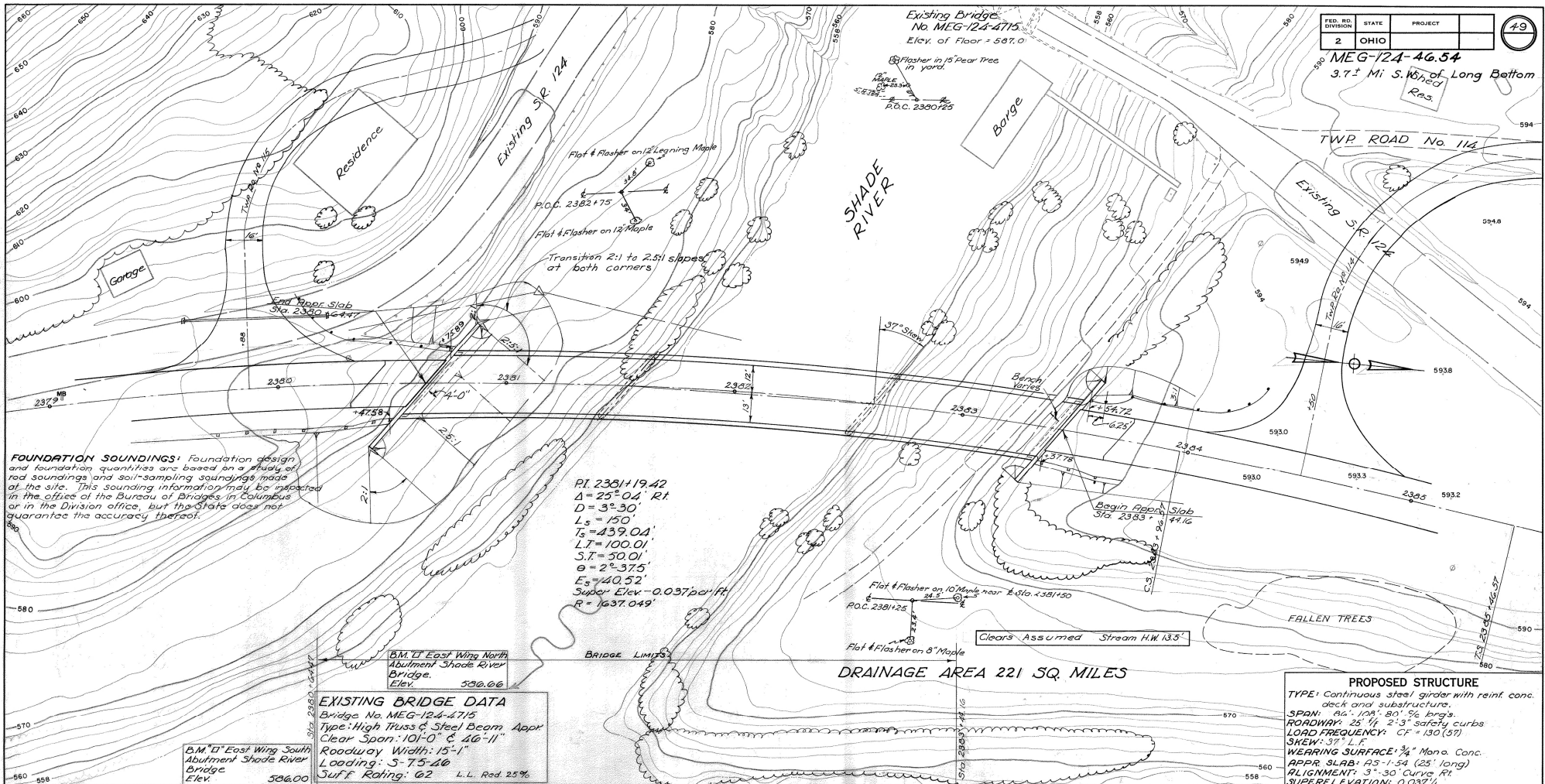


MEG-124-46.54
3.77 Mi S. 16th of Long Bottom
Ras.



FOUNDATION SOUNDINGS: Foundation design and foundation quantities are based on a study of red soundings and soil-sampling soundings made at the site. This sounding information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division office, but this State does not guarantee the accuracy thereof.

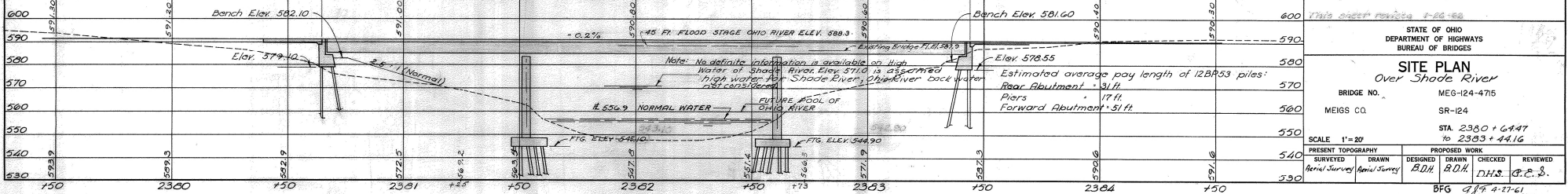
PI. 238119.42
Δ = 25°-04' RT
D = 3°-30'
L_s = 150'
T_s = 439.04'
L.T. = 100.01'
S.T. = 50.01'
θ = 2°-37.5'
E_s = 40.52'
Super Elev. = 0.037 pc ft
R = 1637.049'

EXISTING BRIDGE DATA
Bridge No. MEG-124-4715
Type: High Truss & Steel Beam Appr
Clear Span: 101'-0" @ 46'-11"
Roadway Width: 15'-1"
Loading: S-7.5-10
Suff. Rating: 02 L.L. Rod 25%.

B.M. "D" East Wing South Abutment Shade River Bridge Elev. 586.00

B.M. "D" East Wing North Abutment Shade River Bridge Elev. 586.06

PROPOSED STRUCTURE
TYPE: Continuous steel girder with reinf. conc. deck and substructure.
SPAN: 64'-10 1/2", 80'-9 1/2" brgs.
ROADWAY: 25' 1/4" 2'-3" safety curbs
LOAD FREQUENCY: CF = 130 (S7)
SKEW: 37° L.F.
WEARING SURFACE: 3/4" Man. Conc.
APPR. SLAB: AS-1.54 (25' long)
ALIGNMENT: 3°-30' Curve Rt.
SUPERELEVATION: 0.037'



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

SITE PLAN
Over Shade River

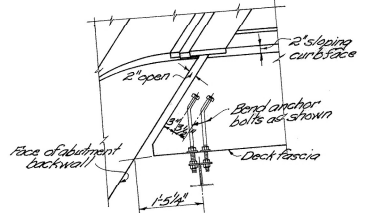
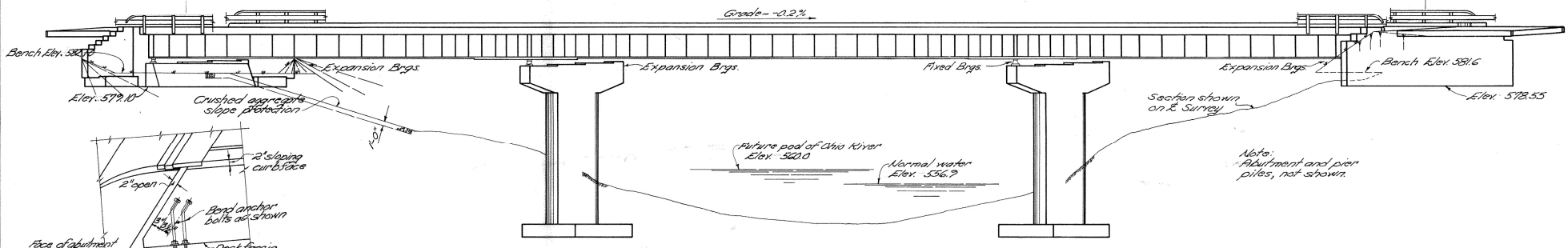
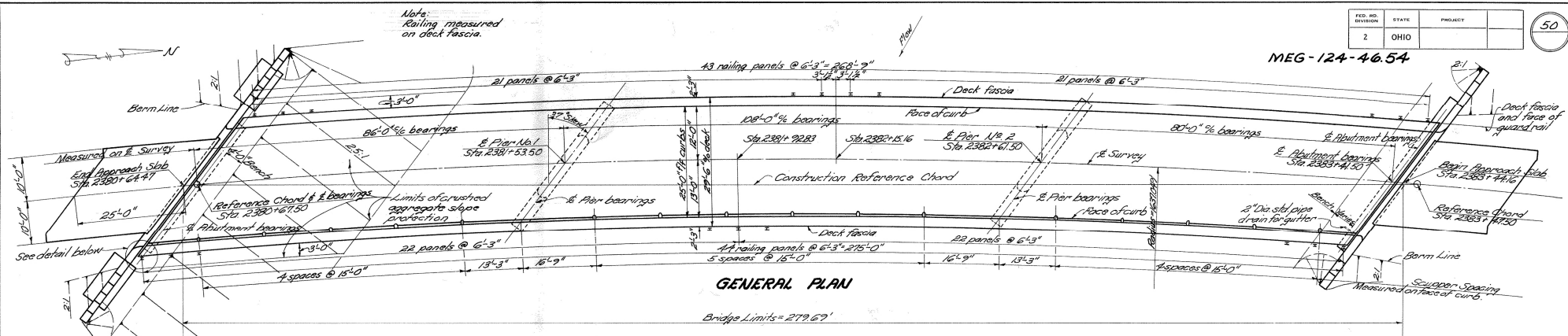
BRIDGE NO. MEG-124-4715
MEIGS CO. SR-124

SCALE 1" = 20'
STA. 2380 + 64.47 to 2383 + 44.16

PRESENT TOPOGRAPHY		PROPOSED WORK			
SURVEYED	DRAWN	DESIGNED	DRAWN	CHECKED	REVIEWED
April Survey	April Survey	B.D.H.	B.D.H.	D.H.S.	C.P.S.

BFG 7/19 4-27-61

MEG-124-46.54



ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER	PIERS	ABUTS	GEN'L
E-2	Lump	Sum	Cofferdams, cribs and sheeting				Lump
E-2	397	Cu. Yds.	Unclassified excavation		434	163	
S-1	240	Cu. Yds.	Class C concrete, superstructure	240			
S-1	94	Cu. Yds.	Class E concrete, pier footings		94		
S-1	150	Cu. Yds.	Class C concrete, piers above footings		150		
S-1	156	Cu. Yds.	Class E concrete, abutments			156	
S-3	19	Lin. Ft.	Waterproofing, preformed sealing strip			19	
S-4	115,648	Lbs.	Reinforcing steel	86,988	17,053	12,102	
S-7	245,000	Lbs.	Structural steel	245,000			
S-8	245,000	Lbs.	Field painting of structural steel	245,000			
S-9	40	Sq. Ft.	1/2" preformed expansion joint filler			40	
S-14	532.54	Lin. Ft.	Railings (Type I-15.11) with handrail and galvanized steel posts and bolts			532.54	
S-16	Lump	Sum	First fast pile				Lump
S-18	2710	Lin. Ft.	Steel piles, 12 BP53		1360	1550	
S-24	Lump	Sum	Removal of existing structure				Lump
S-27	67	Cu. Yds.	Porous backfill			67	
S-29	16	Each	Scuppers			16	
I-10	194	Sq. Yds.	Crushed aggregate slope protection				194

* Additional quantities shown on sheet 54.11.

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

**GENERAL PLAN AND ELEVATION
ESTIMATED QUANTITIES**
BRIDGE No. MEG-124-4715
0416
SHADE RIVER
Sta 2380+64.47
Sta 2383+44.16

MEIGS COUNTY

DESIGNED	DRAWN	TRACKED	CHECKED	REVISIONS	DATE	REVISED
MPB	MPB	MPB	KED	FIG.	01.7.42.61	

MEG-124-46.54

REINFORCING STEEL LIST				Bending Diagrams			
Mark	No.	Length	Weight	Mark	No.	Length	Weight
Abutments							
A801	7	35'-8"	667 S				
A802	10	23'-7"	630 S				
A803	14	22'-7"	844 S				
A804	10	32'-1"	857 S				
Piers							
A601	26	20'-4"	794 B				
A602	26	21'-4"	833 B				
A603	12	20'-1"	362 B				
A604	8	18'-1"	217 B				
A605	23	4'-4"	150 B				
A606	25	6'-10"	257 B				
A607	7	21'-7"	227 B				
A501	62	11'-6"	744 B				
A502	62	9'-7"	620 B				
A503	80	8'-1"	674 B				
A504	8	6'-0"	50 S				
A505	16	23'-2"	387 S				
A506	29	4'-6"	136 S				
A507	2	5'-6"	11 S				
A508	9	12'-3"	102 S				
A509	6	13'-1"	82 S				
A510	8	5'-1"	42 S				
A511	4	6'-1"	25 S				
A512	6	7'-0"	44 S				
A513	8	8'-0"	67 S				
A514	8	9'-0"	75 S				
A515	16	10'-0"	167 S				
A516	6	15'-0"	94 S				
A517	2	9'-10"	21 S				
A518	2	4'-8"	10 S				
A519	8	3'-6"	29 S				
A520	2	2'-2"	5 S				
A521	6	16'-6"	103 S				
A522	2	11'-2"	23 S				
A523	2	5'-10"	12 S				
A524	2	3'-0"	6 S				
A525	8	11'-6"	96 S				
A526	6	12'-0"	75 S				
A527	4	30'-0"	125 S				
A528	8	31'-8"	264 S				
A529	4	9'-2"	38 S				
A530	4	10'-8"	45 S				
A531	4	10'-3"	43 S				
A532	4	11'-8"	49 S				
Replacement Bars							
RE701	1	7'-6"	— S				
RE701	1	6'-10"	— S				
RE801	1	6'-6"	— S				
RE702	2	6'-2"	— S				
RE401	4	5'-11"	— S				
RE501	1	5'-7"	— S				
RE401	1	4'-10"	— B				

* Additional reinforcing shown on sheets 53 & 56.

GENERAL NOTES

REFERENCE shall be made to Standard Drawings RB-1-55 dated 2-2-59, CSB-2-56 (sheets 1, 2, and 3) revised 2-2-59, and to Supplemental Specification S-307 dated 8-23-60.

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. Steel stringers in the beam span and on the truss span shall be removed and piled along the right of way for disposal by the State's forces. Pier shall be removed according to item S-24. Abutments shall remain in place.

PILES shall be driven with a hammer of not less than 11000 ft. lb. per blow to firm contact with rock. If the length of penetration is approximately equal to the depth of 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. S-18.05 is not less than the following value for a pile hammer of the indicated energy rating:

For the rear abutment piles:

- 45 tons per pile using an 11000 ft. lb. hammer
 - 40 tons per pile using a 15000 ft. lb. or greater hammer
- For the forward abutment piles:
- 40 tons per pile using an 11000 ft. lb. hammer
 - 34 tons per pile using a 15000 ft. lb. or greater hammer
 - 65 tons per pile using an 11000 ft. lb. hammer
 - 54 tons per pile using a 15000 ft. lb. or greater hammer

If the energy rating of the hammer is between the ratings as shown above, the required formula capacity shall be determined by interpolation. The design load is 28 tons per pile.

CONCRETE DECK PLACING: In order to facilitate water curing of the concrete of the deck slab, the placing of concrete shall progress downgrade. The slab may be placed in sections, between transverse construction joints which are parallel to transverse reinforcing steel and are located near the center of any span.

WELDING of structural steel shall be Class "A" except as otherwise shown. Welds shown as field welds may, at the option of the Contractor, be made in the shop. Class "B" welds are shown thus B.

SHOP ASSEMBLY: Each line of girders shall be assembled in the shop to their correct unloaded positions as shown on the shop drawing layout (required by Section S-702 of the Specifications) so that the panel joints for welding the segments together may be checked for proper fit-up.

MACHINE FINISH: At the Contractor's option, the concrete bridge deck may be finished by the use of a finishing machine.

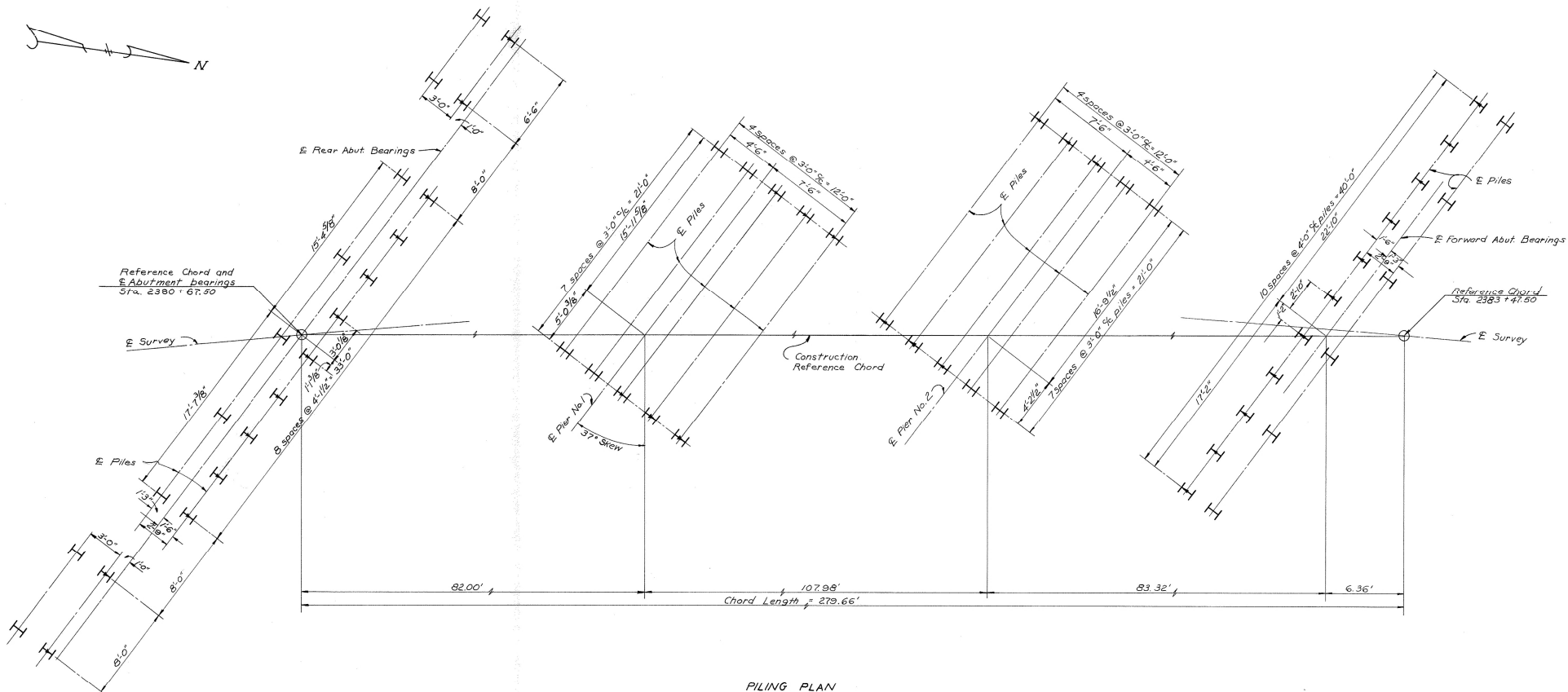
ADDITIONAL NOTES are shown on sheets 53 and 56.

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

**REINFORCING STEEL LIST
AND GENERAL NOTES**
BRIDGE No. MEG-124-4715
SHADESVILLE RIVER
574.2390 + 64.47
MEIGS COUNTY 2383 + 44-16

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISION
MPB	MPB	N.L.D.	KED	BFG		

MEG-124-4654



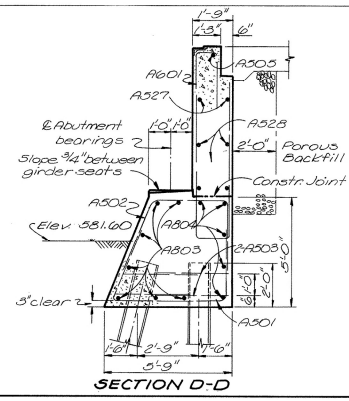
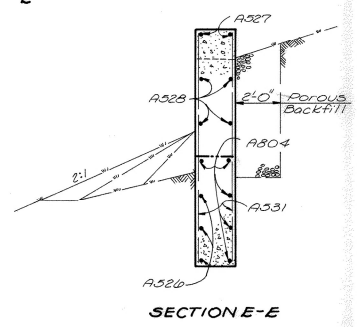
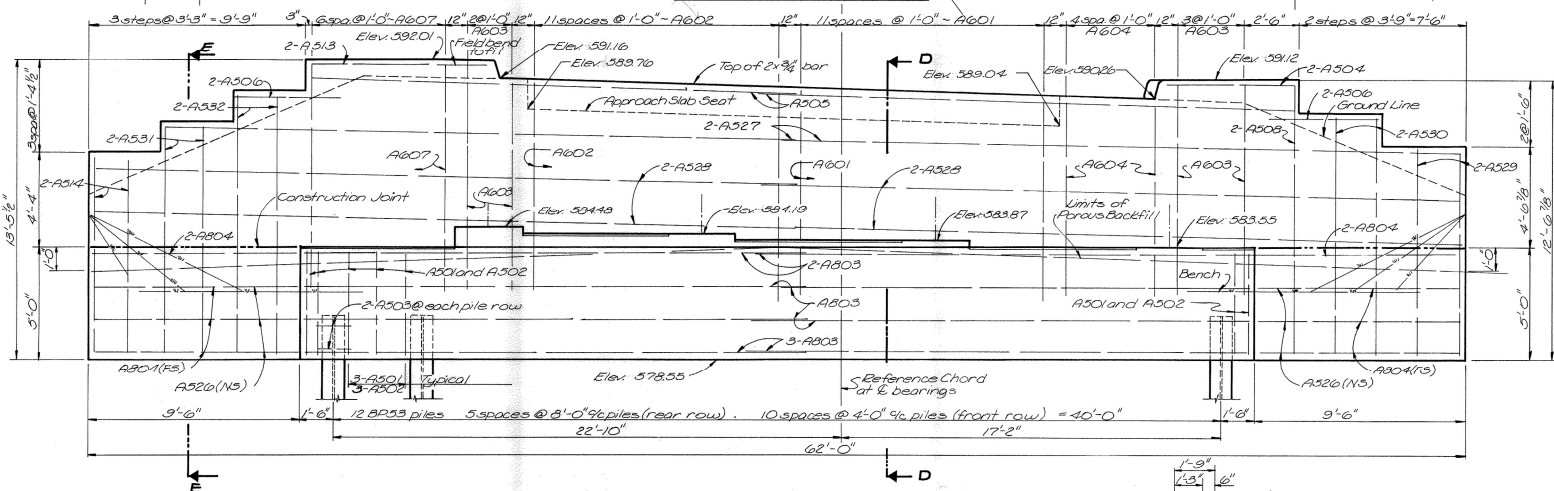
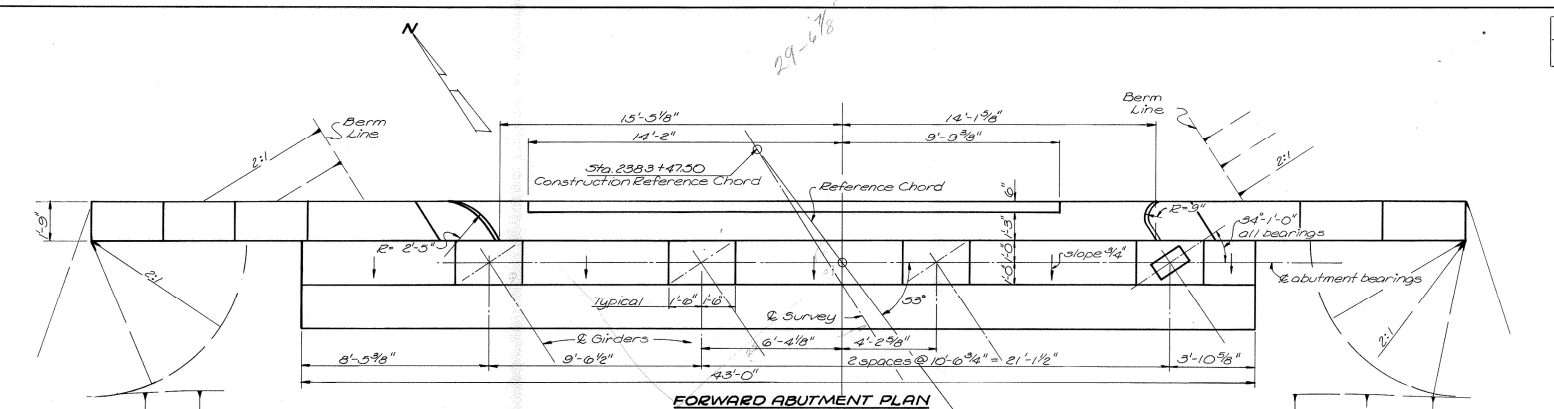
PILING PLAN
 I Vertical piles
 I Batter piles

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES					
PILING PLAN BRIDGE NO. MEG-124-4715 -over- SHADE RIVER					
				Sta. 2380+64.47	
				Sta. 2383+44.16	
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE	APPROVED
MPB	MPB	WWN	KED	BFG	AL 11-27-61

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

55

MEG-124-4654



For abutment notes see sheet no. 53

STATE OF OHIO DEPARTMENT OF HIGHWAYS DIVISION OF DESIGN AND CONSTRUCTION BUREAU OF BRIDGES					
FORWARD ABUTMENT DETAILS					
BRIDGE NO. MEG-124-4715					
over					
SHADE RIVER					
MEIGS COUNTY			Sta. 2380+64.47 Sta. 2383+44.16		
DESIGNED	DRAWN	TRACED	CHECKED	APPROVED	DATE
MFB	MPB	MKH	KED	BFG	9/4/47
					REVISION

FHWA REGION	STATE	PROJECT
5	OHIO	

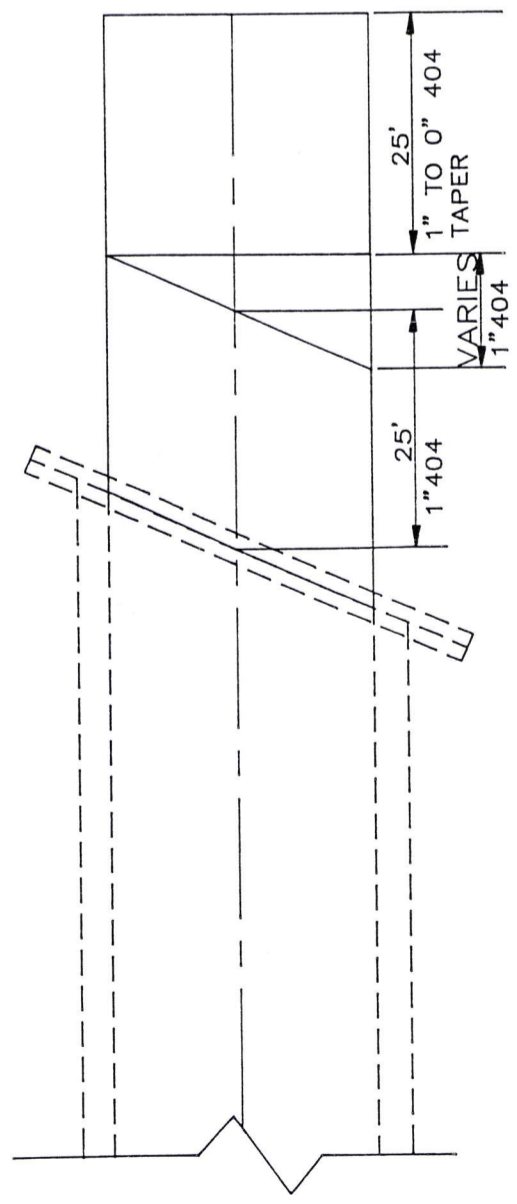
MEG-7-0243
MEG-7-0263
MEG-124-4709

BR-7-91

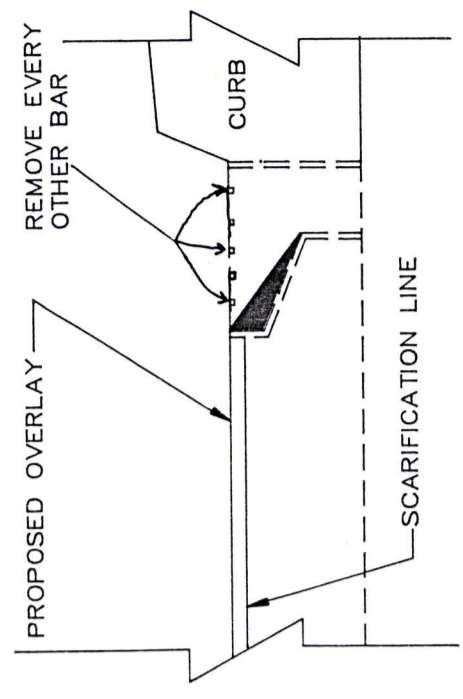
Proj. 404(91)
PBS Const. Inc.

SCOPE OF PROPOSED WORK ON STRUCTURE

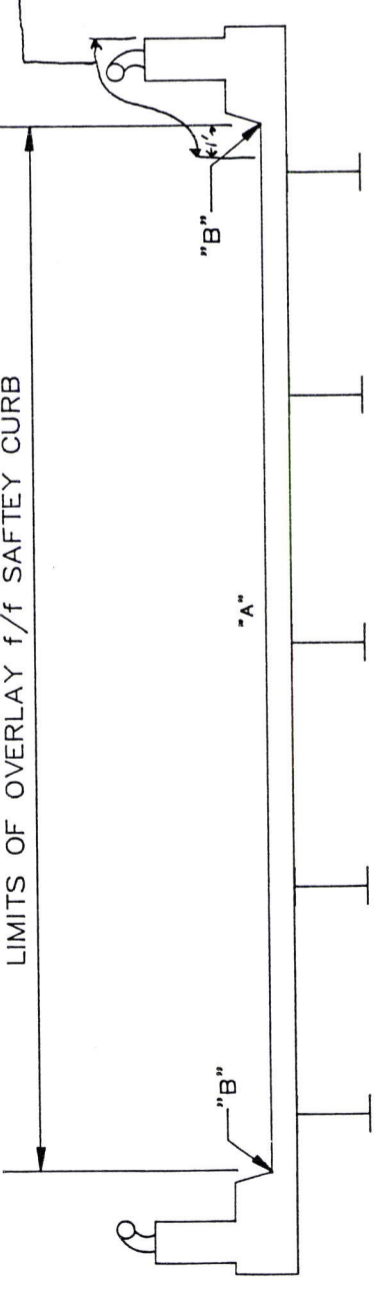
THIS PROJECT SHALL CONSIST OF REPAIRING CONCRETE BRIDGE DECK BY SCARIFYING DECK AND CLEANING THE EXISTING CONCRETE SURFACE TO THE EXTENT THAT IT IS COMPLETELY FREE OF UNSOUND CONCRETE AT THE TIME OF OVERLAYING WITH MICRO-SILICA MODIFIED CONCRETE. THE WORK SHALL ALSO INCLUDE VERTICAL EXTENDING OF STRUCTURAL EXPANSION JOINTS AND ASSOCIATED APPROACH ASPHALT WORK.



TYPICAL ASPHALT APPROACHES EACH END



SANDBLAST BOTTOM OF SCUPPER AND FILL WITH DECK OVERLAY MATERIAL AS SHOWN. BAR REMOVAL AND PLACEMENT OF CONCRETE WEDGE IN SCUPPERS INCLUDED WITH ITEM SPECIAL MICRO-SILICA MODIFIED CONCRETE OVERLAY (1 1/4" THICK).



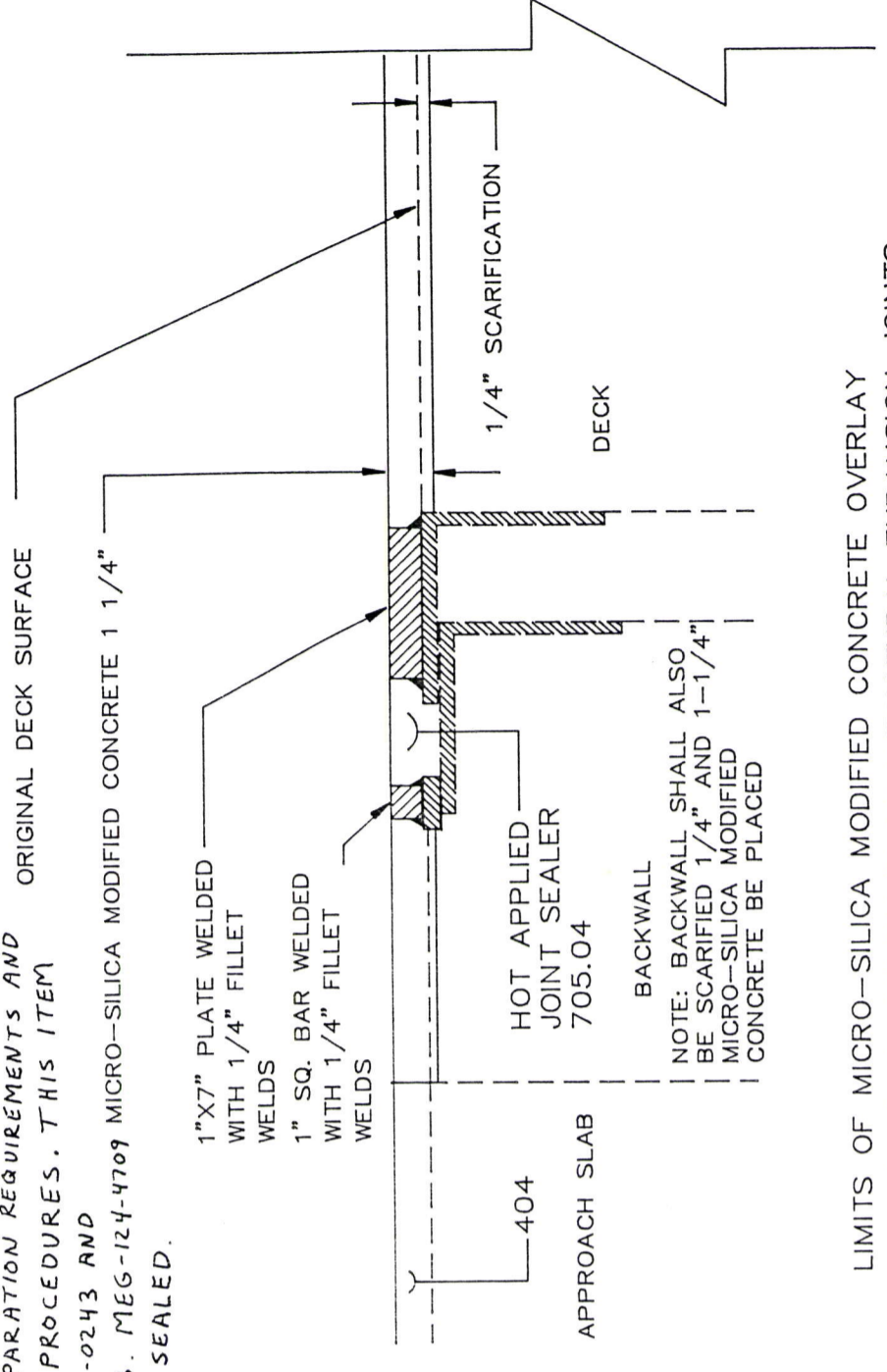
TYPICAL DECK SECTIONS

"A" AT LEAST 1/4" OF THE DECK SURFACE SHALL BE REMOVED BY SCARIFICATION AND REPLACED WITH 1 1/4" MICRO-SILICA MODIFIED CONCRETE.
"B" THE EXISTING BULB ANGLES SHALL BE SANDBLASTED AND CLEANED AND FILLED WITH MICRO-SILICA CONCRETE. PAYMENT WILL BE INCLUDED WITH ITEM SPECIAL MICRO-SILICA MODIFIED CONCRETE OVERLAY (1 1/4" THICK)

ITEM SPECIAL-SEALING OF CONCRETE SURFACES

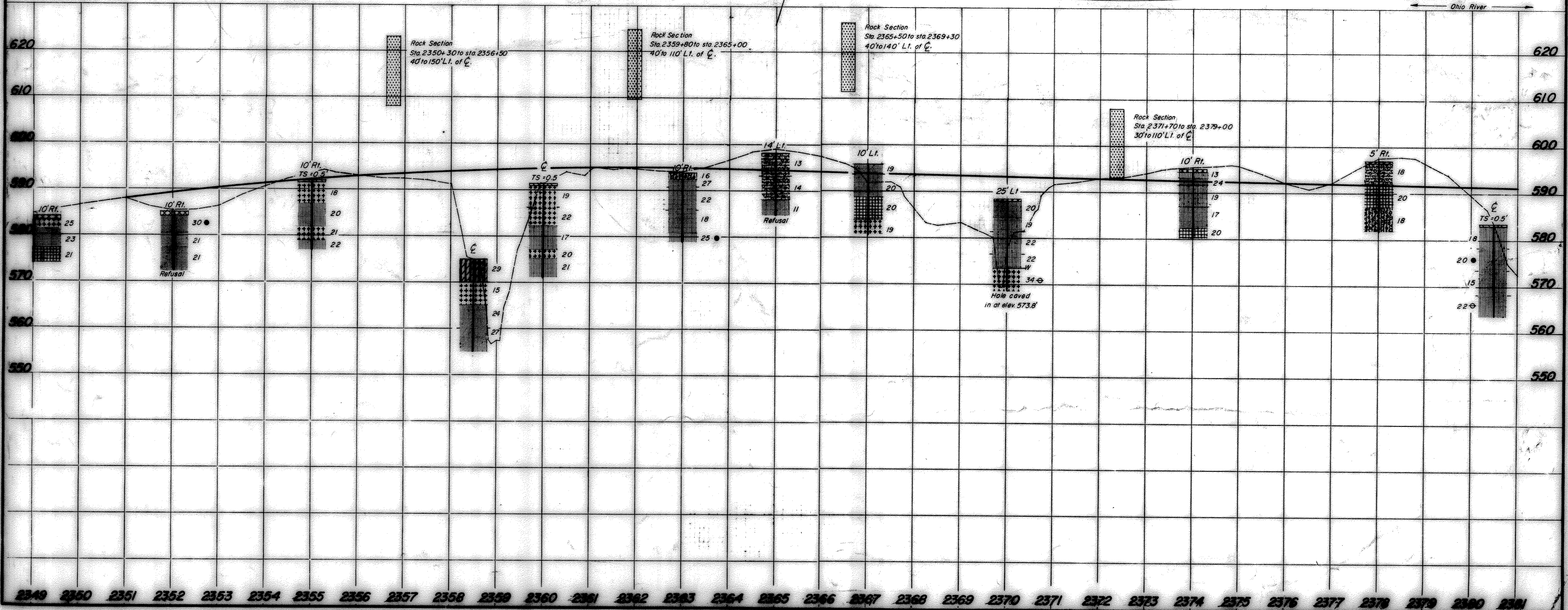
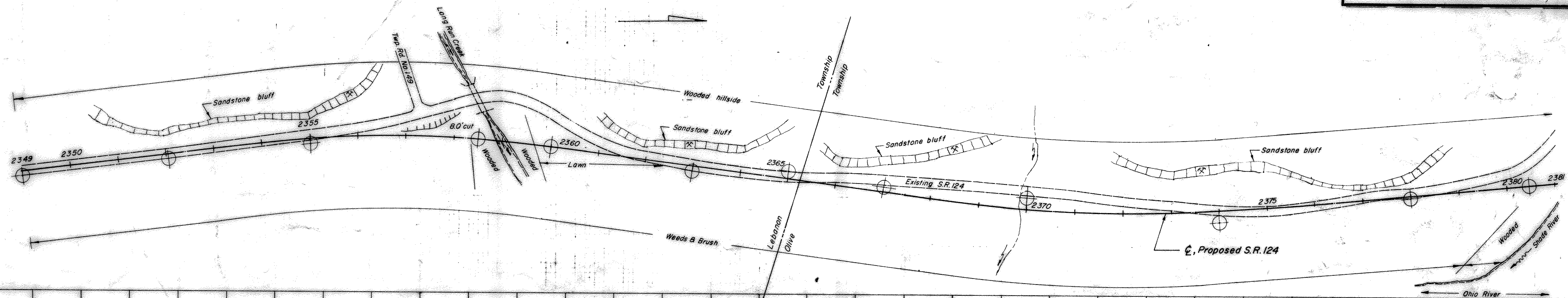
AN EPOXY SEALER SHALL BE APPLIED TO THE CONCRETE SURFACES AS SHOWN ON THE TYPICAL SECTION FOR THE FULL LENGTH OF THE BRIDGE. SEE PROPOSAL FOR SURFACE PREPARATION REQUIREMENTS AND APPLICATION PROCEDURES. THIS ITEM IS FOR MEG-7-0243 AND MEG-7-0263. MEG-124-4709 MICRO-SILICA MODIFIED CONCRETE 1 1/4" WILL NOT BE SEALED.

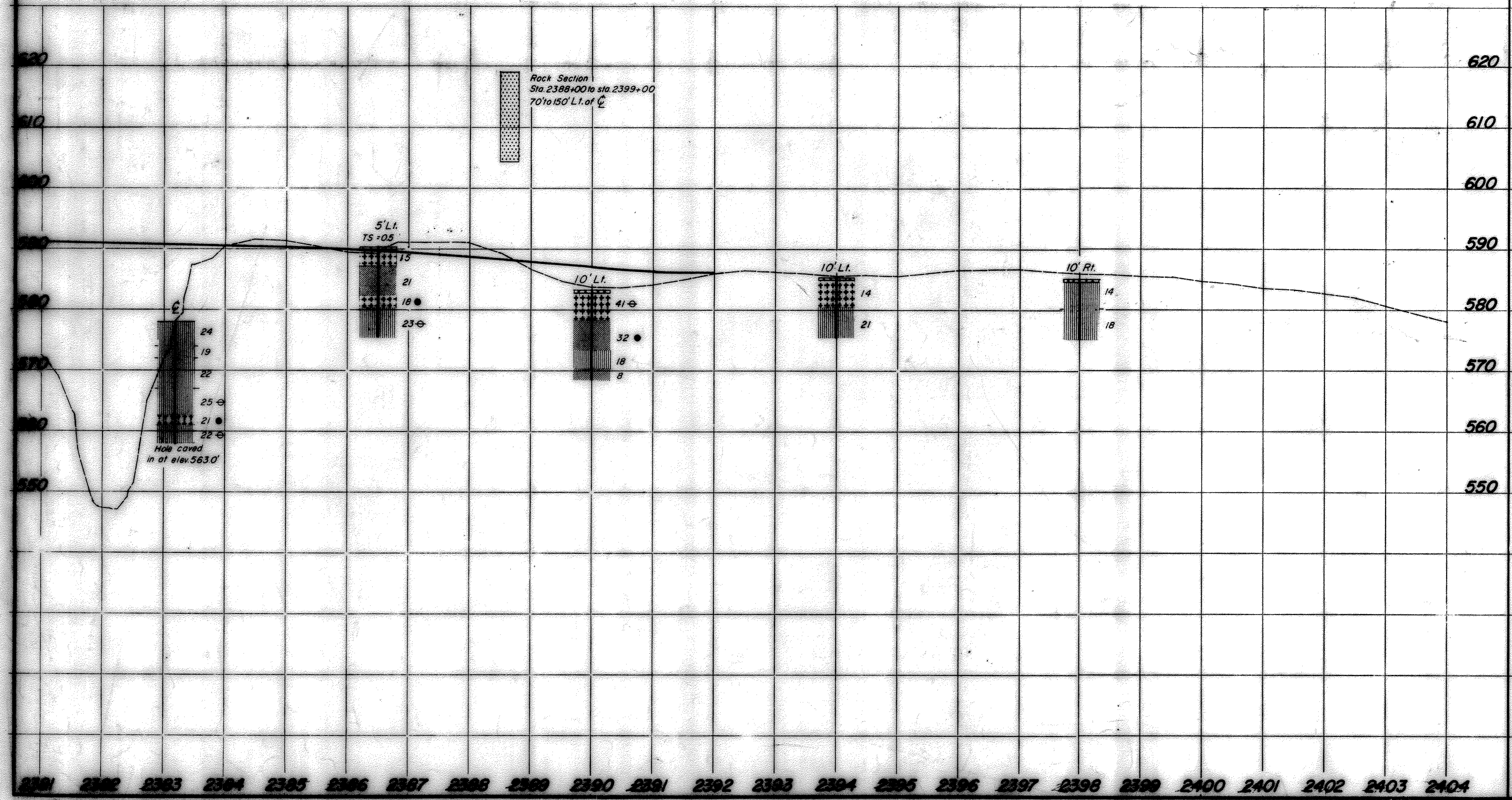
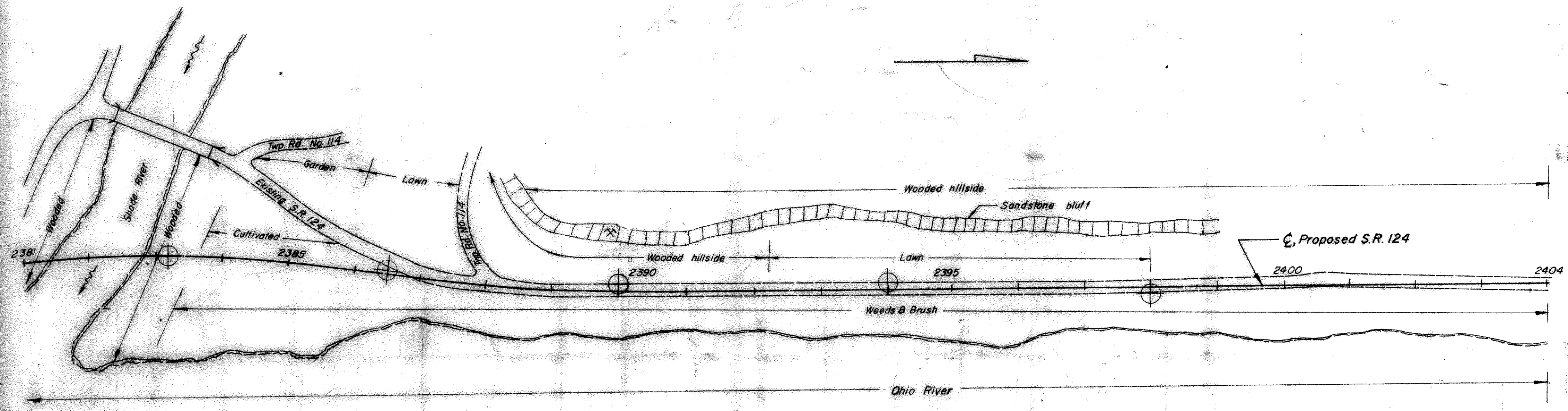
SCUPPER DETAILS



STRUCTURE INFORMATION				
BRIDGE NO.	SKEW	ALIGNMENT	BRIDGE LIMITS	SUPERELEVATION
MEG-7-0243	20° LFS	2° -15'	336.31	0.053 FT/FT
MEG-7-0263	20° LFS	TANGENT	367.78	NONE
MEG-124-4709	37° LFS	3° -30'	279.69	0.037 FT/FT

LIMITS OF MICRO-SILICA MODIFIED CONCRETE OVERLAY AND VERTICAL EXTENSION OF STRUCTURAL EXPANSION JOINTS





DATE: 3-23-50
BY: [Signature]
CHECKED: [Signature]
SCALE: 1" = 40'