

**NOTES**

1. POLE HEIGHT SHALL BE 20'-40' AND SHALL BE DETERMINED BY THE COUNTY DURING CONSTRUCTION AFTER COORDINATES HAVE BEEN SUBMITTED AND A RADIO PATH REPORT HAS BEEN COMPLETED BY THE COUNTY.
2. POLES SHALL BE HINGED ALUMINUM FOR ANTENNA HEIGHTS 20' AND BELOW. POLES SHALL BE NON HINGED ALUMINUM FOR ANTENNA HEIGHTS GREATER THAN 20'. ORIENTATION OF HINGE SHALL BE COORDINATED WITH LOCATION OF OTHER ABOVE GROUND FEATURES WITHIN PUMP STATION SITE.
3. MOUNTING STUDS AND CONCRETE BASE SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. LAGS OR DRIVE PINS WILL NOT BE PERMITTED. NON-SHRINK GROUT TO BE APPLIED AROUND BASE.
4. CONFIGURATION OF ANTENNA SHALL BE BASED ON SUSSEX COUNTY RADIO PATH REPORTING.



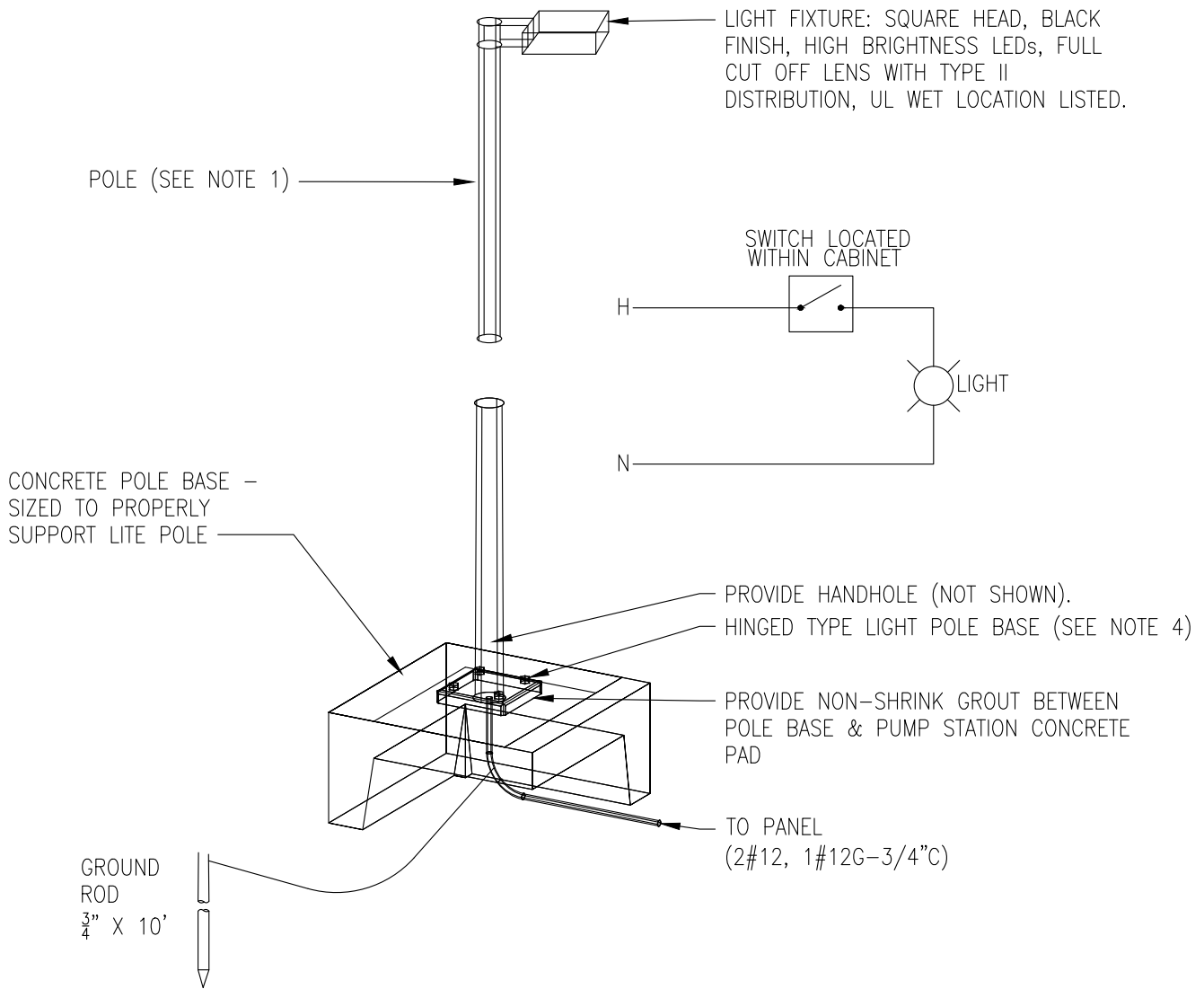
SUSSEX COUNTY  
ENGINEERING DEPARTMENT

APPROVED: *[Signature]*  
SUSSEX COUNTY ENGINEER

**ANTENNA POLE**

DETAIL  
E-1

LAST REVISED:  
12/30/2021



**NOTES**

1. POLE SHALL BE ALUMINUM ROUND TAPERED, BLACK FINISH, 12' HEIGHT, 3" PIPE FITTER, WITH ANCHOR BOLTED BASE.
2. LIGHT TO BE LOCATED TO PROVIDE DIRECT ILLUMINANCE OF WET WELL AREA.
3. LIGHT FIXTURE TO BE RATED TO PROVIDE A MIN OF 10,000 LUMENS AT 5,000 K.
4. ORIENTATION OF HINGE SHALL BE COORDINATED WITH LOCATION OF OTHER ABOVE GROUND FEATURES WITHIN PUMP STATION SITE.



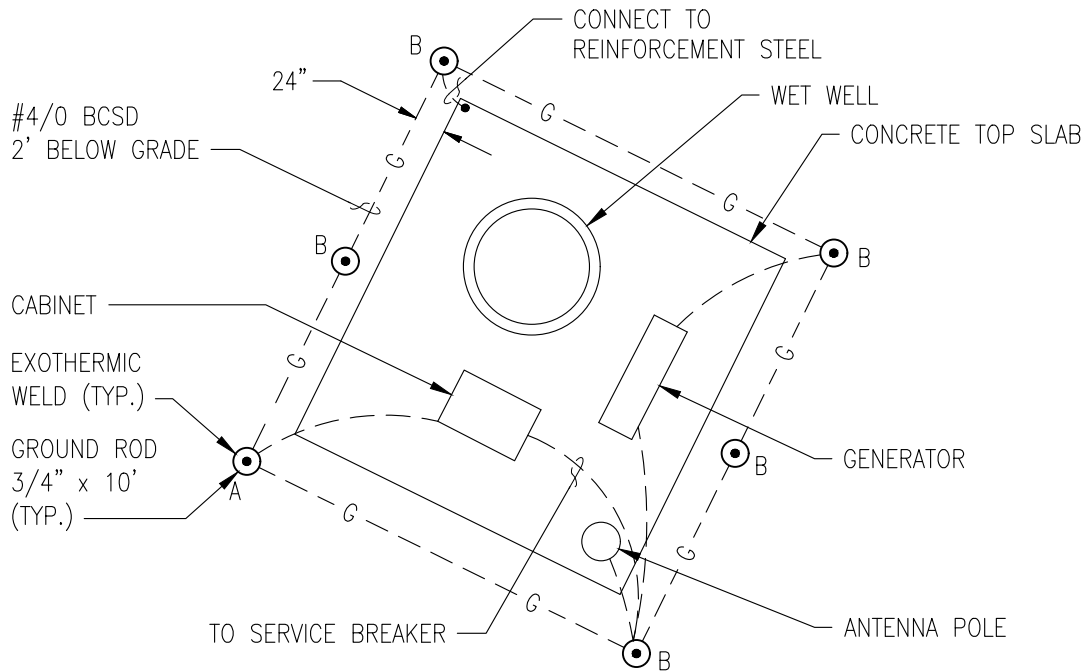
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SUSSEX COUNTY ENGINEER

SITE LIGHT

DETAIL  
E-2

LAST REVISED:  
DEC 2021



**NOTES**

1. PLAN PROVIDED REPRESENTS A TYPICAL GROUND RING CONFIGURATION. ALTERNATE GROUNDING LAYOUTS ARE ACCEPTABLE PER CONFORMANCE TO APPLICABLE CODE AND COUNTY APPROVAL.
2. SEE DETAIL E-4 FOR GROUND ROD CONFIGURATION.



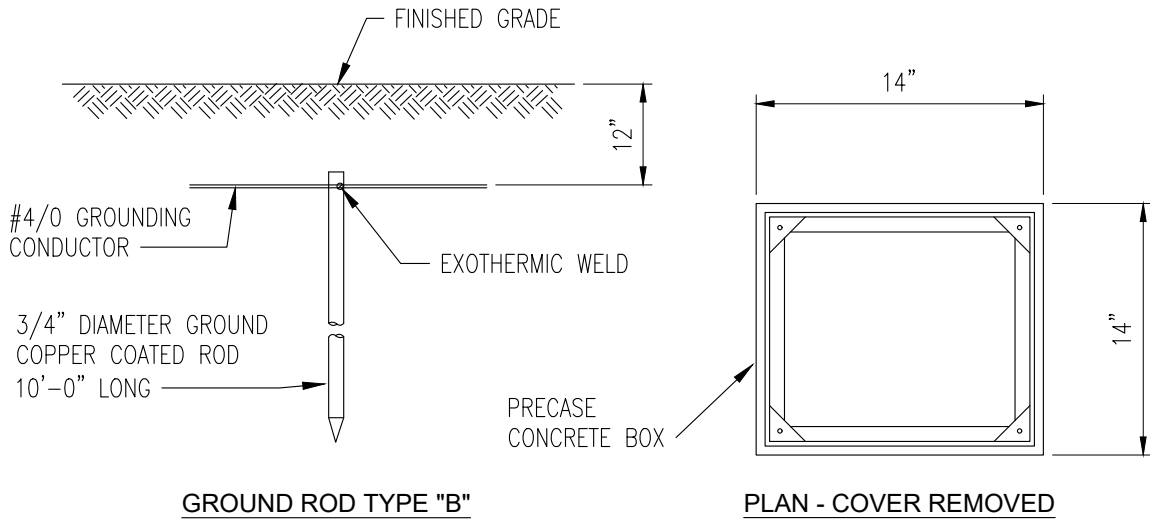
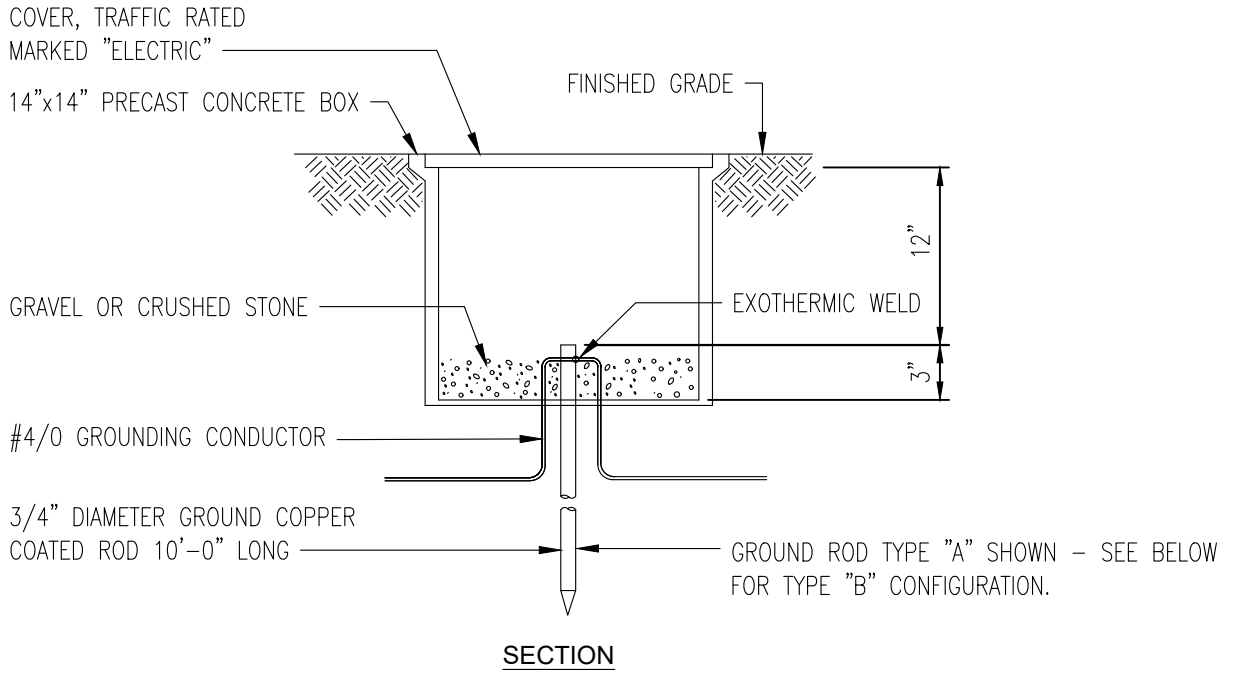
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TYPICAL  
GROUNDING PLAN

DETAIL  
E-3

LAST REVISED:  
DEC 2021



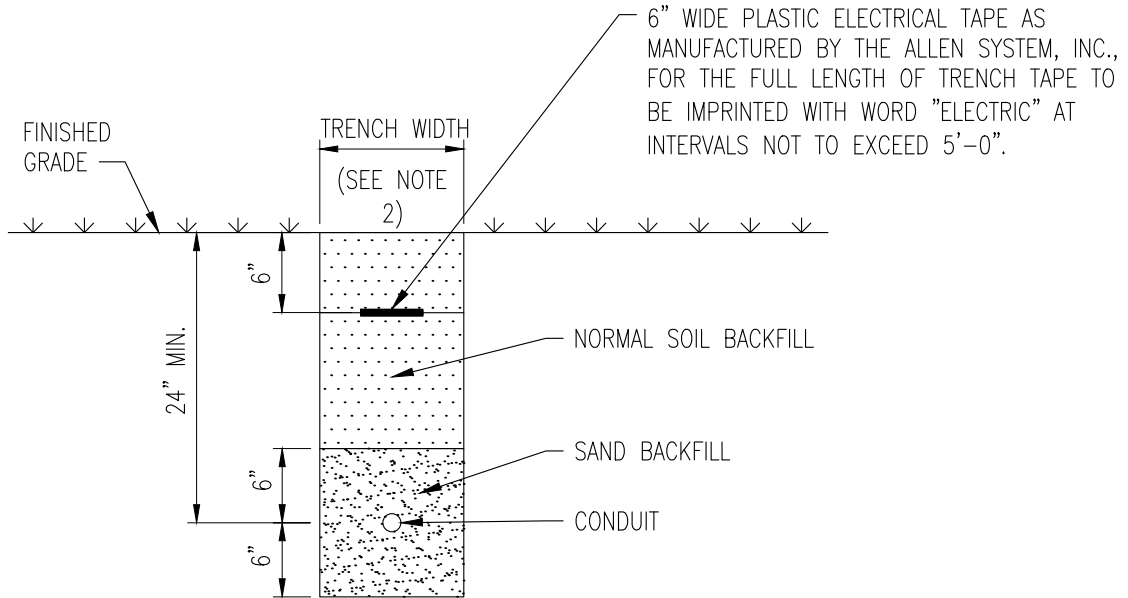
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ENGINEERING DEPARTMENT

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SUSSEX COUNTY ENGINEER

**GROUND ROD  
TYPES**

DETAIL  
E-4

LAST REVISED:  
DEC 2021



**NOTES**

1. TRENCH DETAIL IS APPLICABLE TO PUMP STATION SITES ONLY.
2. TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF CONDUIT PLUS 6 INCHES ON EITHER SIDE.
3. FOR MULTIPLE CONDUIT CONFIGURATIONS, PROVIDE 3" SEPARATION BETWEEN CONDUITS.



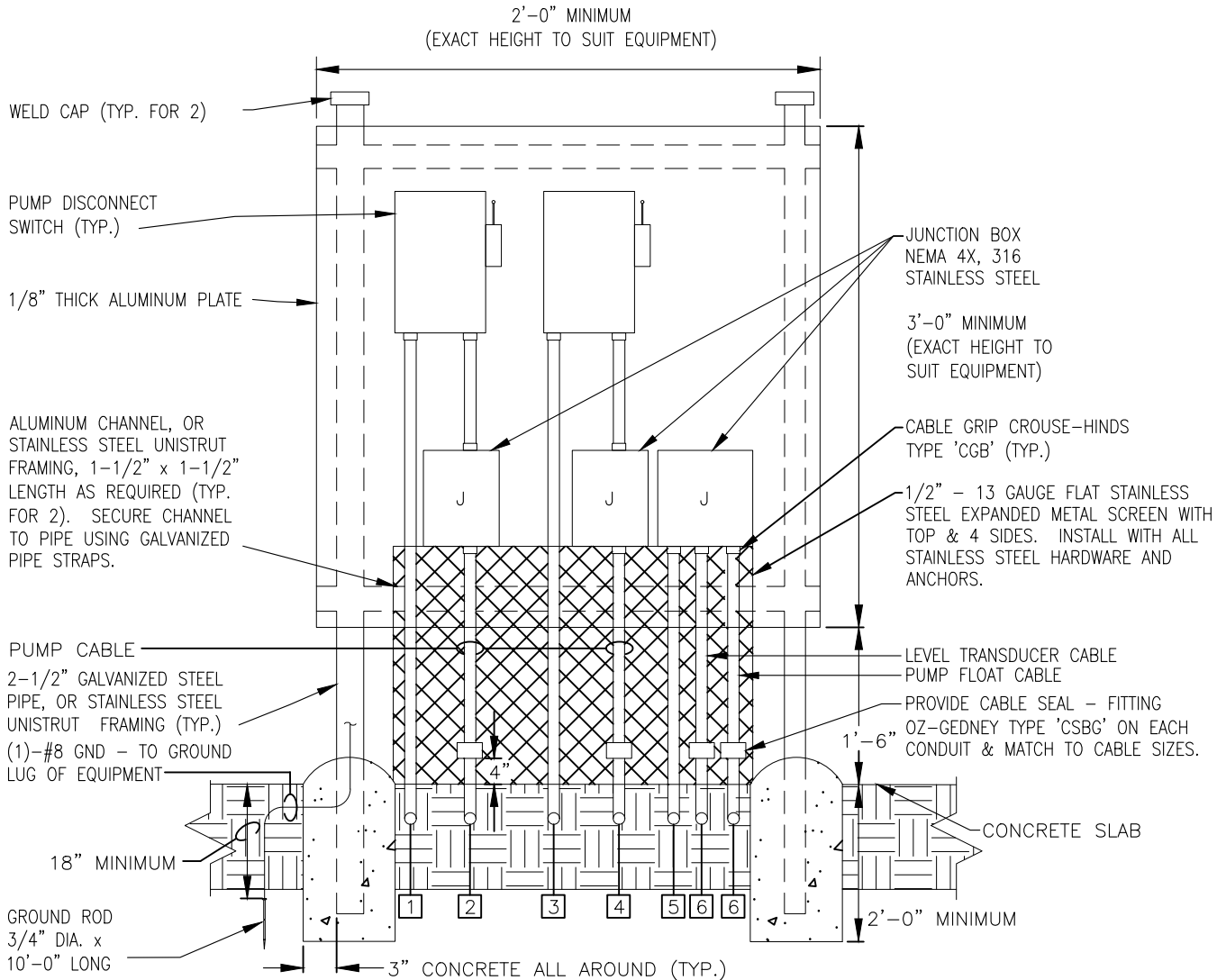
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UNDERGROUND  
CONDUIT  
INSTALLATION

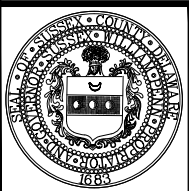
DETAIL  
E-5

LAST REVISED:  
DEC 2021



**EQUIPMENT SUPPORT STRUCTURE**  
NO SCALE

- 1 PUMP #1 CONDUIT TO SERVICE ENCLOSURE
- 2 PUMP #1 CONDUIT/CABLE TO WET WELL
- 3 PUMP #2 CONDUIT TO SERVICE ENCLOSURE
- 4 PUMP #2 CONDUIT/CABLE TO WET WELL
- 5 TRANSDUCER CONDUIT TO SERVICE ENCL.
- 6 TRANSDUCER/PUMP FLOAT CABLE TO WET WELL



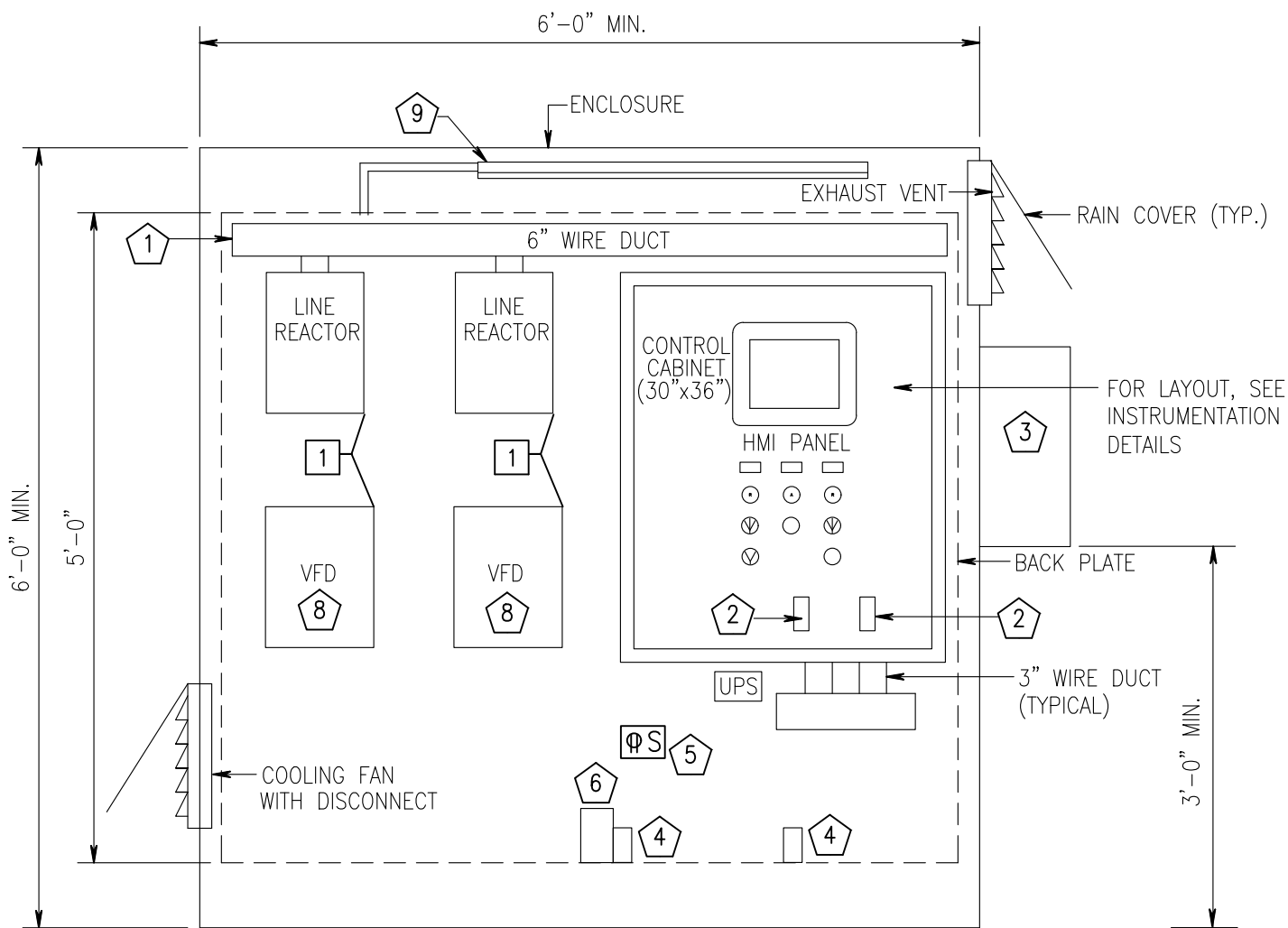
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ENGINEERING DEPARTMENT

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SUSSEX COUNTY ENGINEER

**ELECTRICAL  
TERMINATORS AND  
CONDUITS AND BASES**

DETAIL  
E-6

LAST REVISED:  
DEC 2021



**ELECTRICAL CABINET - CONTROLS SIDE**



**NOTES**



1. WIREWAY 6" WITH POWER TERMINAL BLOCKS, UL RATED
2. MINI CAS II.
3. JUNCTION BOX NEMA 4 ENCLOSURE
4. THERMOSTATS
5. 125V., 20A, GFCI RECEPTACLE AND LIGHT SWITCH
6. CABINET HEATER
7. CONTROL CABINET TO FACE WET WELL
8. VFD
9. INTERIOR LIGHT FIXTURE

**SPECIFIC NOTES**



VFD WITH LINE REACTOR FOR PHASE CONVERSION SHALL BE SUPPLIED ONLY IF SINGLE PHASE ELECTRICAL SERVICE IS APPROVED BY THE COUNTY. COMBINATION NEMA 1 MOTOR STARTER SHALL BE PROVIDED IF THREE PHASE SERVICE IS PROVIDED.



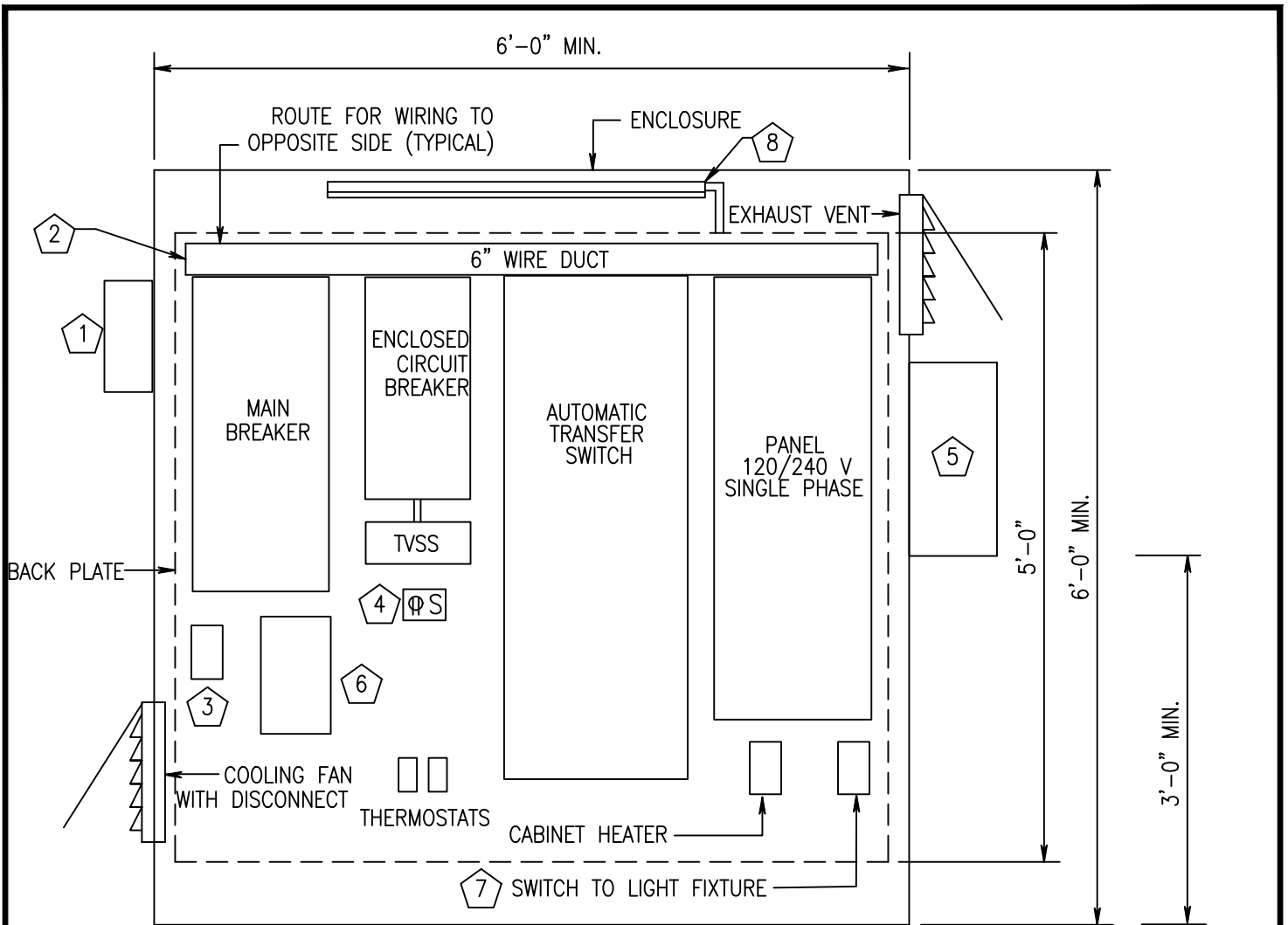
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ENGINEERING DEPARTMENT

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SUSSEX COUNTY ENGINEER

TIER 1 PUMP STATION:  
TYPICAL ELECTRICAL  
CABINET CONTROL SIDE

DETAIL  
E-7

LAST REVISED:  
DEC 2021



**ELECTRICAL CABINET - POWER SIDE**

**NOTES**



1. METER & BASE (MOUNT ON POWER CABINET).
2. WIREWAY 6" WITH POWER TERMINAL BLOCKS, UL RATED.
3. SINGLE PHASE MONITOR.
4. 125V, 20A, GFCI RECEPTACLE AND LIGHT SWITCH.
5. JUNCTION BOX NEMA 4 ENCLOSURE.
6. WETWELL FAN MOTOR CONTROLLER.
7. MANUAL 20A-120V SWITCH (FOR EXTERIOR SITE LIGHT MANUAL CONTROL).
8. INTERIOR LIGHT FIXTURE.



SUSSEX COUNTY  
ENGINEERING DEPARTMENT

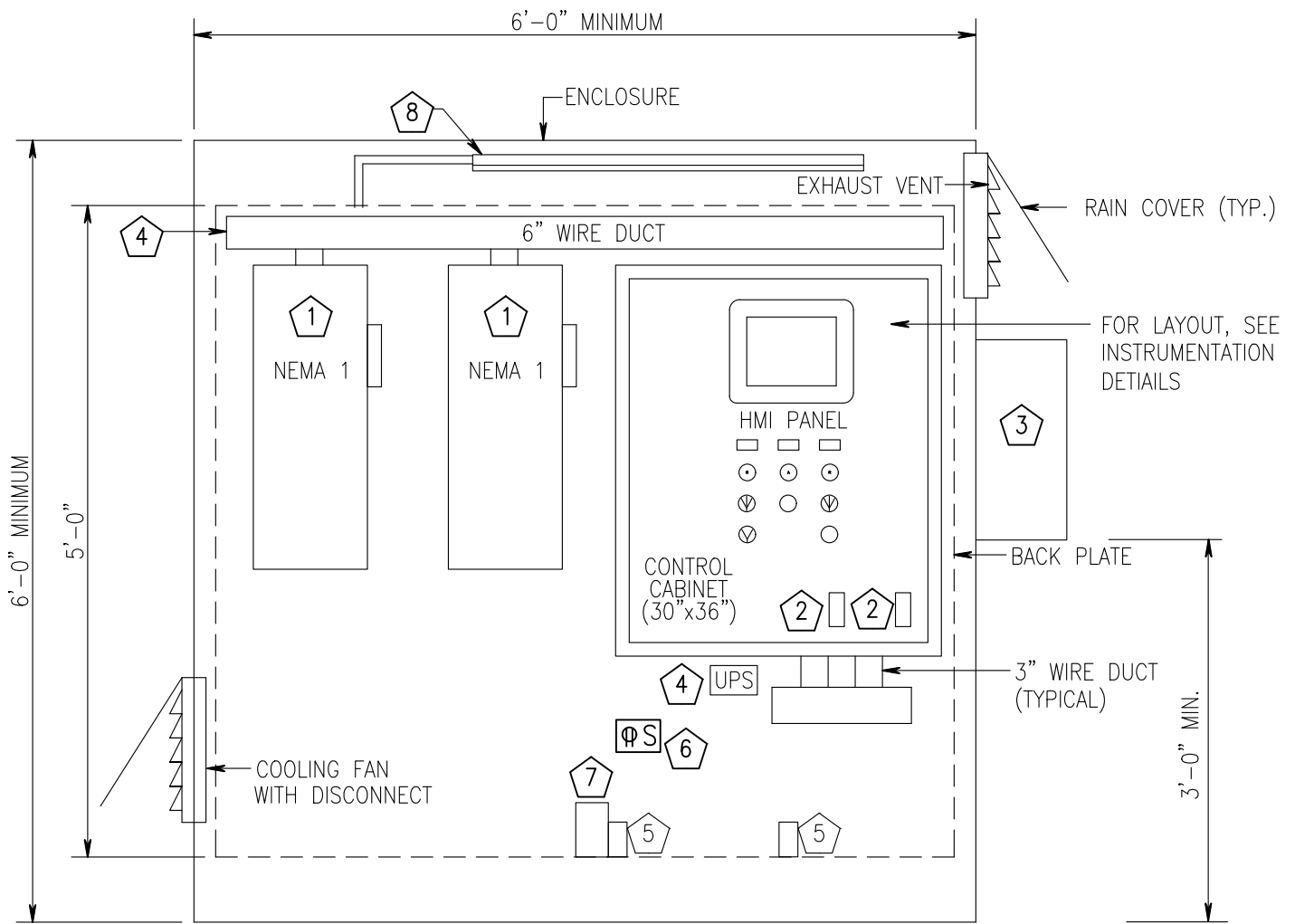
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TIER 1 PUMP STATION:  
TYPICAL ELECTRICAL  
CABINET POWER SIDE

DETAIL  
E-8

LAST REVISED:  
DEC 2021





**ELECTRICAL CABINET - CONTROLS SIDE**

**NOTES**



1. RRT
2. COMBINATION NEMA 1 MOTOR STARTER
3. MINI CAS II
4. JUNCTION BOX NEMA 4 ENCLOSURE
5. UPS
6. THERMOSTAT
7. 125V, 20A, GFCI RECEPTACLE AND LIGHT SWITCH
8. CABINET HEATER
9. INTERIOR LIGHT FIXTURE



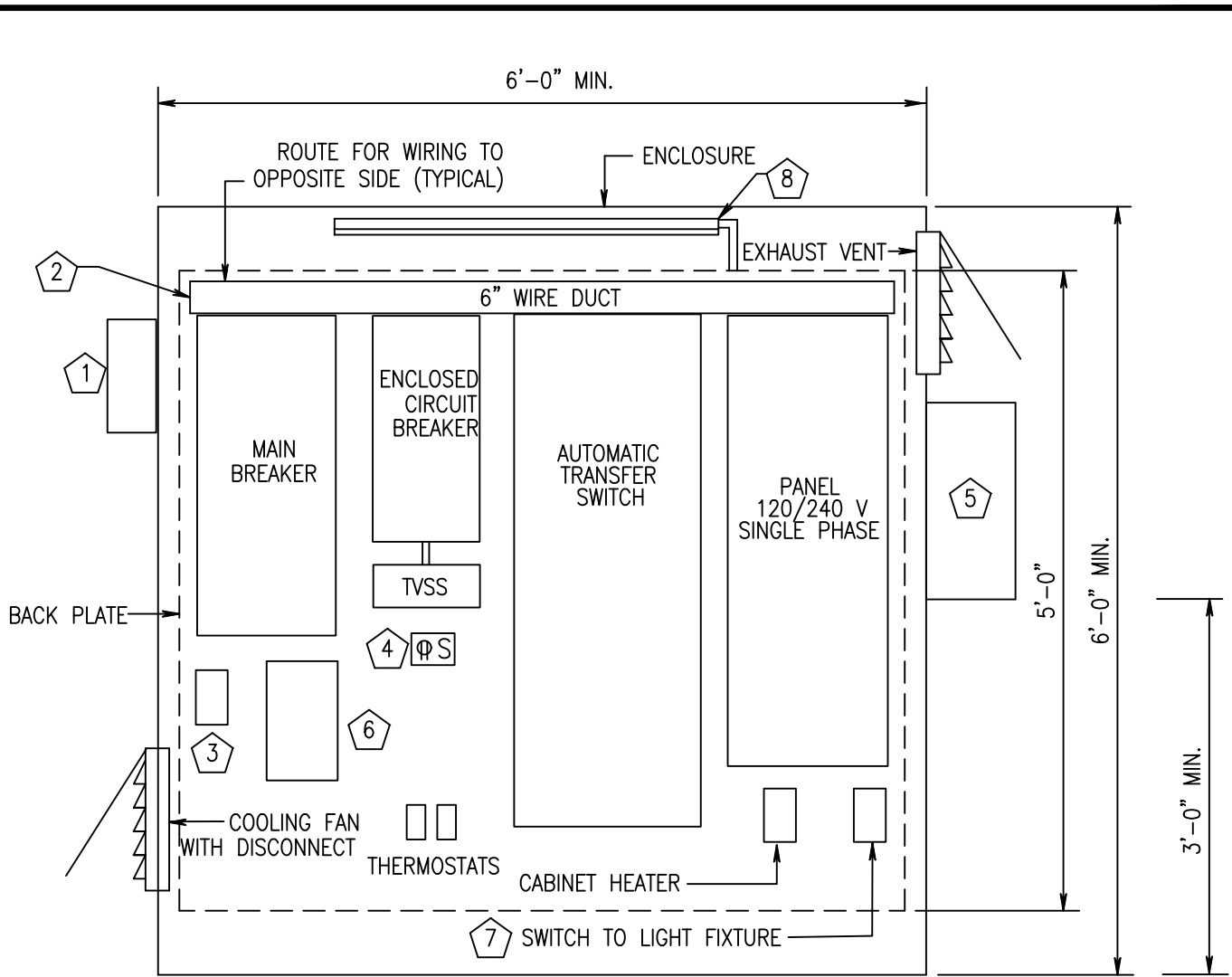
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SUSSEX COUNTY ENGINEER

TIER 2 PUMP STATION:  
TYPICAL ELECTRICAL  
CABINET CONTROL SIDE

DETAIL  
E-9

LAST REVISED:  
DEC 2021



### ELECTRICAL CABINET - POWER SIDE

#### NOTES



1. METER & BASE (MOUNT ON POWER CABINET).
2. WIREWAY 6" WITH POWER TERMINAL BLOCKS, UL RATED.
3. SINGLE PHASE MONITOR.
4. 125V, 20A, GFCI RECEPTACLE AND LIGHT SWITCH.
5. JUNCTION BOX NEMA 4 ENCLOSURE.
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7. MANUAL 20A-120V SWITCH (FOR EXTERIOR SITE LIGHT MANUAL CONTROL).
8. INTERIOR LIGHT FIXTURE.



SUSSEX COUNTY  
ENGINEERING DEPARTMENT

APPROVED:

*James Chedoke*  
SUSSEX COUNTY ENGINEER

TIER 2 PUMP STATION:  
TYPICAL ELECTRICAL  
CABINET POWER SIDE

DETAIL  
E-10

LAST REVISED:  
DEC 2021