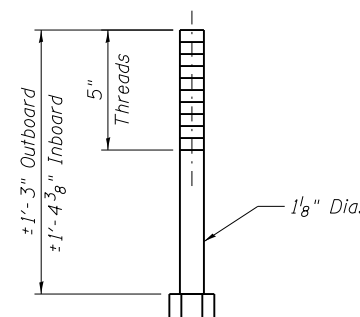


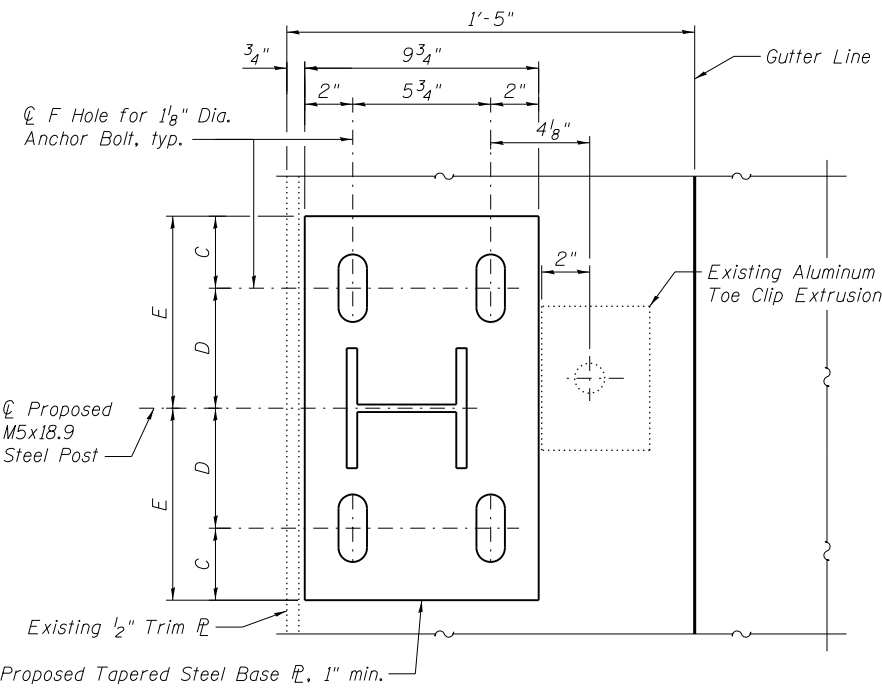
TYPICAL SECTION THRU PARAPET AT CONCRETE DECK SPANS 9, 10 AND 11

BILL OF MATERIAL

Item	Unit	Total
Steel Post, Attached to Structures	Each	504
Remove and Reinstall Existing Aluminum Parapet	Foot	1180



TYPICAL PROPOSED ANCHOR BOLT DETAIL



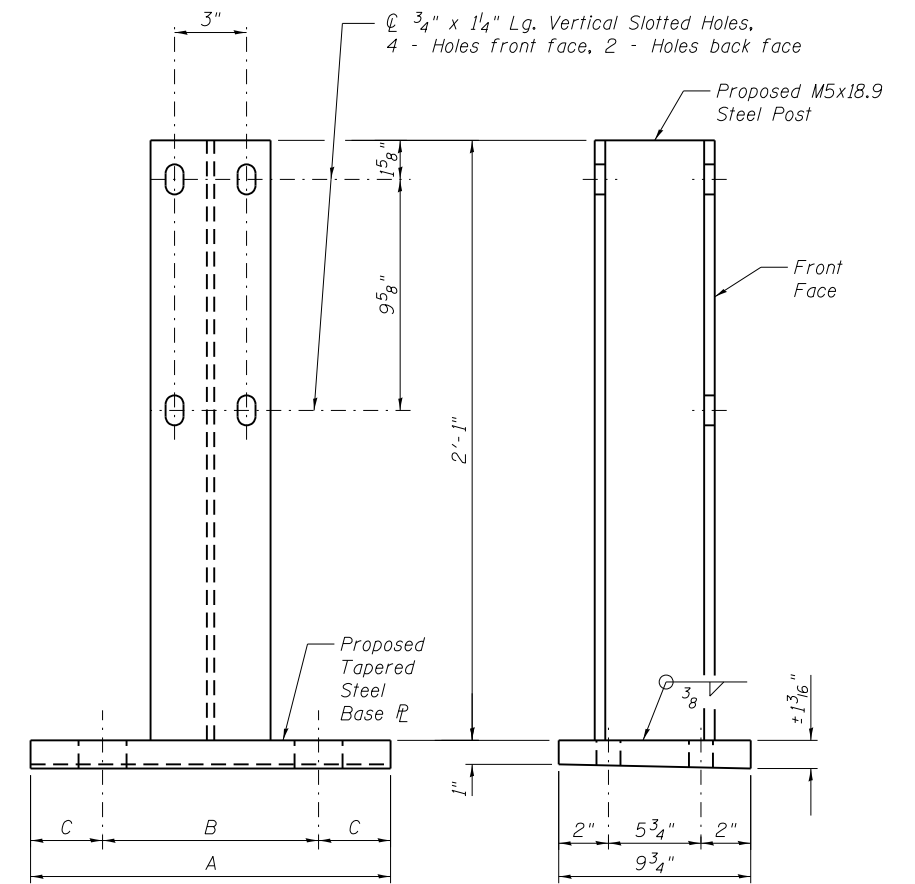
PARAPET ANCHORAGE PLAN

LOCATION	DIMENSIONS						
	A	B	C	D	E	F (Base PL)	F (Anchor PL)
L6 and L6'	1'-4"	1'-0"	2"	6"	8"	1 3/16" Dia.	1 7/16" Dia.
Otherwise	1'-8"	1'-2"	3"	7"	10"	1 3/16" x 2 13/16" Slotted	1 7/16" Dia.

Notes:
 Anchorage plan at L6 and L6' differs from typical due to anchorage proximity to floorbeam.
 Anchor plate is not tapered.

Parapet Post Replacement Procedure at Concrete Deck

- Remove fasteners from existing aluminum parapet extrusion and slide extrusion either left or right to facilitate existing post removal.
- Cut existing 1" anchor bolts flush with the existing concrete surface, grind smooth, and seal with epoxy. Cost is included with Remove and Reinstall Existing Aluminum Parapet.
- Layout posts with the following constraints:
 - maximum post spacing = 6'-0"
 - four posts spaced no more than 2'-11" from centerline shall be placed at each end panel posts shall be placed so as to not interfere with floorbeams
 - posts shall be placed with the existing aluminum extrusion attachments in mind and so that the need for additional holes being drilled in the aluminum extrusion is kept to a minimum.
- Install new parapet post with new anchor bolts. Drill new holes in aluminum extrusion using new post as a template when required.
- Re-install existing aluminum parapet extrusion and fasten to new post with new fasteners.



PROPOSED STEEL POST

Notes:
 The contractor shall exercise extreme care during removal of existing parapet.
 See existing parapet erection plans for additional details.
 Field drill additional holes in the aluminum parapet extrusion as required. An estimated 848 additional holes are required.
 Abandoned holes in aluminum extrusion shall be filled with a 5/8" dia. Stainless Steel bolt. An estimated 384 bolts are required.
 All steel shapes and plates shall conform to the requirements of AASHTO M 270 Gr. 36.
 Post and parapet shall be in accordance with Section 509 of the Standard Specifications, except as noted and shall be paid for at the contract unit price Each for Steel Post, Attached to Structures.
 All stainless steel hardware for railings shall conform to Section 1006.31 of the Standard Specifications.
 All post and anchor devices shall be galvanized after shop fabrication in accordance with AASHTO M 111.
 Anchor bolt material shall conform to the requirements of ASTM F 1554 Gr. 36 and Section 1006.09 of the Standard Specifications.
 Structural plate washers or a continuous bar with standard holes, not less than 0.3125 in. in thickness shall be required to completely cover long slotted holes in the anchorage. Hardened washers shall be placed over the outer surface of the plate washer or bar.
 Nut and washer material for anchor bolts shall conform to Section 1006.09 of the Standard Specifications, except as noted.
 Anchor bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232, Class C.
 Existing conduit shall be temporarily supported while posts are being replaced and reattached when posts are in place.
 The cost of posts, base plates, anchor plates, bolts, nuts, washers, fabric pads, and anchor bolts along with complete installation shall be included in the cost of Steel Post, Attached to Structure.
 The cost of drilling new holes in the aluminum parapet extrusion and the cost to temporarily support and reattach existing conduit shall be included in the cost of Remove and Reinstall Existing Aluminum Parapet.



USER NAME =	DESIGNED - ZJB	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 05/02/2014	CHECKED - ZJB	REVISED

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MAIN SPANS ALUMINUM PARAPET DETAILS - CONCRETE DECK 1
 S.N. 082-6001 MLK BRIDGE OVER MISSISSIPPI RIVER**

SHEET NO. S31 OF S138 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
799	1BR, DRS-2	ST. CLAIR	156	49
CONTRACT NO. 76B03				
ILLINOIS FED. AID PROJECT				