

**THE SCHOOL DISTRICT OF PHILADLPHIA
SCHOOL REFORM COMMISSION
Office of Capital Programs
440 North Broad Street, 3rd Floor – Suite 371
Philadelphia, PA 19130**

TELEPHONE: (215) 400-4730

Addendum No. 01

Subject: James Lowell School – Emergency Generator Replacement
SDP Contract No. B-064C of 2018/19

Location: James R. Lowell Elementary School
450 W Nedro Ave,
Philadelphia, Pennsylvania 19120

This Addendum, dated October 9, 2018, shall modify and become part of the Contract Documents for the work of this project. Any items not mentioned herein, or affected by, shall be performed strictly in accordance with the original documents.

Drawing Revisions:

Drawings

E100:

1. Drawing updated to indicate location of new generator and routing of conduit.
2. New Work Key Note 1 updated with generator exhaust location.
3. New Work Key Note 4 updated to indicate routing of conduit.
4. Single line diagram updated to indicate removal of existing time clock and addition of new time clock.
5. New Work Key Note 11 added for new time clock requirement.
6. New Work Key Note 12 added to clarify routing of conduits through walls in lieu of window or louvres.

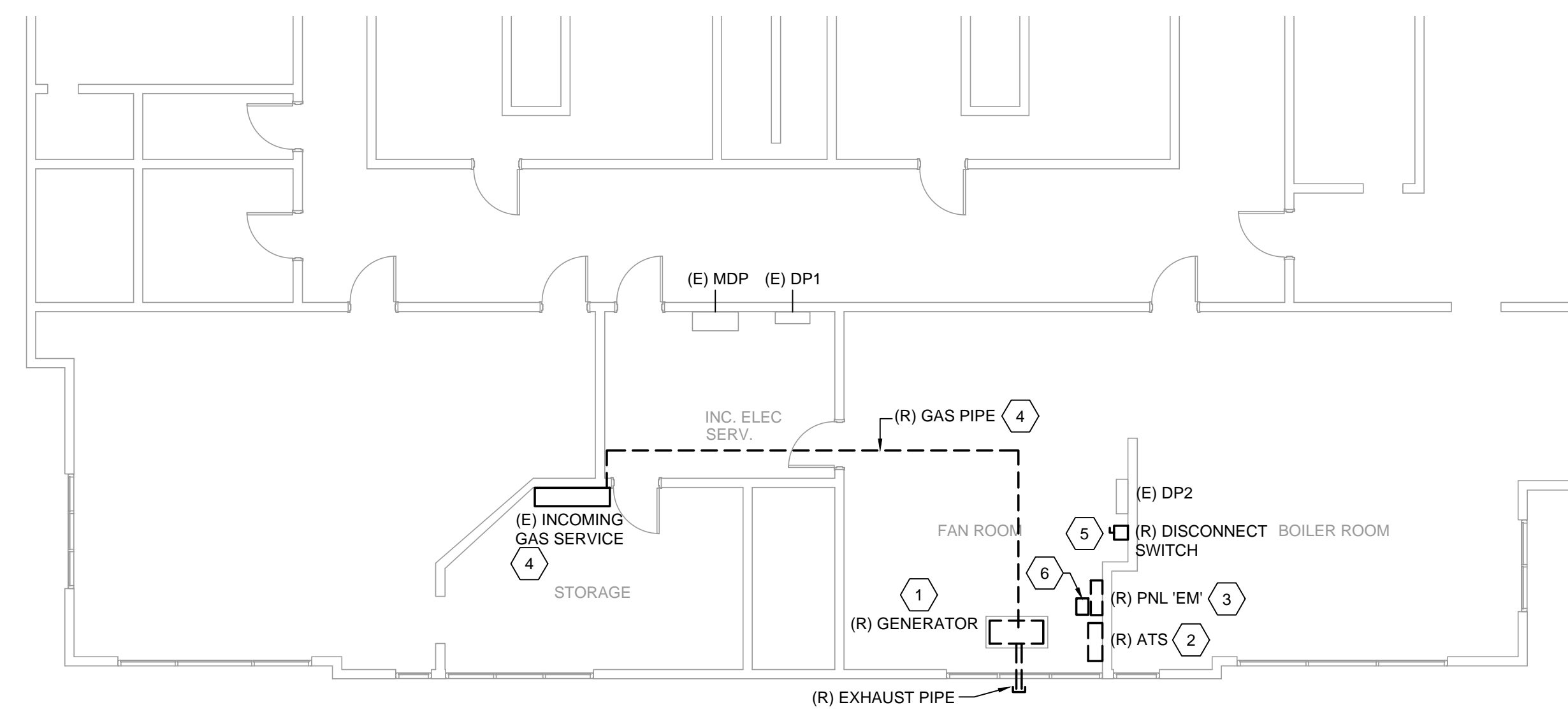
E501:

1. Updated Generator Fence detail (Detail#1).

E601:

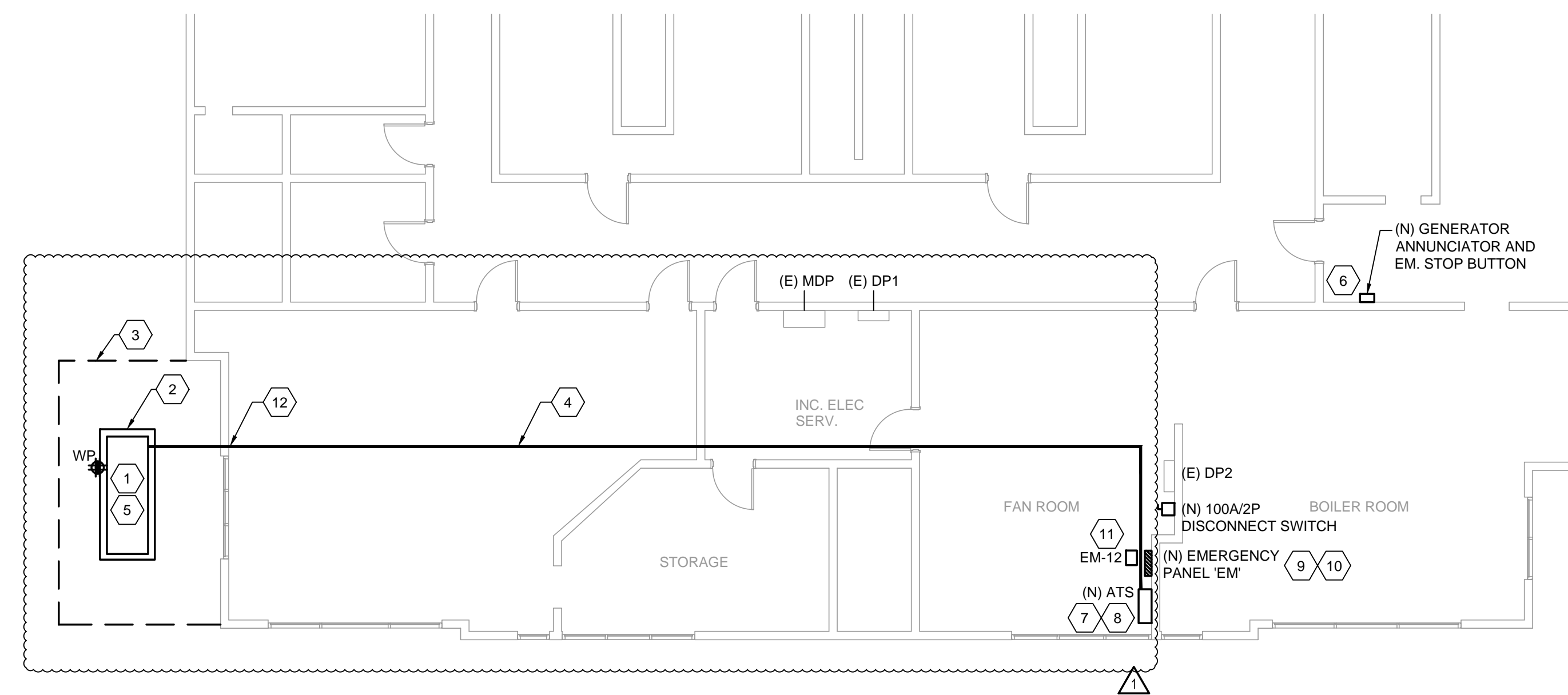
1. Added circuit for Time Clock to Panel Schedule.

End of Addendum



PARTIAL DEMOLITION PLAN
1/8" = 1'-0" 1

| DEMOLITION KEYNOTES | |
|---------------------|---|
| 1 | DISCONNECT AND REMOVE GENERATOR, ALL ASSOCIATED ACCESSORIES (BATTERY CHARGERS, EXHAUST MANIFOLD, ETC.) AND ALL ASSOCIATED WIRING AND CONDUIT. EXISTING CONCRETE HOUSEKEEPING PAD FOR GENERATOR TO REMAIN. CLEAN EXISTING HOUSEKEEPING PAD FOR FUTURE USE. DISCONNECT AND REMOVE ALL EXHAUST AND GAS PIPING AND HANGERS. PATCH AND REPAIR WALL PENETRATION FOR EXHAUST PIPING. |
| 2 | DISCONNECT AND REMOVE 80A, 2-POLE, 240V, AUTOMATIC TRANSFER SWITCH (ATS), DISCONNECT EMERGENCY LINE FEEDERS, LOAD FEEDERS, AND ASSOCIATED CONDUIT. NORMAL POWER FEED FROM MDP TO BE DISCONNECTED AND PREPARED TO CONNECTION TO NEW AUTOMATIC TRANSFER SWITCH. |
| 3 | DISCONNECT AND REMOVE FUSED EMERGENCY PANEL. DISCONNECT AND SAFE OFF ALL (20) BRANCH CIRCUITS. PREPARE FOR RECONNECTION TO NEW PANEL BOARD. REMOVE EXISTING POWER FEEDERS AND CONDUIT BACK TO EXISTING AUTOMATIC TRANSFER SWITCH. |
| 4 | EXISTING GAS SERVICE FOR GENERATOR TO BE REMOVED BACK TO INCOMING GAS SERVICE. CAP AND SEAL PIPING AT TEE OR CROSS FITTING. |
| 5 | REMOVE EXISTING 100A, 240V, 3-POLE DISCONNECT SWITCH. DISCONNECT AND REMOVE ALL INCOMING AND OUTGOING CONDUIT AND WIRE. |
| 6 | REMOVE EXISTING TIME CLOCK. |



PARTIAL NEW WORK PLAN
1/8" = 1'-0" 2

- GENERAL NOTES:
- A. ALL CONDUIT SHALL BE THREADED GALVANIZED RIGID METAL (STEEL) CONDUIT ONLY.
 - B. CONTRACTORS SHALL COORDINATE INSTALLATION WITH SDP ENVIRONMENTAL TEAM.

| NEW WORK KEY NOTES | |
|--------------------|--|
| 1 | PROVIDE NEW DIESEL GENERATOR WITH LEVEL 1 SOUND ATTENUATING WEATHERPROOF ENCLOSURE. GENERATOR SHALL BE RATED FOR 15KW, 120/240V, 1PH, WITH 80A/2P MCB AT GENERATOR CONTROL PANEL. PROVIDE GENERATOR WITH 48-HOUR DOUBLE-WALLED SKID-BASED DIESEL FUEL TANK WITH OVERFLOW AND SECONDARY VENTILATION, MOUNTED UNDER GENERATOR. GENERATOR EXHAUST SHALL FACE AWAY FROM THE BUILDING AND EXTEND ABOVE WINDOW. |
| 2 | PROVIDE NEW 6" CONCRETE HOUSEKEEPING PAD 3000 PSI CONCRETE SLAB FOR NEW GENERATOR. PAD SHALL EXTEND AT MINIMUM 6" BEYOND FOOTPRINT OF GENERATOR ENCLOSURE ON ALL SIDES. COORDINATE EXACT DIMENSIONS OF PAD WITH SELECTED GENERATOR EQUIPMENT. SEE DWG E501 FOR GENERATOR PAD DETAIL. |
| 3 | PROVIDE CHAIN LINK FENCE FOR GENERATOR. SEE DWG E501 FOR FENCING DETAILS. |
| 4 | PROVIDE (1) 2" CONDUIT FOR GENSET INCOMING POWER WIRING, (1) 1" CONDUIT FOR CONTROL WIRING TO ATS, (1) 1" FOR GENERATOR EM STOP AND REMOTE ANNUNCIATOR PANEL, (1) 1-1/2" FOR GENSET ACCESSORIES BRANCH CIRCUITS. CONDUITS SHALL BE ROUTED ABOVE GROUND AND PENETRATE EXTERIOR WALL OF BUILDING, ROUTE TIGHT TO CEILING OF CLASSROOM, STORAGE SPACE, ELECTRICAL ROOM, AND FAN ROOM. TERMINATE CONDUIT AT AUTOMATIC TRANSFER SWITCH (ATS). COORDINATE EXACT PATHWAY IN FIELD. SEE DRAWING E501 FOR DETAIL OF CONDUIT PENETRATION AT EXTERIOR WALL. ALL INTERIOR WALL PENETRATIONS SHALL BE FIRE STOPPED. |
| 5 | PROVIDE POWER FOR GENERATOR ACCESSORIES: ANTI-CONDENSATE HEATER, BLOCK HEATER, CONVENIENCE RECEPTACLE, AND BATTERY CHARGER. UTILIZE DEDICATED 120V, 20AMP CIRCUITS FOR EACH ACCESSORY: ANTI-CONDENSATE HEATER - EM1; BLOCK HEATER - EM8; BATTERY CHARGER - EMS; CONV. RECEPTACLE - EM10. PROVIDE (2) #12 - (1) #12 GND. FOR EACH CIRCUIT ROUTED WITHIN 1-1/2" CONDUIT TO GENERATOR. BREAKERS UTILIZED FOR GENERATOR ACCESSORIES SHALL BE LOCKED IN THE NORMALEMERGENCY SWITCH POSITION. |
| 6 | PROVIDE NEW EMERGENCY STOP BUTTON AND GENERATOR ANNUNCIATOR WITH WIRE GUARD CASE, COMPATIBLE WITH NEW GENERATOR. PROVIDE 1" CONDUIT FROM GENERATOR TO EM STOP BUTTON AND ANNUNCIATOR FOR INTERCONNECTION OF BUTTON AND ANNUNCIATOR TO GENERATOR CONTROL PANEL. PROVIDE WIRING INTERCONNECTION PER GENSET MANUFACTURER REQUIREMENTS. ANNUNCIATOR PANEL AND EM STOP BUTTON TO BE LOCATED WITHIN BUILDING ENGINEER'S OFFICE. |
| 7 | PROVIDE NEW 100A, 2-POLE, 240V, 3-WIRE ATS, ASCO 300 SERIES OR APPROVED EQUAL. ATS CONTROLLER SHALL BE PROVIDED WITH AUTOMATIC ENGINE EXERCISER FUNCTION. RECONNECT EXISTING NORMAL POWER FEEDER TO NEW ATS. |
| 8 | GENERATOR IS NOT A SEPARATELY DERIVED SYSTEM. GROUNDED NEUTRAL CONDUCTOR SHALL BE SOLIDLY INTERCONNECTED TO SUPPLY FEEDER CONDUCTORS NEUTRAL AT AUTOMATIC TRANSFER SWITCH. NEUTRAL CONDUCTOR SHALL NOT BE SWITCHED. |
| 9 | NEW CUSTOM PANEL 'EM'. SEE SINGLE LINE DIAGRAM AND DWG E501 FOR MORE DETAILS. RECONNECT ALL EXISTING (QTY 20) BRANCH CIRCUITS TO NEW PANEL BOARD. PROVIDE NAME PLATE PLACARDS FOR EACH BRANCH CIRCUIT. PANEL BOARD SHALL BE PROVIDED WITH (2) MAIN BREAKERS: (1) MCB FOR EMERGENCY ONLY FEEDER, (1) MCB FOR NORMALEMERGENCY FEEDER TO PANEL BOARD. PROVIDE PLACARD LABELS FOR EACH MAIN BREAKER. PROVIDE A TVSS FOR NEW PANEL BOARD; 30A, DISCONNECT WITH (2) 30A FUSES AND TRANSIENT SURGE SUPPRESSION DEVICE. RUN #10 AWG FROM DISCONNECT TO FEED THRU LUGS ON NORMAL POWER BUS BAR. |
| 10 | PROVIDE A PLACARD LABEL AT PANEL BOARD IDENTIFYING THAT THE PANEL BOARD IS SUPPLIED FROM (2) SOURCES OF POWER. PLACARD SHALL STATE: "PANEL BOARD IS SUPPLIED FROM TWO SOURCES OF POWER. TO DE-ENERGIZE PANEL BOARD: 1. SHUT OFF EMERGENCY ONLY MAIN BREAKER AND NORMAL EMERGENCY MAIN BREAKER, AND LOCK OUT BREAKER. AUTOMATIC TRANSFER SWITCH SHALL BE LOCKED INTO OPEN SWITCH POSITION." |
| 11 | PROVIDE NEW TIME CLOCK. RECONNECT EXISTING OUTSIDE LIGHTING CIRCUITS TO NEW TIMECLOCK. TIME CLOCK SHALL BE AS MANUFACTURED BY INTERMATIC MODEL #T101 OR APPROVED EQUAL. |
| 12 | ROUTE CONDUIT THROUGH CONCRETE WALL. PROVIDE CONDUIT LINK SEALS AT WALL PENETRATION. CONDUITS SHALL NOT PENETRATE WINDOWS AND LOUVERS. |

100% CD BID SUBMISSION
SEPTEMBER 5, 2018

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| NO. | DATE | REVISION |

SCHOOL & LOCATION
**JAMES R. LOWELL
ELEMENTARY SCHOOL**
453 W. NEDRO AVE
PHILADELPHIA, PA 19120

PROJECT TITLE
GENERATOR REPLACEMENT

DRAWING TITLE
BASEMENT PLAN

DRAWING SCALE
AS NOTED

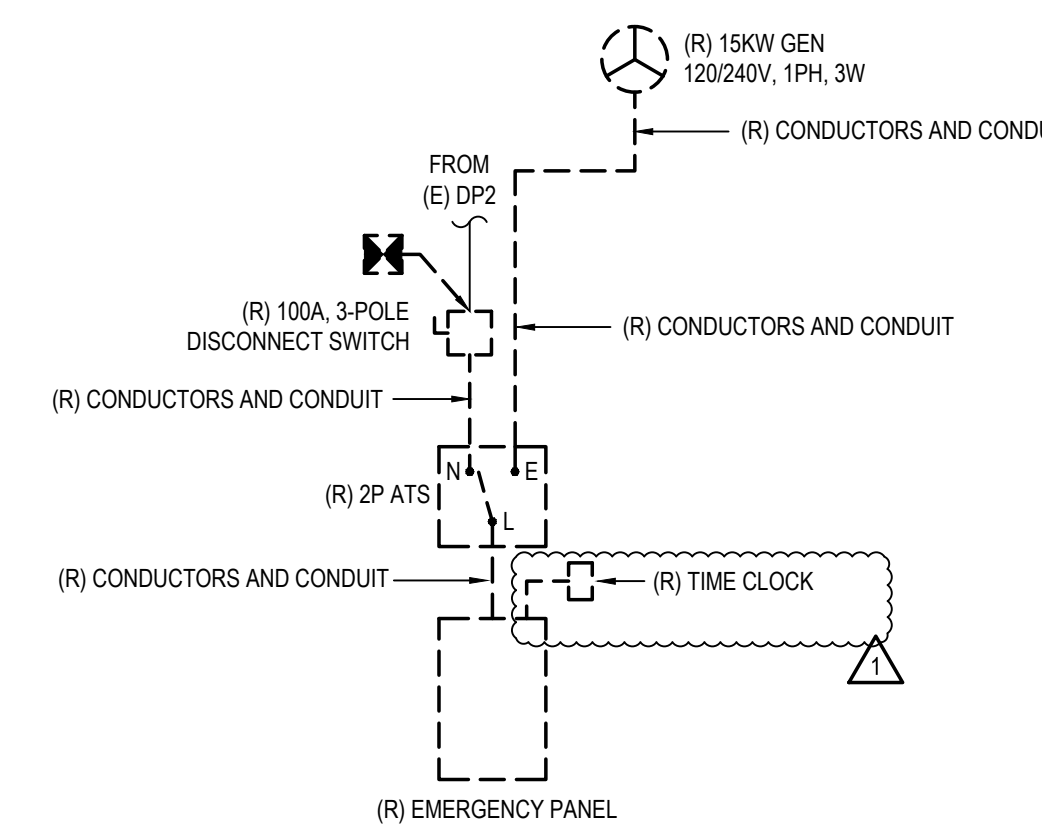
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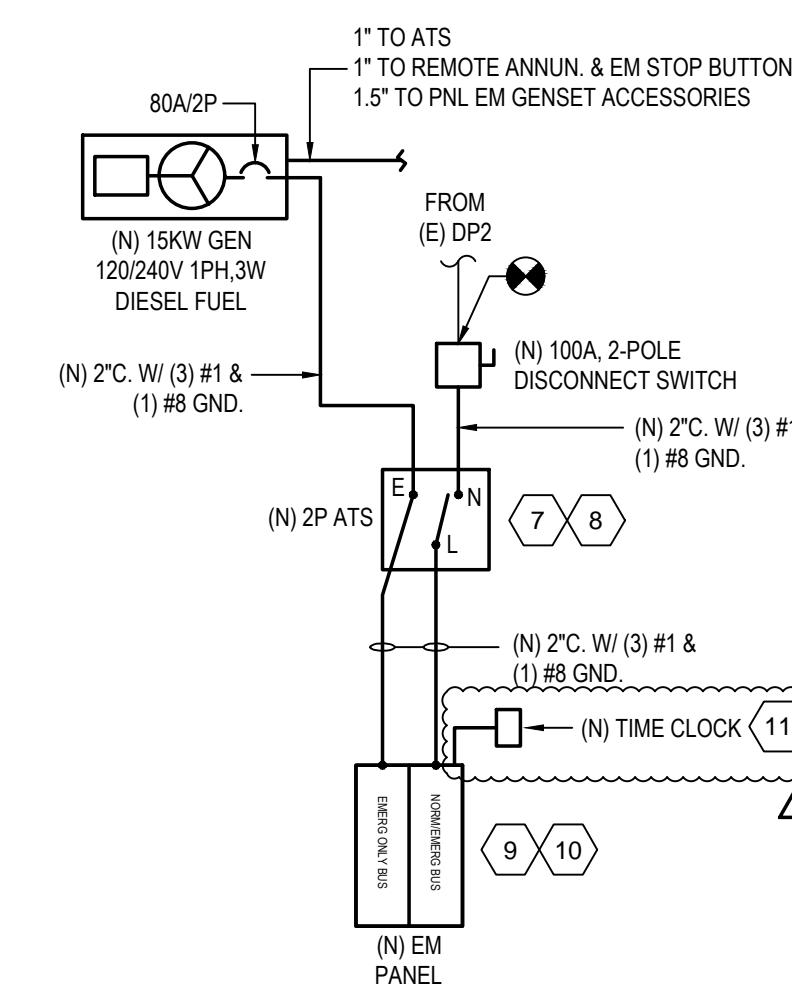
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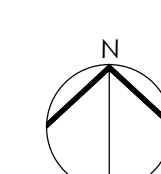
PROJECT SITE PLAN
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DEMOLITION SINGLE LINE DIAGRAM
NOT TO SCALE 4



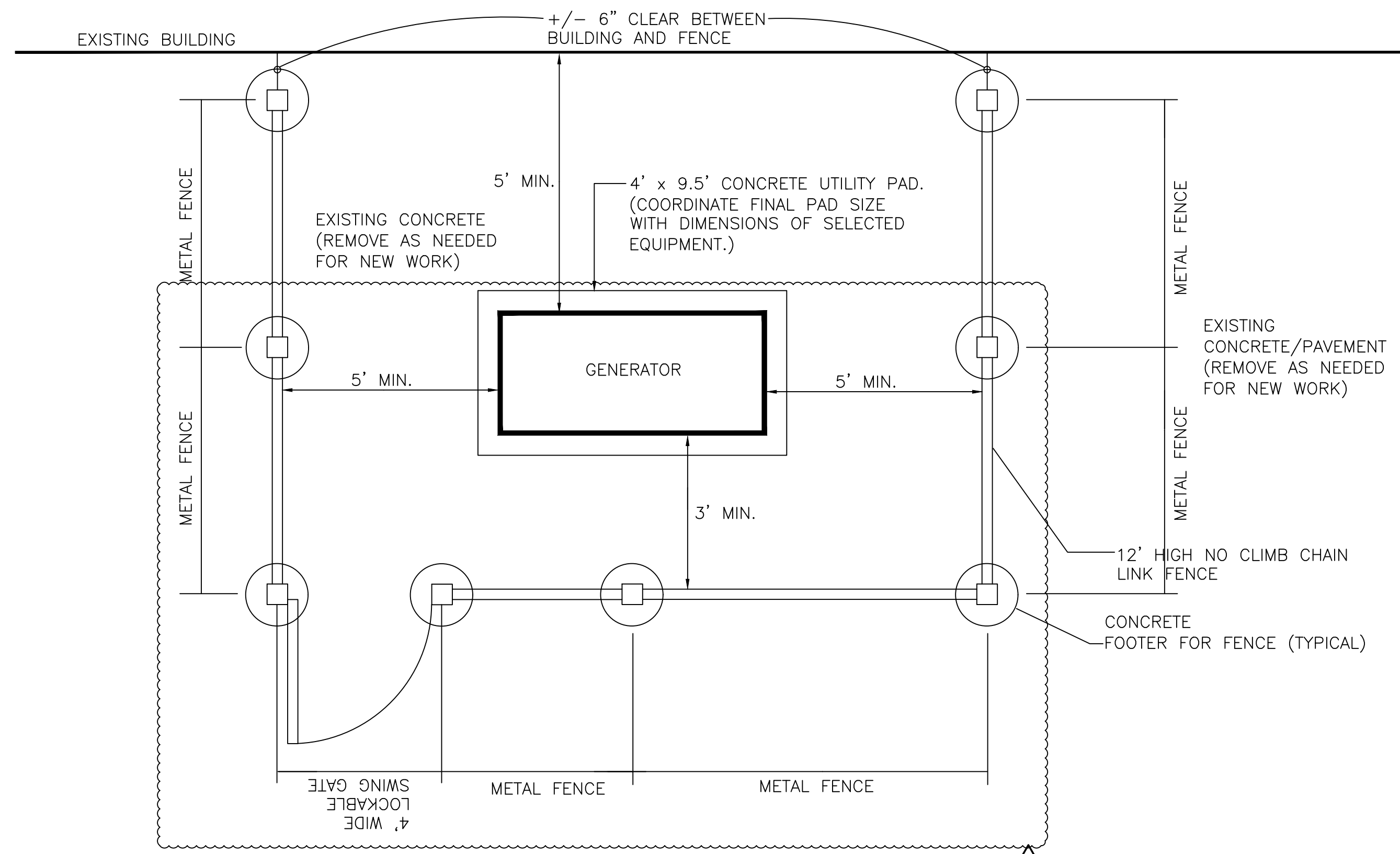
NEW WORK SINGLE LINE DIAGRAM
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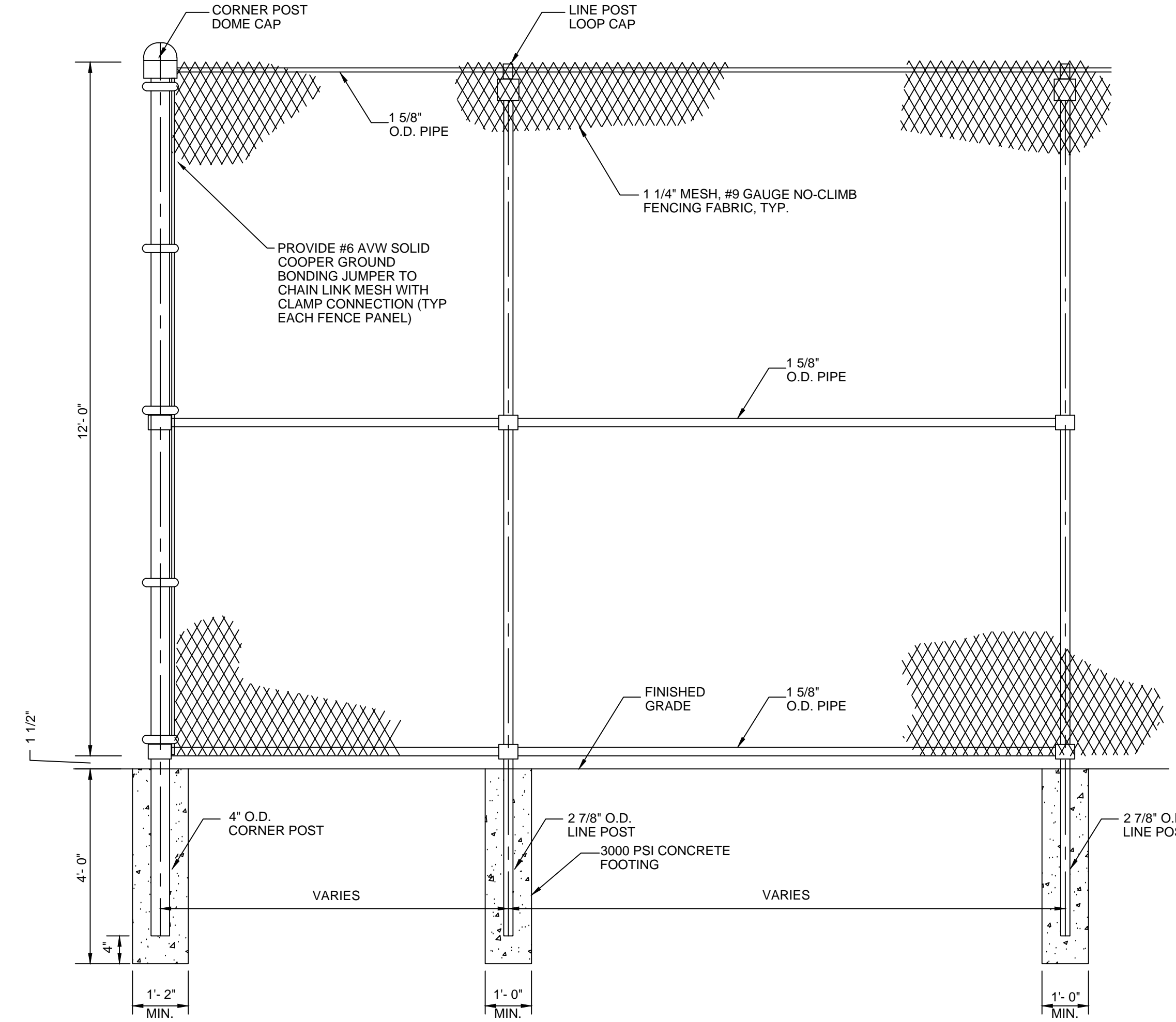
SEAL:

MICHAEL BELLO (LICENSED PROFESSIONAL) DA
STATE AND LICENSE NO: PA 33443 E 09/30/20

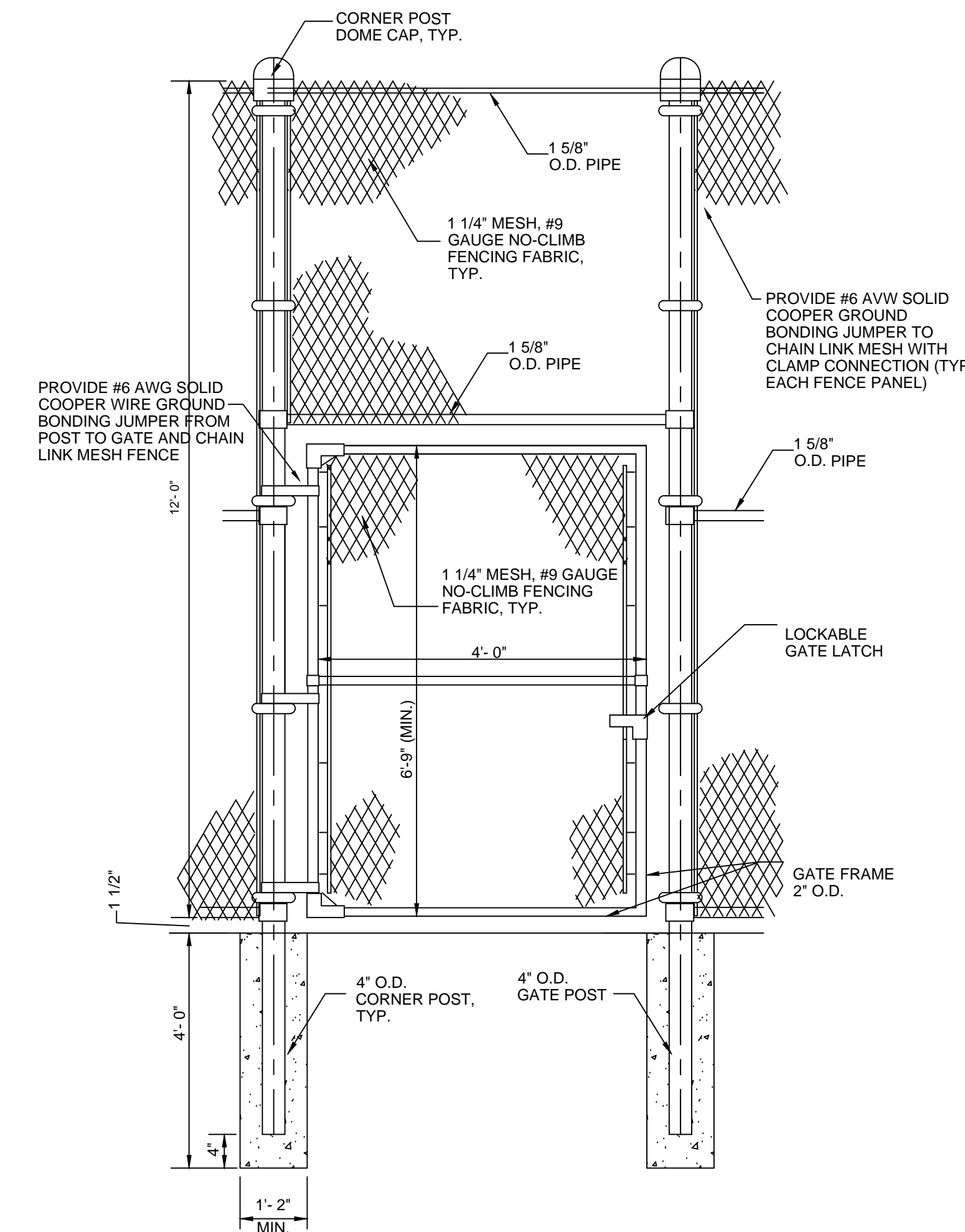
MEP Engineer
NORR
1617 JFK Blvd, Suite 1400
Philadelphia, PA 19103
Phone: 215-525-4849
Fax:
Email: Nayan.Patel@NORR.com
Attn: Nayan Patel



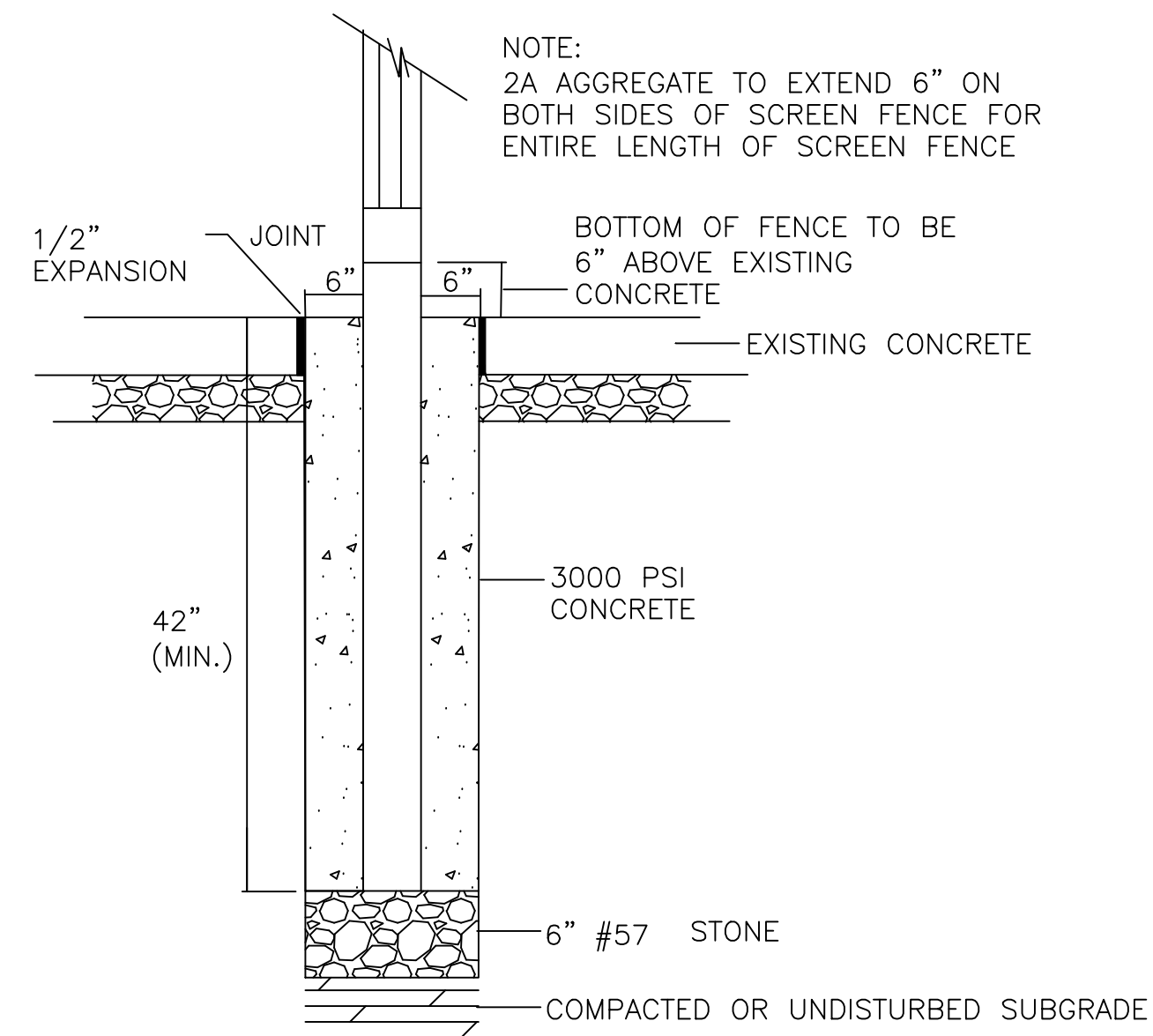
GENERATOR FENCE PLAN 1
NOT TO SCALE



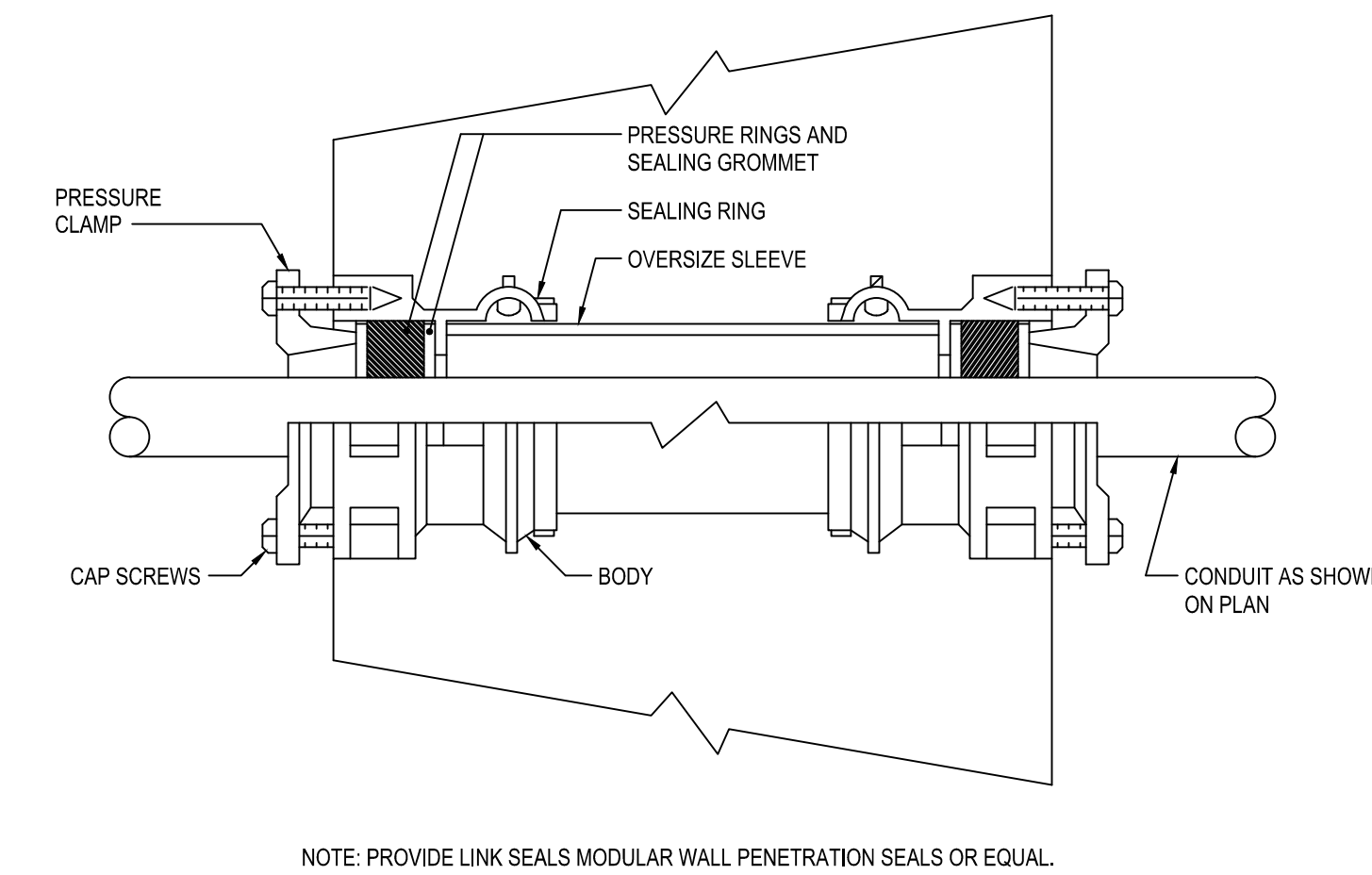
CHAIN LINK FENCE DETAIL 2
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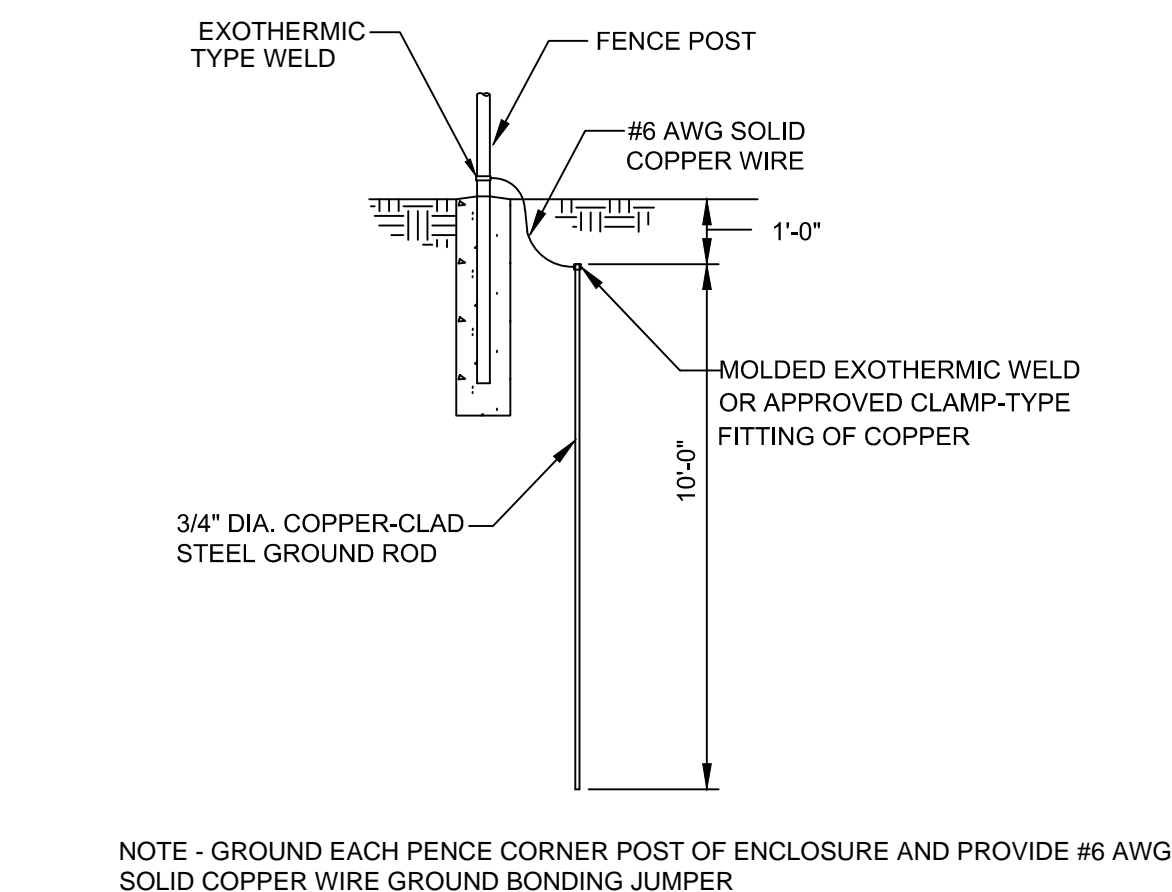
CHAIN LINK FENCE GATE DETAIL 3
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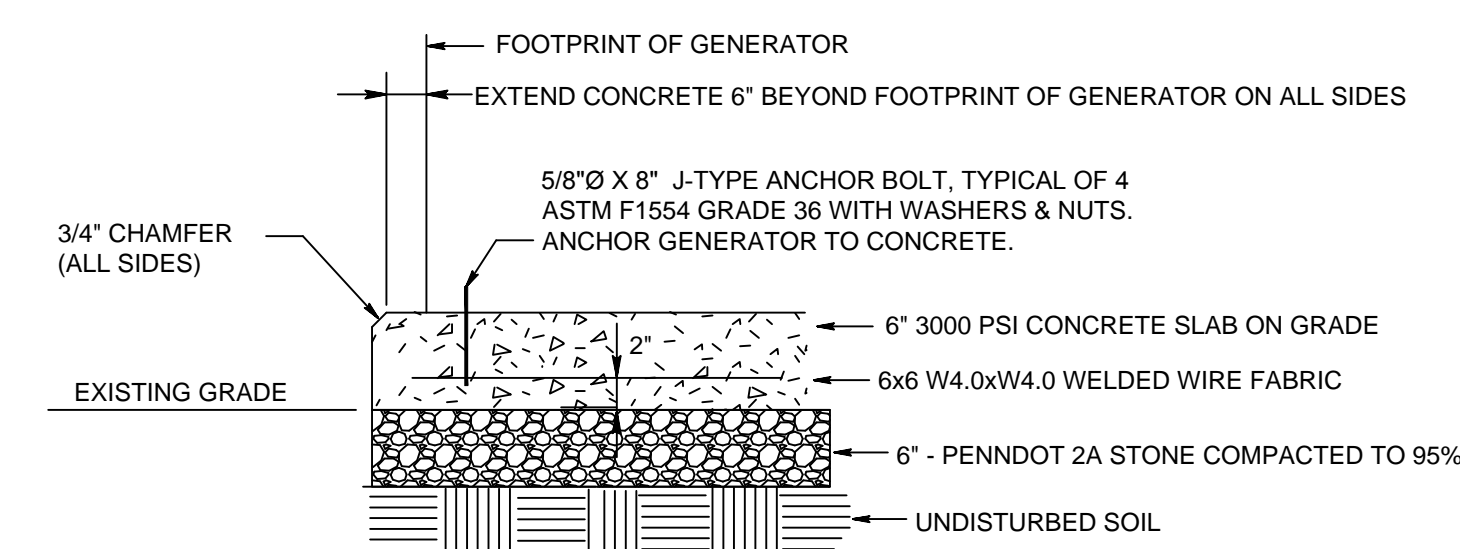
SCREEN FENCE POST FOOTER DETAIL 4
NOT TO SCALE



EXTERIOR WALL CONDUIT PENETRATION DETAIL 5
NOT TO SCALE



FENCE GROUNDING DETAIL 6
NOT TO SCALE



GENERATOR HOUSEKEEPING PAD DETAIL 7
NOT TO SCALE

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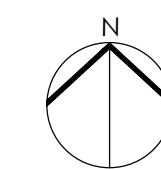
PROJECT TITLE
GENERATOR REPLACEMENT

DRAWING TITLE
BASEMENT PLAN

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SHEET 3 OF 4



SEAL:

MICHAEL BOLD (LICENSED PROFESSIONAL) STATE AND LICENSE NO. PA 33443-E 09/30/20

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Attn: Nayan Patel

100% CD BID SUBMISSION
SEPTEMBER 5, 2018

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450 W. NEDRO AVE
PHILADELPHIA, PA 19120

PROJECT TITLE
GENERATOR REPLACEMENT

DRAWING TITLE

SCHEDULES AND DIAGRAMS

DRAWING SCALE
AS NOTED

LOCATION NO.
7350

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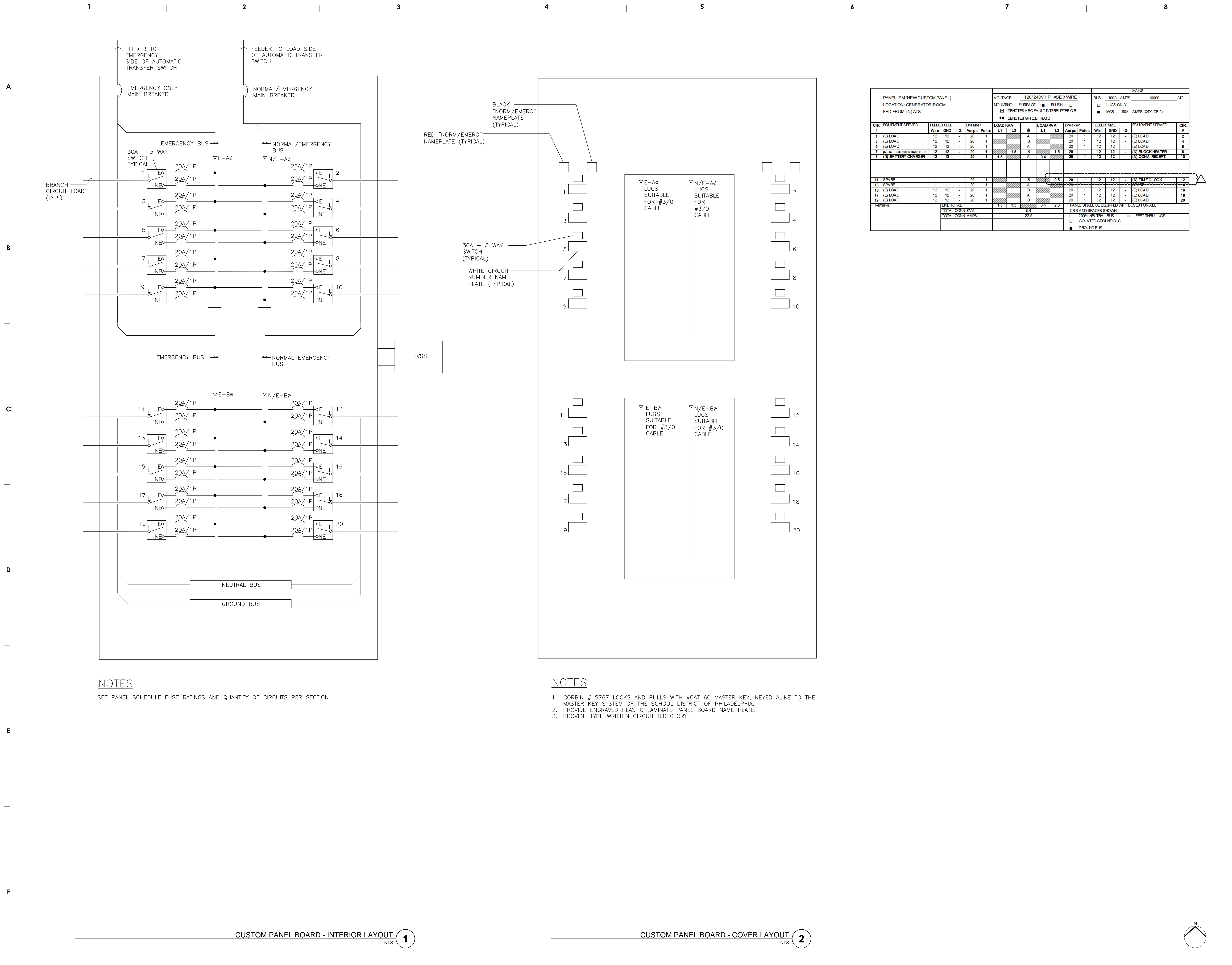
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SHEET 4 OF 4



| CIR # | EQUIPMENT SERVED | FEEDER SIZE | | | Breaker | | LOAD KVA | | Breaker | | FEEDER SIZE | | | EQUIPMENT SERVED | CIR # | | | | | |
|------------------|---------------------------|-------------|-----|------|---------|-------|----------|-----|---------|-----|-------------|------|-------|------------------|--|----------------------|-----|------|--|--|
| | | Wire | GND | I.G. | Amps | Poles | L1 | L2 | Ø | L1 | L2 | Amps | Poles | | | Wire | GND | I.G. | | |
| 1 | (E) LOAD | 12 | 12 | - | 20 | 1 | - | - | A | - | 20 | 1 | 12 | 12 | - | (E) LOAD | 2 | | | |
| 3 | (E) LOAD | 12 | 12 | - | 20 | 1 | - | - | B | - | 20 | 1 | 12 | 12 | - | (E) LOAD | 4 | | | |
| 5 | (E) LOAD | 12 | 12 | - | 20 | 1 | - | - | A | - | 20 | 1 | 12 | 12 | - | (E) LOAD | 6 | | | |
| 7 | (N) W/FC CONDENSATE H. W. | 12 | 12 | - | 20 | 1 | - | 1.5 | B | - | 20 | 1 | 12 | 12 | - | (N) BLOCK HEATER | 8 | | | |
| 9 | (N) BATTERY CHARGER | 12 | 12 | - | 20 | 1 | - | 1.5 | A | 0.4 | - | - | - | - | - | (N) CONV. RECEPT. | 10 | | | |
| 11 | SPARE | - | - | - | 20 | 1 | - | - | B | 0.5 | 20 | 1 | 12 | 12 | - | (N) TIME CLOCK | 12 | | | |
| 13 | SPARE | - | - | - | 20 | 1 | - | - | A | - | 20 | 1 | 12 | 12 | - | SPARE | 14 | | | |
| 15 | (E) LOAD | 12 | 12 | - | 20 | 1 | - | - | B | - | 20 | 1 | 12 | 12 | - | (E) LOAD | 16 | | | |
| 17 | (E) LOAD | 12 | 12 | - | 20 | 1 | - | - | A | - | 20 | 1 | 12 | 12 | - | (E) LOAD | 18 | | | |
| 19 | (E) LOAD | 12 | 12 | - | 20 | 1 | - | - | B | - | 20 | 1 | 12 | 12 | - | (E) LOAD | 20 | | | |
| LINE TOTAL | | | | | | | | | | | 1.5 | 1.5 | 0.4 | 2.0 | PANEL SHALL BE EQUIPPED WITH BUSES FOR ALL | | | | | |
| TOTAL CONN. KVA | | | | | | | | | | | 5.4 | | | | | CBS AND SPACES SHOWN | | | | |
| TOTAL CONN. AMPS | | | | | | | | | | | 22.5 | | | | | 200% NEUTRAL BUS | | | | |
| | | | | | | | | | | | | | | | | ISOLATED GROUND BUS | | | | |
| | | | | | | | | | | | | | | | | FEED THRU LUGS | | | | |
| | | | | | | | | | | | | | | | | GROUND BUS | | | | |

NOTES
SEE PANEL SCHEDULE FUSE RATINGS AND QUANTITY OF CIRCUITS PER SECTION

NOTES
1. CORBIN #15767 LOCKS AND PULLS WITH #CAT 60 MASTER KEY, KEYED ALIKE TO THE MASTER KEY SYSTEM OF THE SCHOOL DISTRICT OF PHILADELPHIA.
2. PROVIDE ENGRAVED PLASTIC LAMINATE PANEL BOARD NAME PLATE.
3. PROVIDE TYPE WRITTEN CIRCUIT DIRECTORY.

CUSTOM PANEL BOARD - INTERIOR LAYOUT 1

CUSTOM PANEL BOARD - COVER LAYOUT 2

