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<td>02</td>
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NOTES:
1. GRID MARKERS LOCATION & MECHANICAL DRAINAGE.
### 8-4-7. STANDARDS AND SPECIFICATIONS

**Erosion and Sediment Control - Standard Specifications for Baltimore City**

**Part 2 of 2**

**Erosion and Sediment Control Notes**

Erosion and Sediment Control, Inc. (ECSI) is responsible for ensuring that all erosional and sediment control requirements are met. Erosion and Sediment Control Services, Inc. (ESCI) provides consulting services in this area. All projects must comply with the latest version of the Erosion and Sediment Control Manual. Contact ECSI for details.

**Maintenance of Sediment Control**

All stormwater drainage systems must be properly maintained and repaired, and all water quality criteria for sediment control must be met. In the event of a storm event that causes erosion or sedimentation, the site must be immediately restored to pre-storm conditions.

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MECHANICAL LEGEND AND NOTES

1. THIS SHEET IS INTENDED TO BE A DRAWING INDEX, ACCORDING TO THE DRAWING INDEX ON THIS SHEET. THE INCLUSIONS MAY BE SEEN IN THE DRAWING RESPECTively.

2. MECHANICAL WORK SHOWN ON THIS CONTRACT CONSISTS OF VARIOUS CONSTRUCTION DOCUMENTATION FOR VARIOUS ASPECTS REQUIRED FOR THE INSTALLATION AND OPERATION OF THE WORK.

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CONCRETE ESCAPE TUNNEL

EXISTING FEEDER NOT IN SCOPE
EXISTING TUNNEL NOT IN SCOPE

DUCTWORK MOUNTED UP HIGH ALONG WALL. (TYPICAL OF 10 PER DUCT RUN)

1/4" THICK 3'X3'X3.5' HIGH STEEL PLENUM AND FAN SUPPORT.

DF

SD

DUCT DETECTOR FOR OUTDOOR MOUNTING.

TROLLEY HOIST BEAM IN CENTER OF TUNNEL.

VF-1 VENTILATION FAN

24" WIDE X 24" HIGH X 78" LONG SHEET METAL PLENUM.
FIELD COORDINATE EXACT SIZE OF PLENUM TO MAKE DUCTWORK CONNECTION.

CONCRETE ESCAPE TUNNEL

EXISTING SUMP PIT WITH PUMP. NOT IN SCOPE

WELDED TO STEEL PLENUM

PLENUM BOLTED TO NEW CONCRETE STRUCTURE. (TYP. ON ALL SIDES)

SHEET METAL DUCT MOUNTED FROM CEILING OF TUNNEL. SET OF TWO. SEE PLAN FOR SIZES.

SPRING ISOLATOR (TYP. OF 4)

FAN GUARD WIRE SCREEN ON FAN INTAKE

SUPPLY REGISTER DIRECTED TOWARDS TUNNEL WALL. SEE PLAN FOR LAYOUT AND AIRFLOW CFM.

REGISTER SHALL BE BY TITUS OR APPROVED EQUAL. MODEL '300 SERIES' IN 18"x6" MODULE SIZE. PROVIDE WITH VOLUME DAMPER ACCESSIBLE FROM FACE OF REGISTER.

TUNNEL PROFILE - MECHANICAL

TUNNEL ENTRANCE - MECHANICAL

TUNNEL SECTION - MECHANICAL

PARTIAL PLAN - NEW ESCAPE TUNNEL - MECHANICAL

GENERAL NOTES
1. DUE TO THE SMALL SCALE OF THE DRAWINGS, NOT ALL OFFSETS, FITTINGS, AND ACCESSORIES THAT MAY BE REQUIRED ARE INDICATED.
2. LOCATIONS INDICATED ON PLANS ARE APPROXIMATE. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK.

GRAPHIC SCALE: 1/8" = 1'-0"
MECHANICAL SPECIFICATIONS, SCHEDULE AND

PROJECT NO: P101

THERMOSTATS, RELAYS, CONTROL TUBING, SWITCHES, ETC. REQUIRED FOR SUCCESSFUL OPERATION. ELECTRICAL

SECTION 15950 - CONTROLS

E.

AABC'S "NATIONAL STANDARDS FOR TESTING AND BALANCING HEATING, VENTILATING, AND AIR CONDITIONING

3.

SYSTEM.

SCALE:

D.

AABC'S "HVAC DUCT CONSTRUCTION STANDARDS--METAL AND FLEXIBLE" FOR ACCEPTABLE MATERIALS, MATERIAL THICKNESSES, AND DUCT

C.

CONSTRUCTION METHODS. PRESSURE CLASS FOR SUPPLY AIR DUCTWORK SHALL BE PLUS 4-INCHES WATER

B.

INSTALLATION: INSTALL DUCTS ACCORDING TO SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS--METAL AND

A.

FACTORY FABRICATED, WITH REQUIRED HARDWARE AND ACCESSORIES, PARALLEL- OR OPPOSED BLADE FOR

CONSTRUCTION, CONFORMING TO ASTM AND SMACNA STANDARDS. STANDARD ELBOWS WILL HAVE 1.5 CENTERLINE

SEAL. FASTEN COLLAR WITH

BE ALLOWED.

B.

PREPARE AND SUBMIT ACTION SUBMITTALS FOR ALL EQUIPMENT, DUCTWORK, DAMPERS, TESTING AND

A.

INFORMATIONAL SUBMITTALS

ACTION SUBMITTALS

B.

SUBMIT COPIES TO CONSTRUCTION, ELECTRICAL, AND ELECTRONIC SUBMITTALS DETAIL.

A.

GENERAL: PROVIDE SYSTEM INDIVIDUAL INFORMATION SUBMITTAL FOR EACH ELEMENT OF CONSTRUCTION AND TYPE OF

INFORMATIONAL SUBMITTALS

A.

GENERAL: PROVIDE AND SIGN INFORMATION SUBMITTAL REQUIRED BY EACH STATE/PROVINCIAL/LOCAL CODE.

ACTION SUBMITTALS

B.

GENERAL: PROVIDE AND SIGN ACTION SUBMITTAL FOR ALL EQUIPMENT, DUCTWORK, SAMPLES, TESTING AND

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A.
ELECTRICAL & CONTROLS NOTES

1. ELECTRICAL WORK TO BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES.

2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND UNUSED FIRST-QUALITY PRODUCTS OF REPUTABLE MANUFACTURERS TO THE ENGINEER FOR APPROVAL.

3. ALL SUBMITTALS FOR COMPLIANCE WITH CONTRACT REQUIREMENTS OF THE CONTRACT DRAWINGS. ANY DEVIATIONS FROM THE DRAWINGS MUST BE APPROVED IN WRITING BY THE OWNER OR CONTRACTOR REPRESENTATIVE IN ORDER TO MAINTAIN ROOF WARRANTY. SEAL PENETRATION, IF APPLICABLE. WHEN PENETRATING ROOF, CONTRACTOR SHALL VISIT THE SITE AND CAREFULLY EXAMINE ALL EXISTING ELECTRICAL WORK AND CONDUIT SIZES INDICATED ON THE ELECTRICAL DRAWINGS ARE BASED ON SPECIFIC MECHANICAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING ELECTRICAL EQUIPMENT & CONDUIT LOCATIONS. LOCATIONS OF ALL ELECTRICAL EQUIPMENT & CONDUIT SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.

4. THE CONTRACTOR SHALL INSTALL WIRING, CONDUIT AND DEVICES IN ACCORDANCE WITH WHAT IS INDICATED ON THE ELECTRICAL & CONTROLS NOTES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING NEW ELECTRICAL SERVICES FROM THE OWNER IN ADVANCE OF TEN OUTLET, DEVICE OR FIXTURE ON THE CIRCUIT.

5. THE CONTRACTOR SHALL INSTALL WIRING, CONDUIT AND DEVICES IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. THE CONTRACTOR SHALL INSTALL WIRING, CONDUIT AND DEVICES IN ACCORDANCE WITH THE NEC AND IN ACCORDANCE WITH ALL REQUIREMENTS OF THE CONTRACT DRAWINGS. ANY DEVIATIONS FROM THE DRAWINGS MUST BE APPROVED IN WRITING BY THE OWNER OR CONTRACTOR REPRESENTATIVE IN ORDER TO MAINTAIN ROOF WARRANTY.

6. THE CONTRACTOR SHALL INSTALL WIRING, CONDUIT AND DEVICES IN ACCORDANCE WITH WHAT IS INDICATED ON THE ELECTRICAL & CONTROLS NOTES. THE CONTRACTOR SHALL INSTALL WIRING, CONDUIT AND DEVICES IN ACCORDANCE WITH THE NEC AND IN ACCORDANCE WITH ALL REQUIREMENTS OF THE CONTRACT DRAWINGS.

7. THE CONTRACTOR SHALL NOT REMOVE ANY ROOF PENETRATIONS, IF APPLICABLE. WHEN PENETRATING ROOF, CONTRACTOR SHALL VISIT THE SITE AND CAREFULLY EXAMINE ALL EXISTING ELECTRICAL WORK AND CONDUIT SIZES INDICATED ON THE ELECTRICAL DRAWINGS ARE BASED ON SPECIFIC MECHANICAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING ELECTRICAL EQUIPMENT & CONDUIT LOCATIONS. LOCATIONS OF ALL ELECTRICAL EQUIPMENT & CONDUIT SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.

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ELECTRICAL SPECIFICATIONS

1. ELECTRICAL SPECIFICATIONS

1.1. RED PHASE A:

- Wire Number Shall Be Permanently Affixed To Each Wire Permanently Marker Engraved With A Machine Printed Issue:

1.2. RED PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.3. RED PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.4. BLUE PHASE A:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.5. BLUE PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.6. BLUE PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.7. WHITE PHASE A:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.8. WHITE PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.9. WHITE PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.10. ORANGE PHASE A:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.11. ORANGE PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.12. ORANGE PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.13. PURPLE PHASE A:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.14. PURPLE PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.15. PURPLE PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.16. GREEN PHASE A:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.17. GREEN PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.18. GREEN PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.19. YELLOW PHASE A:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.20. YELLOW PHASE B:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.21. YELLOW PHASE C:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.22. MISC. DRY CONTACTS (RELAY)

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.23. CONTROL WIRE AND CABLE:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.24. POWER WIRE AND CABLE:

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.25. VFD'S

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.26. SAFETY SWITCHES

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.27. PROTECTIVE DOOR

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.28. FUSES

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.29. MISC. CONDUIT SYSTEMS

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.30. THERMOSTATICALLY CONTROLLED SPACE HEATER

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.31. VIBRATION CHARACTERISTICS (MAXIMUM 3 FT UNSUPPORTED)

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.32. INSTRUMENT ENCASMENT

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.33. THERMO/FIRE-RATED WALLS WITH AN APPROVED SEALANT

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.34. NECESSARY COMPONENT MOUNTED BY CONTRACTOR IN EXISTING PANEL

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.35. PANEL SCHEDULE FOR SPECIFIC PANEL SPECIFICATIONS

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.36. PROTECTIVE DOOR

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.37. GROUNDED COMMON ENVIRONMENTAL DEVICES

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.38. ADDITIONAL INSTALLATION DEVICES

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.39. LOCAL CODES

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.40. PANEL WIRING DEVICES

- All Analogue Signal Wiring And 24VDC Wiring Shall Be #18 AWG. Power Wire And Cable:

1.41. INSTALLATION DEVICES IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, AS REQUIRED BY LOCAL CODES, THE UTILITY, AND SPECIAL SYSTEMS AND EQUIPMENT SERVED.

1.42. ALL SYSTEMS SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, AS RECOMMENDED BY LOCAL CODES, THE UTILITY, AND SPECIAL SYSTEMS AND EQUIPMENT SERVED.

1.43. PROVIDE PHENOLIC NAMEPLATES ON ALL NEW PANELBOARDS AND EQUIPMENT SERVED. MATCH EXISTING LABEL TYPE.

1.44. PROPERLY MOUNTED PANELS SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
1. REFER TO COVER SHEET FOR ASSOCIATED PROJECT AND GENERAL NOTES.

2. UNLESS NOTED OTHERWISE, ALL CONDUITS SHALL BE RIGID GALVANIZED STEEL.

CONTRACTOR SHALL FURNISH AND INSTALL 480V, 3Ø, 5HP RATED VFD WITH 'SAFE TORQUE OFF' IN NEMA 4X ENCLOSURE. PROVIDE ABB VFD CATALOG# ACS355.

NOTED EQUIPMENT PROVIDED BY OTHERS INSTALLED BY CONTRACTOR.

CONTRACTOR SHALL FURNISH AND INSTALL 480V, 3P, 30A FUSED SAFETY DISCONNECT SWITCH, FUSED AT 15A IN NEMA 4X ENCLOSURE. PROVIDE HIGH SPEED FUSES. REFER TO VFD MANUFACTURER'S SPECIFICATIONS SHEET.
GENERAL NOTES
1. REFER TO COVER SHEET FOR ASSOCIATED PROJECT AND GENERAL NOTES.
2. REFER TO ELECTRICAL SINGLE-LINE DIAGRAM AND DETAILS FOR ADDITIONAL INFORMATION.
3. UNLESS NOTED OTHERWISE, ALL CONDUITS SHALL BE RIGID GALVANIZED STEEL.

DRAWING NOTES
1. PROVIDE HORN STROBE EQUIPMENT RACK AS REQUIRED FOR MOUNTING OF EQUIPMENT.
2. PROVIDE 3/4" I.D. 10'-0" COPPER CLAD STEEL GROUND RODS (TYP.), REFER TO DETAILS FOR ADDITIONAL INFORMATION.
3. PROVIDE EXOTHERMIC WELDED CONNECTIONS.
4. PROVIDE 3/4" RIGID COLD FORMED STEEL CONDUIT, REFER TO DETAILS FOR ADDITIONAL INFORMATION.
5. DUCT SMOKE DETECTOR FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE WIRING TO VFD FOR "SAFE TORQUE OFF" CONTROL UPON SMOKE DETECTION. MAKE ALL FINAL CONNECTIONS AS NECESSARY AND INSPECT WORK.
6. PROVIDE 3/4" DIA., X 10'-0" COPPER CLAD STEEL GROUND RODS, (TYP.) REFER TO DETAILS FOR ADDITIONAL INFORMATION.
7. PROVIDE EXOTHERMIC WELDED CONNECTIONS.
8. PROVIDE #4/0 BARE COPPER GROUND WIRE, BURIED MINIMUM 3'-0" BELOW FINISH GRADE AND MINIMUM 3'-0" OUTSIDE OF EQUIPMENT LOCATIONS.

NOTED EQUIPMENT PROVIDED BY OTHERS, INSTALLED BY CONTRACTOR.

CONTRACTOR SHALL FURNISH AND INSTALL 120V WALL MOUNTED, CLASS 2 DIVISION 2 RATED HORN STROBE FOR DOOR ALARM. COORDINATE WITH PROJECT ENGINEER FOR EXACT MOUNTING LOCATION IN FIELD.

CONTRACTOR SHALL FURNISH AND INSTALL 120V MAGNETIC DOOR SWITCH FOR DOOR ALARM. REFER TO CONTROL PANEL BILL OF MATERIALS FOR ADDITIONAL INFORMATION.

EXCEPT AS NOTED OTHERWISE, ALL USEFUL DETAILS SHALL BE PROTECTED UNLESS OTHERWISE SPECIFIED.


1. REFER TO COVER SHEET FOR ASSOCIATED PROJECT AND GENERAL NOTES.

2. PANEL BUILDER SHALL INSTALL ALL PANEL INTERIOR AND EXTERIOR DEVICES AS SHOWN ON DRAWING. PANEL BUILDER SHALL BE RESPONSIBLE FOR ALL INTERNAL PANEL WIRING AS DETAILED ON DRAWINGS.

3. ALL WIRES SHALL BE DELIVERED DIRECTLY BETWEEN TERMINATING ENTITIES. INTERMEDIATE SPLICING OF WIRES IS NOT PERMITTED.

4. WIRING WITHIN PANEL SHALL BE INSTALLED IN A NEAT AND ORGANIZED MANNER, UTILIZING TIE-WRAPS WHERE APPROPRIATE.

5. NO MORE THAN TWO WIRES SHALL BE CONNECTED TO ONE TERMINAL. A PERMANENT WIRE MARKER ENGRAVED WITH A MACHINE PRINTED WIRE NUMBER SHALL BE PERMANENTLY AFFIXED TO EACH WIRE AT BOTH ENDS.

6. ALL INTERNAL AND FIELD CABLES SHALL BE PERMANENTLY AND CLEARLY LABELED WITH LOOP AND CHANNEL DESIGNATIONS AT BOTH ENDS.

7. ALL CABLE LENGTHS FROM FIELD SHALL BE LONG ENOUGH TO REACH ANY TERMINAL BLOCK WITHIN THE PANEL.

**CONTROL PANEL CP1**

**BILL OF MATERIALS**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>ENCLOSURE, NEMA 4X, 12x10x6</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>SUB PANEL,</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>TIMING RELAY, TRIGGER ON DELAY, 0.3-30 SECONDS</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>NAMEPLATE, SEE DETAIL &quot;A &quot;</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>TERMINAL BLOCK PARTITION PLATE</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>DIN RAIL</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>TERMINAL BLOCK, FEED THRU UT2..5</td>
</tr>
</tbody>
</table>

**CONVERSIONS**

- TERMINAL LOCATED IN VFD UNIT
- TERMINAL LOCATED IN MCC BUCKET
- WIRED BETWEEN UNIT AND MCC
- WIRED BETWEEN PANEL AND INSTALLATION
- WIRED BETWEEN MCC AND INSTALLATION
- TERMINAL LOCATED WITHIN CONTROL PANEL

**DETAIL "A"**

- MATERIAL: LAMINATED PHENOLIC ENAMEL OVER PRINTED ON WHITE BACKGROUND
NOTES:
1. ALL METALLIC ITEMS SHALL BE STAINLESS STEEL OR HOT-DIPPED GALVANIZED. ALL FIELD CUTS SHALL BE BRUSHED MARINE GRADE GALVANIZING.
2. ALL EXPOSED UNISTRUT BASE SHALL BE CAPPED.

UNDERGROUND GROUND LOOP: #4/0 AWG BARE COPPER CABLE 3/4" DIA x 10'-0" LONG COPPER CLAD STEEL GROUND ROD NON-REVERSIBLE CRIMP CONNECTION (UL-LISTED FOR DIRECT BURIAL)

6'-0" UNDERGROUND GROUND LOOP: #4/0 AWG BARE COPPER CABLE 3/4" DIA x 10'-0" LONG COPPER CLAD STEEL GROUND ROD NON-REVERSIBLE CRIMP CONNECTION (UL-LISTED FOR DIRECT BURIAL)

POST CAP (TYP.) UNISTRUT P1000 T, CONTRACTOR SHALL SPACE ACCORDING TO EQUIPMENT ATTACHMENT POINTS. 3" DIA. STD. PIPE (TYP.) UNISTRUT P1000 T 3" DIA. STD. PIPE 1/2" DIA. U-BOLT 3" DIA. STD. PIPE 1/2" DIA. U-BOLT OF POST T.O. GRADE 6" CLR. 4" (±) 7'-0" 6" CLR. #3 TIES AT 12" O.C. MAX. SPACING (4 TOTAL) 2'-8" DIA. 1'-0" (6) #6 BARS EQ. SPACED SEE ELEC. DWG.'S FOR GROUND WIRE SPEC.

FINISHED GRADE 36" MIN. 18" UNDERGROUND GROUND LOOP: #4/0 AWG BARE COPPER CABLE 3/4" DIA x 10'-0" LONG COPPER CLAD STEEL GROUND ROD NON-REVERSIBLE CRIMP CONNECTION (UL-LISTED FOR DIRECT BURIAL)

GROUND ROD DETAIL

TYPICAL BACKBOARD DETAIL

TYPICAL POST FOUNDATION DETAIL
1. REFER TO COVER SHEET FOR ASSOCIATED PROJECT AND GENERAL NOTES.

2. THIS DRAWING IS TO BE WORKED WITH SINGLE LINE DIAGRAM.

CONVENTIONS

- TERMINAL LOCATED IN VFD UNIT
- TERMINAL LOCATED IN MCC BUCKET
- WIRING WITHIN MCC BUCKET (BY MCC MANUFACTURER)
- FIELD WIRING (BY INSTALLATION CONTRACTOR)
- TERMINAL LOCATED IN PLC PANEL
- MOTOR WIRING DIAGRAM

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MOTOR WIRING DIAGRAM

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DISCONNECT SWITCH 600V, 30A
AUX PANEL 'DP-1' 480V, 3Ø FUSED DISCONNECT SWITCH 600V, 30A

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1. 24VDC
2. -24VDC
3. +24VDC
4. 48VDC

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CONTROL PANEL CP1

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DISCONNECT SWITCH 600V, 30A