

Newfield Construction, Inc.

BULLETIN NO. 2

Date: March 21, 2018

Rocky Hill Intermediate School – Phase 2, Rocky Hill, CT

Clarifications

1. **The bid date, place and time are unchanged by this bulletin.**
2. Section 00 52 00 Form of Agreement Between the CM and Trade Contractor, Part 6 Time of Performance, Item e, First Sentence, **Delete** “liquidated damages of \$5,000 per calendar day” and **Replace** with “liquidated damages of \$1,000 per calendar day”
3. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Bid Package Notes, **Add Note A2.01** “The Storm Water Pollution Control Plan is available on the File Share Site with the Bid Documents.”
4. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Bid Package Notes, Note 01.28, after “loader” **Add** “with operator.”
5. Section 00 24 00 Bid Packages, Part K Bid Package 2.11 Drywall, Bid Package Notes, **Add Note A2.02** “The Drywall Contractor is responsible for all items in Section 06 16 00 Sheathing”
6. Bulletin 1, Item 14, Note A1.07, **Add** “The Plumbing Contractor shall be responsible for the freeze resistant bury valve per Detail 3/P4.02 including the PVC pipe, wye, removable cap insulation and Quazite valve box.”
7. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Part C Bid Package 2.3 Landscaping, Part D Bid Package 2.4 Concrete, Part E Bid Package 2.5 Masonry, Bid Package Notes, **Add Note A2.03** “All site concrete walls and site flatwork are the responsibility of the Site Construction Contractor except for the concrete walls shown on Drawing S1.04, concrete stairs at the loading dock shown on Drawing S1.04 and the concrete slab at the loading dock. The exterior concrete stairs shown at DV Line on Drawing S1.04 are the responsibility of the Site Construction Contractor. In general, all the site concrete as detailed on the Civil and Landscape Drawings including but not limited to the sitting walls (7/L6.01, 5/L6.06 (alt.)), sidewalks, equipment pads, tiered retaining wall (5/L2.02), concrete curbs and planter curb wall (5/L6.03) are the responsibility of the Site Construction Contractor. Masonry, concrete tops and precast tops at all exterior walls and at the Site Sign are the responsibility of the Masonry Contractor.”
8. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Part C Bid Package 2.3 Landscaping, Part E Bid Package 2.5 Masonry, Bid Package Notes, **Add Note A2.04** “Unit Pavers are the responsibility of the Site Construction Contractor.”

Newfield Construction, Inc.

9. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Part C Bid Package 2.3 Landscaping, Bid Package Notes, **Add Note A2.05** “The landscape stone including fabric, at the islands and planting beds (Detail 11/L6.04), stone adjacent to the basketball court, stone at the generator/transformer enclosure (13/L6.04) and the stone dust shall be the responsibility of the Landscape Contractor.”
10. Bulletin 1, Item 21, Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Part T Bid Package 2.20 Electrical, Bid Package Notes, Note A01.09, **Add:** “The electrical manholes designated S/B shall be furnished and installed by the Site Construction Contractor. Reference Drawing ESU1.01 and Detail 10/C5.02”
11. Section 00 24 00 Bid Packages, Part C Bid Package 2.3 Landscaping, Bid Package Notes, Note 01.07 **Delete** entirely and **Replace** with “All bollards and sign posts are by others.”
12. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Bid Package Notes, **Add Note A2.06** “Include all stair nosings for this scope of work.”
13. Section 00 24 00 Bid Packages, Part E Bid Package 2.5 Masonry, Bid Package Notes, Note 01.13, Part F Bid Package 2.6 Metals, Bid Package Notes, Note 01.07, **Delete** the first two sentences and **Replace** with “All non-load bearing interior partition top of wall lateral bracing anchors are the responsibility of the Masonry Contractor. Mechanical attachment to the steel is by the Masonry Contractor. Welded attachment to the steel is by the Metals Contractor.”
14. Section 00 24 00 Bid Packages, Part E Bid Package 2.5 Masonry, Part F Bid Package 2.6 Metals, Bid Package Notes, **Add Note A2.07** “All required two part masonry anchors (in addition to top of wall anchors) shall be provided by the Masonry Contractor and welded or bolted to the steel by the Metals Contractor.”
15. Section 00 24 00 Bid Packages, Part I Bid Package 2.9 Firestopping, Bid Package Notes, Note 01.05 **Delete** entirely and **Replace** with “Include penetration firestopping at all MEP/FP and structural member penetrations. Include firestopping or smoke sealing the tops of all walls whether shown or not.”
16. Section 00 24 00 Bid Packages, Part M Bid Package 2.13 Resilient Floors, Bid Package Title **Delete** entirely and **Replace** with “Bid Package 2.13 Resilient Floors” Bid Package 2.13 is not a set aside bid package.
17. Section 00 24 00 Bid Packages, Part B Bid Package 2.2 Site Construction, Part T Bid Package 2.20 Electrical, Bid Package Notes, **Add Note A2.08** “The Site Construction Contractor shall provide the concrete bases for pole mounted security cameras. Reference Drawing SE-100 and Detail 45/SE-400. The Electrical Contractor shall provide poles, all required handholes and electrical power to each pole.”
18. Bulletin 1, Item 13, Note A01.06 **Delete** “sixty thousand dollars” and replace with “sixty five thousand dollars”.

Newfield Construction, Inc.

19. Section 00 24 00 Bid Packages, Part B Bid Package 2.20 Electrical, Bid Package Notes, **Delete** Note 01.23 entirely.
20. Section 00 24 00 Bid Packages, Part B Bid Package 2.19 Mechanical, Bid Package Notes, Note 01.08 **Delete** “Electrical Contractor” and **Replace** with “Fire Alarm Contractor”. Two locations.
21. Section 00 24 00 Bid Packages, Part B Bid Package 2.21 Fire Alarm, Bid Package Notes, Add Note A02.09 “The Fire Alarm Contractor shall furnish all duct smoke detectors and wire. Installation by Mechanical Contractor. Any control wiring for fan shut down is the responsibility of both the Mechanical (Control) and Fire Alarm Contractors.”

Attachments

1. RFI Log with RFI responses to RFIs 10, 11, 13, 14, 16, 17, 23, 25, 28, 29, 30, 31, 32, 34, 37, 38, 39, 40 dated March 21, 2018, 8 pages.
2. KBA Addendum 2 dated March 20, 2018, five pages plus attachments.



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002
Updated: March 21, 2018

RFI #	Description	Response
010	Please advise about the AWI if we were to manufacture the cabinets per AWI but not inspected would that be acceptable.	Per the specifications, we require AWI quality certification. The work must meet all the requirements per AWI to be in receipt of those certifications.
011	Specification 042000; 2.11 Veneer Anchors to Metal Studs a. Is a H&B 2-Seal Wing Nut with Seismic pintels for veneer acceptable alternative? (See the link below) http://www.h-b.com/index.php?main_page=product_info&cPath=93_76_10&products_id=218	H&B 2-seal is not an acceptable alternative to the specified HB213.



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002

Updated: March 21, 2018

RFI #	Description	Response
013	<p>1. Please provide information on the size of the two storm water retention systems.</p> <p>Need the total number of chambers in order to size it correctly. The detail shows 3 chambers in width, but no length.</p> <p>The area darkened out on the plan is much wider than what 3 chambers would be.</p> <p>2. Item 01.28 requires 200 hours of a loader and 200 laborer hours.</p> <p>Do you mean 200 hours of a loader with operator and laborer.</p> <p>3. Item 01.46 states the Site contractor is responsible for the concrete bases for play equipment.</p> <p>Typically these are hand dug by the playground subcontractor as they are installing the equipment, however if you want the site contractor to install the footings please provide a detailed foundation plan so we can price accordingly.</p>	<p>1. StormTech was used as the basis of design for cost estimating purposes. Alternate designs and/or manufacturers would be acceptable to the engineer if they can be shown to provide similar storage and infiltration capabilities. Underground Detention System 1 was designed with StormTech SC-740 Chambers. The system is 240 chambers and provides 18,871 CF storage (including stone). Underground Detention System 2 was designed with StormTech MC-3500 Chambers. The system is 220 chambers and provides 40,979 CF storage (including stone). In both systems the chambers should be configured to the areas outlined on the plans as best as possible and to the engineers approval.</p> <p>2. Yes, 200 hours of a laborer and 200 hours of an operator and a loader.</p> <p>3. Concrete bases are to be excluded by site contractor. Site contractor is to provide concrete edging.</p>
014	<ol style="list-style-type: none"> 1. Bid package 2.6 item 01.24 states 3 sided frame & embedded angle , what detail does this refer to ? 2. Will the rails @ the roof hatch per detail 5B-A3.02 be supplied with the hatch ? 3. Specification section 05 51 00 page 7 item B-3 notes 1" u-shaped channels . Details per 14-A4.06 note ¼" thick stock . Page 7 item B-4 states the same material as mesh . 	<ol style="list-style-type: none"> 1. Loading Dock and Adjacent Overhead Coiling Door. 2. Yes, use integrated guard rail by hatch manufacturer.



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002

Updated: March 21, 2018

RFI #	Description	Response
	<p>4. Being S.S. the panels have to be bolted the frame due to the powder coat finish . Would an 1/8" x 2" S.S. flat bar w/ # 4 finish bent around the perimeter of the mesh be acceptable ?</p> <p>5. Specification section 05 51 00 page 11 item 3.2-A-2 notes iron , steel shot , sand & aluminum oxide is not to be used . Is this correct ? If so what medium would you suggest we use ?</p> <p>All powder coated items must be sandblasted</p> <p>6. Who is to supply and install the wood cap per detail 10 & 11-A4.06 ?</p> <p>7. Rail details per A4.06 note 2" sq. posts and rails, is this in bar shape ? Can we supply 2" tube steel with rounded corners, this would be more cost effective for the material , powder coating and installation .</p> <p>8. Can we utilize local finishers for the powder coating of rails per A4.06 other than Duncan ?</p> <p>9. Will a sump pit cover be required for the elevator ?</p> <p>10. Will the loading dock stair require nosings per A1.04 ?</p> <p>11. Roof hatch detail 5A-A3.02 notes ladder and safety post, they are not shown on plan . Are they required?</p> <p>12. Corner guards per 26 & 27 –A9.02 , who is to supply and install ? What is the detail or mfg.?</p> <p>13. Storefront door frame S06 on A8.02 notes to see door schedule. No door S06 is listed do they exist ? IF so where are they located ?</p> <p>14. Will the elevator doors per A4.04 require lintels ?</p>	<p>3. Remove line 2.7 B 3. Provide 2-inch U-shaped channels made from steel.</p> <p>4.The frame is to be powder coated steel. 1/8" x 2" bent steel would be acceptable. Provide 1/8" thick taps welded to vertical and horizontal members of mesh frame to align with 1/8" thick welded tabs on railing system. Provide bolt holes accordingly for attachment.</p> <p>5. This is in reference to galvanized metals. The interior rail is not galvanized.</p> <p>6. General Trades</p> <p>7. Provide 2" tube steel with rounded corners.</p> <p>8.Yes.</p> <p>9.Yes.</p> <p>10. Yes, of contrasting color. Concrete Contractor responsible for these nosings</p> <p>11. Yes, ladder and safety post required.</p> <p>12. No metal corner guards on the project.</p> <p>13. See addendum #1.</p> <p>14.Yes.</p>



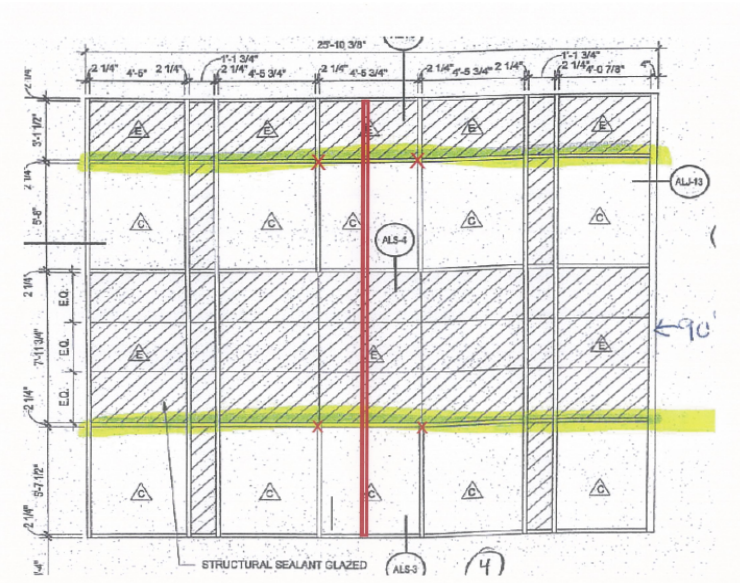
Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002

Updated: March 21, 2018

RFI #	Description	Response
	<p>15. The drawing details refer me to R01 & R02 this clearly notes lintels for M.O.s up to 8'-4" , would all lintels over that size require hung lintels ?</p> <p>See C01 , C07 , S02 , S04 , S09 and S09B .</p> <p>16. Sill angles @ ALS-8 , ALS-12 & ALS-15 should they be anchored ? What are the angles sizes ?</p> <p>17. Bid package 2.6 metals item 1.07 . All the lateral details show self drilling screws , in a beam this is all ways difficult . Would PAF be better for this situation? Also there are details showing structural steel as well as light guage steel @ top of non –load bearing partitions. Per the scope of work it seems the mason supplies all the seismic restraints in light guage steel is this correct.</p>	<p>15.Yes.</p> <p>16.For sill angle @ ALS-8 see DR-3 on S6.03. For sill angle @ ALS-12 see B4 on S2.02. For sill angle @ ALS-15 use L5x3x1/4 galv. EXP. Bolt to C.M.U. – Stop ¼" short of jamb each end.</p> <p>17. PAF acceptable, provide submittal for review. Mason provide top of partition anchors per details.</p>
016	<p>We cannot locate Spec Section 104400 Fire Protection Specialties for the Rocky Hill Project.</p>	<p>1. See addendum #1.</p>
017	<p>In a quick view of the specs, there are no curtain sizes listed in the stage curtains schedule (116143 page 8)</p> <p>Please provide the following –</p> <ul style="list-style-type: none"> - Fullness requirements for each curtain - The design intent and expectation for height and width for each curtain. This is especially problematic as neither drawing A1.04 nor A2.04 seem to show the plan for the curtains. They also do not appear in the AV Drawing 	<p>See SKA2.07 for location and length of curtains. Assume lengths of 14'-0", final size will be verified in field. Rigging height to be coordinated below MEP equipment.</p>
023	<p>Please provide the horizontal deflection criteria for exterior non-load bearing wall framing as this is missing from the Gypsum Board Assembly section</p>	<p>Exterior Non-Load-Bearing Framing: Horizontal deflection of 1/600 of the wall height.</p>



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002
 Updated: March 21, 2018

RFI #	Description	Response
025	<p>After checking the structural of the shades the listed sizes won't work. We could either add two tie rods per shade at the X or add one vertical at dead center as shown on attachment, please advise.</p> <p>SEE PRE BID RFI 025 ATTACHMENT 1</p> 	Add 2 tie-rods per shade at the indicated locations.
028	Please see attached substitution request form for Spec Section 275116 Public Address	All Substitutions will be reviewed after formal Bid results.



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002
 Updated: March 21, 2018

RFI #	Description	Response
029	The spec sections for 101200 Display Cases and 104400 Fire Protection Specialties cannot be found anywhere in the specifications/project manual.	See Addendum #1 for 10 44 00 Fire Protection Specialties. See Addendum #2 for 10 12 00 Display Cases.
030	<p>1. Plans show typical 26 academic lockers per bank. Elevations show 12 double tier frames and 1 single tier ADA frame. This doesn't equal 26. Do we go by the plans or elevations?</p> <p>2. Do the ADA academic lockers require a ADA lock? The specs are not clear.</p> <p>3. Boys and girls locker rooms don't indicate any base on the drawings. The specs for athletic lockers page 9, of section 105113, subsection (J)(3) "provide z base as indicated." Nothing is indicated on the drawings. Plan A607 Detail 5 shows the locker on the floor with no base. Do you want a concrete base, Z-Base or no base for these lockers?</p>	<ol style="list-style-type: none"> 1. Each bank includes 12 double-tier and 1 single-tier HC locker. 2. No, Locks provided by owner. 3. Z-Base.
031	1) BP 2.2 Site Construction Item 01.35 - Can you clarify who owns the flatwork within the exterior concrete ramp walls show on S1.04/C1.01? (See attached Sketch) If the concrete contractor owns it where does their work end and the site contractor begin?	<ol style="list-style-type: none"> 1. Site Contractor 2. Site Contractor 3. Site Contractor



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002

Updated: March 21, 2018

RFI #	Description	Response
	<p>2) Which contractor is responsible for the unit pavers shown at the B Wing Outdoor Space Shown on 3/L2.02?</p> <p>3) Which contractor is responsible to furnish and install the steel bollards? There is a contradiction between Item BP2.2 Item 01.13 and BP2.3 Item 01.07.</p> <p>4) Section 320000 Exterior Improvements Section 2.4 Trash Receptacles- Where are these located or how many should be carried in the bid?</p> <p>5) Which contractor owns the 6' benches and curved bench. If the alternate for the curved wall is accepted is that by the site contractor?</p> <p>6) Which contractor owns the stone at the generator enclosure, the stone along the retaining wall at the basketball court and in the parking lot islands?</p>	<p>4. Six – to be field located. Specification Section 32 00 00 “Exterior Improvements”, Paragraph 3.7.A.</p> <p>5. Site Contractor</p> <p>6. Landscape Contractor</p>
032	<p>It is not clear exactly where window shades are to be provided, cut-through sections of windows are not shown in all classrooms. Kindly provide more detail.</p>	<p>Shade schedule 12 24 13.01 Provides number of shades and ties them to the associated frames.</p>
034	<ol style="list-style-type: none"> 1. Drawing ESU1.01 shows electrical manholes and to reference civil drawing details. No electrical manhole detail has been provided. Please provide electrical manhole details. 2. Drawing SE-100 shows poles for exterior cameras. No camera pole details or site pole base details provided for this work. Please provide details for poles and base. 	<p>1.Shown on Detail 10/C5.02</p> <p>2.Shown on Detail 45/SE-400</p>
037	<p>In the attached Bulletin 1: RFI # 022 response, drywall scope is to only include Roof sheathing at roof types D and E correct?</p>	<p>No, See Bulletin #2 Item 5</p>



Rocky Hill Intermediate School Pre-Bid RFI Log – Bulletin 002

Updated: March 21, 2018

RFI #	Description	Response
038	On drawing S201 is the cut section correct that is designated 9/A207 on Column lines A10-13 between AS & AG	Yes, it is correct. Bent plate size is ¼” max.
039	<ol style="list-style-type: none"> 1. 12 24 13 - Roller Window Shades calls for (4) different shade types; single manual, dual manual, dual motorized, and spring roller for doors. No locations for the different shade types are shown on drawings or finish plan. 2. SKA1.06 Soffit Detail 24 shows a tensioned single roller motorized shade tracks and cables which is not in the specs. 	<ol style="list-style-type: none"> 1. See RFI 032. 2. See Addendum #2 revised specification section.
040	Per Bulletin #1 we are to carry \$60,000 in our bid for the pre purchased detailing of the structural steel only. Is this to be an Allowance or a separate line item on the bid form? Please advise.	No do not list separately but include in base bid value

A D D E N D U M N O . 2

BUILDING AND SITE CONSTRUCTION–PHASE 2
ROCKY HILL INTERMEDIATE SCHOOL
Rocky Hill, CT
KBA #17005.00

Date: March 20, 2018
Page: 1 of 5

The following changes to the Project Manual shall become a part of the Drawings, Specifications, Bidding Requirements and Contract Documents; superseding previously issued Drawings, Specifications, Bidding Requirements, Contract Documents and Addenda, to the extent modified by this Addendum.

CHANGES TO SPECIFICATIONS

TABLE OF CONTENTS

Add the following attachment under Section 12 24 13 ROLLER WINDOW SHADES:
ROLLER SHADE LOCATION SCHEDULE

DIVISION –03 CONCRETE

Section 03 30 00 “Cast in Place Concrete”

Add Item 2.2.J.

INTEGRALLY WATERPROOFED CONCRETE C

Concrete to be integrally waterproofed shall consist of Type I Portland cement, clean, well graded, fine and coarse aggregates designed for maximum strength and denseness with a minimum of 3,500 psi compressive strength. Each cubic yard shall contain at least 5.6 bags of Type I Portland cement, combined with not more than 1 1/2 gallons of “Anti-Hydro NCR” (Flemington, NJ) and not more than 35 gallons of total liquid. Maximum slump shall be 4”. The “Anti-Hydro NCR” shall be added with the mixing water or to be concrete while partially mixed and mixed for a minimum 1 minute per cubic yard. Addition of “Anti-Hydro” shall be done at the Project site.

Add Item 2.4.E:

Reinforcing for stair treads and platforms shall be sheets of galvanized wire fabric with 2” mesh of No. 14 wire full size of treads and platforms.

Add Item 3.8.E.

PLACING INTEGRALLY WATERPROOFED CONCRETE:

1. No integrally waterproofed concrete shall be placed unless the base on which the concrete is to be poured is sufficiently dry to prevent contamination of the concrete with soil. It shall be the Contractor's responsibility to create the conditions required in case the soil bottom is wet or soggy or otherwise unsuitable for placing concrete thereon. Water table shall be well below the bottom of the concrete at the time of pouring and at least 24 hours after the completion of the pour.
2. All concrete shall be properly spaded and vibrated. Construction joints shall be permissible only where indicated and called for on the drawings. Provide rabbet at inside face of wall, in footing and wall, to form a waterproof cove. When pouring is about to be resumed, the entire joint shall be thoroughly roughened and cleaned and then treated with a bonding grout composed of one part (1) part of "Anti-Hydro NCR", three (3) parts of water and sufficient Portland cement to form a thick, creamy mixture. While this grout is still wet, continue pouring new concrete. After curing of second pour, provide waterproof cove made with waterproof mortar, as recommended by manufacturer.
3. The surface of the concrete shall be finished as specified elsewhere.

A D D E N D U M N O . 2

BUILDING AND SITE CONSTRUCTION—PHASE 2
ROCKY HILL INTERMEDIATE SCHOOL
Rocky Hill, CT
KBA #17005.00

Date: March 20, 2018
Page: 2 of 5

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4. Contractor shall notify manufacturer of the approved liquid integral waterproofing, not less than three working days before the said integral waterproofing is to be added to the mix at the job site, and the labor of the installation shall be supervised by said manufacturer at the Contractor's expense, and a report of each day's inspection furnished to the Architect. The manufacturer shall continuously inspect said installation, and after completion and acceptance shall issue its maintenance guarantee for five years to cover the impermeability of the concrete in which its material has.

Add Item 3.5.E.

Stair tread and platform reinforcing shall be laid at mid-height of the concrete fill. The tread and platform fills shall not be placed until temporary use of the stairs for construction purposes as been discontinued.

DIVISION 05 – METALS

Section 05 51 00 “Metal Stairs”

Revise Paragraph 1.2A.5 as follows:

5. Factory applied coating for guardrails and handrails at Stair A3, **Upper Level perimeter of two story open to below at Media Center, and Cafetorium ramp and upper landing.**

DIVISION 08 – OPENINGS

Section 087100 “Door Hardware”

Hardware schedule classroom security model ML2072 to read as follows:

- 1) ML2075

DIVISION 09 – FINISHES

Section 09 21 16 “Gypsum Board Assemblies”

Revise Paragraph 1.3A.2.a to read as follows:

- a. Exterior Non-Load-Bearing Framing: **Horizontal deflection of 1/600 of the wall height.**

Section 09 64 66 “Wood Athletic Flooring”

Add the following new Paragraph 2.1A.3 as follows:

3. Tarkett; ClutchCourt Performance.

Section 09 65 66 “Resilient Athletic Flooring”

Delete Section in its entirety and replace with new Section attached to this Addendum.

DIVISION – 10 SPECIALTIES

Section 10 12 00 “Display Cases”

Attached in its entirety at the end of this Addendum dated March 20, 2018 – Addendum No. 2.

Section 10 12 00 “Display Cases”

DIVISION 11 – EQUIPMENT

Section 114000 “Food Service Equipment”

2.27 ITEM NO. 27 - SPARE NO. Change to read:

2.27 ITEM NO. 27 - ONE (1) COOK'S TABLE

- A. Unit to be of length as shown on plans x 30" wide x 34" high to working surface. Unit shall be mounted on 5" high

A D D E N D U M N O . 2

BUILDING AND SITE CONSTRUCTION—PHASE 2
ROCKY HILL INTERMEDIATE SCHOOL
Rocky Hill, CT
KBA #17005.00

Date: March 20, 2018
Page: 3 of 5

heavy-duty swivel casters, all with brakes.

- B. Top to be constructed of 14-gauge stainless steel having all edges turned down 2" and returned 1/2" in channel shape with corners welded.
- C. At right end of table, understructure shall be approximately 6" short of top to clear electrical receptacle. Kitchen Equipment Contractor to coordinate with rough-in drawings.
- D. Table shall be fitted with tool drawer with carving board and bottom shelf. Table shall be furnished with reinforcements, gussets, stainless steel legs, all as herein set forth.
- E. Unit to be manufactured by "EMI Industries, RI" or approved equal as manufactured by "Carbone Metal Fabricator, Inc., MA" and in accordance with all details set forth herein including all modifications.

DIVISION 12 – FURNISHINGS

Section 12 24 13 "Roller Window Shades"

Delete Section in its entirety and replace with new Section attached to this Addendum.

"Roller Shade Location Schedule"

Revise line D115 Cafetorium to: D115 | CAFETORIUM | C07 | 3 | light blocking | AL-1 | 4 | light blocking | Provide single roll on windows.

Change specification footer information to read:

"Roller Shade Location Schedule"

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

Section 282312 "Video Management System"

Paragraph 2.1.A.1.b. to read as follows:

- 1) Alternate video management systems, including but not limited to Hikvision, shall be considered.

CHANGES TO DRAWINGS

L2.01 SITE LAYOUT PLAN

At guard rails north and west of the baseball field, change reference detail button to read: "1/L6.05".

L3.01 SITE MATERIALS PLAN

At guard rails north and west of baseball field, change detail reference buttons to read: "1/L6.05".

At basketball court, change guard rail reference detail button to read: "2/L6.05".

At Accessible Parking Spaces in front of school, change reference detail button to read: "2/L6.05".

A D D E N D U M N O . 2

BUILDING AND SITE CONSTRUCTION—PHASE 2
ROCKY HILL INTERMEDIATE SCHOOL
Rocky Hill, CT
KBA #17005.00

Date: March 20, 2018
Page: 4 of 5

L6.01 SITE DETAILS

Revise detail 6 to add concrete wall.

L6.04 SITE DETAILS

Add Detail #13, “3/4” Crushed Stone Surface”.

L6.05 SITE DETAILS

Add Detail #2 “Wood Guard Rail”

L6.06 SITE DETAILS

Add Detail #5 “ ‘B’ Wing Outdoor Space Wall – Alt.”

S2.01 UPPER LEVEL FRAMING PLAN AREA A

See revised section B2 on SKS2.04.

S4.03 BRACED FRAME ELEVATIONS

See revised full size Drawing S4.03 for changes to braced frame elevations.

S6.04 ROOF FRAMING DETAILS

See SKS-2.03 for revised SECTION DR9, DR10, DR11, and DR12 (similar to).

S6.06 ROOF FRAMING DETAILS

See SKS-2.02 for revised SECTION CR1.

See SKS-2.01 for new SECTION CR7 occurring in Area-C at Vestibule C100.

A1.03 MAIN LEVEL FLOOR PLAN AREA C

See revised sheet for corridor & wall revisions. See also, E1.03, FP1.03.

A2.01 & A2.05 MAIN & UPPER LEVEL REFLECTED CEILING PLAN – AREA A

Revise Ceiling equipment location see attached E1.01, FP1.01

A2.04 MAIN LEVEL REFLECTED CEILING PLAN – AREA D

Revise Lobby, Cafetorium window wall soffit, & add stage traveler curtains. See SKA2.03, SKA2.07, SKA2.08, & E1.04.

A2.07 SOFFIT DETAILS

Add detail 32, see SKA2.05

Revise detail 15, see SKA2.06

Revise detail 24, see SKA2.08

A4.01 LARGE SCALE TOILET PLANS

See SKA2.02 for dimensional revisions along toilet/lobby wall.

A6.11 WALL SECTIONS X

Revise soffit @ fire wall, see SKA2.10

A D D E N D U M N O . 2

BUILDING AND SITE CONSTRUCTION–PHASE 2
ROCKY HILL INTERMEDIATE SCHOOL
Rocky Hill, CT
KBA #17005.00

Date: March 20, 2018
Page: 5 of 5

A8.02 DOOR, FRAME, AND OPENINGS ELEVATIONS
Revise height of frame S05, see SKA2.09

A10.08 INTERIOR ELEVATIONS VIII
See revised dimensions and material callouts on SKA2.01A & SKA2.01B

P5.01 PLUMBING SCHEDULES
Revise General note, see attached P5.01.

E1.01 ELECTRICAL LIGHTING MAIN LEVEL - AREA A
Revise corridor A104 ceiling lighting layout.

E1.03 ELECTRICAL LIGHTING MAIN LEVE – AREA C
Revise corridor C102 ceiling lighting layout.

E1.04 ELECTRICAL LIGHTING MAIN LEVEL – AREA D
Revise Lobby D101 & Vestibule D100 ceiling lighting layout.

ATTACHMENTS

Sketches: SKA2.01A, SKA2.01B, SKA2.02, SKA2.03, SKA2.04, SKA2.05, SKA2.06, SKA2.07, SKA2.08, SKA2.09, SKA2.10, SKS2.01, SKS2.02, SKS2.03, SKS2.04.

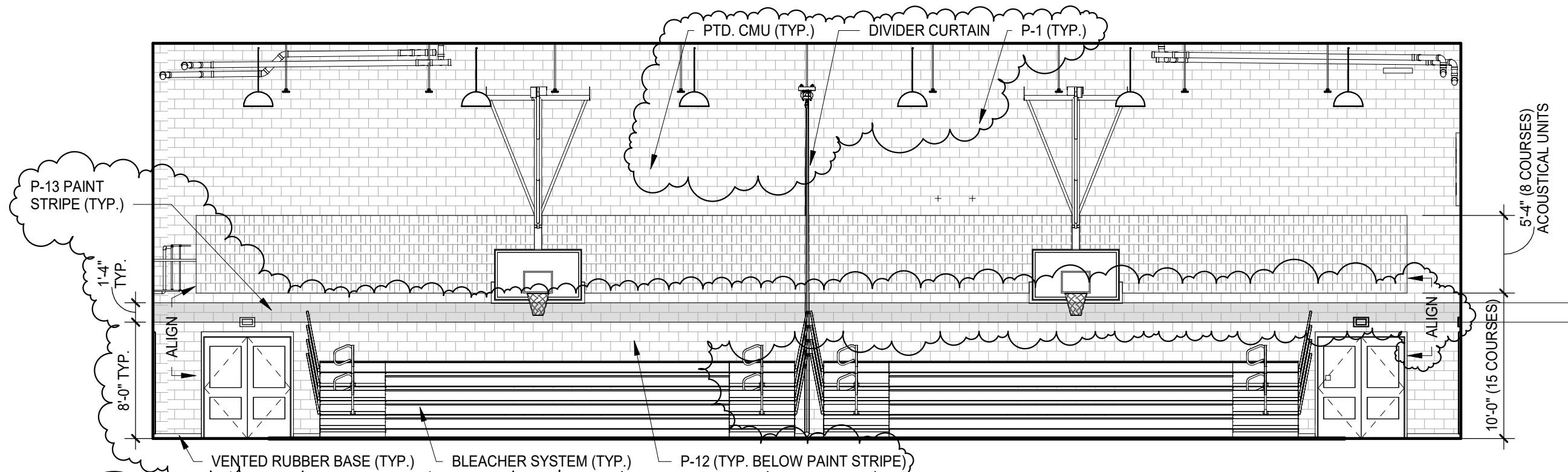
Drawings: L2.01; L3.01, L6.01, L6.04, L6.05, L6.06, S4.03, A1.03. FP1.01, FP1.03, P5.01, E1.01, E1.03, E1.04.

Specifications:

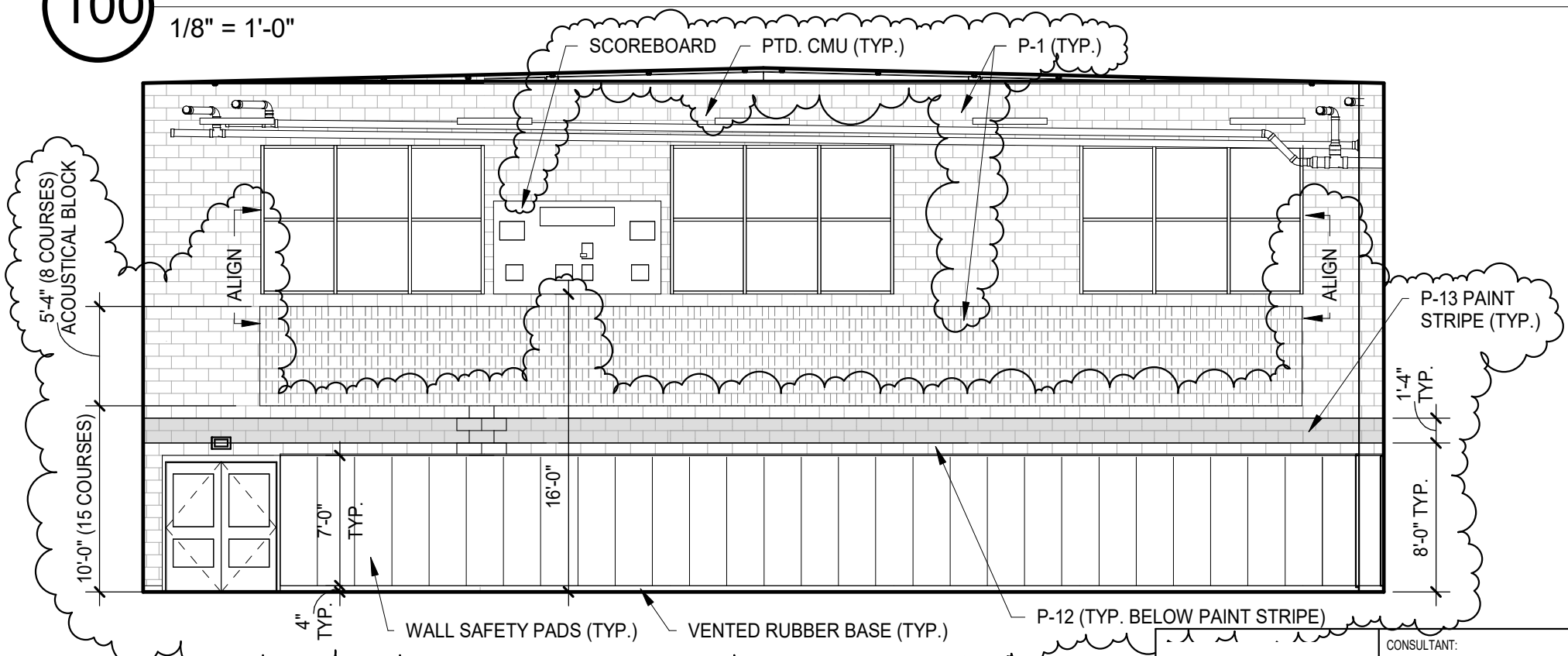
Section 09 65 66 “Resilient Athletic Flooring”, dated March 20, 2018 – Addendum No. 2, a total of 7 pages.

Section 10 12 00 “Display Cases”, dated March 20, 2018 – Addendum No. 2, a total of 7 pages.

Section 12 24 13 “Roller Window Shades”, dated March 20, 2018 – Addendum No. 2, a total of 13 pages.



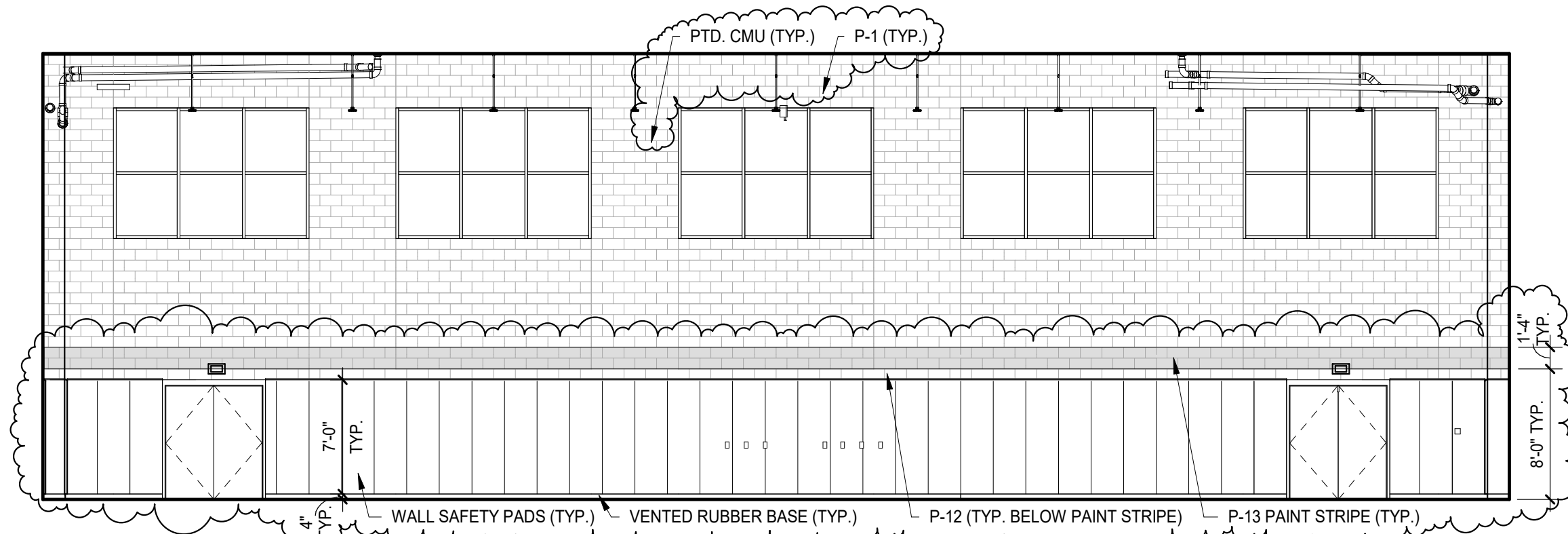
100 D105 GYMNASIUM - NORTH
1/8" = 1'-0"



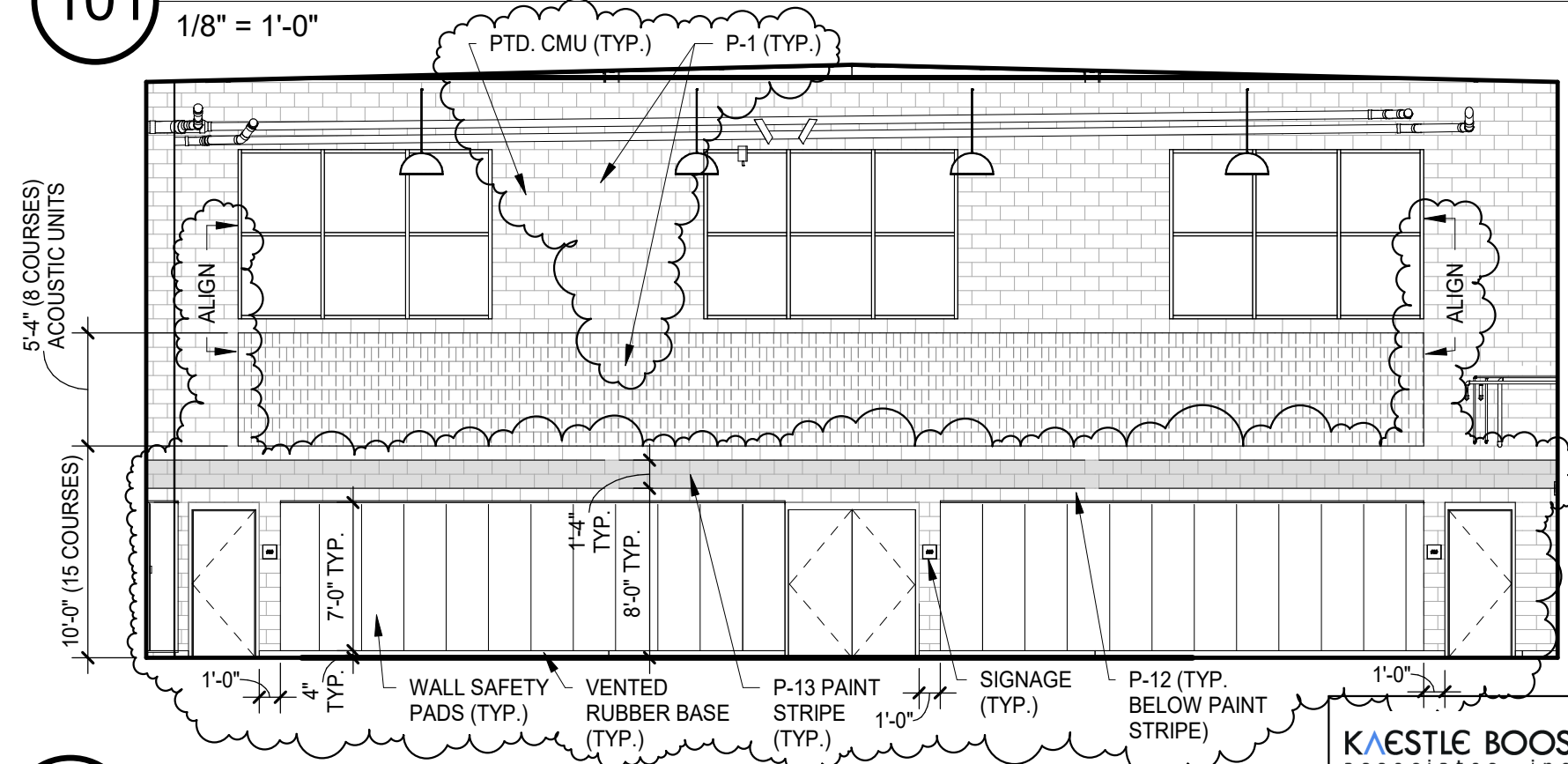
102 D105 GYMNASIUM - EAST
1/8" = 1'-0"

KAESTLE BOOS associates, inc 416 Slater Road, P.O. Box 2590 New Britain, CT 06050-2590 Ph: 860-229-0361 ▲ F: 860-229-5303 325 Foxborough Boulevard, Suite 100 Foxborough, MA 02035 Ph: 508-549-9906 ▲ F: 508-549-9907 Email: kba@kba-architects.com Web: www.kba-architects.com	CONSULTANT:	PROJECT: ROCKY HILL INTERMEDIATE SCHOOL	THIS SKETCH TO BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS	SKETCH GENERATED FOR:				
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				2				
				REFERENCE DETAIL/SHEET: 100 & 102/A10.08				
			TITLE: D105 GYMNASIUM INTERIOR ELEVATION REVISIONS					
			DATE: 03/19/18	DRAWN BY: KLS	DRAWING NO.:			SKA2.01A
			SCALE: 1/8" = 1'-0"	PROJECT NO.:	17005.00			
					STATE PROJECT # 119-0052			

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101 D105 GYMNASIUM - SOUTH
1/8" = 1'-0"



103 D105 GYMNASIUM - WEST
1/8" = 1'-0"

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Ph: 508-549-9906 ▲ F: 508-549-9907
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CONSULTANT:

PROJECT:
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INTERMEDIATE
SCHOOL**

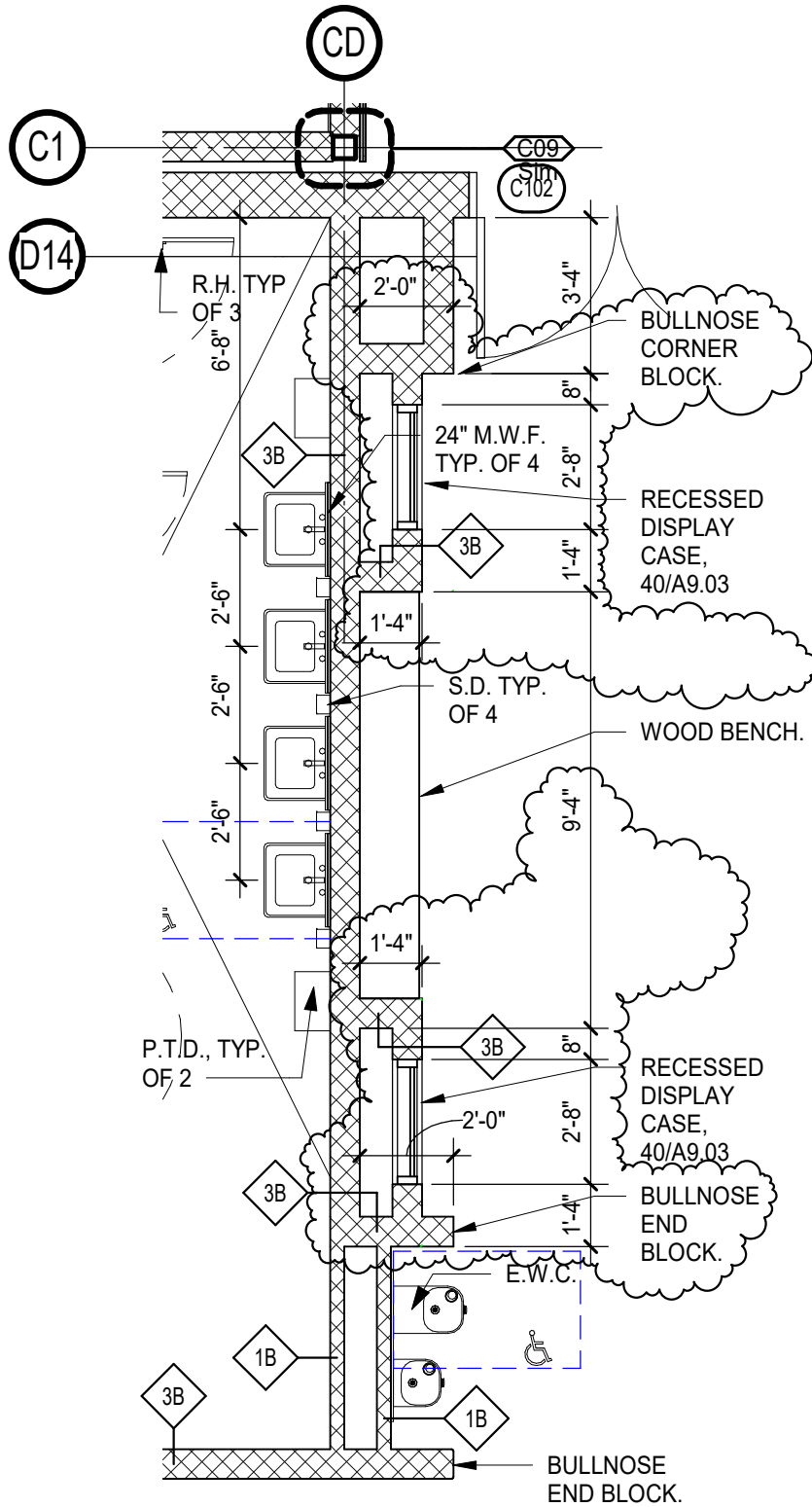
10 SCHOOL ST. ROCKY
HILL, CT. 06067
STATE PROJECT # 119-0052

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2				
REFERENCE DETAIL/SHEET: 101 & 103/A10.08				

TITLE: **D105 GYMNASIUM INTERIOR ELEVATION
REVISIONS**

DATE: 03/19/18	DRAWN BY: KLS	DRAWING NO.:
SCALE: 1/8" = 1'-0"	PROJECT NO.: 17005.00	SKA2.01B



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Web: www.kba-architects.com

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2

REFERENCE
DETAIL/SHEET: 10/A4.01

TITLE: **D101 GYM/ CAFETORIUM LOBBY
ENLARGED PLAN REVISIONS**

DATE: 03/19/18

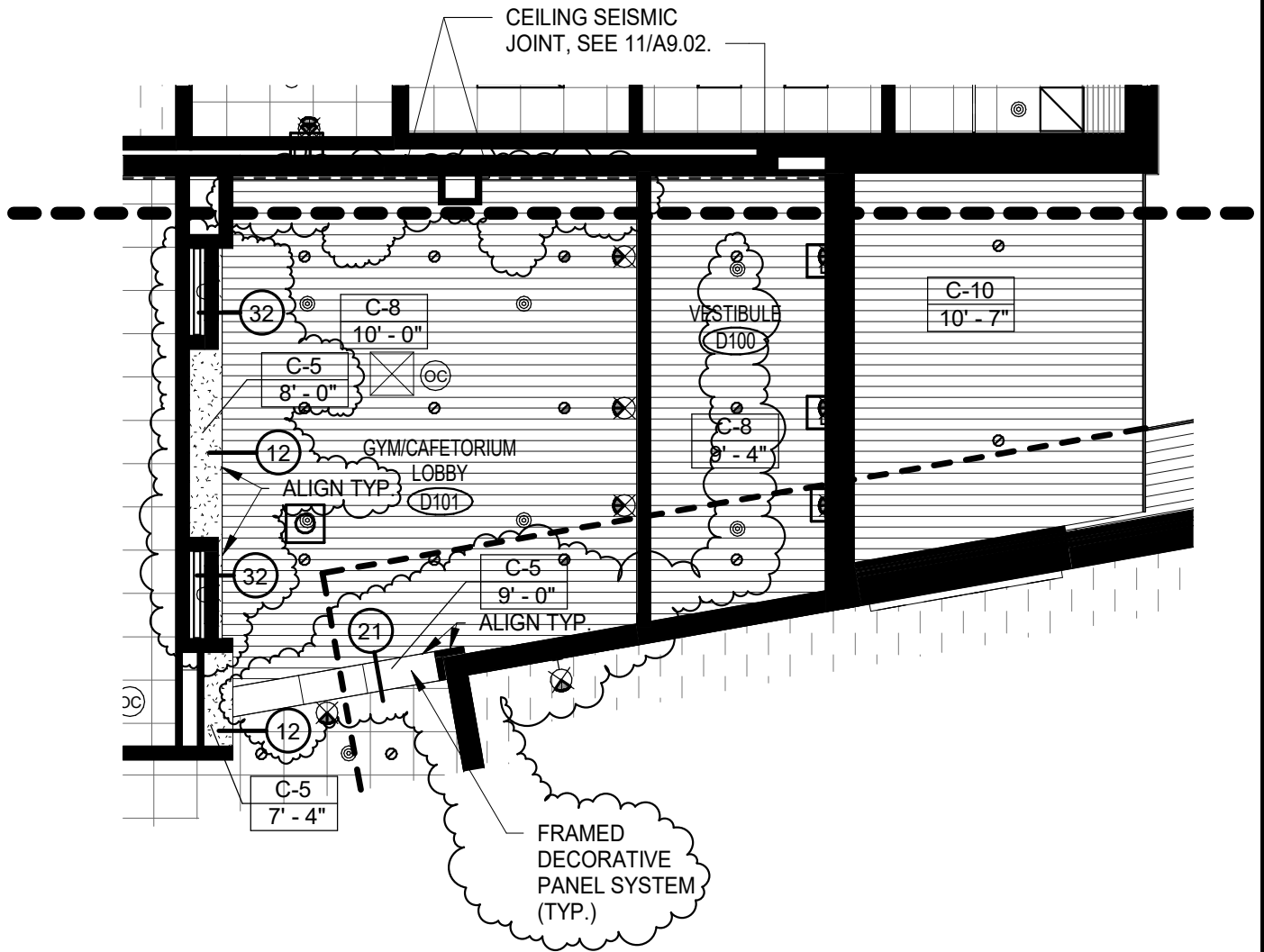
DRAWN BY: KLS

DRAWING
NO.:

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

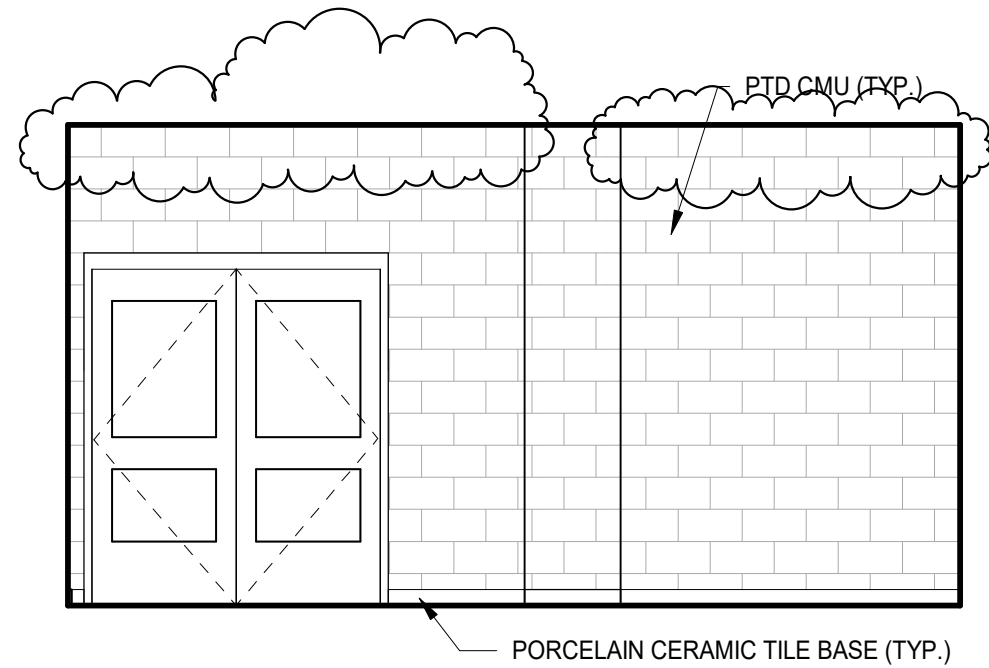
PROJECT NO.:
17005.00

SKA2.02

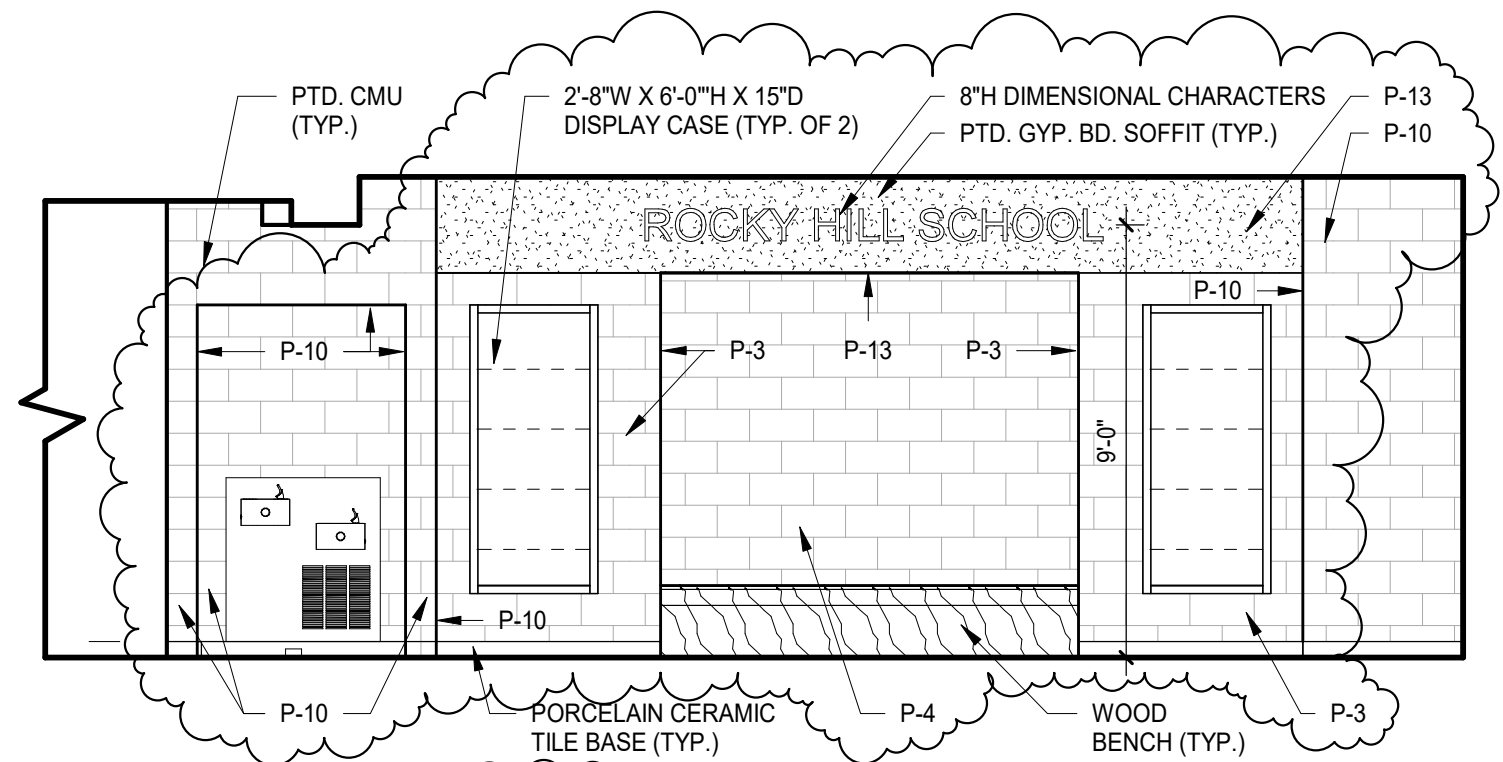


1 MAIN LEVEL AREA D
 1/8" = 1'-0"

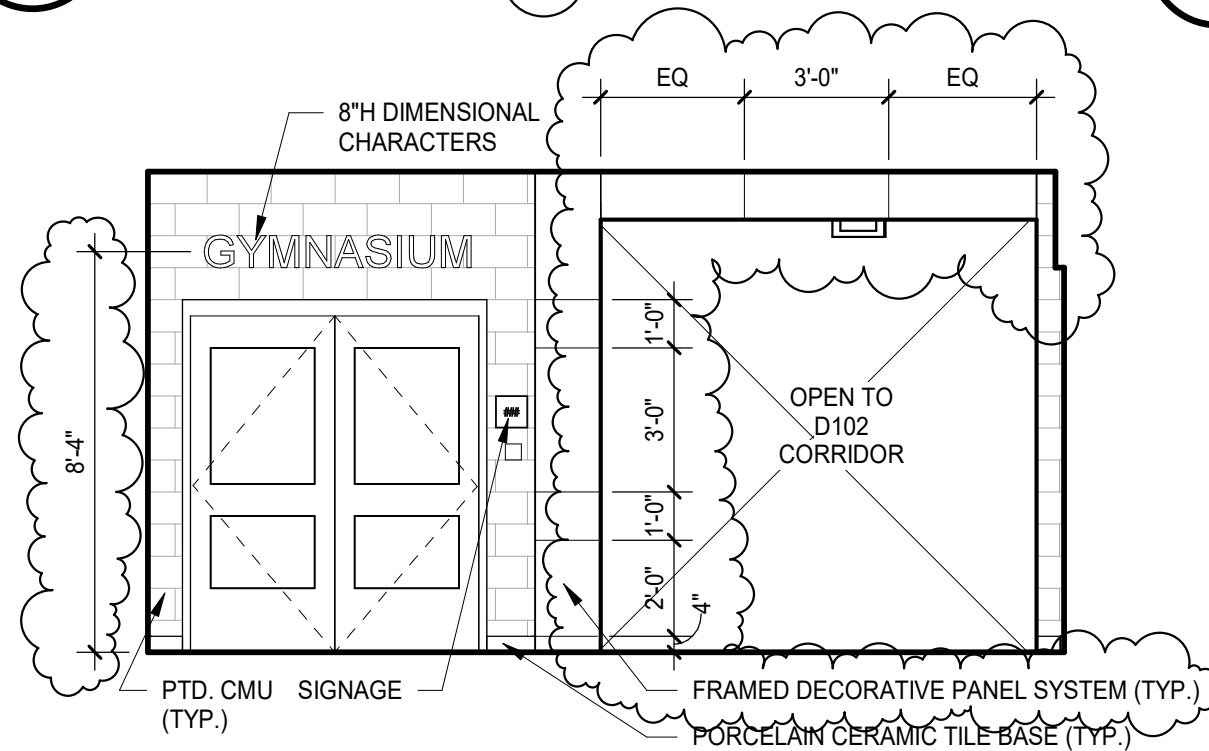
KAESTLE BOOS associates, inc 416 Slater Road, P.O. Box 2590 New Britain, CT 06050-2590 Ph: 860-229-0361 ▲ F: 860-229-5303 325 Foxborough Boulevard, Suite 100 Foxborough, MA 02035 Ph: 508-549-9906 ▲ F: 508-549-9907 Email: kba@kba-architects.com Web: www.kba-architects.com	CONSULTANT:	PROJECT:	THIS SKETCH TO BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS	SKETCH GENERATED FOR:				
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				2				
				REFERENCE DETAIL/SHEET:	1/A2.04			
		10 SCHOOL ST. ROCKY HILL, CT. 06067	TITLE:	D101 GYM/ CAFETORIUM LOBBY RCP REVISIONS				
			DATE: 03/19/18	DRAWN BY: KLS	DRAWING NO.:			
			SCALE: 1/8" = 1'-0"	PROJECT NO.: 17005.00	SKA2.03			



105 D101 LOBBY - EAST
1/4" = 1'-0"

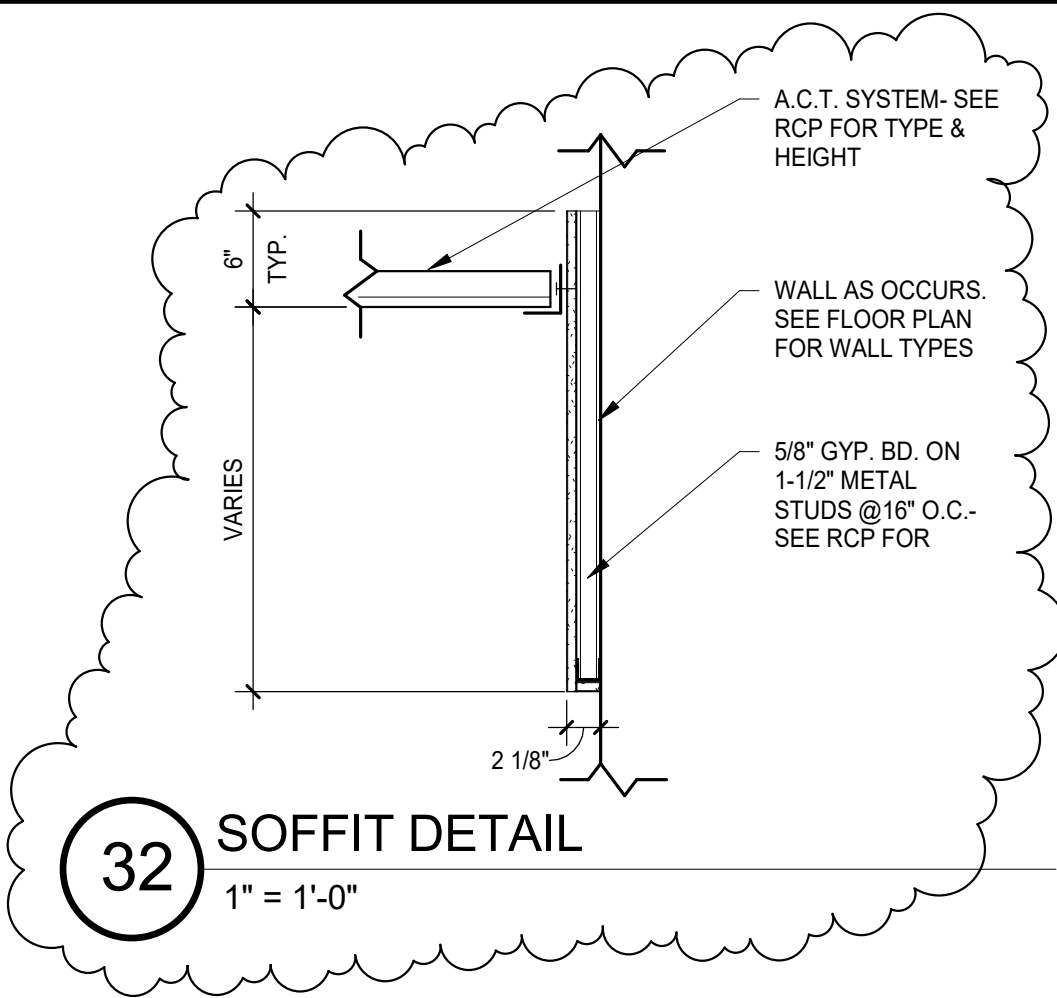


107 D101 LOBBY - NORTH
1/4" = 1'-0"



106 D101 LOBBY - WEST
1/4" = 1'-0"

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		ROCKY HILL INTERMEDIATE SCHOOL 10 SCHOOL ST. ROCKY HILL, CT. 06067 STATE PROJECT # 119-0052	



32

SOFFIT DETAIL

1" = 1'-0"

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Web: www.kba-architects.com

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PROJECT:

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2				
REFERENCE DETAIL/SHEET:		A2.07		

TITLE: **SOFFIT DETAIL**

DATE: 03/19/18

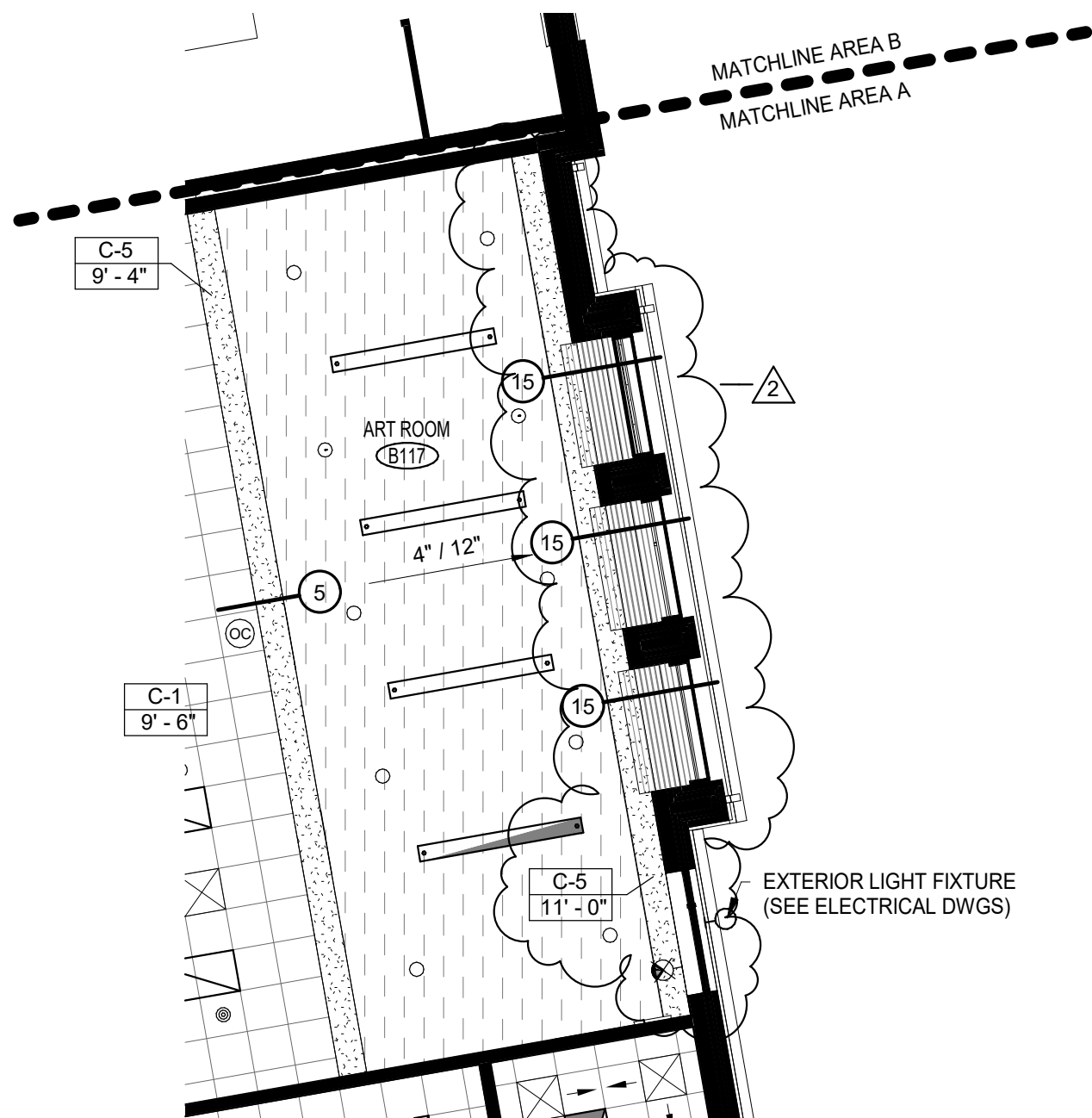
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NO.:

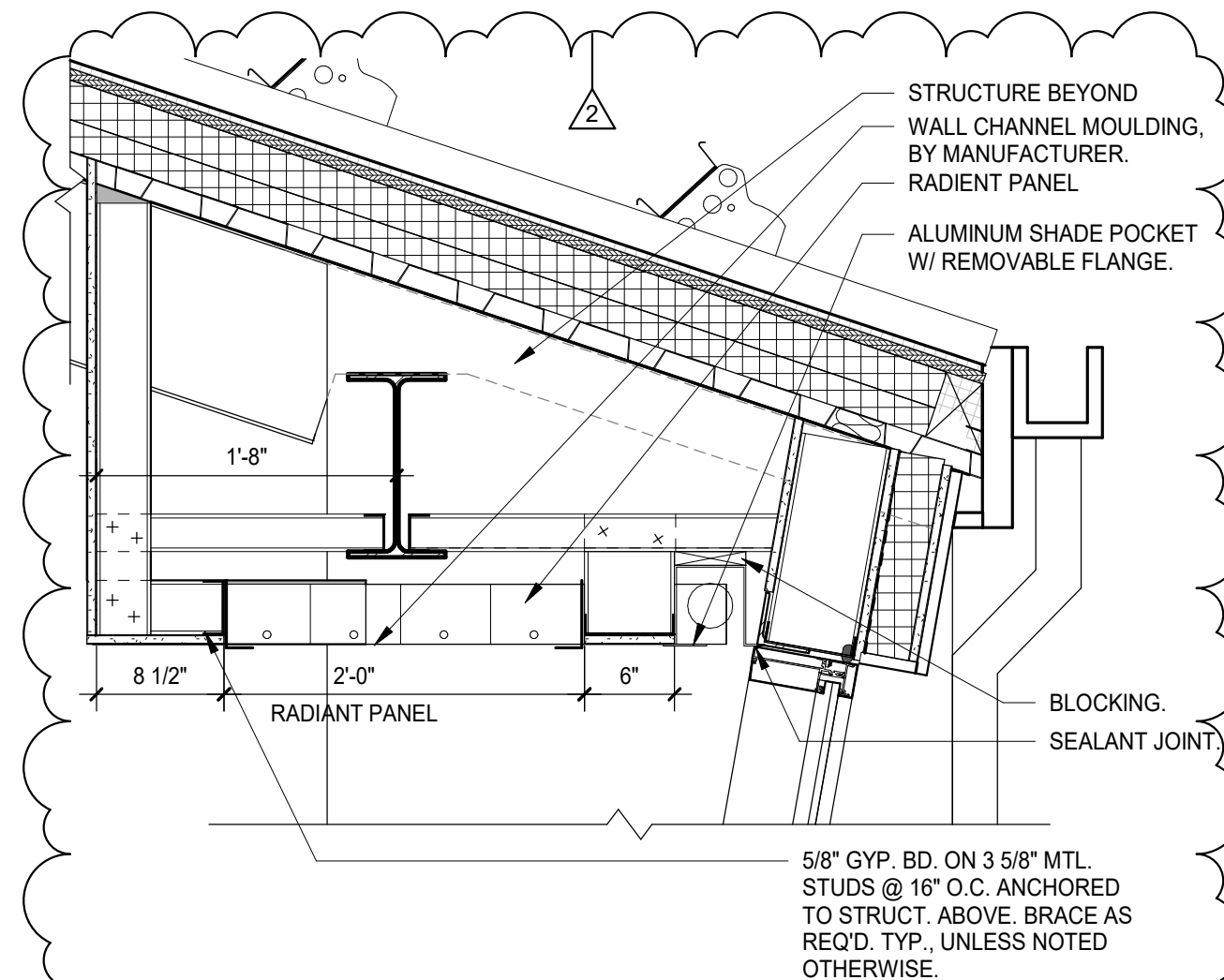
SCALE: 1" = 1'-0"

PROJECT NO.:
17005.00

SKA2.05



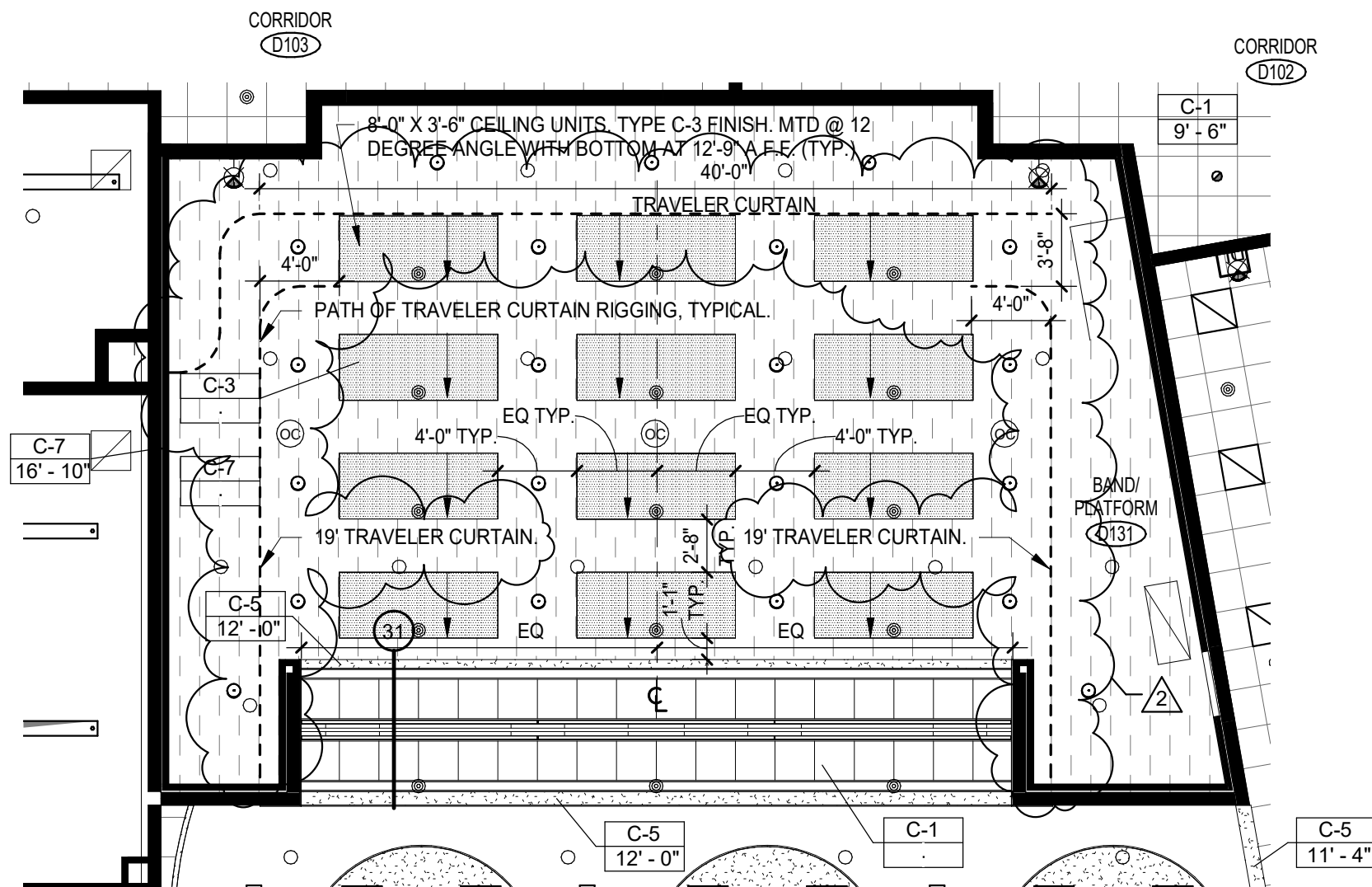
1 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"



15 SOFFIT DETAIL
1" = 1'-0"

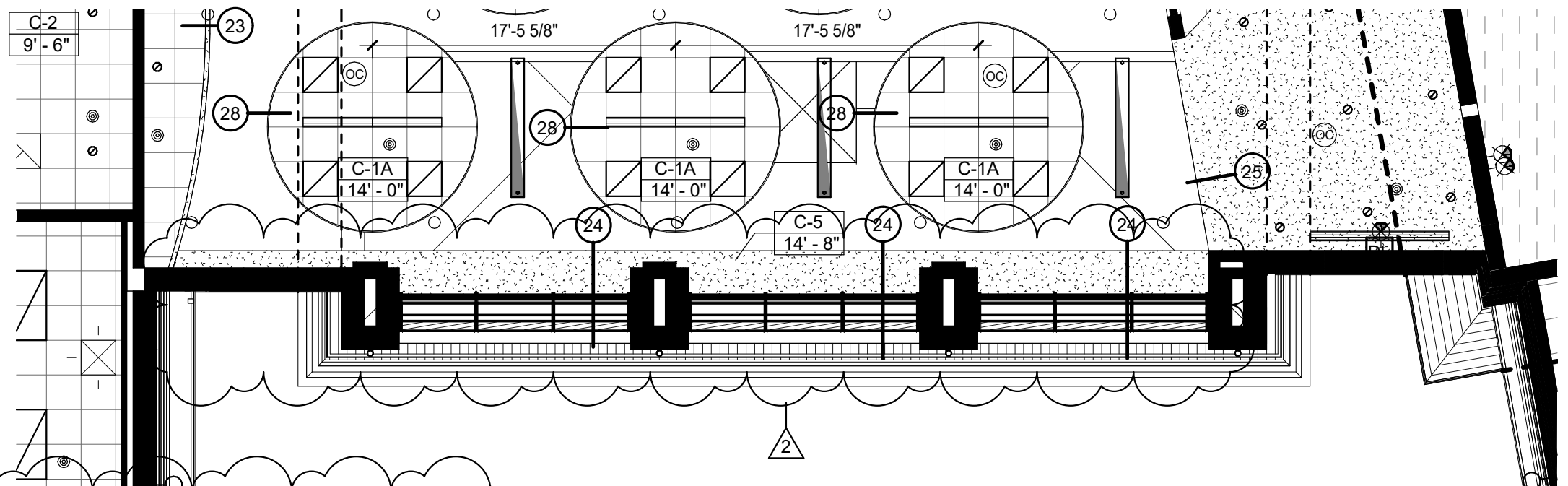
KAESTLE BOOS associates, inc 416 Slater Road, P.O. Box 2590 New Britain, CT 06050-2590 Ph: 860-229-0361 ▲ F: 860-229-5303 325 Foxborough Boulevard, Suite 100 Foxborough, MA 02035 Ph: 508-549-9906 ▲ F: 508-549-9907 Email: kba@kba-architects.com Web: www.kba-architects.com	CONSULTANT:	PROJECT:	THIS SKETCH TO BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS	SKETCH GENERATED FOR:				
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				02				
				REFERENCE DETAIL/SHEET: A2.02 & 15/A2.07				
		10 SCHOOL ST. ROCKY HILL, CT. 06067 STATE PROJECT # 119-0052	TITLE: ART ROOM SOFFIT	DATE: 03/20/18	DRAWN BY: MTK	DRAWING NO.:		
			SCALE: As indicated	PROJECT NO.:	17005.00			
					SKA2.06			

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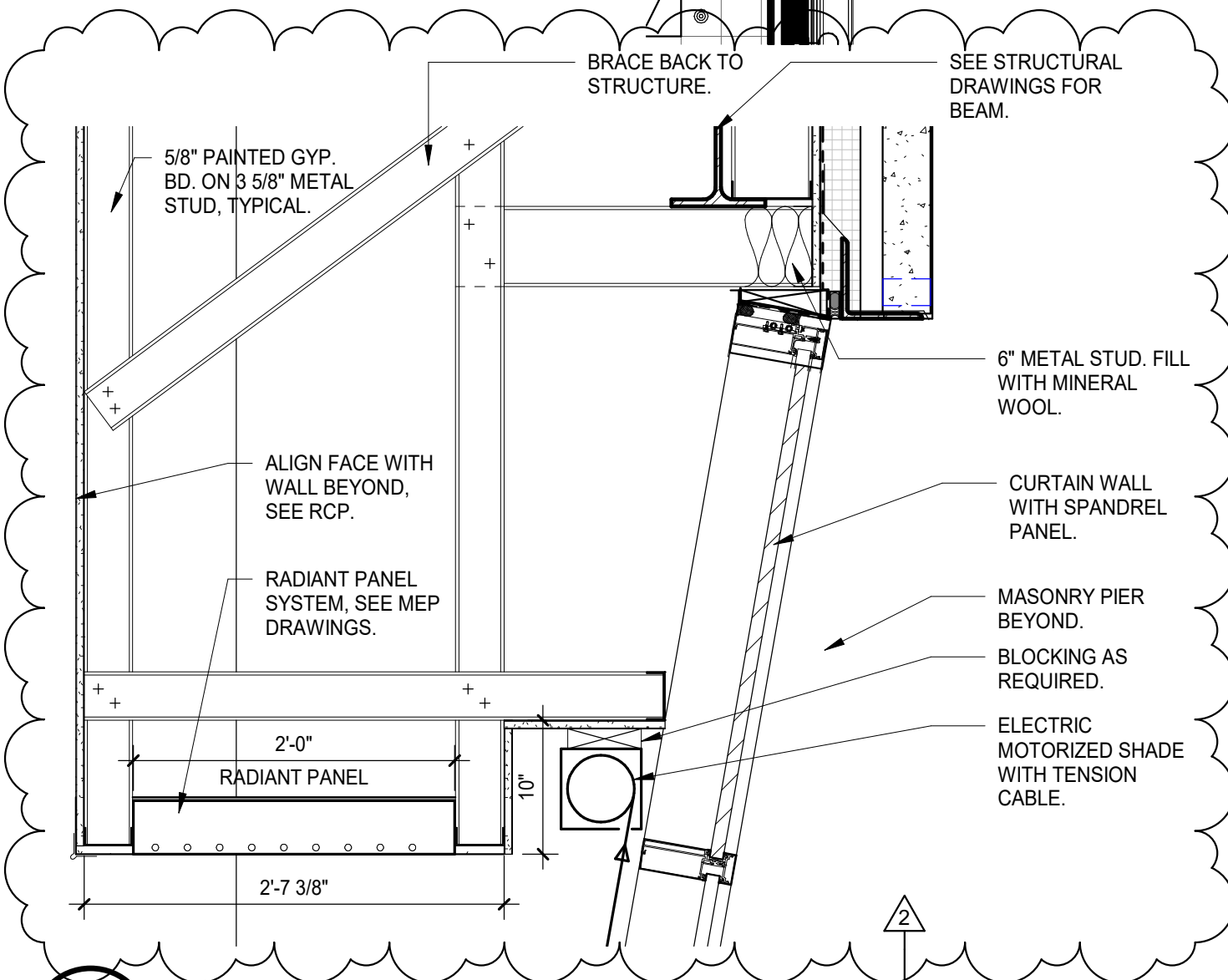


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	ROCKY HILL INTERMEDIATE SCHOOL 10 SCHOOL ST. ROCKY HILL, CT. 06067 STATE PROJECT # 119-0052				ADDENDUM 02	R.R.F.I.	A.S.I.	P.R.
			TITLE:	PLATFORM TRAVELER CURTAIN RIGGING				
			DATE: 03/20/18	DRAWN BY: MTK	DRAWING NO.:			SKA2.07
			SCALE: 1/8" = 1'-0"	PROJECT NO.:	17005.00			

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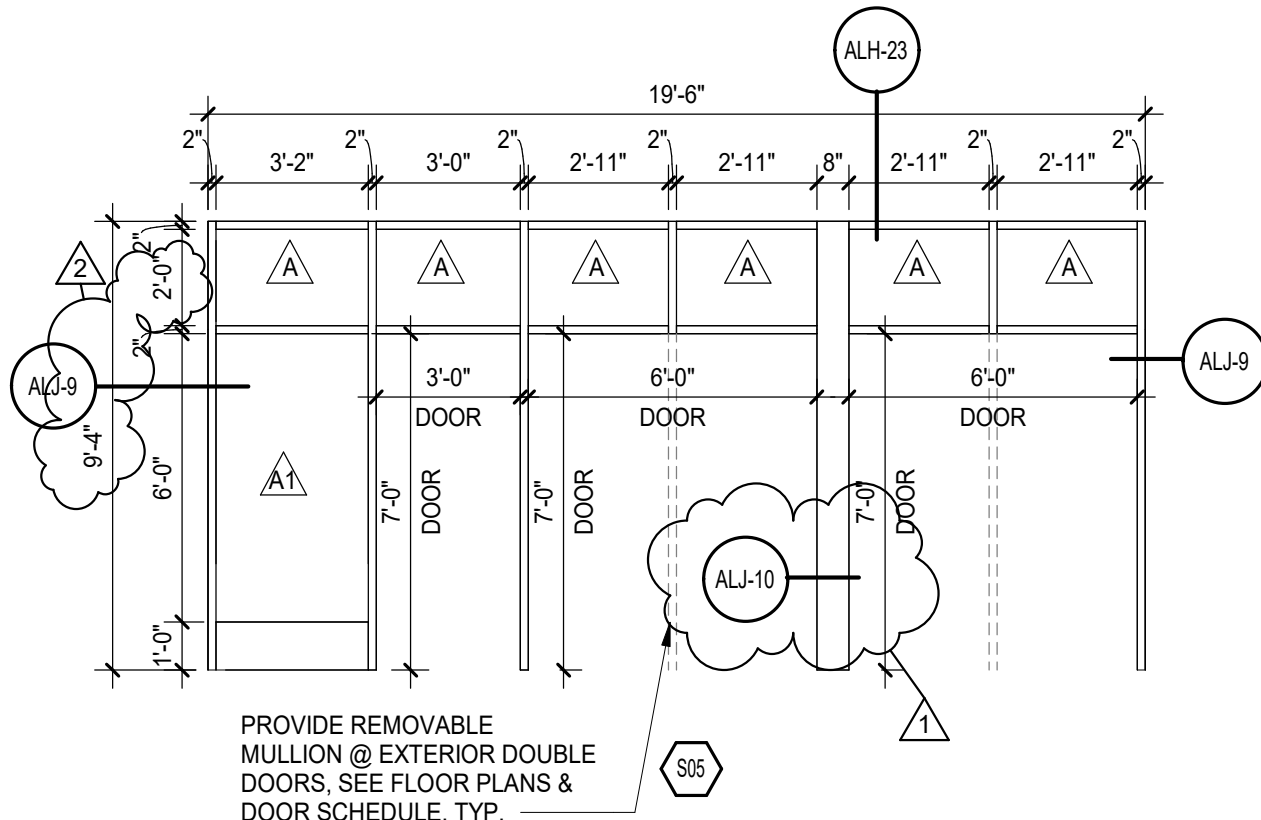
1 PARTIAL AREA D REFLECTED CEILING PLAN
1/8" = 1'-0"



24 SOFFIT DETAIL
1" = 1'-0"

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	ROCKY HILL INTERMEDIATE SCHOOL 10 SCHOOL ST. ROCKY HILL, CT. 06067 STATE PROJECT # 119-0052	<table border="1"> <tr> <td>ADDENDUM</td> <td>R.R.F.I.</td> <td>A.S.I.</td> <td>P.R.</td> <td>C.C.D.</td> </tr> <tr> <td>02</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> REFERENCE DETAIL/SHEET: A2.04 & 24/A2.07		ADDENDUM	R.R.F.I.	A.S.I.	P.R.	C.C.D.	02				
ADDENDUM	R.R.F.I.	A.S.I.	P.R.	C.C.D.									
02													
CAFETORIUM WINDOW WALL SOFFIT			PROJECT NO.:	SKA2.08									
			17005.00										

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02

REFERENCE
DETAIL/SHEET: S05/A8.02

TITLE: GYMNASIUM LOBBY FRAME HEIGHT

DATE: 03/20/18

DRAWN BY: MTK

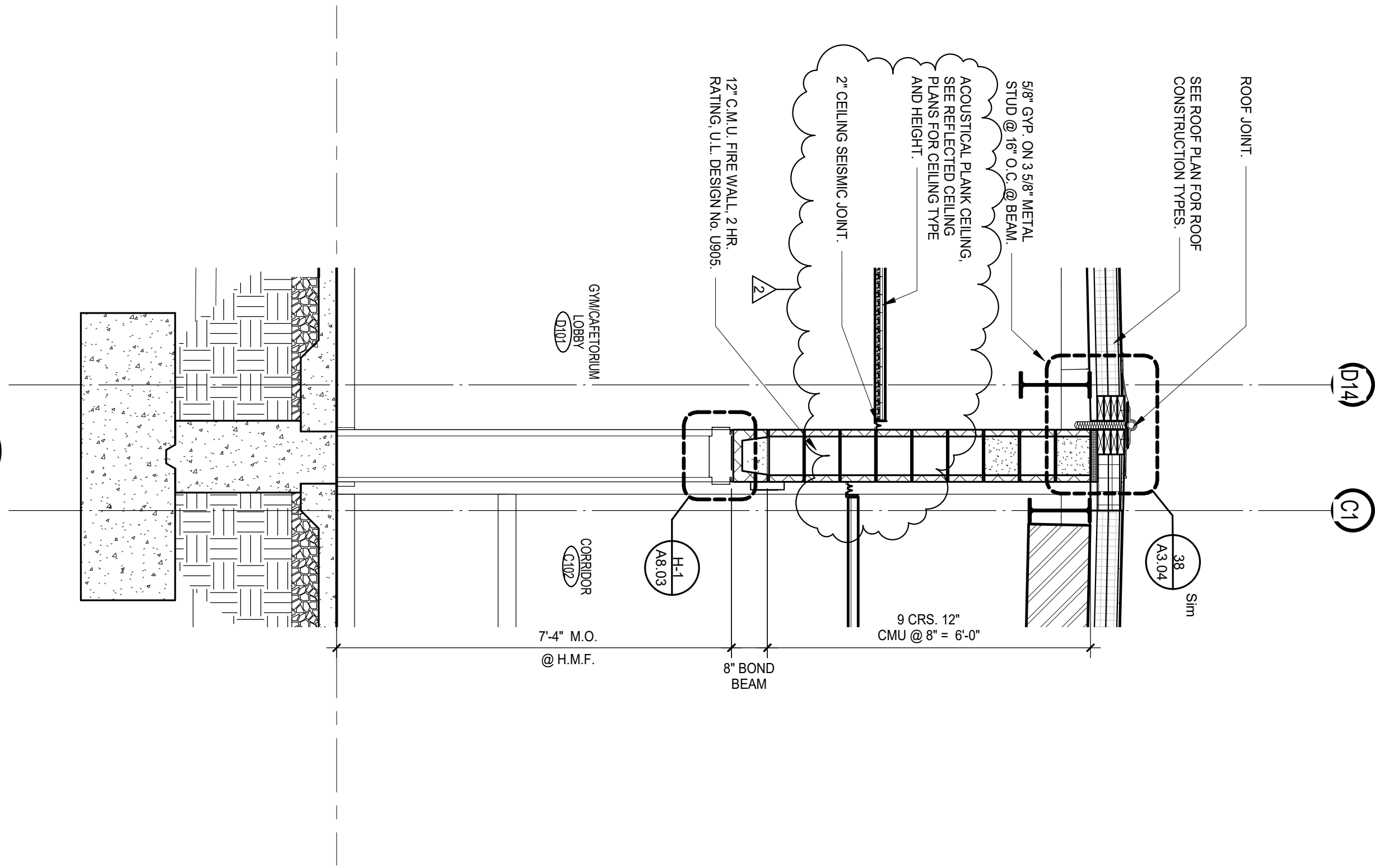
DRAWING
NO.:

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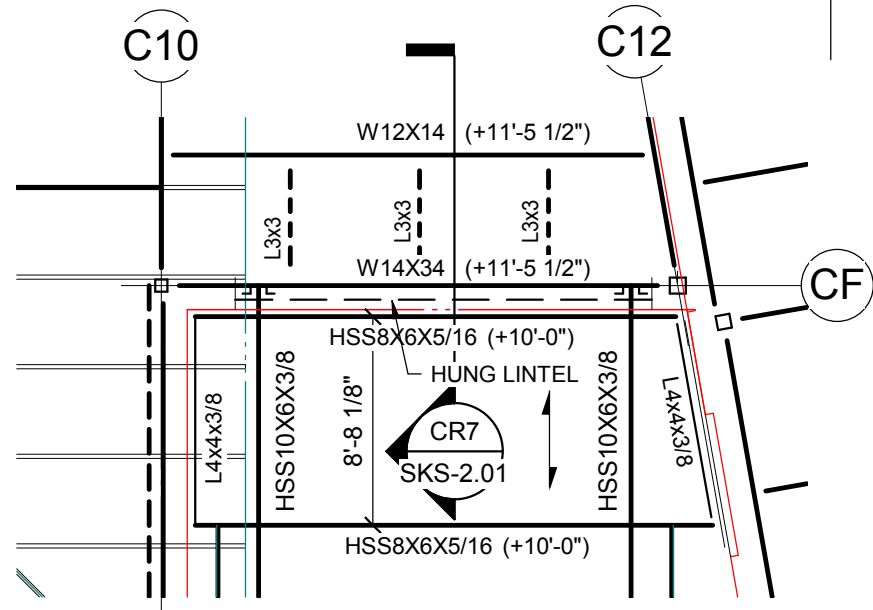
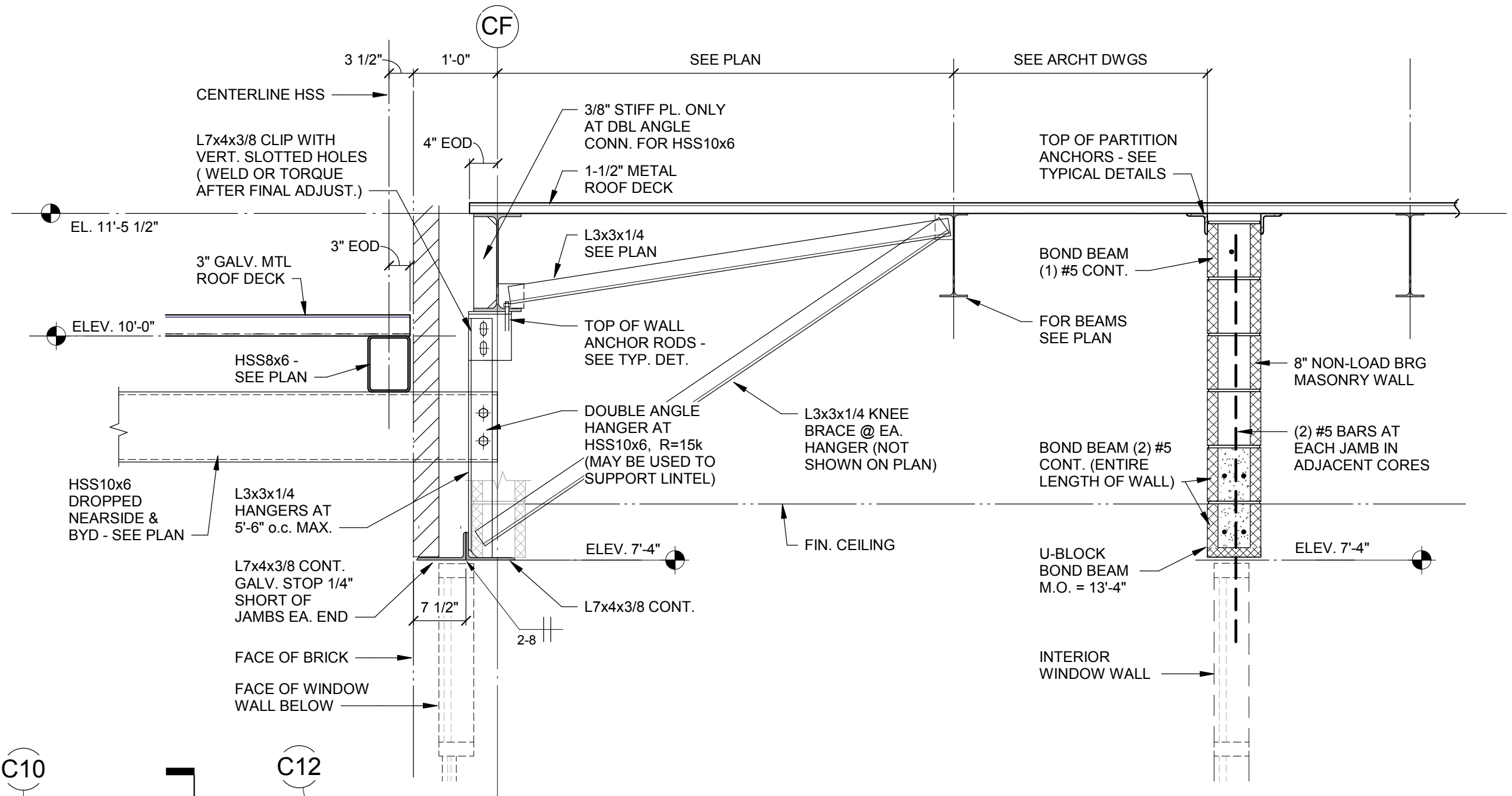
PROJECT NO.:
17005.00

SKA2.09

2



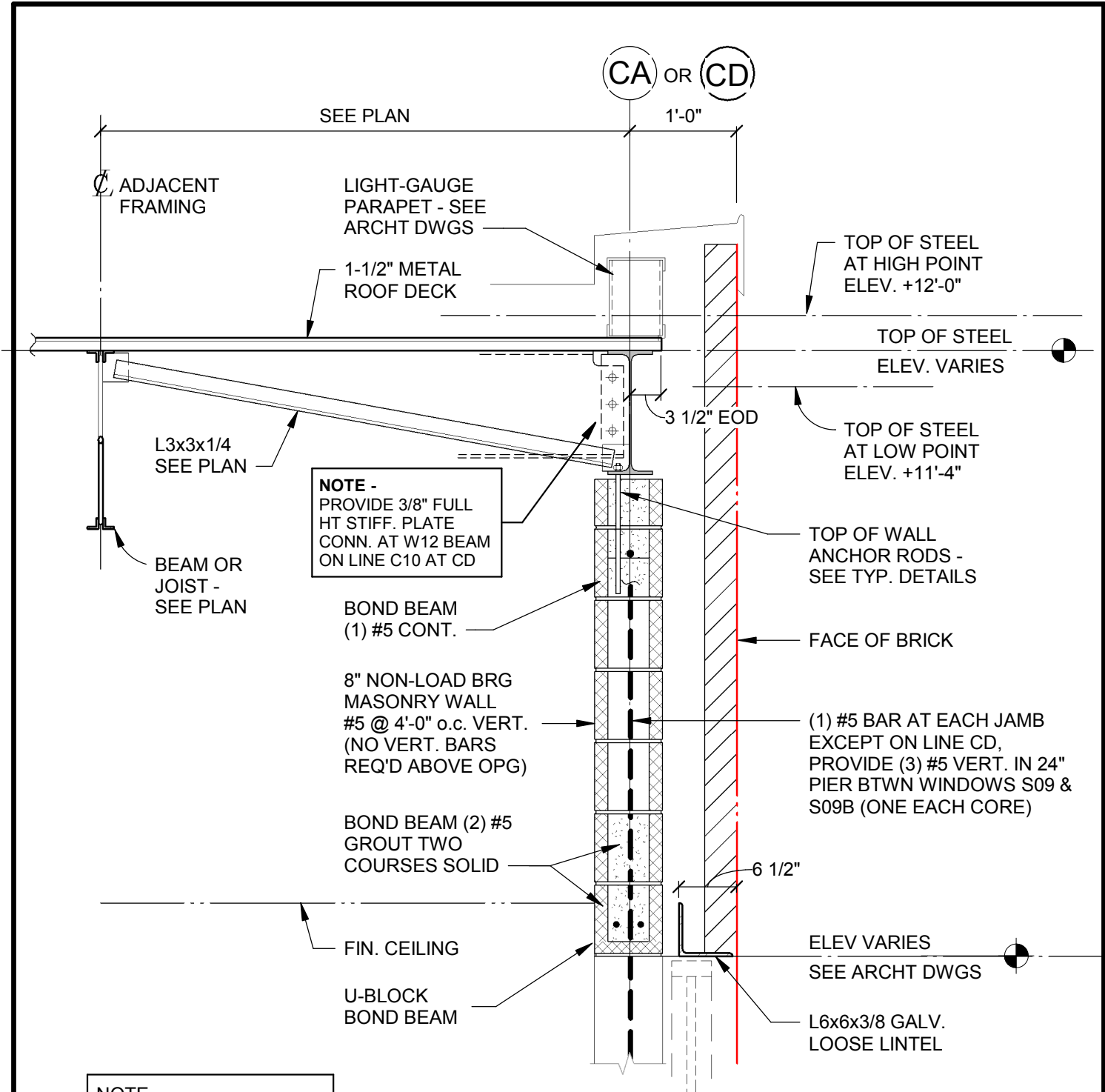
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				ADDENDUM 02	R.R.F.I.	A.S.I.	P.R.
				REFERENCE DETAIL/SHEET: 2/A6.11			
			TITLE: FIRE WALL SECTION @ DOOR FRAME				
			DATE: 03/20/18	DRAWN BY: MTK	DRAWING NO.:		
			SCALE: 1/2" = 1'-0"	PROJECT NO.:	SKA2.10		
				17005.00			



SECTION CR7

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

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		ROCKY HILL INTERMEDIATE SCHOOL		ADDENDUM	R.R.F.I.	A.S.I.	P.R.	C.C.D.
				2				
				REFERENCE DETAIL/SHEET:	S3.03			
			TITLE:	SECTION CR7 AND PART ROOF FRAMING PLAN - AREA C AT VESTIBULE C100				
			DATE: 03/19/18	DRAWN BY: RL	DRAWING NO.:			
			SCALE: As indicated	PROJECT NO.:	17005.00			
					SKS-2.01			



NOTE -
 PROVIDE 3/8" FULL
 HT STIFF. PLATE
 CONN. AT W12 BEAM
 ON LINE C10 AT CD

NOTE -
 REVISED SECTION CR1
 ALSO APPLIES ONLINE
 CD BETWEEN C7 & C12
 (NOT CUT ON PLAN)



SECTION CR1 REVISED

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

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CONSULTANT:

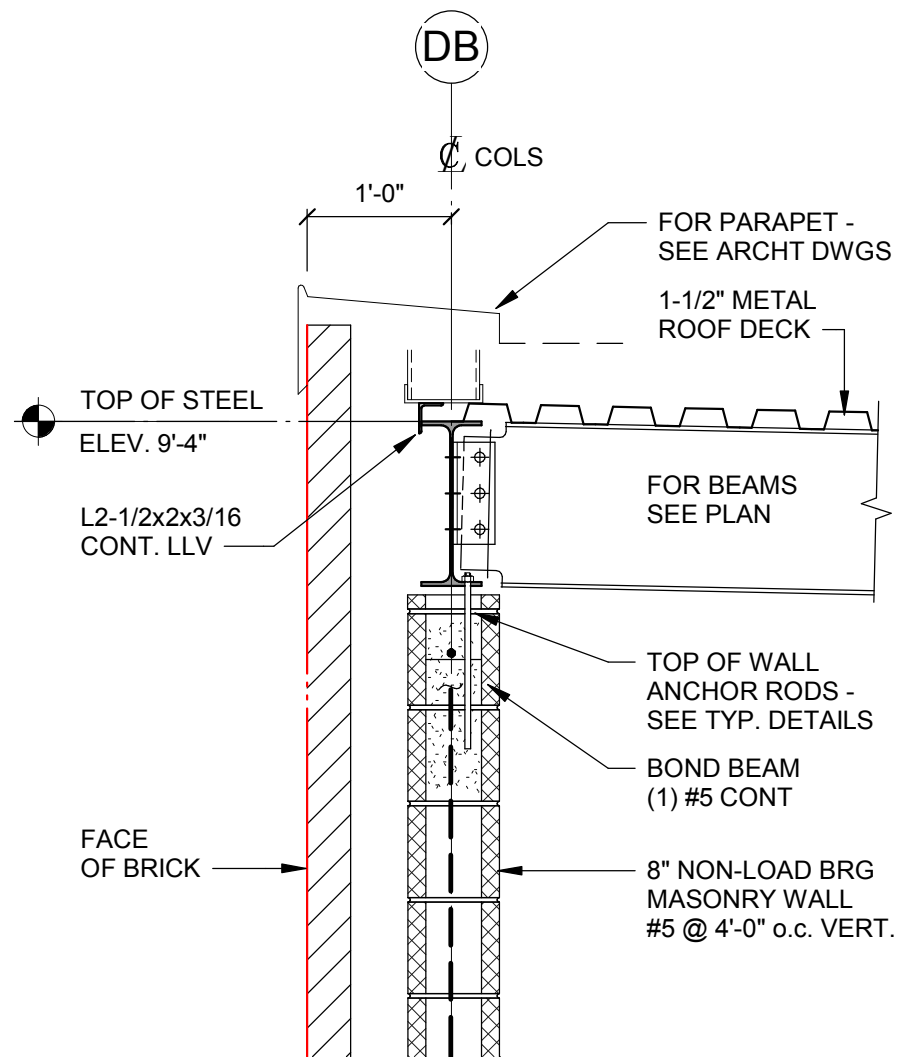
PROJECT:
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 SCHOOL

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DATE: 03/19/18
 SCALE: 3/4" = 1'-0"

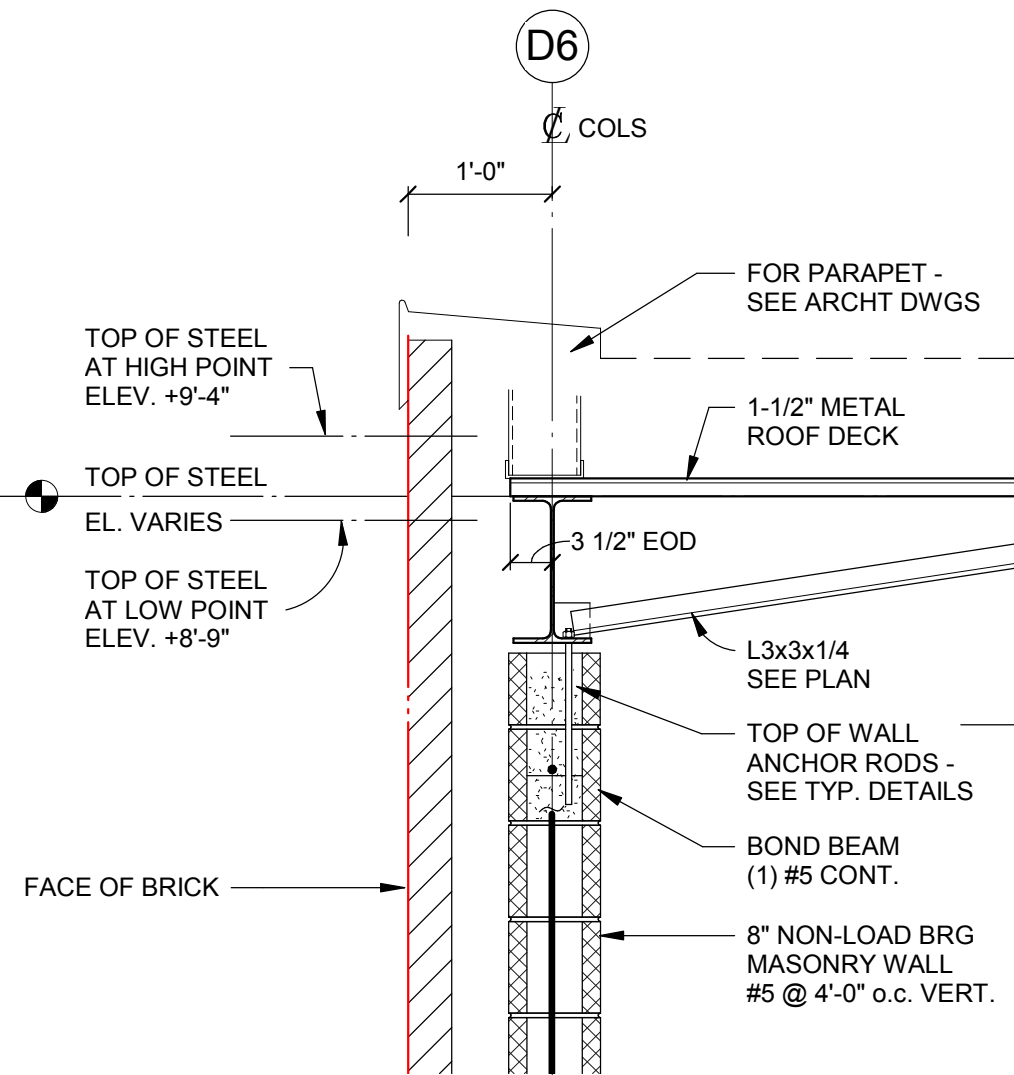
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2				
REFERENCE DETAIL/SHEET:		S3.03 and S6.06		
TITLE: REVISED SECTION CR1 / S6.06				
DRAWING NO.:		SKS-2.02		
PROJECT NO.:		17005.00		



SECTION DR9 REVISED

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

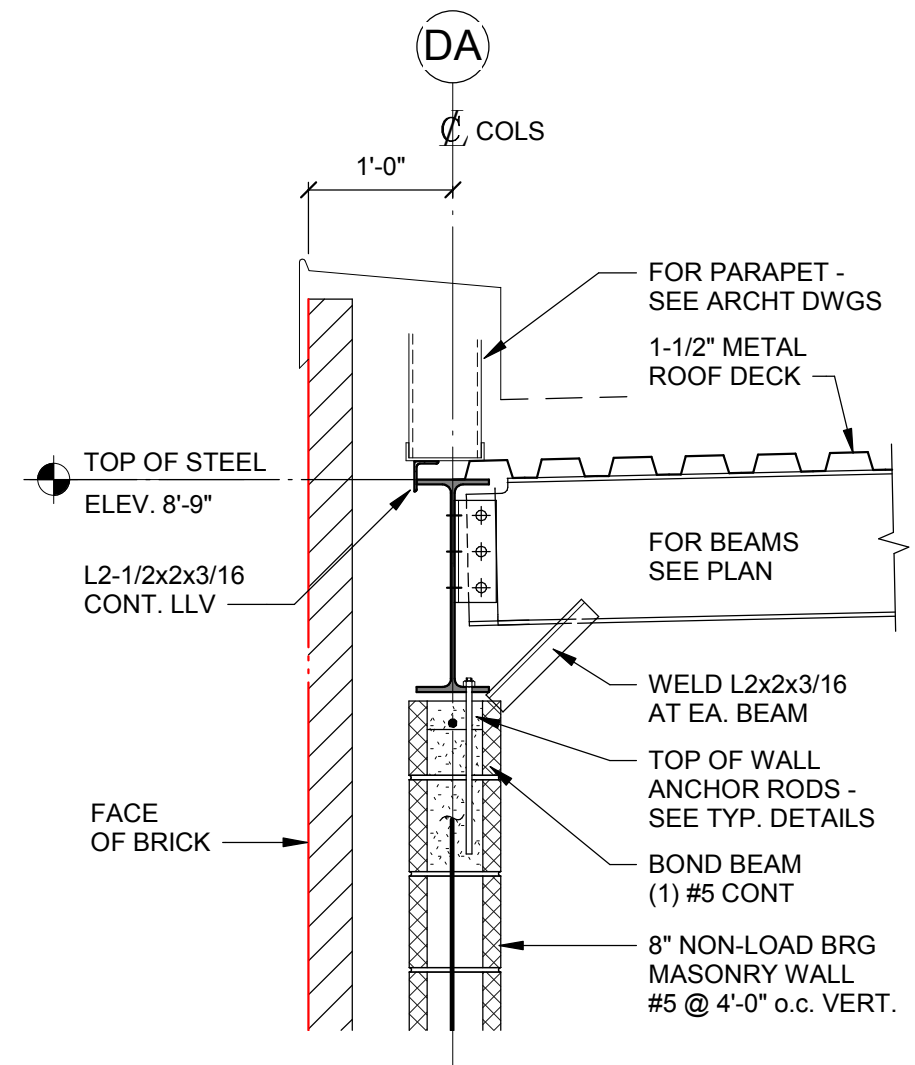
SEE ORIGINAL SECTION DR9 / S6.04 FOR BALANCE OF DETAIL AT OVERHEAD DOOR BELOW



SECTION DR10 & DR12 REVISED

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

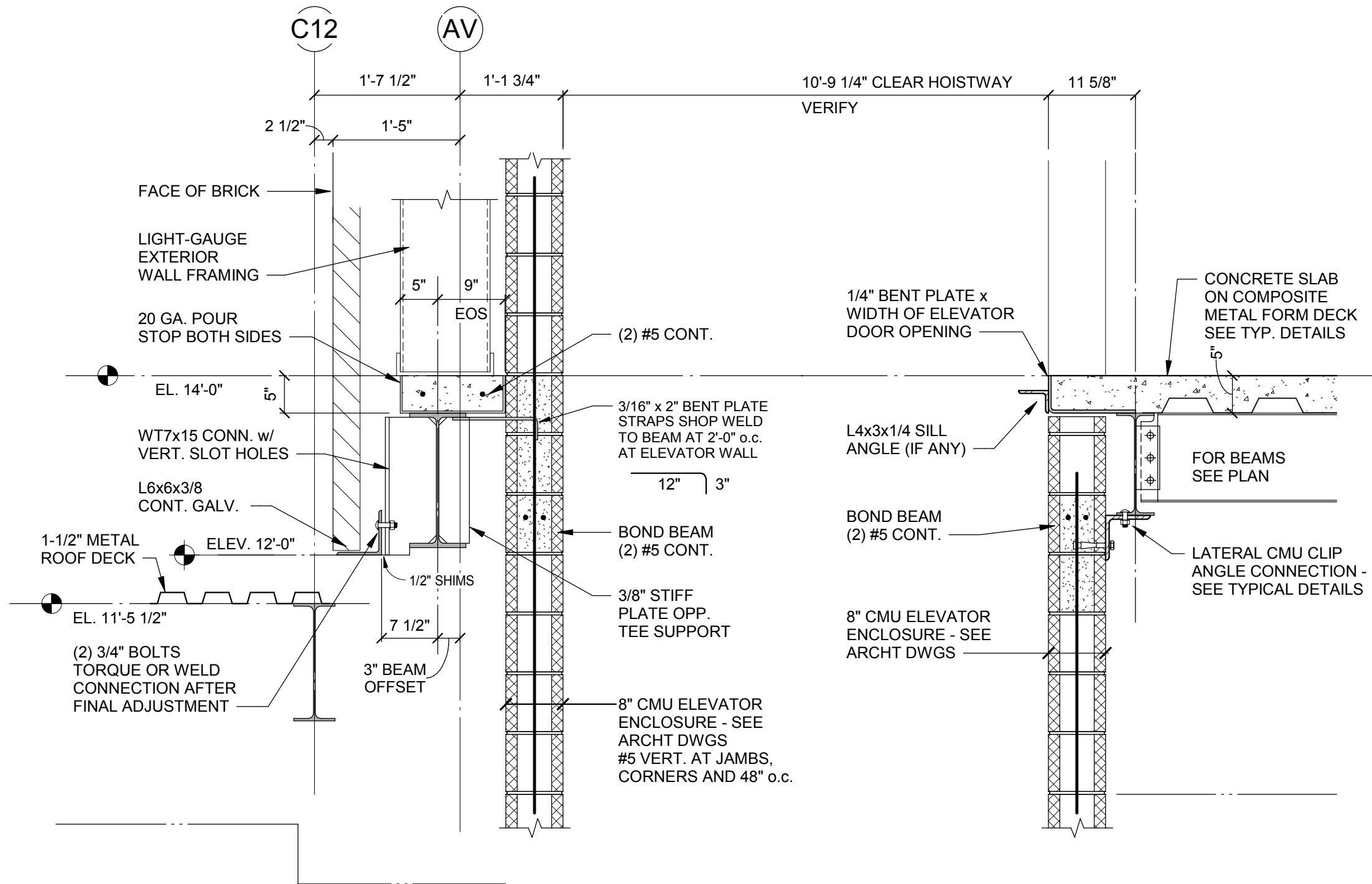
NOTE - SECTION DR12 / S6.04 REVISED SIMILARLY TO DR10



SECTION DR11 REVISED

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

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		ROCKY HILL INTERMEDIATE SCHOOL		ADDENDUM	R.R.F.I.	A.S.I.	P.R.	C.C.D.
		10 SCHOOL ST. ROCKY HILL, CT. 06067 STATE PROJECT # 119-0052		2				
			TITLE:	REFERENCE DETAIL/SHEET: S6.04				
			DATE: 03/20/18	REVISED SECTIONS DR9, DR10, DR11, AND DR12				
			SCALE: 3/4" = 1'-0"	DRAWN BY: RL	DRAWING NO.:			
				PROJECT NO.: 17005.00	SKS-2.03			



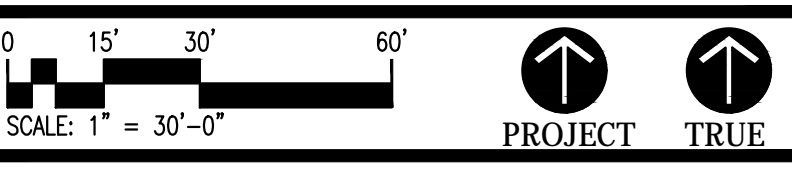
SECTION B2 REVISED

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

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		ROCKY HILL INTERMEDIATE SCHOOL 10 SCHOOL ST. ROCKY HILL, CT. 06067 STATE PROJECT # 119-0052		ADDENDUM 3	R.R.F.I.	A.S.I.	P.R.	C.C.D.
			REFERENCE DETAIL/SHEET: B2 / S2.01					
			TITLE: REVISED SECTION B2 / S2.01					
			DRAWN BY: RL		DRAWING NO.:			
			PROJECT NO.:		SKS-2.04			
			17005.00					

ISSUE DATE	
DATE	DESCRIPTION
03/07/18	1.) ADDENDUM #1
03/20/18	2.) ADDENDUM #2

REVISIONS	
DATE	DESCRIPTION



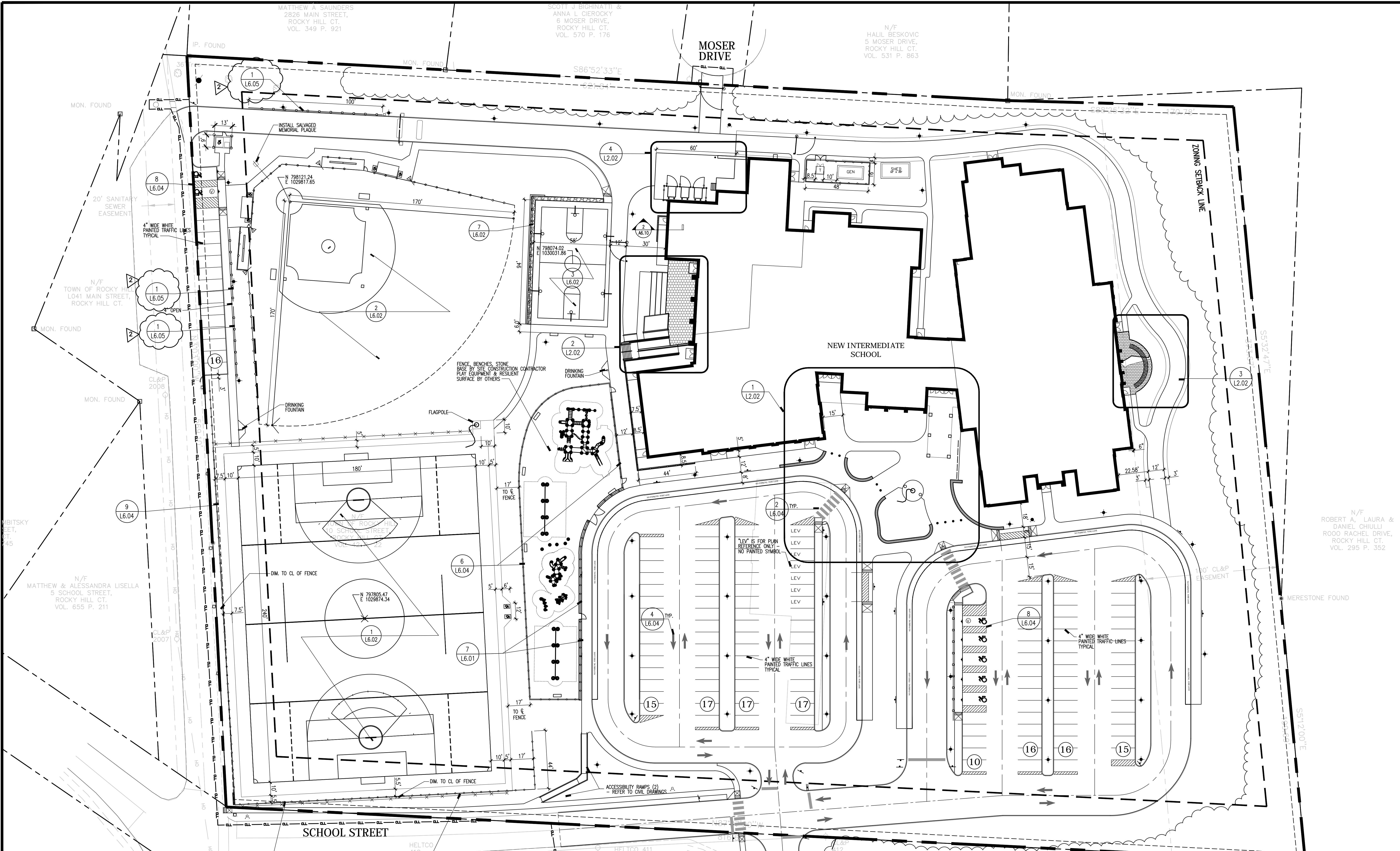
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INTERMEDIATE
SCHOOL**
10 SCHOOL ST. ROCKY HILL, CT.
06067

PROJECT NO.: 17005.00 DRAWN BY: JAD

**SITE
LAYOUT
PLAN**

DRAWING NO.:
L2.01

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LEGEND

	PROPERTY LINE
	EXPANSION JOINTS
	CONTROL JOINTS
	LAYOUT BASE LINE
	CONSTRUCTION LIMIT LINE
	RADIAL DIMENSION
	LINEAR DIMENSION
	ANGULAR DIMENSION
	PARKING TOTAL
	CURB RAMP LOCATION

NOTES

- LAYOUT INFORMATION IS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL LAYOUT INFORMATION. BRING ANY DISCREPANCIES TO THE ARCHITECT'S ATTENTION FOR REVIEW AND CLARIFICATION.
- REFER TO CIVIL DRAWINGS FOR MAJOR ELEMENTS, INCLUDING ROAD, WALK LAYOUT AND BUILDING LOCATION INFORMATION.

MATTHEW A. SAUNDERS
2826 MAIN STREET,
ROCKY HILL CT.
VOL. 349 P. 921

SCOTT P. BISHARA
ANNA L. CIEROCKY
6 MOSER DRIVE,
ROCKY HILL CT.
VOL. 570 P. 176

N/F
HAUL BESKOVIC
5 MOSER DRIVE,
ROCKY HILL CT.
VOL. 531 P. 863

N/F
TOWN OF ROCKY HILL
1041 MAIN STREET,
ROCKY HILL CT.

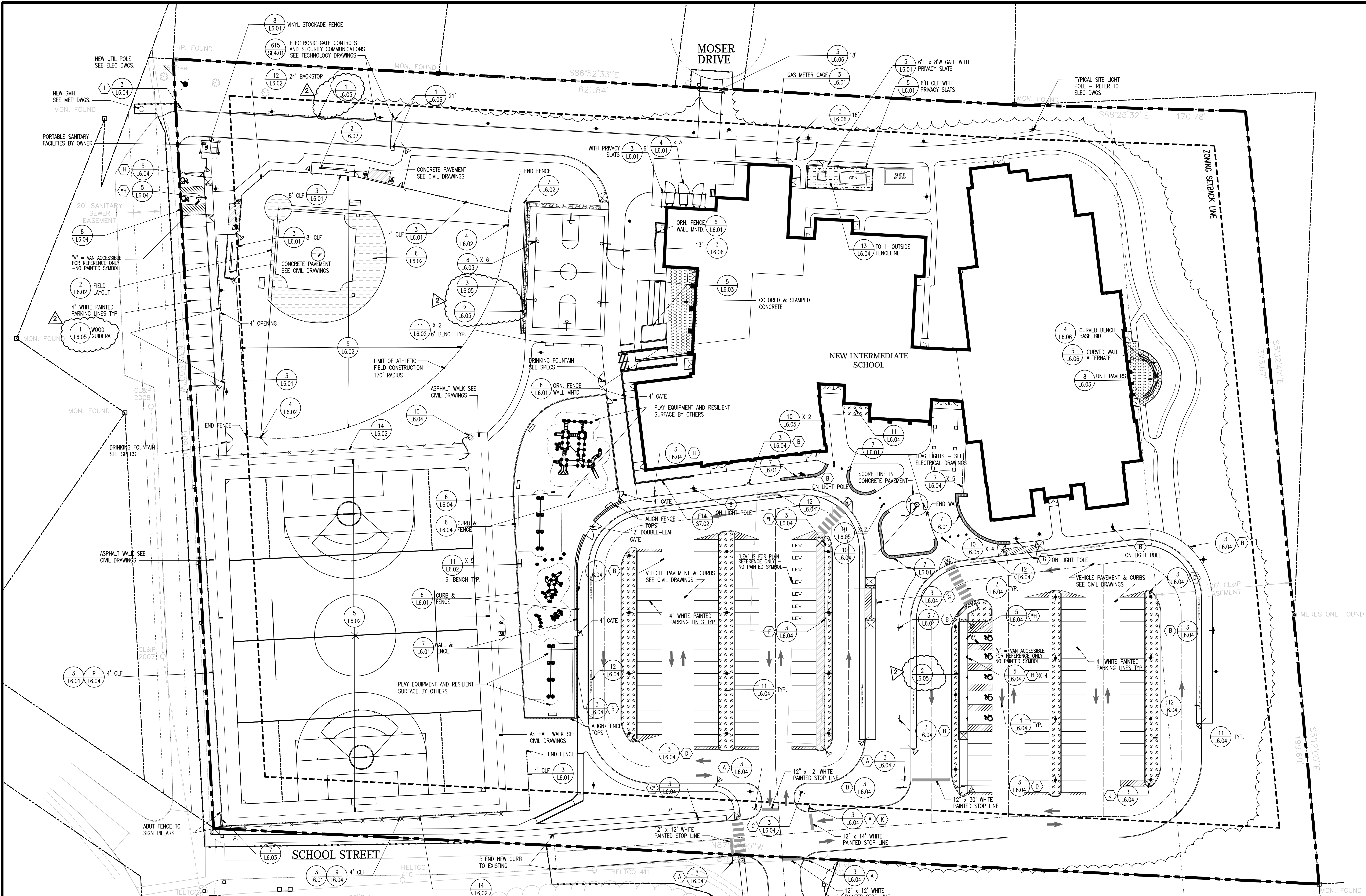
N/F
MATTHEW & ALESSANDRA LISELLA
5 SCHOOL STREET,
ROCKY HILL CT.
VOL. 655 P. 211

N/F
TOWN OF ROCKY HILL
HOUSING AUTHORITY
BIRCH ROAD,
ROCKY HILL CT.
VOL. 110 P. 535

N/F
TOWN OF ROCKY HILL
HOUSING AUTHORITY
20 SCHOOL STREET,
ROCKY HILL CT.
VOL. 164 P. 234

N/F
ROBERT A., LAURA &
DANIEL CHIULLI
ROOD RACHEL DRIVE,
ROCKY HILL CT.
VOL. 295 P. 352

N/F
97 HAMMERMILL ROAD, LLC
97 HAMMERMILL ROAD,
ROCKY HILL CT.
VOL. 583 P. 912



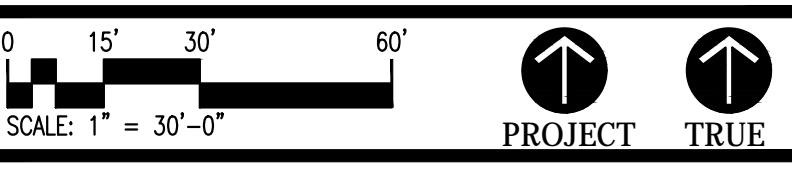
LEGEND

- | | |
|---|---|
| <p>DETAIL #
XX
XXX</p> <p>SHEET #</p> <p>▲ DENOTES MATERIAL CHANGE</p> <p>— LIMIT OF MATERIAL</p> <p>ATHLETIC FIELD CONSTRUCTION AREA</p> <p>COMPOSITE DETECTABLE WARNING SURFACE (SEE SPECIFICATIONS)</p> <p>WASHED STONE MULCH</p> <p>INFIELD SURFACING</p> <p>COLORED & STAMPED CONCRETE (SEE CIVIL DRAWINGS)</p> <p>CRUSHED STONE SURFACE</p> | <p>○ SIGNAGE: REFER TO DETAIL #1 ON L6.01. INSTALL ON SIGN POST #3 OR #5 ON L6.01 UNLESS NOTED OTHERWISE</p> <p>● AREA LIGHTING</p> <p>— CURBING</p> <p>— CONCRETE WALL</p> <p>— GATES (TYP.)</p> <p>— FENCING</p> <p>— WOOD GUARD RAIL</p> <p>● BOLLARD</p> <p>— CLL — CONSTRUCTION LIMIT LINE</p> |
|---|---|

NOTE: REFER TO CIVIL DRAWINGS FOR PAVEMENT AND CURB MATERIALS AND LOCATIONS

ISSUE DATE	
DATE	DESCRIPTION
03/07/18	1.) ADDENDUM #1

REVISIONS	
DATE	DESCRIPTION

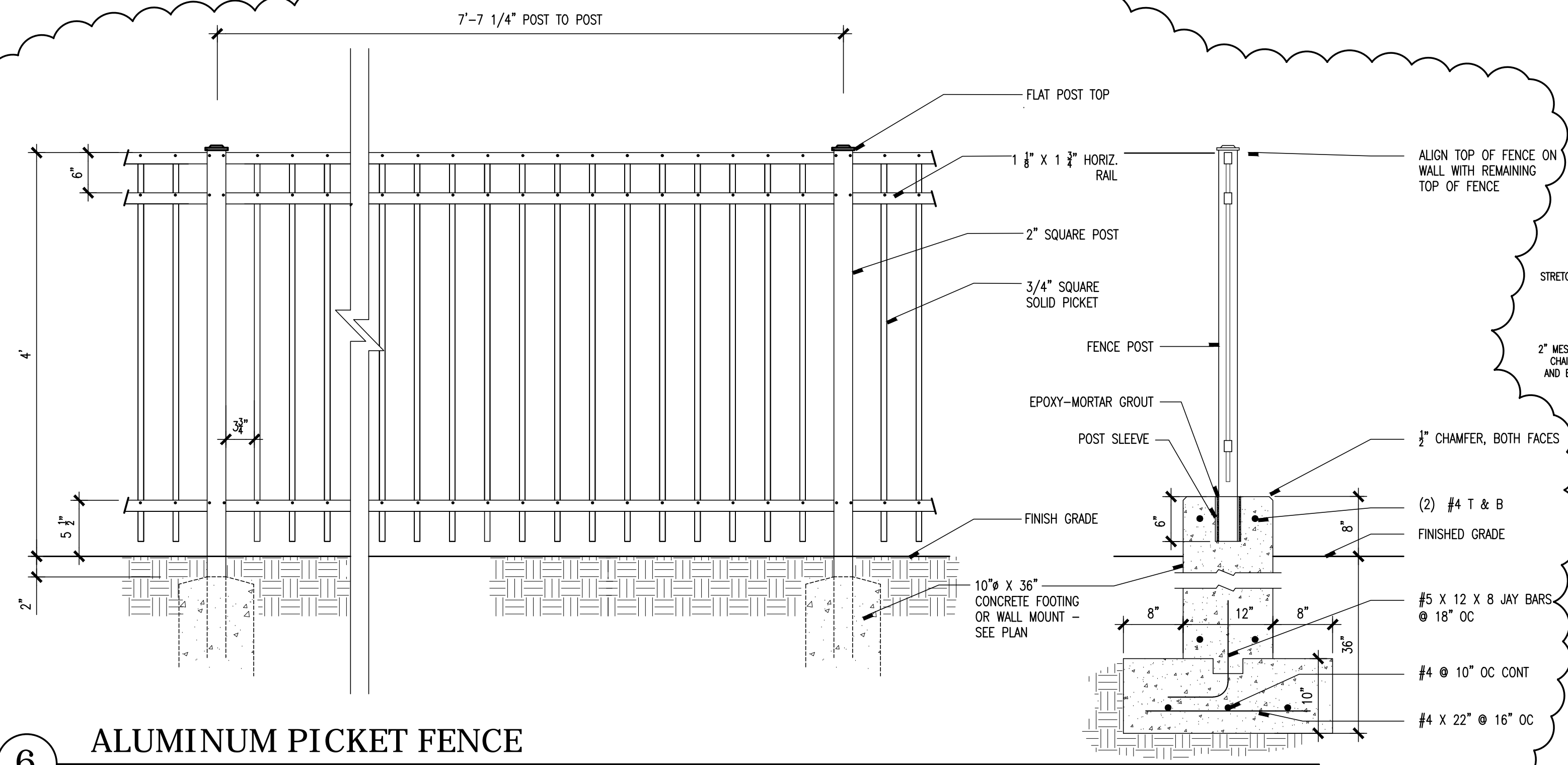


ROCKY HILL
INTERMEDIATE
SCHOOL
10 SCHOOL ST. ROCKY HILL, CT.
06067

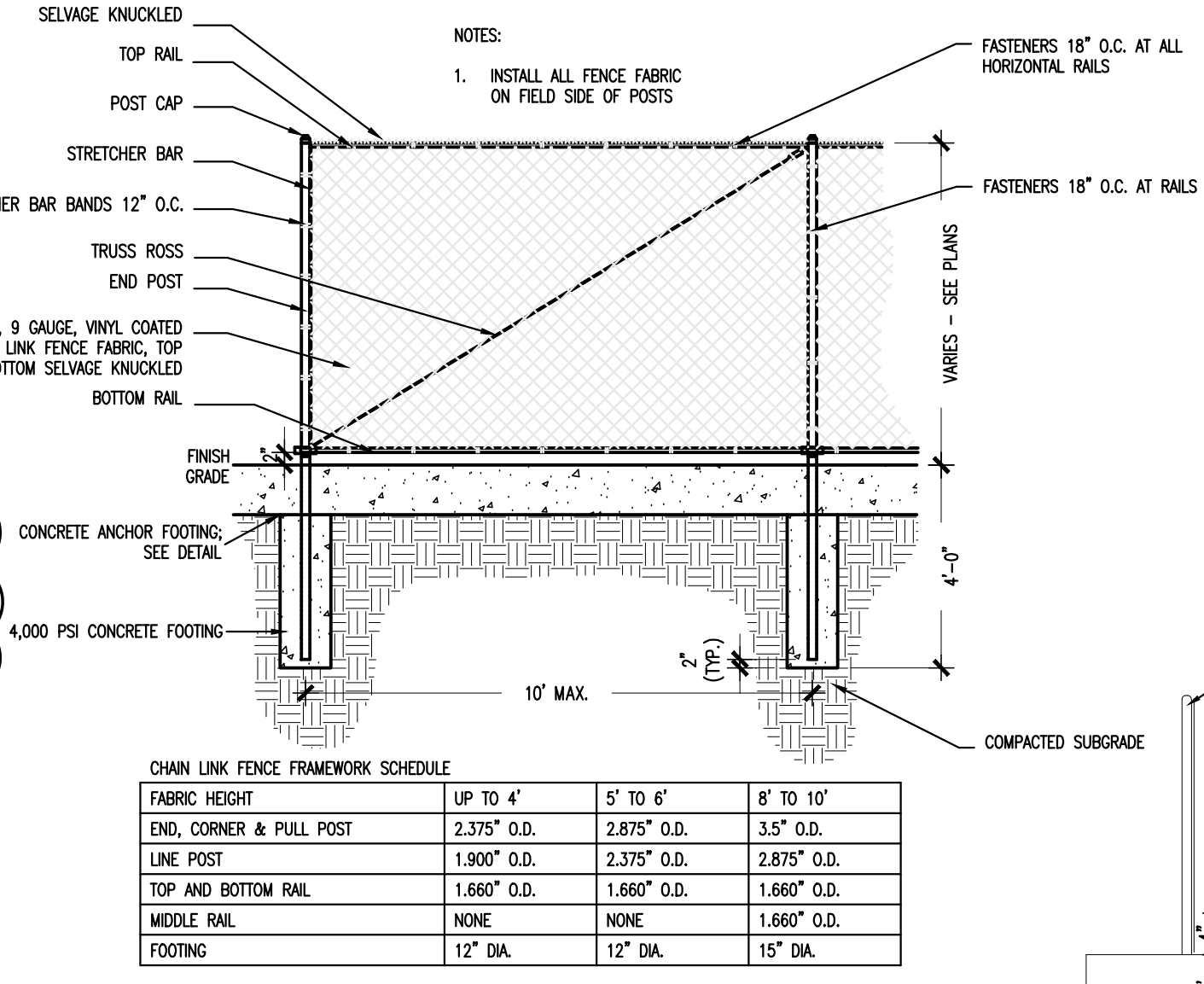
PROJECT NO.: 17005.00 DRAWN BY: JAD

SITE
MATERIALS
PLAN

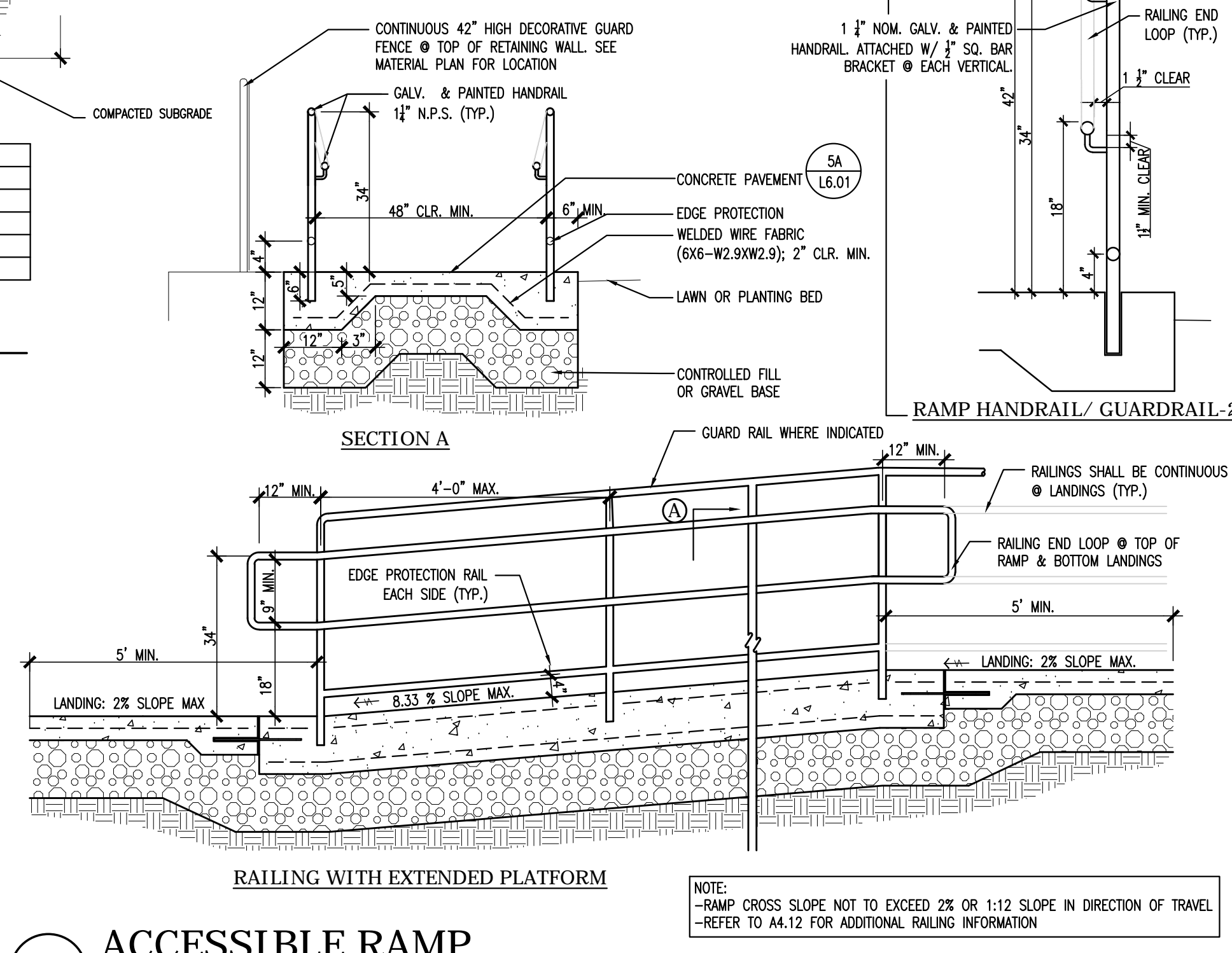
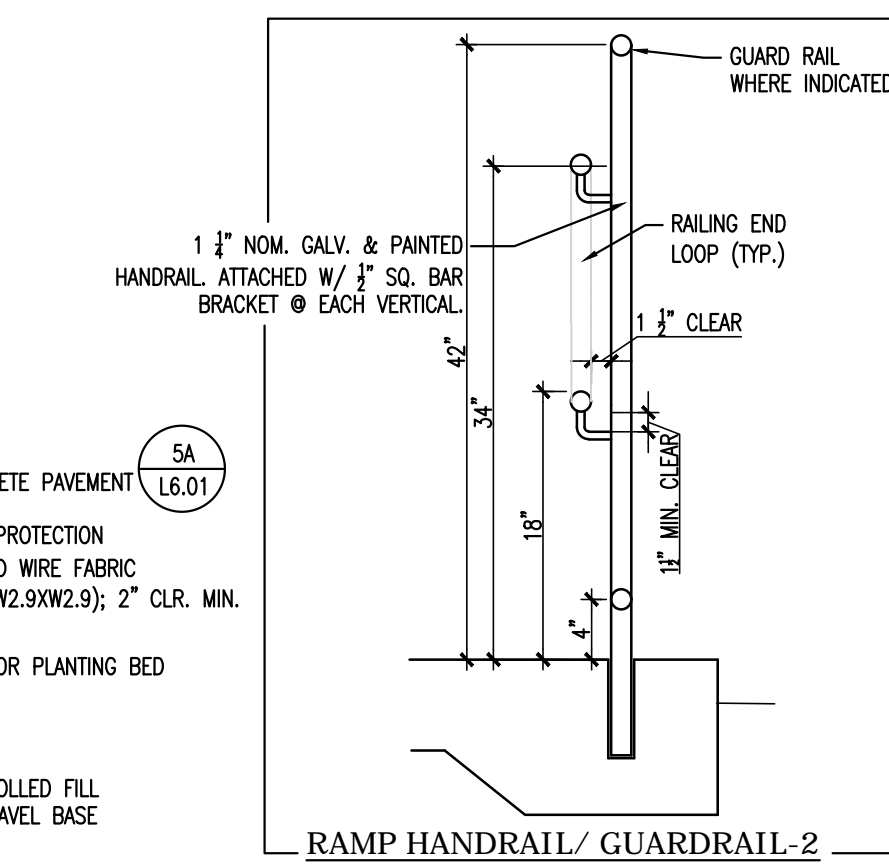
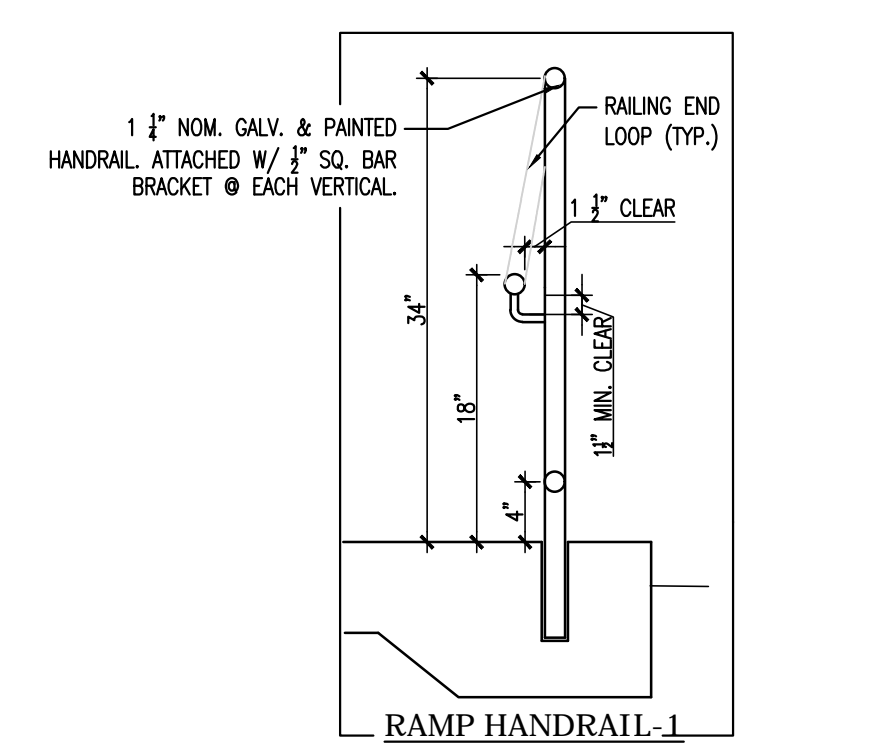
DRAWING NO.:
L3.01



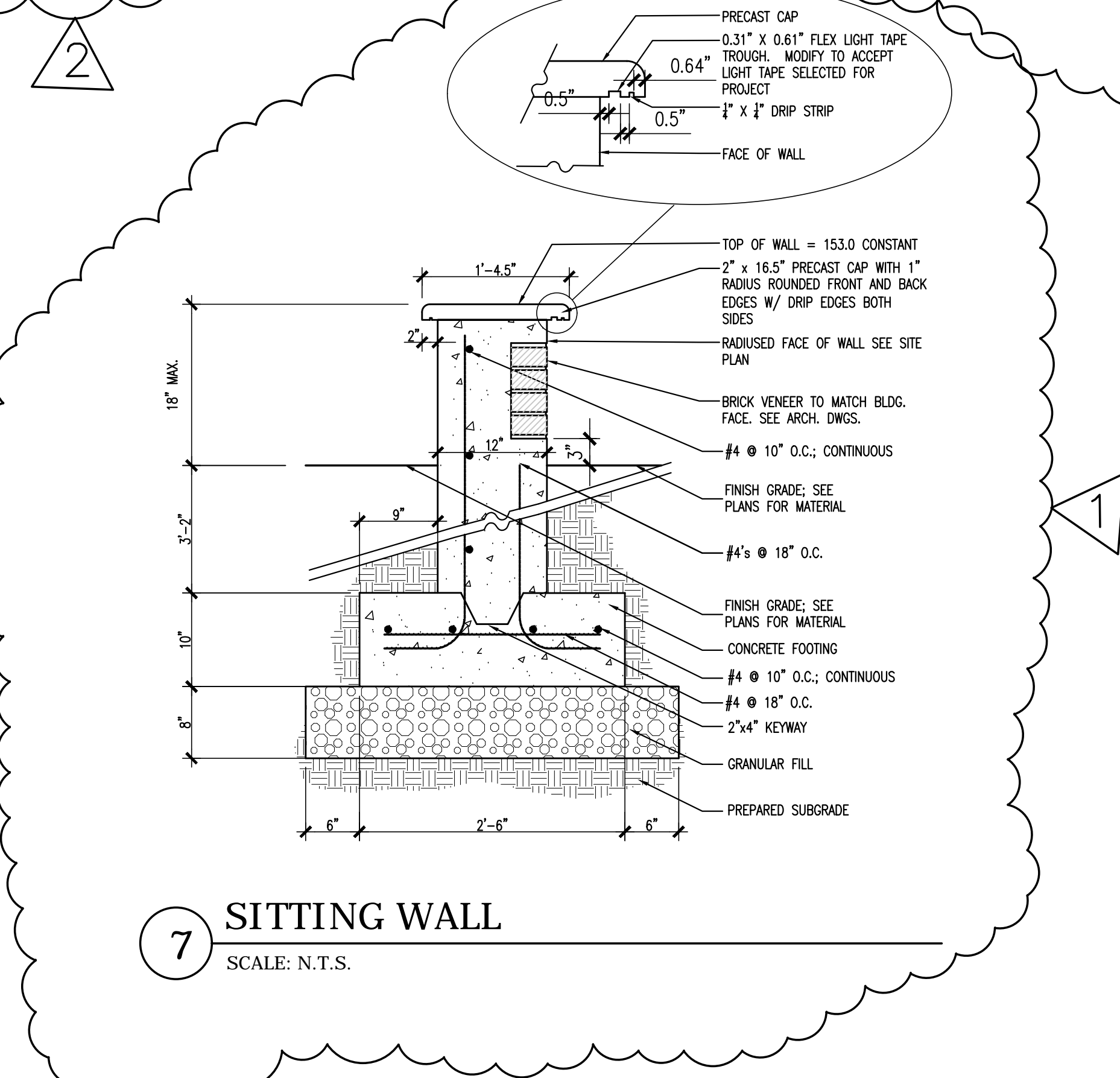
6 ALUMINUM PICKET FENCE
N.T.S.



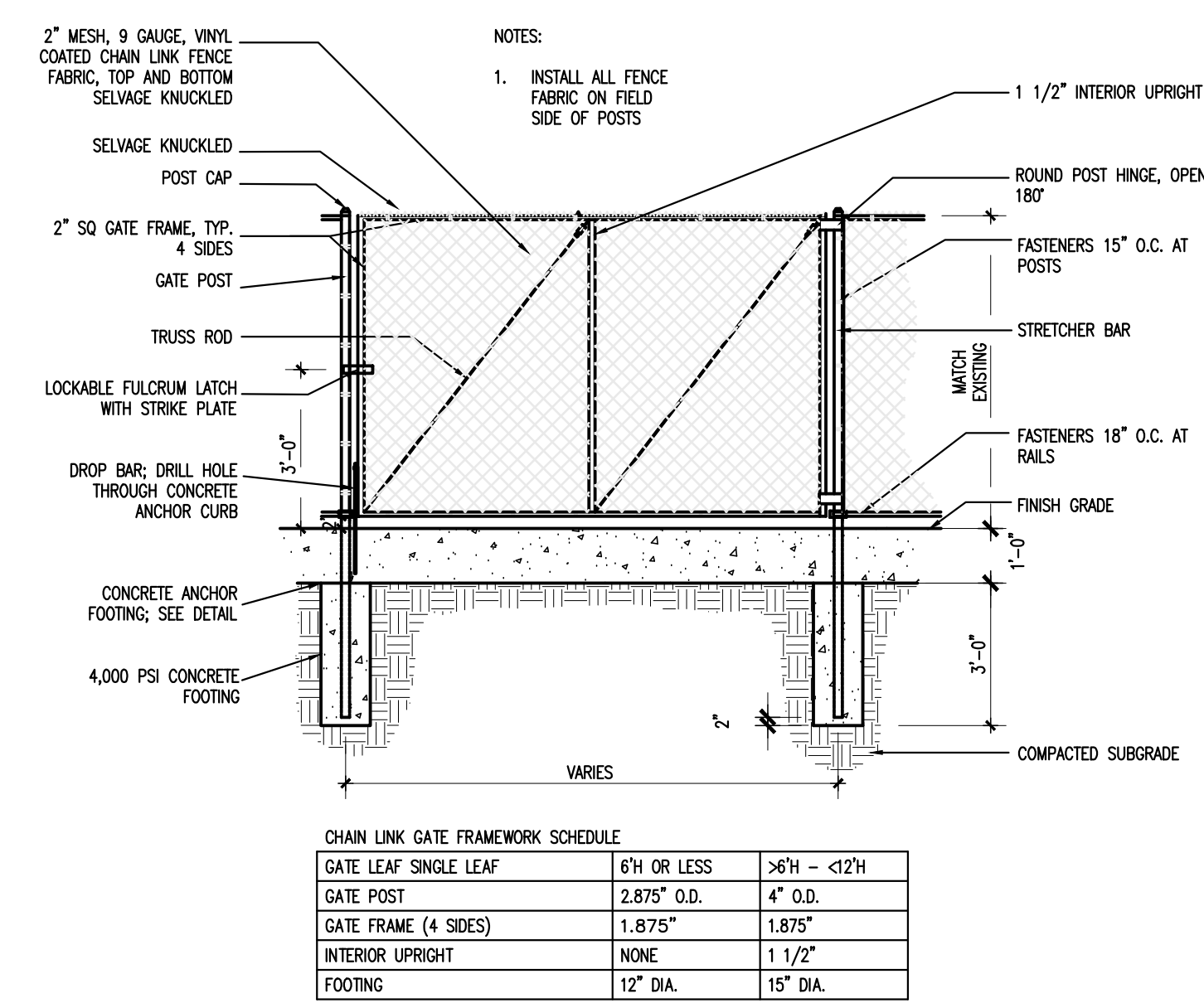
3 CHAIN LINK FENCE
N.T.S.



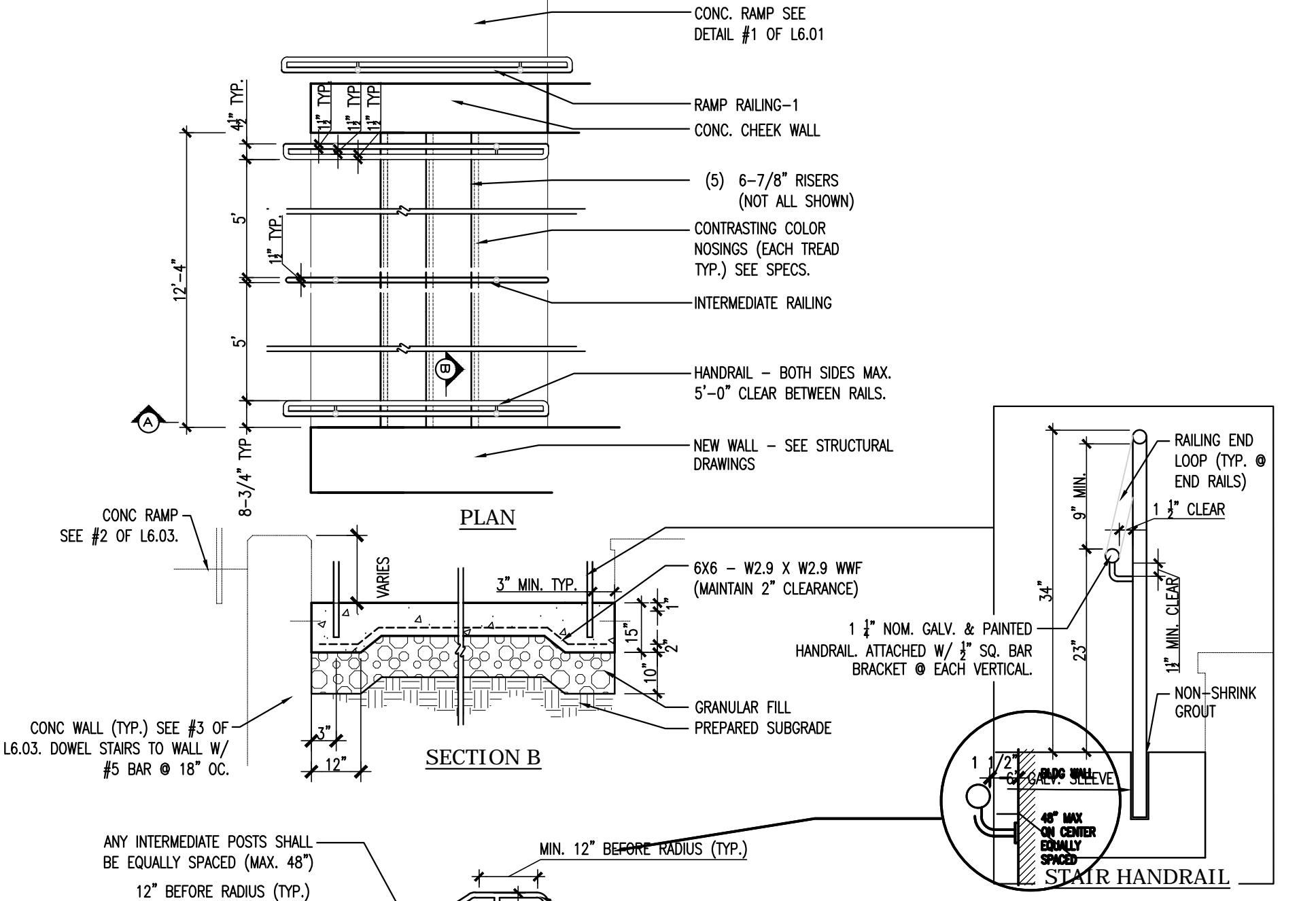
1 ACCESSIBLE RAMP
N.T.S.



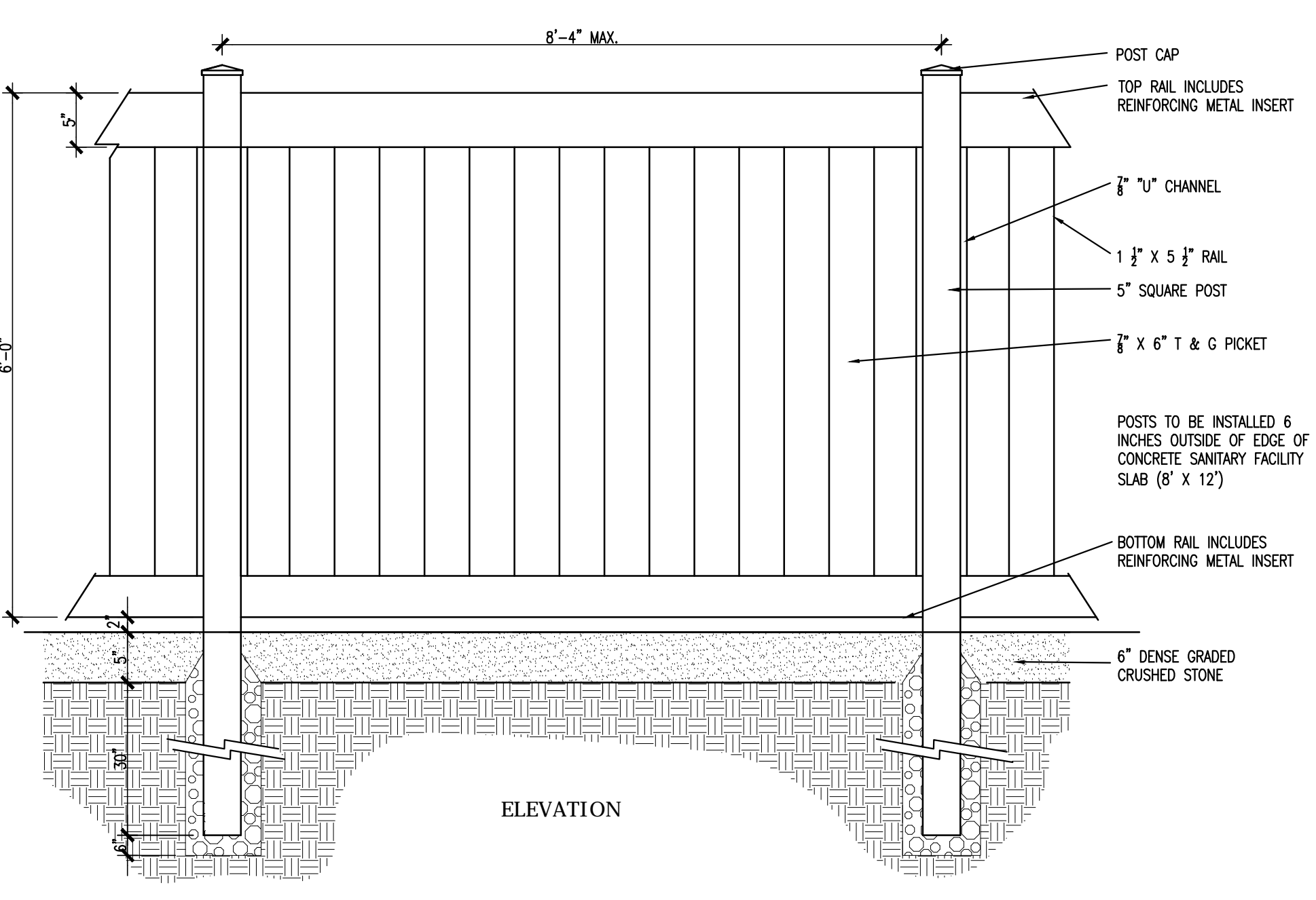
7 SITTING WALL
SCALE: N.T.S.



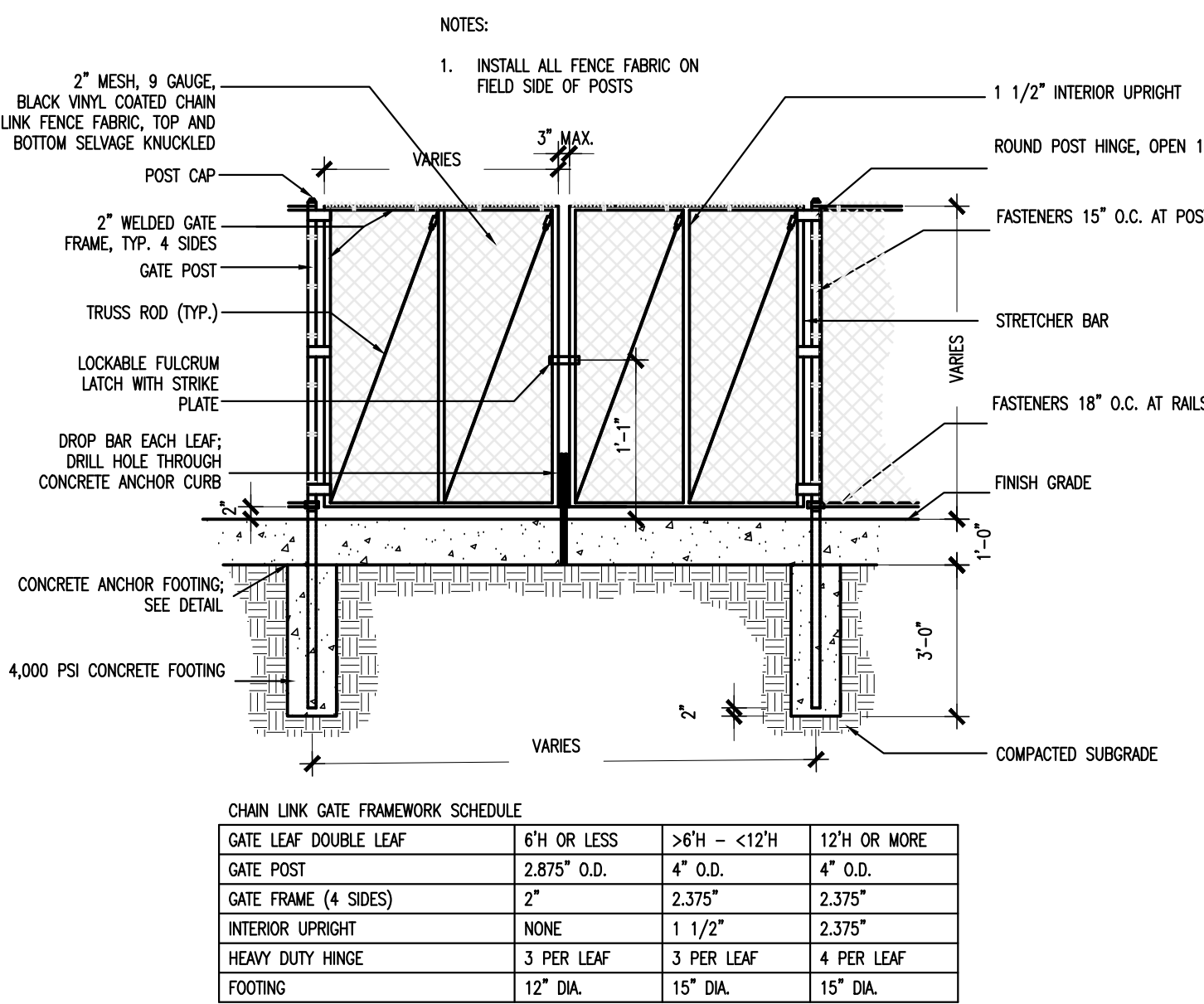
4 CHAIN LINK GATE - SINGLE LEAF
N.T.S.



2 CONCRETE STEPS W/ DBL HANDRAIL
N.T.S.



8 VINYL STOCKADE FENCE
SCALE: N.T.S.



5 CHAIN LINK GATE - DOUBLE LEAF
N.T.S.

ISSUE DATE

DATE	DESCRIPTION
03/07/18	1.) ADDENDUM #1
03/20/18	2.) ADDENDUM #2

REVISIONS

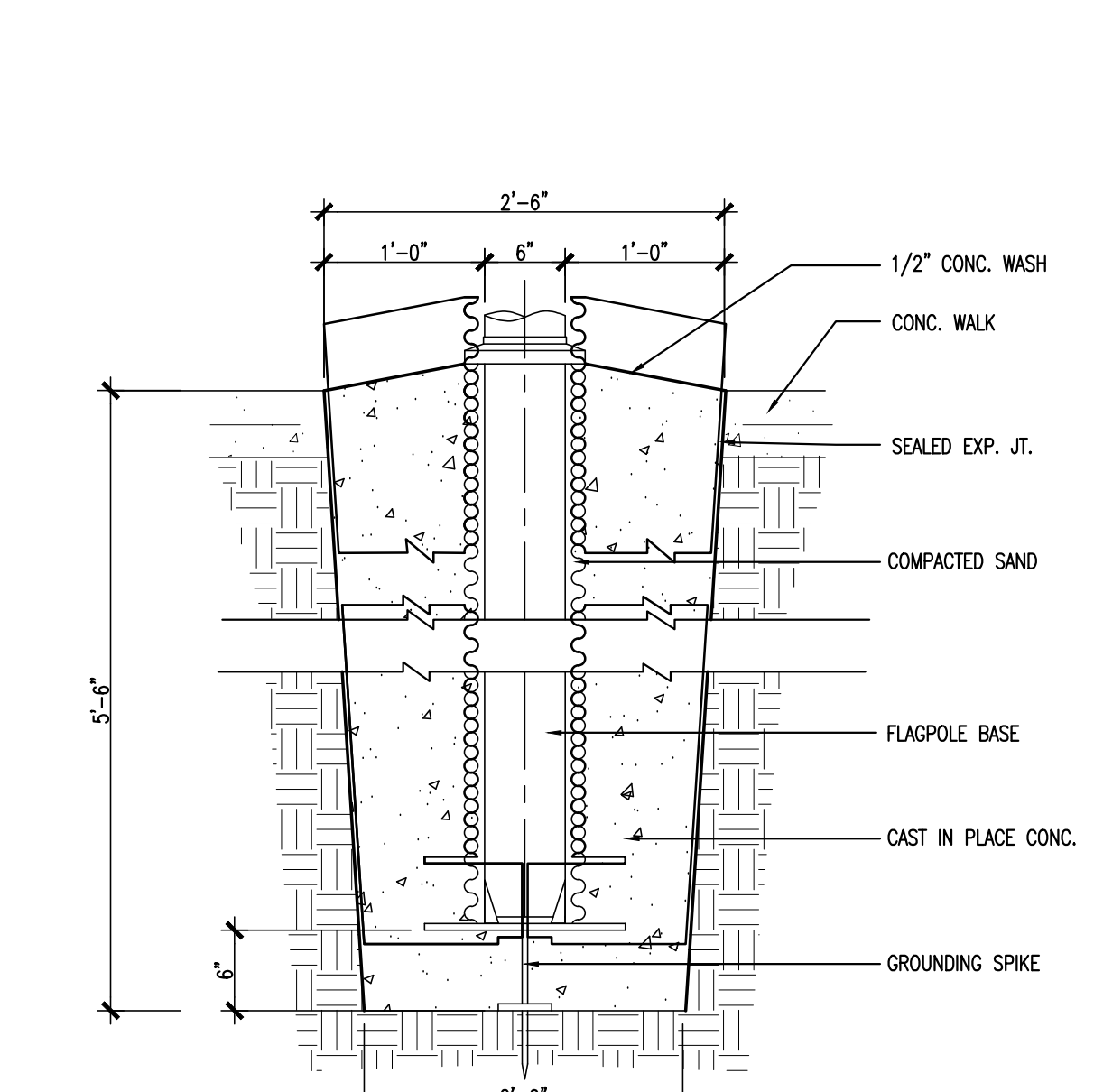
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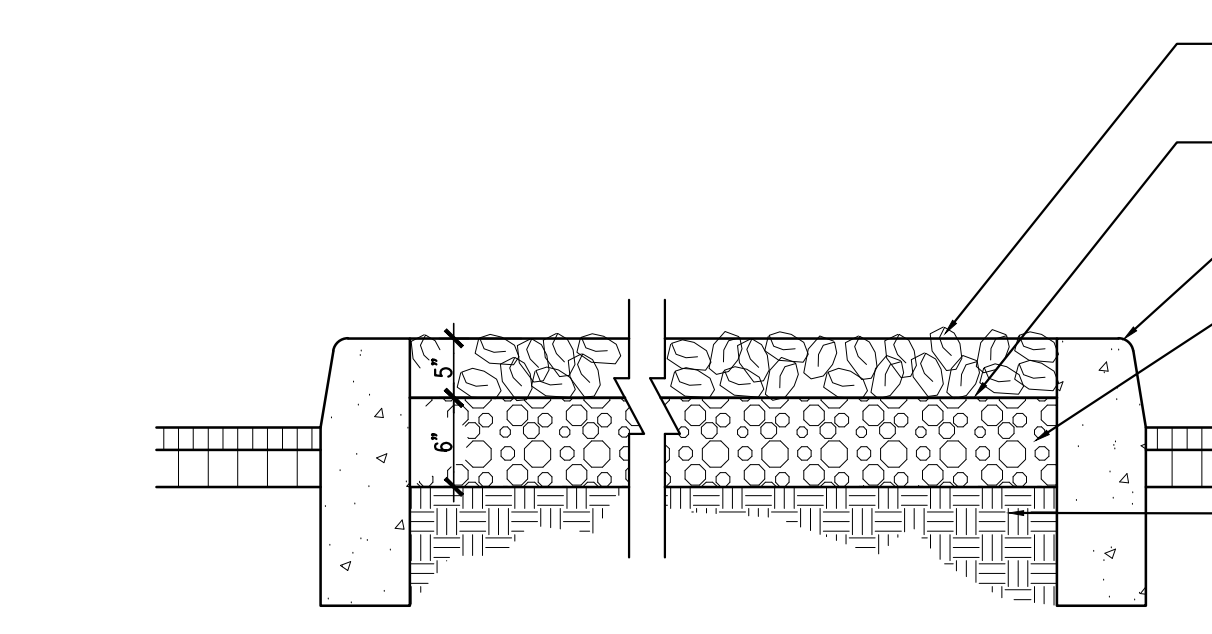
ROCKY HILL INTERMEDIATE SCHOOL
10 SCHOOL ST. ROCKY HILL, CT. 06067

PROJECT NO.: 17005.00 DRAWN BY: JAD

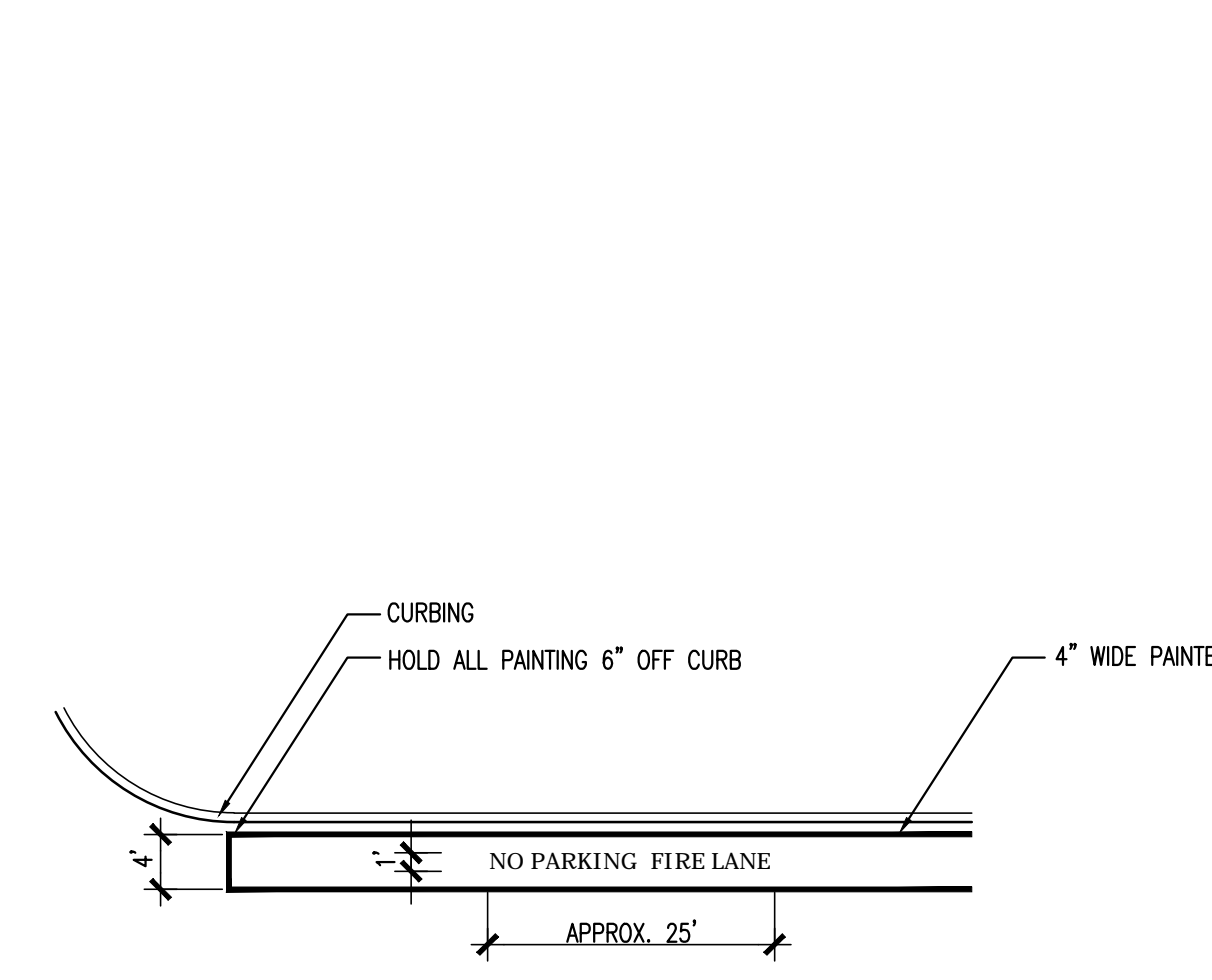
SITE DETAILS



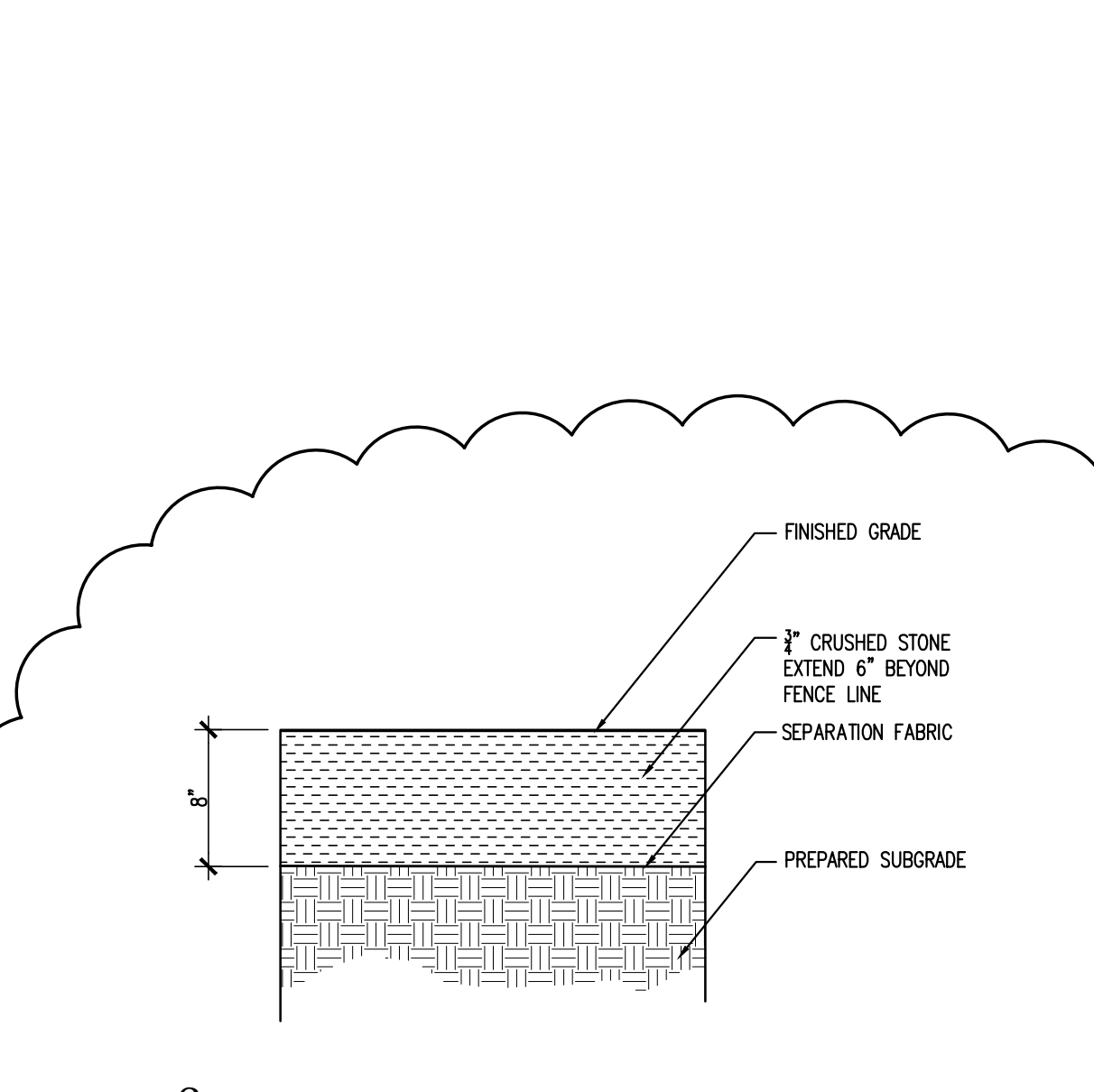
10 FLAGPOLE FOUNDATION
N.T.S.



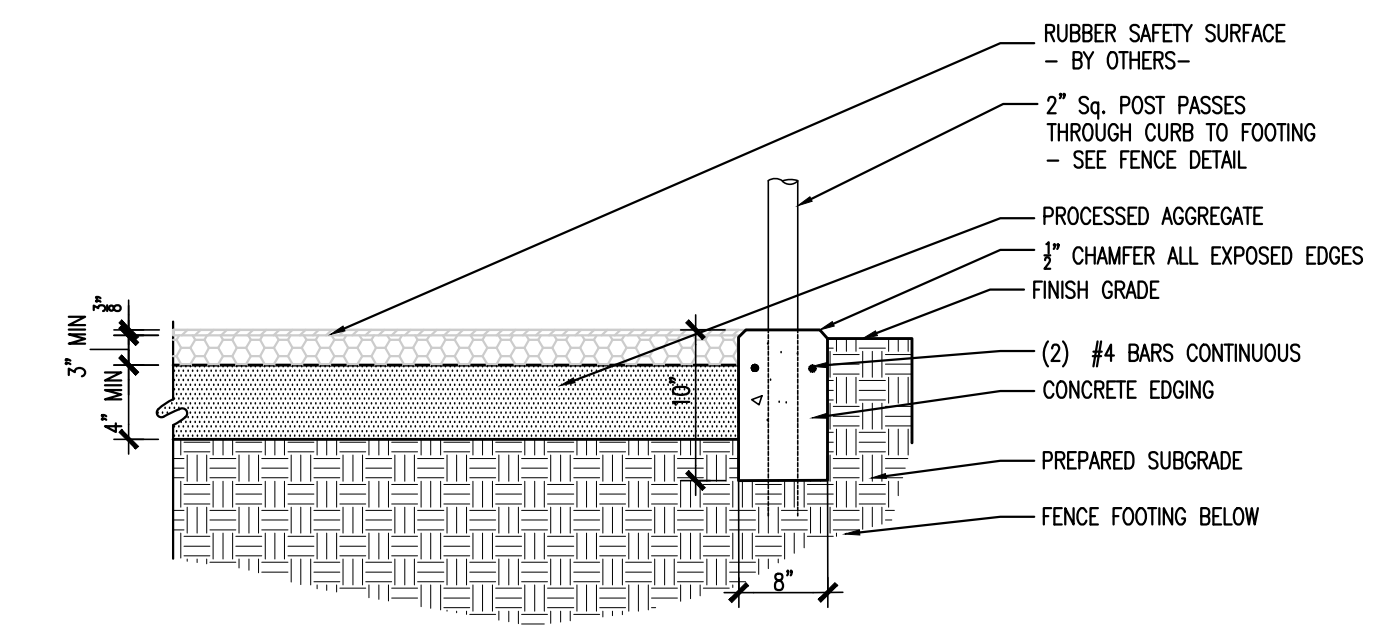
11 WASHED STONE BED
SCALE: N.T.S.



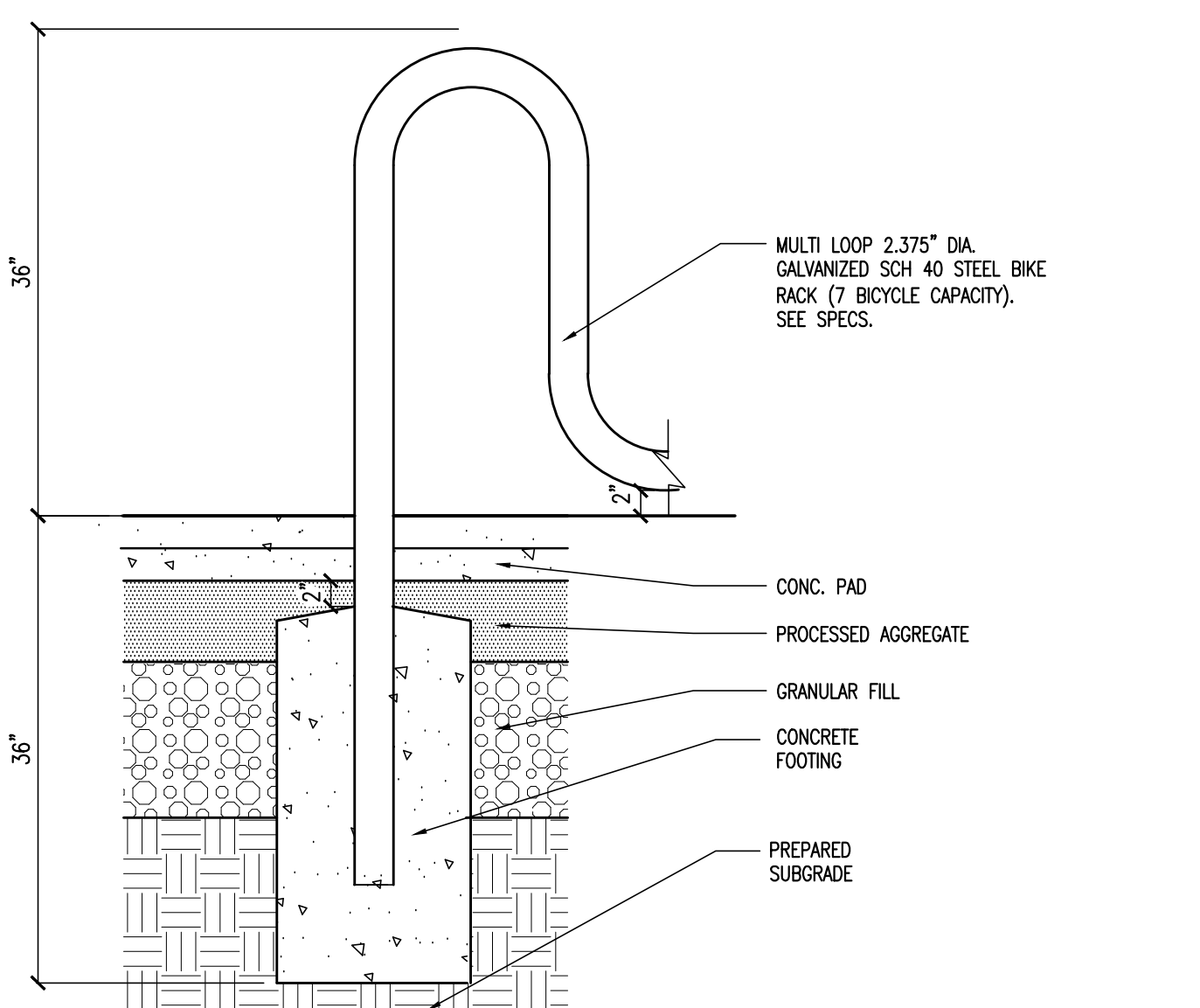
12 FIRE LANE
N.T.S.



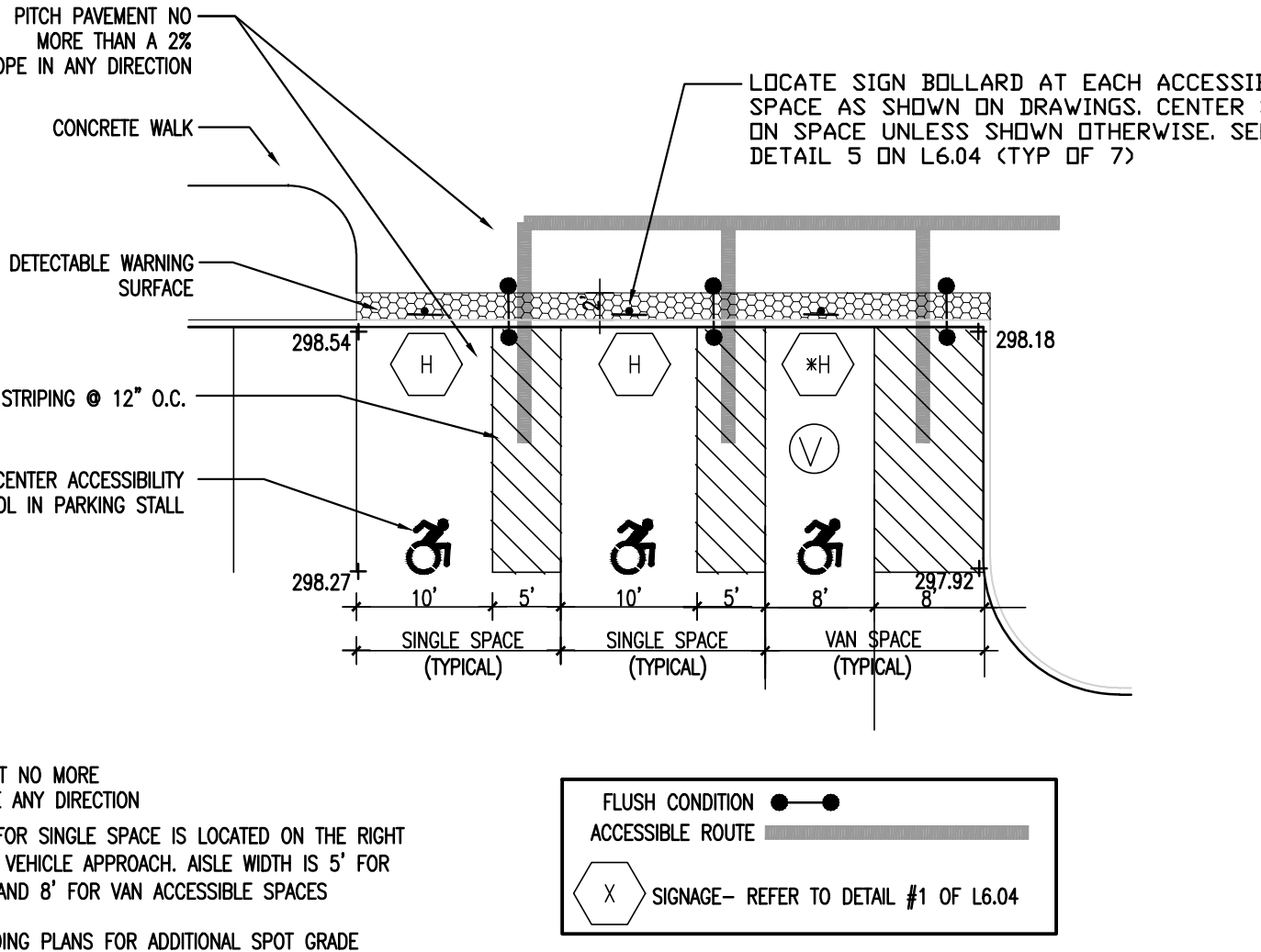
13 3/4" CRUSHED STONE SURFACE
SCALE: N.T.S.



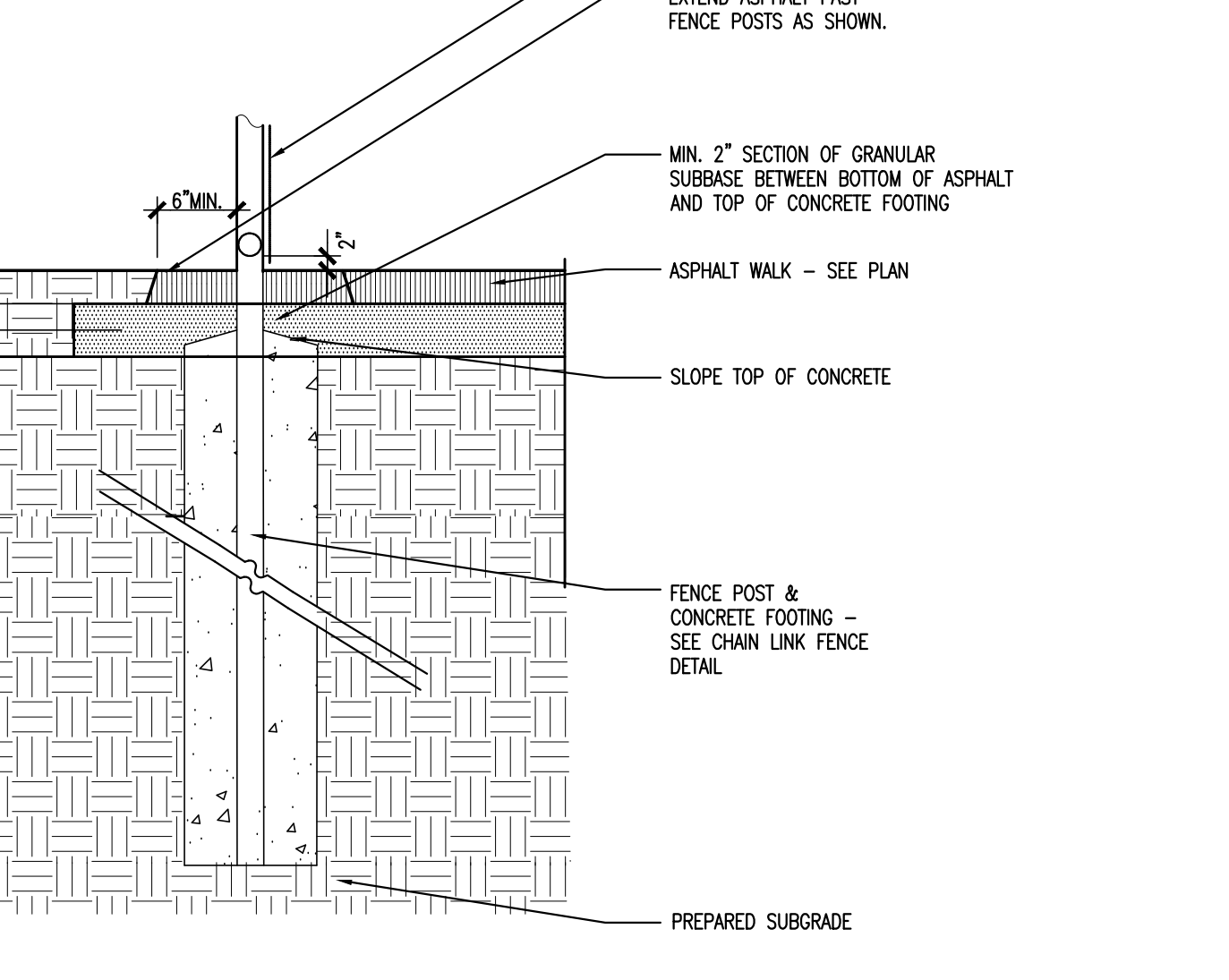
6 RUBBER SAFETY SURFACE
SCALE: N.T.S.



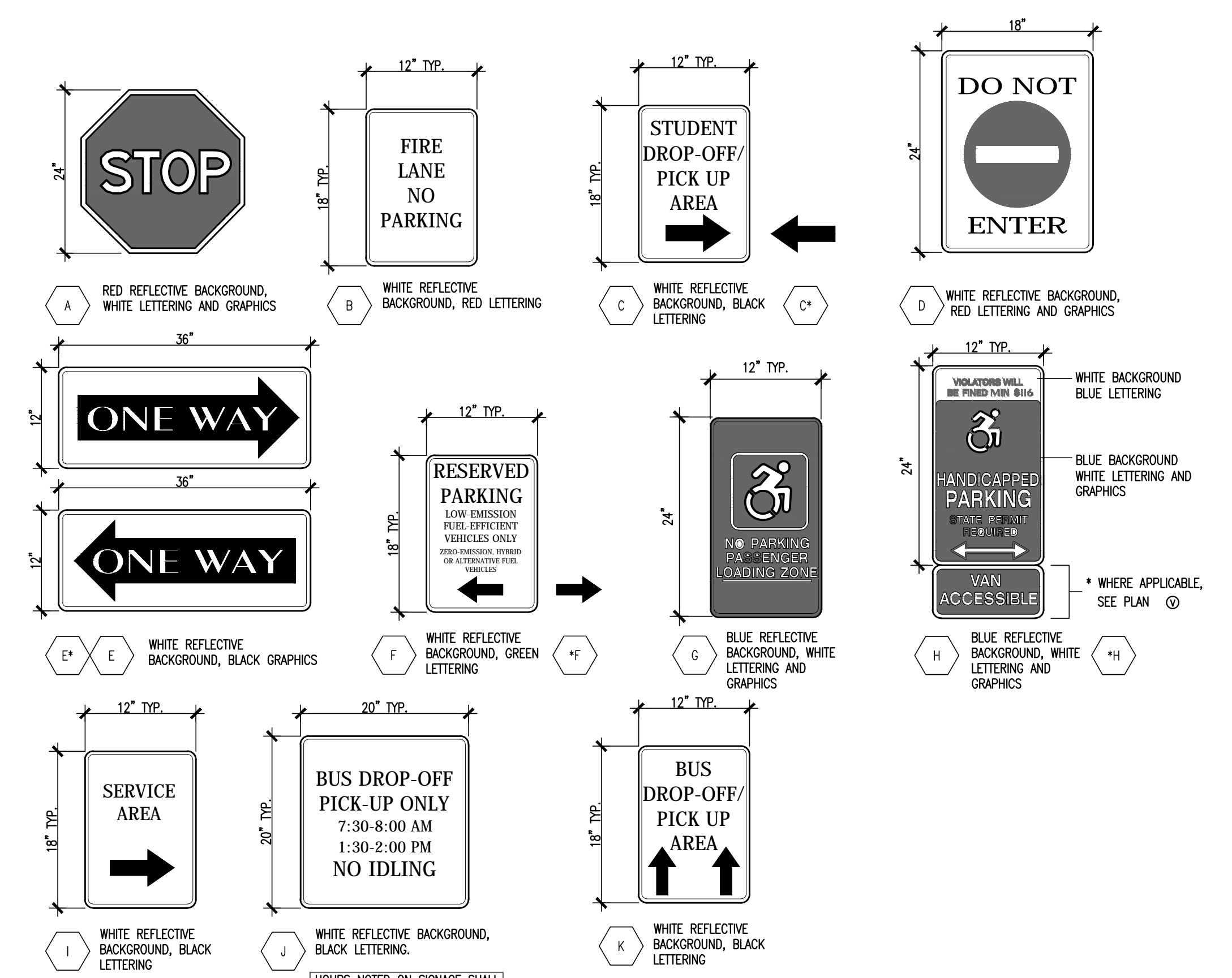
7 BICYCLE RACK
N.T.S.



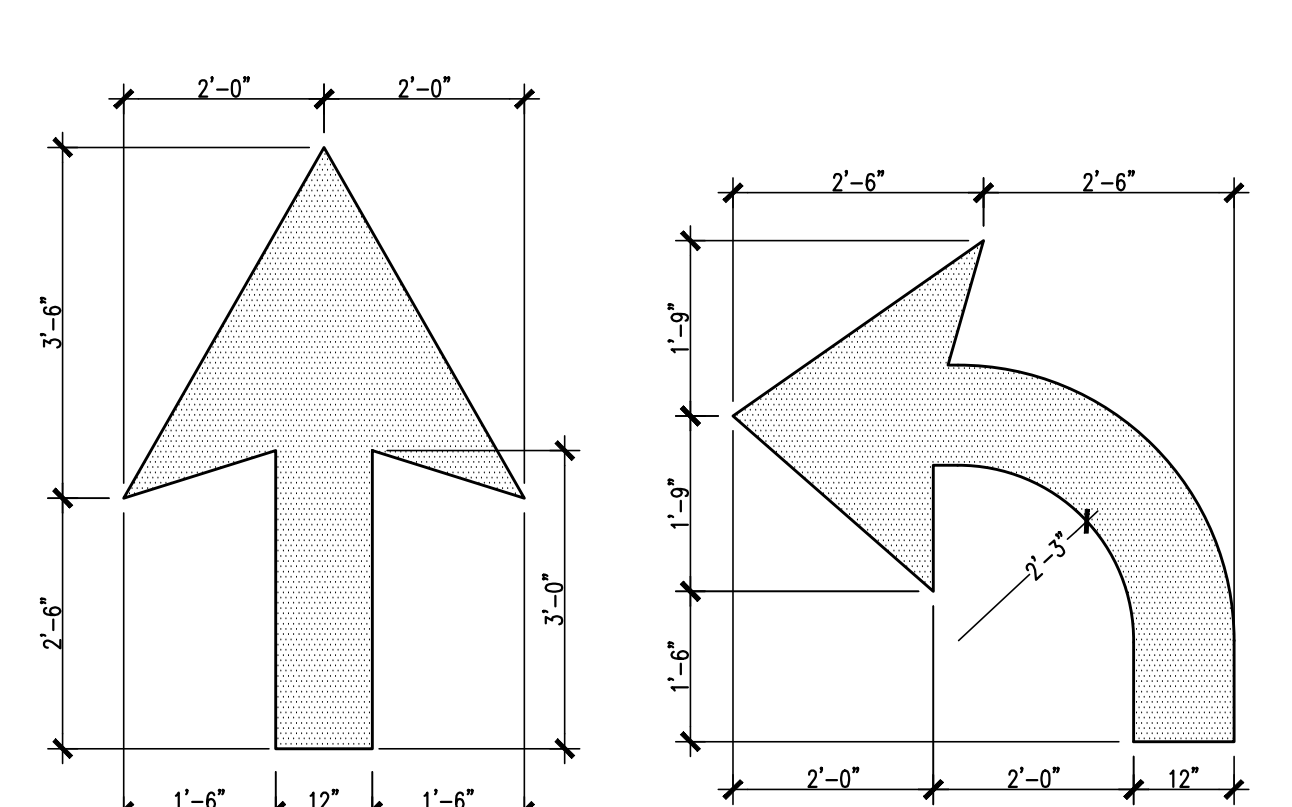
8 ACCESSIBLE PARKING SPACES
N.T.S.



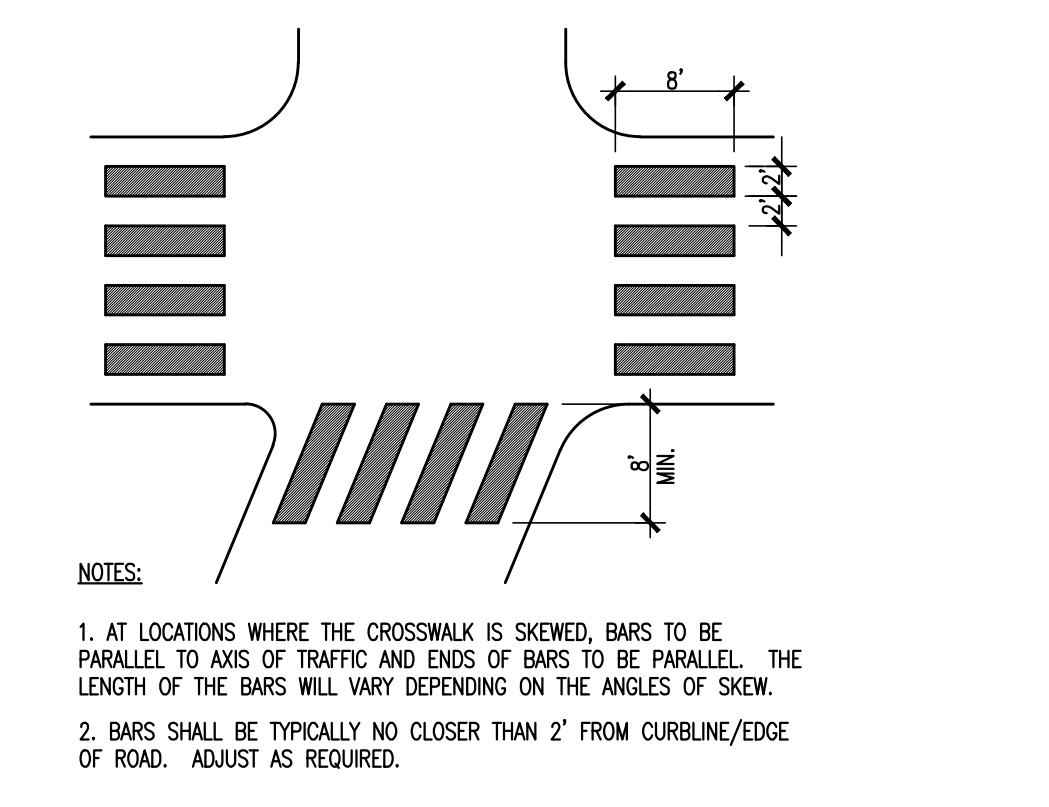
9 CHAIN LINK FENCE POST FOOTING & MOW STRIP
N.T.S.



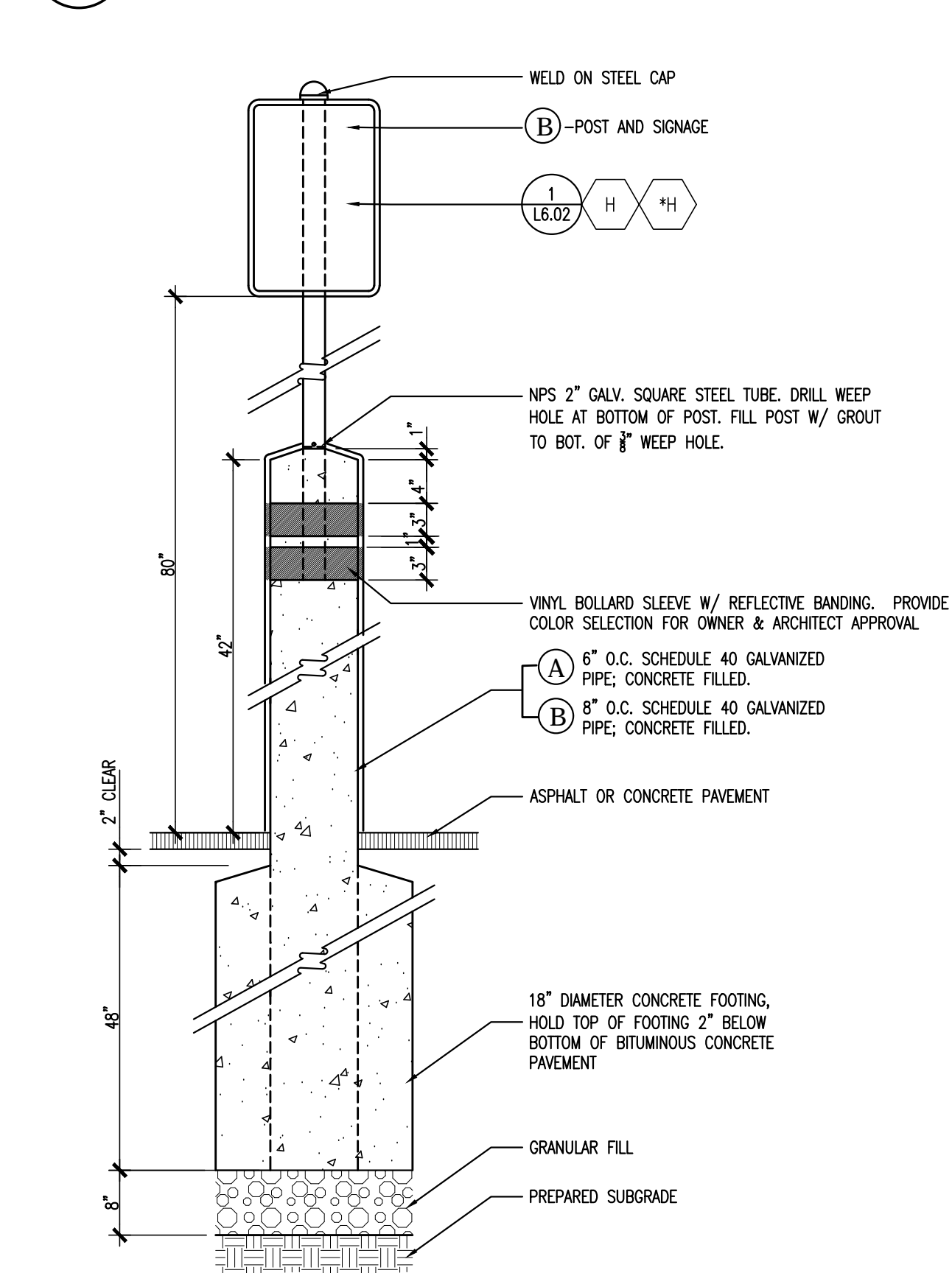
1 PROJECT SIGNAGE KEY
N.T.S.



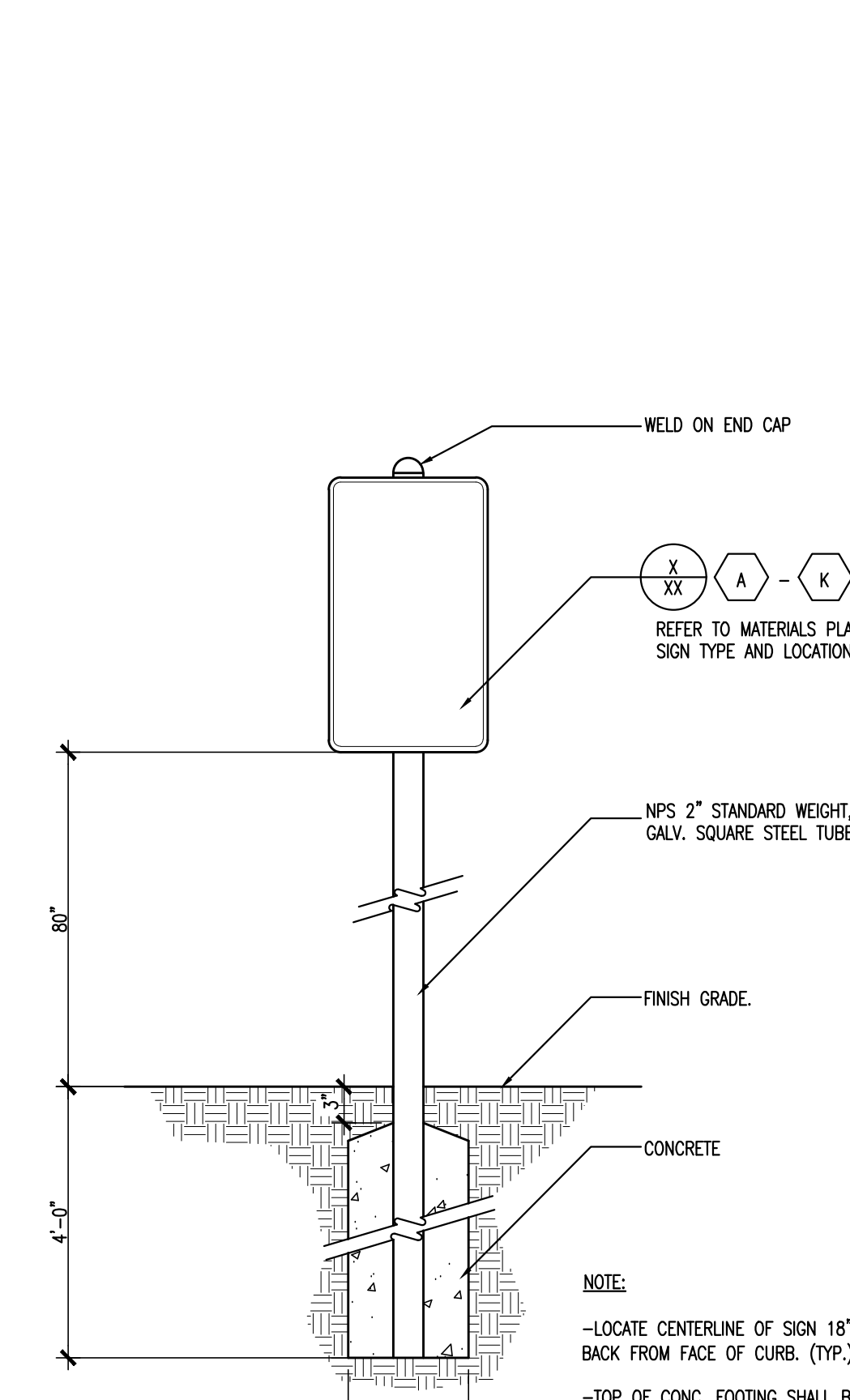
4 TRAFFIC ARROWS



2 CROSSWALK LAYOUT (TYP.)
N.T.S.



5 STEEL PIPE BOLLARD & SIGNAGE
N.T.S.



3 SIGN STANDARD
N.T.S.

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03/07/18	1.) ADDENDUM #1
03/20/18	2.) ADDENDUM #2

REVISIONS	
DATE	DESCRIPTION



ROCKY HILL INTERMEDIATE SCHOOL
10 SCHOOL ST. ROCKY HILL, CT. 06067

PROJECT NO.: 17005.00 DRAWN BY: JAD

SITE DETAILS

NOTE: -LOCATE CENTERLINE OF SIGN 18" BACK FROM FACE OF CURB. (TYP.)
-TOP OF CONC. FOOTING SHALL BE MIN. 2" BELOW BOT. OF PAVEMENT AS OCCURS.

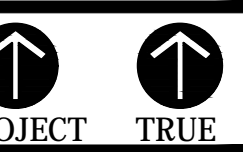
ISSUE DATE

DATE	DESCRIPTION
03/07/18	1.) ADDENDUM #1
03/20/18	2.) ADDENDUM #2

REVISIONS

DATE	DESCRIPTION
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NOT TO SCALE

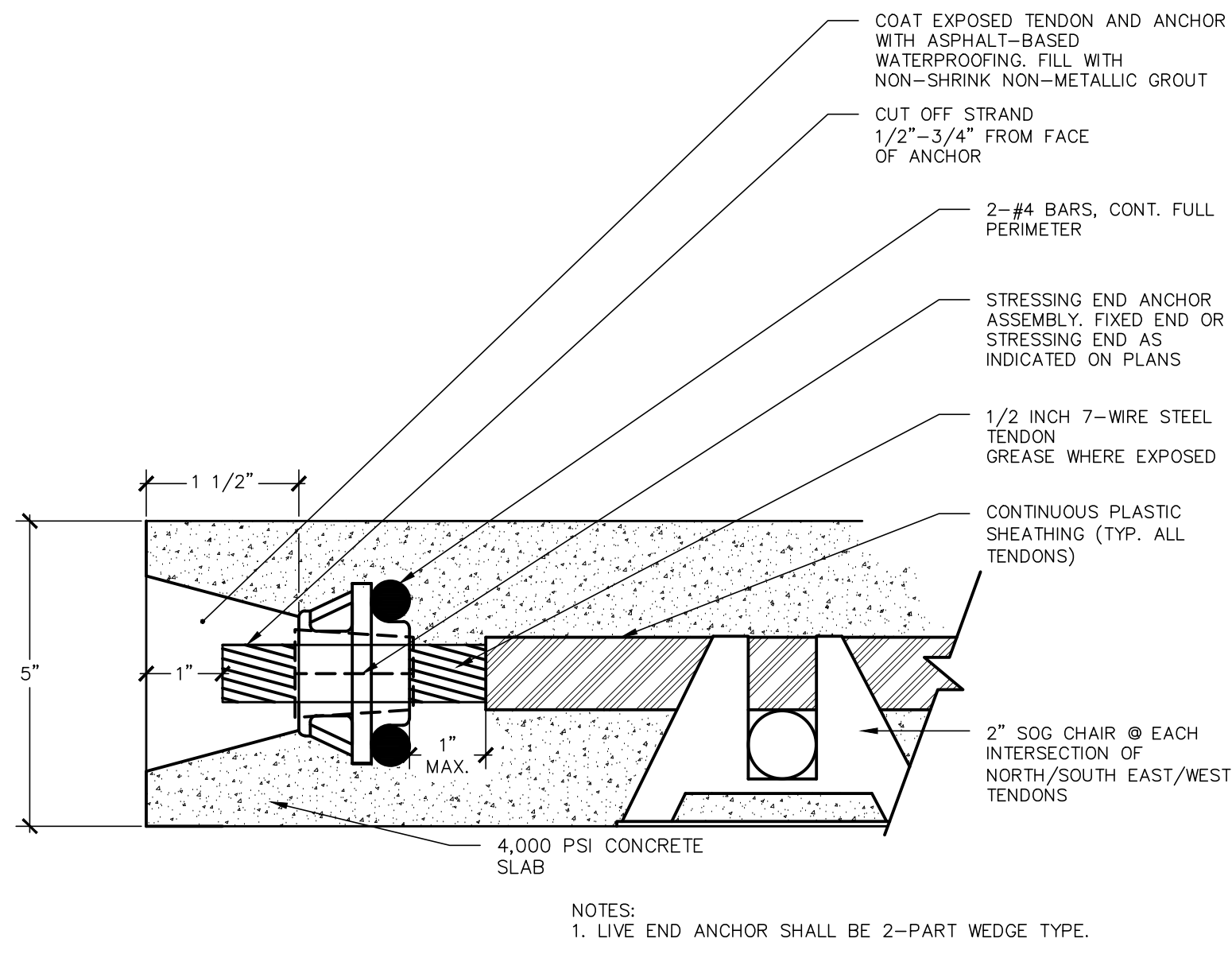


ROCKY HILL
INTERMEDIATE
SCHOOL
10 SCHOOL ST. ROCKY HILL, CT.
06067

PROJECT NO.: 17005.00 DRAWN BY: JAD

SITE
DETAILS

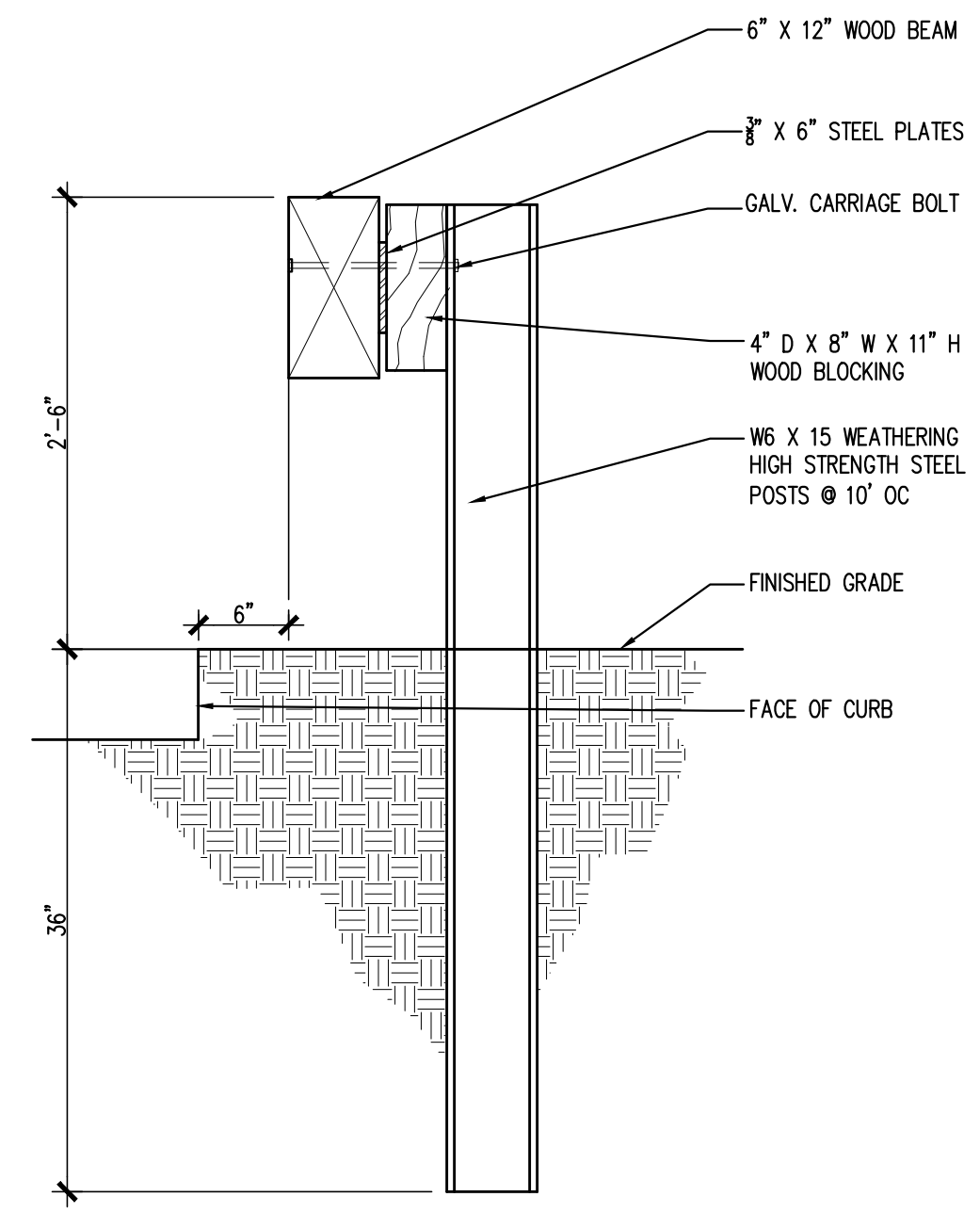
DRAWING NO.:
L6.05



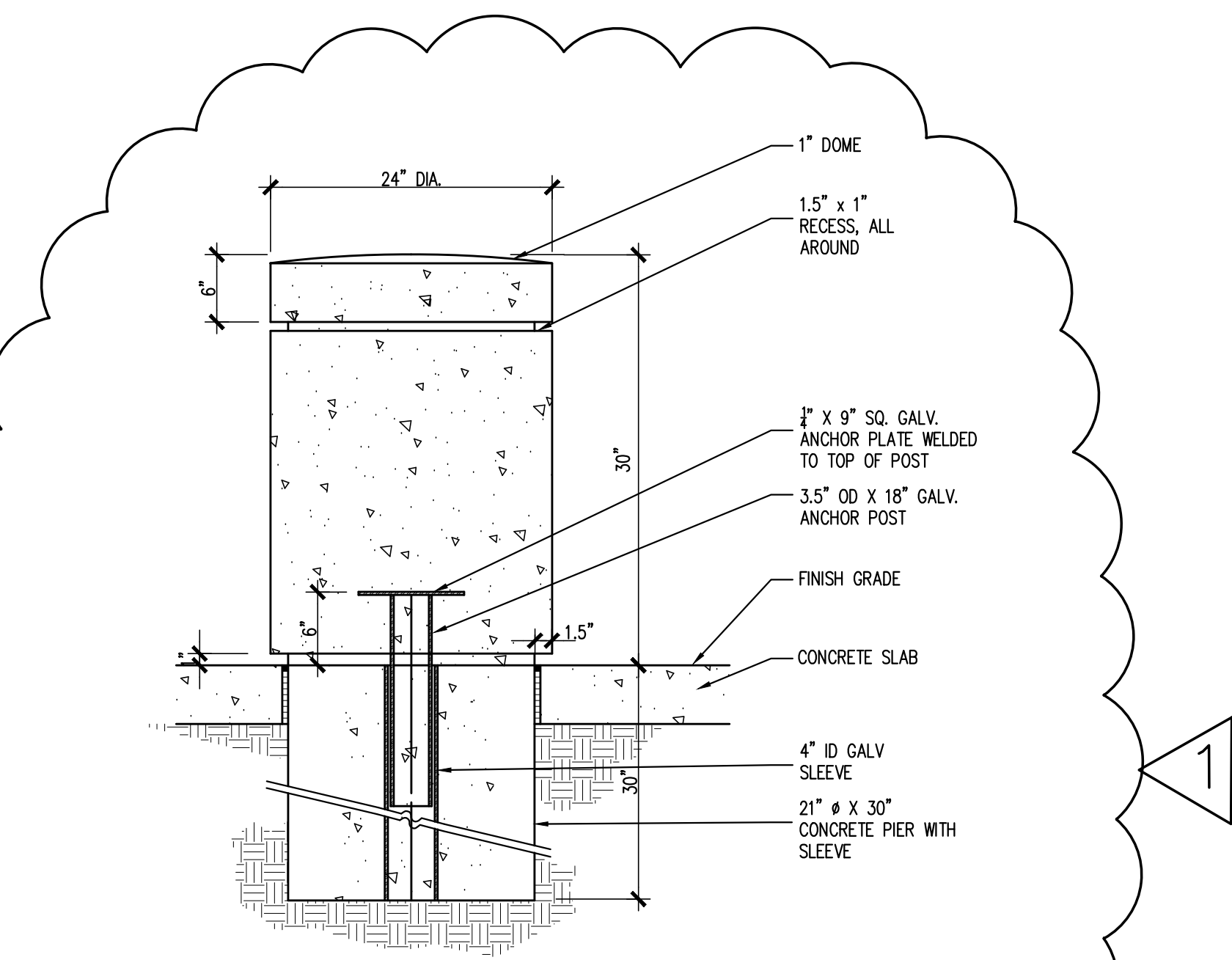
9 SLAB SECTION WITH TENDON ANCHORAGE
NOT TO SCALE

- POST-TENSION WORK SHALL CONFORM TO THE LATEST EDITIONS OF GOVERNING CODES INCLUDING GUIDE SPECIFICATIONS FOR POST-TENSION MATERIALS BY THE POST-TENSIONING INSTITUTE, ASTM-A416 AND ACI 318. STRANDS SHALL BE PRODUCED FROM A MANUFACTURING PLANT CERTIFIED UNDER THE POST-TENSIONING INSTITUTE PROGRAM OF CERTIFICATION OF P/T SUPPLIERS. PROVIDE EVIDENCE OF CERTIFICATION WITH SHOP DRAWINGS.
- STRANDS SHALL BE ENCASED IN CONTINUOUS EXTRUDED POLYETHYLENE TUBING WITH THE VOID COMPLETELY FILLED WITH A RUST-INHIBITIVE GREASE CONFORMING TO GUIDE SPECIFICATIONS BY THE POST-TENSIONING INSTITUTE FOR CORROSIVE ENVIRONMENTS. STUFFED SYSTEMS WILL NOT BE PERMITTED.
- ALL TENDONS STORED ON SITE SHALL BE STORED IN UNDAMAGED PLASTIC BAGS, VENTED ON THE BOTTOM, AND PREVENTED FROM MECHANICAL, CHEMICAL OR HEAT DAMAGE.
- PRESTRESSING TENDONS SHALL BE TIED SECURELY IN PLACE AND SHALL BE PLACED TO THE FOLLOWING TOLERANCES:
VERTICAL ALIGNMENT $\pm 1/4"$
HORIZONTAL ALIGNMENT $\pm 2"$ IN 26'
- ALL PRE-STRESSING STEEL SHALL BE TIED IN ITS FINAL POSITION BEFORE CONCRETE IS POURED.
- WHEREVER POSSIBLE, ALL INSERTS MUST BE CAST-IN-PLACE. NO DRILLED OR CORED INSERTS EMBEDDED MORE THAN 3/4" WILL BE PERMITTED IN HARDENED CONCRETE WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
- ALL TENDON ANCHORAGES SHALL BE OF AN APPROVED WATERTIGHT ASSEMBLY AND RECESSED. A MINIMUM OF 2-1/2" POCKETS SHALL BE COATED WITH AN EPOXY BONDING AGENT AND FILLED WITH AN APPROVED NON-SHRINK GROUT AFTER STRESSING.
- TENSIONING OF THE TENDONS SHALL NOT COMMENCE UNTIL IN SITU CONCRETE TESTS INDICATE A CONCRETE STRENGTH OF 2500 psi HAS BEEN OBTAINED OR AS OTHERWISE DIRECTED BY THE SUPPLIER WHO SHALL BE RESPONSIBLE FOR ANCHOR ZONE REQUIREMENTS.

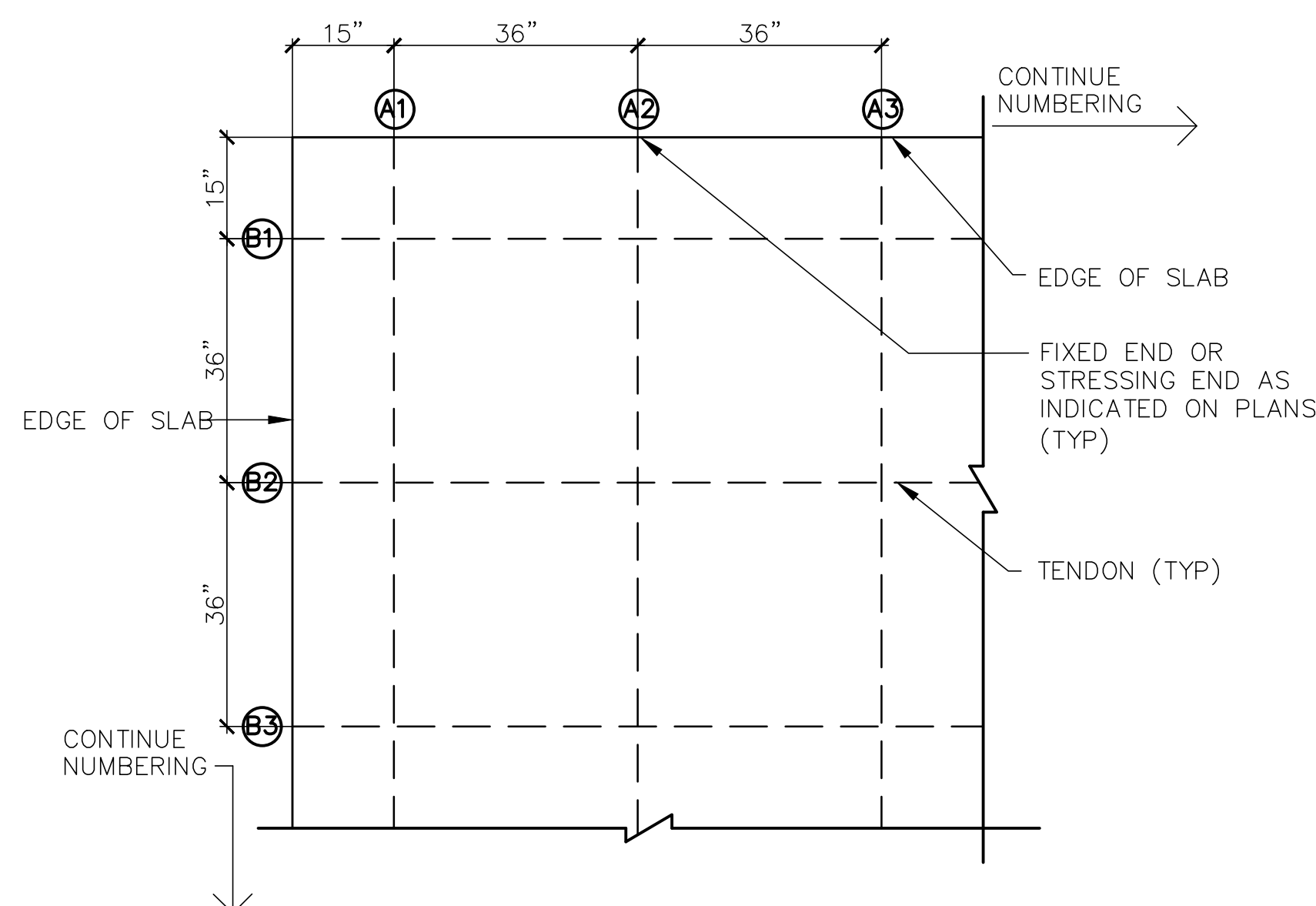
5 POST TENSION CONCRETE NOTES



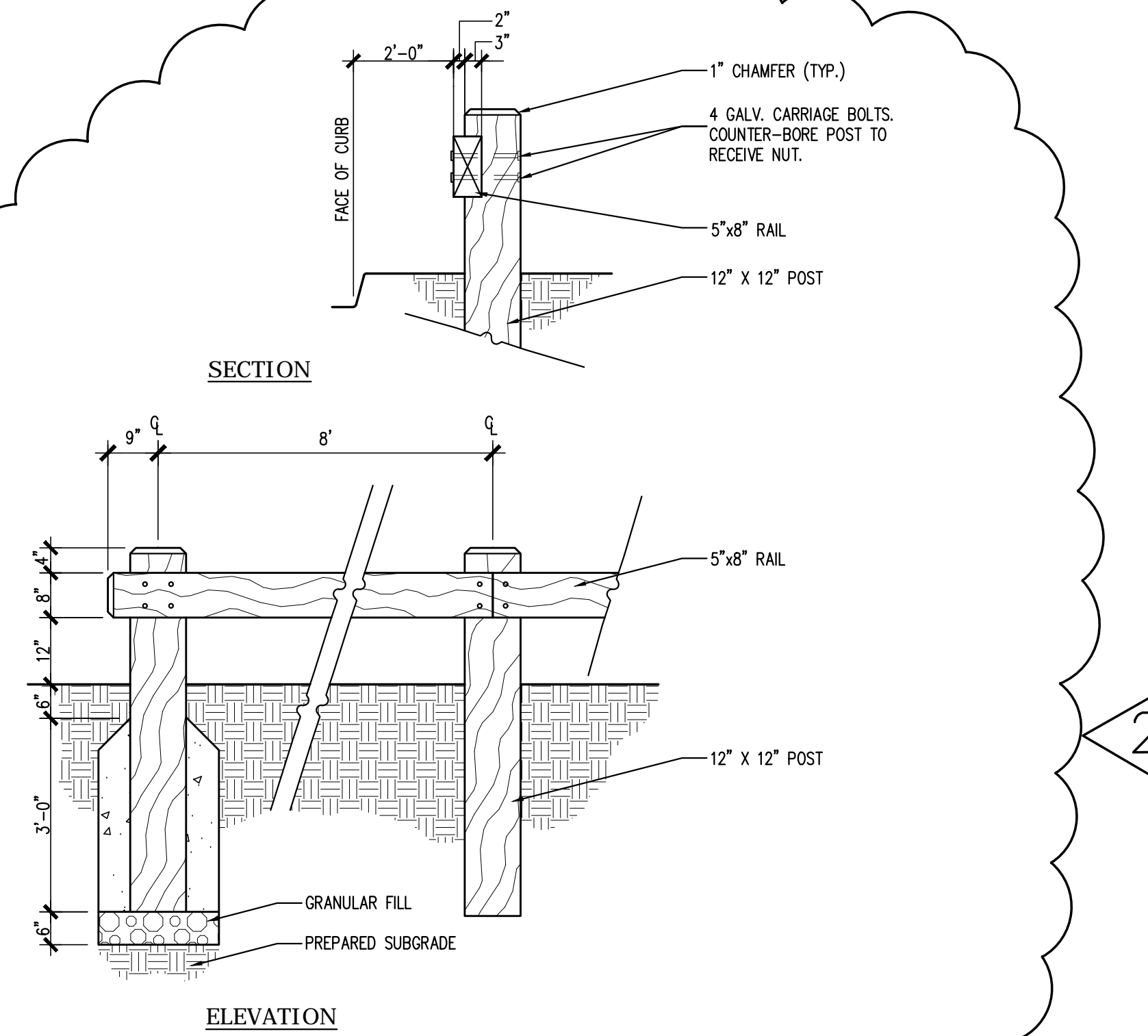
1 STEEL-BACKED WOOD GUIDE RAIL
SCALE: N.T.S.



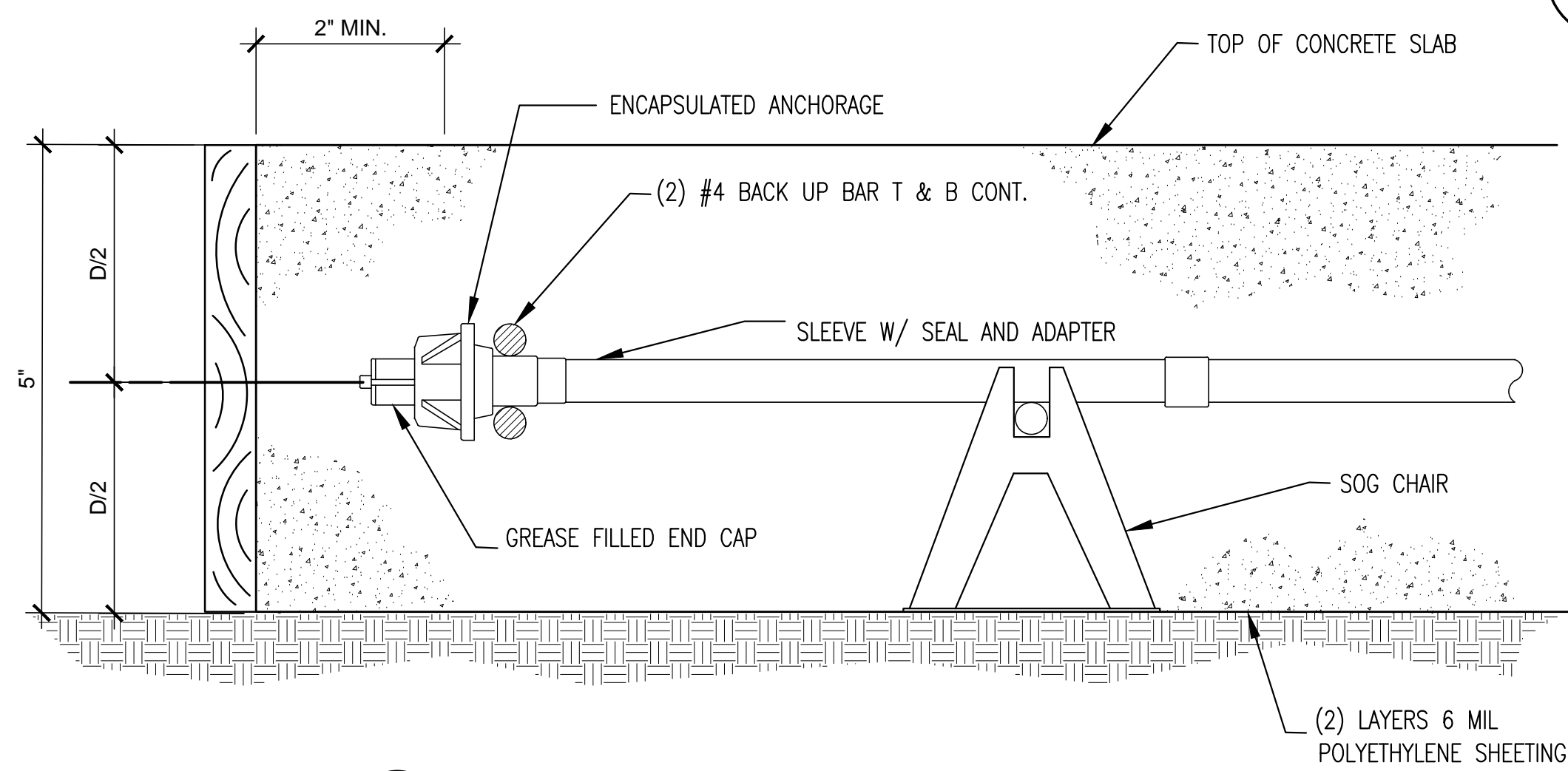
10 DECORATIVE BOLLARD
SCALE: N.T.S.



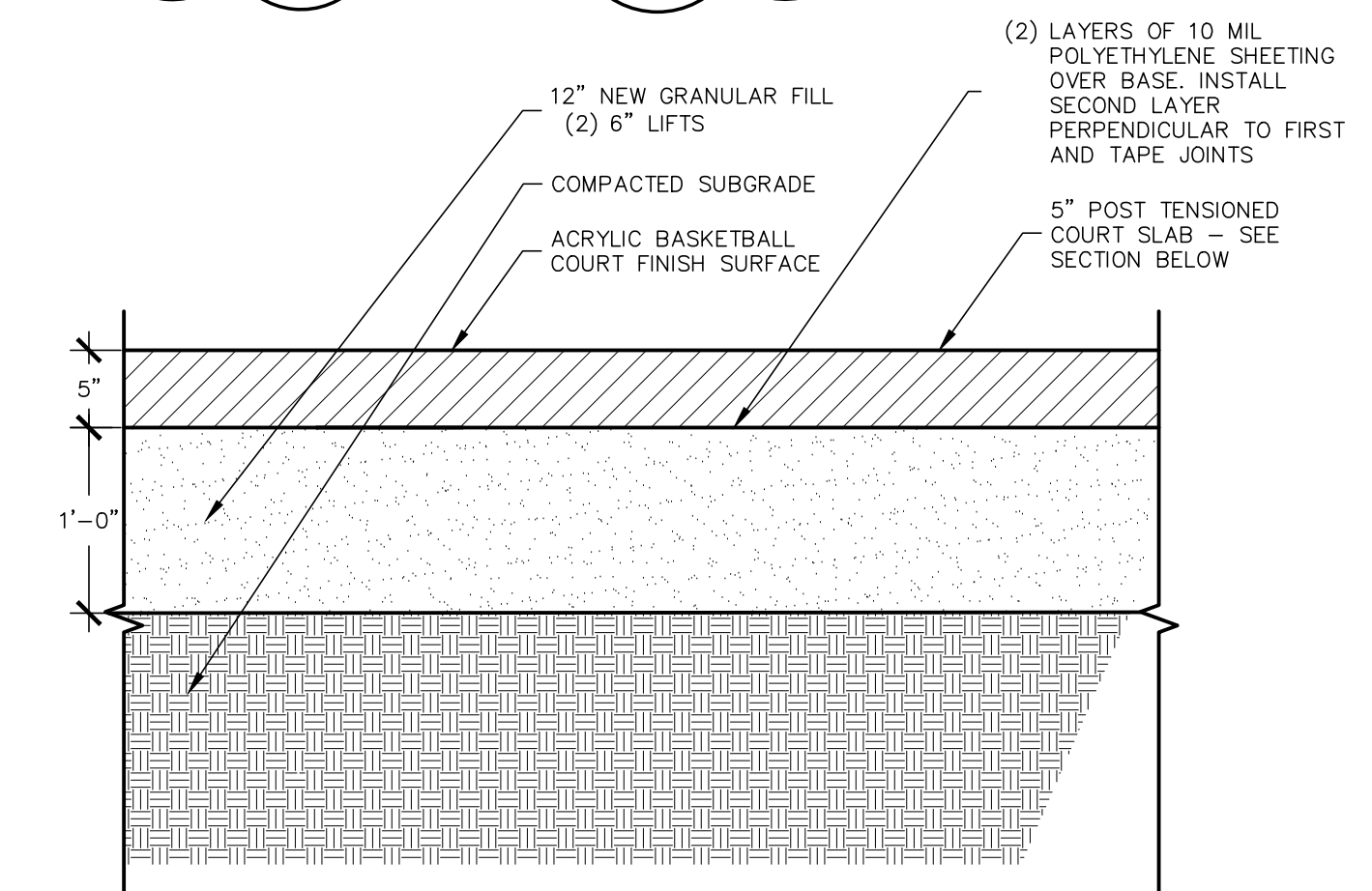
6 TYPICAL TENDON SPACING
NOT TO SCALE



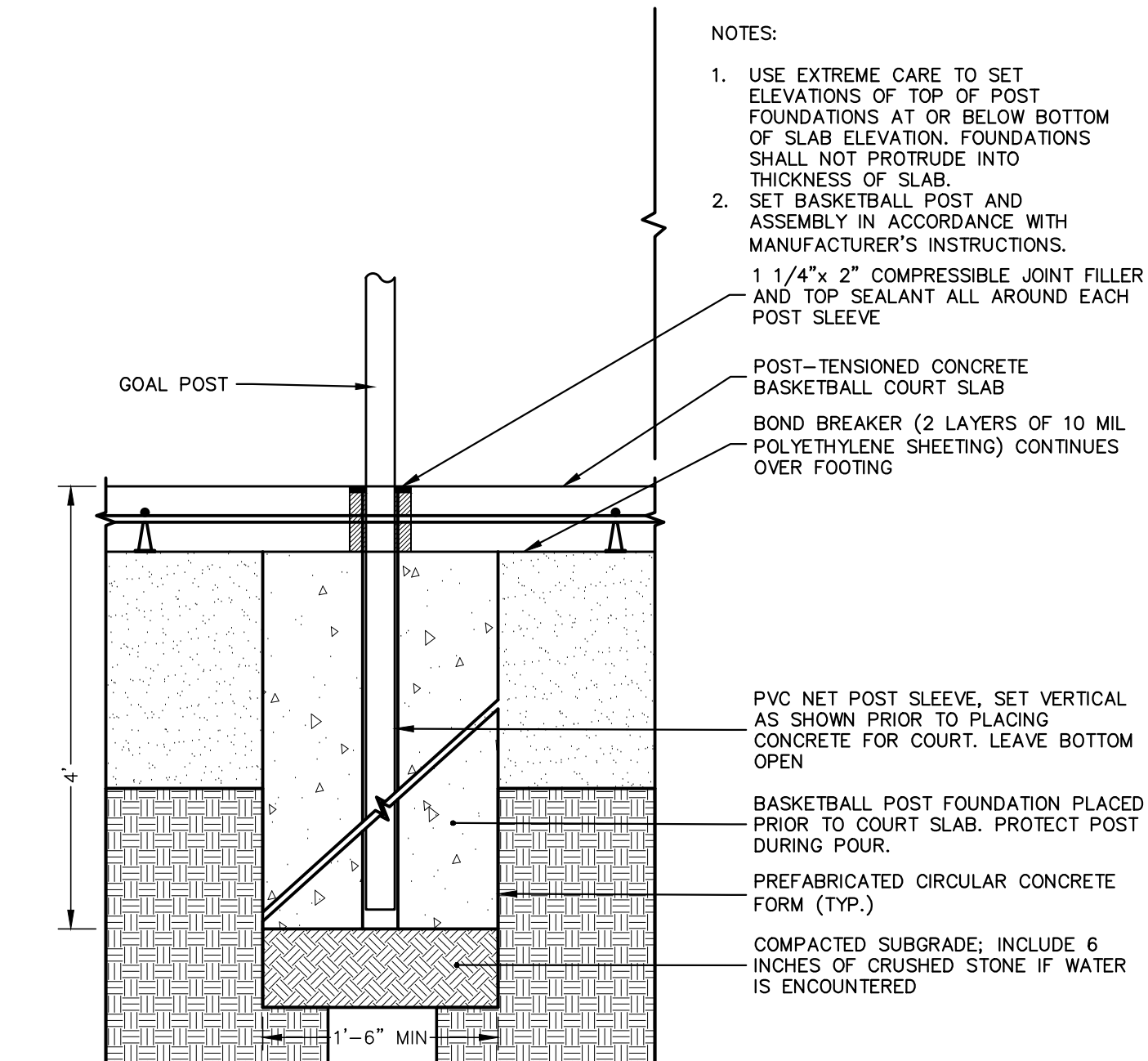
2 WOOD GUIDE RAIL
SCALE: N.T.S.



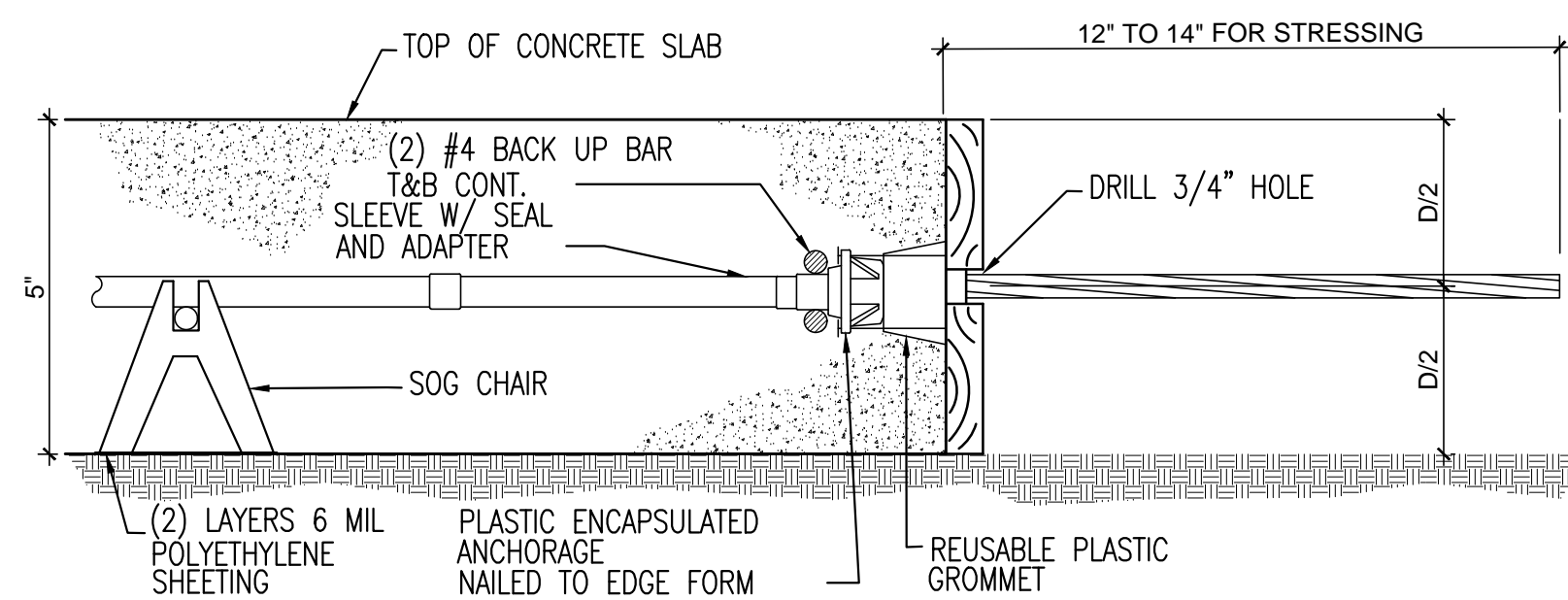
7 FIXED END ANCHORAGE
NOT TO SCALE



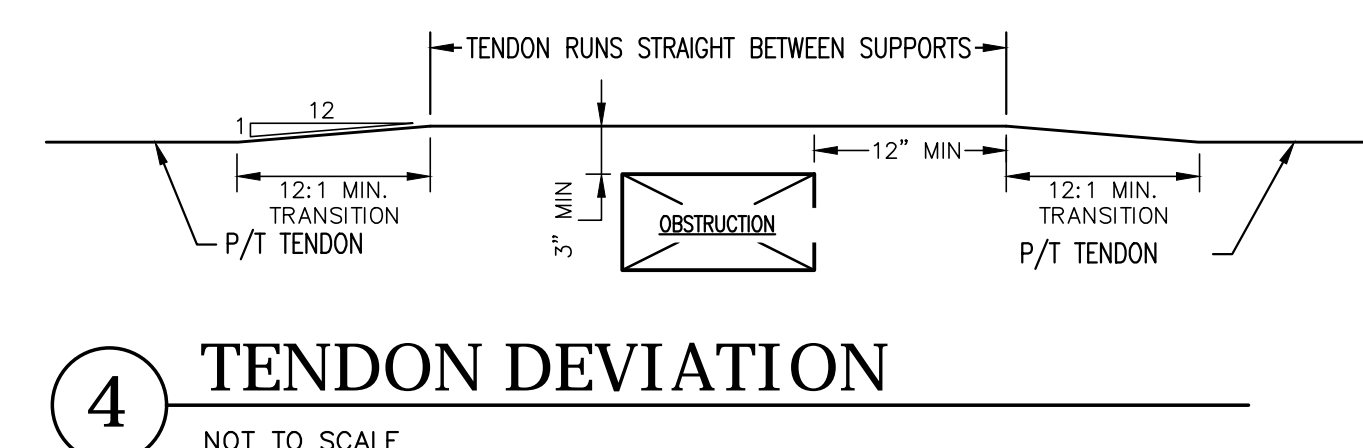
3 POST-TENSION SLAB SECTION
NOT TO SCALE



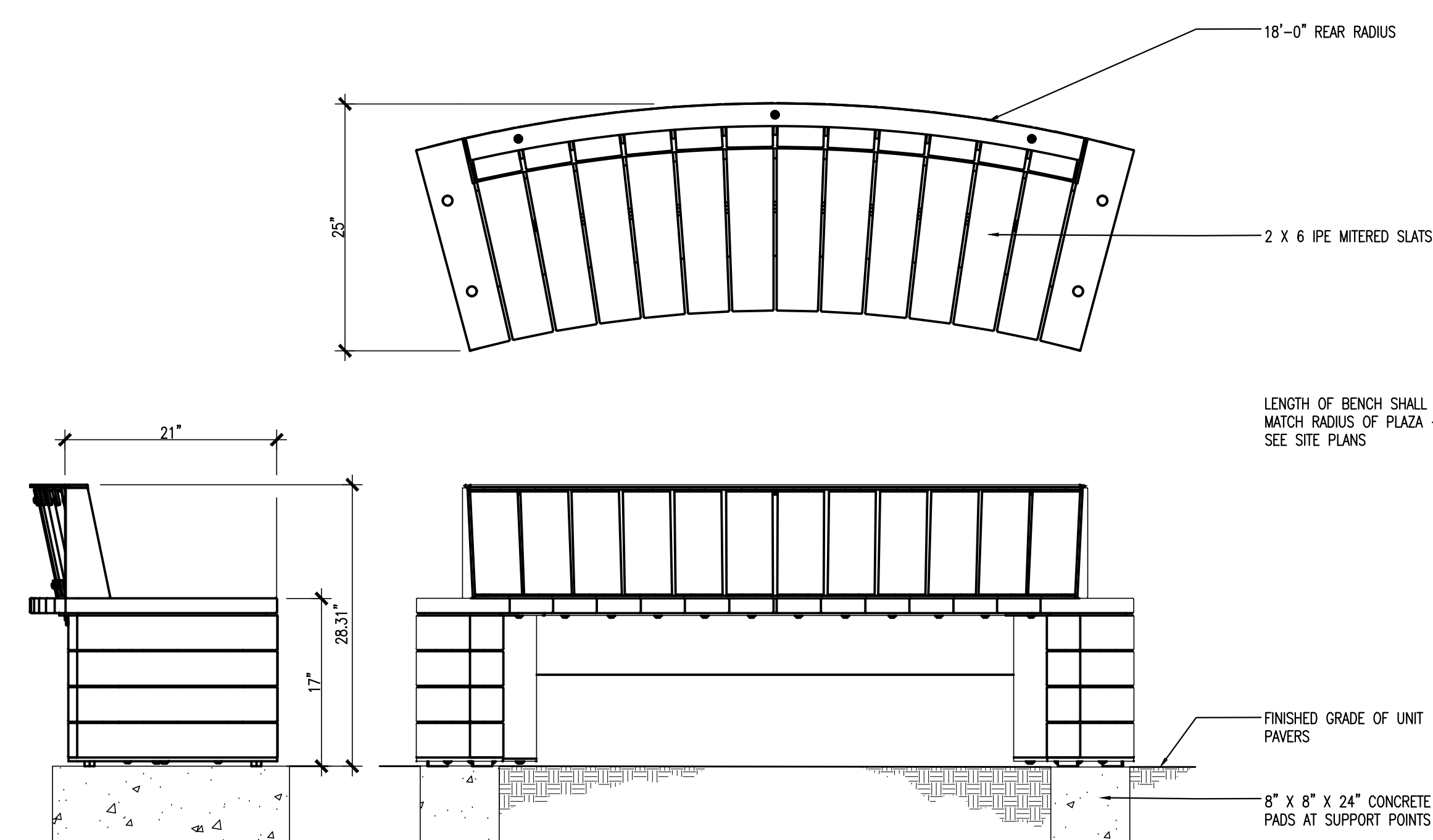
11 POST ANCHOR
NOT TO SCALE



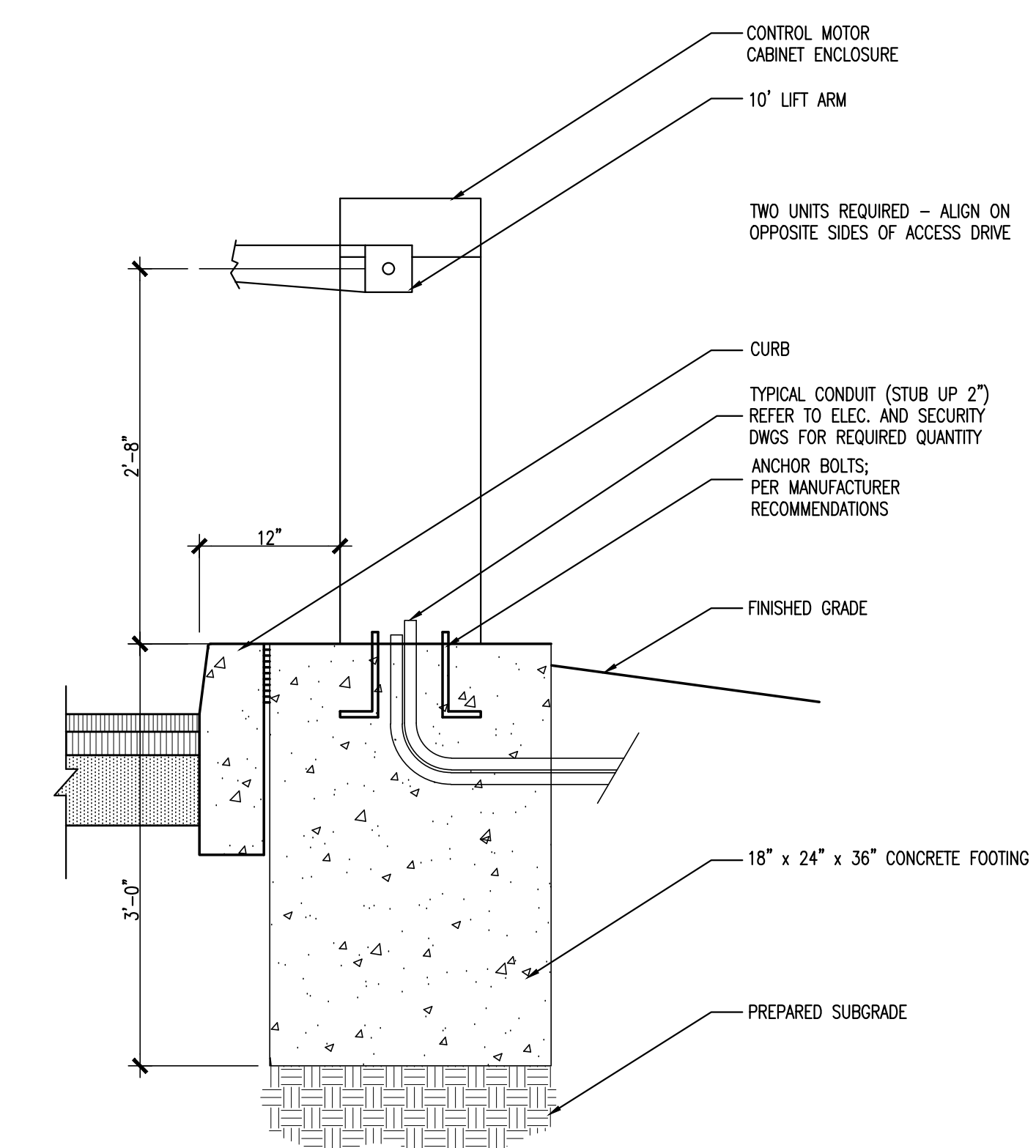
8 STRESSING ANCHORAGE
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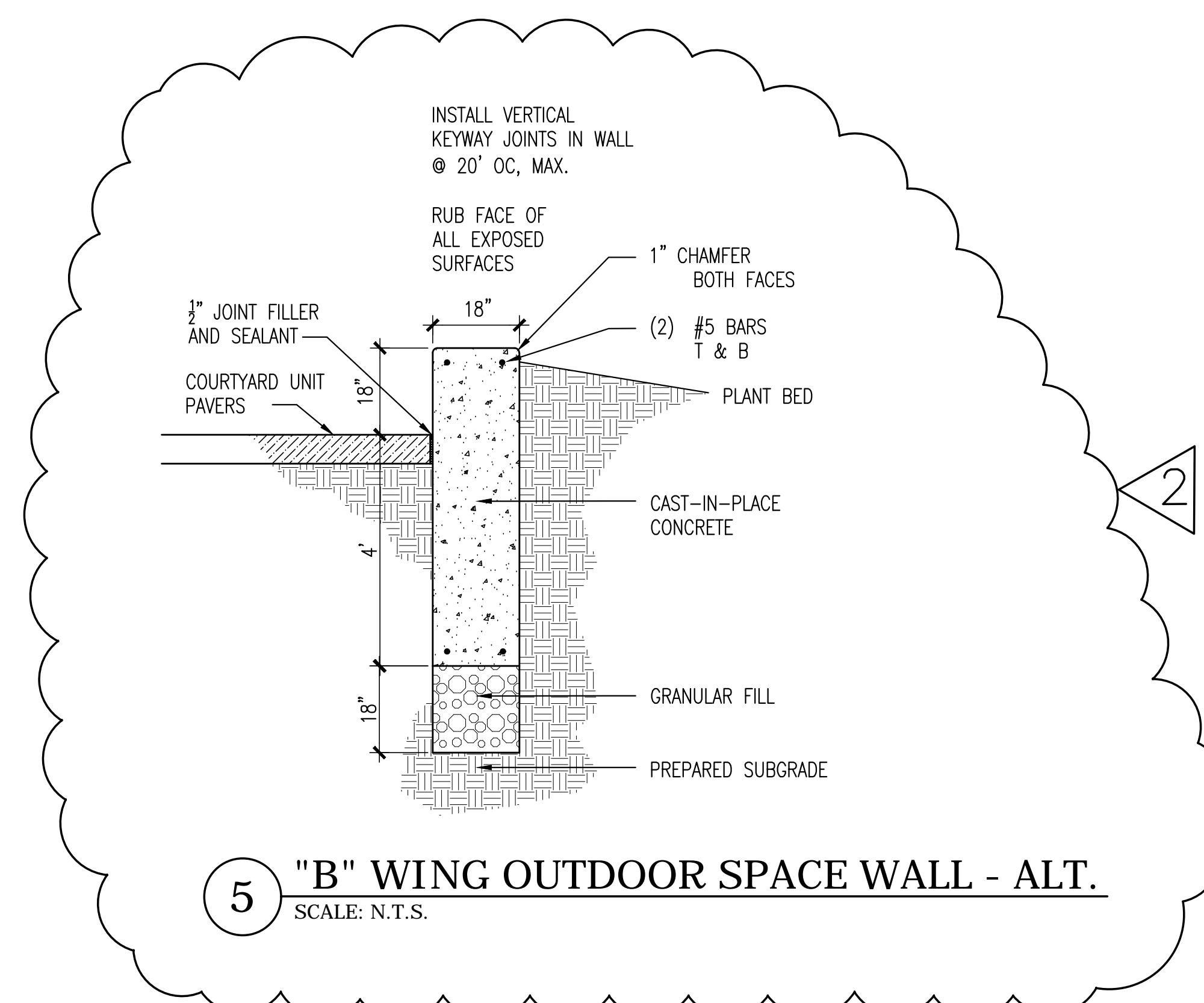
4 TENDON DEVIATION
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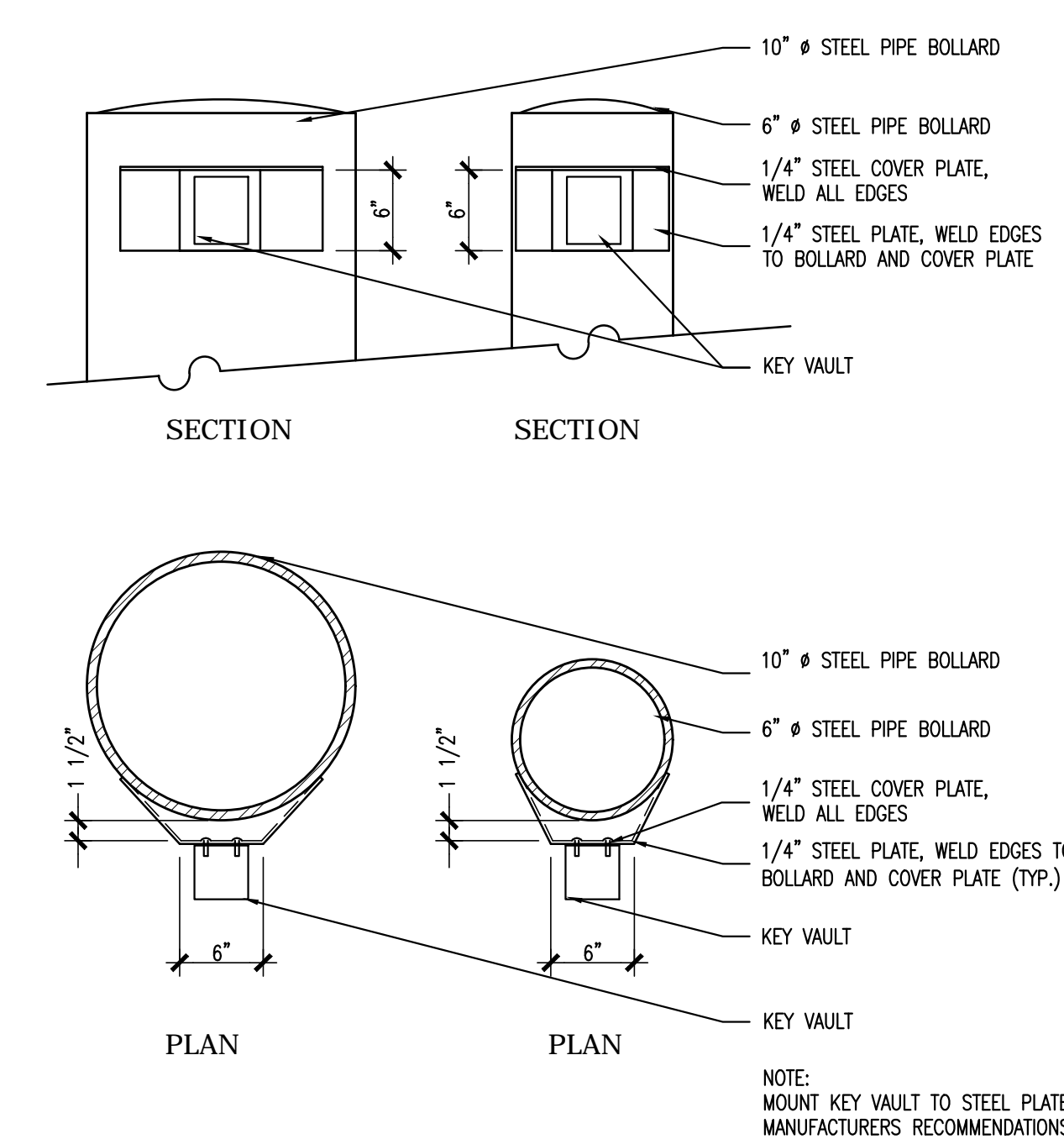
4 CURVED BENCH - BASE BID
N.T.S.



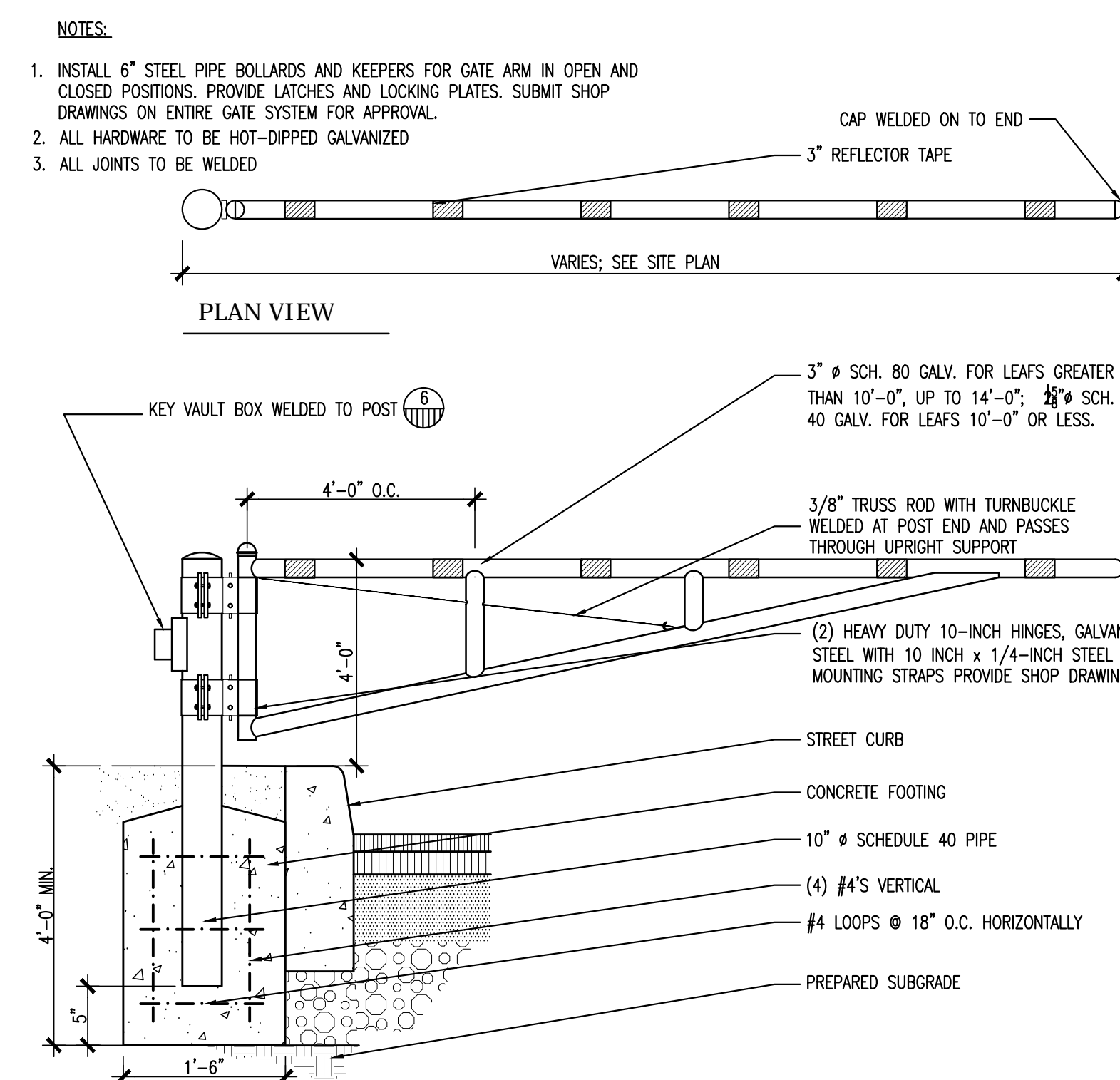
1 VEHICLE GATE 1 - BARRIER ARM
SCALE: N.T.S.



5 "B" WING OUTDOOR SPACE WALL - ALT.
SCALE: N.T.S.



2 KEY VAULT MOUNTING
SCALE: N.T.S.



3 VEHICLE GATE - 2
SCALE: N.T.S.

ISSUE DATE

DATE	DESCRIPTION
03/07/18	1) ADDENDUM #1
03/20/18	2) ADDENDUM #2

REVISIONS

DATE	DESCRIPTION
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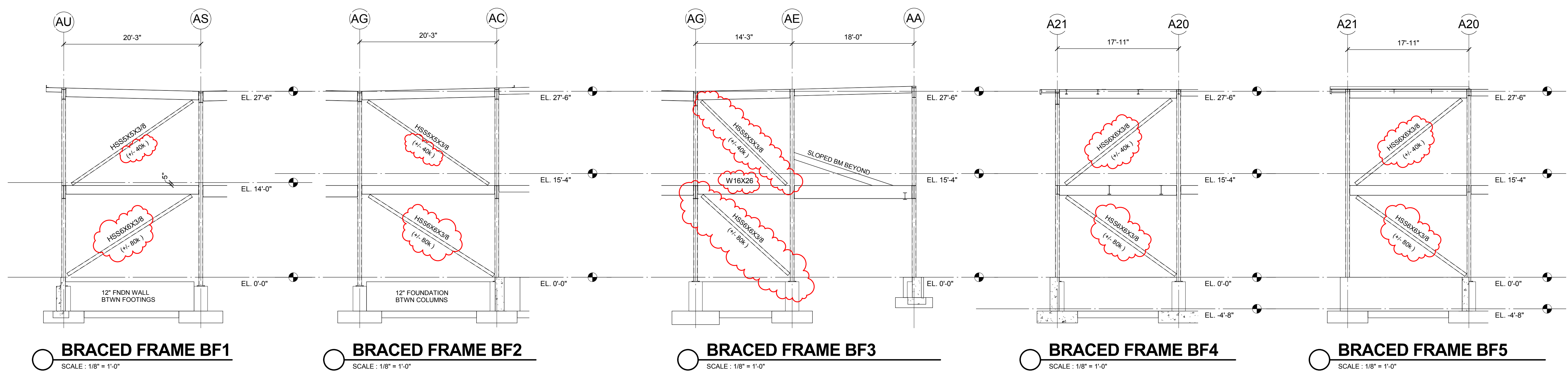
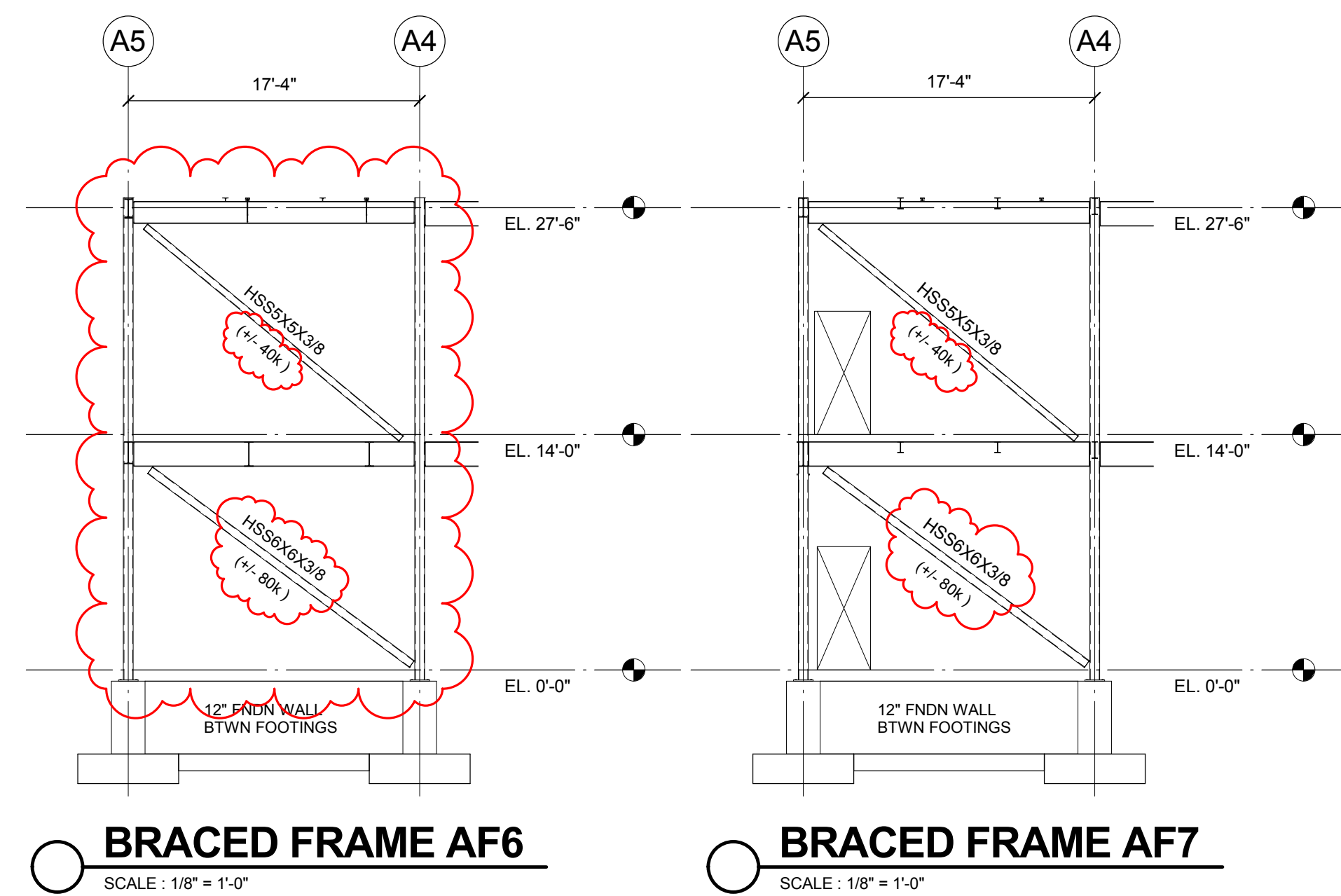
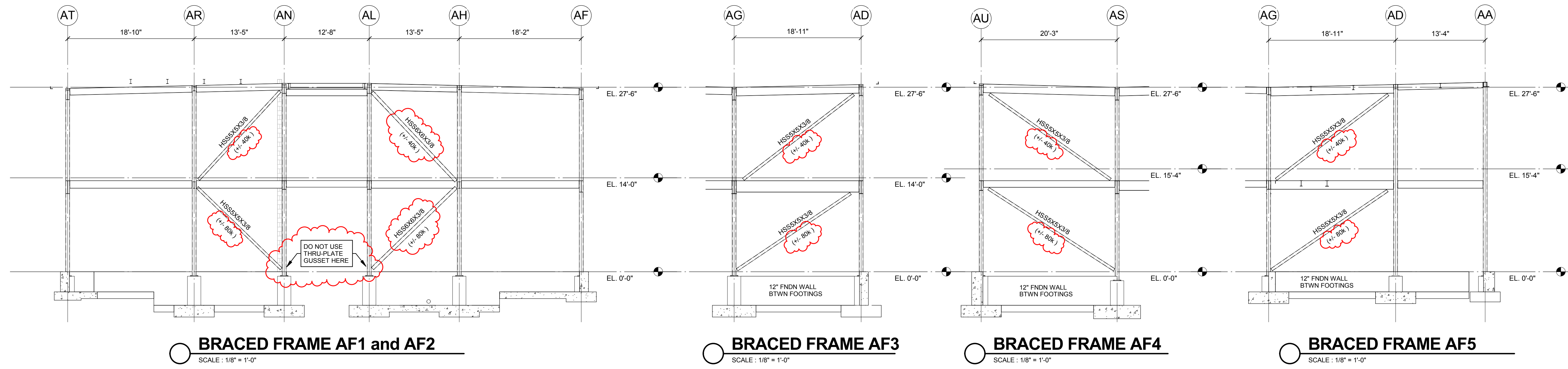


ROCKY HILL
INTERMEDIATE
SCHOOL
10 SCHOOL ST. ROCKY HILL, CT.
06067

PROJECT NO.: 17005.00 DRAWN BY: JAD

SITE
DETAILS

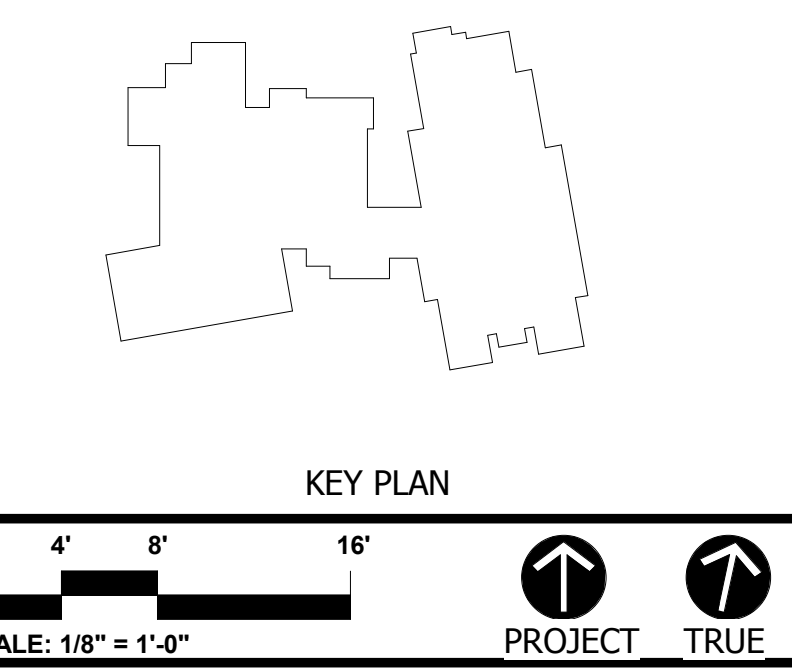
DRAWING NO.:
L6.06



ISSUE DATE	
DATE	DESCRIPTION
JANUARY 17, 2018	DRAWINGS ISSUED FOR BID.
MARCH 20, 2018	ADDENDA No. 2

REVISIONS	
DATE	DESCRIPTION

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01

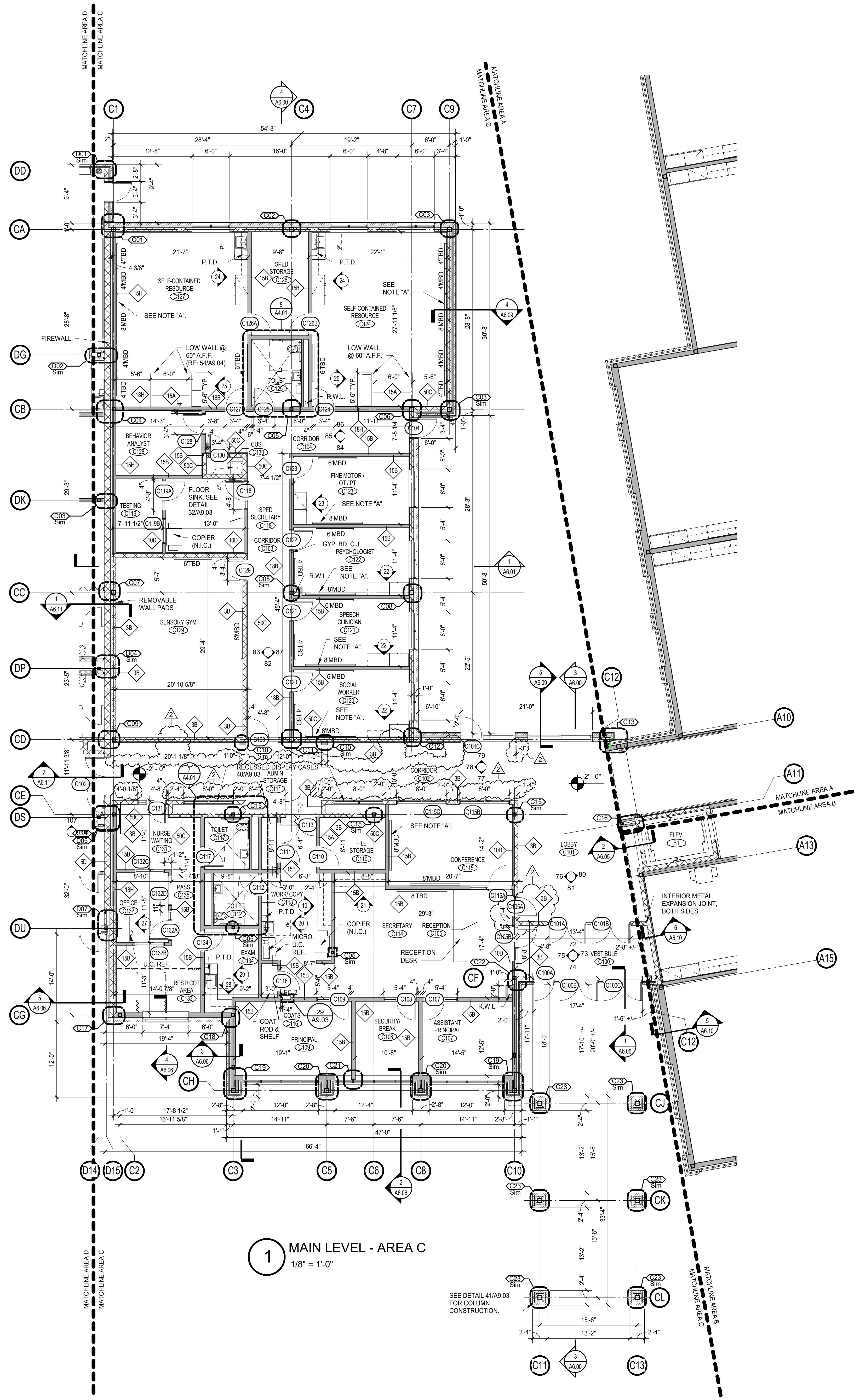


ROCKY HILL
INTERMEDIATE
SCHOOL
10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17005.00 DRAWN BY: Author

BRACED
FRAME
ELEVATIONS

DRAWING NO.:
S4.03



1 MAIN LEVEL - AREA C
1/8" = 1'-0"

FLOOR PLAN LEGEND

- FACE BRICK
- ▤ CONCRETE MASONRY
- ▨ METAL STUD AND GYPSUM BOARD WALL
- (101A) DOOR NUMBER
- COLUMN DETAIL (REFER TO A7 SERIES)
- ⊕ WINDOW TYPE
- △ SIM BUILDING SECTION
- △ WALL SECTION
- PLAN DETAIL
- ⊙ CASEWORK ELEVATION REFER TO DWG SERIES A11.00
- ⊙ INTERIOR ELEVATION REFER TO DWG SERIES A10.00
- ◇ WALL TYPE
- △ REVISION MARK
- ROOM NAME
- ROOM NUMBER
- SEMI-RECESSED FIRE EXTINGUISHER
- HANDICAPPED ACCESSIBLE AREA OR EXIT
- AREA ASSEMBLY SEATING POSITION

GENERAL SHEET NOTE:
A - FOR WALL MOUNTED PROJECTOR LOCATIONS SEE TECHNOLOGY DRAWINGS, TYP.

KAESTLE BOOS
associates, inc

416 Slater Road, P.O. Box 2590, New Britain, CT 06500-2590
Phone: 860-229-0361 • Fax: 860-229-5303

325 Foxborough Boulevard, Suite 100, Foxborough, MA 02035
Phone: 508-549-9906 • Fax: 508-549-9907

Email: kba@kba-architects.com • Web: www.kba-architects.com

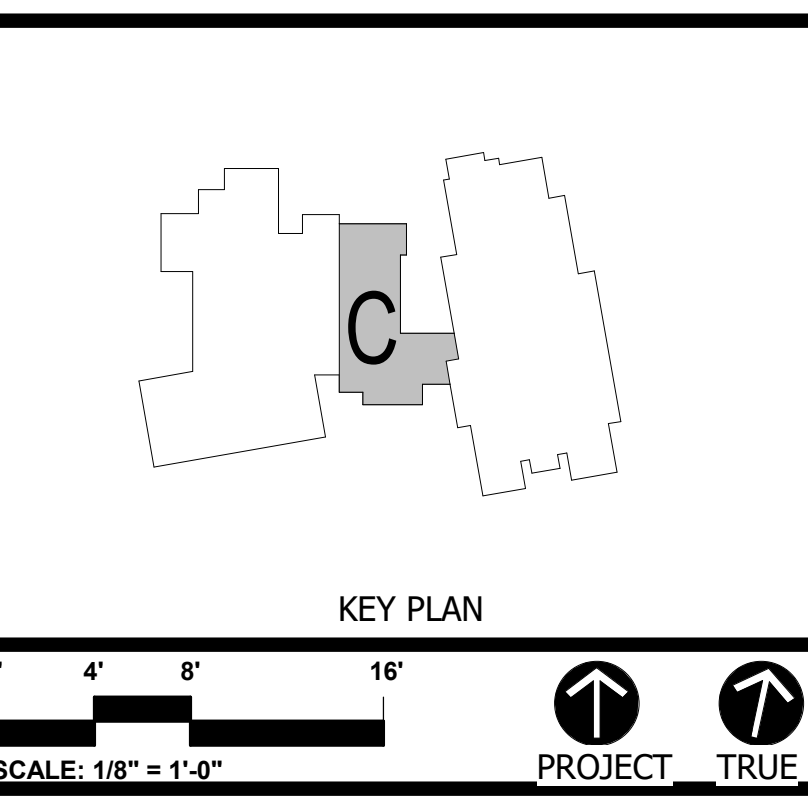
ISSUE DATE

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JANUARY 17, 2018	DRAWINGS ISSUED FOR BID.

REVISIONS

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03/20/18	2.) ADDENDUM #2

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



ROCKY HILL INTERMEDIATE SCHOOL

10 SCHOOL ST. ROCKY HILL, CT. 06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17005.00 DRAWN BY: MK, KKS

MAIN LEVEL - AREA C

DRAWING NO.: **A1.03**

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FIRE PROTECTION LEGEND	
	FIRE PROTECTION PIPING (PROPOSED)
	RECESSED PENDENT SPRINKLER HEAD
	CONCEALED PENDENT SPRINKLER HEAD
	UPRIGHT SPRINKLER HEAD

GENERAL NOTES

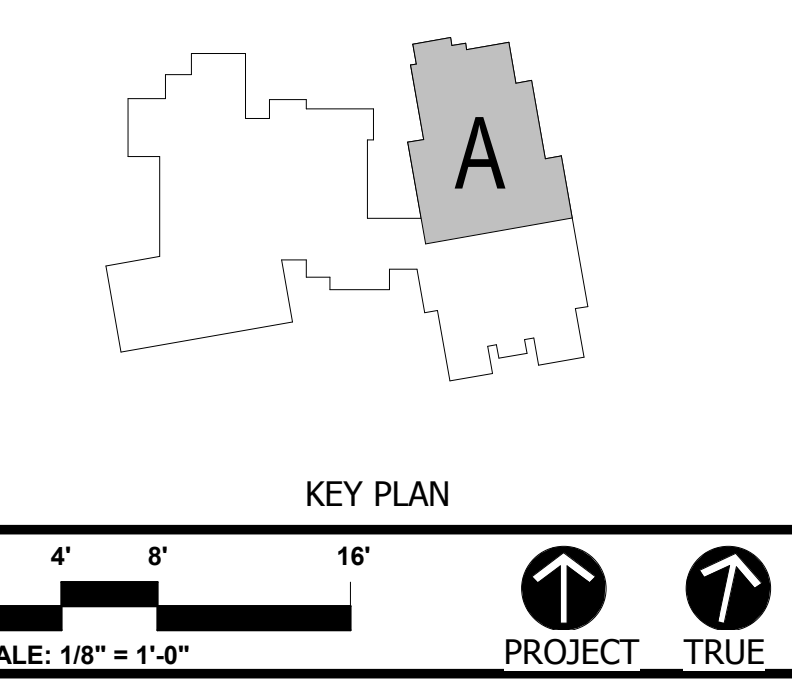
1. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SPRINKLER PIPING LAYOUT AND HYDRAULIC CALCULATIONS TO MEET THE REQUIREMENTS OF NFPA #13 AND #14.
2. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE WORK INSTALLATION DRAWINGS AND SUBMIT THEM TO THE ENGINEER AND RATING BUREAU FOR APPROVAL. SHOP DRAWING APPROVAL FROM THE AHJ IS REQUIRED PRIOR TO THE START OF SYSTEM INSTALLATION.
3. PROVIDE CALCULATION FOR LIGHT HAZARD SPRINKLER SYSTEM FOR REMOTE CLASSROOMS.
4. PIPING SHALL BE RUN CONCEALED THROUGHOUT FINISHED SPACES. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS AND CONSTRUCTION DETAILS. NOTE: WHERE UPRIGHT HEADS ARE SHOWN THERE IS TYPICALLY NO FINISHED CEILING.



1 MAIN LEVEL - AREA A
1/8" = 1'-0"

ISSUE DATE	
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REVISIONS	
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**ROCKY HILL
INTERMEDIATE
SCHOOL**
10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17005.00 DRAWN BY: GFL

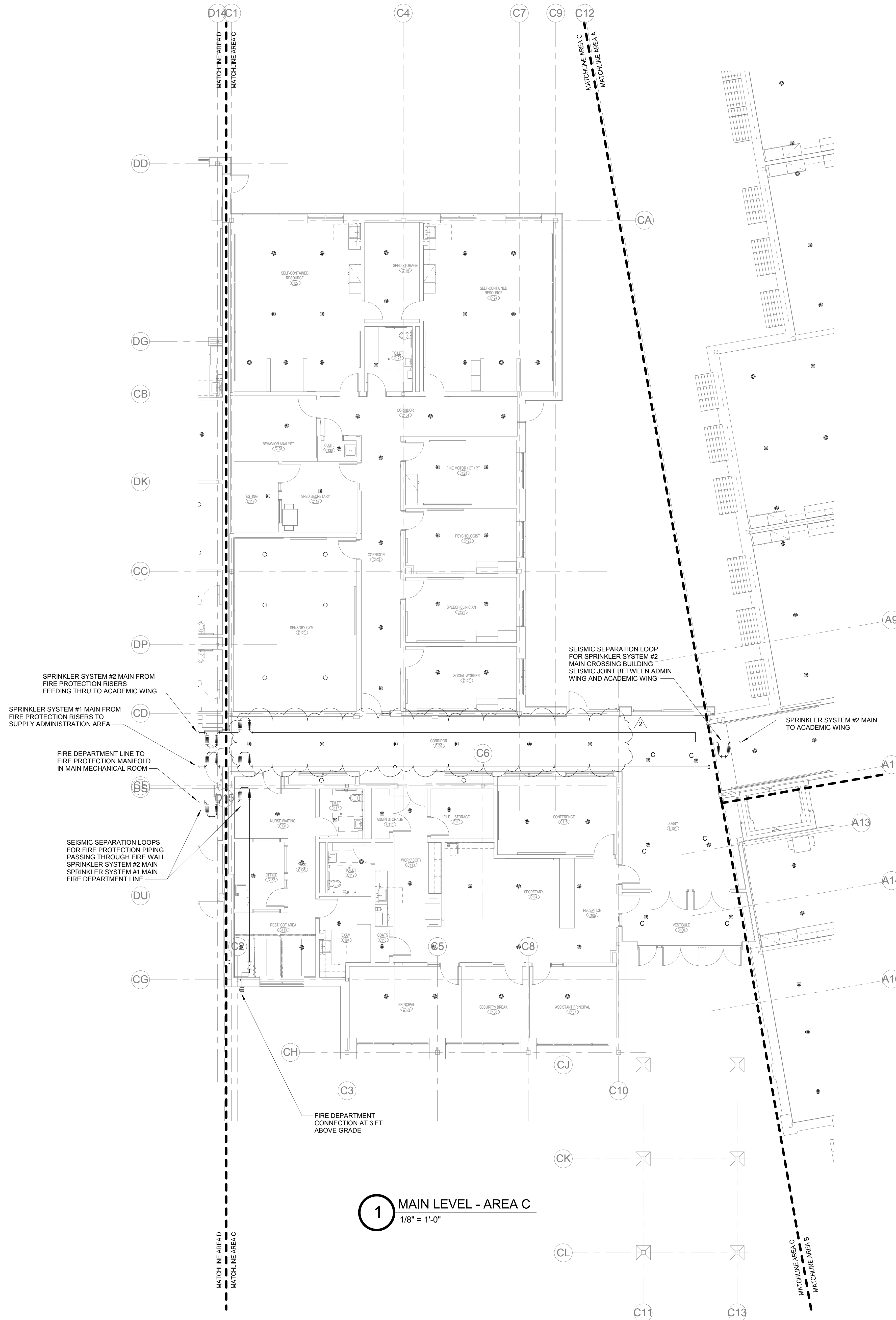
**FIRE
PROTECTION
MAIN LEVEL -
AREA A**
DRAWING NO.:
FP1.01

FIRE PROTECTION LEGEND

	FIRE PROTECTION PIPING (PROPOSED)
	5' STORZ TYPE FIRE DEPARTMENT CONNECTION
	CHECK VALVE
	RECESSED PENDENT SPRINKLER HEAD
	CONCEALED PENDENT SPRINKLER HEAD
	UPRIGHT SPRINKLER HEAD

GENERAL NOTES

1. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR SPRINKLER PIPING LAYOUT AND HYDRAULIC CALCULATIONS TO MEET THE REQUIREMENTS OF NFPA #13 AND #14.
2. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE WORK INSTALLATION DRAWINGS AND SUBMIT THEM TO THE ENGINEER AND RATING BUREAU FOR APPROVAL. SHOP DRAWINGS APPROVAL FROM THE AHJ IS REQUIRED PRIOR TO THE START OF SYSTEM INSTALLATION.
3. PROVIDE CALCULATION FOR LIGHT HAZARD SPRINKLER SYSTEM FOR REMOTE OFFICES.
4. THE LOCATION OF THE FIRE DEPARTMENT CONNECTION SHALL BE AS SHOWN.
5. PIPING SHALL BE RUN CONCEALED THROUGHOUT FINISHED SPACES. REFER TO ARCHITECTURAL PLANS FOR CEILING TYPES, HEIGHTS AND CONSTRUCTION DETAILS. NOTE: WHERE UPRIGHT HEADS ARE SHOWN THERE IS TYPICALLY NO FINISHED CEILING.



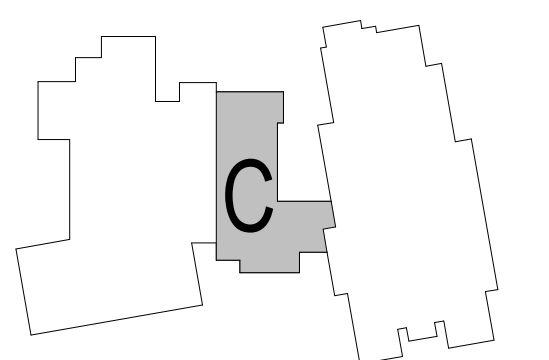
1 MAIN LEVEL - AREA C
1/8" = 1'-0"

ISSUE DATE

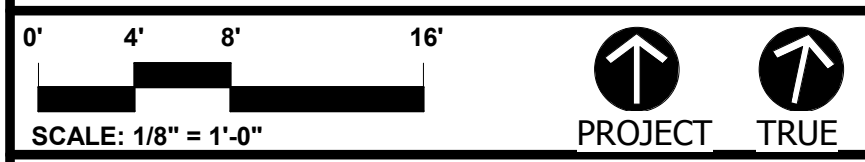
DATE	DESCRIPTION
JANUARY 17, 2018	DRAWINGS ISSUED FOR BID.

REVISIONS

DATE	DESCRIPTION
03/20/18	2.) ADDENDUM #2



KEY PLAN



**ROCKY HILL
INTERMEDIATE
SCHOOL**

10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17005.00 DRAWN BY: GFL

**FIRE
PROTECTION
MAIN LEVEL -
AREA C**

DRAWING NO.:
FP1.03

FUEL-FIRED WATER HEATER SCHEDULE				
GENERAL NOTE: REFER TO SPECIFICATION FOR MORE DETAIL, DESCRIPTION OF THE EQUIPMENT AND EQUIPMENT EQUIVALENTS. PROVIDE SUPPORTS, FITTINGS, ADAPTERS, ETC. AS NECESSARY TO MAKE FINAL CONNECTION TO EQUIPMENT.				
TYPE	EQUIPMENT	DESCRIPTION	REMARKS	
GWH-1 & 2	GAS WATER HEATER	PVI "CONQUEST", MODEL #26L 100A-GCL, CONDENSING GAS FIRED WATER HEATER WITH STORAGE TANK. WATER HEATER RATED FOR INPUT OF 250 MBH, RECOVERY OF 291 GPH AT 40°-140°F TEMPERATURE RISE AND 100 GALLON ASME STORAGE TANK. PERFORMANCE: THE WATER HEATER SHALL OPERATE AT 97% RECOVERIES AND THERMAL EFFICIENCY BASED UPON 40°-140°F ENTERING WATER TEMPERATURE AND DERIVED FROM DOE 10 CFR 431 TESTING REQUIREMENTS (ANSI Z21.10.3 @ 40°F TO 140°F). EXHAUST VENTING: USE A CATEGORY IV, STAINLESS STEEL AL29-4C, MINIMUM VENT LENGTH 5 EQ. FEET, DO NOT SIZE VENT BASED ONLY UPON CONNECTION DIAMETER AT THE APPLIANCE. REFER TO INSTALLATION MANUAL FOR SIZING. INLET COMBUSTION AIR DUCT: UP TO 100 EQ. FEET USING 3" DIA. COPPER VENT PIPE. LONGER LENGTHS ARE ETL LISTED THROUGH LARGER DIAMETER PIPE. REFER TO INSTALLATION MANUAL. GAS PRESSURE - NATURAL: MINIMUM INLET FLOW PRESSURE 3.5" W.C., MAXIMUM STATIC PRESSURE 14" W.C. MINIMUM CLEARANCE FROM COMBUSTIBLES: ZERO CLEARANCE FOR SIDES AND REAR, 24" FROM FRONT, 15" FROM TOP. CAN BE INSTALLED DIRECTLY ON A COMBUSTIBLE FLOOR. RECOMMENDED SERVICE CLEARANCES: 18" FROM ALL SIDES, CHECK LOCAL AND NATIONAL CODES FOR ADDITIONAL REQUIREMENTS. MISCELLANEOUS: FACTORY AUTHORIZED START UP, CONDENSATE NEUTRALIZATION DEVICE, CONDENSATE "P" TRAP, VENT TERMINATION CAP, WARRANTY: REFER TO SPECIFICATION	120VAC, 10, 60 HZ, 5 AMPS	
"ET"	EXPANSION TANK	AMTROL "THERM-X-TROL" ST-42-C, 18 GALLON, 16" DIA X 24" HIGH, ASME PRECHARGED THERMAL EXPANSION TANK, WITH A HEAVY DUTY BUTYL BLADDER SUITABLE FOR DOMESTIC POTABLE WATER SYSTEM. ALL INTERNAL WETTED PARTS MUST COMPLY WITH FDA REGULATIONS. THE TANK SHALL HAVE A SYSTEM CONNECTION AND CHARGING VALVE TO FACILITATE THE ON-SITE CHARGING OF THE TANK TO MEET SYSTEM REQUIREMENTS. THE TANK MUST BE CONSTRUCTED IN ACCORDANCE WITH SECTION VIII OF THE ASME BOILER AND PRESSURE VESSEL CODE, RATED FOR 150 PSI WORKING PRESSURE AND 210°F TEMPERATURE.		

WATER DISTRIBUTION PUMPS SCHEDULE				
TYPE	EQUIPMENT	DESCRIPTION	REMARKS	
HWRP1	HOT WATER RETURN PUMP (BUILDING)	BELL & GOSSETT #PL-308, BRONZE BODY, HORIZONTAL LUBRICATED TYPE IN-LINE PUMP, SUITABLE FOR POTABLE WATER SERVICE, 225F OPERATION AT 150 PSIG WORKING PRESSURE AND SHALL BE UL LISTED. MOTOR SHALL HAVE BUILT-IN OVERLOAD PROTECTION. PUMP SHALL HAVE CAPACITY OF 10 GPM AT 18 FEET OF HEAD, RATED FOR 1/12 HP, 120V-1. INCLUDE #TC-1 AUTOMATIC TIMER KIT AND #AQS AQUASTAT.		
HWRP2	HOT WATER RETURN PUMP (KITCHEN)	BELL & GOSSETT #NB-22, BRONZE BODY, HORIZONTAL LUBRICATED TYPE IN-LINE PUMP, SUITABLE FOR POTABLE WATER SERVICE, 225F OPERATION AT 150 PSIG WORKING PRESSURE AND SHALL BE UL LISTED. MOTOR SHALL HAVE BUILT-IN OVERLOAD PROTECTION. PUMP SHALL HAVE CAPACITY OF 8 GPM AT 10 FEET OF HEAD, RATED FOR 80 AMPS, 120V-1. INCLUDE #TC-1 AUTOMATIC TIMER KIT AND #AQS AQUASTAT.		

EMERGENCY FIXTURE SCHEDULES								
TYPE	FIXTURE	SOIL	VENT	COLD	HOT	MOUNT	DESCRIPTION	REMARKS
EF	EMERGENCY EYE / FACE WASH UNIT LOCATED IN MECHANICAL ROOM	-	-	TEPID 34"		WALL	BRADLEY #S19224FW, EYE/FACE WASH UNIT. UNIT SHALL INCLUDE WALL BRACKET, 13" YELLOW PLASTIC BOWL WITH TWIN HEADS AND FACE SPRAY RING, 1/2" STAY OPEN BALL VALVE OPERATED BY "YELLOW" PUSH HANDLE, DOME STRAINER AND TAILPIECE	INSTALL UNIT WITH "ETMV"
ETMV	EMERGENCY THERMOSTATIC MIXING VALVE (EYE WASH UNIT)	-	-	1/2"	1/2"	WALL	BRADLEY #S19-2000, THERMOSTATIC MIXING VALVE WITH LIQUID FILLED THERMO MOTOR AND PISTON CONTROL MECHANISM WITH POSITIVE SHUT OFF OF HOT WATER AND BUILT-IN COLD WATER BY-PASS, ASSURING COLD WATER FLOW. UNIT SHALL INCLUDE CHECK STOPS & THERMOMETER. SET AT 80-90°F.	
EF1	EMERGENCY EYE / FACE WASH UNIT LOCATED IN NURSE ROOM	-	-	TEPID 34"		COUNTER	HAWS #7610, BARRIER-FREE SINK MOUNTED EYE/FACE WASH HEAD WITH INVERTED DIRECTIONAL LAMINAR FLOW, POLISHED CHROME BRASS SINGLE ACTION PULL-DOWN VALVE BODY, WHEELCHAIR ACCESSIBILITY, UNIVERSAL SIGN, AND 1/2" O.D. SLIP JOINT INLET	INSTALL UNIT WITH "ETMV1"
ETMV1	EMERGENCY THERMOSTATIC MIXING VALVE (EYE WASH UNIT)	-	-	1/2"	1/2"		HAWS #2021EFFE, THERMOSTATIC MIXING VALVE WITH POSITIVE SHUT OFF OF HOT WATER AND BUILT-IN COLD WATER BY-PASS, ASSURING COLD WATER FLOW. UNIT SHALL INCLUDE CHECK STOPS & THERMOMETER. SET AT 85°F.	

PLUMBING WATER SPECIALTIES SCHEDULE				
GENERAL NOTE: PROVIDE SUPPORTS, FITTINGS, ADAPTERS, ETC. AS NECESSARY TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR MISCELLANEOUS WATER SPECIALTIES AND FOR WATER SPECIALTIES ITEMS EQUIVALENTS.				
ITEM	SPECIALTY ITEM	DESCRIPTION	REMARKS	
"WHA"	WATER HAMMER ARRESTORS	SILOUX CHIEF "HYDRA-RESTER" SEAMLESS PRESSURE CHAMBER, SPUN CLOSED COPPER TUBE PERMANENTLY SEALS A 60 PSIG. SHALL CONFORM TO ASME/ANSI STANDARDS AND PDI CERTIFIED. INSTALL PER FACTORY RECOMMENDATION, LIFETIME WARRANTY.	PROVIDE AT QUICK CLOSING VALVES	
"RP2"	BACKFLOW PREVENTER	WATTS #F909-QT-S, REDUCED PRESSURE BACKFLOW PREVENTER, ALL BRONZE BODY CONSTRUCTION WITH STRAINER & QUARTER TURN BALL VALVES. #909AG FIXED AIR GAP.	PIPE RELIEF TO FLOOR DRAIN OR AS INDICATED ON DWGS.	
"HB"	HOSE BIBB	WOODFORD #24P, CHROME FINISHED CONSTRUCTION WALL FAUCET WITH VACUUM BREAKER - BACKFLOW PREVENTER, 3/4" HOSE CONNECTION AND WHEEL HANDLE.		
"WH"	WALL HYDRANT (RECESSED)	WOODFORD #MODEL 65, POLISHED BRASS FREEZELESS WALL HYDRANT WITH INTEGRAL VACUUM BREAKER (ASSE 1011), 3/4" HOSE CONNECTION "TEE" HANDLE KEY. WOODFORD #MODEL 66S, POLISHED BRASS BOX AND DOOR.	SEE ARCHITECTURAL PLANS FOR WALL THICKNESS	
"TMV"	H-LOW THERMOSTATIC MIXING VALVE	POWERS "HYDROGUARD" HI-LOW #FSH1434-13, THERMOSTATIC CONTROLLER, LEAD FREE BRASS BODY AND CHECKSTOPS, CHECK STOPS, THERMOMETERS, BRASS FITTINGS & UNIONS, PRESSURE GAUGES, BALL VALVES, WALL BRACKET AND SPARE "RC" CARTRIDGE FOR EACH CONTROLLER. ASSEMBLY SHALL BE FACTORY ASSEMBLED AND TESTED.		
"ETP"	ELECTRONIC TRAP PRIMER DEVICE	PPP #MPB-500, MINI-PRIME ELECTRONIC TRAP PRIMING DEVICE HOUSED IN NEMA METAL BOX WITH COVER. UNIT SHALL EMPLOY SOLENOID VALVE, AIR GAP AND ELECTRONIC CONTROLLER. PROVIDE DISTRIBUTION UNITS #DU-2, 3 OR 4 FOR MULTIPLE DRAIN PRIMING. NUMBER OF "DU" TO BE DETERMINED BY THE CONTRACTOR PER MANUFACTURER RECOMMENDATION.	120 VOLT	

PLUMBING DRAINAGE SPECIALTIES SCHEDULE				
GENERAL NOTE: PROVIDE SUPPORTS, TRAPS, ADAPTERS, ETC. AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR MISCELLANEOUS DRAINAGE SPECIALTIES AND FOR DRAINAGE SPECIALTIES ITEMS EQUIVALENTS.				
ITEM	SPECIALTY ITEM	DESCRIPTION	REMARKS/ELECTRICAL	
WALL	CLEANOUT ACCESS COVER (ROUND)	J.R. SMITH #4720-U, FACE OF WALL CHROME-PLATED BRONZE ROUND FRAME AND SECURED COVER, VANDAL PROOF SCREWS.		
FCO	FLOOR CLEANOUT (ROUND)	J.R. SMITH #4032L-U, CAST IRON CLEANOUT, WITH ROUND ADJUSTABLE NICKEL-BRONZE TOP, GASKET SEAL AND BRONZE PLUG, VANDAL PROOF TOP.	PROVIDE "Y" CARPET MARKER FOR CARPET FINISHED FLOORS	
"RD1"	ROOF DRAIN	FROET #100C-OFS-DEX, BI-FUNCTIONAL ROOF DRAIN, CAST IRON BODY WITH OVERFLOW STRAINER, COMBINED FLASHING CLAMP AND GRAVEL STOP, STANDPIPE, CAST IRON DOME, UNDERDECK CLAMP, SUMP RECEIVER AND RING EXTENSION. EXTENSION HEIGHT TO BE DETERMINED BY THE CONTRACTOR.	REFER TO ROOF PLANS FOR SIZE.	
"RD2"	ROOF DRAIN	FROET #200C-DC-DEX, ROOF DRAIN, CAST IRON BODY WITH STRAINER, COMBINED FLASHING CLAMP AND GRAVEL STOP, STANDPIPE, CAST IRON DOME, UNDERDECK CLAMP, SUMP RECEIVER AND RING EXTENSION. EXTENSION HEIGHT TO BE DETERMINED BY THE CONTRACTOR.	REFER TO ROOF PLANS FOR SIZE.	
"RD3"	ROOF DRAIN	JAY R SMITH #1510T, SIDE OUTLET (90°) DRAIN, CAST IRON BODY, FLASHING CLAMP AND ANGLE GRATE.	REFER TO ROOF PLANS FOR SIZE.	
"FD1"	FLOOR DRAIN	J.R. SMITH #2005Y-A-U, CAST IRON BODY WITH FLASHING COLLAR, 8" DIA. ROUND NICKEL-BRONZE ADJUSTABLE STRAINER, VANDAL PROOF SCREWS. INSTALL WITH DEEP SEAL "P" TRAP AND TRAP SEAL GUARD	LOCATED IN UTILITY OR MECH. ROOMS.	
"FD2"	FLOOR DRAIN	J.R. SMITH #2131Y-U-P, CAST IRON DEEP BODY, AND FLASHING COLLAR, 12" DIA. CAST IRON BAR GRATE, VANDAL PROOF SCREWS. INSTALL WITH DEEP SEAL "P" TRAP AND TRAP SEAL GUARD	LOCATED IN UTILITY OR MECH. ROOMS.	
"FS1"	FLOOR SINK	J.R. SMITH #8693Y-13, 12" SQUARE TOP, D'DEEP, 14 GAUGE TYPE 304 SS RECEPTOR BODY WITH SEEPAGE CONTROL HOLES, CAST TYPE 316 SS RIBBED NON-TILT LOOSE SET GRATE WITH 3/4"x13" SQUARE HOLES, PERFORATED SS DOME BOTTOM STRAINER. SIZE AS INDICATED ON FLOOR PLANS.	LOCATED IN KITCHEN	
"FS2"	FLOOR SINK	J.R. SMITH #8694Y-13, 12" SQUARE TOP, 10"DDEEP, 14 GAUGE TYPE 304 SS RECEPTOR BODY WITH SEEPAGE CONTROL HOLES, CAST TYPE 316 SS RIBBED NON-TILT LOOSE SET GRATE WITH 3/4"x13" SQUARE HOLES, PERFORATED SS DOME BOTTOM STRAINER. SIZE AS INDICATED ON FLOOR PLANS.	LOCATED IN KITCHEN	

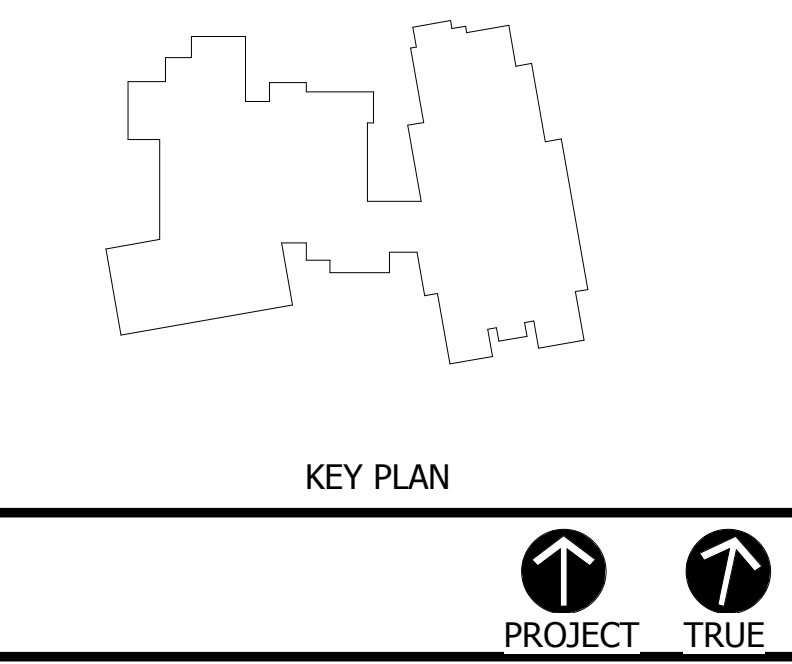
ELECTRIC WATER COOLER SCHEDULE								
GENERAL NOTES: PIPE SIZES SHOWN ARE FOR SUPPLY AND DRAINAGE ONLY. PROVIDE SUPPLIES WITH STOPS, SEMI-CAST "P" TRAPS, PLUMBING FIXTURE SUPPORTS AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR EQUIVALENTS.								
TYPE	FIXTURE	SOIL	VENT	COLD	HOT	MOUNT	DESCRIPTION	REMARKS
"EWC"	WATER COOLER	1 1/2"	1 1/2"	1/2"		WALL PER ANSIA/ADA STANDARD	ELKAY #ERFFM28K, 8 1/2 LEVEL ELECTRIC WATER COOLER, ERFFM28K SHALL DELIVER 8 GPH OF 50°F DRINKING WATER AT 90°F AMBIENT AND 80°F INLET WATER. COOLER UNITS SHALL HAVE FRONT PUSH BUTTON ACTIVATION, VANDAL RESISTANT BUBBLER. UNIT SHALL MEET ANSI AND A.D.A. REQUIREMENTS.	REFER TO POWER PLANS FOR CIRCUITING ARRANGEMENTS

DRINKING FOUNTAIN SCHEDULE								
GENERAL NOTES: PIPE SIZES SHOWN ARE FOR SUPPLY AND DRAINAGE ONLY. PROVIDE SUPPLIES WITH STOPS, PLUMBING FIXTURE SUPPORTS AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR EQUIVALENTS.								
TYPE	FIXTURE	SOIL	VENT	COLD	HOT	MOUNT	DESCRIPTION	REMARKS
"DF"	OUTDOOR DRINKING FOUNTAIN	1 1/2"	-	1/2"	-	PEDESTAL	HAWS #3380FR BARRIER-FREE FREEZE-RESISTANT PEDESTAL DRINKING FOUNTAIN SHALL INCLUDE AN 18 GAUGE TYPE 304 STAINLESS STEEL SATIN FINISH BASIN WITH INTEGRAL SWIRL DESIGN, POLISHED CHROME-PLATED BRASS PUSH-BUTTON, POLISHED CHROME-PLATED BRASS VANDAL-RESISTANT BUBBLER HEAD, CHROME-PLATED BRASS VANDAL-RESISTANT WASTE STRAINER, 11 GAUGE GALVANIZED SUBSTRATE STEEL PEDESTAL WITH GREEN POWDER-COATING, INTEGRAL MOUNTING PLATE, AND 1-1/2" O.D. TAILPIECE. PROVIDE MODEL #6518FR, FREEZE RESISTANT BURY VALVE.	REFER TO LANDSCAPE ARCHITECT PLANS FOR LOCATIONS

PLUMBING FIXTURE SCHEDULE									
GENERAL NOTES: PIPE SIZES SHOWN ARE FOR SUPPLY AND DRAINAGE ONLY. PROVIDE SUPPLIES WITH 1/4 TURN BALL STOPS, SEMI-CAST "P" TRAPS, PLUMBING FIXTURE SUPPORTS AND NECESSARY FITTINGS TO MAKE FINAL CONNECTION. REFER TO SPECIFICATION FOR EQUIVALENTS AND ARCHITECTURAL DOCUMENTS FOR EXACT PLUMBING FIXTURE MOUNTING HEIGHTS.									
TYPE	FIXTURE	SOIL	VENT	COLD	HOT	MOUNT	DESCRIPTION	REMARKS	
A	WATER CLOSET	4"	2"	1"		WALL	KOHLER "KINGSTON" #K-432S, VITREOUS CHINA ELONGATED BOWL, TOP SPUD, 1.28 GPF, SLOAN "ROYAL" #111-1-28, MANUAL FLUSH VALVE, 1 1/2" TOP SPUD, OLSONITE #95 WHITE OPEN FRONT SEAT.		
A1	WATER CLOSET	4"	2"	1"		WALL 16" HIGH	KOHLER "KINGSTON" #K-432S, VITREOUS CHINA ELONGATED BOWL, TOP SPUD, 1.28 GPF, SLOAN "ROYAL" #111-1-28, MANUAL FLUSH VALVE, 1 1/2" TOP SPUD, OLSONITE #95 WHITE OPEN FRONT SEAT.	MOUNT FLUSH VALVE HANDLE, PER A.D.A. /ANSI STANDARD	
B	URINAL	2"	1 1/2"	3/4"		WALL	KOHLER "BARDON" #K-4904-ET, VITREOUS CHINA, ELONGATED RM, 3/4" TOP SPUD, HIGH EFFICIENCY WASHDOWN ACTION, 0.125 GPF, SLOAN "ROYAL" #186-0-125 DBP, MANUAL FLUSH VALVE.		
B1	URINAL	2"	1 1/2"	3/4"		WALL 17" AFF	KOHLER "BARDON" #K-4904-ET, VITREOUS CHINA, ELONGATED RM, 3/4" TOP SPUD, HIGH EFFICIENCY WASHDOWN ACTION, .125 GPF, SLOAN "ROYAL" #186-0-125 DBP, MANUAL FLUSH VALVE.	MOUNT FLUSH VALVE HANDLE, PER A.D.A. /ANSI STANDARD	
C	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	WALL 34" AFF	KOHLER "BRENHAM" #K-1997-1, 22"x20" VITREOUS CHINA, SINGLE HOLE, OVERFLOW DRAIN, WALL HANGER, DRILLED FOR CONCEALED ARM CARRIER, CHICAGO FAUCET, #333-66PSHABCP, SINGLE HOLE, 0.25 GPM AERATOR, 0.25 GPF, VANDAL PROOF METERING PUSH HANDLE, TRUBRO #102-W LAV. INSULATION KIT		
C1	LAVATORY	1 1/2"	1 1/2"	1/2"	1/2"	WALL 34" AFF	KOHLER "BRENHAM" #K-1997-1, 22"x20" VITREOUS CHINA, SINGLE HOLE, OVERFLOW DRAIN, WALL HANGER, DRILLED FOR CONCEALED ARM CARRIER, CHICAGO FAUCET, #807-66PSHABCP, SINGLE HOLE, 0.5 GPM AERATOR, 0.25 GPF, VANDAL PROOF METERING PUSH HANDLE, TRUBRO #102-W LAV. INSULATION KIT	PROVIDE TRUBRO "SOFT-GUARD PLUS" INSULATION KIT	
D	SINGLE BOWL SINK (GENERAL USE)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LR2521PD, 18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SELF RIMMING, (3) FAUCET HOLES, 25"x21"x 8" DEEP BOWL, PERFECT DRAIN, STRAINER AND TAILPIECE, T&S #B-2886-05 SWIVEL GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM FLOW AERATOR.		
D1	SINGLE BOWL SINK (GENERAL USE)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LRAD025216SPD, 18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SELF RIMMING, (3) FAUCET HOLES, 25"x21"x 8" DEEP BOWL, PERFECT DRAIN, STRAINER AND TAILPIECE, T&S #B-2886-05 SWIVEL GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM FLOW AERATOR.	PROVIDE TRUBRO "SOFT-GUARD PLUS" INSULATION KIT	
"E"	SINGLE BOWL SINK (NURSE ROOM WITH EYEWASH)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY #RAD22196PD SINGLE BOWL SINK, SELF-RIMMING STAINLESS STEEL SINK, 18 GAUGE, TYPE 304 STAINLESS STEEL, 22"x19-1/2"x 8" DEEP BOWL, PERFECT DRAIN, STRAINER AND TAILPIECE, T&S #B-2886-05 SWIVEL GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM FLOW AERATOR.	PROVIDE TRUBRO "SOFT-GUARD PLUS" INSULATION KIT	
"G1"	SINGLE BOWL SINK (ART ROOM)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LRAD1919S, 18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SATIN FINISH, SELF RIMMING, SOUND DEADENED, (3) FAUCET HOLES, 19"x19"x 7 1/2" DEEP BOWL, #LKAD-35 STRAINER AND OFFSET TAILPIECE, T&S #B-2886-05 SWIVEL GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM FLOW AERATOR.	INSTALL WITH "SP" J.R. SMITH #8710 SOLID INTERCEPTOR IN LIEU OF "P" TRAP.	
"G"	SINGLE BOWL SINK (ART ROOM)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LRAD1919, 18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SATIN FINISH, SELF RIMMING, SOUND DEADENED, (3) FAUCET HOLES, 19"x19"x 7 1/2" DEEP BOWL, #LKAD-35 STRAINER AND OFFSET TAILPIECE, T&S #B-2886-05 SWIVEL GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM FLOW AERATOR.	INSTALL WITH "SP" J.R. SMITH #8710 SOLID INTERCEPTOR IN LIEU OF "P" TRAP.	
"H"	SINGLE BOWL SINK (SCIENCE CLASSROOM)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LR2521PD, 18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SELF RIMMING, (1) FAUCET HOLE, 25"x21"x 8" DEEP BOWL, PERFECT DRAIN, STRAINER AND TAILPIECE, T&S #B-2886-05 SWIVEL GOOSENECK FAUCET WITH WRIST BLADE HANDLES, 1.5 GPM FLOW AERATOR.		
"H1"	SINGLE BOWL SINK (SCIENCE CLASSROOM)	1 1/2"	1 1/2"	1/2"	1/2"	COUNTER	ELKAY "LUSTERTONE" #LRAD025216SPD, 18 GAUGE, TYPE 304 STAINLESS STEEL SINK, SELF RIMMING, (1) FAUCET HOLE, 25"x21"x 8" DEEP BOWL, PERFECT DRAIN, STRAINER AND TAILPIECE, PROVIDE CHICAGO #930-31E7-2XKCP, GOOSENECK FAUCET WITH VACUUM BREAKER AND WRIST BLADE HANDLES.	PROVIDE TRUBRO "SOFT-GUARD PLUS" INSULATION KIT	
J	JANITOR SINK	3"	1 1/2"	1/2"	1/2"	FLOOR	FIAT "MOLDED-STONE" #M5B-2424, 24"x24"x10" DEEP MOP SERVICE BASIN WITH THE FOLLOWING OPTIONS: #E-77AA-36 BUMPER GUARDS, #889C MOP HANGER, #82AA HOSE & BRACKET #83AA WALL FAUCET WITH VACUUM BREAKER, #MSG3624 WALL GUARD		
S	SHOWER VALVE	2"	1 1/2"	1/2"	1/2"	WALL	COMFORT DESIGNS #XST3838TR 75 4P LBAR INCLUDES TRENCH SHOWER DRAIN BY SHOWER MFG. 4 PIECE, ACRYLIC FINISH, 36"x36" INSIDE DIMENSIONS, 38 1/2"x38 1/2"x79" OUTSIDE DIMENSIONS, 3/4" THRESHOLD (1/2" AFTER TILE FLOORING), FRONT TRENCH DRAIN. SHOWER SHALL MEET ANSI A117.1, UFAS AND ADA REQUIREMENTS. UNIT SHALL BE PROVIDED WITH GRAB BARS (PER CT CODE) AND WOOD BLOCKING, ANTI-BACTERIAL CURTAIN AND HOOKS, S.S. CURTAIN ROD, SELF CALKING BRASS DRAIN WITH CHROME STRAINER, SOAP DISH, WHITE HDPE FOLD-UP SEAT, EDPM WATER DAM, COLOR SELECTED BY ARCHITECT. SYMMONS "SAFETY MIX" #1-117-FS-B30-QD-X, PRESSURE BALANCING MIXING VALVE, INTEGRAL SERVICE STOPS, SHOWER HEAD WITH ARM & FLANGE, DIVERTER VALVE, HAND SHOWER WITH FLEXIBLE HOSE, 3/8" BAR AND HOSE QUICK DISCONNECT.	NOTE: PRIVACY CURTAIN, DOOR, COLOR BY ARCHITECT	

ISSUE DATE		
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**ROCKY HILL
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SCHOOL**
10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17005.00 DRAWN BY: MK

**PLUMBING
SCHEDULES**

DRAWING NO.:
P5.01

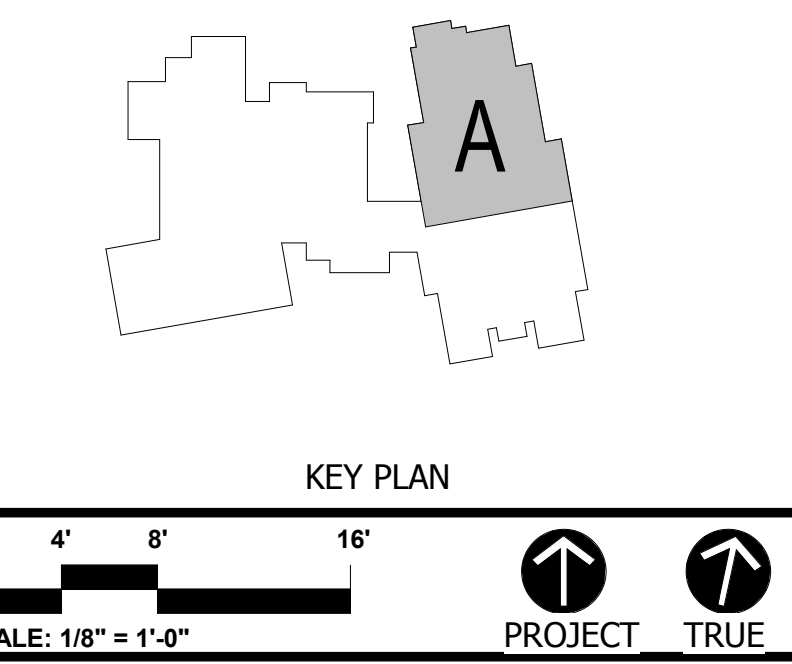


1 MAIN LEVEL - AREA A
1/8" = 1'-0"

ISSUE DATE	
DATE	DESCRIPTION
JANUARY 17, 2018	DRAWINGS ISSUED FOR BID.

REVISIONS	
DATE	DESCRIPTION
03/07/18	1.) ADDENDUM #1
03/20/18	2.) ADDENDUM #2

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



**ROCKY HILL
INTERMEDIATE
SCHOOL**
10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

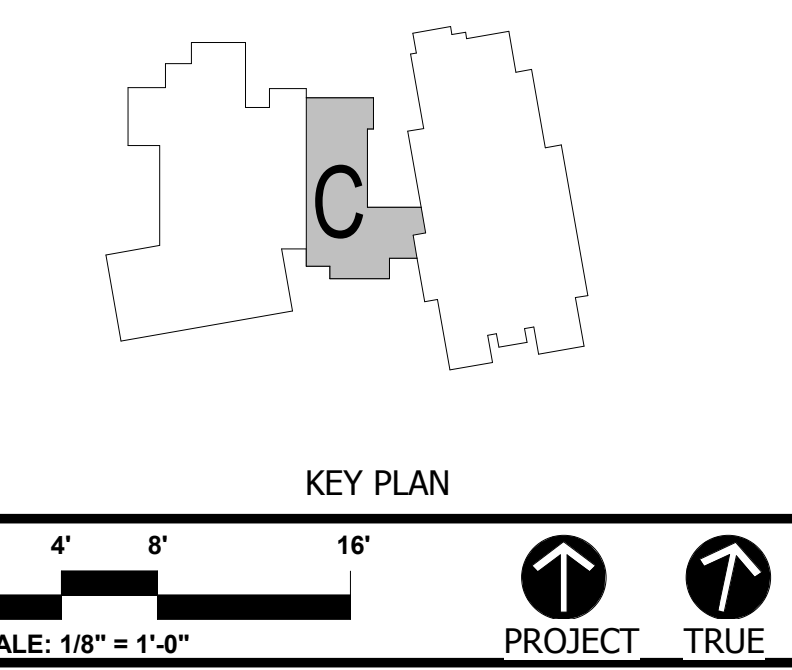
PROJECT NO.: 17-061 DRAWN BY: JJZ

**ELECTRICAL
LIGHTING
MAIN LEVEL -
AREA A**
DRAWING NO.:
E1.01

ISSUE DATE	
DATE	DESCRIPTION
JANUARY 17, 2018	DRAWINGS ISSUED FOR BID.

REVISIONS	
DATE	DESCRIPTION
03/20/18	2.) ADDENDUM #2

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS,
AND GENERAL NOTES SEE SHEET R0.01



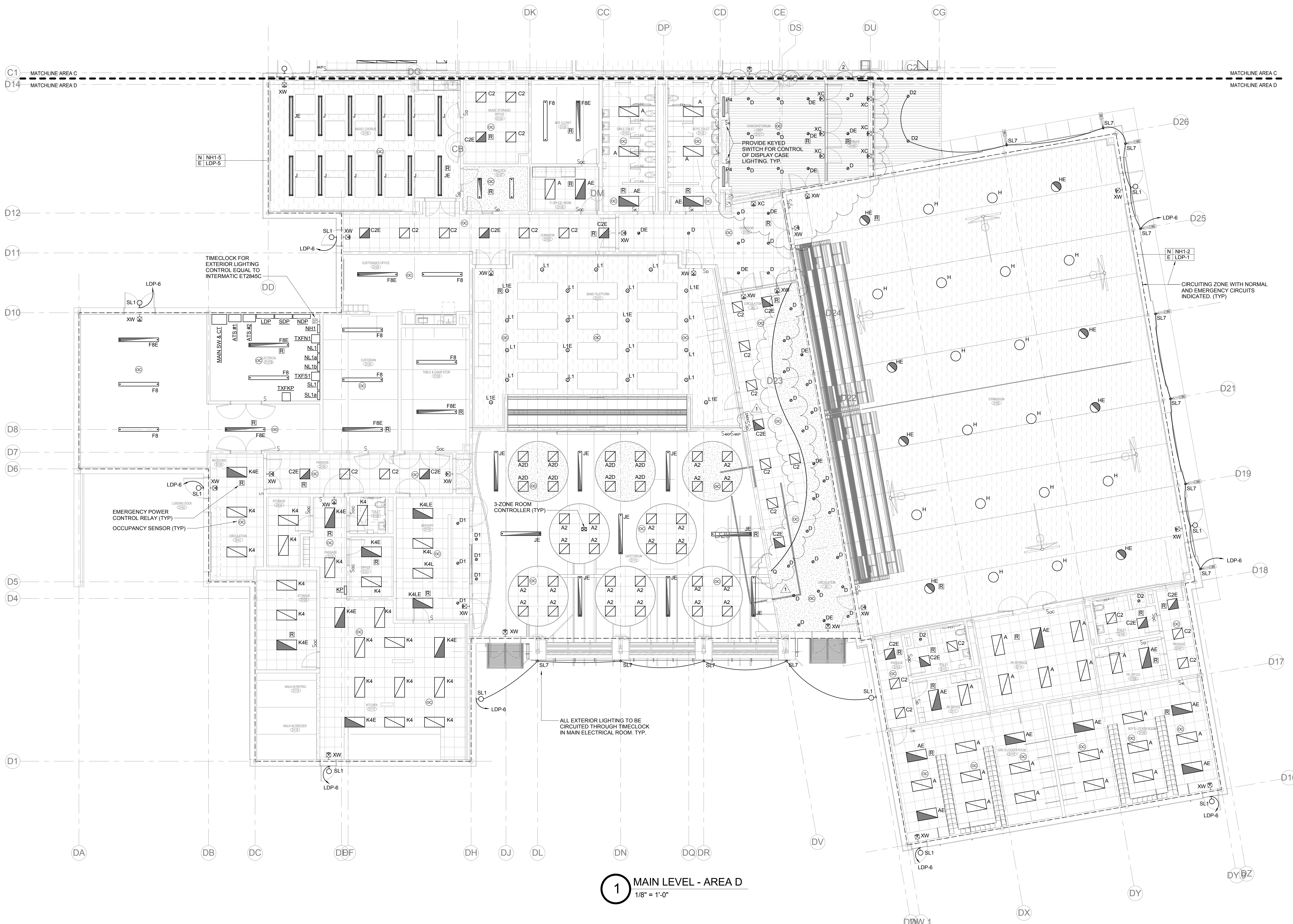
**ROCKY HILL
INTERMEDIATE
SCHOOL**
10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17-061 DRAWN BY: JJZ

**ELECTRICAL
LIGHTING
MAIN LEVEL -
AREA C**
DRAWING NO.:
E1.03



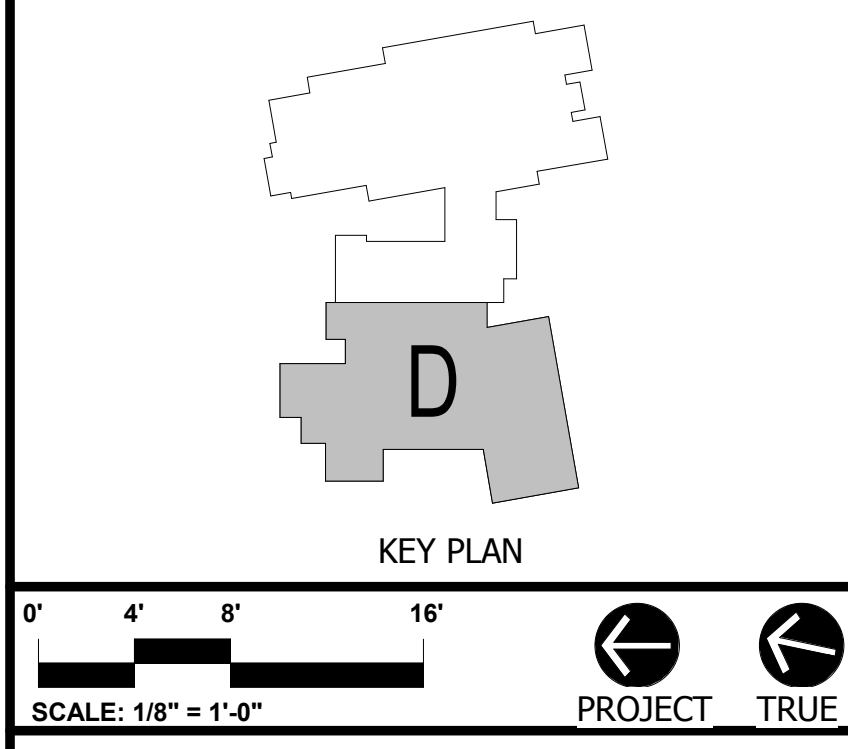
1 MAIN LEVEL - AREA C
1/8" = 1'-0"



1 MAIN LEVEL - AREA D
1/8" = 1'-0"

ISSUE DATE	
DATE	DESCRIPTION
JANUARY 17, 2018	DRAWINGS ISSUED FOR BID.
REVISIONS	
DATE	DESCRIPTION
03/07/18	1.) ADDENDUM #1
03/20/18	2.) ADDENDUM #2

FOR ALL ABBREVIATIONS, SYMBOL LEGENDS, AND GENERAL NOTES SEE SHEET R0.01



**ROCKY HILL
INTERMEDIATE
SCHOOL**
10 SCHOOL ST. ROCKY HILL, CT.
06067
STATE PROJECT NO. 119-0052

PROJECT NO.: 17-061 DRAWN BY: JJZ

**ELECTRICAL
LIGHTING
MAIN LEVEL -
AREA D**
DRAWING NO.:
E1.04

SECTION 09 65 66 - RESILIENT ATHLETIC FLOORING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Contractor, Subcontractors, and/or suppliers providing goods and services referenced in or related to this Section shall also be bound by the Related Documents identified in Division 01 Section "Summary."

1.2 SUMMARY

- A. Section Includes:

- 1. Sheet vinyl flooring.
- 2. Floor preparation.

- B. Related Requirements:

- 1. Division 01 Section "Sustainable Design Requirements."
- 2. Division 03 Section "Concrete Moisture Vapor Reduction Admixture" for integral waterproofing installed in new concrete slabs.
- 3. Division 03 Section "Cast-in-Place Concrete" for monolithic slab finishes specified for substrates.
- 4. Division 09 Section "Resilient Base and Accessories" for wall base and accessories installed with resilient athletic flooring.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.

- B. CTHPB Documentation Submittals: Comply with Division 01 Section "Sustainable Design Requirements" and provide the following in addition to other action submittals:

- 1. Product Data for Credit 5d: For adhesives and sealants, documentation including printed statement of VOC content.
- 2. Product Data for Credit 5d: For resilient athletic flooring, documentation from an independent testing agency indicating compliance with the FloorScore standard.
- 3. Product Data for Credit d8: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.
- 4. Product Certificates for Credit d10: For products and materials required to comply with requirements for regional materials indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material.

Include statement indicating cost for each regional material and the fraction by weight that is considered regional.

C. Shop Drawings: Show installation details and locations of the following:

1. Seam locations for sheet flooring.

D. Samples for Initial Selection: For each type of floor covering indicated.

E. Samples for Verification: For each type, color, and pattern of floor covering indicated, 6-inch-square Samples of same thickness and material indicated for the Work.

1. Seam Samples: For each vinyl sheet flooring color and pattern required; with seam running lengthwise and in center of 6-by-9-inch Sample applied to a rigid backing and prepared by Installer for this Project.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified sheet vinyl flooring Installer.

B. Warranty: Special warranty included in this Section.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For floor coverings to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Sheet Flooring: Furnish full-width rolls of not less than 10 linear feet for each 500 linear feet or fraction thereof, of each type, color, and pattern of flooring installed.

1.7 QUALITY ASSURANCE

A. Sheet Vinyl Flooring Installer Qualifications: An experienced installer who has completed sheet vinyl flooring installations using seaming methods indicated for this Project and similar in material, design, and extent to that indicated for this Project; who is acceptable to manufacturer; and whose work has resulted in installations with a record of successful in-service performance for a minimum of five years.

B. Fire-Test-Response Characteristics: As determined by testing identical products according to ASTM E 648 or NFPA 253 by a qualified testing agency.

1. Critical Radiant Flux Classification: Class I, not less than 0.45 W/sq. cm.

- C. Preconstruction Testing Service: Engage a qualified independent testing agency to perform testing indicated below.
 - 1. ASTM F 3191, Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring.
- D. Preconstruction Testing Service: Moisture testing on new concrete slabs to be performed by manufacturer of moisture vapor reduction admixture in accordance with Division 03 Section "Concrete Moisture Vapor Reduction Admixture."
- E. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to flooring installation including, but not limited to, the following:
 - 1. Review substrate conditions, moisture and pH test results, manufacturer's installation instructions, and warranty requirements.
 - 2. Document proceedings, including required corrective measures.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storing.
- B. Store materials to prevent deterioration.
 - 1. Store the material in a secure, clean and dry location. Maintain temperature between 55 and 85 deg Fahrenheit. Store the indoor resilient athletic surfacing rolls in an upright position on a smooth flat surface immediately upon delivery to jobsite. Rolls shipped in rigid protective cardboard containers can be laid horizontally prior to unpacking and installation.

1.9 PROJECT CONDITIONS

- A. Adhesively Applied Products:
 - 1. Maintain temperatures during installation within range recommended in writing by manufacturer, but not less than 65 deg F or more than 85 deg F, in spaces to receive flooring one week before installation, during installation, and one week after installation unless longer period is recommended in writing by manufacturer.
 - 2. After postinstallation period, maintain temperatures within range recommended in writing by manufacturer, but not less than 65 deg F or more than 85 deg F.
 - 3. Close spaces to traffic during flooring installation.
 - 4. Close spaces to traffic for 48 hours after flooring installation unless manufacturer recommends longer period in writing.
- B. Install floor coverings after other finishing operations, including painting, have been completed.

1.10 WARRANTY

- A. Special Warranty: Written warranty, signed by manufacturer agreeing to repair or replace resilient athletic flooring that fails in performance, materials, or workmanship within specified warranty period.
1. Warranty Period for Material: 10 years from date of Substantial Completion.
 2. Warranty Period for Wear Through: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SHEET VINYL FLOORING

- A. Basis of Design Product: Subject to compliance with requirements, provide **Tarkett Sports; Omnisports 8.3 with Tarkolay**, one of the following, or equal:
1. Gerflor/Taraflex Sports Flooring; Taraflex Sport M Performance with Isolsport.
 2. Mats Inc.; Woodflex 8 mm with Underfloor SL.
- B. Description: Sheet vinyl flooring specifically designed for adhered athletic flooring applications.
- C. Sheet Vinyl Flooring with Backing: ASTM F 1303.
1. Type (Binder Content): Type I, minimum binder content of 90 percent.
 2. Wear-Layer Thickness: 2 mm.
 3. Overall Thickness: 9.4 mm.
 4. Interlayer Material: Foamed plastic.
 5. Backing Class: Class C (foamed plastic).
- D. Seaming Method: Heat welded.
- E. Traffic-Surface Texture: Slightly textured, embossed.
- F. Applied Finish: Factory-applied UV urethane.
- G. Roll Size: Not less than 6'-6" wide by longest length that is practical to minimize splicing during installation.
- H. Color and Pattern: Wood look, as selected by Architect from manufacturer's full range.
- I. Slip Sheet: Low permeance slip sheet vapor retarder to separate installed system from substrate.

2.2 ACCESSORIES

- A. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer. Comply with Division 09 Section "Resilient Tile Flooring" for preparation underlayments.
- B. Adhesives: Water-resistant type recommended in writing by manufacturer for substrate and conditions indicated.
 - 1. Adhesives shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written recommendations to ensure adhesion of floor coverings.
- B. Grind high spots and fill low spots on concrete substrates to produce a maximum 1/8-inch deviation in any direction when checked with a 10-foot straight edge.
 - 1. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, and depressions in substrates.
- C. Concrete Substrates: Prepare according to ASTM F 710.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Alkalinity Testing: Perform pH testing according to ASTM F 710. Proceed with installation only if pH readings are not less than 7.0 and not greater than 8.5.
 - 3. Moisture testing for new concrete slabs that contain integral waterproofing in accordance with Division 03 Section "Concrete Moisture Vapor Reduction System."
 - a. Drilled sample cores of concrete slabs on grade will be tested for permeability and test results provided by the integral waterproofing manufacturer.

4. Porosity Testing: Perform tests as follows prior to installation of flooring.
 - a. Perform water absorption testing in accordance with ASTM F 3191 to determine if the substrate surface is porous or non-porous.
 - b. Substrate and ambient temperature: 75 +/- 10 degrees F.
 - c. Ambient humidity: 50 +/- 10 percent relative humidity.
- D. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended in writing by manufacturer. Do not use solvents.
- E. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates.
- F. Move floor coverings and installation materials into spaces where they will be installed at least 48 hours in advance of installation, unless manufacturer recommends a longer period in writing.
 1. Do not install floor coverings until they are same temperature as space where they are to be installed.
- G. Sweep and vacuum clean substrates to be covered by floor coverings immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 FLOOR COVERING INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions.
- B. Scribe, cut, and fit floor coverings to butt neatly and tightly to vertical surfaces, equipment anchors, floor outlets, and other interruptions of floor surface.
- C. Extend floor coverings into toe spaces, door reveals, closets, and similar openings, unless otherwise indicated.
- D. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating subfloor markings on floor coverings. Use nonpermanent, nonstaining marking device.

3.4 SHEET FLOORING INSTALLATION

- A. Unroll sheet flooring and allow it to stabilize before cutting and fitting.
- B. Lay out sheet flooring as follows:
 1. Maintain uniformity of flooring direction.
 2. Minimize number of seams; place seams in inconspicuous and low-traffic areas, at least 6 inches away from parallel joints in flooring substrates.
 3. Match edges of flooring for color shading at seams.

4. Locate seams per approved Shop Drawings.
- C. Adhered Flooring: Adhere products to substrates using a full spread of adhesive applied to substrate to comply with adhesive and flooring manufacturers' written instructions, including those for trowel notching, adhesive mixing, and adhesive open and working times.
 1. Provide completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- D. Vinyl Sheet Flooring Seams: Prepare and finish seams to produce surfaces flush with adjoining flooring surfaces.
 1. Heat-Welded Seams: Comply with ASTM F 1516. Rout joints and use welding bead to permanently fuse sections into a seamless flooring.

3.5 CLEANING AND PROTECTING

- A. Perform the following operations immediately after completing floor covering installation:
 1. Remove adhesive and other blemishes from floor covering surfaces.
 2. Sweep and vacuum floor coverings thoroughly.
 3. Damp-mop floor coverings to remove marks and soil.
 - a. Do not wash floor coverings until after time period recommended in writing by manufacturer.
- B. Protect floor coverings from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
 1. Do not move heavy and sharp objects directly over floor coverings. Protect floor coverings with plywood or hardboard panels to prevent damage from storing or moving objects over floor coverings.

END OF SECTION 09 65 66

SECTION 10 12 00 - DISPLAY CASES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Contractor, Subcontractors, and/or suppliers providing goods and services referenced in or related to this Section shall also be bound by the Related Documents identified in Division 01 Section "Summary."

1.2 SUMMARY

- A. Section Includes:

- 1. Bulletin boards (poster cases).
- 2. Illuminated display cases.

- B. Related Sections:

- 1. Division 01 Section "Sustainable Design Requirements."
- 2. Division 06 Section "Miscellaneous Rough Carpentry" for wood blocking.
- 3. Division 26 Electrical Sections for wiring and other electrical work associated with illuminated display cases.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for display cases.
- B. CTHPB Documentation Submittals: Comply with Division 01 Section "Sustainable Design Requirements" and provide the following in addition to other action submittals:
 - 1. Product Data for Credit 5d: For adhesives and sealants, documentation including printed statement of VOC content.
 - 2. Product Data for Credit d8: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.
 - 3. Product Certificates for Credit d10: For products and materials required to comply with requirements for regional materials indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include statement indicating cost for each regional material and the fraction by weight that is considered regional.

- C. Shop Drawings: For display cases. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Show location of seams and joints in visual display surfaces.
 - 2. Include sections of typical trim members.
 - 3. Wiring Diagrams: For power, signal, and control wiring.
- D. Samples for Initial Selection: For units with factory-applied color finishes, and as follows:
 - 1. Actual sections of visual display surfaces.
- E. Samples for Verification: For each type of product indicated.
 - 1. Visual Display Surface: Not less than 8-1/2 by 11 inches, mounted on substrate indicated for final Work. Include one panel for each type, color, and texture required.
 - 2. Trim: 6-inch- long sections of each trim profile including corner section.
- F. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for surface-burning characteristics of fabrics.
- G. Maintenance Data: For visual display surfaces, operating hardware[, and illuminated units] to include in maintenance manuals.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain display cases from single source from single manufacturer.
- B. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. Preinstallation Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install display cases until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above ceilings is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Verify actual dimensions of openings for display cases by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Hardwood Plywood: HPVA HP-1, made with adhesive containing no urea formaldehyde.
- B. Extruded-Aluminum Bars and Shapes: ASTM B 221, Alloy 6063.
- C. Clear Tempered Glass: ASTM C 1048, Kind FT, Condition A, Type I, Class 1, Quality Q3, with exposed edges seamed before tempering, and 6 mm thick unless otherwise indicated.
- D. High-Pressure Plastic Laminate: NEMA LD 3.
- E. Fasteners: Provide screws, bolts, and other fastening devices made from same material as items being fastened, except provide hot-dip galvanized, stainless-steel, or aluminum fasteners for exterior applications. Provide types, sizes, and lengths to suit installation conditions. Use security fasteners where exposed to view.
- F. Adhesives: Manufacturer's standard product that complies with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

2.2 BULLETIN BOARDS (POSTER CASES)

- A. Basis of Design Product: Subject to compliance with requirements, provide **The Tablet & Ticket Co.; 800 Series**, or comparable product by one of the following:
 - 1. Claridge Products and Equipment.
 - 2. Waddell.
- B. General: Factory-fabricated unit consisting of manufacturer's standard wall-mounted cabinet with tackboard assembly on back inside surface and operable glazed doors at front.
- C. Aluminum-Framed Cabinet: Extruded aluminum; with clear anodic finish.
- D. Cabinet Corners: Square.
- E. Glazed Hinged Doors: Tempered glass; set in frame matching cabinet material and finish. Equip each door with full-height continuous hinge and cylinder lock with two keys.
 - 1. Thickness: Not less than 6 mm thick.
 - 2. Number of Doors: One for units less than 48 inches wide, two for units over 48 inches wide.
- F. Linoleum Resilient Tackboard Assembly: 1/4-inch-thick minimum, linoleum resilient tackable surface material, factory laminated to 1/4-inch-thick hardboard backing.

1. Provide linoleum resilient homogeneous tackable surface material of natural materials consisting of linseed oil, granulated cork, rosin binders and dry pigments, mixed and calendered onto a natural jute backing. Uni-color shall extend through thickness of material.
2. Color: As selected by Architect from manufacturer's full range of colors.
3. Product: Subject to compliance with requirements, provide the following, or equal:
 - a. Forbo Bulletin Board; Forbo.

G. Width: As indicated on Drawings.

H. Height: 48 inches, unless otherwise indicated on Drawings.

I. Depth: 2 inches.

J. Mounting Height: Set bottom of unit at 3'-4" above finished floor, unless otherwise indicated on Drawings.

K. Mounting: Surface mounted.

2.3 DISPLAY CASES

A. Basis of Design Product: Subject to compliance with requirements, provide products by **The Tablet & Ticket Co.**, or comparable product by one of the following:

1. Claridge Products and Equipment.
2. Waddell.

B. Recessed Display Case: Factory-fabricated display case; with finished interior, glazed doors at front, and trim on face to cover edge of recessed opening.

1. Cabinet Box: Factory assembled aluminum cabinet, 0.090" aluminum walls with 3/4-inch AC plywood backing. Provide plastic laminate finish on sides and bottom panels.
2. Cabinet Frame and Trim: Aluminum.
3. Aluminum Finish: Clear anodic.
4. Hinged Doors: Provide hinged doors for display cases less than 48 inches wide.
5. Sliding Doors: Provide sliding doors for display cases more than 48 inches wide.

C. Glazed Sliding Doors: Tempered glass; unframed; with extruded-aluminum top and bottom track; supported on nylon or ball-bearing rollers; with plastic top guide and rubber bumpers. Equip each door with ground finger pull and adjustable cylinder lock with two keys.

1. Thickness: Not less than 1/4-inch (6 mm) thick.
2. Number of Doors: Four.

D. Glazed Hinged Doors: Tempered glass; set in frame matching cabinet material and finish. Equip each door with full-height continuous hinge and cylinder lock with two keys.

1. Thickness: Not less than 6 mm thick.

- E. Shelves: 6-mm-thick tempered glass; supported on adjustable shelf standards and supports.
 - 1. Shelf Width: As indicated.
 - 2. Number of Shelves: As indicated.
- F. Adjustable Shelf Standards and Supports: BHMA A156.9, B04102; with shelf brackets, B04112; recess mounted in rear surface. Provide standards full height of display case.
 - 1. At double sided cases, provide recess mounted in sides of case, with intermediate posts.
- G. Linoleum Resilient Tackboard Assembly: 1/4-inch-thick minimum, linoleum resilient tackable surface material, factory laminated to 1/4-inch-thick hardboard backing.
 - 1. Provide linoleum resilient homogeneous tackable surface material of natural materials consisting of linseed oil, granulated cork, rosin binders and dry pigments, mixed and calendered onto a natural jute backing. Uni-color shall extend through thickness of material.
 - 2. Color: As selected by Architect from manufacturer's full range of colors.
 - 3. Product: Subject to compliance with requirements, provide the following, or equal:
 - a. Forbo Bulletin Board; Forbo.
- H. Illumination System: Concealed top-lighting system consisting of LED fixtures. Include lamps and internal wiring with single concealed electrical connection to building system. Coordinate electrical characteristics with power supply provided.
- I. Width, Depth and Height: As indicated on Drawings.

2.4 FABRICATION

- A. Fabricate bulletin boards and display cases to requirements indicated for dimensions, design, and thickness and finish of materials.
- B. Use metals and shapes of thickness and reinforcing to produce flat surfaces, free of oil-canning, and to impart strength for size, design, and application indicated.
- C. Fabricate cabinets and door frames with reinforced corners, mitered to a hairline fit, with no exposed fasteners.
- D. Fabricate shelf standards plumb and at heights to align shelf brackets for level shelves.

2.5 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.6 ALUMINUM FINISHES

- A. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine walls, with Installer present, for compliance with requirements for installation tolerances, surface conditions of wall, and other conditions affecting performance of the Work.
- B. Examine roughing-in for electrical power system to verify actual locations of connections before installation of illuminated units.
- C. Examine walls and partitions for proper backing for display cases.
- D. Examine walls and partitions for suitable framing depth where recessed units will be installed.
- E. Proceed with installation only after unsatisfactory conditions have been corrected. Commencement of work indicates acceptance of substrates.

3.2 PREPARATION

- A. Prepare recesses for display cases as required by type and size of unit.

3.3 INSTALLATION

- A. General: Install units in locations and at mounting heights indicated on Drawings, or if not indicated, at heights indicated below. Keep perimeter lines straight, level, and plumb. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for complete installation.
- B. Recessed Display Cases: Attach units to wall framing with fasteners at not more than 16 inches o.c. Attach aluminum trim over edges of recessed display cases and conceal grounds and clips. Attach trim with fasteners at not more than 24 inches o.c.
- C. Surface-Mounted Display Cases: Attach units to wall surfaces with concealed clips, hangers, or grounds fastened at not more than 16 inches o.c. Secure both top and bottom of display cases to walls.

- D. Comply with requirements in Division 26 for connecting illuminated display cases.
 - 1. After installation is complete, install new LED lamps.
- E. Install display case shelving level and straight.

3.4 ADJUSTING AND CLEANING

- A. Adjust doors to operate smoothly without warp or bind and so contact points meet accurately. Lubricate operating hardware as recommended by manufacturer.
- B. Touch up factory-applied finishes to restore damaged or soiled areas.

END OF SECTION 10 12 00

SECTION 12 24 13 - ROLLER WINDOW SHADES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The Contractor, Subcontractors, and/or suppliers providing goods and services referenced in or related to this Section shall also be bound by the Related Documents identified in Division 01 Section "Summary."

1.2 SUMMARY

A. Section Includes:

1. Manually operated roller shades with single rollers.
- ~~2. Manually operated roller shades with double rollers.~~
3. Motor-operated roller shades with **single** rollers.
4. Manually operated spring roller shades for interior doors, **sidelights and borrowed lites**.

B. Related Sections include the following:

1. Division 01 Section "Sustainable Design Requirements."
2. Division 06 Section "Miscellaneous Rough Carpentry" for wood blocking and grounds for mounting roller shades and accessories.
3. Division 26 Sections for electrical service and connections for motor operators, controls, limit switches, and other powered devices and for system disconnect switches for motorized shade operation.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include styles, material descriptions, construction details, dimensions of individual components and profiles, features, finishes, and operating instructions.

1. Motorized Shade Operators: Include operating instructions.
2. Motors: Show nameplate data, ratings, characteristics, and mounting arrangements.

- B. CTHPB Documentation Submittals: Comply with Division 01 Section "Sustainable Design Requirements" and provide the following in addition to other action submittals:

1. Product Data for Credit d8: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.

- C. Shop Drawings: Show location and extent of roller shades. Include elevations, sections, details, and dimensions not shown in Product Data. Show installation details, mountings, attachments to other work, operational clearances, and relationship to adjoining work.
 - 1. Motorized Shade Operators: Show locations and details for installing operator components, switches, and controls. Indicate motor size, electrical characteristics, drive arrangement, mounting, and grounding provisions.
 - 2. Wiring Diagrams: Power, system, and control wiring.
- D. Samples for Initial Selection: For each colored component of each type of shade indicated.
 - 1. Include similar Samples of accessories involving color selection.
- E. Samples for Verification:
 - 1. Complete, full-size operating unit not less than 16 inches wide for each type of roller shade indicated.
 - 2. For the following products:
 - a. Shade Material: Not less than 3 inches square, with specified treatments applied. Mark face of material.
- F. Window Treatment Schedule: For roller shades. Use same designations indicated on Drawings.
- G. Product Certificates: For each type of roller shade, signed by product manufacturer.
- H. Qualification Data: For Installer.
- I. Product Test Reports: For each type of roller shade.
- J. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each type of roller shade.
- K. Maintenance Data: For roller shades to include in maintenance manuals. Include the following:
 - 1. Methods for maintaining roller shades and finishes.
 - 2. Precautions about cleaning materials and methods that could be detrimental to fabrics, finishes, and performance.
 - 3. Operating hardware.
- L. Warranty: Special warranty included in this Section.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Installer trained and certified by the manufacturer with a minimum of ten years' experience in installing products comparable to those specified in this section.
- B. Source Limitations: Obtain roller shades through one source from a single manufacturer.

- C. Fire-Test-Response Characteristics: Provide roller shade band materials with the fire-test-response characteristics indicated, as determined by testing identical products per test method indicated below by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
 - 1. Flame-Resistance Ratings: Passes NFPA 701.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- E. Product Standard: Provide roller shades complying with WCMA A 100.1.
- F. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver shades in factory packages, marked with manufacturer and product name, fire-test-response characteristics, lead-free designation, and location of installation using same designations indicated on Drawings and in a window treatment schedule.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install roller shades until construction and wet and dirty finish work in spaces, including painting, is complete and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Where roller shades are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Allow clearances for operable glazed units' operation hardware throughout the entire operating range. Notify Architect of discrepancies. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of manual roller shades that fail in performance, materials, or workmanship within specified warranty period.
 - 1. Warranty Period for Chain and Shadecloth: 25 years from date of Substantial Completion.
 - 2. Warranty Period for Motors and Motor Control System: 5 years from date of Substantial Completion.

3. Warranty Period for Installation: One year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUALLY OPERATED SHADES WITH SINGLE ROLLERS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide **MechoShade Systems, Inc.; MechoShade Mecho/5** or comparable product by one of the following:
 1. Draper Inc.; FlexShade.
 2. Hunter Douglas Contract; RB 500.
- B. Rollers: Extruded-aluminum roller tubes of diameter and wall thickness required to support and fit internal components of operating system and the weight and width of shade band material without sagging; designed to be easily removable from support brackets. Provide positive mechanical engagement of drive mechanism to shade roller tube. Friction fit connectors for drive mechanism connection to shade roller tube are not acceptable.
 1. Roller Drive-End Location: Right side of inside face of shade.
 2. Direction of Shadeband Roll: Regular, from back of roller.
 3. Shadeband-to-Roller Attachment: Manufacturer's standard method.
- C. Mounting Hardware: Brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated.
- D. Installation Accessories:
 1. Front Fascia: Aluminum extrusion that conceals front and underside of roller and operating mechanism and attaches to roller endcaps without exposed fasteners.
 - a. Shape: L-shaped.
 - b. Height: Manufacturer's standard height required to conceal roller and shadeband when shade is fully open, but not less than 4 inches.
 - c. Provide optional wall mount angle for wall mounted and window mounted shades.
 2. Endcap Covers: To cover exposed endcaps.
 - ~~3. Recessed Shade Pocket: Rectangular, extruded aluminum enclosure designed for recessed ceiling installation; with front, top, and back formed as one piece, end plates, and removable bottom closure panel.
 - ~~a. Height: Manufacturer's standard height required to enclose roller and shadeband when shade is fully open, but not less than 5 inches.~~
 - ~~b. Provide ceiling pocket Model 4124, with lip at lower edge to support acoustical ceiling panel.~~~~
 4. Installation Accessories Color and Finish: As selected from manufacturer's full range.

5. Provide the following accessories for Art:

- a. Tension kit assembly for angled mounting.**
- b. Exposed hembar.**
- c. Pocket type #7113 for ceiling mounting, installed level and parallel to window wall.**

- E. Shade Operation: Manual; with 90 lb. stainless steel continuous-loop bead-chain, clutch, and chain retainer.
1. Clutch: Capacity to lift size and weight of shade; sized to fit roller or provide adaptor. Delrin and stainless steel; commercial grade. Provide shade hardware constructed of minimum 1/8-inch thick plated steel or heavier as required to support 150 percent of the full weight of each shade.
 2. Lift Assist Mechanism: Manufacturer's standard spring assist for balancing roller shade weight and lifting heavy roller shades as required for size of shade.
 3. Loop Length: Full length of roller shade.
 4. Bead Chain: Stainless steel. 90 lb. test.
 5. Cord Tensioner Mounting: Sill.
 6. Operating Function: Static; stop and hold shade at any position in ascending or descending travel.
 7. Fascia: Continuous extruded aluminum SnapLoc type. Bent steel will not be accepted.
 8. Shadeband: Provide for positive mechanical attachment of shade band to roller tube; shade band shall be made removable / replaceable with a "snap-on" snap-off" spline mounting, without having to remove shade roller from shade brackets.
 9. Mounting spline: shall not require use of adhesives, adhesive tapes, staples, and/or rivets.
 10. Any method of attaching shade band to roller tube that requires the use of: adhesive, adhesive tapes, staples, and/or rivets are not acceptable.
- F. Manual Operated Chain Drive Hardware and Brackets: Provide for universal, regular and offset drive capacity, allowing drive chain to fall at front, rear or non-offset for all shade drive end brackets. Universal offset shall be adjustable for future change.
1. Drive Bracket and Brake Assembly: Drive sprocket and brake assembly shall rotate and be supported on a welded 3/8-inch steel pin.
 2. Brake: Provide an over -running clutch design which disengages to 90 percent during the raising and lowering of a shade. The brake shall withstand a pull force of 50 lbs. in the stopped position.
 3. Braking mechanism: Applied to an oil-impregnated hub on to which the brake system is mounted. The oil impregnated hub design includes an articulated brake assembly, which assures a smooth, non-jerky operation in raising and lowering the shades. The assembly shall be permanently lubricated. Products that require externally applied lubrication and or not permanently lubricated are not acceptable.
 4. The entire assembly shall be fully mounted on the steel support bracket, and fully independent of the shade tube assembly, which may be removed and reinstalled without effecting the roller shade limit adjustments.
- G. Shadebands:
1. Shadeband Material: **Light-filtering or light-blocking fabric, as indicated.**

~~2.2 MANUALLY OPERATED SHADES WITH DOUBLE ROLLERS~~

~~2.3 MOTOR OPERATED, DOUBLE ROLLER SHADES~~

2.4 MOTOR-OPERATED, SINGLE-ROLLER SHADES

- A. Basis-of-Design Product: Subject to compliance with requirements, provide **MechoShade Systems, Inc.; ElectroShade Electro1** or comparable product by one of the following:
1. Draper Inc.; Motorized FlexShade.
 2. Hunter Douglas Contract; RB 500.
- B. Rollers: Extruded-aluminum tubes of diameters and wall thicknesses required to accommodate operating mechanisms and weights and widths of shadebands indicated without deflection. Provide with permanently lubricated drive-end assemblies and idle-end assemblies designed to facilitate removal of shadebands for service.
1. Roller Drive-End Location: Right side of inside face of shade.
 2. Direction of Shadeband Roll: Regular, from back of roller.
 3. Shadeband-to-Roller Attachment: Manufacturer's standard method.
- C. Mounting Hardware: Brackets or endcaps, corrosion resistant and compatible with roller assembly, operating mechanism, installation accessories, and mounting location and conditions indicated.
- D. Roller-Coupling Assemblies: Coordinated with operating mechanism and designed to join up to three inline rollers that are operated by one roller drive-end assembly.
- E. Installation Accessories:
1. Front Fascia: Aluminum extrusion that conceals front and underside of roller and operating mechanism and attaches to roller endcaps without exposed fasteners.
 - a. Shape: L-shaped.
 - b. Height: Manufacturer's standard height required to conceal roller and shadeband when shade is fully open, but not less than 4 inches.
 - c. Provide optional wall mount angle for wall mounted and window mounted shades.
 2. Endcap Covers: To cover exposed endcaps.
 3. Provide the following accessories for Cafeteria:
 - a. Side Channels: With light seals and designed to eliminate light gaps at sides of shades as shades are drawn down. Provide side channels with shadeband guides or other means of aligning shadebands with channels at tops.
 - b. Bottom (Sill) Channel or Angle: With light seals and designed to eliminate light gaps at bottoms of shades when shades are closed.

- c. Tension kit assembly for angled mounting.
- d. Exposed hembar.
- e. Pocket type #7113 for ceiling mounting, installed level and parallel to window wall.

F. **Shadebands:**

- 1. **Shadeband Material: Light-blocking.**

2.5 **SHADEBAND MATERIALS**

A. **Light-Filtering Fabric: 85% PVC coating, 15% polyester core.**

- 1. **Basis of Design Product:** Subject to compliance with requirements, provide **MechoShade Systems, Inc.; EuroVeil 5300 Series** or comparable product by one of the following:
 - a. Draper Inc.
 - b. Hunter Douglas Contract.
- 2. **Colors:** As indicated on Finish Legend.
- 3. **Material Openness Factor:** 5 percent.
- 4. **Bottom Hem:** Straight.

B. **Light-Blocking Fabric: Opaque fabric, 75% PVC coating, 25% polyester core.**

- 1. **Basis of Design Product:** Subject to compliance with requirements, provide **MechoShade Systems, Inc.; Classic Blackout 0700 Series** or comparable product by one of the following:
 - a. Draper Inc.
 - b. Hunter Douglas Contract.
- 2. **Color:** As selected by Architect from manufacturer's full range.
- 3. **Bottom Hem:** Straight.

2.6 **MANUALLY OPERATED SHADES WITH SINGLE **SPRING ROLLERS****

A. **Basis-of-Design Product:** Subject to compliance with requirements, provide the following, or equal:

- 1. **Draper Inc.; Spring Roller FlexShade.**

B. **Spring Operating Mechanisms:** Roller contains spring sized to accommodate shade size indicated. Provide with positive locking mechanism that can stop shade movement at each half-turn of roller and with manufacturer's standard pull.

1. Roller Tube: 1-1/4-inch diameter, one piece, heavy gauge steel, roll formed with rust resistant finish. Roller tube includes groove for spline attachment of fabric with continuous wire or clips.
2. Mechanism: Inertia/gravity driven, ball bearing catch style, 2-stop design. Lock bearings housed in nylon type 6 cylinder and bushing, completely enclosed. Roller bushing is self-lubricating for life. Spring spindle made of round aluminum tubing, removable for replacement on site.
3. Idler Pin: Case hardened steel, fixed in nylon plug, securely held in roller tube by friction.
4. Brackets: Universal brackets for face mounting.
5. Pulley and Cord: Provide locking pulley with cord in length required to operate shade from open position on door at 48" above finish floor maximum.

C. Shadeband Material: Light-blocking fabric.

2.7 SHADE MOTOR DRIVE SYSTEM

A. Motorized Operating System: Provide factory-assembled, shade-operator system of size and capacity and with features, characteristics, and accessories suitable for conditions indicated, complete with electric motor and factory-rewired motor controls, power disconnect switch, enclosures protecting controls and operating parts, and accessories required for reliable operation without malfunction. Include wiring from motor controls to motors. Coordinate operator wiring requirements and electrical characteristics with building electrical system.

1. Basis of Design Product: Subject to compliance with requirements, provide the following, or equal:

a. MechoShade Systems, Inc.; Intelligent Control System / WhisperShade IQ2.

B. Electronic Drive Unit (EDU):

1. Intelligent Encoded EDU, and Control System: Tubular, asynchronous (non-synchronous) EDU's, with built-in reversible capacitor operating at 120VAC/60Hz, (230VAC/50Hz) single phase, temperature Class B, thermally protected, totally enclosed, maintenance free with line voltage power supply equipped with locking disconnect plug assembly furnished with each EDU.
2. Quiet 42 – 46 db (within 3 feet open air).
3. Conceal EDU's inside shade roller tube.
4. Maximum current draw for each shade EDU of 0.9Amps at 120VAC.
5. Use EDU's rated at the same nominal speed for all shades in the same room.
6. Use EDU's with minimum of 34RPM, that shall not vary due to load / lift capacity.
7. Total hanging weight of shade band shall not exceed 80 percent of the rated lifting capacity of the shade EDU and tube assembly.

C. EDU System (software, two-way communication): EDU shall support two methods of control.

1. Local Dry Contact Control Inputs:

- a. EDU shall be equipped with dry contact inputs to support moving the EDU/shade to the upper and lower limits.
 - b. EDU shall be equipped with dry contact inputs to support moving the EDU/shade to local switch preset positions.
 - c. Shall support configuring the EDU under protected sequences so that a typical user would not change the EDU's setup. At a minimum the configuration should include setting limits, setting custom presets and configuring key modes of operation.
2. Network Control:
- a. EDU shall be equipped with a bi-directional network communication capability in order to support commanding the operation of large groups of shades over a common backbone. The network communication card shall be embedded into the tubular EDU assembly.
3. Upper and lower stopping points (operating limits) of shade bands shall be programmed into EDU's using either a hand held removable program module / configurator or a local switch.
4. Alignment Positions: Each EDU shall support a minimum of 133 repeatable and precisely aligned shade positions (including limits and presets).
- a. All shades on the same switch circuit or with the same network group address with the same opening height shall align at each limit or preset (intermediate stopping position) when traveling from any position, up or down.
 - b. Shades of differing heights shall have capability for custom, aligned intermediate stop positions when traveling from any position, up or down.
 - c. Alignment of shades mechanically aligned on the same EDU shall not exceed +/- 0.125 inches when commanded to the same alignment position.
 - d. Alignment of shades on adjacent EDU's shall not exceed +/- 0.25" inches when commanded to the same alignment position.
 - e. Local Switch Presets: A minimum of 3 customizable preset positions shall be accessible over the local dry contact control inputs and over the network connection.
 - 1) Upon setting the limits for the shade EDU these preset positions shall automatically default to 25%, 50% and 57% of the shade travel.
 - 2) These positions shall be capable of being customized to any position between and including the upper and lower limits of the shade. A removable program module / configurator or local switch shall be capable of customizing the position of these presets.
 - f. Network Presets: A minimum of 29 customizable preset positions (including the 3 local switch presets) shall be accessible via network commands.
 - 1) Upon setting the limits for the shade EDU these preset positions shall automatically default to the lower limit unless customized elsewhere.
 - 2) These positions shall be capable of being customized to any position between and including the upper and lower limits of the shade. A

removable program module / configurator shall be capable of customizing the position of these presets.

5. Network Control:

- a. The system shall have the capability of two-way digital communication with the EDU's over a common backbone.
- b. Each EDU shall possess 8 addresses capable of being employed for various levels of group control. These addresses shall be configurable via a handheld configurator and/or a PC controller. A 9th unique address shall enable the EDU(s) to be independently controlled and configured over the network via a handheld configurator and/or a PC controller.
- c. Low Voltage Communication Network Implementation.
 - 1) The low voltage network shall employ a bus topology with daisy chained network connections between nodes over a CAT5 cable (4 UTP) or over a 2 UTP cable employing at least 1 pair at 16 AWG for power and 1 pair at 22 AWG for data.
 - 2) The low voltage network (+/- 13VDC) shall be powered by the nodes attached to it. These nodes could be line voltage powered EDU's attached to 120 VAC or 230 VAC. Alternatively, low voltage nodes shall be powered typically by a centralized low voltage power supply. If a CAT5 network cable is employed and the node draws less than 1W then the node may be powered by DC power supplied by an associated line voltage EDU.
 - 3) Network Capacity: 4000 ft max, 250 nodes max.
 - a) The number and size of a centralized DC supply shall vary depending upon the network requirements.

6. Operating Modes: Uniform or normal modes of operation:

- a. Uniform mode shall allow for shades to only move to defined intermediate stop positions to maintain maximum uniformity and organization.
- b. Normal Mode shall allow for shades to move to both intermediate stop positions, plus any position desired between the upper and lower limits as set by the installer.

7. Wall Switches:

- a. Conference Center: Shades shall be operated by, 5, 7, or 10-button low voltage standard switches, or programmable intelligent switches [IS]. Standard switch shall be wired to a bus interface and the bus interface will be programmed to transmit an address for the local switch.
- b. Intelligent switches may be installed anywhere on the bus line. Each IS shall be capable of storing one control level address to be broadcast along the bus line.
- c. An address that is transmitted by either a switch or central controller shall be responded to by those EDU's with the same address in their control table.
- d. IS shall provide for interface with other low voltage input devices via a set of dry contact terminals located on the switch.
- e. Standard switch or IS may control an individual, sub-group or group of EDU's in accordance with the address in each EDU.

2.8 ROLLER SHADE FABRICATION

- A. Product Description: Roller shade consisting of a roller, a means of supporting the roller, a flexible sheet or band of material carried by the roller, a means of attaching the material to the roller, a bottom bar, and an operating mechanism that lifts and lowers the shade.
1. Hem Pockets and Hem Weights: Fabric hem pocket with RF-welded seams (including welded ends) and concealed hem weights. Hem weights shall be of appropriate size and weight for shade band. Hem weight shall be continuous inside a sealed hem pocket. Hem pocket construction and hem weights shall be similar, for all shades within one room. Sewn seams or hem pockets with open ends will not be accepted.
 2. Shade band and Shade Roller Attachment:
 - a. Use extruded aluminum shade roller tube of a diameter and wall thickness required to support shade fabric without excessive deflection. Roller tubes less than 1.55 inch in diameter for manual shades, and less than 2.55 inches for motorize shades are not acceptable.
 - b. Provide for positive mechanical engagement with drive / brake mechanism.
 - c. Provide for positive mechanical attachment of shade band to roller tube; shade band shall be made removable / replaceable with a "snap-on" snap-off" spline mounting, without having to remove shade roller from shade brackets.
 - d. Mounting spline shall not require use of adhesives, adhesive tapes, staples, and/or rivets.
 - e. Any method of attaching shade band to roller tube that requires the use of: adhesive, adhesive tapes, staples, and/or rivets are not acceptable.
- B. Concealed Components: Noncorrodible or corrosion-resistant-coated materials.
1. Lifting Mechanism: With permanently lubricated moving parts.
- C. Unit Sizes: Obtain units fabricated in sizes to fill window and other openings as follows, measured at 74 deg F:
1. Between (Inside) Jamb Installation: Width equal to jamb-to-jamb dimension of opening in which shade is installed less 1/4 inch per side or 1/2-inch total, plus or minus 1/8 inch. Length equal to head-to-sill or -floor dimension of opening in which shade is installed less 1/4 inch, plus or minus 1/8 inch.
 2. Outside of Jamb Installation: Width and length as indicated, with terminations between shades of end-to-end installations at centerlines of mullion or other defined vertical separations between openings.
- D. Fabricate shadecloth to hang flat without buckling or distortion. Fabricate with heat-sealed trimmed edges to hang straight without curling or raveling. Fabricate unguided shadecloth to roll true and straight without shifting sideways more than 1/8 inch in either direction per 8 feet of shade height due to warp distortion or weave design.
1. Fabricate hem as follows: Concealed hemtube.

- E. For railroaded shadebands, provide seams in railroaded multi-width shadebands as required to meet size requirements and in accordance with seam alignment as acceptable to Architect. Seams shall be properly located. Furnish battens in place of plain seams when the width, height, or weight of the shade exceeds manufacturer's standards. In absence of such standards, assure proper use of seams or battens as required to, and assure the proper tracking of the railroaded multi-width shadebands.
 - 1. Provide battens for railroaded shades when width-to-height (W:H) ratios meet or exceed manufacturer's standards. In absence of manufacturer's standards, be responsible for proper use and placement of battens to assure proper tracking and roll of shadebands.
- F. Installation Brackets: Designed for easy removal and reinstallation of shade, for supporting headbox, roller, and operating hardware and for hardware position and shade mounting method indicated.
 - 1. Provide shade hardware allowing for the removal of shade roller tube from brackets without removing hardware from opening and without requiring end or center supports to be removed.
 - 2. Provide shade hardware that allows for removal and re-mounting of the shade bands without having to remove the shade tube, drive or operating support brackets.
 - 3. Use only Delrin engineered plastics by DuPont for all plastic components of shade hardware. Styrene based plastics, and /or polyester, or reinforced polyester will not be acceptable.
- G. Installation Fasteners: No fewer than two fasteners per bracket, fabricated from metal noncorrosive to shade hardware and adjoining construction; type designed for securing to supporting substrate; and supporting shades and accessories under conditions of normal use.
- H. Color-Coated Finish: For metal components exposed to view, apply manufacturer's standard baked finish complying with manufacturer's written instructions for surface preparation including pretreatment, application, baking, and minimum dry film thickness.
- I. Colors of Metal and Plastic Components Exposed to View: Matching or coordinating with shade band color, unless otherwise indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, operational clearances, and other conditions affecting performance.
 - 1. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROLLER SHADE INSTALLATION

- A. Install roller shades level, plumb, and aligned with adjacent units according to manufacturer's written instructions, and located so shade band is not closer than 2 inches to interior face of glass. Allow clearances for window operation hardware.

3.3 ADJUSTING

- A. Adjust and balance roller shades to operate smoothly, easily, safely, and free from binding or malfunction throughout entire operational range.

3.4 CLEANING AND PROTECTION

- A. Clean roller shade surfaces after installation, according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of Substantial Completion.
- C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain roller shades. Refer to Division 01 Section "Demonstration and Training."

3.6 ROLLER SHADE SCHEDULE

- A. Refer to the Roller Shade Location Schedule at the end of this Section, a total of 6 pages.
 - 1. Provide manually operated single roller shades for exterior windows, unless otherwise indicated as electric on Schedule.
 - 2. Provide manually operated spring roller shades on interior doors, sidelights and borrowed lites as indicated on Schedule.

END OF SECTION 12 24 13