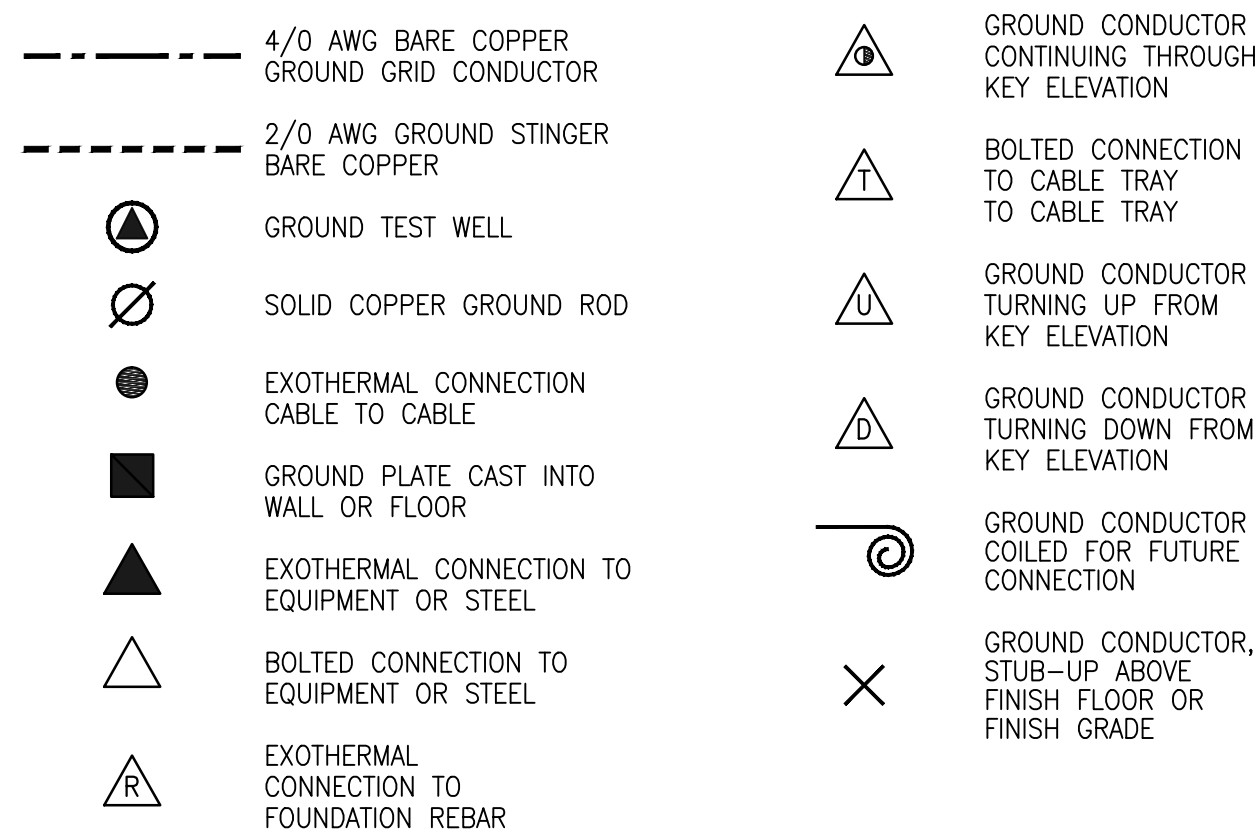
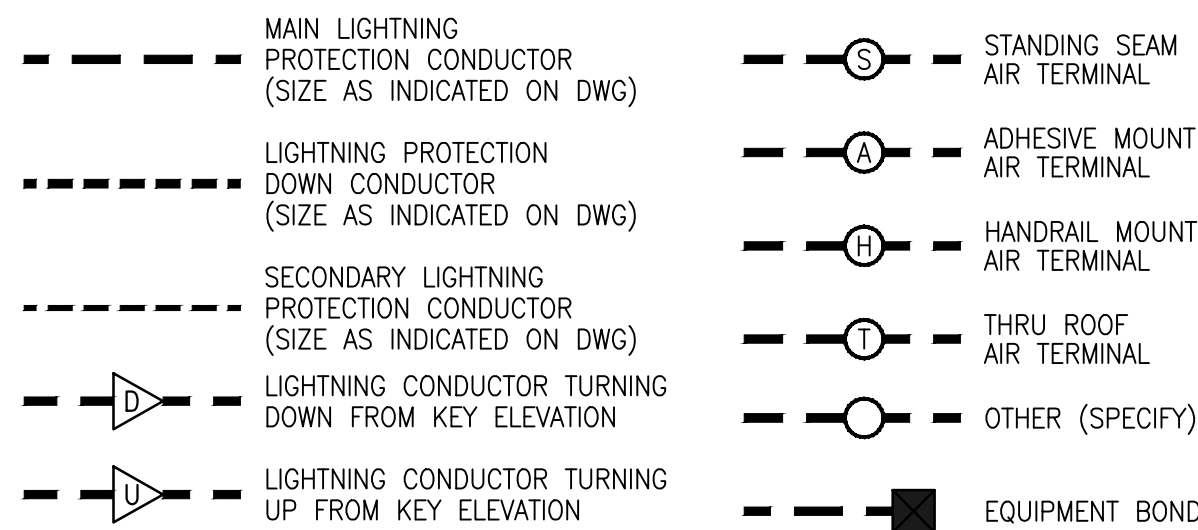


## GROUNDING & BONDING

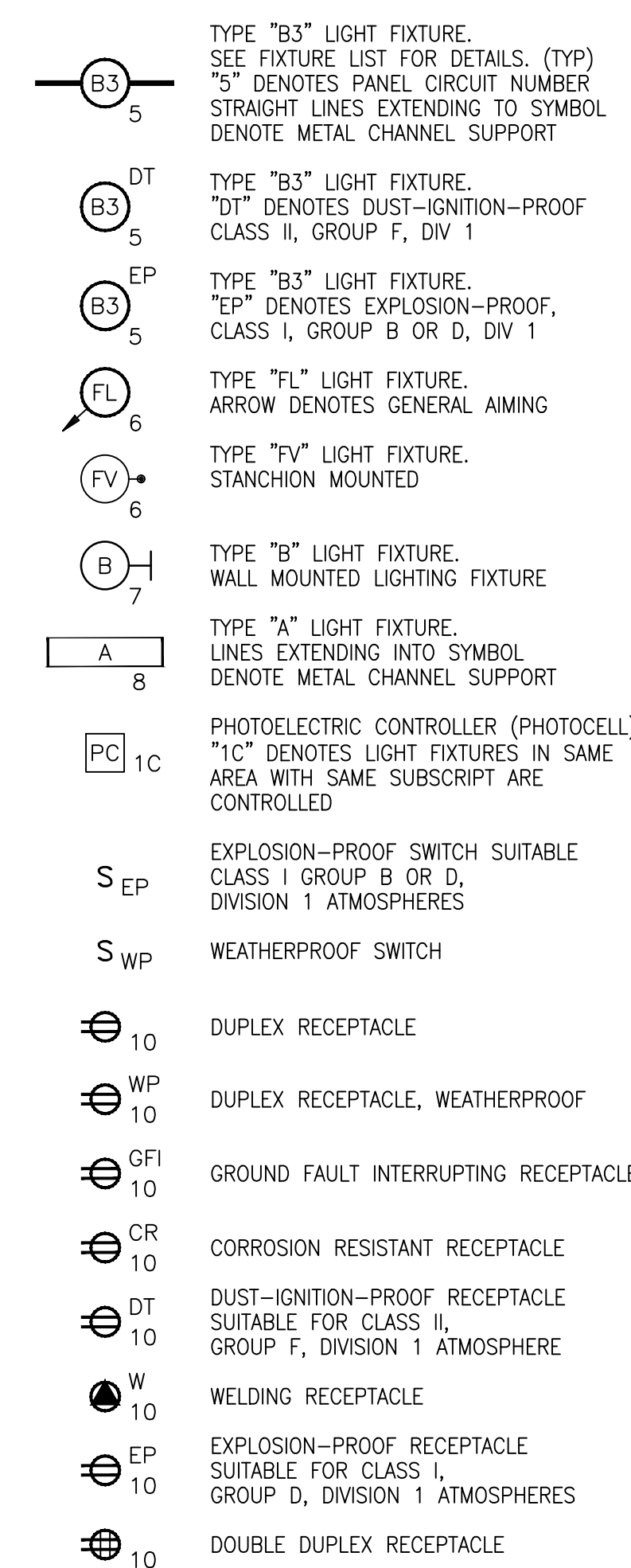
GROUNDING SYMBOLS ARE USED TO SHOW GROUNDING INVOLVED IN THE KEY ELEVATION. THE KEY ELEVATION INCLUDES, THE SPACE BETWEEN THE BOTTOM OF THE STRUCTURAL FLOOR OR THE SLAB BELOW AND THE BOTTOM OF THE STRUCTURAL FLOOR, SLAB OR ROOF ABOVE THE KEY ELEVATION. THE KEY ELEVATION ALSO INCLUDES THE EARTH BELOW THE BASEMENT, GROUND FLOOR SLAB OR FINISHED GRADE AS NEEDED. VERIFY MATERIALS, INSTALLATION AND WORKMANSHIP REQUIREMENTS WITH SPECIFICATIONS.



## LIGHTNING PROTECTION



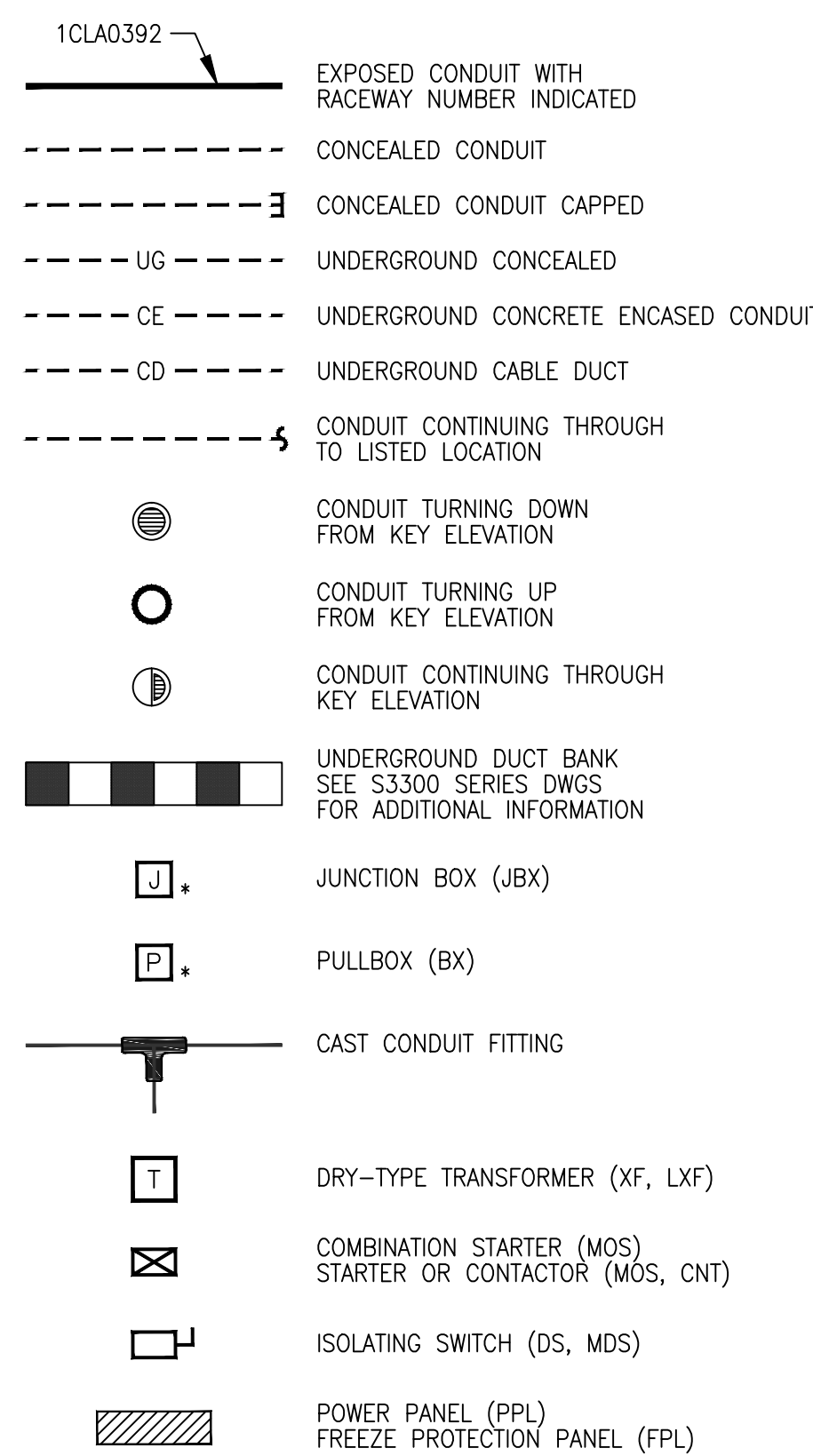
## LIGHTING AND COMMUNICATION



## RACEWAY - COMPOSITE

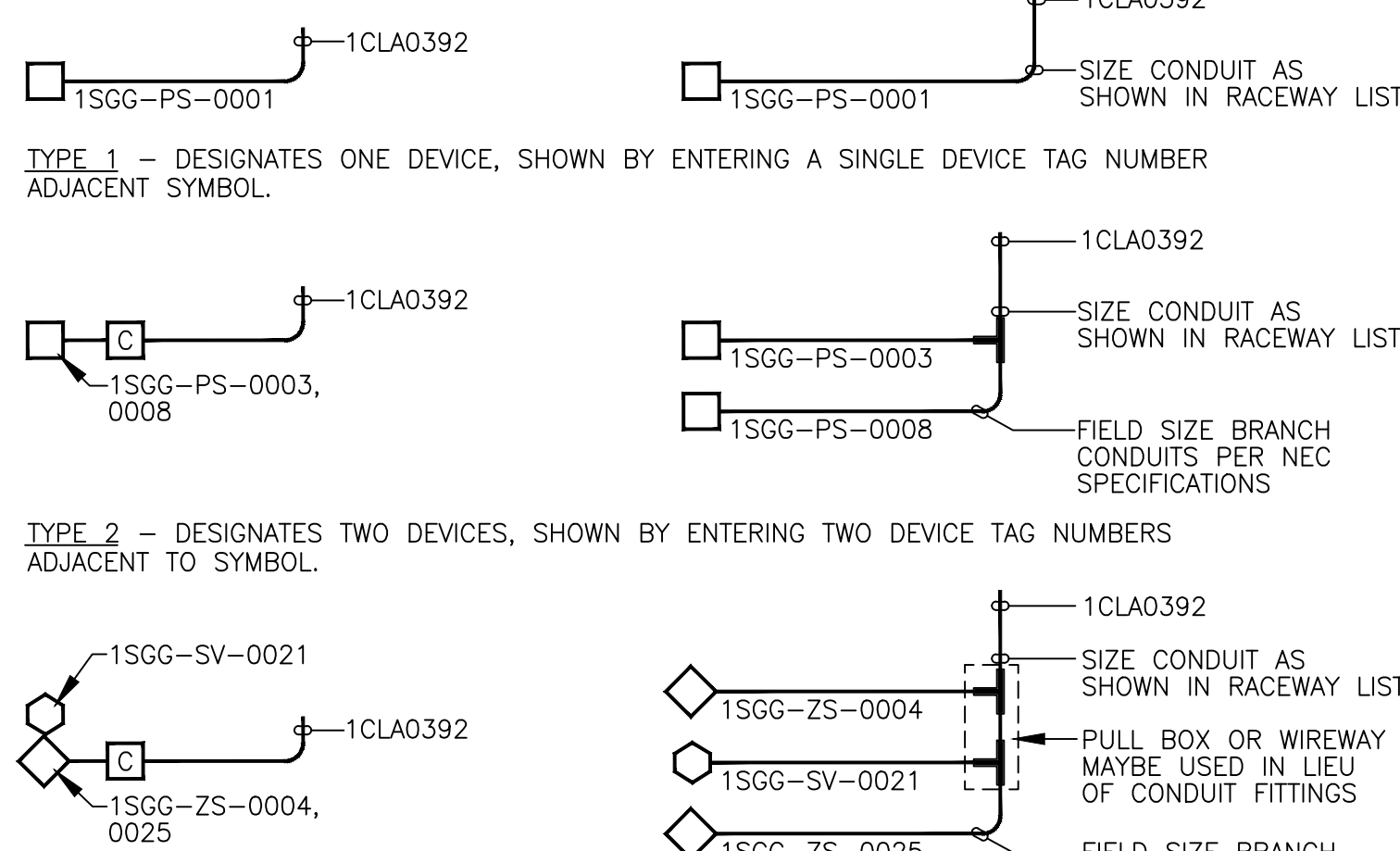
LETTERS WITHIN PARENTHESIS ( ) INDICATE COMPONENT FUNCTION CODE

IDENTIFICATION NUMBER SHOWN ON PLANS CORRESPONDS TO PROJECT ACCESSORY  
EQUIPMENT OR MAJOR EQUIPMENT LIST

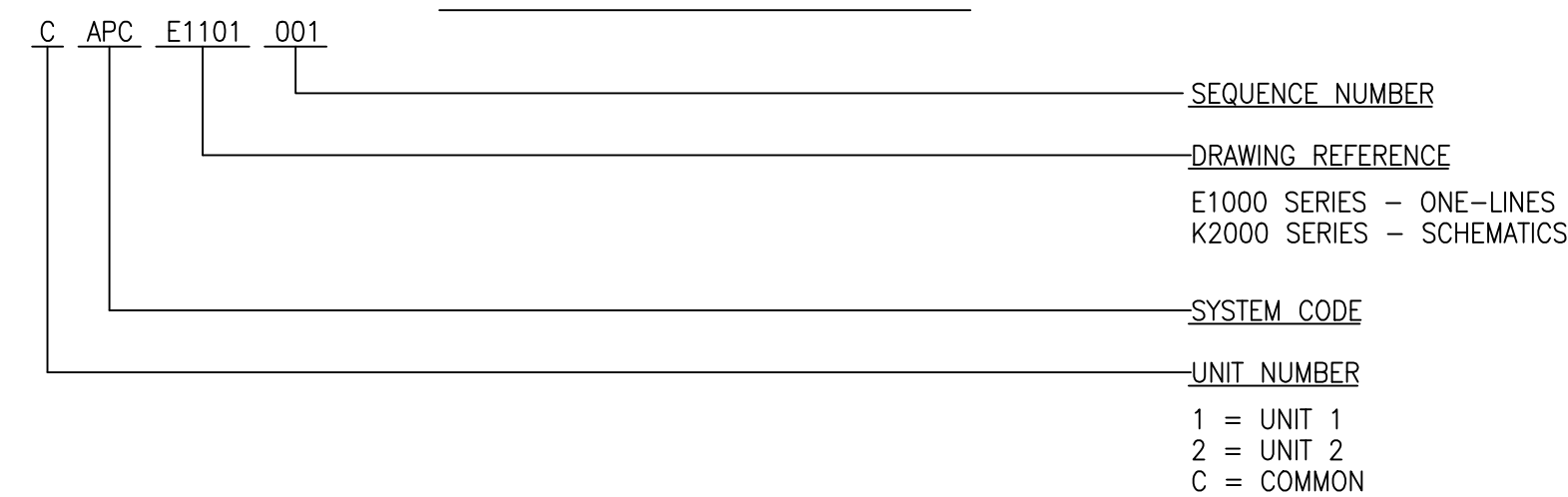


### DEVICE & CONDUIT DESCRIPTION

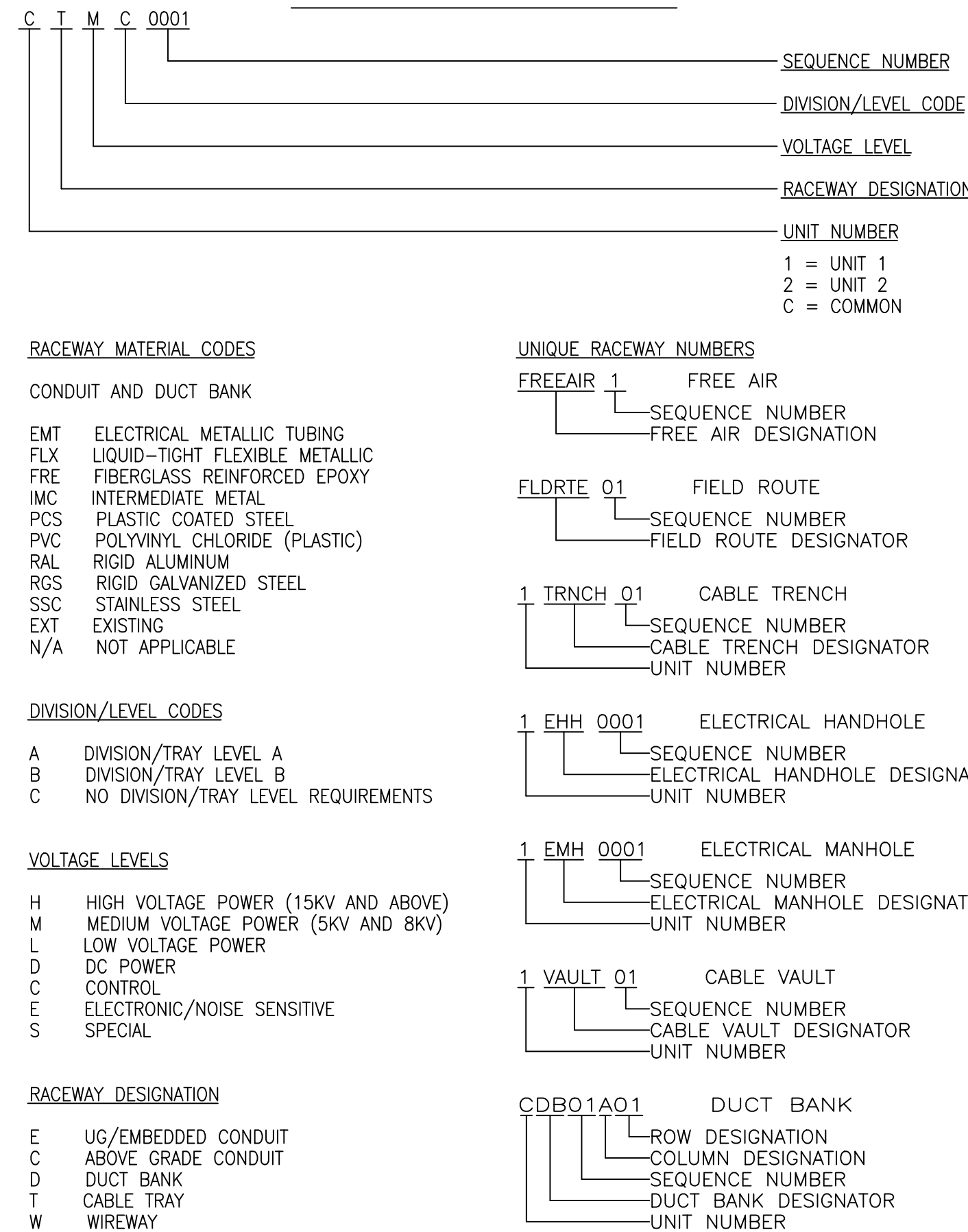
ACCESSORY EQUIPMENT DEVICES GROUPED IN A SMALL AREA MAY BE SHOWN ON THE PLANS WITH SYMBOLS AS ILLUSTRATED IN THE LEFT HAND COLUMN BELOW. CONDUIT AND ASSOCIATED WIRING INSTALLATION SHALL BE INSTALLED AS SHOWN IN THE RIGHT HAND COLUMN BELOW.



### CIRCUIT NUMBER FORMAT



### RACEWAY LIST DESCRIPTION




## CIRCUIT LIST

| FROM<br>EQUIP/DESG/DEVICE/  | TO<br>EQUIP/DESG/DEVICE/  | CABLE DATA<br>SIZE TYPE | ROUTING  |
|---|---|-------------------------|--|
| 1APC - SUS-11<br>489V WIR TRMT<br>SUS 11<br>SCT 2A  | 1APC - MCC-111<br>WIR TRMT MCC 111<br><br>SCT 3   | 6 1 500 C1              | 1TLIC0024, 1TLIC0001, 1TLIC0017, 1TLIC0018,<br>1ELC0004, 1TLIC0006   |
| "FROM" INDICATES THE<br>EQUIPMENT OR DEVICE<br>AT WHICH THE SUBJECT<br>CIRCUIT ORIGINATES | "TO" INDICATES THE<br>EQUIPMENT OR DEVICE<br>AT WHICH THE SUBJECT<br>CIRCUIT TERMINATES |                         | "ROUTING" INDICATES THE ROUTES IN WHICH THE<br>CIRCUIT IS TO BE RATED. RACEWAY NUMBERS<br>ARE IN THE ORDER OF ROUTING STARTING AT<br>THE "FROM" EQUIPMENT. ROUTING DOES NOT<br>NECESSARILY SPECIFY THE DIRECTION TO BE<br>USED FOR CABLE PULLING |
|   |   |                         | PRIMARY-SECONDARY CABLE<br>PRIMARY & SECONDARY CABLES WILL BE USED TO<br>ALLOW FOR A SINGLE CIRCUIT TO CONSIST OF TWO<br>DIFFERENT SIZES AND TYPES OF CABLE AS FOLLOWS   |
|   |   |                         | CABLE TYPE<br>REFER TO E-CBLSPE (CABLE SPECIFICATION)  |
|   |   |                         | SIZE<br>SIZE OF INDIVIDUAL CONDUCTORS. NUMBER<br>INDICATED IS AWG, KCMIL OR sq MM  |
|   |   |                         | CONDUCTOR<br>INDICATES THE NUMBER OF CONDUCTORS<br>IN AN OVERALL CABLE ASSEMBLY  |
|   |   |                         | NUMBER<br>INDICATES THE NUMBER OF OVERALL CABLE<br>ASSEMBLIES TO BE INSTALLED  |

NOT TO BE USED  
FOR CONSTRUCTION

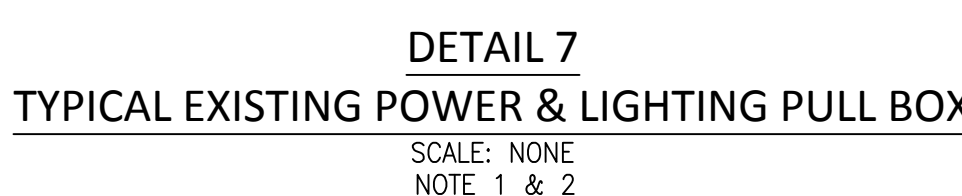
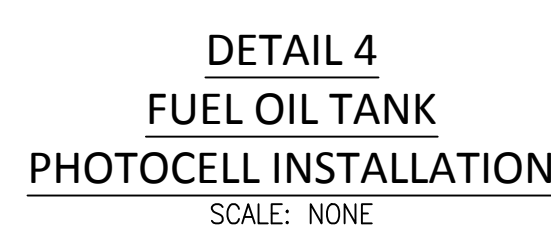
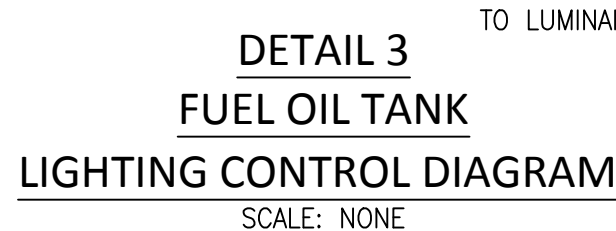
THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

|   |  |  |
|---|--|--|
|  <b>BLACK &amp; VEATCH</b> | 12740 Glen Bay Parkway West<br>Suite 2140<br>Jacksonville, Florida 32258 |  |
|   | CERTIFICATE OF AUTHORIZATION<br>NO. 81.52                                |  |
| ENGINEER: PBK   | DRAWN: JKB   |  |
| CHECKED:  | DATE:  |  |

|                                     |
|-------------------------------------|
| JEA                                 |
| GREENLAND ENERGY CENTER             |
| FUEL OIL SUPPLY & STORAGE           |
| ELECTRICAL LEGEND AND GENERAL NOTES |

|                   |                       |                 |  |           |
|-------------------|-----------------------|-----------------|--|-----------|
| PROJECT NUMBER:   |                       | DRAWING NUMBER: |  | REVISION: |
| 196116-CAAA-E0001 |                       |                 |  | 0         |
| CODE:             | REFERENCE DWG NUMBER: |                 |  |           |
| AREA:             |                       |                 |  |           |





SECTION



## NOTES

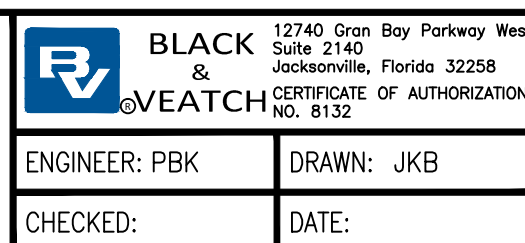
1. JEA MATERIAL CROSS REFERENCE DATA IS PROVIDED AS A REFERENCE ONLY. CONTRACTOR SHALL VERIFY PART NUMBERS AND INSTALLED CONDITIONS AND PROVIDE MATERIALS SUITABLE AND ACCEPTABLE TO JEA.
2. PULLBOX DETAIL INDICATES A TYPICAL CONFIGURATION AND INSTALLATION. VARIATIONS IN CONDUIT, CABLING AND OR TERMINATIONS MAY VARY.

| FIXTURE LIST |  |             |              |                           |
|--------------|--|-------------|--------------|---------------------------|
| SYMBOL       | FIXTURE DESCRIPTION / PART NUMBER  | INPUT WATTS | TOTAL LUMENS | MTG. EL.                  |
| B1           | LED AREA LIGHT<br>CROUSE-HINDS # PVM5L-W-P-R3-UNV34<br>MOUNTED PER DETAIL 5 OR 6 | 43          | 5335         | AS INDICATED<br>BY DETAIL |
|              |  |             |              |                           |

| MATERIAL LIST (REFERENCE ONLY) |                           |   |   |
|--------------------------------|---------------------------|---|---|
| ITEM                           | MANUFACTURER/SUPPLIER     | DESCRIPTION   | PART NUMBER   |
| [5]                            | BUSSMAN                   | STREET LIGHT CONNECTION<br>(FUSE)                             | JE A STORES ITEM #<br>FUSUG 046                                 |
| [10]                           | HOMAC                     | FLOOD SEAL<br>MECHANICAL CONNECTOR                            | JE A STORES ITEM #<br>SHC 4/0-3 - SHC 4/0-4<br>SIZE AS REQUIRED |
| [13]                           | ASSOCIATED PLASTICS, INC. | POWER PULP BOX - POLYMER<br>WITH POLYMER COMPOSITE LID & RING | JE A STORES ITEM #<br>BOXPS001                                  |
| [15]                           | BUSSMAN                   | HEB SERIES 600V<br>FUSE HOLDER                                | 1.5"X2.18" DEEP<br>HEB-AW-RLC-A                                 |

[illegible]

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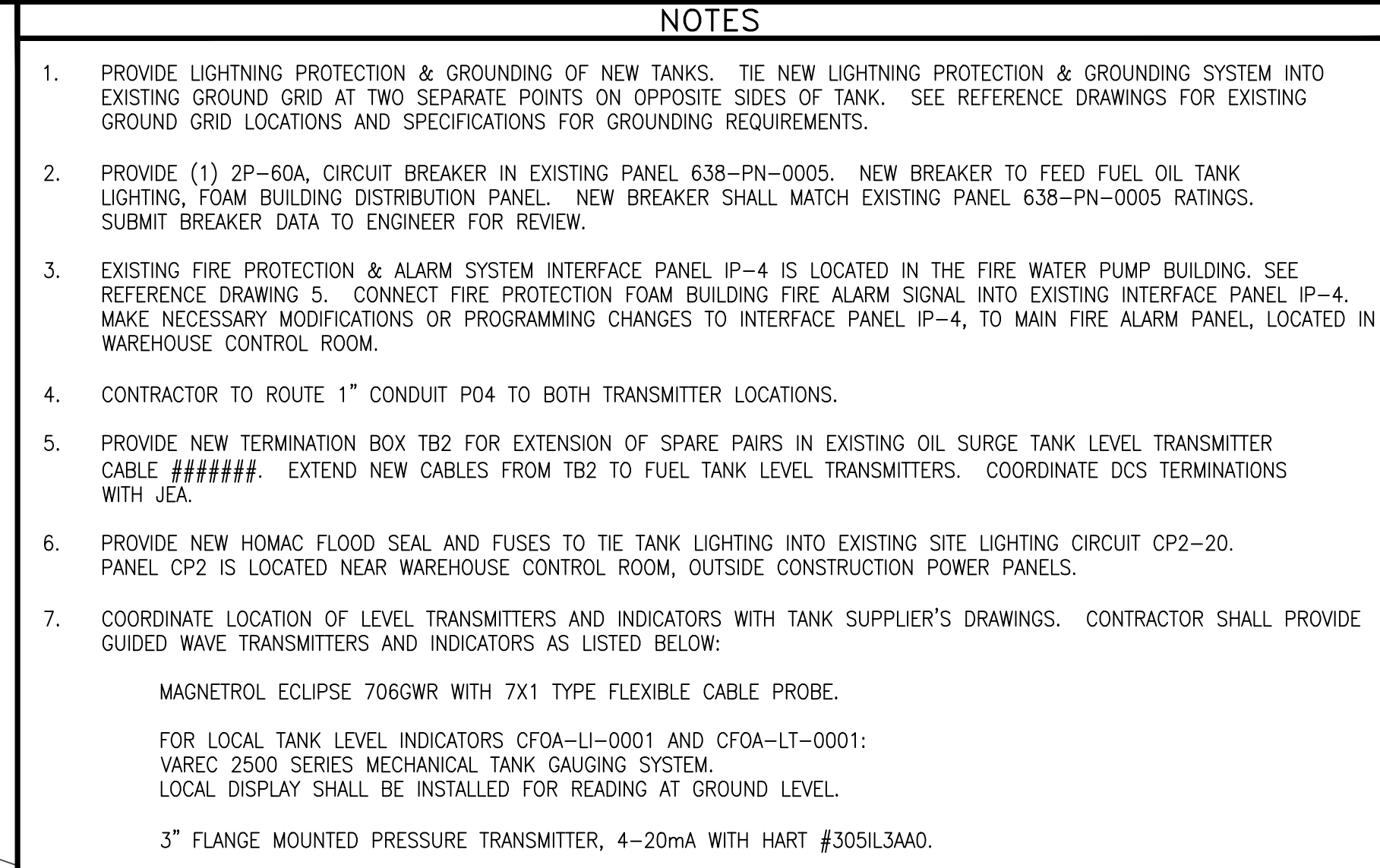


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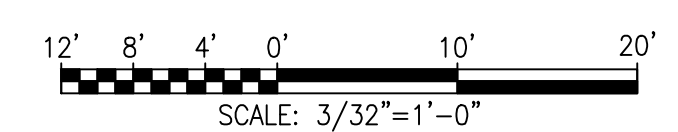
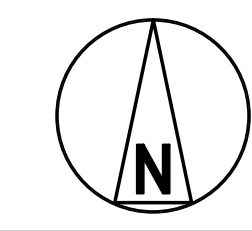
|   |  |                                      |                       |          |
|---|--|--------------------------------------|-----------------------|----------|
| JEA<br>GREENLAND ENERGY CENTER                  |  | PROJECT NUMBER:<br>196116-CAAA-E0002 | DRAWING NUMBER:       | REV<br>0 |
| FUEL OIL SUPPLY & STORAGE<br>ELECTRICAL DETAILS |  | CODE:<br>AREA:                       | REFERENCE DWG NUMBER: |          |



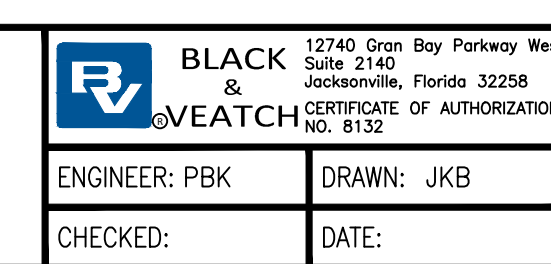


- DOCUMENT CONTROL NOTES
- A. DRAWING CONTENTS CREATED FOR BLACK & VEATCH PROJECT 196116.
- B. REFERENCE DRAWINGS:
- 1. ZACHRY #D013784-100E00001
  - 2. ZACHRY #D013784-684E00002
  - 3. ZACHRY #D013784-684E00003
  - 4. ZACHRY #D013784-684E00005
  - 5. ZACHRY #M013784-572E023

BAU57645 ACAD 1=1 18.2s (LMS Tech)  
07/07/17 09:44:58 34" x 44" C

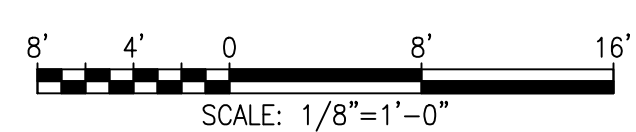
[illegible]

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BAU57645 ACAD  
1=1  
07/07/17 09:45:33

[illegible]

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|                                      |                       |                 |          |
|--------------------------------------|-----------------------|-----------------|----------|
| PROJECT NUMBER:<br>196116-CWSH-E3010 |                       | DRAWING NUMBER: | REV<br>0 |
| CODE:                                | REFERENCE DWG NUMBER: |                 |          |
| AREA:                                |                       |                 |          |

## NOTES

1. PROVIDE LIGHTNING PROTECTION & GROUNDING OF NEW TANK. THE NEW LIGHTNING PROTECTION & GROUNDING SYSTEM INTO EXISTING GROUNDING SYSTEM OF EXISTING TANK. PROVIDE ALL NECESSARY MATERIALS, EQUIPMENT, AND LABOR FOR EXISTING GROUNDING GRID LOCATIONS AND SPECIFICATIONS FOR GROUNDING AND LIGHTNING PROTECTION REQUIREMENTS.
2. PROVIDE NEW HOMAC FUSED LACE AND FUSES TO THE TANK LIGHTING INTO EXISTING SITE LIGHTING CIRCUIT CP2-20. PANEL CP2 IS LOCATED NEAR WAREHOUSE CONTROL ROOM, OUTSIDE CONSTRUCTION POWER PANELS.
3. COORDINATE EXACT LOCATION OF LEVEL TRANSMITTERS IN FIELD AND WITH APPROVED DEMIN TANK SUPPLIER'S DRAWINGS. THE DEMIN WATER TANK LEVEL TRANSMITTER CWSH-1L-001 SHALL BE A ROSEMOUNT 3" FLANGE MOUNTED PRESSURE TRANSMITTER 4-20mA (SEE DEMIN REQUEST FOR PROPOSAL).
4. PROVIDE TERMINAL BOX BAY FOR EXTENSION OF EXISTING SPARE 4-20 mA PHA IN CABL #513-#E0001-01 (FROM 691-CP-0001 1K5-19, 20) TO FEED NEW TANK LEVEL TRANSMITTER. COORDINATE CDS TERMINATION POINTS WITH JEA.