

|                         |   |              |            |
|-------------------------|---|--------------|------------|
| <b>Project Name:</b>    | Verizon Generator Radiators Replacement Temple Terrace Center |              |            |
| <b>Project Address:</b> | 7701 East Telecom Parkway Temple Terrace, FL 33673            |              |            |
| <b>Project #:</b>       | 20-1260003  | <b>Date:</b> | 12/01/2020 |
| <b>Subject:</b>         | RDELINES  |              |            |

## REDLINE CONSTRUCTION DOUCMENTS

Please see below for Macon Building Redlines for the above referenced project.

| Plan Page # | Plan Page Name   | Description  |
|-------------|--|--|
| COVER       | COVER  | <b><u>DRAWING INDEX &amp; STATUS</u></b><br>Drawing index is missing sheet ME-4 and Sheet Title for ME-4.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a>  |
| S.1         | EQUIPMENT STRUCTURE<br>/SUPPORTS - DEMOLITION<br>/NEW                        | <b><u>DETAIL B PARTIAL ROOF PLAN – EQUIPMENT SUPPORT NEW</u></b><br>Directed per the Engineer of record that the center steel supports are not required. Due to the design of the new radiators.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a>                 |
| ME.2        | BUILDING 'G' - ROOF TOP<br>EQUIPMENT - MECHANICAL<br>/ELECTRICAL -DEMOLITION | <b><u>DETAIL 3 SCHEDULE – MOTOR CONTROL CENTER</u></b><br>Plan calls out connection points to be terminated in MCCC panel. The correct termination panel is MCC-B.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a>   |
| ME.3        | New Radiator Details and<br>electrical schematics                            | <b><u>DETAIL 2 Generator Room Roof Top</u></b><br>Identifying fan locations by number.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a>   |
| ME.3        | New Radiator Details and<br>electrical schematics                            | <b><u>DETAIL B POWER NEW</u></b><br>Detail calls out incorrect panel location. Correct panel location is MCC-B.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a>  |
| ME.3        | New Radiator Details and<br>electrical schematics                            | <b><u>ONE LINE DIAGRAM</u></b><br>Plans calls out connection point to be MCCC. Plans were incorrectly labeled. Correction on location was MCC-B Section -A and Section-B.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a>  |
| ME.4        |  | <b><u>DETAIL 1 ELEVATION</u></b><br>Needed to replace drawing specifications per IEA manufacture to meet their specification and design build based on signed submitted drawings of radiator inlets and outlets.<br><a href="#">"CLICK HERE TO VIEW REDLINE"</a> |





# GENERATOR RADIATOR REPLACEMENTS

AT THE

## VERIZON TECH CENTER BUILDING 'G'

7701 EAST TELECOM PARKWAY

### TEMPLE TERRACE, FLORIDA

Missing ME-4

#### PROJECT GENERAL NOTES:

##### GENERAL DEMOLITION NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO VERIFY EXISTING CONDITIONS, OF THEIR DISCIPLINE AND SCOPE OF WORK AT THE JOBSITE PRIOR TO BEGINNING DEMOLITION AND BRING TO THE DESIGN PROFESSIONAL'S ATTENTION ANY DISCREPANCIES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION WORK OF THIS PROJECT WHICH IS RELATED TO THAT CONTRACTORS FIELD.
3. EACH CONTRACTOR (OF THEIR DISCIPLINE AND SCOPE OF WORK) SHALL PLACE ALL ITEMS THAT THEY REMOVE IN A LOCATION DIRECTED BY THE OWNER. THE OWNER SHALL EXAMINE ALL ITEMS AND RETAIN OWNERSHIP SELECTED TO ANY ITEM. ITEMS THE OWNER CHOOSES NOT TO RETAIN OWNERSHIP OF SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE JOBSITE BY THE CONTRACTOR.
4. EACH CONTRACTOR (OF THEIR DISCIPLINE AND SCOPE OF WORK) SHALL BE RESPONSIBLE FOR CUTTING, PATCHING, REPAIRING, AND PAINTING ANY PART OF THE FACILITY DAMAGED DUE TO THE DEMOLITION WORK OF THIS PROJECT RELATED TO THEIR FIELD OR THE INSTALLATION OF REQUIRED ITEMS INSTALLED UNDER THE PROJECT RELATED TO THEIR FIELD WITH MATERIALS AND METHODS TO MATCH EXISTING AND AS APPROVED BY THE PROJECT MANAGER AND DESIGN PROFESSIONAL.
5. EACH CONTRACTOR (OF THEIR DISCIPLINE AND SCOPE OF WORK) SHALL BE RESPONSIBLE FOR RELOCATING ANY ITEM RELATED TO THEIR FIELD REQUIRED BY THE DEMOLITION WORK OF THIS PROJECT OR THE INSTALLATION OF NEW ITEMS TO BE INSTALLED UNDER THIS PROJECT.

##### GENERAL NOTES:

1. COORDINATE SECURITY MEASURES WITH DESIGN PROFESSIONAL BEFORE CONSTRUCTION STARTS.
2. EACH CONTRACTOR AND SUB CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PROTECT EXISTING FACILITIES. FACILITIES SHALL REMAIN IN OPERATION DURING CONSTRUCTION.
3. VERIZON'S ACCESS TO EXISTING FACILITY SHALL CONTINUE DURING CONSTRUCTION.
4. EACH CONTRACTOR AND SUB CONTRACTOR SHALL COORDINATE WITH AND MEET ALL LOCAL REQUIREMENTS FOR THE WORK IN THIS PROJECT. EACH CONTRACTOR AND SUB CONTRACTOR IS TO PAY ANY LOCAL FEES AS REQUIRED FOR THEIR FIELD.
5. DURING PROJECT, EXISTING BUILDING ALARMS SHALL REMAIN OPERATIONAL.
6. ANY CUTTING OR WELDING SHALL REQUIRE "BURN" PERMIT SUBMITTED BY THE CONTRACTOR THAT IS PERFORMING WORK PRIOR TO EVENT.
7. EACH CONTRACTOR AND SUB CONTRACTOR SHALL PROVIDE DETAILED METHOD OF PROCEDURE (MOP) FOR EACH POTENTIALLY "SERVICE EFFECTING" EVENT TO DESIGN PROFESSIONAL OFFICE ALONG WITH PROPOSED EVENT DATE A MINIMUM OF TWO (2) WEEKS PRIOR TO THE EVENT.
8. POTENTIAL SERVICE IMPACTING EVENTS TO BE PERFORMED WITH IN VERIZON ALLOWED WINDOW (12:00 AM TO 6:00 AM) OF DAY SELECTED BY VERIZON

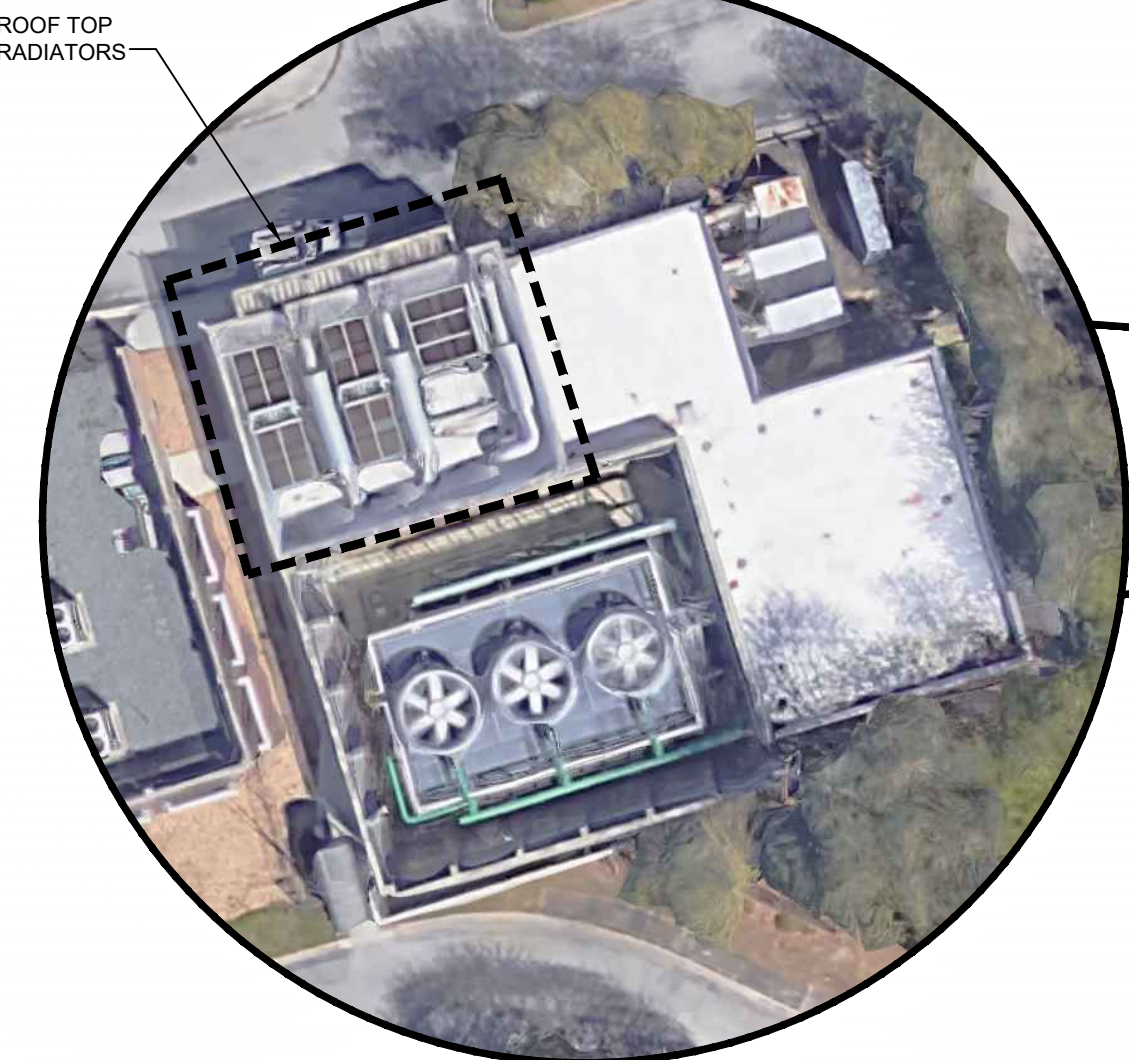
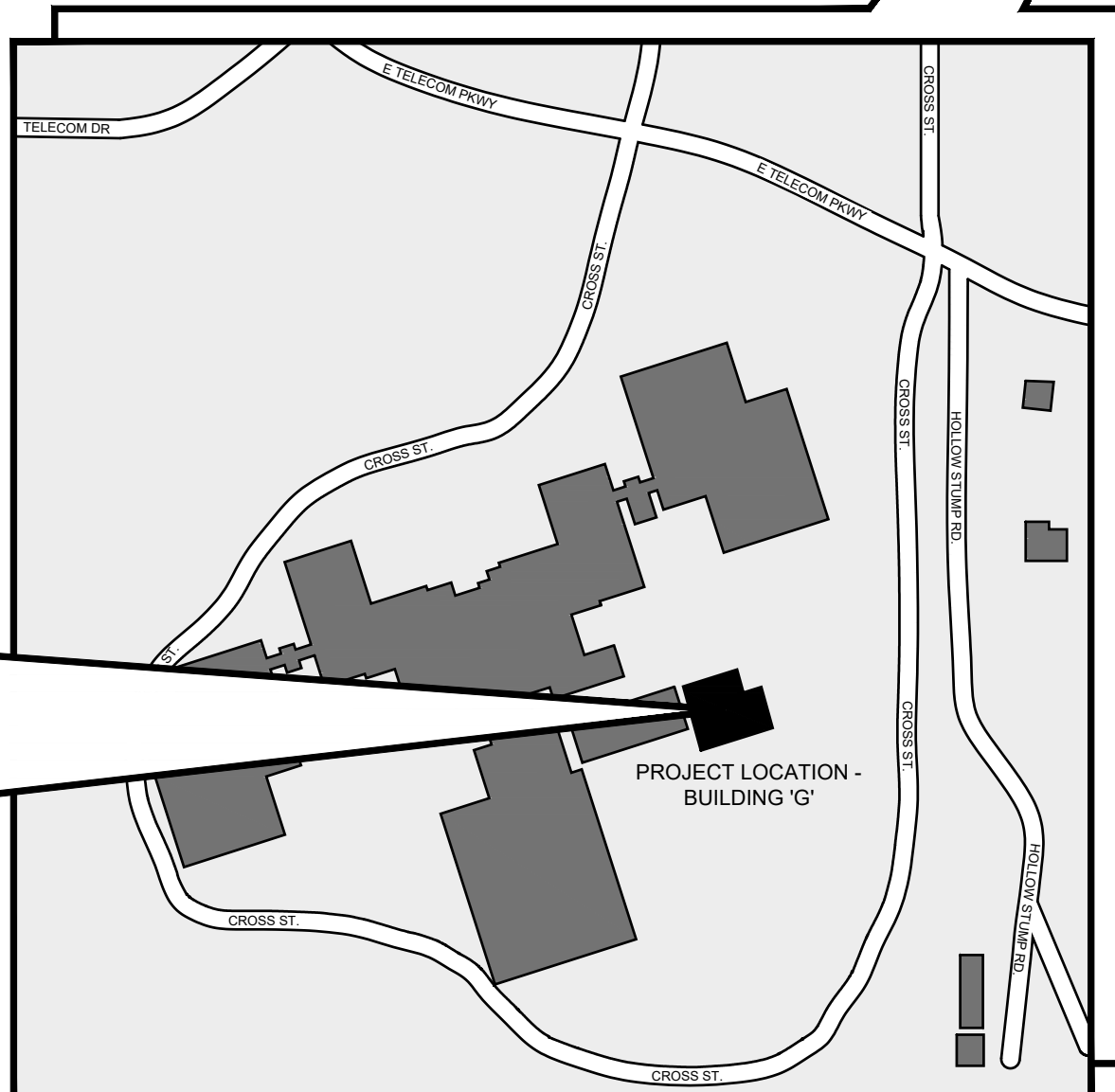
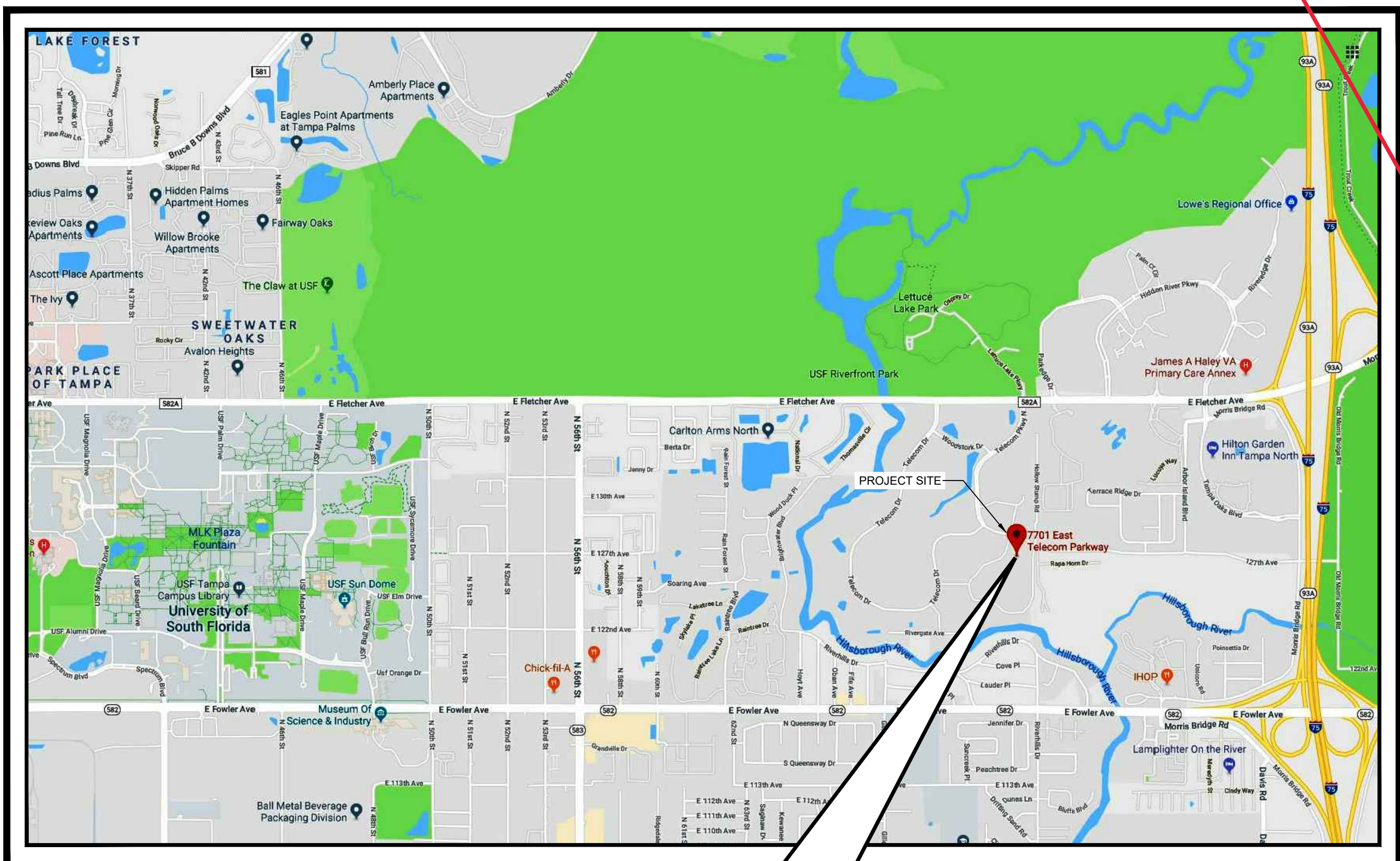


IMAGE - BUILDING 'G'

SCALE: NONE



SITE MAP - BUILDING 'G'

SCALE: NONE

| DRAWING INDEX & STATUS |                                       |             |  |             |  |                   |   |   |   |
|------------------------|---------------------------------------|-------------|--|-------------|--|-------------------|---|---|---|
| LEGEND:                |                                       |             |  |             |  |                   |   |   |   |
| [X]                    | SHEET ISSUED FOR CONSTRUCTION         |             |  |             |  |                   |   |   |   |
| [Y]                    | SHEET ISSUED FOR INFO. & COORDINATION |             |  |             |  |                   |   |   |   |
| [Z]                    | SHEET ISSUED FOR BIDDING              |             |  |             |  |                   |   |   |   |
| [R]                    | SHEET ISSUED FOR REVIEW               |             |  |             |  |                   |   |   |   |
| [A]                    | SHEET ISSUED AS AN ADDENDUM           |             |  |             |  |                   |   |   |   |
| SHEET                  |                                       | COVER SHEET |  | SHEET TITLE |  | ISSUE / REVISIONS |   |   |   |
| C-1                    |                                       |             |  |             |  | R                 | B | 3 | 4 |
| S-1                    |                                       |             |  |             |  | R                 | B |   |   |
| ME-1                   |                                       |             |  |             |  | R                 | B |   |   |
| ME-2                   |                                       |             |  |             |  | R                 | B |   |   |
| ME-3                   |                                       |             |  |             |  | R                 | B |   |   |
| E-4                    |                                       |             |  |             |  | R                 | B |   |   |

#### PROJECT SCOPE

- PROJECT IS SPECIFIC TO FURNISHING AND INSTALLATION OF (2) TWO SINGLE CORE REMOTE RADIATORS (ONE FOR EACH OF 2 EXISTING DIESEL ENGINE DRIVEN ELECTRIC GENERATORS) IN PLACE OF EXISTING (EXISTING TO BE REMOVED AND REPLACED ARE 2 SECTION EACH) SERVING STATIONARY STAND BY POWER GENERATORS (2-1500 KW / A THIRD 1000 KW GENERATOR IS LOCATED IN THE SAME PLANT HOWEVER HAS UNIT MOUNTED RADIATOR AND IS NOT PART OF THIS PROJECTS SCOPE OF WORK). TWO OF THE 3 GENERATORS MUST ALWAYS BE IN AUTOMATIC SERVICE.
- ONCE A GENERATOR IS TAKEN OUT OF SERVICE WORK SHALL BE 7 DAYS A WEEK UNTIL UNIT IS PLACED BACK INTO SERVICE / NO GENERATOR SHALL BE REMOVED FROM SERVICE IF A HURRICANE/TROPICAL STORM IS FORECASTED. SHOULD A STORM FORM WORK SHALL BE 7X24 TO ASSURE GENERATOR IS PLACED BACK INTO SERVICE PRIOR TO LANDFALL.
- VERIZON OWNS THIS CAMPUS. WORK OF THIS PROJECT IS IN THE SINGLE-STORY UTILITY BUILDING IDENTIFIED AS "E" BUILDING OF THIS MULTI BUILDING CAMPUS.
- ALL WORK REQUIRED FOR A COMPLETE PROJECT SHALL BE INCLUDED IN THE PROPOSED BID AMOUNTS, UNLESS SPECIFICALLY NOTED OTHERWISE.
- BIDDERS' PROPOSAL SHALL INCLUDE THE FURNISHING OF ALL LABOR, TOOLS, TRANSPORTATION SERVICES, SUPERVISION, MATERIALS, AND EQUIPMENT AS WELL AS ALL SUBCONTRACTORS REQUIRED TO COMPLETE THE SCOPE OF WORK REQUIRED FOR A FULL AND OPERATIONAL SYSTEM UNDER THIS PROJECT.
- ALL NEW RADIATORS EQUIPMENT AND INSTALLATION SHALL BE IN ACCORDANCE (INCLUDING AMENDMENTS) WITH:
  - FLORIDA BUILDING CODE
  - TEMPLE TERRACE CODE CHAPTER 8
  - NATIONAL FIRE PREVENTION CODES
  - FLORIDA FIRE PREVENTION CODE
  - NATIONAL ELECTRICAL CODE
- ALL PERMIT COST AND OTHER FEES REQUIRED BY TEMPLE TERRACE, FLORIDA.
- THE PROJECT INCLUDES A 12-MONTH NON-PRORATED PARTS AND LABOR WARRANTY WHICH BEGINS UPON COMPLETION OF THE ENTIRE PROJECT.
- ASBESTOS: IF REQUIRED, TESTING FOR AND REMEDIATION OF ASBESTOS OR OTHER HAZARDOUS MATERIALS WILL BE PROVIDED BY A SEPARATE VERIZON CONTRACTOR. THIS TESTING AND REMEDIATION IS NOT PART OF THE SCOPE OF THIS PROJECT.
- CUTTING OF EXISTING WALLS, FLOORS AND FINISHES, TOGETHER WITH ALL REPAIRS/REFINISHING MADE NECESSARY BY SUCH CUTTING OR CHANGES. REMOVAL, REPLACEMENT OF FINISHES REQUIRED FOR THE WORK SHALL BE PART OF THE SCOPE OF THIS PROJECT.
- ALL WORK BY CONTRACTOR OR ANY OF ITS SUBCONTRACTORS MUST BE COMPLETE AND READY PRIOR TO THE TIME CONTRACTOR CALLS FOR SYSTEM CUT OVERS.
- CONTRACTOR SHALL PROVIDE A SAFE WORKING ENVIRONMENT. CONTRACTOR MUST PROVIDE AND SUPPORT SUCH WITH PROVISION(S) FOR ADEQUATE ENTRANCE PROTECTION, MEANS OF HOISTING, HOIST, PROTECTION OF FLOORS, WALLS, DOORS, ETC.
- APPROPRIATE SIGNAGE INDICATING ANY CHANGES TO PEDESTRIAN ACCESS ROUTES FOR BUILDING USERS MUST BE IN PLACE PRIOR TO START OF THE WORK.
- CONTRACTOR IS RESPONSIBLE TO EMPLOY ANY AND ALL NEEDED SUBCONTRACTORS FOR COMPLETION OF THE ENTIRE SCOPE OF WORK.
- IT IS ENVISIONED THAT THE SELECTED CONTRACTOR WILL SUBCONTRACT A MINIMUM OF 13% OF THE CONTRACT AMOUNT TO CERTIFIED M/M/VBE SUBCONTRACTORS.
- ALL REMEDIAL OR PREPARATORY WORK REQUIRED BY THE AHJ SHALL BE PERFORMED BY PROPERLY LICENSED TRADE CONTRACTORS IN COMPLIANCE WITH APPLICABLE CODES AND BASED ON A SCHEDULE OF PERFORMANCE THAT ALLOWS FOR UNINTERRUPTED PROGRESS OF THE WORK.
- ANY DEFECTS DISCOVERED IN THE EXISTING EQUIPMENT DURING THIS PROJECT WILL BE BROUGHT TO THE ATTENTION OF THE OWNER FOR RESOLUTION.
- INFRASTRUCTURE RELATED SCOPE REQUIRED FOR A COMPLETE SYSTEM SHALL BE INCLUDED UNDER THIS PROPOSAL.
- PRICING SHALL INCLUDE ALL APPLICABLE SALES TAX AND FREIGHT ON EQUIPMENT AND MATERIALS INCLUDING EXPEDITED FREIGHT TO MEET PROJECT SCHEDULE.
- SEQUENCING:
  - REMOVE AND REPLACE ONE RADIATOR AT A TIME
  - MODIFY, CLEAN, AND PREPARE RADIATORS SUPPORT SECTIONS TO BE REUSED
  - REPLACE ALL RADIATOR RELATED PIPING AND WIRING ON ROOF SPECIFIC TO THE TWO RADIATORS BEING REPLACED.
  - MATERIALS INCLUDING CONTROLLED ANTIFREEZE AND EQUIPMENT SHALL HAVE MANIFEST OF DISPOSAL PROVIDED AS PART OF THE CLOSEOUT DOCUMENTS.
  - SCHEDULE RUN TEST CONCURRENT WITH FACILITIES MONTHLY RUN

#### PROPRIETARY CONTRACTORS

THE FOLLOWING PROPRIETARY SUBCONTRACTORS **MUST** BE USED ON THIS PROJECT.

- ROOFING REPAIRS / MODIFICATIONS IF REQUIRED

JOHN ERLAND  
TECTA AMERICA  
SR. PROJECT MANAGER

C: 812.396.0750  
E: JERLAND@TECTAAMERICA.COM

This item has been electronically signed and sealed by Joseph H. Griner using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

|   |   |
|---|---|
| <b>GRINER</b>   |   |
| GRINER ENGINEERING, INC.<br>3125 Fifth Ave N., Suite 300<br>St. Petersburg, Florida 33713<br>Phone: (727) 822-2335<br>Fax: (727) 821-3361<br>Certificate of Authorization #3173 | Date: 06/23/20<br>Drawn: JHG<br>Designed: JHG<br>ECR: JHG<br>Job no.: 20072 |

GENERATOR RADIATOR REPLACEMENTS  
AT THE  
VERIZON TECH CENTER BUILDING 'G'  
7701 EAST TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA

| ISSUE DATES: |                         |
|--------------|-------------------------|
| NO.          | DATE & DESCRIPTION      |
| 1            | 08.16.2019 - REVIEW SET |
| 2            | 06.23.2020 - BID SET    |
| 3            |                         |
| 4            |                         |
| 5            |                         |
| 6            |                         |

|              |       |
|--------------|-------|
| PROJECT NO.: | 20072 |
| DRAWN BY:    | MM    |
| CHECKED BY:  | JHG   |

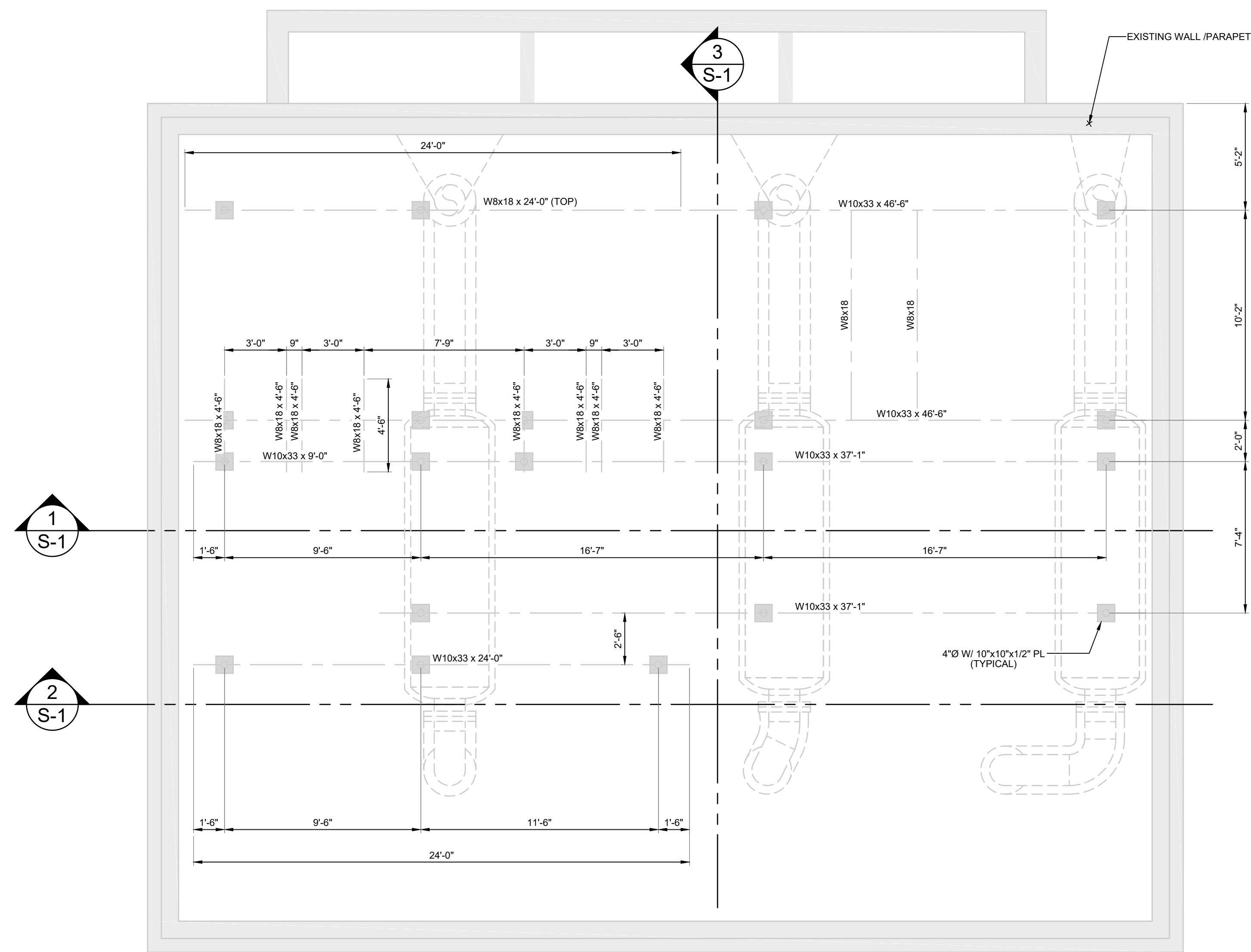
SHEET

COVER

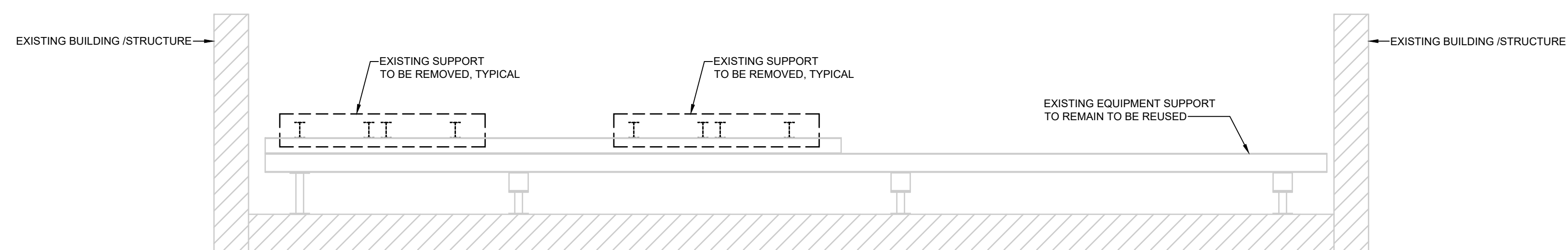


 **SITE PLAN - FOR REFERENCE**  
SCALE: NONE

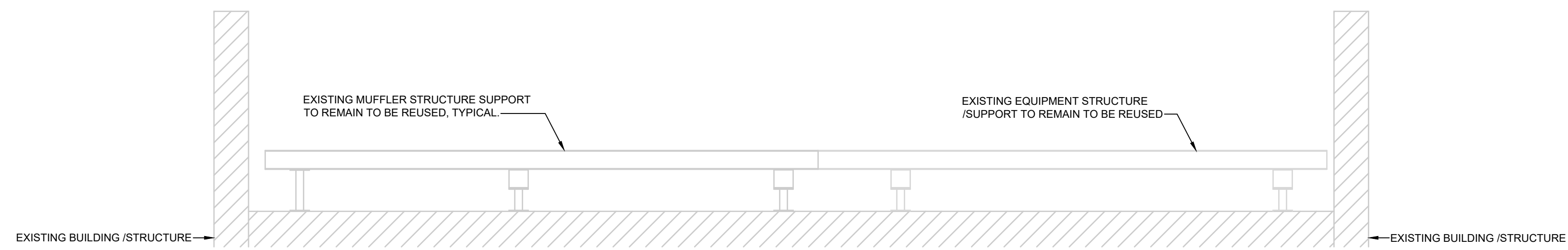




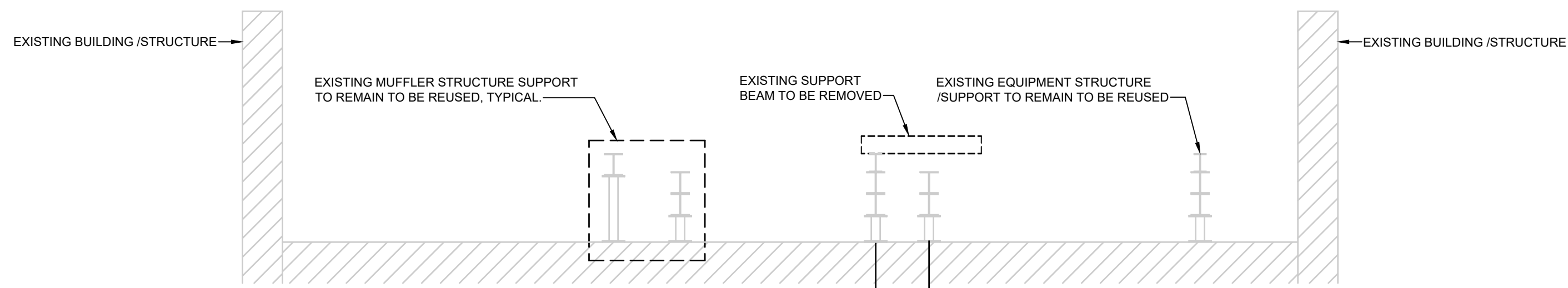
**A PARTIAL ROOF PLAN - EQUIPMENT SUPPORT - DEMOLITION**  
SCALE: NONE  
TAKEN FROM EXISTING OWNER'S RECORDS



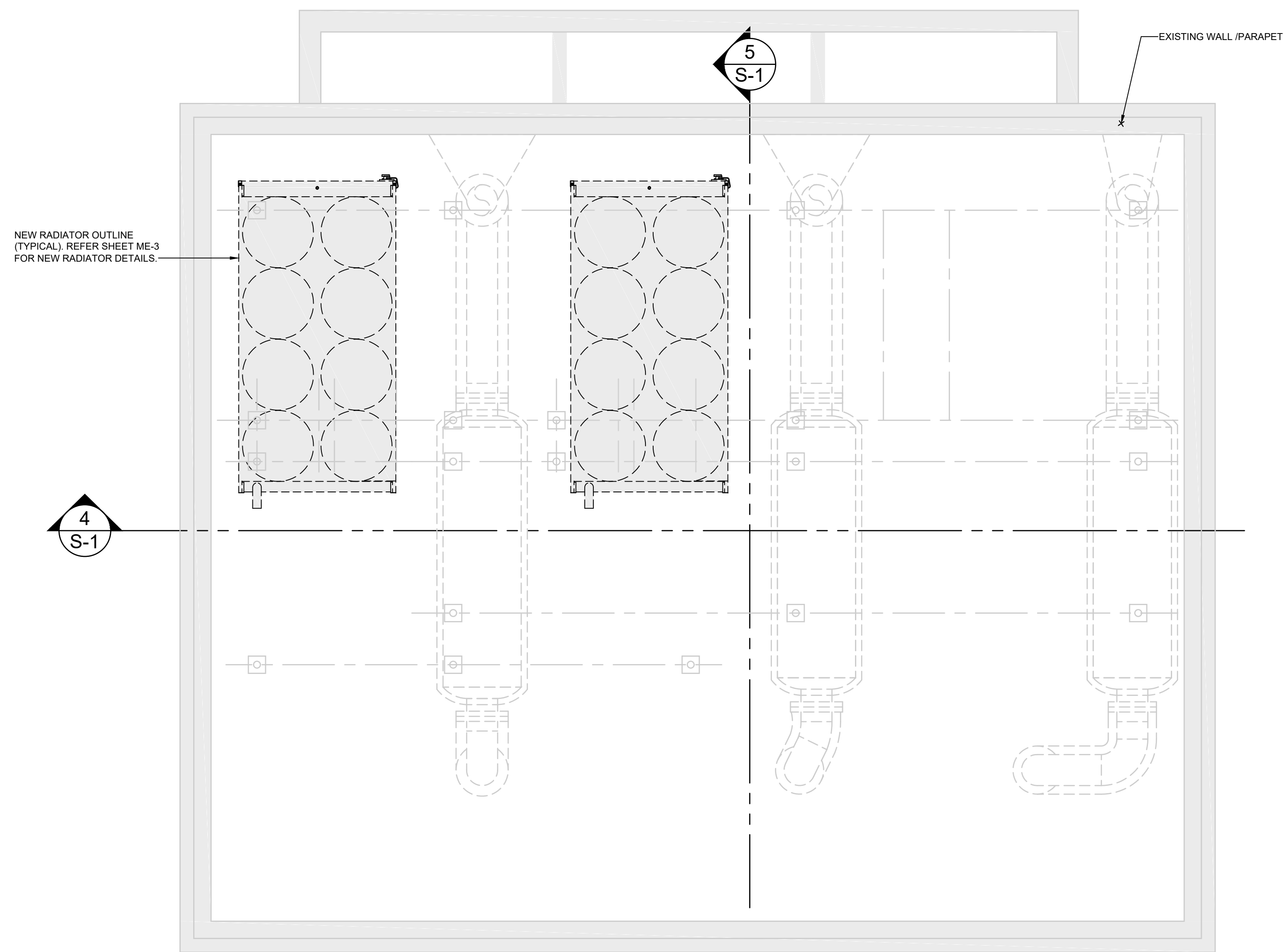
**1 SECTION - ROOF EQUIPMENT STRUCTURE - DEMOLITION**  
SCALE: NONE



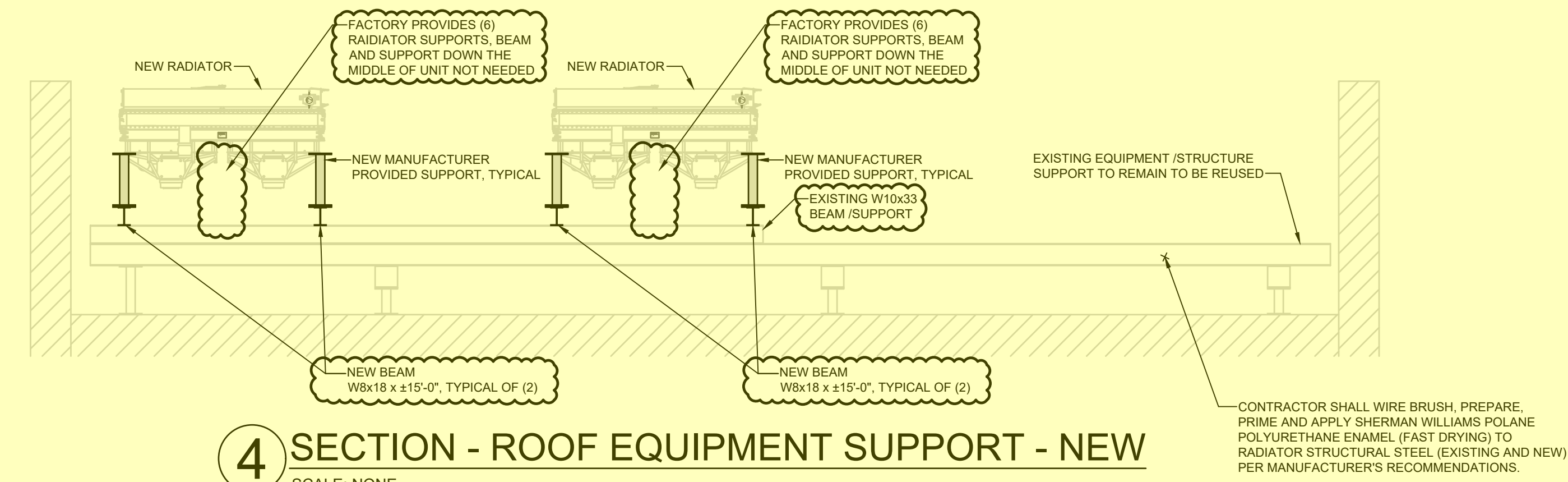
**2 SECTION - ROOF EQUIPMENT STRUCTURE - DEMOLITION**  
SCALE: NONE



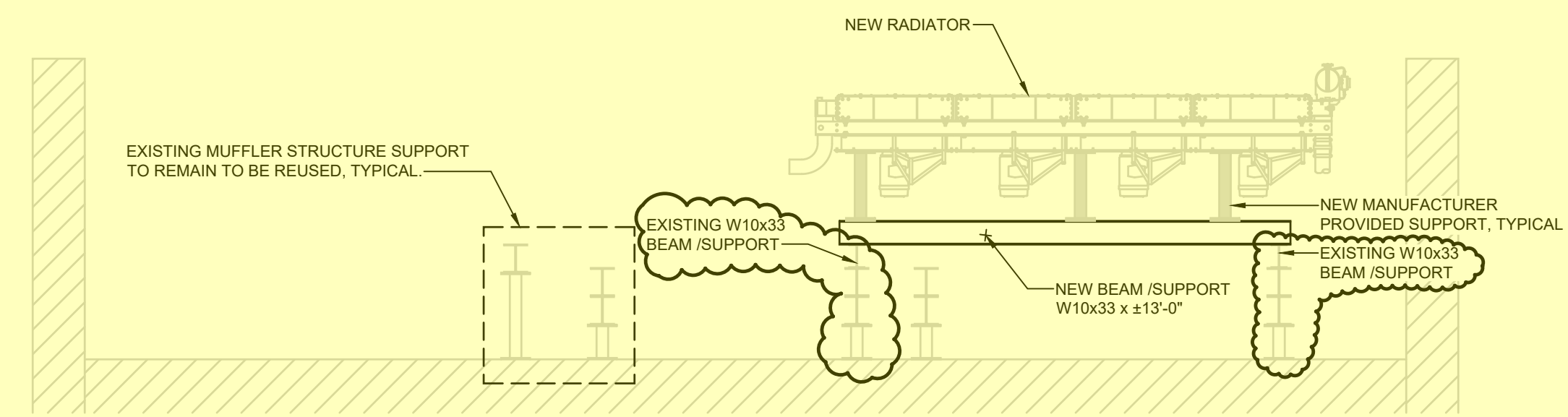
**3 SECTION - ROOF EQUIPMENT STRUCTURE - DEMOLITION**  
SCALE: NONE



**B PARTIAL ROOF PLAN - EQUIPMENT SUPPORT - NEW**  
SCALE: NONE  
TAKEN FROM EXISTING OWNER'S RECORDS



**4 SECTION - ROOF EQUIPMENT SUPPORT - NEW**  
SCALE: NONE



**5 SECTION - ROOF EQUIPMENT STRUCTURE - NEW**  
SCALE: NONE

**NOTE:**  
WEIGHT OF NEW RADIATOR IS LESS THAN EXISTING RADIATOR. EXISTING EQUIPMENT SUPPORTS SHOWN ARE TO BE MODIFIED TO ALLOW FOR INSTALLATION DIMENSIONS OF NEW RADIATORS.

**NOTE:**  
ANY AND ALL EQUIPMENT ON ROOF AND ROOF ITSELF TO BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.

NOT FOR CONSTRUCTION OR PERMITTING, FOR BIDDING PURPOSES ONLY.

This item has been electronically signed and sealed by Joseph H. Griner using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

**GRINER**  
GRINER ENGINEERING, INC.  
3125 Fifth Ave N., Suite 300  
St. Petersburg, Florida 33713  
Phone: (727) 822-2335  
Fax: (727) 821-3361  
Certificate of Authorization #3173

|          |          |
|----------|----------|
| Date     | 10/28/20 |
| Drawn    | JHG      |
| Designed | JHG      |
| ECR      | JHG      |
| Job no.  | 20072    |

**Building Owner:**  
**verizon**

**Project Management:**  
**JLL**  
BRANDY BOYLE, CPE  
SR. PROJECT MANAGER  
VERIZON ACCOUNT - FOS  
JONES LANG LASALLE AMERICAS  
813.269.9168  
brandy.boyle@jll.com

**Project Design Professional:**  
WTA  
**Project Engineer:**  
**GRINER**

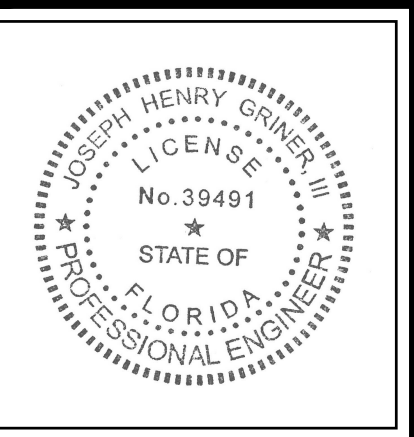
GENERATOR RADIATOR REPLACEMENTS  
AT THE  
VERIZON TECH CENTER BUILDING 'G'  
7701 EAST TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA

**ISSUE DATES:**

|     |                                    |
|-----|------------------------------------|
| NO. | DATE & DESCRIPTION                 |
| 1   | 08.16.2019 - REVIEW SET            |
| 2   | 06.23.2020 - BID SET               |
| 3   | 10.28.2020 - CONSTRUCTION REVISION |
| 4   |                                    |
| 5   |                                    |
| 6   |                                    |

**PROJECT NO.:** 20072  
**DRAWN BY:** MM  
**CHECKED BY:** JHG  
**SHEET**  
**S-1**





Building Owner:  
**verizon**

Project Management:  
**JLL**  
BRANDY RYLE, CPE  
SR. PROJECT MANAGER  
VERIZON ACCOUNT - FOS  
JONES LANG LASALLE AMERICAS  
C 813.269.9168  
Email: jonesbrandy@jll.com

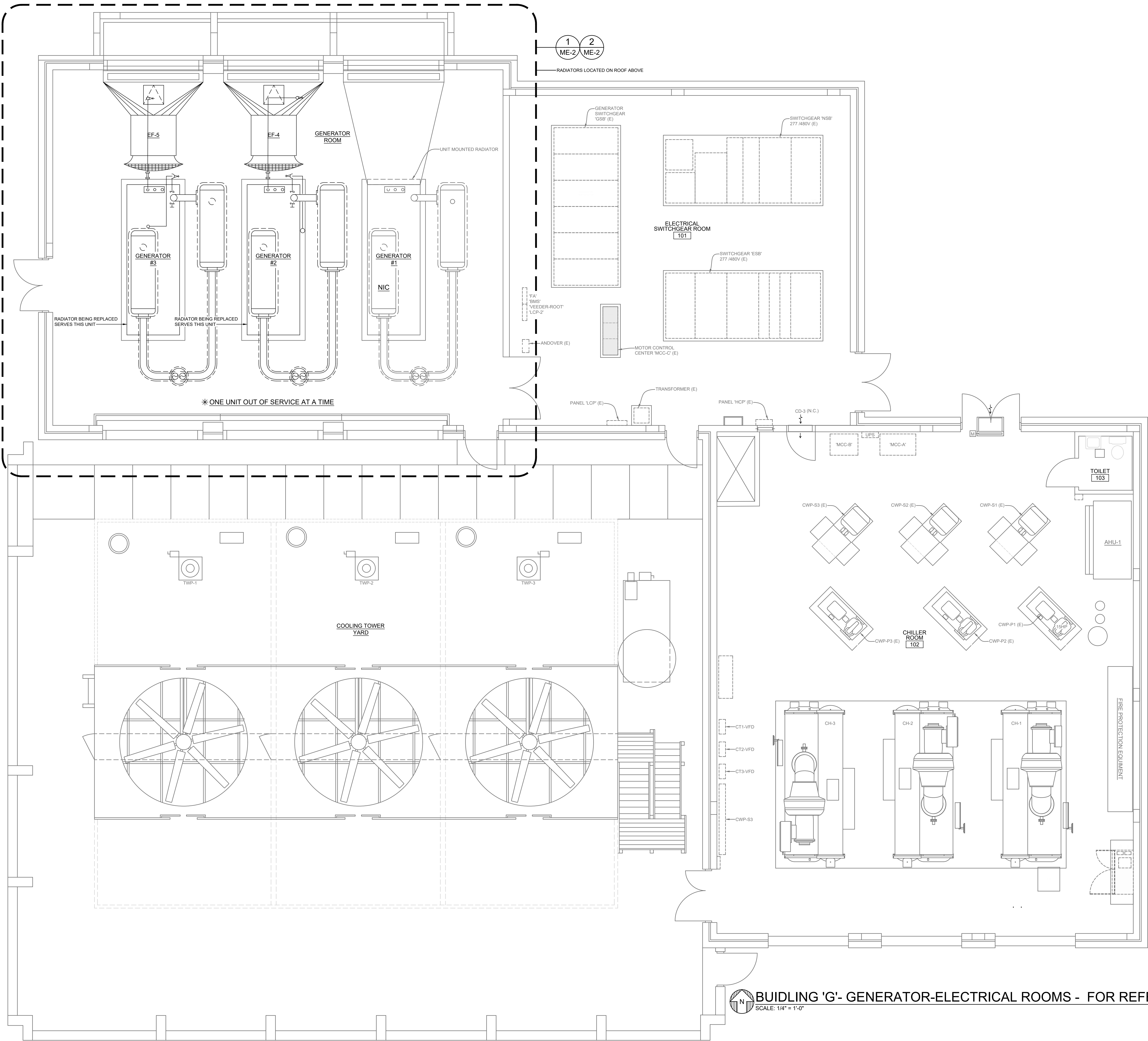
Project Design Professional:  
WTA  
Project Engineer:  
**GRINER**

GENERATOR RADIATOR REPLACEMENTS  
AT THE  
VERIZON TECH CENTER BUILDING 'G'  
7701 EAST TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA

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| 6            |                         |  |

|              |       |
|--------------|-------|
| PROJECT NO.: | 20072 |
| DRAWN BY:    | MM    |
| CHECKED BY:  | JHG   |

SHEET  
**ME-1**



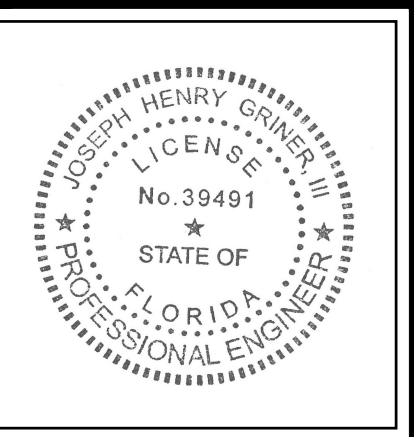
**BUILDING 'G'- GENERATOR-ELECTRICAL ROOMS - FOR REFERENCE**  
SCALE: 1/4" = 1'-0"

**GRINER**  
GRINER ENGINEERING, INC.  
3125 Fifth Ave N., Suite 300  
St. Petersburg, Florida 33713  
Phone: (727) 822-2335  
Fax: (727) 821-3361  
Certificate of Authorization #3173

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|          |          |
|----------|----------|
| Date     | 06/23/20 |
| Drawn    | JHG      |
| Designed | JHG      |
| ECR      | JHG      |
| Job no.  | 20072    |





Building Owner:



Project Management:



BRIAN BOYLE, CPE  
SR. PROJECT MANAGER  
VERIZON ACCOUNT - FOS  
JONES LANG LASALLE AMERICAS  
C 813.263.9168  
bboyle@jll.com

Project Design Professional:

WIT:

Project Engineer:



GENERATOR RADIATOR REPLACEMENTS  
AT THE  
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|              |       |
|--------------|-------|
| PROJECT NO.: | 20072 |
| DRAWN BY:    | MM    |
| CHECKED BY:  | JHG   |
| SHEET        |       |

ME-2

#### GENERAL DEMOLITION NOTES:

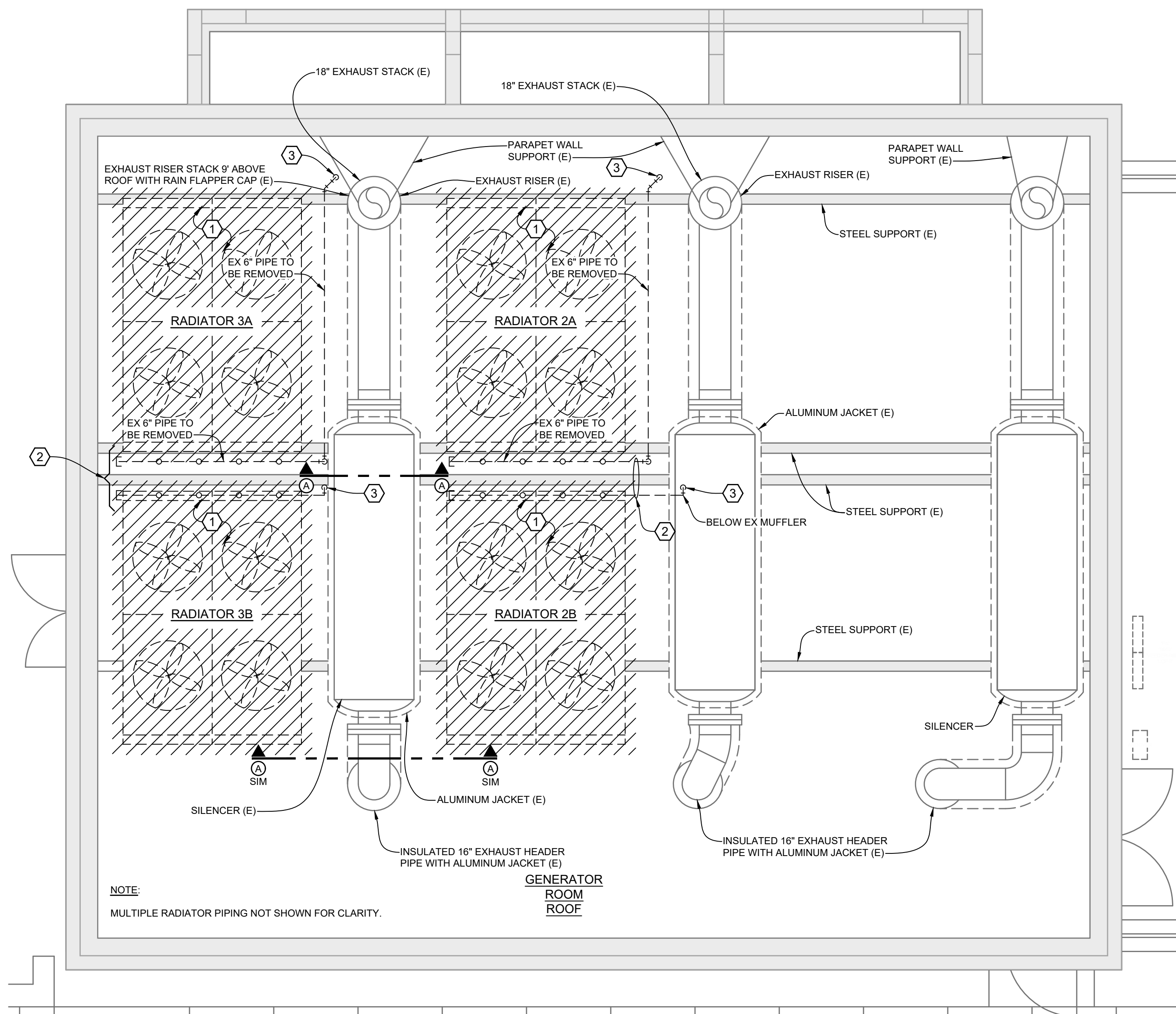
1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY EXISTING CONDITIONS AT THE JOBSITE PRIOR TO BEGINNING DEMOLITION AND BRING TO THE DESIGN PROFESSIONALS ATTENTION ANY DISCREPANCIES.
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#### NOTES INDICATED BY NUMBER IN (E)

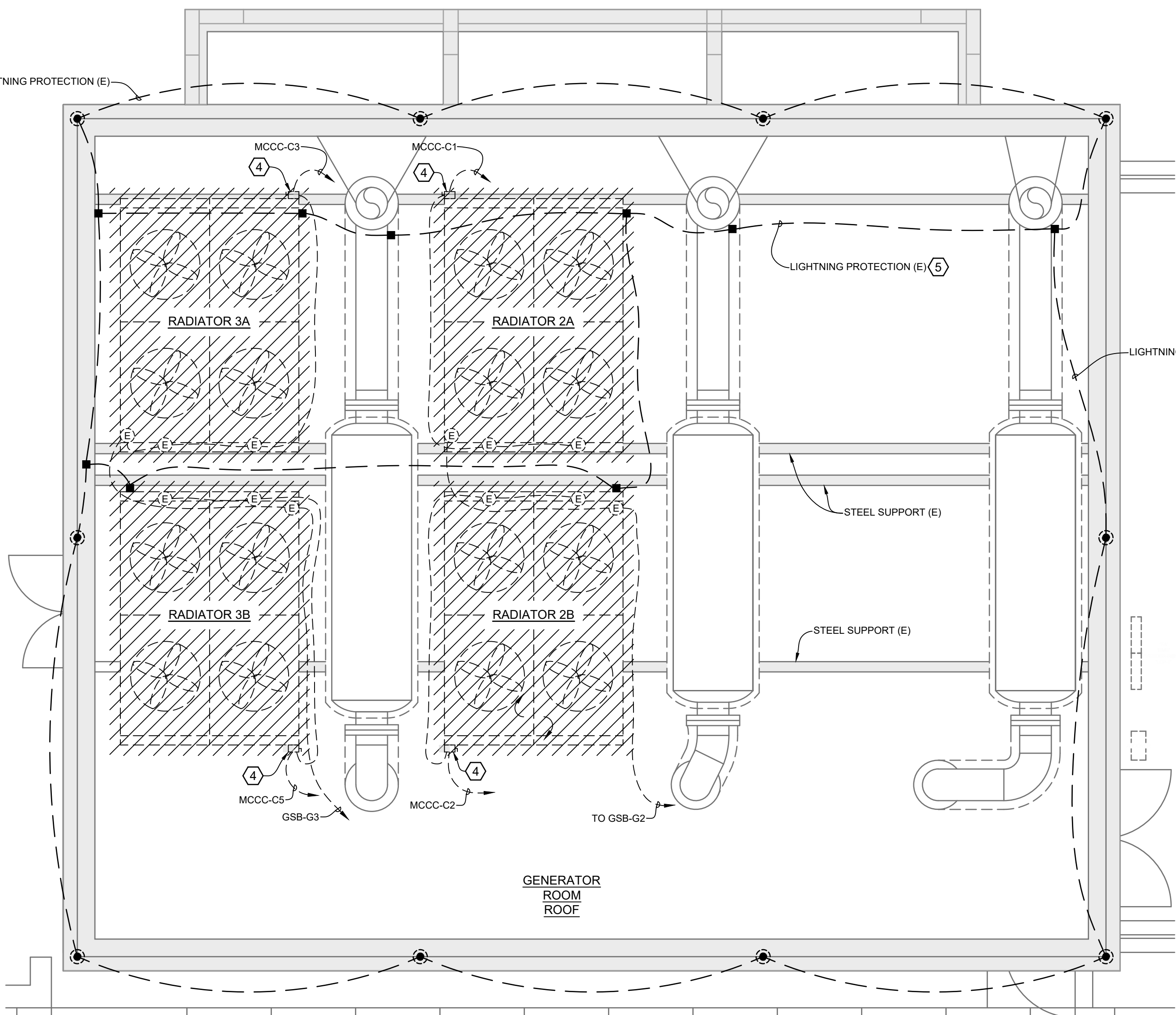
1. EXISTING ROOFTOP RADIATOR (SHOWN HATCHED) AND APPURTENANCES TO BE REMOVED. EXISTING RADIATOR STEEL SUPPORTS / STRUCTURE TO REMAIN TO BE RE-USED.
2. EXISTING 2'-8" RISERS WITH S.S. BRAIDED FLEX TO BE REMOVED.
3. EXISTING 6" PIPE TO BE REMOVED BACK TO ELBOWS, ELBOWS TO REMAIN. REFER DETAIL 'B'.
4. EXISTING RADIATOR MOUNTED DISCONNECT TO BE REMOVED COMPLETELY. EXISTING CONDUIT AND CONDUCTORS TO BE DISCONNECTED, MOVED ASIDE AND MADE SAFE TO BE RE-USED FOR NEW DISCONNECT.
5. ANY EXISTING LIGHTNING PROTECTION ATTACHED TO RADIATORS TO BE REMOVED AND SET ASIDE TO BE RE-USED.

#### NOTE:

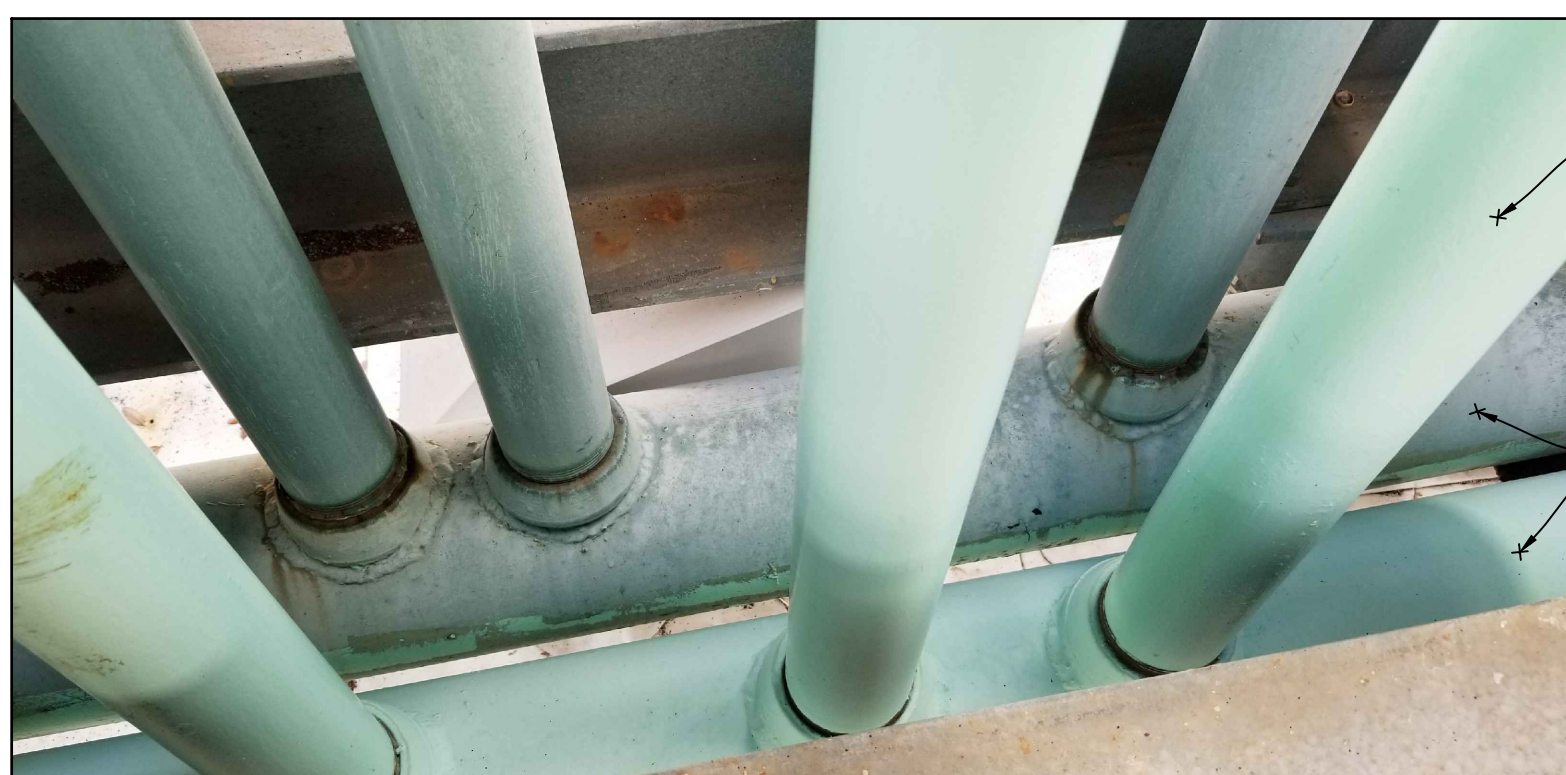
ANY AND ALL EQUIPMENT ON ROOF AND ROOF ITSELF TO BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.



**1 GENERATOR ROOM ROOF TOP - MECHANICAL - DEMOLITION**  
SCALE: 1/4" = 1'-0"  
TAKEN FROM OWNERS RECORD



**2 GENERATOR ROOM ROOF TOP - ELECTRICAL - DEMOLITION**  
SCALE: 1/4" = 1'-0"  
TAKEN FROM OWNERS RECORD

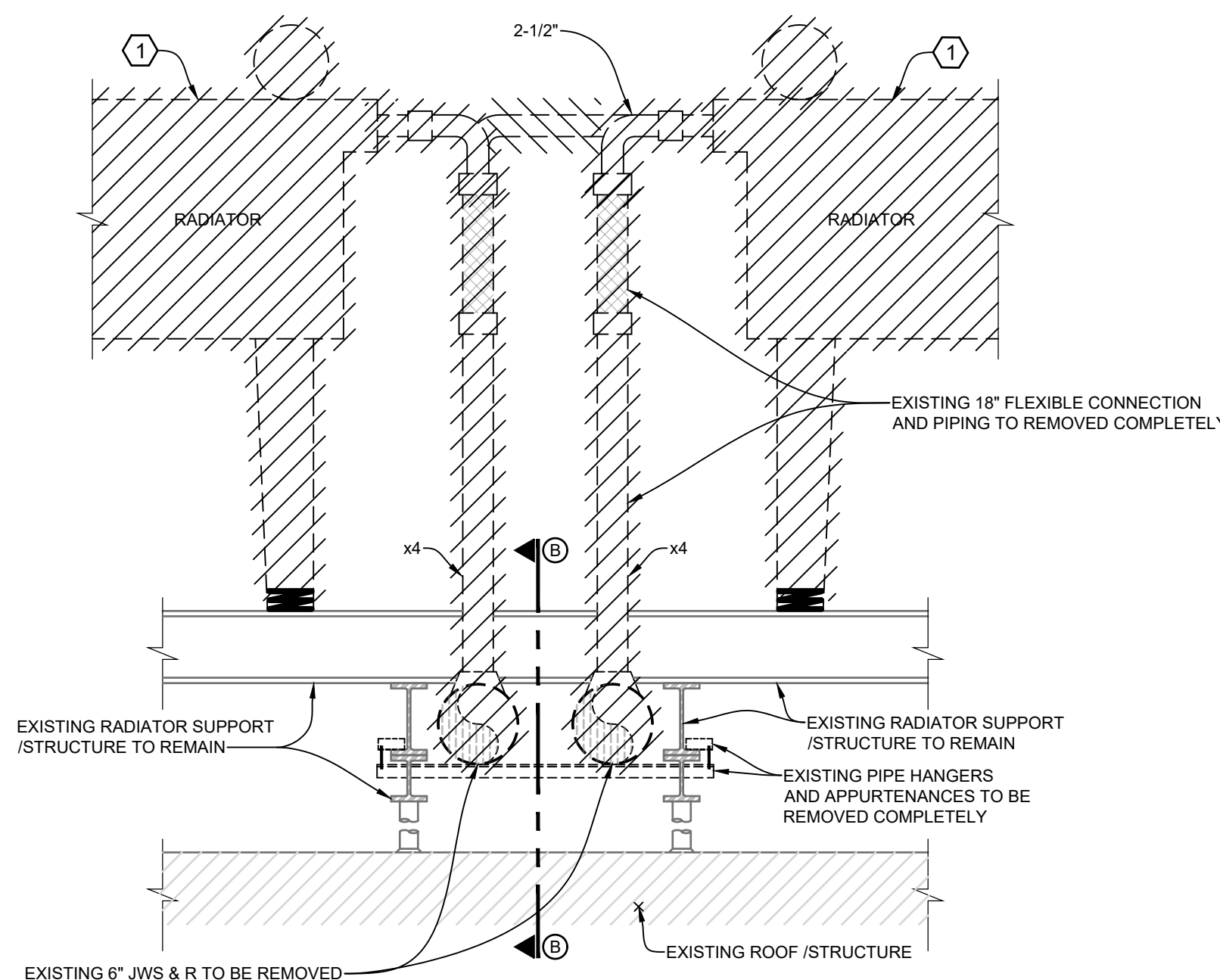


**C IMAGE - PIPING - DEMOLITION**  
SCALE: NONE

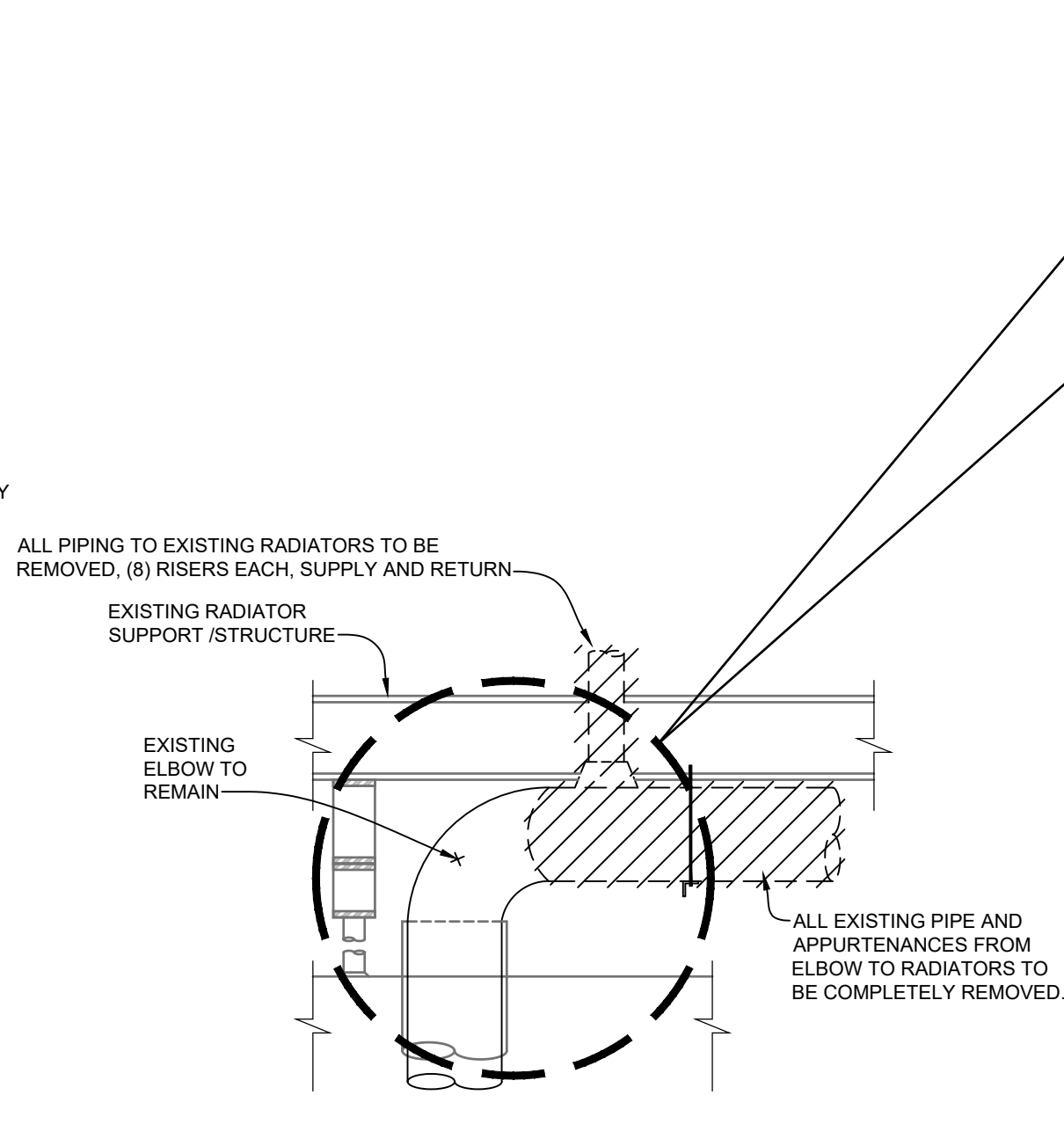
| MOTOR CONTROL CENTER (EXISTING) |                             |            |       |   |                 |      |            |              |           |      |            |      |       |
|---------------------------------|-----------------------------|------------|-------|---|-----------------|------|------------|--------------|-----------|------|------------|------|-------|
| CKT NO.                         | DESCRIPTION                 | MOTOR DATA |       |   | CIRCUIT BREAKER |      |            | STARTER DATA |           |      | CONDUCTORS | GND. | COND. |
|                                 |                             | H.P.       | VOLTS | Ø | F.L.A.          | KVA  | AMP RATING | TYPE         | NEMA SIZE | TYPE |            |      |       |
| A1                              | SPACE                       |            |       |   |                 |      |            |              |           |      |            |      |       |
| A2                              | RADIATOR FAN RF-1           | 12         | 460   | 3 | 20.4            | 16.3 | 30         | MCB          | 2         | FVNR |            |      |       |
| A3                              | SPACE                       |            |       |   |                 |      |            |              |           |      |            |      |       |
| A4                              | FUEL RETURN PUMP #1 (FRP-1) | 1          | 460   | 3 | 1.8             | 1.4  | 3          | MCB          | 1         | FVNR |            |      |       |
| A5                              | FUEL RETURN PUMP #2 (FRP-2) | 1          | 460   | 3 | 1.8             | 1.4  | 3          | MCB          | 1         | FVNR |            |      |       |
| B1                              | SPACE                       |            |       |   |                 |      |            |              |           |      |            |      |       |
| B2                              | ENG. EXH. FAN (EF-5)        | 30         | 460   | 3 | 40              | 32   | 100        | MCB          | 3         | FVNR | (3) #6     | #10  | 1"    |
| B3                              | ENG. EXH. FAN (EF-4)        | 30         | 460   | 3 | 40              | 32   | 100        | MCB          | 3         | FVNR | (3) #6     | #10  | 1"    |
| B4                              | ENG. EXH. FAN (EF-3)        | 30         | 460   | 3 | 40              | 32   | 100        | MCB          | 3         | FVNR |            |      |       |
| C1                              | RADIATOR FAN RF-2A          | 12         | 460   | 3 | 20.4            | 16.3 | 30         | MCB          | 2         | FVNR | (3) #10    | #10  | 3/4"  |
| C2                              | RADIATOR FAN RF-2B          | 12         | 460   | 3 | 20.4            | 16.3 | 30         | MCB          | 2         | FVNR | (3) #10    | #10  | 3/4"  |
| C3                              | RADIATOR FAN RF-3A          | 12         | 460   | 3 | 20.4            | 16.3 | 30         | MCB          | 2         | FVNR | (3) #10    | #10  | 3/4"  |
| C4                              | SPACE                       |            |       |   |                 |      |            |              |           |      |            |      |       |
| C5                              | RADIATOR FAN RF-3B          | 12         | 460   | 3 | 20.4            | 16.3 | 30         | MCB          | 2         | FVNR | (3) #10    | #10  | 3/4"  |

-- RE-USE - NO LOAD CHANGE - PROVIDE AND INSTALL CONTACT SET  
-- RE-USE  
-- RE-USE  
-- RE-USE

**3 SCHEDULE - MOTOR CONTROL CENTER 'MCCC' (EXISTING)**  
SCALE: 1/4" = 1'-0"  
TAKEN FROM OWNERS RECORD - FOR REFERENCE - REFER SHEET ME-1 FOR MOTOR CONTROL CENTER LOCATION



**A DETAIL - RADIATOR PIPING - EXISTING**  
SCALE: NONE



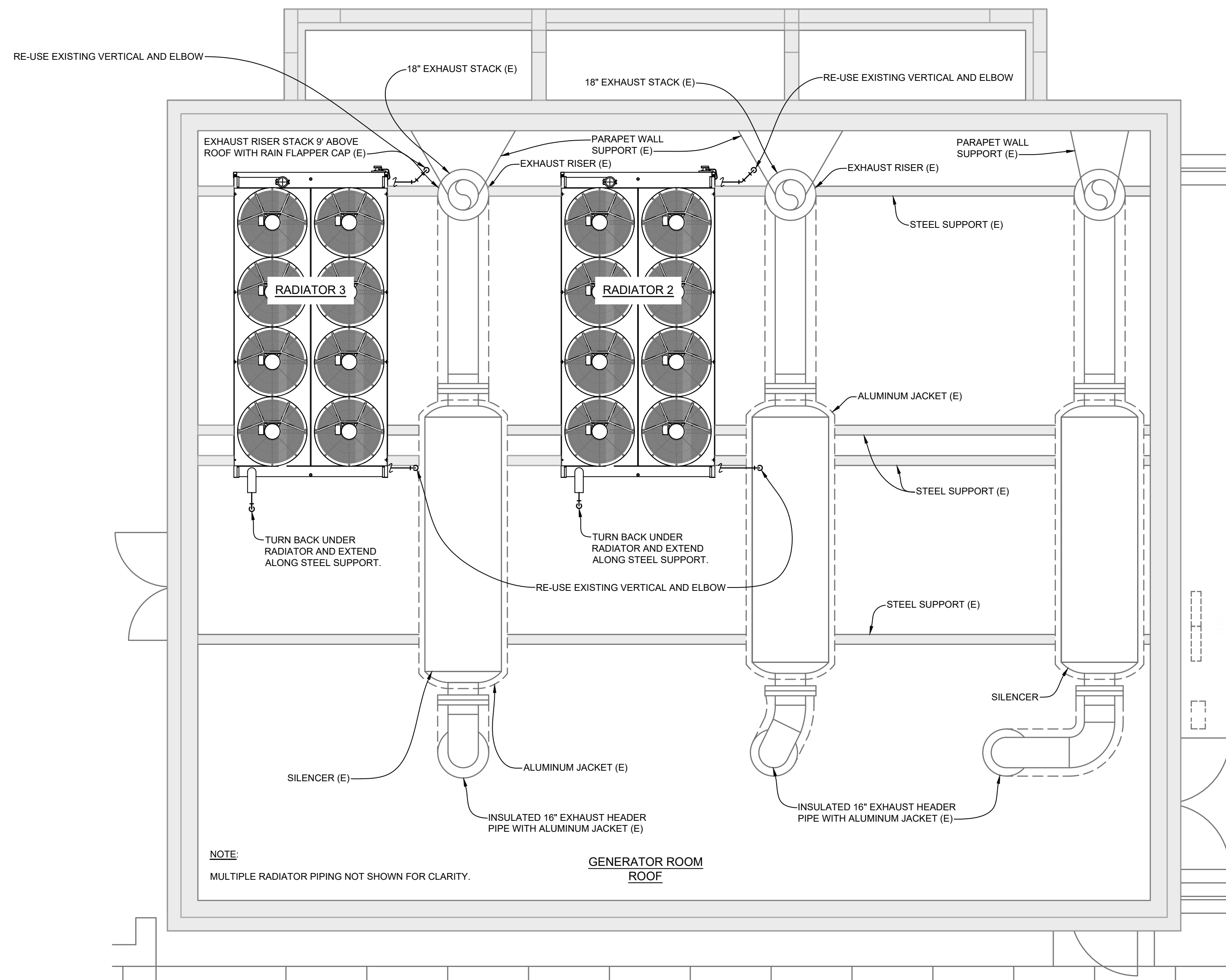
**B DETAIL - PIPE PENETRATION DOWN THRU ROOF - DEMOLITION**  
SCALE: NONE



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| GRINER                             |                              | Date     | 06/23/20 |
|------------------------------------|------------------------------|----------|----------|
| GRINER ENGINEERING, INC.           | 3125 Fifth Ave N., Suite 300 | Drawn    | JHG      |
| St. Petersburg, Florida 33713      | Phone: (727) 822-2335        | Designed | JHG      |
|                                    | Fax: (727) 821-3341          | ECR      | JHG      |
| Certificate of Authorization #3173 | Job no.                      | 20072    |          |

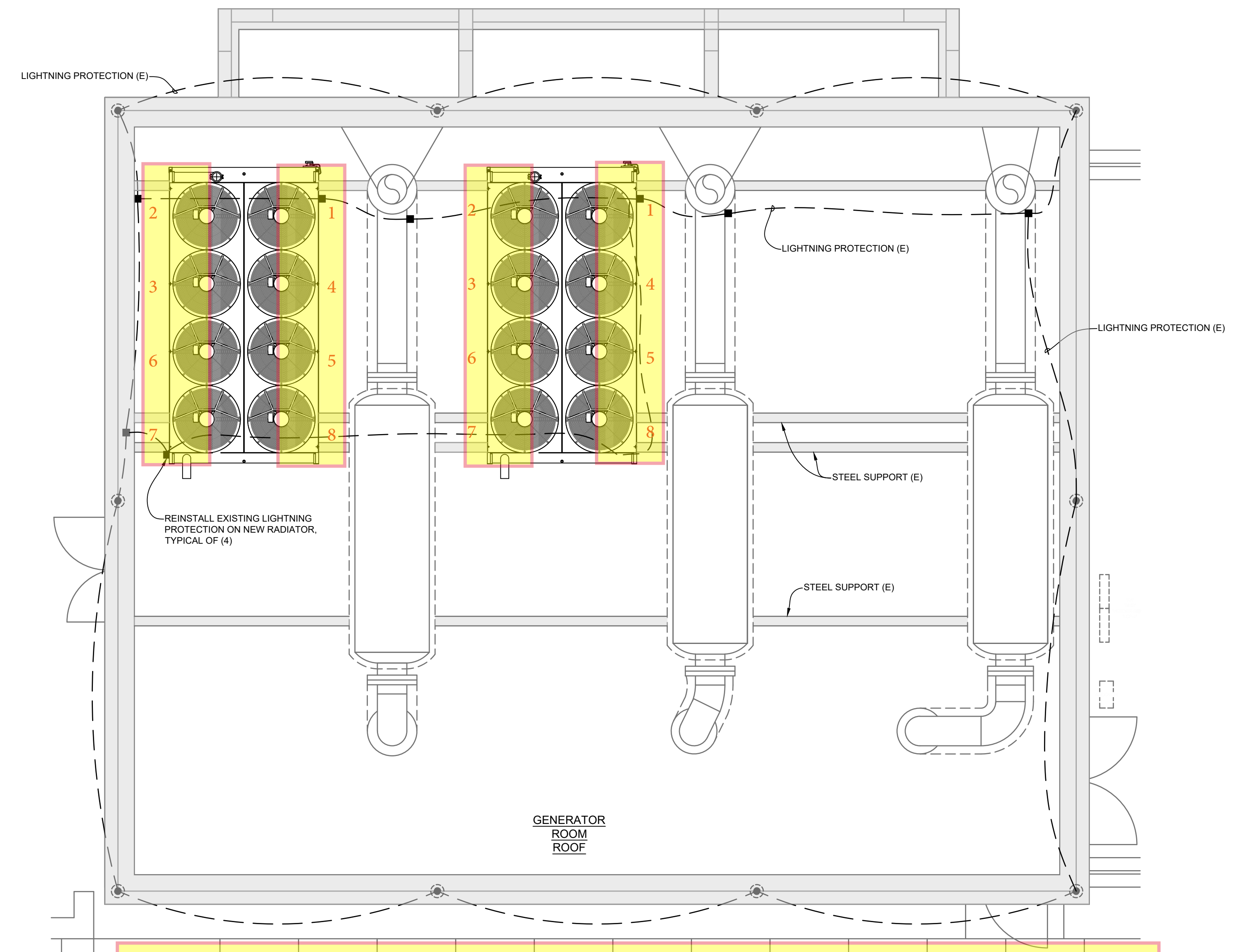
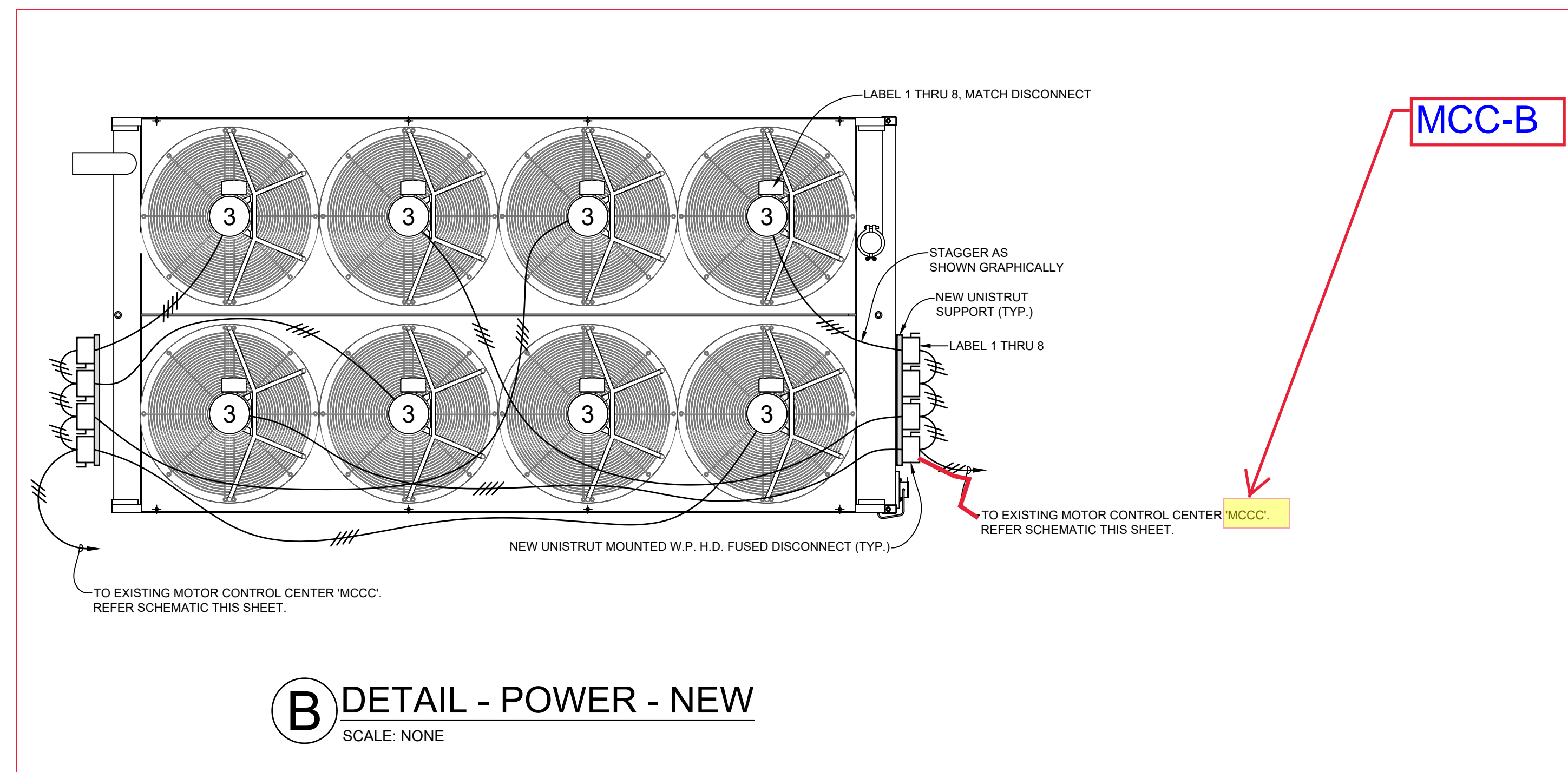




NOTE:  
NEW 6" B.S. EXTEND ALONG BOTTOM OF STRUCTURE AS HIGH AS POSSIBLE. NEW AND EXISTING PIPING TO BE WIRE BRUSHED, PREPARED, PRIMED AND SHERWIN WILLIAMS POLARURETHANE ENAMEL (FAST DRYING) APPLIED. SUPPORTS FOR PIPING SHALL BE GALVANIZED ROLLER TYPE SUSPENDED WITH 1/2" ALL-THREAD FROM SUPPORT. REFER PIPING SCHEMATIC SHEET ME-4.

## 1 GENERATOR ROOM ROOF TOP - PIPING - NEW

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

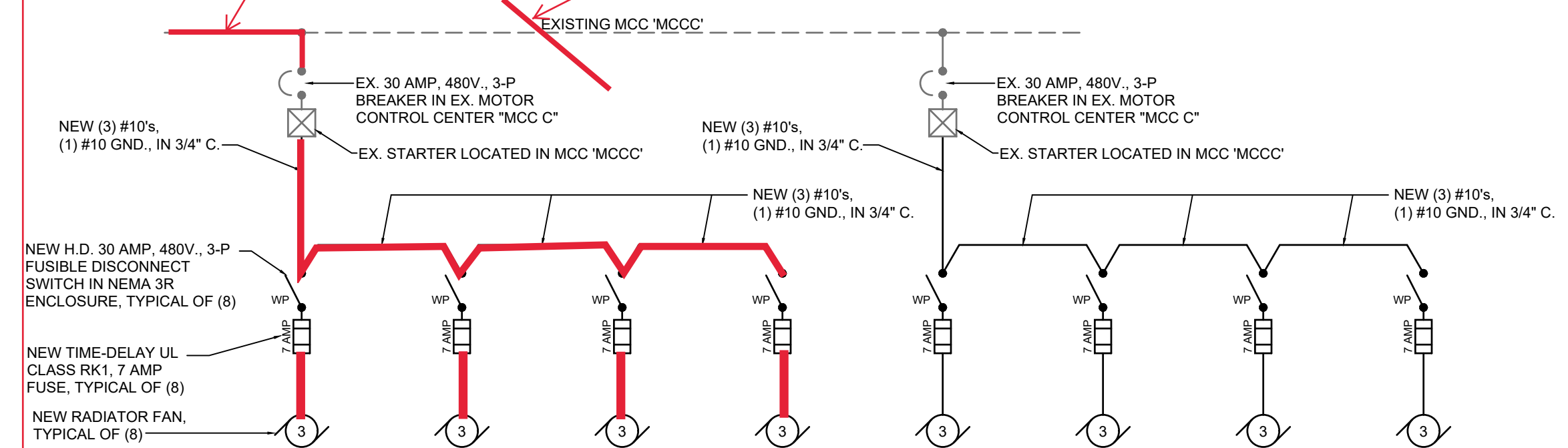


## 2 GENERATOR ROOM ROOF TOP - LIGHTNING PROTECTION - NEW

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

### Section A MCC-B Panel

### Section B



NOTE:  
LINE FOR LIKE REPLACEMENT - EIGHT (8) 3 HP RADIATOR FANS PER GENERATOR. MATCH EXISTING LOAD. NO DEVIATION FROM CURRENT AS BUILT CONDITIONS. REFER SHEET ME-1 FOR MOTOR CONTROL CENTER 'MCCC' LOCATION.

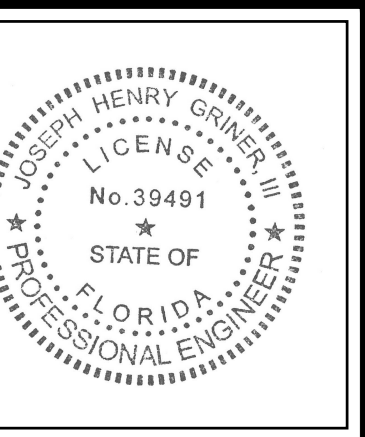
## ONE LINE DIAGRAM - TYPICAL FOR EACH RADIATOR (2) - NEW

SCALE: NONE

NOTE:  
ANY AND ALL EQUIPMENT ON ROOF AND ROOF ITSELF TO BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.

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| PROJECT NO.: |  | DATE     |  |
|--------------|--|----------|--|
| DRAWN BY:    |  | JHG      |  |
| CHECKED BY:  |  | JHG      |  |
| SHEET        |  | DATE     |  |
| ME-3         |  | 06/23/20 |  |



Building Owner:  
**verizon**

Project Management:  
**JLL**  
BRIAN BOYLE, CPE  
SR. PROJECT MANAGER  
VERIZON ACCOUNT - FOS  
JONES LANG LASALLE AMERICAS  
C 813.269.9168  
Email: bboyle@jll.com

Project Design Professional:  
WHA  
Project Engineer:  
**GRINER**

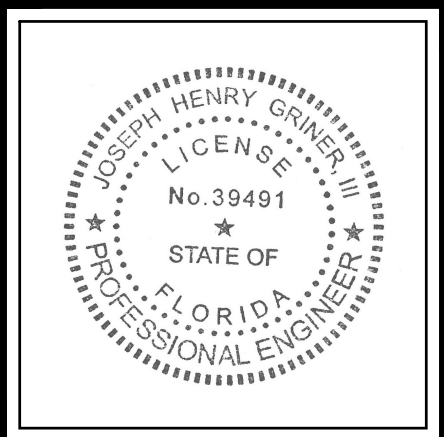
GENERATOR RADIATOR REPLACEMENTS  
AT THE  
VERIZON TECH CENTER BUILDING 'G'  
7701 EAST TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA

| ISSUE DATES: |                         |
|--------------|-------------------------|
| NO.          | DATE & DESCRIPTION      |
| 1            | 08.16.2019 - REVIEW SET |
| 2            | 06.23.2020 - BID SET    |
| 3            |                         |
| 4            |                         |
| 5            |                         |
| 6            |                         |

PROJECT NO.:  
DRAWN BY: MM  
CHECKED BY: JHG

SHEET  
ME-3





GENERATOR RADIATOR REPLACEMENTS  
AT THE  
VERIZON TECH CENTER BUILDING 'G'  
7701 EAST TELECOM PARKWAY  
TEMPLE TERRACE, FLORIDA

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| 3            |                         |
| 4            |                         |
| 5            |                         |
| 6            |                         |
| PROJECT NO.: |                         |
| 20072        |                         |
| DRAWN BY:    |                         |
| MM           |                         |
| CHECKED BY:  |                         |
| JHG          |                         |
| SHEET        |                         |
| ME-4         |                         |

## SCHEDULE (EACH OF 2 RADIATORS)

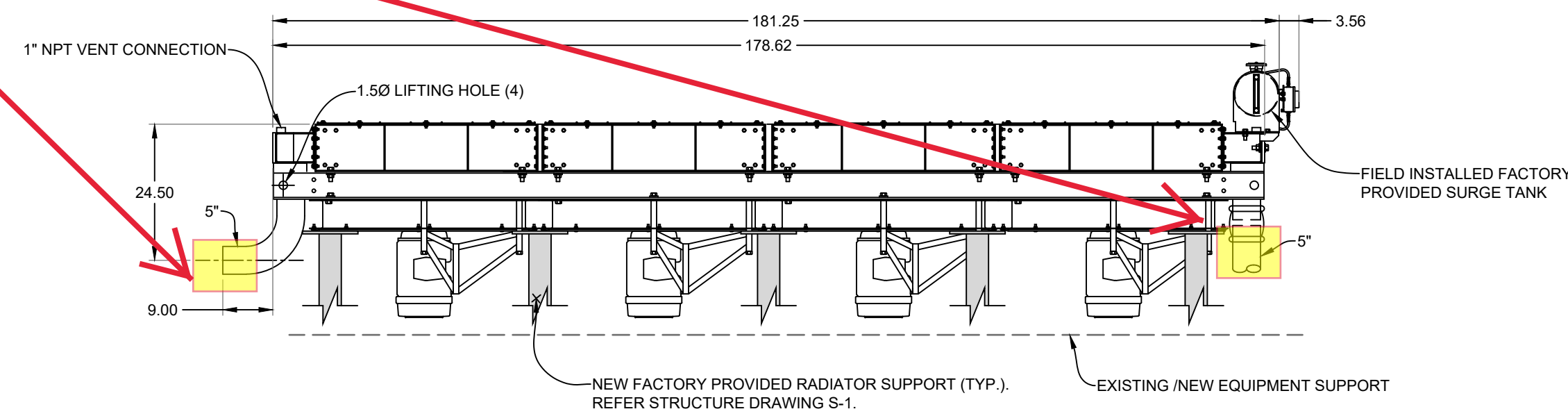
IEA HORIZONTAL REMOTE RADIATOR, MODEL #MC092S38, SINGLE CORE  
(SIZED FOR CATERPILLAR 3516 TA DIESEL ENGINE)

AMBIENT TEMPERATURE: 130 DEG. F  
ELEVATION: <100'  
FAN DESCRIPTION: (QTY. 8) 48" DIAMETER, 870 RPM, DIRECT DRIVE (NO V-BELTS)  
CFM: 50,913  
NOISE LEVEL: 87 DBA AT 6 FT.  
MOTOR DESCRIPTION: (QTY. 8) 3 HP /480 VOLT  
DIMENSIONS: 8'W x 16'L  
FLUID CAPACITY: 47.5 GALLONS  
APPROXIMATE WEIGHT: 8,000 LBS.

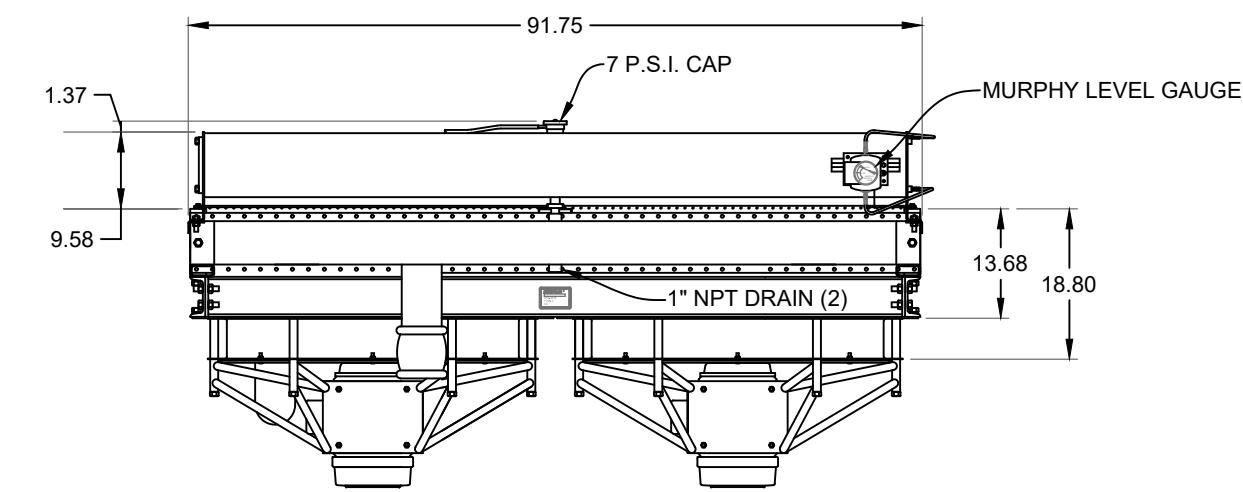
INCLUDED OPTIONS:

SOLDER COATED CORE  
GALVANIZED FRAME WITH SEAL WELDS  
EXPANSION TANK (100 GALLON) (SHIPPED LOOSE FOR CONTRACTOR INSTALLATION)  
HERESITE COATED FUEL COOLER  
MURPHY LEVEL GAUGE  
FACTORY MOUNTED LEGS WITH VIBRATION PADS

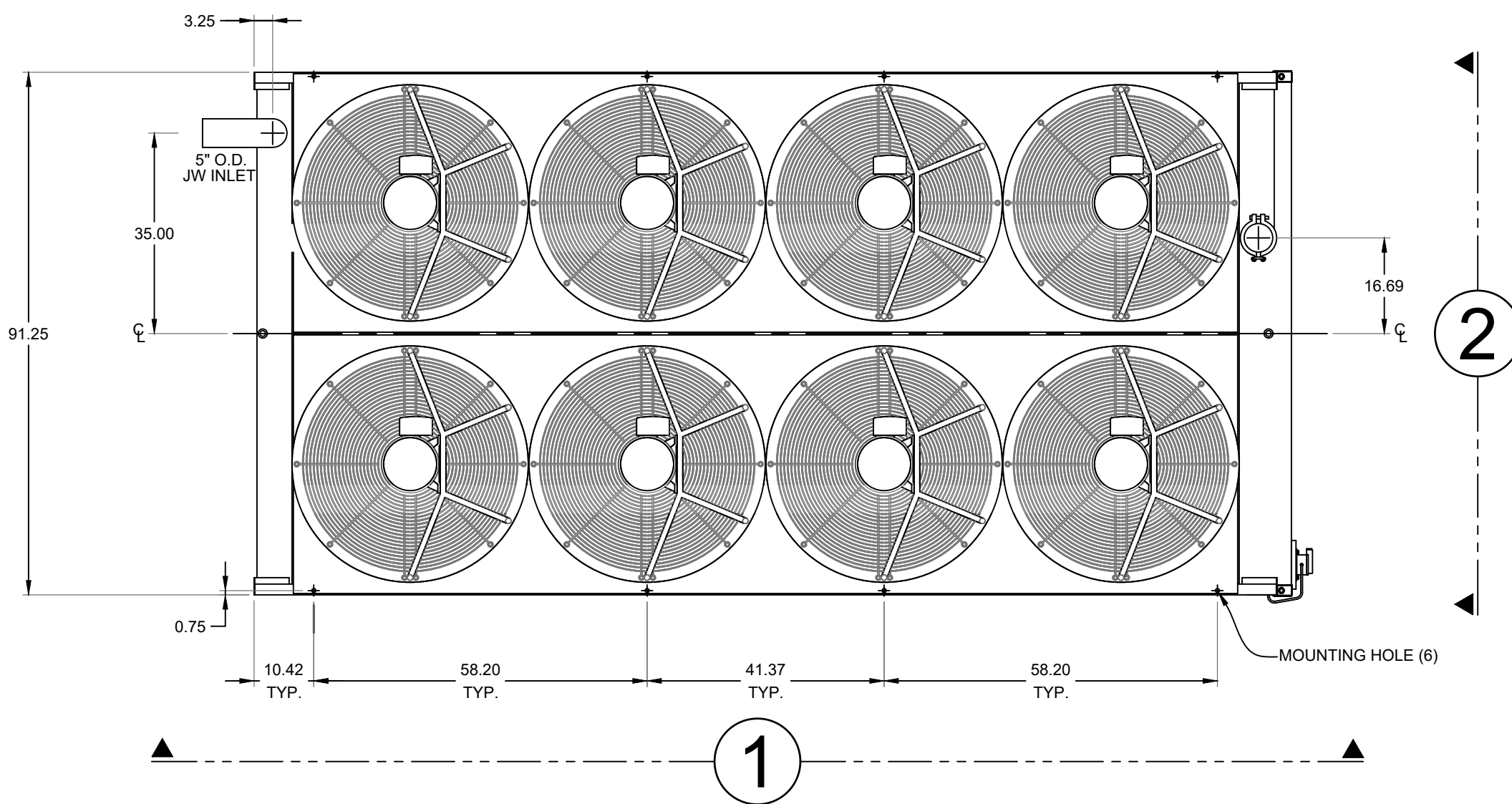
Needed to replace drawing specifications per IEA manufacture to meet their specification and design build based on signed submitted drawings of radiator inlets and outlets.



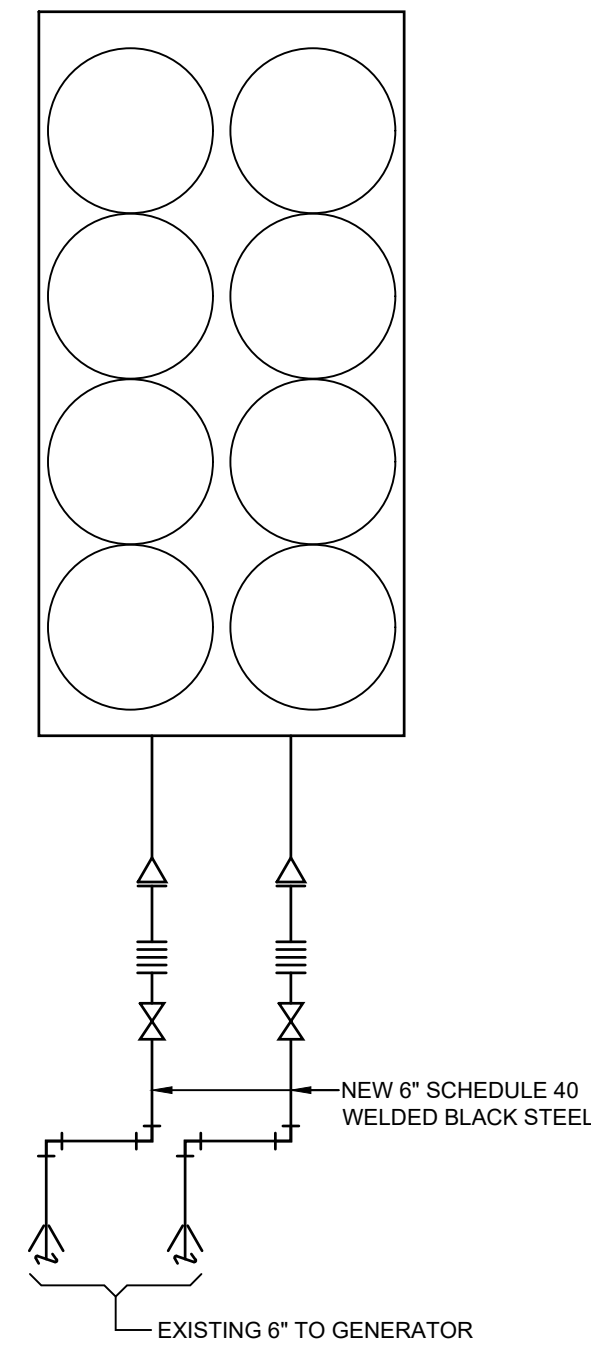
1 DETAIL - ELEVATION  
SCALE: NONE



2 DETAIL - ELEVATION  
SCALE: NONE



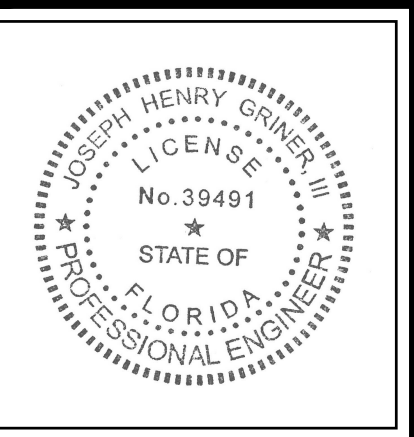
A DETAILS - HORIZONTAL REMOTE RADIATOR  
SCALE: NONE



DETAIL - PIPING  
SCALE: NONE

|   |   |
|---|---|
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| <b>GRINER</b>   |   |
| GRINER ENGINEERING, INC.<br>3125 Fifth Ave N., Suite 300<br>St. Petersburg, Florida 33713<br>Phone: (727) 822-2335<br>Fax: (727) 821-3361<br>Certificate of Authorization #3173   | Date: 06/23/20<br>Drawn: JHG<br>Designed: JHG<br>ECR: JHG<br>Job no.: 20072 |





Building Owner:  
**verizon**

Project Management:  
**JLL**  
BRANDY BOYLE, CPE  
SR. PROJECT MANAGER  
VERIZON ACCOUNT - FOS  
JONES LANG LASALLE AMERICAS  
813.269.9168  
brandy.boyle@jll.com

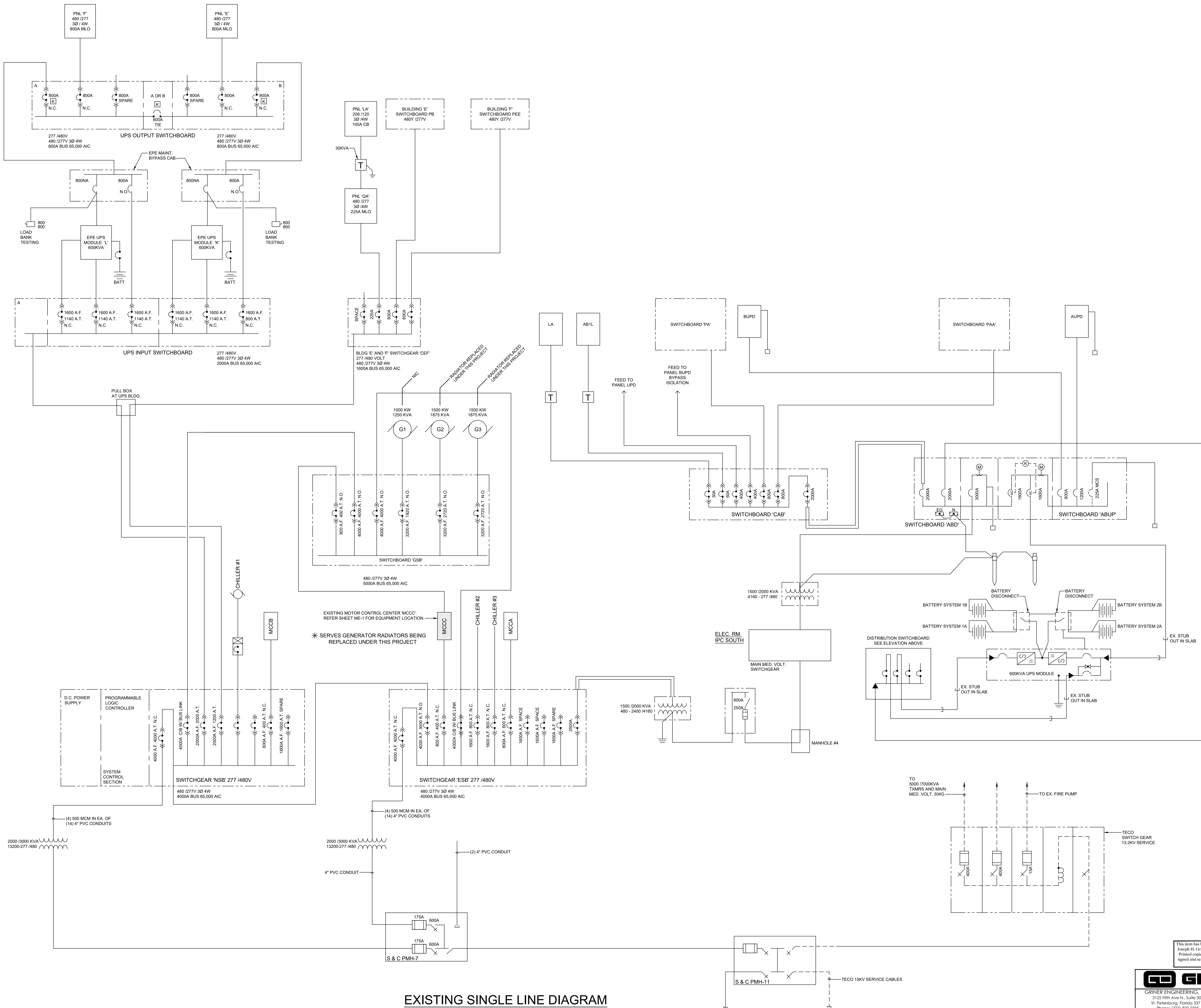
Project Design Professional:  
WIA  
Project Engineer:  
**GRINER**

GENERATOR RADIATOR REPLACEMENTS  
AT THE  
VERIZON TECH CENTER BUILDING 'G'  
7701 EAST TELECOM PARKWAY  
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| 4            |                         |
| 5            |                         |
| 6            |                         |

PROJECT NO.: 20072  
DRAWN BY: MM  
CHECKED BY: JHG  
SHEET

E-4



EXISTING SINGLE LINE DIAGRAM  
SCALE: NONE  
FOR REFERENCE

**GRINER**  
GRINER ENGINEERING, INC.  
3125 Fifth Ave N., Suite 300  
St. Petersburg, Florida 33713  
Phone: (727) 822-2335  
Fax: (727) 821-3341  
Certificate of Authorization #3173

|          |          |
|----------|----------|
| Date     | 06/23/20 |
| Drawn    | JHG      |
| Designed | JHG      |
| ECR      | JHG      |
| Job no.  | 20072    |

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