

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.		B60121	215	406

06911 Layout 43574

GENERAL NOTES

BENCH MARK: S0 Cut W End S. Service Rd. BR Hurricane
Elev. 372.81.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation
Department Standard Specifications for Highway Construction (1996 Edition)
with applicable supplemental specifications and special provisions.

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:

Class S(AE) Concrete (Superstructure) $f'_c = 4,000$ psi
Class S Concrete (Substructure) $f'_c = 3,500$ psi
Reinforcing Steel (AASHTO M 31 or M 53, Gr. 60) $F_y = 60,000$ psi
Structural Steel (AASHTO M 270, Gr. 50W) $F_y = 50,000$ psi

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

STEEL PILING: Piling in End Bents 1 and 7 shall be HP 12x53 and shall be driven
with an approved air, steam, or diesel hammer with a total energy developed of
20,000 ft.-lbs. to a minimum safe bearing capacity of 60 tons per pile and
into the material designated as medium hard dark gray shale on the boring legend.
Lengths shown are for estimating quantities and for use in determining payment for
cut-off and build-up in accordance with the Standard Specifications. Piles in end bents
to be driven after embankment to bottom of cap is in place. On all piles contractor
shall use approved steel H-piles driving points.

FOOTINGS: Footings shall be set a minimum of 1'-6" into materials designated
as medium hard dark gray shale on the boring legend. The top of the intermediate
bent footings shall be set at or below the channel bottom. Foundations
for footings shall be prepared in accordance with Section 801.04 of the Standard
Specifications. Rock excavations shall be made to neat lines of the concrete
footings. Care shall be exercised to avoid shattering of rock faces. No Blasting
shall be permitted. Concrete in footings shall be poured directly against excavated
surfaces of rock.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified
for final finishing in subsection 802.19 for Class 5 tined Bridge Roadway Surface Finish.

MAINTENANCE OF TRAFFIC: Traffic will be maintained during construction. See Dwg. No.
43576 through 43577 for traffic staging details. For additional maintenance of traffic
details see Roadway Plans.

EXISTING BRIDGE: Both existing bridge No. A2811 and 02811 are 40' wide and 182' long and
consists of a concrete deck with W-beam superstructure. The substructure consists
of concrete abutments with concrete cap extensions with steel piling and concrete
intermediate bents with spread footings. Plans for existing bridge will be made
available to the contractor upon request to Programs and Contracts Division.
Existing Dwg. Nos. 30997 through 31002 and 19453 through 19458.

REMOVAL AND SALVAGE: The work contemplated consists of removing both existing bridge
No. A2811 and 02811 and constructing one new bridge for Westbound and Eastbound
traffic. Removal of existing bridges shall be in accordance with Section 205 of the
Standard Specifications, with the addition that all existing footings shall be completely
removed. All material removed from the existing bridges shall become the property
of the Contractor.

DETAIL DRAWINGS:

Bridge Layouts
Sequence of Construction
End Bents
Intermediate Bents
90' Cont. W-Beam Unit
Bearings & Joint Assembly
Steel Piling
Type C Approach Gutters
Type Special Approach Slab
Type Special Approach Gutter at Median B
Type Special Approach Gutter A
Temporary Precast Barrier

DRAWING NO.

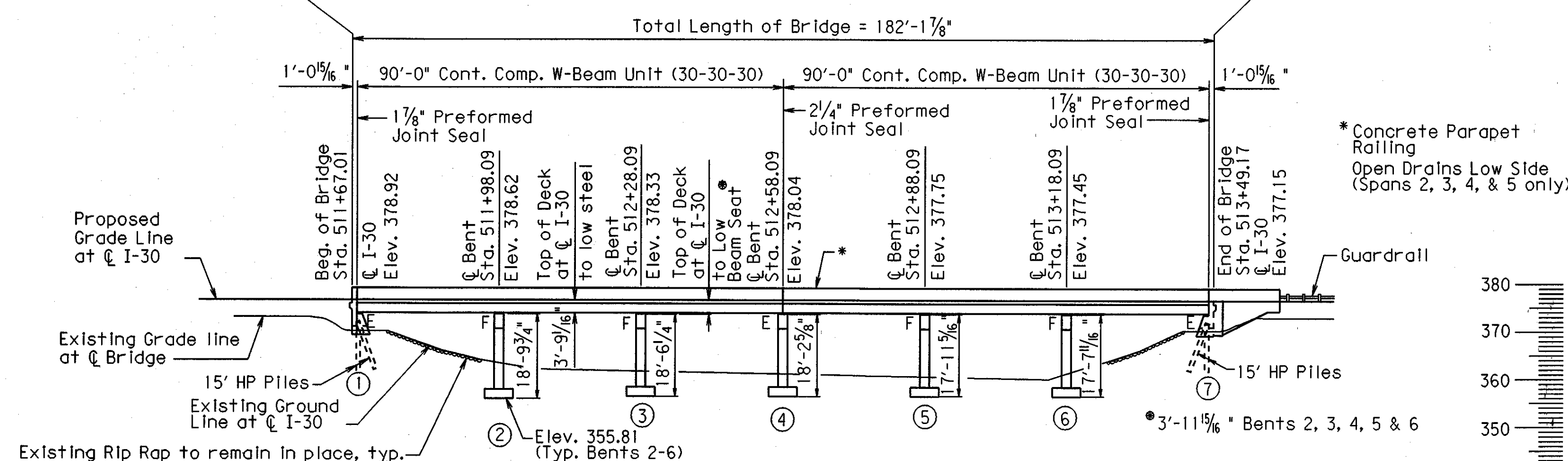
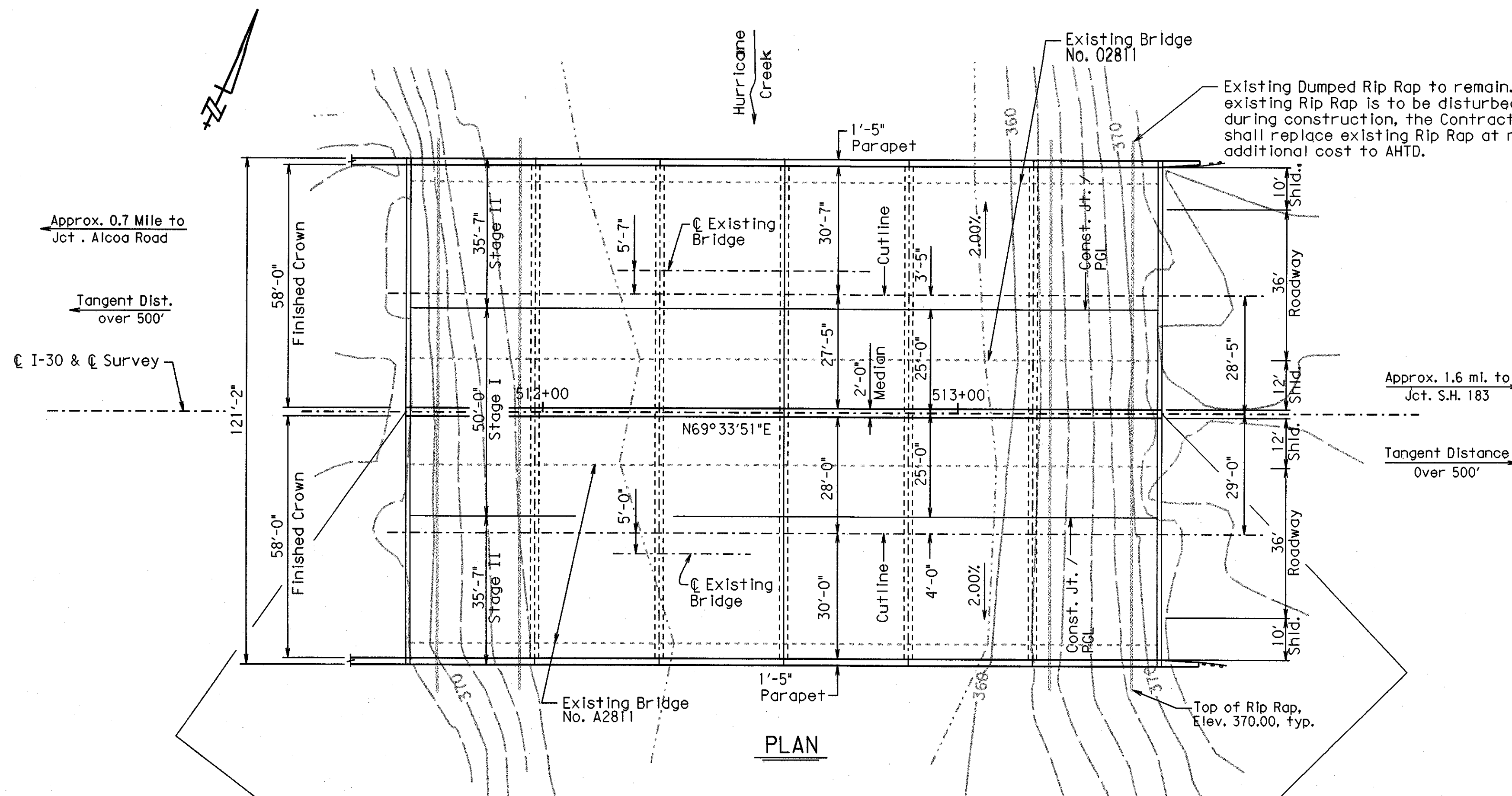
43574 - 43575
43576 - 43577
43578 - 43581
43582 - 43584
43585 - 43590
43591
14995A
2016C
43594
43593
43592
TC-4

LAYOUT OF I-30 OVER
HURRICANE CREEK
WEST OF ALCOA RD. -
WEST OF PULASKI CO. LINE (F)
SALINE COUNTY

ROUTE 30 SEC. 22
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

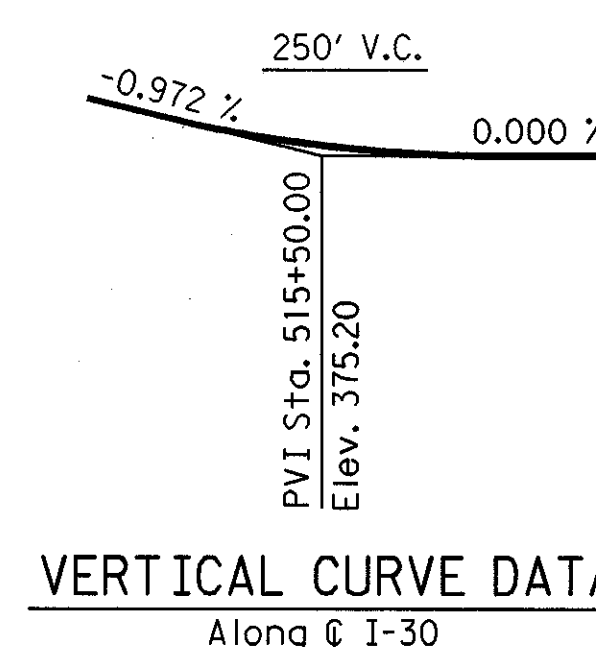
DRAWN BY: CAB DATE: 4-1-02 FILENAME: BB60121X2.L1
CHECKED BY: HWC DATE: 4-1-02 SCALE: 1"=10'-0"
DESIGNED BY: DPD DATE: 2-21-02

BRIDGE NO. 06911 DRAWING NO. 43574



Note: For R/W Data, Median, and Guard Rail Details, see Rdwy. Plans.
Remove existing Approach Gutters and use Type C Approach
Gutter at outside lane of End Bridge, Type Special Approach
Gutters A at outside lane of Begin Bridge and use Type
Special Approach Gutter at Median B for inside lane. Remove
existing approach slabs and use 36' Type Special Approach Slab.

Note: Elevations shown are at @ I-30 unless
otherwise noted.



[illegible]

GENERAL NOTES

BENCH MARK: ☐ Cut In West end of Lt. Wheelguard of bridge over Lt. Service Rd. 118' Lt. Sta. 61+70, Elev. 299.62

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1991 edition, with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, 1989 with current Interim specifications.

LINE LOADING: HS20

METHOD OF DESIGN: Load Factor

MATERIALS AND STRENGTHS:

Class 5(AE) Concrete (superstructure)	f'c = 4,000 psi
Class 5 Concrete (substructure)	f'c = 3,500 psi
Reinforcing Steel (A615 or A617, Gr. 60)	FY = 60,000 psi
Structural Steel (A36)	FY = 36,000 psi

STEEL PILING: All piling shall be HP 10x42 and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 55 tons per pile. Lengths shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the specifications. Piles in end bents to be driven after embankment to bottom of cap is in place.

FOOTINGS: Footings at Bent Nos. 2 and 3 shall be set 2'-0" into cemented gravel and clay. Footings for Bent Nos. 4, 5, and 6 shall be set into cemented gravel and clay at approximately the same elevation as the existing footings. Foundations for footings shall be prepared in accordance with section 801.04 of the Standard Specifications.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified for final finishing in subsection 802.20 for Class 5 Bridge Roadway Surface Finish.

DETAIL DRAWINGS:

DRAWING NO.

End Bents	31005, 31008
Intermediate Bents	31006, 31007
90' Cont. Comp. W-Beam Unit	31002, 31009

DETOUR BRIDGE: The New Right Frontage Road Bridge will be used as a detour. See Roadway Plans for actual detour alignment and grade.

EXISTING BRIDGE: The existing bridge No. 2804A is 28' wide and 122' long and consists of a concrete deck with I-beam superstructure. The substructure consists of concrete end bents with steel piling and concrete col. int. bents with spread footings. The work contemplated consists of widening and lengthening the existing bridge; Replacing the existing superstructure; modifying and repairing existing bents; removal of end bent at beginning of the existing bridge; constructing new bent nos. 1, 2, and 3. For requirements in conducting the work, see section 821 of the Standard Specifications § 821-1.

All dimensions relating to the existing bridge are to be verified in the field and the Contractor shall be responsible for adjusting widening to existing structure.

Plans of the existing structure will be made available to the Contractor upon request to the Programs and Contracts Division, Existing dwg. nos. 8628, 8039, 5165 & 5166.

All material from the existing bridge shall become the property of the contractor except the metal bridge railing which shall remain the property of the state.

STATE OF
ARKANSAS

REGISTERED
PROFESSIONAL
ENGINEER

No. 1779

LITTLE ROCK, ARK.

DRAWN BY: TEB DATE: 6/6/90

CHECKED BY: GEC DATE: 7/23/90 SCALE: 1" = 20' - 0"

DESIGNED BY: William J. Brown DATE: 04-20-90

BRIDGE NO. 2804AR DRAWING NO. 3100

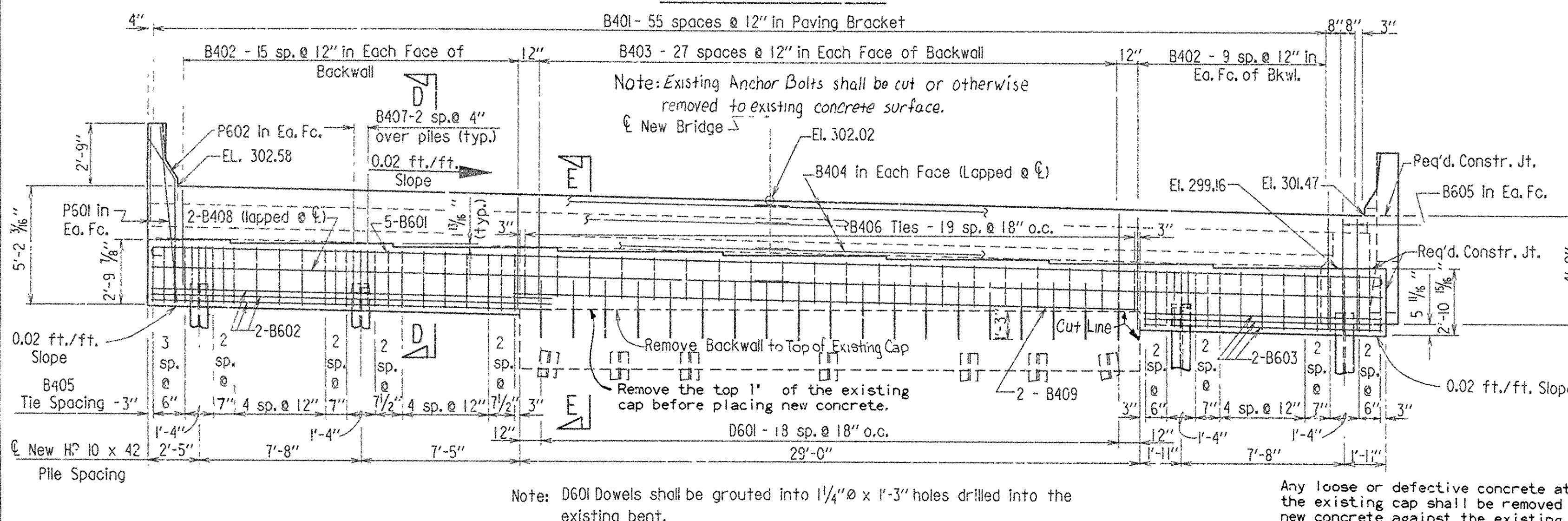
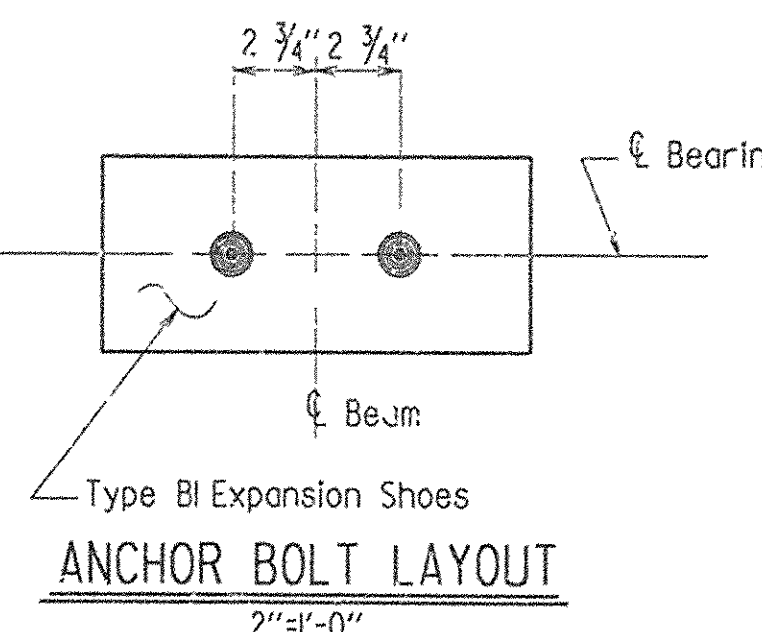
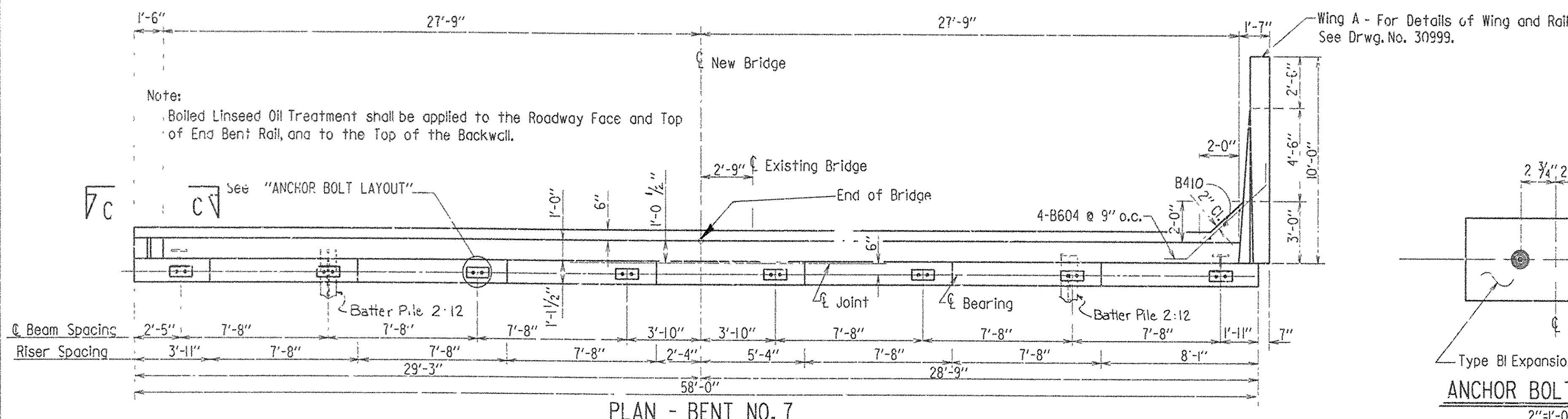
Note: Cut and Remove Existing Backwall and Wingwalls to the cut line. Retain, Strip, Clean, and bend the existing vertical reinforcing steel into the new construction as directed by the Engineer. If two or more adjacent bars or two bars separated by only one bar are broken in the concrete removal or bar straightening process, replacement dowel bars shall be drilled and grouted in place.

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.	60452	48	118	
				2804AR	BENT DTL'S.	31008		

BAR LIST (ONE END BT.)

Mark	No.	Req'd.	Length	A	B	Pin Dia	Bending Diagrams (Dimensions are out to out of bars.)
B401	56		3'-11"	1'-2"	4 1/2"	2"	
B402	52		3'-10"			Str.	
B403	56		3'-10"			Str.	
B404	12		3'-0"			Str.	
B405	37		8'-9"	1'-9 1/2"	2'-5"	2"	
B406	20		7'-9"	1'-9 1/2"	1'-11"	2"	
B407	12		6'-6"	1'-9 1/2"	2'-5"	2"	
B408	4		2'-8"			Str.	
B409	2		3'-0"			Str.	
B410	3		3'-7"			Str.	
B601	5		5'-0"	5'-8"	6"	4 1/2"	
B602	6		18'-10"			Str.	
B603	6		1'-2"			Str.	
B604	4		7'-3"	5'-3"	1'-0"	4 1/2"	
B605	4		4'-2"			Str.	
D601	19		2'-6"			Str.	
P401	6		8"			Str.	
P601	4		7'-5"			Str.	
P602	2		6'-4"	5'-2"	1'-2"	4 1/2"	

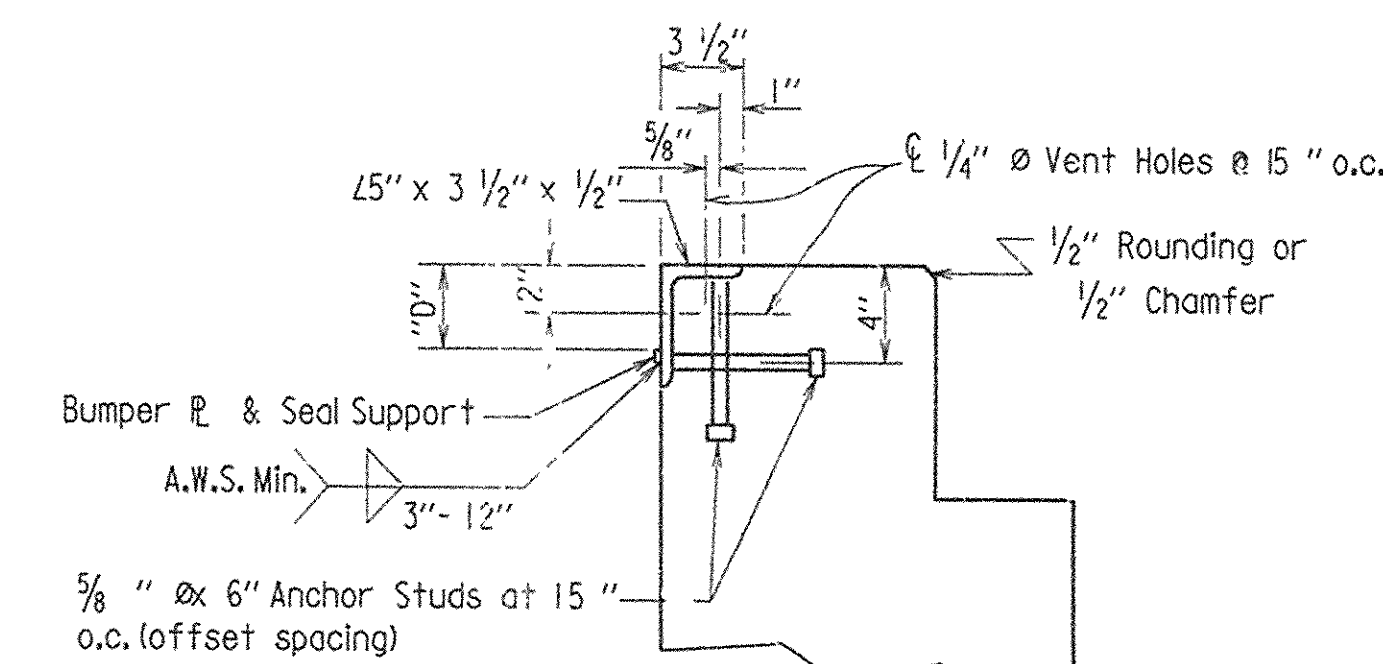
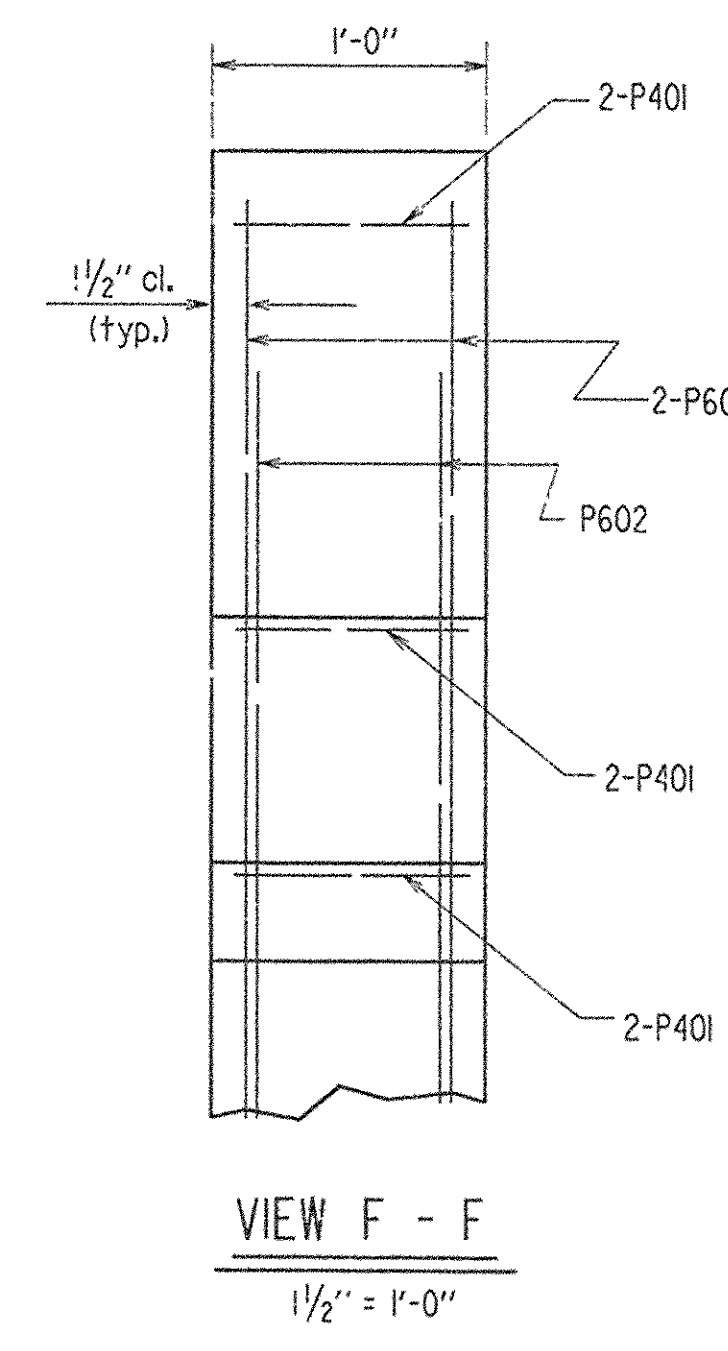
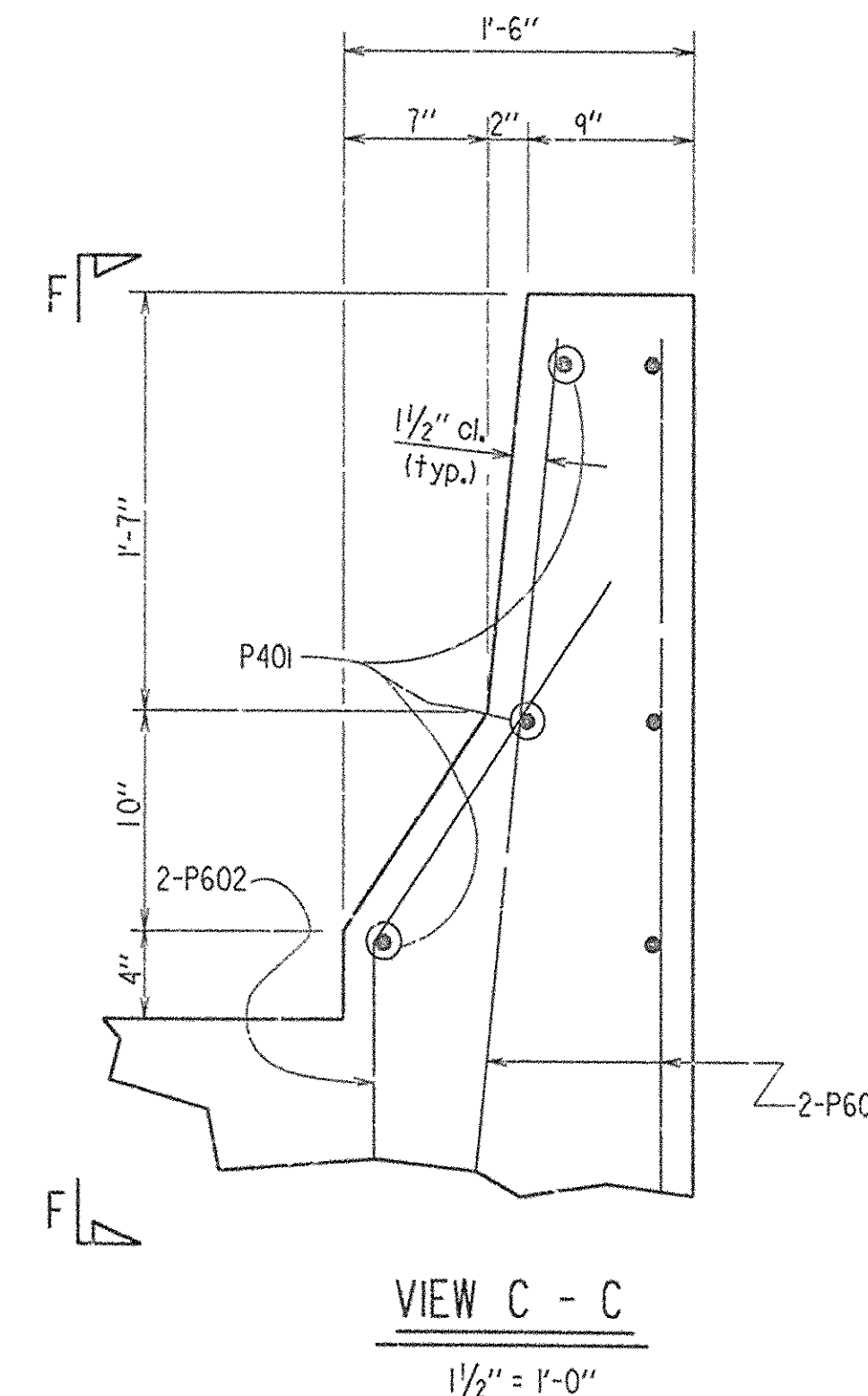
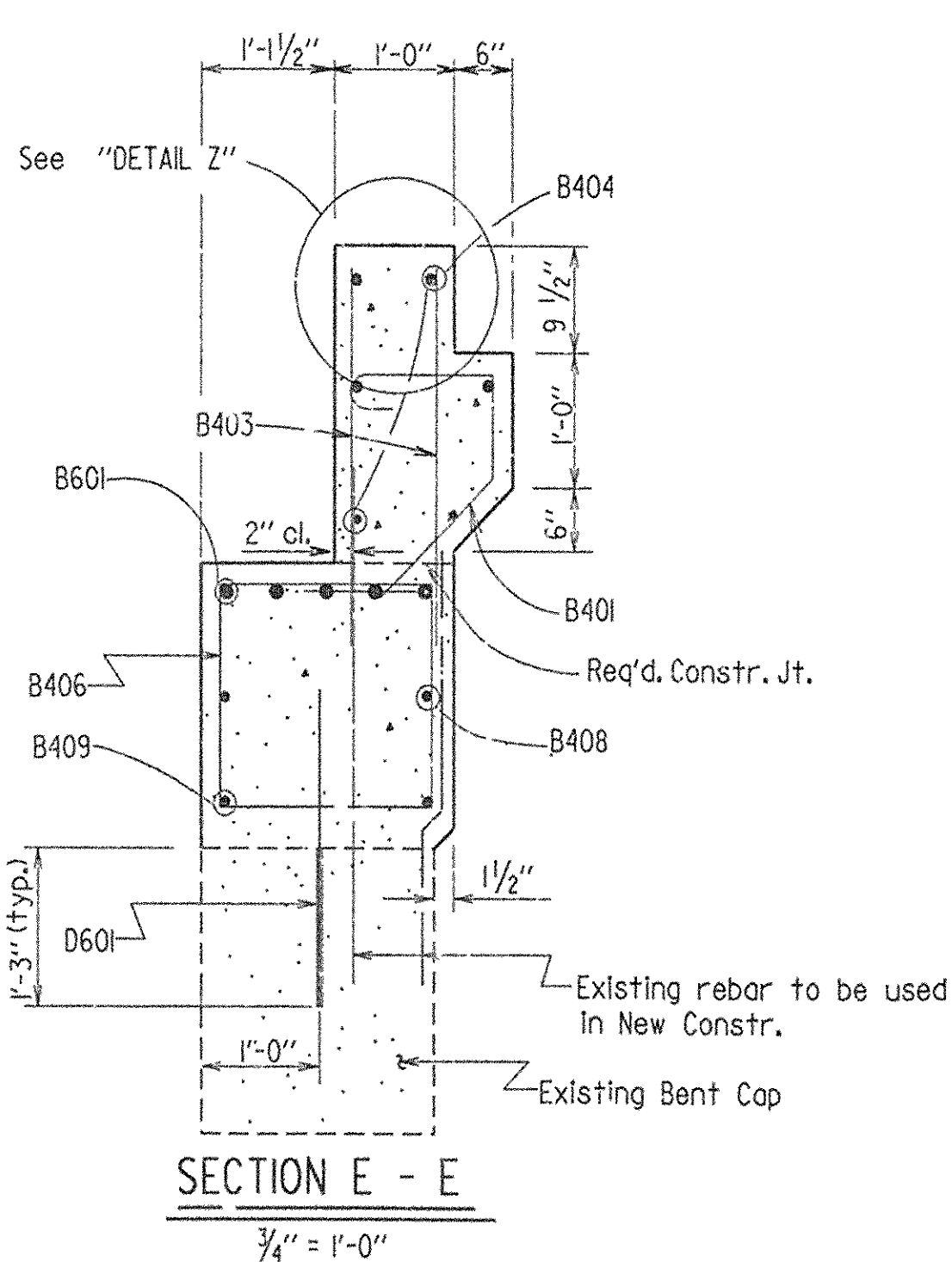
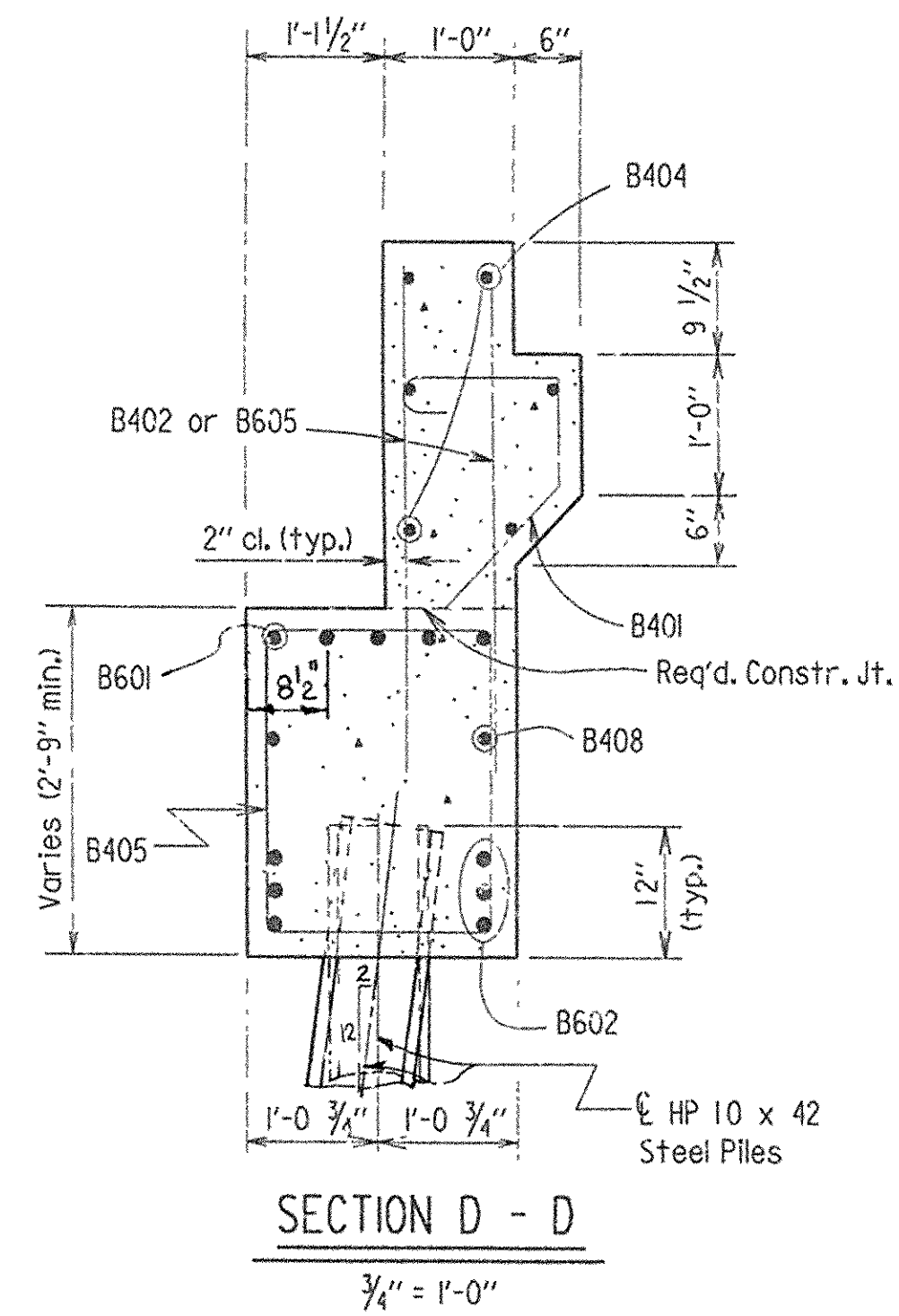
For Bar List and Bending Diagrams of Wing and Rail, See Drwg. No. 30999.



Note: D601 Dowels shall be grouted into 1 1/4" x 1'-3" holes drilled into the existing bent.

Any loose or defective concrete at the ends of the existing cap shall be removed before placing new concrete against the existing surface.

ELEVATION - BENT NO. 7 (LOOKING AHEAD)



Note: For Joint Support Details & Dimension "D" - See Drwg. No. 31002.

DETAIL Z

GENERAL NOTES
All concrete shall be Class "S" and shall be poured in the dry. All exposed to be chamfered 3/4" unless otherwise noted.
All reinforcing steel shall conform to ASTM A615 or A617, Grade 60.
Backwall shall not be poured before beams are in place.
Structural steel in end bents shall be ASTM A36 and shall be paid for as "Structural Steel in Beam Spans (A36)".
If anchor bolts are drilled into cap, top reinforcing bars shall be properly placed to avoid damage.
For additional information, see layout.

DETAILS OF WIDENING
END BENT NO. 7
CROOKED CREEK
ROUTE 30 SEC. 23
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: TEB DATE: 10/23/89
CHECKED BY: J. E. B. DATE: 10/21/90
DESIGNED BY: GEC DATE: 8-7-90
BRIDGE NO. 2804AR DRAWING NO. 31008

GENERAL NOTES

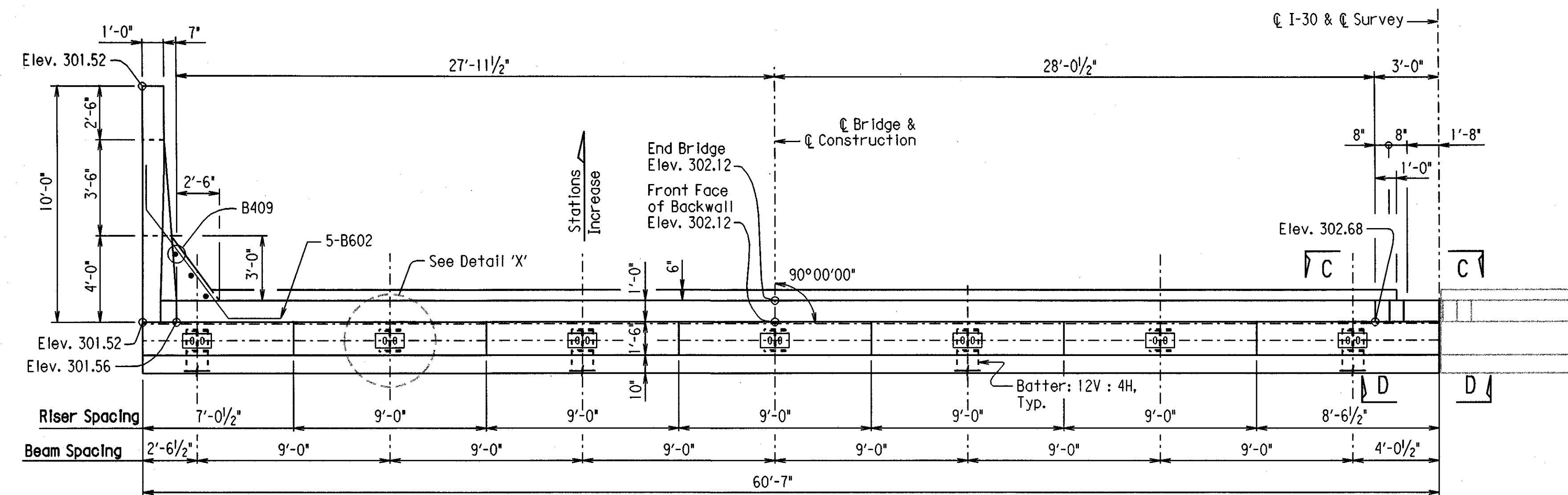
DESIGNED BY: RTP DATE: 9-8-01
BRIDGE NO. B6926 DRAWING NO. 43858



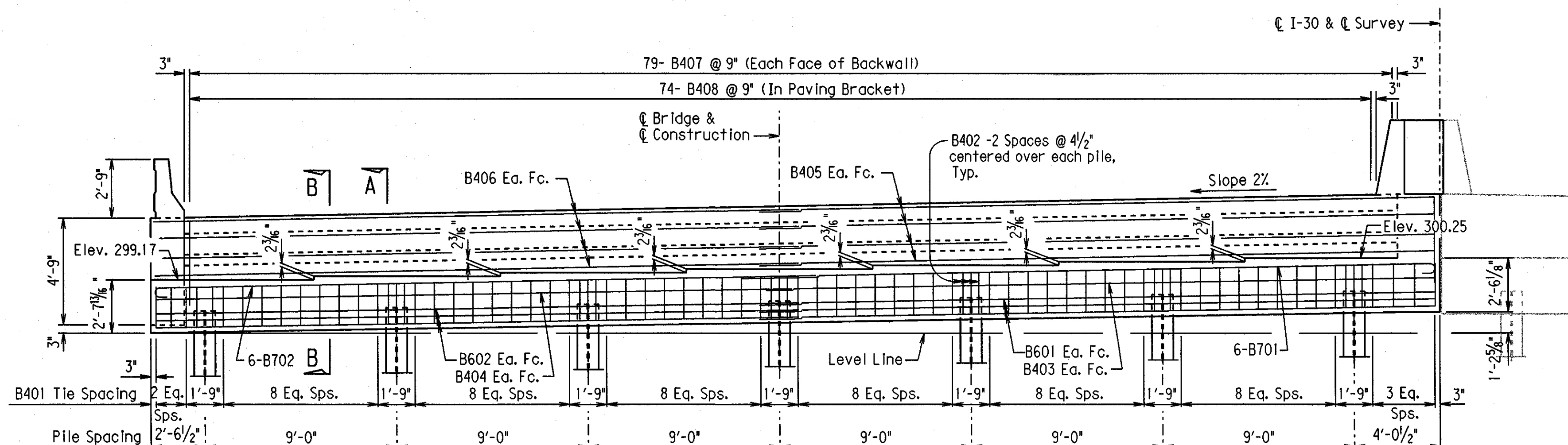
30-APR-2002
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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B60120	233	503
				B6926 End Bent Details 43861				

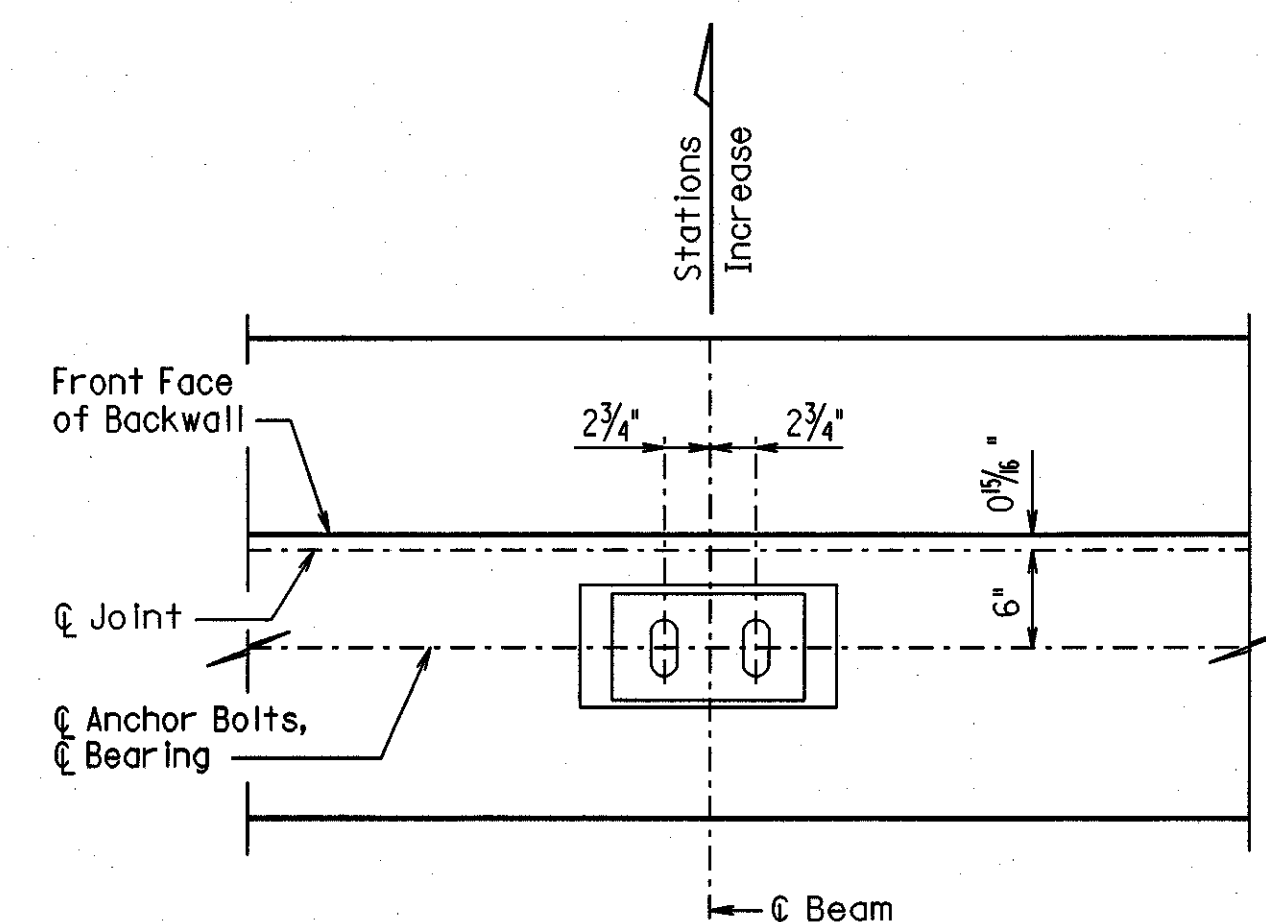
Note:
Class 1 Protective Surface Treatment shall be applied
to the Roadway Face and Top of End Bent Rail and End Post
and the Top of Backwall.



PLAN
Scale: $\frac{1}{4}" = 1'-0"$

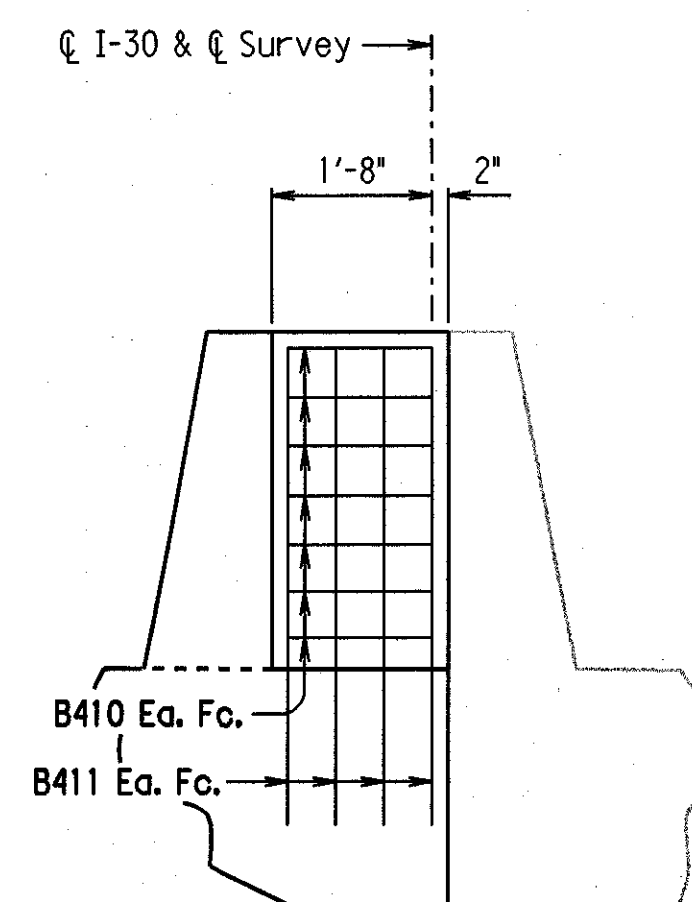


ELEVATION (Looking Ahead)
Scale: $\frac{1}{4}" = 1'-0"$



For Details of Steel Bearings
See Dwg. No. 43870.

DETAIL 'X'
No Scale



SECTION D-D
Scale: 1/2" to 1'-0"

GENERAL NOTES

All concrete shall be Class "S" with a minimum 28 day compressive strength $f'_c = 3,500$ psi. Concrete shall be poured in the dry and all exposed corners to be chamfered $\frac{3}{4}$ " unless otherwise noted.

All Reinforcing steel shall conform to AASHTO M31 or M53, Grade 60 (yield strength = 60,000 psi).

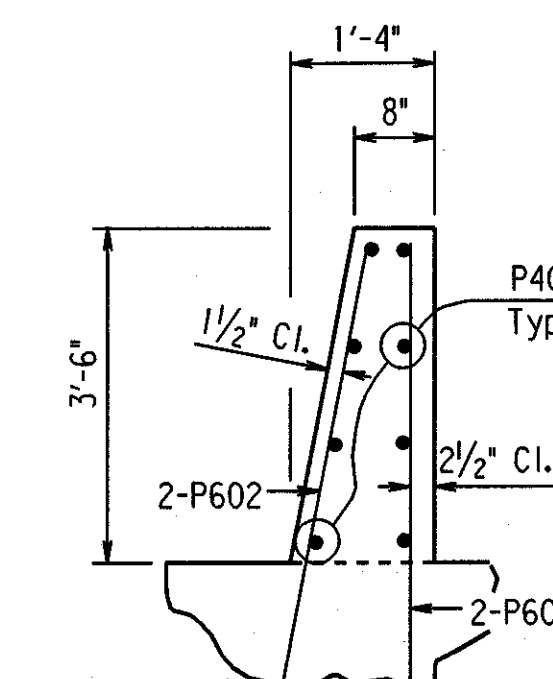
Backwall shall not be poured before beams are in place, and concrete deck is poured.

Structural Steel in end bents shall be AASHTO M270, Gr. 50W and paid for as "STRUCTURAL STEEL IN BEAM SPANS (M270, Gr 50W)".

Top reinforcing bars in cap shall be properly placed to avoid interference with anchor bolts.

Notes:
For Details of Wing Wall and Sections A-A
and B-B see Dwg. No. 43862.

4 bars lapped @ 1'-8"
6 bars lapped @ 2'-7"
7 bars lapped @ 3'-5"



SECTION C-C
No Scale

MARK	NO. REQ'D.	LENGTH	P.D.
B401	61	10'-0"	2"
B402	21	6'-6"	2"
B403	2	31'-8"	str.
B404	2	30'-3"	str.
B405	8	31'-8"	str.
B406	8	30'-3"	str.
B407	158	3'-7"	str.
B408	74	3'-9"	2"
B409	3	3'-6"	str.
B410	14	1'-6"	str.
B411	8	5'-0"	str.
B601	6	32'-2"	str.
B602	6	30'-8"	str.
B603	5	8'-4"	4 1/2"
B701	6	33'-5"	5 1/4"
B702	6	31'-11"	5 1/4"
P401	8	8"	str.
P601	2	5'-2"	str.
P602	2	5'-2"	str.
R401	4	3'-11"	2"
R402	4	4'-0"	2"
R403	6	9'-8"	str.
R601	8	4'-5"	str.
R602	3	5'-0"	str.
W401	4	6'-0"	2"
W402	4	7'-2"	str.
W403 - W406	1 Each	3'-5" to 5'-5"	2"
W407 - W410	1 Each	4'-6" to 6'-6"	str.
W411	1	12'-2"	2"
W701	6	9'-8"	str.
W702	2	6'-4"	str.
W703	2	5'-2"	str.
W704	2	8'-10"	5 1/4"

BENDING DIAGRAMS

Dimensions are out to out of bars.

B401

B402

B701, B702

B603

W401

W402

W403-W406

W407-W410

W411

W701

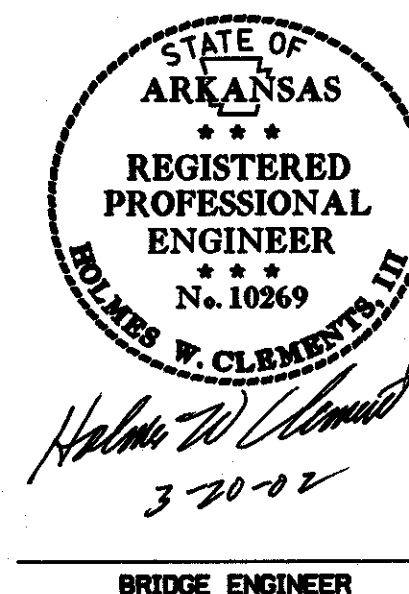
W702

W703

W704

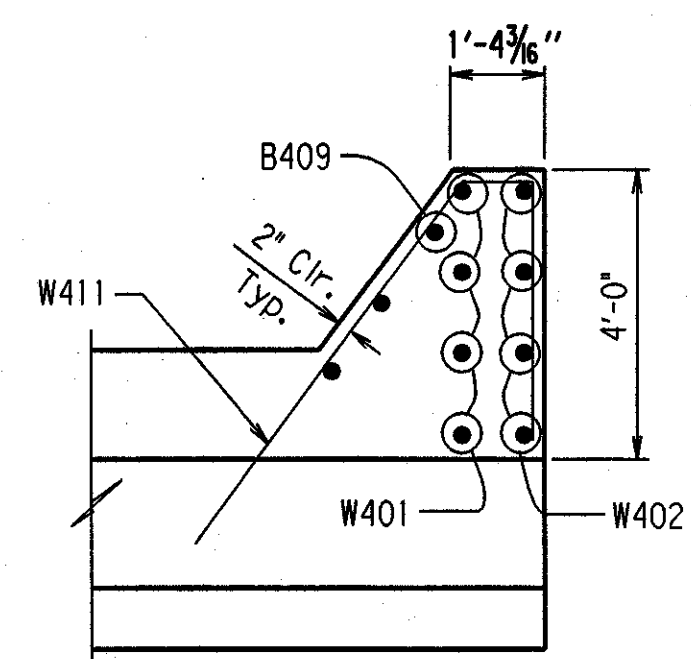
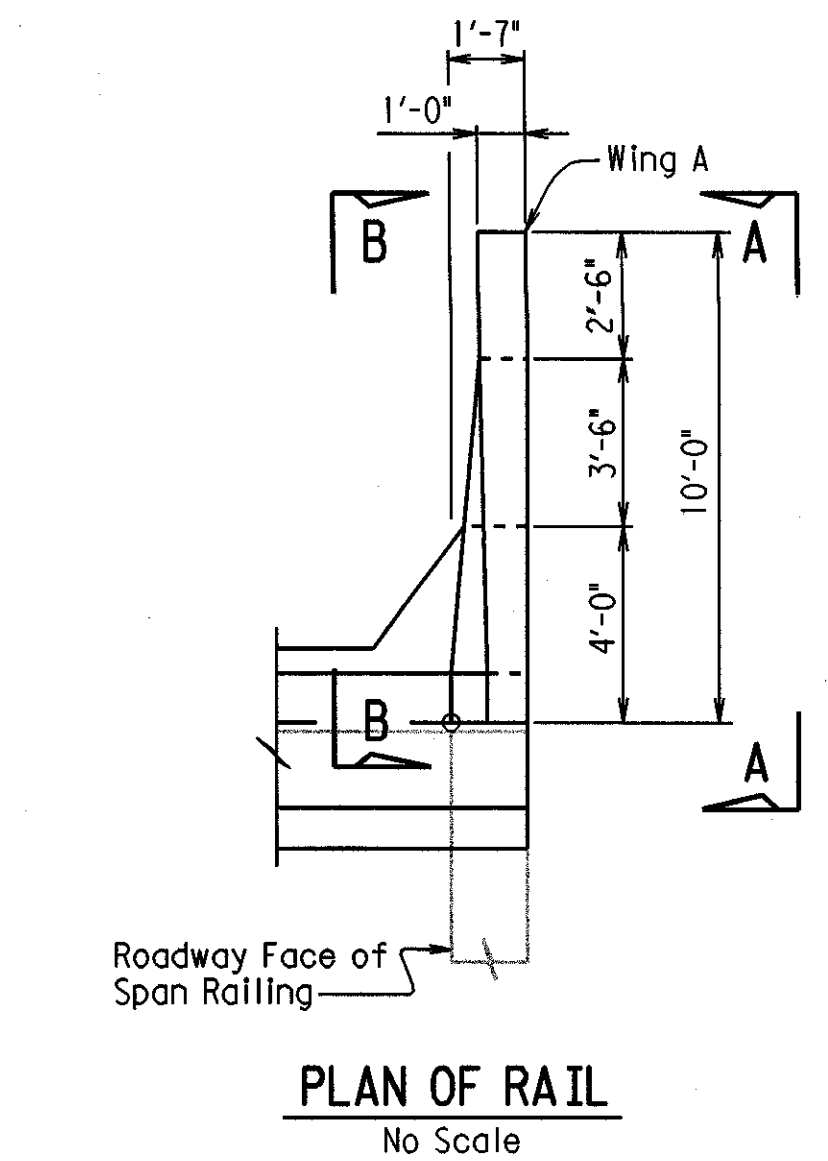
SHEET 2 OF 3
DETAILS OF END BENT 7
I-30 (WESTBOUND) OVER CROOKED CREEK
WEST OF PULASKI COUNTY LINE - I-430
PULASKI COUNTY

ROUTE 30 SEC. 23
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: CAB DATE: 1-04-02 F. FILENAME: BB60120X2.B7
CHECKED BY: RTP DATE: 1-04-02 SCALE: 1/4" = 1'-0"
DESIGNED BY: AS DATE: 9-15-01
BRIDGE NO. B6926 DRAWING NO. 43861

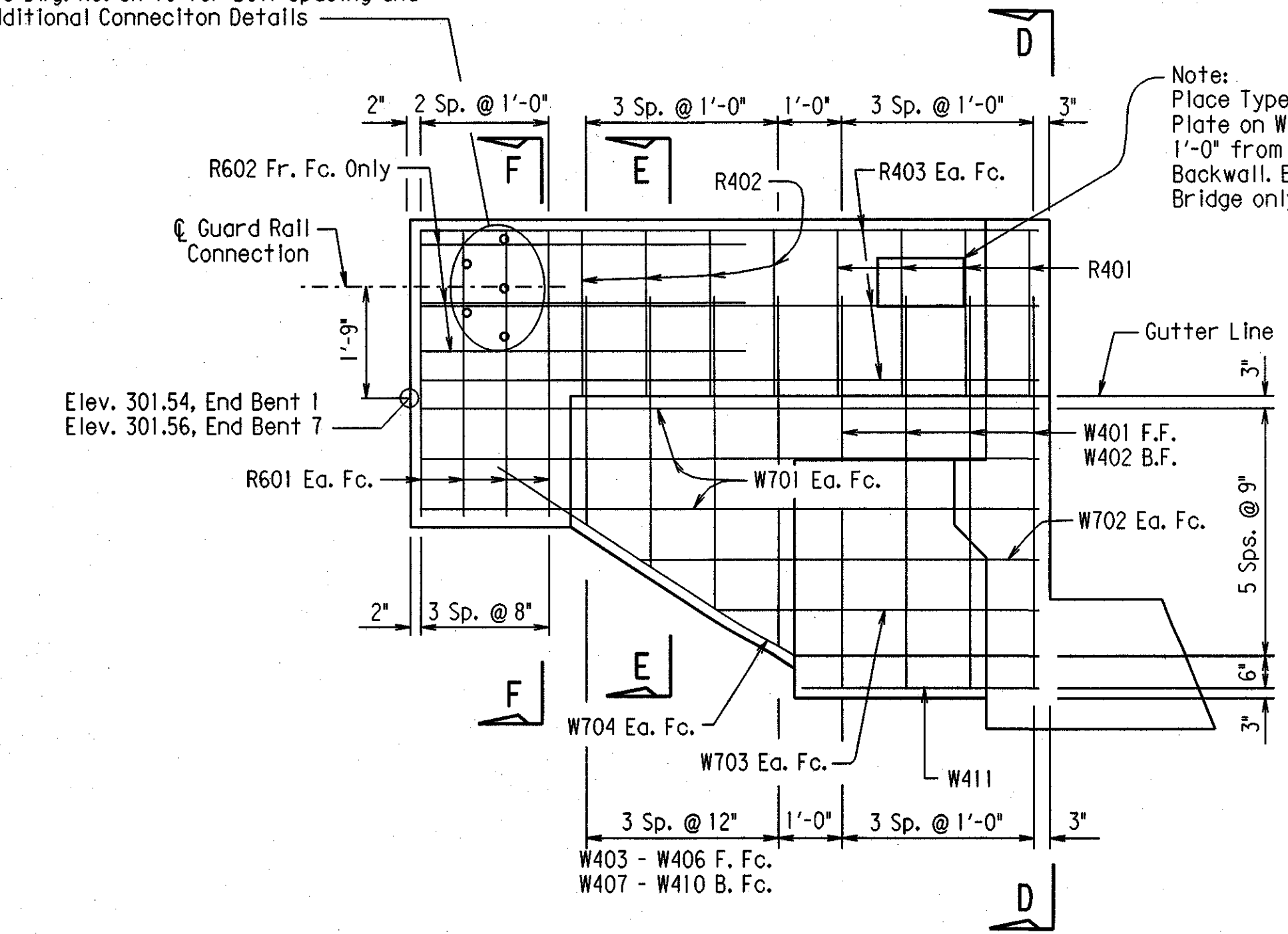


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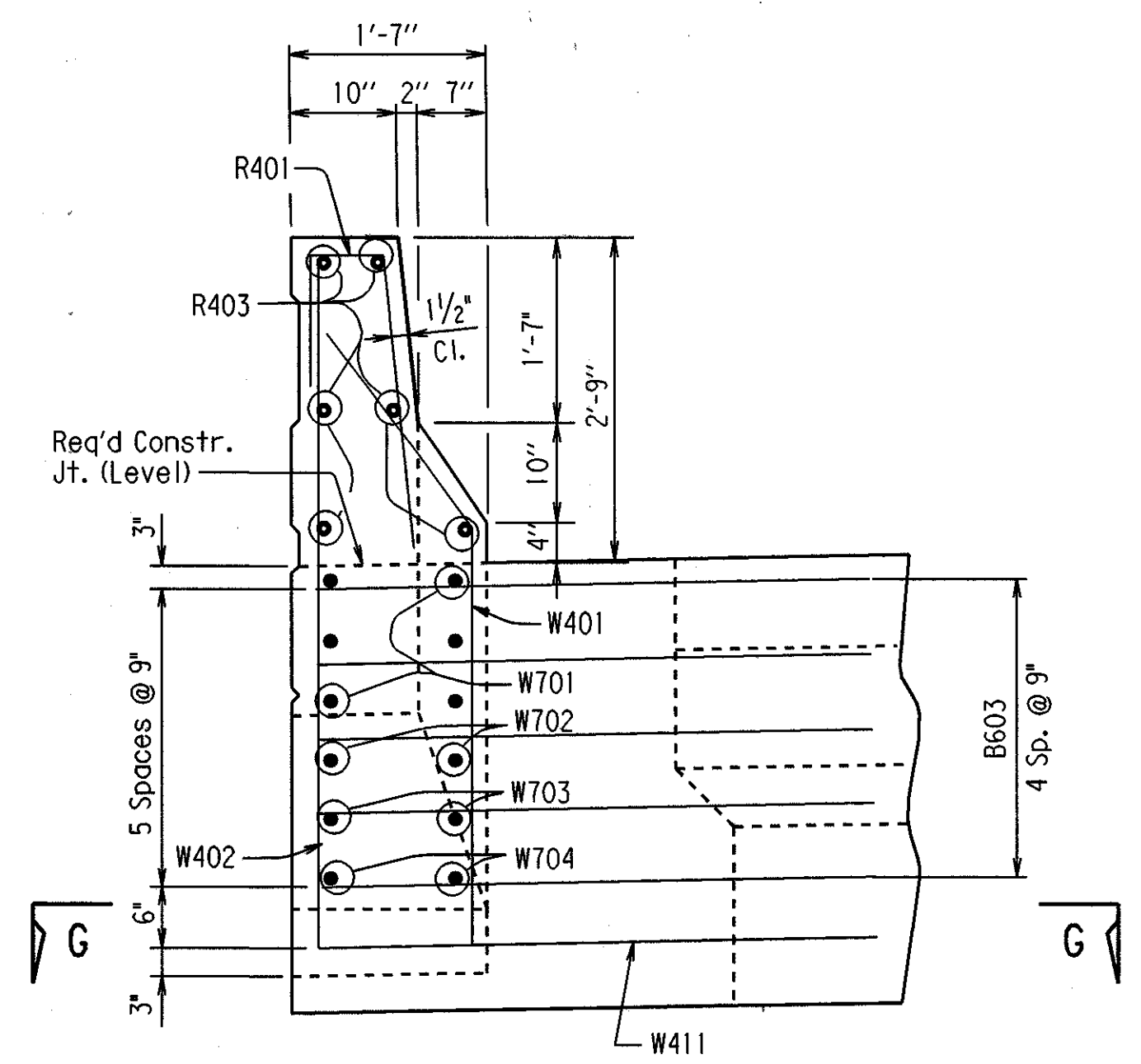
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		B60120	234	502
				B6926 End Bent Details 43862				



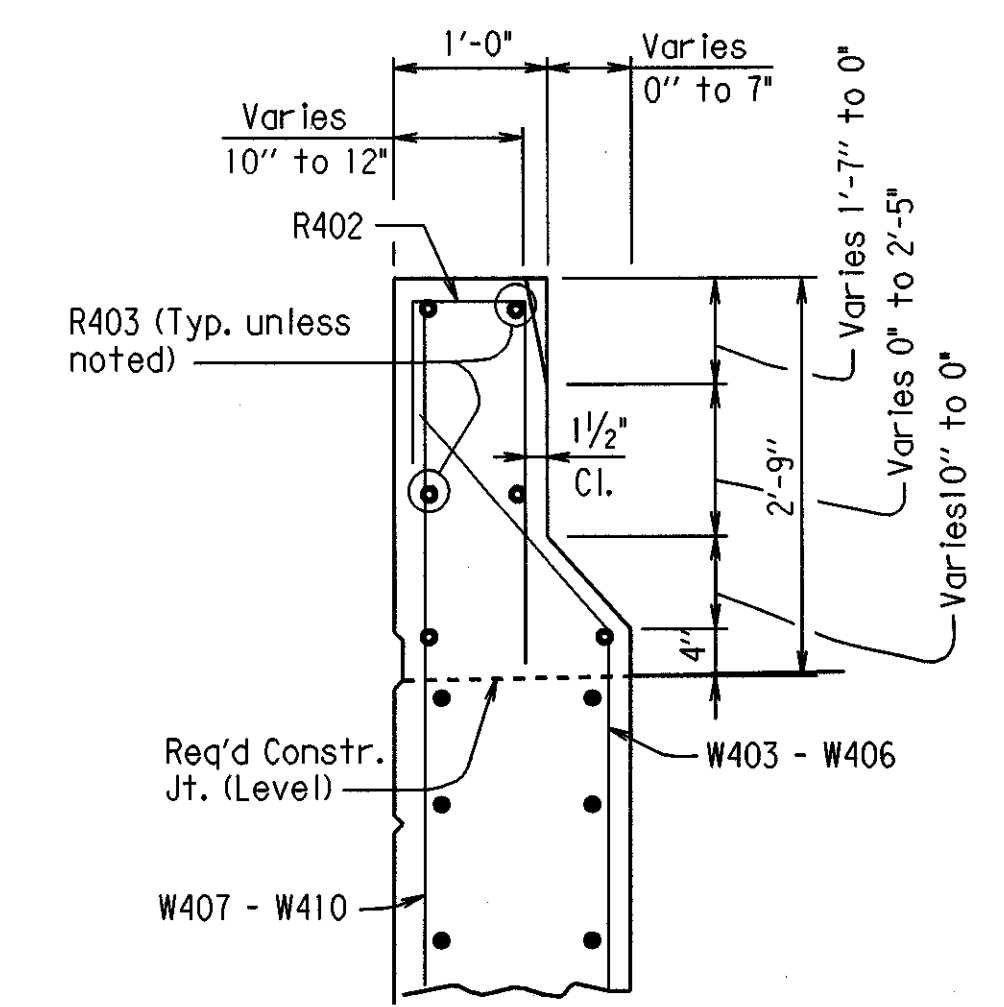
5-1/8" Formed Holes for Guard Rail Connection.
See Dwg. No. GR-10 for Bolt Spacing and
Additional Connection Details



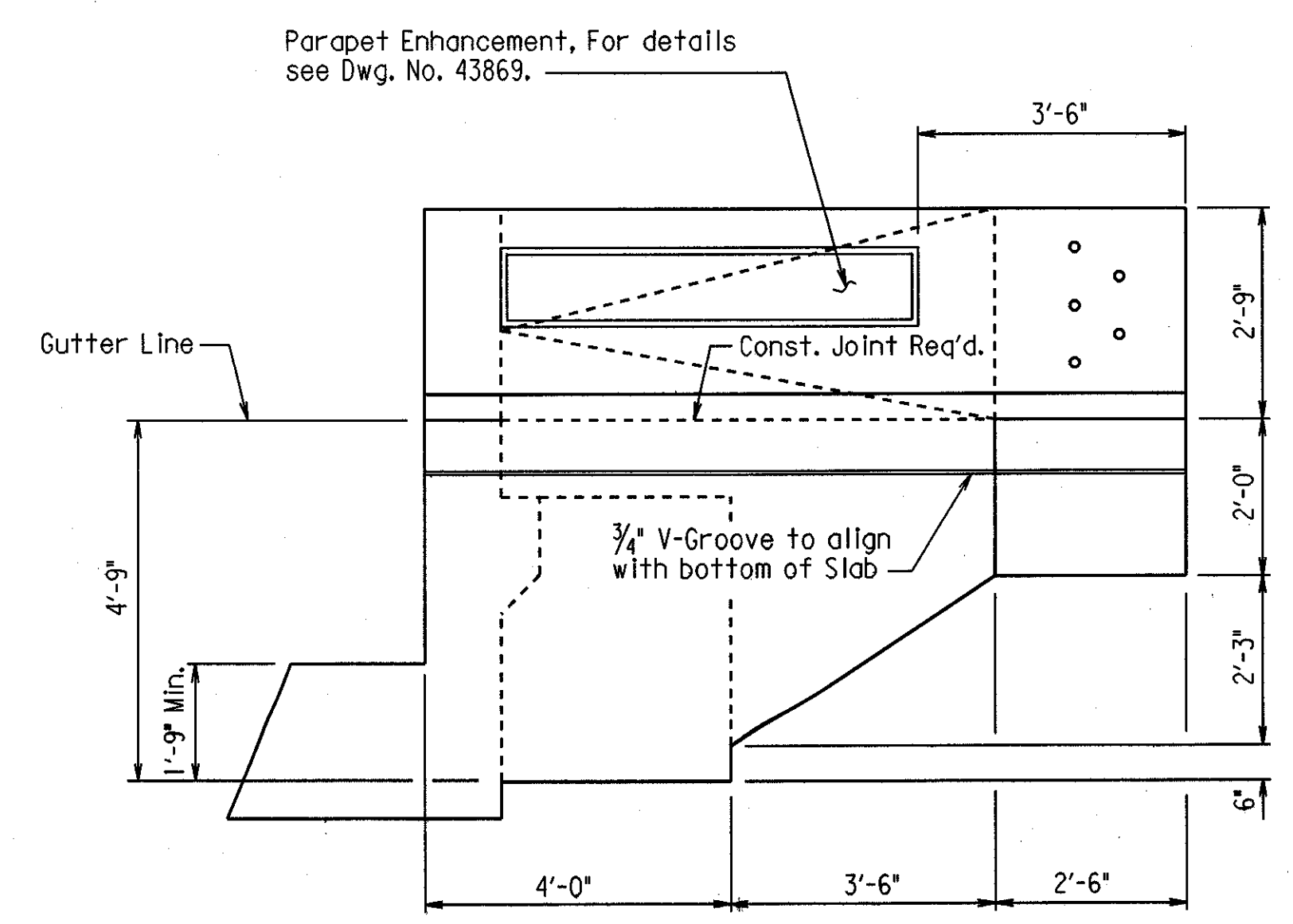
VIEW B-B
Scale: 1/2" = 1'-0"



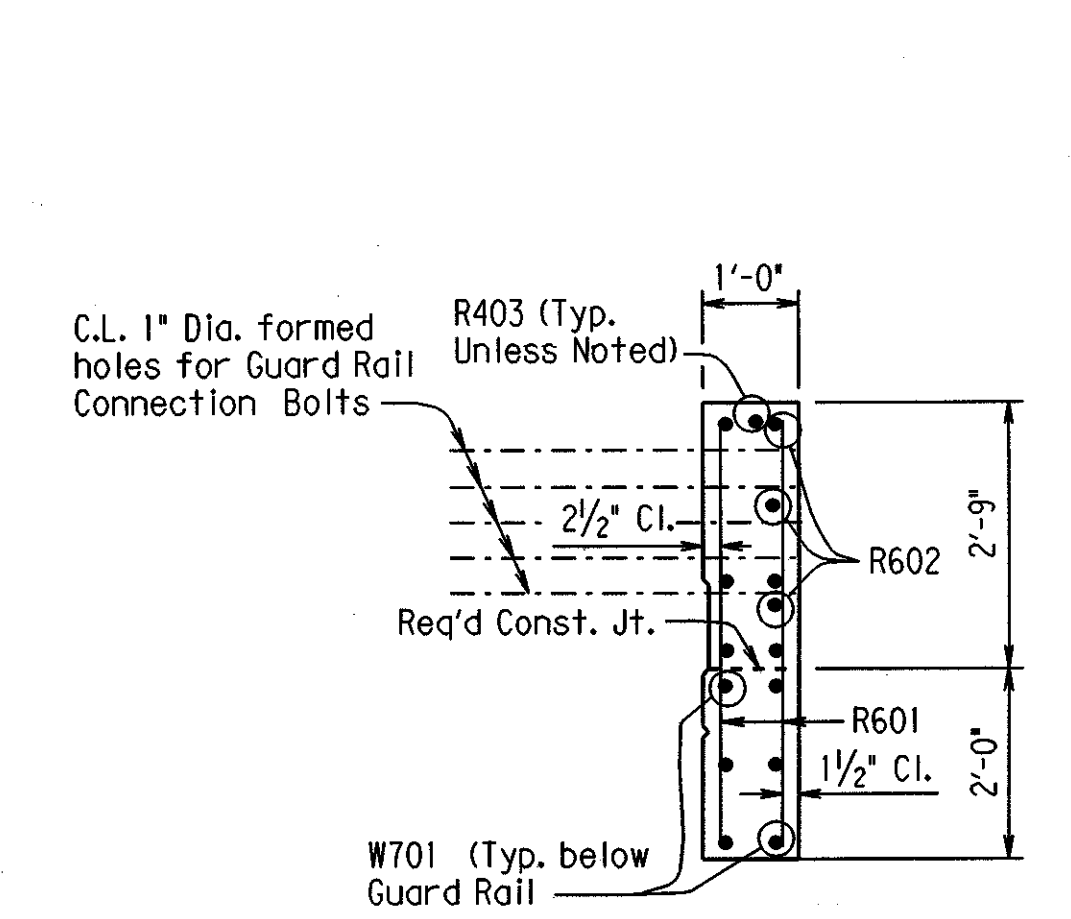
VIEW D-D (WING A)
No Scale



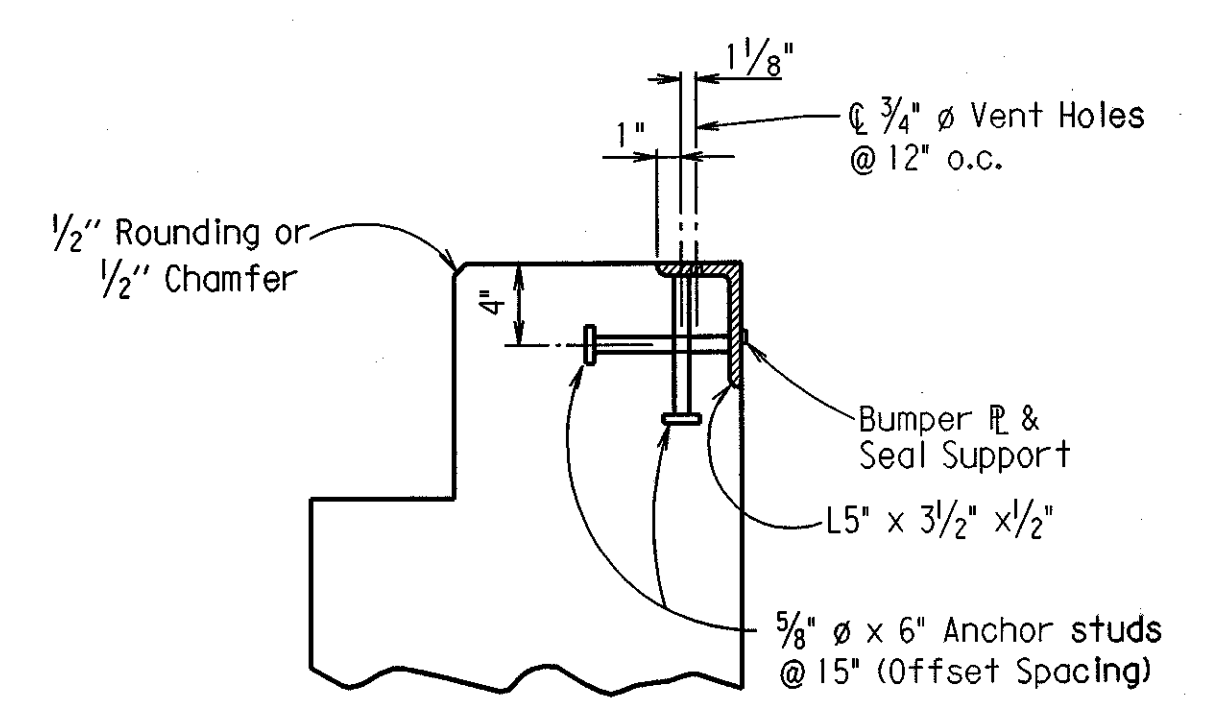
SECTION E-E
Scale: 3/4" = 1'-0"



VIEW A-A
Scale: 1/2" = 1'-0"



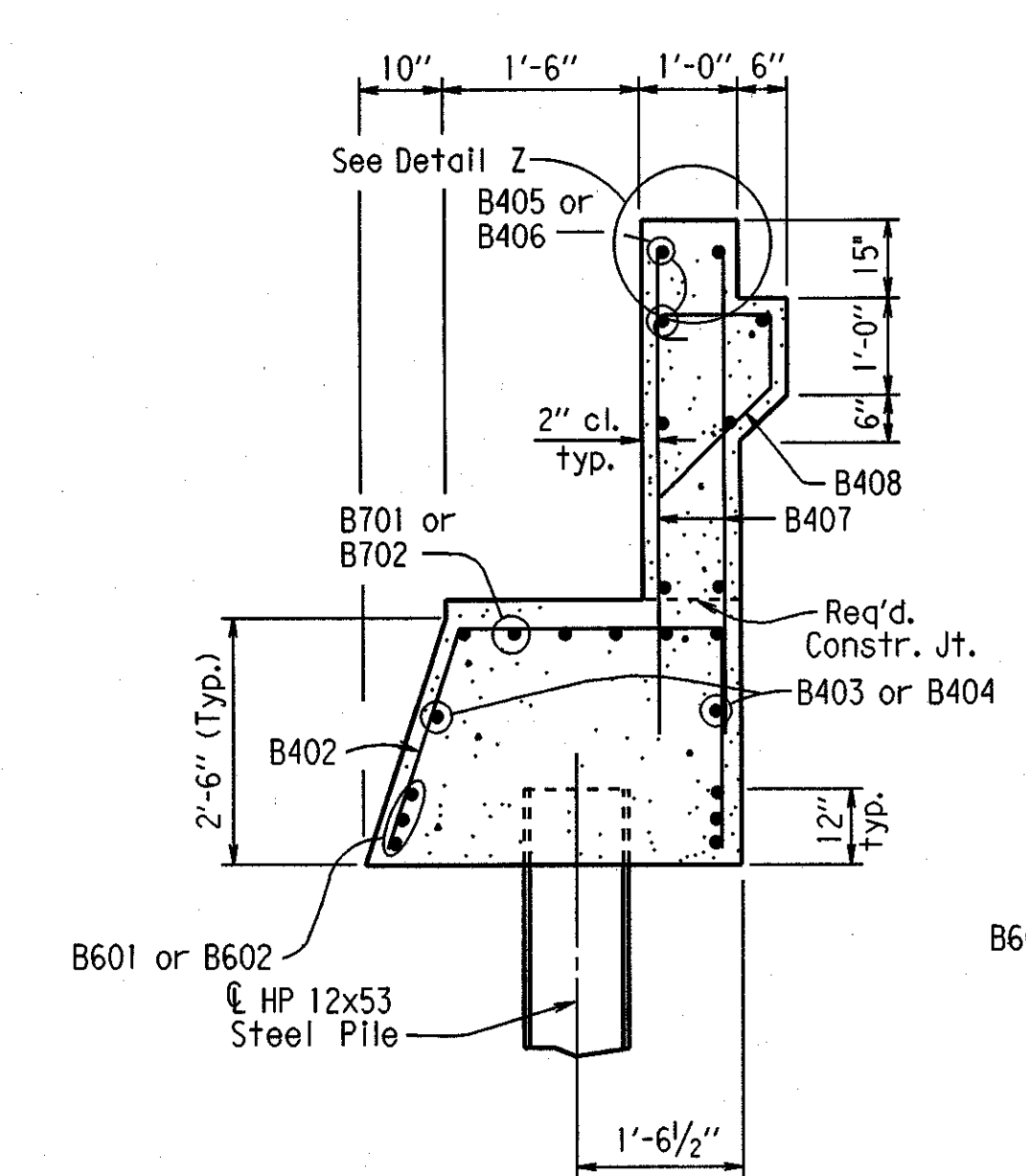
SECTION F-F
Scale: 1/2" = 1'-0"



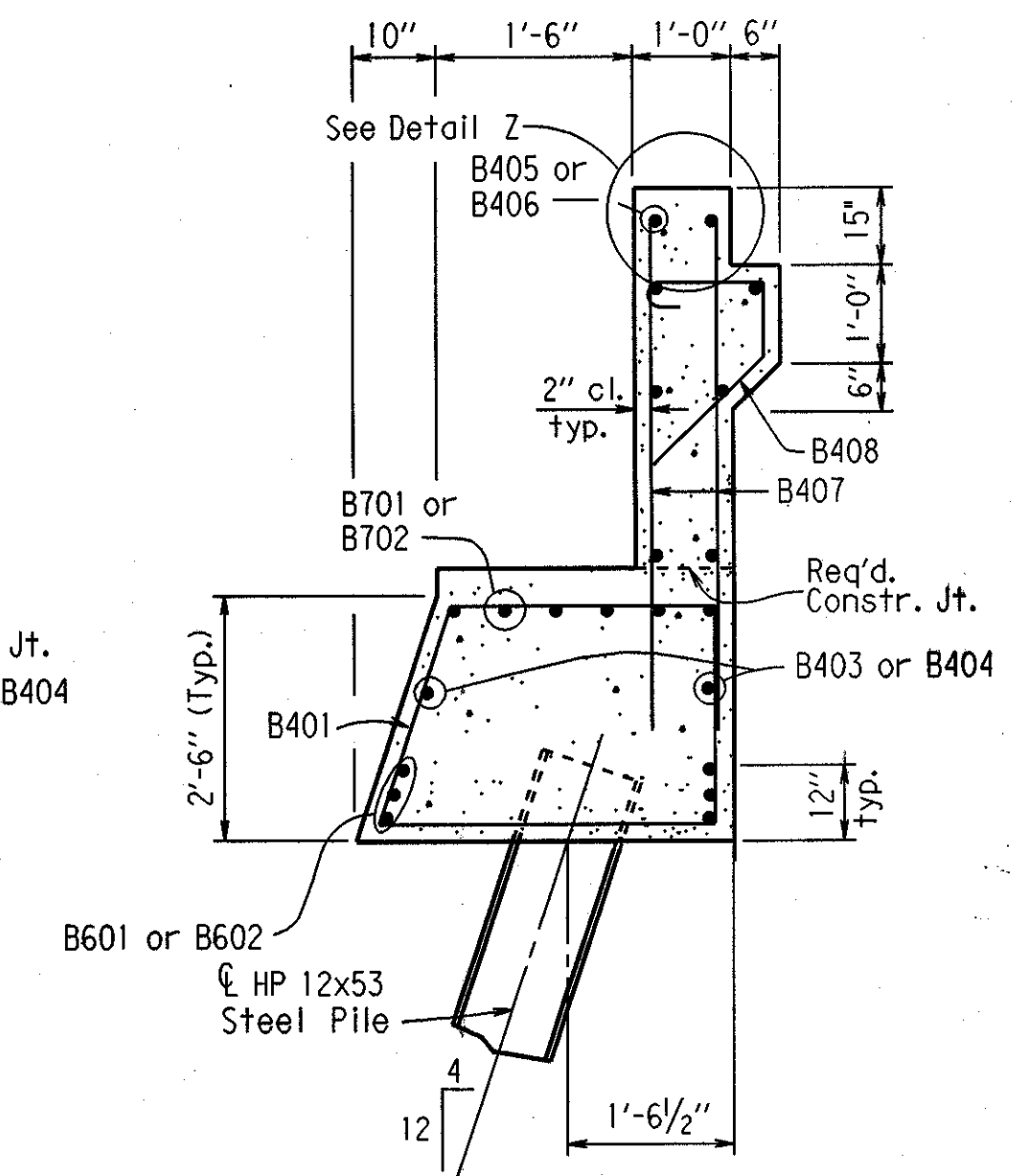
For additional details, See Dwg. No. 43870.

DETAIL Z
No Scale

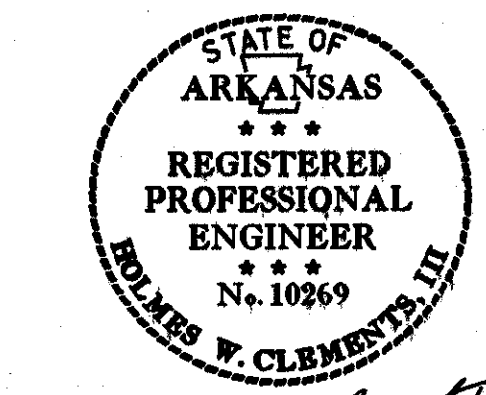
Note: Concrete Shall be hand packed under the
Joint Armor in the Backwall.



SECTION A-A
No Scale



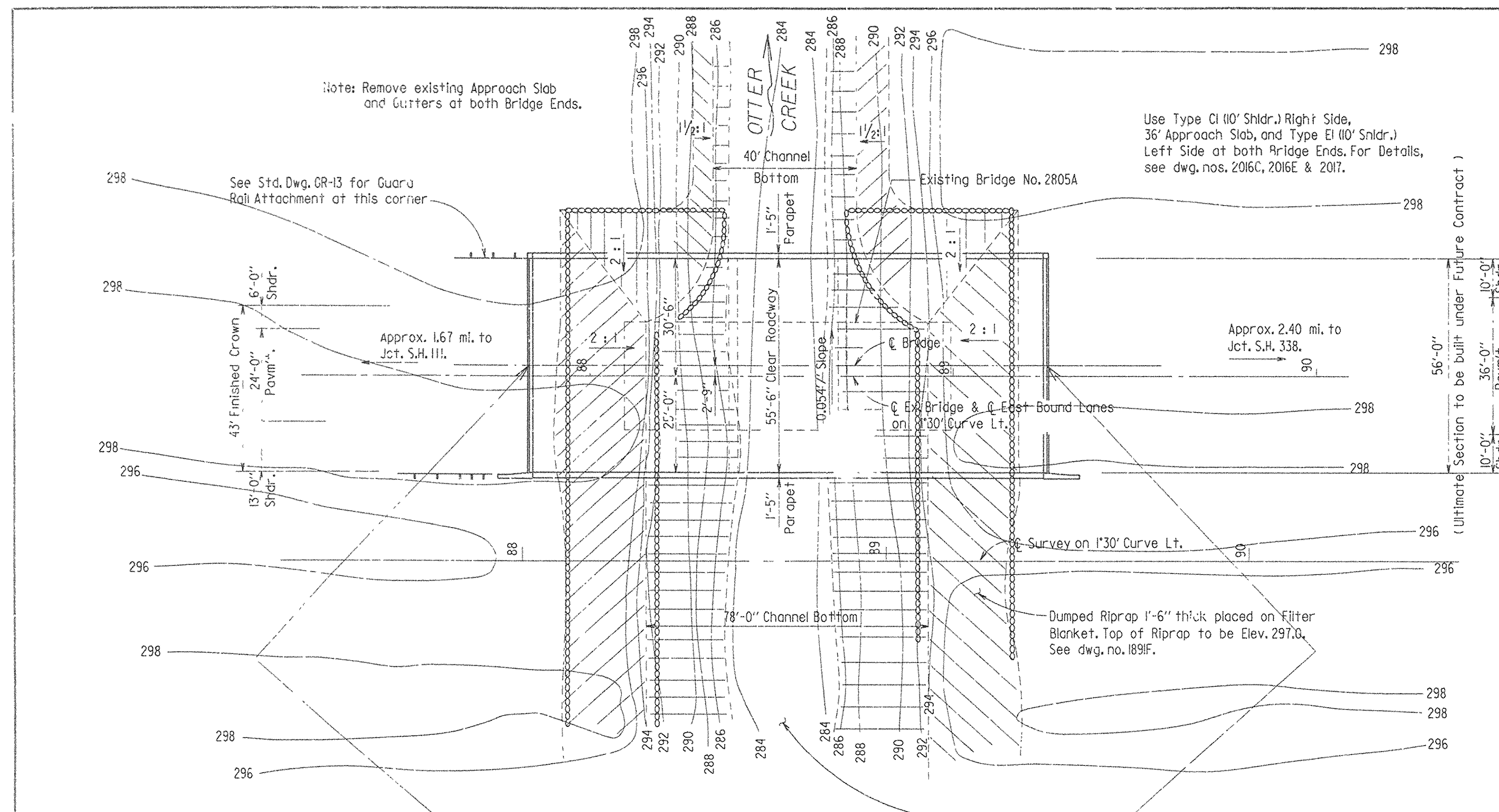
SECTION B-B
No Scale



SHEET 3 OF 3
DETAILS OF END BENTS
I-30 (WESTBOUND) OVER CROOKED CREEK
WEST OF PULASKI COUNTY LINE - I-430
PULASKI COUNTY
ROUTE 30 SEC. 23
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: CAB DATE: 4-29-02 FILENAME: BB60120X2.Bdt
CHECKED BY: RTP DATE: 4-29-02 SCALE: As shown
DESIGNED BY: AS DATE: 9-15-01
BRIDGE NO. B6926 DRAWING NO. 43862

30-APR-2002
L:\P060300\WB CrookedBent1.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FTA ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	AR.			
				JOB NO.		63452	56	118
				①	6357A	LAYOUT	31015	



For R/W Data - See Rdwy. Plans

Use Type CI (10' Shldr.) Right Side, 36' Approach Slab, and Type EI (10' Shldr.) Left Side at both Bridge Ends. For Details, see dwg. nos. 2016C, 2016E & 2017.

HORIZONTAL CURVE DATA: (FOR @ SURVEY)

P.I. = Sta. 84+46.92
 Δ = 32°00'21" Lt.
D = 1°30'
R = 3819.7186'
L = 2133.72'
T = 1095.50'

HORIZONTAL CURVE DATA: (FOR @ MAIN LANES)

P.I. = Sta. 84+33.44
P.C. = Sta. 73+37.94
P.T. = Sta. 94+71.66
 Δ = 32°00'21" Lt.
D = 1°30'
R = 3819.7186'
L = 2133.72'
T = 1095.50'

GENERAL NOTES

BENCH MARK: □ Cut in East end of Lt. Wheeguard of bridge over Rt. Service Rd. 8' Rt. Sta. 89+18, Elev. 298.26.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1931 edition, with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, 1983 with current Interim specifications.

LIVE LOADING: HS20

METHOD OF DESIGN: Load Factor

MATERIALS AND STRENGTHS:

Class S(AE) Concrete (superstructure)	f'c = 4,000 psi
Class S Concrete (substructure)	f'c = 3,500 psi
Reinforcing Steel (A615 or A617, Gr. 60)	Fy = 60,000 psi
Structural Steel (A36)	Fy = 36,000 psi

STEEL PILING: Piling in end bents 1 & 6 shall be HP 10x42 and shall be driven to a minimum safe bearing capacity of 55 tons per pile. Piling in int. bents 2 - 5 shall be HP 12x53 and shall be driven to a minimum safe bearing capacity of 70 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. Piling in bents 2 - 5 shall have a minimum penetration of 20' below the excavated channel surface. Lengths of piling shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the standard specifications. On all piles the Contractor shall use Hard-Bite HP 77600 H-Pile Points manufactured by Associated Pipe and Fitting Corporation, Versa-Bite 300 P Rock Duty Series H-Pile points manufactured by Versa-Steel, Inc. or equal as approved by the Bridge Engineer.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified for final finishing in subsection 802.20 for Class 5 Bridge Roadway Surface Finish.

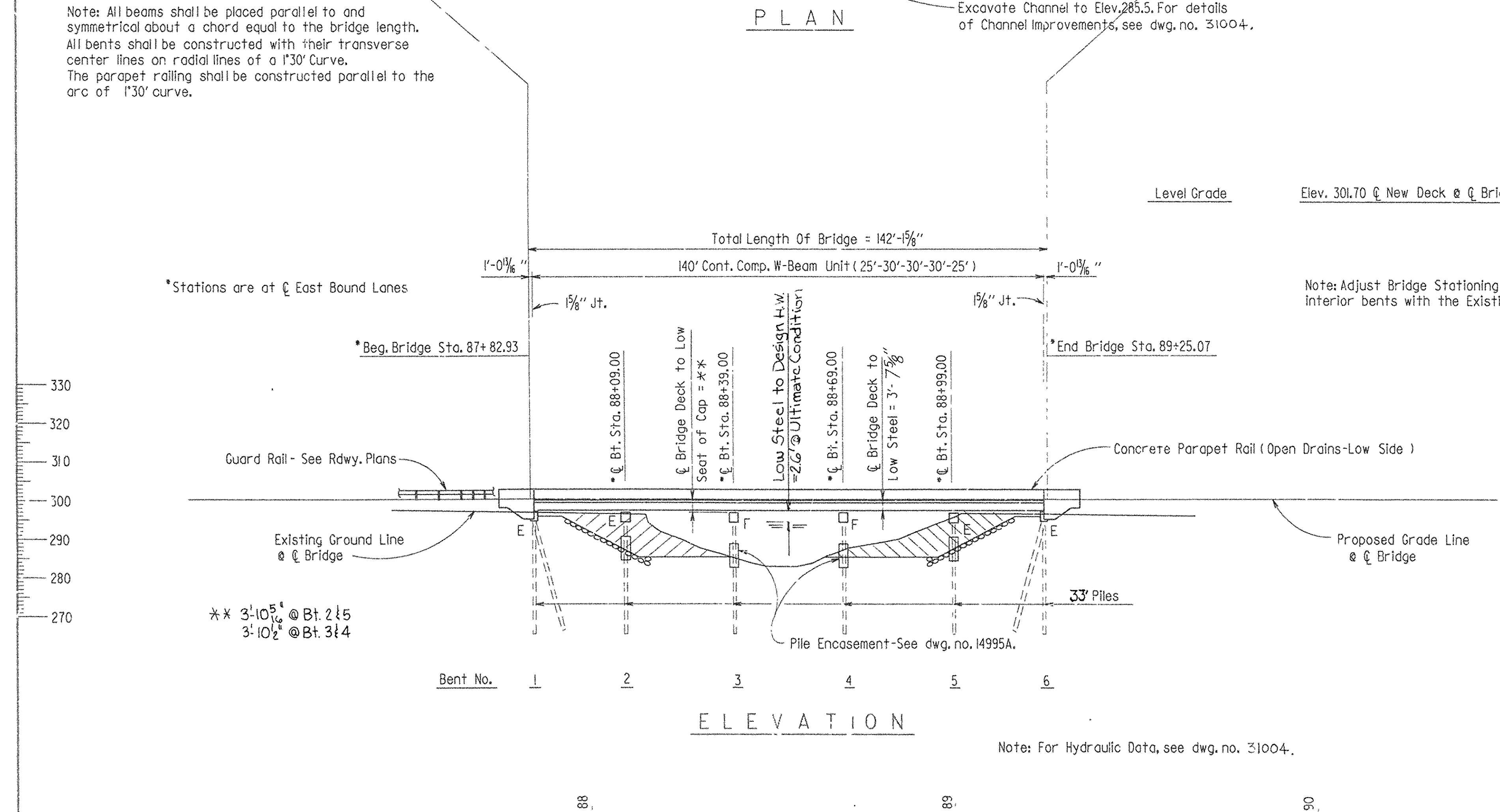
DETAIL DRAWINGS:

	DRAWING NO.
End Bents	31012
Intermediate Bents	31016
140' Cont. Comp. W-Beam Unit	31022, 31017, 31017A

DETOUR BRIDGE: The New Right Frontage Road Bridge will be used as a detour. See Roadway Plans for actual detour alignment and grade.

EXISTING BRIDGE: The existing bridge No. 2805A is 28' wide and 92' long and consists of a concrete deck with I-beam superstructure. The substructure consists of concrete caps with steel piling.

REMOVAL AND SALVAGE: The Existing Bridge shall be removed in accordance with Section 205 of the Standard Specifications. All material from the existing bridge shall become the property of the Contractor except the metal bridge railing which shall remain the property of the state.



Note: Adjust Bridge Stationing as needed to align new interior bents with the Existing West Bound Bridge interior bents.

LAYOUT OF BRIDGE OVER
OTTER CREEK
CROOKED, HURRICANE, AND OTTER CREEK
STRS. & APPRS. (E.B. LANE)
SALINE & PULASKI COUNTIES
INT. ROUTE 30 SEC. 23
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: W.M.A. DATE: 6-23-90
CHECKED BY: GEC DATE: 7-23-90
DESIGNED BY: GEC DATE: 5-90

BRIDGE NO. 6357A DRAWING NO. 31015

SCALE: 1" = 20'

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.		B60120	243	502

B6357 Layout 43871

GENERAL NOTES

BENCH MARK: R.R. Spike in C.P. E. Side Rd. S. of Service Rd. Elev. 294.29

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 Edition) with applicable supplemental specifications and special provisions.

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:
Class S(AE) Concrete (Superstructure) $f'c = 4,000$ psi
Class S Concrete (Substructure) $f'c = 3,500$ psi
Reinforcing Steel (AASHTO M31 or M53, Gr. 60) $F_y = 60,000$ psi
Structural Steel (AASHTO M 270, Gr. 50W) $F_y 50,000$ psi

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

STEEL PILING: Piling in End Bents shall be HP 12x53. Piling in Int. Bents 2-6 shall be HP 14x73. Piles shall be driven with an approved air, steam, or diesel hammer with a total energy developed of 20,000 ft.-lbs. to a minimum safe bearing capacity of 60 tons per pile and to a minimum required tip elevation of 270.00 for all bents. Lengths of piling shown are for estimating only. Actual lengths to be determined in the field. No additional payment will be made for cut-off and build-up. Test piles are not required, but may be driven for the Contractor's information in accordance with subsection 805.08 (g). Piles in end bents to be driven after embankment to bottom of cap is in place. On all piles contractor shall use approved steel H-piles driving points.

PREBORING: Preboring to elevation 270.00 for all bents will be required before driving the first pile in each bent. The Engineer shall consider the field conditions in determining the necessity and depth of preboring required for the remaining piles in each bent.

PILE ENCASEMENT: Pile Encasement for Bents 2, 3, 4, and 5 shall extend 3' into the ground and a minimum of 2' above ground line. See Dwg. No. 14995A for additional information.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified for final finishing in subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

EXISTING BRIDGE: The existing bridge No. 02805 is 42' wide and 92' long and consists of a concrete deck with W-beam superstructure. The substructure consists of HP steel pile bents. Plans for existing bridge will be made available to the contractor upon request to Programs and Contracts Division. Existing Dwg. Nos. 19269, 19270, 19271, 19272, 19272A, 19273, 19273A, 19274, 8040, 5167, & 5168.

REMOVAL AND SALVAGE: Existing Bridge No. 02805 shall be removed in accordance with Section 205 of the Standard Specifications, with the addition that piles at existing intermediate bents be pulled if there is a conflict with the new piles. All material from the existing bridge shall become the property of the Contractor.

Rubbed Finish at Median Parapet: At the outside face of the parapet, adjacent to C.L. Median, the rubbed finish specified in subsection 802.19(b)(2) shall be extended down from the top of the parapet a minimum of 12 inches.

MAINTENANCE OF TRAFFIC: See Roadway plans for detour alignment and grade. Westbound Interstate traffic will be detoured to the Eastbound Bridge.

HYDRAULIC DATA

FLOOD DESCRIPTION	FREQUENCY	DISCHARGE	NATURAL WATER SURFACE ELEVATION	WATER SURFACE ELEV. WITH BACKWATER
	YEARS	CFS	FEET	FEET
Design	50	6450	295.6	296.8
Base	100	7720	296.2	297.7
Overtopping	***	-	-	-

*** Unconstricted water surface without structure or roadway approaches.
Drainage area = 12.1 square miles.
Historical H.W. Elev. = 300.1 (Sept. 1978)

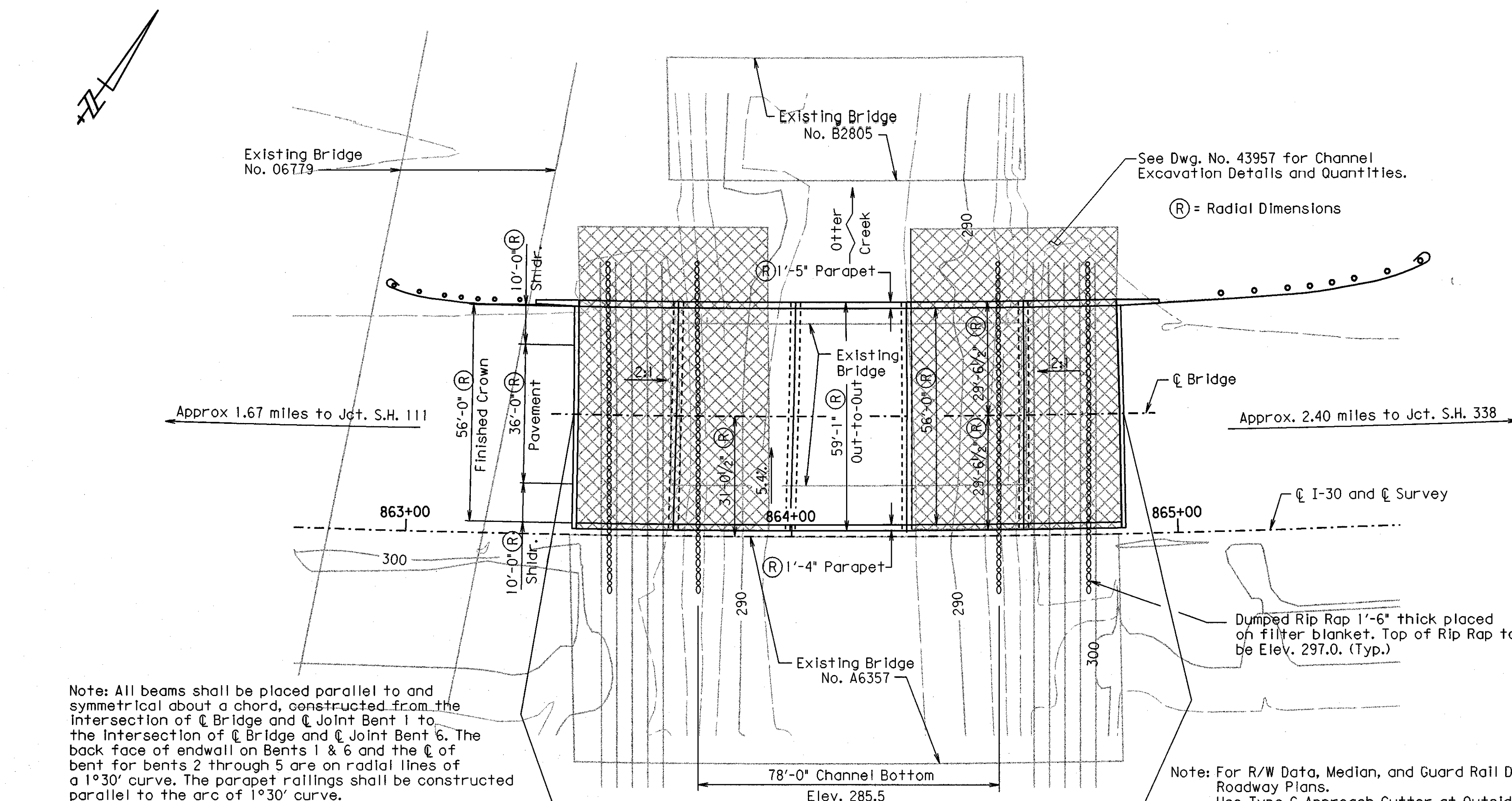
*** Frequency > 50 yrs.

DETAIL DRAWINGS:

DETAIL DRAWINGS:	DRAWING NO.
Bridge Layouts	43871 - 43872
End Bents	43873 - 43876
Intermediate Bents	43877
140' Cont. Composite W-Beam Unit	43878 - 43884
Bearing Assembly & Joint Seal	43885
Steel Piling	14995A
Type C Approach Cutters	2016C
Type Special Approach Gutter at Median A	43956
36' Approach Slab	43956

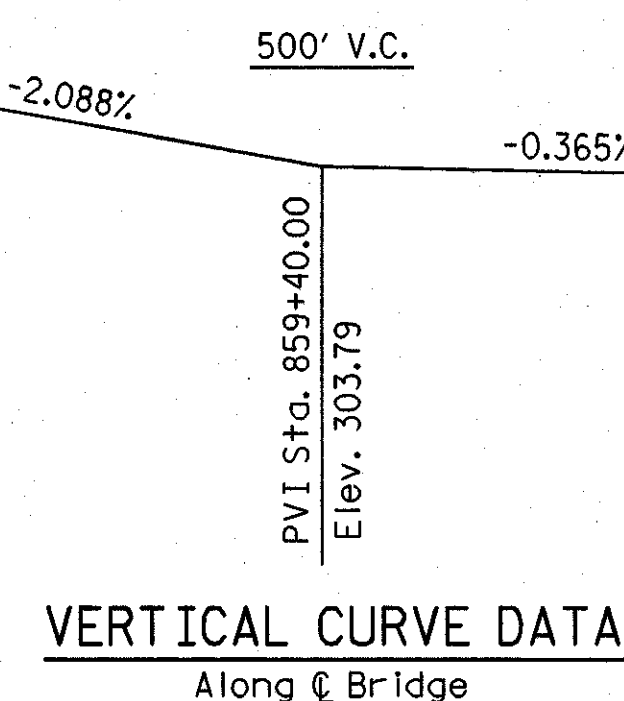
LAYOUT OF I-30 (WESTBOUND) OVER OTTER CREEK WEST OF PULASKI CO. LINE - I-430 (F) PULASKI COUNTY

ROUTE 30 SEC. 23
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY: CAB DATE: 4-29-02 FILENAME: BB60120X3.L1
CHECKED BY: AS/HWC DATE: 4-29-02 SCALE: 1"=20'
DESIGNED BY: RTP DATE: 8-10-01
BRIDGE NO. B6357 DRAWING NO. 43871



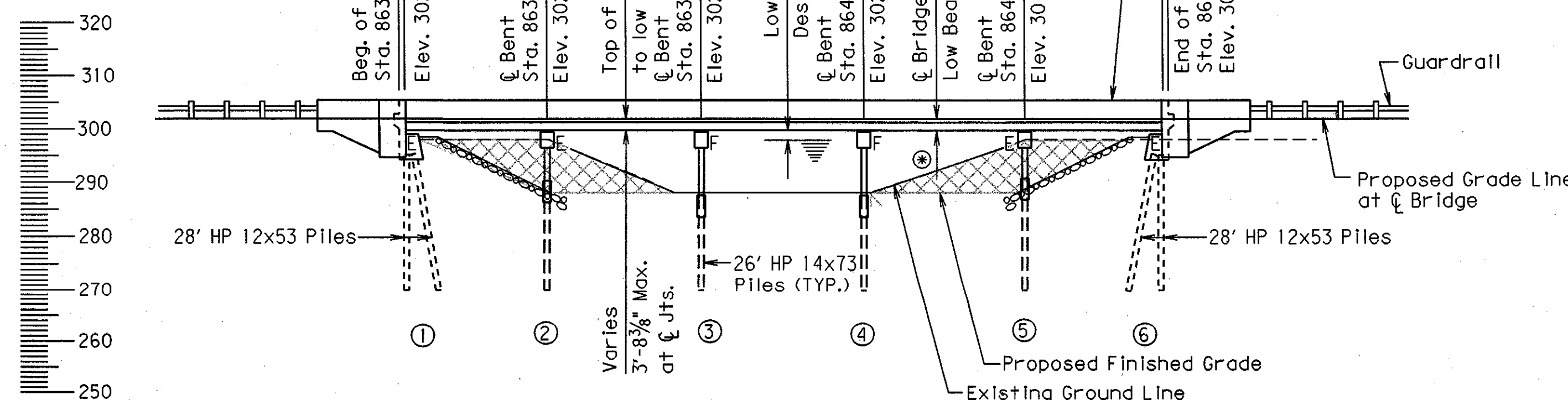
PLAN

Note: For R/W Data, Median, and Guard Rail Details, See Roadway Plans.
Use Type C Approach Gutter at Outside Lane and use Type Special Approach Gutter at Median A for inside lane. Use 36' Approach Slab on Std. Dwg. No. 2018.



HORIZONTAL CURVE DATA

(for Centerline of I-30)
P.I. = Sta. 859+96.60
P.C. = Sta. 849+02.18
P.T. = Sta. 870+33.92
Δ = 31°58'34.17" LT.
D = 1°30'
R = 3819.71
L = 2131.74
T = 1094.42



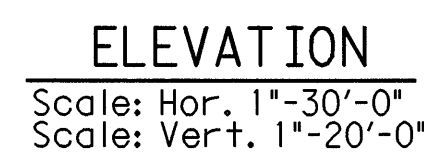
ELEVATION

GENERAL NOTES

BRIDGE NO. A&B 6919 DRAWING NO. 44709



ES W. CLEMENT
Helmuth W. Clement
7-15-02
BRIDGE ENGINEER



5-JUL-2002
P060300Pbase\roadPbasepe.dgn

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.		292	639
				JOB NO.	B60119			

GENERAL NOTES

BENCH MARK: Square cut top of H.W. 150' E of I-30 E.B. Elev. 284.877

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 Edition) with applicable supplemental specifications and special provisions.

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

SEISMIC PERFORMANCE CATEGORY: A

LIVE LOADING: HS20 + Military **METHOD OF DESIGN:** Load Factor

MATERIALS AND STRENGTHS:
Class S(AE) Concrete (Superstructure) f'c = 4,000 psi
Class S Concrete (Substructure) f'c = 3,500 psi
Reinforcing Steel (AASHTO M31 or M53, Gr. 60) Fy = 60,000 psi
Structural Steel (AASHTO M270, Gr. 50) Fy 50,000 psi
Structural Steel (AASHTO M270, Gr. 36) Fy 36,000 psi

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

STEEL PILING: All piling shall be HP 14 x 73 and shall be driven with an approved air, steam, or diesel hammer with a total energy developed of 20,000 ft.-lbs. to a minimum safe bearing capacity of 80 tons per pile and to minimum required tip elevations of 273.00 for Bent 1, 258.00 for Bent 2, 254.00 for Bents 3 and Bent 4. Lengths of piling shown are for estimating only. Actual lengths to be determined in the field. No additional payment will be made for cut-off and build-up. Test piles are not required, but may be driven for the Contractor's information in accordance with subsection 805.08(g). Piles in end bents to be driven after embankment to bottom of cap is in place. On all piles the contractor shall use approved steel H-Pile driving points.

PREBORING: Preboring to elevation 268.00 for bent 2 will be required before driving the first pile. The Engineer shall consider the field conditions in determining the necessity and depth of preboring required for the remaining piles.

FOOTINGS: The top of all footings shall have a minimum cover of 2'-0" below finished grade or 6'-0" below base of rail. Foundations for footings shall be prepared in accordance with subsection 801.04.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified for final finishing in subsection 802.19 for Class 5 Tined Bridge Roadway Surface Finish.

FINISHING CONCRETE SURFACES: The bridge shall be given a class 3 Textured Coating Finish in accordance with subsection 802.19 and SP B60119 "Textured Coating Finish".

MAINTENANCE OF TRAFFIC: See Roadway Plans for maintenance of traffic.

PAINTING STRUCTURAL STEEL: Paint Color shall be Green in accordance with Federal Paint Chip Color No. 14109, Green.

EXISTING BRIDGE: Existing Bridge No. 03172 and A3172 are both 28' wide and 572.4' and 542.4' long respectively. Both bridges consist of a concrete deck with W-beam superstructure. The substructure consists of concrete end bents with concrete piling and concrete column intermediate bents with spread footings. Plans for existing bridge will be made available to the Contractor upon request to Programs and Contracts Division. Existing Dwg. Nos. 9745, 9748, 9749, 9750, 5456, 5457B, 5457E, and 5457F.

REMOVAL AND SALVAGE: After the Proposed Bridge No. B6920 and C6920 are open to traffic, Existing Bridge No. 03172 shall be removed in accordance with Section 205 of the Standard Specification. Proposed Bridge No. A6920 shall be built at this stage. Existing Rip Rap shall be removed. The removal will not be paid for directly, but will be considered subsidiary to the item "Removal of Existing Bridge Structure". All material from existing bridges shall become the property of the contractor.

PC Sta. 35+98.86
PI Sta. 39+07.35
PT Sta. 42+15.23
Δ = 6°12'02" Lt.
D = 1°00'21.5"
R = 5695.58'
L = 616.38'
T = 308.49'

HORIZONTAL CURVE DATA

(Along R of U.S.70 / U.S. 67)

LAYOUT OF I-30 (EASTBOUND) OVER UNIVERSITY AVENUE I-430 - GEYER SPRINGS RD. (F) PULASKI COUNTY

ROUTE 30 SEC. 23
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

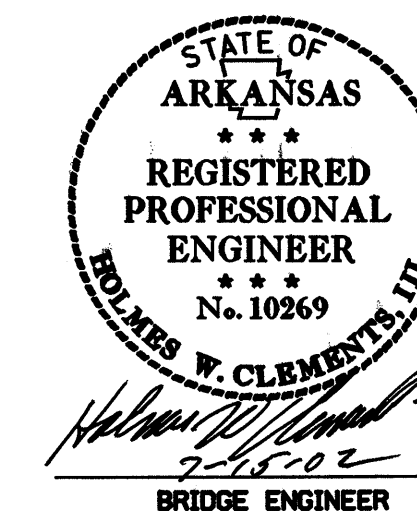
DRAWN BY: CAB/DPD DATE: 7-11-02 FILENAME: BB60119x3.LLI
CHECKED BY: HWC DATE: 7-11-02 SCALE: 1"=30'
DESIGNED BY: AS/RTD DATE: 8-16-01
BRIDGE NO. A6920 DRAWING NO. 44730

DETAIL DRAWINGS:

Bridge Layout
Railroad Exhibit
End Bents
Intermediate Bents
411' Cont. Plate Girder Unit
Elastomeric Bearings
Fence
Neoprene Strip Seal
Steel Piling
Type C Approach Gutters
48" Type Special Approach Slab

DRAWING NO.

44730 - 44731
44732 - 44733
44734 - 44738
44739 - 44742
44743 - 44755
44756
44807
44808 - 44809
14995A
2016C
44810

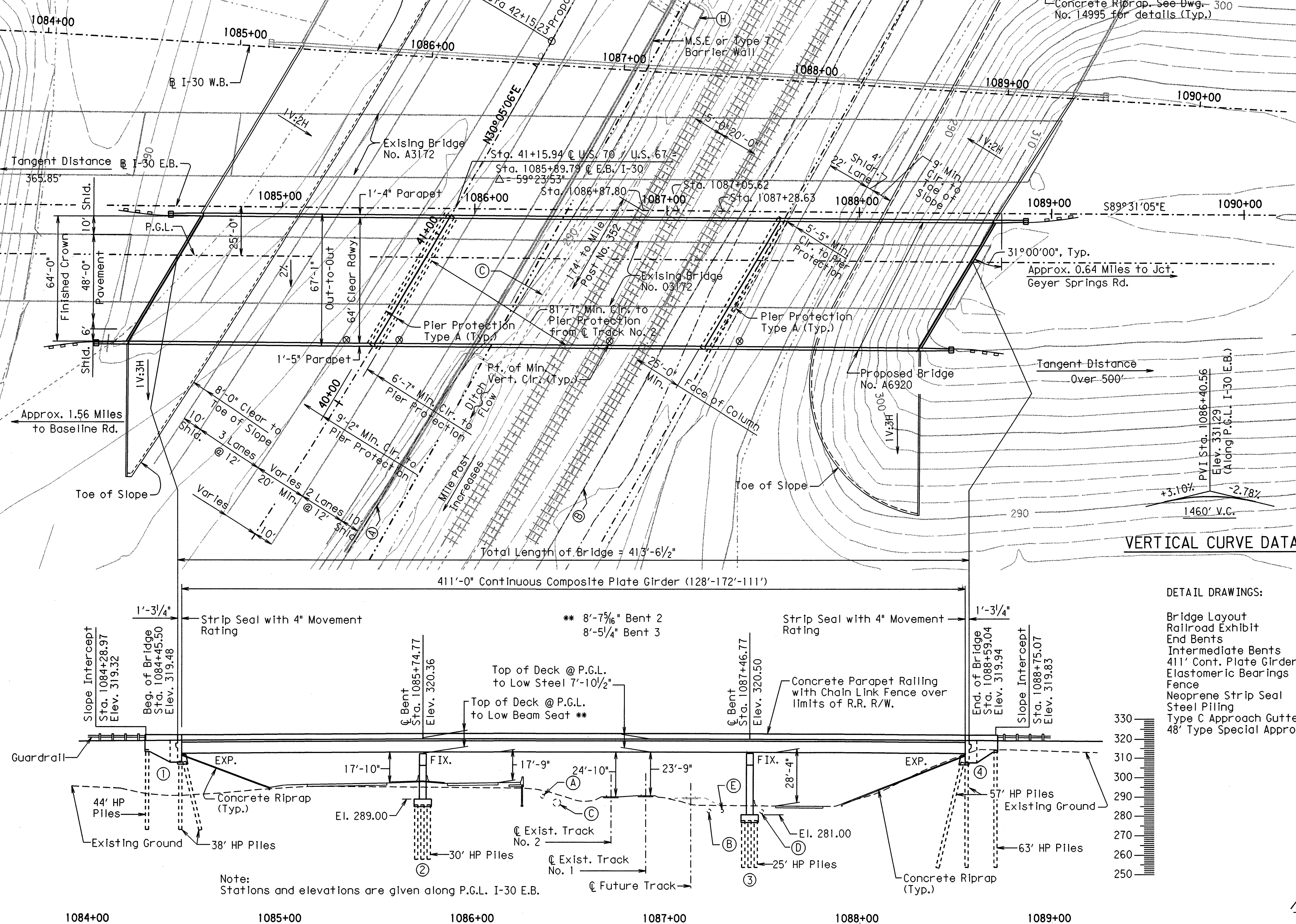


- (A): Existing Fiber Optic to be retained.
- (B): Existing MCI Fiber Optic to remain.
- (C): Existing 48" R.C.P. to remain.
- (D): Existing 12" Sanitary Sewer to be relocated.
- (E): Existing 20" Water Main to be retained.
- (F): Existing 30" R.C.P. to remain.
- (G): Existing Head Wall and portion DBL. 30" R.C.P. to be removed.
- (H): Existing Junction Box to remain.
- (J): Proposed Drainage Structures.

Note:
For R/W data, M.S.E Wall Details, Type 7 Barrier Wall Details, and Guard Rail Detail, see Rdwy. Plans.

For existing and proposed Drainage Structures and Pipes and existing and relocated utilities, see Dwg. No. 44732 and Rdwy. Plans.

Use Type C Approach Gutters.
Use 48" Approach Slab Type Special.



Note:
Stations and elevations are given along P.G.L. I-30 E.B.

⊗For Superelevation Data, See Dwg. No. 44758.

W. CLEMENS
Helen W. Clemens
7-15-02
BRIDGE ENGINEER

