WYANDOT COUNTY
S.H. 222 SECTION F (PT.)

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

FINDLAY-UPPER SANDUSKY ROAD

S.H. 222 SECTION "F" (PT.)

WYANDOT COUNTY

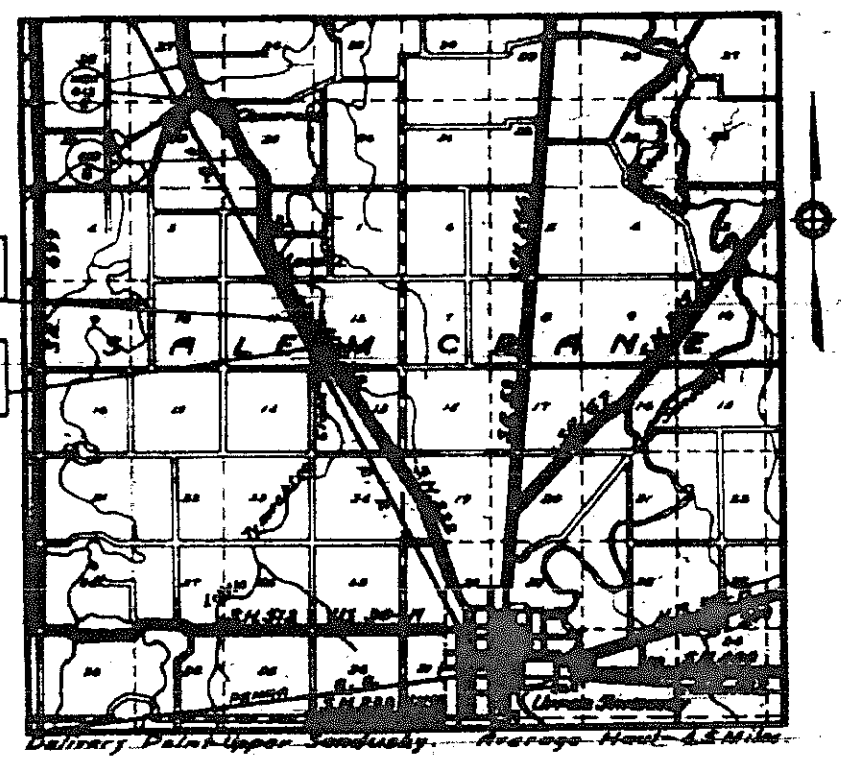
SALEM TOWNSHIP

CONVENTIONAL SIGNS

TOWNSHIP LINE
SECTION LINE
CENTER LINE
PROPERTY LINE
CITY or VILLAGE LINE
FENCE LINE
STEAM RAILROAD
TELEPHONE POLE LINE
POWER POLE LINE
GUARD RAIL, EXISTING
GUARD RAIL, PROPOSED
DRAIN PIPE, EXISTING
DRAIN PIPE, PROPOSED

INDEX OF SHEETS

TITLE SHEET	1
TYPICAL SECTIONS	2-3
GENERAL NOTES	4
SUMMARY	5
PLAN & PROFILE	6-7
CROSS SECTIONS	8-13
SITE PLAN & STRUCTURE DETAILS BRIDGE No. WY-23-1.59	14-18



LOCATION PLAN
Scale of Miles

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

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

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

Approved _____
Date _____ Resident Director Deputy Director

Approved _____
Date _____ Chief Engineer, Bureau of Maintenance

Approved _____
Date 3-11-46 Chief Engineer, Bureau of Bridges and Railroad Crossings

Approved _____
Date _____ Chief Engineer, Bureau of Location and Design

Approved _____
Date 3-21-46 First Assistant Director and Chief Engineer

Approved _____
Date 3-21-46 Director of Highways

LINE DATA

Beginning of Project = 167+00
End of Project = 184+92.45
No additions or deductions.
Net Length of Project = 1792.45 Lin. Ft. or 0.339 Miles

PORTION TO BE IMPROVED
STATE HIGHWAYS
COUNTY ROADS

SUPPLEMENTAL SPECIFICATIONS

Number	Date	Number	Date	Number	Date
M-102.12	6-2-45	T-710.18	6-2-45	M-103.10	Rev. 3-14-46
S-203	4-6-45	127	2-8-44	M-103.11	Rev. 3-14-46
S-119	6-5-42	119	2-17-44	M-103.8	7-22-45
112	Rev. 2-1-44	M-103.1	Rev. 1-24-44		
T-110	Rev. 6-5-45	M-103.3	Rev. 1-24-44		
S-205	Rev. 2-1-41	M-103.5	Rev. 1-24-44		
T-117	1-5-45	M-103.6	Rev. 1-24-44		

SUPPLEMENTAL PRINTS OF STANDARD CONSTRUCTION DRAWINGS

DRAWING	DATE	DRAWING	DATE
1-15 No. 1	11-1-41		
1-15 No. 2	11-1-41		
1-1, 2, 3 & 4S	3-20-43		
1-2.C & 1-2-A & B	12-15-41		
1-15 No. 4	11-1-41		
9-7.07	9-1-42		
AS-44-3	4-2-43		
1-15 No. 5	11-1-41		
1-15 No. 6	11-1-41		
1-15 No. 7	5-15-43		
1-15 No. 8	10-1-43		

SCALES

PLAN	1" = 50'
PROFILE — VERTICAL	1" = 5'
PROFILE — HORIZONTAL	1" = 50'
CROSS SECTIONS	1" = 5'

Wyandot Co. S.H. 222 Sec. F (Pt.)
Date for Letting _____ 194
Project No. _____

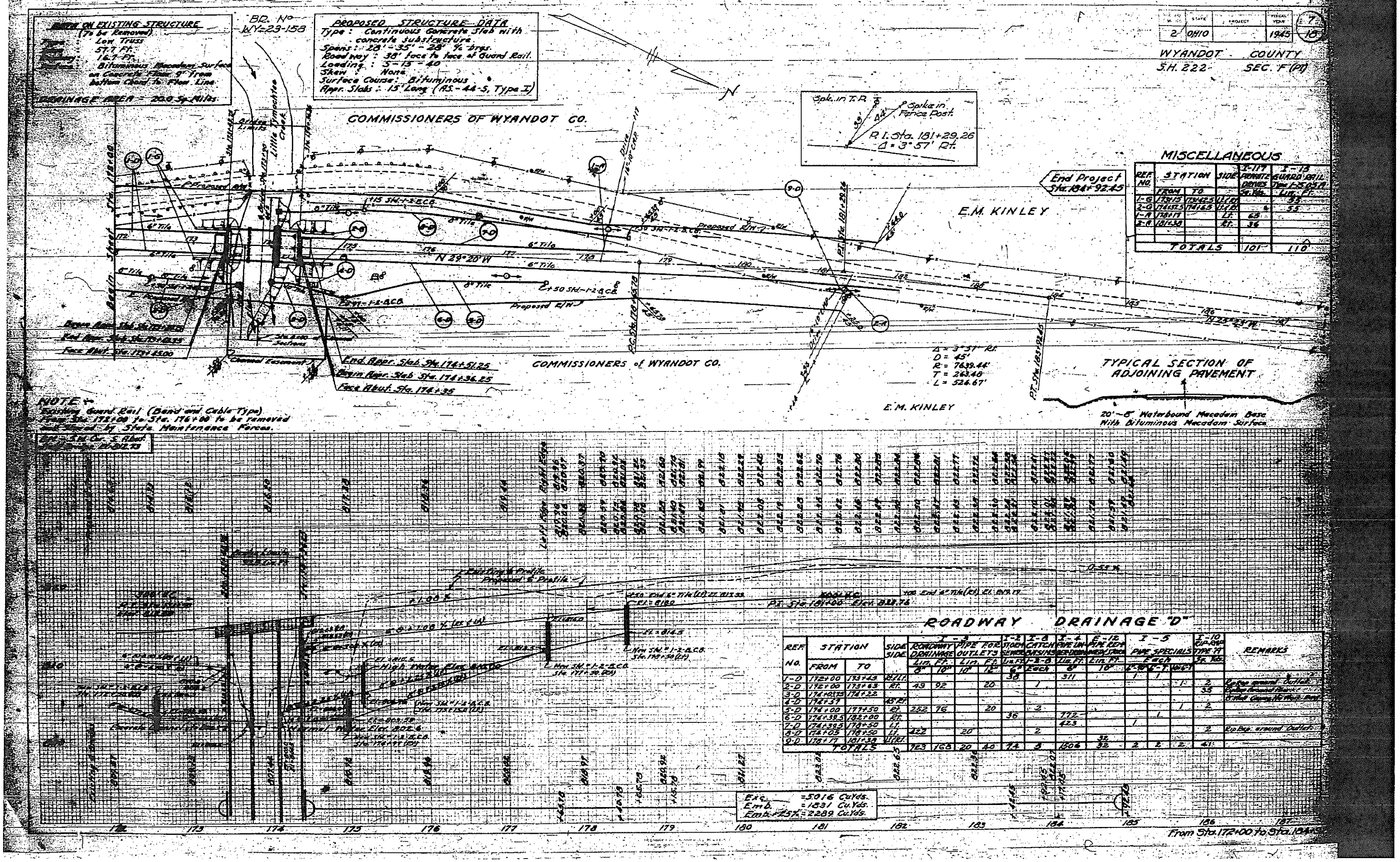
W.	STATE	PROJECT	FISCAL YEAR	
2	OHIO		1945	7 / 18

WYANDOT COUNTY
S.H. 222 SEC. F (Pt)

BRIDGE ON EXISTING STRUCTURE
(To be Removed)
Type: Low Truss
Span: 57.7 Ft.
Roadway: 16.1 Ft.
Surface: Bituminous Macadam Surface on Concrete Floor 9" from Bottom Chord to Floor Line.
DRAINAGE AREA - 20.0 Sq. Miles

BD. No. WY-23-158

PROPOSED STRUCTURE DATA
Type: Continuous Concrete Slab with concrete substructure.
Spans: 28'-35'-28' ℄ brgs.
Roadway: 38' face to face of Guard Rail.
Loading: S-13-40
Skew: None
Surface Course: Bituminous
Appr. Slabs: 15' Long (RS.-44-S, Type I)



MISCELLANEOUS

REF. NO.	STATION FROM	STATION TO	SIDE	I-17 PORTABLE DEVICES Ea. No.	I-13 GUARD RAIL Type I-S-05-A Lin. Ft.
1-G	173+15	173+62.5	Lt. Rt.		45
2-G	174+97.5	174+165	Lt. Rt.		55
1-R	178+19		Lt.	68	
2-R	181+38		Rt.	36	
TOTALS				101	110

ROADWAY DRAINAGE "D"

REF. NO.	STATION FROM	STATION TO	SIDE SIDE	I-3 ROADWAY DRAINAGE 8" Lin. Ft.	10" Lin. Ft.	I-3 PIPE FOR OUTLETS 10" Lin. Ft.	12" Lin. Ft.	I-2 INLET SEWER 6" Lin. Ft.	I-8 CATCH BASINS Each	I-4 PIPE UNDERDRAINS 8" Lin. Ft.	E-12 PIPE REHABILITATION 10" Lin. Ft.	I-5 PIPE SPECIALS Each 12"-90°	12"-T	12"-Y	I-10 RIP-RAP TYPE M Sq. Yds.	REMARKS
1-D	172+00	173+43	Rt. Lt.					38		311		1	1			
2-D	172+00	173+63	Rt.	49	92		20		1					1	2	Rip-Rap around Outlet
3-D	174+03.75	174+22													35	Rip-Rap Around Flares
4-D	174+37		45° Rt.													8" Vit. Conc. Pipe Wing End
5-D	174+00	177+50	Rt.	252	76		20		2					1	2	
6-D	174+39.5	182+00	Rt.					36		172			1			
7-D	174+39.5	178+50	Lt.							423		1				
8-D	174+05	178+50	Lt.	422		20			2						2	Rip Rap around Outlet
9-D	178+17	181+38	Lt. (Rt.)								32					
TOTALS				723	168	20	40	74	5	1506	32	2	2	2	41	

FED. RD. SYC. NO.	STATE	PROJECT	
2	OHIO	STATE	PID

WYANDOT COUNTY
J.H. 222 SEC. F
3½ Mi. N.W. of Upper Sandusky

DATA ON EXISTING STRUCTURE
(To be removed)
Low Truss 57.7' Span, 16.7' Roadway
Concrete Abutments Bit. Mac. wearing surface on Concrete Floor 8' from bottom Chord to flow line
DRAINAGE AREA 20.0 Sq. Mi.

FLOW

N 40° 05' W

N 18° 15' W

Original ℄ P
Revised ℄ P

Begin Appr. Slab Sta. 173+28.75
N 26° 57' W.
N 25° 20' W
End Appr. Slab Sta. 173+43.75
Face Abut. Sta. 173+45.00

End Appr. Slab Sta. 174+51.25
Begin Appr. Slab Sta. 174+56.25
Face Abut. Sta. 174+55.00

Guard Rail Post Sta. 173+40.00
Guard Rail Post Sta. 174+40.00
5' paved gutter
2:1
Rip-rap belt 3' wide around pier (included with roadway quantities for payment)
℄ Pier Sta. 174+07.50
Little Tymochtee Creek
B.C. Sta. 175+00.00
Tangent

SOUNDING NOTE:—
The estimated average piling lengths shown on these plans and used as a basis for the approximate estimate have been chosen as the result of a few rod soundings. This foundation investigation report is available to bidders, but the contractor shall assume responsibility for lengths of piling selected for driving.

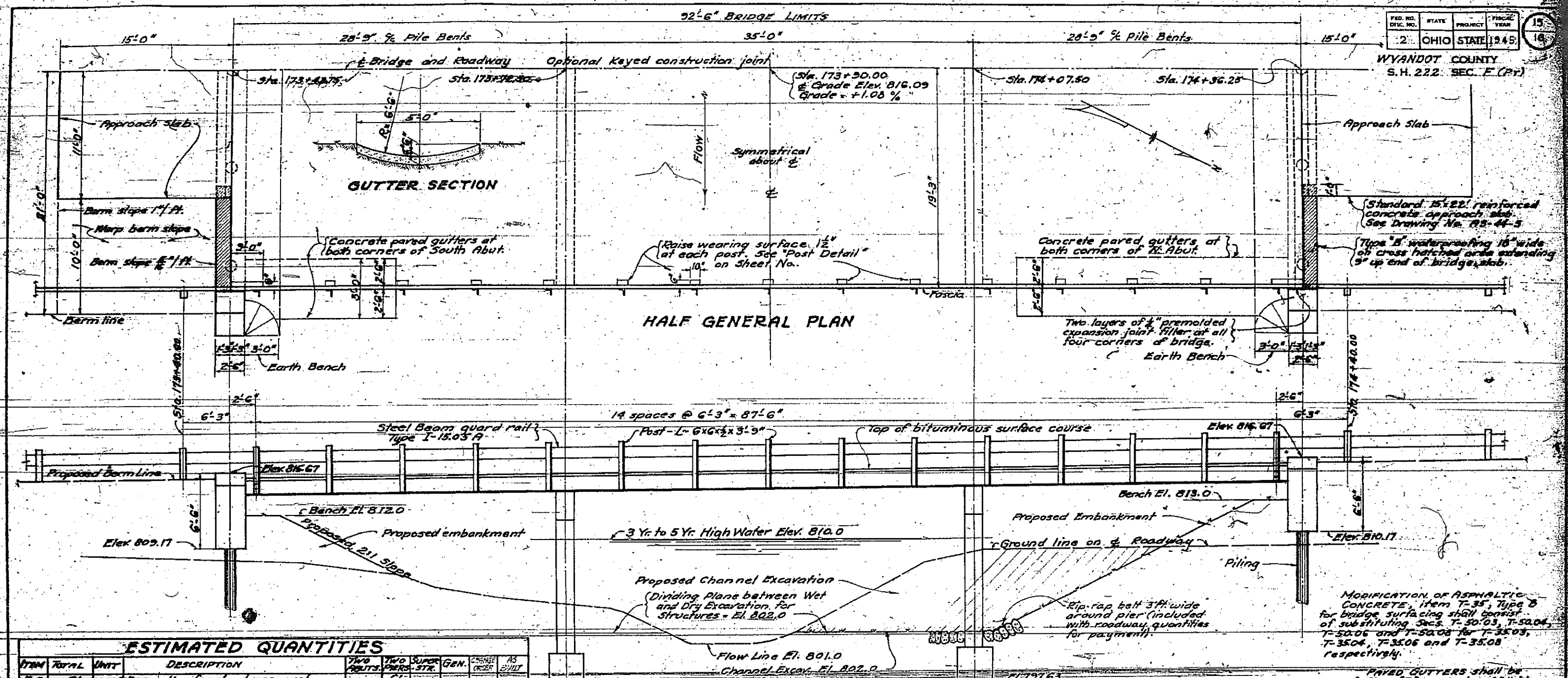
PROPOSED STRUCTURE
Type: Continuous concrete slab with concrete substructure
Spans: 28'-35'-28' ¼ brgs.
Roadway: 38' face to face of guard rail.
Loading: S-15-40
Skew: None
Surf. Course: Bituminous
Appr. Slabs: 15' long (AS-41-S, Type I)

Bridge Limits
Elev. 812.0
Elev. 812.56
Elev. 812.63
Elev. 812.42
Elev. 812.35
Elev. 812.19
Elev. 812.36
Elev. 812.40
Elev. 812.50
Elev. 812.32
Elev. 812.35
Elev. 812.19
Elev. 812.36
Elev. 812.56
Elev. 812.63
Elev. 812.42

FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR
2	OHIO	STATE	1945

15
16

WYANDOT COUNTY
S.H. 222 SEC. F (Pt)



GENERAL ELEVATION

ESTIMATED QUANTITIES

ITEM	TOTAL	UNIT	DESCRIPTION	TWO ABUTS.	TWO PIERS	SUPER. STR.	GEN.	CHANGE ORDER	AS BUILT
E-2	61	cu.yd.	Excavation for structures, wet		61				
E-2	63	cu.yd.	Excavation for structures, dry	46	17				
S-1	159	cu.yd.	Class "C" concrete, superstructure			159			
S-1	21	cu.yd.	Class "C" concrete, piers		21				
S-1	42	cu.yd.	Class "E" concrete, abutment pile caps	42					
S-1	20	cu.yd.	Class "E" concrete, footings		20			(-) +2	22
S-3	7	sq.yd.	Type "B" waterproofing	7					
S-4	53,548	lb.	Reinforcing steel	3567	14,507	41,034	140		
S-9	65	sq.ft.	½" Premolded expansion joint filler	15		50			
S-14	190	lin.ft.	Steel bridge railing (Guard rail Type I-15.05A)			190			
S-16	Lump	Sum	First test pile				Lump		
S-19	594	lin.ft.	12" Cast in-place reinf. concrete piling	240	354			(-) +12	606
T-35	27.5	cu.yd.	Asphaltic concrete, Type "B", modified for bridge surfacing.			27.5		(-) -1	27.4
S-205	400	sq.yd.	Type "C" waterproofing for bridge deck			400			
I-14	84	lin.ft.	Paved gutter (Class "E" concrete)	84					
S-24	Lump	Sum	Removal of existing structure				Lump		
E-2	Lump	Sum	Cofferdams and pumping				Lump		

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:- Standard Drawings AS-44-5 dated 4-2-45, and Supplemental Specifications M-102.12 dated 8-2-43, S-203 dated 4-6-43, and S-119 dated 10-20-42 are a part of these plans.

REMOVAL OF EXISTING BRIDGE: Existing superstructure shall be removed when no longer needed to maintain traffic. Structural steel shall be carefully dismantled, match marked and piled at the bridge site at disposal of the State.

Existing substructure shall be removed to ground line at faces of abutments and slopes dressed at 2:1 slope. Payment for dressing slopes to be included in removal of existing structure.

UNIT STRESSES:- Maximum unit design stresses for this structure are as follows:-
Class "C" Concrete, $f_c = 1200$ p.s.i., $n = 8$
Class "E" Concrete, $f_c = 900$ p.s.i., $n = 10$
$f_s = 18,000$

EXCAVATION:- Excavation quantity includes the removal of fill material between top of earth bench and bottom of abutment cap.

FALSEWORK:- Not less than 15 days prior to erection of falsework, the contractor shall submit three blue prints of falsework plans to the Director for approval by the Bureau of Bridges. Falsework shall be supported on piling designed to carry the superimposed loads, and driven in accordance with an accepted pile driving formula.

Falsework shall not be released under any portion of the deck until the entire deck has attained the age specified in Sec. - 0.01. Heavy equipment such as pavers, transit mixers etc. will not be permitted on the completed portion of the deck while the second half is being placed.

PILING:- Piling shall be driven to a minimum bearing capacity of 35 tons for piers and 30 tons for abutments.

GUARD RAIL:- Transition between rail height on bridge and on approaches shall be made in distance of 100 ft. each end of bridge. Railing and posts shall be painted the same color as the approach guard rail. Tabulated railing quantities includes posts and rail, and is for bridge length (span plus 2'-6").

MODIFICATION OF ASPHALTIC CONCRETE, item T-35, Type B for bridge surfacing shall consist of substituting Secs. T-50.03, T-50.04, T-50.06 and T-50.08 for T-35.03, T-35.04, T-35.06 and T-35.08 respectively.

PAVED GUTTERS shall be of Class "E" concrete, 4" thick, 5 ft. wide, depressed 6" at center as shown on this drawing.

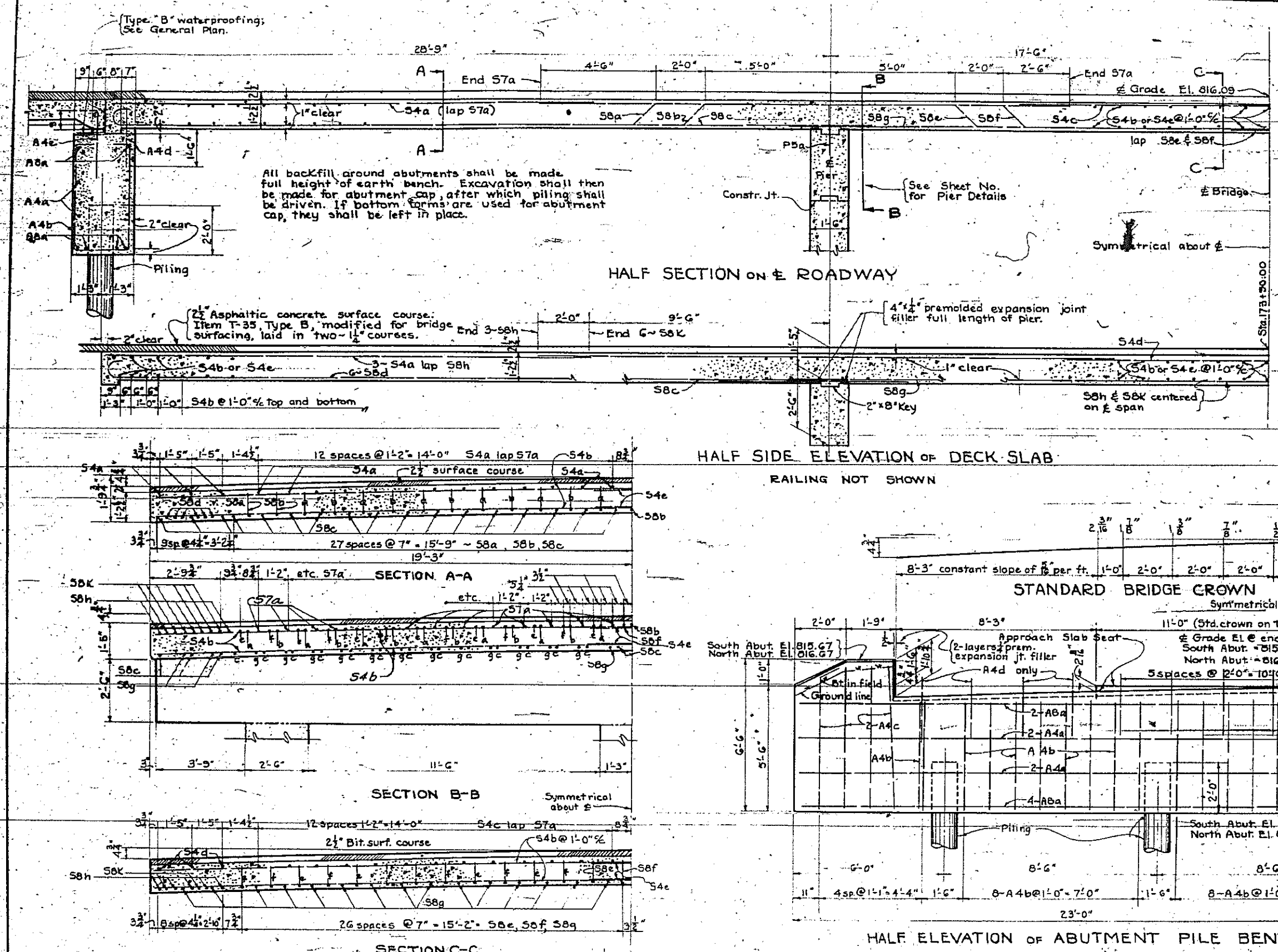
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

GENERAL PLAN AND ELEVATION
NOTES AND ESTIMATED QUANTITIES
BRIDGE NO. WY-23-158
OVER LITTLE TYMOCHTEE CREEK
WYANDOT COUNTY S.H. 222
SECTION F (Pt) STA. 173+90.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVIEWED
R.E.B.	R.E.B.	R.E.B.	E.D.S.	W.H.C.	1-10-46	

FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR	
2	OHIO	STATE	1945	16/18

WYANDOT COUNTY
S.H. 222 SEC. F(PT)



STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

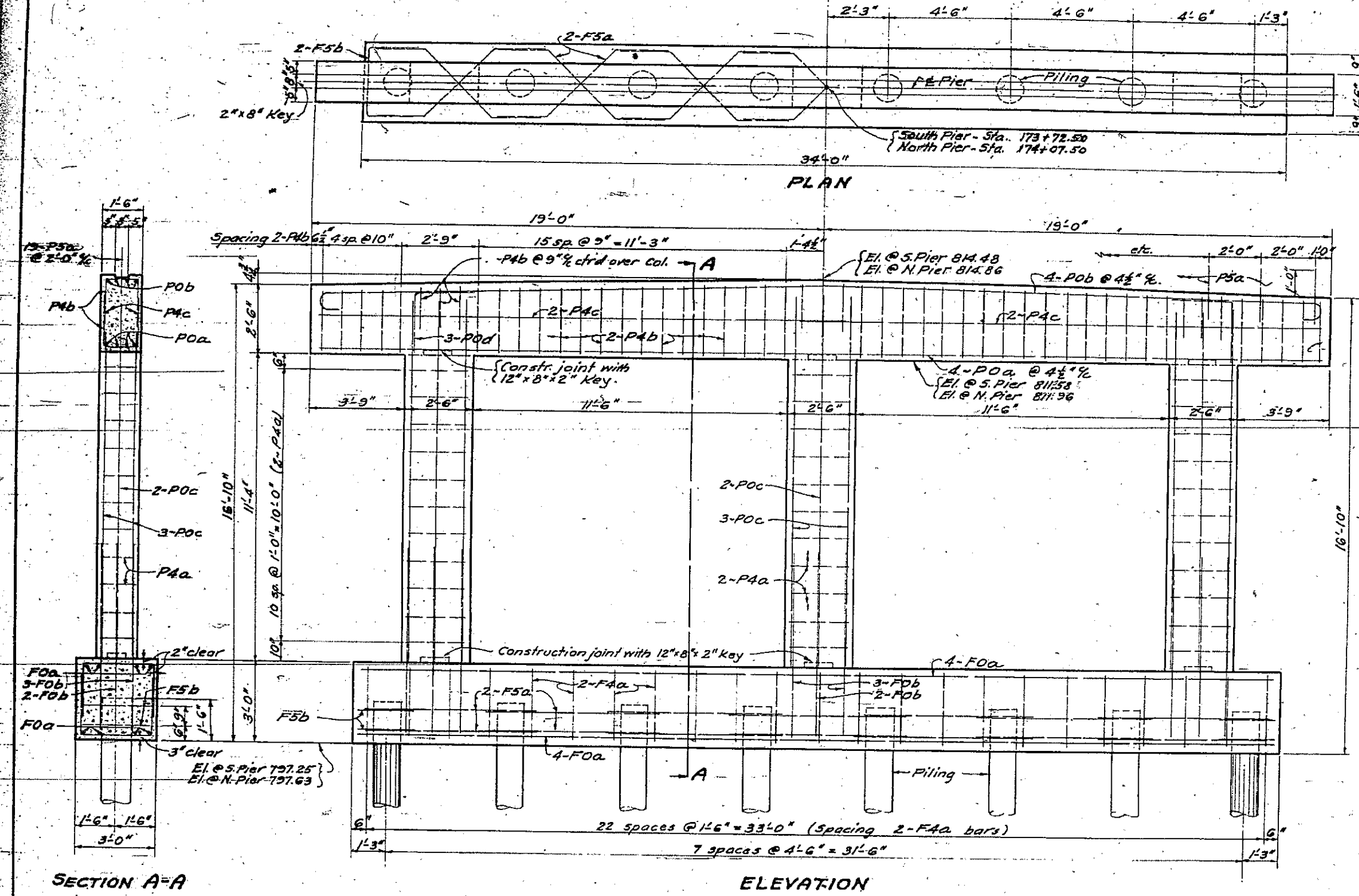
SUPERSTRUCTURE ~ ABUTMENT PILE BENT ~

BRIDGE NO. WY-23-158
OVER LITTLE TYMOCHTEE CREEK
WYANDOT CO. S.H. 222
SEC. F STA. 173+90.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
H.C.B.	H.C.B.	H.C.T.	[illegible]	[illegible]	1-10-46

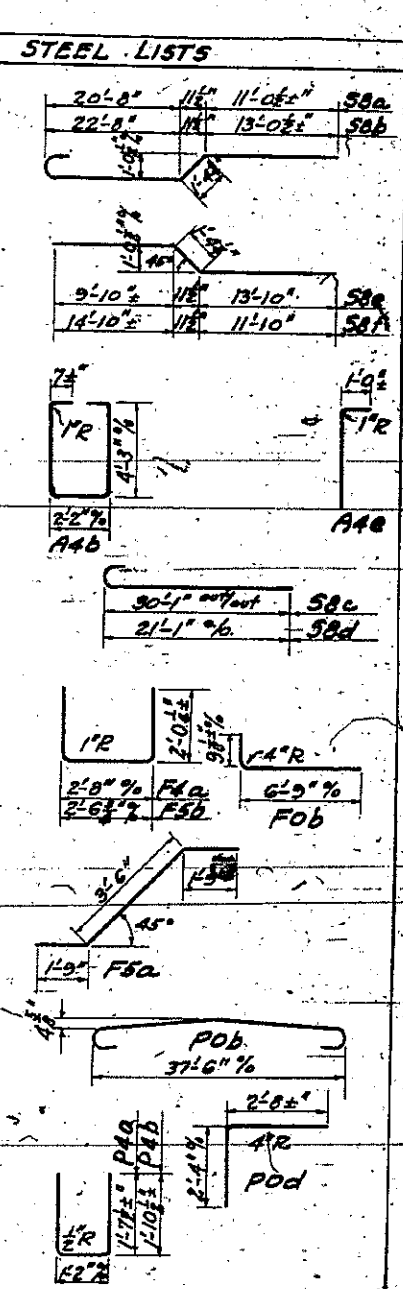
FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR	
2	OHIO	STATE	1945	17/18

WYANDOT COUNTY
S.H. 222 SEC. F (PT.)



REINFORCING STEEL LISTS

Mark	Size	No.	Length	Weight	Shape
TWO ABUTMENTS					
A8a	1"	24	24'-3"	1980	S
A4a	⅝"	16	23'-9"	396	S
A4b	⅝"	68	11'-6"	816	B
A4c	⅝"	32	6'-0"	200	S
A4d	⅝"	38	2'-3"	89	S
A4e	⅝"	22	3'-9"	86	B
SUPERSTRUCTURE					
S8a	1"	28	34'-0"	3237	B
S8b	1"	26	38'-0"	3359	B
S8c	1"	68	31'-0"	7167	B
S8d	1"	24	22'-0"	1735	B
S8e	1"	28	25'-0"	2380	B
S8f	1"	28	28'-0"	2665	B
S8g	1"	30	38'-9"	3358	S
S8h	1"	22	23'-0"	1720	S
S8k	1"	28	19'-0"	1810	S
S7a	1"	52	23'-0"	3190	S
S4a	⅝"	64	19'-0"	1268	S
S4b	⅝"	188	17'-3"	3480	S
S4c	⅝"	26	20'-0"	542	S
S4d	⅝"	6	16'-0"	100	S
S4e	⅝"	188	22'-3"	4363	S
TWO PIERS					
F0a	1½"	16	33'-6"	2848	S
F0b	1½"	48	7'-3"	1849	B
F5a	⅝"	56	7'-0"	589	B
F5b	⅝"	8	6'-6"	78	B
F4a	⅝"	92	6'-6"	624	B
P0a	1½"	8	37'-0"	1573	S
P0b	1½"	8	40'-0"	1700	B
P0c	1½"	48	13'-6"	3443	S
P0d	1½"	12	5'-0"	319	B
P4a	⅝"	182	4'-3"	585	B
P4b	⅝"	186	4'-9"	921	B
P4c	⅝"	8	19'-9"	164	S
P5a	½"	38	2'-0"	114	S
REPLACEMENT BARS					
RE0	½"	1	9'-0"	48	S
RE8	1"	2	8'-0"	54	S
RE7	1"	1	8'-0"	21	S
RE5	¾"	1	7'-0"	10	S
RE4	⅝"	1	6'-6"	7	S



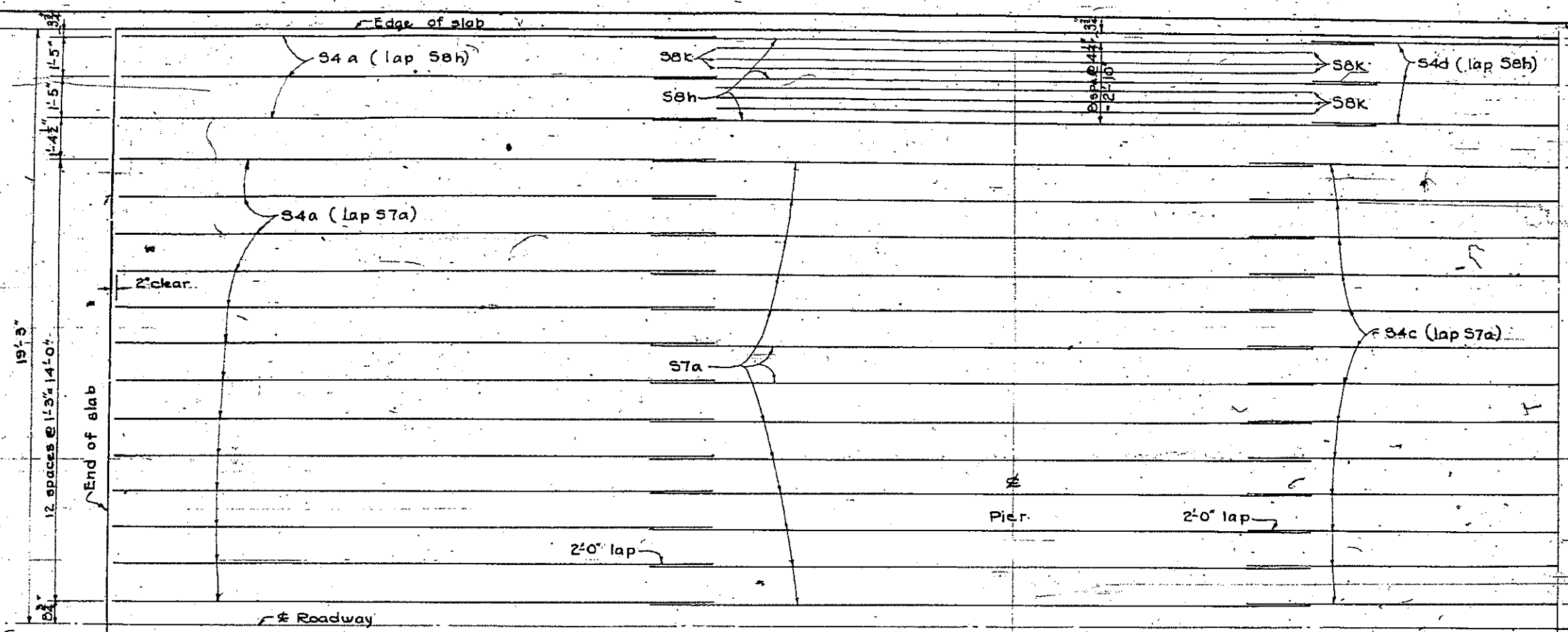
STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

·PIERS·
REINFORCING STEEL LISTS·
BRIDGE No. WY-23-158
OVER LITTLE TYMOCHTEE CREEK
WYANDOT COUNTY S.H. 222
SECTION F (PT) STA. 173+90.00

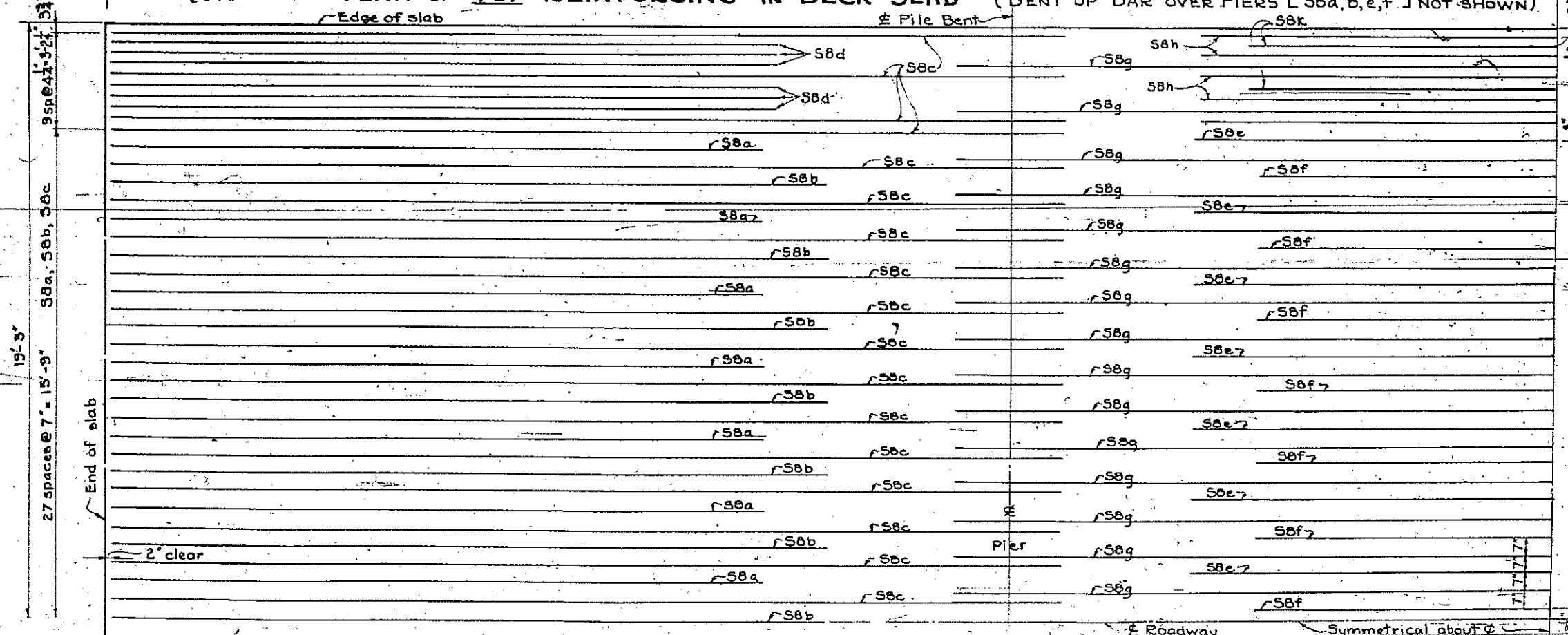
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
K.E.D.	K.E.D.	K.E.D.	E.V.J.	W.H.K.	10-46	

FED. RD. DIV. NO.	STATE	PROJECT	FISCAL YEAR	
2	OHIO	STATE	1945	16 / 16

WYANDOT COUNTY
S.H. 222 SEC. F (PT)



QUARTER PLAN OF TOP REINFORCING IN DECK SLAB (BENT UP BAR OVER PIERS [S8a, b, e, f] NOT SHOWN)



QUARTER PLAN OF BOTTOM REINFORCING IN DECK SLAB

STATE OF OHIO
DEPARTMENT OF HIGHWAYS
BUREAU OF BRIDGES

QUARTER PLAN OF MAIN SLAB REINFORCING

BRIDGE NO. WY-23-158
OVER LITTLE TYMOCHTEE CREEK
WYANDOT COUNTY S.H. 222
SECTION F STA. 173+90.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE
K.E.D.	K.E.D.	K.E.T.	E.H.S.	[illegible]	1-10-46