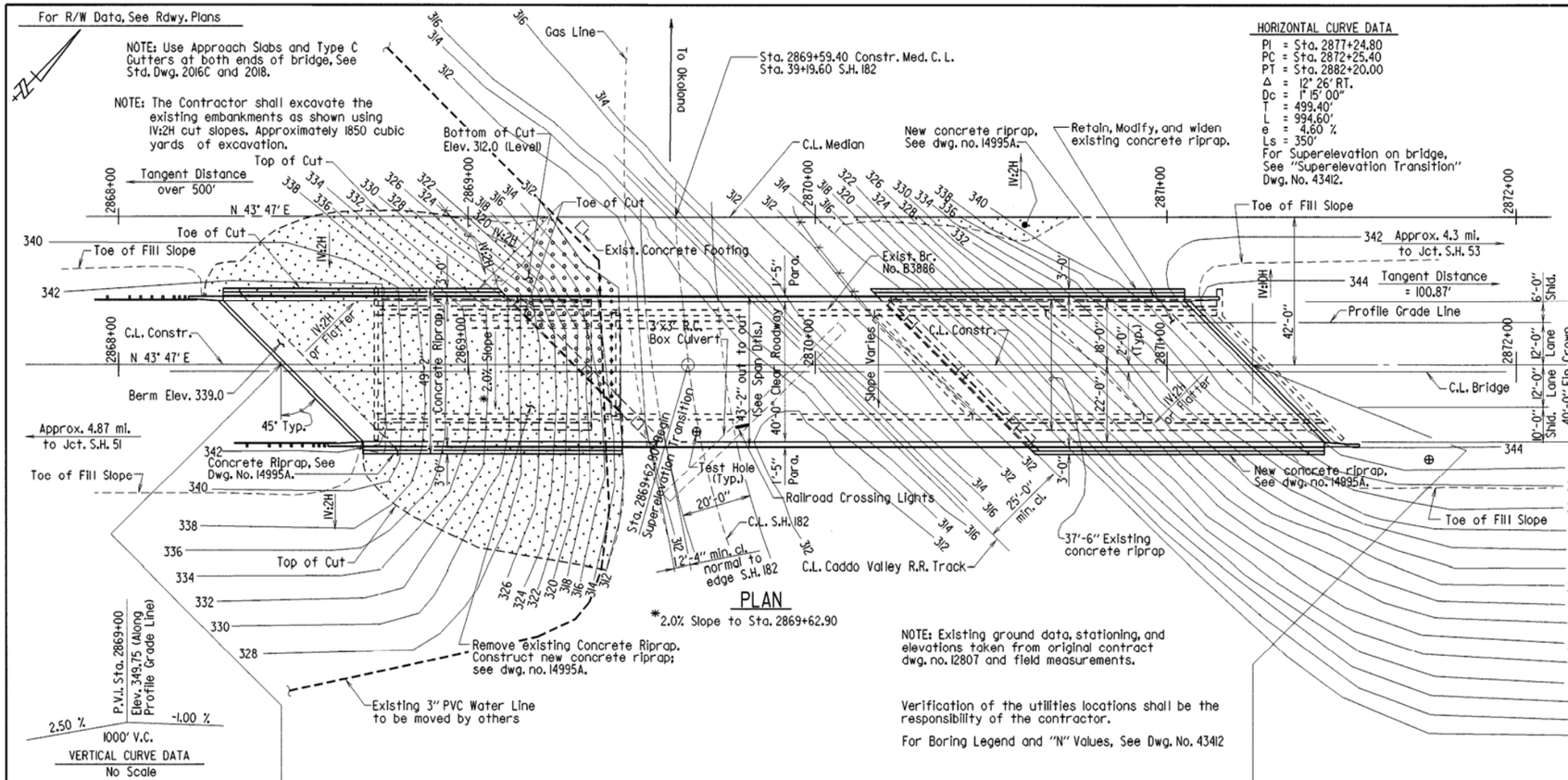
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				6	ARK.			
				JOB NO.		B70100	75	159
				① B6875		-LAYOUT-		43411

For R/W Data, See Rdwy. Plans

NOTE: Use Approach Slabs and Type C Gutters at both ends of bridge, See Std. Dwg. 2016C and 2018.

NOTE: The Contractor shall excavate the existing embankments as shown using IV:2H cut slopes. Approximately 1850 cubic yards of excavation.

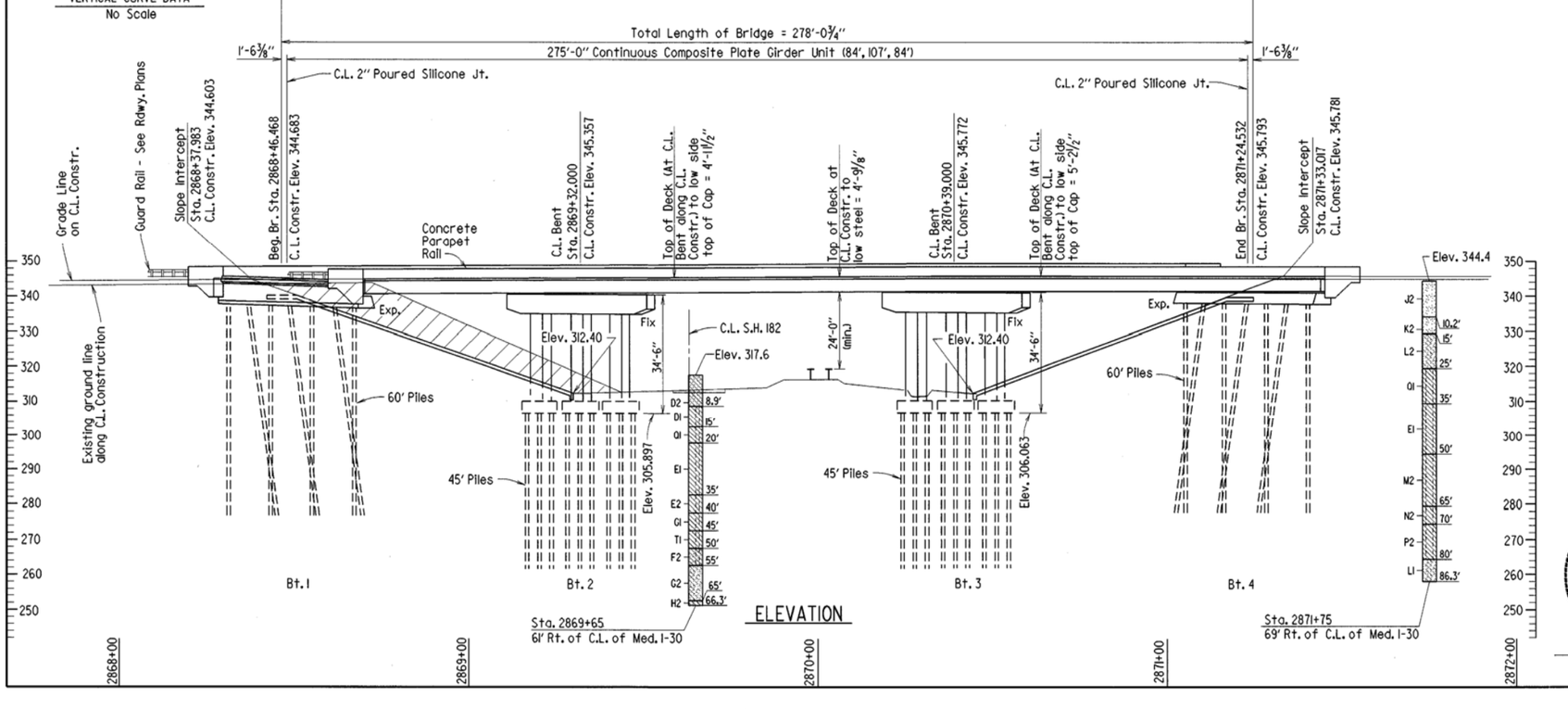


HORIZONTAL CURVE DATA
PI = Sta. 2877+24.80
PC = Sta. 2872+25.40
PT = Sta. 2882+20.00
Δ = 12° 26' RT.
Dc = 1° 15' 00"
T = 499.40'
L = 994.60'
e = 4.60 %
Ls = 350'
For Superelevation on bridge, See "Superelevation Transition" Dwg. No. 43412.

NOTE: Existing ground data, stationing, and elevations taken from original contract dwg. no. 12807 and field measurements.

Verification of the utilities locations shall be the responsibility of the contractor.

For Boring Legend and "N" Values, See Dwg. No. 43412



GENERAL NOTES

BENCH MARK: C.L. Existing bridge Sta. 2871+29.81, Elev. 344.80.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions. Unless otherwise noted on the plans, Section and subsection refer to the Standard Construction Specifications.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges (1996 edition) with current interim specifications.

LIVE LOADING: HS20+MILITARY METHOD OF DESIGN: Load Factor

SEISMIC PERFORMANCE CATEGORY: A

MATERIALS AND STRENGTHS:

Substructure Concrete (Class S)	f'c = 3,500 psi
Superstructure Concrete (Class S(AE))	f'c = 4,000 psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr. 60)	fy = 60,000 psi
Structural Steel (AASHTO M270, Gr. 36)	Fy = 36,000 psi
Structural Steel (AASHTO M270, Gr. 50W)	Fy = 50,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

FOOTINGS: Foundations for footings shall be prepared in accordance with Section 801. Sheet piling or shoring will be required to accomplish the excavation near the railroad tracks, near Highway 182, and within the limits of the existing concrete riprap. Railroad live load effects shall be taken into account in the design of sheeting or shoring near tracks.

CONCRETE PILING: Piling for bents 1 thru 4 shall be 18" square precast concrete and shall be driven to a minimum safe bearing capacity of 60 tons per pile. All piling shall be driven with an approved air, steam or diesel hammer. Piling in end bents shall be driven after embankment to bottom of cap is in place and shall be driven to a minimum penetration of 20' below existing ground. Piles in intermediate bents shall be driven to a minimum penetration of 10' feet below bottom of footings. Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Drive one 65' test pile in Bent 1 and one 50' test pile in Bent 3.

PROTECTIVE SURFACE TREATMENT: Class 1 Protective Surface Treatment shall be applied to the roadway surface and to the face and top of the concrete parapet rail.

BRIDGE DECK: The concrete bridge deck shall be given a tine finish as specified for final finishing in subsection 802.19 for Class S Tined Bridge Roadway Surface Finish.

DETAIL DRAWINGS:	DRAWING NO.
End Bents	43418-43421
Intermediate Bents	43427-43430
275'-0" Cont. Comp. Plate Girder Unit	43438-43444
Concrete Piling	2383
Type C Approach Gutters	2016C
Approach Slab	2018
Concrete Riprap	14995A

EXISTING BRIDGE: The existing bridge no. B3886 (log mile 58.53) is 28' wide and 252' long and consists of steel multi-beam spans supported by concrete bents and concrete pile bents. Half-size drawings of the existing bridge may be obtained from Programs and Contracts Division, drawing nos. 12806, 12807, 12810-12814, 14990A, 15034, 15035, 15035A.

REMOVAL AND SALVAGE: The existing bridge No. B3886 shall be removed according to Section 205, SP Job B70100 "Conditions for Removal or Construction on Existing Bridge and Culvert Structures", and SP Job B70100 "Special Safety Requirements for Bridges". All material from the existing bridge shall become the property of the contractor.

REMOVAL OF EXISTING FOOTINGS: Footings that interfere with Bents 2 and 3 shall be removed as required for construction of new bents. Removal of Footings shall be paid for under the item "Removal of Existing Bridge Structure".

CONCRETE RIPRAP: The existing riprap at Bent 4 shall be retained, modified to fit the new structure, and widened to the limits shown. Cut back existing riprap on each longitudinal edge, and as required for new bent construction or existing bent removal, leaving 12" minmum of wire mesh exposed to lap with new wire mesh. Construct new riprap as shown on drawing 14995A. Payment for modification will be made under the item "Modification of Existing Bridge Structure". Payment for new riprap at Bent 4 will be based on the volume of riprap constructed outside of the limits shown for the existing riprap. Payment for replacement of existing riprap at bents will be subsidiary to the item "Concrete Riprap". Payment for new riprap will be made under Section 816. The existing concrete riprap at Bent 1 shall be removed completely. Removal of riprap shall be paid for under the item "Removal of Existing Bridge Structure".

MAINTENANCE OF TRAFFIC: Unless the Engineer directs otherwise, Temporary precast barrier shall be placed 2'-0" from the edge of pavement at Bent 2 during construction of the bent; see drawing TC-4. See roadway plans for additional maintenance of traffic details.

STATE OF ARKANSAS
Edward T. Fain
REGISTERED PROFESSIONAL ENGINEER
No. 3915
1-7-02
EDWARD T. FAIN
BRIDGE ENGINEER

SHEET NO. 2 OF 3
BRIDGE B6875
LAYOUT OF OVERPASSES
OVER CADDO VALLEY R.R. & S.H. 182
GURDON REST AREA - HWY. 53 (F)
CLARK COUNTY
INT. ROUTE 30 SEC. 14
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

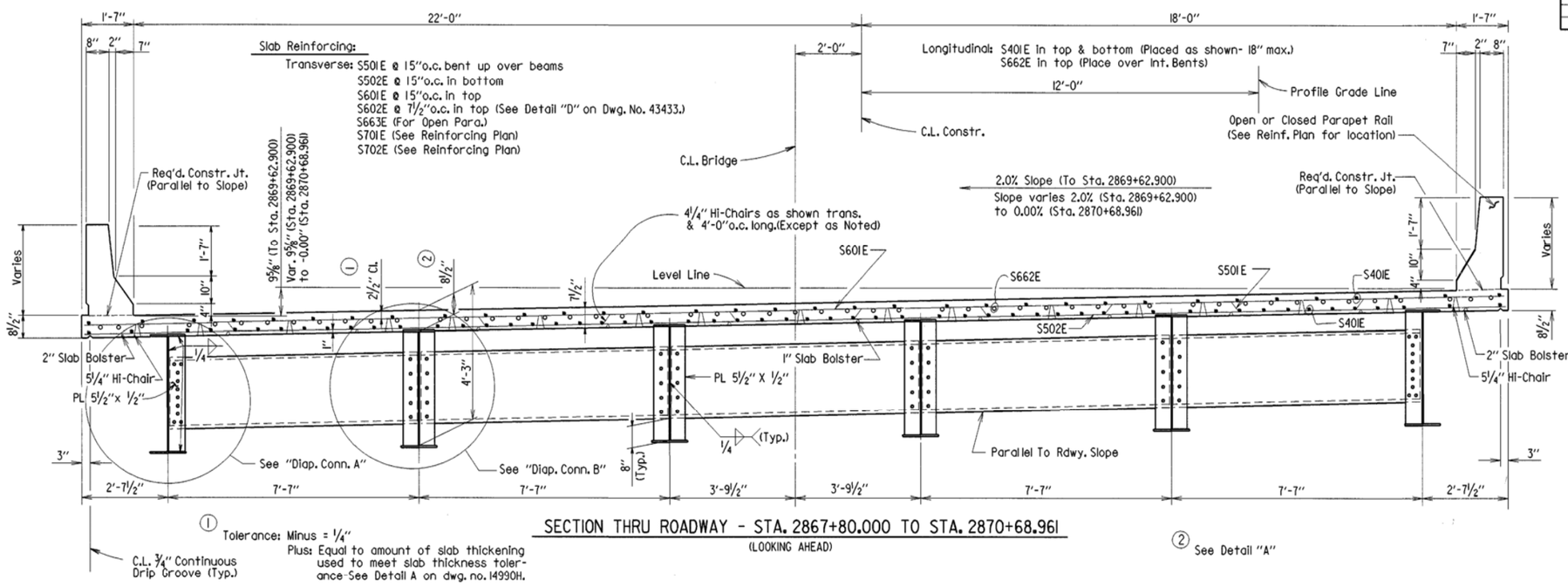
DRAWN BY: LDF DATE: 12-15-00 FILENAME: bb70100.12
CHECKED BY: DATE: 01-07-02 SCALE: 1" = 20'-0"
DESIGNED BY: CAG DATE: 01-01

BRIDGE NO. B6875 DRAWING NO. 43411

Note: Class I Protective Surface Treatment shall be applied to the Roadway Surface and the Face and Top of Concrete Parapet Rail.

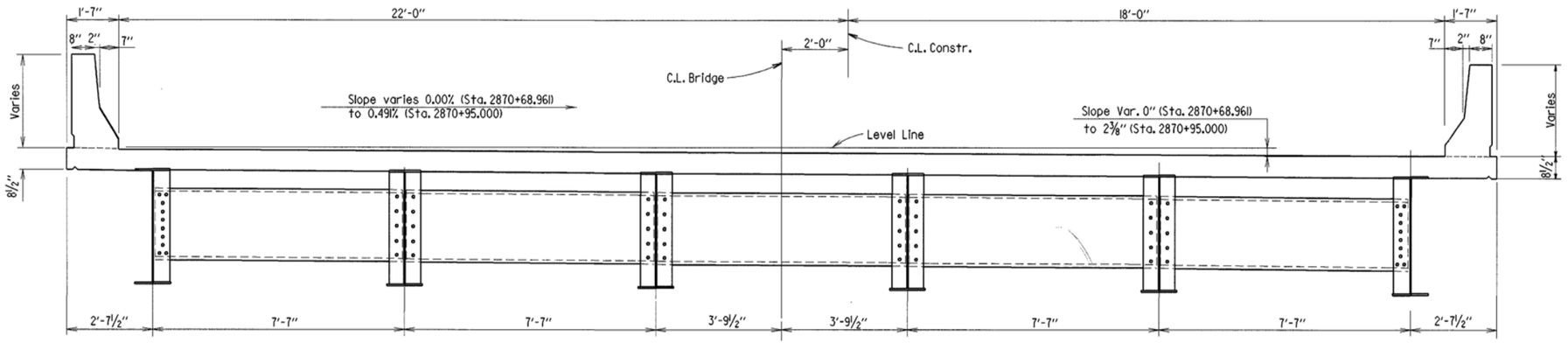
Note: One epoxy coated #5 bar in the top and one coated #5 bar in the bottom may be substituted for each bar S501E. Payment will be based on the weight of bar S501E.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B70100	95	159
				① A6875		-SPAN DTLS.-	43431	



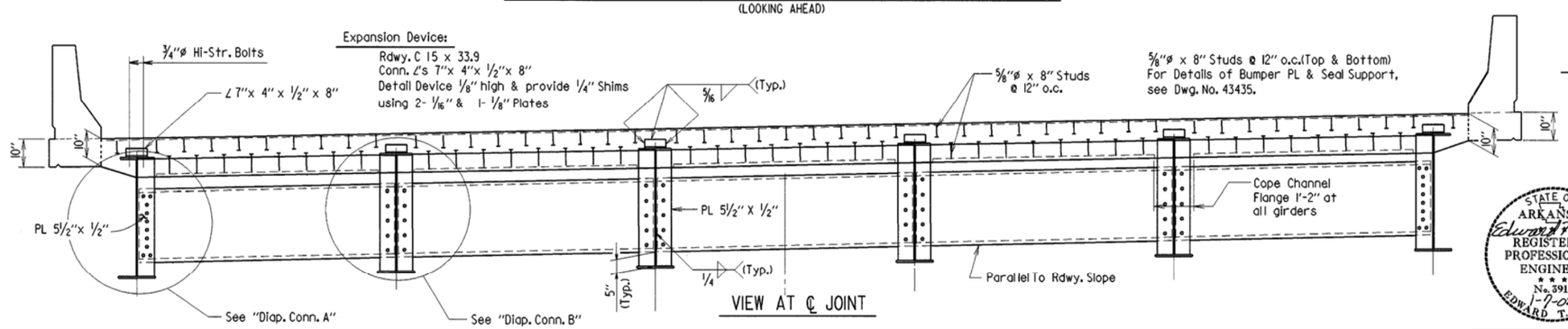
SECTION THRU ROADWAY - STA. 2867+80.000 TO STA. 2870+68.961

(LOOKING AHEAD)

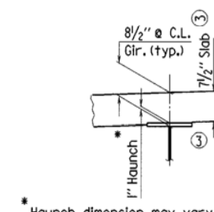


SECTION THRU ROADWAY - STA. 2870+68.961 TO STA. 2870+95.000

(LOOKING AHEAD)



VIEW AT ℄ JOINT



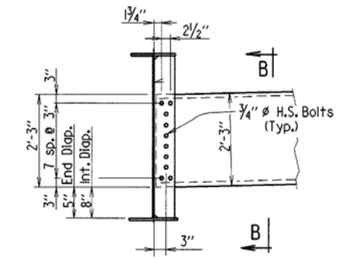
③ Tolerance when removable deck forming is used is +½", -¼". Haunch forming is required and shall be adjusted to maintain slab thickness tolerance.

* Haunch dimension may vary within the following limits to maintain the grade and slab thickness tolerance : Minimum - occurs when top flange contacts bottom reinforcing steel; Maximum - top flange thickness plus 1¾". No increase in concrete and structural steel quantities will be made to maintain tolerances.

DETAIL "A"

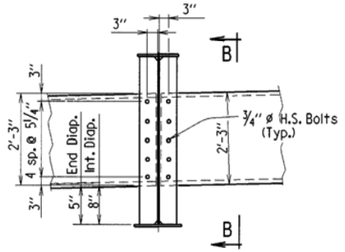
No Scale

Tolerances shown are applicable only when removable deck forming is used. See Std. Dwg. No. 14991 for tolerances when permanent steel deck forms are used. Payment for concrete shall be based on removable deck forming.



DIAPHRAGM CONNECTION A

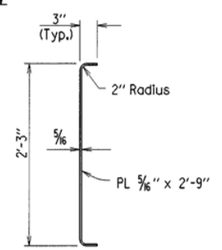
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DIAPHRAGM CONNECTION B

No Scale

Note: Bolts in strut and diaphragm connections shall be properly installed and tightened in accordance with Subsection 807.7.1 of the Standard Specifications.



SECTION B-B (TYPICAL DIAPHRAGM)

No Scale

STATE OF ARKANSAS
Edward T. Fain
REGISTERED PROFESSIONAL ENGINEER
No. 3915
1-9-02
EDWARD T. FAIN

BRIDGE ENGINEER

SHEET 1 OF 6

DETAILS OF 275'-0" CONTINUOUS COMPOSITE PLATE GIRDER UNIT OVERPASS OVER CADDO VALLEY R.R. & S.H. 182

CLARK COUNTY

ROUTE 30 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY:	LDF	DATE:	10-10-01	FILENAME:	b70100x2.sl
CHECKED BY:	CAB	DATE:	01-07-02	SCALE:	½" = 1'-0" or as shown
DESIGNED BY:	CAB	DATE:	09-2001		

BRIDGE NO. A6875 DRAWING NO. 43431