

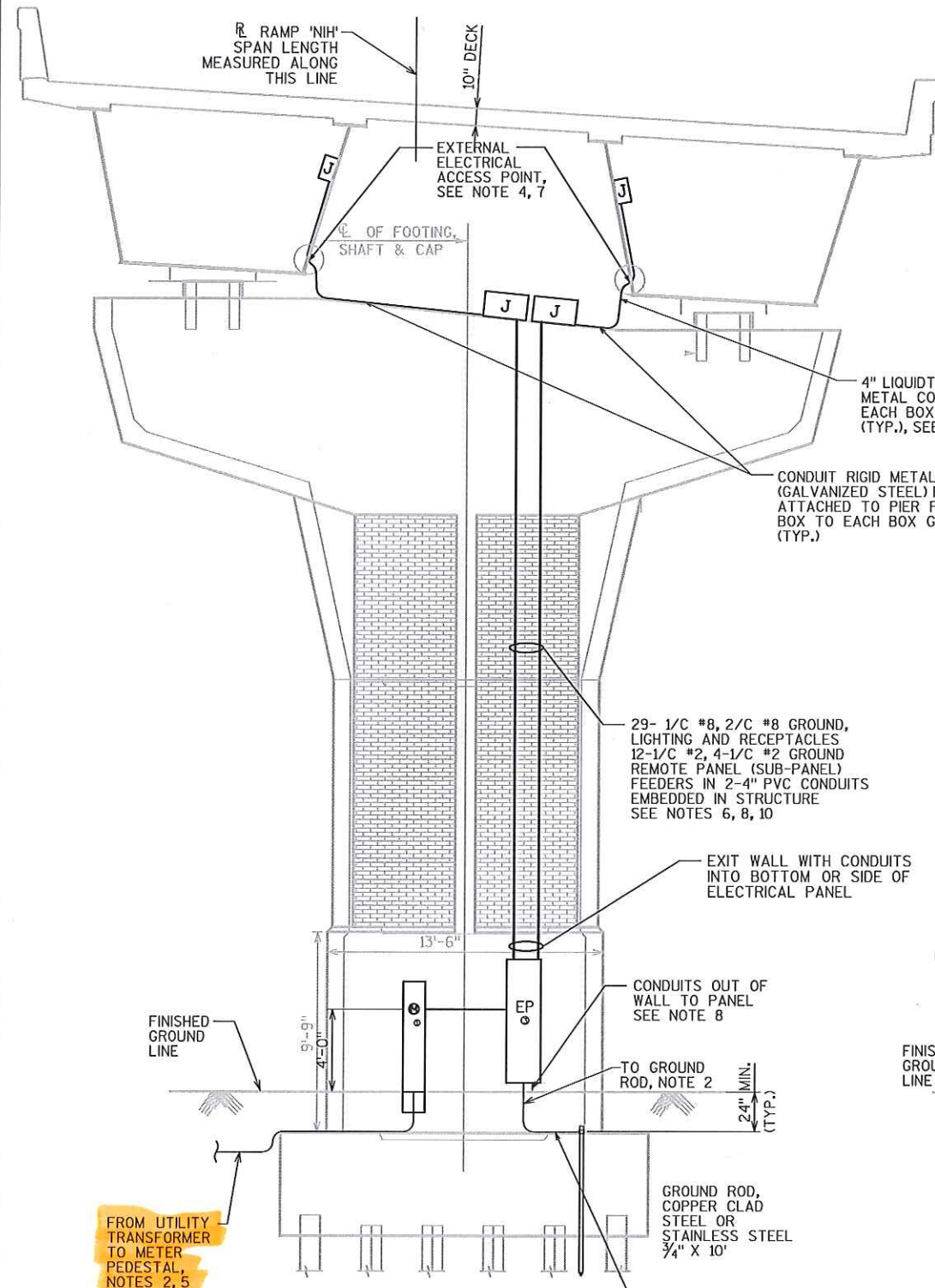


LEGEND:

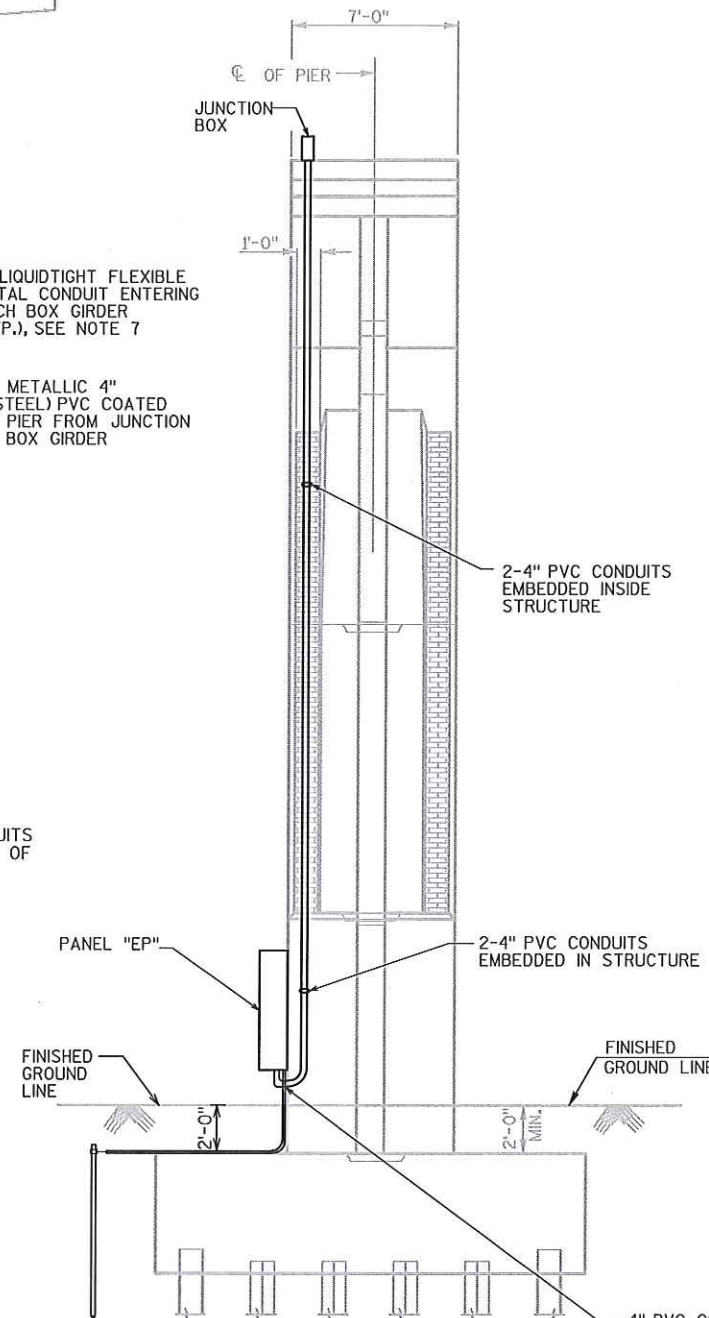
- ① METER PEDESTAL, 200A, NEMA 3R, WITH MAIN BREAKER, NOTE 11
- ② SAFETY DISCONNECT SWITCH, 200A, NON-FUSIBLE, NOTE 11
- ③ MAIN ELECTRICAL PANEL, 200A, 240V/120, 1-PH, 3-W

STATE PROJECT NUMBER

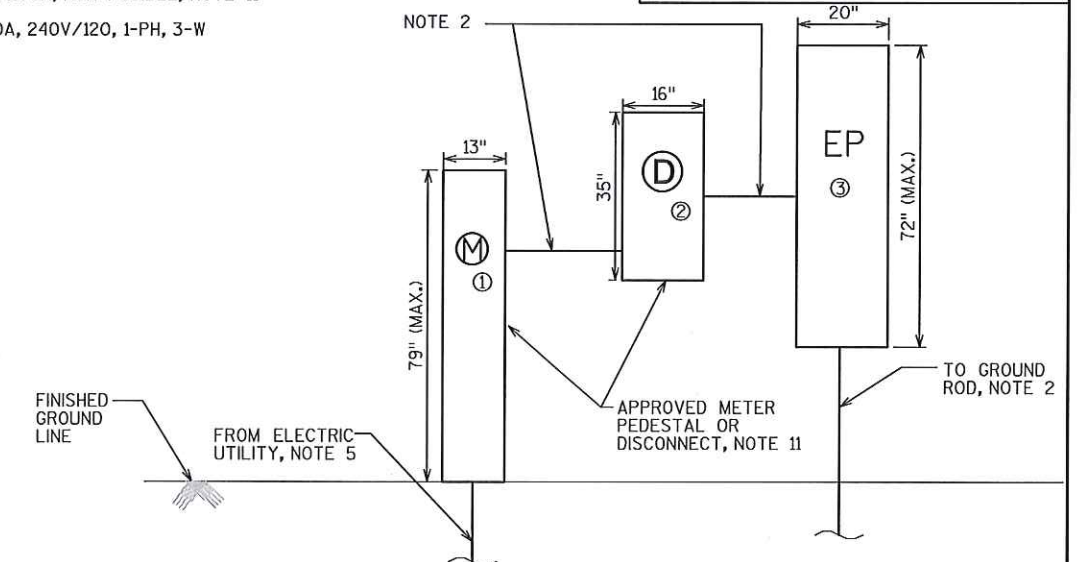
1133-11-74



ELEVATION - PIER 5
(LOOKING UPSTATION)
NOT TO SCALE



END VIEW
(LOW SIDE SHOWN, HIGH SIDE SIMILAR)
NOT TO SCALE



ELECTRICAL SERVICE EQUIPMENT DETAILS

* DIMENSIONS ARE APPROXIMATE AND VARY BY MANUFACTURER.
NOT TO SCALE

NOTES:

- FURNISH AND INSTALL NEMA 4X RATED STAINLESS STEEL OUTDOOR CABINETS AND ENCLOSURES, WHEN AVAILABLE. ALL CABINETS MUST HAVE PAD-LOCKING PROVISIONS.
- FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, AND INCIDENTALS NEEDED TO CONNECT THE SERVICE FROM THE METER PEDESTAL TO THE MAIN ELECTRICAL PANEL "EP" AND TO REMOTE PANELS (SUB-PANELS) AS PART OF PAY ITEM FOR "ELECTRICAL SERVICE INSTALLATION B-5-679". THAT PAYMENT INCLUDES THE APPROVED METER PEDESTAL, ALL ELECTRICAL PANELS INCLUDING SUB-PANELS, SAFETY DISCONNECT SWITCH (WHEN REQUIRED), CABLES, CONDUITS, GROUNDING, AND TRENCHING FOR CONDUITS SHOWN ON THE PLANS. ALL CONNECTIONS, SPLICING, AND WIRING TO THE NEW ELECTRICAL PANELS AND METER PEDESTAL IS ALSO INCLUDED UNDER THE SAME PAY ITEM. FURNISH, INSTALL, AND PAY FOR ELECTRICAL EQUIPMENT GROUNDING MATERIALS, EQUIPMENT AND LABOR UNDER THIS PAY ITEM. CABLE AND CONDUIT FROM PANEL "EP" TO BOX GIRDERS AND JUNCTION BOXES SHOWN ARE PAID FOR SEPARATELY.
- EXTEND THE SERVICE UP THE PIER TO THE DISTRIBUTION JUNCTION BOXES. FROM THERE, ROUTE THE BRANCH CIRCUIT WIRING AND REMOTE PANEL FEEDERS THROUGH ACCESS HOLES TO EACH BOX GIRDER.
- SEE EXTERNAL ELECTRICAL ACCESS DETAIL ON SHEET 75. ALSO SEE INTERMEDIATE PIER DIAPHRAGMS XD1 AND D1 FOR EXACT LOCATION OF ELECTRICAL ACCESS HOLES.
- COORDINATE WITH THE UTILITY TO PROVIDE ELECTRIC SERVICE TO PIER MOUNTED EQUIPMENT.
- FURNISH AND INSTALL 2-4" CONDUIT RIGID NONMETALLIC SCHEDULE 40 (PVC) CAST INTO THE PIER (EMBEDDED) AS SHOWN. INSTALL CONDUITS ENTERING EACH BOX GIRDER THAT WILL HAVE THE CONDUCTORS FOR THE LIGHTING CIRCUITS, GFCI RECEPTACLE CIRCUITS, AND POWER FEEDS TO EACH OF THE ELECTRICAL REMOTE PANELS (SUB-PANELS).
- FURNISH AND INSTALL 4" LIQUIDTIGHT FLEXIBLE METAL CONDUITS (LTFMC) WHEN ENTERING THE BOX GIRDERS THROUGH THE ELECTRICAL ACCESS HOLES. INSTALL THE LTFMC BETWEEN THE RIGID GALVANIZED STEEL CONDUITS. SEAL THE AREA AROUND THE FLEXIBLE CONDUITS ENTERING THE BOX GIRDERS AT THE ACCESS HOLE TO PROVIDE A TIGHT, WEATHER-PROOF SEAL. PAYMENT FOR ALL 4" AND LARGER FLEXIBLE METAL CONDUITS, ADAPTERS AND FITTINGS ARE INCLUDED IN THE "CONDUIT RIGID METALLIC PVC COATED" PAY ITEM, SEPARATE PAYMENT WILL NOT BE MADE.
- STUB CONDUITS EMBEDDED IN STRUCTURE OUT OF WALL UNDER (OR SIDE OF) THE ELECTRICAL PANEL "EP". FURNISH AND INSTALL CONDUIT RIGID METALLIC 4" (GALVANIZED STEEL) PVC COATED FOR ALL EXPOSED LOCATIONS AND BETWEEN THE PVC CONDUIT EMBEDDED IN THE PIER AND THE ELECTRICAL PANEL "EP". FURNISH AND INSTALL ALL NECESSARY ELBOWS, FITTINGS, AND PVC TO RGS CONDUIT ADAPTERS TO COMPLETE THE INSTALLATION. INCLUDE COST FOR THE MATERIALS AND LABOR NEEDED, AND DESCRIBED HERE, IN THE COST OF THE ELECTRICAL PANEL.
- FURNISH AND INSTALL GALVANIZED STEEL OR 304 STAINLESS STEEL SUPPORTS, HARDWARE, CLAMPS, BRACKETS, HANGER RODS, NUTS, BOLTS, AND WASHERS FOR CONDUITS, JUNCTIONS BOXES, AND RECEPTACLES. ALL THREADED HARDWARE SHALL BE STAINLESS STEEL.
- FURNISH AND INSTALL GROUND CONDUCTORS IN ALL CONDUITS. GROUND CONDUCTORS SHALL BE BONDED TO METAL CONDUITS, BOXES, AND OTHER PARTS TO ENSURE SYSTEM GROUND CONTINUITY THROUGHOUT ELECTRICAL SYSTEM. GROUNDING AND BONDING SHALL BE ACCORDING TO NEC STANDARDS.

- FURNISH AND INSTALL A NEMA 3R RATED, 200A METER PEDESTAL WITH A MAIN CIRCUIT BREAKER IN PLACE OF A DISCONNECT SWITCH. FURNISH PEDESTAL ENCLOSURE WITH PAD-LOCKING PROVISIONS. INCLUDE METER PEDESTAL EXTENSIONS IF REQUIRED BY UTILITY AT NO ADDITIONAL COST. FURNISH A 200A, MOLDED CASE, THERMAL MAGNETIC MAIN CIRCUIT BREAKER IN THE PEDESTAL RATED AT 25K AIC MINIMUM. FURNISH AND INSTALL A HEAVY DUTY, OUTDOOR RATED, NON-FUSIBLE DISCONNECT SWITCH IN A NEMA 4X RATED ENCLOSURE THAT IS PAD-LOCKABLE ONLY IF AN APPROVED METER PEDESTAL CANNOT BE PROVIDED.

STEEL ERECTION & SITE CONSTRUCTION CONTRACT

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-5-679			
DRAWN BY MAE		PLANS CK'D. DAD	
ELECTRICAL CROSS SECTION AT PIER		SHEET 80 OF 91 969	

DATE: 5/1/2013
I.D.