

ATTENTION: These documents are provided for informational purposes. They provide standard configurations, general requirements, and guidelines for trenching and standard customer interconnections for APS customers. These documents do not address every possible situation. It is the responsibility of the customer to ensure that the documents provided here are the most current version. APS reserves the rights to require modifications based on site specific or system conditions.



ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

BY	LDR.	MGR.	DATE	REV.
MLM	M. CAM	J.M. HORMELL	10/2020	9

**SUBSTRUCTURES
JUNCTION BOX
HEAVY DUTY POLYMER
FOR SECONDARY AND SERVICE**

COVER

**8663
THRU
8665**

TABLE 1	
CODE	JUNCTION BARS
A	THREE-POSITION MOLDS
B	FIVE-POSITION MOLDS
C	EIGHT-POSITION MOLDS
D	TWO-POSITION GEL PACKS
N	NO CONNECTORS

8663. _ _

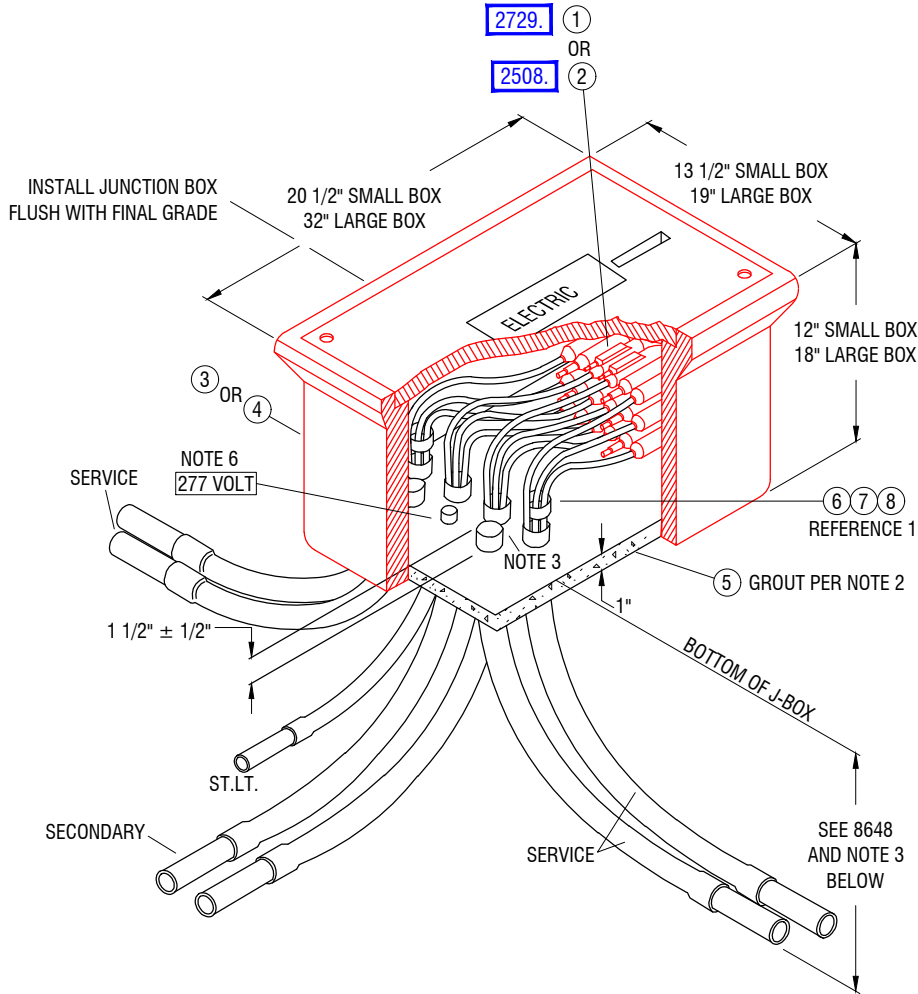
SEE NOTE 9 AND 11
SMALL BOX

8665. _ _

SEE NOTE 12
LARGE BOX

IF APPLICABLE
G = APS GROUT PROVIDED

JUNCTION BAR CODE SEE TABLE 1



NOTES:

1. PENTA-HEAD BOLTS SHALL BE INSTALLED PRIOR TO ENERGIZING NEW UNDERGROUND SYSTEMS. LOST OR MISPLACED PENTA-HEAD BOLTS SHALL BE REPLACED WITH APN 71402628.
2. CONCRETE GROUT SHALL BE PREMIX APN 71301280 OR EQUIVALENT.
3. BRING ALL CABLE/CONDUITS AND GROUND RODS INTO THE SAME END OF THE BOX TO ENABLE CABLES TO BE RAISE AND LOWERED EASILY. CONDUIT SWEEPS SHALL BE POSITIONED AND ALIGNED SO THAT WHEN TWO AND FOUR POSITION JUNCTION BARS ARE SPECIFIED, THE ST. LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "A". WHEN SIX POSITION JUNCTION BARS ARE SPECIFIED, THE ST. LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "B".
4. COMPACTION AROUND JUNCTION BOX SHALL BE A MINIMUM OF 90 PERCENT.
5. ADDITIONAL TRENCH DEPTH IS USUALLY REQUIRED AT ALL EQUIPMENT LOCATIONS. SEE 8648 FOR THE MINIMUM TRENCH DEPTHS AND THE DEGREE OF SLOPE ALLOWED AS THE TRENCH DEPTH CHANGES.
6. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL "277 VOLT" RED MICARTA TAG (APN 80796) PROVIDED BY SPEC 8129.
7. TORQUE PENTAHEAD BOLTS PER THE FOLLOWING:

3/8 - 16 UNC	15FT - LBS
1/2 - 13 UNC	40FT - LBS



ARIZONA PUBLIC SERVICE COMPANY
T&D CONSTRUCTION STANDARDS

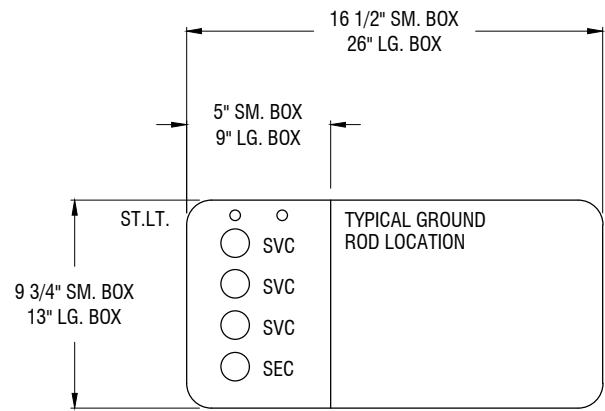
BY	LDR.	MGR.	DATE	REV.
MLM	M. CAMPA	J.M. HORMELL	10/2020	9

**SUBSTRUCTURES
JUNCTION BOX
HEAVY DUTY POLYMER
FOR SECONDARY AND SERVICE**

SH 1 OF 2

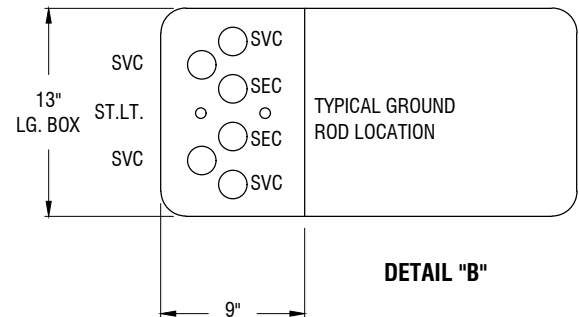
**8663
THRU
8665**

8. CONDUIT SWEEPS SHALL BE 90 DEGREES.
9. GEL PACK CONNECTORS ARE PREFERRED FOR ALL TWO POSITION APPLICATIONS FOR CABLE SIZES #1/0 AND SMALLER.
10. INSTALLATION OF THIS HEAVY DUTY JUNCTION BOX IS LIMITED TO AREAS SUBJECT TO OCCASIONAL LOAD SUCH AS IN SIDEWALKS ADJACENT TO STREETS AND RAISED ISLANDS IN THE CENTER OF STREETS. THIS JUNCTION BOX SHALL NOT BE INSTALLED IN VEHICULAR TRAFFIC AREAS.
11. THE SMALL JUNCTION BOX IS SUITABLE FOR USE WITH THREE (INCLUDES ST LT CONDUIT) POSITION JUNCTION BOX. CONDUIT POSITIONS ENTERING THE JUNCTION BOX SHALL BE LIMITED TO THREE OR LESS. THIS BOX IS RECOMMENDED FOR SECONDARY/SERVICE CABLE #1/0 AND SLAMMER. USE THE LARGER JUNCTION BOX FOR #4/0 AND LARGER CABLE.
12. THE LARGE JUNCTION BOX IS SUITABLE FOR USE WITH THE THREE-FIVE-OR EITHER POSITION JUNCTION BARS. WHEN FIVE (INCLUDES ST LT CONDUIT) OR MORE CONDUIT POSITIONS WILL BE ENTERING THE J-BOX, THE LARGE JUNCTION BOX IS PREFERABLE. THIS BOX IS RECOMMENDED FOR SECONDARY/SERVICE CABLE 500 KCMIL AL AND SMALLER.
13. AN ELECTRONIC MARKER IS PROVIDED WITH THE J-BOX. THE MARKER IS SCREWED INTO THE J-BOX LID.
14. THIS SPEC WILL NOT AUTOMATICALLY SUPPLY GROUT FROM APS. THE LETTER "G" MUST BE PLACED AT THE END OF THE CODE FOR THE GROUT TO BE SUPPLIED BY APS AND TO BE ORDERED ON THE BILL OF MATERIALS.
15. SEE 1226 FOR CABLE MARKER IDENTIFICATION REQUIREMENTS. 



DETAIL "A"

SPACE ALLOTMENT FOR
CONDUITS AND GROUND ROD
NOTE 3



DETAIL "B"

SPACE ALLOTMENT FOR
CONDUITS AND GROUND ROD
NOTE 3

CODE	8663	8665	MATERIAL LIST 	
ITEM	QTY	QTY	DESCRIPTION	CU / APN
1	1	1	ASSY BAR JUNCTION	2729.
2	1	-	ASSY GEL PACK 1/0	2508.
3	1	-	BOX JUNCTION 11"X18"X12"	33100965
4	-	1	BOX JUNCTION 17"X30"X18"	33100976
5	1	1	CONCRETE PRE-MIX 25#	71301280
6	1	-	RING PVC SEC SERVICE ID	72202162
7	1	-	TIE CABLE MAX 2 IN OD	00103864