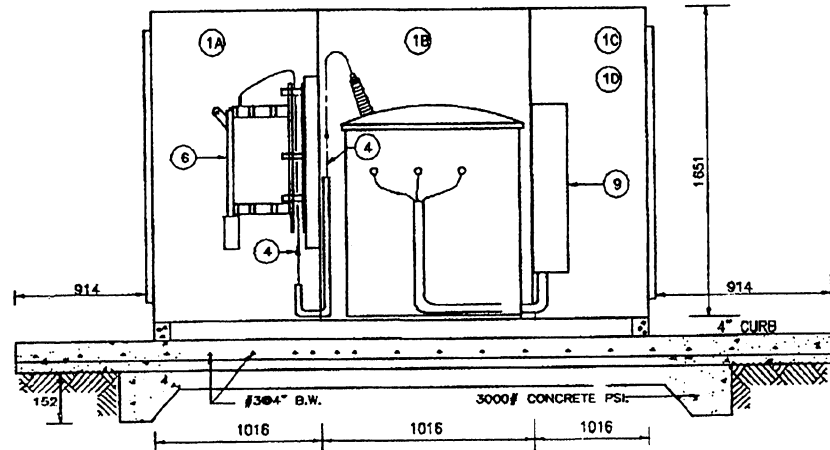
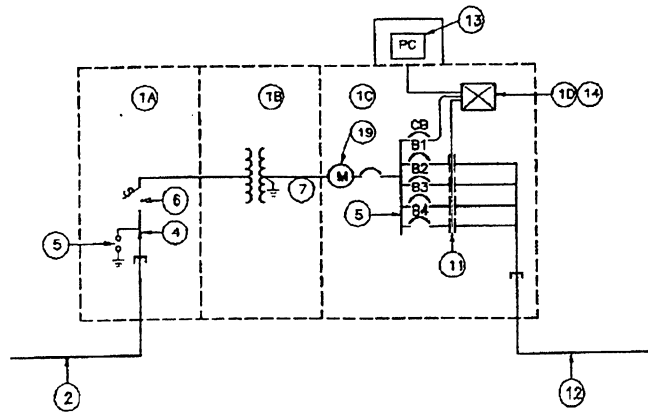


TOP VIEW
NOT TO SCALE



FRONT VIEW
NOT TO SCALE



DISTRIBUTION CENTER SINGLE LINE DIAGRAM
NOT TO SCALE

DESCRIPTION

- 1 STAINLESS STEEL PAD MOUNTED SUBSTATION ENCLOSURE DEAD FRONT TYPE PREPA APPROVED CONSISTING OF THE FOLLOWING:
- 1A HIGH VOLTAGE COMPARTMENT

- 1B TRANSFORMER NON-PCB OIL FILLED 25KVA OR 37.5KVA (AS INDICATED ON DRAWINGS). 120/240V, 1 PHASE 3 WIRE SECONDARY WITH #4 - 2 1/2% TAPS:

PRIMARY VOLTAGE	SECONDARY VOLTAGE	NO. OF 2 1/2% TAPS A.H.V.	NO. OF 2 1/2% TAPS B.L.V.
13,200V.	120/240	2	2
13,200V.	240/480	2	2
8,320V AND LESS	120/240	0	4
8,320V AND LESS	240/480	2	2

- 1C SECONDARY COMPARTMENT WITH METER SOCKET, 200AMP 120/240V, 1 PHASE, 3 WIRE PANELBOARD WITH 125AMP MAIN CIRCUIT BREAKER, FOR 25KVA TRANSFORMER, 200AMP MAIN CIRCUIT BREAKER FOR 37.5KVA TRANSFORMER 30AMP 2P BRANCH BREAKERS FOR LIGHTING CIRCUIT AND 1-20AMP, 1P BRANCH BREAKER FOR LIGHTING CONTROL. (SEE PLANS FOR FINAL PANELBOARD SCHEDULE 20 AMP 2P BREAKERS)

- 1D LIGHTING CONTACTOR SECTION WITH 4 POLES 50 AMPS. 240V. LIGHTING CONTACTORS WITH 120VOLT COILS. NUMBER OF CONTACTORS AS INDICATED ON DRAWINGS.

- 2 INCOMING PRIMARY LINE CONSISTING OF ONE #2 CU XLP, 15KV. SHIELDED PVC JACKFIED AND ONE #2 CU THW GROUND INSTALLED IN 4" PVC DB-120 CONDUIT ENCASED IN CONCRETE 1.2m BELOW GRADE AND ONE SAME SIZE SPARE CONDUIT. SEE TRENCH DETAIL.

- 3 ONE #2 CU XLP, 15 KV SHIELDED PVC JACKETED AND ONE #2 CU TW GROUND INSTALLED IN 4" PVC DB-120 CONDUIT.

- 4 15KV STRESS CONE

- 5 LIGHTNING ARRESTER, METAL OXIDE VARISTOR TYPE VOLTAGE AS FOLLOWS:

2.4/4.16 KV	3 KV
4.16/7.2 KV	6 KV
4.8/8.32 KV	8 KV
7.62/13.2KV	10 KV

- 6 FUSE SIZE AS FOLLOWS:

VOLTAGE	25KVA	37.5KVA
2.4KV	15E	20E
4.8KV	7E	10.E
7.62KV	5E	7.E

- 7 GROUND CONNECTION.

- 8 MAIN SECONDARY FEEDER CONSISTING OF 3 #1/0 XHHW AND 1 #6 THW GND IN 2" CONDUIT.

- 9 LIGHTING PANELBOARD SEE (1C) ABOVE.

- 10 SECONDARY LIGHTING CIRCUIT CONDUIT, EXACT NUMBER AND ARRANGEMENT ACCORDING TO LAYOUT.

- 11 LIGHTING CONTACTOR SEE (1D) ABOVE.

- 12 SECONDARY LIGHTING CIRCUITS CONDUITS, 2" PVC DB-120.

- 13 WEATHERPROOF ELECTRONIC PHOTOCELL CONTROL (P.R.E.P.A. APPROVED TYPE) ON TOP OF STEEL HOUSING PROVIDED WITH WIRE MESH PROTECTION.

- 14 MANUAL HAND-OFF-AUTO SWITCH.

- 15 19x3.05m COPPERWELD GROUND RODS (4 MIN.REQ'D) INTERCONNECTED WITH A #4/0 AWG BARE COPPER CONDUCTOR TO FORM A GROUND LOOP.

- 16 GROUNDING ELECTRODE CONDUCTOR CONSISTING OF #4/0 COPPER CONDUCTOR.

- 17 CONCRETE BASE PER P.R.E.P.A.

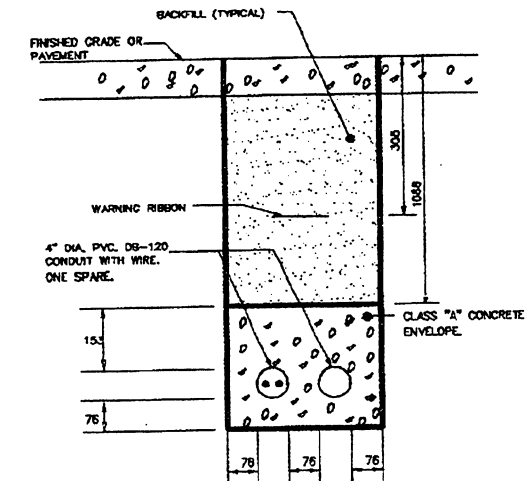
- 18 PLASTIC BUSHING, 76 MINIMUM ABOVE CONCRETE PAD.

- 19 PREPA METER SOCKET, 1ø, 120/240V

- 20 LEXAN VIEWING WINDOW 6" X 2 1/2"

NOTES FOR PAD MOUNTED SUBSTATION & LIGHTING CONTROL CABINET

- 1- ALL DIMENSIONS SHOWN ARE MINIMUM.
- 2- DOORS SHALL OPEN 90 DEGREES MIN. OR BE COMPLETELY REMOVABLE.
- 3- FINAL DIMENSIONS OF ENCLOSURES TO BE DETERMINED BY MANUFACTURER TO CONFORM TO ALL P.R.E.P.A., NEC, ANSI, & NEMA STANDARDS.
- 4- THIS STANDARD CAN BE USED ONLY WHEN THE SYSTEM IS THE PROPERTY OF THE HIGHWAY AND TRANSPORTATION AUTHORITY, A MUNICIPAL GOVERNMENT OR A PRIVATE PARTY.
- 5- THE SUBSTATION SHALL COMPLY WITH PREPA TRANSCLOSURE SPECIFICATIONS.



TRENCH DETAIL
NOT TO SCALE

EFFECTIVE DATE: JUNE 1996

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

PAD MOUNTED
SUBSTATION
STANDARD II

RECOMMENDED BY: <i>[Signature]</i>	DESIGN AREA DIRECTOR DATE: 8/22/96
APPROVED BY: <i>[Signature]</i>	EXECUTIVE DIRECTOR DATE:
APPROVED BY: <i>[Signature]</i>	DIST. ENG. SUPERINT. P.R.E.P.A. DATE: 20 SEPT 1996
APPROVED BY: <i>[Signature]</i>	DIV. ADM. FHWA-PR DIVISION DATE:

DATE	REVISION	BY	
			STD. LS DWG. 10 OF 17