081-0134, 0135

FED. ROAD DIST. NO.	STATE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 403	161-1-2	ROCK ISLAND	832		1
FED. ROAD DIV. NO. 4	ILLINOIS	PROJECT	EBRF-403-1(6)		

P-92-001-71 (161)

SEE SHEET NO. 2
FOR INDEX OF SHEETS

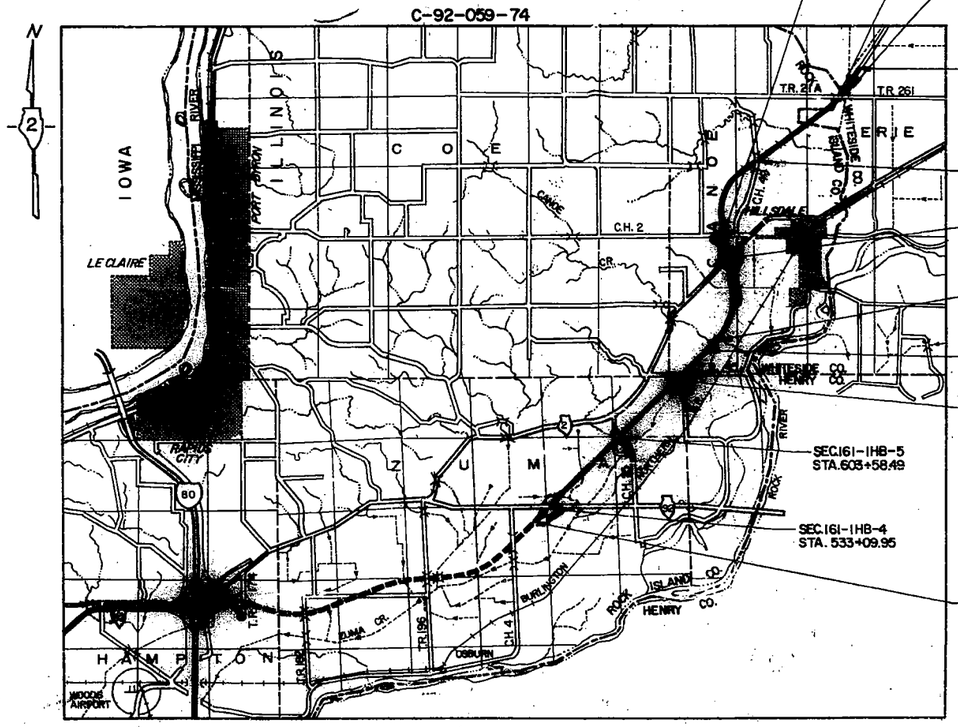
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SCALES

PLAN	1 INCH	100 FT.
PROFILE, HOR.	1 INCH	100 FT.
PROFILE, VERT.	1 INCH	10 FT.
CROSS-SECTIONS	1 INCH	10 FT.

F.A. ROUTE 403
SEC. 161-1-(2,2SG,HB-4,HB-5,HB-10,B-2,HB-6,HB-7,HB-8,HB-9,B-3,B-4)
PROJECT EBRF 403-1(6)
ROCK ISLAND COUNTY
WHITESIDE COUNTY

C-92-059-74



SEC. 161-1HB-7
STA 792+93.31

SEC. 161-1HB-9 & 161-1B-3
STA. 937+37.43

SEC. 161-1B-4
STA. 944+69

PROJECT EBRF 403-1(6)
SEC. 161-1-2 ENDS
STA. 960+00

SEC. 161-1HB-8
STA. 866+12.86

SEC. 161-1HB-6
STA. 774+50.24

SEC. 161-1B-2
STA. 710+50

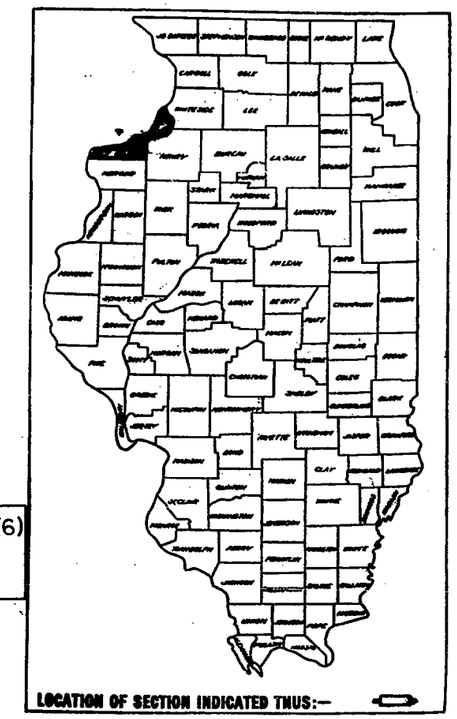
EQUATION STA 703+68.46 BACK=
STA. 703+69.44 AHEAD

SEC. 161-1HB-10
STA. 669+50

SEC. 161-1HB-5
STA. 603+58.49

SEC. 161-1HB-4
STA. 533+09.95

PROJECT EBRF 403-1(6)
SEC. 161-1-2 BEGINS
STA. 504+00



LOCATION OF SECTION INDICATED THUS:-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED Jan. 8 19 74
EXAMINED Aug. 27 19 74
PASSED Aug. 27 19 74
APPROVED Aug. 27 19 74
DIRECTOR OF HIGHWAYS

DESIGN DESIGNATION
1235(95) TRUNK 7.16 (CRPCC-20)

SCALE: 1 INCH = 1 MILE

NET LENGTH OF PROJECT 45,599.02 FEET = 8.636 MILES = 13.898 KILOMETERS

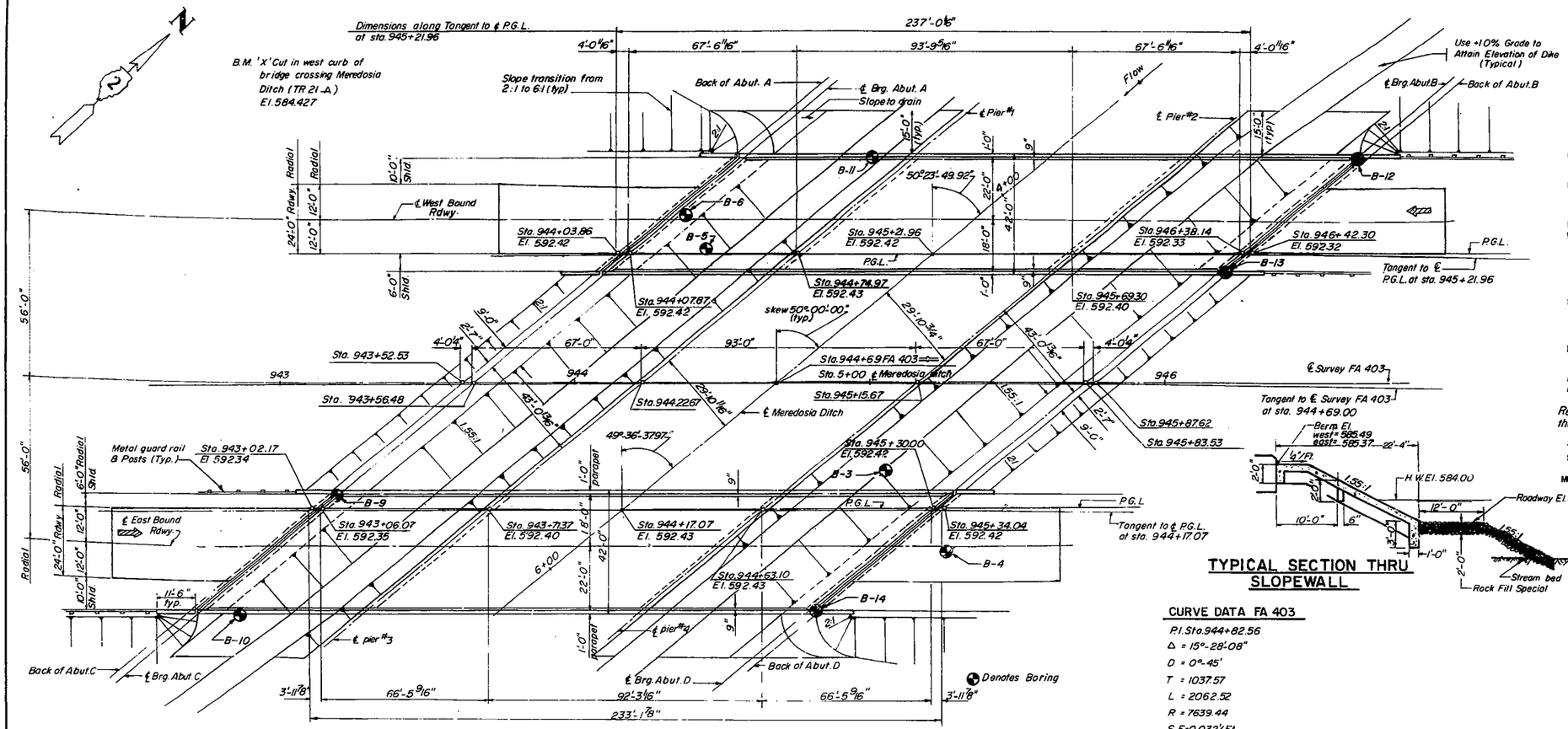
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ENGINEER | DATE

CONTRACT NO. 30278

ROCK ISLAND COUNTY
WHITESIDE
SECTION 161-1-2 F.A. ROUTE 403

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. N. I. F. A. 403	161-I-2	ROCK ISLAND WHITESIDE	532	281
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.	

SHEET NO. 1
27 SHEETS



PLAN

TYPICAL SECTION THRU SLOPEWALL

CURVE DATA FA 403

P.I. Sta. 944+82.56
Δ = 15°-28'-08"
D = 0°-45'
T = 1037.57
L = 2062.52
R = 7639.44
S.E. = 0.032'/Ft.
E = 7.014

WATERWAY DATA

Drainage Area	36.55 Sq. Mi.
Character	Flat Cultivated Land
Required Opening	765 Sq. Ft.
Bottom of Channel	El. 570.8
Design Discharge	3514 cfs.

NOTES:

DESIGN LOADING:
HS 20-44 And Allowance For 25 P.S.F. Future Wearing Surface

DESIGN STRESSES:
fc = 1400 P.S.I. Except As follows:
fc = 1200 P.S.I. For Deck Slab
fc = 1000 P.S.I. For Conc. In Contact With Earth
fs = 20,000 P.S.I. - Structural Steel
fs = 20,000 P.S.I. Reinforcement Steel
v = 75 P.S.I. Allowable Shear In Footings.
n = 10
Allowable Live Load Deflection = L/1200 (Composite)
DESIGN SPECIFICATIONS: AASHO 1973 As Applicable.

GENERAL NOTES

ALL REINFORCEMENT BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE SHOWN.

FIELD CONNECTIONS SHALL BE BOLTED USING HIGH STRENGTH BOLTS. BOLTS 3/4" Φ, OPEN HOLES 13/16" Φ, UNLESS OTHERWISE NOTED.

THE BASIC LEAD SILICO CHROMATE PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM OF FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.

SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" MESH, WEIGHING 58# PER 100 SQ. FT..

THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM EMBANKMENT THAT MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.

THE CONTRACTOR SHALL DRIVE FOUR TIMBER TEST PILES, ONE AT EACH PIER AND FOUR CONCRETE TEST PILES, ONE AT EACH ABUTMENT, IN A PERMANENT LOCATION, AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.

The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the flanges, webs, and splice plates of the steel girders or wide flange beams.

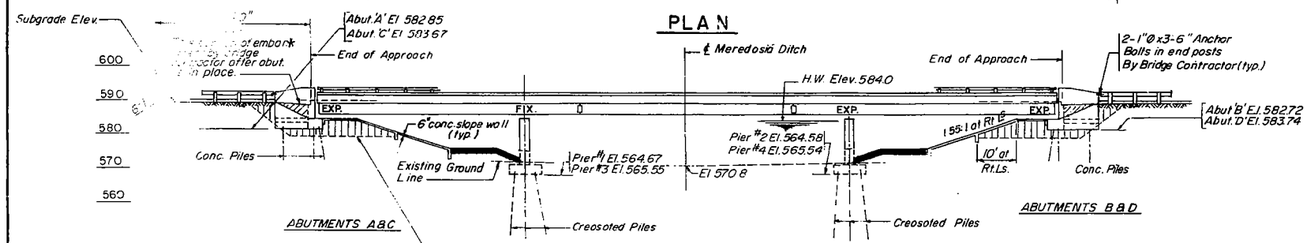
THE CONCRETE RAIL SECTION ABOVE THE MANDATORY CONST. JOINT AT THE TOP OF THE SLAB SHALL BE CONSTRUCTED OF CLASS X CONCRETE, EXCEPT THE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL CONCRETE.

PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATERPROOFING MEMBRANE SYSTEM IS APPLIED.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
STRUCTURE EXCAVATION	CU. YDS.	--	625	625
PROTECTIVE COAT	SQ. YDS.	445	--	445
CLASS "X" CONCRETE	CU. YDS.	591.0	1,044.8	1,635.8
STRUCTURAL STEEL	L. SUM	0.16	--	0.16
ALUMINUM RAILING	LIN. FT.	920	--	920
REINFORCEMENT BARS	LBS.	169,260	54,040	223,300
STUD SHEAR CONNECTORS	EACH	6,390	--	6,390
CREOSOTED PILES (20.1' TO 38')	LIN. FT.	--	2,920	2,920
CONCRETE PILES	LIN. FT.	--	2,748	2,748
TEST PILES (CONCRETE)	EACH	--	4	4
TEST PILES (TIMBER)	EACH	--	4	4
SLOPE WALL (6")	SQ. YDS.	1,573	--	1,573
BIT. CONC. SURFACE COURSE CLASS I	TONS	166	--	166
WATERPROOFING MEMBRANE SYSTEM	SQ. YDS.	1,967	--	1,967
NEOPRENE EXP. JOINT 2"	LIN. FT.	124	--	124
NEOPRENE EXP. JOINT 2 1/2"	LIN. FT.	130	--	130
REMOVAL & REPLACEMENT OF GRANULAR MAT'LS.	CU. YDS.	--	3,900	3,900
METAL SHOES	EACH	--	212	212
CREOSOTED PILES (UP TO 20')	LIN. FT.	--	846	846
PERMANENT B.M. TYPE I	EACH	1	--	1
NAME PLATES	EACH	1	--	1
ROCK FILL SPECIAL	TON		2,364	2,364

* CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL = 628,240 LBS.



ELEVATION

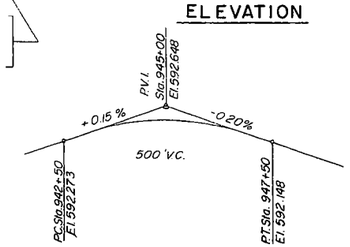
Hatched area indicates Removal & Replacement with suitable granular material (See Note)

NOTE:

A removal and replacement scheme from 10' behind the abutments to the outer quarter point of the end slopes and between the outer quarter points of the side slopes and to the depths indicated below should be adopted:

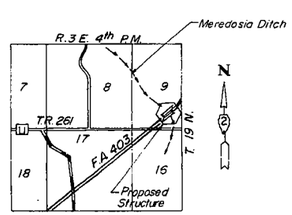
a. At abutment A to elevation ± 566.3
b. At abutment B to elevation ± 570.5
c. At abutment C to elevation ± 571.3
d. At abutment D to elevation ± 574.3

Backfill should be with a porous granular material to 2' above the water level in the excavation at the time of replacement. Replacement above this level should be with suitable earth embankment materials.



PROFILE FA 403 ALONG ℄ SURVEY

(Top of Class I)



LOCATION MAP

STATION 944+69.0
BUILT 19 BY
STATE OF ILLINOIS
FA 403 SECTION 161-1B-4
FA PROJ. EBRF-403-1(6)
LOADING HS 20

NAME PLATE
SEE STD 2113

APPROVED

DESIGNED	A.
CHECKED	D.
DRAWN	A. M.
CHECKED	D. M. P.

Dmytro M. Polevoy

GENERAL PLAN & ELEVATION

FA 403 SECTION 161-1E-4

FA 403 OVER MEREDOSIA DITCH

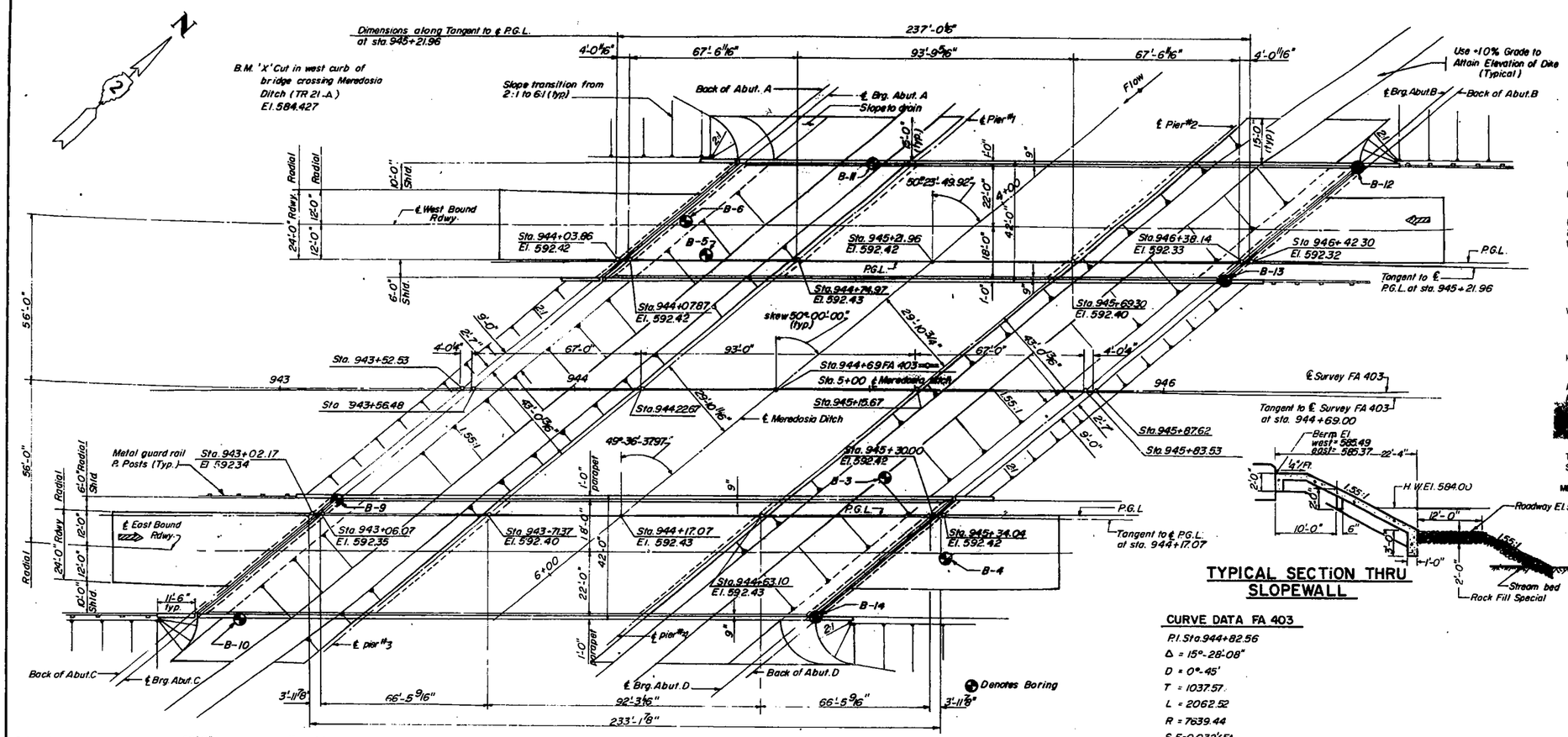
ROCK ISLAND & WHITE SIDE COUNTY

STATION 944+69.00

G. JANDA & ASSOC. INC., CHICAGO

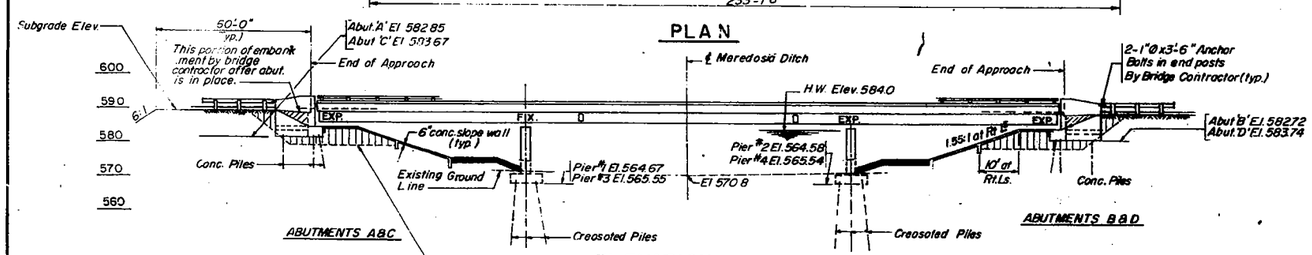
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	28A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 1A
27 SHEETS



PLAN

TYPICAL SECTION THRU SLOPEWALL



ABUTMENTS A&C

ABUTMENTS B&D

ELEVATION

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NOTE:

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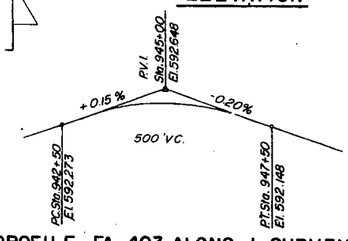
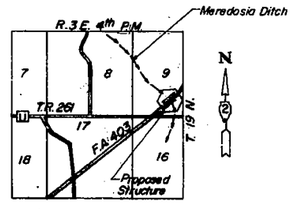


PROFILE FA 403 ALONG ℄ SURVEY
(Top of Class I)



LOCATION MAP

CURVE DATA FA 403

P.I. Sta. 944+82.56
Δ = 15°-28'-08"
D = 0°-45'
T = 1037.57'
L = 2062.52
R = 7639.44
S.E = 0.032'/Ft.
E = 7.014

WATERWAY DATA

Drainage Area	36.55 Sq. Mi.
Character	Flat Cultivated Land
Required Opening	765 Sq. Ft.
Bottom of Channel	El. 570.8
Design Discharge	3514 cfs.

NOTES:

DESIGN LOADING:
HS 20-44 And Allowance For 25 P.S.F. Future Wearing Surface

DESIGN STRESSES:
fc = 1400 P.S.I. Except As follows:
fc = 1200 P.S.I. For Deck Slab
fc = 1000 P.S.I. For Conc. In Contact With Earth
fs = 20,000 P.S.I. - M183 Structural Steel
fs = 20,000 P.S.I. Reinforcement Steel
v = 75 P.S.I. Allowable Shear In Footings.
n = 10
Allowable Live Load Deflection = L/1200 (Composite)
DESIGN SPECIFICATIONS: AASHTO 1973 As Applicable.

GENERAL NOTES

ALL REINFORCEMENT BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE SHOWN.

FIELD CONNECTIONS SHALL BE BOLTED USING HIGH STRENGTH BOLTS. BOLTS 3/4" Φ, OPEN HOLES 13/16" ω, UNLESS OTHERWISE NOTED.

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SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC 6" x 6" MESH, WEIGHING 58# PER 100 SQ. FT..

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[redacted]

THE CONCRETE RAIL SECTION ABOVE THE MANDATORY CONST. JOINT AT THE TOP OF THE SLAB SHALL BE CONSTRUCTED OF CLASS X CONCRETE, EXCEPT THE AGGREGATES SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL CONCRETE.

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TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
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PROTECTIVE COAT	SQ. YDS.	445	--	445
CLASS "X" CONCRETE	CU. YDS.	591.0	1,044.8	1,635.8
STRUCTURAL STEEL	L. SUM	0.16	--	0.16
ALUMINUM RAILING	LIN. FT.	920	--	920
REINFORCEMENT BARS	LBS.	169,260	54,040	223,300
STUD SHEAR CONNECTORS	EACH	6,390	--	6,390
CREOSOTED PILES (20.1' TO 38')	LIN. FT.	--	7,920	7,920
CONCRETE PILES	LIN. FT.	--	2,748	2,748
TEST PILES (CONCRETE)	EACH	--	4	4
TEST PILES (TIMBER)	EACH	--	4	4
SLOPE WALL (6")	SQ. YDS.	1,573	--	1,573
BIT. CONC. SURFACE COURSE CLASS I	TONS	166	--	166
WATERPROOFING MEMBRANE SYSTEM	SQ. YDS.	1,967	--	1,967
NEOPRENE EXP. JOINT 2"	LIN. FT.	124	--	124
NEOPRENE EXP. JOINT 2 1/2"	LIN. FT.	130	--	130
REMOVAL & REPLACEMENT OF GRANULAR MAT'LS.	CU. YDS.	--	3,900	3,900
METAL SHOES	EACH	--	212	212
CREOSOTED PILES (UP TO 20')	LIN. FT.	--	846	846
PERMANENT B.M. TYPE I	EACH	1	--	1
NAME PLATES	EACH	1	--	1
ROCK FILL SPECIAL	TON		2,364	2,364

* CALCULATED PLAN WEIGHT OF STRUCTURAL STEEL = 628,240 LBS.

STATION 944+69.0
BUILT 19 BY
STATE OF ILLINOIS
FA 403 SECTION 161-1B-4
FA PROJ. EBRF-403-1(6)
LOADING HS 20

NAME PLATE
SEE STD 2113

APPROVED
EDWARD J. SEMMENS
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES

DESIGNED	H.S.
CHECKED	D.M.P.
DRAWN	A.M.
CHECKED	D.M.P.

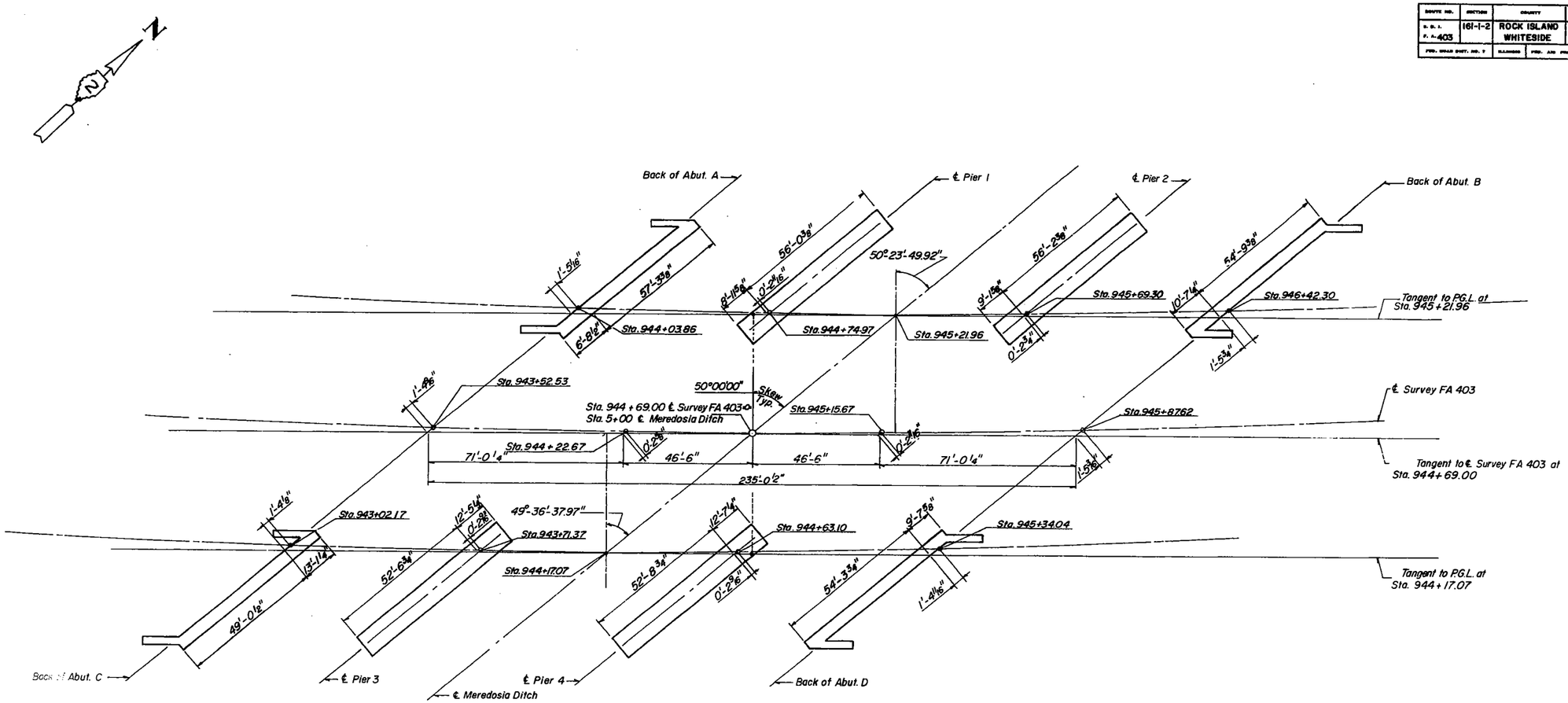
AS REVISED

GENERAL PLAN & ELEVATION
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

As Revised 2-3-75 L.W.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A.-403	161-1-2	ROCK ISLAND WHITESIDE	532	282
PRE. SHEET NO. ?	ILLINOIS	PRE. AND PROJECT-		

SHEET NO. 2
27 SHEETS



FOOTING LAYOUT

DESIGNED	HRS
CHECKED	RA, AA
DRAWN	GG
CHECKED	HRS

FOOTING LAYOUT

FA 403 SECTION 161 - 1B-4

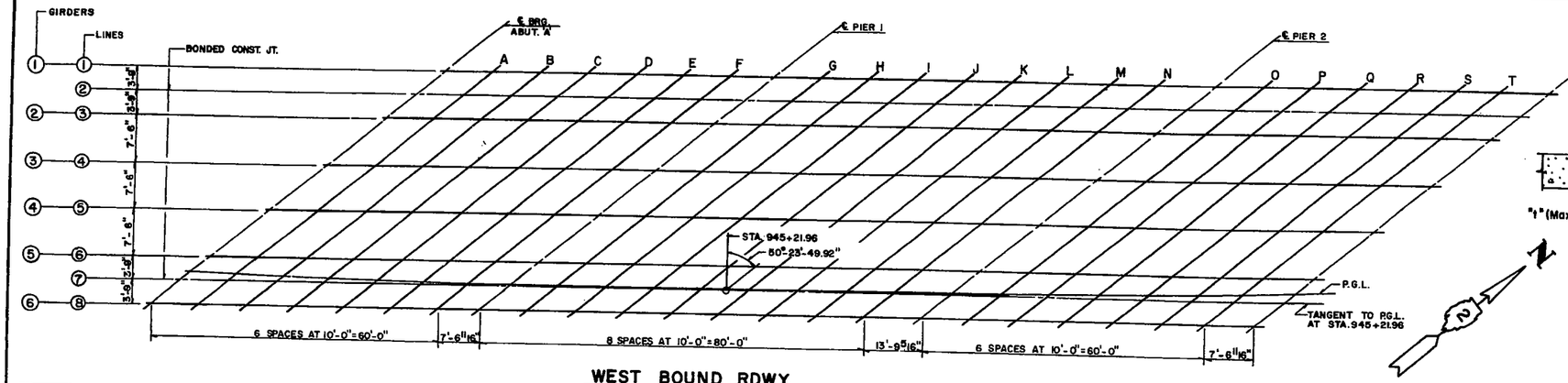
FA 403 OVER MEREDOSIA DITCH

ROCK ISLAND & WHITE SIDE COUNTY

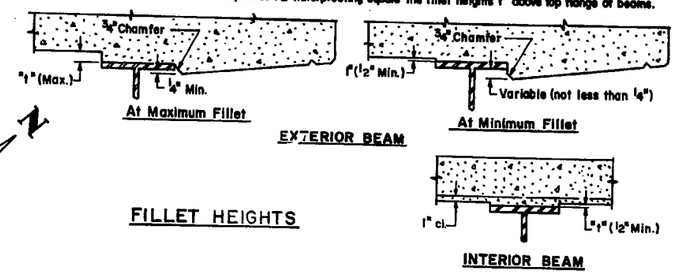
STATION 944+69.00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 161-1-2		ROCK ISLAND	532	283
F.A. 403		WHITESIDE		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
27 SHEETS



To determine "t". After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus floor thickness, minus 1/2" waterproofing equals the fillet heights "t" above top flange of beams.



FILLET HEIGHTS

WEST BOUND RDWY.

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
1	℄ Brg. Abut. 'A'	94447.544	-33.391	591.3642	591.364
	A	94457.648	-33.482	591.3621	591.380
	B	94467.751	-33.559	591.3597	591.389
	C	94477.855	-33.623	591.3571	591.388
	D	94487.959	-33.675	591.3541	591.378
	E	94498.064	-33.713	591.3509	591.361
	F	94508.168	-33.737	591.3473	591.349
	Pier I	94515.804	-33.747	591.3445	591.344
	G	94525.907	-33.748	591.3404	591.361
	H	94536.009	-33.737	591.3361	591.386
	I	94546.112	-33.712	591.3314	591.411
	J	94556.214	-33.675	591.3265	591.423
	K	94566.316	-33.622	591.3213	591.421
	L	94576.419	-33.557	591.3158	591.404
	M	94586.521	-33.479	591.3100	591.372
	N	94596.622	-33.388	591.3039	591.336
	Pier 2	94610.538	-33.241	591.2951	591.295
	O	94620.640	-33.119	591.2883	591.291
	P	94630.741	-32.983	591.2812	591.294
	Q	94640.841	-32.834	591.2739	591.301
	R	94650.942	-32.672	591.2662	591.298
	S	94661.042	-32.496	591.2583	591.286
	T	94671.141	-32.308	591.2500	591.264
	℄ Brg. Abut. 'B'	94678.773	-32.156	591.2436	591.243
2	℄ Brg. Abut. 'A'	94443.005	-29.595	591.4850	591.485
	A	94453.103	-29.692	591.4831	591.502
	B	94463.202	-29.776	591.4808	591.512
	C	94473.301	-29.846	591.4783	591.511
	D	94483.400	-29.903	591.4755	591.501
	E	94493.499	-29.947	591.4724	591.483
	F	94503.598	-29.978	591.4690	591.470
	Pier I	94511.230	-29.992	591.4662	591.466
	G	94521.328	-29.999	591.4623	591.484
	H	94531.425	-29.994	591.4581	591.512
	I	94541.523	-29.975	591.4536	591.539
	J	94551.620	-29.942	591.4488	591.552
	K	94561.718	-29.897	591.4437	591.550
	L	94571.815	-29.838	591.4384	591.532
	M	94581.912	-29.767	591.4327	591.498
	N	94592.009	-29.681	591.4267	591.461
	Pier 2	94605.918	-29.543	591.4181	591.418
	O	94616.015	-29.426	591.4114	591.414
	P	94626.111	-29.296	591.4045	591.419
	Q	94636.207	-29.153	591.3973	591.425
	R	94646.302	-28.997	591.3898	591.424
	S	94656.397	-28.828	591.3820	591.411
	T	94666.492	-28.645	591.3739	591.389
	℄ Brg. Abut. 'B'	94674.120	-28.499	591.3676	591.367

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
3	℄ Brg. Abut. 'A'	94438.470	-25.797	591.6058	591.605
	A	94448.563	-25.900	591.6040	591.624
	B	94458.657	-25.990	591.6019	591.634
	C	94468.750	-26.066	591.5995	591.634
	D	94478.844	-26.129	591.5968	591.624
	E	94488.938	-26.179	591.5938	591.606
	F	94499.032	-26.215	591.5905	591.592
	Pier I	94506.661	-26.234	591.5879	591.587
	G	94516.753	-26.248	591.5841	591.608
	H	94526.846	-26.248	591.5800	591.637
	I	94536.939	-26.235	591.5757	591.666
	J	94547.031	-26.209	591.5710	591.680
	K	94557.124	-26.169	591.5661	591.679
	L	94567.216	-26.117	591.5608	591.660
	M	94577.308	-26.051	591.5553	591.625
	N	94587.400	-25.972	591.5495	591.586
	Pier 2	94601.302	-25.841	591.5410	591.541
	O	94611.394	-25.731	591.5345	591.537
	P	94621.485	-25.607	591.5277	591.543
	Q	94631.577	-25.470	591.5206	591.550
	R	94641.667	-25.320	591.5133	591.549
	S	94651.758	-25.157	591.5056	591.536
	T	94661.847	-24.980	591.4977	591.513
	℄ Brg. Abut. 'B'	94669.472	-24.838	591.4915	591.491
4	℄ Brg. Abut. 'A'	94429.414	-18.194	591.8472	591.847
	A	94439.497	-18.308	591.8456	591.866
	B	94449.580	-18.409	591.8438	591.876
	C	94459.663	-18.498	591.8417	591.877
	D	94469.747	-18.573	591.8392	591.866
	E	94479.831	-18.634	591.8365	591.849
	F	94489.915	-18.683	591.8335	591.835
	Pier I	94497.536	-18.711	591.8310	591.831
	G	94507.619	-18.736	591.8275	591.851
	H	94517.701	-18.748	591.8237	591.881
	I	94527.784	-18.747	591.8196	591.910
	J	94537.866	-18.733	591.8152	591.924
	K	94547.949	-18.706	591.8106	591.923
	L	94558.031	-18.665	591.8056	591.904
	M	94568.114	-18.611	591.8004	591.870
	N	94578.196	-18.544	591.7948	591.831
	Pier 2	94592.085	-18.430	591.7867	591.786
	O	94602.167	-18.332	591.7805	591.783
	P	94612.248	-18.220	591.7740	591.790
	Q	94622.330	-18.096	591.7672	591.797
	R	94632.411	-17.958	591.7601	591.796
	S	94642.491	-17.806	591.7527	591.783
	T	94652.572	-17.642	591.7450	591.761
	℄ Brg. Abut. 'B'	94660.180	-17.509	591.7390	591.739

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
5	℄ Brg. Abut. 'A'	94420.375	-10.579	592.0884	592.088
	A	94430.468	-10.705	592.0871	592.107
	B	94440.521	-10.819	592.0855	592.118
	C	94450.595	-10.919	592.0836	592.119
	D	94460.668	-11.005	592.0814	592.108
	E	94470.742	-11.079	592.0790	592.091
	F	94480.816	-11.140	592.0762	592.077
	Pier I	94488.429	-11.176	592.0740	592.074
	G	94498.502	-11.214	592.0707	592.094
	H	94508.574	-11.238	592.0672	592.124
	I	94518.647	-11.249	592.0633	592.154
	J	94528.720	-11.247	592.0592	592.168
	K	94538.792	-11.231	592.0548	592.167
	L	94548.865	-11.202	592.0501	592.149
	M	94558.937	-11.161	592.0452	592.115
	N	94569.010	-11.106	592.0399	592.076
	Pier 2	94582.885	-11.008	592.0322	592.032
	O	94592.957	-10.922	592.0262	592.029
	P	94603.029	-10.822	592.0200	592.036
	Q	94613.101	-10.710	592.0134	592.043
	R	94623.172	-10.584	592.0066	592.042
	S	94633.243	-10.445	591.9995	592.030
	T	94643.314	-10.293	591.9921	592.008
	℄ Brg. Abut. 'B'	94650.924	-10.169	591.9863	591.986
6	℄ Brg. Abut. 'A'	94411.356	-2.954	592.3293	592.329
	A	94421.418	-3.092	592.3283	592.348
	B	94431.481	-3.217	592.3269	592.359
	C	94441.544	-3.329	592.3253	592.360
	D	94451.607	-3.428	592.3234	592.350
	E	94461.671	-3.513	592.3212	592.333
	F	94471.735	-3.585	592.3187	592.320
	Pier I	94479.341	-3.631	592.3167	592.316
	G	94489.403	-3.681	592.3137	592.337
	H	94499.456	-3.717	592.3104	592.367
	I	94509.528	-3.739	592.3068	592.397
	J	94519.591	-3.749	592.3030	592.412
	K	94529.656	-3.746	592.2988	592.411
	L	94539.716	-3.729	592.2944	592.393
	M	94549.779	-3.699	592.2897	592.359
	N	94559.841	-3.656	592.2847	592.321
	Pier 2	94573.703	-3.575	592.2773	592.277
	O	94583.766	-3.501	592.2717	592.275
	P	94593.828	-3.414	592.2657	592.281
	Q	94603.890	-3.313	592.2594	592.289
	R	94613.952	-3.199	592.2529	592.289
	S	94624.013	-3.072	592.2460	592.277
	T	94634.074	-2.932	592.2389	592.255
	℄ Brg. Abut. 'B'	94641.677	-2.817	592.2334	592.233

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEV. ADJUSTED FOR DEAD LOAD DEFLECTION
7	℄ Brg. Abut. 'A'	94406.852	0.862	592.4497	592.449
	A	94416.910	0.718	592.4488	592.468
	B	94426.967	0.587	592.4475	592.479
	C	94437.025	0.469	592.4461	592.479
	D	94447.084	0.364	592.4443	592.470
	E	94457.142	0.273	592.4422	592.453
	F	94467.201	0.195	592.4399	592.441
	Pier I	94474.803	0.144	592.4379	592.437
	G	94484.860	0.089	592.4350	592.457
	H	94494.918	0.047	592.4319	592.485
	I	94504.976	0.018	592.4285	592.513
	J	94515.033	0.003	592.4247	592.528
	K	94525.091	0.000	592.4207	592.527
	L	94535.149	0.011	592.4165	592.510
	M	94545.206	0.035	592.4119	592.478
	N	94555.264	0.072	592.4070	592.441
	Pier 2	94569.119	0.144	592.3998	592.399
	O	94579.177	0.212	592.3943	592.397
	P	94589.234	0.294	592.3884	592.403
	Q	94599.291	0.389	592.3823	592.410
	R	94609.348	0.496	592.3759	592.410
	S	94619.405	0.617	592.3692	592.395
	T	94629.461	0.752	592.3622	592.377
	℄ Brg. Abut. 'B'	94637.061	0.862	592.3568	592.356
8	℄ Brg. Abut. 'A'	94402.354	4.681	592.5700	592.570
	A	94412.406	4.531	592.5692	592.587
	B	94422.458	4.394	592.5682	592.597
	C	94432.511	4.270	592.5668	592.598
	D	94442.565	4.160	592.5651	592.589
	E	94452.618	4.063	592.5632	592.573
	F	94462.672	3.978	592.5610	592.562
	Pier I	94470.270	3.923	592.5591	592.559
	G	94480.322	3.862	592.5564	592.577
	H	94490.375	3.814	592.5534	592.604
	I	94500.427	3.780	592.5501	592.630
	J	94510.480	3.758	592.5465	592.643
	K	94520.533	3.750	592.5426	592.642
	L	94530.586	3.754	592.5384	592.626
	M	94540.638	3.772	592.5340	592.596
	N	94550.691	3.803	592.5293	592.561
	Pier 2	94564.539	3.867	592.5223	592.522
	O	94574.592	3.930	592.5168	592.519
	P	94584.645	4.005	592.5111	592.524
	Q	94594.697	4.094	592.5052	592.532
	R	94604.749	4.196	592.4989	592.531
	S	94614.801	4.311	592.4923	592.520
	T	94624.852	4.439	592.4855	592.500
	℄ Brg. Abut. 'B'	94632.448	4.544	592.4801	592.480

DESIGNED	R.A
CHECKED	R.T.F.
DRAWN	M.B.
CHECKED	R.T.F

NOTE:
WORK THIS SHEET WITH SHEET 4

ELEVATIONS - TOP OF SLAB

FA 403 SECTION 161-1B-4

FA 403 OVER MEREDOSIA DITCH

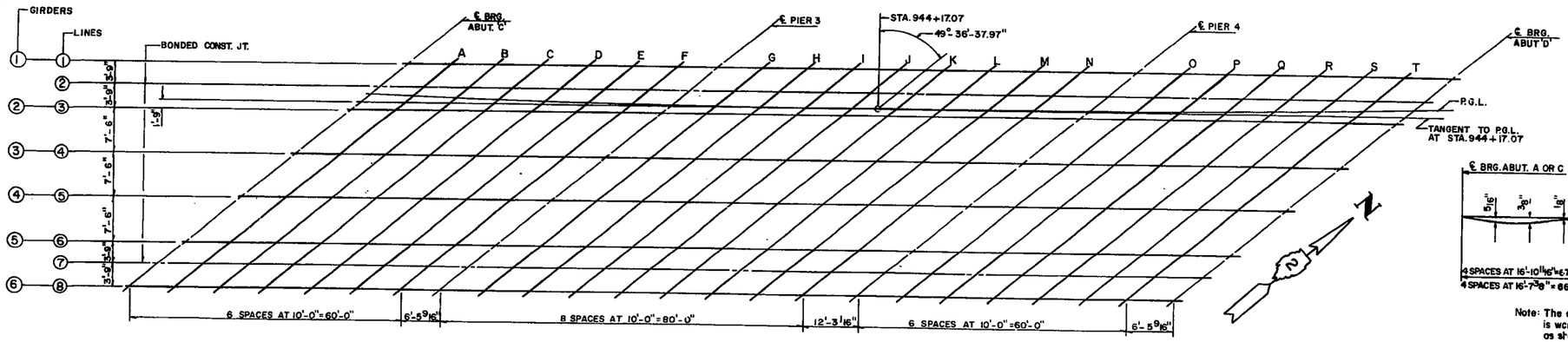
ROCK ISLAND & WHITE SIDE COUNTY

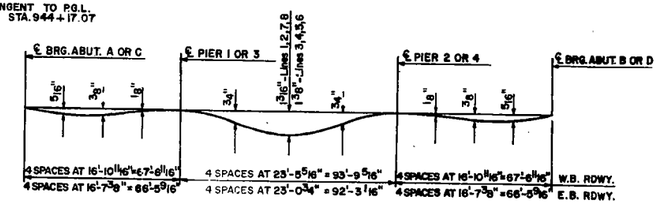
STATION 944+69.00

GLENNON & ASSOC. INC., CHICAGO

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	284
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 4
27 SHEETS





Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete slab, curb, parapet and water proofing.)

EAST BOUND RDWY.

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
1	℄ Brg. Abut. 'C'	94311.770	-5.020	592.1916	592.191
	A	94321.720	-5.151	592.1977	592.216
	B	94331.669	-5.270	592.2035	592.233
	C	94341.620	-5.375	592.2090	592.240
	D	94351.570	-5.467	592.2142	592.238
	E	94361.521	-5.546	592.2192	592.229
	F	94371.471	-5.613	592.2239	592.225
	PIER 3	94377.903	-5.649	592.2268	592.226
	G	94387.853	-5.693	592.2310	592.251
	H	94397.803	-5.725	592.2350	592.285
	I	94407.753	-5.744	592.2387	592.318
	J	94417.703	-5.749	592.2421	592.339
	R	94427.654	-5.742	592.2452	592.345
	L	94437.604	-5.722	592.2481	592.336
	M	94447.554	-5.688	592.2506	592.312
	N	94457.504	-5.642	592.2529	592.285
	PIER 4	94469.694	-5.567	592.2554	592.255
	O	94479.644	-5.492	592.2571	592.260
	P	94489.593	-5.404	592.2585	592.272
	Q	94499.542	-5.302	592.2596	592.286
	R	94509.491	-5.188	592.2605	592.292
	S	94519.439	-5.060	592.2611	592.289
	T	94529.387	-4.920	592.2614	592.276
	℄ Brg. Abut. 'D'	94535.817	-4.822	592.2614	592.261

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
2	℄ Brg. Abut. 'C'	94307.4390	-1.208	592.3089	592.308
	A	94317.3835	-1.345	592.3151	592.334
	B	94327.3283	-1.469	592.3210	592.352
	C	94337.2735	-1.580	592.3266	592.359
	D	94347.2190	-1.678	592.3320	592.357
	E	94357.1647	-1.763	592.3371	592.348
	F	94367.1105	-1.835	592.3419	592.343
	PIER 3	94373.539	-1.875	592.3448	592.448
	G	94383.484	-1.925	592.3492	592.371
	H	94393.429	-1.963	592.3533	592.407
	I	94403.374	-1.987	592.3571	592.442
	J	94413.319	-1.999	592.3606	592.463
	K	94423.265	-1.997	592.3639	592.470
	L	94433.210	-1.982	592.3668	592.460
	M	94443.155	-1.955	592.3695	592.435
	N	94453.100	-1.914	592.3720	592.406
	PIER 4	94465.285	-1.847	592.3746	592.374
	O	94475.230	-1.777	592.3764	592.379
	P	94485.174	-1.694	592.3779	592.392
	Q	94495.118	-1.599	592.3792	592.407
	R	94505.062	-1.490	592.3802	592.414
	S	94515.006	-1.368	592.3809	592.410
	T	94524.950	-1.234	592.3813	592.396
	℄ Brg. Abut. D	94531.376	-1.140	592.3814	592.381

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
3	℄ Brg. Abut. 'C'	94333.111	2.605	592.4261	592.426
	A	94313.051	2.462	592.4324	592.452
	B	94322.991	2.332	592.4384	592.471
	C	94332.931	2.216	592.4442	592.479
	D	94342.871	2.112	592.4497	592.477
	E	94352.812	2.021	592.4549	592.467
	F	94362.753	1.944	592.4598	592.461
	PIER 3	94369.178	1.901	592.4628	592.462
	G	94379.119	1.844	592.4673	592.491
	H	94389.059	1.801	592.4715	592.529
	I	94398.999	1.771	592.4754	592.566
	J	94408.940	1.756	592.4791	592.588
	K	94418.880	1.750	592.4825	592.595
	L	94428.820	1.759	592.4856	592.584
	M	94438.761	1.781	592.4884	592.558
	N	94448.701	1.815	592.4909	592.527
	PIER 4	94460.880	1.876	592.4937	592.493
	O	94470.820	1.940	592.4956	592.498
	P	94480.760	2.017	592.4973	592.513
	Q	94490.699	2.107	592.4986	592.528
	R	94500.638	2.209	592.4998	592.536
	S	94510.577	2.325	592.5006	592.531
	T	94520.516	2.454	592.5011	592.517
	℄ Brg. Abut. 'D'	94526.940	2.544	592.5014	592.501

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
4	℄ Brg. Abut. 'C'	94294.470	10.240	592.6604	592.660
	A	94304.399	10.086	592.6670	592.687
	B	94314.329	9.945	592.6732	592.706
	C	94324.259	9.817	592.6792	592.714
	D	94334.190	9.702	592.6849	592.712
	E	94344.121	9.600	592.6904	592.702
	F	94354.052	9.511	592.6955	592.697
	PIER 3	94360.471	9.461	592.6987	592.698
	G	94370.401	9.393	592.7034	592.727
	H	94380.331	9.339	592.7078	592.765
	I	94390.262	9.297	592.7120	592.802
	J	94400.193	9.268	592.7159	592.825
	K	94410.123	9.253	592.7195	592.832
	L	94420.054	9.250	592.7228	592.822
	M	94429.985	9.261	592.7259	592.795
	N	94439.916	9.284	592.7287	592.765
	PIER 4	94452.083	9.330	592.7317	592.731
	O	94462.013	9.383	592.7339	592.737
	P	94471.943	9.448	592.7358	592.752
	Q	94481.873	9.526	592.7374	592.767
	R	94491.803	9.618	592.7388	592.775
	S	94501.733	9.722	592.7399	592.771
	T	94511.662	9.839	592.7407	592.756
	℄ Brg. Abut. 'D'	94518.080	9.922	592.7411	592.741

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
5	℄ Brg. Abut. 'C'	94285.845	17.886	592.8946	592.894
	A	94295.765	17.720	592.9013	592.921
	B	94305.685	17.568	592.9078	592.940
	C	94315.605	17.429	592.9140	592.949
	D	94325.525	17.303	592.9200	592.947
	E	94335.446	17.189	592.9256	592.938
	F	94345.368	17.089	592.9310	592.932
	PIER 3	94351.780	17.031	592.9344	592.934
	G	94361.701	16.952	592.9393	592.963
	H	94371.621	16.886	592.9440	593.001
	I	94381.542	16.833	592.9484	593.039
	J	94391.463	16.793	592.9525	593.062
	K	94401.384	16.766	592.9563	593.069
	L	94411.305	16.752	592.9599	593.059
	M	94421.226	16.751	592.9632	593.033
	N	94431.147	16.763	592.9662	593.002
	PIER 4	94443.303	16.795	592.9696	592.969
	O	94453.223	16.836	592.9720	592.975
	P	94463.144	16.890	592.9741	592.990
	Q	94473.065	16.957	592.9760	593.006
	R	94482.985	17.036	592.9776	593.013
	S	94492.905	17.129	592.9789	593.010
	T	94502.825	17.235	592.9800	592.996
	℄ Brg. Abut. 'D'	94509.236	17.310	592.9805	592.980

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
6	℄ Brg. Abut. 'C'	94277.238	25.541	593.1285	593.128
	A	94287.147	25.364	593.1355	593.155
	B	94297.057	25.201	593.1422	593.175
	C	94306.968	25.050	593.1487	593.184
	D	94316.878	24.913	593.1548	593.182
	E	94326.789	24.788	593.1607	593.173
	F	94336.700	24.676	593.1663	593.168
	PIER 3	94343.107	24.611	593.1698	593.169
	G	94353.017	24.521	593.1750	593.199
	H	94362.925	24.443	593.1799	593.237
	I	94372.839	24.379	593.1845	593.275
	J	94382.750	24.327	593.1889	593.298
	K	94392.662	24.289	593.1930	593.305
	L	94402.573	24.264	593.1968	593.296
	M	94412.484	24.251	593.2003	593.270
	N	94422.396	24.252	593.2036	593.240
	PIER 4	94434.539	24.270	593.2072	593.207
	O	94444.450	24.299	593.2099	593.213
	P	94454.362	24.342	593.2123	593.228
	Q	94464.273	24.397	593.2144	593.244
	R	94474.184	24.465	593.2162	593.252
	S	94484.094	24.546	593.2178	593.249
	T	94494.005	24.641	593.2191	593.235
	℄ Brg. Abut. 'D'	94500.410	24.708	593.2198	593.219

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
7	℄ Brg. Abut. 'C'	94272.941	29.372	593.2455	593.245
	A	94282.845	29.190	593.2525	593.271
	B	94292.750	29.021	593.2594	593.290
	C	94302.655	28.865	593.2659	593.299
	D	94312.561	28.721	593.2722	593.298
	E	94322.467	28.591	593.2782	593.289
	F	94332.373	28.474	593.2839	593.285
	PIER 3	94338.776	28.405	593.2875	593.287
	G	94348.682	28.309	593.2928	593.315
	H	94358.588	28.226	593.2978	593.352
	I	94368.494	28.156	593.3025	593.387
	J	94378.400	28.099	593.3070	593.410
	K	94388.307	28.054	593.3112	593.417
	L	94398.213	28.023	593.3151	593.408
	M	94408.120	28.005	593.3188	593.384
	N	94418.026	28.000	593.3222	593.356
	PIER 4	94430.164	28.011	593.3260	593.326
	O	94440.070	28.035	593.3287	593.331
	P	94449.977	28.071	593.3312	593.346
	Q	94459.883	28.121	593.3335	593.362
	R	94469.789	28.183	593.3354	593.369
	S	94479.695	28.259	593.3371	593.366
	T	94489.601	28.347	593.3386	593.354
	℄ Brg. Abut. 'D'	94496.003	28.412	593.3393	593.339

LINES	LOCATION	STATION	RADIAL OFFSET FROM P.G.L.	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
8	℄ Brg. Abut. 'C'	94268.648	33.206	593.3623	593.362
	A	94278.547	33.018	593.3695	593.387
	B	94288.447	32.843	593.3765	593.406
	C	94298.347	32.682	593.3831	593.414
	D	94308.248	32.533	593.3895	593.413
	E	94318.149	32.397	593.3956	593.406
	F	94328.050	32.274	593.4015	593.403
	PIER 3	94334.450	32.201	593.4051	593.405
	G	94344.351	32.099	593.4105	593.431
	H	94354.252	32.011	593.4156	593.466
	I	94364.153	31.935	593.4205	593.500
	J	94374.055	31.872	593.4251	593.522
	K	94383.956	31.822	593.4294	593.529
	L	94393.858	31.785	593.4335	593.521
	M	94403.760	31.761	593.4372	593.499
	N	94413.661	31.751	593.4407	593.473
	PIER 4	94425.793	31.755	593.4446	593.444
	O	94435.695	31.773	593.4475	593.450
	P	94445.596	31.804	593.4502	593.463
	Q	94455.498	31.847	593.4525	593.479
	R	94465.399	31.904	593.4546	593.486
	S	94475.300	31.974	593.4564	593.484
	T	94485.201	32.057	593.4580	593.472
	℄ Brg. Abut. 'D'	94491.601	32.117	593.4588	593.458

DESIGNED	R. A.
CHECKED	R.T.F.
DRAWN	A.M.
CHECKED	R.T.F.

NOTE:
WORK THIS SHEET WITH SHEET NO. 3

ELEVATIONS - TOP OF SLAB

FA 403 SECTION 161-1B-4

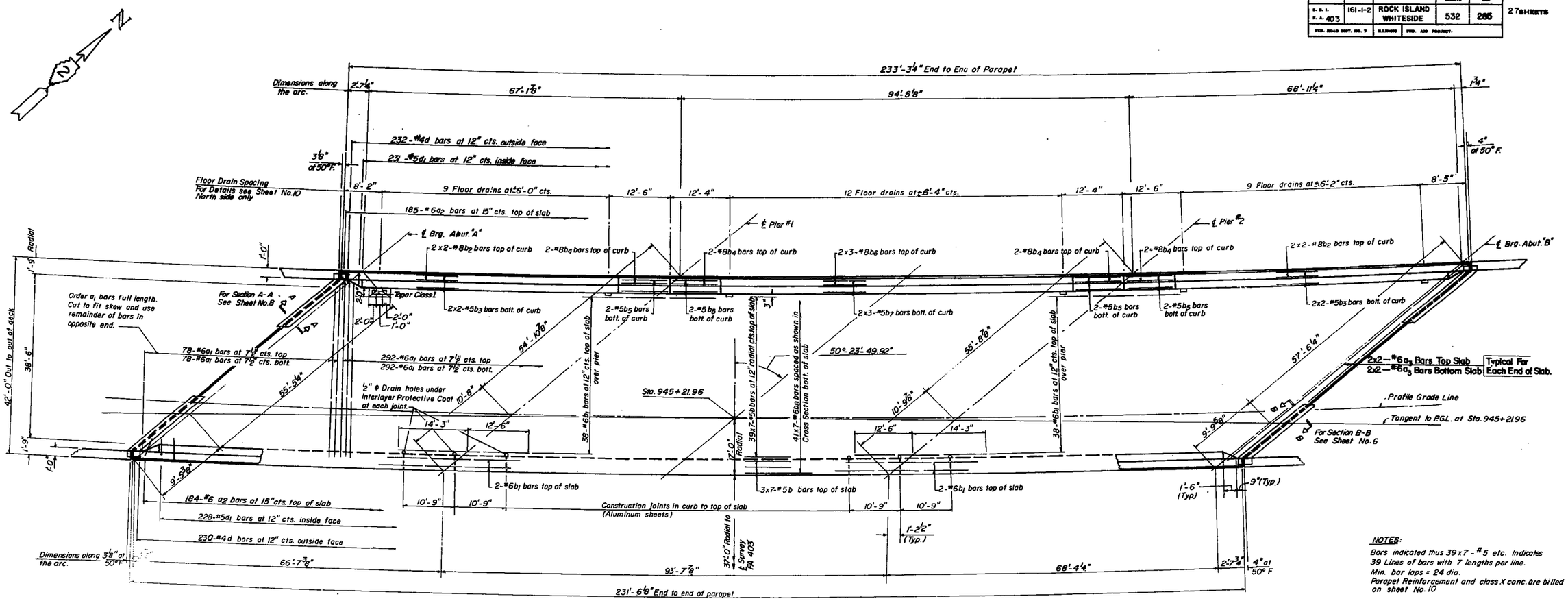
FA 403 OVER MEREDOSIA DITCH

ROCK ISLAND & WHITE SIDE COUNTY

STATION 944+69.00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. R. A. 403	161-I-2	ROCK ISLAND WHITESIDE	532	285
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
27 SHEETS



DECK PLAN
WEST BOUND ROADWAY

NOTES:

Bars indicated thus 39x7-#5 etc. Indicates 39 Lines of bars with 7 lengths per line.
Min. bar laps = 24 dia.
Parapet Reinforcement and class X conc. are billed on sheet No. 10

Work this sheet with sheets No. 6 & 8

Dimensions shown are outside fascia of deck.

DESIGNED	HRS
CHECKED	AA
DRAWN	GG
CHECKED	A.A.

DECK SLAB
WEST BOUND ROADWAY

FA 403 SECTION 161-1B-4

FA 403 OVER MEREDOSIA DITCH

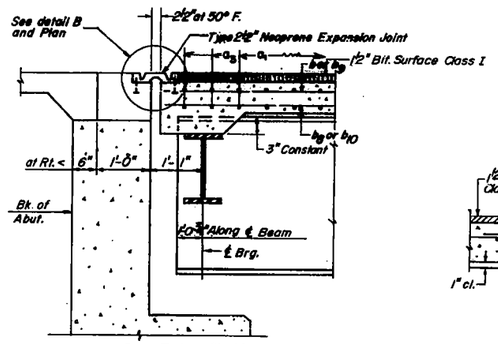
ROCK ISLAND & WHITE SIDE COUNTY

STATION 944+69.00

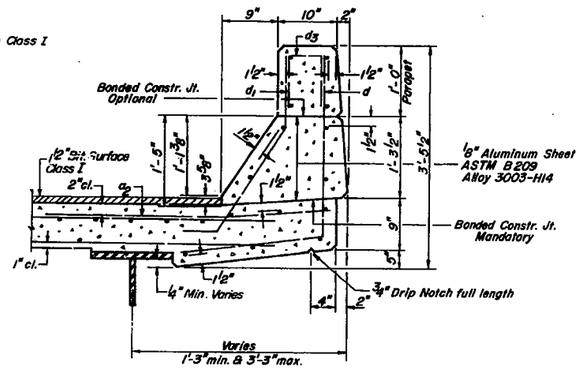
REV. 9-26-72 L.S.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	286
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 6
27 SHEETS

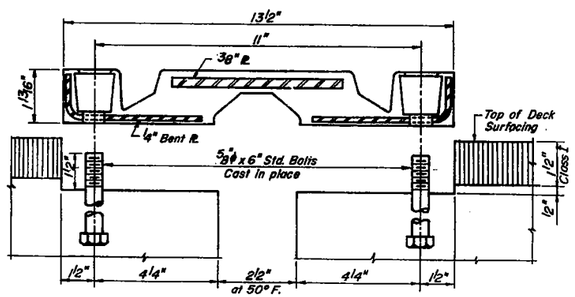


SECTION B-B



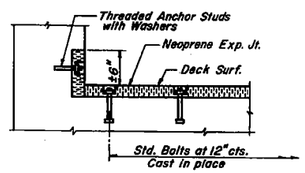
CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete

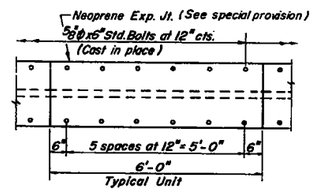


DETAIL B

NEOPRENE EXPANSION JOINT (Abut. B & D only)



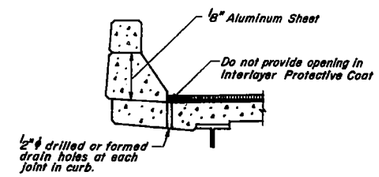
ABUTMENT INSTALLATION



Note: Anchor bolts require a clipped washer, lockwasher and hex. nut.

PLAN

NEOPRENE EXPANSION JOINT



SECTION AT CURB JOINTS

(Cost Incidental)

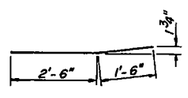
BILL OF MATERIAL

	BAR	NO.	SIZE	LENGTH	SHAPE
	a_1	740	#6	40'-0"	
	a_2	369	#6	4'-0"	
	a_3	16	#6	34'-3"	
	b	315	#5	34'-5"	
	b_1	84	#6	26'-9"	
	b_2	16	#8	30'-0"	
	b_3	16	#5	29'-8"	
	b_4	16	#8	10'-6"	
	b_5	16	#5	10'-6"	
	b_6	12	#8	25'-8"	
	b_7	12	#5	25'-2"	
	b_8	287	#6	34'-7"	
	d	462	#4	4'-7"	
	d_1	459	#5	3'-8"	
*	Reinforcement Bars			Lbs.	83,800
*	Class X Concrete			Cu. Yds.	251
**	Structural Steel			Lbs.	316,280
	Protective Coat			Sq. Yds.	225
	Bituminous Concrete Surface Course Class I			Tons	84
	Waterproof Membrane System			Sq. Yds.	994
	Neoprene Exp. Jt. 2½"			Lin. Ft.	64
	Neoprene Exp. Jt. 2"			Lin. Ft.	61

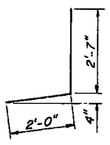
* Parapet Reinforcement and Class X Concrete are billed on sheet No. 10

** Weights of bearing assemblies with lead plates and anchor bolts are included as Structural Steel.

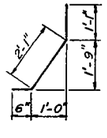
Note: Work this sheet with sheet No. 5



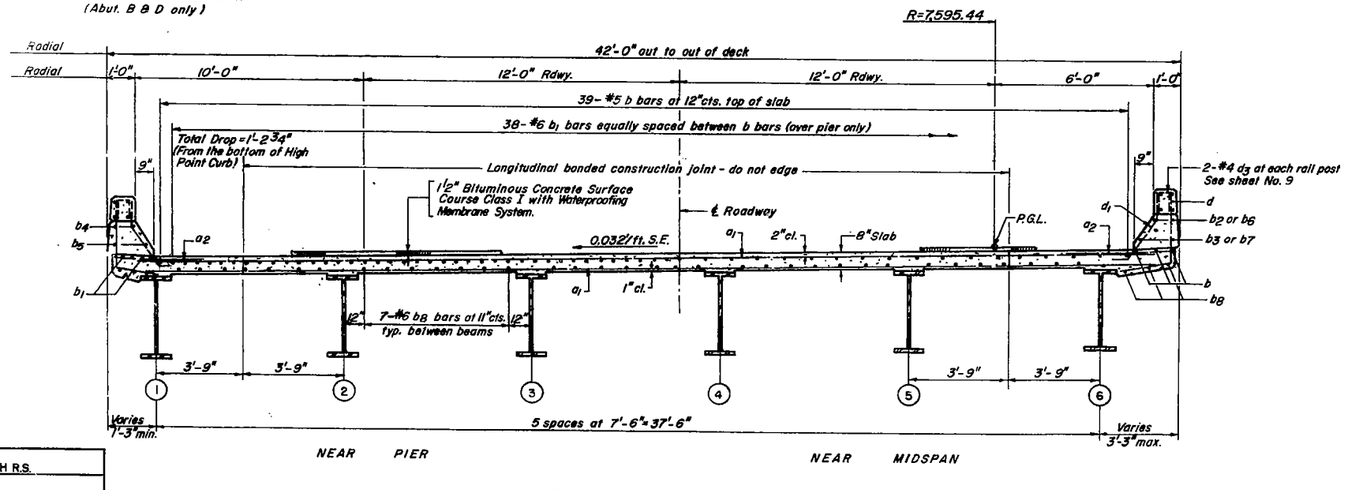
BAR a_2



BAR d



BAR d_1



CROSS SECTION

LOOKING AHEAD STATION

DESIGNED	H.R.S.
CHECKED	A.A.
DRAWN	I.P.
CHECKED	A.A.

WEST BOUND DECK DETAILS

FA 403 SECTION 161-1B-4

FA 403 OVER MEREDOSIA DITCH

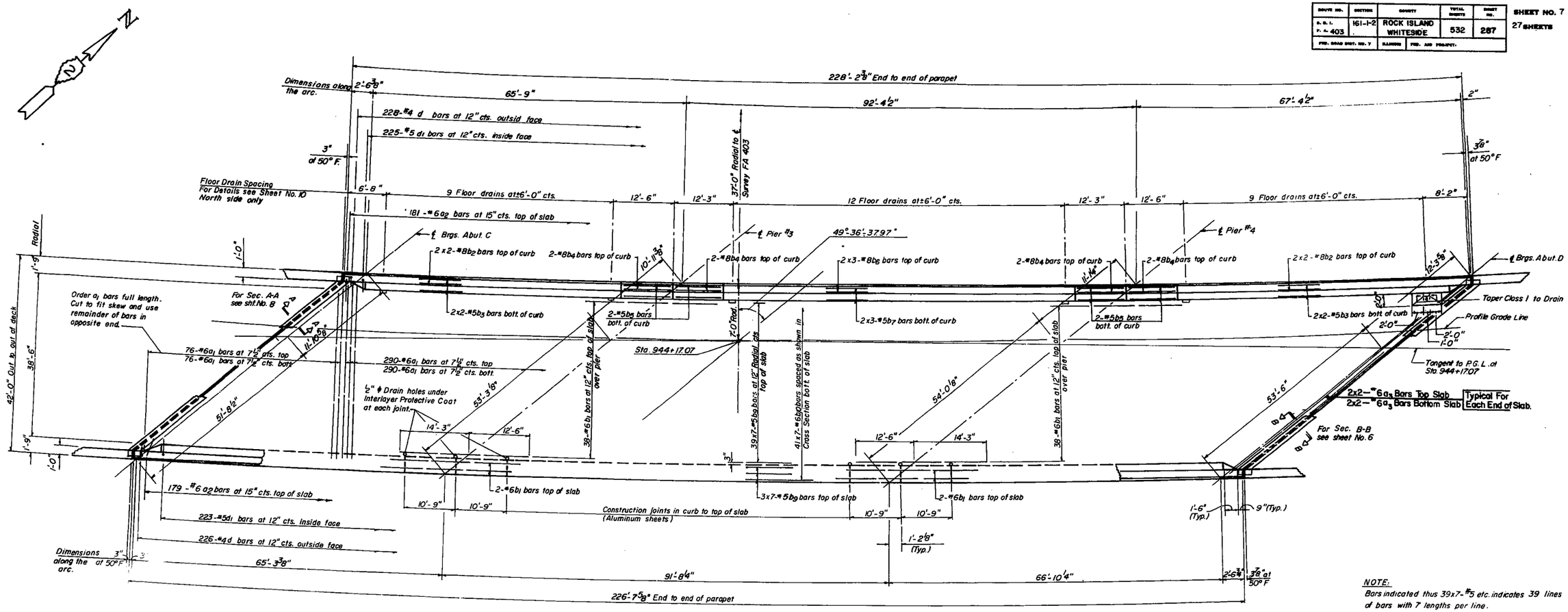
ROCK ISLAND & WHITE SIDE COUNTY

STATION 944+69.00

REV 9-27-72 L.S.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 403	161-1-2	ROCK ISLAND WHITESIDE	532	287
PRE. ROAD SHEET NO. 7	PLANNED	PRE. AND PROJECT.		

SHEET NO. 7
27 SHEETS



DECK PLAN
EAST BOUND ROADWAY

NOTE:
Bars indicated thus 39x7-#5 etc. indicates 39 lines of bars with 7 lengths per line.
Min. bar laps = 24 dia.
Parapet Reinforcement and Class X Conc. are billed on sheet No. 10

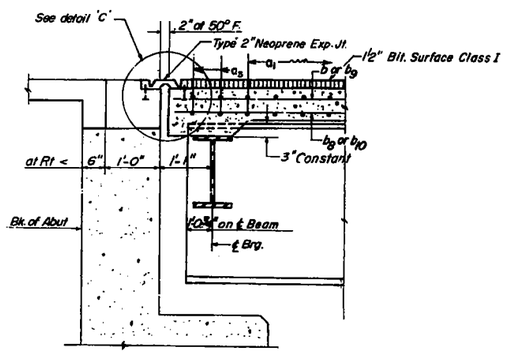
Work this sheet with sheets 6 & 8

DESIGNED	HRS
CHECKED	AA
DRAWN	GG
CHECKED	A.A.

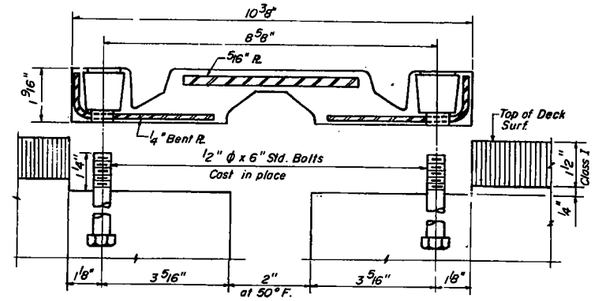
DECK SLAB
EAST BOUND ROADWAY
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00
REV. 9-27-72 L.S.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	288
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 8
27 SHEETS



SECTION A-A



DETAIL 'C'
NEOPRENE EXPANSION JOINT
(Abut. A & C only)

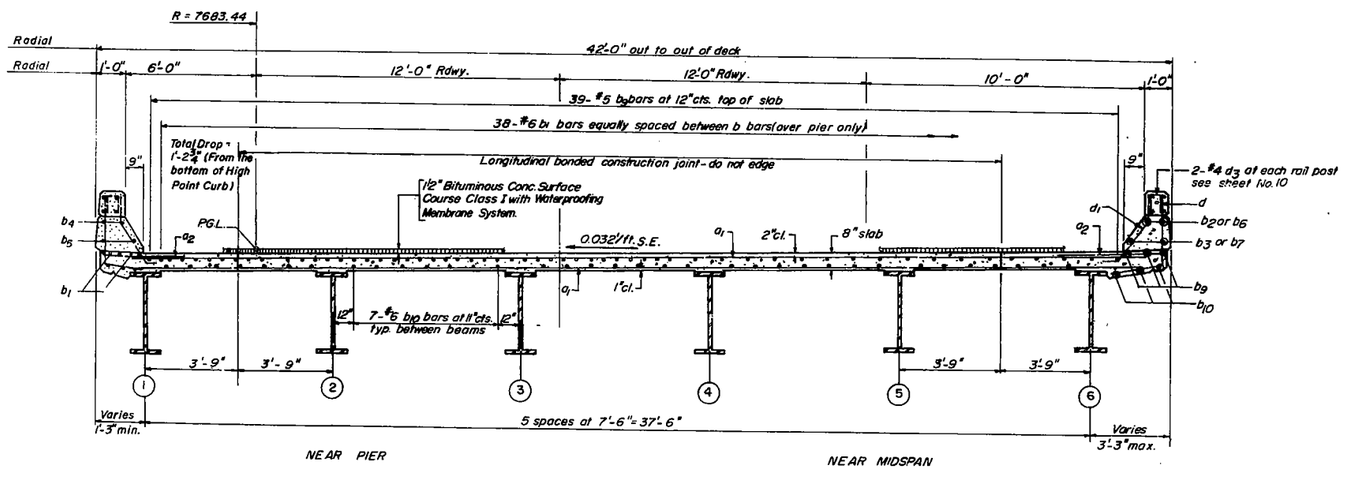
BILL OF MATERIAL

	BAR	NO.	SIZE	LENGTH	SHAPE
	a_1	732	#6	40'-0"	
	a_2	364	#6	4'-0"	
	a_3	16	#6	34'-3"	
	b_1	84	#6	26'-9"	
	b_2	16	#8	30'-0"	
	b_3	16	#5	29'-8"	
	b_4	16	#8	10'-6"	
	b_5	16	#5	10'-6"	
	b_6	12	#8	25'-8"	
	b_7	12	#5	25'-2"	
	b_9	315	#5	33'-9"	
	b_{10}	287	#6	33'-11"	
	d	454	#4	4'-7"	
	d_1	448	#5	3'-8"	
*	Reinforcement Bars			Lbs.	82,690
*	Class X Concrete			Cu.Yds.	245.7
**	Structural Steel			Lbs.	311,960
	Protective Coat			Sq. Yds.	220
	Bituminous Concrete Surface Course Class I			Tons	82
	Waterproof Membrane System			Sq. Yds.	973
	Neoprene Exp. Jt. 2½"			Lin. Ft.	66
	Neoprene Exp. Jt. 2"			Lin. Ft.	63

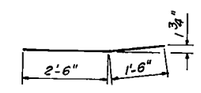
* Parapet Reinforcement and Class X Concrete are billed on sheet No. 10

** Weights of bearing assemblies with lead plates and anchor bolts are included as Structural Steel.

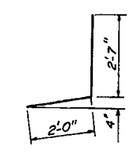
NOTE:
Work this sheet with sheets No. 6 & 7



CROSS SECTION
Looking Ahead Station

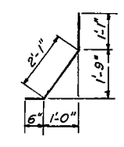


BAR a_2



BAR d

NOTE: For Curb Section See Sheet No. 6



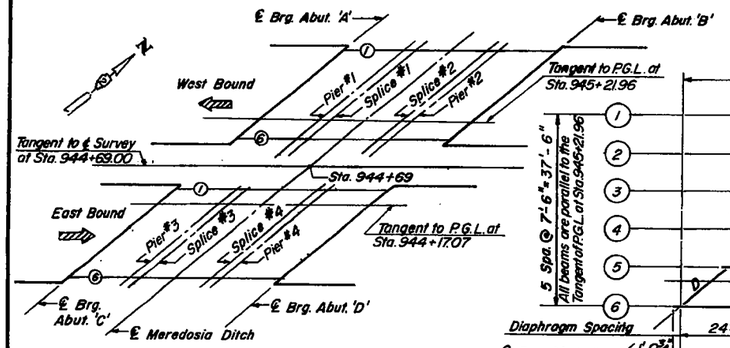
BAR d_1

DESIGNED	H. R. S.
CHECKED	A. A
DRAWN	A. M.
CHECKED	A. A.

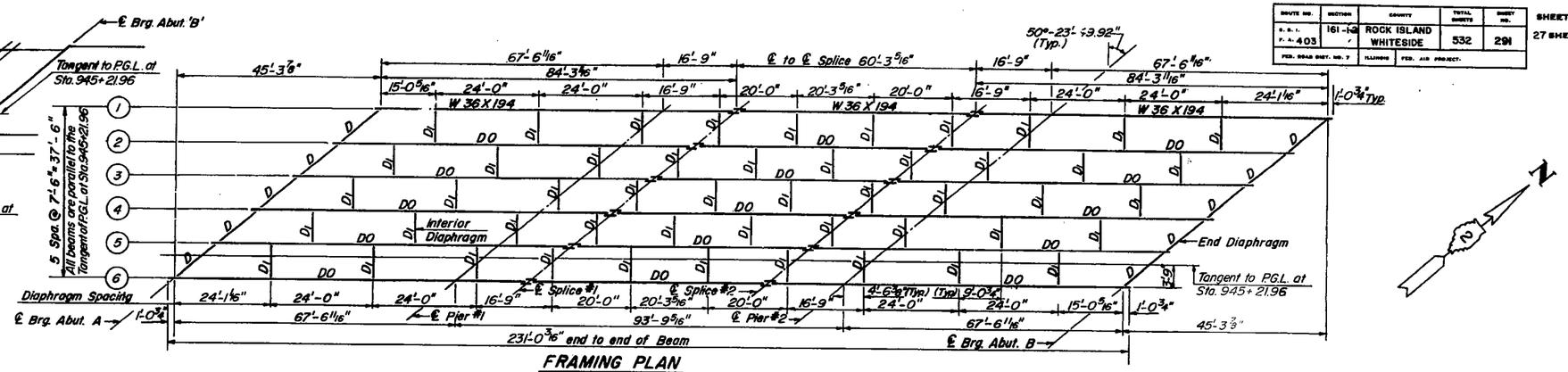
EAST BOUND DECK DETAILS
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00
REV. 9-27-72 L.S.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 403	161-1B	ROCK ISLAND WHITESIDE	532	291
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
27 SHEETS

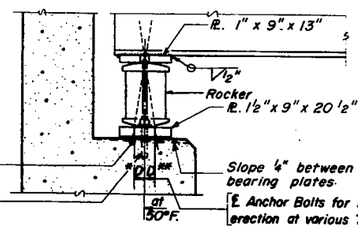


KEY PLAN

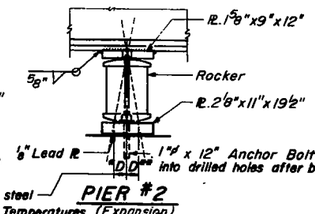


FRAMING PLAN
WEST BOUND

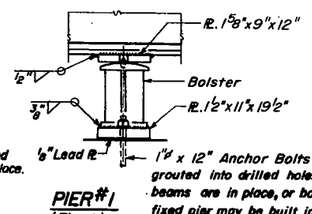
Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.



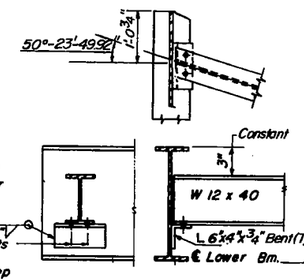
ABUTMENT BEARING



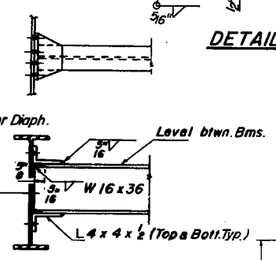
PIER #2



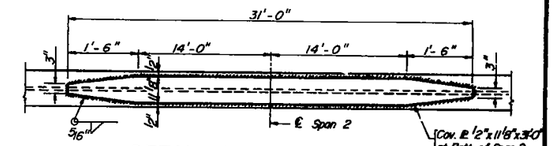
PIER #1
(Fixed)



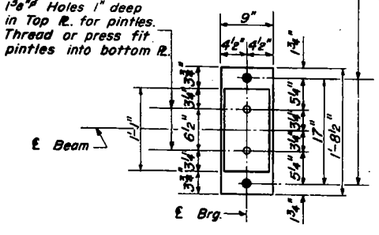
END DIAPHRAGM D
(10 D Required)



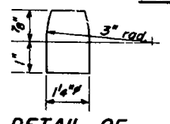
INTERIOR DIAPHRAGM D1
(50 D1 Required)



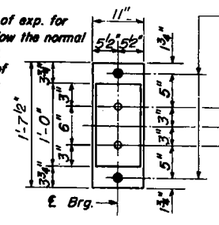
DETAIL OF COVER PLATE
AT MIDSPAN ONLY



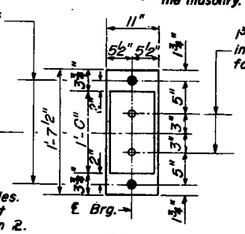
PLAN



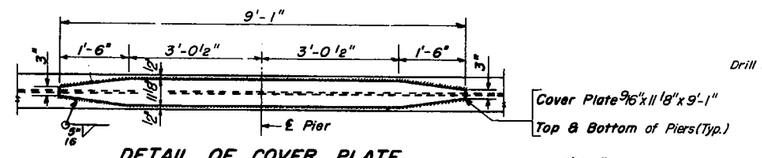
DETAIL OF PINTLE



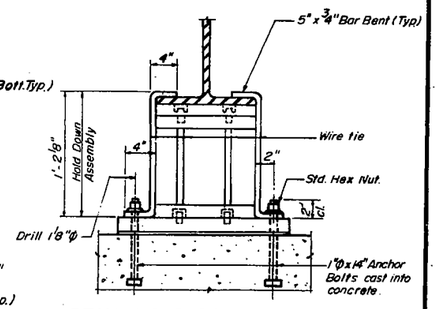
PLAN



PLAN

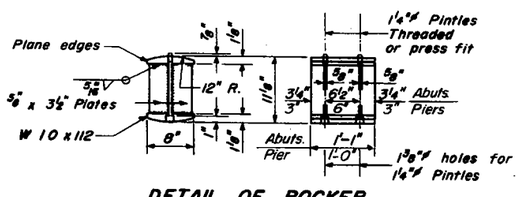


DETAIL OF COVER PLATE
AT PIERS #1 & #2

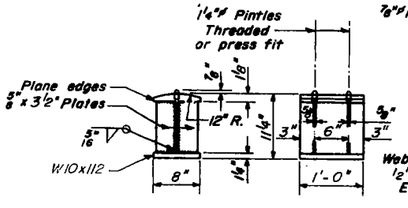


BEAM HOLD DOWN DETAIL

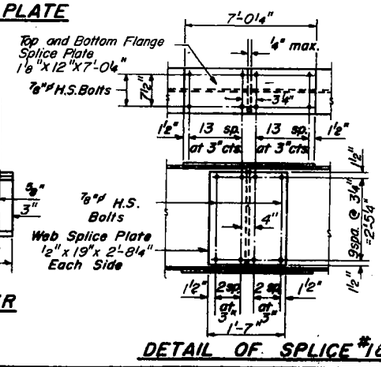
NOTE:
Beams shall be held down at the Abutment on the opposite end of Bridge from which the deck pour is commenced. After pouring is completed the Hold Down Assembly shall be removed and Nuts placed on Anchor Bolts.
Cost of Hold Down Assembly incidental to Class X Concrete.



DETAIL OF ROCKER
AT ABUTMENTS A & B
& PIER #2



DETAIL OF BOLSTER
AT PIER #1



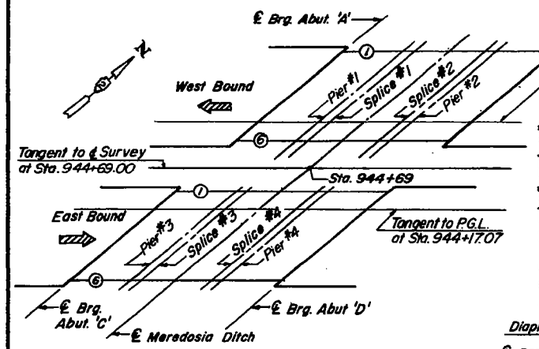
DETAIL OF SPLICE #1 & #2

DESIGNED	H.R.S.
CHECKED	A.A.
DRAWN	A.M.
CHECKED	A.A.

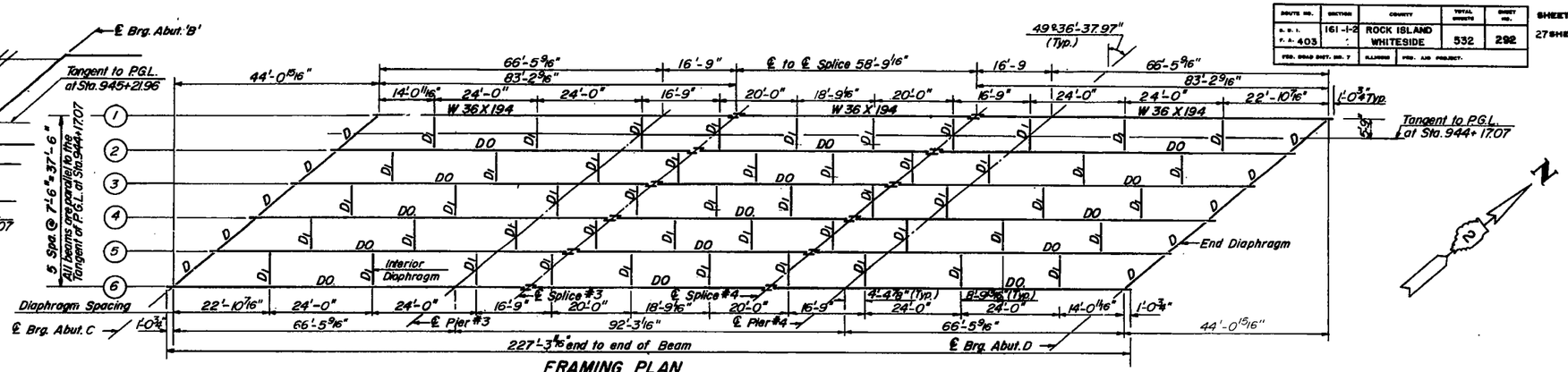
SUPERSTRUCTURE STEEL
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	292

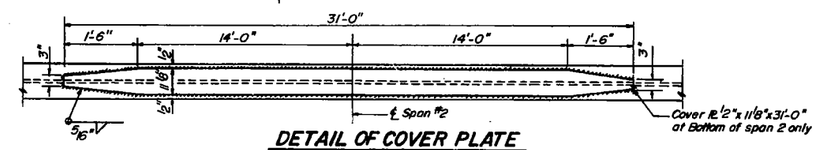
SHEET NO. 12
27 SHEETS



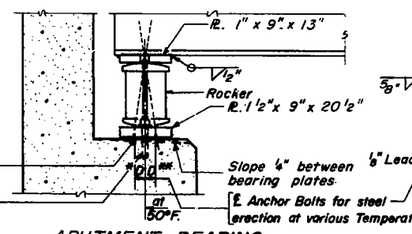
KEY PLAN



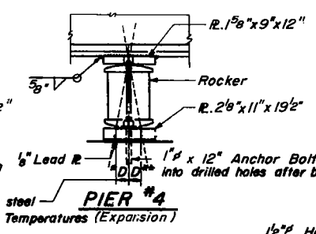
FRAMING PLAN
EAST BOUND



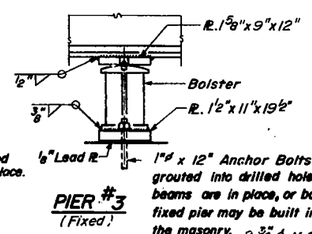
DETAIL OF COVER PLATE
AT MIDSPAN ONLY



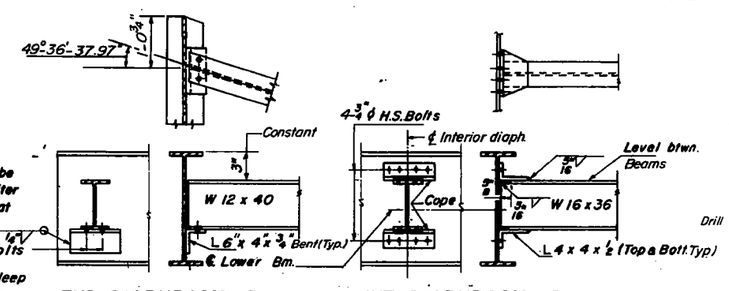
ABUTMENT BEARING



PIER #4

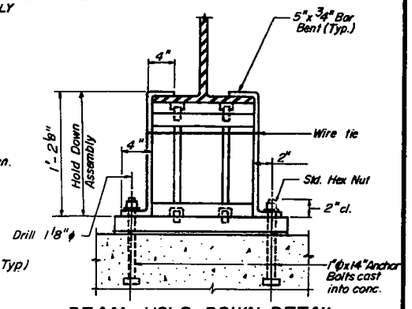


PIER #3
(Fixed)



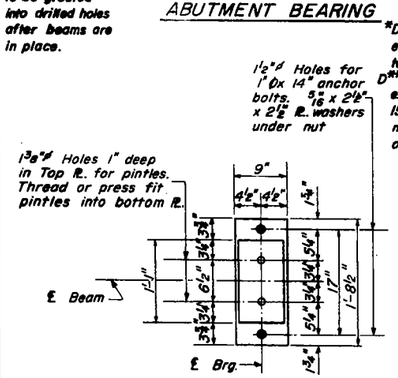
END DIAPHRAGM D
10 Required Each Bridge

INT. DIAPHRAGM D1
50 Required Each Bridge

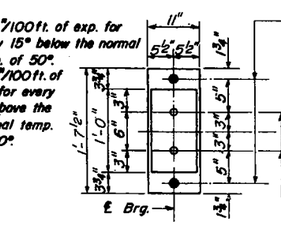


BEAM HOLD DOWN DETAIL

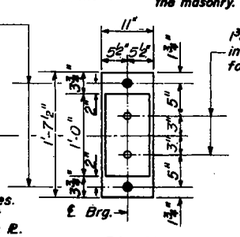
NOTE:
Beams shall be held down at the Abutment on the opposite end of Bridge from which the deck pour is commenced. After pouring is completed the Hold Down Assembly shall be removed and Nuts placed on Anchor Bolts.
Cost of Hold Down Assembly incidental to Class X Concrete.



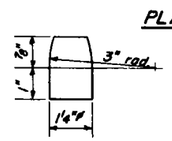
PLAN



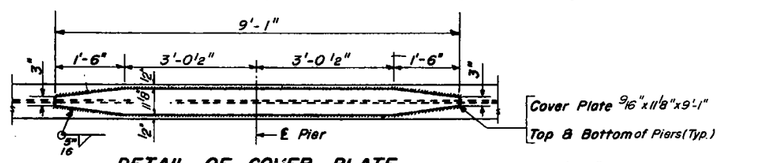
PLAN



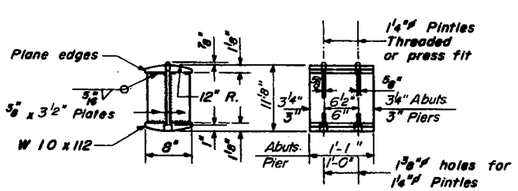
PLAN



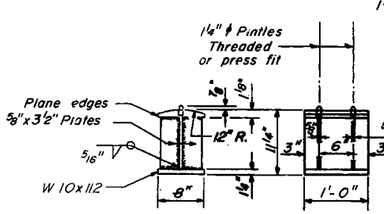
DETAIL OF PINTLE



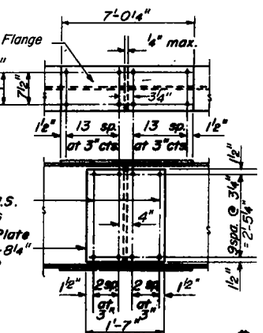
DETAIL OF COVER PLATE
AT PIERS #3 & #4



DETAIL OF ROCKER AT ABUTMENTS C & D & PIER #4



DETAIL OF BOLSTER AT PIER #3



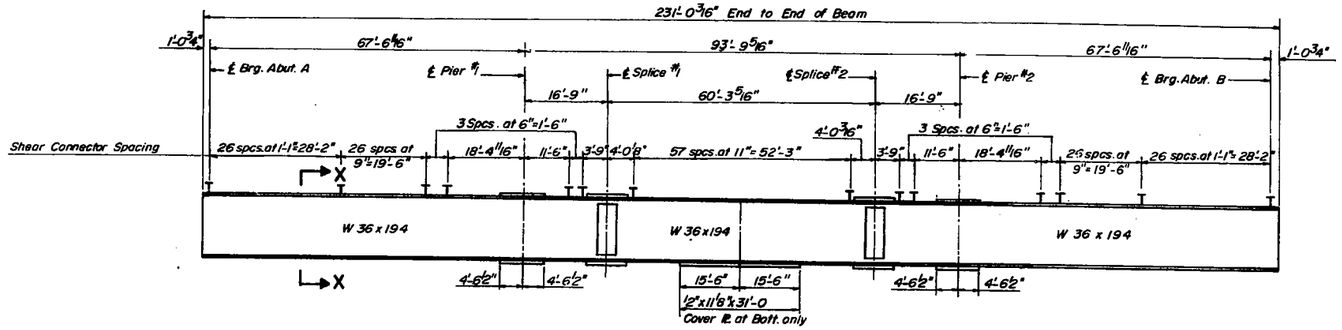
DETAIL OF SPLICE #3 & #4

DESIGNED	H.R.S.
CHECKED	A.A.
DRAWN	A.M.
CHECKED	A.A.

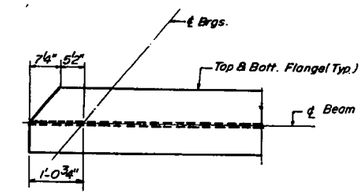
SUPERSTRUCTURE STEEL
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U. S. I. F. A. 403	161-I-2	ROCK ISLAND WHITESIDE	532	293
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

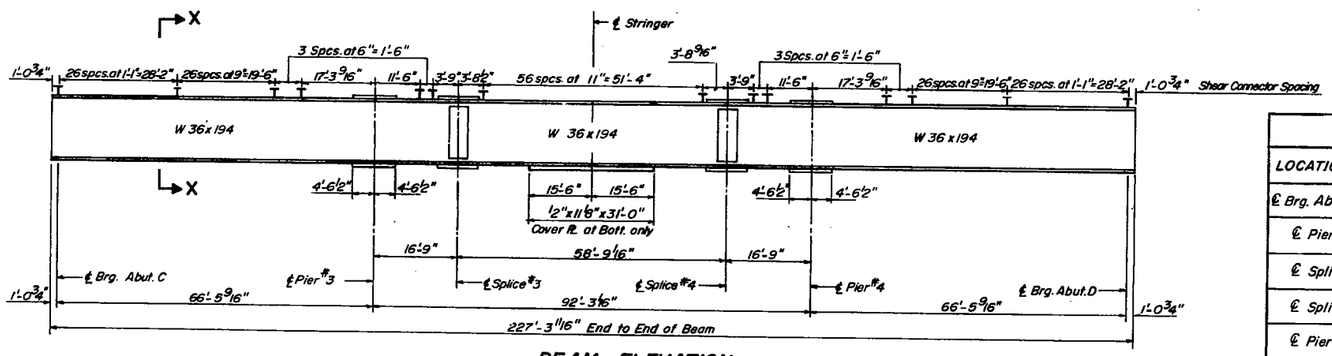
SHEET NO. 13
27 SHEETS



BEAM ELEVATION
WEST BOUND (TYP.)



TYPICAL BEAM END



BEAM ELEVATION
EAST BOUND (TYP.)

WEST BOUND BRIDGE

*TOP OF BEAM ELEVATIONS						
LOCATION	BEAM #1	BEAM #2	BEAM #3	BEAM #4	BEAM #5	BEAM #6
℄ Brg. Abut A	590.53	590.77	591.01	591.26	591.50	591.74
℄ Pier 1	590.46	590.71	590.95	591.19	591.44	591.68
℄ Splice 1	590.45	590.69	590.94	591.18	591.42	591.66
℄ Splice 2	590.42	590.66	590.91	591.15	591.40	591.64
℄ Pier 2	590.41	590.66	590.91	591.15	591.40	591.64
℄ Brg. Abut B	590.41	590.66	590.91	591.15	591.40	591.65

EAST BOUND BRIDGE

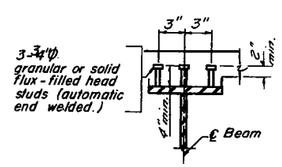
* TOP OF BEAM ELEVATIONS						
LOCATION	BEAM #1	BEAM #2	BEAM #3	BEAM #4	BEAM #5	BEAM #6
℄ Brg. Abut C	591.36	591.59	591.83	592.06	592.30	592.53
℄ Pier 3	591.35	591.58	591.82	592.05	592.29	592.52
℄ Splice 3	591.34	591.58	591.82	592.05	592.29	592.52
℄ Splice 4	591.36	591.60	591.84	592.07	592.31	592.55
℄ Pier 4	591.38	591.61	591.85	592.09	592.33	592.56
℄ Brg. Abut D	591.43	591.67	591.91	592.15	592.39	592.63

* For Fabrication Only

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 or 3	Pier 1 or 2	0.5 Sp. 2
Is	(in)	12103.	16393	13835
Ic	(in)	28982	—	34169
Ss	(in)	663.5	871.9	809.1
Sc	(in)	936.5	—	1132.7
ℙ	(k 1)	1.00	1.048	1.020
MD	(1k)	276.61	698	421.27
fs D	(ksi)	5.00	9.61	6.25
S D	(k 1)	.47	.47	.47
Ms D	(1k)	154.6	257.17	259.51
ML+Imp.	(1k)	703.7	486.3	818.0
Total	(1k)	858.3	743.47	1077.51
fs L	(ksi)	11.00	10.23	11.42
fs Total	(ksi)	16.0	20.0	17.67
VR	(k)	55.0	—	55.5

(Composite in Positive Moment Areas only)

INTERIOR BEAM REACTION TABLE		
	Abutment	Pier
R D (k)	35.8	132.4
R L+Imp. (k)	58.2	77.0
R Total (k)	94.0	209.4



SECTION X-X

No. Req'd. 3204 West Bound
3186 East Bound

DESIGNED	H.R.S
CHECKED	A.A.
DRAWN	A.S.
CHECKED	A.A.

I_s and S_s are the moment of inertia and section modulus of the steel section.
I_c and S_c are the moment of inertia and section modulus of the composite section used in computing fs.
VR is the maximum L + Impact shear range in span.

SUPERSTRUCTURE STEEL
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

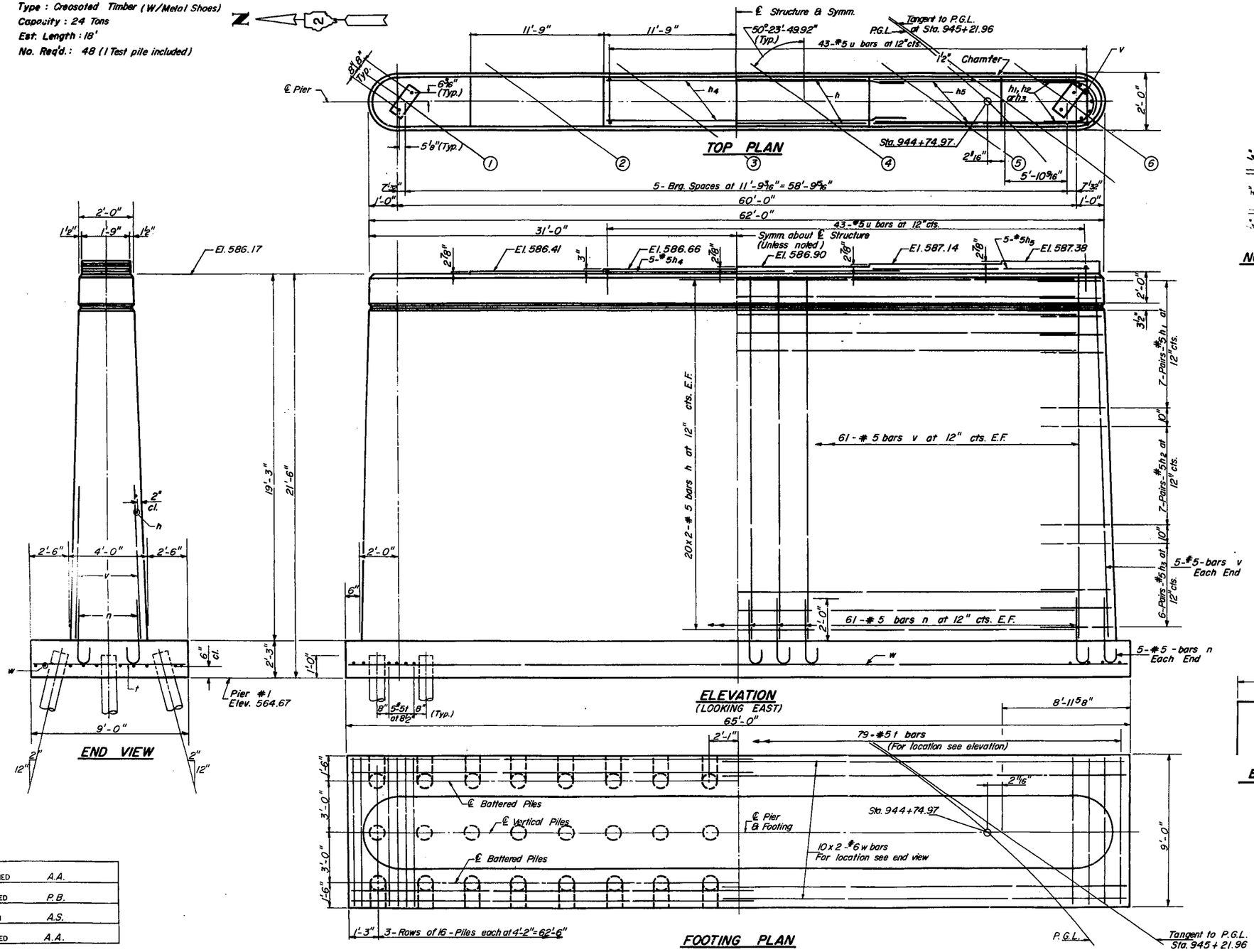
BLANKER & KERN, INC., CHICAGO

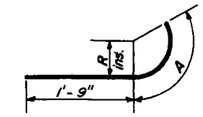
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 403	161-1B	ROCK ISLAND WHITESIDE	532	294
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

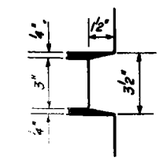
SHEET NO. 14
27 SHEETS

PILE DATA

Type : Creosoted Timber (W/Metal Shoes)
Capacity : 24 Tons
Est. Length : 18'
No. Req'd. : 48 (1 Test pile included)

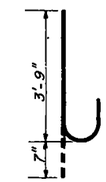




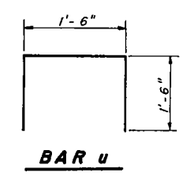


Bar	R	A
h_1	10"	2'-3"
h_2	14"	2'-9"
h_3	18"	3'-3"

DETAIL OF BARS
h_1, h_2 & h_3



BAR n



BAR u

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	80	#5	30'-10"	
h_1	28	#5	4'-0"	
h_2	28	#5	4'-6"	
h_3	24	#5	5'-0"	
h_4	5	#5	24'-6"	
h_5	5	#5	18'-6"	
n	132	#5	4'-4"	
t	79	#5	8'-8"	
v	132	#5	19'-0"	
u	43	#5	4'-6"	
w	20	#6	33'-1"	
Metal Shoes			Each	48
Class X Concrete			Cu. Yds.	184.6
Reinforcement Bars			Lbs.	8,290
Creosoted Timber Piles (10"/18"/20")			Lin. Ft.	846
Test Pile			Each	1
Structural Excavation			Cu. Yds.	167

DESIGNED	A.A.
CHECKED	P.B.
DRAWN	A.S.
CHECKED	A.A.

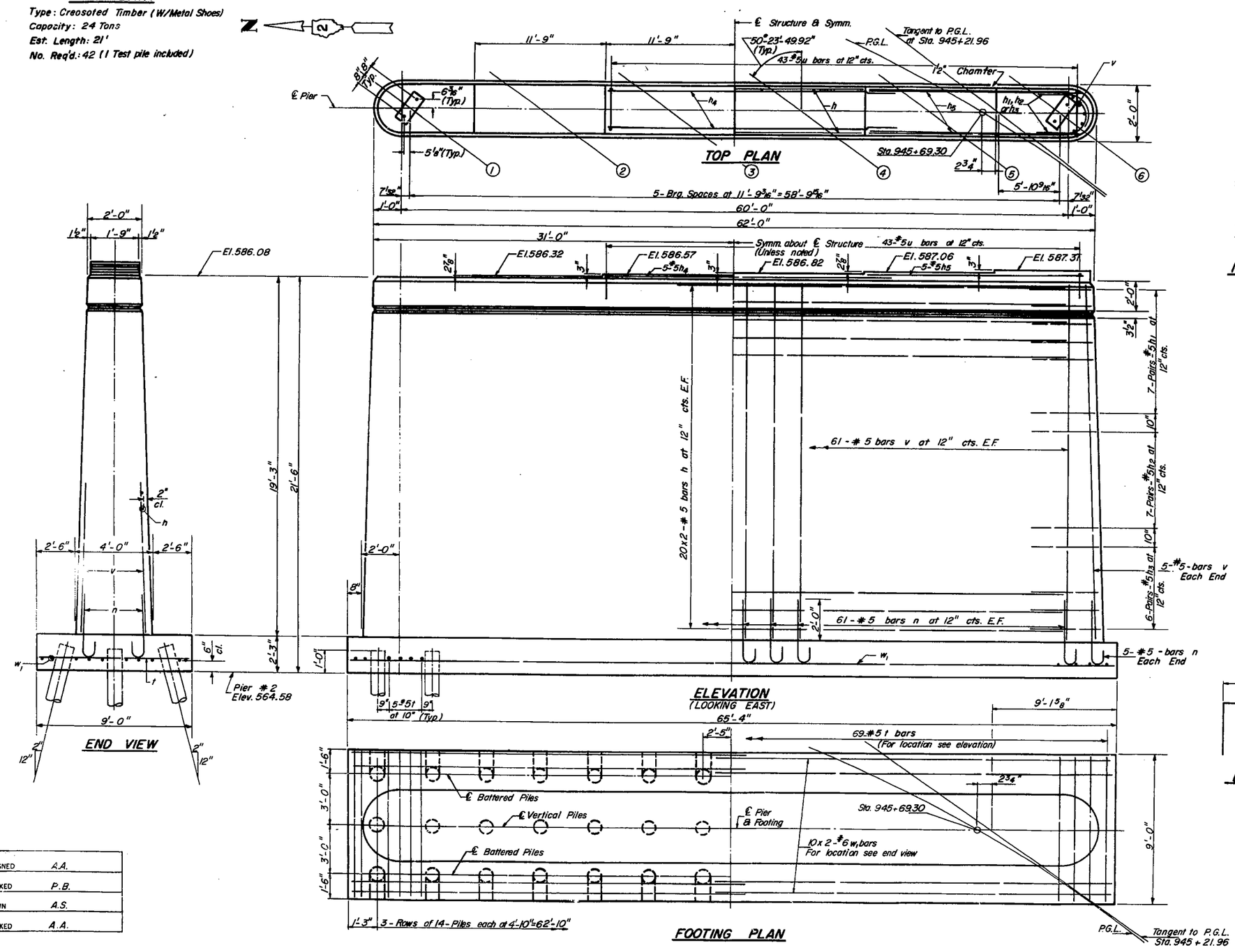
PIER #1
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

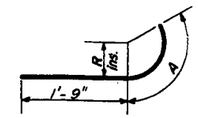
ROUTE NO.	SECT-ION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B. F.A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	295
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

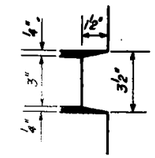
SHEET NO. 15
27 SHEETS

PILE DATA

Type: Creosoted Timber (W/Metal Shoes)
Capacity: 24 Tons
Est. Length: 21'
No. Req'd.: 42 (1 Test pile included)



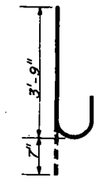




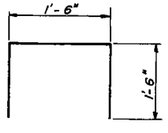
NOTCH DETAIL

Bar	R	A
h_1	10"	2'-3"
h_2	14"	2'-9"
h_3	18"	3'-3"

DETAIL OF BARS
h_1, h_2, & h_3



BAR n



BAR u

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	80	#5	30'-10"	
h_1	28	#5	4'-0"	
h_2	28	#5	4'-6"	
h_3	24	#5	5'-0"	
h_4	5	#5	24'-6"	
h_5	5	#5	18'-6"	
n	132	#5	4'-4"	
t	69	#5	8'-8"	
v	132	#5	19'-0"	
u	43	#5	4'-6"	
w_1	20	#6	33'-3"	
Metal Shoes			Each	42
Class X Concrete			Cu. Yds.	184.8
Reinforcement Bars			Lbs.	8,210
Creosoted Timber Piles			Lin. Ft.	861
Test Pile			Each	1
Structural Excavation			Cu. Yds.	171

NOTE:
For detail of metal pile shoes see sheet No. 14

DESIGNED	A.A.
CHECKED	P.B.
DRAWN	A.S.
CHECKED	A.A.

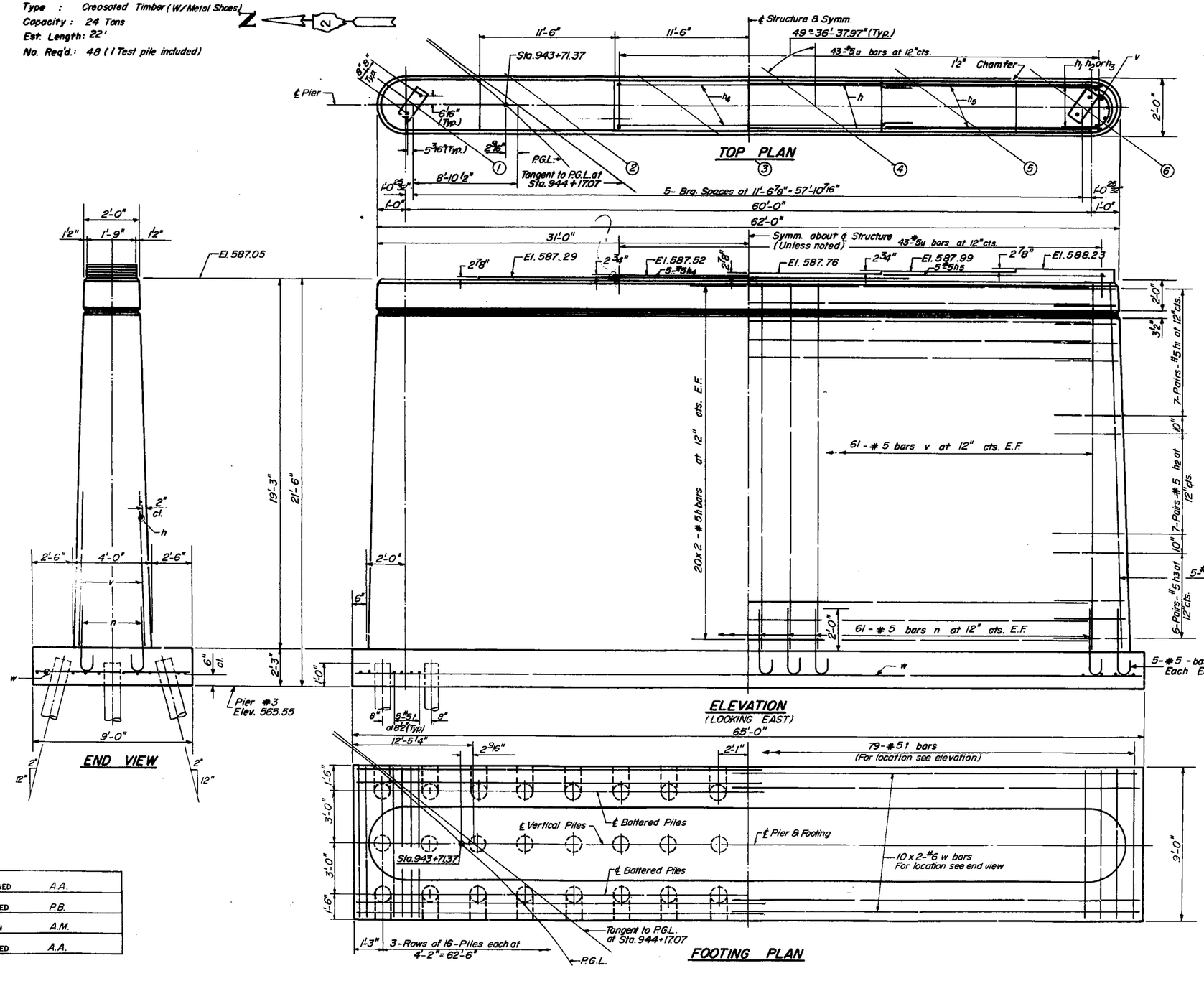
PIER #2
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

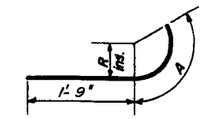
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 403	161-1-2	ROCK ISLAND WHITESIDE	532	296
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

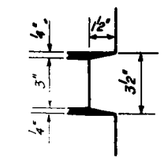
SHEET NO. 16
27 SHEETS

PILE DATA

Type : Creosoted Timber (W/Metal Shoes)
Capacity : 24 Tons
Est. Length: 22'
No. Req'd.: 48 (1 Test pile included)



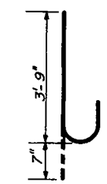




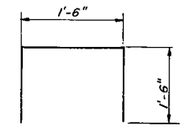
NOTCH DETAIL

Bar	R	A
h	10"	2'-3"
h	14"	2'-9"
h	18"	3'-3"

DETAIL OF BARS
h_1, h_2 & h_3



BAR n



BAR u

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	80	#5	30'-10"	—
h_1	28	#5	4'-0"	⌒
h_2	28	#5	4'-6"	⌒
h_3	24	#5	5'-0"	⌒
h_4	5	#5	24'-6"	—
h_5	5	#5	18'-6"	—
n	132	#5	4'-4"	⌒
t	79	#5	8'-8"	—
v	132	#5	19'-0"	—
u	43	#5	4'-6"	⊓
w	20	#6	33'-1"	—
Metal Shoes			Each	48
Class X Concrete			Cu. Yds.	184.5
Reinforcement Bars			Lbs.	8,290
Creosoted Timber Piles			Lin. Ft.	1034
Test Pile			Each	1
Structural Excavation			Cu. Yds.	143

NOTE :
For detail of metal pile shoes see sheet No. 14

DESIGNED	A.A.
CHECKED	P.B.
DRAWN	A.M.
CHECKED	A.A.

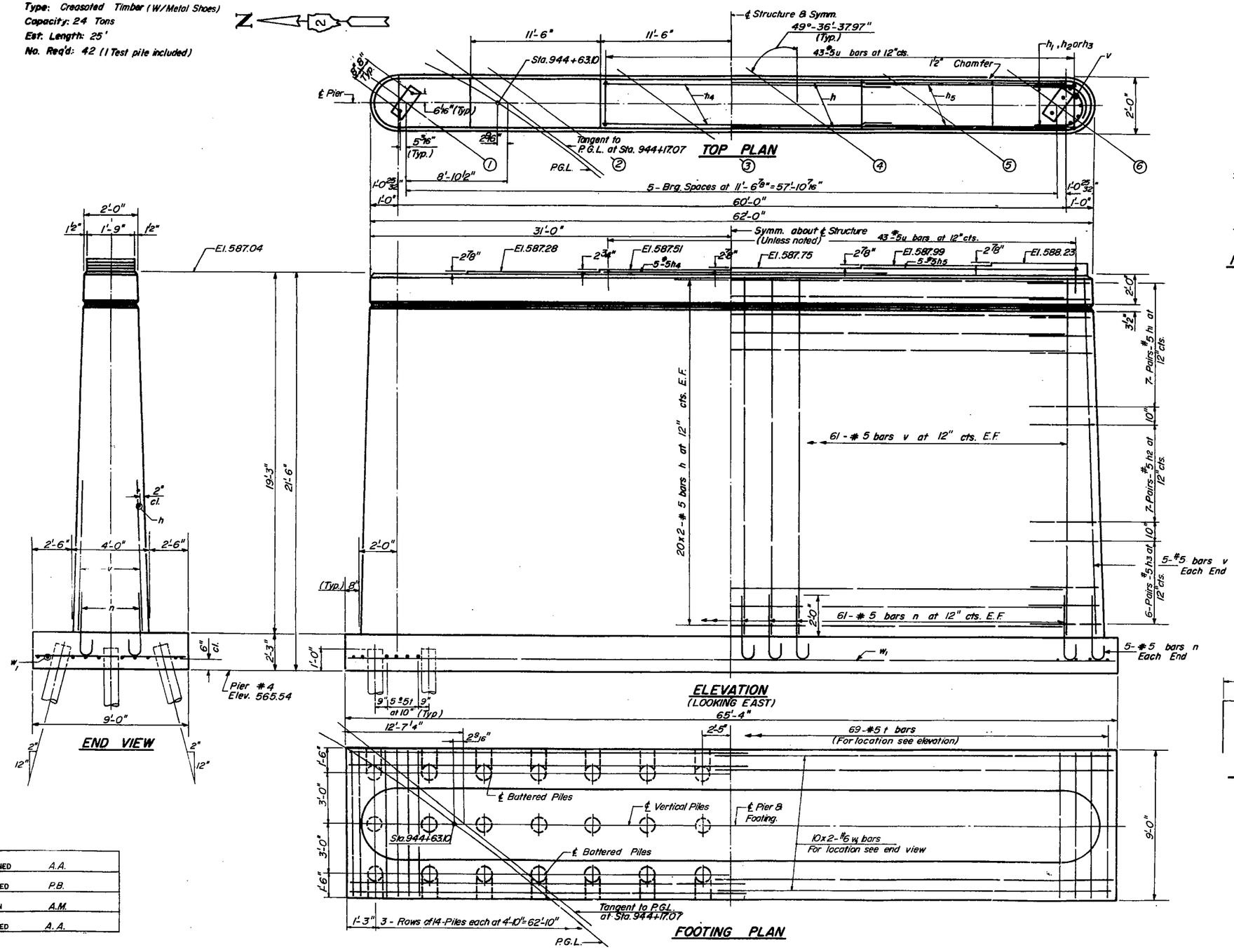
PIER #3
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00
REV. 9-27-72 L.S.

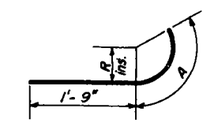
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	297
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 17
27 SHEETS

PILE DATA

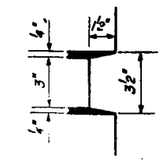
Type: Creosoted Timber (W/Metal Shoes)
Capacity: 24 Tons
Est. Length: 25'
No. Req'd: 42 (1 Test pile included)



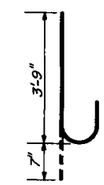


Bar	R	A
h1	10"	2'-3"
h2	14"	2'-9"
h3	18"	3'-3"

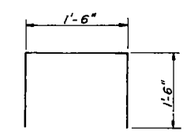
DETAIL OF BARS
h1, h2, & h3



NOTCH DETAIL



BAR n



BAR u

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	80	#5	30'-10"	—
h1	28	#5	4'-0"	⌒
h2	28	#5	4'-6"	⌒
h3	24	#5	5'-0"	⌒
h4	5	#5	24'-6"	—
h5	5	#5	18'-6"	—
n	132	#5	4'-4"	⊂
t	69	#5	8'-8"	—
v	132	#5	19'-0"	—
u	43	#5	4'-6"	⊓
w1	20	#6	33'-3"	—
Metal Shoes			Each	42
Class X Concrete			Cu. Yds.	184.7
Reinforcement Bars			Lbs.	8,210
Creosoted Timber Piles			Lin. Ft.	1025
Test Pile			Each	1
Structural Excavation			Cu. Yds.	144

NOTE:
For detail of metal pile shoe see sheet No. 14.

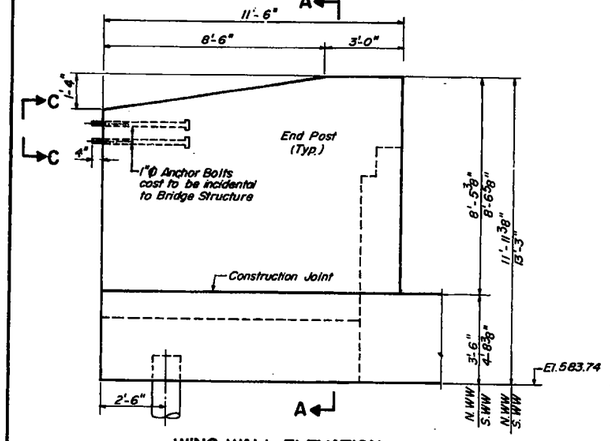
DESIGNED	A.A.
CHECKED	P.B.
DRAWN	A.M.
CHECKED	A.A.

PIER #4

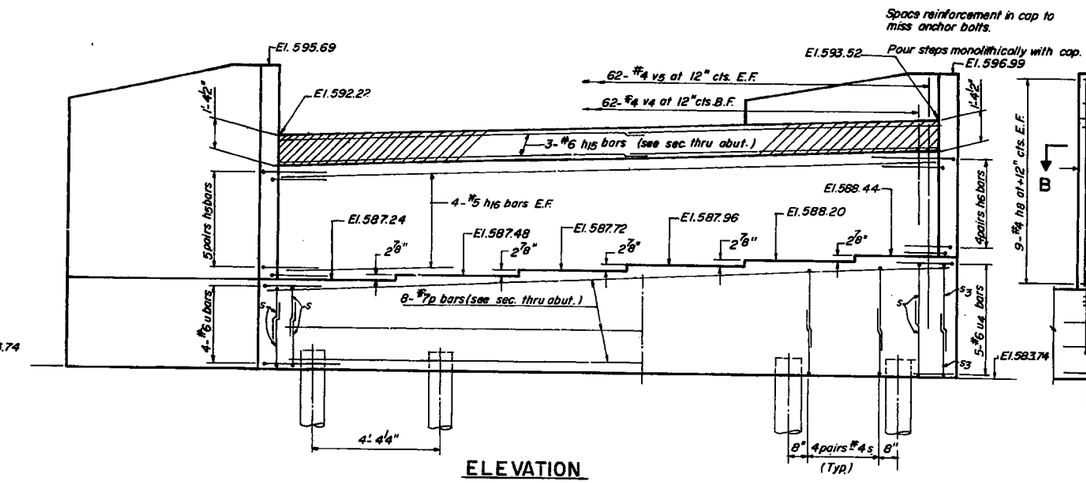
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00
REV. 9-27-72 L.S.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U. S. I. F. A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	301
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

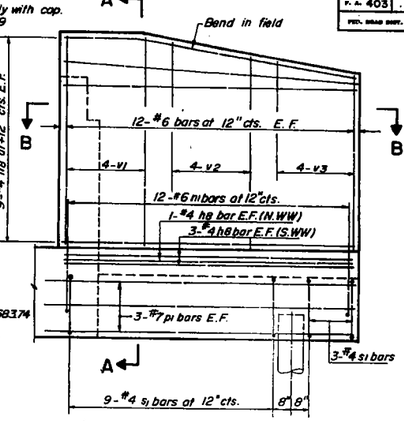
SHEET NO. 21
27 SHEETS



WING WALL ELEVATION



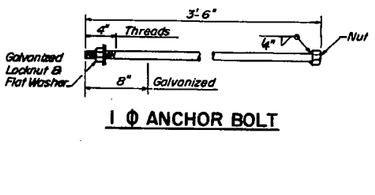
ELEVATION



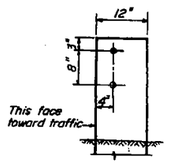
WING WALL ELEVATION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5	8	#5	4'-0"	
h6	8	#5	4'-0"	
h8	44	#4	11'-3"	
h15	6	#6	32'-0"	
h16	16	#5	31'-10"	
n1	24	#6	11'-7"	
p	16	#7	32'-9"	
p1	12	#7	11'-6"	
s	118	#4	9'-10"	
s1	24	#4	9'-5"	
s3	2	#4	9'-5"	
u	4	#6	11'-2"	
u4	5	#6	10'-6"	
v1	16	#6	8'-1"	
v2	16	#6	7'-5"	
v3	16	#6	6'-9"	
v4	62	#4	3'-5"	
v5	124	#4	4'-9"	
v6	38	#5	3'-0"	
Class X Concrete			Cu. Yds.	81.10
Reinforcement Bars			Lbs.	5260
Concrete Piles			Lin. Ft.	736
Concrete Test Pile			Each	1
Removal and Replacement of Granular Materials			Cu. Yds.	856

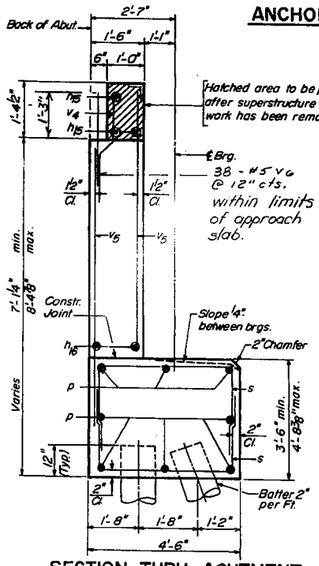


I Φ ANCHOR BOLT

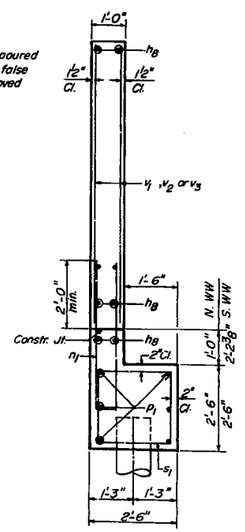


VIEW C-C

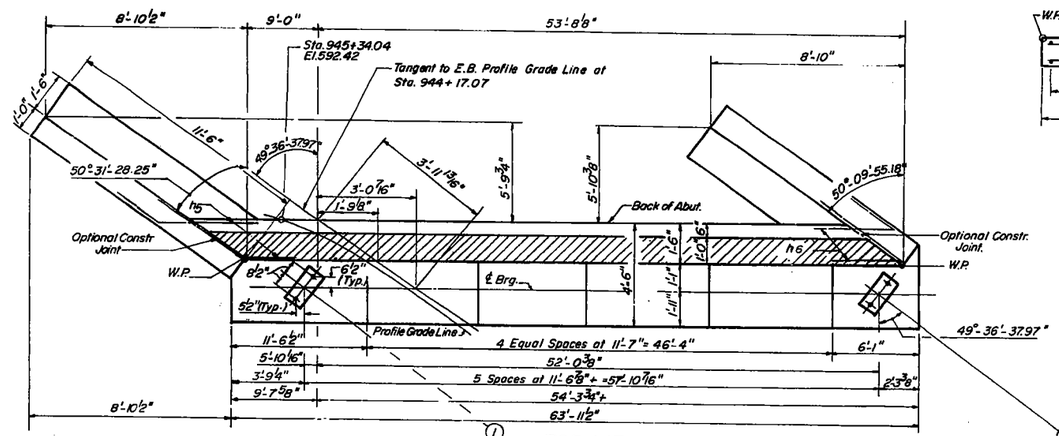
ANCHOR BOLT DETAILS



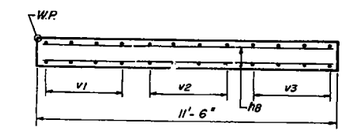
SECTION THRU ABUTMENT



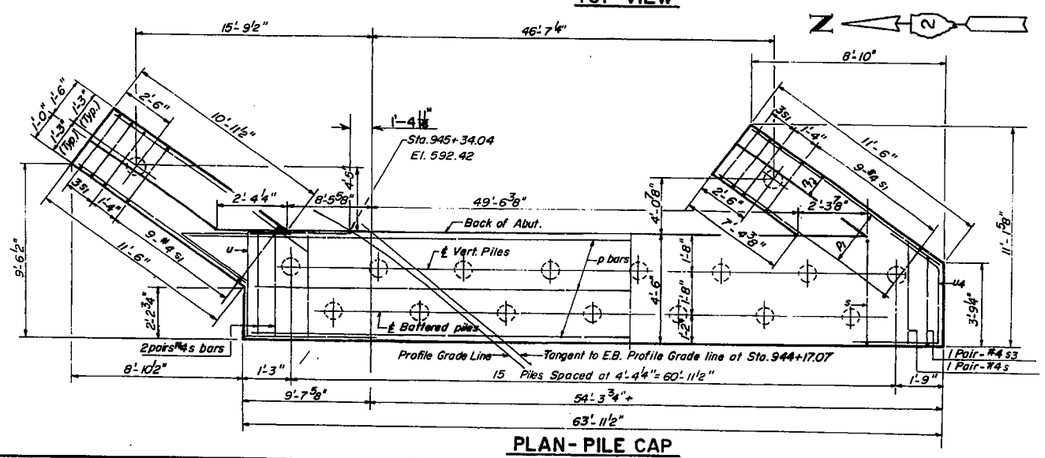
SECTION A-A



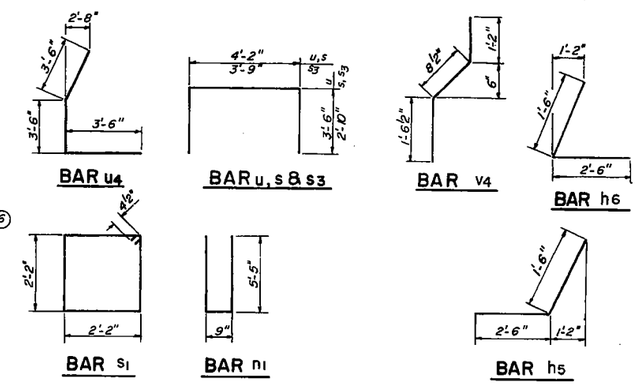
TOP VIEW



SECTION B-B



PLAN-PILE CAP



DESIGNED	H.R.S. & A.A.
CHECKED	P.B.
DRAWN	A.M.
CHECKED	H.R.S.

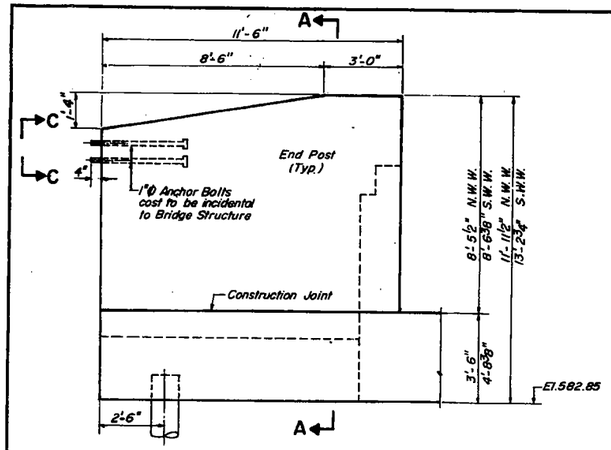
PILE DATA
Type ---------- Concrete
Capacity 35 Tons
Est. Length ---- 46'-0"
No. Req'd. ------ 17 (Including 1 test pile)

ABUTMENT D
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00
REV. 9-27-72 L.S.

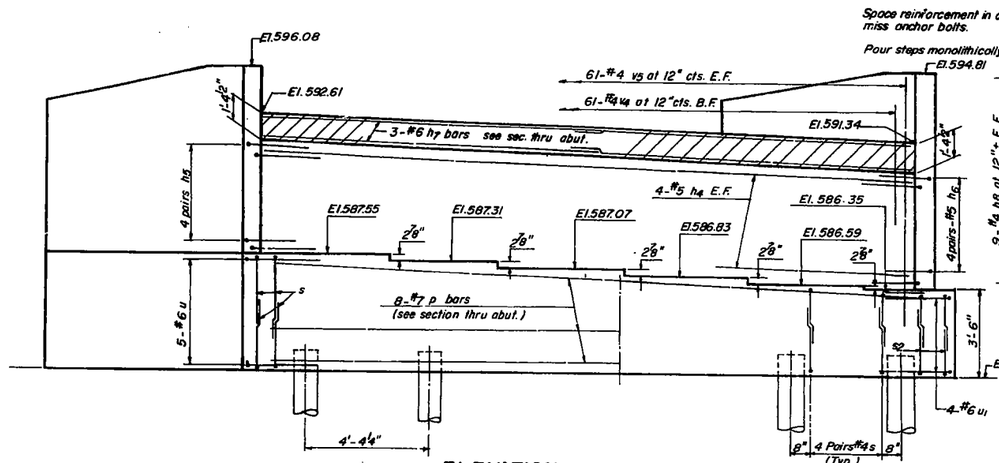
Rev. Reinf. Bars from 5140# to 5260# 8-12-74 D.D.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U. S. R. 1. F. A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	298
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

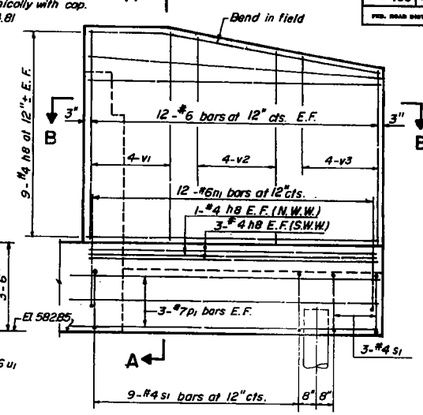
SHEET NO. 18
27 SHEETS



WING WALL ELEVATION



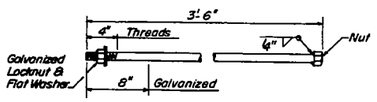
ELEVATION



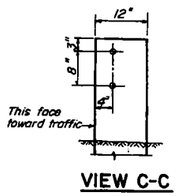
WING WALL ELEVATION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_4	16	#5	31'-3"	
h_5	8	#5	4'-0"	
h_6	8	#5	4'-0"	
h_7	6	#6	31'-5"	
h_8	44	#4	11'-3"	
n_1	24	#6	11'-7"	
p	16	#7	32'-9"	
p_1	12	#7	11'-6"	
s	116	#4	9'-10"	
s_1	24	#4	9'-5"	
s_2	4	#4	8'-3"	
u	5	#6	11'-2"	
u_1	4	#6	9'-9"	
v_1	16	#6	8'-1"	
v_2	16	#6	7'-5"	
v_3	16	#6	6'-9"	
v_4	61	#4	3'-5"	
v_5	122	#4	4'-9"	
v_6	38	#5	3'-0"	
Class X Concrete			Cu. Yds.	71.6
Reinforcement Bars			Lbs.	5230
Concrete Piles			Lin. Ft.	704
Concrete Test Pile			Each	1
Removal and Replacement of Granular Materials			Cu. Yds.	1141

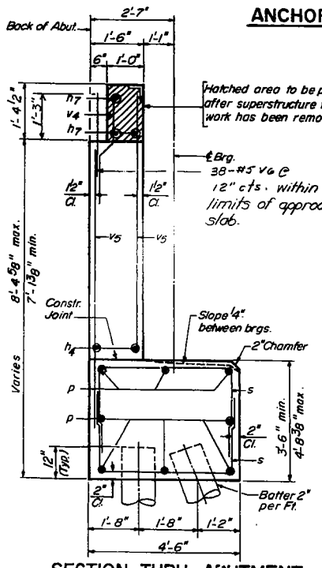


I Φ ANCHOR BOLT

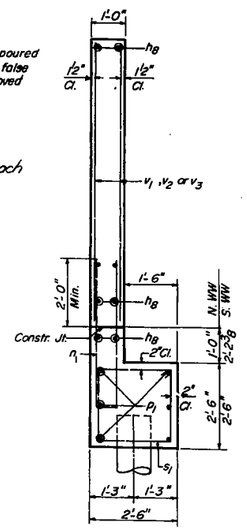


VIEW C-C

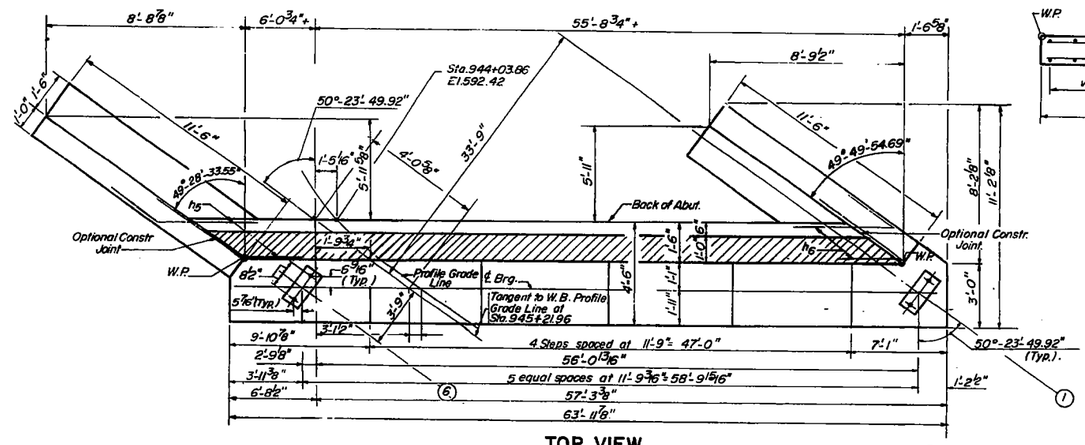
ANCHOR BOLT DETAILS



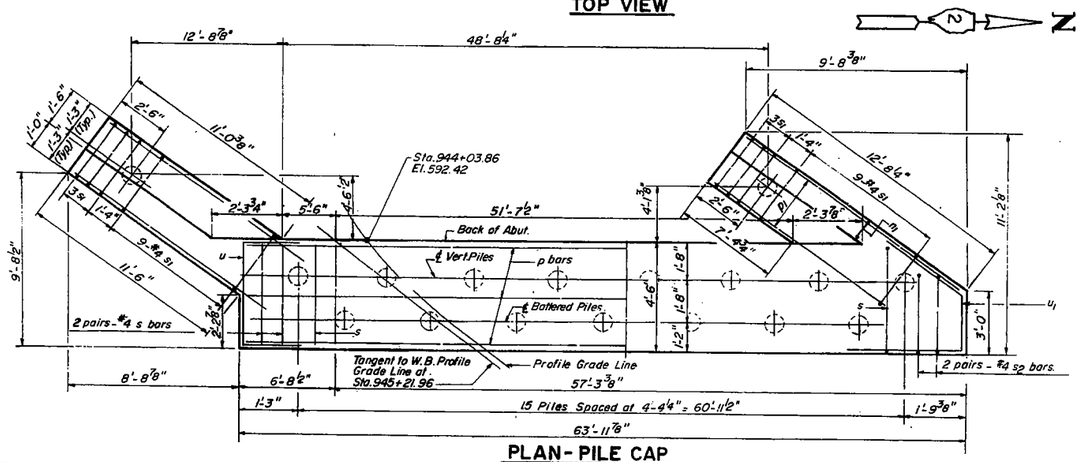
SECTION THRU ABUTMENT



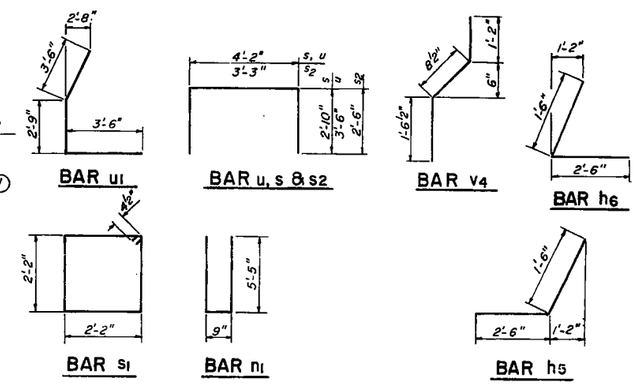
SECTION A-A



TOP VIEW



PLAN-PILE CAP



DESIGNED	H. R. S. & A. A.
CHECKED	P. B.
DRAWN	A. M.
CHECKED	H. R. S.

PILE DATA

Type----------Concrete
Capacity------35 Tons
F.st. length------44'-0"
No. Req'd.------17 (Including 1 test pile)

ABUTMENT A

FA 403 SECTION 161-1B-4

FA 403 OVER MEREDOSIA DITCH

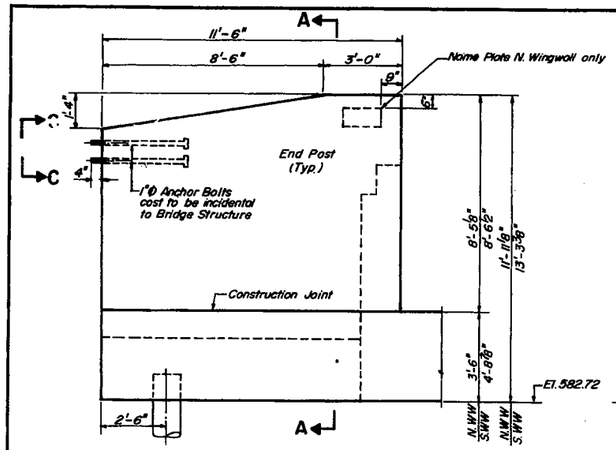
ROCK ISLAND & WHITE SIDE COUNTY

STATION 944+69.00

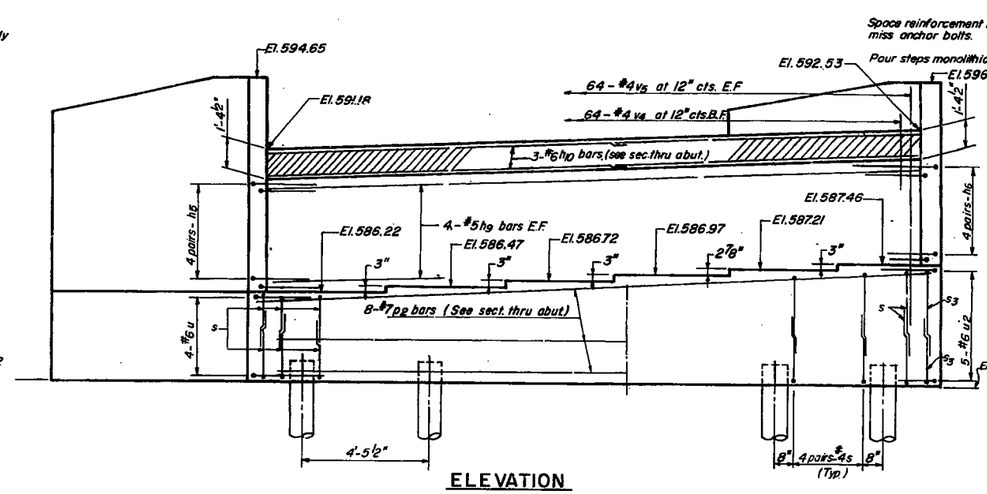
Rev. Reinf. Bars from 5110# to 5230# 8-8-74 D.D.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. No. 403	161-1-2	ROCK ISLAND WHITESIDE	532	299
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

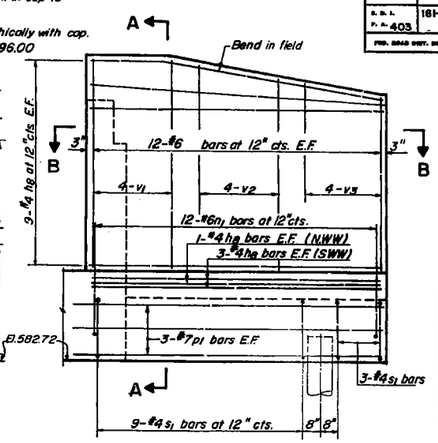
SHEET NO. 19
27 SHEETS



WING WALL ELEVATION



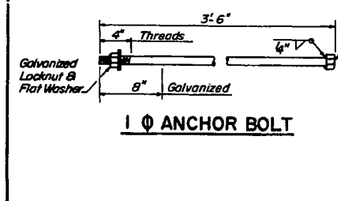
ELEVATION



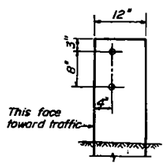
WING WALL ELEVATION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h5	8	#5	4'-0"	
h6	8	#5	4'-0"	
h8	44	#4	11'-3"	
h9	16	#5	32'-6"	
h10	6	#6	32'-8"	
n1	24	#6	11'-7"	
p1	12	#7	11'-6"	
p2	16	#7	33'-6"	
s	118	#4	9'-10"	
s1	24	#4	9'-5"	
s3	2	#4	9'-5"	
u	4	#6	11'-2"	
u2	5	#6	10'-6"	
v1	16	#6	8'-1"	
v2	16	#6	7'-5"	
v3	16	#6	6'-9"	
v4	64	#4	3'-5"	
v5	128	#4	4'-9"	
v6	38	#5	3'-0"	
Class X Concrete			Cu. Yds.	83.2
Reinforcement Bars			Lbs.	5320
Concrete Piles			Lin. Ft.	720
Concrete Test Pile			Each	1
Name Plate			Each	1
Removal and Replacement of Granular Materials			Cu. Yds.	1000

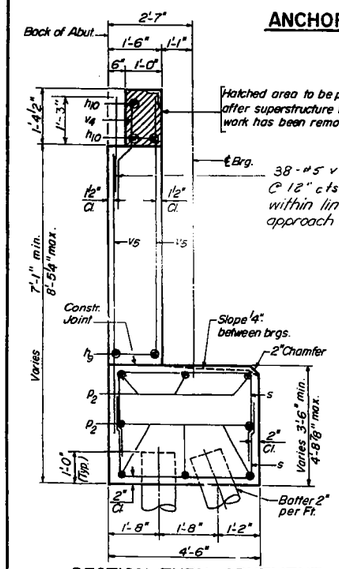


1 Φ ANCHOR BOLT

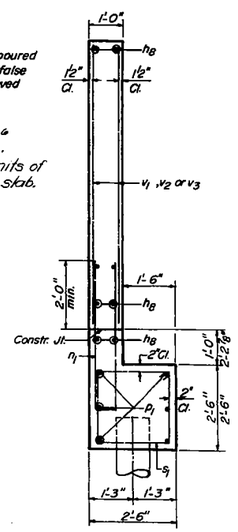


VIEW C-C

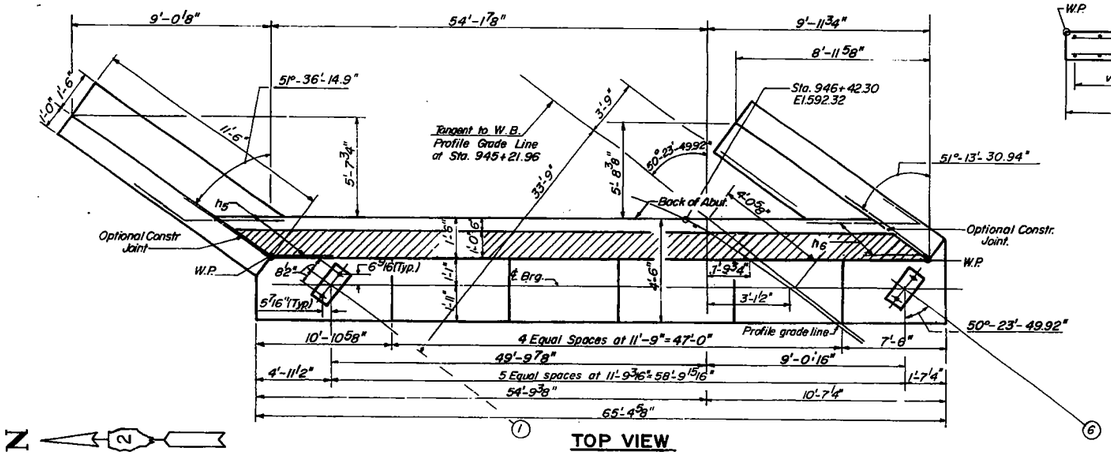
ANCHOR BOLT DETAILS



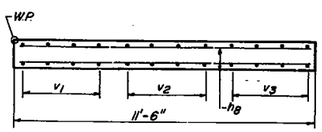
SECTION THRU ABUTMENT



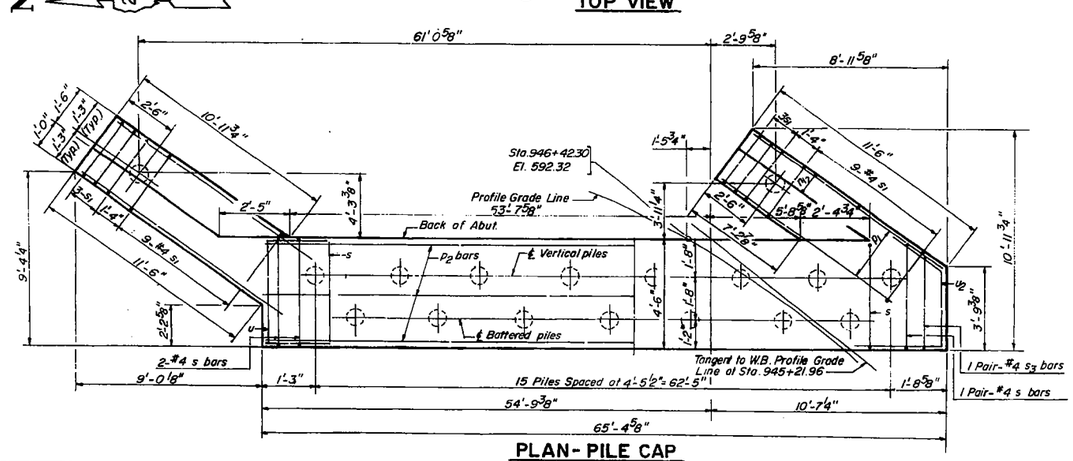
SECTION A-A



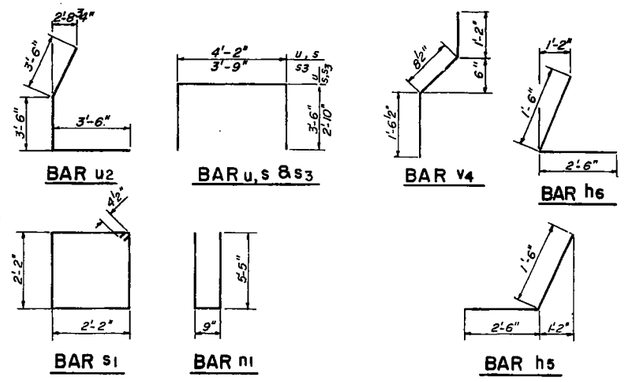
TOP VIEW



SECTION B-B



PLAN-PILE CAP



DESIGNED	H.R.S. & A.A.
CHECKED	P.B.
DRAWN	A.M.
CHECKED	H.R.S.

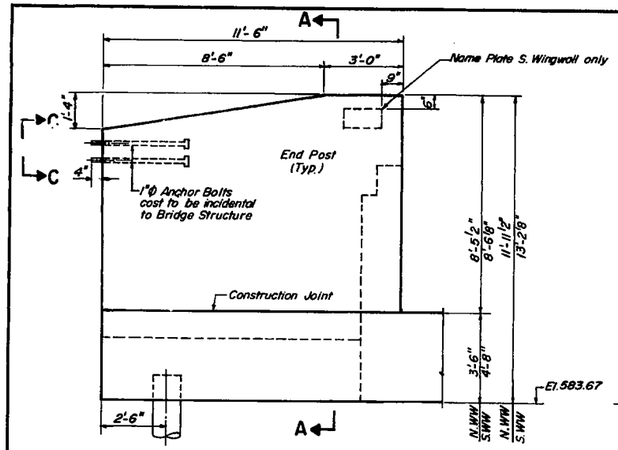
PILE DATA
Type------ Concrete
Capacity----35 Tons
Est length--45'-0"
No. Req'd --17 (Including 1 test pile)

ABUTMENT B
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

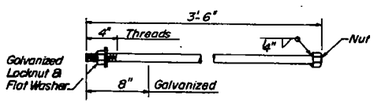
Rev. Reinf. Bars from 5200# to 5320# 8-12-74 D.D.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A. 403	161-1-2	ROCK ISLAND WHITESIDE	532	300
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

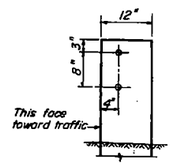
SHEET NO. 20
27 SHEETS



WING WALL ELEVATION

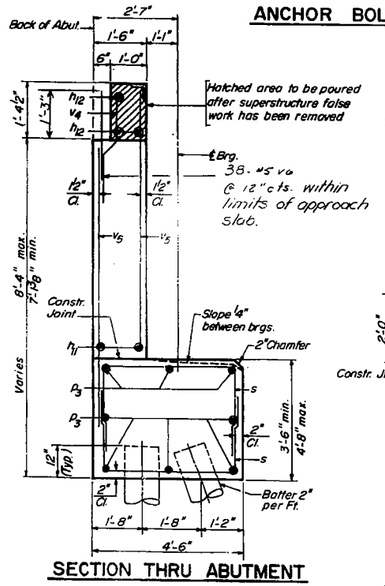


1 Φ ANCHOR BOLT

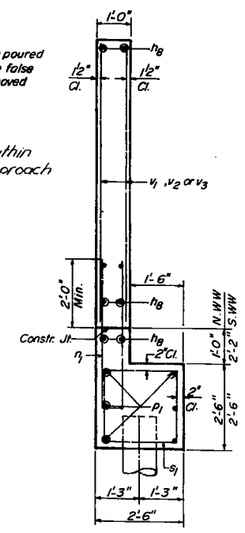


VIEW C-C

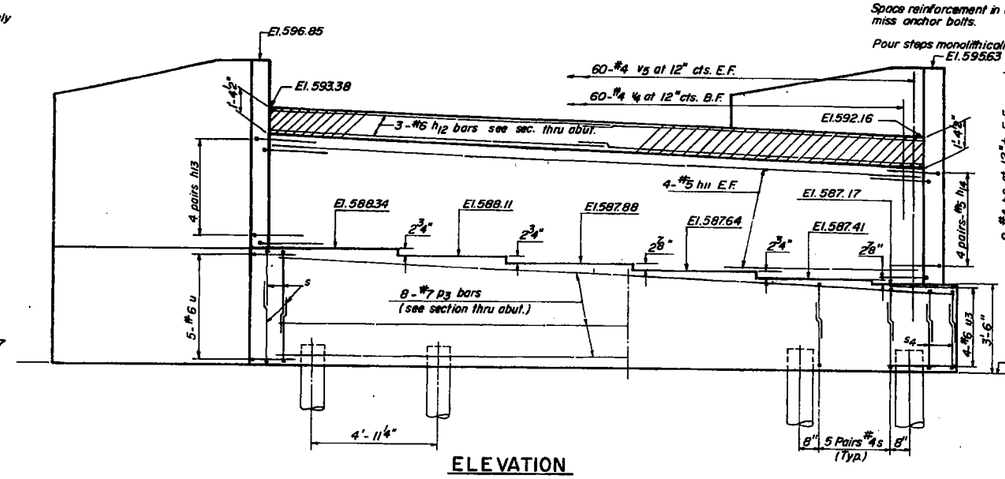
ANCHOR BOLT DETAILS



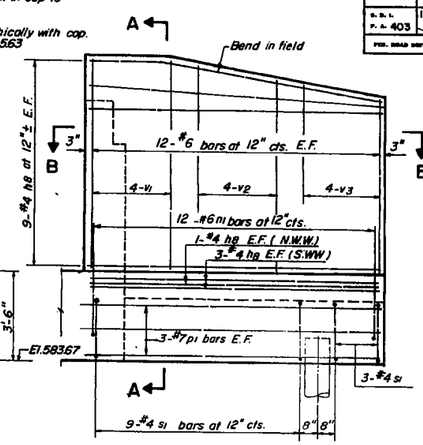
SECTION THRU ABUTMENT



SECTION A-A



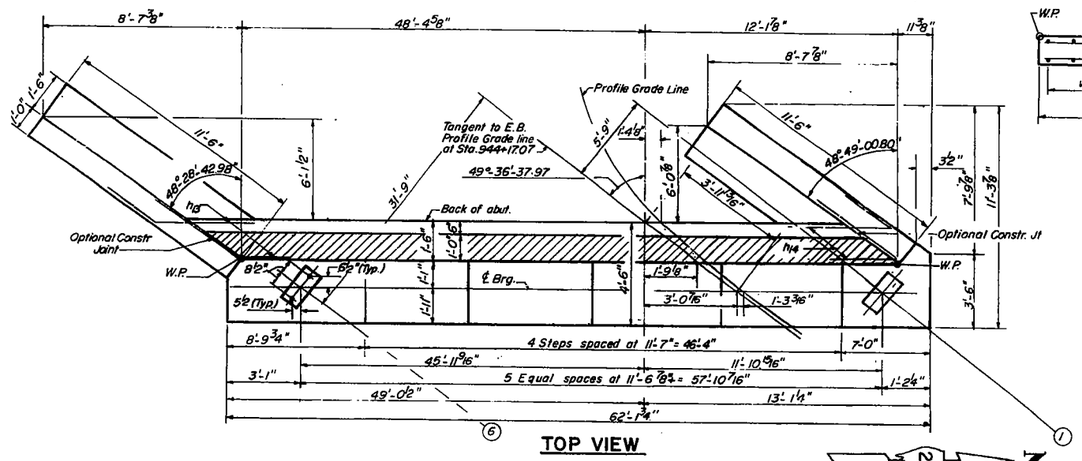
ELEVATION



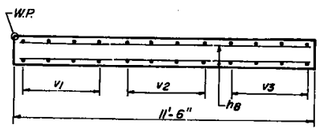
WING WALL ELEVATION

BILL OF MATERIAL

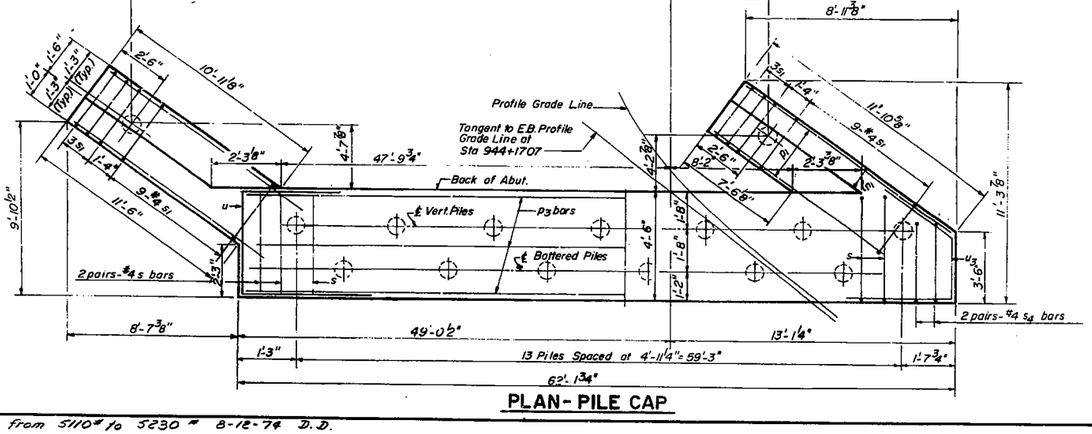
Bar	No.	Size	Length	Shape
h8	44	#4	11'-3"	
h11	16	#5	30'-9"	
h12	6	#6	30'-11"	
h13	8	#5	4'-0"	
h14	8	#5	4'-0"	
n1	24	#6	11'-7"	
p1	12	#7	11'-6"	
p3	16	#7	31'-9"	
s	124	#4	9'-10"	
s1	24	#4	9'-5"	
s4	4	#4	8'-6"	
u	5	#6	11'-2"	
u3	4	#6	10'-3"	
v1	16	#6	8'-1"	
v2	16	#6	7'-5"	
v3	16	#6	6'-9"	
v4	60	#4	3'-5"	
v5	120	#4	4'-9"	
v6	36	#5	3'-0"	
Class X Concrete			Cu. Yds.	70.3
Reinforcement Bars			Lbs.	5230
Concrete Piles			Lin. Ft.	588
Concrete Test Pile			Each	1
Removal and Replacement of Granular Materials			Cu. Yds.	903



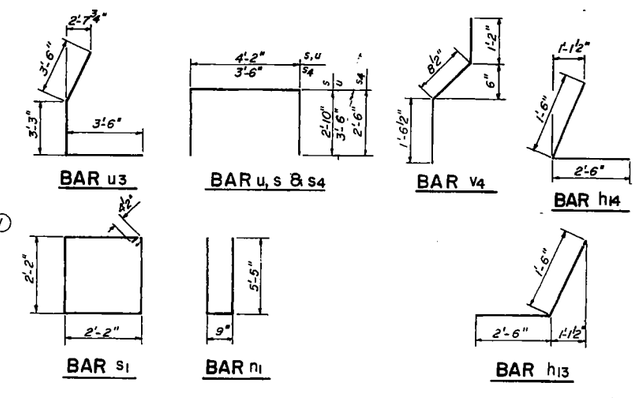
TOP VIEW



SECTION B-B



PLAN-PILE CAP



DESIGNED	H.R.S. & A.A.
CHECKED	P.B.
DRAWN	A.M.
CHECKED	H.R.S.

PILE DATA
Type: Concrete
Capacity: 35 Tons
Est. Length: 42'-0"
No. Req'd 15 (Including one Test Pile)

ABUTMENT C
FA 403 SECTION 161-1B-4
FA 403 OVER MEREDOSIA DITCH
ROCK ISLAND & WHITE SIDE COUNTY
STATION 944+69.00

Rev. Reinf. Bars from 5110# to 5230# 8-12-74 D.D.