

TYPICAL LOCATION OF JUNCTION BOX AND FOUNDATION

- ① EQUIPMENT BONDING JUMPER ~ FROM RMC CONDUIT
- ② EQUIPMENT GROUNDING CONDUCTOR
- NOTE: ① AND ② MAY BE SAME WIRE
- ③ EQUIPMENT BONDING JUMPER ~ FROM FOUNDATION
- ④ DOUBLE QUICK DISCONNECTS ~ PULL DOWN TIGHT TO CONDUIT (SHOWN LEFT UP FOR CLARITY)



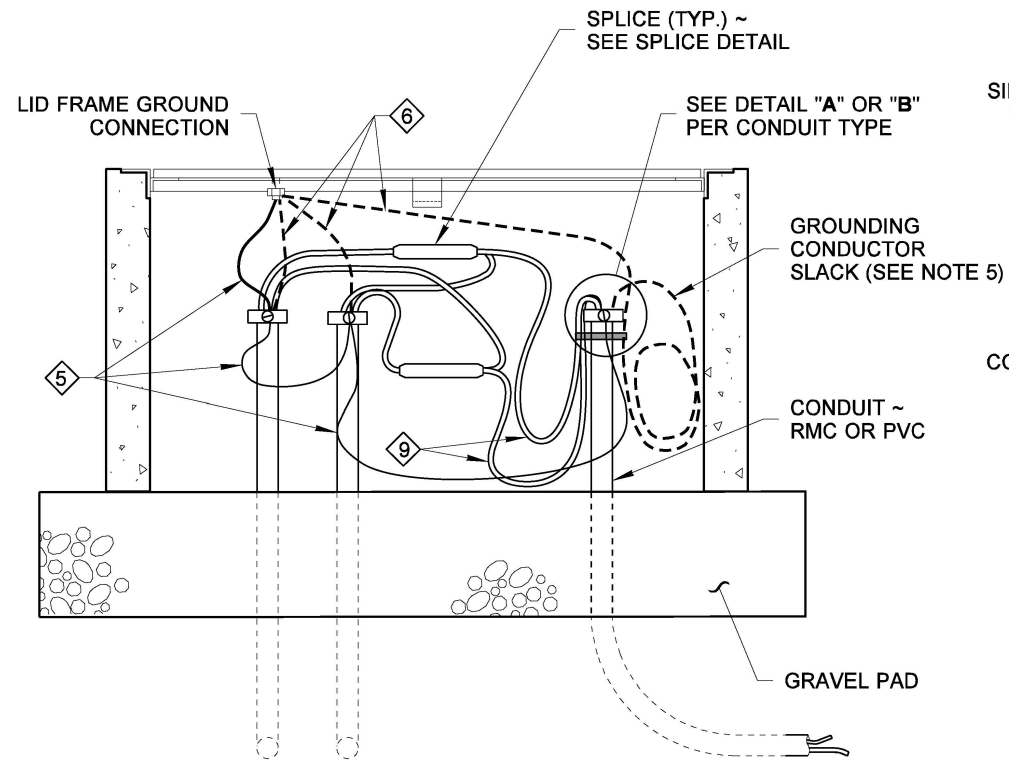
Aug 30, 2022

STEEL LIGHT STANDARD WIRING DETAILS

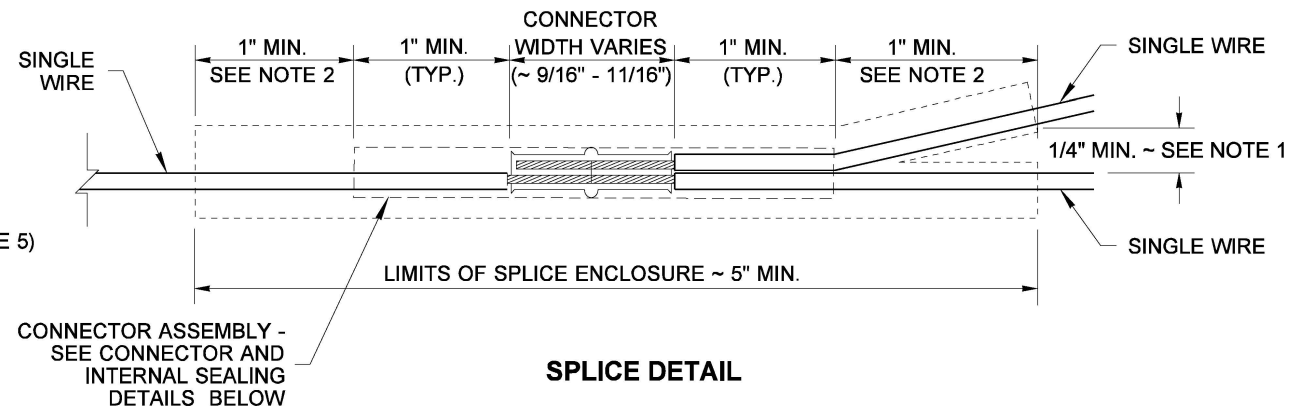
STANDARD PLAN J-28.70-04

SHEET 1 OF 2 SHEETS

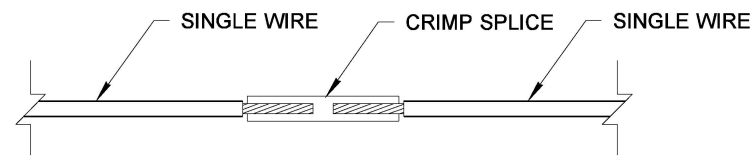
APPROVED FOR PUBLICATION
Mark Gaines
 Mark Gaines (Aug 30, 2022 11:22 PDT)
 STATE DESIGN ENGINEER
 Washington State Department of Transportation
 Aug 30, 2022



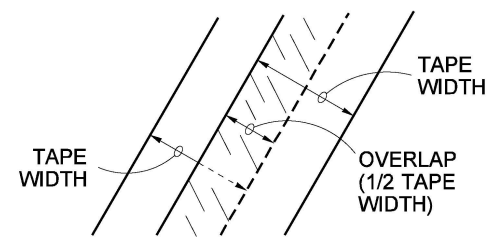
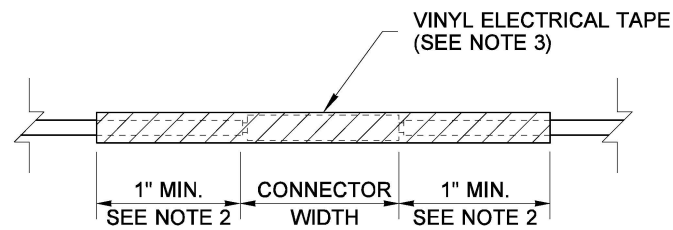
JUNCTION BOX WIRING DETAIL
FOR GROUNDING REQUIREMENTS, SEE **STANDARD PLAN J-60.05**



STEP 1 - CRIMP CONNECTION



STEP 2 - WRAP CONNECTION



TAPE OVERLAP DIAGRAM

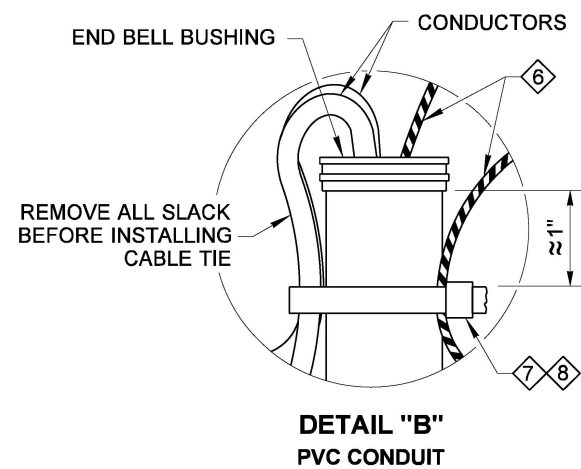
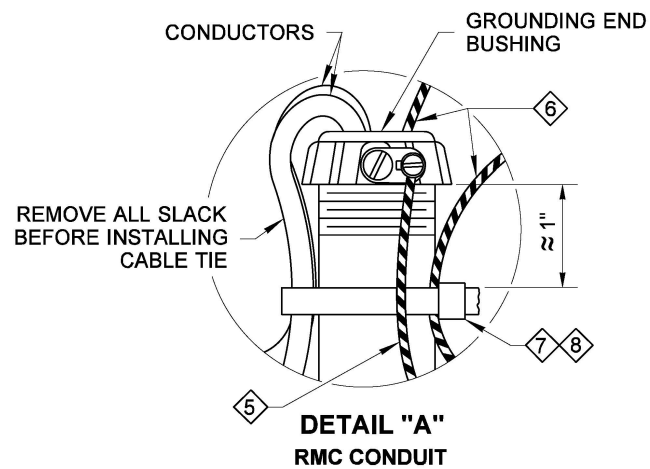
WHEN USING WRAPPED VINYL ELECTRICAL TAPE:

- INSTALL TWO LAYERS OF SPIRAL WRAPPED TAPE.
- EACH SPIRAL LAYER SHALL HAVE AN OVERLAP OF 1/2 OF THE TAPE WIDTH (SEE DIAGRAM ABOVE).

CONNECTOR AND INTERNAL SEALING DETAILS

NOTES

- Each wire shall be physically separated by at least 1/4" (in) so that sealing material can fill in between the wires; where heat shrink tubing is used for the outer splice enclosure, it shall meet one of the following requirements:
 - Have separate ports for each conductor ("WYE" or "X" shaped tubing). ~ or ~
 - Have rubber electrical mastic tape wrapped around each conductor to ensure a weather-proof seal. See Rubber Electrical Mastic Tape Installation Detail, **Standard Plan J-50.05**.
- Where heat shrink tubing is used, it shall extend a minimum of one inch onto the original wire insulation for each wire in the splice. Rigid splice enclosures shall be centered over the crimped connection.
- Electrical tape used in splicing applications shall be 3/4" (in) wide, be UL listed under UL 510, and be CSA Certified under C22.2 NO. 197-M1983.
- Crimp splices shall be installed with an approved crimping tool for the type and size of crimp splice used. Pliers and similar multi-purpose tools may not be used.
- The equipment grounding conductor connected to the light standard shall include 18 inches of slack on the pole side of the cable tie.



- 5 EQUIPMENT BONDING JUMPER ~ FROM RMC CONDUIT
NOTE: 5 AND 6 MAY BE SAME WIRE
- 6 EQUIPMENT GROUNDING CONDUCTOR
- 7 CABLE TIE ~ 120 POUND TENSILE STRENGTH, BLACK

- 8 APPLICATION FOR FIXED BASE SIMILAR, EXCEPT NO CABLE TIE IS REQUIRED AT JUNCTION BOX
- 9 24" (IN) MIN. SLACK REQUIRED TO ALLOW QUICK DISCONNECTS TO BE PULLED OUTSIDE HAND HOLE 6" (IN) MIN.



Aug 30, 2022

STEEL LIGHT STANDARD WIRING DETAILS

STANDARD PLAN J-28.70-04

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION
 Mark Gaines
 Mark Gaines (Aug 30, 2022 11:22 PDT)
 STATE DESIGN ENGINEER
 Aug 30, 2022
 Washington State Department of Transportation