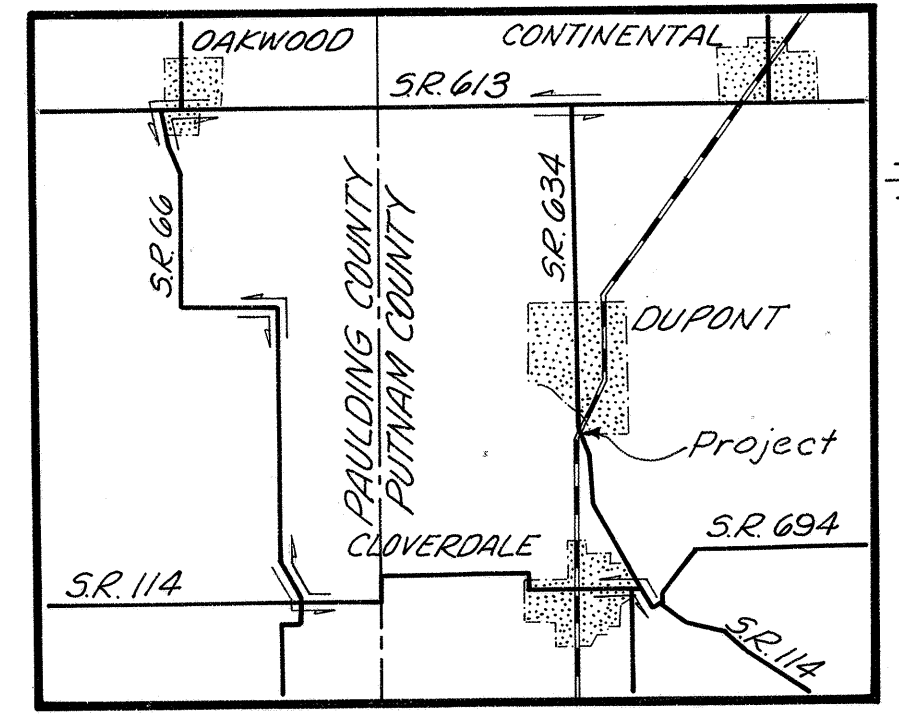


STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
**PUT-634-10.05**  
PUTNAM COUNTY  
PERRY TOWNSHIP  
VILLAGE OF DUPONT

5-1586(1)



DETOUR MAP  
0 2 4 Miles

MICROFILMED  
SEP 7 1978  
REPRODUCTION

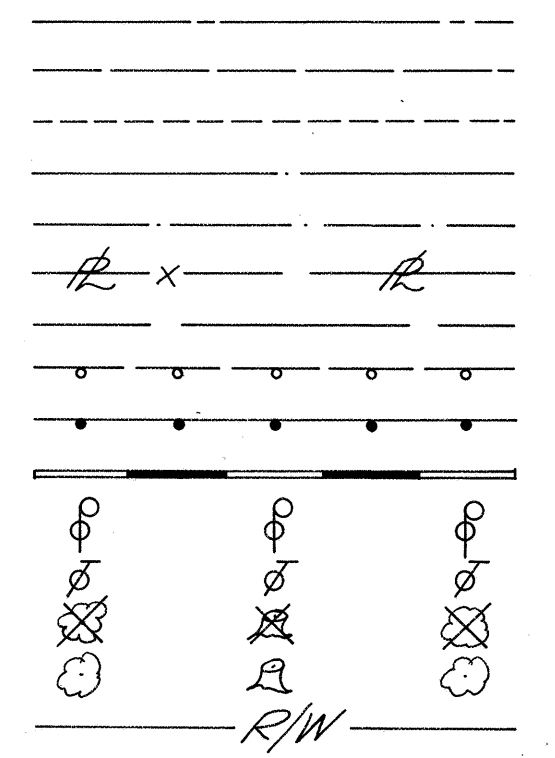
MICROFILMED  
OCT 19 1978  
REPRODUCTION

DESIGN DESIGNATION

Current A.D.T. (1968)	360
Design Year A.D.T. (1988)	500
D.H.V.	60
D.	60%
T.	6%
V.	60 M.P.H.

CONVENTIONAL SIGNS

- County Line
- Township Line
- Section Line
- Center Line
- Corporation Line
- Property Line
- Fence Line
- Guard Rail (Existing)
- Guard Rail (Proposed)
- Railroad
- Power Poles
- Telephone Poles
- Trees and Stumps (Existing)
- Trees and Stumps (To be removed)
- Right-of-Way



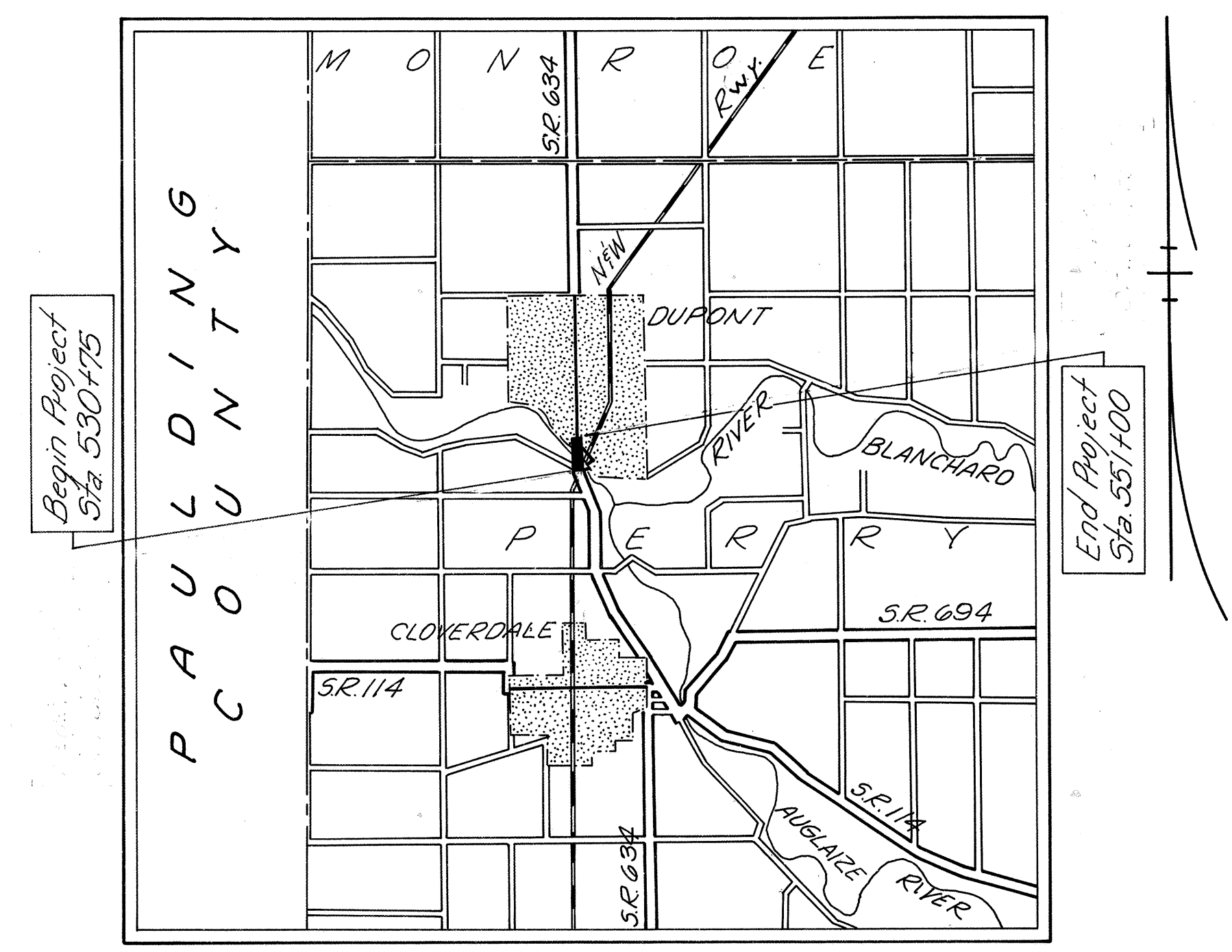
INDEX OF SHEETS

Title Sheet	1
Schematic Plan	2
Typical Sections	3
General Notes	4
Computations and Details & Guard Rail Details	5-5A-5B
General Summary	6
Plan and Profile	7-9
Cross Sections	10-15
Location Plan and Cross Sections - Vacated Roadway	16-17
Channel Sections	18-19
Intersection Details	20-25
Structures, over 20' Span	26-32
Right of Way	33-37

Sheet 27 rev 7-23-70  
Sheet 30 revised As-Built 8-16-73

LINE DATA

Begin Work	Sta 530+00
End Work	Sta 551+50
Deduct for Railroad	2150.00 Lin.Ft.
Net length of Work	16.00 Lin.Ft.
	2134.00 Lin.Ft.
	or 0.404 Mile
Begin Project	Sta 530+75
End Project	Sta 551+00
Deduct for Railroad	2025.00 Lin.Ft.
Net length of Project	16.00 Lin.Ft.
	2009.00 Lin.Ft.
	or 0.380 Mile

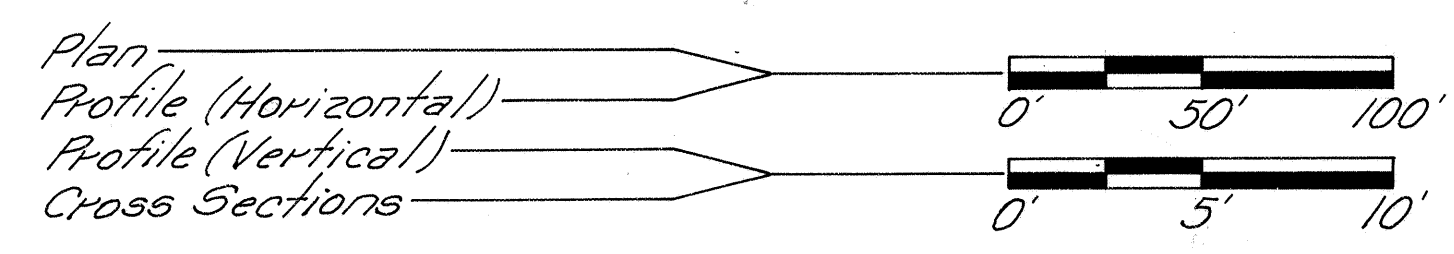


Scale of Miles  
0 1 2

LOCATION MAP



SCALE



1969 SPECIFICATIONS

The Standard Specifications of the State of Ohio Department of Highways, including changes and supplemental specifications listed in the proposal shall govern this improvement.

The Right-of-Way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway, except as noted on Sheet 4, and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

- Approved Thomas R. Com  
Date 9-23-69 Division Deputy Director
- Approved \_\_\_\_\_  
Date \_\_\_\_\_ Engineer of Bridges
- Approved R.E. Gattin  
Date 12-22-69 Engineer of Location and Design
- Approved Wm J. Therman  
Date 12-22-69 Deputy Director of Design and Construction
- Approved T.H. Board  
Date 1-12-70 Deputy Director of Right-of-Way
- Approved \_\_\_\_\_  
Date \_\_\_\_\_ Deputy Director of Planning and Programming
- Approved W. W. Sullivan  
Date 1-12-70 First Assistant Director
- Approved P.E. MacArthur  
Date 1-12-70 Director of Highways

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS

APPROVED: \_\_\_\_\_  
DIVISION ENGINEER DATE

File No.	PUT-634-10.05
Date of Letting	19
Contract No.	

STANDARD DRAWINGS					
BP-5	6-1-65	GR-2A	1-1-67	GR-2B	2-15-68
BP-6	6-1-65	L-1	6-1-65	MC-1	6-13-69
CB-2-A & B	6-1-65	BP-3	12-1-68	CSB-2-63(Sk.1)	12-8-65
FACT-1	9-15-67	MC-3	6-20-69	RB-1-55	2-2-59
FACT-2	6-1-65	MC-4	6-13-69	SD-1-69(Sk.1-2-3)	6-12-69
GR-1	1-1-67	AS-1-67	6-12-69		

SUPPLEMENTAL SPECIFICATIONS	
1001	1-1-69
938	8-12-69
808	1-1-69
811	1-1-69

Computations By	Initials	Date
Computations Checked By	Initials	Date



PUTNAM COUNTY  
PUT-634-10.05  
.51 Mi. S. of Dupont

FIRST BRIDGE DOWNSTREAM  
2.75 Mi. on Putnam-Paulding Co. Line Rd. No. 25  
TYPE - High Steel Truss  
SPAN - 384.5'  
Waterway Area - 7498 Sq. Ft.

FIRST BRIDGE UPSTREAM  
0.08 Mi. on NYC. & St. L. R.R.  
TYPE - High & Low Steel Truss  
SPAN - 300'  
Waterway Area - 6895 Sq. Ft.

EXISTING BRIDGE  
TYPE: High Steel Truss  
SPAN: 2 @ 138'-4 1/2"  
WIDTH: 18'-0"  
SKEW: 0°  
SUBSTRUCTURE: Limestone Gravity Type  
LOADING: S-8.6

DRAINAGE AREA - 1503 Sq. Miles

EARTHWORK limits shown are schematic.  
Actual slopes shall conform to plan cross-sections.

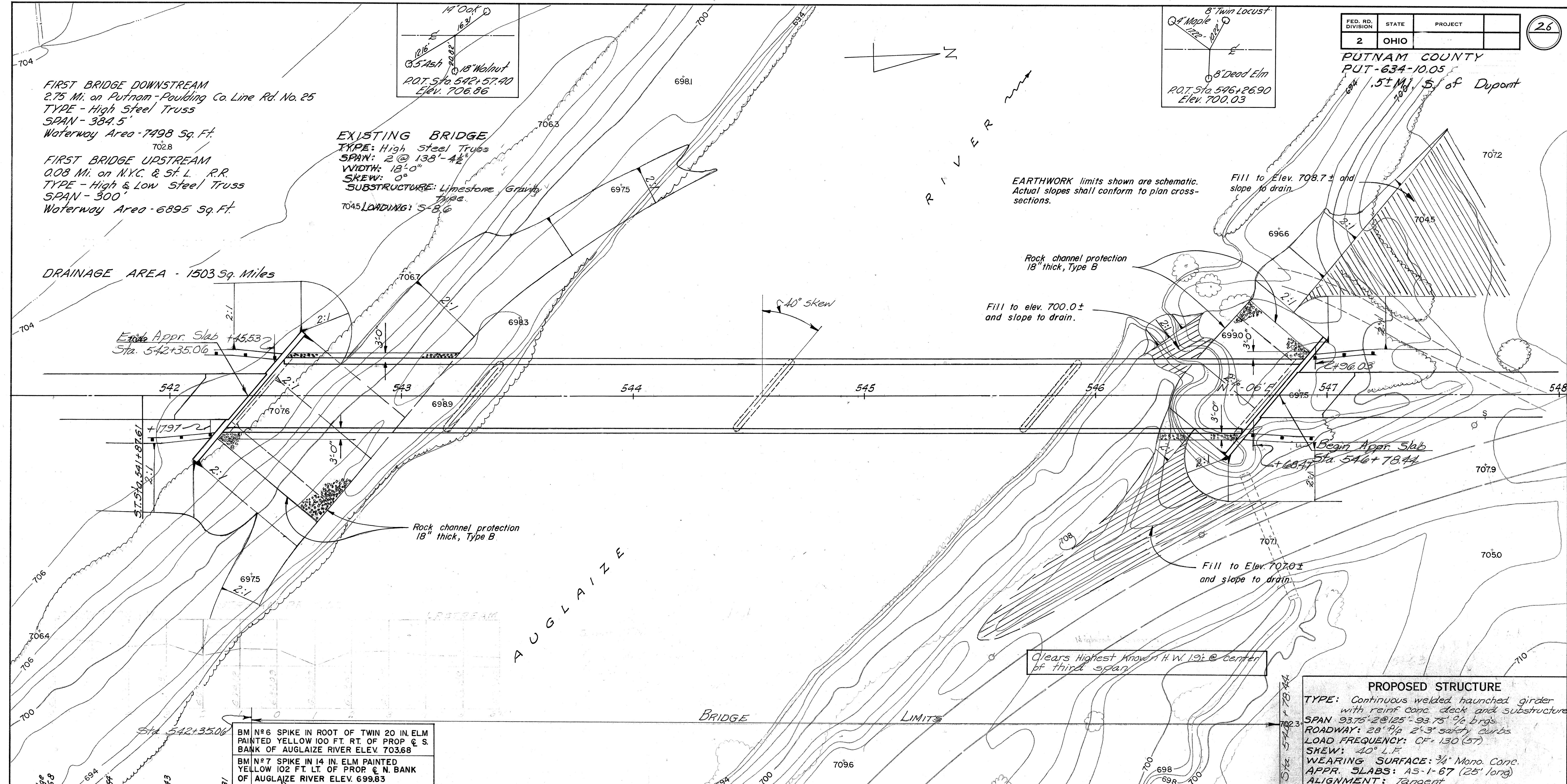
Rock channel protection  
18" thick, Type B

Fill to elev. 700.0±  
and slope to drain.

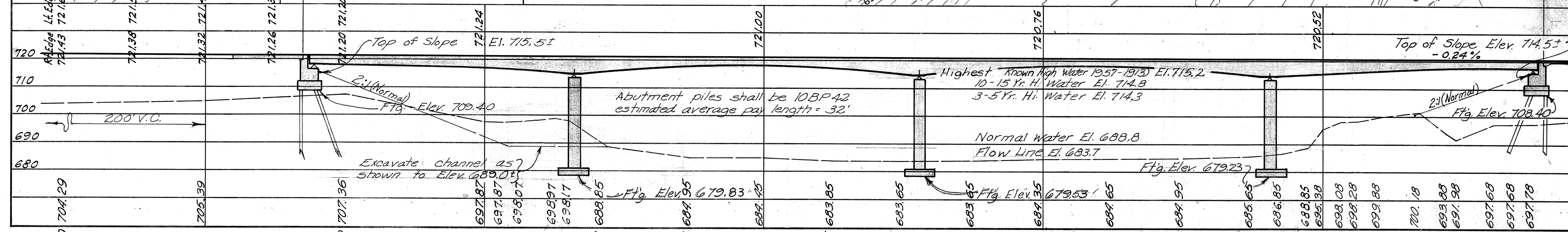
Fill to Elev. 706.7±  
and slope to drain.

Fill to Elev. 707.0±  
and slope to drain.

Clears Highest Known H.W. 1.9± @ Center  
of third span



BM N#6 SPIKE IN ROOT OF TWIN 20 IN. ELM  
PAINTED YELLOW 100 FT. RT. OF PROP. & S.  
BANK OF AUGLAIZE RIVER ELEV. 703.68  
BM N#7 SPIKE IN 14 IN. ELM PAINTED  
YELLOW 102 FT. LT. OF PROP. & N. BANK  
OF AUGLAIZE RIVER ELEV. 699.83

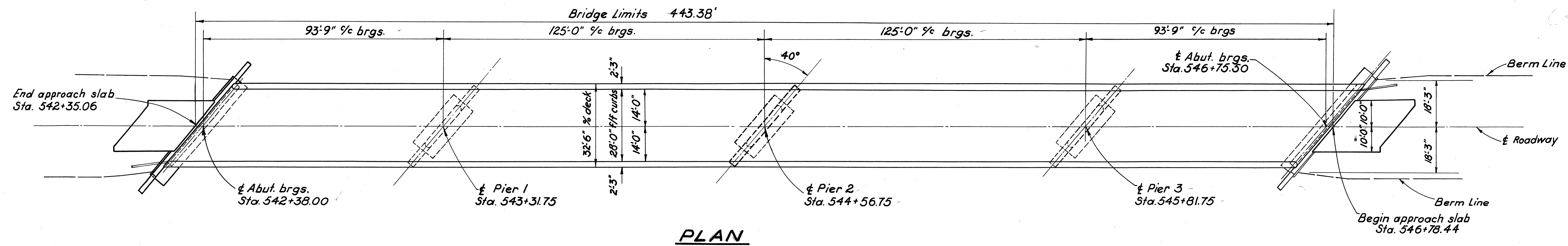


**PROPOSED STRUCTURE**  
TYPE: Continuous welded haunched girder with reinf. conc. deck and substructure  
SPAN 93.75'-2 @ 125'-93.75' % Brgs.  
ROADWAY: 28' @ 2'-3" safety curbs  
LOAD FREQUENCY: CF-130 (57)  
SKEW: 40° L.F.  
WEARING SURFACE: 3/4" Mono. Conc.  
APPR. SLABS: AS-1-67 (25' long)  
ALIGNMENT: Tangent

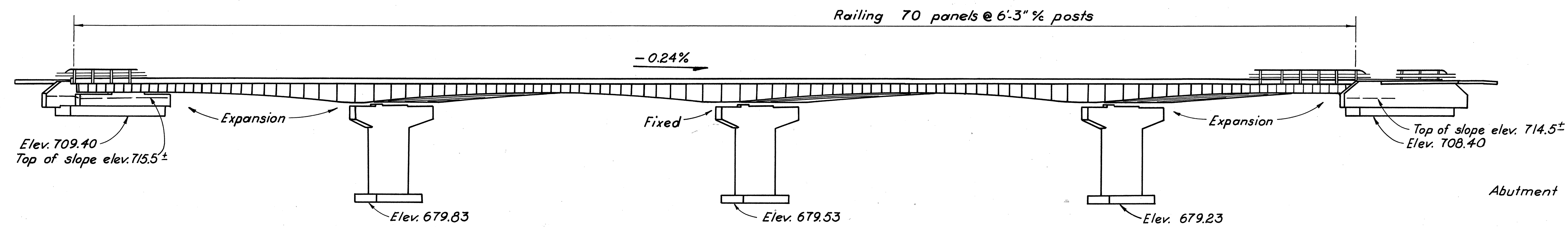
STATE OF OHIO DEPARTMENT OF HIGHWAYS BUREAU OF BRIDGES		1/7	
<b>SITE PLAN</b>			
BRIDGE NO. PUT-634-1020 SR-634 OVER AUGLAIZE RIVER PUTNAM CO.		SR-634	
SEC.	STA. 542+35.06 546+78.44		
SCALE	1" = 20'		
PRESENT TOPOGRAPHY		PROPOSED WORK	
SURVEYED Aerial Survey	DRAWN Aerial Survey	DESIGNED D.H.	DRAWN B.D.H.
		CHECKED D.H.S.	REVIEWED P. E. S.
		BFG 7-11-63	



PUT-634-10.05



PLAN



ELEVATION

GENERAL NOTES

REFERENCE shall be made to Standard Drawings CSB-2-63 sheet 1, revised 12-8-65 RB-1-55 revised 2-2-59, and SD-1-69 sheets 1, 2, 3 dated 6-12-69 and to Supplemental Specifications 808 dated 1-1-69 and 811 dated 1-1-69

DESIGN SPECIFICATIONS: This structure conforms to the requirements of "Design Specifications for Highway Structures" of the State of Ohio, Department of Highways, dated 9-1-57, together with current revisions thereof.

REMOVAL OF EXISTING STRUCTURE: When no longer needed to maintain traffic the existing structure shall be removed. Structural steel stringers shall be carefully dismantled and piled along the right-of-way for disposal by the State's forces. For limits of substructure removal see sheet 17.

EMBANKMENT PROCEDURE: The embankment shall be placed and compacted up to the finished spill-thru slope and to the level of the subgrade for a distance of 200 feet back of the abutments, after which excavation shall be made for the abutment and the piles driven.

EXCAVATION QUANTITY includes the removal of fill material required for construction of the abutments.

PILES shall be driven with a hammer of at least 11000 ft. lb. per blow to firm contact with rock. If the length of penetration is approximately equal to the depth to rock according to the bridge foundation investigation report, the firm contact shall be considered as attained when the capacity according to the formula in Sec. 507.05 is not less than 35 tons per pile. The design load is 35 tons per pile.

BRIDGE SEAT REINFORCING: Special care shall be taken in placing reinforcing steel in the bridge seat of abutments and pier 2 to avoid interference with drilled holes for anchor bars.

ERECTION OF GIRDERS: Before erection of the girders is commenced, the proposed procedure shall be approved by the Director. Three sets of prints showing the proposed procedure shall be submitted to obtain this approval.

On Std. Dwg. FSB-1-62, specification references M-7.11 shall be considered to read 711.17

FOOTINGS shall extend a minimum of 3" into undisturbed rock or to the elevation shown, whichever is lower.

FOUNDATION BEARING PRESSURE: Pier footings are designed for a maximum bearing pressure of 6 tons per sq. ft.

FLAME CUTTING: Structural steel may be flame-cut, provided a smooth surface is obtained by the use of a mechanical guide. Hand guided flame-cutting shall be permitted only when approved by the Engineer and the surface shall be made smooth by planing, chipping or grinding.

RADIOGRAPHIC EXAMINATION OF WELDS: All butt welds in the girder flanges and webs shall be examined by radiography practiced in accordance with Supplemental Specification 811.

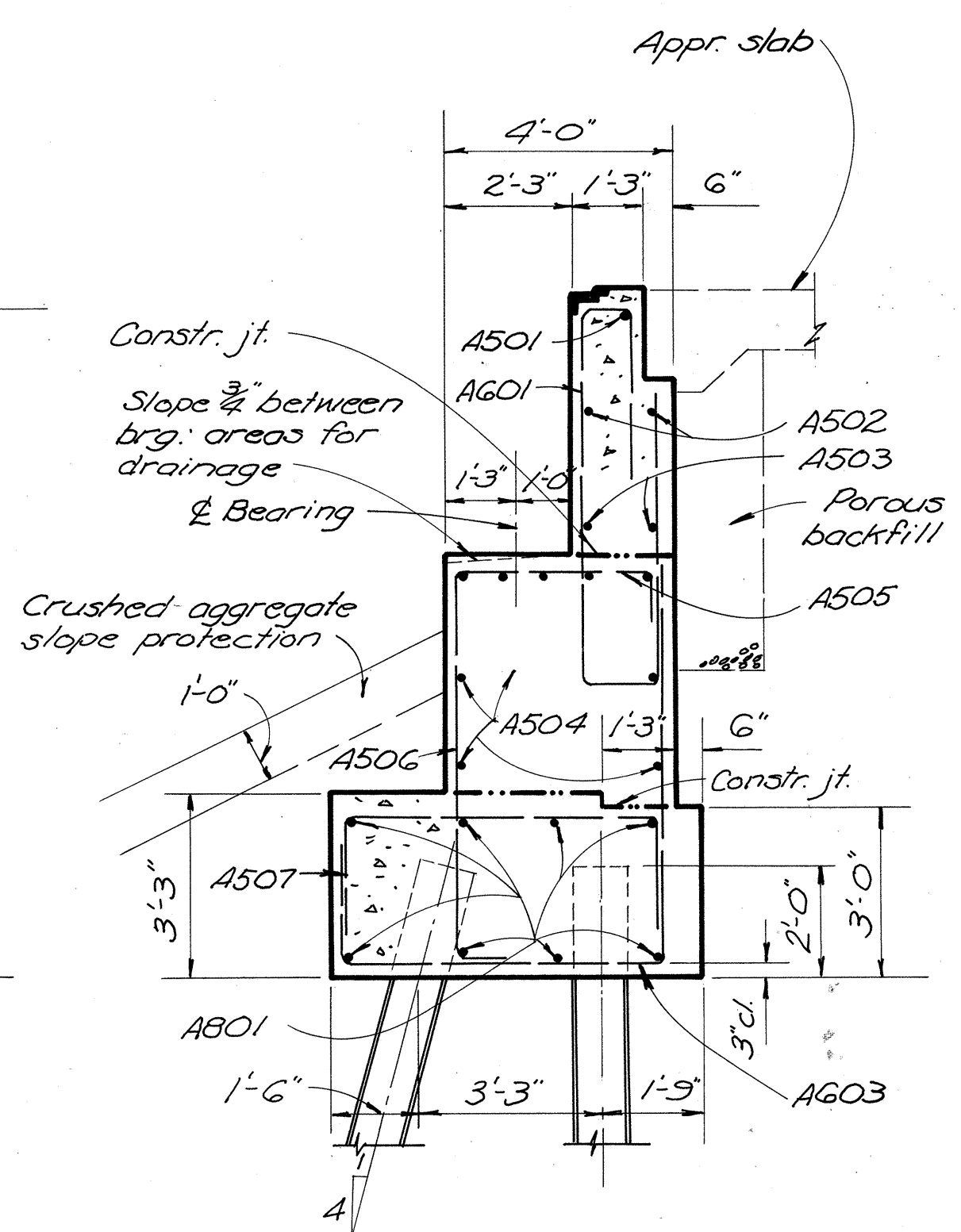
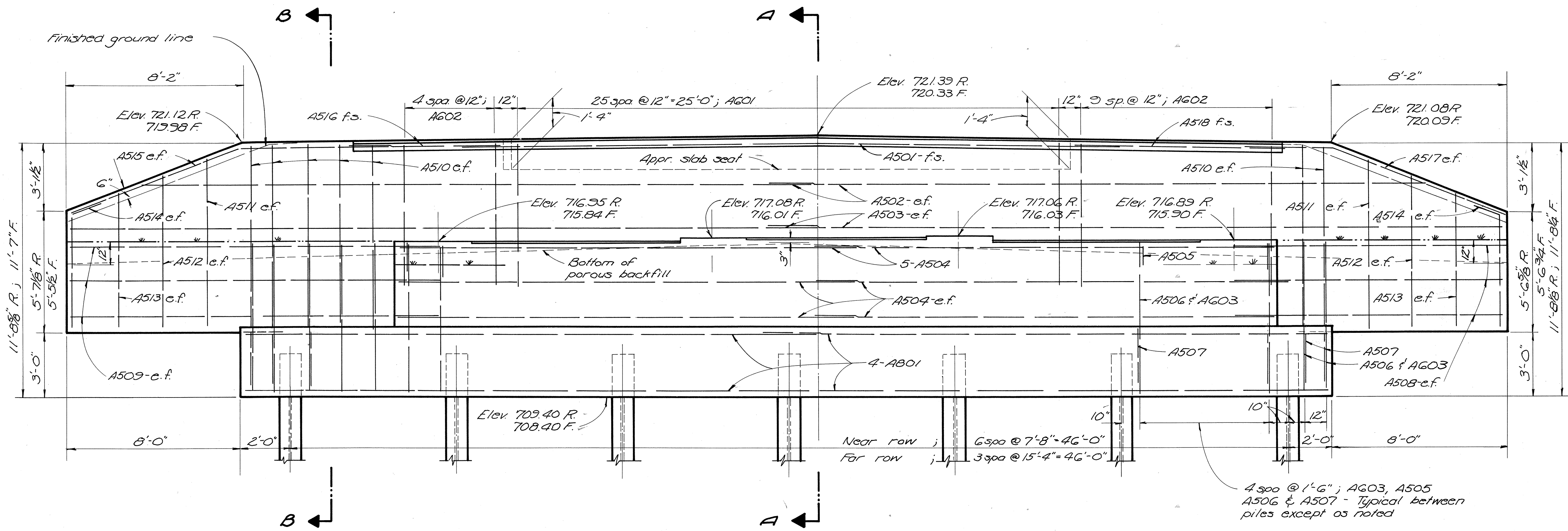
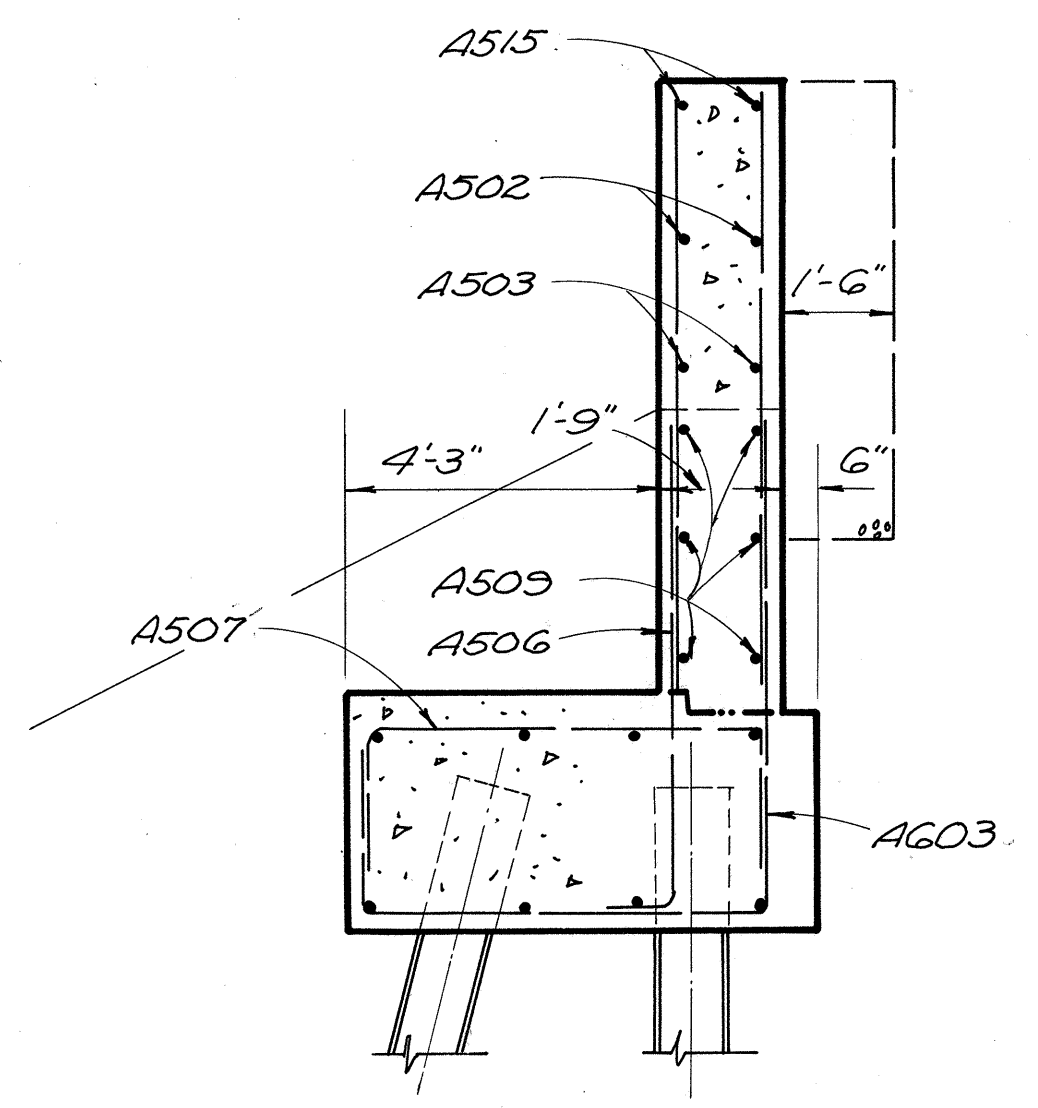
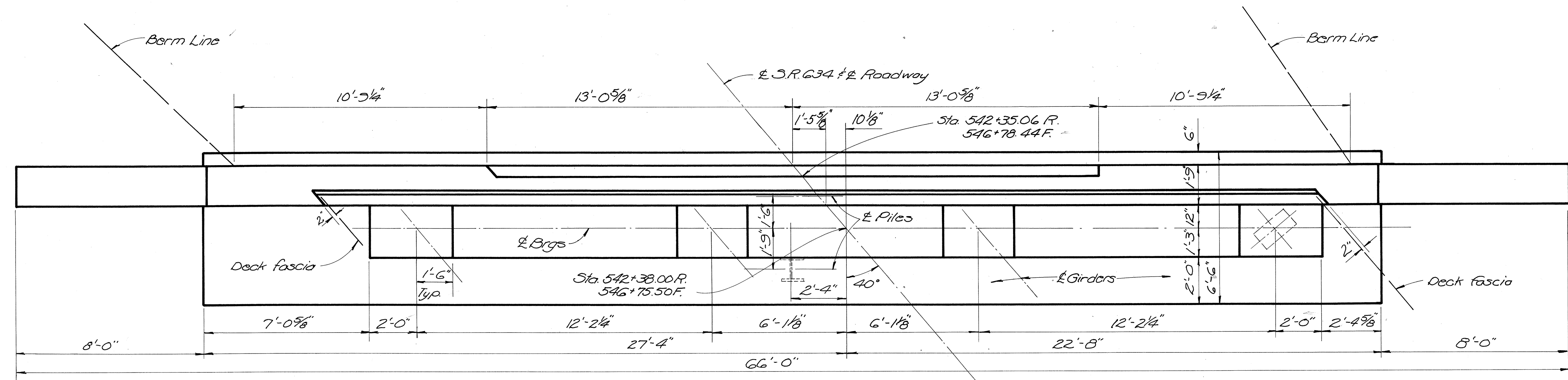
ESTIMATED QUANTITIES							
Item	Total	Unit	Description	Superst.	Abuts	Piers	General
503	Lump	sum	Cofferdams, cribs & sheeting				Lump
503	480	Cu. yd.	Unclassified excavation including rock		260	220	
511	413	Cu. yd.	Class "C" concrete, superstructure	413			
511	236	Cu. yd.	Class "C" concrete, piers above footings			236	
511	64	Cu. yd.	Class "C" concrete, pier footings			64	
511	177	Cu. yd.	Class "C" concrete, abutments		177		
509	153,775	Lb	Reinforcing steel	109840	9509	34426	
513	615700	Lb	Structural steel	615700			
514	615700	Lb	Field painting of structural steel	615700			
517	886.76	Lin ft	Railing (Deep beam with handrail and galvanized steel posts and bolts)	886.76			
505	Lump	Sum	First test pile				Lump
507	700	Lin ft	Steel piles 10 BP 42		700		
202	Lump	Sum	Removal of existing structure				Lump
518	30	Cu. yd.	Porous backfill		30		
518	32	Each	Scuppers, including Supports	32			
808	413	Units	Water-reducing, set-retarding admixture	413			

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
DIVISION OF DESIGN AND CONSTRUCTION  
BUREAU OF BRIDGES

GENERAL PLAN & ELEVATION  
NOTES & ESTIMATED QUANTITIES  
BRIDGE No. PUT-634-1020  
OVER AUGLAIZE RIVER  
STA 542+35.06  
546+78.44  
PUTNAM COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	Ray	Weidi	Innes	BFG	7-11-63	

Rev. 7-23-70



4 sps @ 1'-6" i AG03, A505, A506 & A507 - Typical between piles except as noted

**POROUS BACKFILL** shall extend upward to the approach slab and to the surface of the earth shoulders, and outward to the surface of the embankment slopes. Excavation therefor, in excess of that required for construction of the abutments, shall be considered as paid for in the bid price per cu. yd. paid for porous backfill.

**LEGEND**  
 e.f. each face  
 f.s. for side  
 R. rear abutment  
 F. forward abutment

STATE OF OHIO  
 DEPARTMENT OF HIGHWAYS  
 DIVISION OF DESIGN AND CONSTRUCTION  
 BUREAU OF BRIDGES

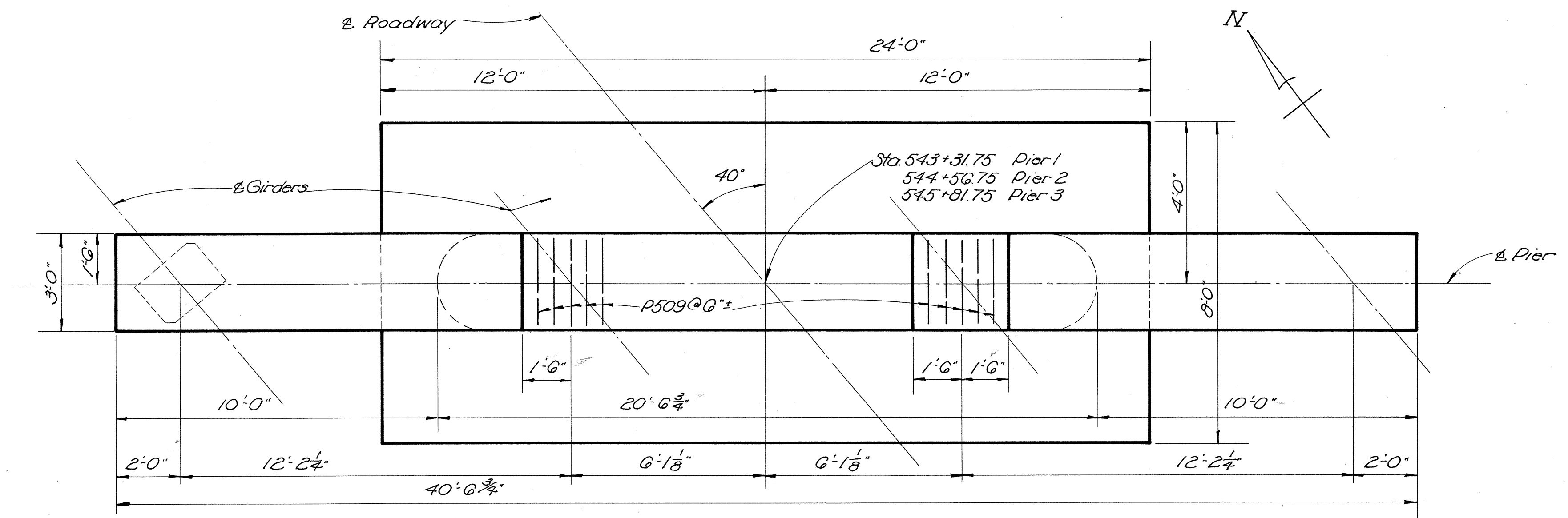
**ABUTMENTS**  
 BRIDGE No. PUT-634-1020  
 OVER AUGLAIZE RIVER

Putnam County Sta. 542+35.06  
 546+78.44

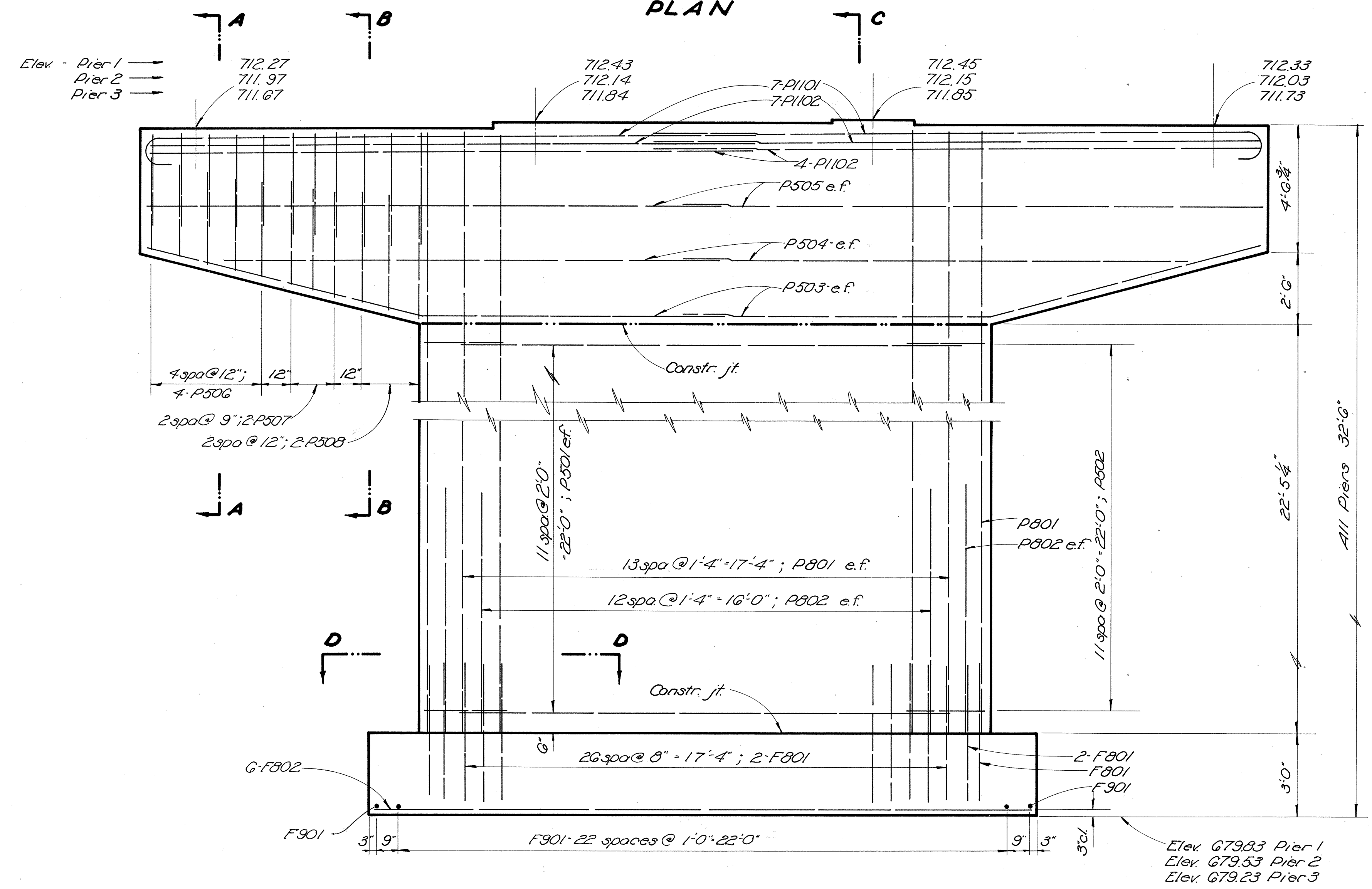
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	JOB	INNES	BFG	7-11-63		



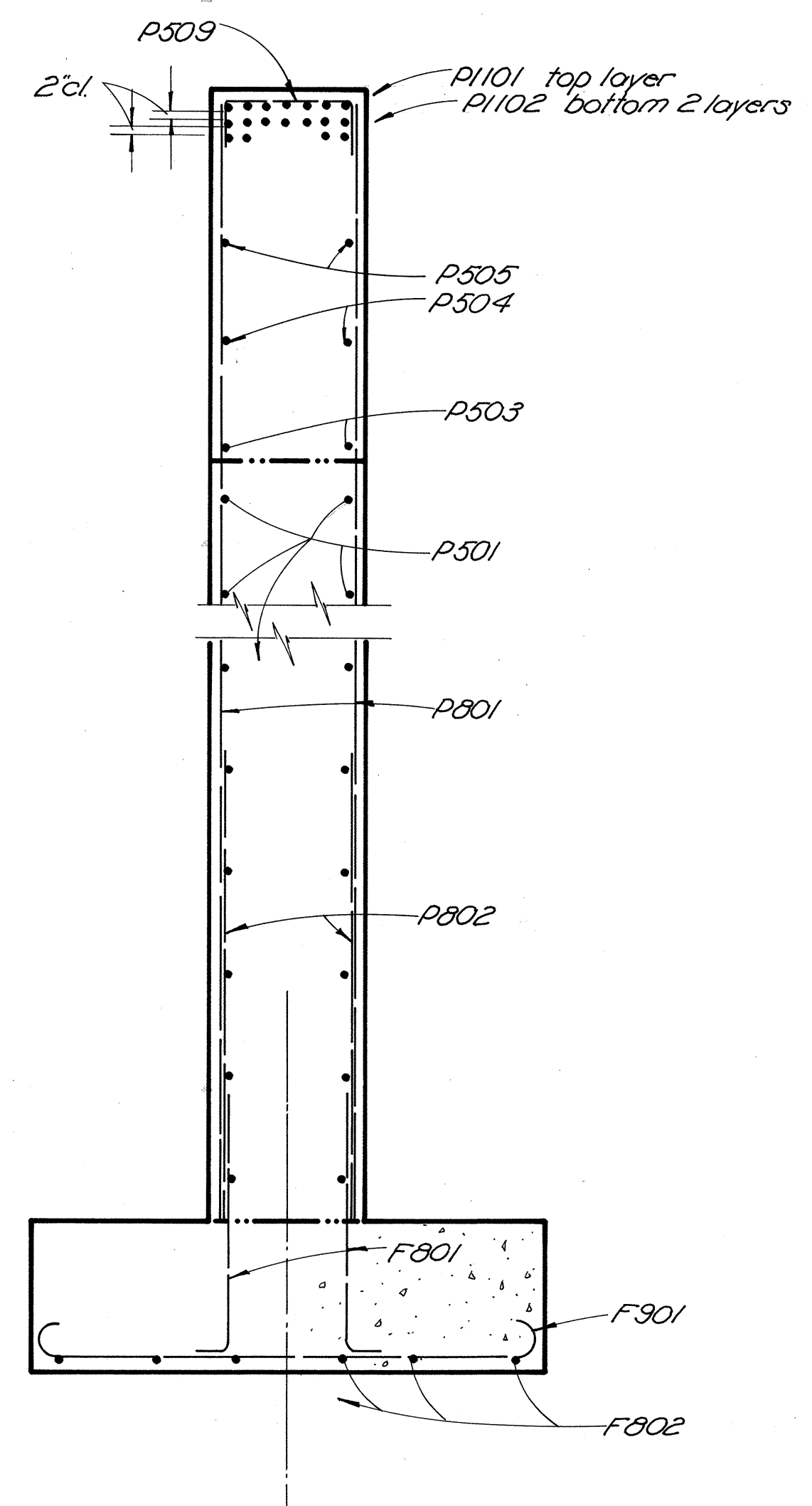
PUT-634-10.05



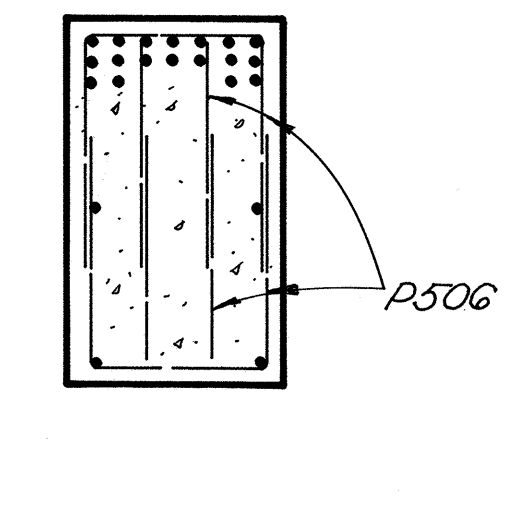
PLAN



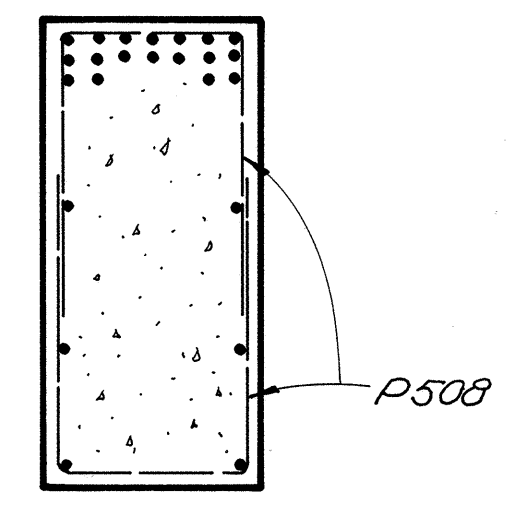
ELEVATION



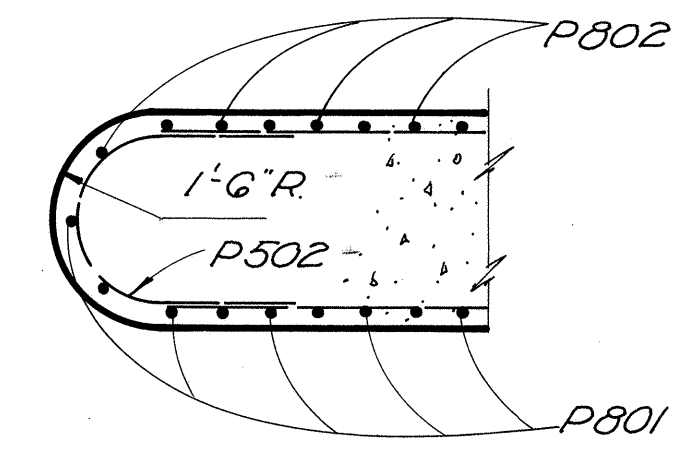
SECTION C-C



SECTION A-A



SECTION B-B



SECTION D-D

e.f. = each face

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
DIVISION OF DESIGN AND CONSTRUCTION  
BUREAU OF BRIDGES

**PIERS**

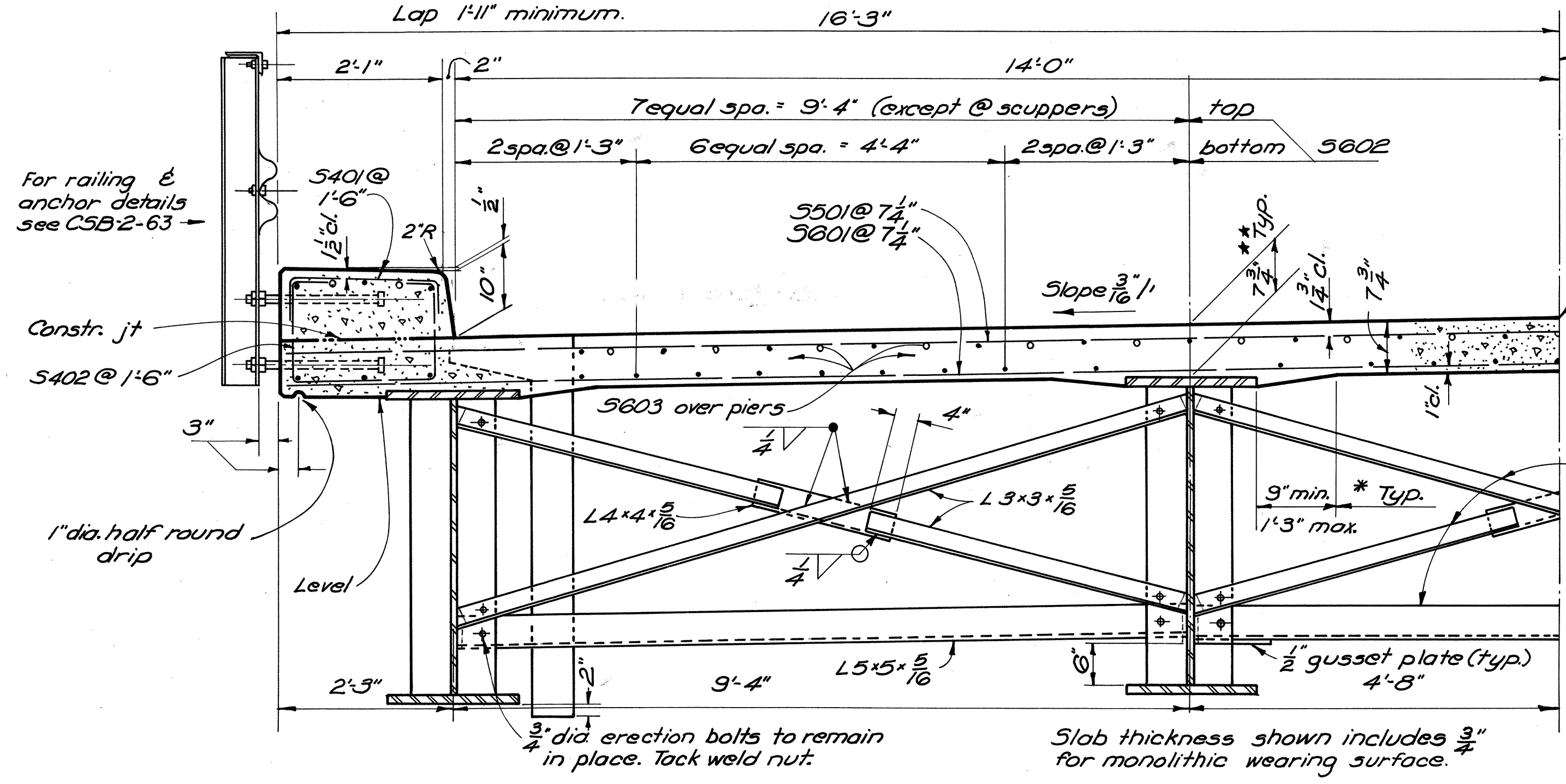
BRIDGE NO. PUT-634-1020  
OVER AUGLAIZE RIVER

PUTNAM COUNTY STA. 542+35.06  
546+73.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray			Innes	BFG	7-11-63	

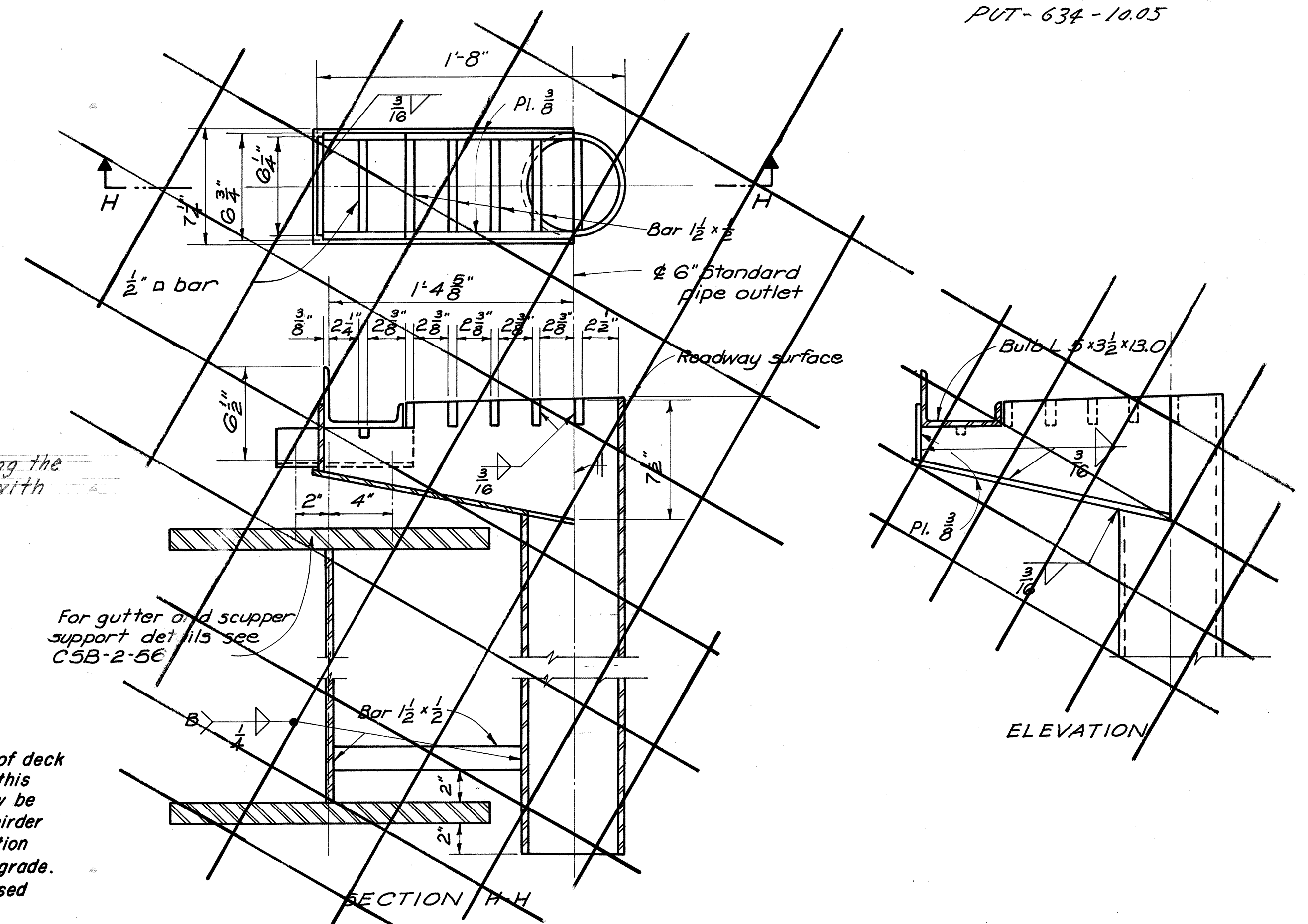
All longitudinal bars are S602 unless otherwise shown. Lap 1'-11" minimum.

\*Pay quantity shall be based on 12"

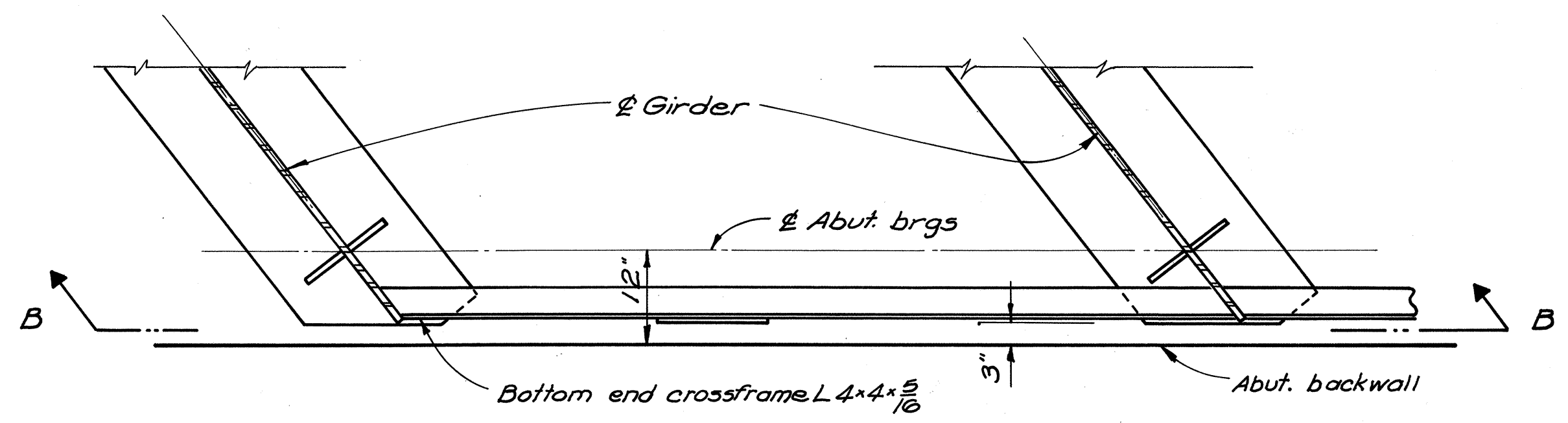


TRANSVERSE SECTION THRU SUPERSTRUCTURE

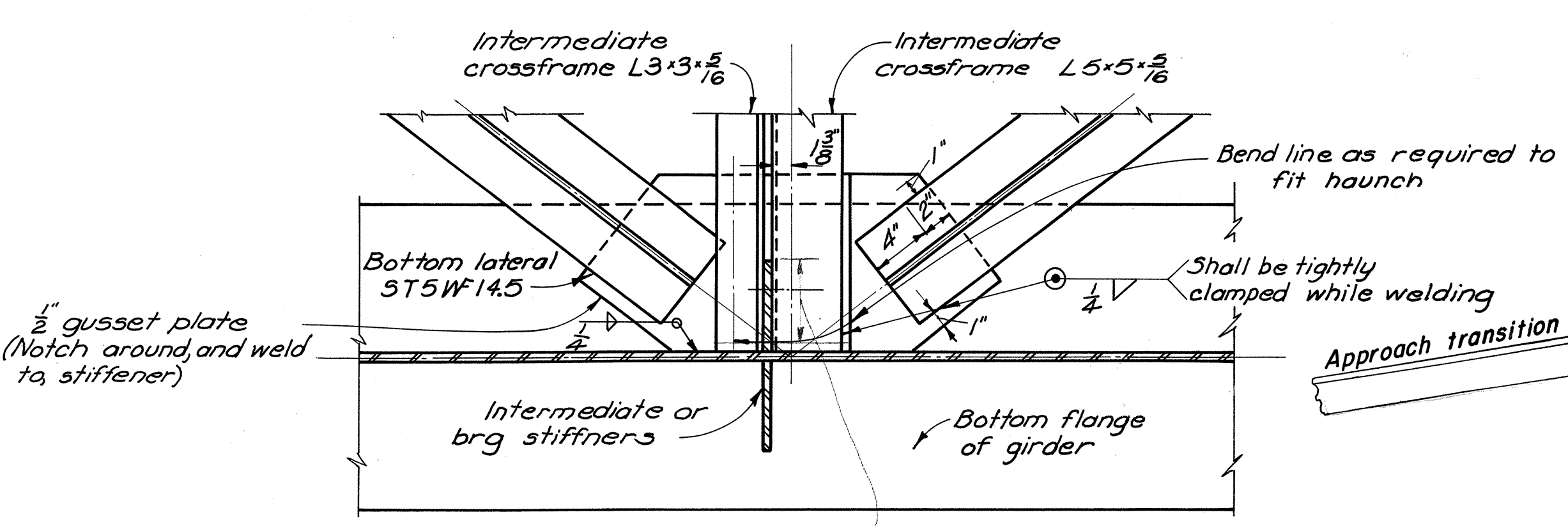
\*\* This is the design dimension. The quantity of deck concrete to be paid for shall be based upon this dimension, even though deviation from it may be necessary because the top flange of the girder may not have the exact camber or conformation required to place it parallel to the finished grade. Deduction shall be made for volume of encased steel plates as per 511.19.



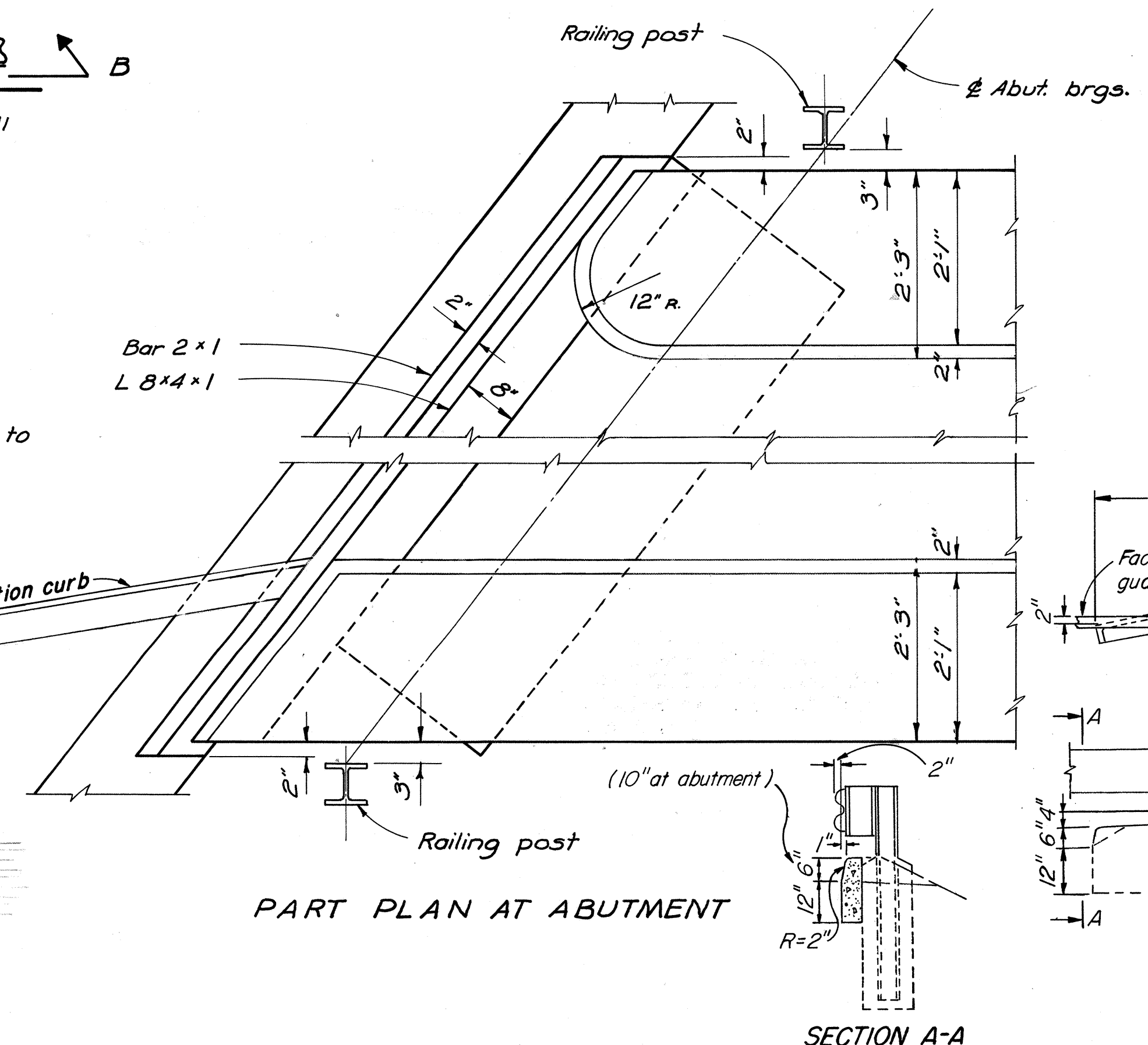
SCUPPER See Std. Dwg. SD-1-69



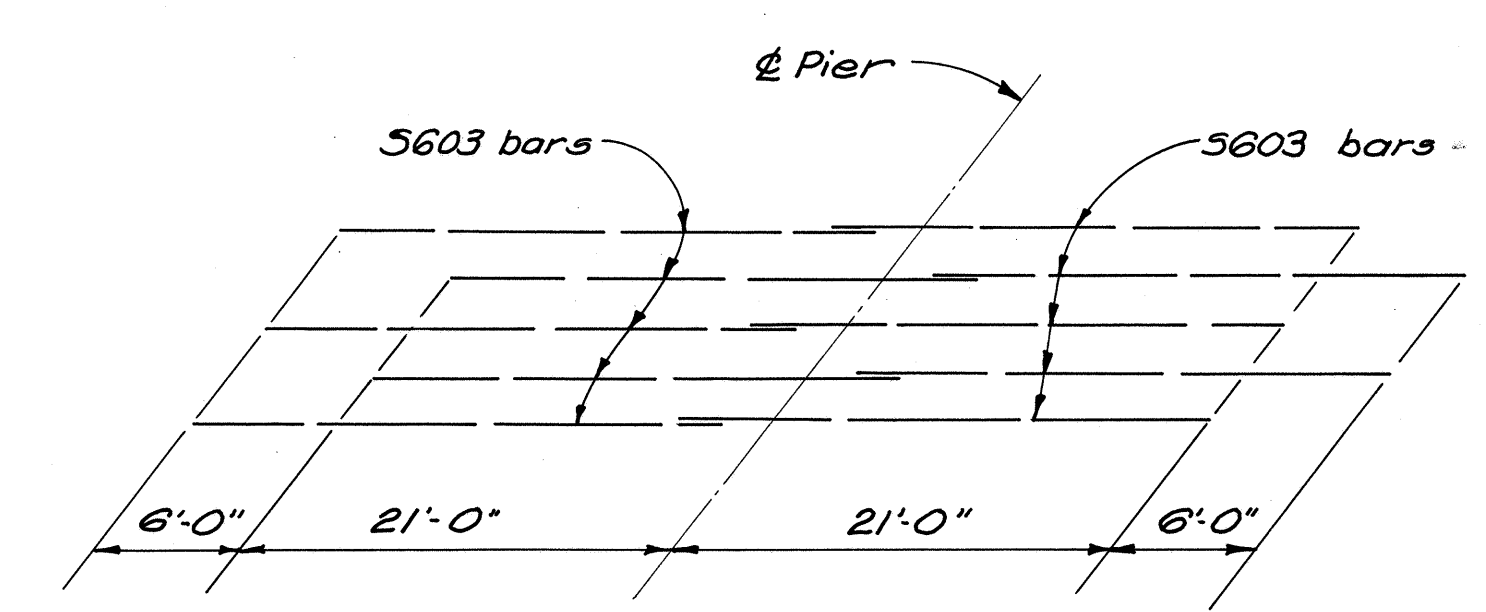
SECTIONAL PLAN OF GIRDERS AT ABUTMENTS For section B-B see SD-1-69 sheet 1



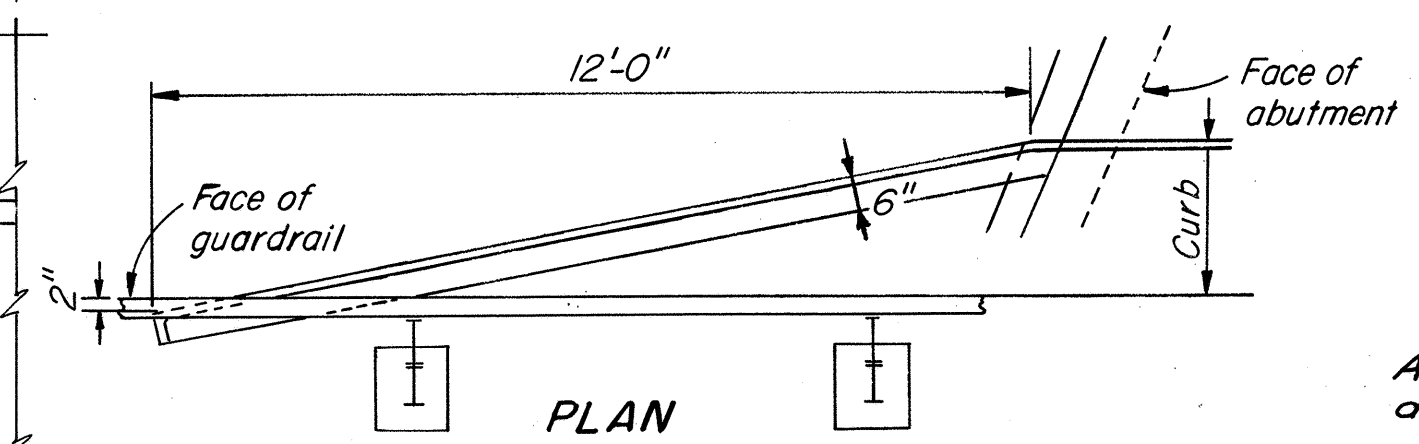
CONNECTION FOR BOTTOM LATERALS



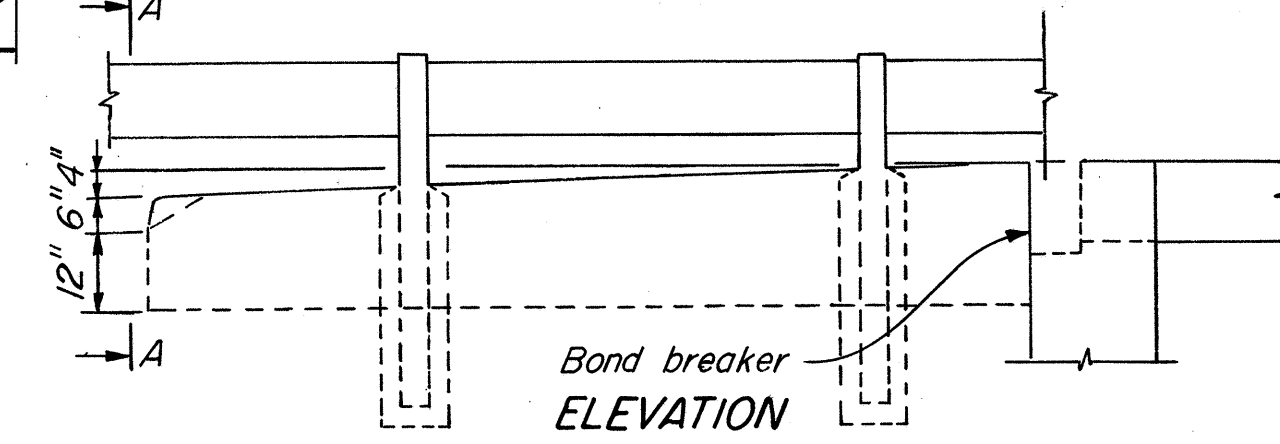
PART PLAN AT ABUTMENT



LOCATION DIAGRAM FOR S603 BARS



PLAN



ELEVATION

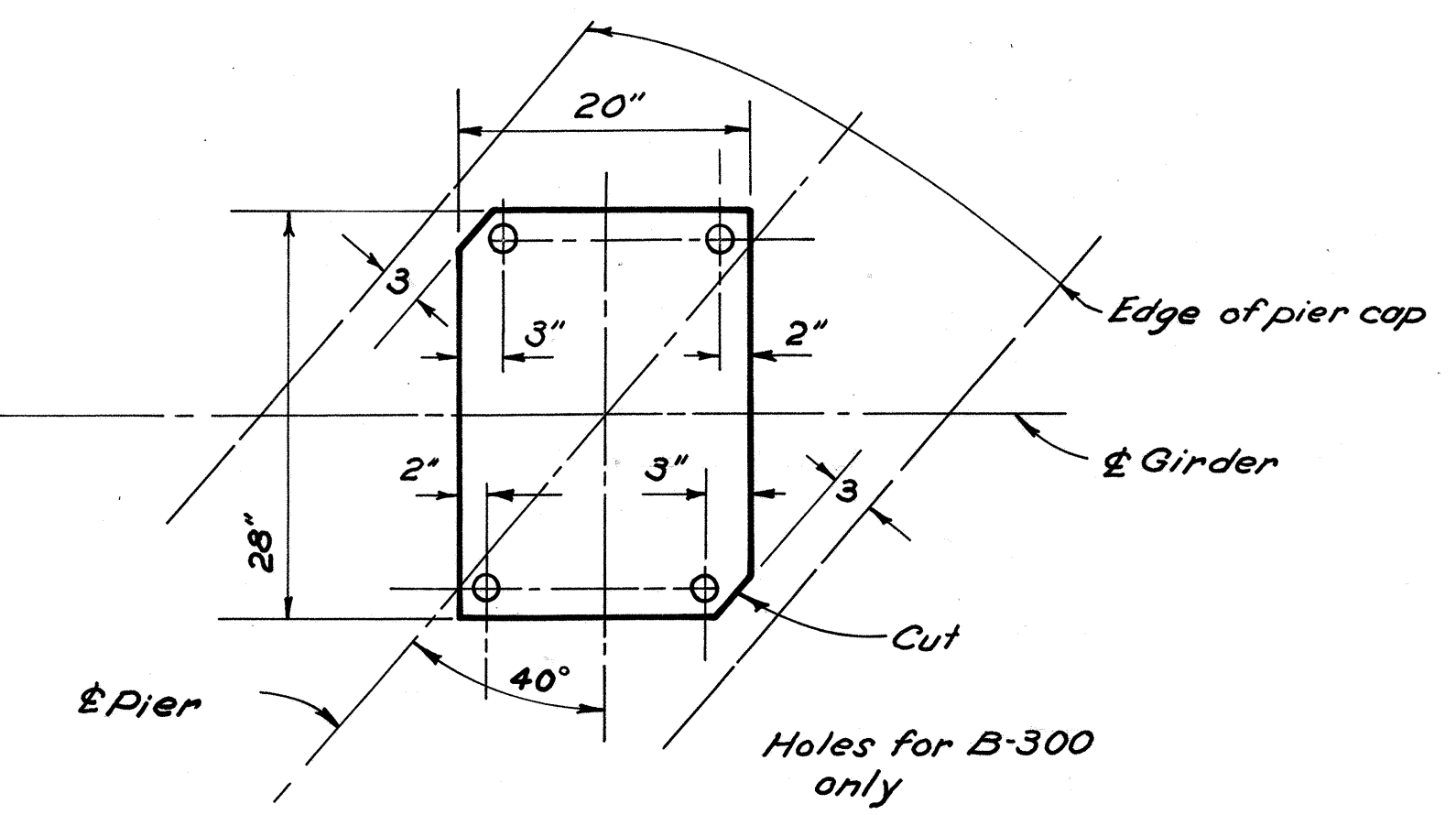
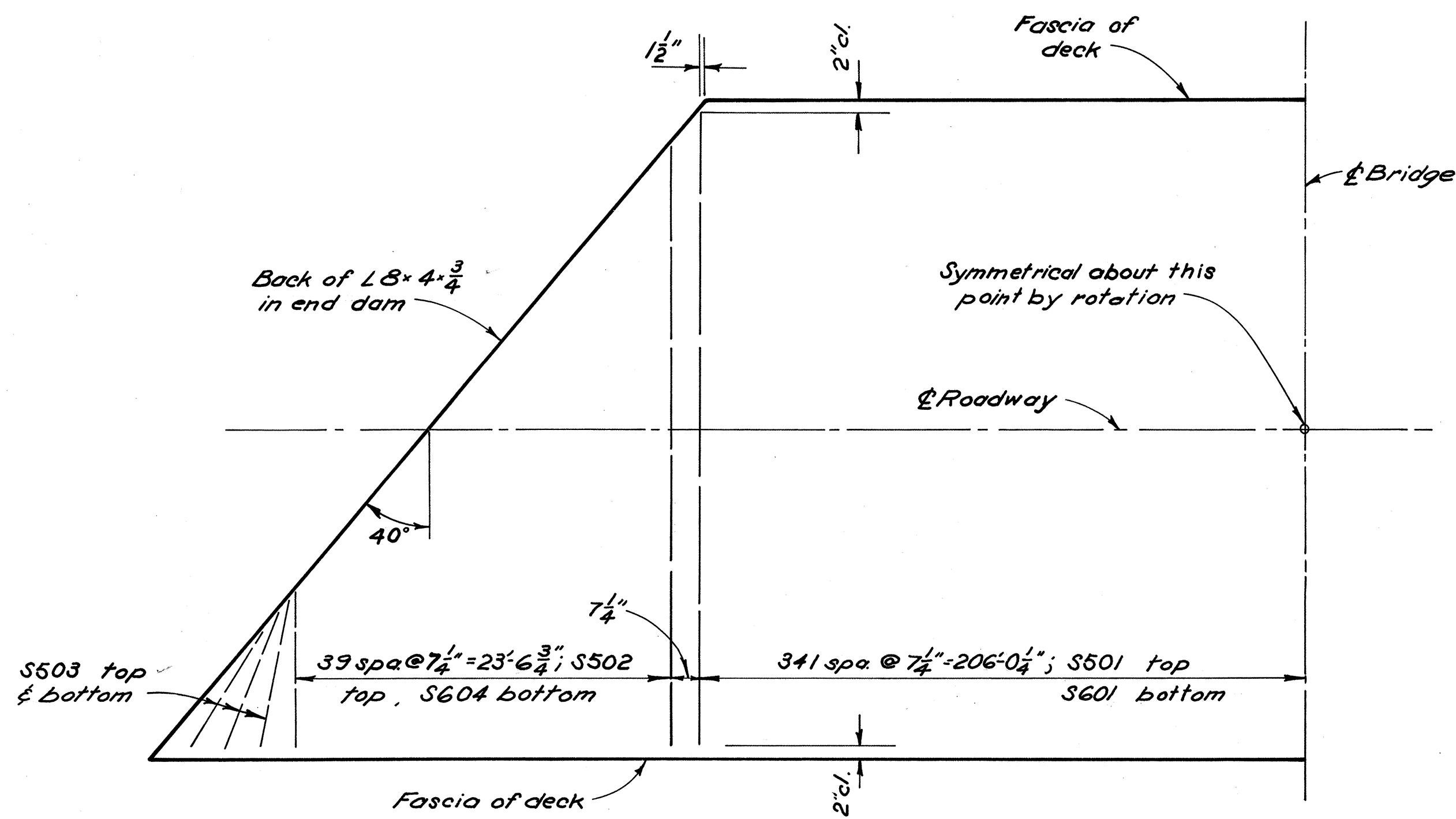
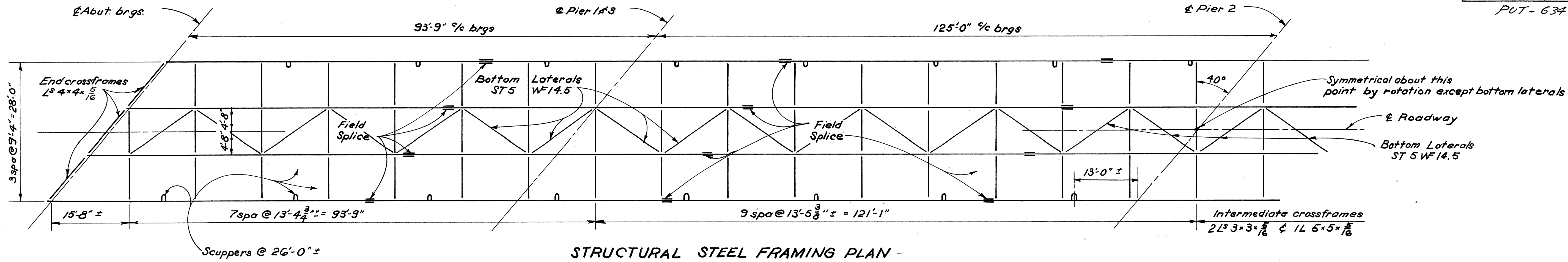
APPROACH TRANSITION CURB Use adjacent to entrance lane both ends of bridge. Include with abutments for payment.

ADDITIONAL SUPERSTRUCTURE DETAILS are shown on sheet

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES					
<b>SUPERSTRUCTURE</b>					
BRIDGE NO. PUT-634-1020 OVER AUGLAIZE RIVER					
PUTNAM COUNTY STA. 542+35.06 546+78.44					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
Ray	CAM	Innes	BFG	7-11-63	



PUT-634-10.05



See RB-1-55 for additional details.

REINFORCING STEEL LIST					BENDING DIAGRAMS				
Mark	No.	Length	Weight	Shp.					
<b>ABUTMENTS</b>					<b>REPLACEMENT BARS</b>				
A801	32	26'-0"	2221	S					
A601	52	16'-0"	1250	B					
A602	30	14'-1"	635	B					
A603	68	14'-11"	1524	B					
A501	2	29'-4"	61	S					
A502	8	30'-0"	250	S					
A503	8	33'-8"	281	S					
A504	36	20'-11"	785	S					
A505	54	6'-9"	380	B					
A506	68	7'-6"	531	B					
A507	68	8'-9"	621	B					
A508	12	12'-0"	150	S					
A509	12	16'-8"	208	S					
A510	28	8'-2"	239	S					
A511	8	7'-6"	63	S					
A512	8	6'-9"	56	S					
A513	8	6'-0"	50	S					
A514	8	6'-9"	56	B					
A515	4	15'-0"	63	B					
A516	2	6'-8"	14	S					
A517	4	12'-3"	51	B					
A518	2	9'-6"	20	S					
<b>PIERS</b>					<b>SUPERSTRUCTURE</b>				
F901	75	10'-2"	2593	B					
F801	180	6'-2"	2964	B					
F802	18	23'-8"	1137	S					
P1101	42	23'-6"	5244	B					
P1102	66	21'-11"	7685	S					
P801	90	29'-9"	7149	S					
P802	90	15'-0"	3605	S					
P501	72	17'-6"	1314	S					
P502	72	7'-0"	526	B					
P503	12	21'-3"	266	B					
P504	12	18'-0"	225	S					
P505	12	20'-11"	262	S					
P506	60	9'-1"	568	B					
P507	36	9'-7"	359	B					
P508	36	10'-5"	391	B					
P509	30	4'-5"	138	B					
					<p>BAR SIZE is indicated in the bar mark. The first digit where three digits are used, and the first two digits where four are used, indicate the bar size number. For example, A801 is a No. 8 size bar and P1101 is a No. 11 size.</p>				
					<p>Vary by 8<sup>5</sup>/<sub>8</sub>"</p>				
					<p>Vary by 8<sup>5</sup>/<sub>8</sub>"</p>				
					<p>S604 78 31'-5" 2036 S</p>				
					<p>S602 708 38'-6" 42,329 S</p>				
					<p>S603 138 25'-0" 5,182 S</p>				
					<p>S501 683 32'-2" 22,915 S</p>				
					<p>S502 78 31'-5" 1,413 S</p>				
					<p>S503 12 3'-2" 40 S</p>				
					<p>S401 584 2'-7" 1,008 B</p>				
					<p>S402 584 4'-11" 1,918 B</p>				

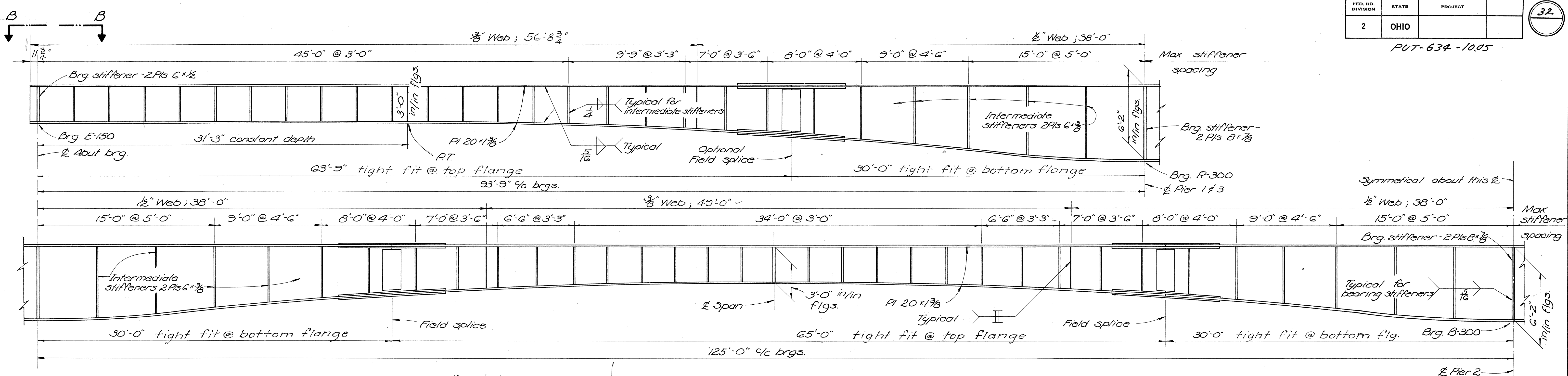
STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
DIVISION OF DESIGN AND CONSTRUCTION  
BUREAU OF BRIDGES

**SUPERSTRUCTURE & REINFORCING STEEL LIST**  
BRIDGE NO. PUT-634-1020  
OVER AUGLAIZE RIVER  
STA 542+35.06  
54G+78.44

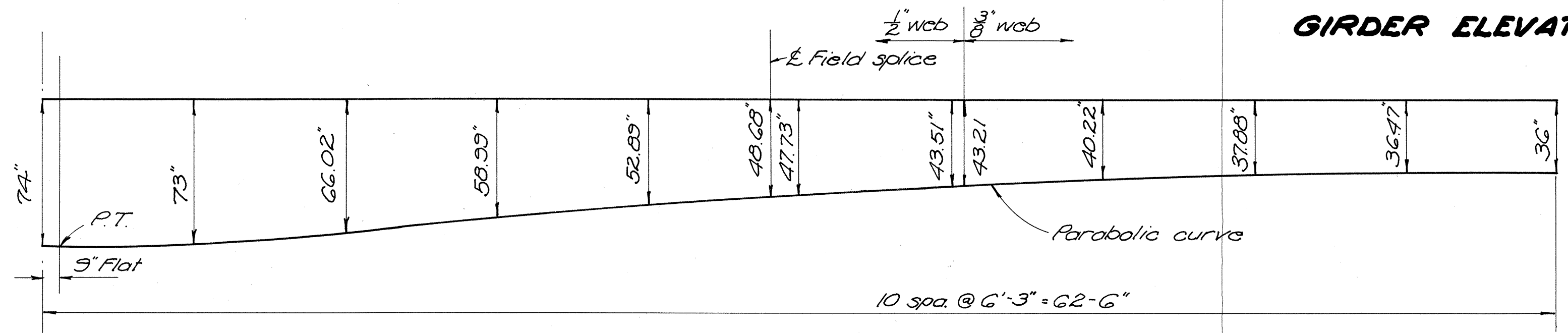
PUTNAM COUNTY

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray			Innes	BFG	7-11-63	

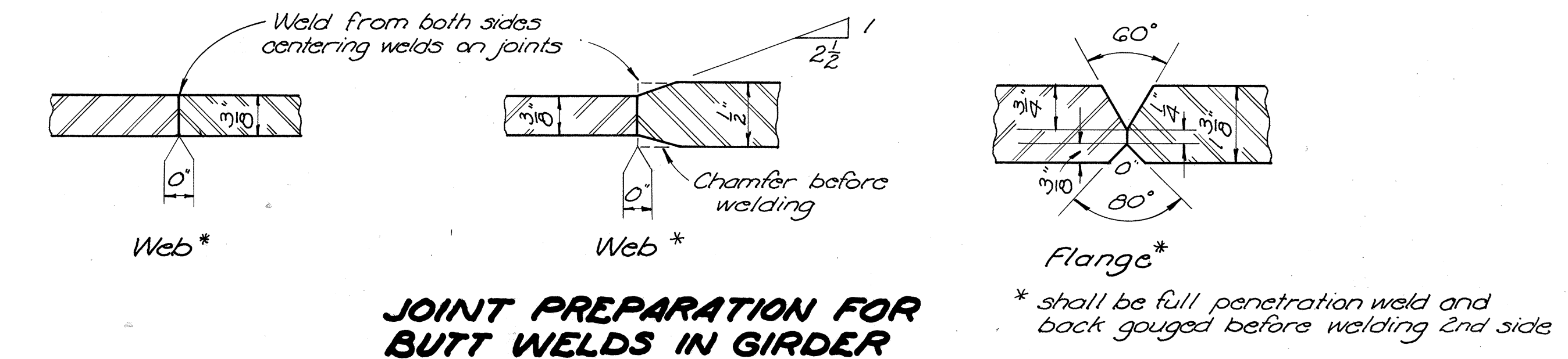
PUT-634-10.05



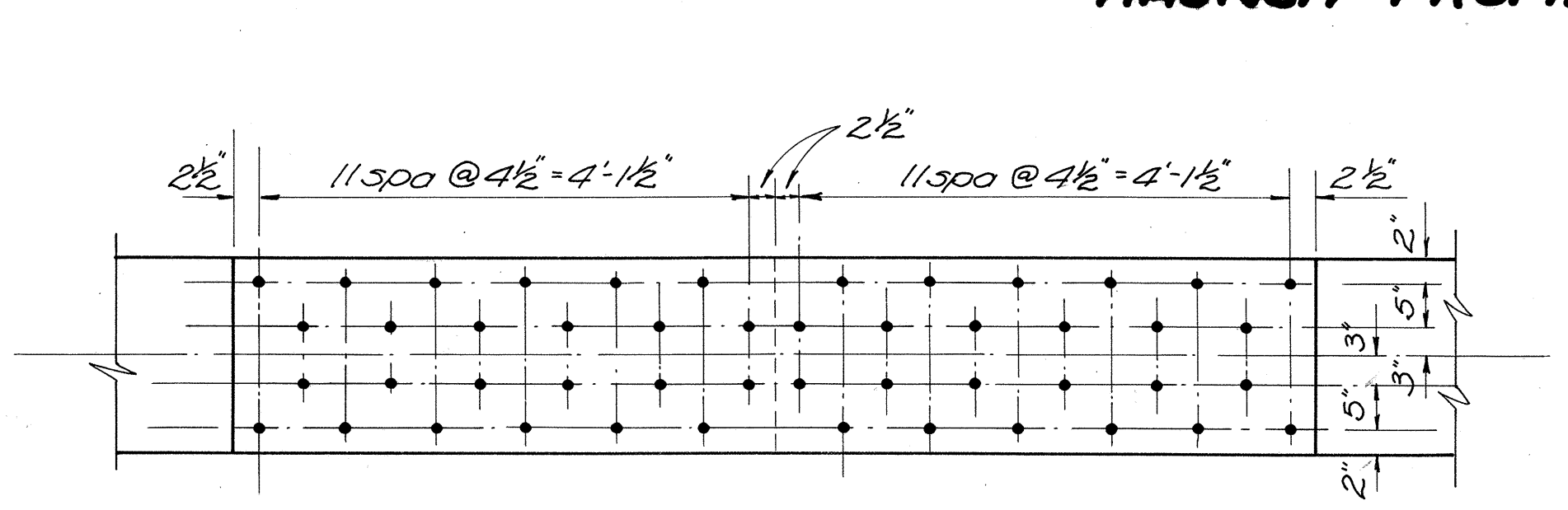
**GIRDER ELEVATION**



**HAUNCH PROFILE**



**JOINT PREPARATION FOR BUTT WELDS IN GIRDER**



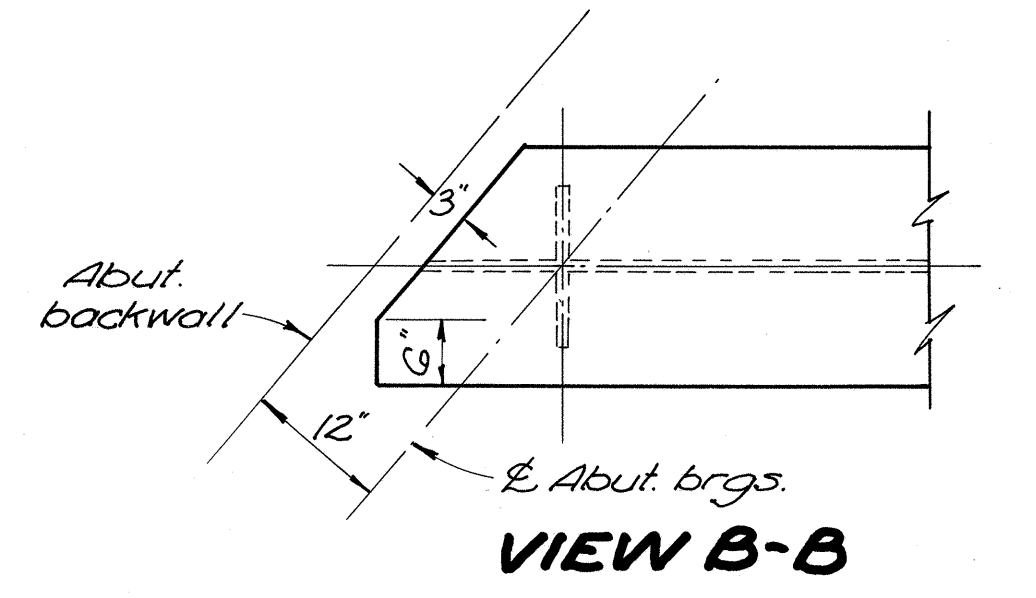
**CAMBER AND DEFLECTION DIAGRAM**

Span Segment A B C D

Required camber for top of girder web

Deflection

	30'-0"	33'-9"	30'-0"	30'-0"	32'-6"	32'-6"	30'-0"
Deflection due to wt. of steel	0	.18"	.09"	0	.08"	.20"	.08"
Deflection due to remaining PL	0	.64"	.32"	0	.29"	.72"	.29"
Total camber = Total deflection	0	.82"	.41"	0	.37"	.92"	.37"



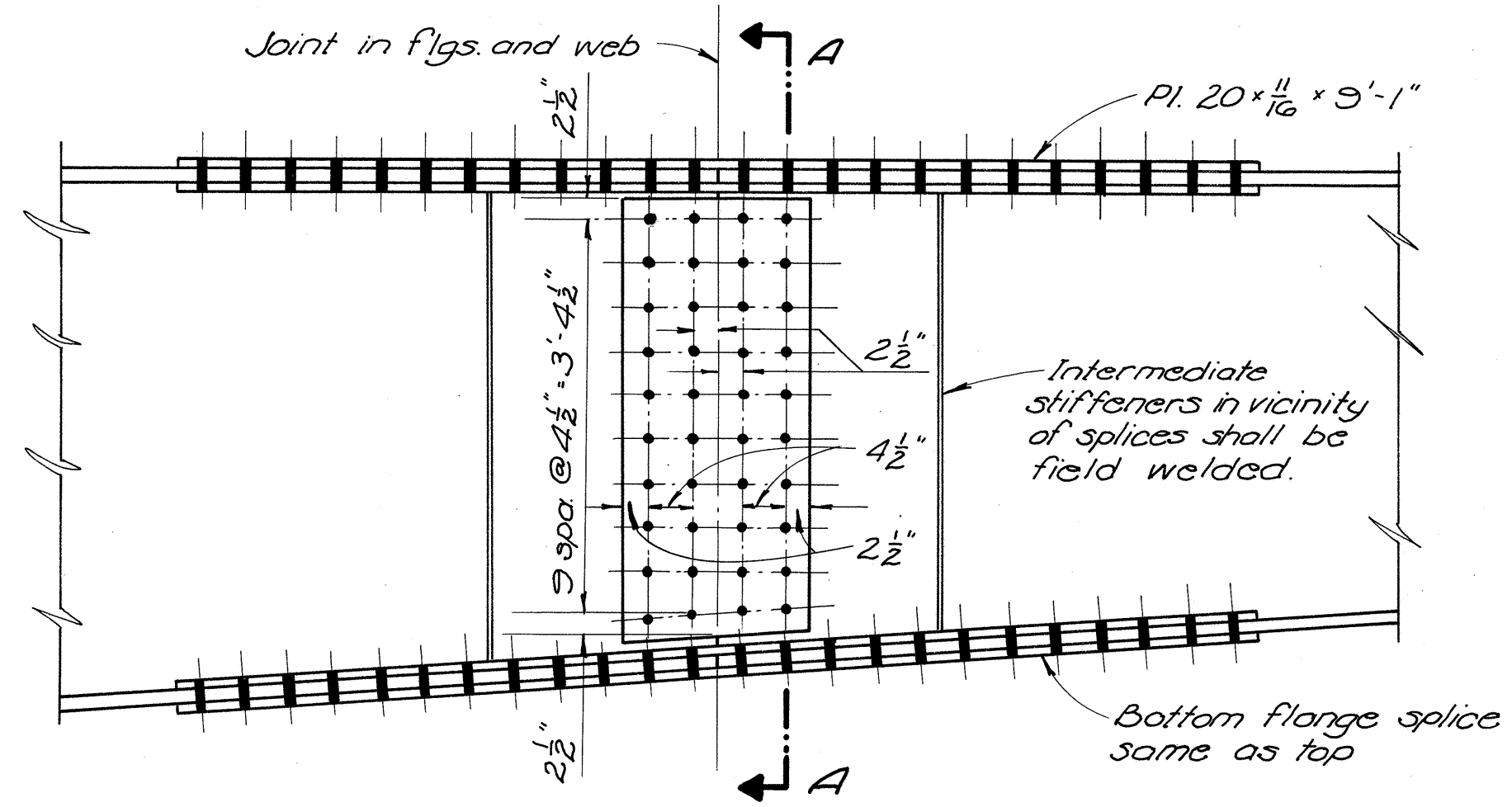
**VIEW B-B**

**CAMBER AND DEFLECTION DIAGRAM**

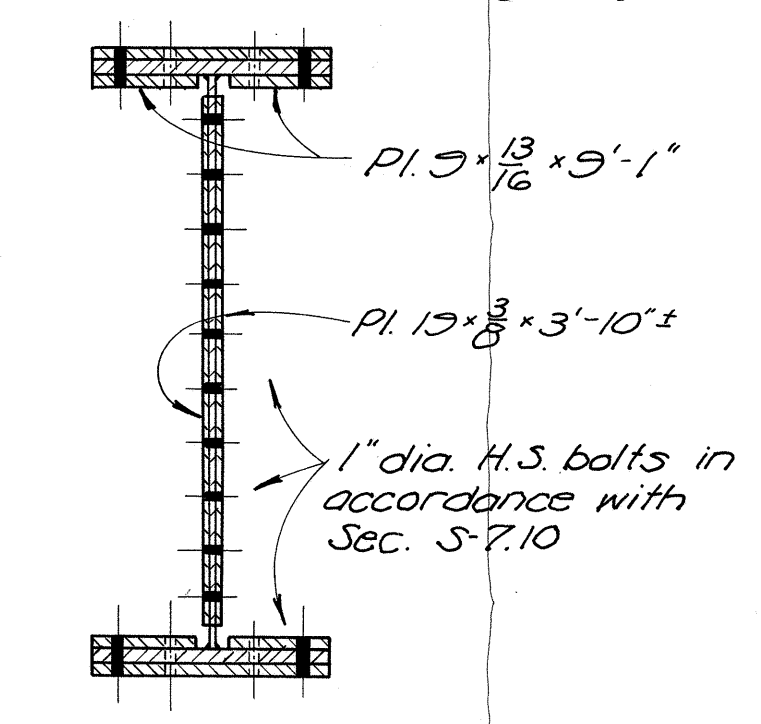
**CAMBER DATA**

Segment	Field Shop camber
A	VOID
B	VOID
C	VOID
D	VOID

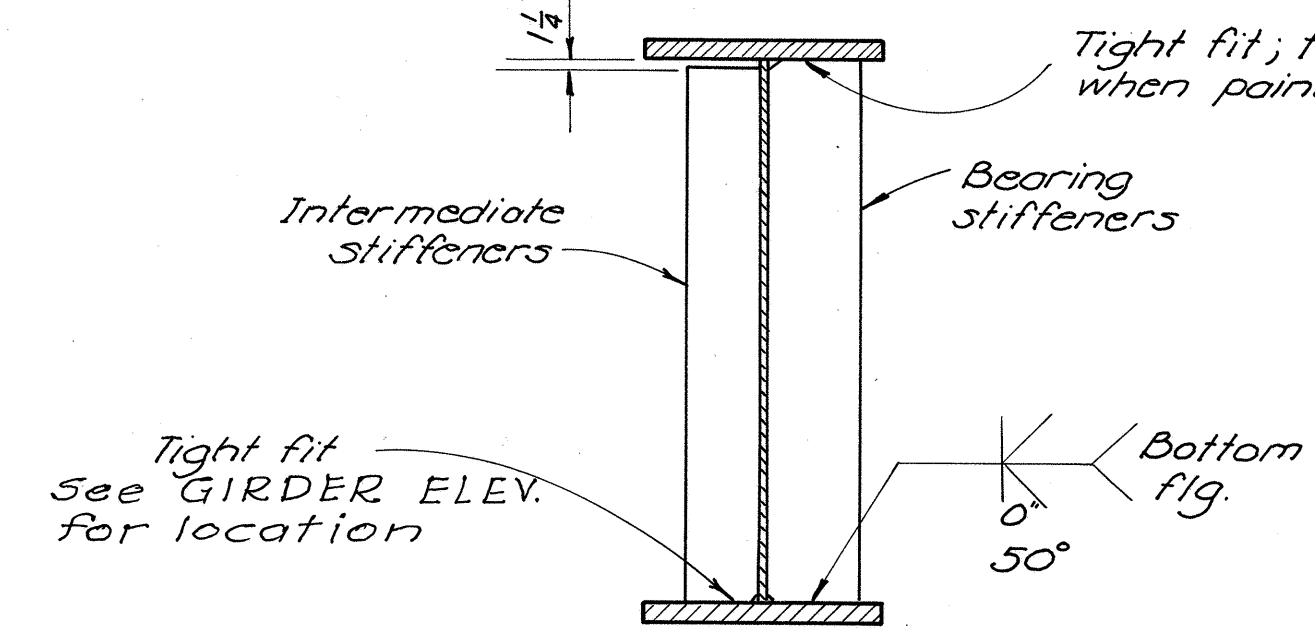
— Camber concaved downward  
— Camber concaved upward



**FIELD SPLICE**



**SECTION A-A**



**STIFFENERS**

STATE OF OHIO  
DEPARTMENT OF HIGHWAYS  
DIVISION OF DESIGN AND CONSTRUCTION  
BUREAU OF BRIDGES

**GIRDERS**

BRIDGE No. PUT-634-1020  
OVER AUGLAIZE RIVER

Sta. 542+35.06  
Sta. 546+78.44

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
Ray	J. RAY	Innes	BFG		7-11-63	