

**511 Capitol Building Stabilization Project**  
IOWA CITY, IOWA  
**10271-10004**

**ADDENDUM 02**  
December 2, 2025

*This addendum forms a part of the Contract Documents and modifies the original bidding documents dated November 14, 2025, as noted below.*

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**SEALS:**

**These Seals Cover All Items included in Addendum 02**



Architectural



Mechanical & Plumbing



Electrical & Technology



Structural

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**CONTRACTOR CLARIFICATIONS:**

1. Background checks and fee.

***A: Per Sheriff Kunkel, background checks will only be performed on contractors working in the building. The Owner will cover the fee. Once interior work starts, General Contractor will need to provide list of names and birth dates of workers to coordinate with Captain Good on these checks. This information has been added to the specifications.***

2. Q: Parking availability for Contractors.

***A: Per the University of Iowa Parking and Transportation Department, Lot 11 currently has mobile parking zones that public persons can use to pay their hourly parking through Park Mobile with the license plate and credit card. Starting in January 2026, the lot will revert back to allowing public persons to pull an entry ticket and pay the hourly rate. The hourly rate is currently \$1.75/hour. This information has been added to the specifications.***

3. Q: Section 7.6 of the specs (*Specification 00 2113 Instruction to Bidders*) references Equal Opportunity compliance (MBE/WBE and Proposed Subcontractors list), however, on the provided Bid Form the only supplement that is mentioned in 1.9 is the Bidder Status Form. Are there documents that need to be submitted reflecting Equal Opportunity compliance; if so, could you please provide them so I know I am submitting the correct ones?

***A: Reference to Equal Opportunity compliance will be removed from this section and is not required. Edits have been made in the specifications.***

4. Q: The agreement template within the specs has a 10% contingency included in the allowances. Is the general contractor supposed to include this 10% in our bid, or will it be added to our base bid amount?

***A: Contractors are to NOT include contingency in the base bid. Once the bid is awarded, the 10% contingency will be added to the base bid amount during contracting.***

5. Q: On plan sheet C100 keynote D. Can you verify what you need from the General Contractor? This could be a pretty big expense.

***A: Due to the demand of the new equipment, MidAmerican is requiring a gas size increase (from 2" to 4"). MidAmerican will bore and install the new service line, the regulator at the desired delivery pressure (anticipated 2psi) and the meter (all work from gas main to the customer meter). The Contractor will take over at the outlet of the meter and be responsible for the piping from that point and any other regulators to further cut the pressure down. The existing line will be abandoned in place per MidAmerican. If there is conflict with the construction project, the Contractor is to remove the abandoned line. See detail 2/M-501 for additional details at the meter.***

***The Contractor will be responsible for obtaining the gas release inspection from the City once everything is tied in before we can unlock the meter for use. The contractor will also be responsible for the coordination of MidAmerican's work and the City of Iowa City ROW inspection, including restoration of ROW infrastructure. In terms of cost, the customer (Johnson County) will be responsible for paying MidAmerican for the new service from the main line to the building as well as the regulator and meter/manifold.***

***Due to the nature of this facility, Contractor coordination with MidAmerican will be essential regarding the gas shut-down timeframe. The gas shutdown to the building will have to be minimized and in no case shall exceed a 12-hour timeframe. If an evening or nighttime switchover can be coordinated with MidAmerican, the Owner would prefer this approach. Once the job is awarded, a pre-installation meeting will be held with the Owner, MidAmerican and the Contractor prior to advancement of construction.***

***Keynotes will be updated.***

6. Q: Can the City clarify what the note D means (C100 keynote) – demo per city franchise means and methods?  
**A: This note is in reference to coordination with the City of Iowa City only. Because the gas main sits within the City ROW, all work within the ROW must be coordinated with the City and completed according to the city requirements including all restoration of public infrastructure per the City's guidance. Per other notes regarding this work, all of the work should be coordinated between the City and Franchise Utilities to ensure the work is completed per City requirements.**
7. Q: Who is responsible for boring the hole for the new MidAmerican gas line?  
**A: MidAmerican will bore the new service. Point of contact is Jacob Winter, Engineer II-Gas; Office 319-341-4406.**
8. Q: Is it permissible to use a NEMA 3R cabinet for the rooftop panel SP-R instead of the proposed Anchor EBK 0900 box?  
**A: Yes, a NEMA 3R cabinet will be adequate provided you coordinate with Anchor to ensure the brackets and mounting are sized appropriately based on the NEMA 3R cabinet dimensions.**
9. Q: Is a curb necessary for the rooftop panel SP-R? And what is the minimum height required from rooftop to bottom of panel?  
**A: No, a curb is not required if the assembly is sized appropriately per Anchor's recommendation. Please keep a minimum of 14" from roof to bottom of panel. The working space platform in front of the panel should have a step up (e.g. 2x 7" risers).**

#### **APPROVED SUBSTITUTION REQUESTS:**

Specification Section: 07 2100 Thermal Insulation  
Item: Polyisocyanurate (ISO) Board Insulation  
Manufacturer: OX Engineered Products: isoREDMAX

Specification Section: 23 7416 Packaged Rooftop Unit  
Item: RTU  
Manufacturer: Carrier

#### **SPECIFICATIONS:**

G2-1

#### **SECTION 00 2113 INSTRUCTIONS TO BIDDERS**

1. **EDIT** Sections to **7.6 ADDITIONAL BID INFORMATION**, as follows:

A. **REMOVE:** A. Equal Opportunity compliance is required for this project and is part of these specifications.

1. **REMOVE:** 1. MBE/WBE Contract Compliance Program; submit with bid.
2. **REMOVE:** 2. Proposed Subcontractors List: submit within 48 hours after submission of bids.
- B. **ADD:** A. Proposed Subcontractors List: submit within 14 days after submission of bids.

G2-2

**SECTION 01 5000 TEMPORARY FACILITIES AND CONTROLS**

1. **ADD** Sections to **1.11 SECURITY**, as follows:
  - A. B. Any interior access that is required during the project must be coordinated with the County and Sheriff personnel per the security requirements of the facility.
    1. **ADD:** 1. Background checks will be performed on Contractors working within the building.
    2. **ADD:** 2. Fee will be covered by the Owner.
    3. **ADD:** 3. General Contractor to coordinate background checks with Captain Good and provide a list of the workers' names and birthdates.

G2-3

**SECTION 01 5500 TEMPORARY FACILITIES AND CONTROLS**

1. **ADD** Sections to **3.3 PARKING**, as follows:
  - A. B. When site space is not adequate, provide additional off-site parking.
    1. **ADD** 1. Lot 11, owned by University of Iowa Parking and Transportation Department, currently has mobile parking zones for public use to pay hourly through the Park Mobile program using license plate and credit card.
    2. **ADD** 2. Starting January 2026, Lot 11 will revert back to allowing the public to pull an entry ticket and pay the hourly rate.
    3. **ADD** 3. The hourly rate is currently \$1.75/hour.

M2-1

**SECTION 22 1516 FACILITY NATURAL GAS PIPING**

1. **ADD** Sections to **2.5 JOINTS**, as follows:
  - A. A. Steel Pipe:
    1. **ADD** 2. Welded pipe (2 1/2" dia and larger): Welding shall conform to welding section of ANSI- B31.3 "Code for Power Piping."

M2-2

**SECTION 23 6500 CLOSED CIRCUIT COOLERS**

1. **ADD** Sections to **2.8 CONTROLS**, as follows:
  - A. **ADD** D. All alarm programming to be provided by the Owner.

**DRAWINGS:**

C2-1

**Drawing C100– SITE PLAN AND STAGING PLAN**

1. **REVISE** Keynote D: Due to the demand of the new equipment, MidAmerican is requiring a gas size increase (from 2" to 4"). MidAmerican will bore and install the new service line, the regulator at the desired delivery pressure (anticipated 2psi) and the meter (all work from gas main to the customer meter). The Contractor will take over at the outlet of the meter and be responsible for the piping from that point and any other regulators to further

cut the pressure down. The existing line will be abandoned in place per MidAmerican. If there is conflict with the construction project, the Contractor is to remove the abandoned line. See detail 2/M-501 for additional details at the meter.

The Contractor will be responsible for obtaining the gas release inspection from the City once everything is tied in before we can unlock the meter for use. The contractor will also be responsible for the coordination of MidAmerican's work and the City of Iowa City ROW inspection, including restoration of ROW infrastructure. In terms of cost, the customer (Johnson County) will be responsible for paying MidAmerican for the new service from the main line to the building as well as the regulator and meter/manifold.

Due to the nature of this facility, Contractor coordination with MidAmerican will be essential regarding the gas shut-down timeframe. The gas shutdown to the building will have to be minimized and in no case shall exceed a 12-hour timeframe. If an evening or nighttime switchover can be coordinated with MidAmerican, the Owner would prefer this approach. Once the job is awarded, a pre-installation meeting will be held with the Owner, MidAmerican and the Contractor prior to advancement of construction.

2. **REMOVE** Keynote E: No longer necessary.

- |      |   |
|------|---|
| A2-1 | Drawing <b>AD201 – ELEVATIONS - DEMO</b> <ul style="list-style-type: none"><li>1. REVISED Keynotes and area hatching to clarify masonry demo scope</li><li>2. ADDED Keynotes for upper window sill replacement</li></ul>  |
| A2-2 | Drawing <b>A201 – ELEVATIONS</b> <ul style="list-style-type: none"><li>1. REVISED Area hatching to clarify masonry replacement scope</li><li>2. ADDED Keynotes for upper window sill replacement</li></ul>  |
| A2-3 | Drawing <b>A501 – ROOF MECHANICAL PLAN</b> <ul style="list-style-type: none"><li>1. REVISED notes on detail 3 to clarify sill replacement scope.</li></ul>  |
| S2-1 | Drawing <b>S-500 – DETAILS</b> <ul style="list-style-type: none"><li>1. Detail 3 S-500: steel coating requirement updated.</li><li>2. Detail 8 S-500: steel coating requirement updated.</li></ul>  |
| M2-1 | Drawing <b>M-121 – ROOF MECHANICAL PLAN</b> <ul style="list-style-type: none"><li>1. ADDED Refrigerant pipe dog house note for existing Daikin Mini-split system.</li><li>2. ADDED Refrigerant pipe dog house note for new mini-split system, <u>UV-1</u> and <u>CU-1</u>.</li><li>3. REVISED Cooling tower <u>CT-1</u> note to include pipe connection size.</li></ul> |
| M2-2 | Drawing <b>M-502 – MECHANICAL SCHEDULES</b> <ul style="list-style-type: none"><li>1. ADDED Pipe connection size to roof drain, RD-1.</li><li>2. ADDED Refrigerant pipe dog house note to MINI-SPLIT AIR-CONDITIONER SCHEDULE.</li></ul>   |

3. ADDED Cooling tower alarm controls note to be provided by owner on CLOSE CIRCUIT COOLER SCHEDULE.

E2-1

Drawing **E-103 – ROOF ELECTRICAL PLAN**

4. ADD Electrical Keyed Notes.
5. REVISE rooftop chiller control panel wiring.

E2-2

Drawing **E-501 – ELECTRICAL DETAILS**

1. Detail 2|E-501: elaborated on basis of design and installation requirements.

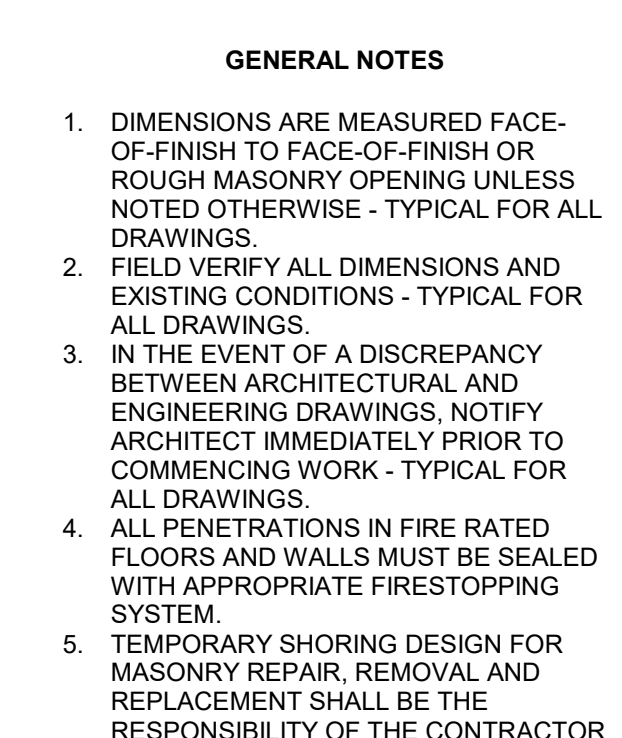
E2-3

Drawing **E-601 – ELECTRICAL SCHEDULES**


1. ADD Electrical Keyed Note 9.
2. REVISE rooftop chiller control amperage and remarks.
3. REVISE CT-1 load and total panel load.
4. REVISE fused disconnect size.


**END OF ADDENDUM 02**



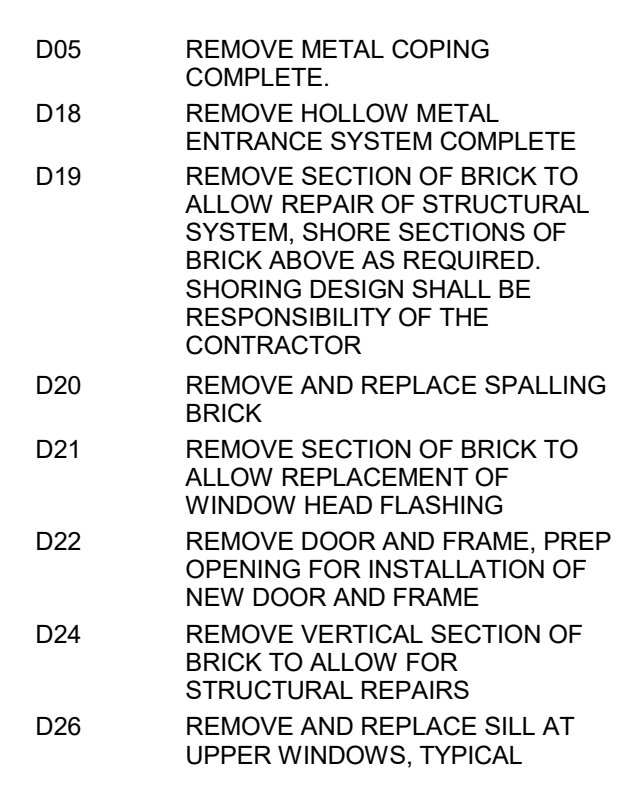


**DEMOLITION LEGEND**

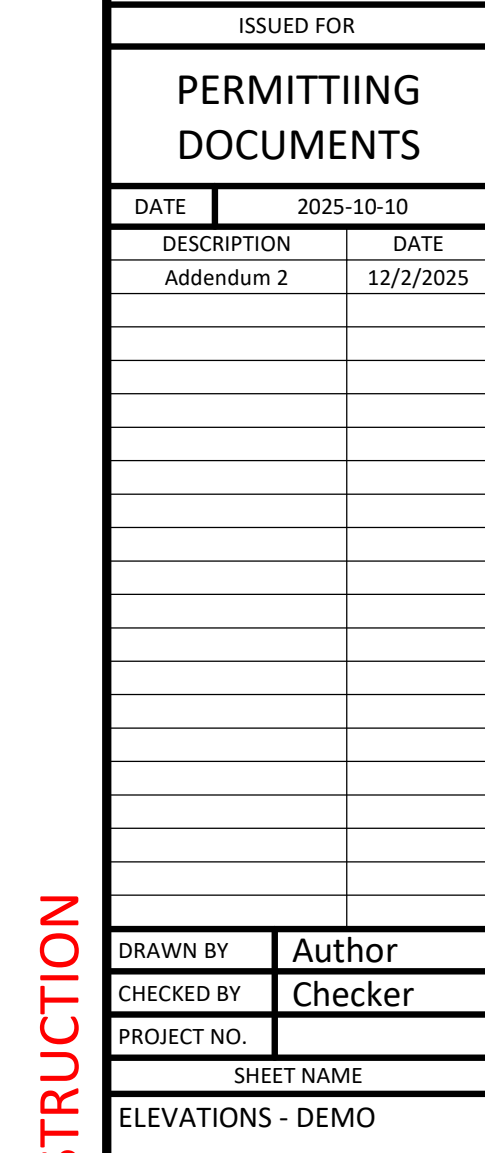
 DENOTES AREA OF COMPLETE REMOVAL OF AN EXISTING BUILDING ELEMENT; SEE KEYNOTES FOR ADDITIONAL INFORMATION

 DENOTES AREA OF SELECTIVE DEMO OF SPALLING BRICK

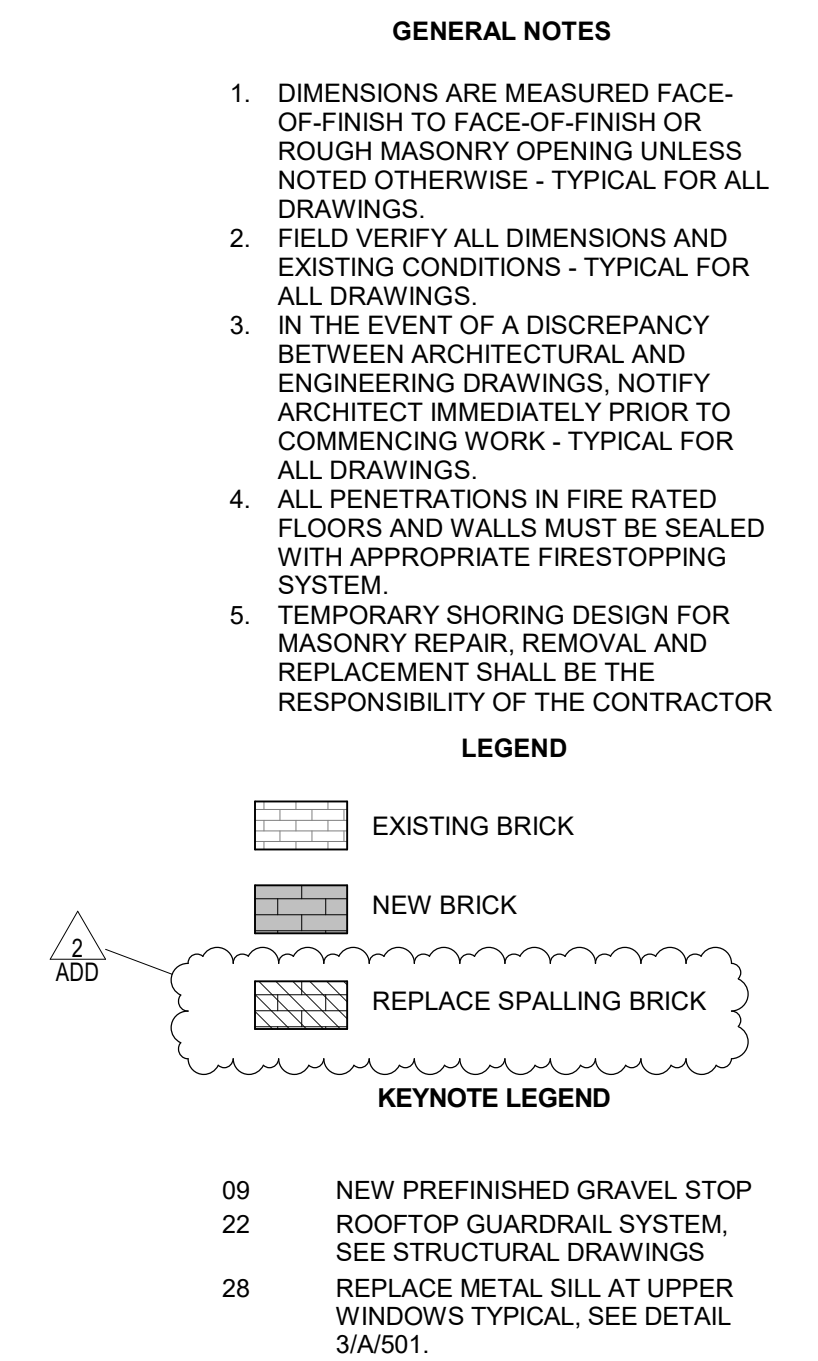
**KEYNOTE LEGEND**



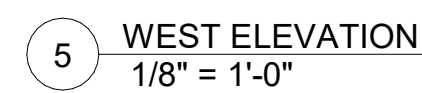
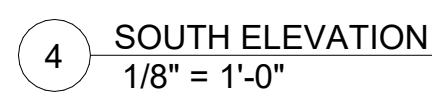
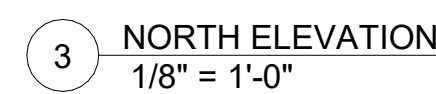
**5111 CAPITOL STREET BUILDING  
STABILIZATION PROJECT**



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| NOT FOR CONSTRUCTION | DRAWN BY    | Author  |
|                      | CHECKED BY  | Checker |
|                      | PROJECT NO. |         |
|                      | SHEET NAME  |         |
| ELEVATIONS - DEMO    |             |         |
| AD201                |             |         |

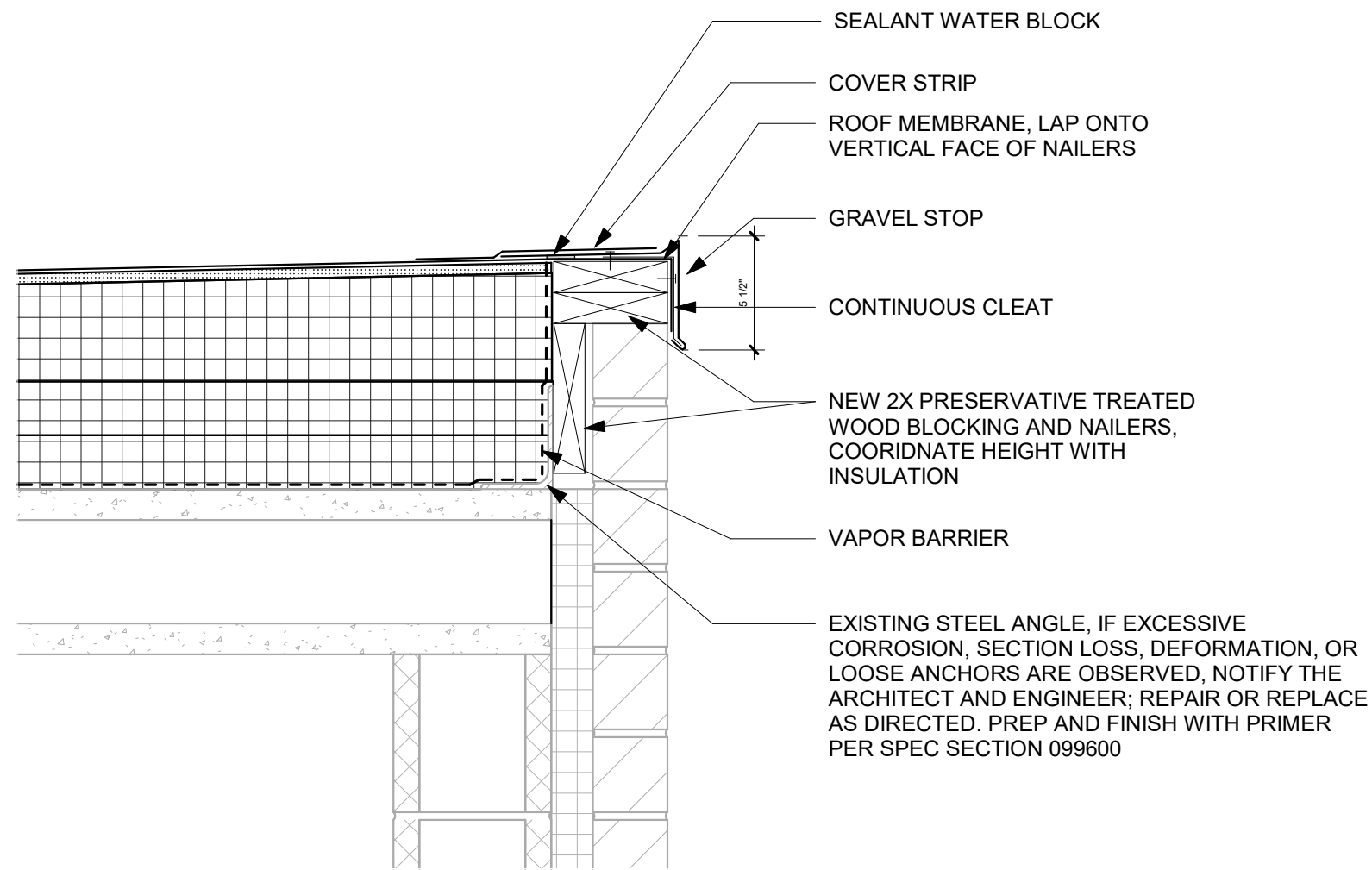


2 EAST ELEVATION  
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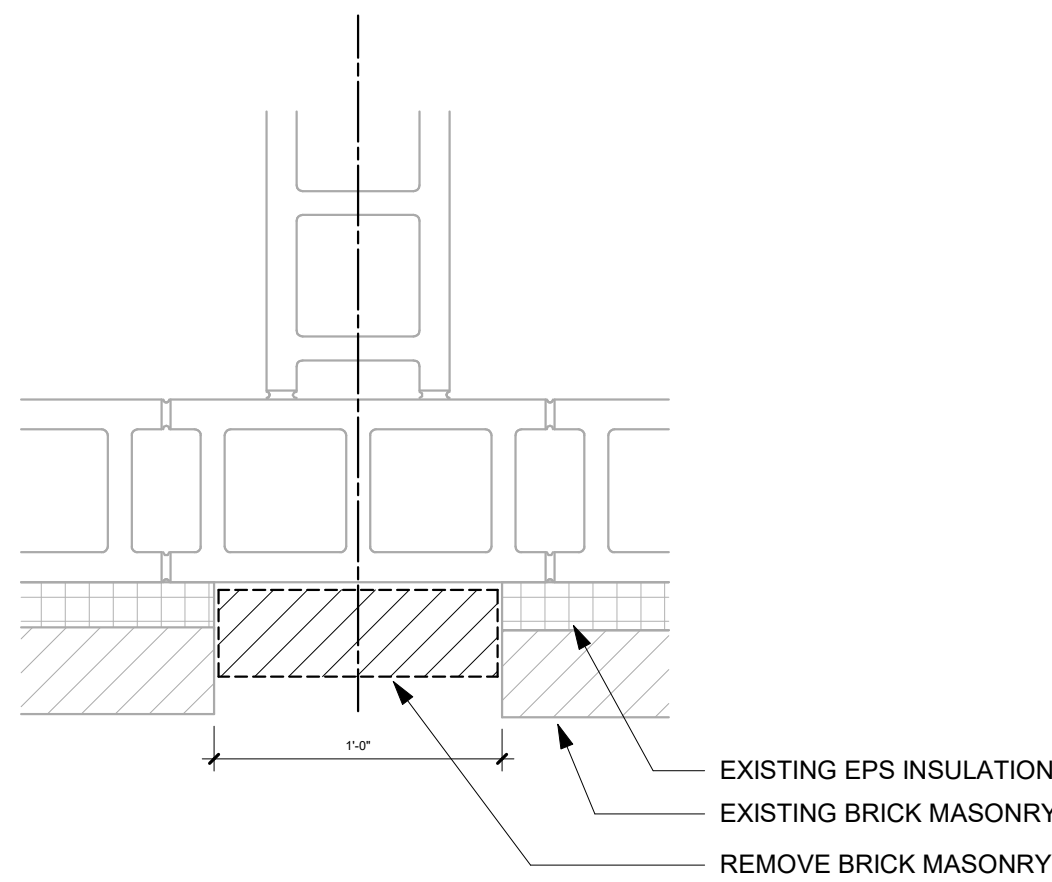


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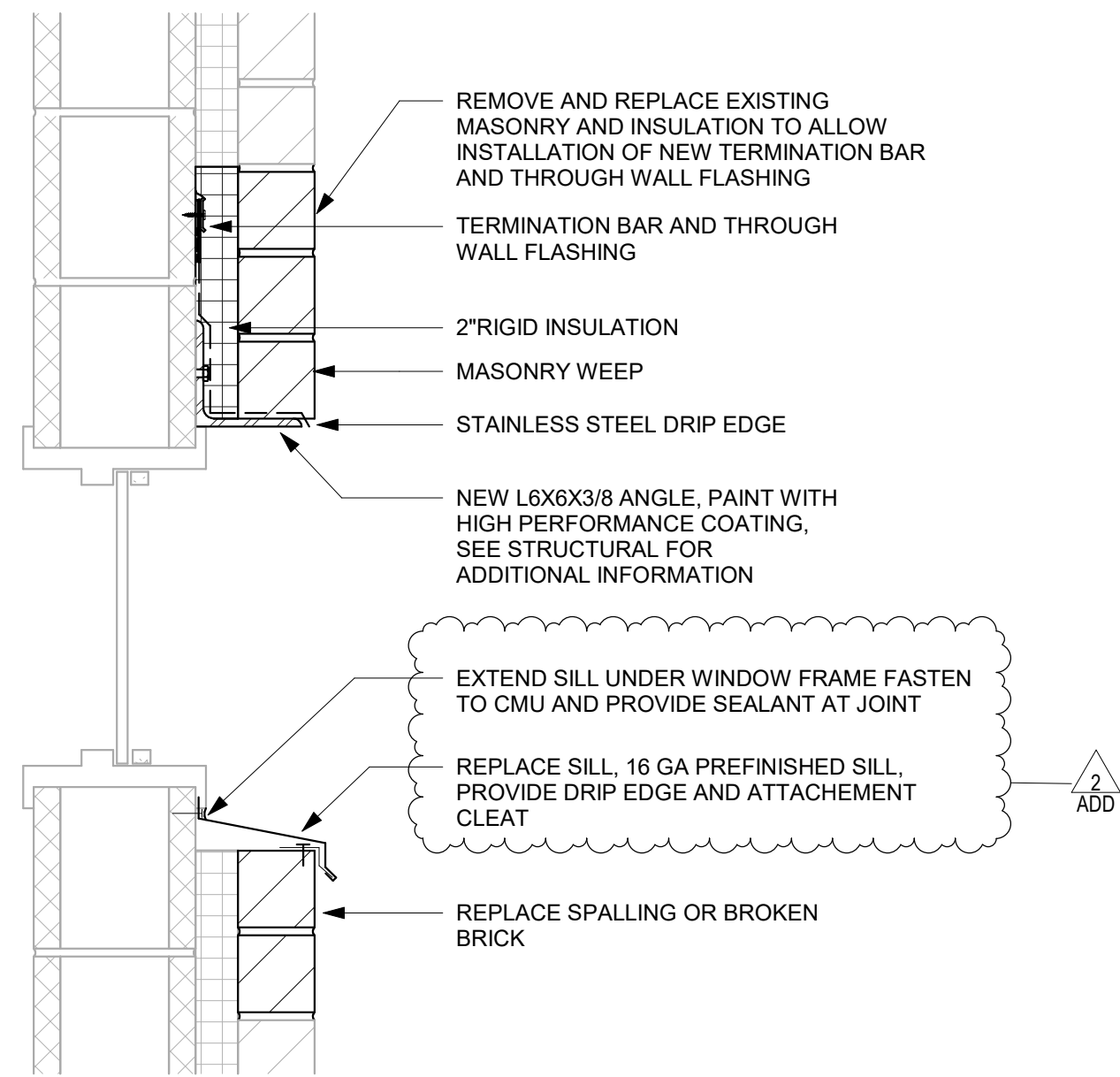




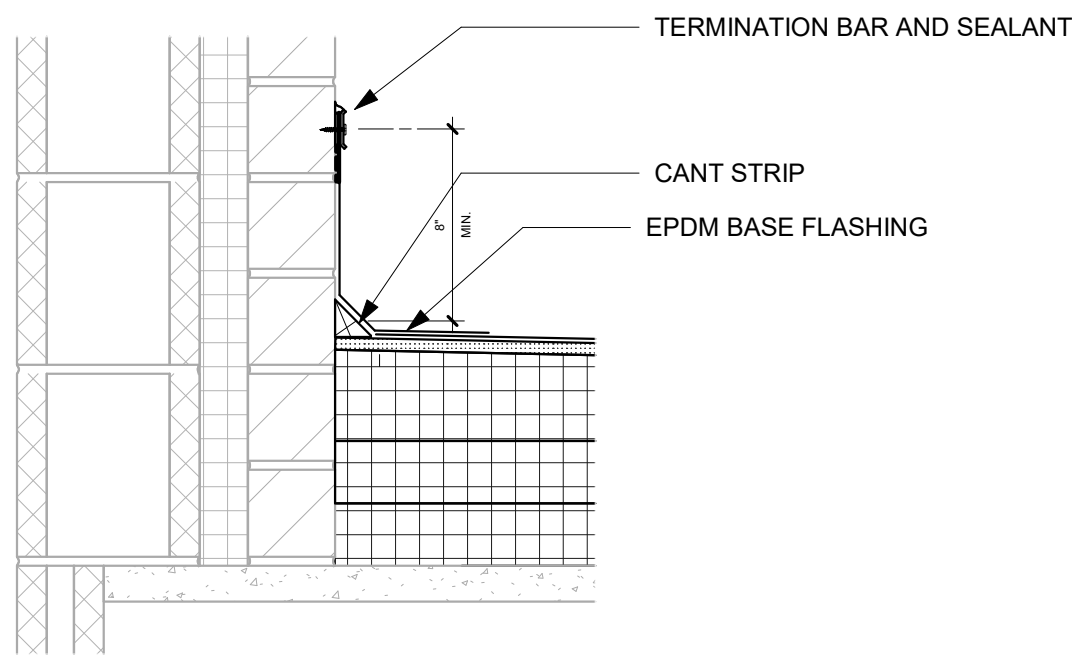
1 ROOF EDGE DETAIL  
1 1/2" = 1'-0"



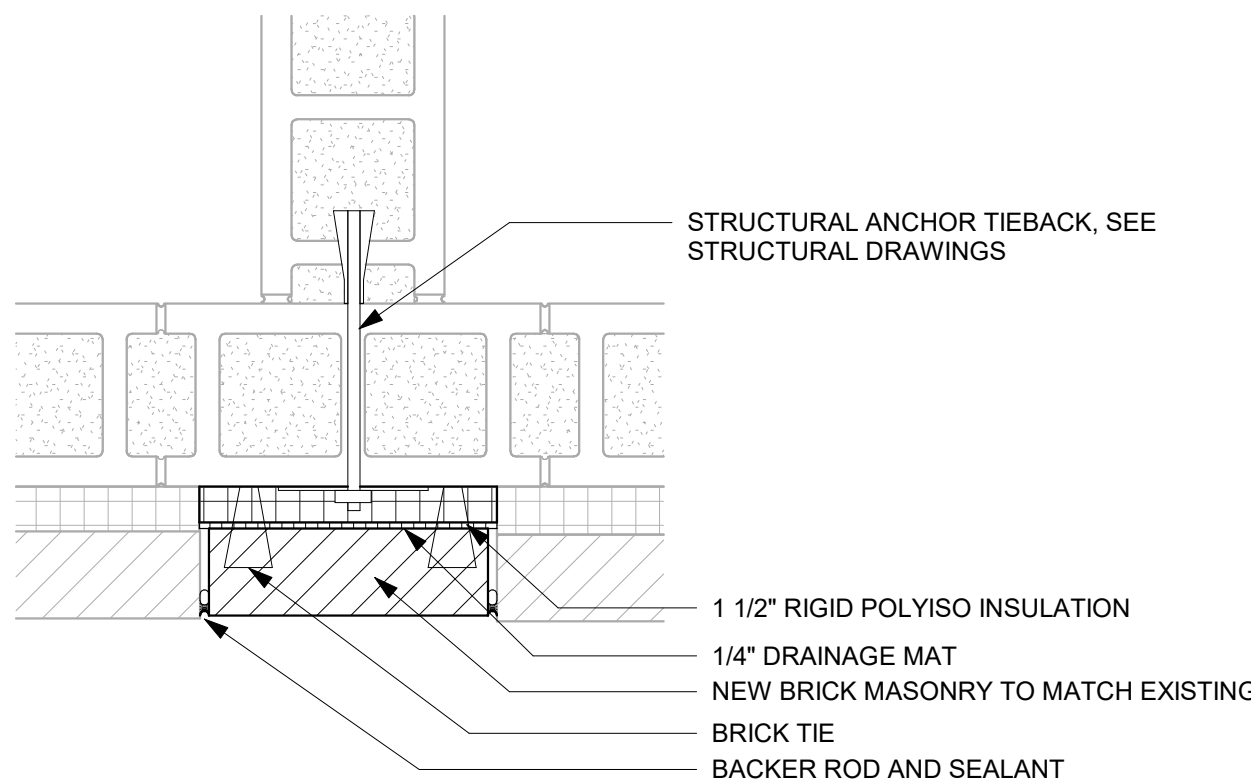
2 SECTION DETAIL AT REVEAL DEMO  
1 1/2" = 1'-0"



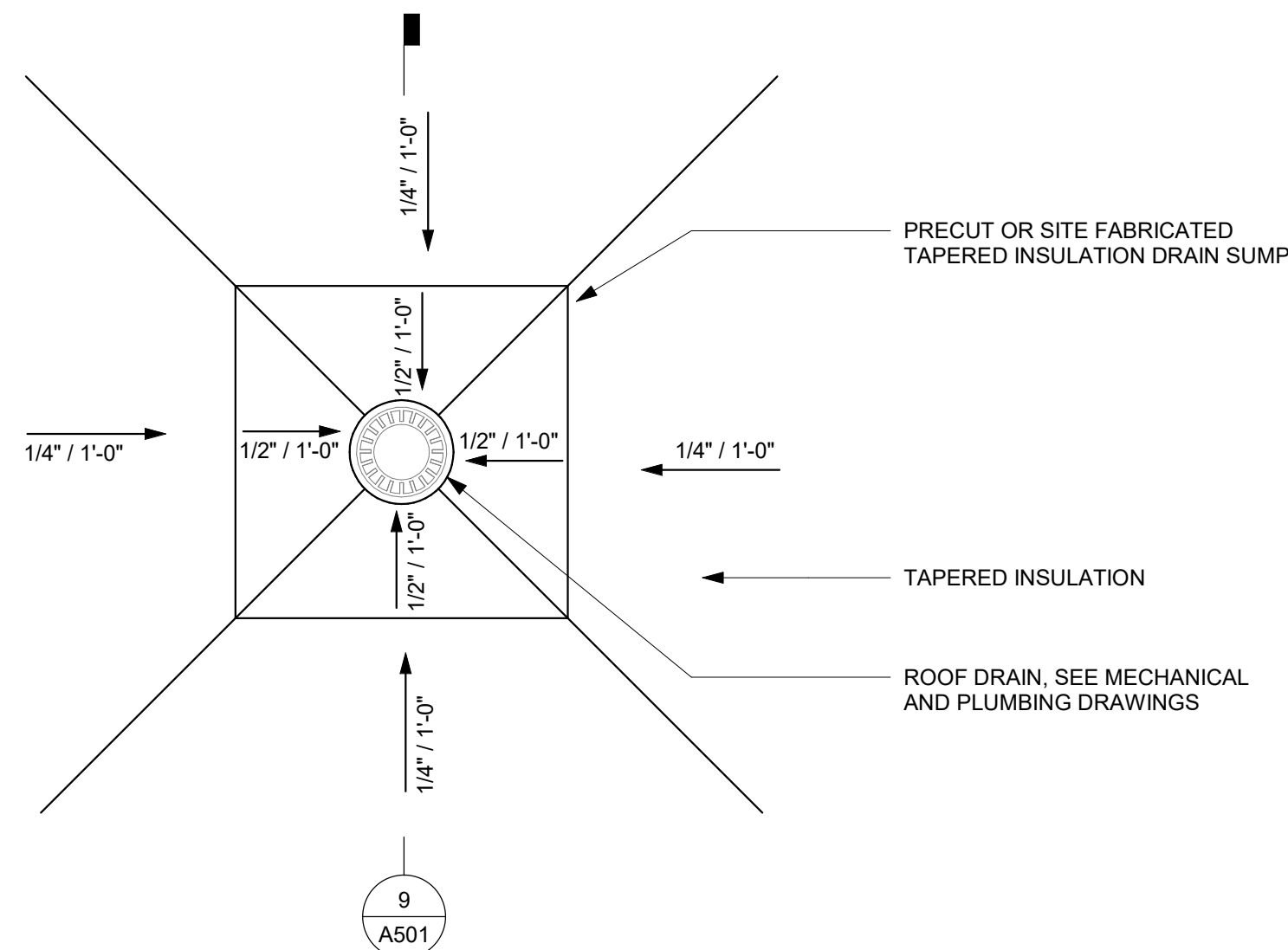
3 SECTION DETAIL UPPER WINDOW  
1 1/2" = 1'-0"



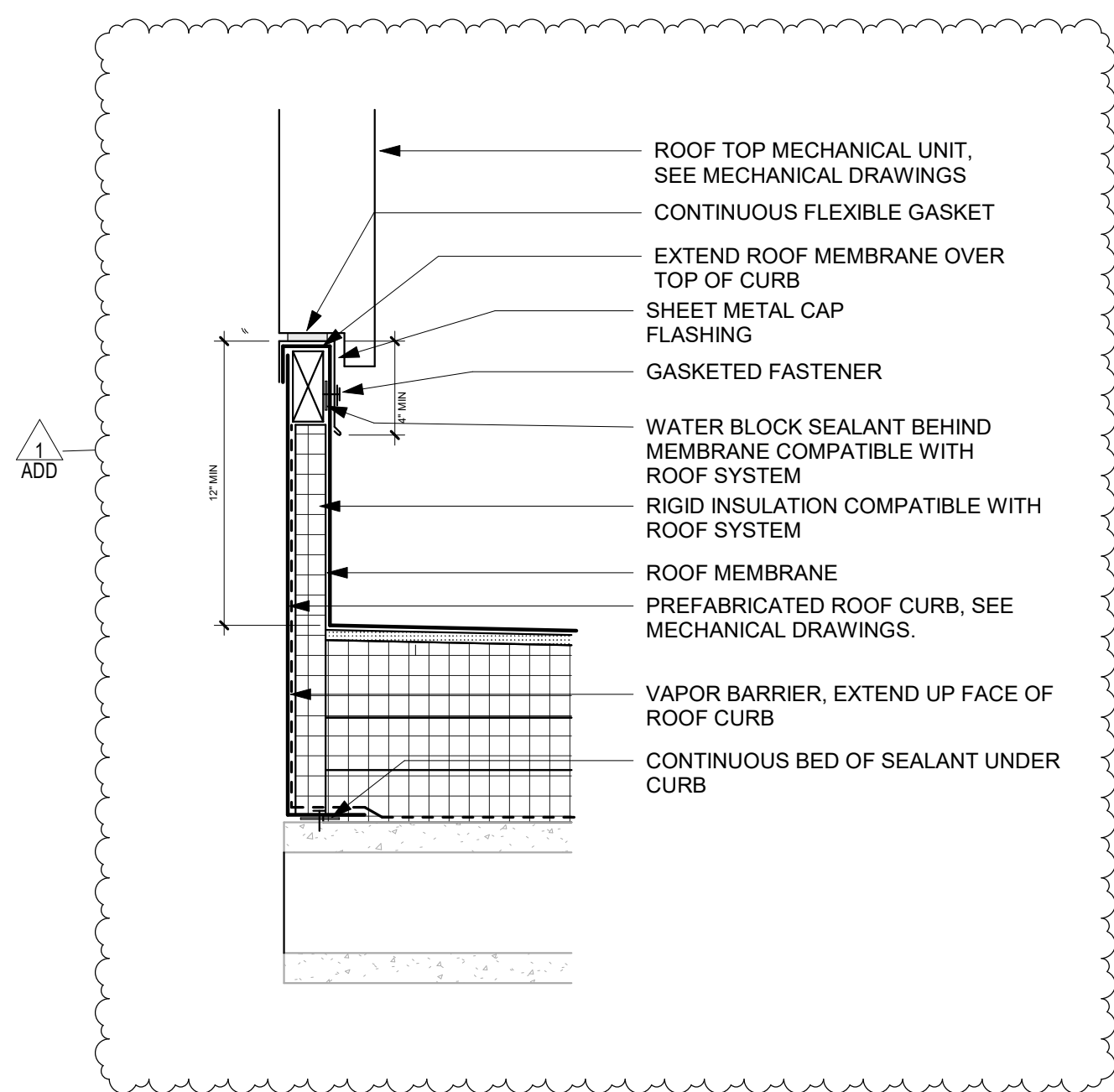
4 ROOF DETAIL - BASE OF WALL  
1 1/2" = 1'-0"



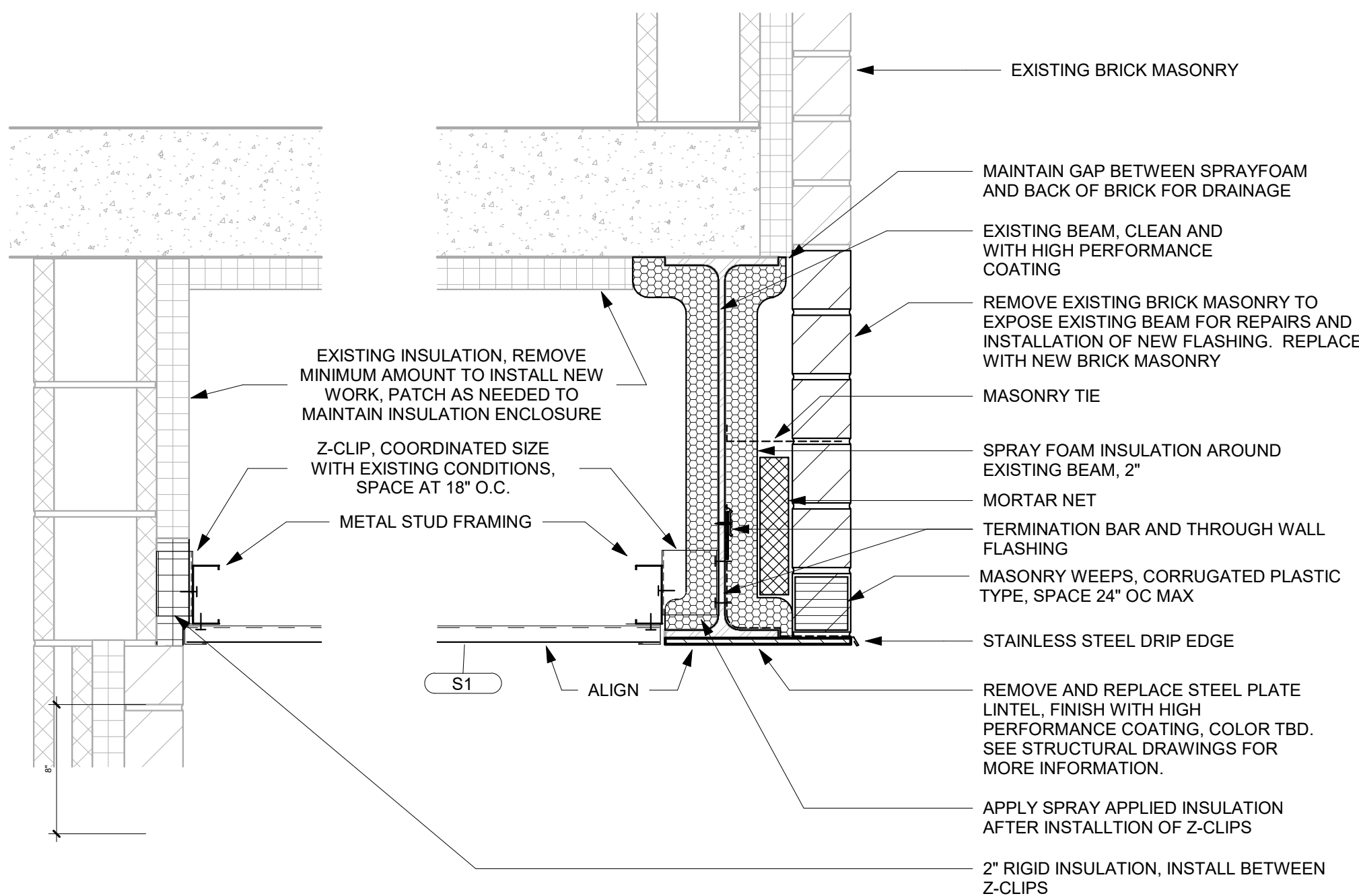
5 SECTION DETAIL AT REVEAL NEW  
1 1/2" = 1'-0"



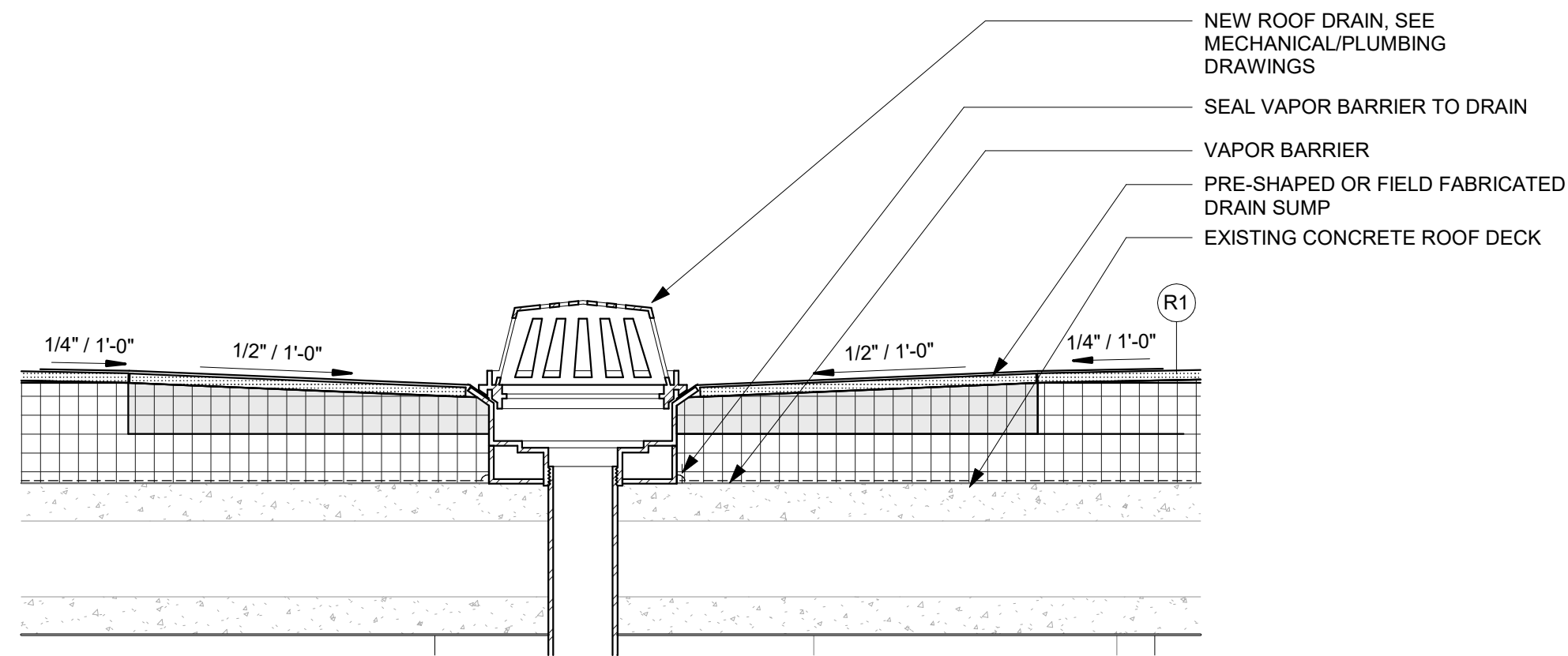
6 DRAIN SUMP DETAIL  
1/2" = 1'-0"



7 ROOF DETAIL - MECHANICAL CURB DETAIL  
1 1/2" = 1'-0"



8 DETAIL AT CANTILEVER EDGE AND SOFFIT  
1 1/2" = 1'-0"

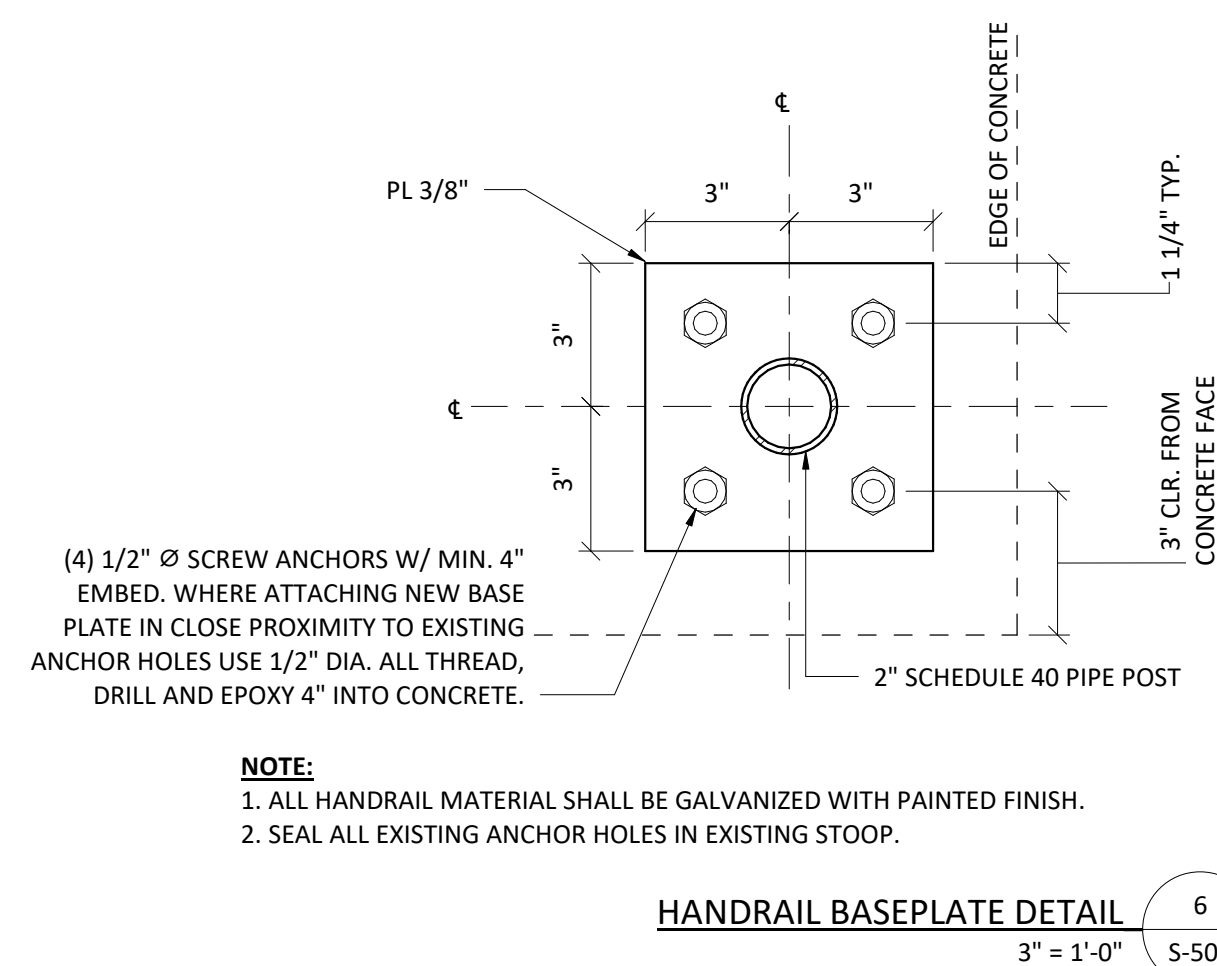
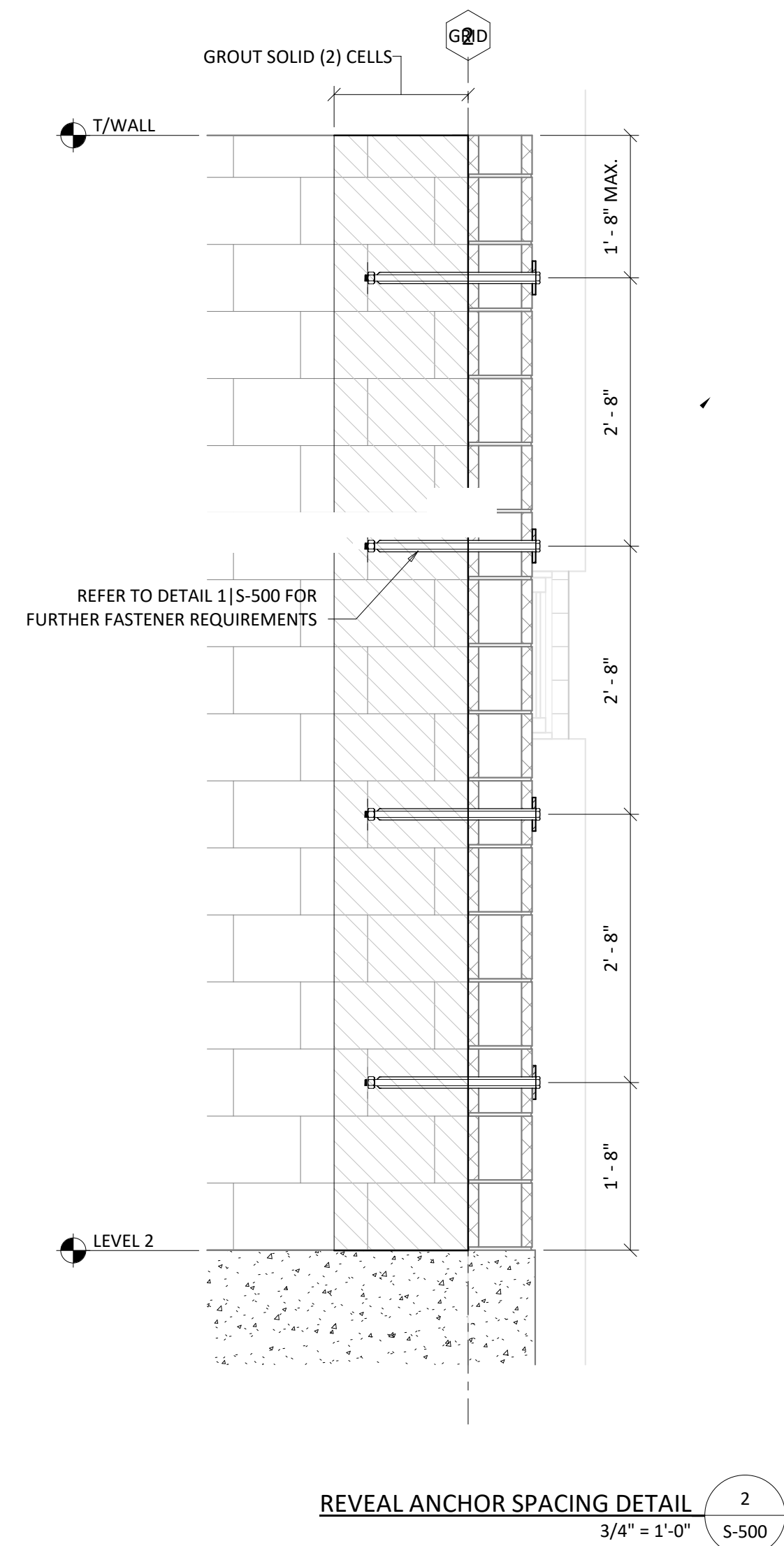
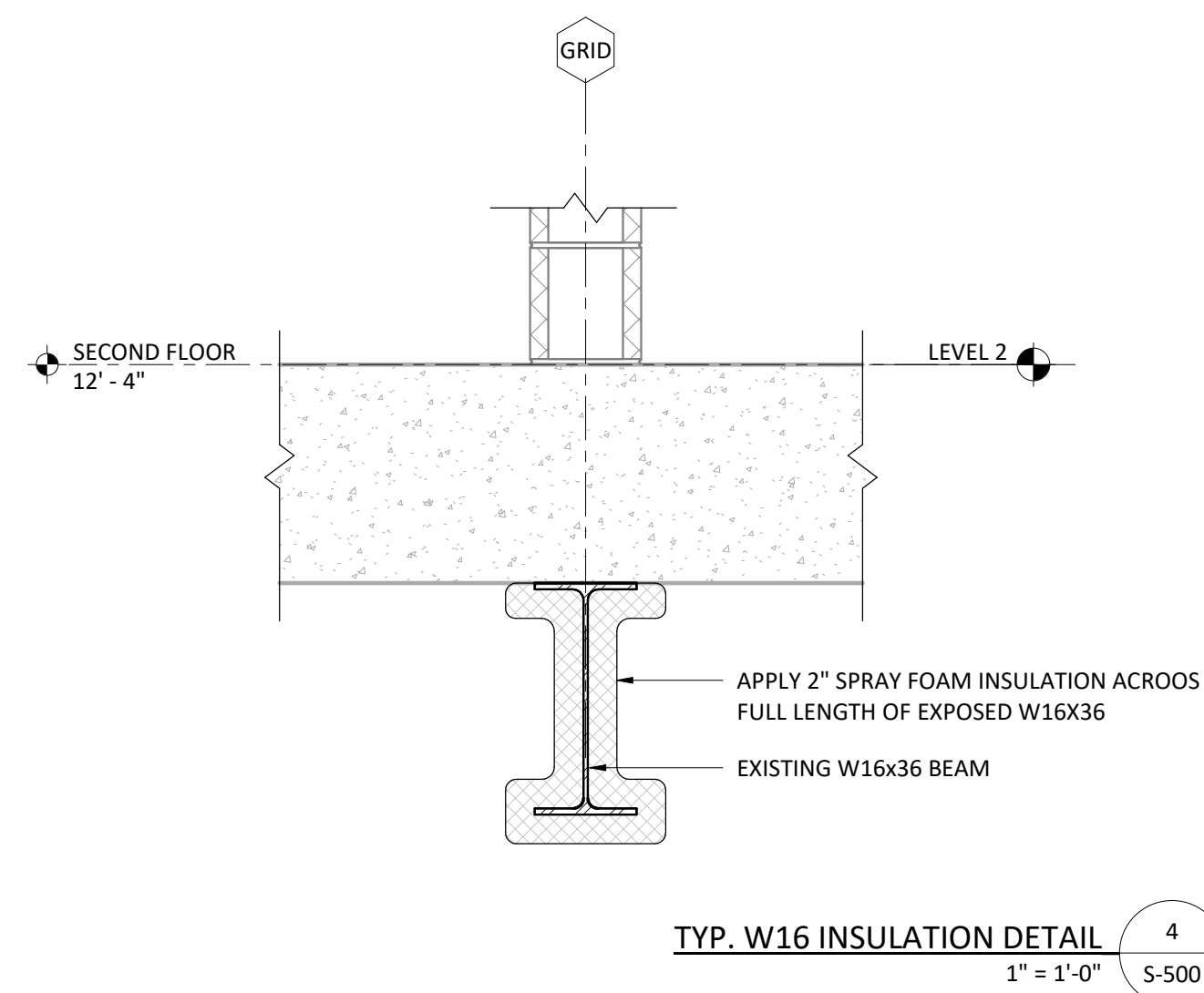
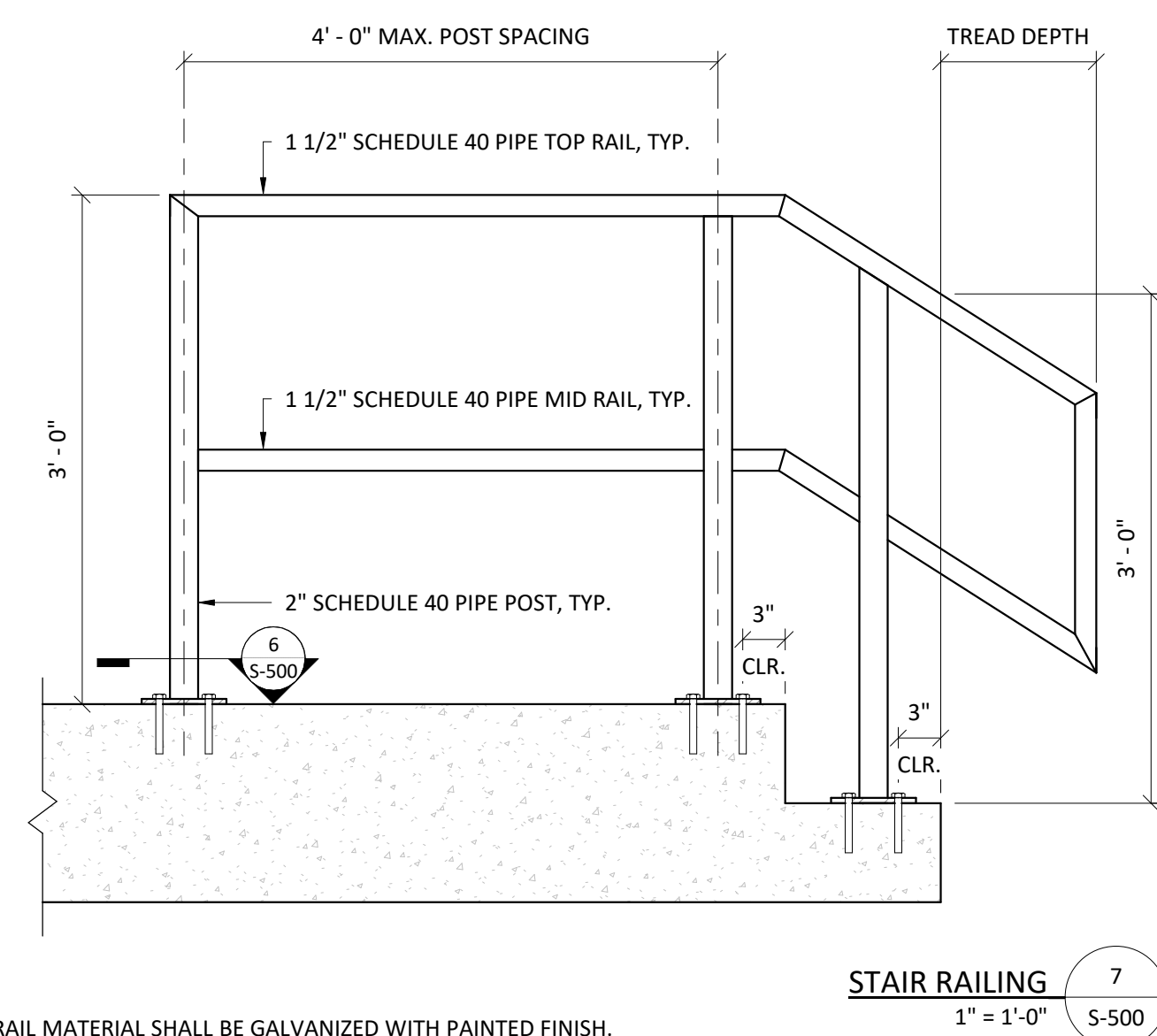
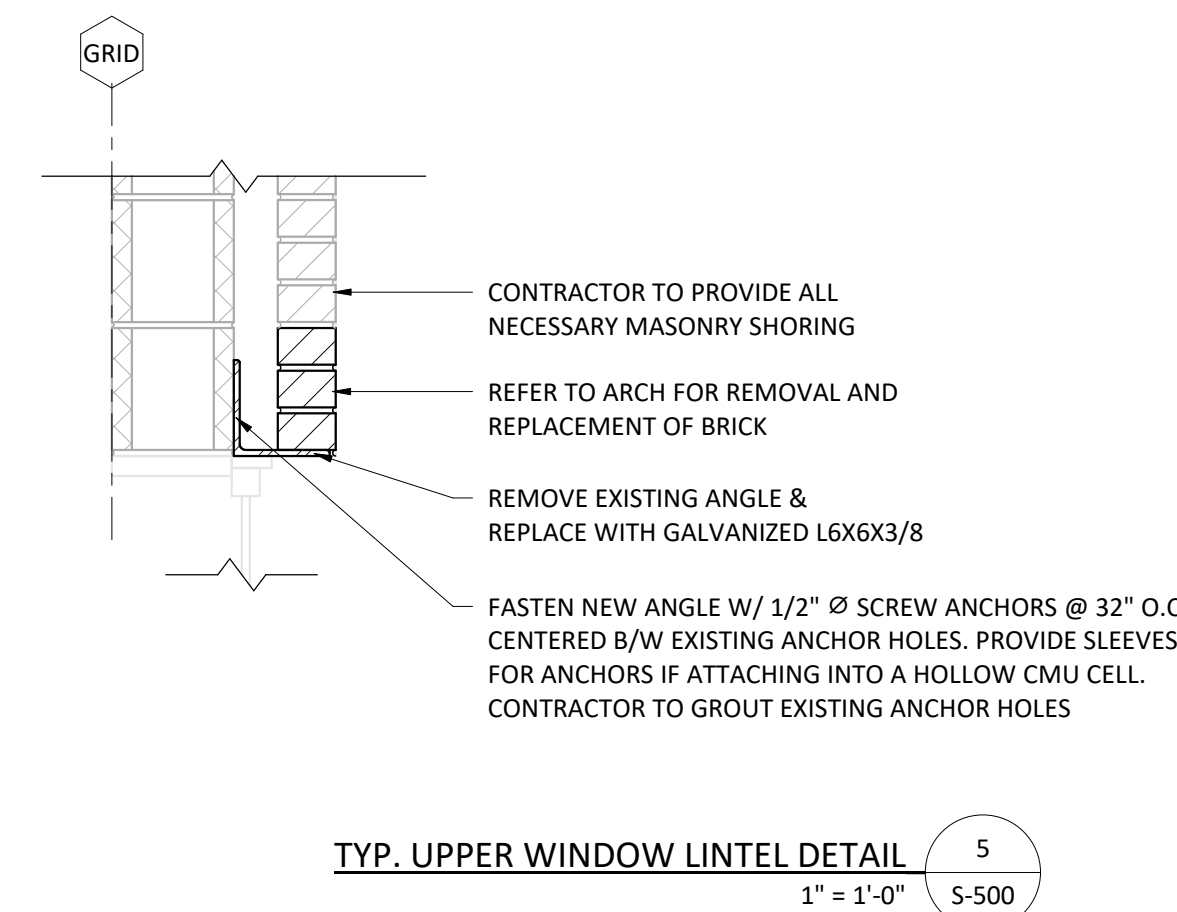
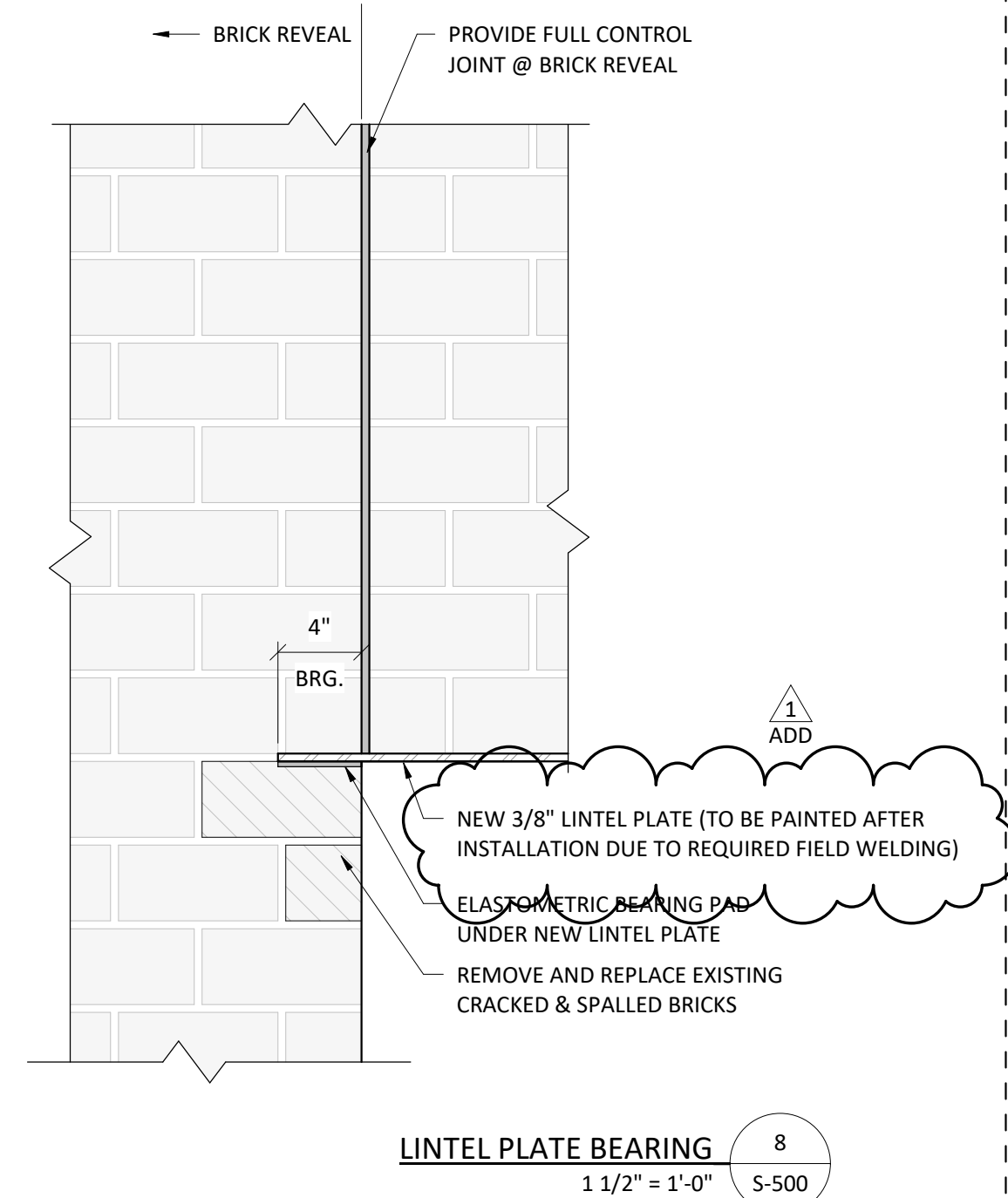


9 ROOF DRAIN DETAIL  
1 1/2" = 1'-0"

| DATE        | 2025-10-10 | DATE |
|-------------|------------|------|
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| Addendum 1  | 11/24/25   |      |
| Addendum 2  | 12/2/2025  |      |

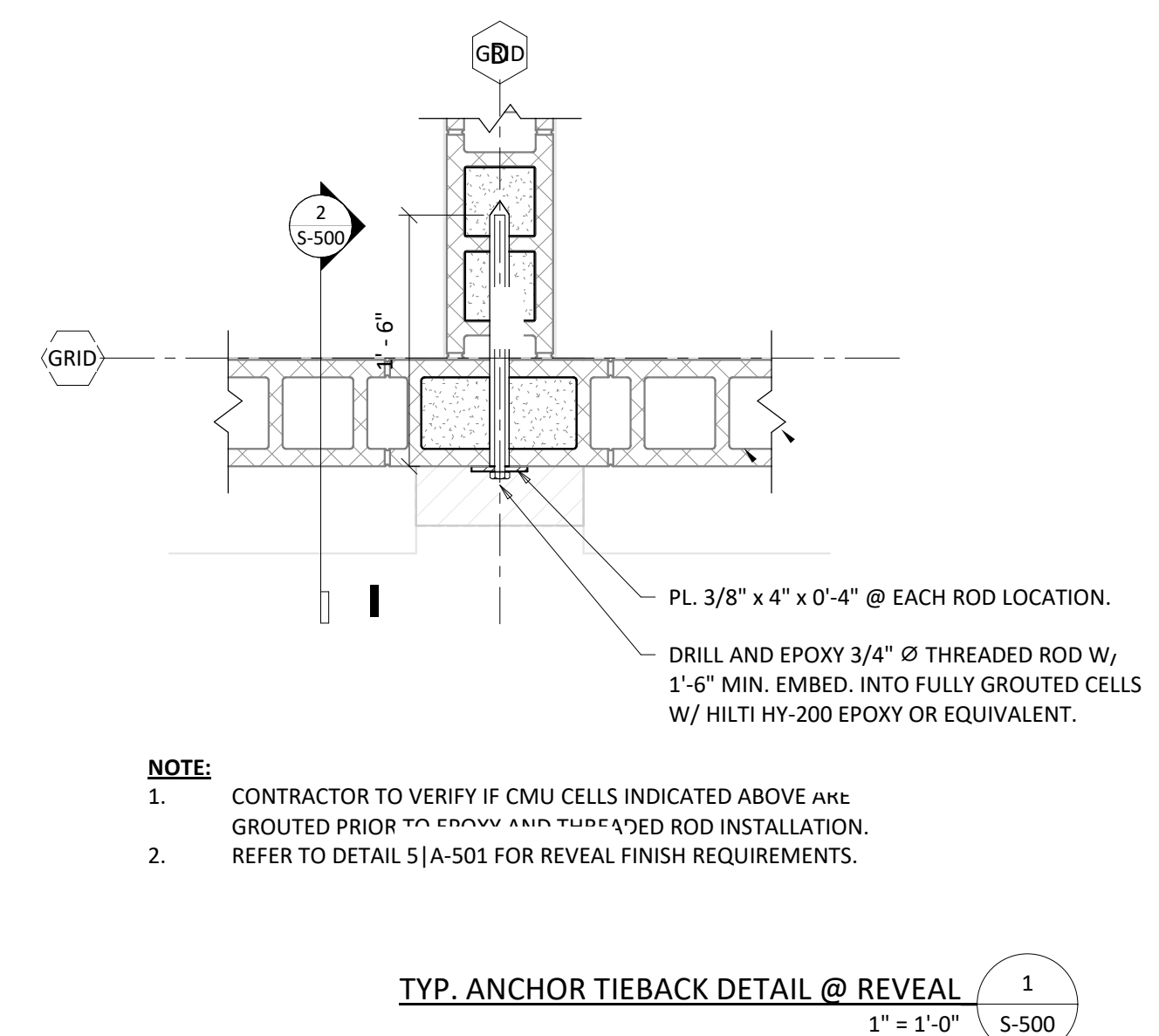
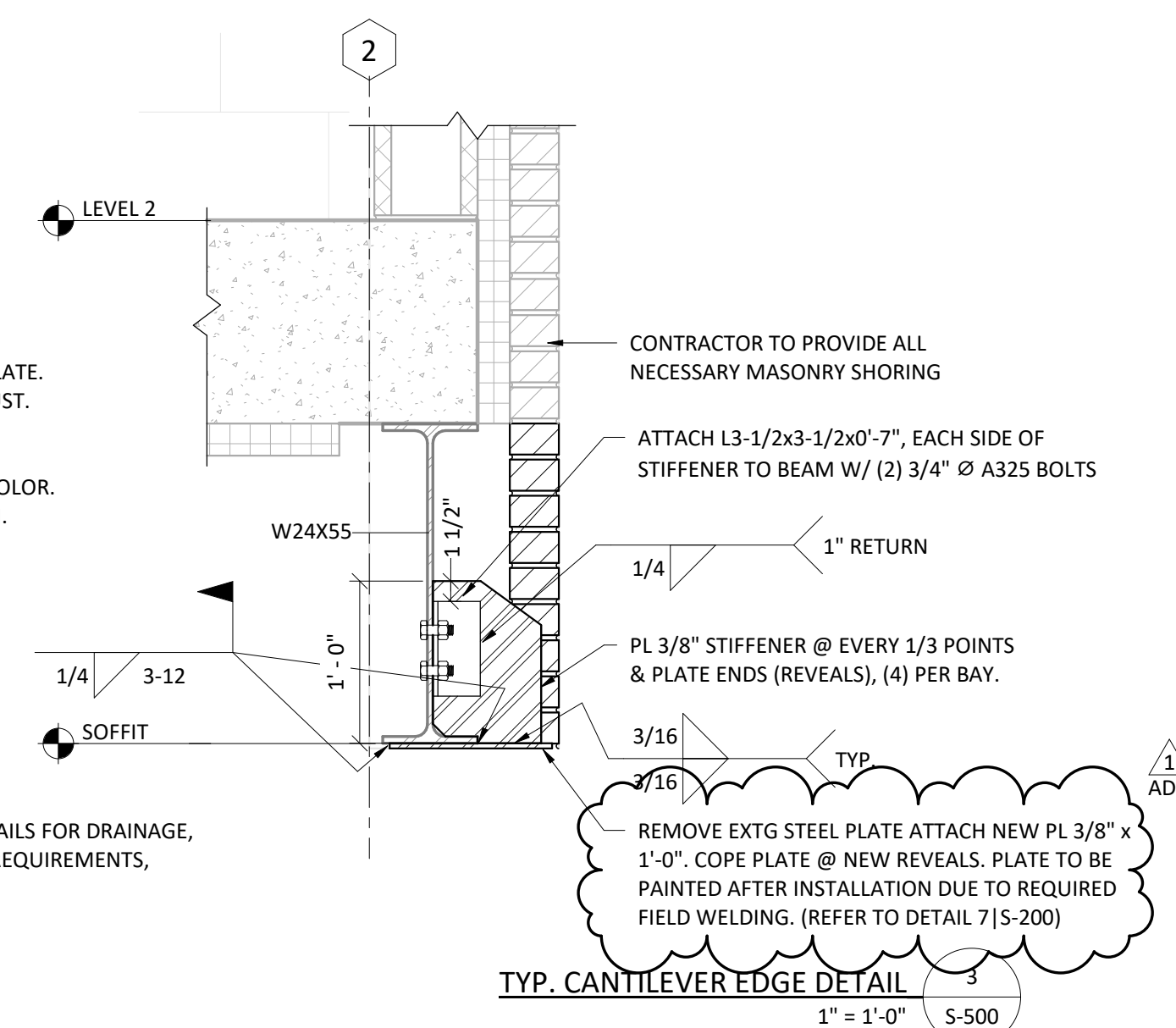
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| PROJECT NO. |     |

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| SHEET NAME |  |
| DETAILS    |  |



**WORK TO BE COMPLETED:**

1. CONTRACTOR TO REMOVE EXISTING LINTEL PLATE.
2. SANDBLAST BEAM TO REMOVE ALL VISIBLE RUST.
3. ATTACHED NEW LINTEL PLATE.
4. APPLY HIGH PERFORMANCE PRIMER TO ALL UNPAINTED STEEL. REFER TO ARCH FOR PAINT COLOR.
5. APPLY 2" SPRAY FOAM AROUND ENTIRE BEAM.



NOT FOR CONSTRUCTION



**Axiom Consultants**  
800 S Clinton St #200  
Iowa City, IA 52240

**OPN Architects**  
14 1/2 S Clinton St #1  
Iowa City, IA 52240

OPN Architects  
14 1/2 S Clinton St #1  
Iowa City, IA 52240

# 511 CAPITOL STREET BUILDING STABILIZATION PROJECT

511 S CAPITAL ST.  
IOWA CITY, IA 52240

GUED FOR

## PERMITTING DOCUMENTS

|             |            |
|-------------|------------|
| DATE        | 10/10/2025 |
| DESCRIPTION | DATE       |
| ADDENDUM 02 | 12/02/2025 |

[illegible]

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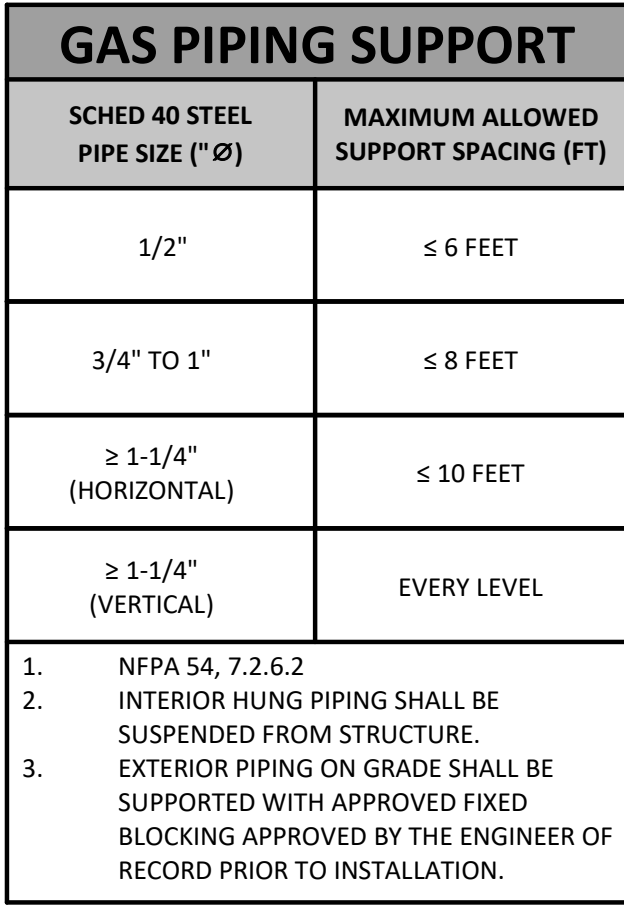
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| PROJECT NO. | 240123 |
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| SHEET NAME         |
| STRUCTURAL DETAILS |

## STRUCTURAL DETAILS

# S-500



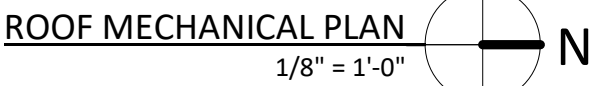
- GENERAL NATURAL GAS PIPING NOTES:**
1. NATURAL GAS PIPING SIZED PER UNIFORM PLUMBING CODE 2024, UPC 2024 [TABLE 1215.2(4)]: INLET PRESSURE 2.0 PSI | PRESSURE DROP 1 PSI.
    - A. ASSUMED DEVELOPMENT LENGTH OF PIPING = 3,000 FEET.
    - B. NEW HVAC EQUIPMENT NATURAL GAS LOAD = 1,200 CFH.
    - C. TOTAL BUILDING NATURAL GAS LOAD (EXISTING + NEW) = 2,380 CFH.
      - a. HEATING VALUE OF NG ASSUMED TO BE: 1,100 BTU/HOUR + 1 CFH.
  2. PROVIDE EACH NATURAL GAS-FIRED EQUIPMENT WITH MANUAL GAS SHUTOFF VALVE AND PRESSURE REGULATOR.
  3. NATURAL GAS PRESSURE REGULATORS SHALL BE VENTED TO THE EXTERIOR PER MANUFACTURER'S REQUIREMENTS.
  4. GAS PIPING THAT CROSSES THE WALK-PATH SHALL BE WRAPPED WITH HIGH-VISIBILITY TAPE TO ALERT STAFF.
  5. GAS PIPING SHALL BE SUPPORTED AS SHOWN IN EXISTING TABLE.

- GENERAL MECHANICAL NOTES:**
1. VERIFY ALL SITE CONDITIONS PRIOR TO STARTING WORK.
  2. COORDINATE ALL DUCTWORK AND PIPE ROUTING WITH BUILDING STRUCTURE AND OTHER TRADES PRIOR TO INSTALLATION TO ALLOW FOR PROPER CLEARANCE SPACE.
  3. MAINTAIN SERVICE CLEARANCE REQUIREMENTS AROUND ALL MECHANICAL EQUIPMENT AND ELECTRICAL EQUIPMENT. DO NOT ROUTE PIPE OR DUCTWORK IN CLEARANCE SPACE.
  4. MAINTAIN COORDINATE REFRIGERANT LINE ROUTING FROM CONDENSING UNITS TO THE RESPECTIVE UNITS.
  5. M.C. SHALL COORDINATE ANY AREA WHERE ACCESS TO EQUIPMENT OR HVAC COMPONENTS ARE REQUIRED TO ALLOW ACCESS FOR MAINTENANCE OR INSPECTION WITH G.C.
  6. COORDINATE NEW RTU LOCATION WITH EXISTING OPENINGS THROUGH ROOF. NEW RTUS SHALL BE PROVIDED WITH NEW ROOF CURBS.
  7. COORDINATE LOCATION OF ROOFTOP EQUIPMENT WITH ALL VENTS.
  8. ROOFTOP EQUIPMENT SHALL BE INSTALLED TO NOT BLOCK ROOF ACCESS DOORS WITH EQUIPMENT.
  9. MAINTAIN 10'-0" CLEARANCE BETWEEN ALL ROOFTOP UNITS, VENTILATION AIR INTAKE, AND ANY SOURCE OF VENT OR EXHAUST.

MECHANICAL KEYNOTES:

- ② ADD  
EXISTING DAIKIN MINI-SPLIT CONDENSING UNIT (CU) TO BE REINSTALLED PRIOR TO THE ROOF REPLACEMENT. PROVIDE NEW CONDENSING UNIT SUPPORT RACK THAT IS INSTALLED PRIOR TO EPDM ROOFING. PROVIDE NEW REFRIGERANT PIPING DOG HOUSE BOX FOR PIPE ROUTING TO EXISTING DAIKIN INDOOR UNIT VENTILATOR
- ③ EXISTING ROOF EXHAUST FANS (EF) TO BE REINSTALLED PRIOR TO THE ROOF REPLACEMENT. CONTRACTOR TO VERIFY IF NEW ROOF CURB IS REQUIRED.
- ④ EXISTING MAKEUP AIR UNIT (MAU) TO BE REINSTALLED PRIOR TO THE NEW ROOF REPLACEMENT. CONTRACTOR TO VERIFY IF NEW ROOF CURB IS REQUIRED.
- ⑤ EXISTING BOILER FLUE AND WEATHER CAP TO BE REINSTALLED PRIOR TO THE ROOF REPLACEMENT.
- ⑥ EXISTING EXHAUST FAN ADJUSTED TO HANDLE ADDITIONAL EXHAUST CFM. CONTRACTOR TO ADJUST FAN SPEED AND BALANCE AIRFLOW FOR AN EXHAUST LOAD OF 810 CFM.
- ⑦ ADD  
PROVIDE NEW REFRIGERANT PIPING DOG HOUSE BOX FOR PIPE ROUTING TO INDOOR UNIT VENTILATOR, UV-1

**GAS METER VIEW DETAIL** (2)  
1/8" = 1'-0" (M-121)



NOT FOR CONSTRUCTION



| ROOFTOP UNIT   NATURAL GAS-FIRED SCHEDULE |                            |                        |                              |                           |                   |                 |                |                        |              |                                   |                                |                |                 |                        |                 |                               |                    |                 |                             |            |               |         |                   |        |       |                  |                |                         |                                      |  |
|---|----------------------------|------------------------|------------------------------|---------------------------|-------------------|-----------------|----------------|------------------------|--------------|-----------------------------------|--------------------------------|----------------|-----------------|------------------------|-----------------|-------------------------------|--------------------|-----------------|-----------------------------|------------|---------------|---------|-------------------|--------|-------|------------------|----------------|-------------------------|--------------------------------------|--|
| PLAN<br>MARK                              | SUPPLY<br>AIRFLOW<br>(CFM) | OA<br>AIRFLOW<br>(CFM) | EXTERNAL<br>SP<br>(IN. W.G.) | TOTAL<br>SP<br>(IN. W.G.) | COOLING LOADS     |                 |                | COOLING AIR CONDITIONS |              | DX COOLING<br>COIL<br>REFRIGERANT | MINIMUM<br>EFFICIENCY<br>(EER) | HEATING        |                 | HEATING AIR CONDITIONS |                 | HEAT<br>EXCHANGER<br>MATERIAL | FUEL - NATURAL GAS |                 |                             | ELECTRICAL |               |         | DIMENSIONS (INCH) |        |       | WEIGHT<br>(LBS.) | AREA<br>SERVED | MANUFACTURER  <br>MODEL | NOTES                                |  |
|   |                            |                        |                              |                           | SENSIBLE<br>(MBH) | LATENT<br>(MBH) | TOTAL<br>(MBH) | EAT<br>DB/WB           | LAT<br>DB/WB |                                   |                                | INPUT<br>(MBH) | OUTPUT<br>(MBH) | EAT<br>(DEG. F)        | LAT<br>(DEG. F) |                               | AFUE               | GAS SIZE<br>(ø) | MIN.-MAX. INLET<br>PRESSURE | HP         | AMPS<br>(FLA) | VOLTAGE | ø                 | LENGTH | WIDTH |                  |                |                         |                                      | HEIGHT<br>(NOTE 15)                      |
| <u>RTU-1</u>                              | 1,840                      | 766                    | 0.67                         | 0.81                      | 46.8              | 16.0            | 62.8           | 83/68                  | 56/56        | R-454B                            | 13.0                           | 100.0          | 81.0            | 60                     | 100             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 30            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,090          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK060   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-2</u>                              | 2,000                      | 393                    | 0.56                         | 0.72                      | 47.8              | 12.4            | 60.2           | 79/65                  | 54/54        | R-454B                            | 13.0                           | 150.0          | 121.5           | 50                     | 105             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 30            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,105          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK060   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-3</u>                              | 2,000                      | 866                    | 0.75                         | 0.91                      | 47.8              | 12.8            | 60.2           | 79/65                  | 54/54        | R-454B                            | 13.0                           | 150.0          | 121.5           | 60                     | 115             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 30            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,105          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK060   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-4</u>                              | 1,600                      | 393                    | 0.49                         | 0.55                      | 33.1              | 14.3            | 47.4           | 82/67                  | 52/52        | R-454B                            | 13.0                           | 80.0           | 64.8            | 60                     | 109             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 28            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,055          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK048   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-5</u>                              | 2,000                      | 1,059                  | 0.65                         | 0.81                      | 65.6              | 18.2            | 83.8           | 86/69                  | 56/56        | R-454B                            | 12.2                           | 150.0          | 121.5           | 70                     | 125             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 34            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,189          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK072   | 1,2,3,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-6</u>                              | 1,285                      | 260                    | 0.96                         | 1.03                      | 33.3              | 12.9            | 46.2           | 79/65                  | 51/51        | R-454B                            | 13.0                           | 80.0           | 64.8            | 60                     | 106             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 28            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,055          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK048   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-7</u>                              | 2,000                      | 1,105                  | 0.71                         | 0.87                      | 65.6              | 18.2            | 83.8           | 86/69                  | 56/56        | R-454B                            | 12.2                           | 150.0          | 121.5           | 60                     | 115             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 34            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,189          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK072   | 1,2,3,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-8</u>                              | 1,580                      | 337                    | 0.44                         | 0.54                      | 39.4              | 8.7             | 48.1           | 80/65                  | 54/54        | R-454B                            | 13.0                           | 80.0           | 64.8            | 70                     | 107             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 28            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,055          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK048   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-9</u>                              | 770                        | 50                     | 0.51                         | 0.51                      | -                 | -               | 24.0           | 77/64                  | 54/54        | R-454B                            | 11.5                           | 60.0           | 48.0            | 60                     | 70              | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 1/2        | 5             | 208     | 1                 | 52.0   | 45.0  | 46.0             | 374            | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL 5YCZ5024 | 1,2,4,7,9,10,1<br>1,12,13,15,16          |
| <u>RTU-10</u>                             | 1,600                      | 658                    | 0.50                         | 0.61                      | 42.8              | 18.3            | 61.1           | 83/68                  | 54/54        | R-454B                            | 13.0                           | 100.0          | 81.0            | 60                     | 106             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 30            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,090          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK060   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-11</u>                             | 1,600                      | 866                    | 0.53                         | 0.65                      | 46.2              | 16.0            | 62.2           | 86/69                  | 55/55        | R-454B                            | 13.0                           | 150.0          | 121.5           | 60                     | 129             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3          | 30            | 208     | 3                 | 88.1   | 53.3  | 50.9             | 1,105          | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK060   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |
| <u>RTU-12</u>                             | 1,000                      | 190                    | 0.29                         | 0.49                      | 27.0              | 9.0             | 36.0           | 79/65                  | 52/52        | R-454B                            | 13.0                           | 80.0           | 64.8            | 70                     | 129             | STAINLESS<br>STEEL            | 81%                | 3/4"            | 5"-13" W.C.                 | 3/4        | 20            | 208     | 3                 | 69.4   | 44.3  | 46.9             | 809            | SEE PLANS               | TRANE ROOFTOP UNIT<br>MODEL YHK036   | 1,2,4,5,6,7,8,9,10,<br>11,12,13,14,15,16 |

1. REFER TO MECHANICAL CONTROL SEQUENCES. REFER TO FLOOR PLANS FOR T-STAT & SENSOR LOCATIONS.

2. PROVIDE FACTORY INSTALLED STAND-ALONE CONTROLS.

3. PROVIDE MODULATING GAS VALVE.

4. PROVIDE STAGED GAS VALVE. RTU SHALL PROVIDE MIN. 2-STAGES OF HEATING.

5. PROVIDE UNITS ECONOMIZER WITH BAROMETRIC RELIEF, BASED ON DRY BULB TEMPERATURE.

6. PROVIDE UNITS WITH POWERED EXHAUST FOR BUILDING PRESSURIZATION CONTROL.

7. SUPPLY FAN IS DIRECT DRIVE, VARIABLE SPEED, BC PLENUM.

8. PROVIDE HOT GAS RE-HEAT (HGRH) FOR DEHUMIDIFICATION.

9. PROVIDE BIRD SCREENS FOR OUTSIDE AIR INLET.

10. PROVIDE 2" MERV13 AIR FILTERS.

11. PROVIDE CLOGGED FILTER SWITCH.

12. PROVIDE FACTORY WIRED 115V CONVENIENCE OUTLET.

13. PROVIDE UNIT MOUNTED NON-FUSED DISCONNECT SWITCH.



14. PROVIDE DUCT MOUNTED RA SMOKE DETECTORS FOR RTUS WITH AIRFLOWS OF 2,000 CFM AND LESS. PROVIDE RA & SA SMOKE DETECTORS FOR RTUS WITH AIRFLOWS GREATER THAN 4,000 CFM. SMOKE DETECTORS SHALL BE PROVIDED AND INSTALLED BY THE FIRE ALARM (FA) CONTRACTOR.

15. PROVIDE ROOF CURB. CURB SHALL MAINTAIN MINIMUM 18" CLEAR ABOVE ROOF AND INSULATION FINISHED ELEVATION. REFER TO ARCHITECTURAL ELEVATIONS, SECTIONS AND DETAILS FOR ROOF AND INSULATION REQUIREMENTS. REFER TO ARCHITECTURAL ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION.

16. OUTSIDE AIR CONDITIONS USED FOR HEATING, COOLING AND MIXED AIR:  
SUMMER: 95°F/75°F DB/WB.  
WINTER: -10°F DB.

| DIFFUSER/REGISTER/GRILLE (DRG) SCHEDULE |   |            |                  |                         |          |                |   |                    |
|---|---|------------|------------------|-------------------------|----------|----------------|---|--------------------|
| PLAN MARK                               | FACE SIZE   | INLET SIZE | BLADE DEFLECTION | INSTALLATION / MOUNTING | MATERIAL | COLOR / FINISH | MANUFACTURER / MODEL                            | NOTES              |
| EG-1                                    | INLET<br>SIZE + 2"  | SEE PLANS  | 0"               | SIDE/WALL<br>MOUNT      | STEEL    | WHITE (4)      | GREENHECK SECURITY GRILLE  <br>MODEL XG-SGLF-50 | 1, 2, 3, 4, 5, & 6 |
| EG-2                                    | 12" X 12"   | SEE PLANS  | N/A              | CEILING                 | STEEL    | WHITE (4)      | GREENHECK EXHAUST GRILLE  <br>MODEL RGP6-F      | 1, 2, 3, 4, & 5    |
| 1.                                      | CONTRACTOR SHALL DETERMINE PROPER MARGIN STYLE TO MATCH CEILING CONSTRUCTION.   |            |                  |                         |          |                |   |                    |
| 2.                                      | ALL RUN OUT DUCTWORK TO DIFFUSERS SHALL BE NECK SIZE, UNLESS OTHERWISE NOTED.   |            |                  |                         |          |                |   |                    |
| 3.                                      | CONTRACTOR SHALL DETERMINE PROPER MARGIN STYLE TO MATCH CEILING CONSTRUCTION. REFER TO ARCHITECTURAL DETAILS FOR FINISH AND DESIRED LOOK. |            |                  |                         |          |                |   |                    |
| 4.                                      | CONFIRM COLOR AND FINISH WITH ARCHITECT TO ENSURE DESIGN INTENT IS ACHIEVED FOR EACH SPACE.   |            |                  |                         |          |                |   |                    |
| 5.                                      | ALL DIFFUSERS/REGISTERS/GRILLES SHALL BE PROVIDED WITH INTEGRAL DAMPER OR MEANS FOR ADJUSTING AIRFLOW AT THE OUTLET.                      |            |                  |                         |          |                |   |                    |
| 6.                                      | GRILLE TO BE SECURITY RATED/TAMPER PROOF.   |            |                  |                         |          |                |   |                    |

| CLOSED CIRCUIT COOLER SCHEDULE   |          |        |            |               |            |            |                |          |              |          |          |          |           |                  |            |             |                         |            |           |    |  |
|--|----------|--------|------------|---------------|------------|------------|----------------|----------|--------------|----------|----------|----------|-----------|------------------|------------|-------------|-------------------------|------------|-----------|----|--|
| PLAN MARK  | LOCATION | MOTORS |            |               |            |            | COOLING EFFECT |          |              |          |          |          |           | DIMENSIONAL DATA |            |             | OPERATING WEIGHT (LBS.) | ELECTRICAL |           |    | MANUFACTURER/ MODEL                                  |
|  |          | FAN    |            |               | SPRAY PUMP |            | AIR SUPPLY     |          | WATER SUPPLY |          |          |          |           | LENGTH (IN)      | WIDTH (IN) | HEIGHT (IN) |                         | AMPS (FLA) | VOLTS (V) | PH |  |
|  |          | QTY    | POWER (HP) | AIRFLOW (CFM) | QTY        | POWER (HP) | EAT (DB)       | EAT (WB) | FLOW (GPM)   | EWT (DB) | LWT (DB) | PD (PSI) | EWR (GPM) |                  |            |             |                         |            |           |    |  |
| CT-1   | ROOF     | 1      | 7.5        | 12,500        | 1          | 0.5        | 95             | 79       | 100          | 103      | 90       | 6.8      | 1.04      | 122.0            | 41.0       | 88.0        | 4,960                   | 23         | 208       | 3  | EVAPCO CLOSED CIRCUIT COOLER<br>MODEL LRWB 3-4H6-Z-H |
| 1. ALARM PROGRAMMING FOR COOLING TOWER, CT-1, TO BE PROVIDED BY OWNER. |          |        |            |               |            |            |                |          |              |          |          |          |           |                  |            |             |                         |            |           |    |  |

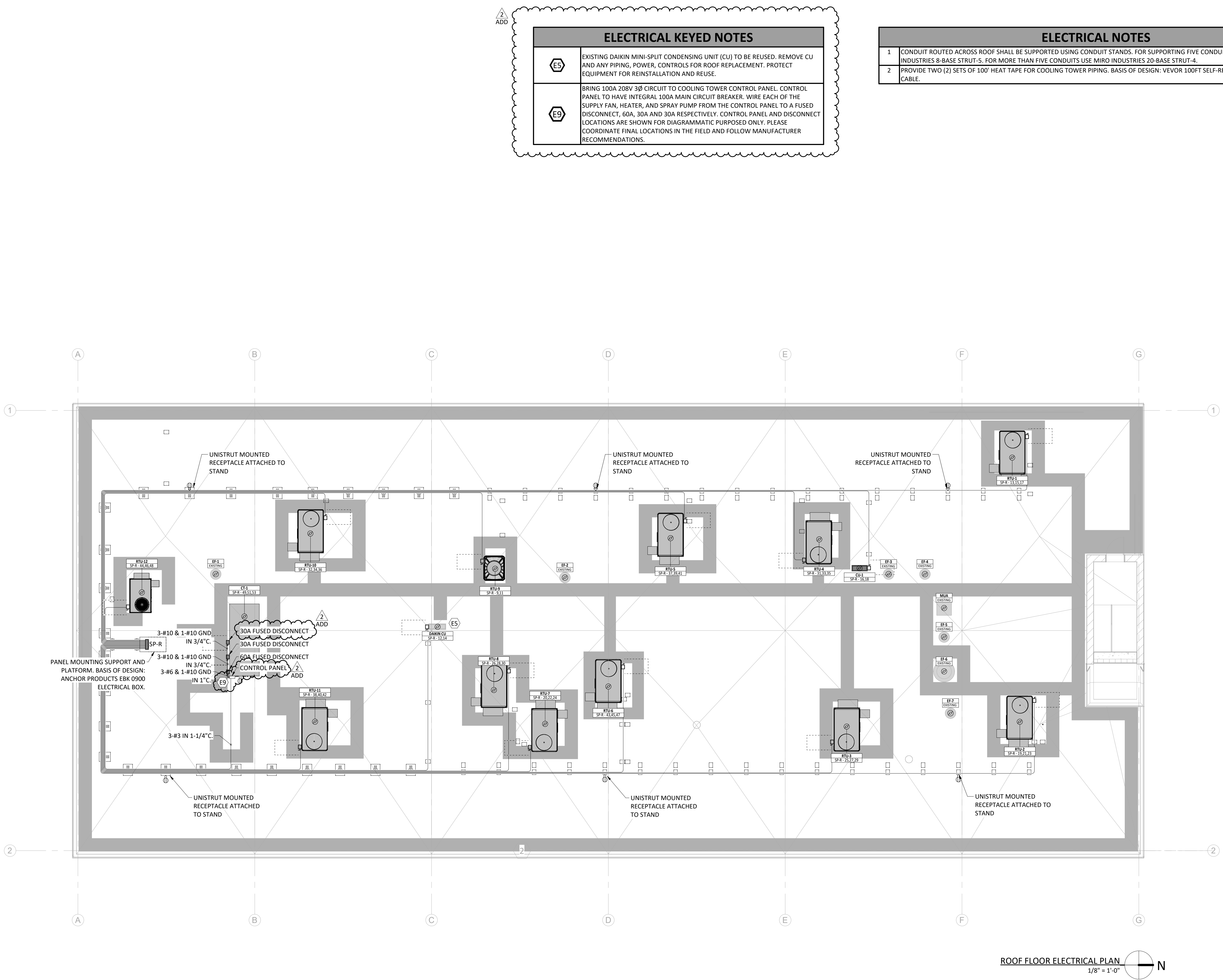
| PLUMBING FIXTURE SCHEDULE |   |   |
|---------------------------|---|---|
| PLAN MARK                 | DESCRIPTION   | MANUFACTURER/MODEL  |
| <u>RD-1</u>               |  <p>PRIMARY ROOF DRAIN - CAST IRON BODY, SECURED LOW SILHOUETTE CAST IRON DOME, 15-INCH ROUND ROOF DRAIN, WITH A BOTTOM 3" PIPE CONNECTION. COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARDS.</p> |  ZURN (Z100) |

| MINI-SPLIT AIR-CONDITIONER SCHEDULE |  |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
|-------------------------------------|--|-------------------------------------|------------------|------|------------------------|------|------------|------|-------|-------------------|----------|----------|--|---------------|---|--------------------|
| PLAN MARK                           | SUPPLY AIRFLOW (CFM)   | COOLING CAPACITY - MIN. / MAX (MBH) | REFRIGERANT TYPE | SEER | HEATING CAPACITY (MBH) | HSPF | ELECTRICAL |      |       | DIMENSIONS (INCH) |          |          | MAX. REFRIG. TOTAL LENGTH // QUANTITY (LBS/1000 FT³) | WEIGHT (LBS.) | MANUFACTURER/MODEL                              | NOTES              |
|                                     |  |                                     |                  |      |                        |      | AMP (MCA)  | VOLT | PHASE | WIDTH             | DEPTH    | HEIGHT   |  |               |   |                    |
| UNIT VENTILATOR                     |  |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| UV-1                                | 317  | --                                  | (4)              | --   | --                     | 10.2 | 2.5        | 208  | 1     | 35-7/16           | 28-7/8   | 9-7/8    | --   | 58            | MITSUBISHI MINI-SPLIT UNIT<br>MODEL PEAD-A12AA9 | 1, 2, 3, 4, & 5    |
| HEAT PUMP (CONDENSING UNIT)         |  |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| CU-1                                | --   | 4.8 / 12.0                          | (4)              | 21.8 | --                     | --   | 11.0       | 208  | 1     | 31-13/16          | 11-13/16 | 24-13/16 | 165.0 // 3.1   | 92            | MITSUBISHI CONDENSING UNIT<br>MODEL PUY-A12NKA7 | 3, 4, 5, 6, 7, & 8 |
| 1.                                  | UNIT VENTILATOR SHALL BE EQUIPPED WITH CONDENSATE LIFT MECHANISM. ROUTE 3/4" CONDENSATE TO MOP SINK IN ADJACENT JANITOR CLOSET. DIVISION 26 CONTRACTOR SHALL WIRE THE CONDENSATE LIFT MECHANISM (PUMP).                    |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 2.                                  | PROVIDE UNIT VENTILATOR WITH WIRELESS REMOTE CONTROLLER.   |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 3.                                  | REFRIGERANT LINESETS SHALL BE ROUTED IN MOST EFFICIENT PATH AND MINIMAL REFRIGERANT PIPE SHALL BE EXPOSED. ALL REFRIGERANT LINESET SHALL BE INSULATED PER ENERGY CODE REQUIREMENTS. PRE-INSULATED LINESETS ARE ACCEPTABLE. |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 4.                                  | MINI-SPLIT MANUFACTURER SHALL PROVIDE REFRIGERANT TYPE THAT MEETS ALL NEW FEDERAL REQUIREMENTS. REFER TO INTERNATIONAL MECHANICAL CODE, CHAPTER 11 REFRIGERANTS FOR MAXIMUM ALLOWABLE QUANTITY FOR SUBMITTED REFRIGERANT.  |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 5.                                  | REFER TO SUBMITTED MANUFACTURER PIPING LENGTH RESTRICTIONS.  |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 6.                                  | PROVIDE HAIL GUARD FOR CONDENSING UNIT <b>CU-1</b> .   |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 7.                                  | PROVIDE WIND BAFFLE FOR LOW AMBIENT COOLING.   |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 8.                                  | INSTALL CONDENSING UNIT <b>CU-1</b> ON MOUNTING STAND - 12 INCH HEIGHT.  |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |
| 9.                                  | PROVIDE NEW REFRIGERANT PIPING DOG HOUSE BOX FOR PIPE ROUTING TO INDOOR UNIT VENTILATOR, <b>UV-1</b> .   |                                     |                  |      |                        |      |            |      |       |                   |          |          |  |               |   |                    |

NOT FOR CONSTRUCTION

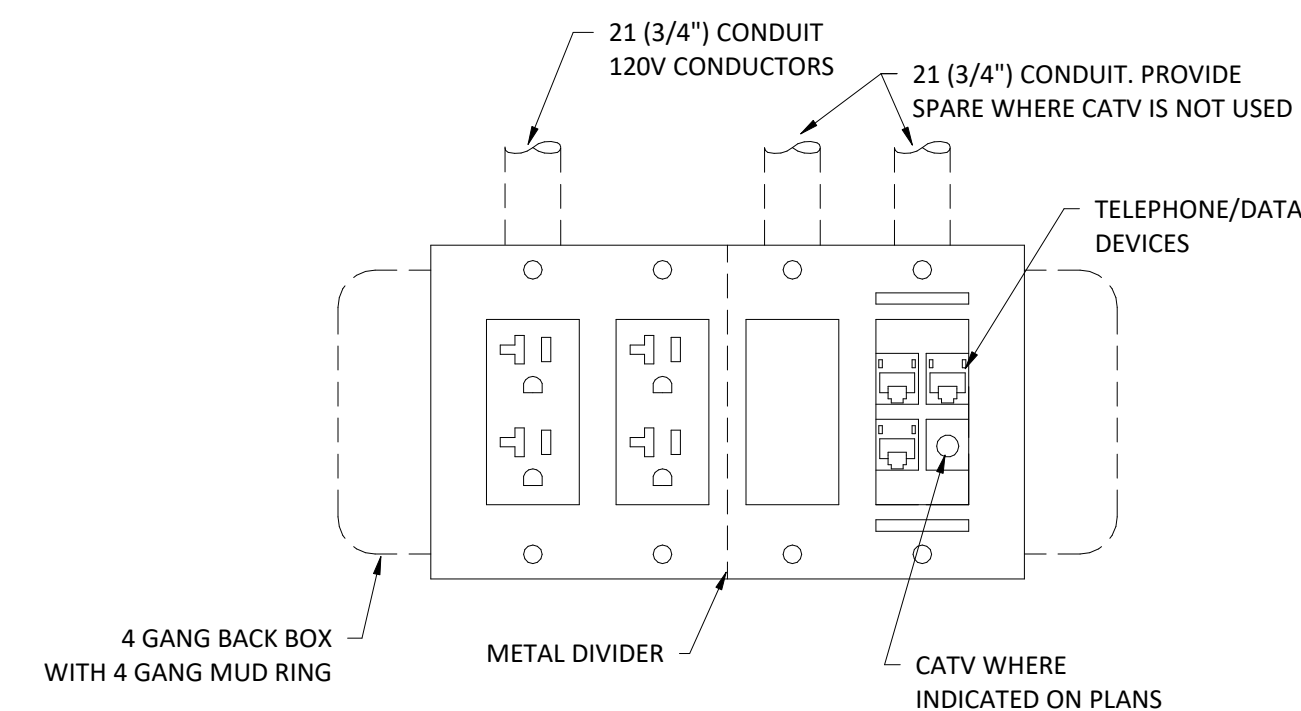


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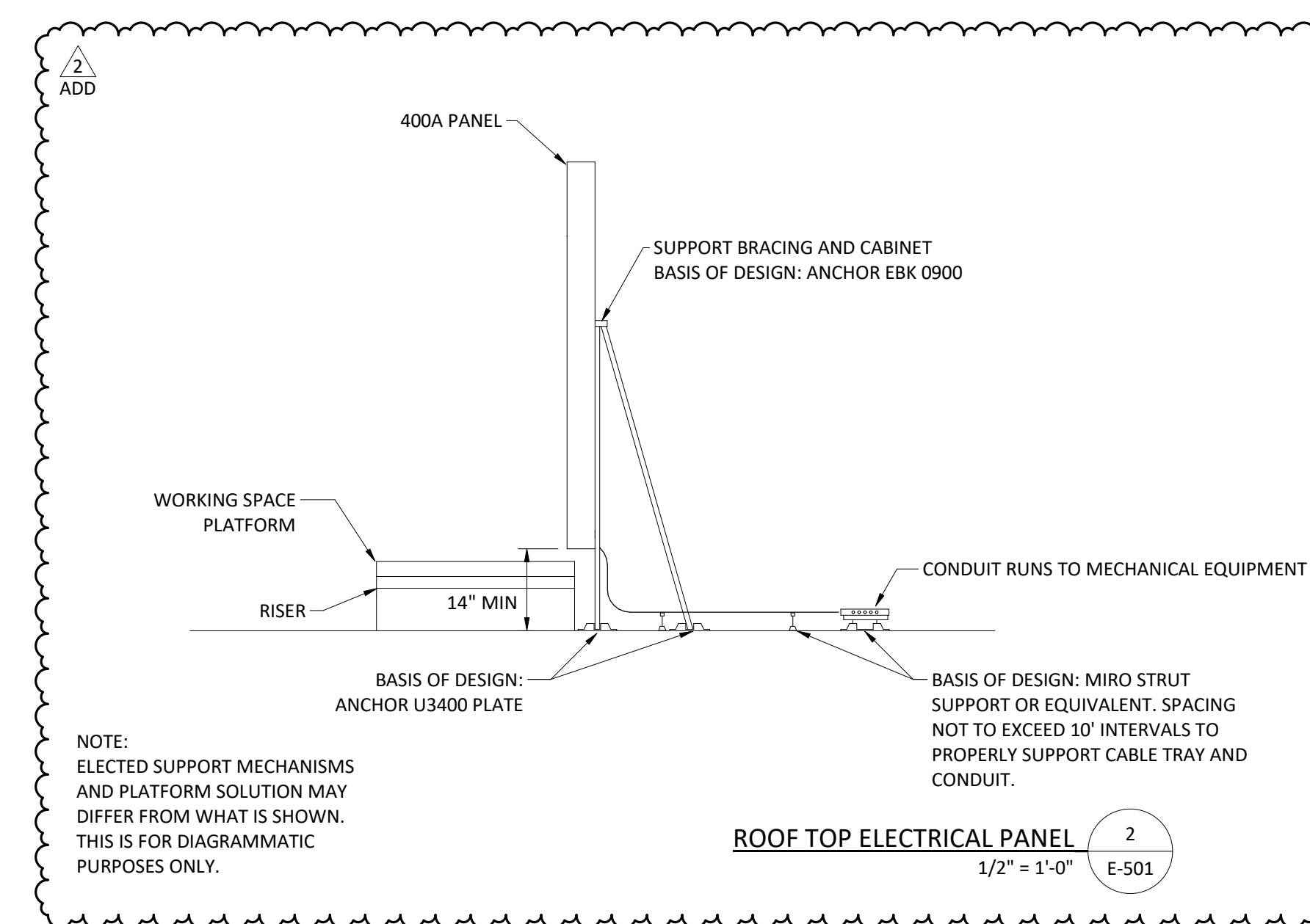


| ELECTRICAL KEYED NOTES |  |
|------------------------|--|
| E5                     | EXISTING DAIKIN MINI-SPLIT CONDENSING UNIT (CU) TO BE REUSED. REMOVE CU AND ANY PIPING, POWER, CONTROLS FOR ROOF REPLACEMENT. PROTECT EQUIPMENT FOR REINSTALLATION AND REUSE.  |
| E9                     | BRING 100A 208V 3Ø CIRCUIT TO COOLING TOWER CONTROL PANEL. CONTROL PANEL TO HAVE INTEGRAL 100A MAIN CIRCUIT BREAKER. WIRE EACH OF THE SUPPLY FAN, HEATER, AND SPRAY PUMP FROM THE CONTROL PANEL TO A FUSED DISCONNECT, 60A, 30A AND 30A RESPECTIVELY. CONTROL PANEL AND DISCONNECT LOCATIONS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY. PLEASE COORDINATE FINAL LOCATIONS IN THE FIELD AND FOLLOW MANUFACTURER RECOMMENDATIONS. |

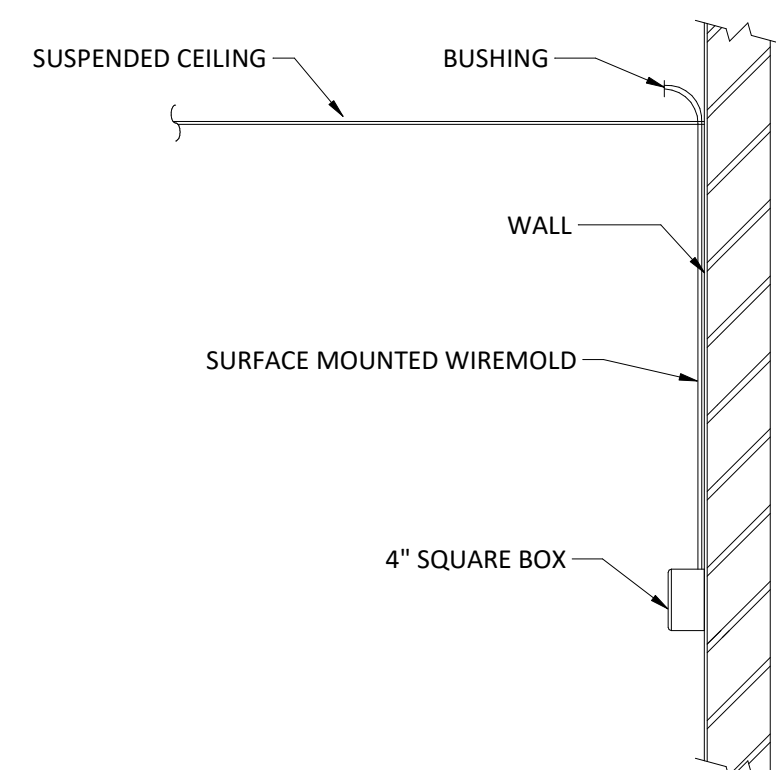
| ELECTRICAL NOTES |   |
|------------------|---|
| 1                | CONDUIT ROUTED ACROSS ROOF SHALL BE SUPPORTED USING CONDUIT STANDS. FOR SUPPORTING FIVE CONDUITS OR LESS USE MIRO INDUSTRIES 8-BASE STRUT-5. FOR MORE THAN FIVE CONDUITS USE MIRO INDUSTRIES 20-BASE STRUT-4. |
| 2                | PROVIDE TWO (2) SETS OF 100' HEAT TAPE FOR COOLING TOWER PIPING. BASIS OF DESIGN: VEVOR 100FT SELF-REGULATING PIPE HEATING CABLE.   |



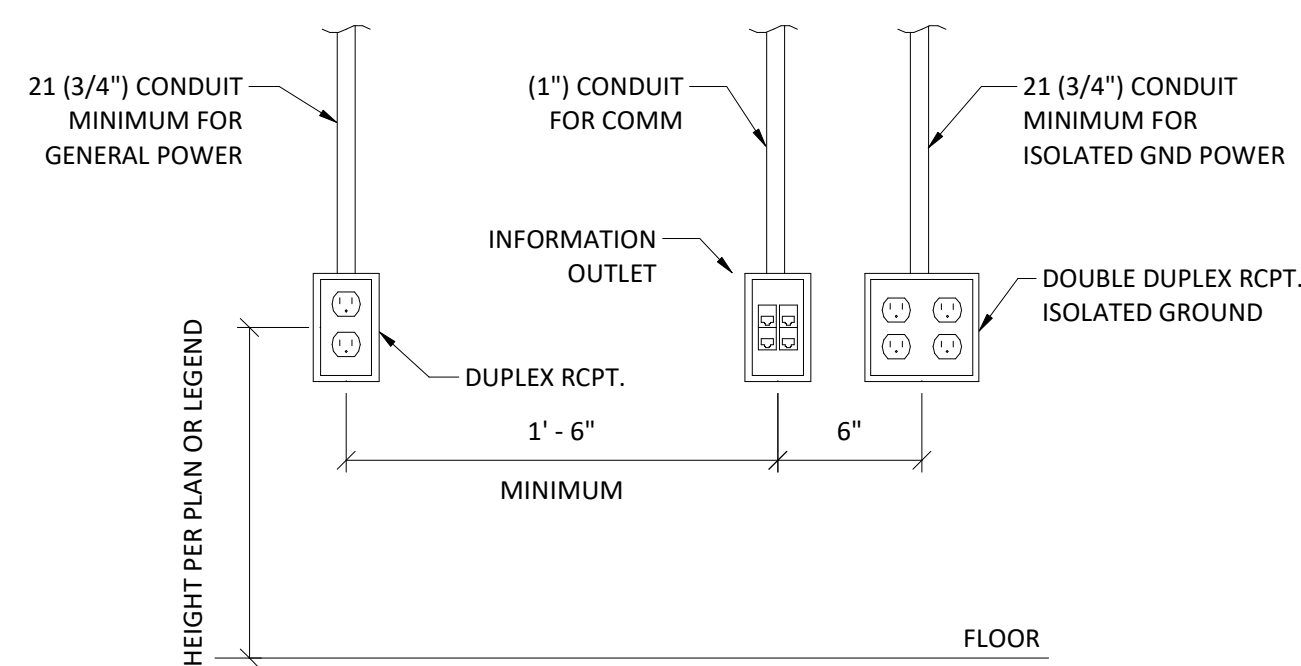
MULTI-SERVICE BOX AND DEVICES 4 PORT 3  
NTS E-501



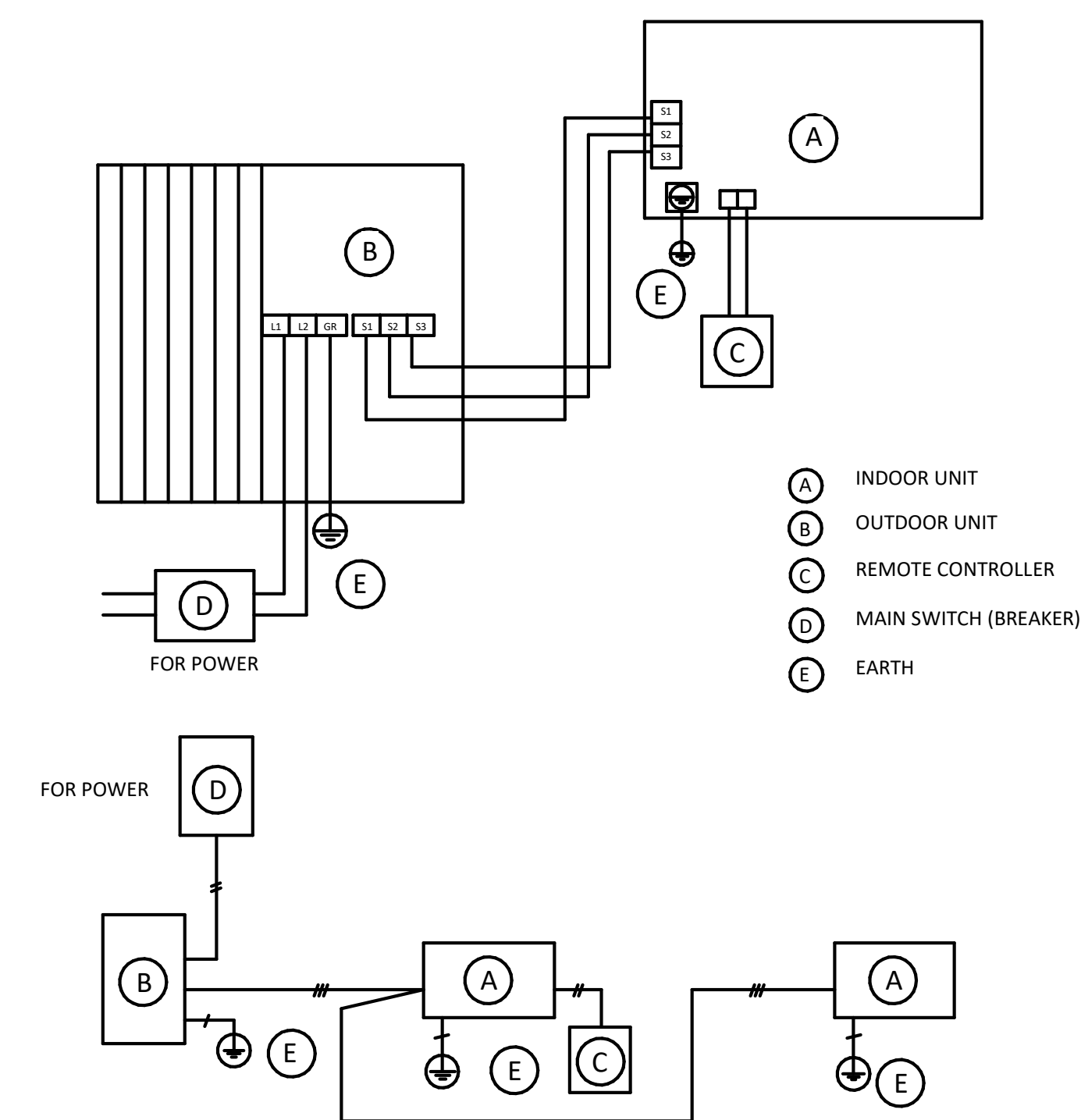
ROOF TOP ELECTRICAL PANEL



TELEPHONE/COMPUTER STUB UP DETAIL



TYPICAL OUTLET INSTALLATION DETAIL



CU-1 / UV-1 WIRING DIAGRAM 1  
3/16" = 1'-0" E-501

| Panelboard: SP-R  |             |          |           |         |  |            |            |         |       |   |             |     |
|---|-------------|----------|-----------|---------|--|------------|------------|---------|-------|---|-------------|-----|
| Location: ROOF<br>Supply:<br>Mounting: Surface<br>Enclosure: NEMA 1 |             |          |           |         | Voltage: 208 V, 3Ø, 4W<br>Bus Rating: 400 A<br>Neutral: 100%<br>Feed-Thru Lugs: No<br>Features &<br>Modifications: - |            |            |         |       | Mains Type: MCB<br>Mains Rating: 400 A<br>Mains FN/Note: -<br>SCCR: 10 kA |             |     |
| Ckt   | Description | Trip (A) | Poles     | FN/Note | Phase A...   | Phase B... | Phase C... | FN/Note | Poles | Trip (A)  | Description | Ckt |
| 1   |             |          |           |         | --   | --         |            |         |       |   |             | 2   |
| 3   | SPACE       | --       | 3         | --      |  | --         | --         |         | --    | 3   | SPACE       | 4   |
| 5   |             |          |           |         |  |            |            |         |       |   |             | 6   |
| 7   | SPACE       | --       | 1         | --      | --   | --         |            | --      | 1     | --  | SPACE       | 8   |
| 9   | RTU-9       | 25       | 2         |         |  | 1560       | --         |         | --    | 1   | CIRCUIT 2   | 10  |
| 11  |             |          |           |         |  |            | 1560       | 1040    |       | 2   | DAIKIN-CU   | 12  |
| 13  |             |          |           |         | 3603   | 1040       |            |         |       |   |             | 14  |
| 15  | RTU-1       | 50       | 3         |         |  | 3603       | 1144       |         |       | 2   | CU-1/UV-1   | 16  |
| 17  |             |          |           |         |  |            | 3603       | 1144    |       |   |             | 18  |
| 19  |             |          |           |         | 3603   | 4119       |            |         |       |   |             | 20  |
| 21  | RTU-2       | 50       | 3         |         |  | 3603       | 4119       |         |       | 3   | RTU-7       | 22  |
| 23  |             |          |           |         |  |            | 3603       | 4119    |       |   |             | 24  |
| 25  |             |          |           |         | 3603   | 3350       |            |         |       |   |             | 26  |
| 27  | RTU-3       | 50       | 3         |         |  | 3603       | 3350       |         |       | 3   | RTU-8       | 28  |
| 29  |             |          |           |         |  |            | 3603       | 3350    |       |   |             | 30  |
| 31  |             |          |           |         | 3350   | 3603       |            |         |       |   |             | 32  |
| 33  | RTU-4       | 50       | 3         |         |  | 3350       | 3603       |         |       | 3   | RTU-10      | 34  |
| 35  |             |          |           |         |  |            | 3350       | 3603    |       |   |             | 36  |
| 37  |             |          |           |         | 4119   | 3603       |            |         |       |   |             | 38  |
| 39  | RTU-5       | 50       | 3         |         |  | 4119       | 3603       |         |       | 3   | RTU-11      | 40  |
| 41  |             |          |           |         |  |            | 4119       | 3603    |       |   |             | 42  |
| 43  |             |          |           |         | 3350   | 2438       |            |         |       |   |             | 44  |
| 45  | RTU-6       | 50       | 3         |         |  | 3350       | 2438       |         |       | 3   | RTU-12      | 46  |
| 47  |             |          |           |         |  |            | 3350       | 2438    |       |   |             | 48  |
| 49  |             |          |           |         | 7205   | 540        |            |         |       | 1   | RECPT EAST  | 50  |
| 51  | CT-1        | 100      | 3         | 2 ADD   |  | 7205       | 540        |         |       | 1   | RECPT WEST  | 52  |
| 53  |             |          |           |         |  |            | 7205       | 180     |       | 1   | HEAT TAPE   | 54  |
| Connected Load:   |             |          |           |         | 147 kVA  | 147 kVA    | 50 kVA     |         |       |   |             |     |
| Connected Current:  |             |          |           |         | 396 A  | 412 A      | 418 A      |         |       |   |             |     |
| Load Classification   |             |          | Connected |         | Factor   |            | Demand     |         | 2 ADD |   |             |     |
| Other   |             |          | 145326 VA |         | 100.00%  |            | 145326 VA  |         |       |   |             |     |
| Receptacle - General  |             |          | 1260 VA   |         | 100.00%  |            | 1260 VA    |         |       |   |             |     |
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