

TRANSPORTATION CABINET
DEPARTMENT OF HIGHWAYS

JEFFERSON COUNTY

ITEM NUMBER 5-2001.00

[illegible]

NOTE: Include in the Lump Sum bid for BRIDGE OVER GARR'S LANE all labor, materials and equipment necessary to construct the bridge in accordance with these plans and the Specifications. The quantities shown on this sheet are for information purposes only. Contrary to notes in these plans, specifications, Special Notes and Standard Drawings, payment will not be made for individual items of work but will instead be included in the Lump Sum bid.

BILL OF INCIDENTAL MATERIALS	
Material	Location
1" Ø I.D. Plastic Pile	Barrier Transitions
2" Ø I.D. Commercial Pipe Sleeve	Barrier Transitions

INDEX OF SHEETS					
Sheet No.		Description			
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S3	Layout				
S4	Phase Construction				
S5-S6	End Bent #1				
S7-S8	End Bent #2				
S9	Southbound Superstructure				
S10	Northbound Superstructure				
S11	Reinforcement Superstructure				
ADDITIONAL NOTES					
SPECIAL NOTES					
SPECIAL PROVISIONS					
STANDARD DRAWINGS					
BGX-006-08	Stencils for Structures				
BGX-010-03	Barrier Transition				
BJE-001-10	Neoprene Expansion Dams and Armored Edges				
SPECIFICATIONS					
2000 Standard Specifications for Road and Bridge Construction					
2001 AASHTO Standard Specifications for Highway Bridges Including Interims through 1998.					
REVISION				DATE	
DATE:		November 2001		CHECKED BY	
DESIGNED BY:		D.Carpenter			
DETAILED BY:		J.L. Flood		D.Carpenter	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS					
JEFFERSON COUNTY					
ROUTE I-264		CROSSING Garr's Lane			
TITLE					
PREPARED BY Division of Bridge Design D. Carpenter Section				SHEET NO. S1	
				DRAWING NO. 25189	

FILE NAME: D:\bridges\PROJECTS\25189\25189.dgn

USERNAME: jflood

DATE: 22-OCT-2002

SHEET LOCATION: TIT

FILE NAME: D:\bridges\PROJECTS\25189\25189.dgn

USERNAME: Jflood

DATE: 22-OCT-2002

SHEET LOCATION: GN1

GENERAL NOTES

SPECIFICATIONS: All references to the stondord Specifcotions are to the current edition of the Kentucky Department of Highways Stondord Specifcotions for Road and Bridge Construction, with current supplemental specifcotions. All references to the AASHTO Specifcotions are to the current edtlon of the AASHTO Standard Specifcotions for Highway Bridges, with Interlms.

LIVE LOAD: This bridge work is designed for HS25 live load or alternote military looding, whichever produces the greater stress. The HS25 live load is orrived ot by increasing the stondord HS20-44 truck and lone loads as specified in the AASHTO Specifcotions by 25%.

DESIGN METHDD: All reinforced concrete members are designed by the load factor method os specified in the current AASHTD Specifications.

REINFRCEMENT: Dimensions shown from the face of concrete to bors ore to center of bors unless otherwise shown. Spoolng af bars is fram center to center of bors. Clear distance to face of concrete is 2 inches unless atherwise nated. Any reinforcing bars designated by suffix (e) in the Plans shall be epoxy coated in accordance with section 8II.ID af the Stondord Specifcotions. Any reinforcing bors designated by suffix (s) in o BIII of Reinforcement shall be considered o stirrup far purposes af bend diameters.

CDNCRETE: Class 'AA' is to be used throughout the new slob ond borriers.

BEVELED EDGES: All expased edges shall be beveled $\frac{3}{8}$ " unless atherwise shawn.

BILL OF INCIDENTAL MATERIAL: The Contractor is responsible for furnishing enough material to complete the work in occordonce with the Plans ond Specifcotions. The cost of these items is to be Included in the unit price bid for Closs 'AA' Concrete.

DIMENSIONDS: Dimensians ore for a normal temperature af 60° F Layout dimensians ore horizontal meosurements.

SUPERSTRUCTURE SLAB: The superstructure slob shall be poured continuously from out to out before the concrete is allowed to set.

ON-SITE INSPECTION: Each contractor submitting a bid for this work shall make o tharaugh inspection of the project site prior ta submitting o bid ond shall be tharaughly fomllorized with existing canditions sa that work can be expeditiously performed ofter o contract is oworded. Submission of o bid will be considered evidence af this inspection having been mode. Any cloims resulting from site conditions will nat be honored by the 0epartment af Highway.

EXISTING REINFORCING STEEL: The cost of cutting, bending ond cleonng existing reinforcing steel is ta be incidental to the unit price bid far Remaving Concrete Masonry.

MASONRY SURFACE FINISH: Only oreos detolled in the Bridge Plans shall receive a masonry coating. All coating shall be applied in accordance with the specifications.

REMOVAL OF EXISTING REINFORCED CONCRETE: This wark shall include removing the reinforced concrete curbs ond hondrolls for the entire length of the bridge plus other concrete noted an the plans and deposing of this materiol owoy from he bridge site. Proper core shall be token to protect the concrete beams ond substructure fram damage during this operation. The contractor shall be responsible for any damage couosed by falling porticles. The cost of this work shall be included in the unit price bid for Removing Concrete Masonry.

TEXTURING: Texture the surface af the new slab in accordance with Section 609 of the specifications. Cast ta texture the surface is included in the unit price bid far 'Concrete Class 'AA'

DAMAGE TO THE STRUCTURE: The contractor is responsible far ony and oll damages to the structure during reconstruction, even to the replacoment of entire sponos ond removal of the fallen sponos of his expense, should they be ollowed ollowed ta foll due to his octions.

PREWETTING THE DECK: The contractor shall use o high pressure washer (minimum 1200 PSI @ 2 gal./min.) to wosh the deck of ony loose materiol ond dirt prior to ploding the reinforcement steel. The contractor shall also continuously woter the deck for 2 hours before ploding the new concrete ond maintain visble moisture on the deck without stondng woter while the new slob is being poured. All cost of this work is incidental to Class 'AA' Concrete.

EXISTING ALUMINUM HANDRAIL: The existing aluminum hondroll, including posts, shall be corefully removed and transported to the Jeffersan Cauntly Maintenance Garage in Middletown. This materiol shall remain the property of the department. All cost is incidental to Removing Concrete Mosonry.

GRADE ELEVATIONS: The Engineer shall check the alignment af the finishing machine rails to verify that the new slab will have a smooth driving surface. Dead laad camber is insignificont on the bridge.

ORIGINAL DRAWING NUMBER: The original drawing number far this structure is 16691.

ARMORED EDGES: Controry to the Standard Drawing BJE-001, c.e. cast ta fobricote ond install the steel Armored Edge is included in the unit price bid far 'Armored Edge for Concrete'.

BAR SPLICES: The unit price bid far 'Bar Splices' includes oll labor, tools, materials, equipment ond incidentals to splice the slob reinforcement between Phose I ond Phose II construction. The contractor hos two options far splicing the bars:

Option I: Field bend the bors placed in the Phose I construction from o vertical position to o horizontal pasltian ond lop with Phose II reinforcement os detolled.

Option II: Provide ond Instoll o mechanical coupler meeting the following requirements:

A) The contractor must submit o detoll of the mechanical coupler to the engineer showing how the coupler works into the finol construction. The manufactures doto sheet shall also be Included in this submittol.

B) The contractor must submit test specimens os required by the Stondord Specifcotions for testing ond approval.

C) The contractor must submit o revised bill of reinforcement to the engineer shawng the changes in far length af the affected bars.

This bid item only addresses the splices in the slob ond Abutment Backfill between Phose I ond Phose II construction. All other mechanical couplers needed will be addressed seperately. The quantity af 'Bar Splices' shall be field verified with the plans. The 'Bar 0plices' ore counted without regord for different sizes of splices. A Splice for o No. 4, No. 5, ond o No. 6 bor oll count equally os one 'Bor Splice'. The quantity for the reinforcement needed far Option I is Included in the bid for 'Steel Reinforcement Epoxy Cooted'. No odjustment in pay quantity for 'Steel Reinforcement Epoxy Cooted' will be mode regardless of the option used.

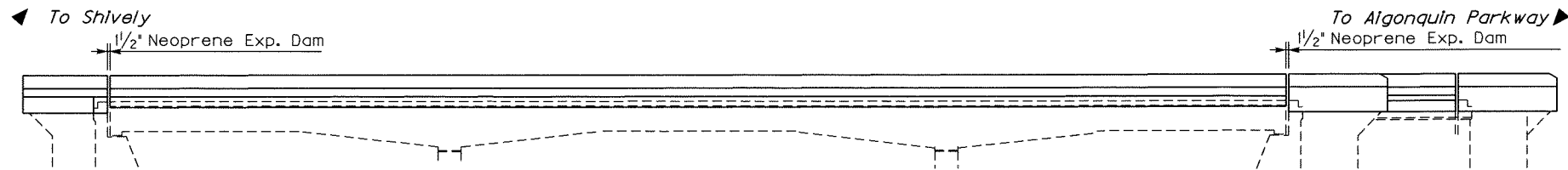
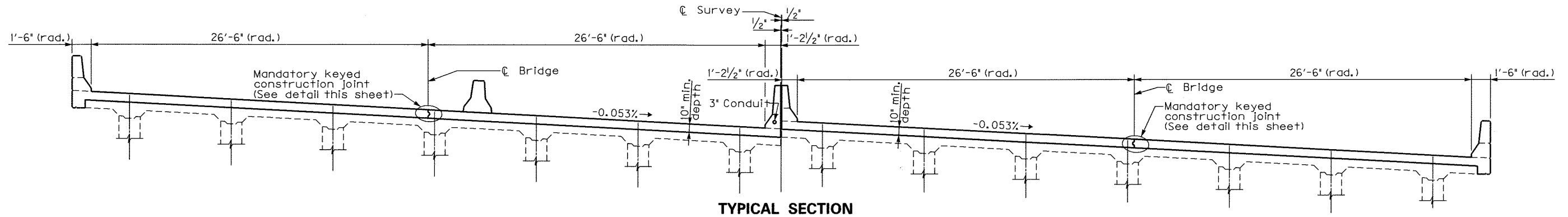
CONSTRUCTION SCHEOULING: All work is to be performed in accordance with the scheduling ond time restraints autlined in the maintenance of troffic notes. All extra cast ta perform this work, such as quick setting concrete shall be Included in the respective bid items.

NEW ELECTRICAL CONDUIT: The unit price bid for Conduit~3 Inch shall include furnishing all junction boxes, conduit, slip joints, and other materials and labor necessary far placing these materials in accordance with the plans and specifcotions.

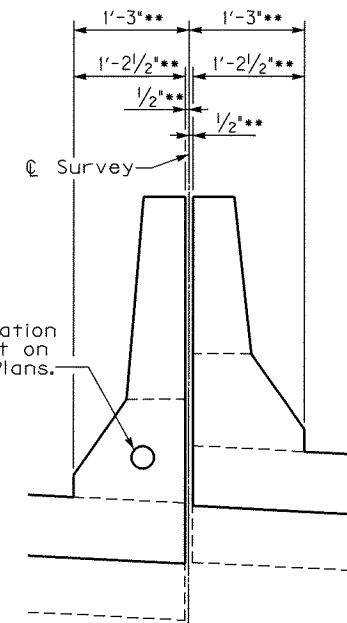
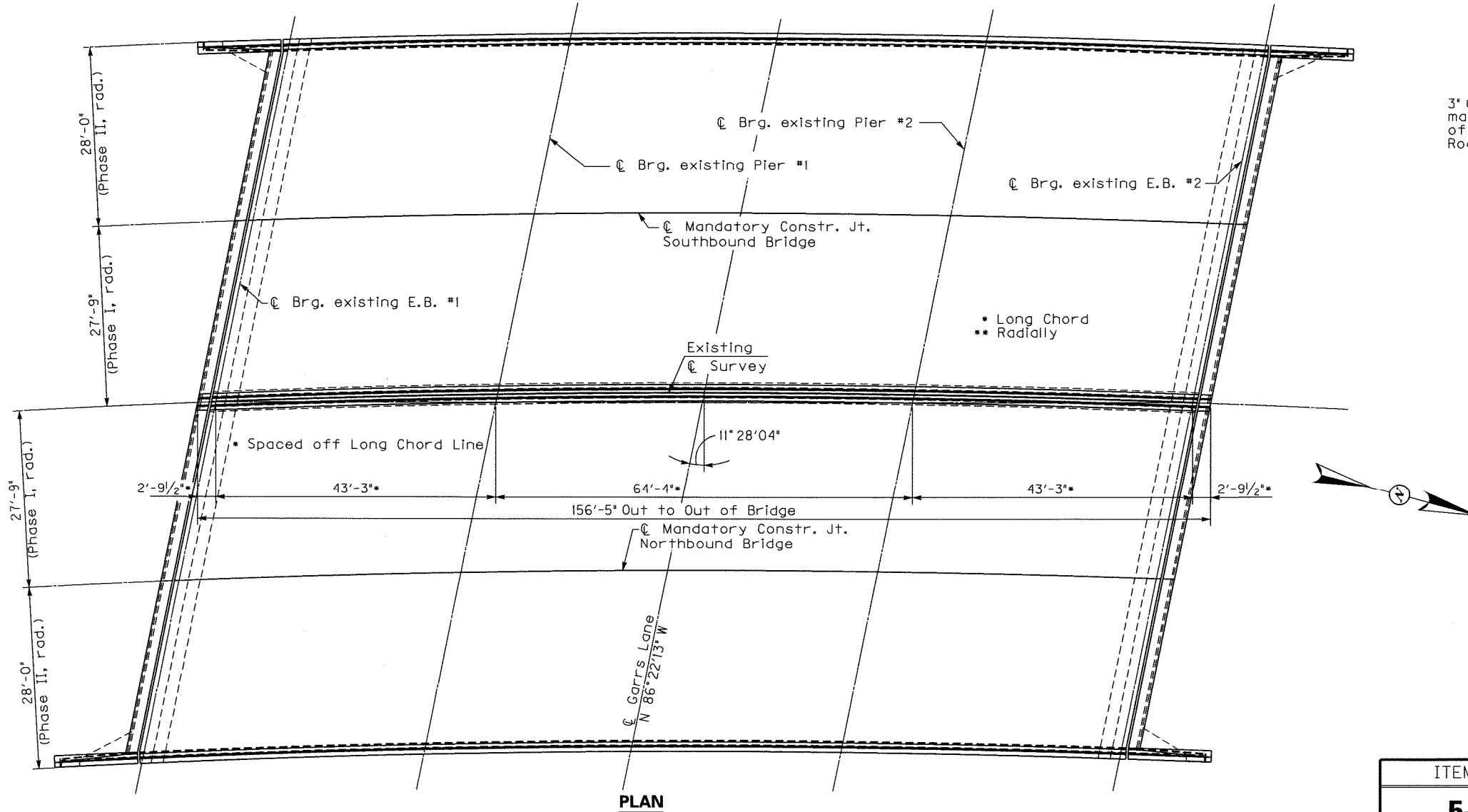
EXISTING ELECTRICAL CONOUIT: Electrical Conduit is within the existing concrete that is ta be removed. The contractor shall determine if live electriclity is in the conduit before removal.

REVISION		DATE
DATE:	November 2001	CHECKED BY
DESIGNED BY: D. Carpenter		
DETAILED BY: J.L. Flood		D. Carpenter
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-264	CROSSING Garr's Lane	
GENERAL NOTES		
PREPARED BY Division of Bridge Design D. Carpenter Section		SHEET NO. S2 DRAWING NO. 25189

ITEM NUMBER
5-2001



43'-3" x 64'-4" x 43'-3" Continuous R.C.D.G., Spans
 HS25 Live Load ~ 119'-9" Shoulder Width @ Bridge
 11°28'04" Right Skew ~ 108'-6" Bridge Roadway Width ~ 2:1 Fill Slopes



PROPOSED

• Long Chord
 ** Radially

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Commonwealth of Kentucky			
DEPARTMENT OF HIGHWAYS			
COUNTY			
JEFFERSON			
ROUTE	CROSSING		
I-264	Garr's Lane		
LAYOUT			
PREPARED BY			SHEET NO.
Division of Bridge Design			S3
D. Carpenter Section			DRAWING NO.
			25189

ITEM NUMBER

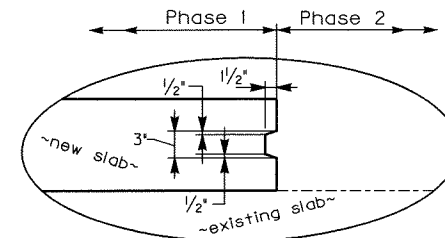
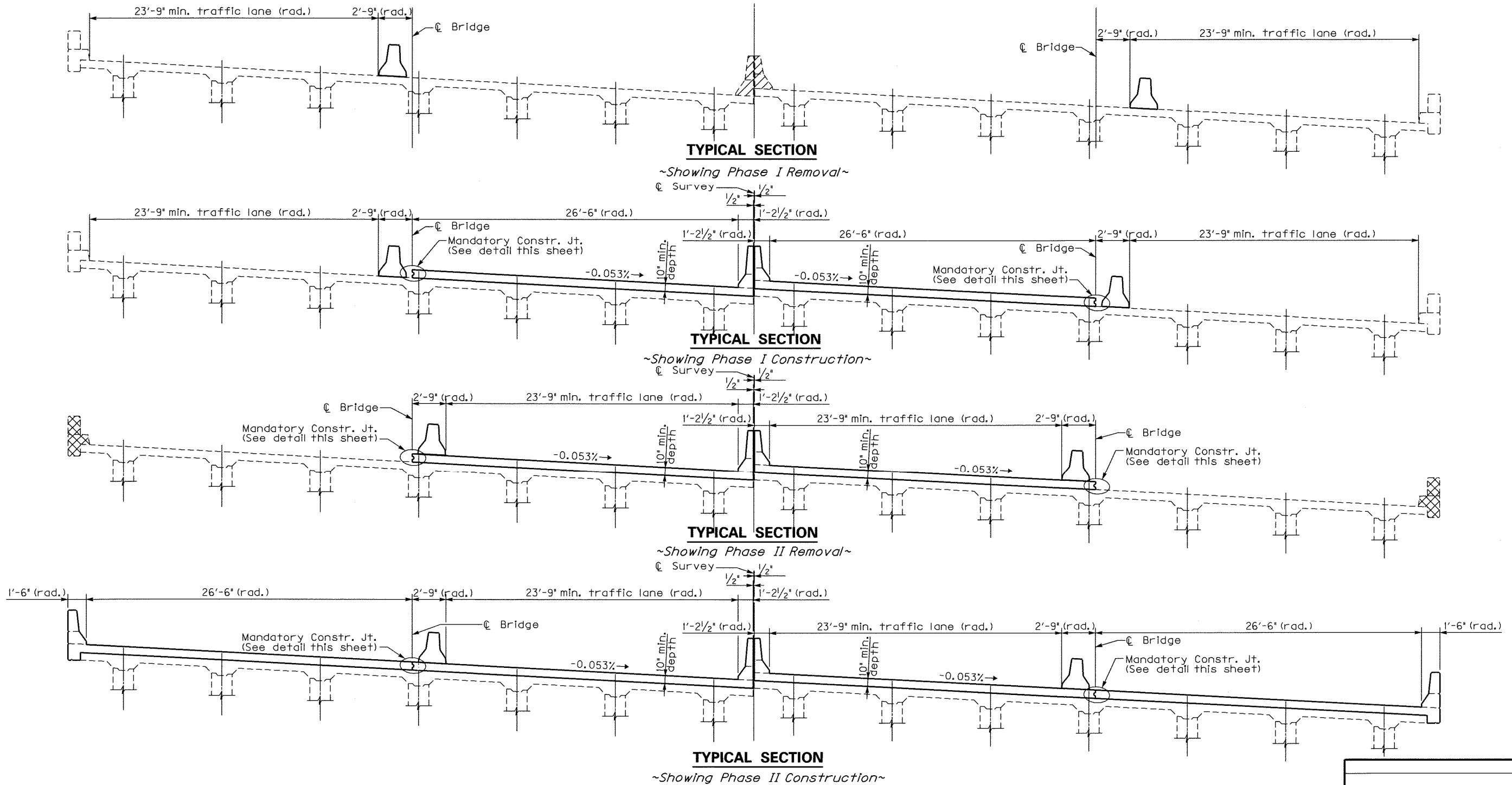
5-2001

FILE NAME: D:\bridges\PROJECTS\25189\25189.dgn

USERNAME: jlflood

DATE: 22-OCT-2002

SHEET LOCATION: A1C



CONSTRUCTION KEY DETAIL	
ITEM NUMBER	5-2001

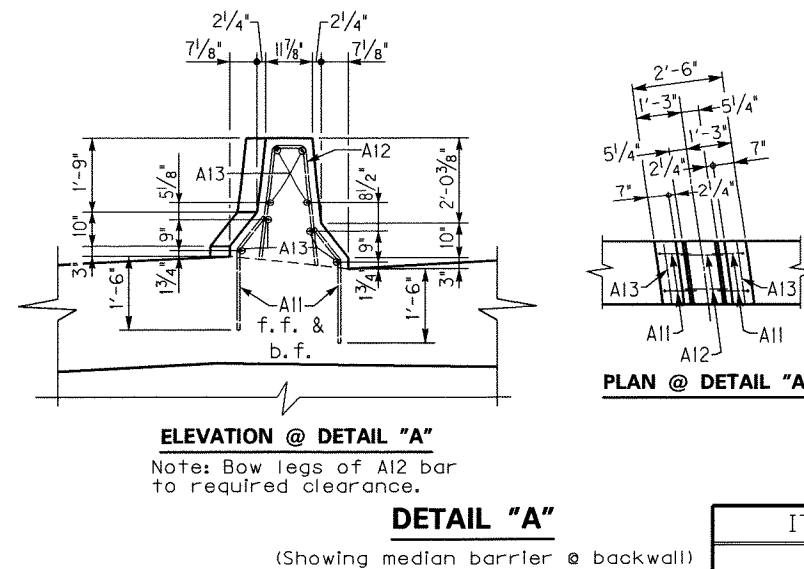
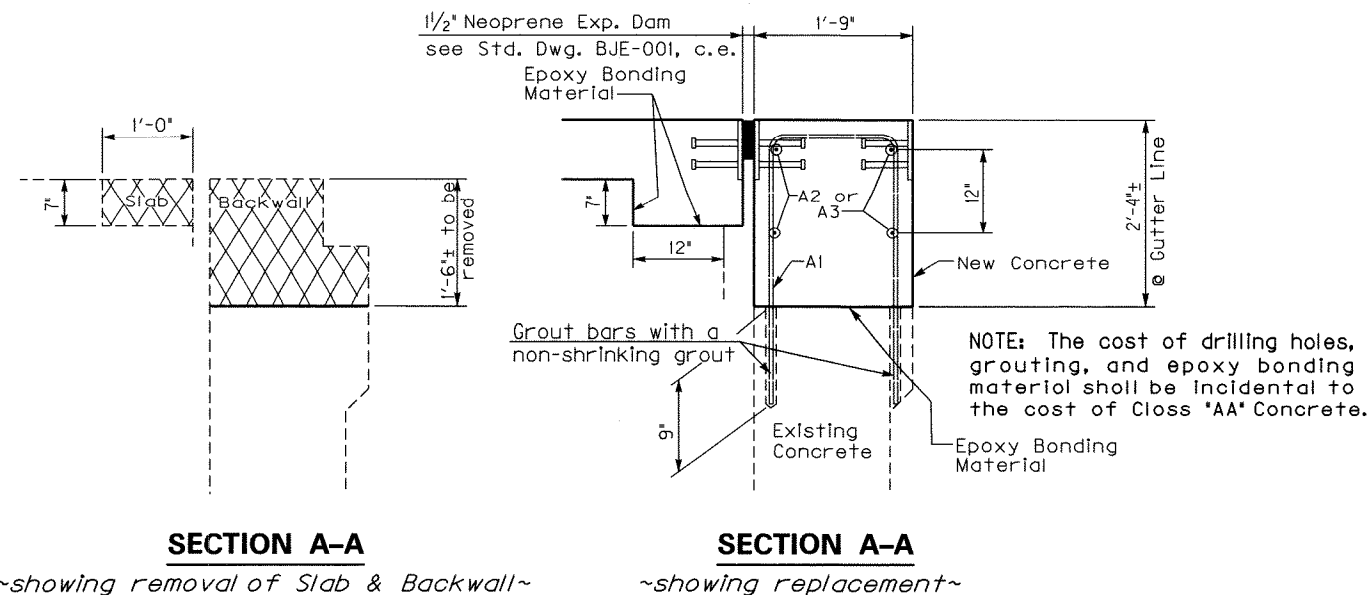
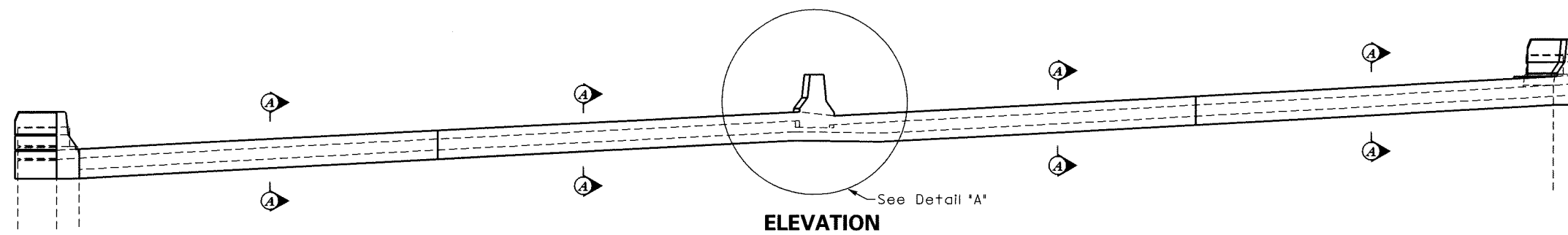
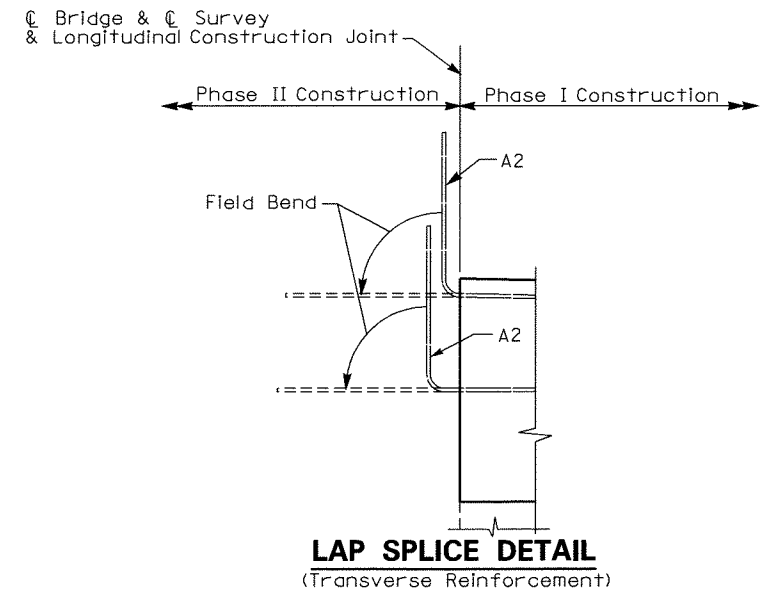
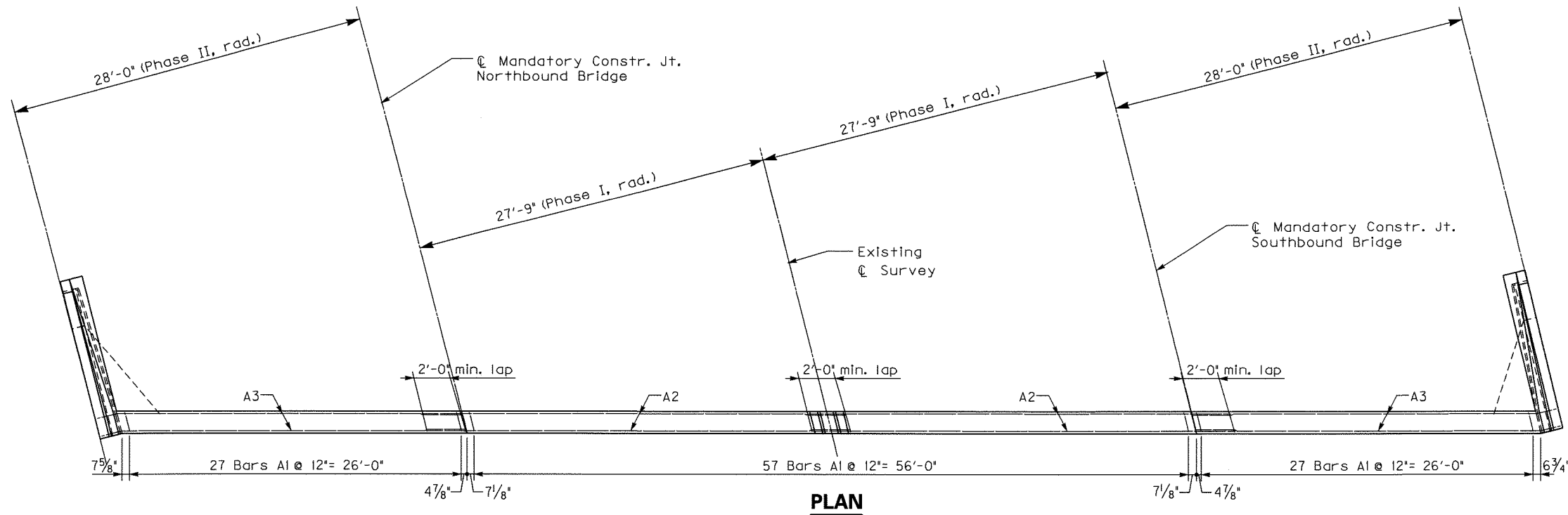
REVISION		DATE
DATE: November 2001	CHECKED BY:	
DESIGNED BY: D. Carpenter		
DETAILED BY: J.L. Flood	D. Carpenter	
Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS		
COUNTY JEFFERSON		
ROUTE I-264	CROSSING Garr's Lane	
PHASE CONSTRUCTION		
PREPARED BY Division of Bridge Design D. Carpenter Section		SHEET NO. S4 DRAWING NO. 25189

FILE NAME: D:\bridges\PROJECTS\25189\25189.dgn

USERNAME: Jflood

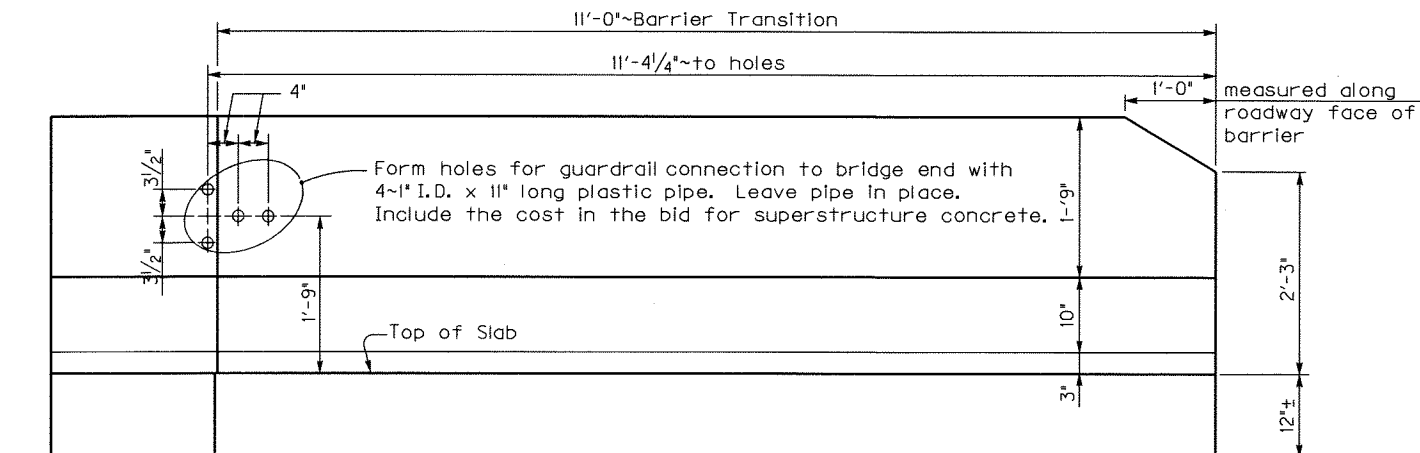
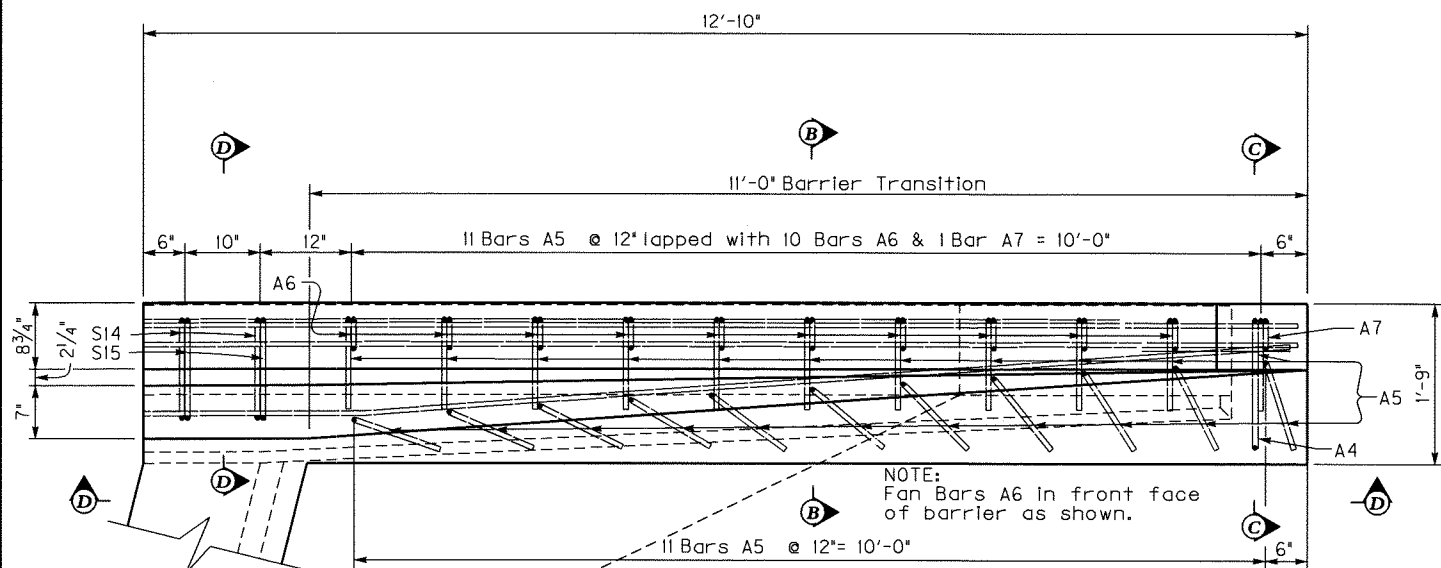
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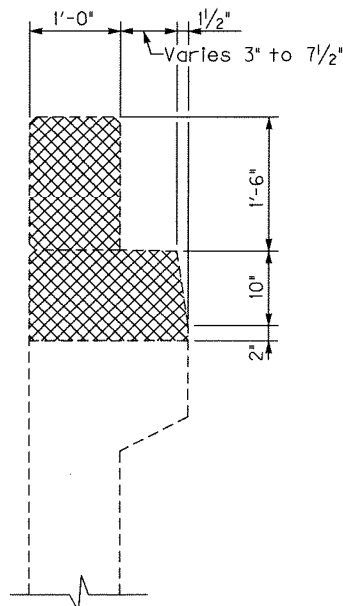
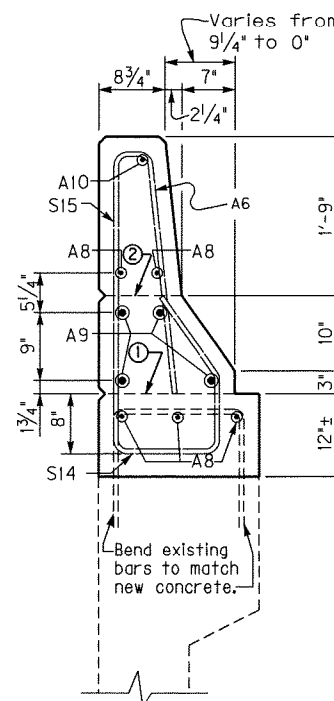


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DETAILED BY: J.L. Flood		D. Carpenter
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
JEFFERSON		
ROUTE	CROSSING	
I-264	Garr's Lane	
END BENT #1		
PREPARED BY		SHEET NO.
Division of Bridge Design		S5
D. Carpenter Section		DRAWING NO.
		25189

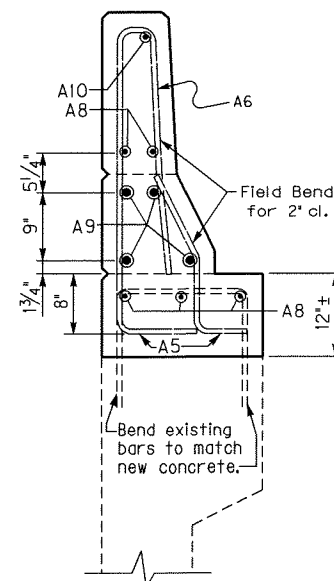
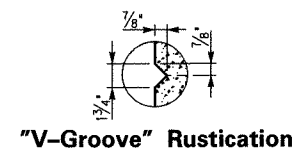
ITEM NUMBER
5-2001

**ELEVATION D-D****PLAN OF BARRIER TRANSITION**

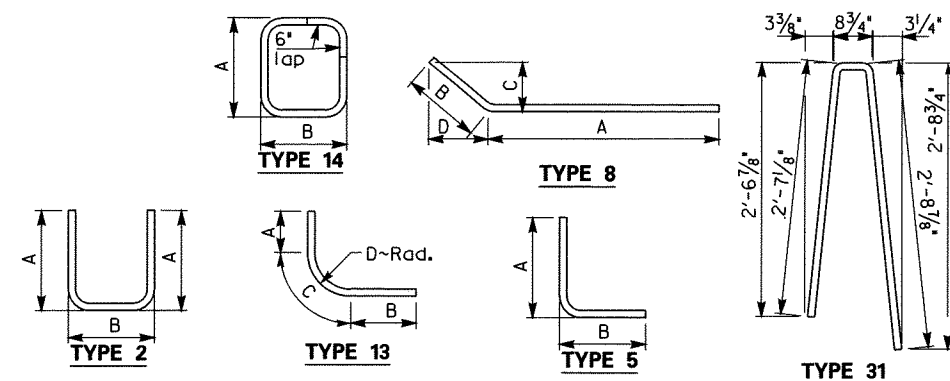
NOTE:
Remove crosshatched portion of existing wing as shown. Bend existing bars to match new concrete.

**SECTION THRU WING**
~Showing concrete removal~**SECTION D-D**

- ① Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured.
- ② Permissible construction joint and bottom of 1/4" open joint in top of barrier. "V-Groove" rustication joint is required if construction joint is used.

**SECTION B-B****BILL OF REINFORCEMENT**

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
A1e	2s	111	4	6- 9	Top of Backwall	2- 9	1- 5 1/2		
A2e	13	8	4	31- 1	Backwall Phase I	2- 0	28- 9	0- 4 3/8	0- 3
A3e	8	8	4	28- 6	Backwall Phase II	26- 11	1- 7	0- 4 3/8	1- 6 1/2
A4e	14s	2	5	4- 6	Wings	0- 7	1- 5		
A5e	5	44	5	2- 7	Wings	1- 9	1- 0		
A6e	2s	20	5	5- 6	Wings	2- 8	0- 5		
A7e	2s	2	5	4- 4	Wings	2- 1	0- 5		
A8e	Str.	20	5	12- 6	Wings				
A9e	Str.	8	8	12- 6	Wings				
A10e	8	2	5	12- 7	Wings	11- 7 1/4	1- 0 3/8	0- 6 1/4	0- 10 3/4
A11e	8	4	6	2- 9	Bottom Middle Barrier	1- 8 3/8	1- 1	0- 7 3/8	0- 10 1/2
A12e	3l	2	6	5- 10	Top Middle Barrier				
A13e	Str.	8	6	1- 5	Middle Barrier				

**SECTION C-C**

ITEM NUMBER

5-2001

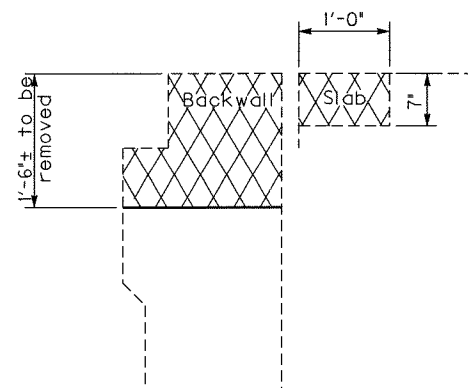
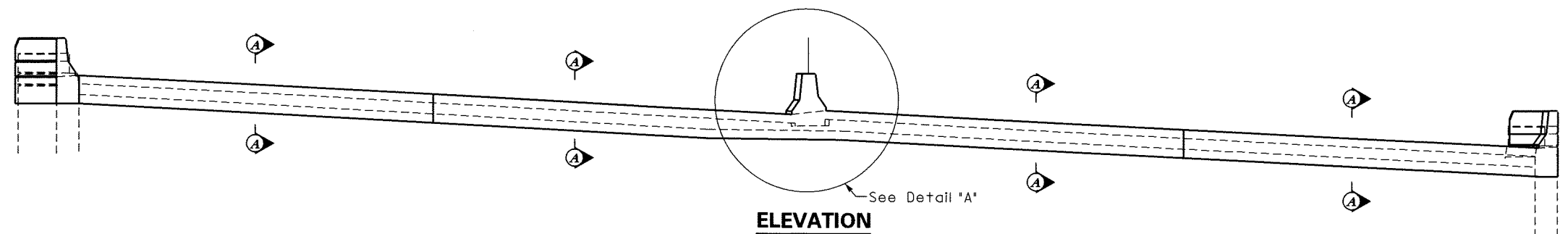
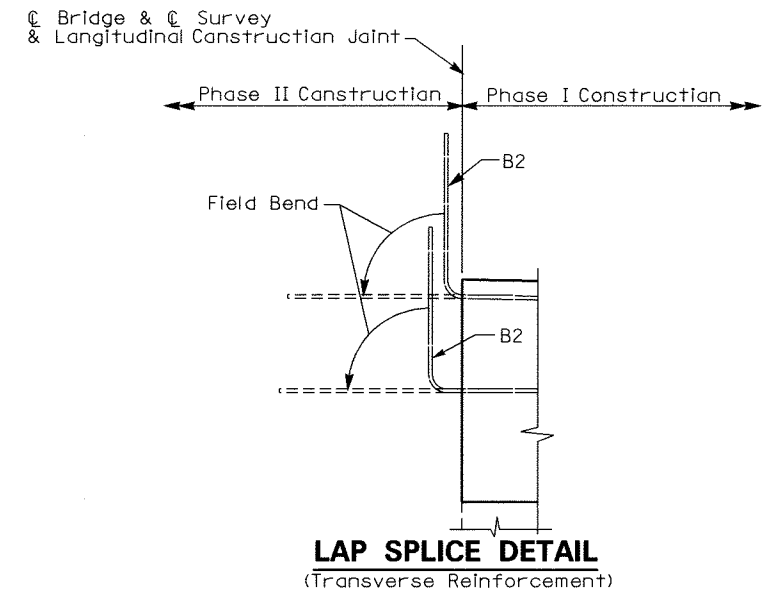
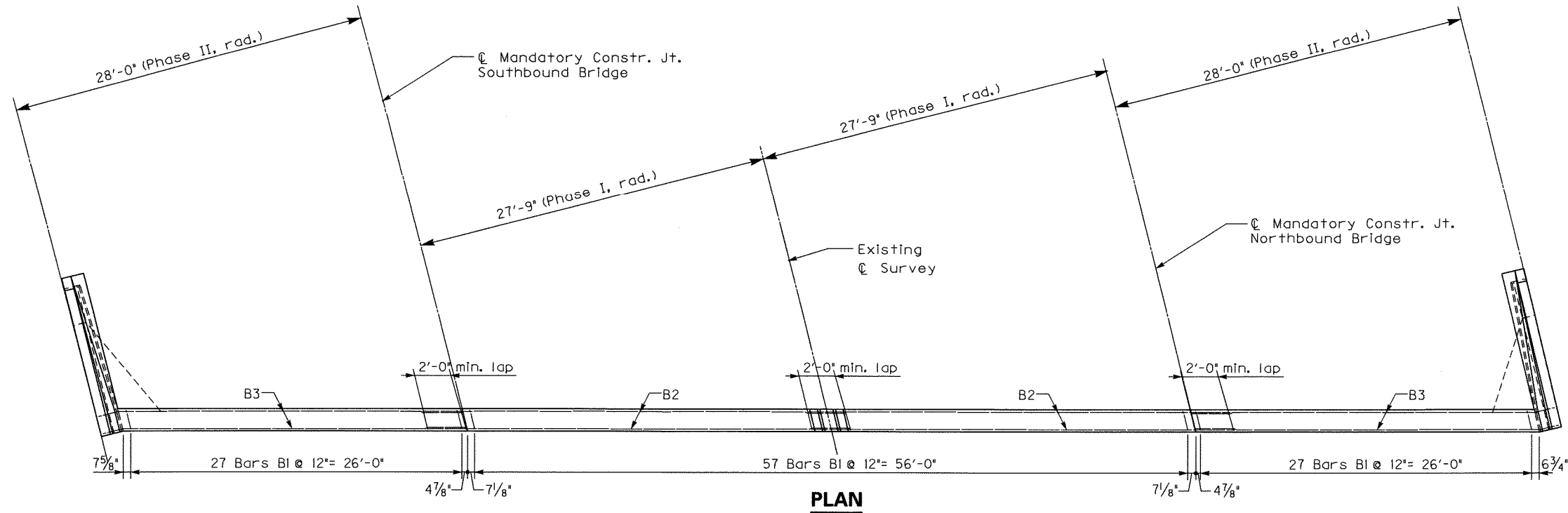
REVISION		DATE
DATE:	November 2001	CHECKED BY
DESIGNED BY: D. Carpenter		
DETAILED BY: J.L. Flood		D. Carpenter
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
JEFFERSON		
ROUTE	CROSSING	
I-264	Garr's Lane	
END BENT #1		
PREPARED BY		
Division of Bridge Design		
D. Carpenter Section		
		SHEET NO. S6
		DRAWING NO. 25189

FILE NAME: D:\bridges\PROJECTS\25189\25189.dgn

USERNAME: jflood

DATE: 22-OCT-2002

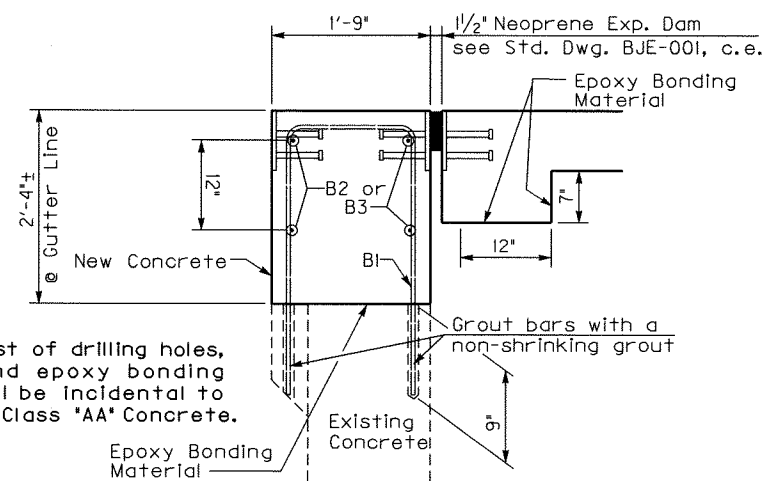
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SECTION A-A

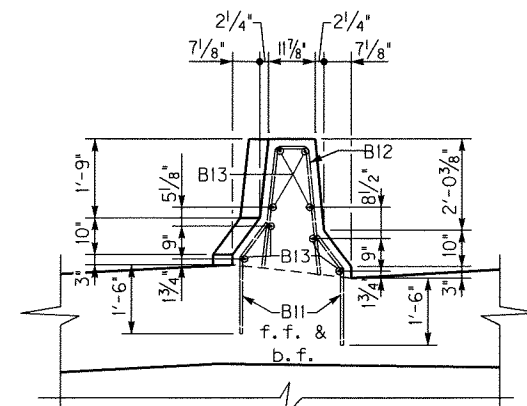
~showing removal of Slab & Backwall~

NOTE: The cost of drilling holes, grouting, and epoxy bonding material shall be incidental to the cost of Class 'AA' Concrete.



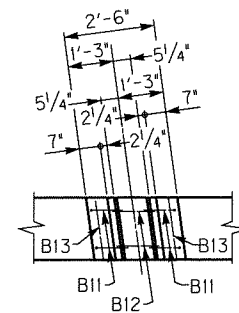
SECTION A-A

~showing replacement~



ELEVATION @ DETAIL "A"

Note: Bow legs of A12 bar to required clearance.



PLAN @ DETAIL "A"

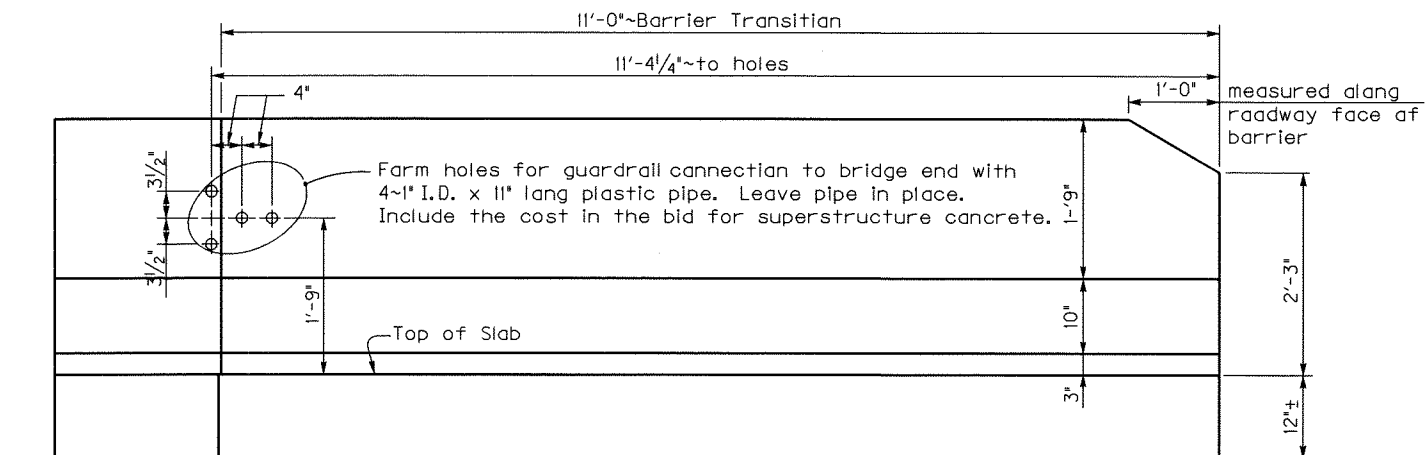
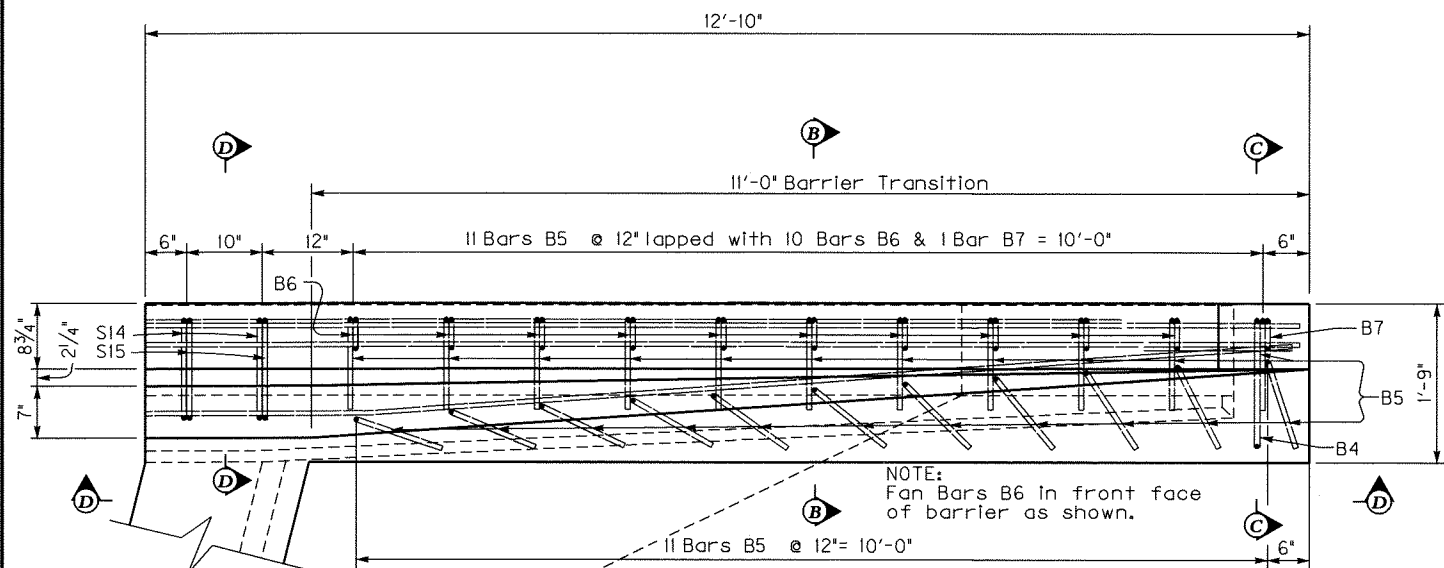
DETAIL "A"

(Showing median barrier @ backwall)

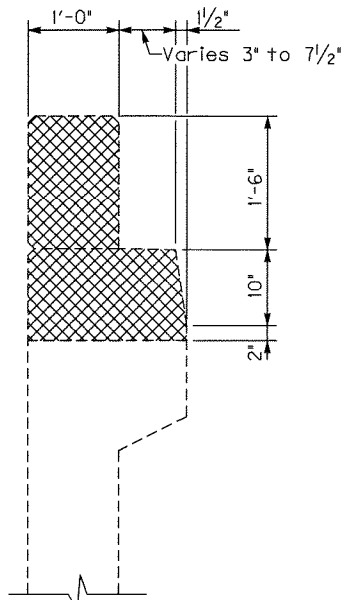
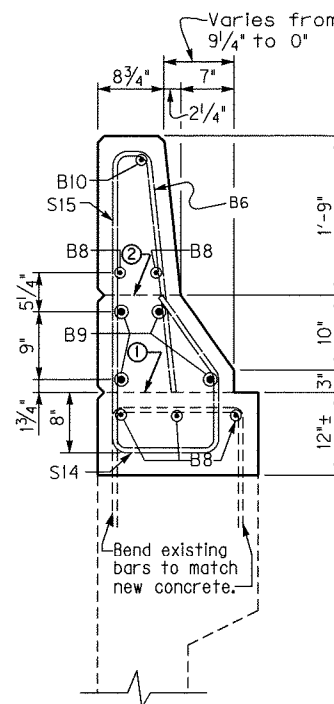
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DETAILED BY: J.L. Flood		D. Carpenter
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
JEFFERSON		
ROUTE	CROSSING	
I-264	Garr's Lane	
END BENT #2		
PREPARED BY		SHEET NO.
Division of Bridge Design		S7
D. Carpenter Section		DRAWING NO.
		25189

ITEM NUMBER

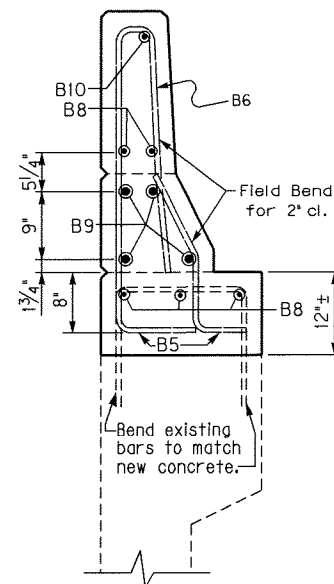
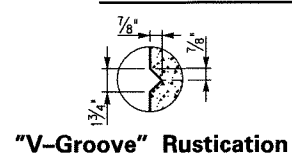
5-2001

**ELEVATION D-D****PLAN OF BARRIER TRANSITION**

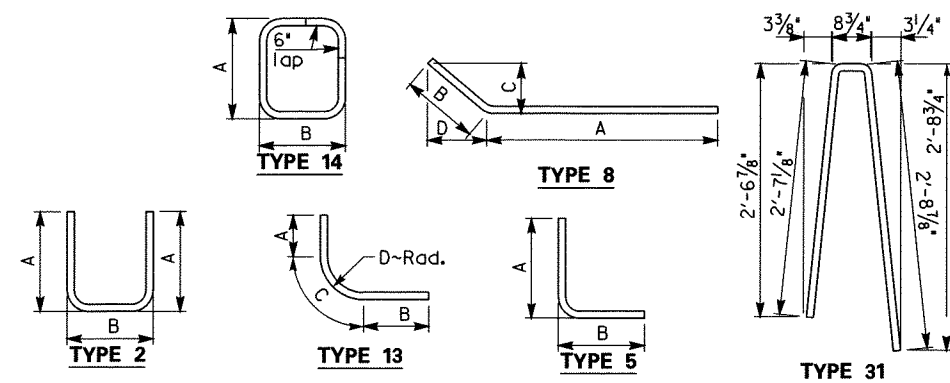
NOTE:
Remove crasshatched portion of existing wing as shown. Bend existing bars to match new concrete.

**SECTION THRU WING**
~Showing concrete removal~**SECTION D-D**

- ① Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured.
- ② Permissible construction joint and bottom of 1/4" open joint in top of barrier. "V-Groove" rustication joint is required if construction joint is used.

**SECTION B-B****BILL OF REINFORCEMENT**

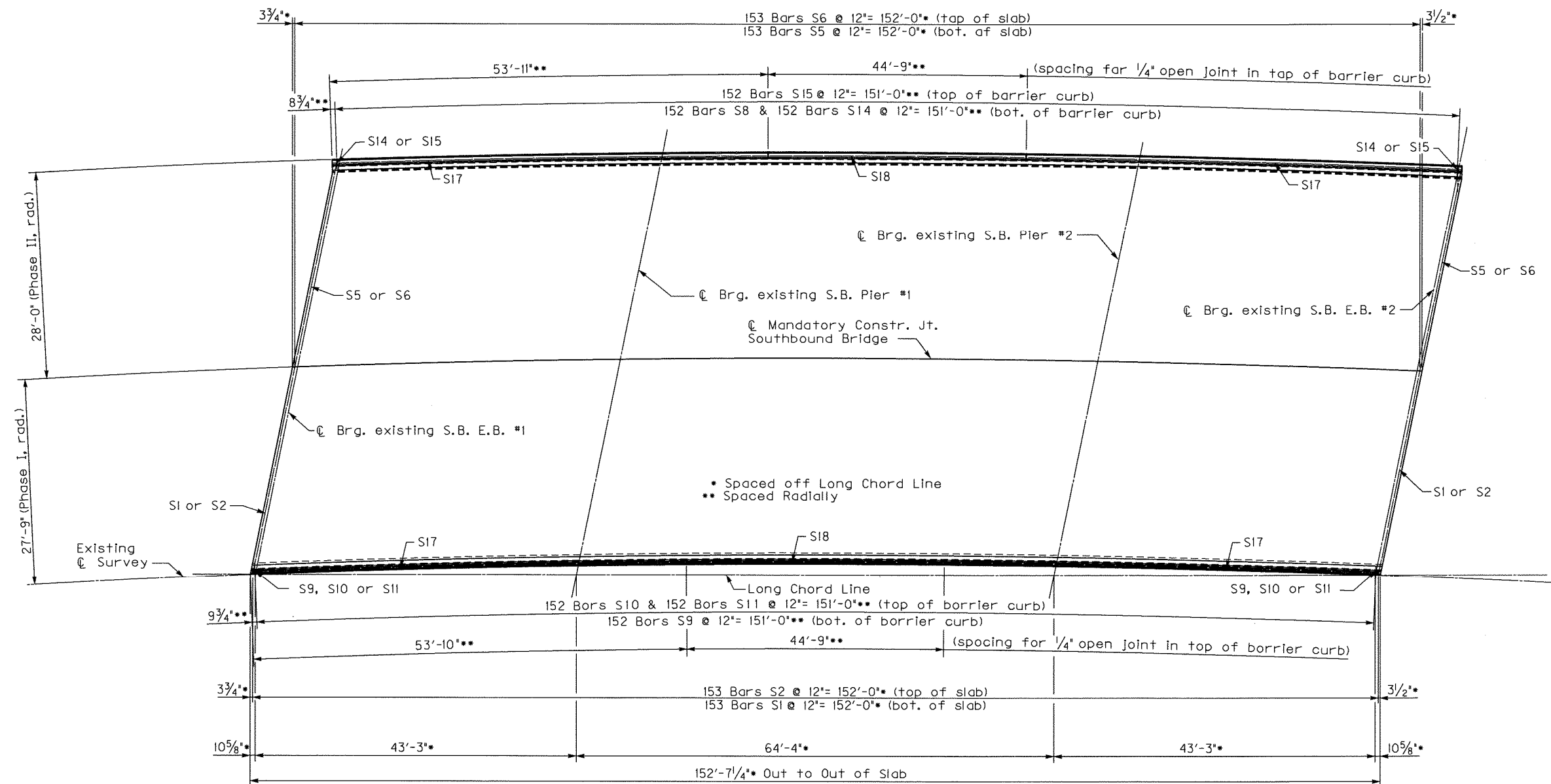
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
B1e	2s	111	4	6- 9	Top of Backwall	2- 9	1- 5 1/2		
B2e	13	8	4	31- 1	Backwall Phase I	2- 0	28- 9	0- 4 3/8	0- 3
B3e	8	8	4	28- 6	Backwall Phase II	26- 11	1- 7	0- 4 3/8	1- 6 1/2
B4e	14s	2	5	4- 6	Wings	0- 7	1- 5		
B5e	5	44	5	2- 7	Wings	1- 9	1- 0		
B6e	2s	20	5	5- 6	Wings	2- 8	0- 5		
B7e	2s	2	5	4- 4	Wings	2- 1	0- 5		
B8e	Str.	20	5	12- 6	Wings				
B9e	Str.	8	8	12- 6	Wings				
B10e	8	2	5	12- 7	Wings	11- 7 1/4	1- 0 3/8	0- 6 1/4	0- 10 3/4
B11e	8	4	6	2- 9	Bottom Middle Barrier	1- 8 3/8	1- 1	0- 7 7/8	0- 10 1/2
B12e	31	2	6	5- 10	Top Middle Barrier				
B13e	Str.	8	6	1- 5	Middle Barrier				

**SECTION C-C**

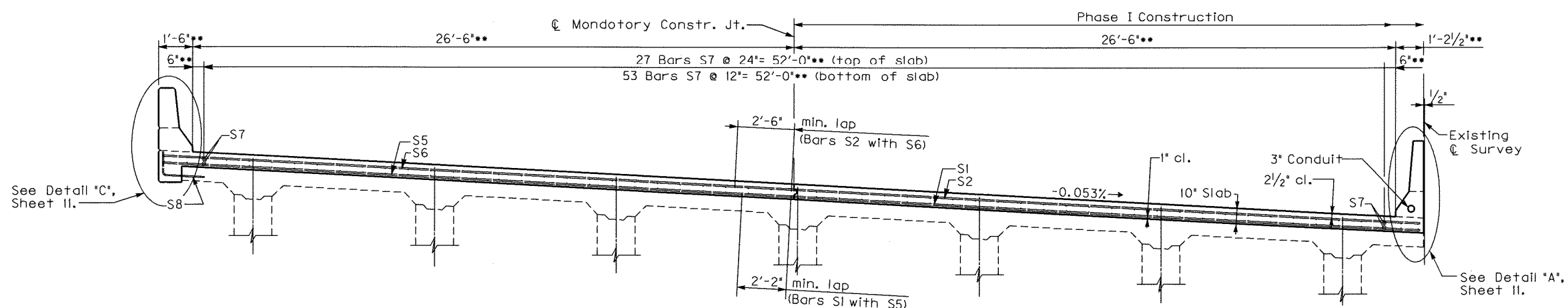
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ROUTE	CROSSING	
I-264	Garr's Lane	
END BENT #2		
PREPARED BY		SHEET NO.
Division of Bridge Design		S8
D. Carpenter Section		DRAWING NO.
		25189

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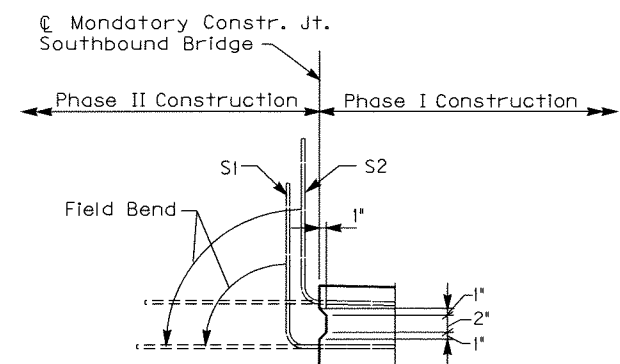
5-2001



PLAN
~Southbound Superstructure~



TYPICAL SECTION
~Southbound Superstructure~



LAP SPLICE DETAIL
(Transverse Reinforcement)

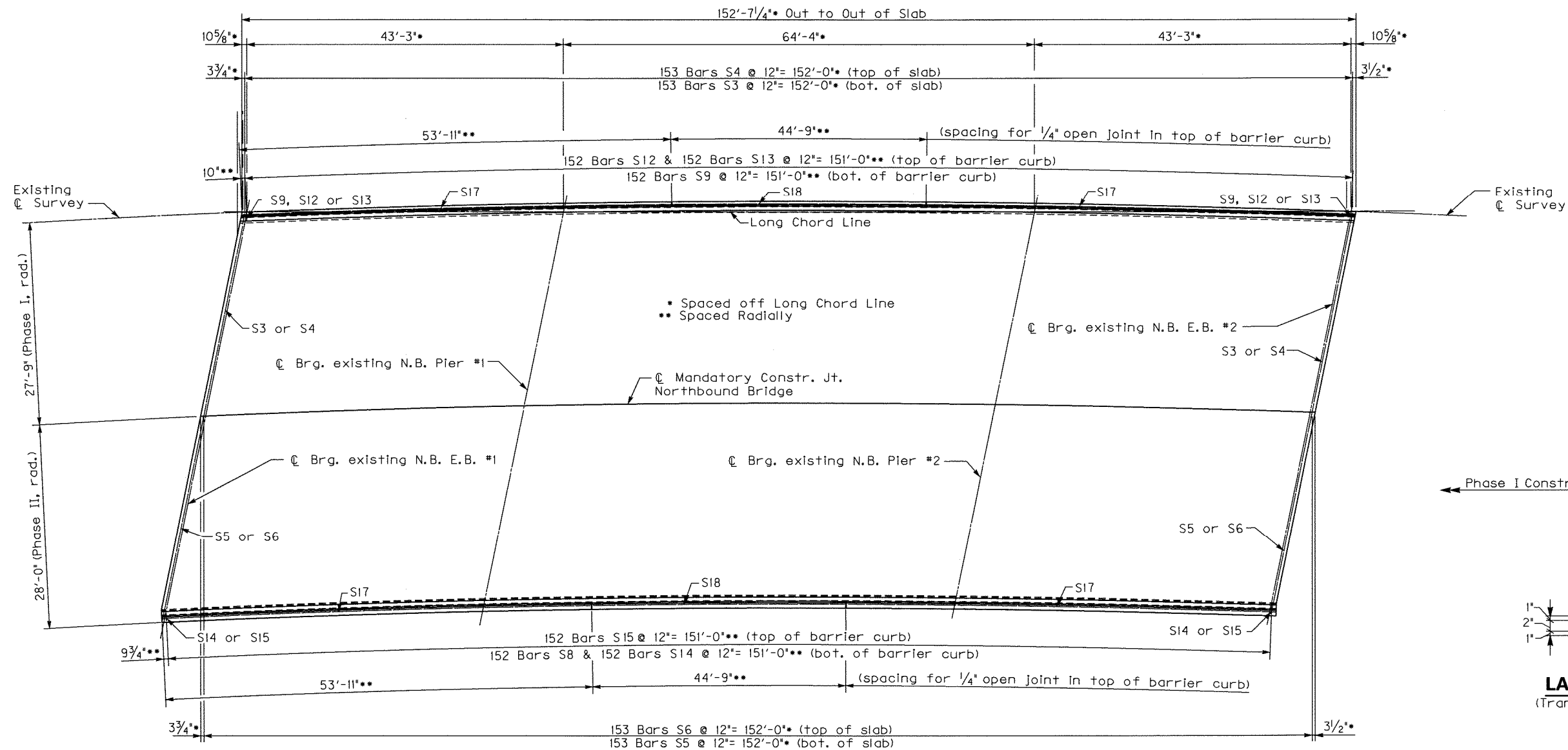
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Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS			
COUNTY JEFFERSON			
ROUTE	CROSSING		
I-264	Garr's Lane		
SOUTHBOUND SUPERSTRUCTURE			
PREPARED BY Division of Bridge Design D. Carpenter Section			SHEET NO. S9 DRAWING NO. 25189

FILE NAME: D:\bridges\PROJECTS\25189\25189.dgn

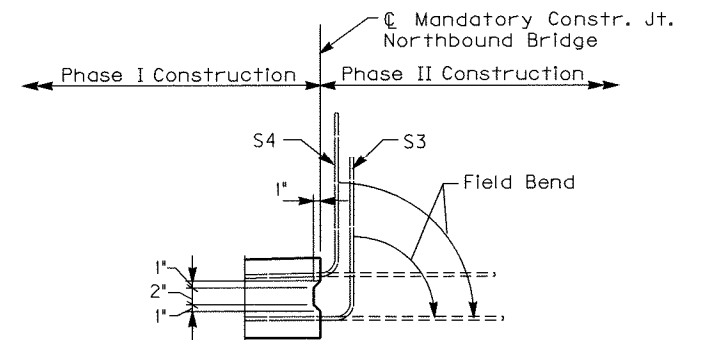
USERNAME: jflood

DATE: 22-OCT-2002

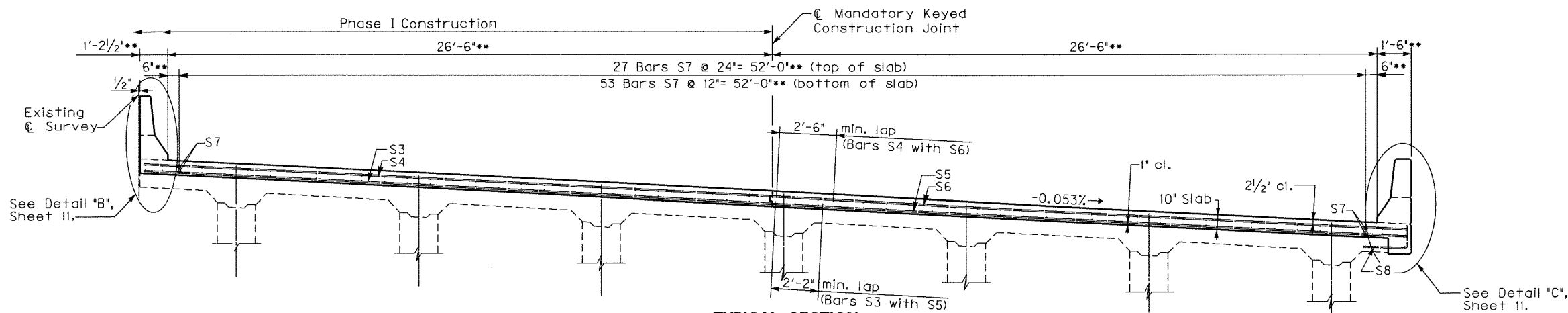
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PLAN
~Northbound Superstructure~



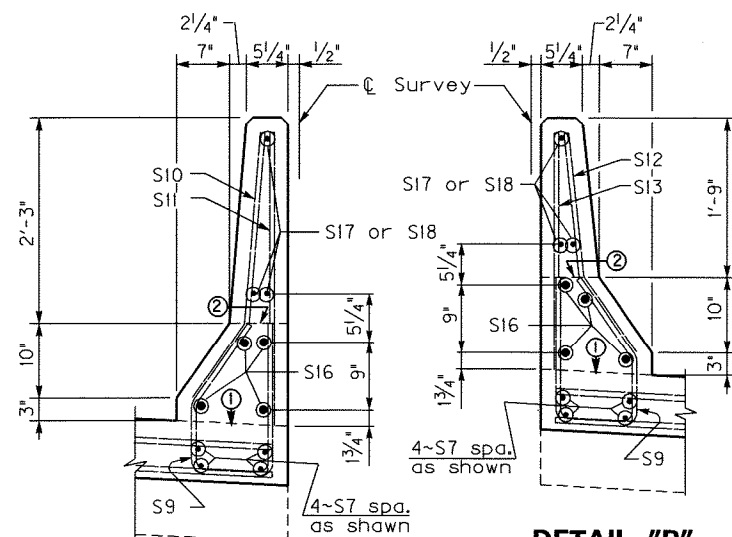
LAP SPICE DETAIL
(Transverse Reinforcement)



TYPICAL SECTION
~Northbound Superstructure~

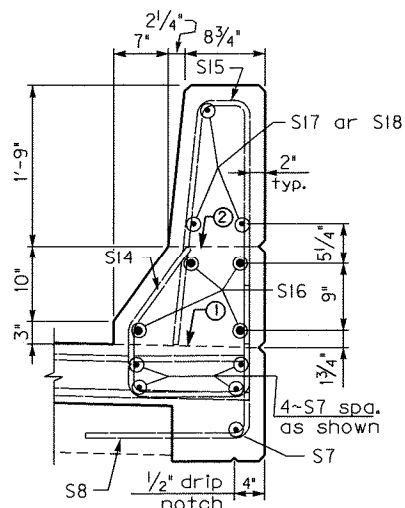
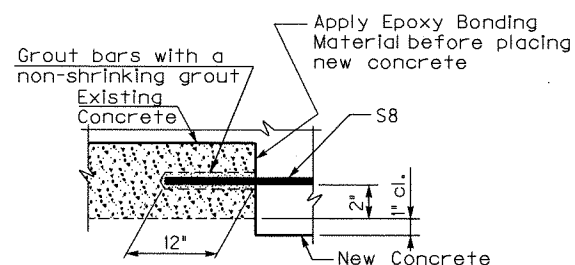
REVISION		DATE
DATE:	November 2001	CHECKED BY
DESIGNED BY: D. Carpenter		
DETAILED BY: J.L. Flood		D. Carpenter
Commonwealth of Kentucky		
DEPARTMENT OF HIGHWAYS		
COUNTY		
JEFFERSON		
ROUTE	CROSSING	
I-264	Garr's Lane	
NORTHBOUND SUPERSTRUCTURE		
PREPARED BY		SHEET NO.
Division of Bridge Design		S10
D. Carpenter Section		DRAWING NO.
		25189

ITEM NUMBER
5-2001

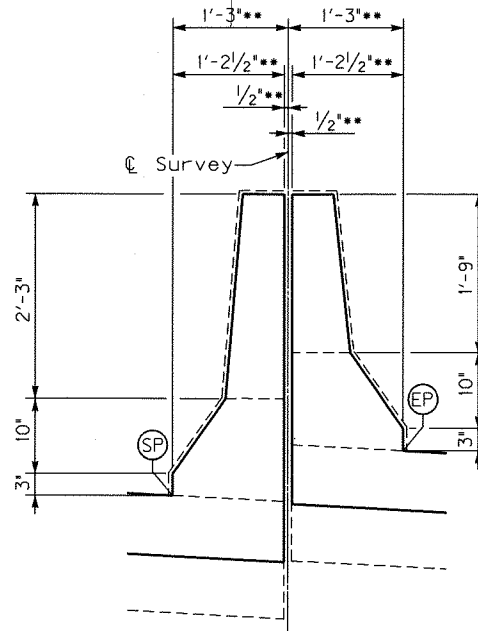
**DETAIL "A"****DETAIL "B"**

- ① Mandatory roughened construction joint. Concrete above this joint is to be placed after slab has been properly cured.
- ② Permissible construction joint and bottom of 1/4" open joint in top of barrier. "V-Groove" rustication joint is required if construction joint is used.

NOTE:
Lap Bars S16 with Bars S16, 4'-11" min.

**DETAIL "C"****S8 DOWEL DETAIL**

NOTE: The cost of drilling holes, grouting, and epoxy bonding material shall be incidental to the cost of Class "AA" Concrete.

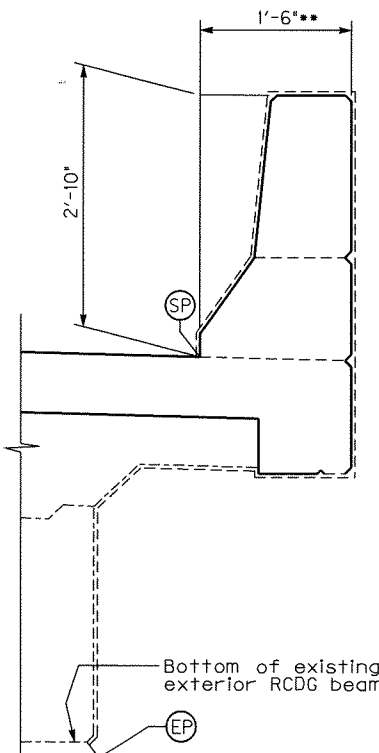


Start Point (SP) End Point (EP)

Denotes perimeter area of required masonry coating.

MASONRY COATING DETAIL

(typical each interior overhang)

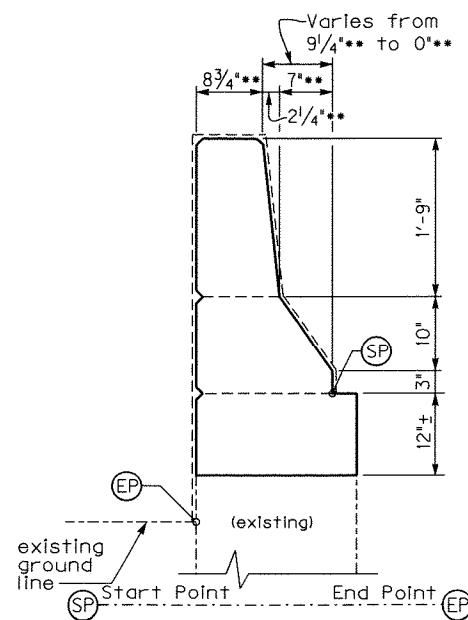


Start Point (SP) End Point (EP)

Denotes perimeter area of required masonry coating.

MASONRY COATING DETAIL

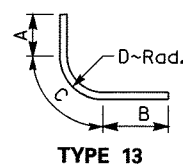
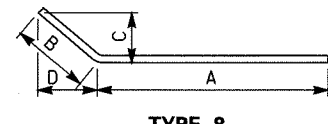
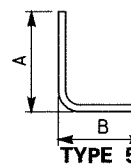
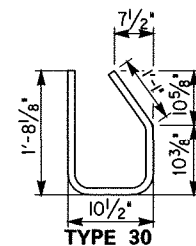
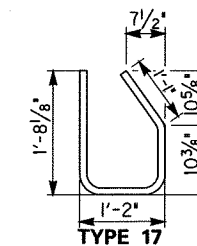
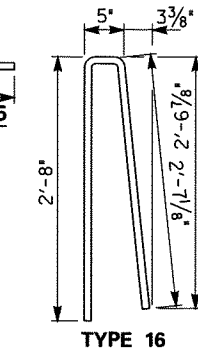
(typical each exterior overhang)

**SECTION THROUGH WING****MASONRY COATING DETAILS**

(typical each wing, 4 total)

BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A	B	C	D
S1e	13	153	4	31- 4	Bot. S.B. Slab Phase I	2-11	28- 1	0- 4 3/8	0- 3
S2e	13	153	5	31- 9	Top S.B. Slab Phase I	3- 4	28- 1	0- 4 1/4	0- 3
S3e	13	153	4	31- 5	Bot. N.B. Slab Phase I	2-11	28- 2	0- 4 3/8	0- 3
S4e	13	153	5	31-10	Top N.B. Slab Phase I	3- 4	28- 2	0- 4 1/4	0- 3
S5e	Str.	306	4	27- 6	Bot. S.B. & N.B. Slab Phase II				
S6e	Str.	306	5	27- 6	Top S.B. & N.B. Slab Phase II				
S7e	Str.	534	4	51-10	Top/Bot. N.B. & S.B. Slabs				
S8e	5	304	5	2- 8	Bot. of Barrier Curb	1- 0	1-10		
S9e	Str.	304	5	4- 5	Bot. of Barrier Curb				
S10e	8	152	5	3- 1	Top of Barrier Curb S.B.	2- 1	1- 0	0- 6	0-10 3/8
S11e	Str.	152	5	3- 2	Top of Barrier Curb S.B.				
S12e	8	152	5	2- 7	Top of Barrier Curb N.B.	1- 7	1- 0	0- 5 1/4	0-10 1/2
S13e	Str.	152	5	2- 7	Top of Barrier Curb N.B.				
S14e	17s	312	5	4- 8	Bot. of Barrier Curb/E.B. Wings				
S15e	16s	312	5	5- 6	Top of Barrier Curb/E.B. Wings				
S16e	Str.	48	8	54- 1	Bot. of Barrier Curb				
S17e	Str.	24	5	53- 6	Top of Barrier Curb				
S18e	Str.	12	5	44- 5	Top of Barrier Curb				

**TYPE 13****TYPE 8****TYPE 5****TYPE 30****TYPE 17****TYPE 16**

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DETAILED BY: J.L. Flood	D. Carpenter	
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ROUTE	CROSSING	
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REINFORCEMENT SUPERSTRUCTURE		
PREPARED BY		SHEET NO.
Division of Bridge Design		S11
D. Carpenter Section		DRAWING NO.
		25189