

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET	TOTAL SHEETS
5-24-17				6	ARK.			
JOB NO.							31' PRECAST SPAN - 55082	

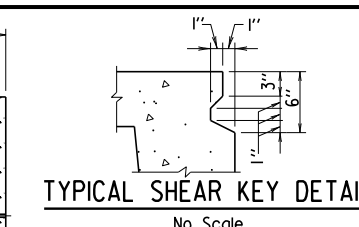
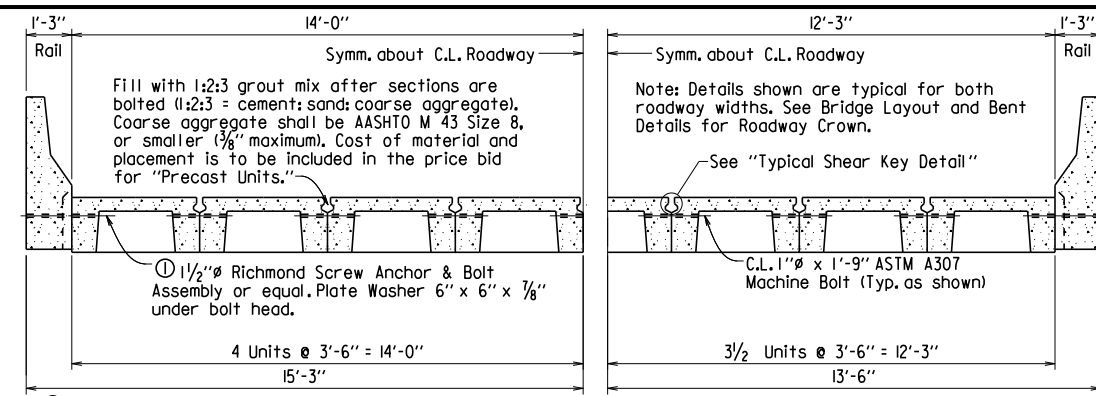
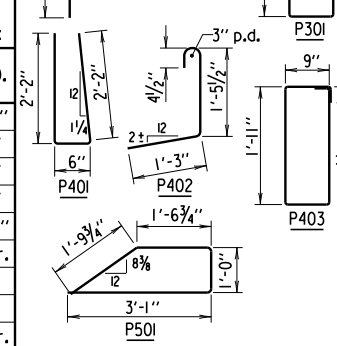
BAR LIST FOR PRECAST BRIDGE COMPONENTS PER PRECAST UNIT

MARK	NUMBER REQUIRED		LENGTH	P.D.	BENDING DIAGRAMS (Dimensions are out to out of bars)
	CURB UNIT	INT. UNIT			
S301	130	130	3'-5 1/2"	1 1/2"	
S302	4	4	2'-9"	1 1/2"	
S401	10	8	3'-2"	Str.	
S501	26	-	4'-8"	2 1/2"	
S1001	8	8	30'-8"	Str.	

③ Plus 7 additional for each Drain Slot eliminated

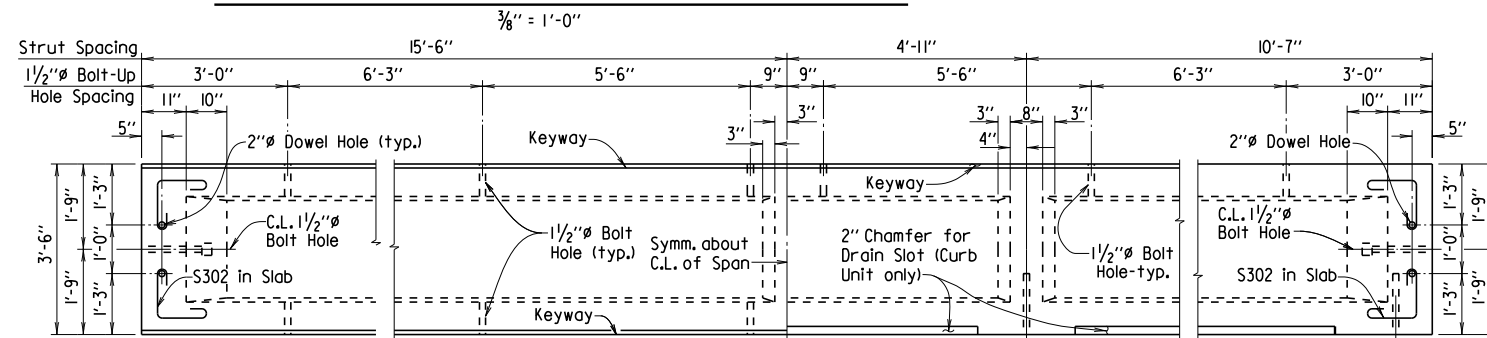
PER PRECAST PARAPET RAIL

MARK	NUMBER REQUIRED		LENGTH	P.D.
	END SPAN	INT. SPAN		
P301	8	8	5'-4"	1 1/2"
P401	54	54	4'-8"	2"
P402	36	36	3'-1 1/2"	2"
P403	36	36	5'-8"	2"
P501	18	18	7'-2"	2 1/2"
P502	9	9	30'-8"	Str.
PI001	2	2	30'-8"	Str.

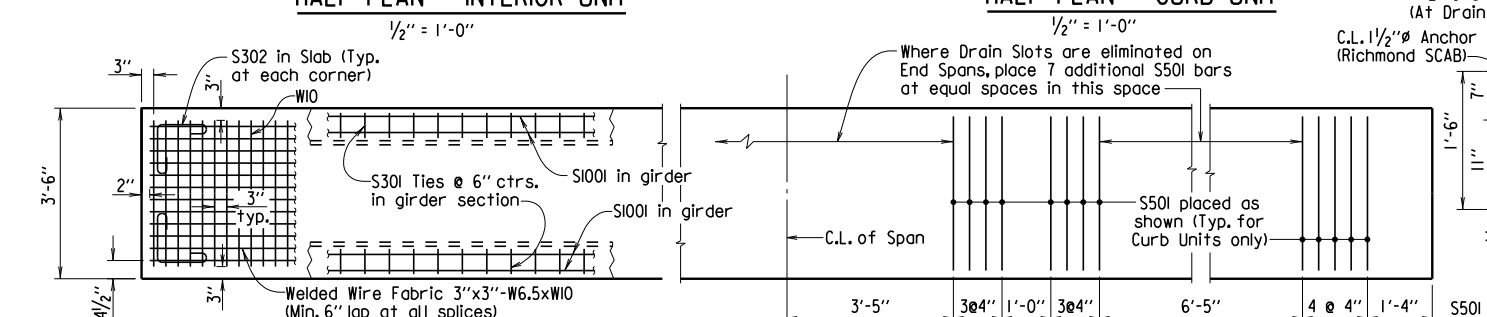


Note: All corners exposed after erection shall have a 1/2" minimum chamfer. All other corners shall have sufficient chamfer or rounding to prevent breakage during form removal, handling and erection.

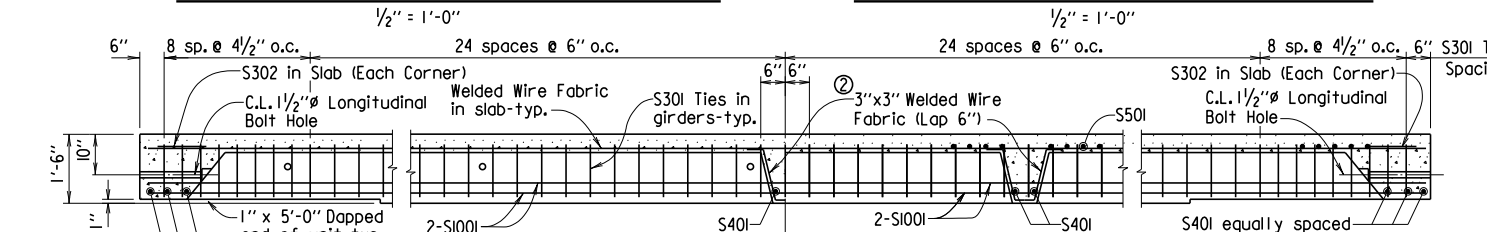
① Designated "Richmond SCAB" on the Plans.
HALF-SECTION OF 28'-0" CLEAR ROADWAY
HALF-SECTION OF 24'-6" CLEAR ROADWAY
TYPICAL SECTION OF PRECAST RDWY. (SHOWING ASSEMBLY)



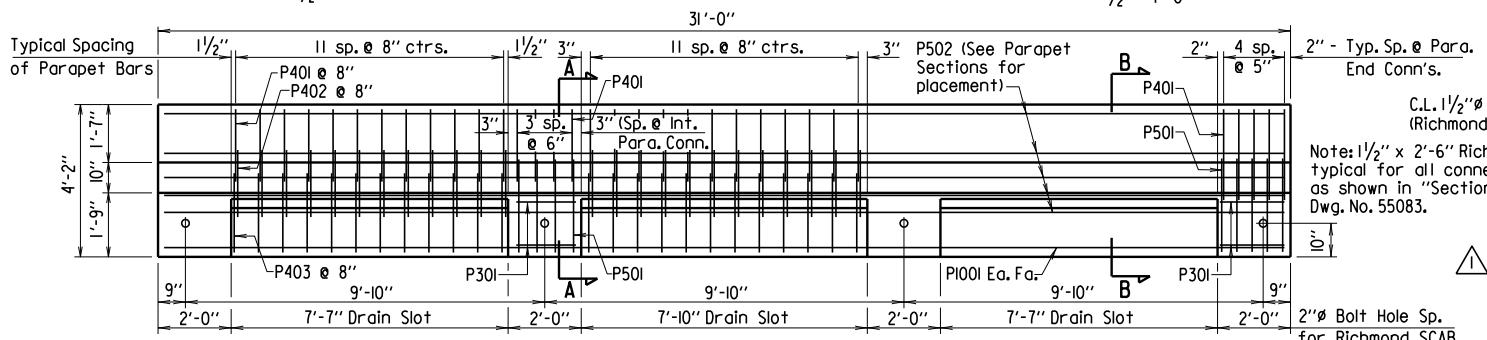
Note: Use 1" x 3" ASTM A307 Machine Bolts with self-locking or double nuts longitudinally between all spans at interior bents. Bolts at expansion joint bents shall be loosely installed to allow approx. 1/2" of thermal movement. All other bolts shall be installed to snug tight.



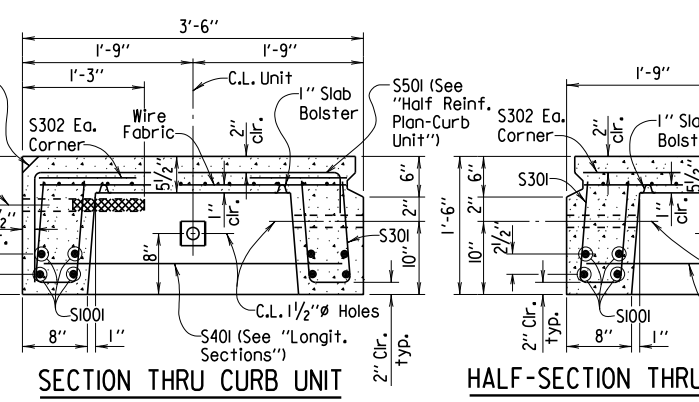
HALF REINFORCING PLAN - CURB & INT. UNITS
HALF REINFORCING PLAN - CURB UNIT ONLY



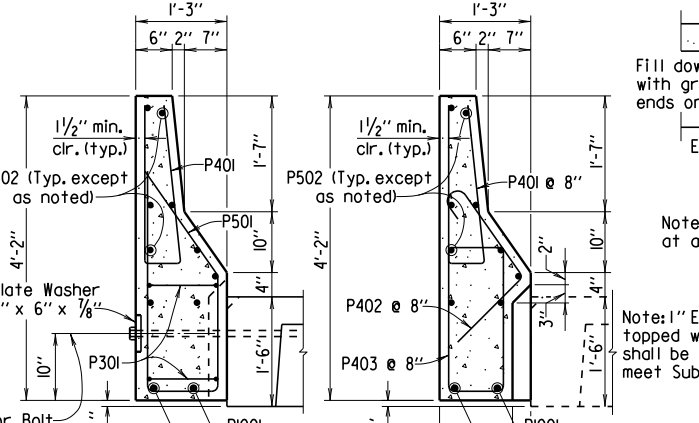
HALF LONGIT. SECTION - INTERIOR UNIT
HALF LONGIT. SECTION - CURB UNIT



FRONT ELEVATION - PRECAST PARAPET RAIL FOR INT. SPAN



SECTION THRU CURB UNIT
HALF-SECTION THRU INT. UNIT



SECTION A-A
SECTION B-B

GENERAL NOTES

Design Specifications: AASHTO LRFD Bridge Design Specifications, Seventh Edition (2014).

Unless otherwise noted, Section and Subsection refer to the Standard Construction Specifications.

Live Loading: HL-93

Materials: 28 Day compressive strength of Concrete = 4,000 psi
Yield strength of Grade 60 Steel = 60,000 psi
Yield strength of Wire Fabric = 65,000 psi

All Reinforcing steel shall be Grade 60, AASHTO M 31 or M 322, Type A with mill test reports. Wire fabric shall be AASHTO M 55 or M 221. Reinforcing steel and wire fabric shall be accurately located in the forms and securely held in place by steel wire supports.

Concrete for precast units shall be Class S(AE) except that the coarse aggregate size shall meet AASHTO M 43, Size 67 (3/4" Max.).

The deck shall be given a fine finish as specified for Class 5 Roadway Surface Finish in Subsection 802.19.

Standard washers shall be provided under head and nut of all bolts in connection with concrete. Bolts shall be A307. All bolts, washers and nuts shall be galvanized to meet AASHTO M 232, Class C or ASTM B695, Class 50.

Screw Anchor and Bolt Assembly (SCAB) shall be 1/2" Richmond Screw Anchor or equal, and have a minimum ultimate strength of 65,000 psi in tension. Assembly shall be galvanized to meet AASHTO M 232, Class C or ASTM B695, Class 50. Plate Washers for SCAB shall be AASHTO M 270, Grade 36 and shall be galvanized to meet AASHTO M 111.

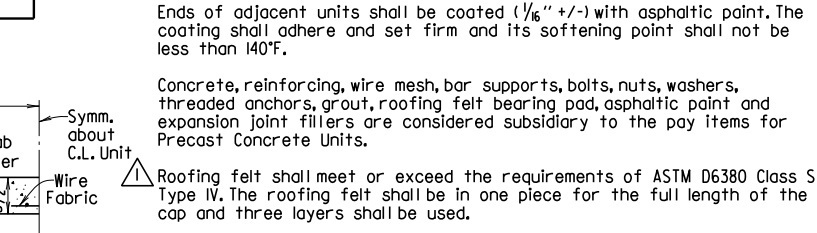
Camber required for dead load deflection is 3/8". Deviation of more than 1/4" in dimension of grade or line will be cause for rejection.

Ends of adjacent units shall be coated (1/16" +/-) with asphaltic paint. The coating shall adhere and set firm and its softening point shall not be less than 140°F.

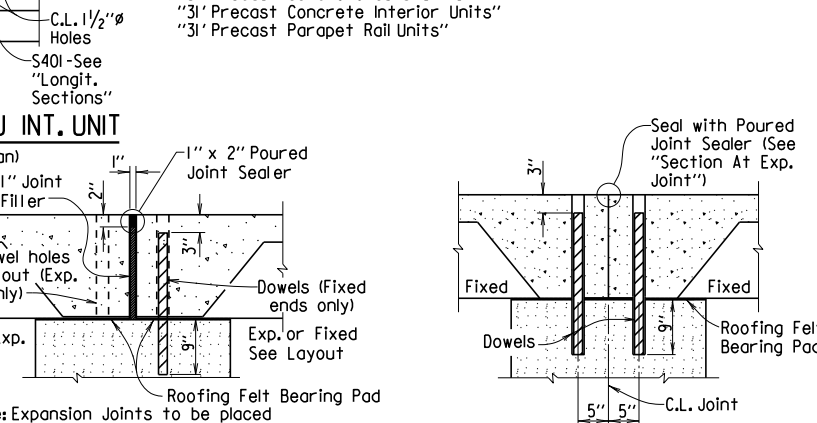
Concrete, reinforcing, wire mesh, bar supports, bolts, nuts, washers, threaded anchors, grout, roofing felt bearing pad, asphaltic paint and expansion joint fillers are considered subsidiary to the pay items for Precast Concrete Units.

Roofing felt shall meet or exceed the requirements of ASTM D6380 Class S Type IV. The roofing felt shall be in one piece for the full length of the cap and three layers shall be used.

Pay Items shall be as follows:
"31' Precast Concrete Curb Units"
"31' Precast Concrete Interior Units"
"31' Precast Parapet Rail Units"



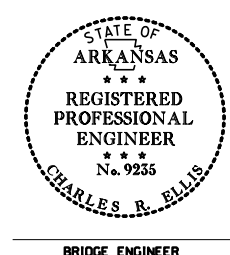
SECTION AT EXP. JOINT



SECTION AT FIXED BENT

Note: Expansion Joints to be placed at approximately 155' max. spacings.

Note: After each unit is in its final position, dowels shall be grouted in place using a OPL approved non-shrink grout that completely fills the holes. See bent drawings for more information.



STANDARD DETAILS FOR 31'-0" PRECAST CONCRETE SPANS 28'-0" AND 24'-6" CLEAR ROADWAYS ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: KDH DATE: 1-20-15 FILENAME: b55082.dgn
CHECKED BY: KWH DATE: 2-4-16 SCALE: AS NOTED
DESIGNED BY: STD. DATE: DRAWING NO. 55082

This document was originally issued and sealed by Charles R. Ellis, PE No. 9235, on February 25, 2016. This copy is not a signed and sealed document.

Revised Roofing Felt specification and note 5-24-17 PGT Checked By: KWH

PRINT DATE: 11/7/2019