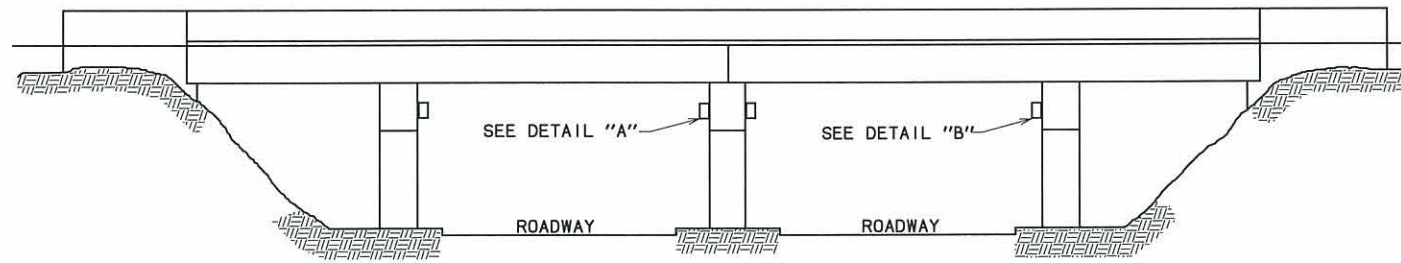


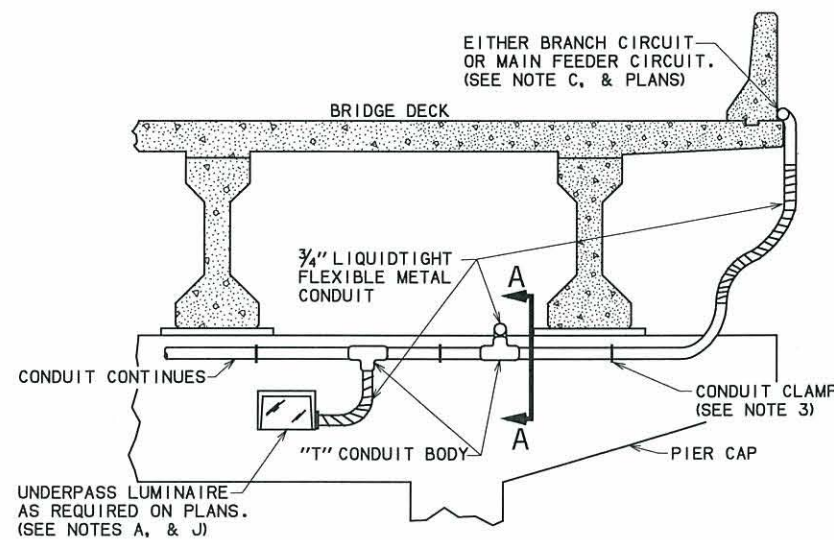
DESCRIPTION	REVISIONS	DATE



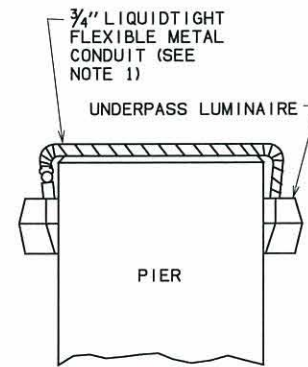
UNDERPASS LUMINAIRE MOUNTED TO PIER

MATERIAL SPECIFICATIONS

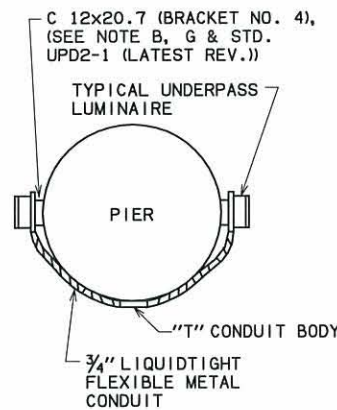
- A. EXPANSION BOLTS - MINIMUM OF 3 REQUIRED, $\frac{3}{8}$ "x $3\frac{3}{4}$ " WITH A MINIMUM PULL-OUT LOAD OF 2200 LBS, SHALL BE USED TO MOUNT THE UNDERPASS LUMINAIRE TO THE PIER.
- B. EXPANSION BOLTS - MINIMUM OF 3 REQUIRED, $\frac{3}{8}$ "x6" WITH A MINIMUM PULL-OUT LOAD OF 2200 LBS, SHALL BE USED TO MOUNT THE UNDERPASS LUMINAIRE AND CHANNEL TO THE PIER COLUMN.
- C. FOR ADDITIONAL INFORMATION ON MATERIAL SPECIFICATIONS SUCH AS CONDUIT, CLAMPS, JCT. BOXES ETC..., SEE STD. CCD1-1-, AND CCD2-1- (LATEST REVISION).
- D. ALL EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL, UNLESS OTHERWISE SPECIFIED.
- E. EXPANSION BOLTS SHALL BE SIMILAR TO EITHER A STAR, RAWL, RED HEAD OR OTHER APPROVED BRAND WITH EQUIVALENT STRENGTH.
- F. ALL STRUCTURAL STEEL SHALL BE A-36 (AASHTO M-183).
- G. ALL STRUCTURAL STEEL SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A-153 (AASHTO M-111).
- H. ALL HARDWARE THAT IS REQUIRED TO FASTEN THE LUMINAIRE TO THE BRACKET AND THE BRACKET TO THE BRIDGE SHALL BE EITHER GALVANIZED OR STAINLESS STEEL.
- I. THE BRANCH CIRCUIT CONDUCTORS INSTALLED FOR UNDERPASS LIGHTING SHALL BE STRANDED OR SOLID NO. 10 AWG, TYPE THW OR THWN, 75 DEG. CELSIUS, 600 VOLT, UNLESS OTHERWISE SPECIFIED. AN ALTERNATE TYPE INSULATION MAY BE USED IF APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- J. THE UNDERPASS LUMINAIRES SHALL BE HIGH PRESSURE SODIUM, CLEAR LAMP 9,500 LUMENS, STYLE B1. SIMILAR TO EITHER AN AMERICAN ELECTRIC MODEL NO. 582-56611 OR A HOLOPHANE MODEL NO. WL2K-100HP-48-GR OR APPROVED EQUAL. THE PRICE BID IS TO INCLUDE COST OF SPECIAL BRACKETS (IF REQUIRED) FOR THE PROPER INSTALLATION OF THE FIXTURES.



DETAIL "A"



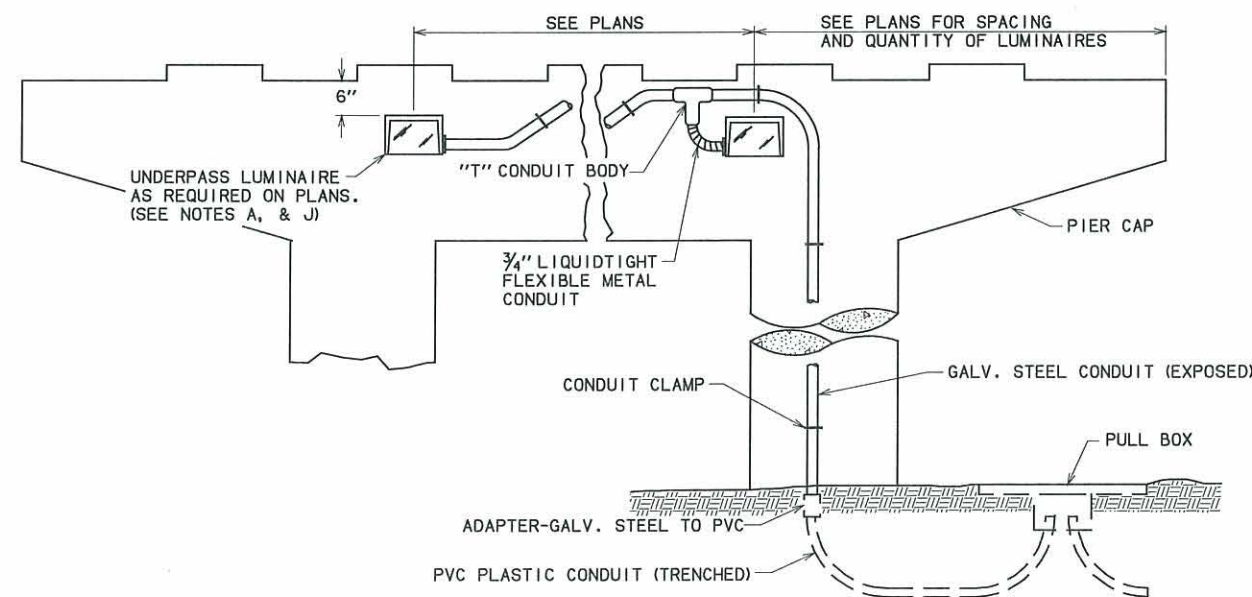
SECTION "A-A"



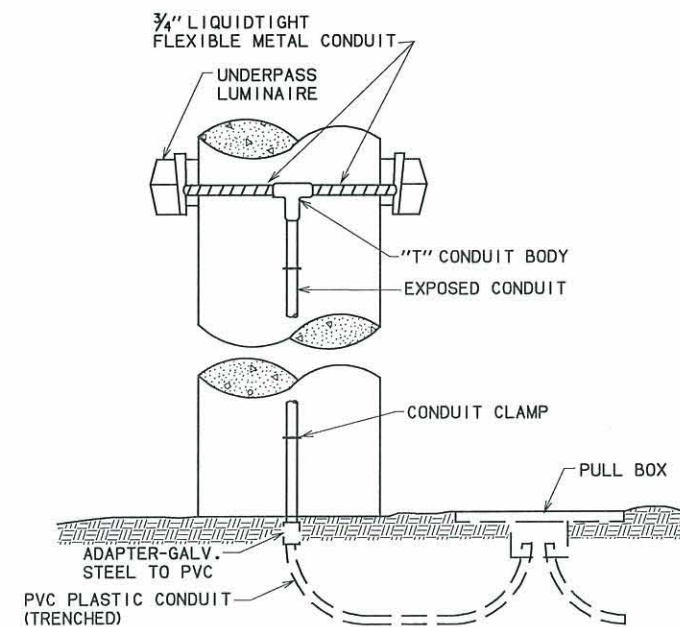
PLAN

GENERAL NOTES

- 1. ALL LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL HAVE A MIN. LENGTH OF 2'-0", AND SHALL BE INSTALLED WHERE THERE WILL BE EXPANSION AND CONTRACTION OF THE STRUCTURE AND WHERE MOVEMENT OF THE STRUCTURE WOULD CAUSE DAMAGE TO THE RIGID GALV. STEEL CONDUIT.
- 2. THE CONTRACTOR SHALL NOT DRILL THROUGH REINFORCING STEEL. IF STEEL IS ENCOUNTERED WHEN DRILLING HOLES IN CONCRETE, THE CONTRACTOR SHALL ADJUST THE LOCATION FOR BOLTS AND FILL ORIGINAL HOLE WITH GROUT.
- 3. THERE SHALL BE A CONDUIT CLAMP APPROX. 1'-0" FROM ANY TYPE OF CONNECTION SUCH AS CONDUIT BODY, JCT. BOX, FLEXIBLE CONDUIT, ETC...
- 4. FOR UNDERPASS LUMINAIRE LOCATIONS AND SPACING, SEE PLANS.
- 5. FOR ADDITIONAL CONDUIT CONSTRUCTION DETAILS, SEE STANDARDS CCD1-1-, AND CCD2-1-(LATEST REVISION).
- 6. FOR ADDITIONAL LUMINAIRE BRACKET DETAILS SEE STANDARD UPD2-1-(LATEST REVISION).
- 7. UNDERPASS LUMINAIRES SHALL BE FUSED WITH A 15 AMP FUSE RATING (KTK) 480 VOLT MAX. ALL COST SHALL BE INCLUDED IN OTHER ITEMS OF WORK.



DETAIL "B"



SIDE
LUMINAIRE MOUNTED TO PIER COLUMN



APPROVED BY TRAFFIC ENGINEER: *Hold Smith* DATE: 8/5/10

TRAFFIC STANDARD

TYPICAL UNDERPASS LUMINAIRE MOUNTING DETAILS