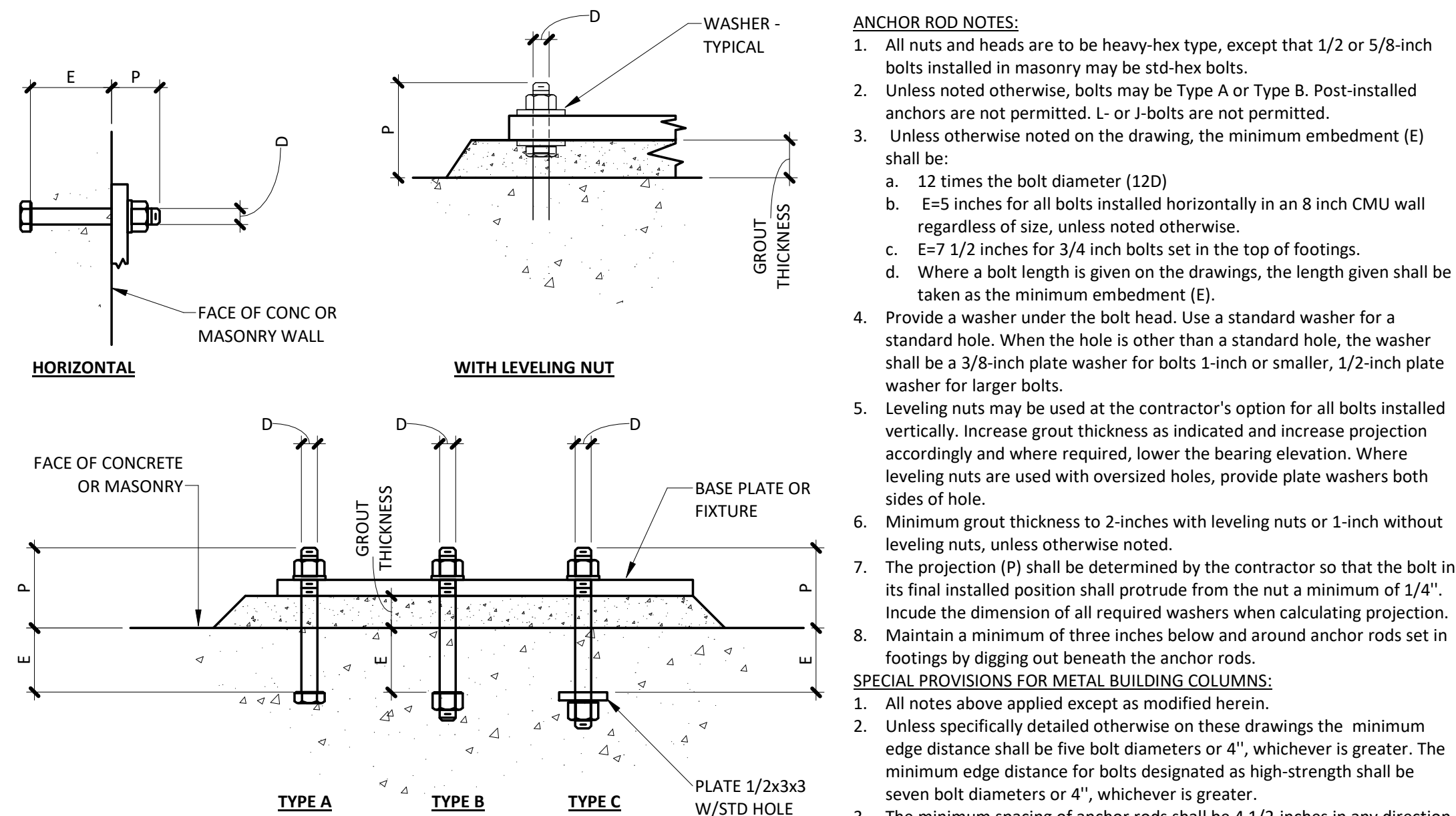
DATE: 09.17.2020	DRAWN: GDP	CHECKED: JLS	REVISIONS:
www.altmanbarrettarchitects.com			

Wheeler County Maintenance
Building Addition
Wheeler County School System
2nd Avenue, Alamo, GA 30411

S5100

DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND SHALL NOT BE REPRODUCED OR USED WITHOUT WRITTEN PERMISSION AND CREDIT.
© 2020 ALTMAN + BARRETT ARCHITECTS P.C.

PROJECT NO: 20028

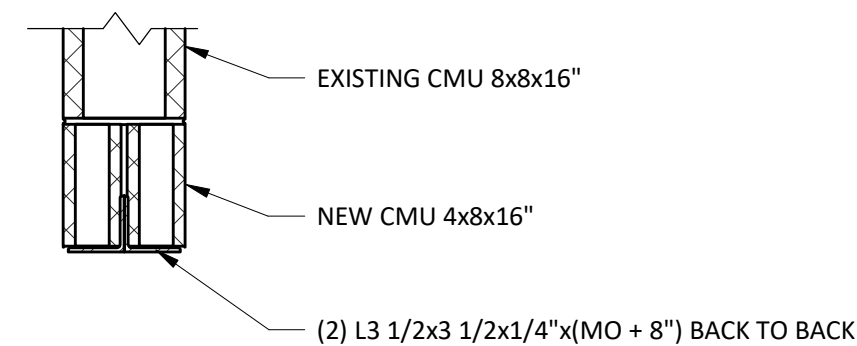


ANCHOR ROD NOTES:

- All nuts and heads are to be heavy-hex type, except that 1/2 or 5/8-inch bolts installed in masonry may be std-hex bolts.
- Unless noted otherwise, bolts may be Type A or Type B. Post-installed anchors are not permitted. L- or J-bolts are not permitted.
- Unless otherwise noted on the drawing, the minimum embedment (E) shall be:
 - 12 times the bolt diameter (12D)
 - E=5 inches for all bolts installed horizontally in an 8 inch CMU wall regardless of size, unless noted otherwise.
 - E=7 1/2 inches for 3/4 inch bolts set in the top of footings.
 - Where a bolt length is given on the drawings, the length given shall be taken as the minimum embedment (E).
- Provide a washer under the bolt head. Use a standard washer for a standard hole. When the hole is other than a standard hole, the washer shall be a 3/8-inch plate washer for bolts 1-inch or smaller, 1/2-inch plate washer for larger bolts.
- Leveling nuts may be used at the contractor's option for all bolts installed vertically. Increase grout thickness as indicated and increase projection accordingly and where required, lower the bearing elevation. Where leveling nuts are used with oversized holes, provide plate washers both sides of hole.
- Minimum grout thickness to 2-inches with leveling nuts or 1-inch without leveling nuts, unless otherwise noted.
- The projection (P) shall be determined by the contractor so that the bolt in its final installed position shall protrude from the nut a minimum of 1/4". Include the dimension of all required washers when calculating projection.
- Maintain a minimum of three inches below and around anchor rods set in footings by digging out beneath the anchor rods.

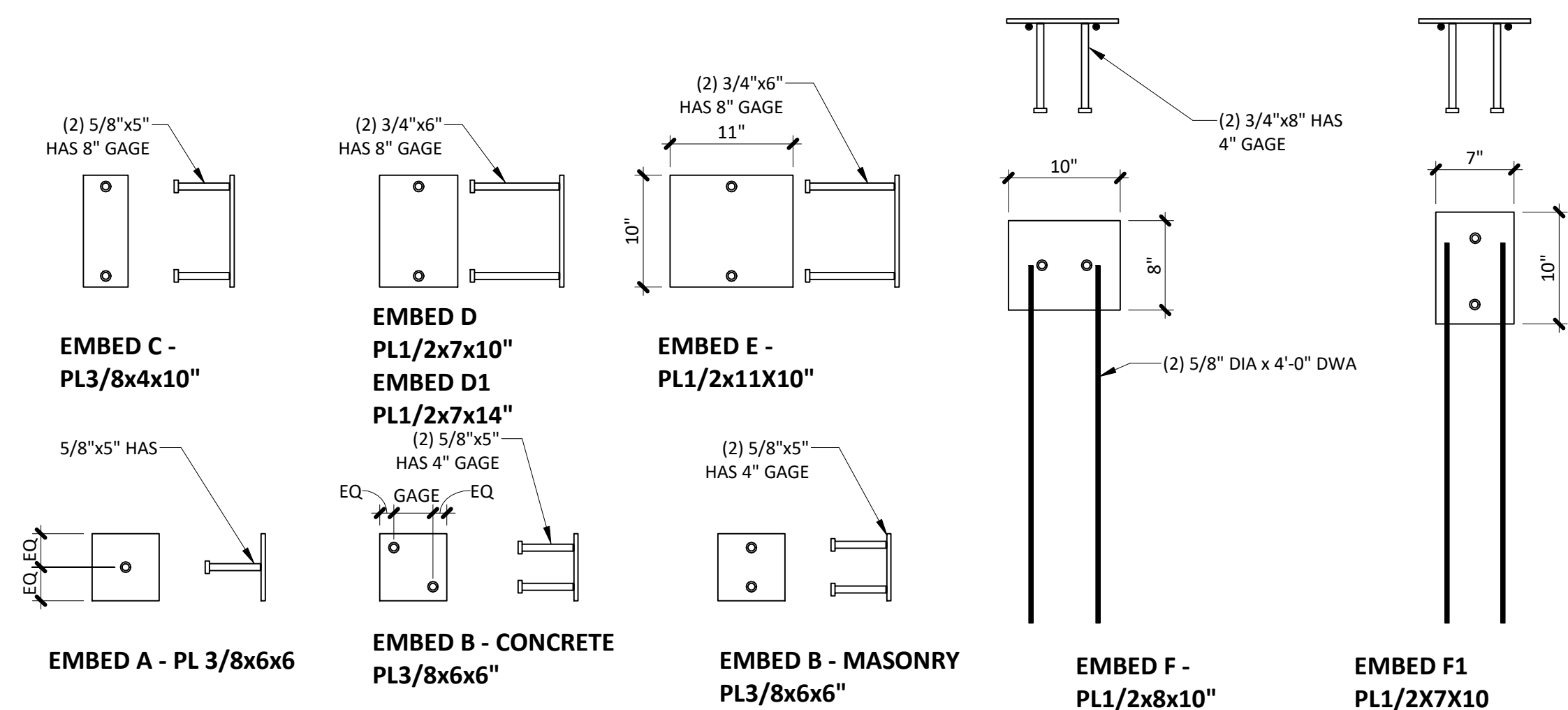
SPECIAL PROVISIONS FOR METAL BUILDING COLUMNS:

- All notes above applied except as modified herein.
- Unless specifically detailed otherwise on these drawings the minimum edge distance shall be five bolt diameters or 4", whichever is greater. The minimum edge distance for bolts designated as high-strength shall be seven bolt diameters or 4", whichever is greater.
- The minimum spacing of anchor rods shall be 4 1/2-inches in any direction.
- The embedment length (E) for anchors installed in a monolithic footing shall be increased so that the clear cover below the anchor is four-inches ± one-inch, but not less than 12D.



8 TYPICAL ANCHOR RODS

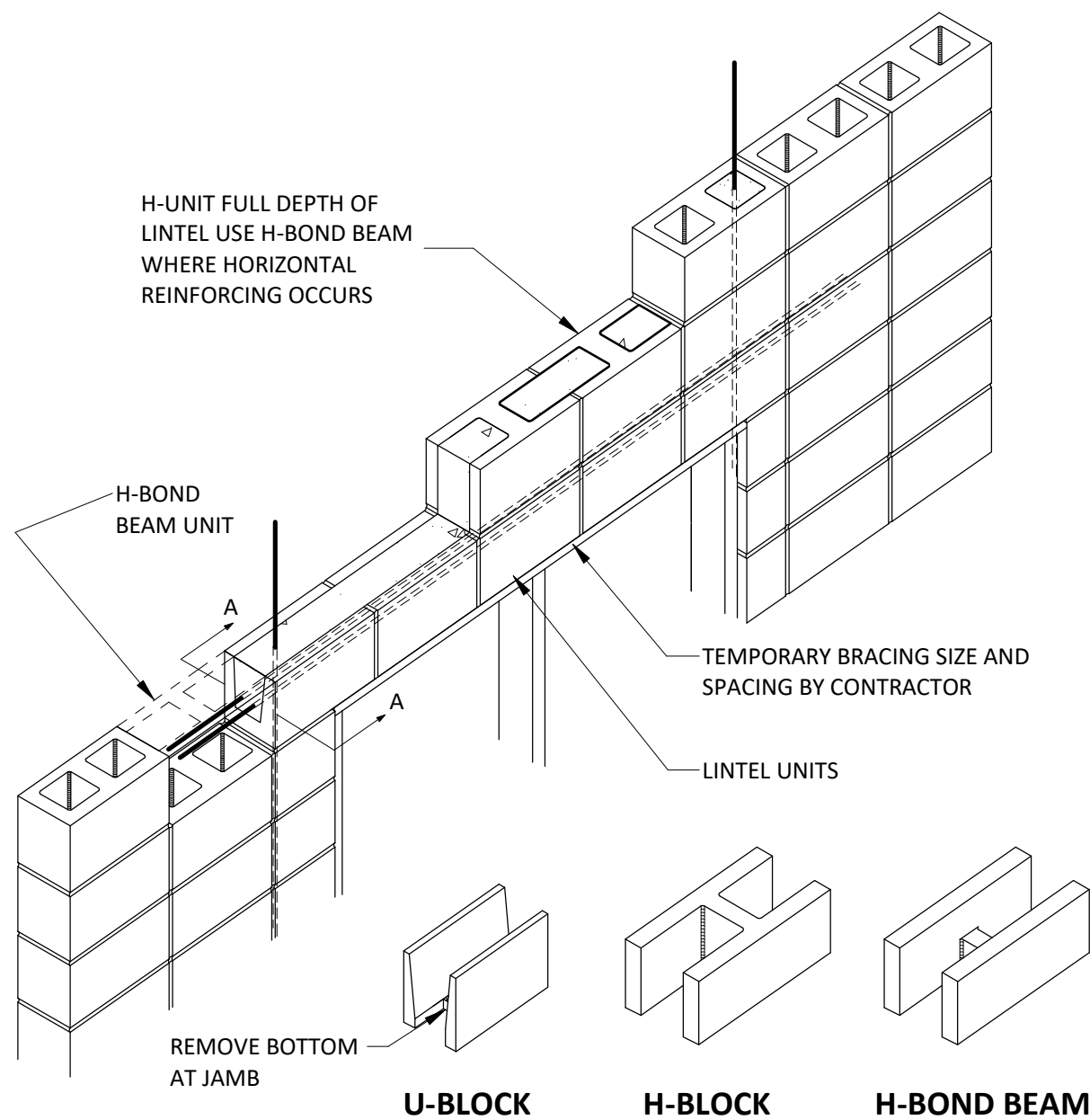
1 1/2" = 1'-0"



NOTE: THIS DETAIL SHOWS STANDARD EMBEDMENT TYPES. SEE SECTIONS FOR LOCATION AND NUMBER OF SPACING OF EMBED REQUIRED. ALL OF THE EMBEDMENTS MAY NOT BE USED ON THIS PROJECT. ASTM A706 REINFORCING MAY BE SUBSTITUTED FOR DWA.

5 EMBED TYPES

No Scale



1 TYP FIELD BUILT LINTEL

No Scale

MASONRY LINTELS:

Locate all openings including but not limited to openings for doors, windows, mechanical ductwork, electrical conduit and mechanical, plumbing and sprinkler piping. All openings larger than 6" diameter shall be sleeved into the wall. Do not cut openings larger than 6" in diameter. Locate reinforcing prior to core drilling wall. Do not core drill within 8" of a reinforcing bar measured edge of opening to centerline of bar.

- Provide a vertical bar to match the size of the typical masonry vertical X (Masonry Opening [MO] plus 4'-0" on each size of opening. Where the vertical dimension of the opening is 4'-0" or more provide a bar for the full height of the story.
- Provide reinforced masonry lintel per schedule above all openings 1'-0" wide or wider.
- Provide a minimum of (2) #4 bars x (MO plus 4'-0") in a minimum 8" deep bond beam below all masonry openings 1'-0" wide or wider unless noted otherwise.

MASONRY OPENING	WALL THICKNESS (NOMINAL)	GROUT DEPTH	REINFORCING (BOTTOM)	REINFORCING (TOP)
1'-0" ≤ MO ≤ 3'-0"	6"	8"	(1) #5	-
3'-0" < MO ≤ 6'-8"	6"	16"	(2) #5	-
1'-0" ≤ MO ≤ 4'-0"	8"	8"	(2) #5	-
4'-0" < MO ≤ 8'-0"	8"	16"	(2) #5	-
8'-0" < MO ≤ 12'-0"	8"	24"	(2) #5	(1) #5
12'-0" < MO ≤ 14'-8"	8"	32"	(2) #5	(1) #5
14'-8" < MO ≤ 17'-4"	8"	40"	(2) #5	(1) #5
17'-4" < MO ≤ 20'-0"	8"	48"	(2) #5	(1) #5
1'-0" ≤ MO ≤ 4'-0"	12"	8"	(2) #6	-
4'-0" < MO ≤ 8'-0"	12"	16"	(2) #6	-
8'-0" < MO ≤ 12'-0"	12"	24"	(2) #6	(1) #5
12'-0" < MO ≤ 14'-8"	12"	32"	(2) #6	(1) #5
14'-8" < MO ≤ 17'-4"	12"	40"	(2) #6	(1) #5
17'-4" < MO ≤ 20'-0"	12"	40"	(2) #6	(1) #5

NOTES:

- Provide precast or field-built lintel per schedule, unless noted otherwise.
- Use field-built U-block lintel where exposed to view.
- See specifications and masonry notes for additional information.
- Shore field-built lintel for a minimum of 7 days after grouting.
- All masonry units used within grouted limits of the lintel are to be H-block units.
- See Architectural head details for cover plates required in addition to the structural lintel.
- No reinforcing splice permitted within lintel.

2 TYP CMU LINTEL - SCHEDULE

No Scale

9 DOOR HEADER

1" = 1'-0"

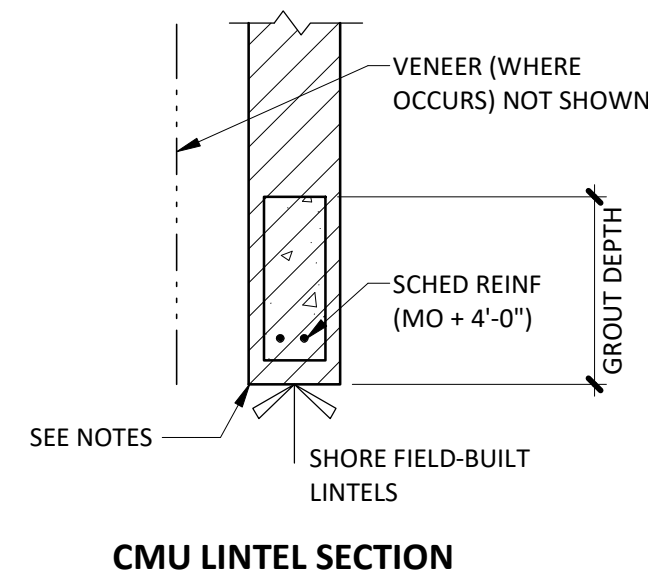
TENSION DEVELOPMENT AND LAP SPICE LENGTHS FOR UNCOATED BARS																
FY = 60,000 PSI				F'C = 2,500 PSI				F'C = 3,000 PSI				F'C = 4,000 PSI				
Size	Metric Size	Bar Diameter (DB)	Area	Lap Splice Class	Top Bars		Other Bars		Top Bars		Other Bars		Top Bars		Other Bars	
#3	#10	0.375 in	0.11 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	24 in	35 in	18 in	27 in	22 in	32 in	17 in	25 in	19 in	28 in	15 in	22 in
#4	#13	0.500 in	0.20 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	31 in	46 in	24 in	35 in	28 in	42 in	22 in	32 in	24 in	36 in	19 in	28 in
#5	#16	0.625 in	0.31 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	31 in	47 in	24 in	36 in	29 in	43 in	22 in	33 in	25 in	37 in	19 in	29 in
#6	#19	0.750 in	0.44 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	41 in	61 in	32 in	47 in	37 in	56 in	29 in	43 in	32 in	48 in	25 in	37 in
#7	#22	0.875 in	0.60 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	39 in	59 in	30 in	45 in	36 in	54 in	28 in	41 in	31 in	47 in	24 in	36 in
#8	#25	1.000 in	0.79 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	51 in	76 in	39 in	59 in	47 in	70 in	36 in	54 in	40 in	60 in	31 in	47 in
#9	#29	1.128 in	1.00 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	47 in	70 in	36 in	54 in	43 in	64 in	33 in	50 in	37 in	56 in	29 in	43 in
#10	#32	1.270 in	1.27 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	61 in	92 in	47 in	71 in	56 in	84 in	43 in	64 in	48 in	72 in	37 in	56 in
#11	#36	1.410 in	1.56 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	69 in	103 in	53 in	79 in	63 in	94 in	48 in	72 in	54 in	81 in	42 in	63 in
#12	#40	1.590 in	1.76 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	89 in	133 in	69 in	103 in	81 in	122 in	63 in	94 in	70 in	106 in	54 in	81 in
#13	#43	1.750 in	1.96 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	78 in	117 in	60 in	90 in	72 in	107 in	55 in	82 in	62 in	93 in	48 in	71 in
#14	#47	1.920 in	2.15 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	102 in	152 in	78 in	117 in	93 in	139 in	72 in	107 in	80 in	121 in	62 in	93 in
#15	#50	2.090 in	2.34 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	88 in	132 in	68 in	102 in	81 in	121 in	62 in	93 in	70 in	105 in	54 in	81 in
#16	#54	2.250 in	2.54 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	115 in	172 in	88 in	132 in	105 in	157 in	81 in	121 in	91 in	136 in	70 in	105 in
#17	#57	2.400 in	2.79 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	99 in	149 in	77 in	115 in	91 in	136 in	70 in	105 in	79 in	118 in	61 in	91 in
#18	#60	2.550 in	3.00 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	129 in	193 in	99 in	149 in	118 in	177 in	91 in	136 in	102 in	153 in	79 in	118 in
#19	#63	2.690 in	3.24 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	110 in	165 in	85 in	127 in	101 in	151 in	78 in	116 in	87 in	131 in	67 in	101 in
#20	#66	2.820 in	3.46 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	143 in	215 in	110 in	165 in	131 in	196 in	101 in	151 in	113 in	170 in	87 in	131 in
#21	#69	2.950 in	3.69 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	132 in	198 in	102 in	153 in	121 in	181 in	93 in	139 in	105 in	157 in	81 in	121 in
#22	#72	3.070 in	3.92 in ²	Lap Splice Class	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2	Case 1	Case 2
				A	176 in	264 in	136 in	203 in	161 in	241 in	124 in	186 in	139 in	209 in	107 in	161 in

NOTES:

- Tabulated values are based on Grade 60 reinforcing bars and normal weight concrete.
- Cases 1 and 2, which depend on the type of structural element, concrete cover, and the center to center spacing of the bars, are defined as:
 - Beams or Columns:
 - Case 1: Cover at least 1.0 db and center to center spacing at least 2.0 db.
 - Case 2: Cover less than 1.0 db or center to center spacing less than 2.0 db.
 - All Others:
 - Case 1: Cover at least 1.0 db and center to center spacing at least 3.0 db.
 - Case 2: Cover less than 1.0 db or center to center spacing less than 3.0 db.
- Lap Splices are not permitted for #14 and #18 bars.

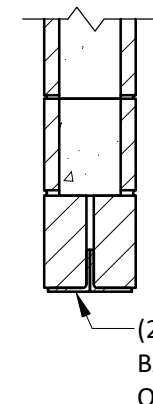
6 CONCRETE EMBEDMENT AND LAP SPICE SCHEDULE

12" = 1'-0"



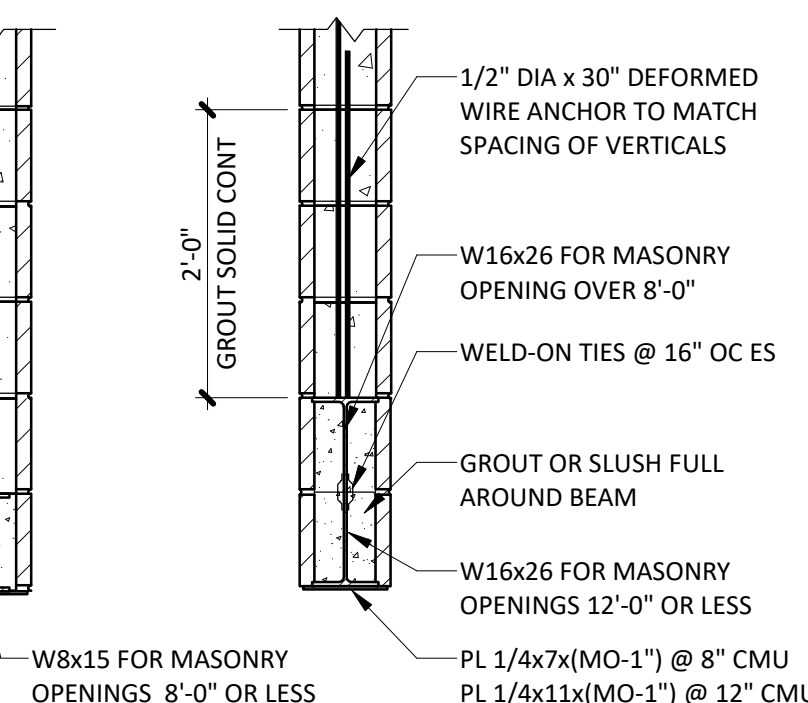
CMU LINTEL SECTION

NOTE: USE STEEL LINTELS WHEN REQUIRED MASONRY BEARING IS NOT AVAILABLE AND FOR FIELD CUT OPENINGS



3 TYP STEEL LINTEL

No Scale



7 LAP SPICE SCHEDULE FOR 8" MASONRY

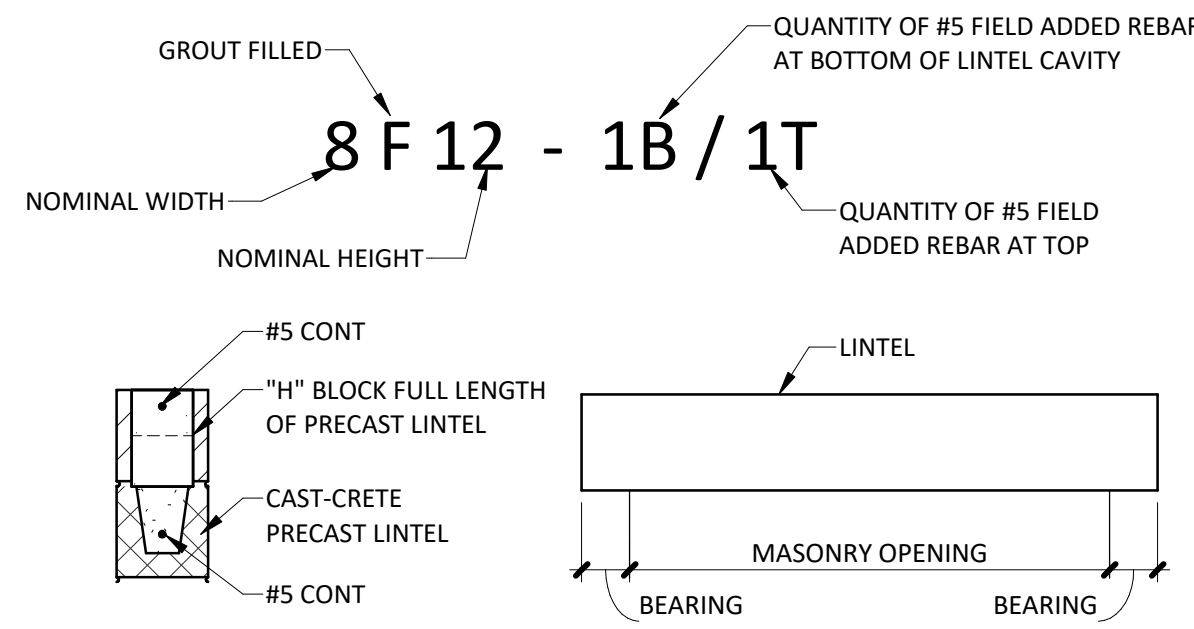
12" = 1'-0"

LAP SPICE AND EMBEDMENT LENGTHS FOR 8" MASONRY					
fy = 60,000 PSI			Fm = 1,500 PSI		
SIZE	METRIC SIZE	DIAMETER (DB)	AREA	LOCATION	LAP LENGTH
#3	#10	0.375 IN	0.110 IN ²	8" WALL - VERTICAL	40 DB 15 IN
				BOND BEAM - SINGLE BAR	40 DB 15 IN
				BOND BEAM - TWO BAR	40 DB 15 IN
#4	#13	0.500 IN	0.200 IN ²	8" WALL - VERTICAL	40 DB 20 IN
				BOND BEAM - SINGLE BAR	40 DB 20 IN
				BOND BEAM - TWO BAR	40 DB 20 IN
#5	#16	0.625 IN	0.305 IN ²	8" WALL - VERTICAL	40 DB 25 IN
				BOND BEAM - SINGLE BAR	43 DB 27 IN
				BOND BEAM - TWO BAR	50 DB 31 IN
#6	#19	0.750 IN	0.440 IN ²	8" WALL - VERTICAL	57 DB 43 IN
				BOND BEAM - SINGLE BAR	67 DB 50 IN
				BOND BEAM - TWO BAR	77 DB 58 IN
#7	#22	0.875 IN	0.600 IN ²	8" WALL - VERTICAL	69 DB 60 IN
				BOND BEAM - SINGLE BAR	80 DB 70 IN
				BOND BEAM - TWO BAR	90 DB 79 IN
#8	#25	1.000 IN	0.790 IN ²	8" WALL - VERTICAL	91 DB 97 IN
				BOND BEAM - SINGLE BAR	108 DB 108 IN
				BOND BEAM - TWO BAR	119 DB 119 IN

NOTES:

- Tabulated values are based on Grade 60 reinforcing bars and normal weight grout.
- Tension development and lap lengths are calculated per ACI 530-11.
- Bar sizes omitted require mechanical connectors.

OPENING SIZE	CAST-CRETE LINTEL DESIGNATION		BEARING LENGTH
	8" CMU	12" CMU	
1'-0" THRU 2'-8"	8U8	12U8	4"
2'-9" THRU 4'-8"	8F8 - 1B	12F8 - 0B	8"
4'-9" THRU 7'-4"	8F16 - 1B	12F16 - 2B	8"
7'-5" THRU 12'-8"	8F24 - 1B	12F24 - 2B	8"
12'-9" THRU 16'-8"	8F32 - 1B	12F32 - 2B	8"



NOTE: LINTEL SIZES AND DETAILS APPLY TO CAST-CRETE LINTELS. OTHER MANUFACTURERS DETAILS MAY VARY. SUBMIT ICC REPORTS FOR APPROVAL.

4 TYP PRECAST LINTEL SCHEDULE

No Scale