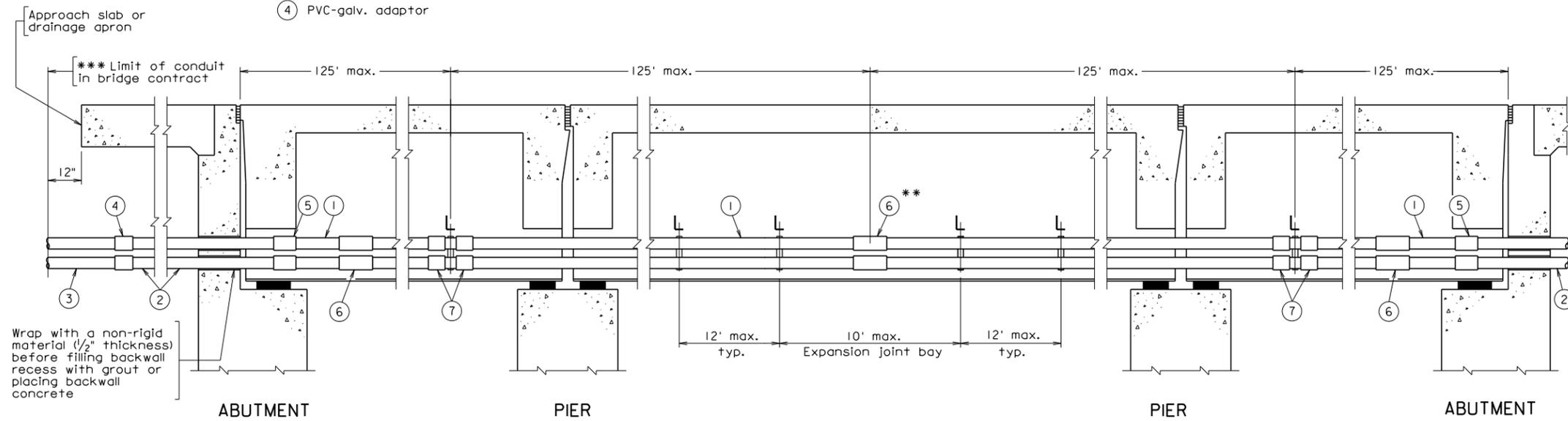


STATE	FEDERAL AID	STATE	SHEET NO.
ROUTE	PROJECT	ROUTE	PROJECT
VA.			

- ① 4" Ø FRE duct
- ② 4" Ø galv. steel duct
- ③ 4" Ø PVC-B duct
- ④ PVC-galv. adaptor
- ⑤ Galv.-FRE adaptor
- ⑥ FRE exp. joint
- ⑦ FRE lock ring

***Limit of telephone conduit in bridge contract when approach slabs or drainage aprons are not used shall be the extension of the conduit a minimum of one foot behind back of backwall



SHORT SPAN BRIDGES
Max. span L = 200'

** Not required on bridges under 250' total length

Notes:

Glass fiber reinforced epoxy (FRE) duct shall comply with ASTM D2310 and ASTM D2996, and shall be RTRP-IIAD-III, except as modified herein. Inside diameter shall be 4.00" minimum, wall thickness shall be 0.060" minimum.

Duct performance shall not be impaired by exposure to ultraviolet radiation. Duct shall have fire resistance which equals or exceeds requirements of U.L. 651 - Section 17.

Joints shall be positive locking, (threaded bell and spigot, adhesive bonded bell and spigot, or driven tapered bell spigot).

Expansion joints shall be sliding sleeve type, with or without o'ringss, with provision for minimum of 6" expansion travel.

Lock rings shall be split FRE duct, minimum of 3" long, .025" minimum thickness, glued in place after installation of conduit system.

Threaded couplings shall be used on steel conduit.

Steel fittings and rods shall be galvanized in accordance with ASTM A153.

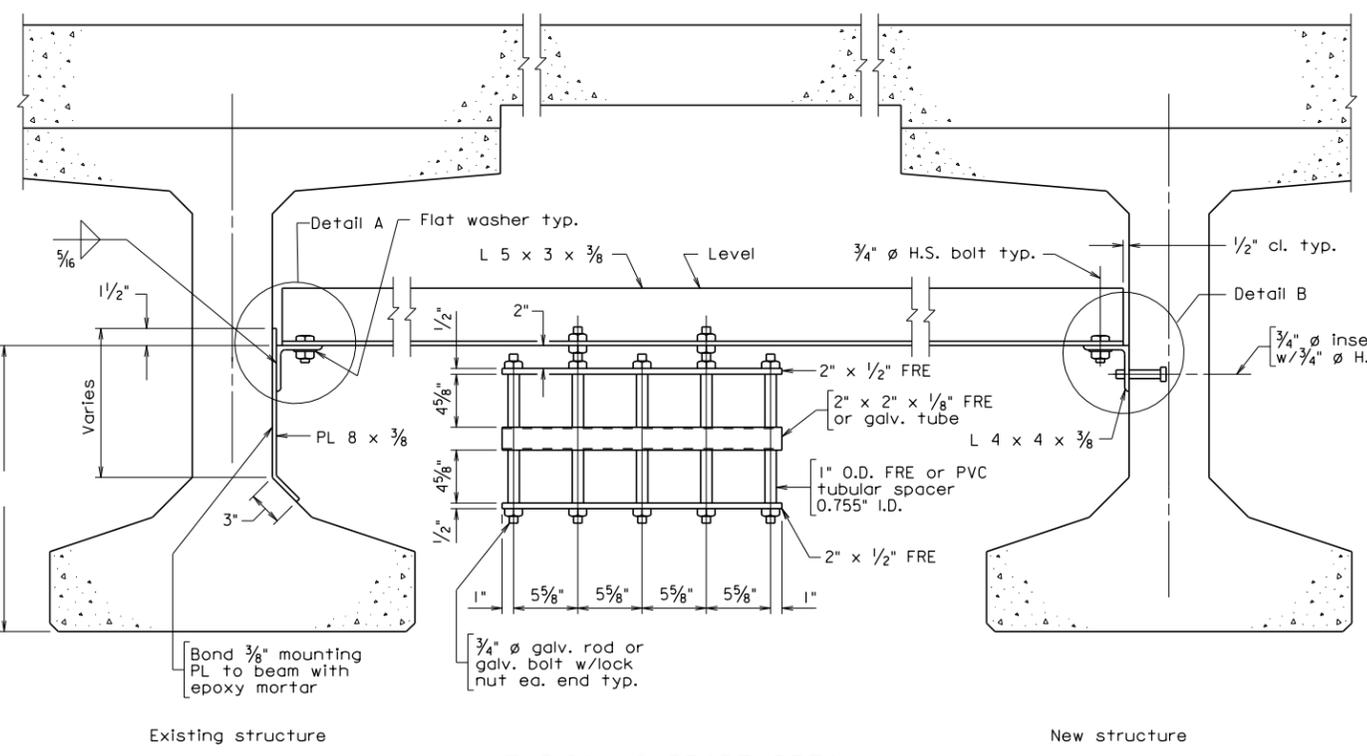
Structural steel for angles shall be ASTM A36. The angles shall be galvanized in accordance with ASTM A123.

H.S. bolts for angles shall be ASTM A325 galvanized.

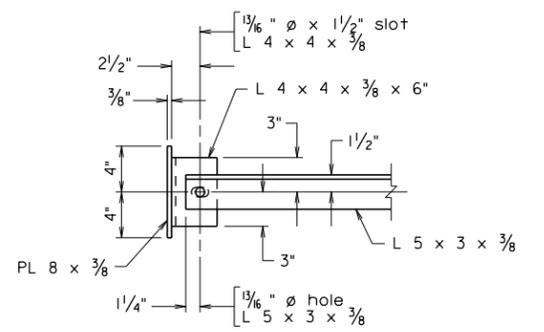
Hanger details shown are designed to support as many as 12 conduits. Dead Loads: Cables: 8.5 lbs./ft. per conduit
Conduit: 0.8 lbs./ft.

Under ground installation of PVC-B duct shall be in accordance with Road and Bridge Standards EC-1 except the minimum spacing between ducts shall be 3/4".

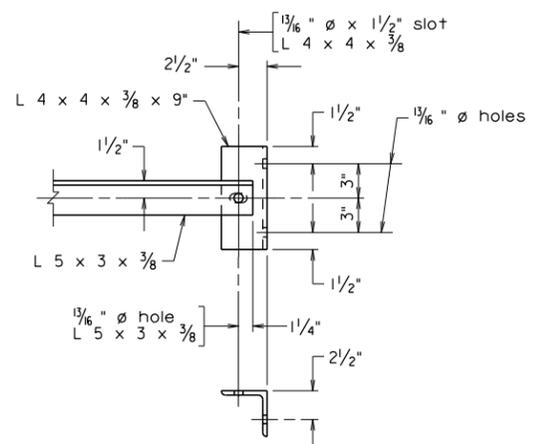
Payment - Telephone Conduit System shall be paid for on a lump sum basis, wherein no measurement shall be made, and shall be paid for at the contract lump sum price. Price shall include furnishing and installing conduit, supporting angles, connections, all related parts/ attachments and miscellaneous hardware; all as detailed on the Telephone Conduit System drawing included herein and within the pay limits shown thereon. Such price shall be full compensation for furnishing all materials, labor, tools, equipment and incidentals necessary to complete the work.



TYPICAL SUPPORT DETAIL



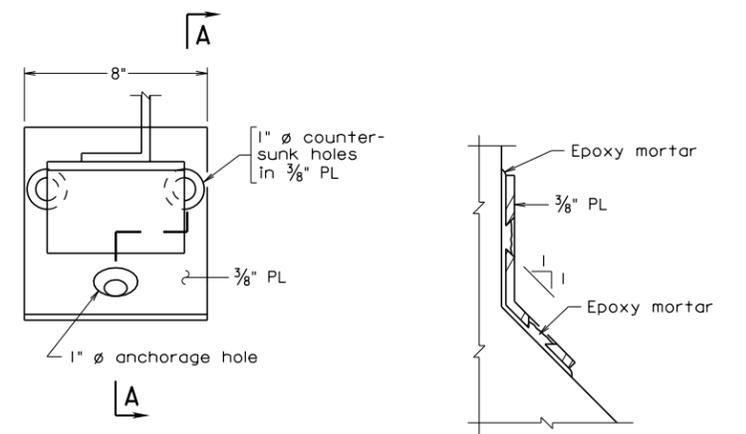
DETAIL A
Existing structure



DETAIL B
New structure

Not to scale

© 2012, Commonwealth of Virginia

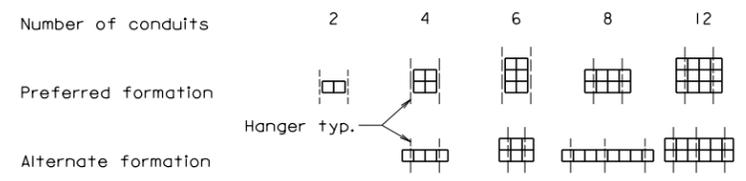


ELEVATION

SECTION A-A

MOUNTING PLATE DETAIL

CONDUIT FORMATIONS



btc7.dgn

08-07-2012

BTC-7

Sealed and Signed by:
Julius F.J. Volgyi Jr.
Lic. No. 010487
On the date of
Aug. 7, 2012

A copy of the original sealed and signed standard drawing is on file in the Central Office.

VDOT S&B DIVISION
RICHMOND, VA
STRUCTURAL ENGINEER

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION STRUCTURE AND BRIDGE DIVISION					
TELEPHONE CONDUIT SYSTEM					
No.	Description	Date	Designed: S&B, DIV	Date	Plan No.
			Drawn: S&B, DIV		BTC-7
			Checked: S&B, DIV		
Revisions					

TELEPHONE CONDUIT SYSTEM
FRE CONDUIT
PRESTRESSED CONCRETE BEAM SPANS

NOTES TO DESIGNER:

Standard is for use with: FRE conduit
Prestressed concrete Bulb-T beam spans

Show dimension from bottom of beam to bottom of angle support at the beam/girder the dimension is set on the transverse section sheet. When setting the dimension, allow for a minimum of 1" (2" to 3" preferred) clearance to diaphragms, cross frames, etc. Include insulation requirements when setting clearances.

Utilities shall be placed in the exterior bays of the bridge if possible.

ADD THE FOLLOWING NOTES, DIMENSIONS, DETAILS, ETC. TO STANDARD:

TYPICAL SUPPORT DETAIL:

Enter dimension from bottom of beam to L 5 x 3 x $\frac{3}{8}$ support. This must agree with dimension set on transverse section sheet.