



Halifax

RFT# 4239 - Addendum #2 Heat Pumps and Electrical Service Bicentennial School

To: All Bidders
Date: May 30, 2024
From: Nancy Rideout, Purchasing Manager
Office: (902) 464-2000 ext. 2222
Email: nrideout@hrce.ca

The bid documents shall be amended, and new drawings and clauses added, and shall become part of the contract documents as follows:

Question #1

Reference section 24 81 35, VRF Multi Split System. I would like to request that Samsung be approved as an alternate.

Response:

The requested alternate is accepted.

Reference Specification section 24 81 35 Variable Refrigerant Flow Multi Split Systems:

- Add "2.8.4 Samsung to the requirements listed above"

Question #2

(Part 1) Is HRCE aware of any asbestos within the building and is there an asbestos report?

(Part 2) For the heat pump condensing unit stands – are aluminum stands acceptable?

(Part 3) On drawing MV-104, there is a note regarding the structural stand for AC-1 to see structural drawings for information. Assuming the stand is part of this tender package, please provide structural drawings.

(Part 4) On drawing MV-104, there is note to refer to architectural drawings for roof infill information. There is architectural drawing with roofing information, could this please be provided?

(Part 5) Is there a warranty on the existing roof? If so, please advise of the contractor that holds the warranty.

(Part 6) The refrigeration specification notes that exterior lines are to be covered in aluminum jacketing, the drawings note that slim duct covering is to be used. Please advise which covering should be used on exterior refrigeration lines. If using slim duct, is the intent for the 1-1/2" condensate line to be run in it as well?

(Part 7) Reaching out on current lead times for equipment, there is concern that the lead times will exceed the current project schedule. If the schedule is not attainable due to equipment lead times, will there be flexibility with the project schedule and will working hours need to be adjusted?

Response:

(Part 1) Please refer Addendum #1 – it included the Asbestos Management Program, and the Hazardous Building Materials Assessment Report for this school.

(Part 2) No, aluminum stands are not acceptable.

(Part 3) Structural drawings are included with this addendum. Refer to "Additional Information" at the end of Addendum #1.

(Part 4) Roofing is not part of the scope of this project. Mechanical accessories and roof components will not be removed from the roof area. Openings will be capped at the interior where ductwork is removed.

(Part 5) The roof is no longer under warranty.

(Part 6) Exterior Refrigeration lines are to be covered with aluminum jacketing unless covered by slim duct. Intent is for the 1-1/2" condensate line to be run within slim duct'

(Part 7) Please include a schedule with submission for review. Schedule extensions will need to be approved by federal government. During the school year, most work will need to happen after school hours and on weekends, with a lot of coordination.

Question #3

Would you please confirm if we need to involve a Sprinkler subcontractor to relocate the sprinklers from the new Electrical room, and adding whatever it should be added as fire protection system according to the code?

Response:

Sprinkler requirements to be confirmed, omit from scope.

Question #4

(Part 1) Vendor requests that Carrier/Toshiba VRF system be approved as alternate to specified units.

(Part 2) Vendor requests that Carrier packaged heat pump unit be approved as alternate to specified unit AC-1.

Response:

(Part 1) Carrier/Toshiba VRF system is not acceptable. Submission does not demonstrate BACNet.

(Part 2) Carrier is already a specified manufacturer for packaged outdoor unit AC-1. Refer to specification section 24 74 00 paragraph 2.9.1.

Question #5

Vendor requests that Fujitsu VRF system be approved as alternate to specified units.

Response:

The requested alternate is accepted.

Reference Specification section 24 81 35 Variable Refrigerant Flow Multisplit Systems:

Add "2.8.5 Fujitsu to the requirements listed above"

Question #6

Please clarify on controls noted below:

- 1) The ventilation plans (MV-101 to MV-103) show existing space temperature sensors throughout the school. We currently only have existing BAS space temperature sensors in 13 rooms. Are we to add a BAS space temperature sensor and perimeter heating control in each space that shows an existing space temperature sensor on the ventilation plans?
- 2) Are BAS controls required for the new gym unit AC-1?

Response:

- 1) Refer to clarification item #4 below.
- 2) Yes. Refer to clarification item #4 below.

Clarifications

Item #1

Please ensure that dust control and site cleanup (including adjacent spaces) is included, as detailed in supplementary general conditions.

Item #2

Reference Specification section 00 41 13, item 6.3. Revise area breakouts as follows, amending price requirements for Area 2:

Area 1. HEAT PUMPS FOR VICTORIA WING CLASSROOMS AND ELECTRICAL SERVICE UPGRADE

_____/100 Dollars (\$_____))
(HST Excluded)

Area 2a. HEAT PUMPS FOR THISTLE WING ~~AND ADDITION~~

_____/100 Dollars (\$_____))
(HST Excluded)

Area 2b. HEAT PUMPS FOR ADDITION

_____/100 Dollars (\$_____))
(HST Excluded)

Area 3. HEAT PUMPS FOR ADMINISTRATIVE AREAS

_____/100 Dollars (\$_____))
(HST Excluded)

Area 4. HEAT PUMP(S) FOR GYMNASIUM

_____/100 Dollars (\$_____))
(HST Excluded)

Item #3

DRAWINGS

1. Reference Drawing E-102
 1. Delete Transformer Pad Detail 1/E-102.
 2. Provide a transformer deep well design as per NSP 6U-ED-26M.
 3. The GC will need to provide a temporary access driveway to the new padmount location for crane access. Remove temporary driveway after transformer installation and return all surfaces to pre-construction state.

Item #4

REFERENCE DRAWINGS

2. Reference Drawing MV102
 1. Revise VRF Heat Pump Schedule – Victoria Main Level
 1. Symbol: HP-151
 2. Model: PLFY-P08
 3. Rated Cooling Capacity: 8 MBH
 4. Rated Heating Capacity: 9 MBH
3. Reference Drawing MV103
 1. Revise VRF Heat Pump Schedule – Addition Wing Main Level
 1. Symbol: HP-232
 2. Model: PLFY-P15
 3. Rated Cooling Capacity: 15 MBH
 4. Rated Heating Capacity: 17 MBH
 2. Revise VRF Heat Pump Schedule – Addition Wing Main Level
 1. Symbol: HP-233
 2. Model: PLFY-P15
 3. Rated Cooling Capacity: 15 MBH
 4. Rated Heating Capacity: 17 MBH
 3. Revise VRF Heat Pump Schedule – Addition Wing Basement Level
 1. Symbol: HP-333
 2. Model: PLFY-P15
 3. Rated Cooling Capacity: 15 MBH
 4. Rated Heating Capacity: 17 MBH
4. Reference Detail 3/MC601
 1. Add note:

"Integrate the following points via BACnet MSTP or IP:

 - *BO AC1 - Enabled*
 - *BI AC1 - Alarm*
 - *AO AC1 - Mode Select*
 - *AI AC1 - Mode*
 - *BO AC1 - Temp Reset*
 - *AI AC1 - SAT*
 - *AI AC1 - Economizer Status*
 - *AI AC1 - Power Exhaust Status"*

5. Reference Detail 3/MC601
 1. Add sequence of operations:
“Where an existing BAS room temperature sensor does not exist (hydronic heat is zoned with multiple rooms), controls shall be coordinated such that when hydronic heat serving a room is enabled, the room’s Heat Pump cooling is disabled.”
6. Sections 24 74 00 Packaged Outdoor HVAC Equipment
 1. Delete 2.7.2
 2. Delete 2.7.7
7. Sections 24 81 35 Variable Refrigerant Flow Multi split systems
 1. Revise 2.3.7.2
Corrosion coatings on coil surfaces tested to withstand a 6000 hour salt spray test in accordance with ASTM B117 or in accordance with JIS Z2371 with a rating number greater than or equal to 9.0.

Additional Information

Included with this addendum find the following information:

- 1) Structural drawing S101.1 STRUCTURAL DETAILS – Enclosed – 24 MAY 2024

Extended Close Date:

The close date of this RFT has been extended to Tuesday – June 4, 2024.

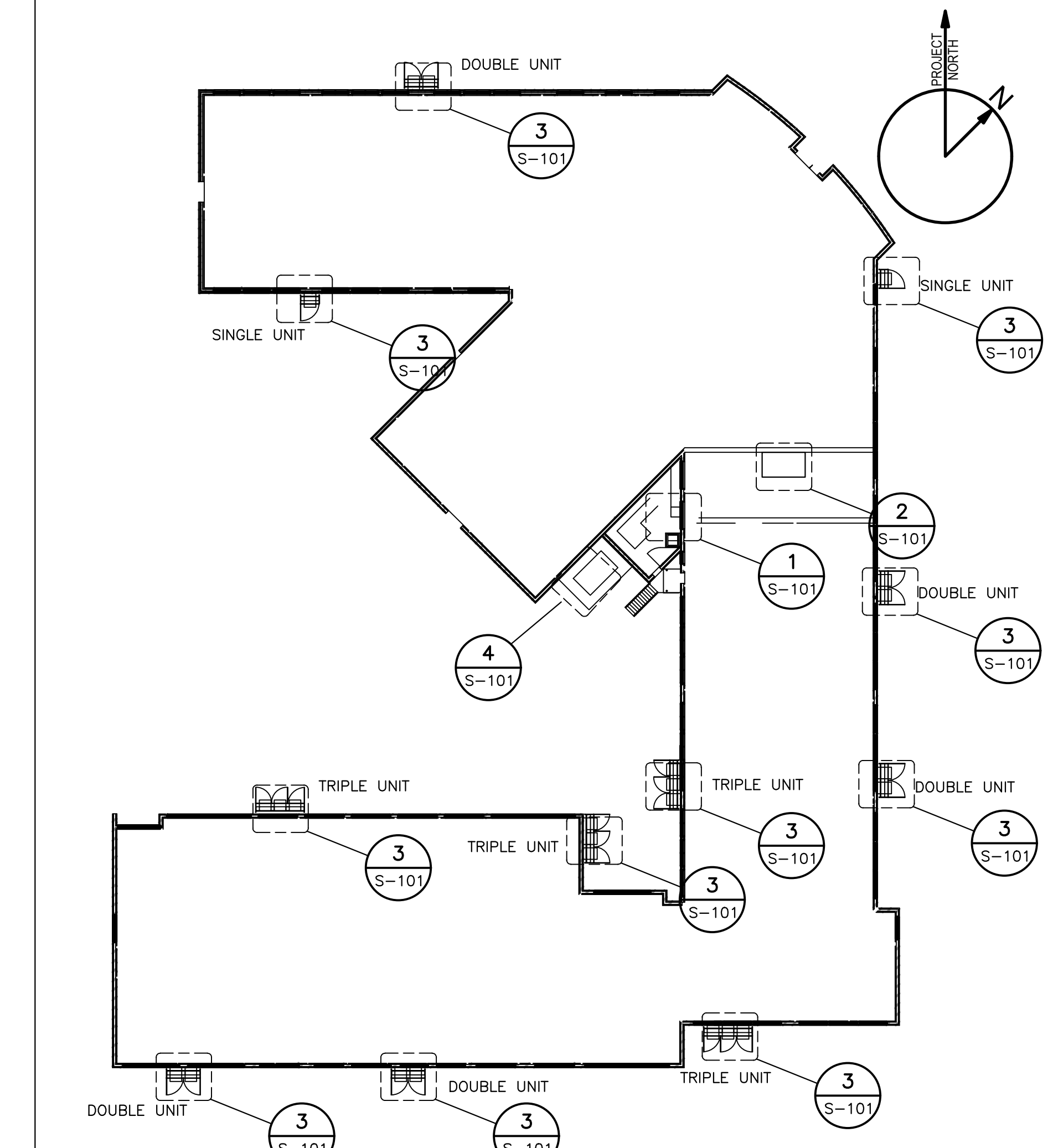
No further questions will be accepted.

RFT 4239 - End of Addendum #2

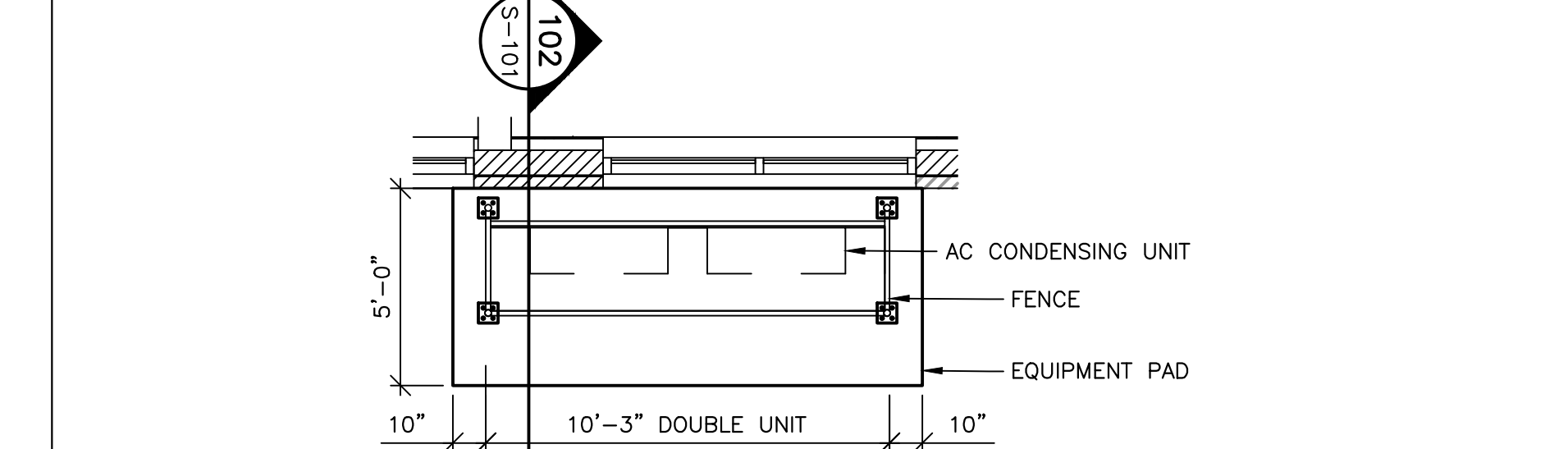
PLEASE SIGN BELOW AND RETURN WITH BID DOCUMENTS:

Signature

Company Name



KEY PLAN
SCALE: NTS

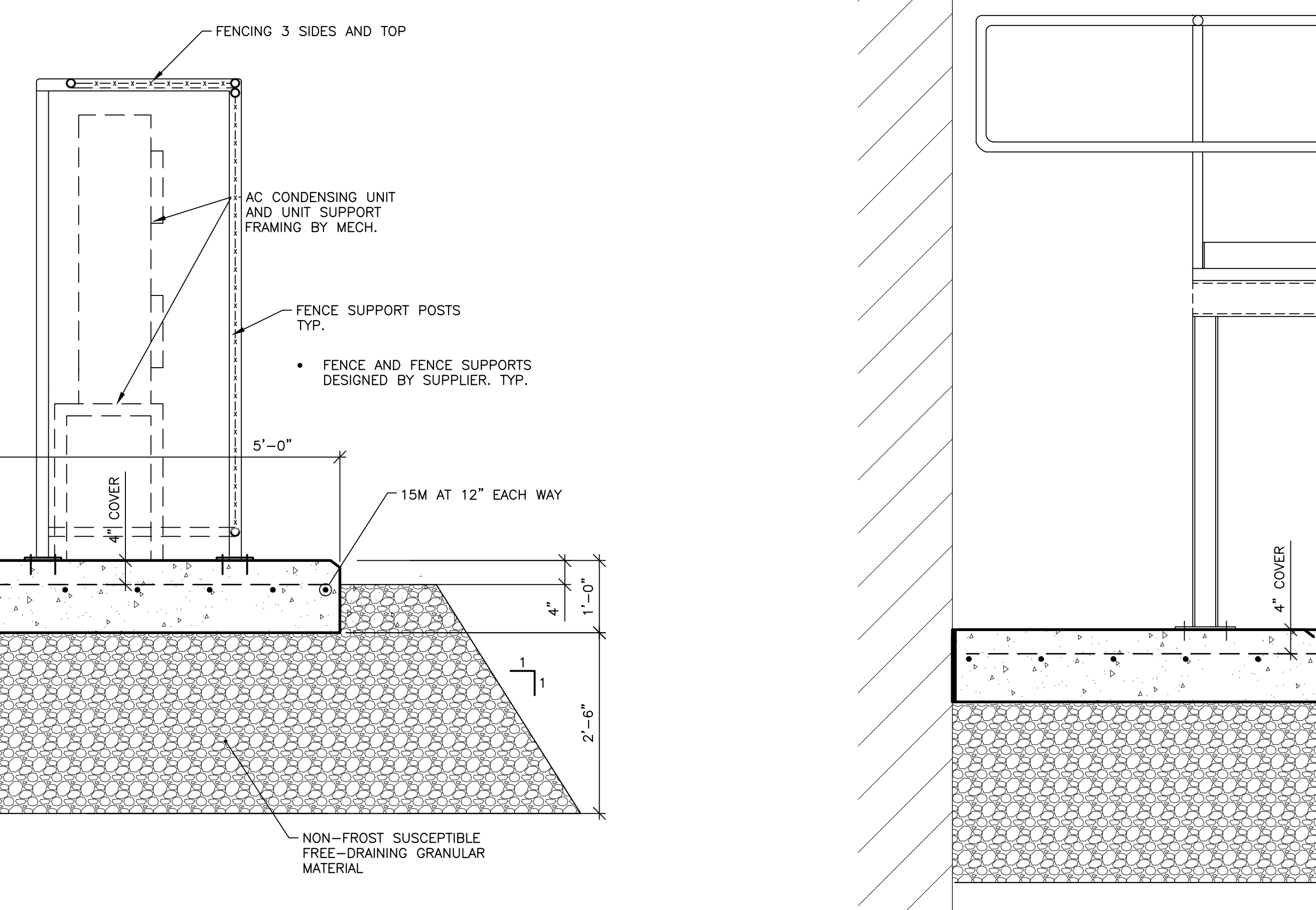
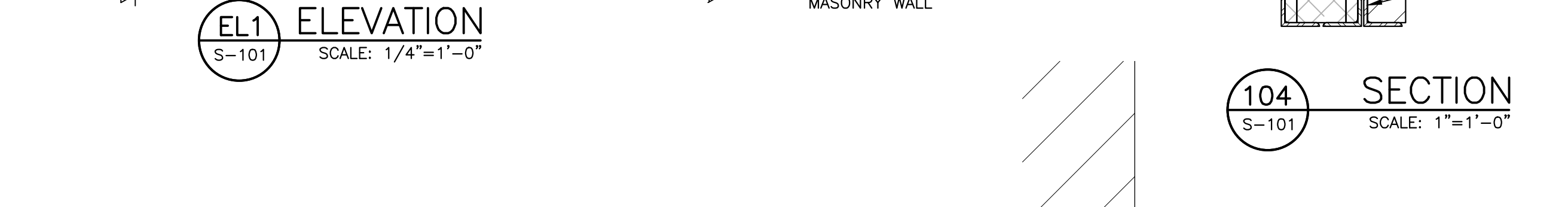
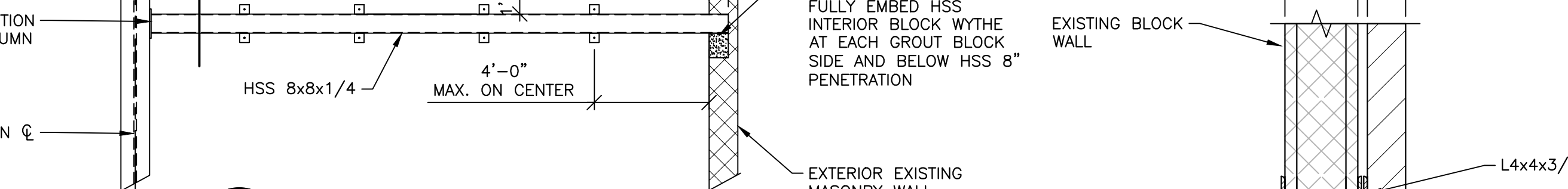
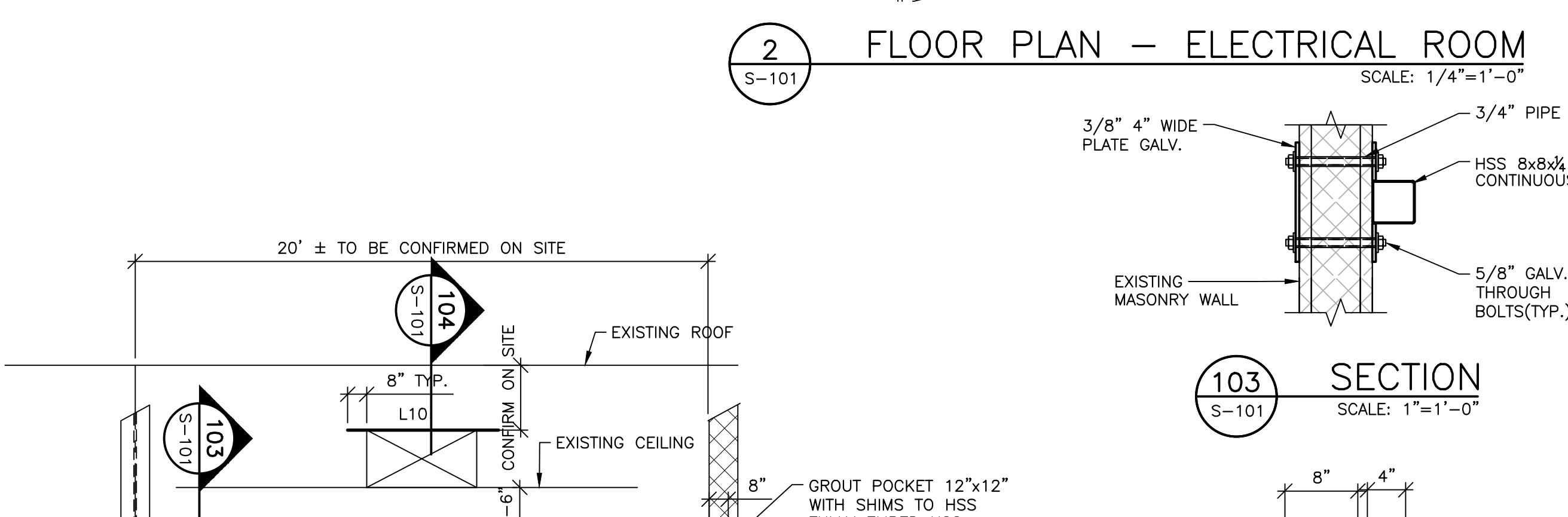
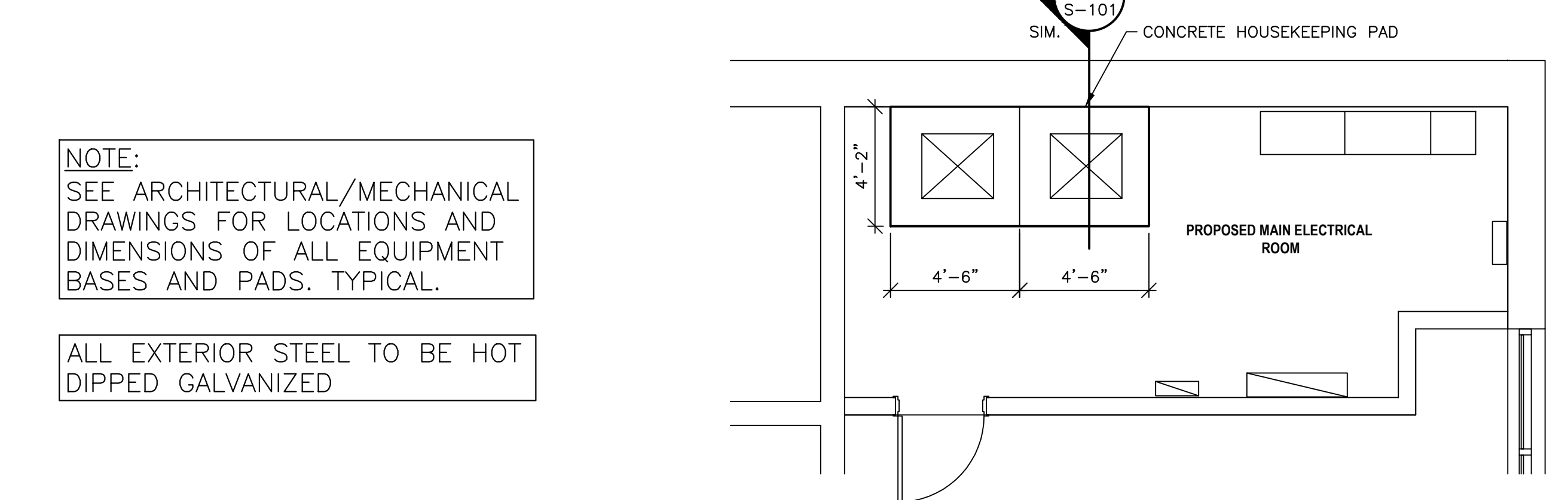
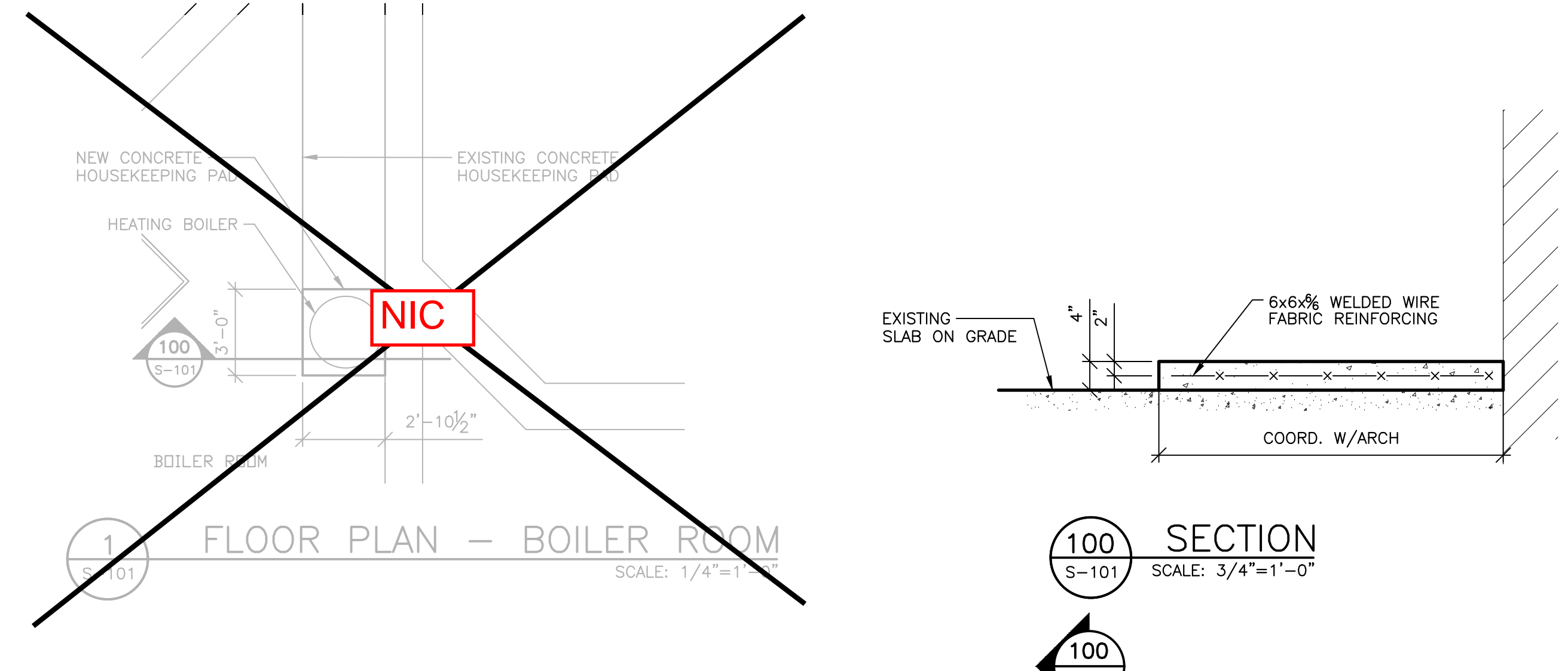


3 BASE PLAN - CONDENSING UNIT AND FENCE
SCALE: 1/4"=1'-0"

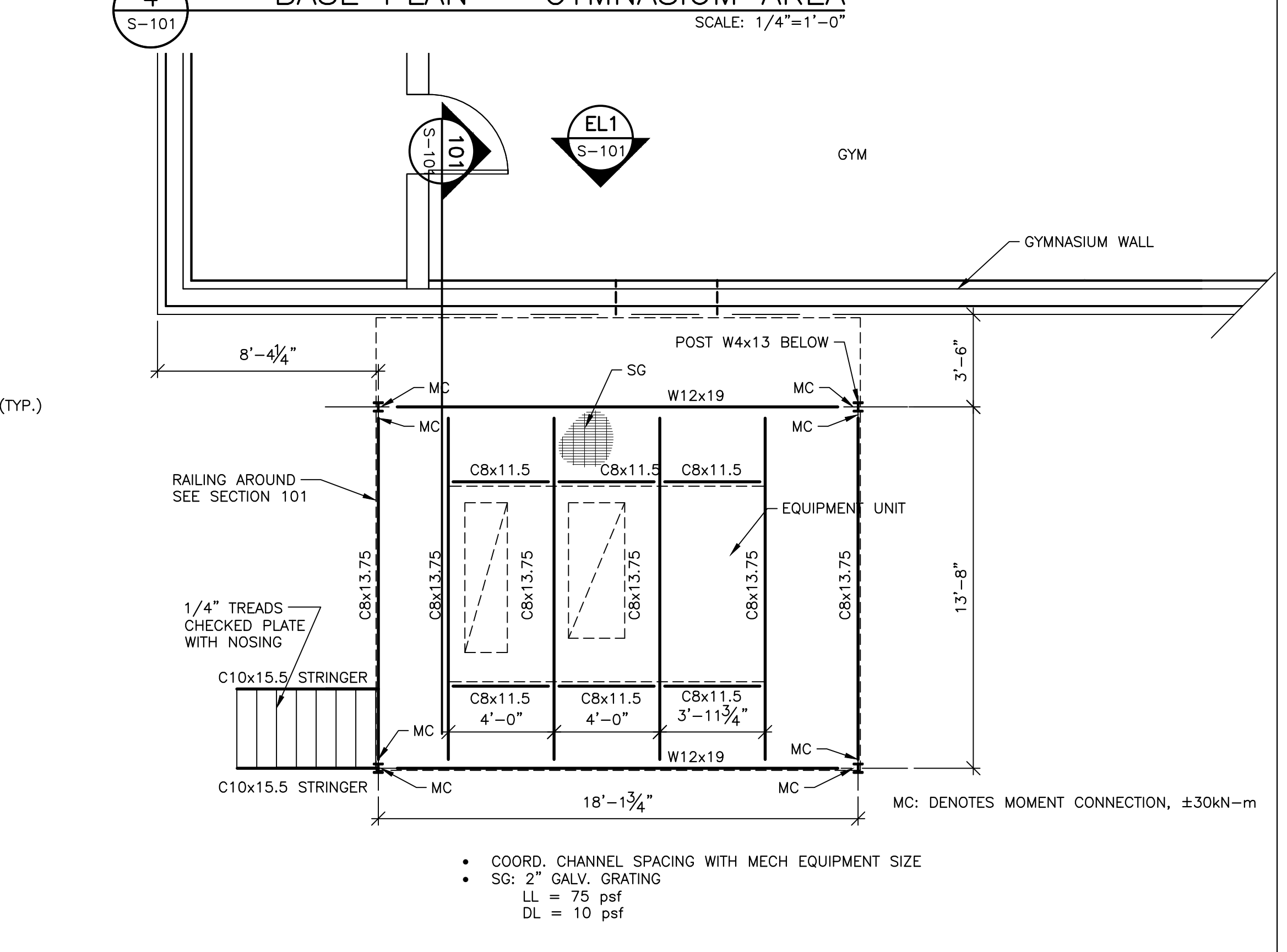
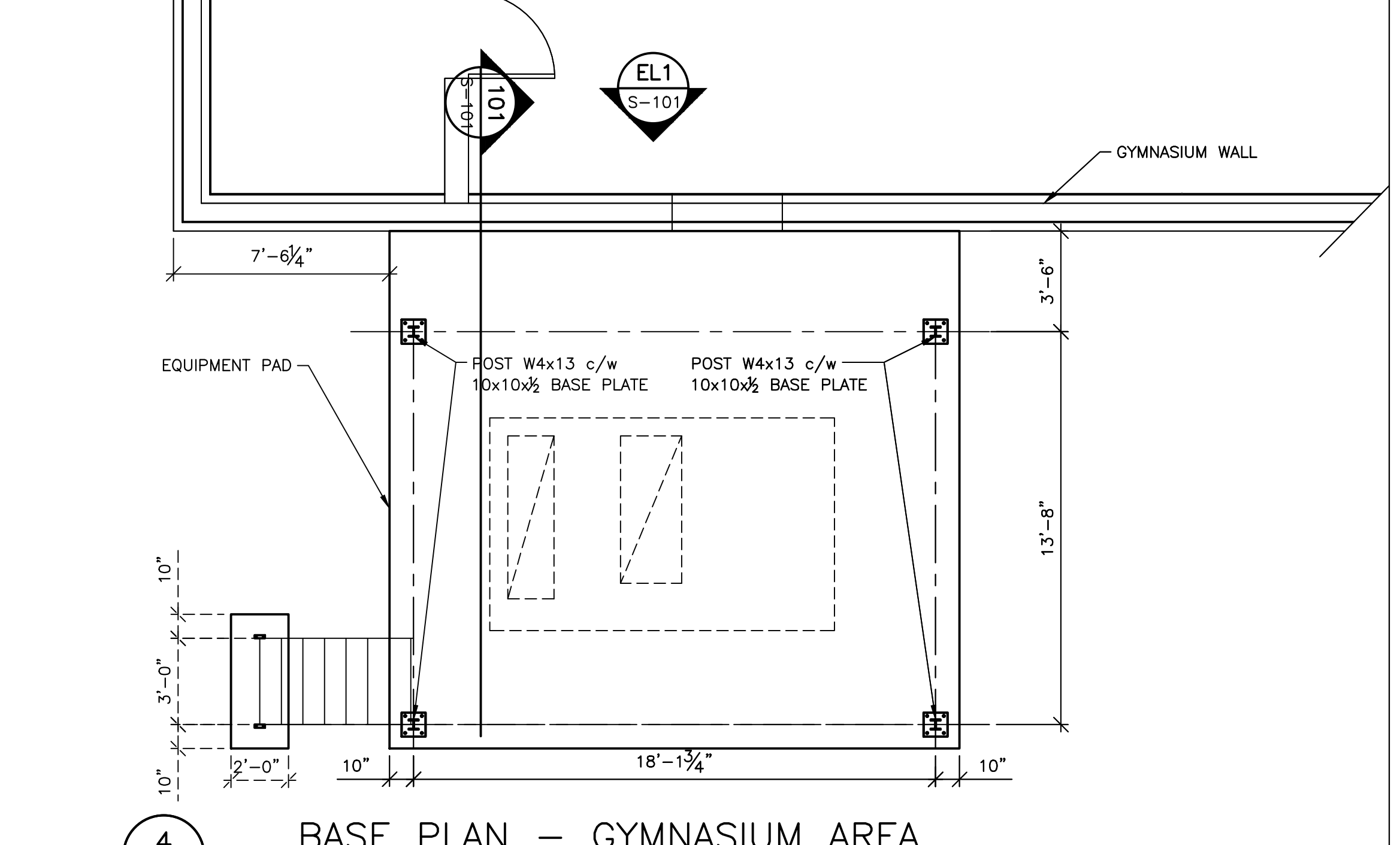
- GENERAL NOTES**
- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS SET OUT IN THE 2015 NATIONAL BUILDING CODE OF CANADA.
 - ALL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE NOVA SCOTIA OCCUPATIONAL HEALTH & SAFETY ACT.
 - THE CONTRACTOR SHALL EXAMINE ALL DRAWINGS, CHECK ALL DIMENSIONS, AND REPORT ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
 - ALL DESIGN LOADS NOTED ON DRAWINGS ARE WORKING LOADS.
 - ALL TRADES SHALL SUBMIT SHOP DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN NOVA SCOTIA, PRIOR TO COMMENCEMENT OF FABRICATION.
 - CONTRACTOR TO CONFIRM EXISTING STRUCTURE RELATED DIMENSIONS IN THE FIELD BEFORE PROCEEDING WITH THE WORK.

- STRUCTURAL STEEL NOTES**
- ALL STRUCTURAL STEEL SHALL BE NEW STOCK AND CONFORM TO THE FOLLOWING GRADES AND STANDARDS:
 - (a) CSA-G40.21-13 (R 2018) TYPE 300W
 - (b) HOLLOW STRUCTURAL SECTIONS: CSA-G40.21-13 (R 2018) TYPE 350W, CLASS 'C' OR ASTM A500 GRADE 'C'
 - (c) STRUCTURAL W SHAPES: CSA-G40.21-13 (R 2018) TYPE 350W
 - ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH CSA-S16-19.
 - ALL WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH CSA W59-18 BY A FABRICATOR FULLY APPROVED UNDER CSA W47.1-19, DIVISION NO. 1 OR NO. 2.
 - ALL BOLTS, NUTS AND WASHERS FOR STRUCTURAL STEEL CONNECTIONS SHALL CONFORM TO ASTM A325.
 - ALL ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A36 OR ASTM A307.
 - ALL BASE PLATES SHALL BE GROUTED SOLID WITH 1" NON-SHRINK GROUT.
 - NO HOLES SHALL BE CUT IN STRUCTURAL STEEL WITHOUT THE PRIOR APPROVAL OF THE STRUCTURAL ENGINEER.
 - SPLICES IN STEEL MEMBERS OTHER THAN THOSE SHOWN ON THE DRAWINGS SHALL NOT BE PERMITTED.
 - CLEAN, PREPARE SURFACES AND SHOP PRIME STRUCTURAL STEEL IN ACCORDANCE WITH CSA-S16-19.
 - TOUCH UP SHOP PRIMER TO BOLTS, WELDS, AND BURNED AND SCRATCHED SURFACES AT COMPLETION OF ERECTION.
 - SHOP PAINT TO CISG/CPMA 1-73d EXCEPT AS NOTED IN SPECIFICATIONS. TOUCH UP SCRATCHES BOLTS AND WELDS AFTER ALL STEEL IS ERECTED.
 - ALL EXTERIOR STRUCTURAL STEEL EXPOSED TO WEATHER, INCLUDING ACCESSORIES, TO BE HOT-DIP GALVANIZED TO CSA-G164-18. MINIMUM COATING OF 2oz./ft².

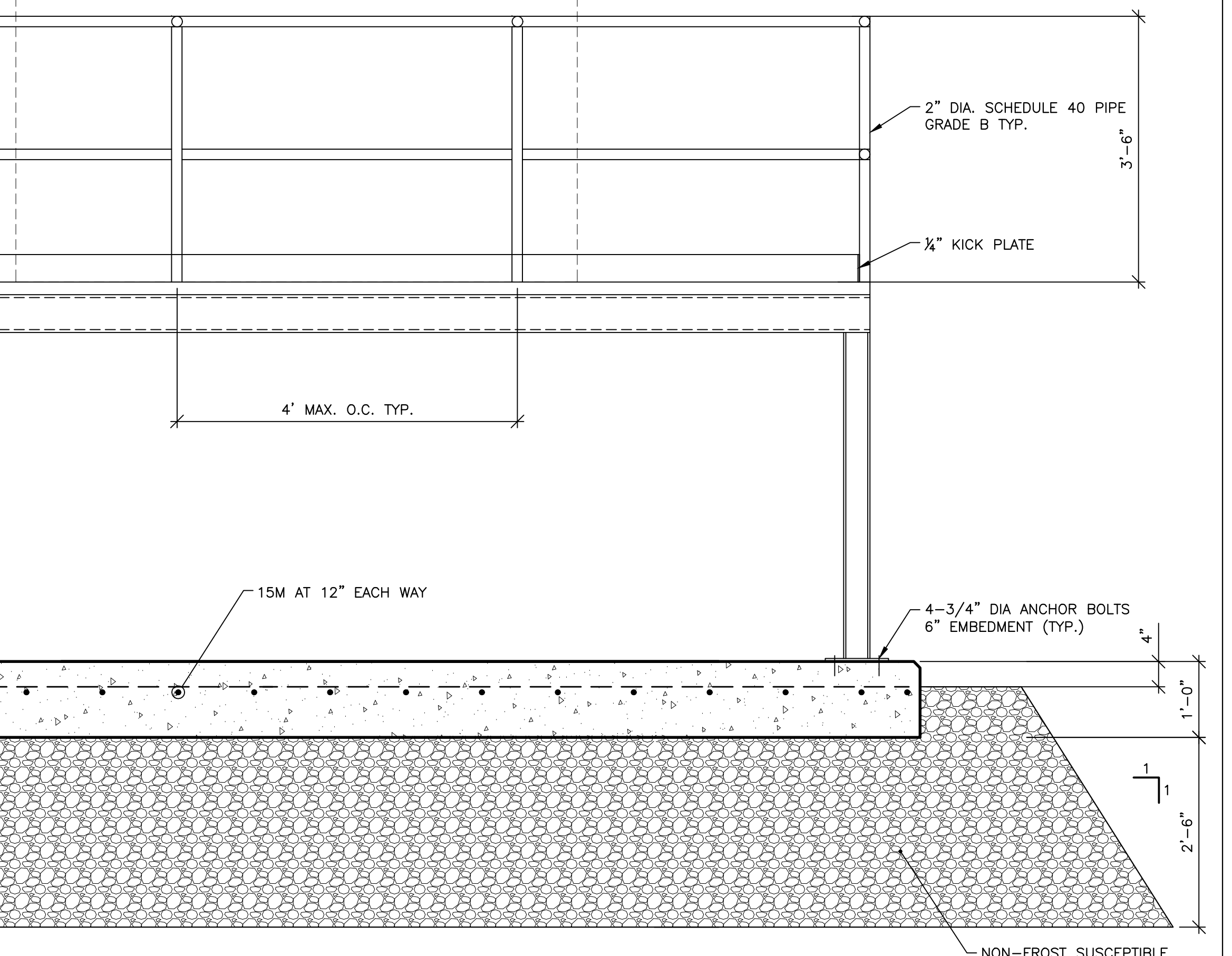
- CONCRETE NOTES**
- ALL CONCRETE SHALL CONFORM TO CSA-A23.1-19 AND BE READY MIX.
 - MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE 32MPa.
 - ALL CONCRETE EXPOSED TO THE WEATHER AND SUBJECT TO DE-ICING SALTS SHALL CONTAIN 6% ± 1% ENTRAINED AIR.
 - ALL CONCRETE ADDITIVES SHALL BE APPROVED BY THE ENGINEER.
 - NO CONCRETE SHALL BE POURED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
 - ALL CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CSA-A23.2-19.
 - FOR COMPRESSIVE STRENGTH TESTING OF CONCRETE A MINIMUM OF 3-6x12 CYLINDERS ARE REQUIRED FOR EACH DAYS POUR.
 - ALL MIX DESIGNS SHALL CONFORM TO CSA-A23.1-19.
 - ALL CONCRETE CURING SHALL CONFORM TO CSA-A23.1-19.
 - CONCRETE PROTECTIVE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
 - A. EXPOSED TO FILL - U/S OF FOOTING..... 3"
 - B. FORMED AND AGAINST FILL..... 2"
 - CONCRETE SLAB ON GRADES MINIMUM THICKNESS 4" AND REINFORCED WITH 6 x 6 @ 6/6 WWF.



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

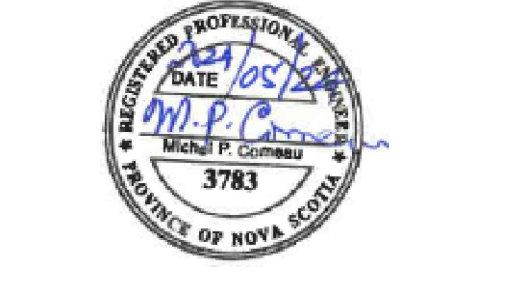


5 EQUIPMENT SUPPORT PLAN - GYMNASIUM AREA
SCALE: 1/4"=1'-0"



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

ISSUED FOR ADDENDUM #1			
No.	REVISION	BY	DATE



SCALE	As indicated
DRAWN	XFL
CHECKED	MC/AC
DATE	23 MAY 2024

PROJECT
BICENTENNIAL SCHOOL - HEAT PUMPS AND ELECTRICAL SERVICE

PROJECT No. 2024-016-1

SHEET TITLE
STRUCTURAL DETAILS

S-101.1