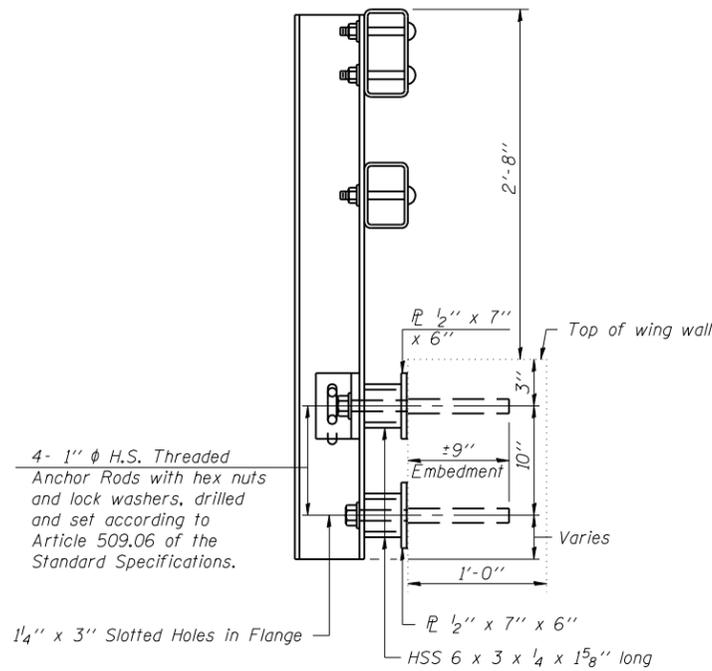
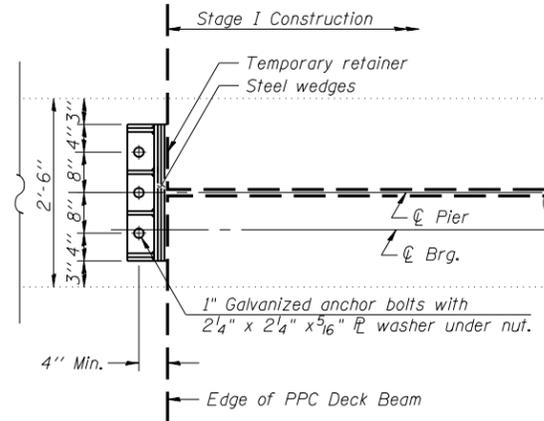


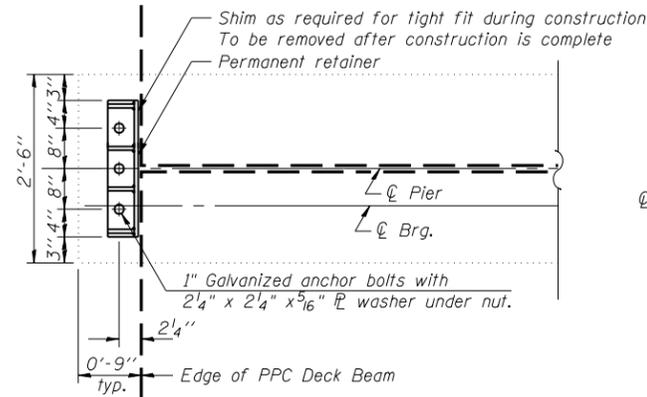
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.P. 753	142 BR-4	SANGAMON	24	21
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT



SECTION THRU WING WALL

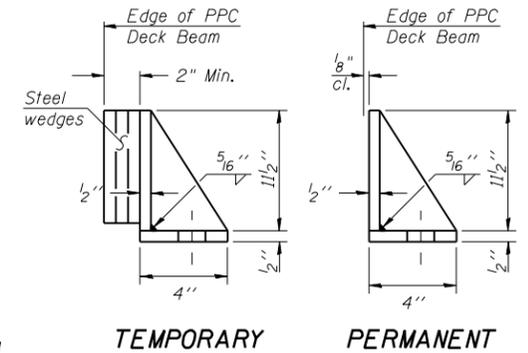
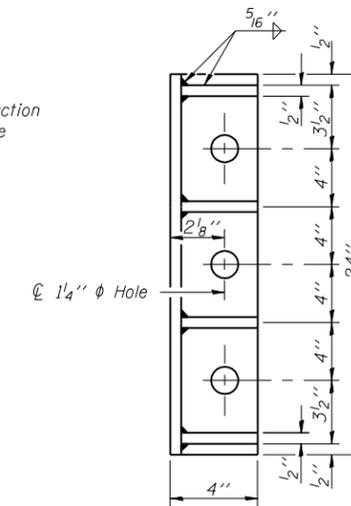


**TEMPORARY RETAINER
PLAN VIEW
(at stage line)**



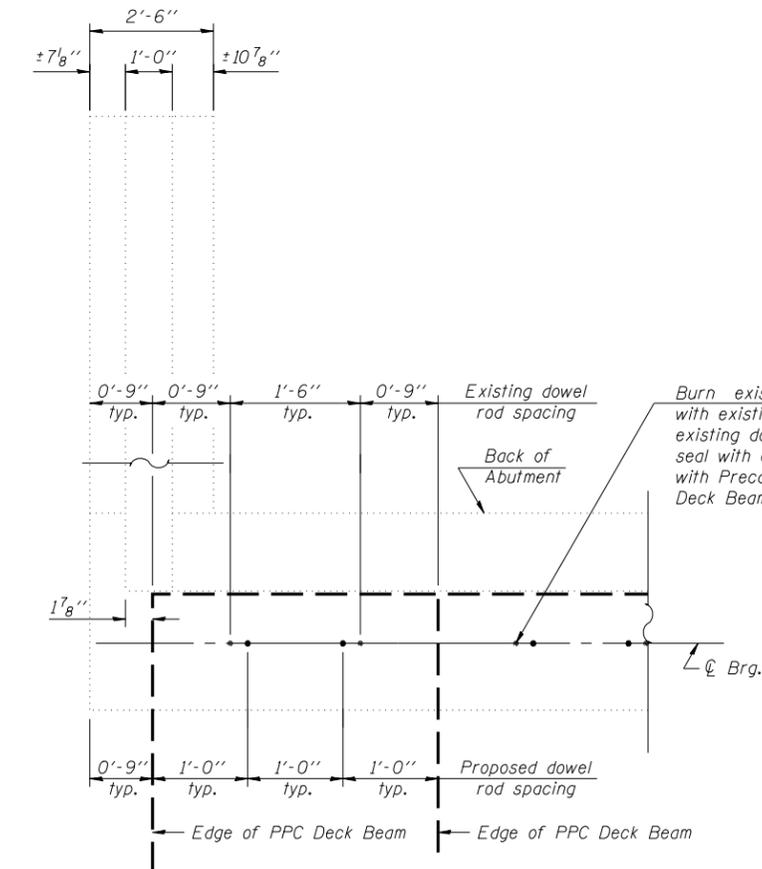
**PERMANENT RETAINER
PLAN VIEW
(at edge of beams)**

Note:
After the Concrete Wearing Surface has been poured and cured the temporary retainer angle and anchor bolts shall be removed. Anchor bolts shall be cut off flush, ground smooth, and sealed with epoxy.

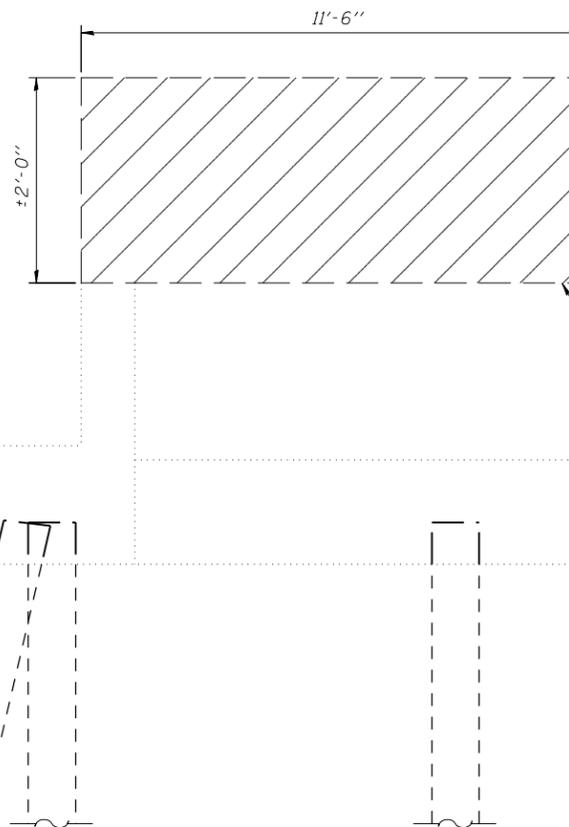


RETAINERS

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



**PLAN VIEW
(at abut.)**



WING WALL ELEVATION

Notes:
Hatched areas indicate Concrete Removal. Existing reinforcement shall be cut off flush. Grind existing reinforcement smooth and seal with epoxy. Cost included with Concrete Removal.
Cost of temporary retainers, permanent retainers and accessories are included with Precast Prestressed Concrete Deck Beams (33").

ANCHOR BOLTS FOR RETAINERS

The anchor bolts, furnished and installed including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Precast Concrete Deck Beams (33" Depth).
Anchor bolts shall be ASTM F1554 all-thread (or and Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Location	Type	Size	Embedded Depth	Retainer Type
Pier	A307	1" ϕ	12"	Perm. Retainer
Pier	A307	1" ϕ	12"	Temp. Retainer

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	3.4

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CHARLESTON, IL 61920
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ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184-003685

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REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		SUBSTRUCTURE DETAILS
		IL RTE. 104 OVER HORSE CREEK FAP 753 - SECTION 142BR-4 SANGAMON COUNTY STA 989+90.00 SN 084-0176
		DATE: 08-01-07
		DRAWN BY: ADG CHECKED BY: OF