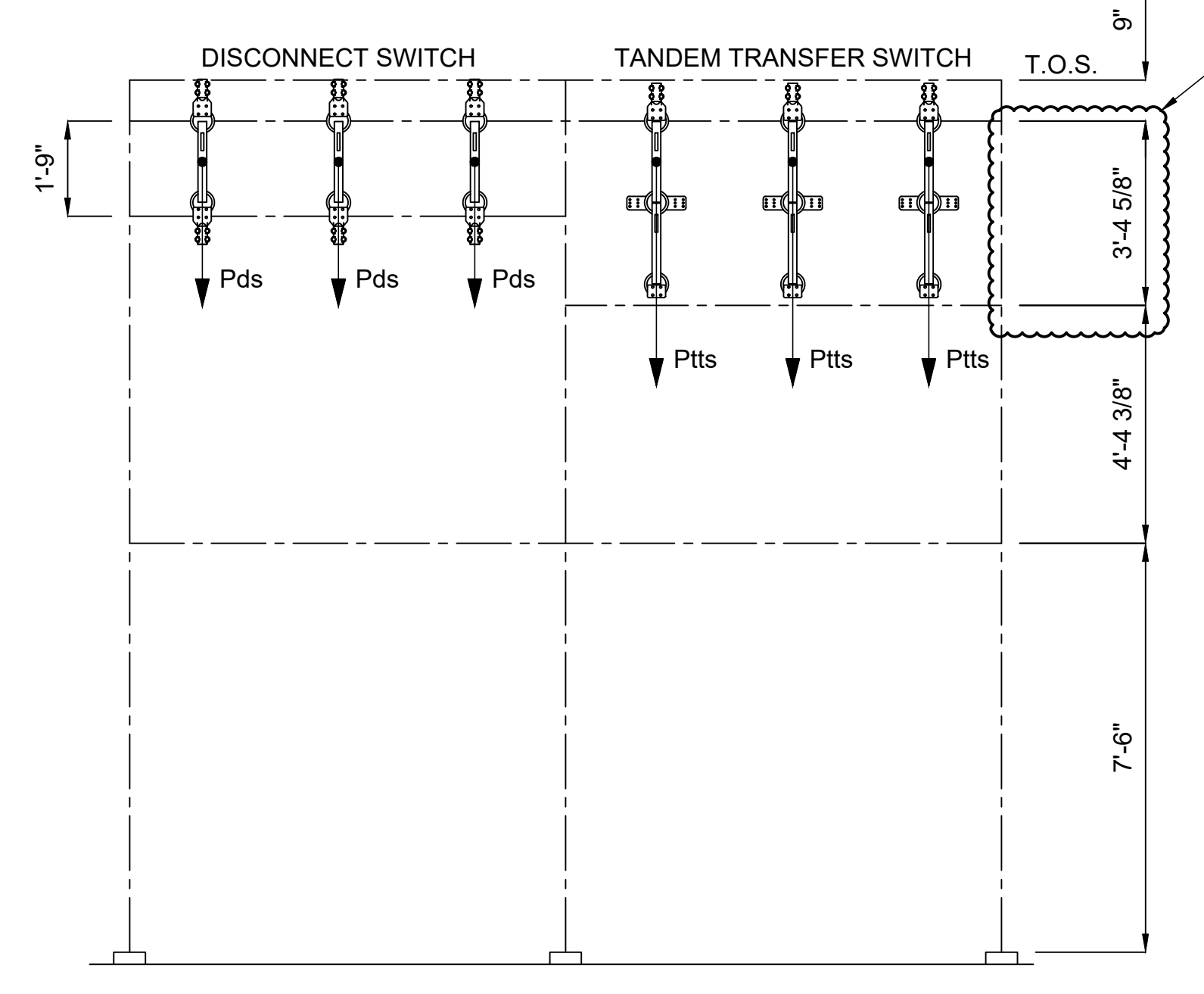
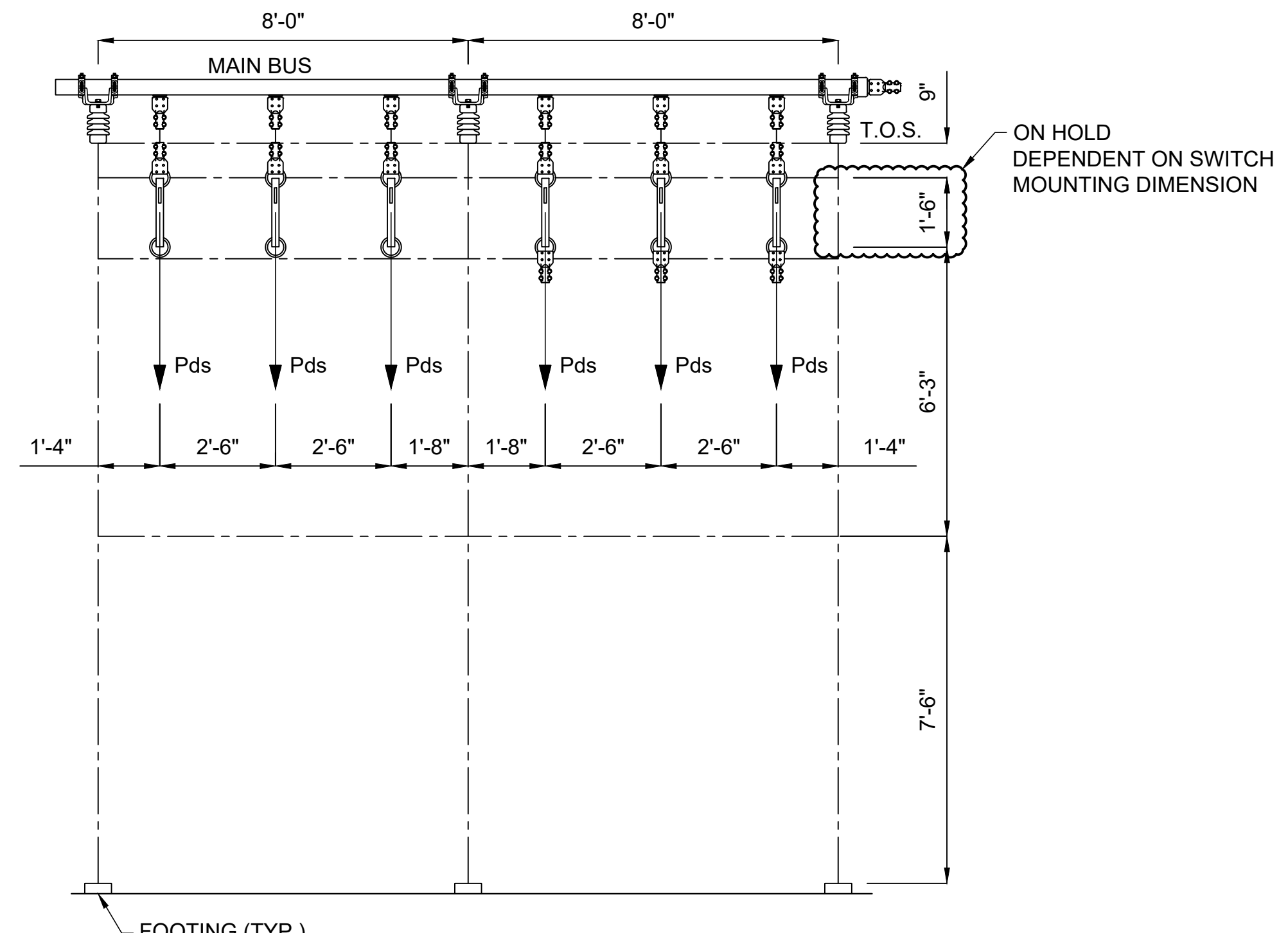


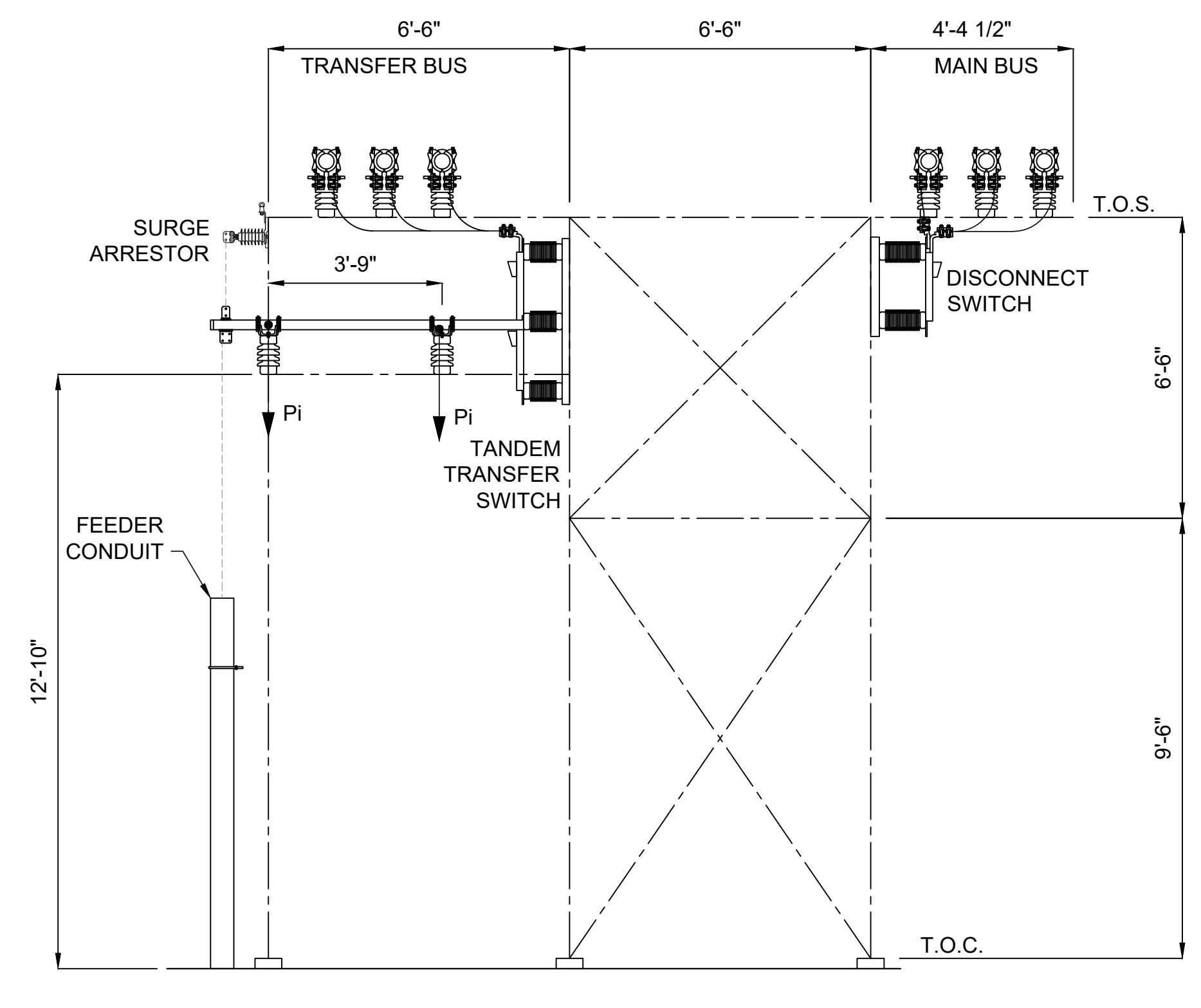
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C
STEEL LAYOUT TYP. FOR (3) LOCATIONS

LOADING NOTES:

- LOADS PER ASCE7-16. ELECTRICAL EQUIPMENT LOADS PER IEEE 693, IN CONJUNCTION WITH THE SUBSTATION STRUCTURE DESIGN GUIDE ASCE 113.
- FOR DESIGN, CONSIDER THE FOLLOWING LOADS:
 - DEAD LOAD**
DEAD WEIGHT OF STRUCTURE, EQUIPMENT, AND COMPONENTS AS DETERMINED BY DESIGN. ADD 15% MINIMUM TO ACCOUNT FOR CONNECTIONS, FASTENERS, ETC. DEAD WEIGHTS OF ELECTRICAL EQUIPMENT IS SHOWN ON THIS DRAWING.
 - WIND LOAD**
BASIC WIND SPEED = 105 MI/HR
EXPOSURE CATEGORY = C, TOPOGRAPHIC FACTOR $K_{zt} = 1.0$
 - SEISMIC LOAD**
SITE CLASS = D, $S_s = 1.692$ s, $S_1 = 0.643$ s, $F_a = 1.0$, $F_v = 1.7$
SEISMIC DESIGN CATEGORY = D
SEISMIC FORCE RESISTING SYSTEM = STEEL ORDINARY CONCENTRICALLY BRACED FRAME
 - SNOW LOADS**
NOT APPLICABLE
 - EQUIPMENT LOADS**
EQUIPMENT WEIGHTS AND LOADS ARE ASSIGNED ON THIS DRAWING, SPECIFIC TO THE ELECTRICAL EQUIPMENT.
 - SHORT CIRCUIT LOAD**
SHORT CIRCUIT FORCE $F_{sc} = 3$ LB/FT FOR BOTH THE MAIN AND TRANSFER BUS PIPE.
- A SOILS INVESTIGATION HAS NOT BEEN PROVIDED FOR THE DESIGN OF THE SWITCHRACK STRUCTURE. FOR SEISMIC CONSIDERATIONS, APPLY SITE CLASS D PER ASCE7-16 SECTION 11.4.3.
- REPORTED LOADS ARE UNFACTORED. STRUCTURE EVALUATION SHALL BE PERFORMED BASED ON LRFD LOAD AND LOAD COMBINATIONS (STRENGTH DESIGN), PER ASCE 7-16.

SWITCHRACK STRUCTURE DESIGN NOTES:

- THE DESIGN OF THE SWITCHRACK STRUCTURE SHALL INCORPORATE THE SWITCHRACK STEEL SPECIFICATION.
- SWITCHRACK DESIGN SHALL CONSIDER THE APPLICABLE WORST-CASE LOADING FOR DESIGN OF MEMBERS, CONNECTIONS, AND BASEPLATES.
- CONSTRUCTION CONCEPTS FOR THE ADJACENT, EXISTING SOUTH SWITCHRACK STRUCTURE SHALL BE CONSIDERED AND INCORPORATED INTO THE SWITCHRACK ADDITION FOR UNIFORMITY WITH THE EXISTING CITY OF AZUSA SOUTH SWITCHRACK STRUCTURE.
- PROVIDE CONDUIT SUPPORT FOR FEEDER CONDUIT.

LOAD ASSIGNMENTS:

- CONDUCTOR LOADS:
 WEIGHT, $P_{cd} = 10$ LBS/FT (VERTICAL)
 EXTREME WIND, $P_{cew} = 12$ LBS/FT (HORIZONTAL, NORMAL TO BUS PIPE)
 INSULATOR WEIGHT, $P_i = 20$ LBS
 DISCONNECT SWITCH WEIGHT, $P_{ds} = 200$ LBS
 TANDEM TRANSFER SWITCH WEIGHT, $P_{tts} = 200$ LBS

NOTES:

- MEMBERS ARE SHOWN AS CENTERLINES ONLY, UNLESS NOTED OTHERWISE. IN CERTAIN INSTANCES, MEMBERS ARE DIMENSIONED TO TOP OF STEEL.
- THIS SHEET IS TO BE USED FOR LOADING INFORMATION ONLY. REFER TO D-2101 FOR SWITCHRACK STRUCTURE LAYOUT AND GEOMETRY.

LEGEND:

- T.O.S. = TOP OF STEEL
 T.O.C. = TOP OF CONCRETE

NOT FOR CONSTRUCTION

INSTALL

| | | | | |
|--|--|---|---------------------------------------|-----------|
| CITY OF AZUSA 2-BREAKER RACK ADDITION AZUSA, CA | | | | |
| | | DRAFTER: DPP ENGR: RSB DATE: | CHECKER: APPD: SCALE: 3/8" = 1'-0" | |
| A Division of Electric Power Systems International, Inc. 1338 E. KINGSLEY, SUITE B SPRINGFIELD, MO 65804 PHONE: (417) 886-4540 FAX: (417) 886-4842 | | REV. 0 DATE DESCRIPTION SOUTH BUS TIE BREAKER ADDITION | | |
| SOUTH BUS TIE 12KV SWITCHRACK LOADING CRITERIA | | | DRAWING NO. D-2104 | REV. 0 |

| | | | | | |
|-----|----------|-----|-----|-----|---|
| OC | 03.11.20 | DPP | - | RSB | ISSUED FOR BID |
| OB | 03.04.20 | DPP | JAB | RSB | 60% DETAIL DESIGN |
| OA | 01.22.20 | DPP | JAB | RSB | 30% DETAIL DESIGN |
| REV | DATE | BY | OC | LD | DESCRIPTION |
| | | | | | TEMPORARY ISSUE TRACKING BLOCK DSG19083 |

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