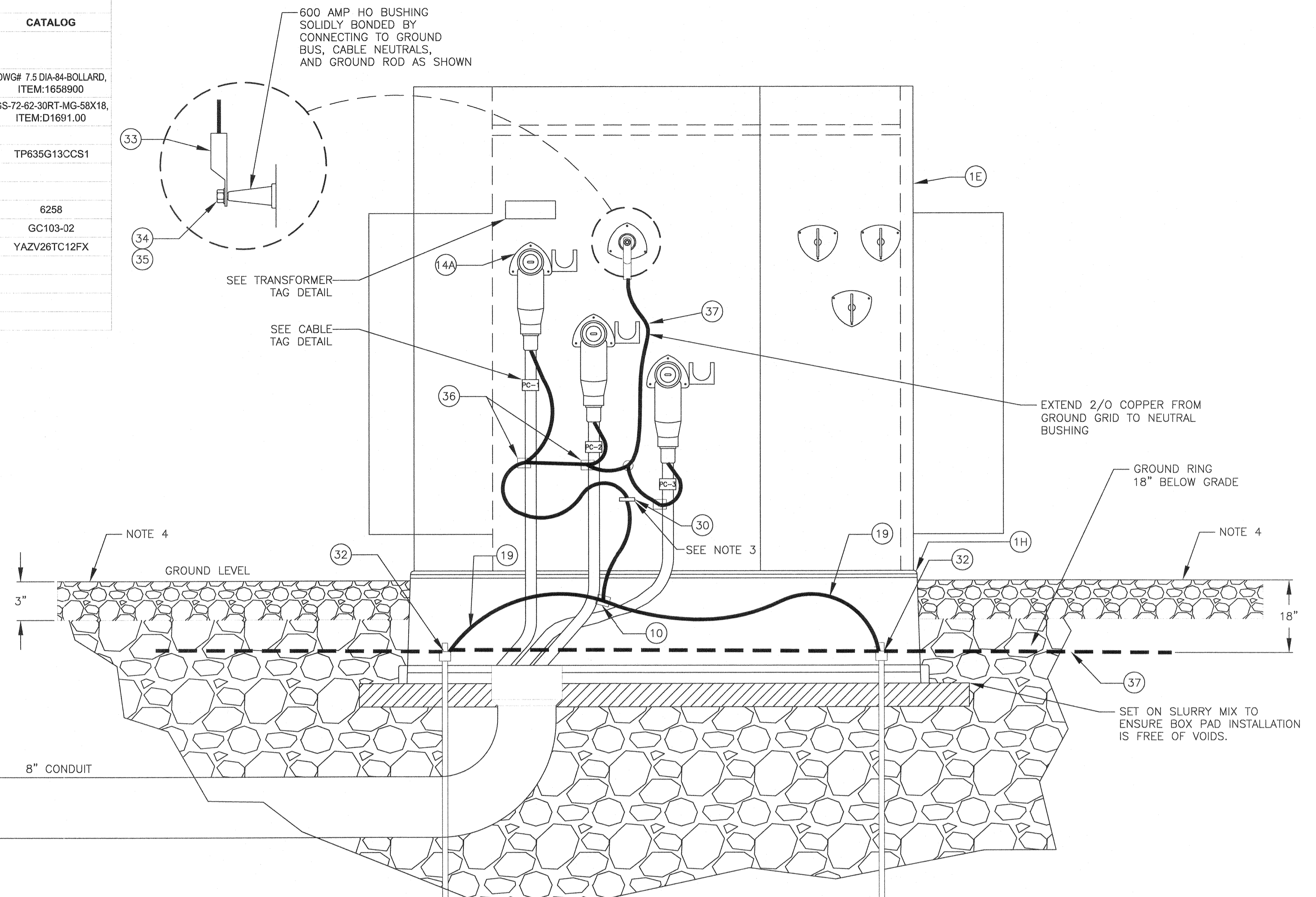
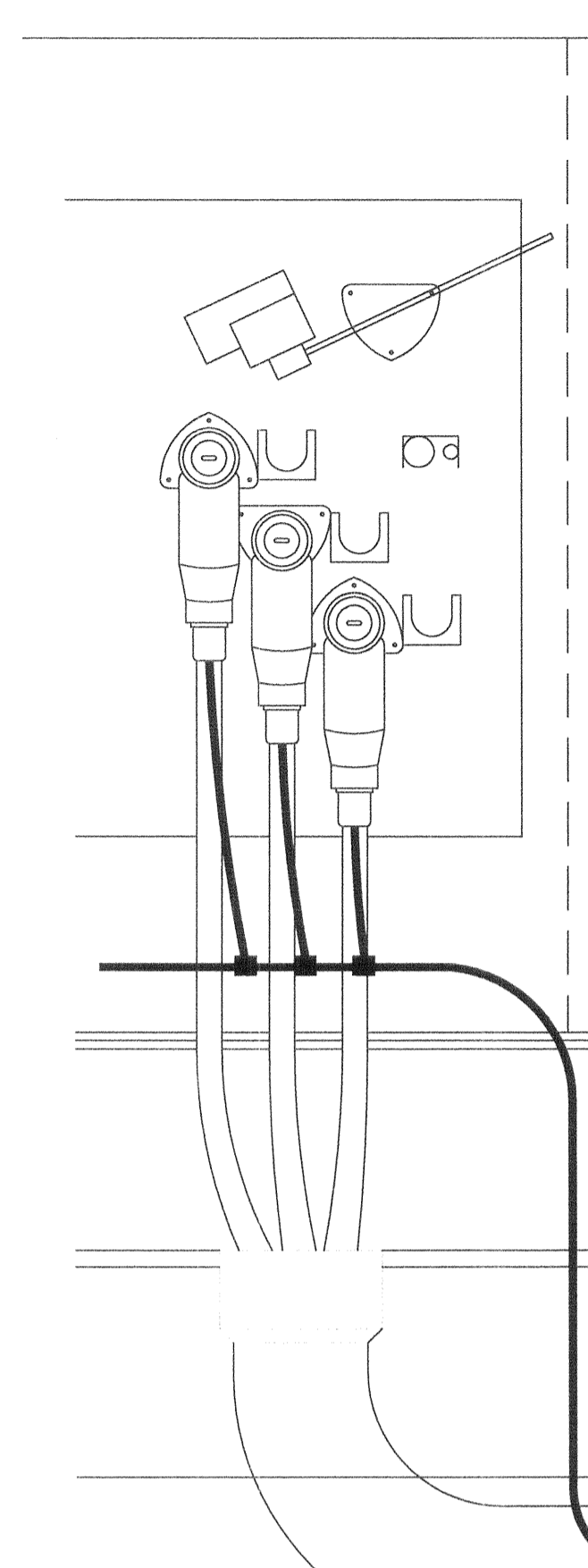
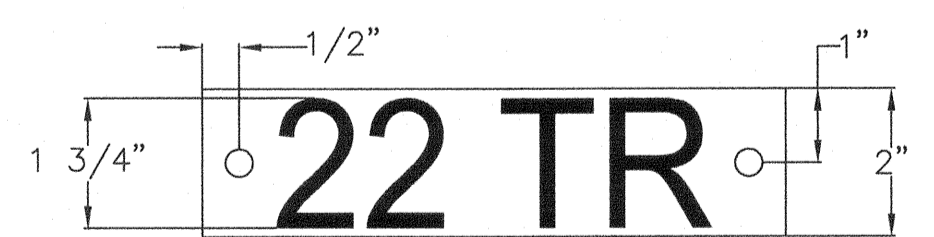


| BILL OF MATERIALS - GROUNDING TRANSFORMER, RADIAL FEED | | | | | |
|--|----------|------|--|--------------------|---------------------------------------|
| ITEM | QUANTITY | UNIT | DESCRIPTION | MANUFACTURER | CATALOG |
| 1E | 1 | EA | ZIG ZAG PADMOUNT GND TRANSFORMER 3Ø, 830A@10 SEC. 60A CONT NEUT I, 20A CONT PHASE I, 70Ω/Ø | PACIFIC CREST | |
| 1F | 2 | EA | BOLLARD 5 1/2" O.D. X 6'-0", CONCRETE FILLED, PAINTED YELLOW OR PROVIDE YELLOW COVERS | OLD CASTLE PRECAST | DWG# 7.5 DIA-84-BOLLARD, ITEM:1658900 |
| 1H | 1 | EA | TRANSFORMER PAD, SIZED TO FIT GROUNDING TRANSFORMER | NORDIC | GS-72-62-30RT-MG-58X18, ITEM:D1691.00 |
| 10 | 1 | EA | CONNECTOR, COPPER COMPRESSION 2/0-4/0 TO 2/0-4/0 | | |
| 14A | 3 | EA | ELBOW ASSEMBLY KIT, 600 AMP, 35kV, 1/0 AWG AL, 345 MILS | COOPER | TP635G13CCS1 |
| 19 | 50 | FT | WIRE, 2/0 COPPER BARE, STR | | |
| 30 | 1 | EA | LUG, TRANSFORMER GROUNDING, 250 KCMIL MAX | | |
| 31 | 2 | EA | GROUND ROD, 5/8" x 8' | BLACKBURN - OE | 6258 |
| 32 | 2 | EA | CONNECTOR, COPPER, 1/2"-5/8" ROD TO 1/0-2/0 | HUBBELL/ ANDERSON | GC103-02 |
| 33 | 1 | EA | LUG, COMPRESSION, COPPER 1 HOLE, 2/0 STR | BURNDY | YAZV26TC12FX |
| 34 | 1 | EA | WASHER, BELLVILLE, STAINLESS, 5/8"-11x1" | | |
| 35 | 1 | EA | BOLT, 302 OR 316 STAINLESS, 5/8"-11x1" | | |
| 36 | 3 | EA | CONNECTOR, COPPER CRIMPIT #2-1/0 TO 2/0-4/0 | | |
| 64 | 2 | EA | 8" SCH 40 PVC 90 DEGREE ELBOW, 48" RADIUS | | |



GROUNDING TRANSFORMER, FRONT VIEW

N.T.S.



NOTES:

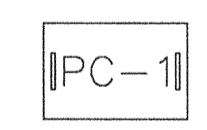
- SIGN BACKING FOR EXTERIOR SIGNS SHALL BE 1/8" IN ALUMINUM OR EQUAL.
- USE SELF TAPPING SCREWS TO MOUNT SIGNAGE ON TRANSFORMER DOORS AND SWITCH DOORS. DO NOT PLACE TAG ON OIL COMPARTMENT.

TRANSFORMER TAG DETAIL

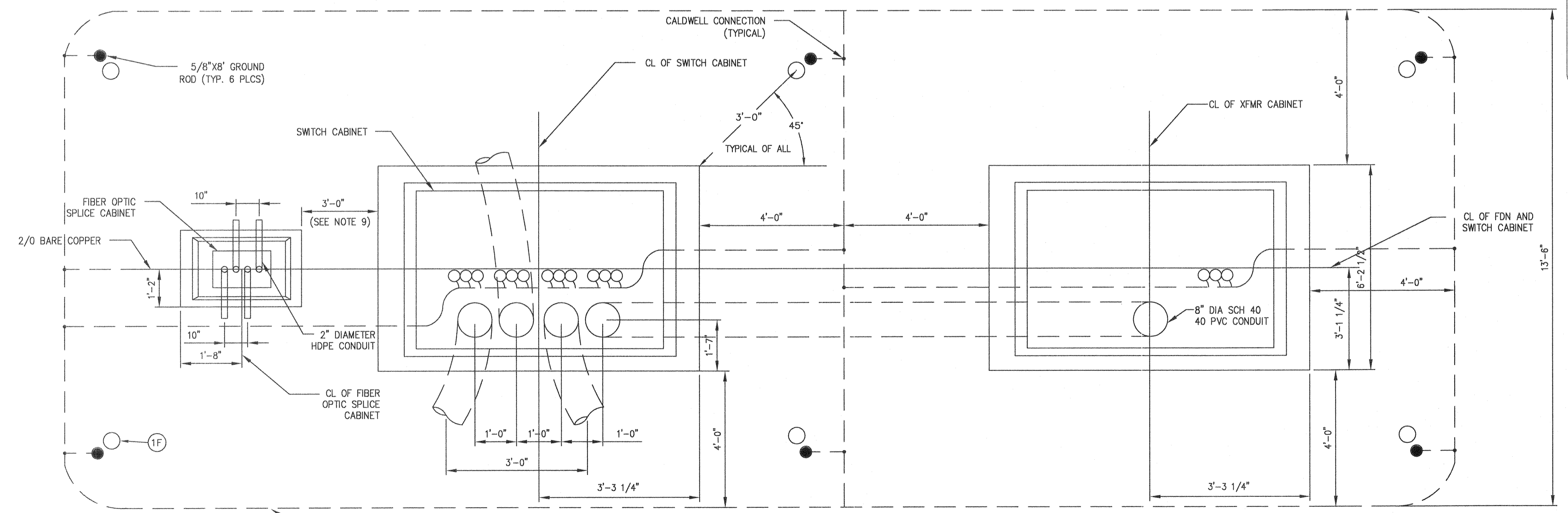
NOTES:

- INDICATE DESTINATION FOR EACH CIRCUIT.
- MARK EACH PHASE USING A, B, C FORMAT.
- BOND 2/0 COPPER FROM GROUND GRID TO ALL APPLICABLE GROUNDING LUGS ON TRANSFORMER.
- 1" CRUSHED STONE SHALL BE INSTALLED 3" DEEP AND 4' AROUND GROUNDING TRANSFORMER.

CABLE TAG DETAIL

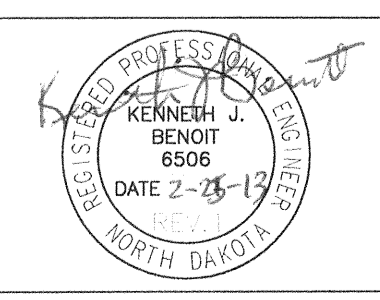


PIKE ENERGY SOLUTIONS, LLC.
10101 Claude Freeman Drive, Suite 100W
Charlotte, NC 28262
ND License No. 954PE



PLAN VIEW
N.T.S.

| NO. | BY | CHK. | APP. | DATE | REVISION DESCRIPTION |
|-----|-----|------|------|---------|------------------------------|
| A | RJG | SGP | CSF | 6/7/11 | 30% DELIVERABLE |
| B | BNK | RJG | CSF | 7/1/11 | 90% DELIVERABLE |
| C | BNK | RJG | CSF | 7/19/11 | REVISED FOR QA CHECKS |
| D | BNK | RJG | CSF | 7/21/11 | REVISED PER CLIENTS COMMENTS |
| O | BNK | RJG | CSF | 8/4/11 | ISSUED FOR CONSTRUCTION |
| 1 | NJG | SGP | CSF | 2/22/13 | CONSTRUCTION REVISIONS |



| CLIENT | 7/1/11/7/19/11/7/21/11/8/4/11 |
|-------------------------|-------------------------------|
| BID | |
| CONSTRUCTION PERMITTING | |
| RELEASED TO/FOR | B C D O 1 2 3 |
| DATE RELEASED | |

BARR
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| Scale | N.T.S. |
|----------|----------|
| Date | 06/07/11 |
| Drawn | RJG |
| Checked | SGP |
| Designed | RJG |
| Approved | CSF |

MINNESOTA POWER
AN ALLETE COMPANY

BISON
A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA

BISON 2 WIND PROJECT
MORTON & OLIVER COUNTIES, NORTH DAKOTA

COLLECTOR SYSTEM
GROUNDING TRANSFORMER DETAIL

| | |
|--------------------|------------|
| BARR PROJECT No. | 34/33-1007 |
| CLIENT PROJECT No. | |
| DWG. No. | E-GT-01 |
| REV. No. | 1 |