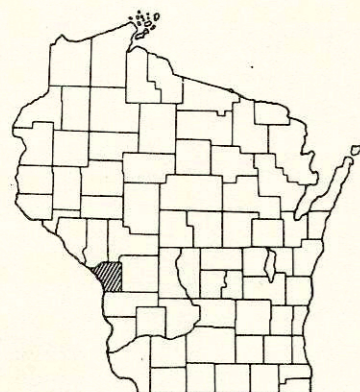


INDEX OF SHEETS

- SHEET NO. 1 TITLE
- SHEET NO. 2-2.11 TYPICAL CROSS SECTIONS
- SHEET NO. 3 ESTIMATE OF QUANTITIES
- SHEET NO. 3A-3B MISCELLANEOUS QUANTITIES
- SHEET NO. 4-4.1 RIGHT OF WAY PLAT
- SHEET NO. 5-19 PLAN AND PROFILE STA. 191+94.89 TO STA. 212+36.84
- SHEET NO. 20-20.8 STANDARD DETAILS
- SHEET NO. 21-70 DRAINAGE STRUCTURES
- SHEET NO. 71-116 CROSS SECTIONS



STATE OF WISCONSIN
STATE HIGHWAY COMMISSION OF WISCONSIN

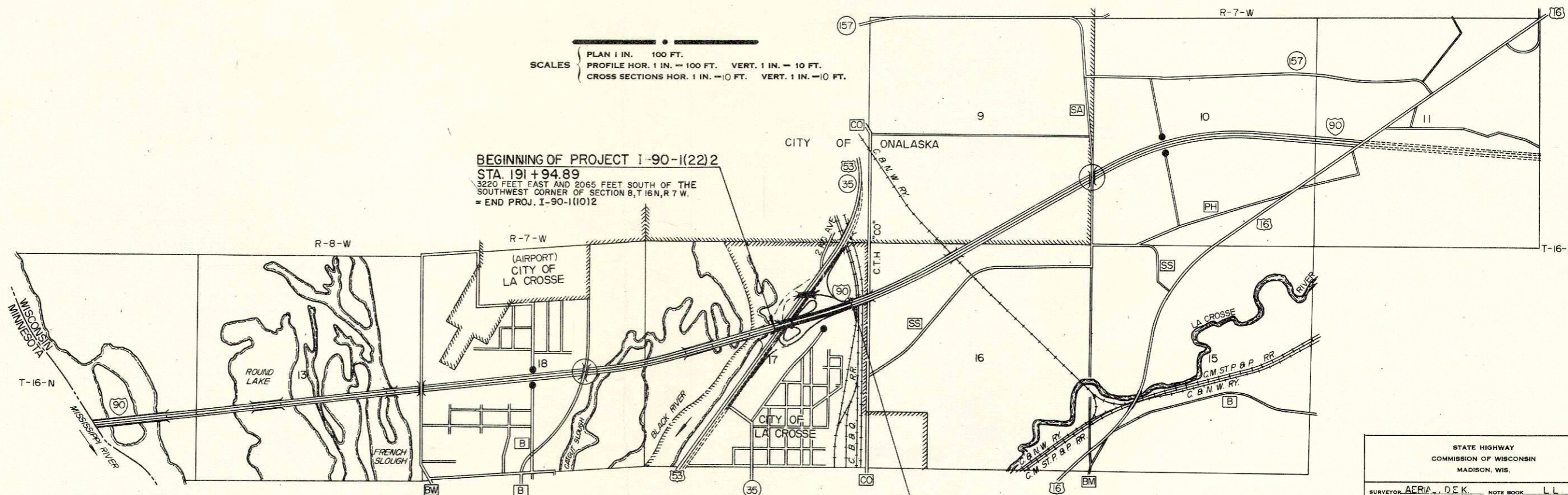
PLAN AND PROFILE OF PROPOSED
LA CROSSE - TOMAH ROAD
(U.S.H. 53 INTERCHANGE)
I.H. 90
LA CROSSE COUNTY
PROJECT I-90-1(22)2

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		S.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
32.3	90.1	12	22	4 WIS.	1	116

CONTROL OF ACCESS

WITHIN THE LIMITS OF THE PROJECT, WHERE CONTROL OF ACCESS LINE IS SHOWN THUS _____ NO ACCESS IS PERMITTED TO THE INTERSTATE HIGHWAY TRAFFIC LANES EXCEPT BY RAMPS AT THE INTERCHANGES

PLAN 1 IN. = 100 FT.
PROFILE HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.
CROSS SECTIONS HOR. 1 IN. = 10 FT. VERT. 1 IN. = 10 FT.



BEGINNING OF PROJECT I-90-1(22)2
STA. 191+94.89
3220 FEET EAST AND 2065 FEET SOUTH OF THE
SOUTHWEST CORNER OF SECTION 8, T 16N, R 7 W.
= END PROJ. I-90-1(10)2

END OF PROJECT I-90-1(22)2
STA. 212+36.84
1343 FEET SOUTH AND 183 FEET WEST OF THE
NORTHEAST CORNER OF SECTION 17, T 16N, R 7 W
BEGIN PROJECT I-16-90-1(16)3

CONVENTIONAL SIGNS

- | | | |
|------------------------------|-------------------------------|-----------------------------------------|
| STATE LINE | CULVERTS IN PLACE | APPROVED INTERSTATE LOCATION |
| COUNTY LINE | CULVERTS REQUIRED | INTERCHANGE |
| TOWNSHIP OR RANGE LINE | DROP INLET | HWY. GRADE SEPARATION (MAIN LINE UNDER) |
| SECTION LINE | POWER POLE | BRIDGES (MAIN LINE OVER) |
| NEW RIGHT OF WAY LINE | TELEPHONE OR TELEGRAPH POLE | TERMINATED CROSS ROAD |
| PRESENT RIGHT OF WAY LINE | RIGHT OF WAY MARKERS | |
| WIRE FENCE {WOVEN
BARBED} | REFERENCE STAKE FOR HUBS ONLY | |
| LOT LINE | MARSH | |
| CORPORATE OR CITY LIMITS | HEDGE | |
| PROPERTY LINE | TREES | |
| TRAVELED WAY OR P.E. | GROUND ELEVATION | |
| RAILROADS | GRADE ELEVATION | |
| BASE OR SURVEY LINE | | |

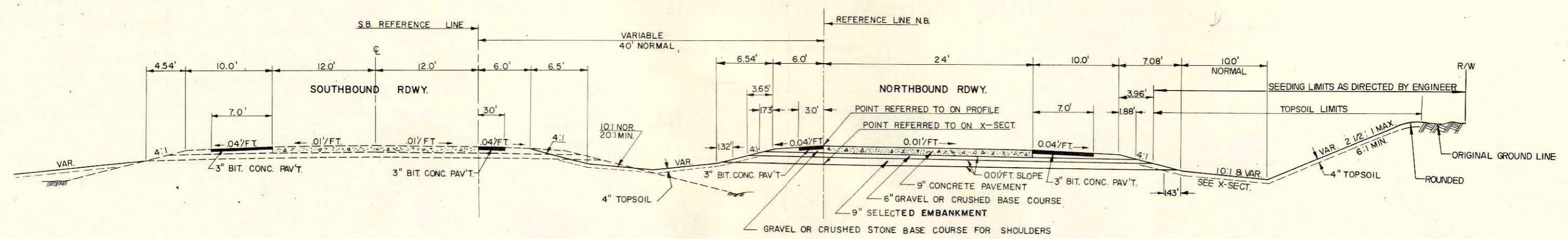
LAYOUT

SCALE 1 MILE

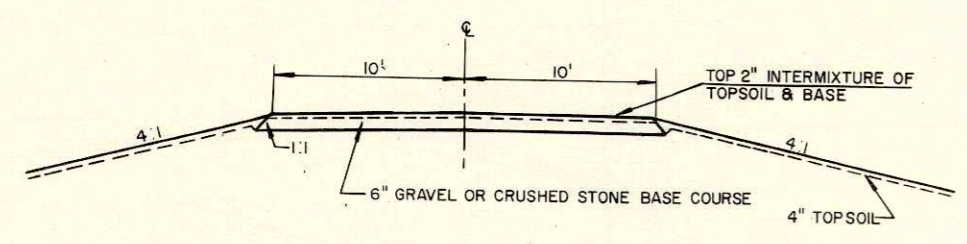
TOTAL NET LENGTH OF CENTERLINE = 0.385 MI.
TOTAL URBAN = 0.365 MI.

STATE HIGHWAY COMMISSION OF WISCONSIN MADISON, WIS.	
SURVEYOR AERIA, DEK.	NOTE BOOK L.L.
DIVISION COMPUTER R.G.S.	M. O. CHECKER W.H.B.
DISTRICT CHECKER A.E.J.	CORRECT
CORRECT:	
DATE 11-12-65	<i>H. J. Fisher</i> DISTRICT ENGINEER
RECOMMENDED FOR APPROVAL:	
DATE 11/24/65	<i>E. J. Byrd</i> CHIEF DESIGN ENGINEER
APPROVED:	
DATE 11/24/65	<i>H. J. Danmister</i> STATE HIGHWAY ENGINEER
DEPARTMENT OF COMMERCE BUREAU OF PUBLIC ROADS	
APPROVED:	
DATE	
DIVISION ENGINEER	

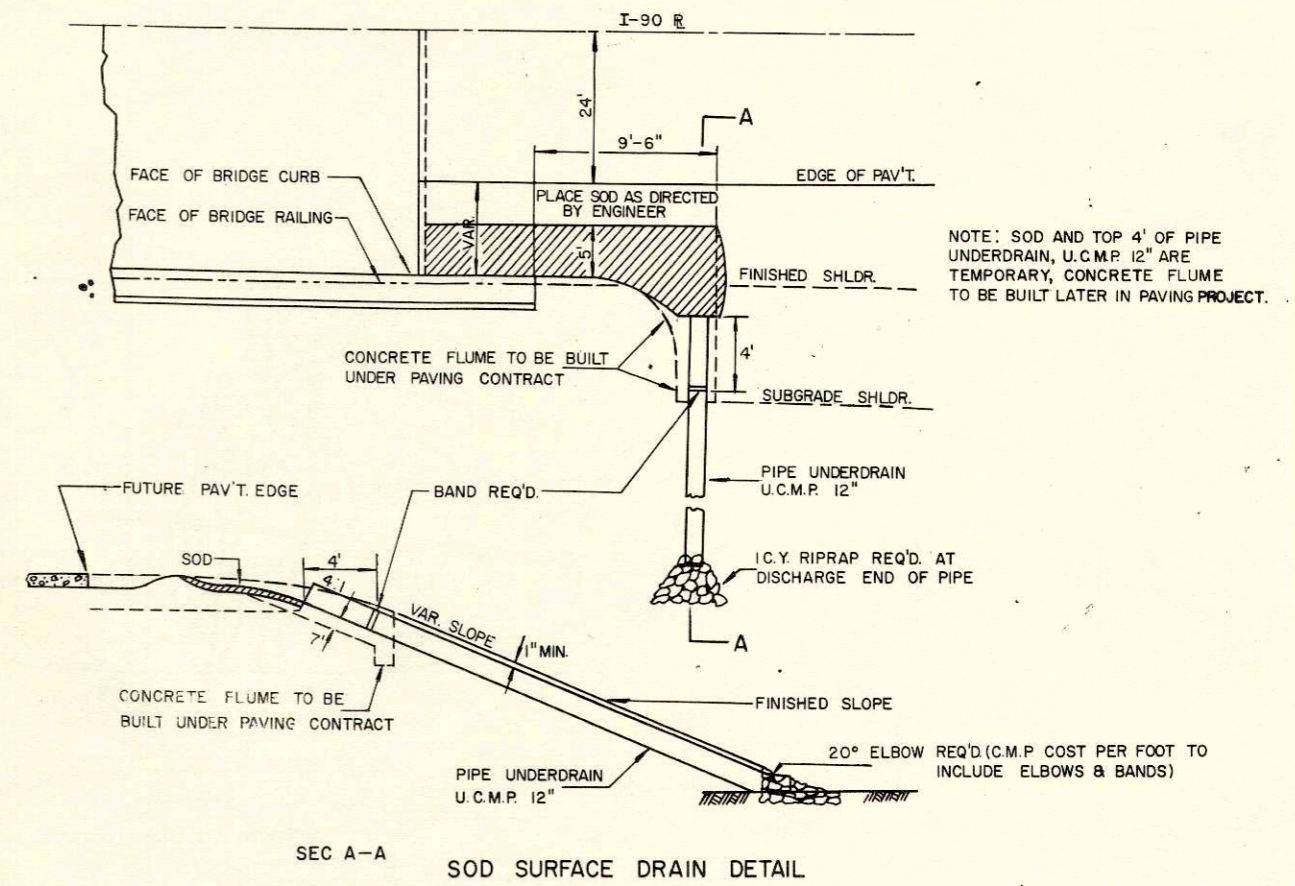
2025



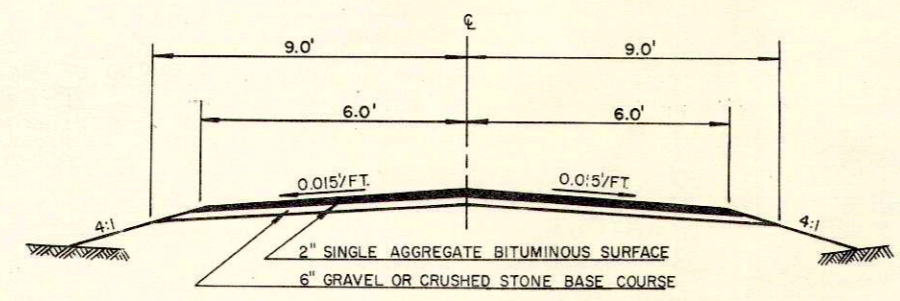
ULTIMATE TYPICAL TANGENT SECTION - U.S.H. 53 N.B. & S.B.



TYPICAL SECTION SERVICE ROAD RT. STA. 114 +00 USH 53



SEC A-A SOD SURFACE DRAIN DETAIL

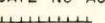



TYPICAL SECTION TEMPORARY ROAD (PART OF CONTRACT NO 3)

GENERAL NOTES

- 9" P.C. CONC. PAV'T., SHOULDERS & GR. OR CR. STONE BASE COURSE ON MAINLINE & RAMPS ARE NOT A PART OF THIS CONTRACT.
- THE REFERENCE LINE (R) IS THE MEDIAN EDGE OF THE EASTBOUND PAVEMENT. THE AUXILIARY (A) IS THE MEDIAN EDGE OF THE WESTBOUND PAVEMENT.
- TOPSOIL TO BE PLACED ON ALL CUT SLOPES AND ALL FILL SLOPES TO AN APPROXIMATE DEPTH OF 4" AT TIME OF PLACING.
- ALL OF THE RIGHT OF WAY EXCLUSIVE OF THE ROADBED AND AREAS ALREADY COVERED WITH SUITABLE GRASSES SHALL BE FERTILIZED AND SEEDED.
- RATE OF SUPERELEVATION AND LENGTH OF TRANSITION SHOWN ON PLANS. TRANSITION LENGTH SHALL BE ESTABLISHED TO PROVIDE TWO-THIRDS OF TOTAL LENGTH ON THE TANGENT AND ONE-THIRD WITHIN THE CURVE.
- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- CURVE DATA IS BASED ON ARC DEFINITION.
- WHEN THE QUANTITY OF THE ITEMS OF SUBBASE, BASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL DIRECTED BY THE ENGINEER.
- BEARINGS SHOWN ARE THE TRUE BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

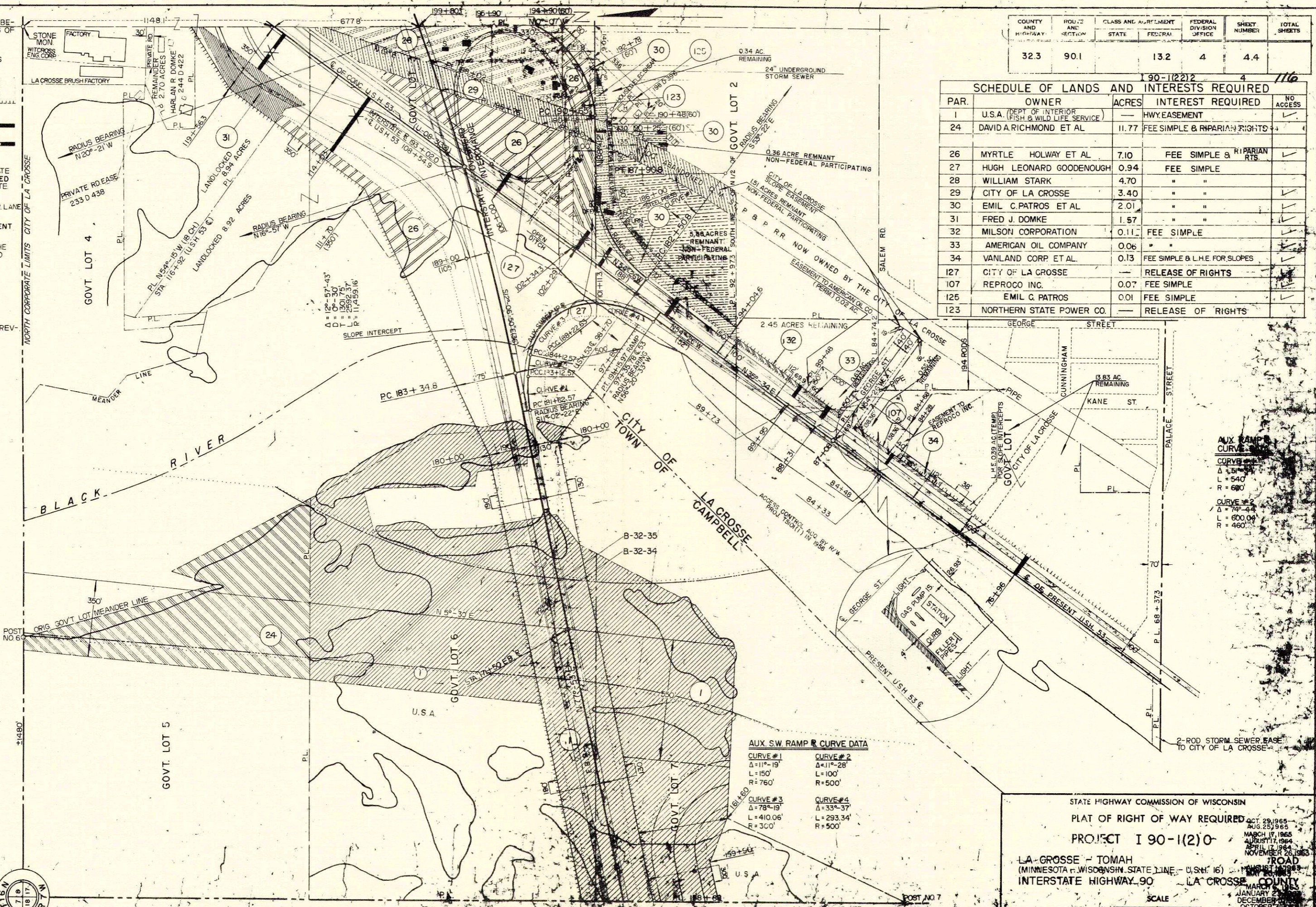
TYPICAL SECTIONS FOR U.S.H. 53, N.B. & S.B. SERVICE ROAD MISCELLANEOUS DETAILS SURFACE DRAIN TEMPORARY ROAD

LEGEND
 NOTE: NO DIRECT ACCESS PERMITTED BETWEEN THE MAIN ROADWAYS OR RAMPS OF THE INTERSTATE HIGHWAY, AND ABUTTING PROPERTIES.
 SYMBOL TO INDICATE NO ACCESS IS SHOWN THUS 
 OPENINGS WHERE ACCESS TO HIGHWAY IS PERMITTED 
 I EXISTING PRIVATE DRIVEWAY ALLOWED BY R/W PROJ. T5701(1)
 I PROPOSED PRIVATE DRIVEWAY ALLOWED BY R/W PROJ. T5701(1)
 WHERE EXISTING OR PROPOSED PRIVATE DRIVEWAY RIGHTS ARE TO BE REVOKED THE SYMBOL "X" IS USED TO INDICATE
 E.B. R. = MEDIAN EDGE OF PAVEMENT E.B. LANE
 AUX. RANGE R = OUTER EDGE OF PAVEMENT
 BEARINGS SHOWN ON THIS PLAT ARE THE TRUE BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.
GENERAL REFERENCE
 SEE RELOC. ORDER U 08-3(32) FOR PREVIOUS R/W ACQ. IN U.S.H. 53.
 SEE RELOC. ORDER T 510(1) ACCESS CONTROL ACQ. IN 1956 ON U.S.H. 53

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND ADJUSTMENT	FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
32.3	90.1	13.2	4	4.4	

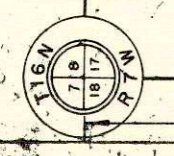
I 90-1(2)0 4 116

PAR.	OWNER	ACRES	INTERESTS REQUIRED	NO ACCESS
1	U.S.A. (DEPT OF INTERIOR (FISH & WILD LIFE SERVICE))	—	HWY. EASEMENT	✓
24	DAVID A RICHMOND ET AL	11.77	FEE SIMPLE & RIPARIAN RIGHTS	✓
26	MYRTLE HOLWAY ET AL	7.10	FEE SIMPLE & RIPARIAN RTS	✓
27	HUGH LEONARD GOODENOUGH	0.94	FEE SIMPLE	
28	WILLIAM STARK	4.70	" "	
29	CITY OF LA CROSSE	3.40	" "	✓
30	EMIL C. PATROS ET AL	2.01	" "	✓
31	FRED J. DOMKE	1.57	" "	✓
32	MILSON CORPORATION	0.11	FEE SIMPLE	✓
33	AMERICAN OIL COMPANY	0.06	" "	✓
34	VANLAND CORP. ET AL.	0.13	FEE SIMPLE & L.H.E. FOR SLOPES	✓
127	CITY OF LA CROSSE	—	RELEASE OF RIGHTS	✓
107	REPROCO INC.	0.07	FEE SIMPLE	✓
125	EMIL C. PATROS	0.01	FEE SIMPLE	✓
123	NORTHERN STATE POWER CO.	—	RELEASE OF RIGHTS	✓



AUX. S.W. RAMP R. CURVE DATA
 CURVE #1
 $\Delta = 11^\circ-19'$
 $L = 150'$
 $R = 760'$
 CURVE #2
 $\Delta = 11^\circ-28'$
 $L = 100'$
 $R = 500'$
 CURVE #3
 $\Delta = 78^\circ-19'$
 $L = 410.06'$
 $R = 300'$
 CURVE #4
 $\Delta = 33^\circ-37'$
 $L = 293.34'$
 $R = 500'$

STATE HIGHWAY COMMISSION OF WISCONSIN
 PLAT OF RIGHT OF WAY REQUIRED
 PROJECT I 90-1(2)0
 LA-CROSSE - TOMAH
 (MINNESOTA WISCONSIN STATE LINE - U.S.H. 16)
 INTERSTATE HIGHWAY 90 - LA CROSSE COUNTY
 SCALE
 1" = 100' 200' 400' FT
 OCT 29 1965
 AUG 25 1965
 MARCH 17 1965
 AUGUST 17 1964
 APRIL 17 1964
 NOVEMBER 26 1963
 ROAD
 LA CROSSE COUNTY
 JANUARY 2
 DECEMBER
 OCTOBER 31
 SEPTEMBER 2
 AUGUST



APPROX. 2640

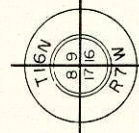
EB R = MEDIAN EDGE OF PAVEMENT - EAST BOUND LANE
 RAMP R = OUTEREDGE OF PAVEMENT

NOTE: NO DIRECT ACCESS PERMITTED BETWEEN THE MAIN ROADWAYS OR RAMP TO THE INTERSTATE HIGHWAY, AND ADJUTING PROPERTIES.
 SYMBOL TO DENOTE NO ACCESS IS SHOWN THUS
 OR = ON RECORD

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT	FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
323	901	13.2	4	4.5	116

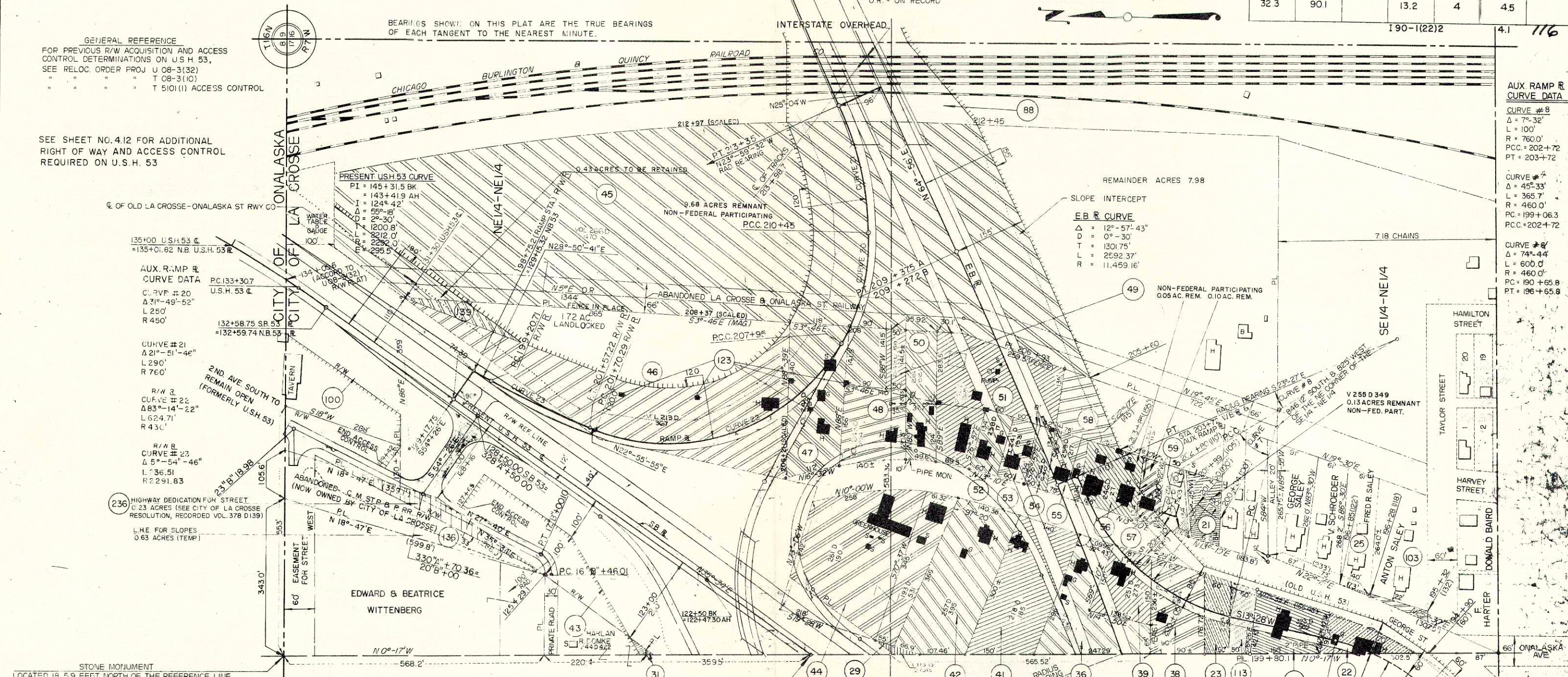
GENERAL REFERENCE
 FOR PREVIOUS R/W ACQUISITION AND ACCESS CONTROL DETERMINATIONS ON U.S.H. 53, SEE RELOC. ORDER PROJ U 08-3(32) T 08-3(10) T 510(1) ACCESS CONTROL

SEE SHEET NO. 4.12 FOR ADDITIONAL RIGHT OF WAY AND ACCESS CONTROL REQUIRED ON U.S.H. 53



BEARINGS SHOWN ON THIS PLAT ARE THE TRUE BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

INTERSTATE OVERHEAD



AUX RAMP R CURVE DATA

CURVE # 8	Δ = 7°-32'	L = 100'	R = 760.0'	PCC = 202+72	PT = 203+72
CURVE # 9	Δ = 45°-33'	L = 365.7'	R = 460.0'	PCC = 199+06.3	PCC = 202+72
CURVE # 6	Δ = 74°-44'	L = 600.0'	R = 460.0'	PCC = 190+65.8	PT = 196+65.8

AUX RAMP R CURVE DATA

CURVE # 20	Δ = 31°-49'-52"	L = 250'	R = 450'
CURVE # 21	Δ = 21°-51'-46"	L = 290'	R = 760'
R/W R CURVE # 22	Δ = 83°-14'-22"	L = 624.71'	R = 430'
R/W R CURVE # 23	Δ = 5°-54'-46"	L = 236.51'	R = 2291.83'

EB R CURVE

Δ	= 12°-57'-43"
D	= 0°-30'
T	= 1301.75'
L	= 2592.37'
R	= 11,459.16'

PAR	OWNER	ACRES	INTEREST REQUIRED
103	ANTON SALEY	0.04	FEE SIMPLE
100	ROY SIVANICH	-	ACCESS RIGHTS
113	GEORGE SALEY ETAL.	0.19	FEE SIMPLE
236	CITY OF LA CROSSE	0.23	DEDICATION
123	NORTHERN STATES POWER CO	-	RELEASE OF RIGHTS
136	CITY OF LA CROSSE	-	L.H.E.
139	WESLEY M. DENNY	0.12	FEE & ACCESS RTS.

PAR	OWNER	ACRES	INTEREST REQUIRED
50	ORIN HANSON	0.46	FEE SIMPLE
51	BASIL F. REARDON	1.15	"
92	KNUTE NELSON	0.18	"
53	HOWARD C. GERLING	0.18	"
54	KNUTE NELSON	0.15	"
55	JAMES O. HOLSETH	0.23	"
56	BADGER LUMBER & COAL CO.	0.33	"
57	PAUL L. KING	0.05	"
58	WILLIAM F. BEITZ	0.31	"
59	JOHN I. MARCOU	0.02	"
25	FRED R. SALEY	0.01	"
23	MARIE HAMRE	0.22	"
22	FRED R. SALEY	0.22	"
21	LEWIS L. ALMETER	0.10	"
31	FRED J. DOMKE	1.57	"
88	C.B. & Q. R.R. CO.	-	AGREEMENT

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PAR	OWNER	ACRES	INTEREST REQUIRED
29	CITY OF LA CROSSE	SEE SHEET 4.4	FEE SIMPLE
36	DONALD F. KELLY	0.71	FEE SIMPLE
38	FRED R. SALEY	0.47	"
39	JOSEPH A. LORD	0.38	"
40	RICHARD M. FOSTER	0.44	"
41	HANS PRECHTER	1.10	"
42	RALPH G. BLUM	1.14	"
43	HARLAN R. DOMKE	0.01	"
44	ROBERT ALLEN	1.81	FEE SIMPLE
45	RUMALI REALTY COMPANY	4.91	"
46	WESLEY M. DENNY	2.45	"
47	MELVIN P. JACOBSON	1.17	"
48	DONALD P. FERRIS	0.46	"
49	JOSEPH CALLAWAY	0.16	"

REVISION DATE

8-25-65	N.C.
10-29-65	

STATE HIGHWAY COMMISSION OF WISCONSIN
 PLAT OF RIGHT OF WAY REQUIRED
 PROJECT I 90-1(2)0
 LA CROSSE - TOMAH (MINNESOTA - WISCONSIN STATE LINE - U.S.H. 16)
 INTERSTATE HIGHWAY 90 'LA CROSSE COUNTY'

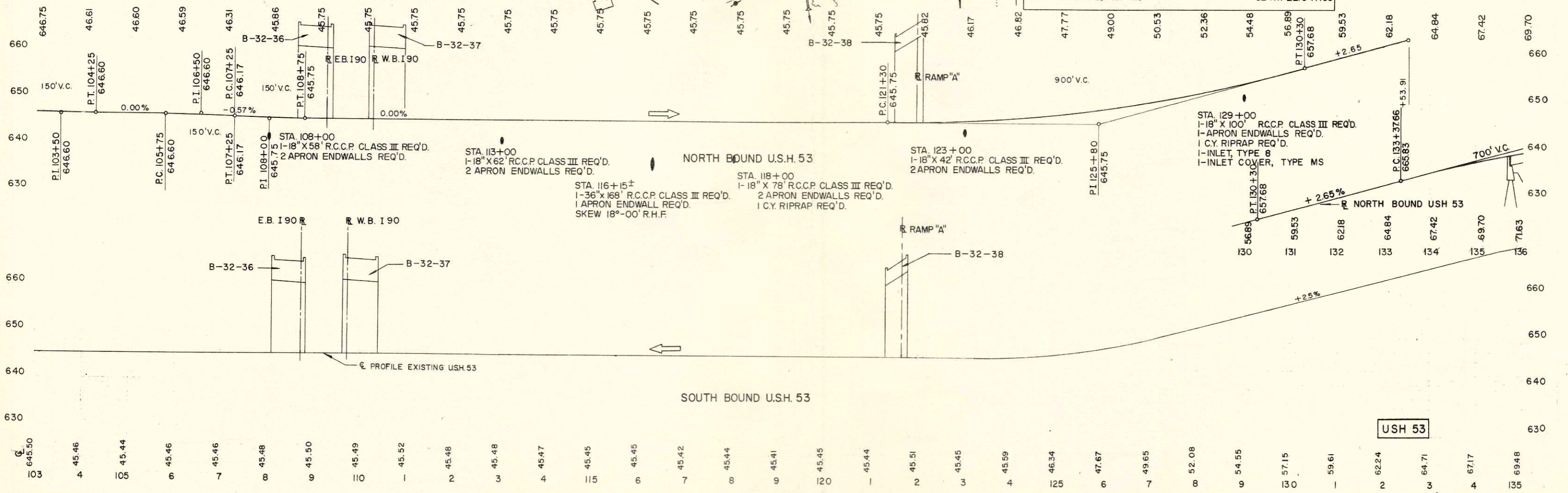
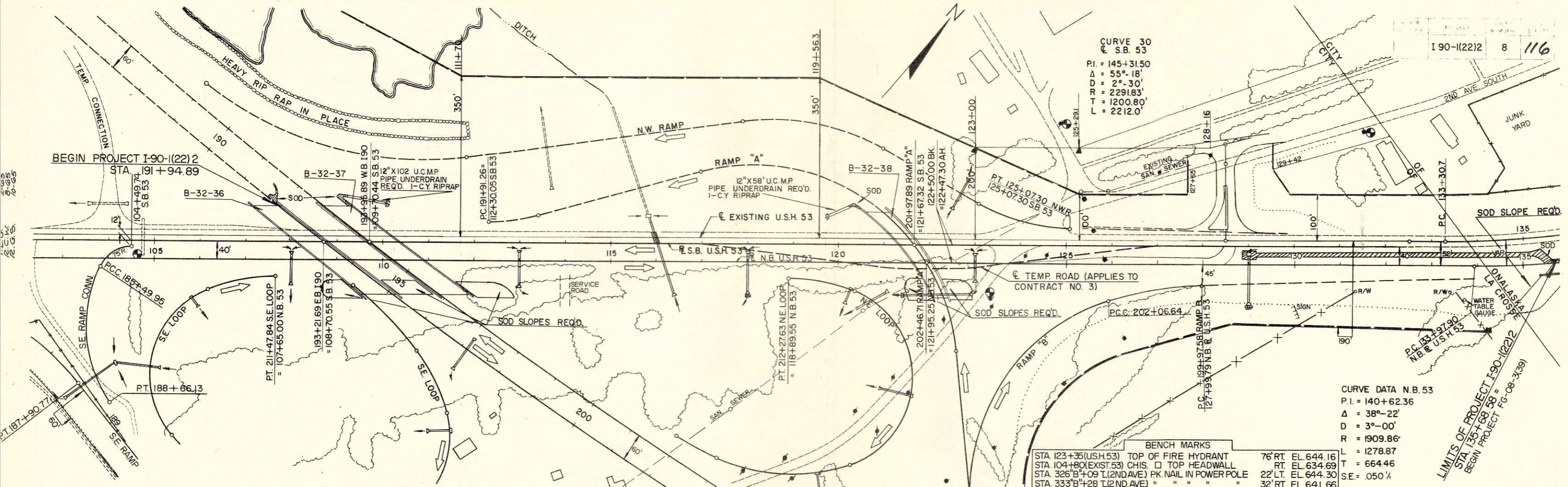
REVISION DATE: MARCH 17, 1966; AUGUST 17, 1964; APRIL 17, 1964; NOVEMBER 26, 1965; AUGUST 14, 1963; MAY 20, 1963; MARCH 6, 1963; JANUARY 23, 1963; DECEMBER 5, 1962; ROAD OCTOBER 31, 1962; SEPTEMBER 27, 1962; MAY 23, 1962; APRIL 11, 1962; NOVEMBER 8, 1961; APRIL 12, 1961; DECEMBER 16, 1960; DATED JULY 23, 1960

SCALE: 1" = 200 FT.

CURVE 30
 P.I. = 145+31.50
 Δ = 55°-18'
 D = 2°-30'
 R = 2291.83'
 T = 1200.80'
 L = 2212.0'

CURVE DATA N.B. 53
 P.I. = 140+62.36
 Δ = 38°-22'
 D = 3°-00'
 R = 1909.86'
 L = 1278.87'
 T = 664.46'
 S.E. = .050 %

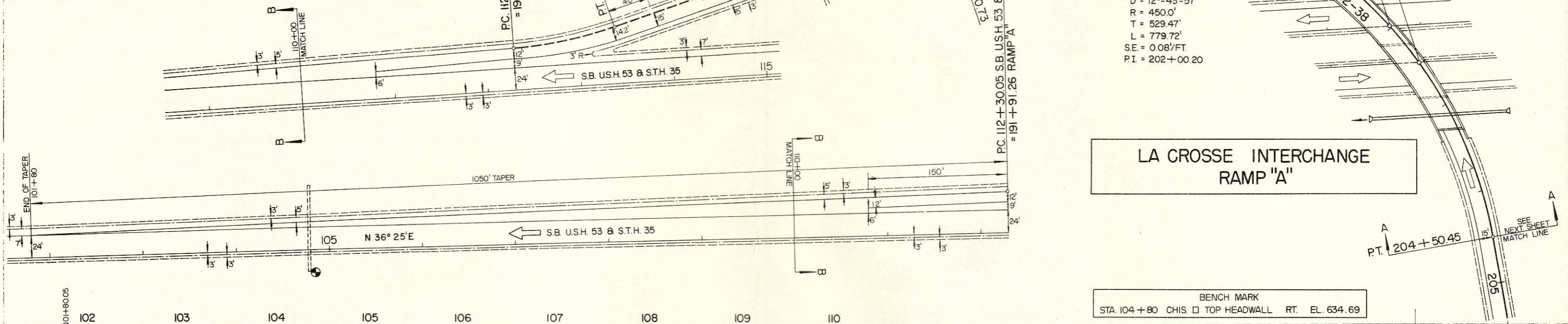
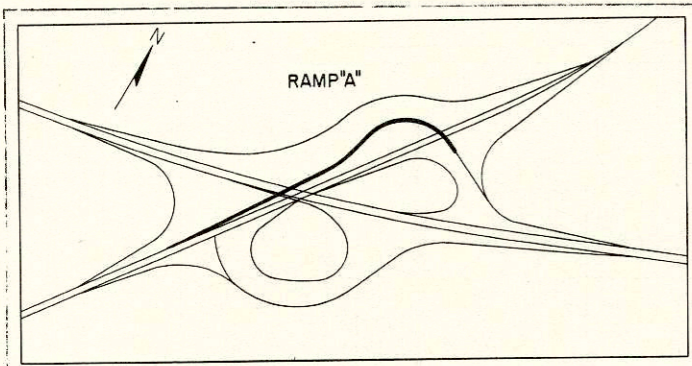
BENCH MARKS
 STA 123+35 (U.S.H. 53) TOP OF FIRE HYDRANT 76' RT. EL. 644.16
 STA 104+80 (EXIST. 53) CHIS. □ TOP HEADWALL RT. EL. 634.69
 STA 326'+09 T. (2ND AVE) PK. NAIL IN POWER POLE 22' LT. EL. 644.30
 STA 333'+28 T. (2ND AVE) " " " " 32' RT. EL. 641.66



USH 53

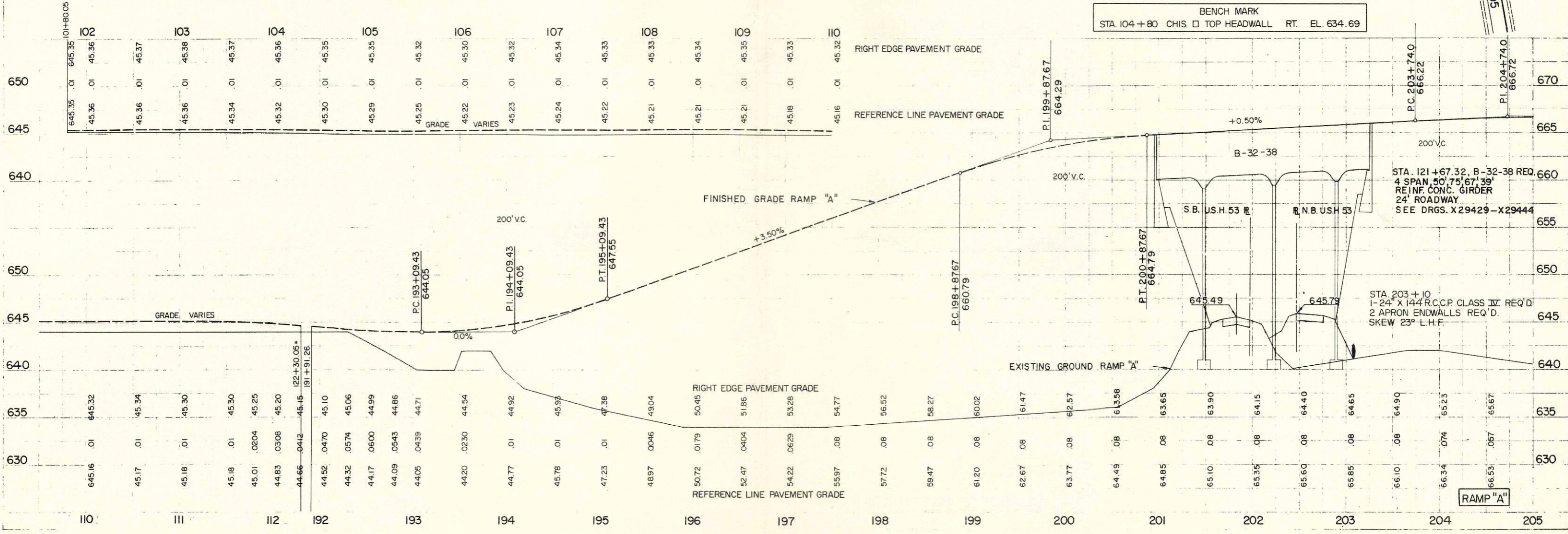
CURVE #18
 $\Delta = 14^{\circ}00'20''$
 $D = 12^{\circ}-43'-57''$
 $R = 450.0'$
 $T = 55.28'$
 $L = 110.0'$
 $SE = 0.08/FT.$
 $PI = 192+46.53$

CURVE #19
 $\Delta = 99^{\circ}-16'-38''$
 $D = 12^{\circ}-43'-57''$
 $R = 450.0'$
 $T = 529.47'$
 $L = 779.72'$
 $SE = 0.08/FT.$
 $PI = 202+00.20$

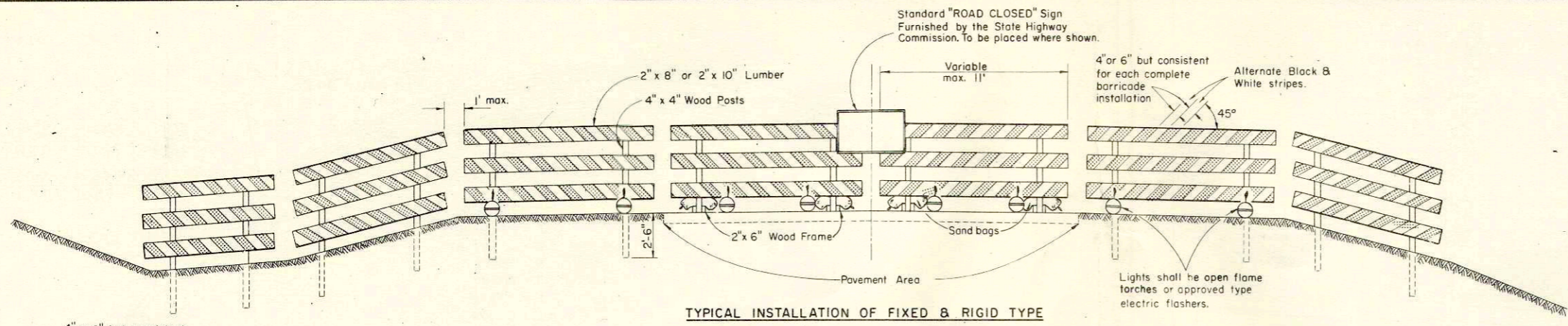


LA CROSSE INTERCHANGE RAMP "A"

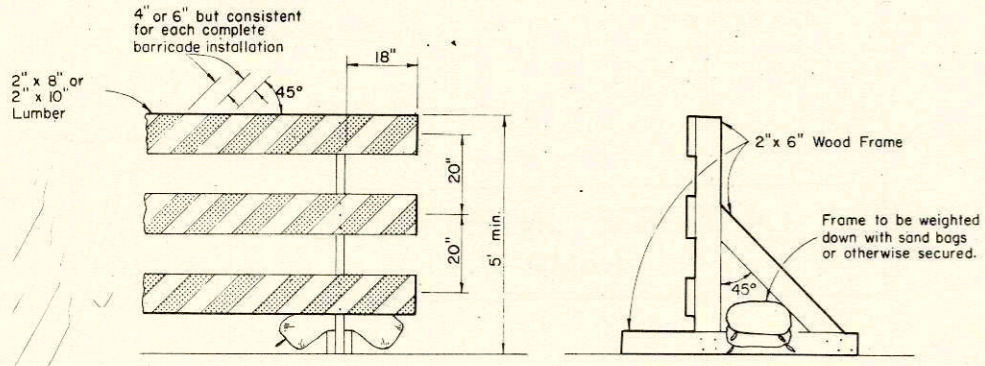
BENCH MARK
 STA. 104+80 CHIS. \square TOP HEADWALL RT. EL. 634.69



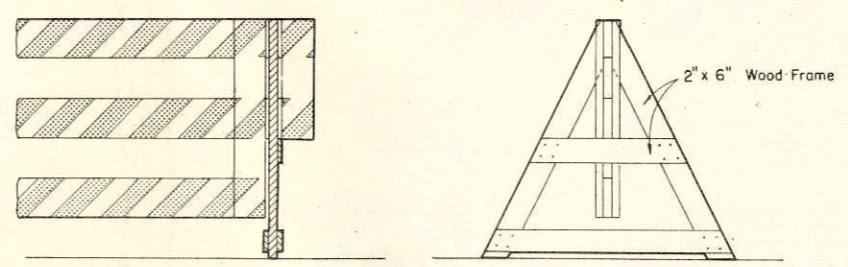
AERIAL PHOTO - 1988



TYPICAL INSTALLATION OF FIXED & RIGID TYPE

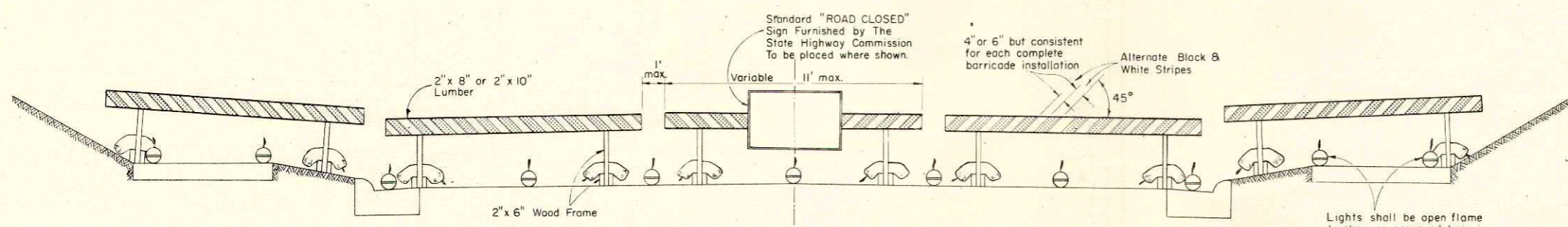


ALTERNATE TYPE INSTALLATION (RIGID)

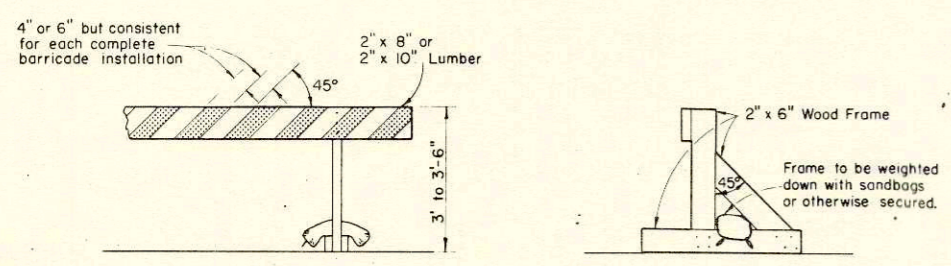


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

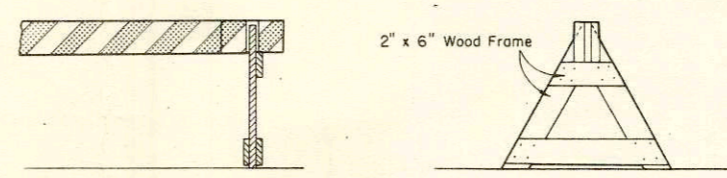
CLASS I BARRICADE



TYPICAL INSTALLATION OF RIGID TYPE



ALTERNATE TYPE INSTALLATION (RIGID)



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)

CLASS II BARRICADE

GENERAL NOTES:

The Contractor shall construct, place and maintain barricades as shown on this drawing and as required by the Standard Specifications for the duration of the project at all points of highway closure. Barricades shall be painted as shown hereon and structurally maintained for maximum visibility at all times, for the duration of the respective project.

CLASS I BARRICADE

Shall be used at points of closure where road is closed to traffic. Gates or movable sections of barricade shall be provided when necessary, for access of equipment or other authorized vehicles only.

CLASS II BARRICADE

May be used only where the hazard to traffic is relatively small, and for the more or less continuous delimiting of a restricted roadway, or for temporary daytime use.

LUMBER & FABRICATION

Lumber shall be of a grade structurally sound and sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility. The fabrication of the barricade shall be in accord with good pertinent wood-working practices.

PAINTING

Barricades shall be painted as shown hereon in alternate black and white stripes. Black stripes shall be painted with weather resistant and durable black paint. White stripes shall be painted a prime coat of good grade wood primer, followed by two coats of white "Codic Reflective Liquid" (Minnesota Mining Co.) or equivalent, or reflective sheeting wide angle, flat top "Scotchlite" brand material (Minnesota Mining Co.) or equivalent.

DIRECTION OF DIAGONAL STRIPES

Where a barricade extends entirely across the roadway and no vehicle access provision, the stripes shall slope downward toward the highway centerline. Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring. Where both right and left turns are provided for, the stripes shall slope downward in both directions from the center.

MEASUREMENT & PAYMENT

All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.

NOTE:

Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

NOTE:

All lumber or timber dimensions shown hereon are nominal.

CONSTRUCTION BARRICADE

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

DATE 3-5-63

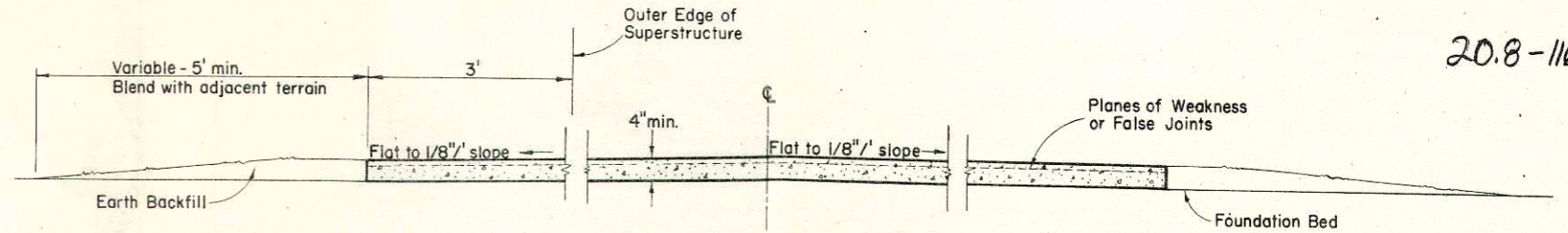
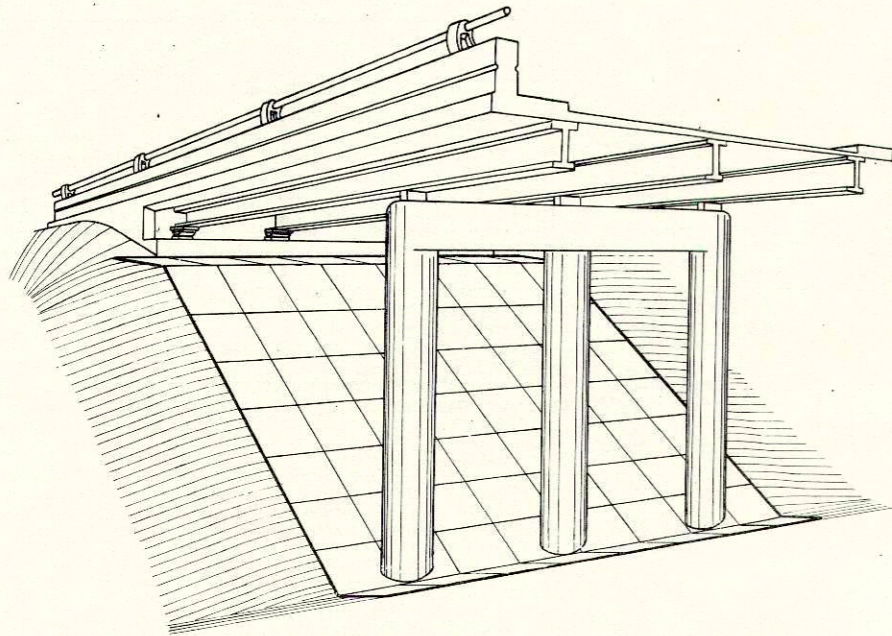
J. S. Pitt
ENGINEER OF DESIGN

APPROVED:

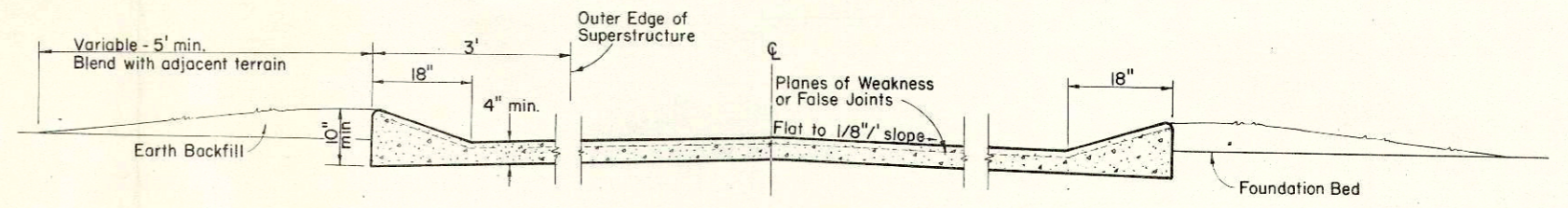
DATE 2/16/63

E. C. Rusten
STATE HIGHWAY ENGINEER

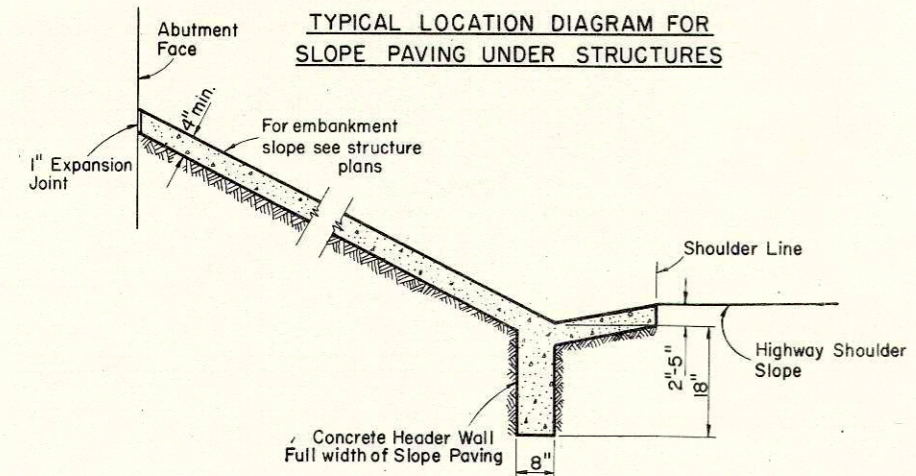
PLATE NO. 7-4.1.4



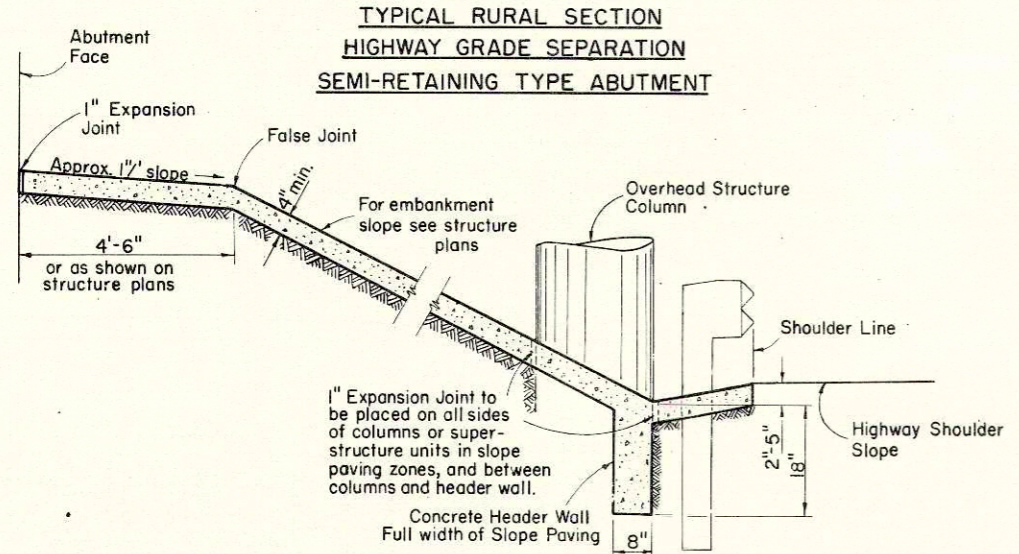
SECTION "A-A"
To be used when $\Delta = 75^\circ$ to 90°



SECTION "B-B"
To be used when $\Delta = 75^\circ$ or less

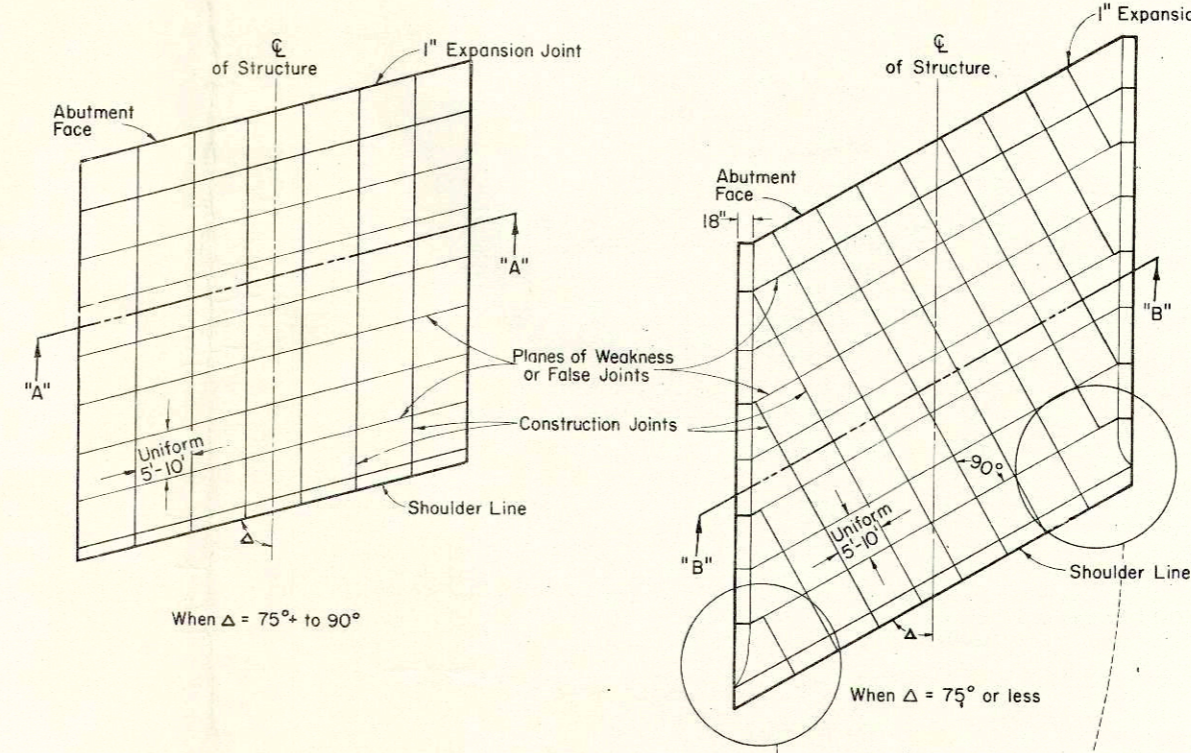


TYPICAL LOCATION DIAGRAM FOR
SLOPE PAVING UNDER STRUCTURES

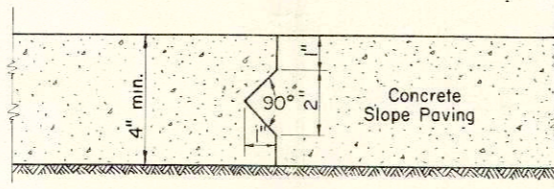


TYPICAL RURAL SECTION
HIGHWAY GRADE SEPARATION
SEMI-RETAINING TYPE ABUTMENT

TYPICAL RURAL SECTION
HIGHWAY GRADE SEPARATION
SILL TYPE ABUTMENT



Sketches Showing Planes of Weakness
Construction Joint Designs for
SKEWED TYPE INSTALLATIONS



CONSTRUCTION JOINT

GENERAL NOTES
Details of construction not shown hereon shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

CONCRETE MASONRY
All concrete masonry shall conform to the Standard Specifications requirements for Grade AA.

EXPANSION JOINTS
Expansion joint filler, where required as shown hereon shall conform to the Standard Specifications.

METHOD OF MEASUREMENT & PAYMENT
This work shall be measured and paid for by the square yard, which yardage shall be the summation of the total area measured on the plane of the surface thereof, which area includes the header wall and thickened edges, but exclusive of the areas occupied by the structure piers or columns, and as provided for in the Standard Specifications.

SLOPE PAVING
(CONCRETE CAST-IN-PLACE)

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

DATE: 11/4/67
DATE: 11/5/64

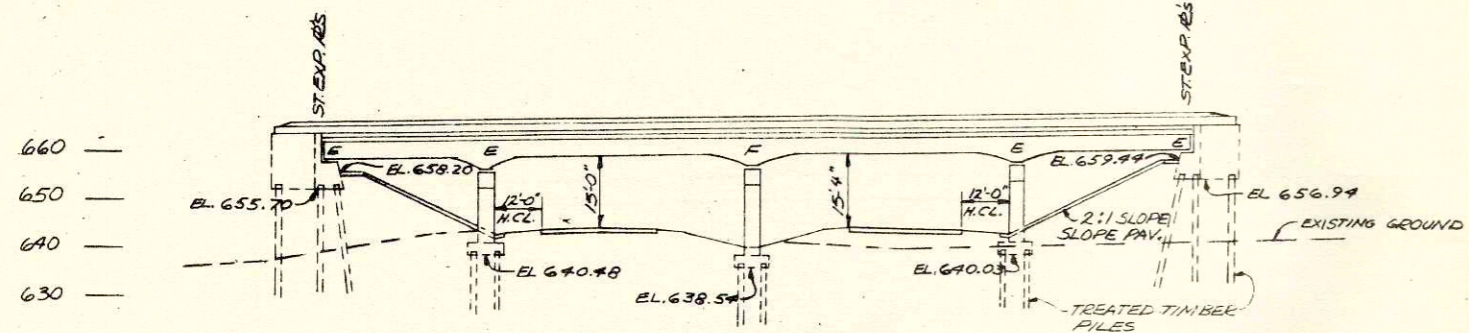
APPROVED:

E. L. B. [Signature]
CHIEF DESIGN ENGINEER

E. L. [Signature]
STATE HIGHWAY ENGINEER

PLATE NO. 8-3.3.7

COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & ASSIGNMENT	S.T.A.	F.I.B.M.	S.E. DISTRICT	PROJECT	DATE	SHEET	TOTAL SHEETS
72.3	90.1	13.1	4	1-90	1-22	55	116		



SIDE ELEVATION
AT RT. ANGLES TO U.S.H. #53

DESIGN DATA

LIVE LOAD - HS20-44
ALLOWABLE DESIGN STRESSES
CONCRETE MASONRY, GRADE "AA"
BAR STEEL REINFORCEMENT

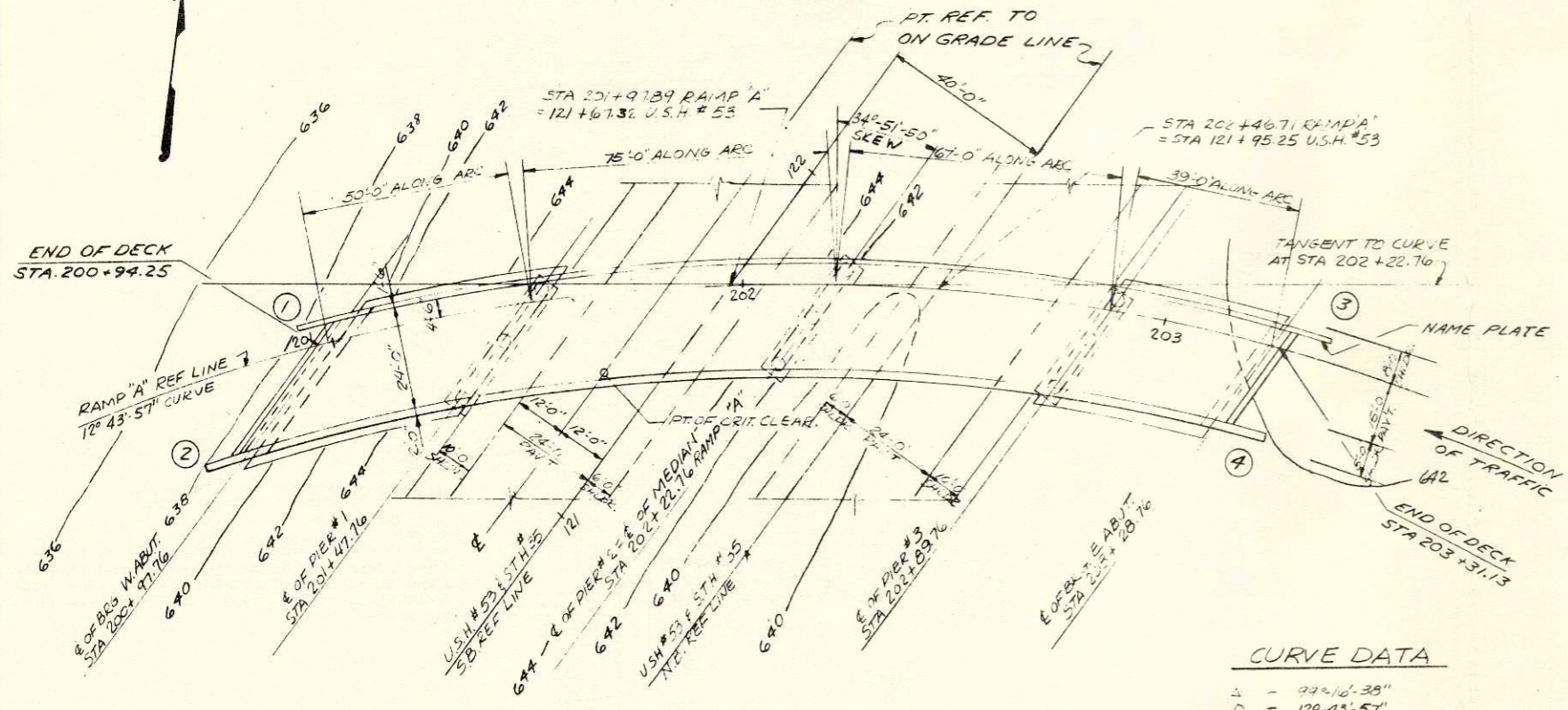
$f'_c = 1400 \text{ psi}$
 $f_s = 20,000 \text{ psi}$

FOUNDATION DATA

PILING AT THE PIERS SHALL BE TREATED TIMBER PILING EST. 40' LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 24 TONS PER PILE. PILING AT THE ABUTMENTS SHALL BE TREATED TIMBER PILING EST. 60' LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 18 TONS PER PILE.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
ALL CONCRETE MASONRY SHALL BE GRADE "A" AT $f'_c = 1900 \text{ psi}$. BEVEL ALL EXPOSED EDGES OF CONCRETE, EXCEPT WHERE NOTED OTHERWISE.
IMBED ALL BAR STEEL 2" UNLESS OTHERWISE SHOWN.
PILING AT THE PIERS SHALL BE TREATED TIMBER PILING 40' LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 24 TONS PER PILE. PILING AT THE ABUTMENTS SHALL BE TREATED TIMBER PILING 60' LONG AND DRIVEN TO A MINIMUM BEARING VALUE OF 18 TONS PER PILE.
THE UPPER LIMITS FOR "EXCAVATION FOR STRUCTURES" SHALL BE EL. 657.87 AT N. ABUT. AND EL. 659.11 AT E. ABUT. AND THE FINISHED GRADED SECTION AT THE PIERS.
HOT POURED ELASTIC TYPE JOINT SEALER SHALL CONFORM TO ASTM DESIGNATION, D1190.
PREBORE PILING AT ABUTMENTS TO ORIGINAL GROUND ELEVATION BEFORE DRIVING PILING.



PLAN

4 SPAN CONTINUOUS R.C. "T" GIRDER SUPERSTRUCTURE WITH R.C. (3) COL. CONT. FOOTING PIERS AND R.C. SILL TYPE ABUTMENTS.

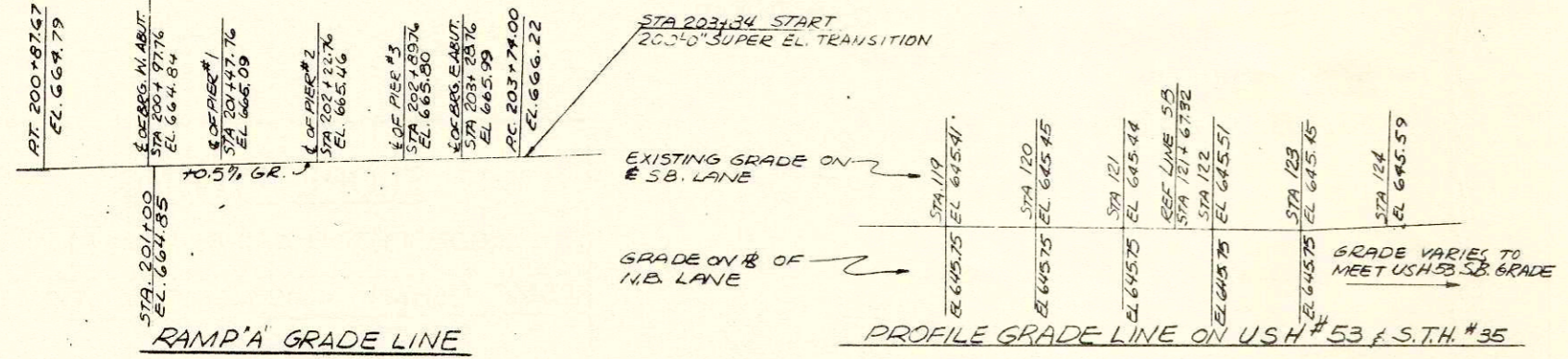
CURVE DATA

- V - 94-16'-38"
- D - 120-43'-57"
- K - 450'
- T - 529.47'
- L - 779.72'
- SE - .03' PER FT
- PC - STA 196+70.73
- PT - STA 204+50.45

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER	W.ABUT.	PIER 1	PIER 2	PIER 3	E.ABUT.	TOTAL
EXCAVATION FOR STRUCTURES	C.Y.		40	60	60	50	30	240
CONCRETE MASONRY	C.Y.	372.8	59.0	49.9	47.4	44.0	43.8	616.9
BAR STEEL REINFORCEMENT	LB.	103,470	2090	8140	7010	5420	1540	127,670
STRUCTURAL LOW ALLOY STEEL	LB.	4,470						4,470
UNTREATED TIMBER TEST PILING	LS.							1
TREATED TIMBER PILING, DELIVERED	L.F.		960	960	960	880	720	4480
TREATED TIMBER PILING, DRIVEN	L.F.		960	960	960	880	720	4480
SLOPE PAVING, CONCRETE	S.Y.		195					195
LUBRICATED BRONZE PLATES	LB.	250						250
BEARING PADS	S.F.	24						24
TUBULAR RAILING, TYPE "6"	L.F.	511						511
STRUCTURAL CARBON STEEL	LB.	5,810						5,810
NON BID ITEMS								
AL. OR ZINC PLATE	S.F.	35						35

* 2-75'-0" TEST PILES REQ'D. DRIVE ONE EACH AT ABUTMENTS.
* 3-60'-0" TEST PILES REQ'D. DRIVE ONE EACH AT PIERS.

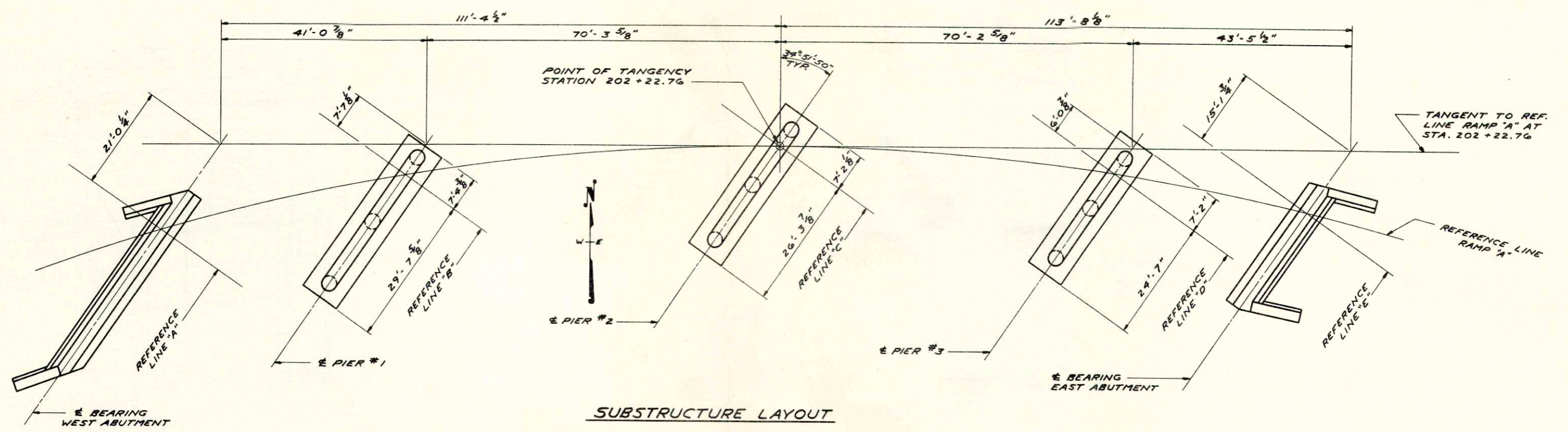


PROFILE GRADE LINE ON U.S.H. #53 & S.T.H. #35

LIST OF DRAWINGS

- 1. GENERAL PLAN X29429
- 2. SUPERSTRUCTURE X29430
- 3. SUPERSTRUCTURE X29431
- 4. SUPERSTRUCTURE X29432
- 5. SUPERSTRUCTURE X29433
- 6. SUPERSTRUCTURE X29434
- 7. BEARING DETAILS X29435
- 8. TUBULAR STEEL RAILING TYPE "6" X29436
- 9. TUBULAR ALUMINUM RAILING TYPE "6" X29437
- 10. EXPANSION JOINT X29438
- 11. WEST ABUTMENT X29439
- 12. PIER 1 X29440
- 13. PIER 2 X29441
- 14. PIER 3 X29442
- 15. EAST ABUTMENT X29443
- 16. SUBSURFACE EXPLORATION X29444

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN			
	GENERAL PLAN			
CD. LACROSSE	CITY	LACROSSE	STA. 727	
SECTION 17	TOWN	N. N.	RANGE 7N	
DESIGN SPEC. AASHO '61	LOADING	#20-S	CONC. SPEC. 1965	
DATE 9-11-64	DESIGN	J. B.	DRAWN	J. T. CED. RLP
SUBMITTED:	J. B. Schultz ENGINEER OF BRIDGES			
APPROVED:	[Signature] STATE HIGHWAY ENGINEER			
STRUCTURE B-32-38		SHEET 1 OF 16		

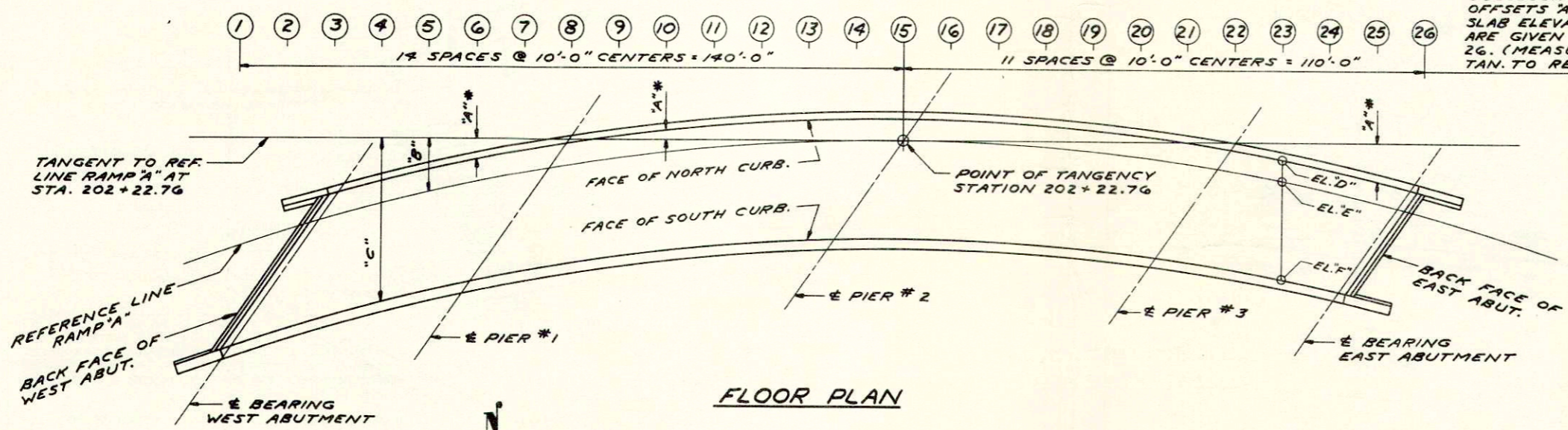


SUBSTRUCTURE LAYOUT

TABLE OF OFFSETS & ELEVATIONS

NO.	"A" * TAN. TO FACE OF N. CURB	"B" * TAN. TO REF. LINE	"C" * TAN. TO FACE OF S. CURB	EL. "D" * @ FACE OF N. CURB	EL. "E" * @ REF. LINE	EL. "F" * @ FACE OF S. CURB
1	17.60	22.33	42.90	665.12	664.75	663.15
2	14.49	19.19	39.60	665.17	664.80	663.21
3	11.63	16.30	36.56	665.22	664.85	663.26
4	9.01	13.65	33.79	665.27	664.90	663.32
5	6.64	11.25	31.28	665.32	664.96	663.37
6	4.50	9.09	29.01	665.37	665.01	663.43
7	2.60	7.17	27.00	665.42	665.06	663.48
8	.92	5.48	25.23	665.47	665.11	663.53
9	-.52	4.02	23.70	665.52	665.16	663.59
10	-1.74	2.79	22.41	665.57	665.21	663.64
11	-2.74	1.78	21.36	665.62	665.26	663.69
12	-3.51	1.00	20.55	665.67	665.31	663.74
13	-4.06	.44	19.96	665.72	665.36	663.80
14	-4.39	.11	19.62	665.77	665.41	663.85
15	-4.50	.00	19.50	665.82	665.46	663.90
16	-4.39	.11	19.62	665.87	665.51	663.95
17	-4.06	.44	19.96	665.92	665.56	664.00
18	-3.51	1.00	20.55	665.97	665.61	664.06
19	-2.74	1.78	21.36	666.02	665.66	664.11
20	-1.74	2.79	22.41	666.07	665.71	664.16
21	-.52	4.02	23.70	666.12	665.76	664.21
22	.92	5.48	25.23	666.17	665.81	664.27
23	2.60	7.17	27.00	666.22	665.86	664.32
24	4.50	9.09	29.01	666.27	665.91	664.37
25	6.64	11.25	31.28	666.32	665.96	664.43
26	9.01	13.65	33.79	666.37	666.02	664.48

SUCCESSIVE POSITIONS OF OFFSETS "A", "B", "C" AND SLAB ELEVATIONS "D", "E", "F" ARE GIVEN AT POINTS 1 THRU 26. (MEASURED ALONG THE TAN. TO REF. LINE RAMP "A".)



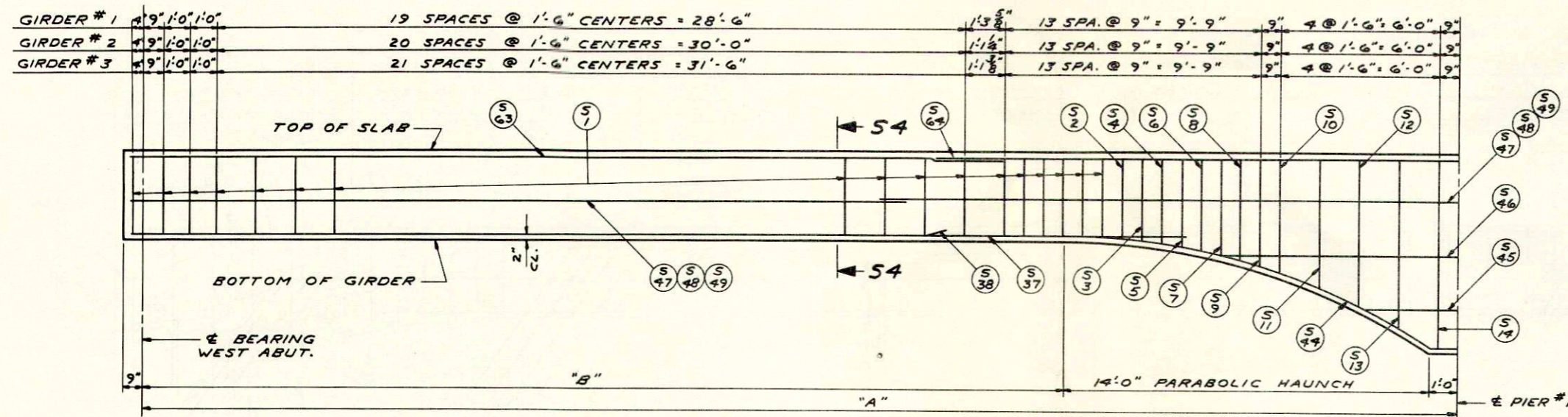
FLOOR PLAN

CURVE DATA

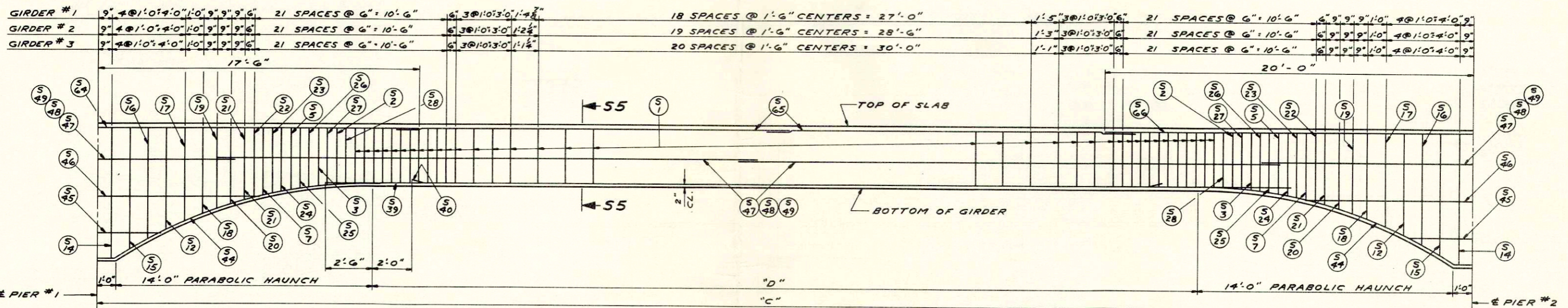
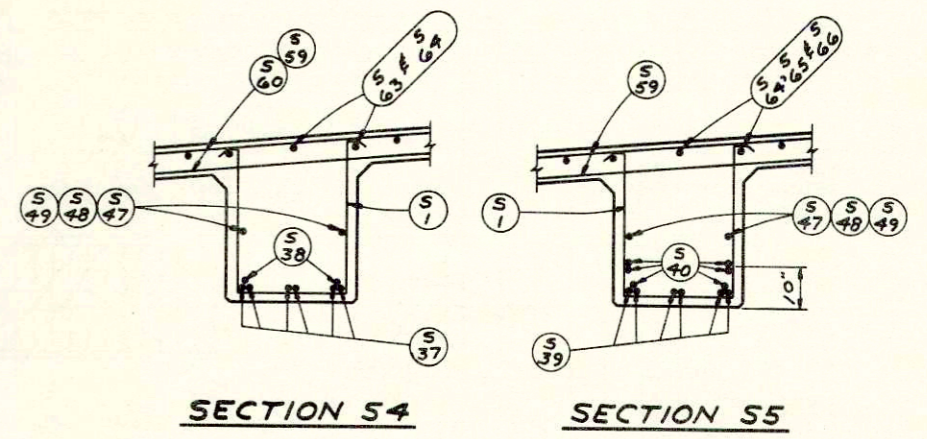
- Δ - 99°-16'-38"
- D - 12°-43'-57"
- R - 450'
- T - 529.47'
- L - 779.72'
- S.E. - .08' PER FT.
- P.C. - STA. 196+70.73
- P.T. - STA. 204+50.45

* OFFSET "A", GIVEN IN THE "TABLE OF OFFSETS AND ELEVATIONS", HAS BOTH POSITIVE AND NEGATIVE VALUES. POSITIVE VALUES INDICATE OFFSETS SOUTH OF TANGENT. NEGATIVE VALUES INDICATE OFFSETS NORTH OF TANGENT.

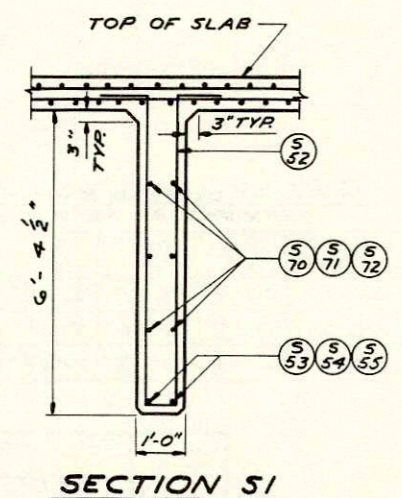
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
DESIGN SPEC. AASHO '61	LOADING H20-S16
DATE 9-11-64	DESIGN J.B. DRAWN J.T. CRD. R.L.P.
STRUCTURE B-32-38	SHEET 2 OF 16



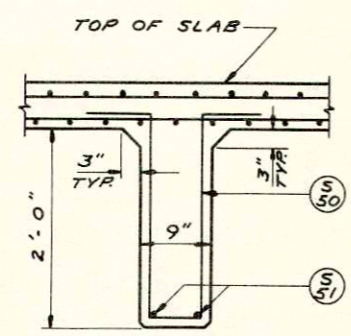
PART LONGITUDINAL SECTION THRU GIRDER - SPAN 1
DIMENSIONS SHOWN ARE MEASURED ALONG ϵ OF GIRDERS.



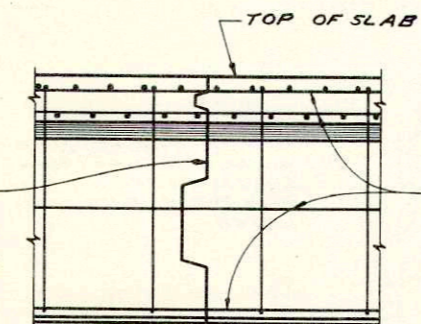
PART LONGITUDINAL SECTION THRU GIRDER - SPAN 2
DIMENSIONS SHOWN ARE MEASURED ALONG ϵ OF GIRDERS.



SECTION 51



SECTION 52



SECTION 53

OPTIONAL TRANSVERSE CONST. JOINT, FORMED BY A SURFACED, BEVELED 2" x 2" IN THE SLAB AND A 4" x 1-1/2" KEYWAY IN THE GIRDERS.

RUN LONGITUDINAL BAR STEEL REINF. THROUGH JOINT.

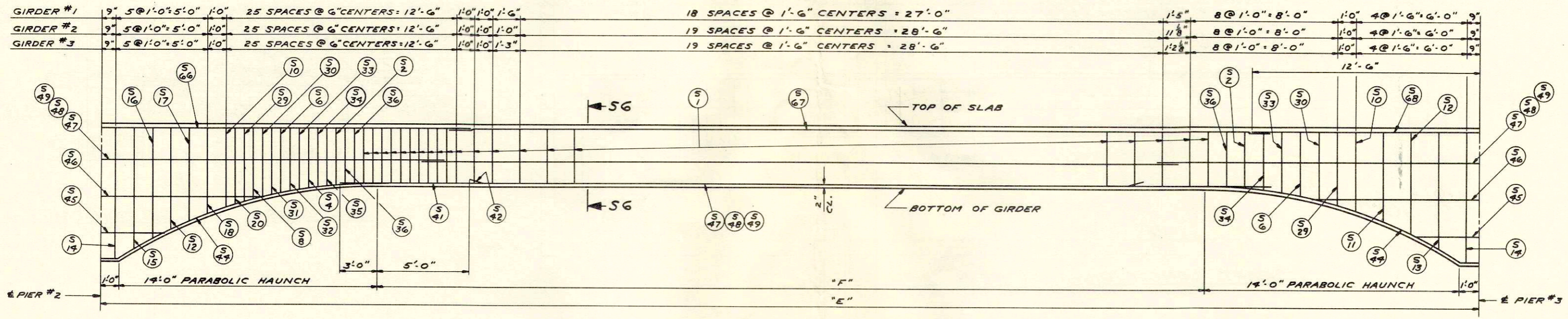
GIRDER LENGTHS (ALONG CURVE)
(MEASURED ALONG THE ϵ OF GIRDER.)

GIRDER NUMBER	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	ϵ BRG.W. ABUT. TO ϵ BRG.E. AB.
NO. 1	49'-9 5/8"	34'-9 5/8"	74'-9 7/8"	44'-9 3/8"	230'-6 1/4"
NO. 2	51'-1 1/4"	36'-1 1/4"	75'-11 1/4"	45'-11 1/4"	233'-7 1/2"
NO. 3	52'-7 3/8"	37'-7 3/8"	77'-2 1/4"	47'-2 1/4"	237'-1"

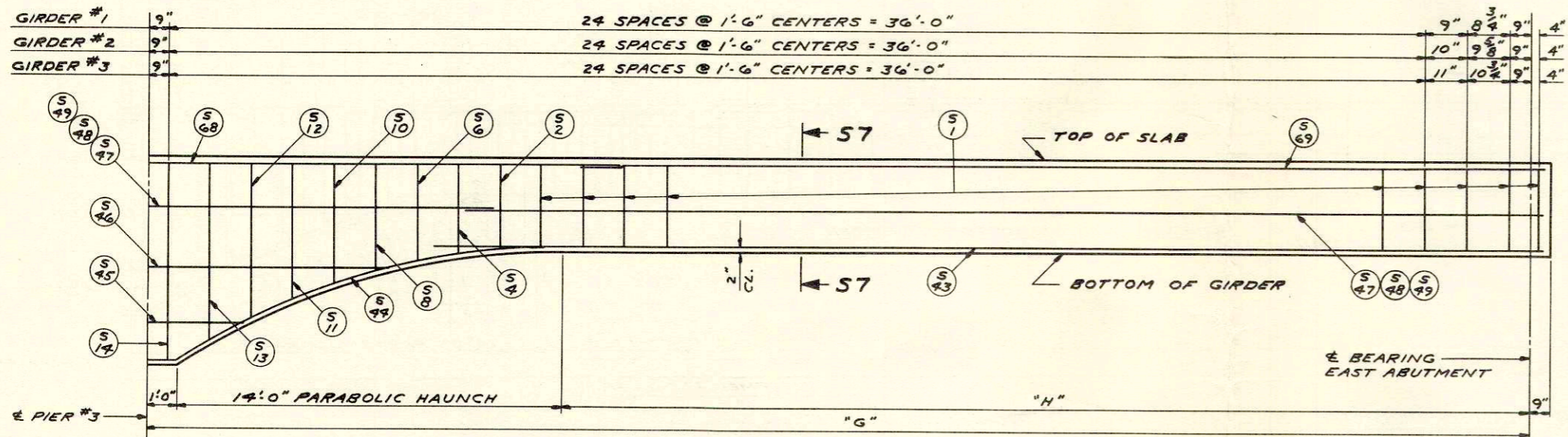
NOTE: FOR LOCATION OF SECTIONS "51", "52" AND "53" SEE X29431.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	SUPERSTRUCTURE		
	DESIGN SPEC. AASHO '61	LOADING H20-S16	CONST. SPEC. 1963
	DATE 9-11-69	DESIGN J.B.	DRAWN J.T. CKD RLP
STRUCTURE B-32-38	SHEET 4 OF 16		

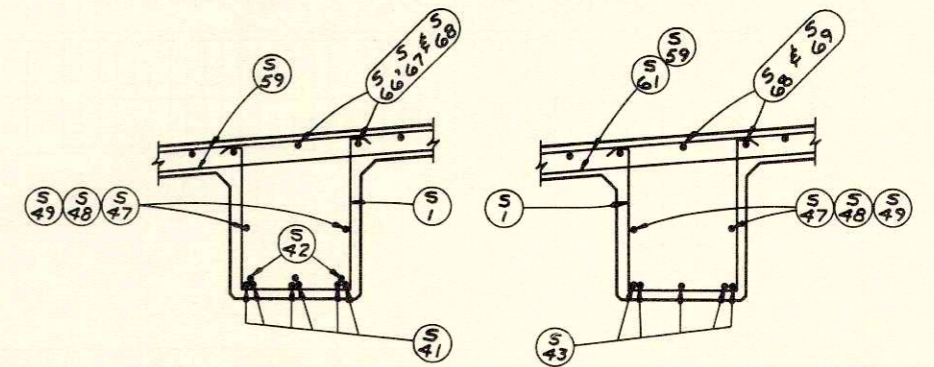
X29432



PART LONGITUDINAL SECTION THRU GIRDER - SPAN 3
DIMENSIONS SHOWN ARE MEASURED ALONG E OF GIRDERS.

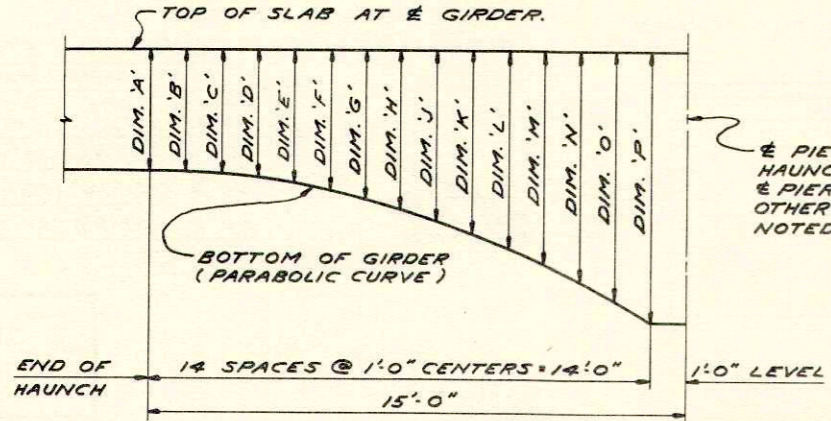


PART LONGITUDINAL SECTION THRU GIRDER - SPAN 4
DIMENSIONS SHOWN ARE MEASURED ALONG E OF GIRDERS.

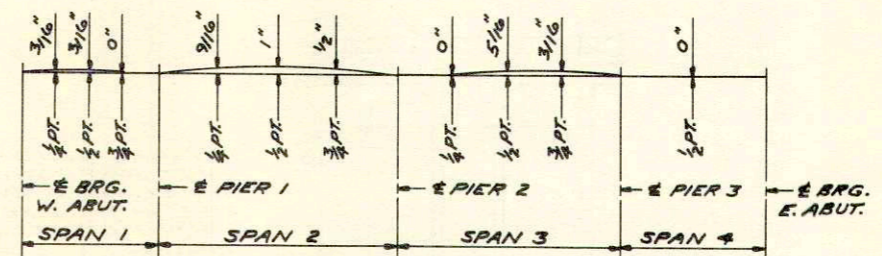


SECTION S6 **SECTION S7**

DIM.	LENGTH
'A'	3'-4 1/2"
'B'	3'-4 3/4"
'C'	3'-5 1/2"
'D'	3'-6 1/16"
'E'	3'-8 3/16"
'F'	3'-10 13/16"
'G'	4'-1 5/8"
'H'	4'-4 3/8"
'J'	4'-8 1/16"
'K'	5'-0 15/16"
'L'	5'-5 3/4"
'M'	5'-11 1/8"
'N'	6'-4 7/8"
'O'	6'-11 3/16"
'P'	7'-6"



TYPICAL PARABOLIC HAUNCH DEPTH DETAILS



CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE PLASTIC FLOW. CAMBER SHOWN DOES NOT INCLUDE AN ALLOWANCE FOR FORM SETTLEMENT. DEAD LOAD DEFLECTION ONLY IS 1/2 OF THE CAMBER VALUES SHOWN. CAMBER IS MEASURED ABOVE GRADE LINE AND DEAD LOAD DEFLECTION BELOW GRADE LINE.

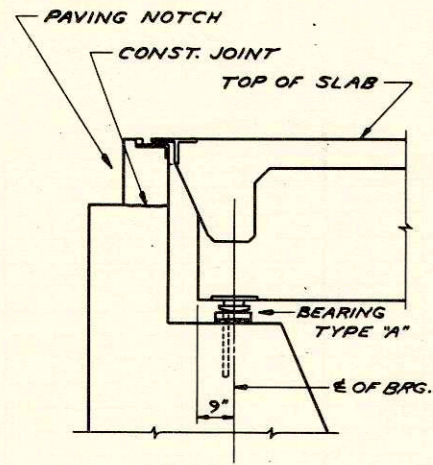
CAMBER DIAGRAM

GIRDER LENGTHS (ALONG CURVE)
(MEASURED ALONG THE E OF GIRDER.)

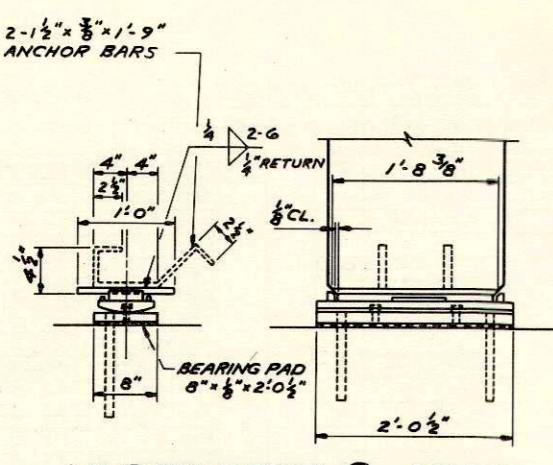
GIRDER NUMBER	DIM. "E"	DIM. "F"	DIM. "H"	E BRG. W. ABUT. - E BRG. E. ABUT.	
NO. 1	66'-11"	36'-11"	38'-11 1/2"	23'-11 1/2"	230'-6 1/2"
NO. 2	67'-5 1/8"	37'-5 1/8"	39'-1 5/8"	24'-1 5/8"	233'-7 1/2"
NO. 3	67'-11 1/8"	37'-11 1/8"	39'-3 1/2"	24'-3 1/2"	237'-1"

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	SUPERSTRUCTURE
	DESIGN SPEC. AASHO '61 LOADING H20-516 CDIST. 1963
	DATE 9-11-64 DESIGN JB DRAWN JT CKD. RLP
STRUCTURE B-32-38	SHEET 5 OF 16

B. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	I-90-1222	61	116

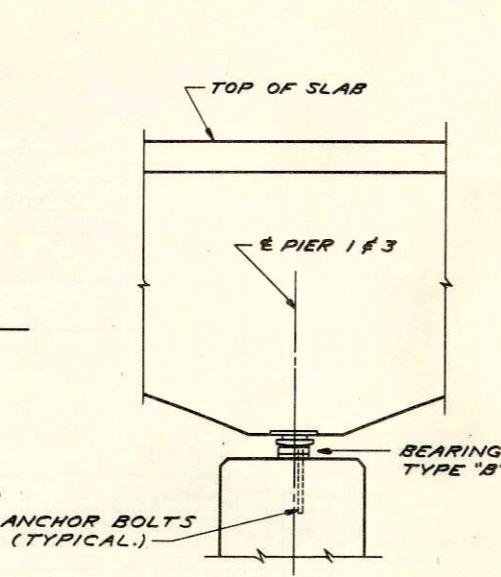


PART ELEV. @ ABUT.

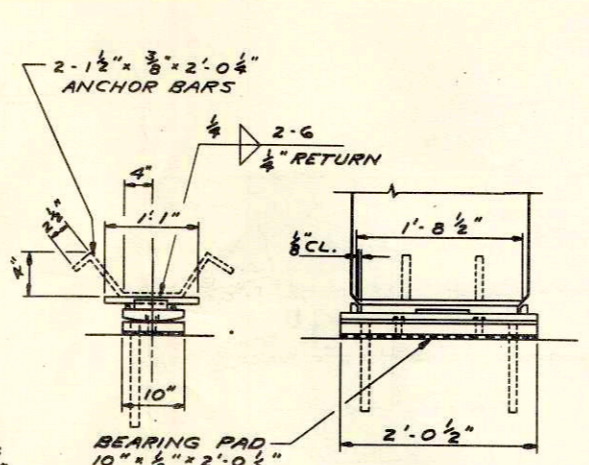


ANCHOR DETAIL @ ABUTS.

BEARING TYPE "A" - 6 REQ'D.

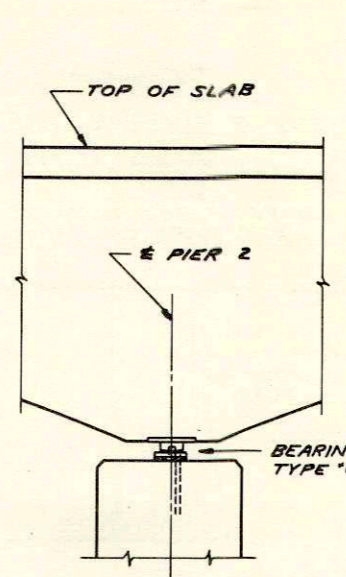


PART ELEV @ PIERS 1 & 3

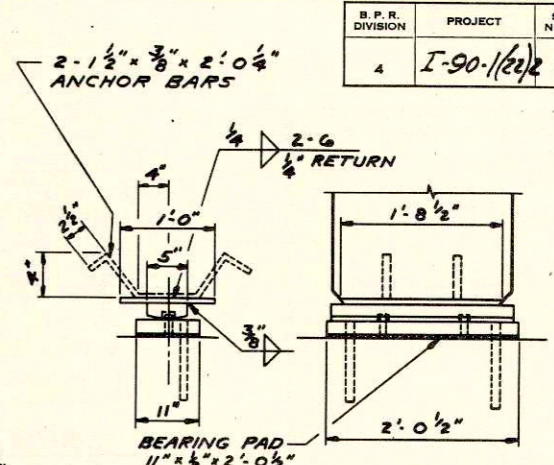


ANCHOR DETAILS @ PIERS 1 & 3

BEARING TYPE "B" - 6 REQ'D.

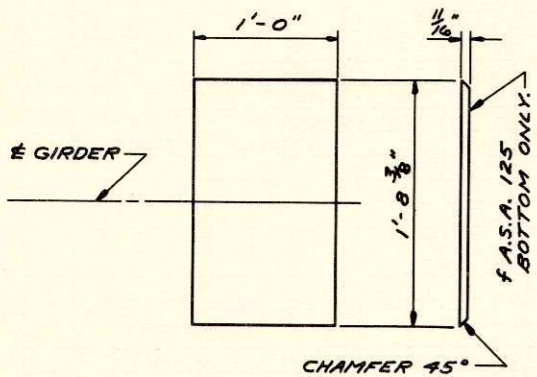


PART ELEV. @ PIER 2

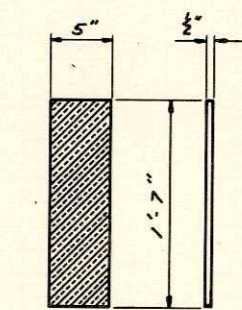


ANCHOR DETAILS @ PIER 2

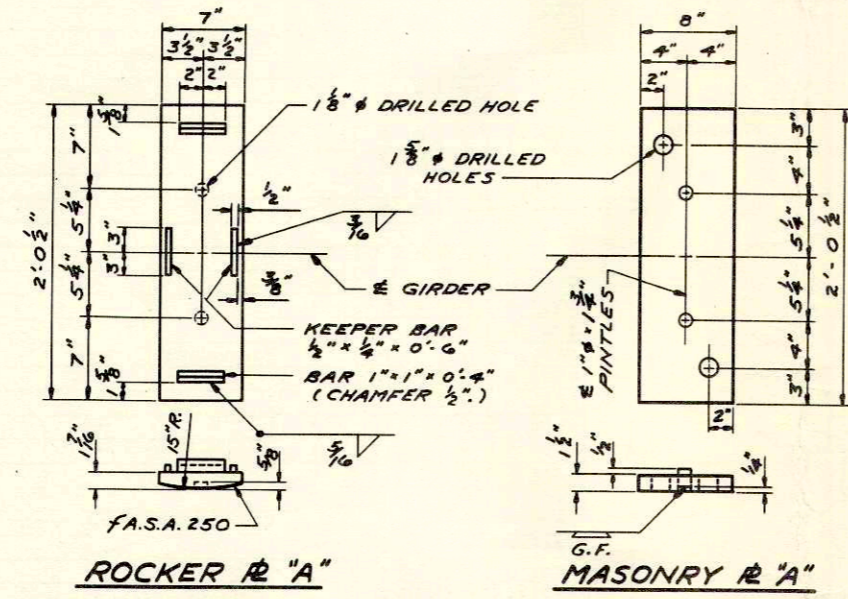
BEARING TYPE "C" - 3 REQ'D.



ANCHOR R "A"
FINISH ANCHOR PLATE IN DIRECTION OF MOVEMENT.



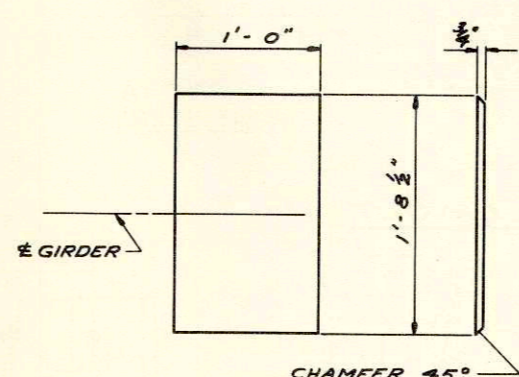
LUBRICATED BRONZE R "A"
LUBRICATE TOP SURFACE ONLY.



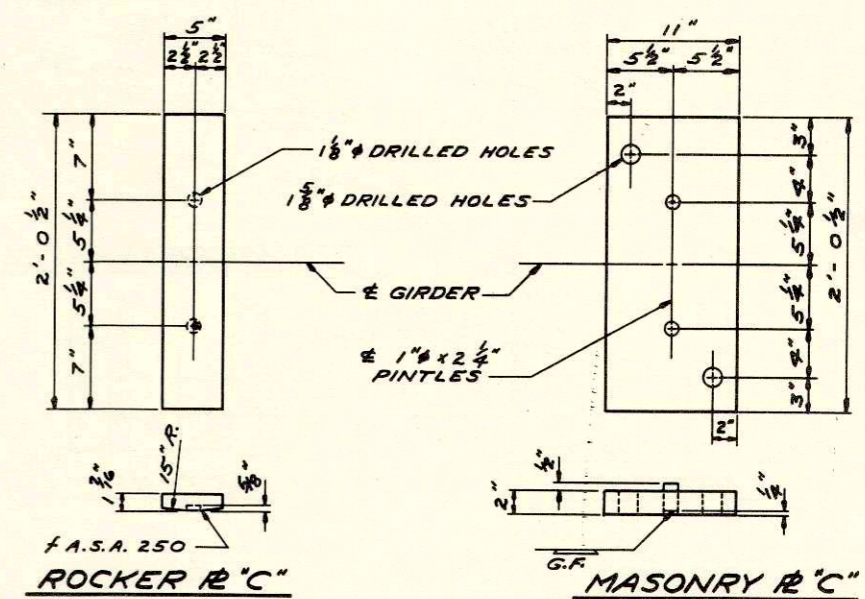
ROCKER R "A"

MASONRY R "A"

BEARING TYPE "A" - 6 REQ'D.



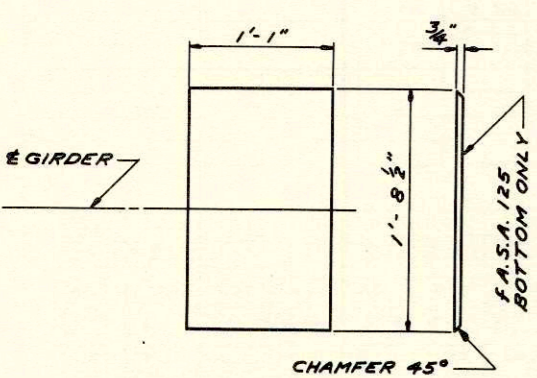
ANCHOR R "C"



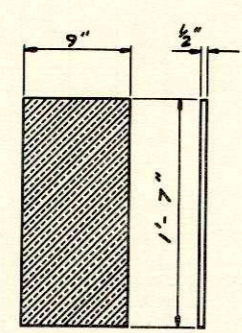
ROCKER R "C"

MASONRY R "C"

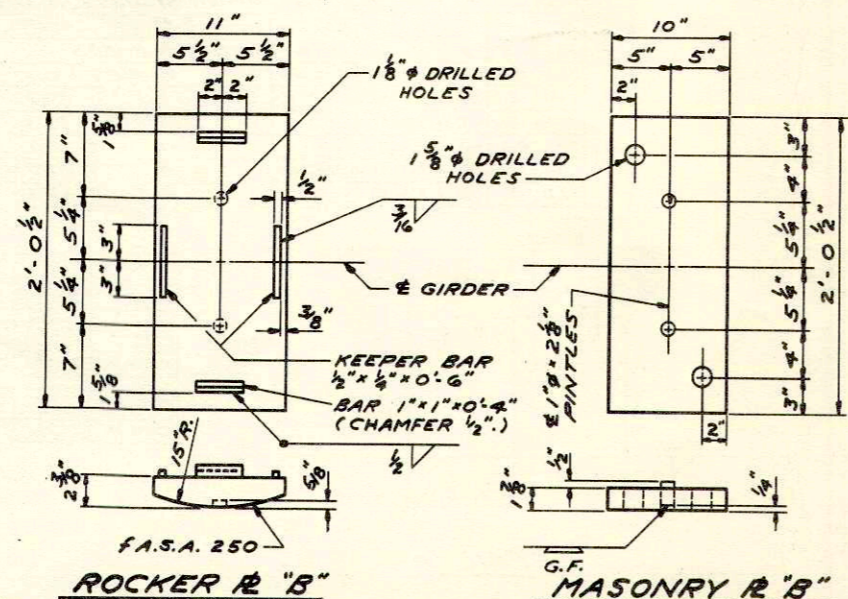
BEARING TYPE "C" - 3 REQ'D.



ANCHOR R "B"
FINISH ANCHOR PLATE IN DIRECTION OF MOVEMENT.



LUBRICATED BRONZE R "B"
LUBRICATE TOP SURFACE ONLY.



ROCKER R "B"

MASONRY R "B"

BEARING TYPE "B" - 6 REQ'D.

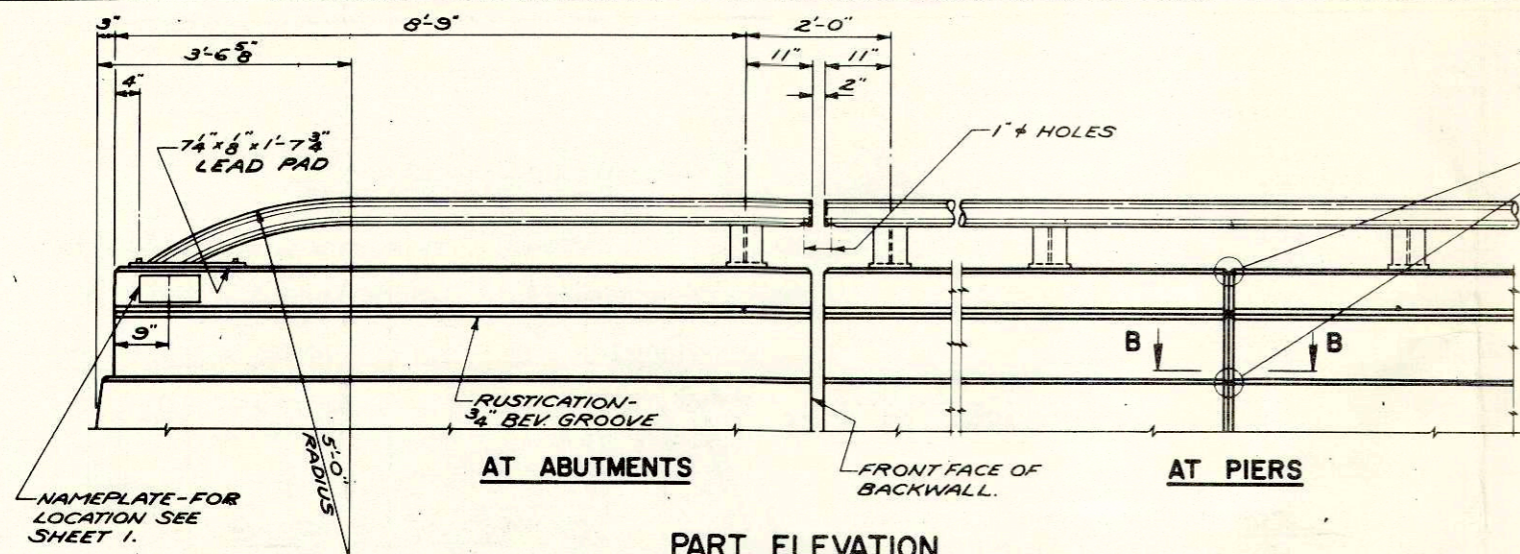
BEARING NOTES

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.
 ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.
 ALL SURFACES MARKED F SHALL BE MACHINE FINISHED.
 2- PRESET ANCHOR BOLTS 1 1/2" x 1-3" LONG. TOP OF BOLT TO BE FLUSH WITH TOP OF MASONRY PLATE. EXCESS LENGTH MAY BE FURNISHED & THREADED FOR SETTING AND CUT FLUSH. FILL AROUND ANCHOR BOLTS WITH LEAD. (TYPICAL FOR ALL BEARINGS.)
 ALL MATERIAL, EXCEPT ANCHOR BOLTS, SHALL BE MADE OF A242 STEEL WITH A CORROSIVE RESISTANCE OF 4 OR MORE TIMES THAT OF A36 STEEL.
 ALL MATERIAL IN BEARINGS, EXCEPT BRONZE PLATES AND BEARING PADS, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR STRUCTURAL LOW ALLOY STEEL.
 PINTLE HOLES IN MASONRY R'S SHALL BE DRILLED FOR A DRIVING FIT. CHAMFER TOP OF PINTLE'S 1/8".

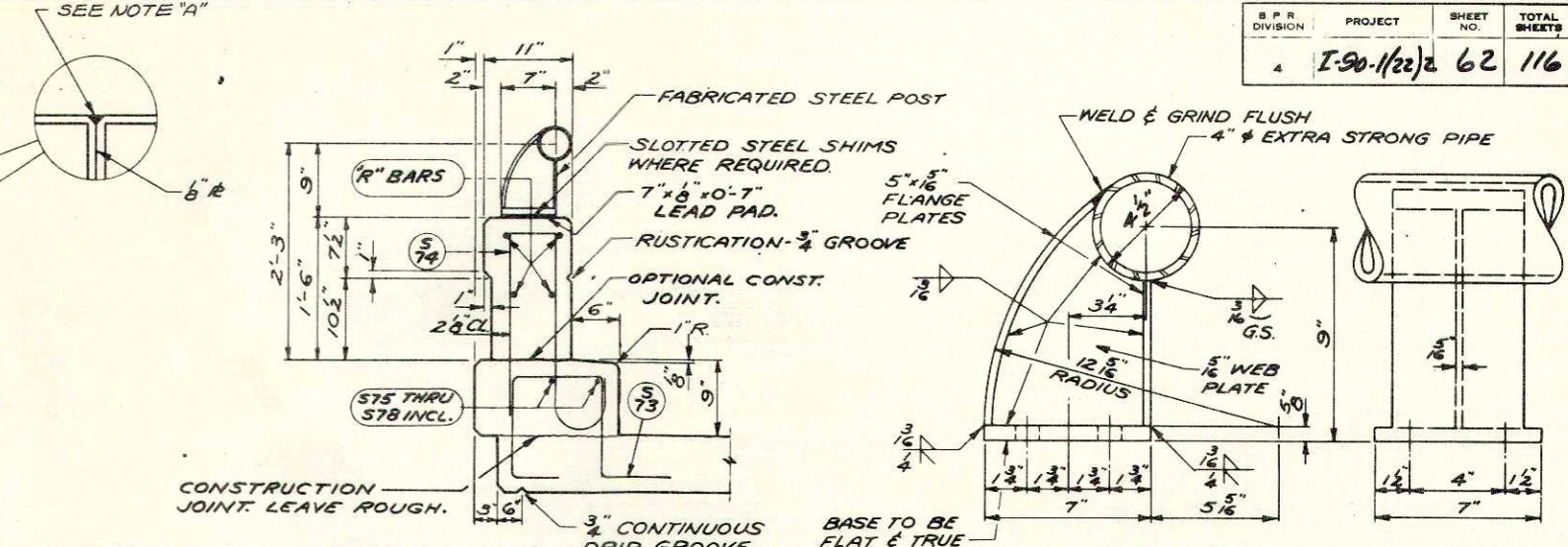
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	BEARING DETAILS		
	DESIGN SPEC. AASHO '61	LOADING H20-S16	CONSTR. SPEC. 1963
	DATE 3-11-67	DESIGN J.P.	DRAWN J.T. CKD. RLP
STRUCTURE B-32-38		SHEET 7 OF 16	

X29435

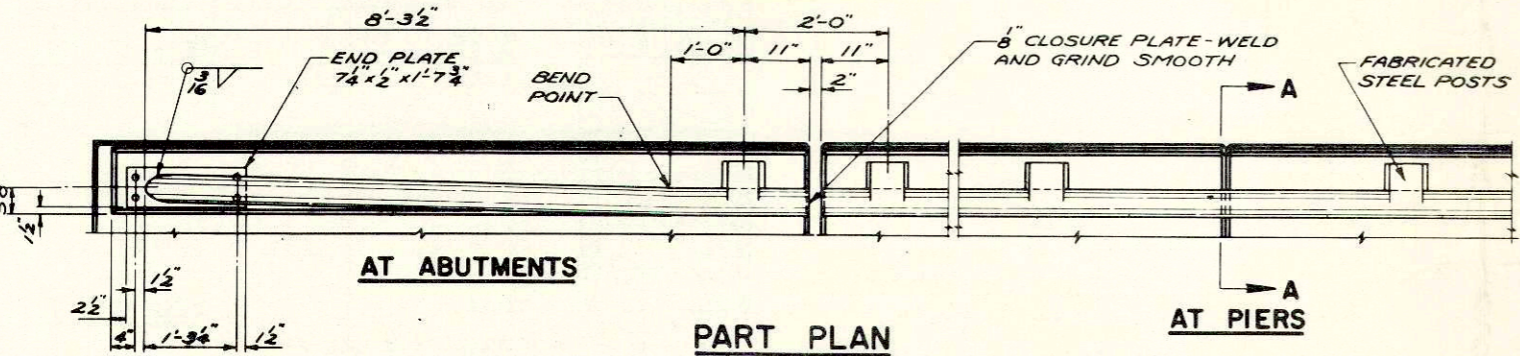
B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-1/22	62	116



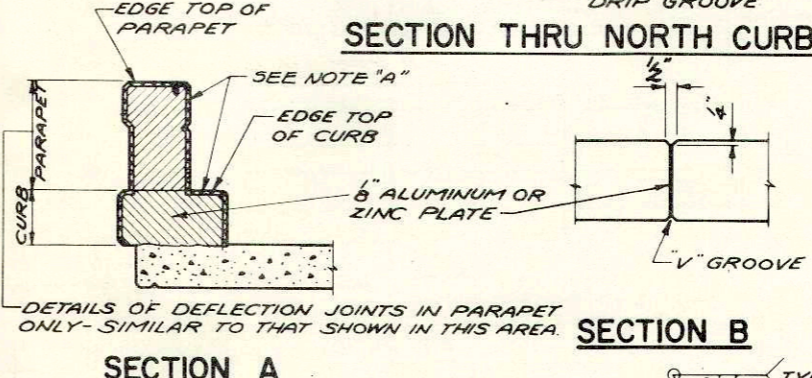
PART ELEVATION



SECTION THRU NORTH CURB



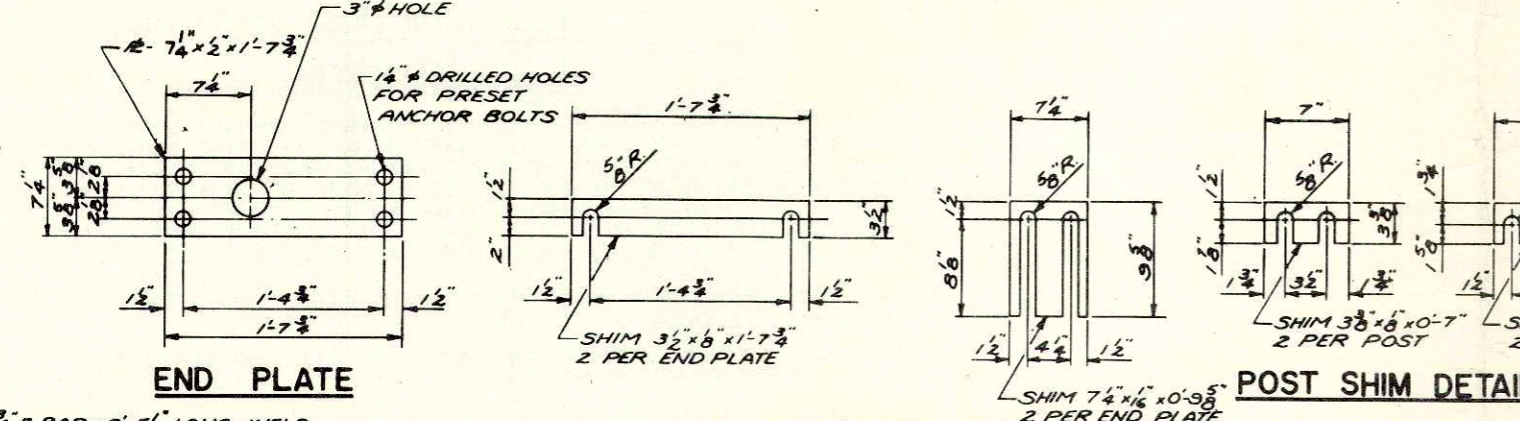
PART PLAN



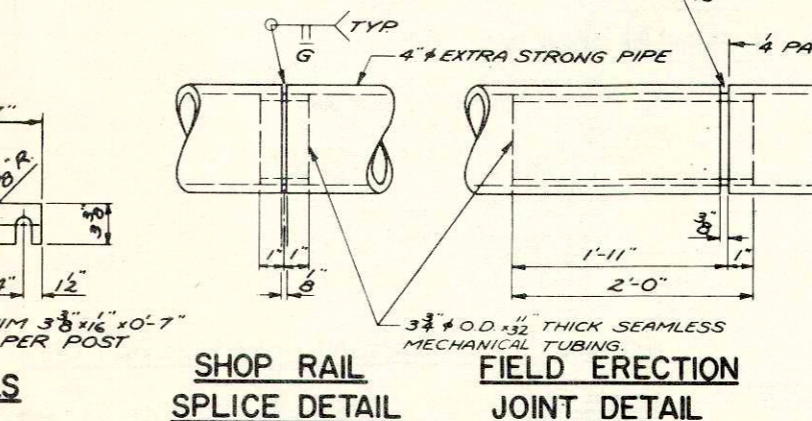
SECTION A

SECTION B

POST DETAILS



END PLATE SHIM DETAILS

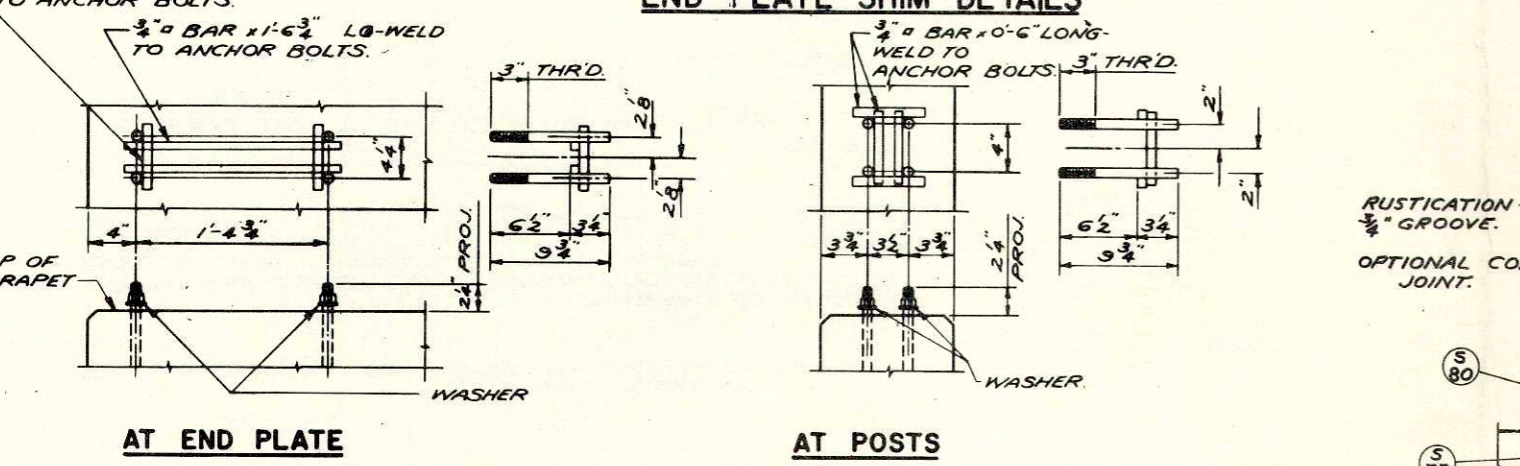


SHOP RAIL SPLICE DETAIL

FIELD ERECTION JOINT DETAIL

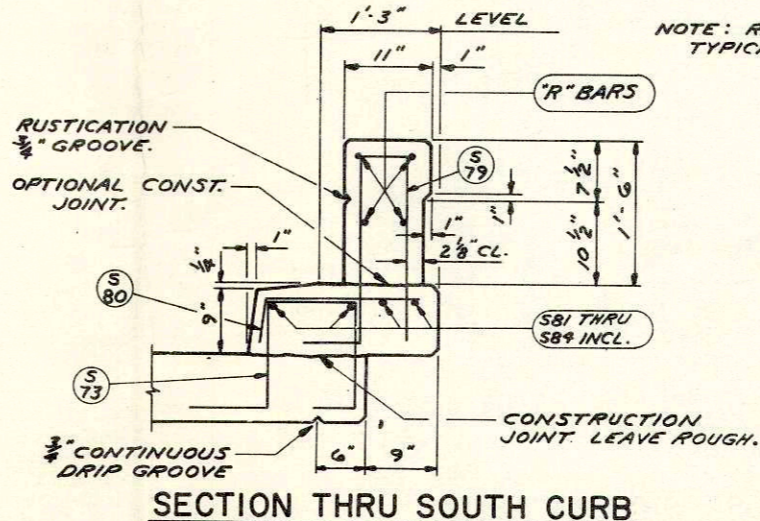
NOTES

1. STEEL RAIL POSTS SHALL BE SET NORMAL TO GRADE.
2. RAILING SHALL BE FABRICATED IN LENGTHS AS SHOWN.
3. STEEL SHIMS SHALL BE USED UNDER POSTS AND UNDER END PLATES WHERE REQUIRED FOR ALIGNMENT.
4. WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 6" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION 'A' BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS AND CURBS ARE USED AT THE DEFLECTION JOINTS ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.
5. THE FOLLOWING MATERIALS SHALL BE USED:
 RAILING SHALL BE 4" EXTRA STRONG PIPE CONFORMING TO ASTM DESIGNATION A53, GRADE B.
 SLEEVES SHALL BE 3/8" O.D. x 32 THICK SEAMLESS MECHANICAL TUBING MADE OF STEEL WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 60,000 P.S.I. AND A MINIMUM ELONGATION OF 10%.
 POSTS SHALL BE FABRICATED FROM MATERIAL CONFORMING TO ASTM DESIGNATION A36.
 ANCHOR BOLTS TO BE MADE FROM MATERIAL CONFORMING TO ASTM A307.
 6. CAULK EXPOSED OPENINGS BETWEEN SHIMS WITH LEAD WOOL.
 7. GALVANIZE ENTIRE RAILING AFTER FABRICATION INCLUDING NUTS, WASHERS, SHIMS AND TOP 3/2" OF ANCHOR BOLTS.



ANCHOR BOLT SETTING DETAILS

THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MINIMUM OF 0.62 INCHES.



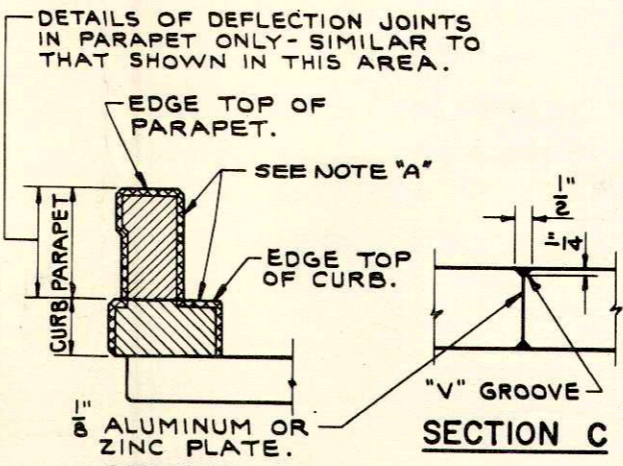
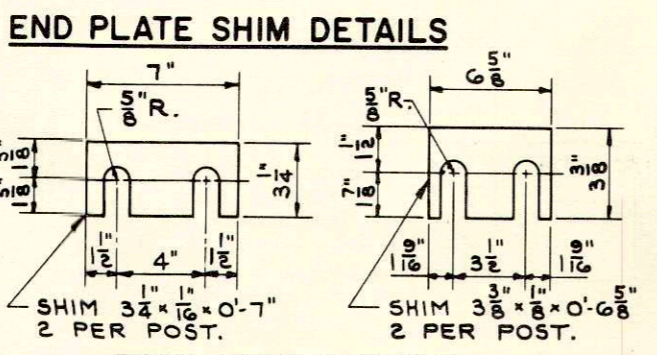
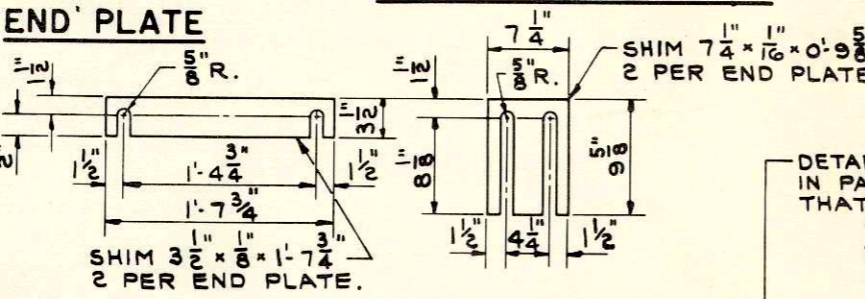
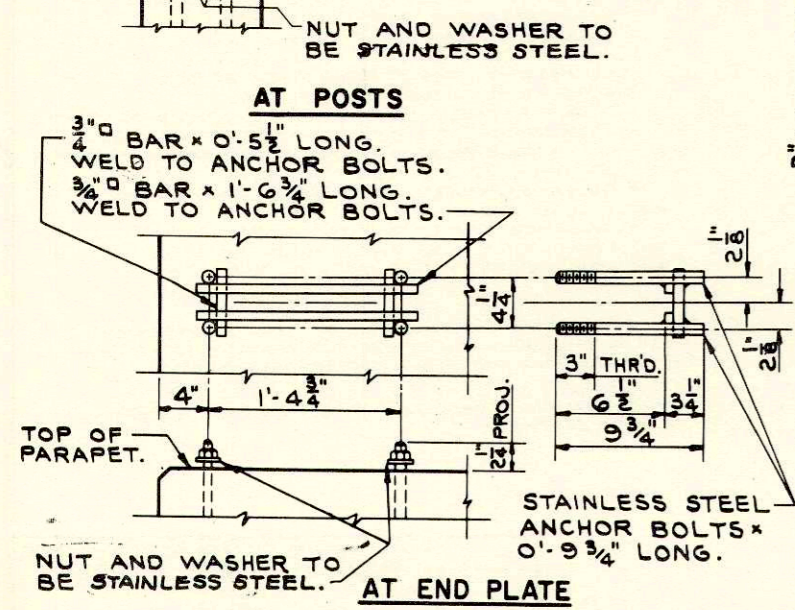
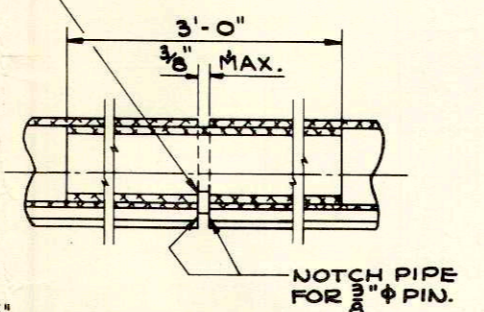
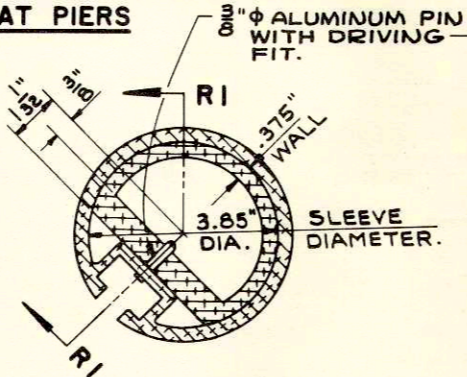
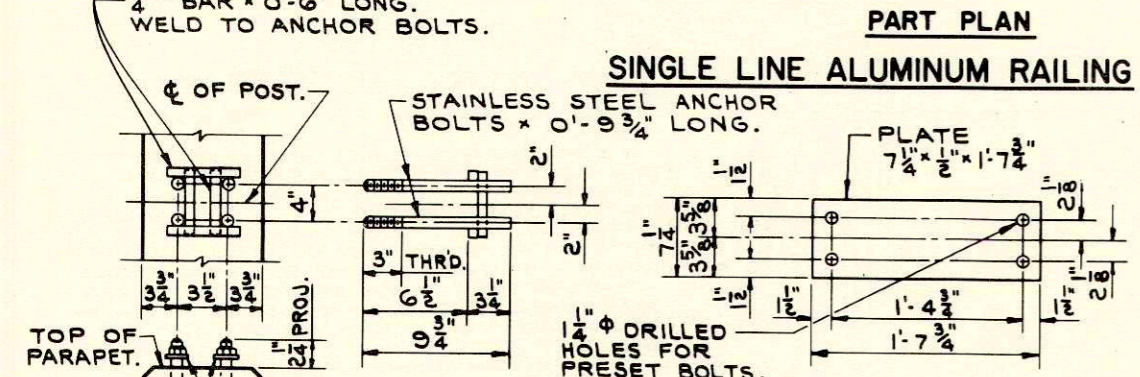
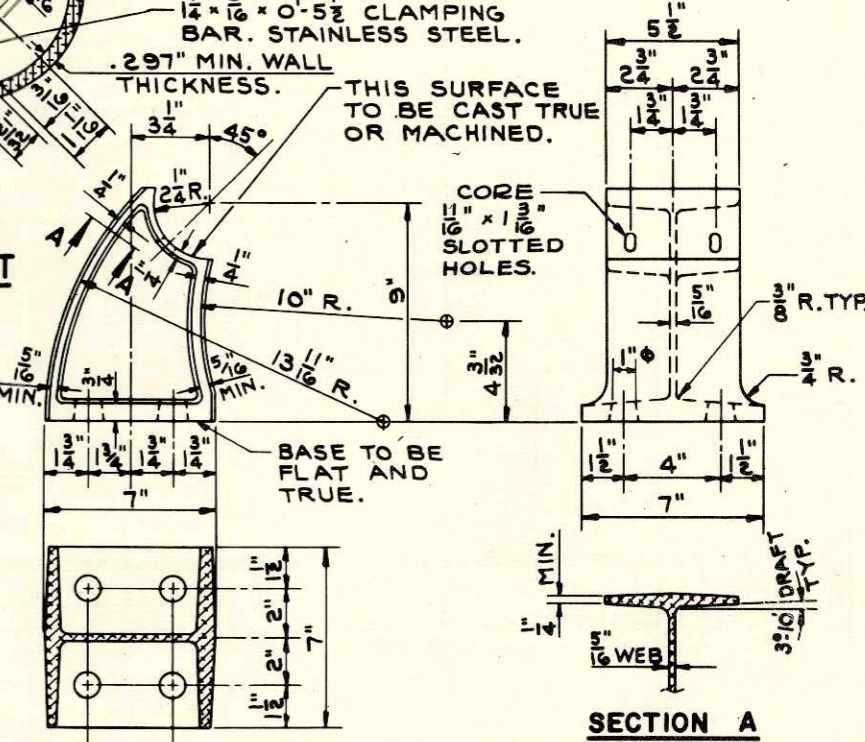
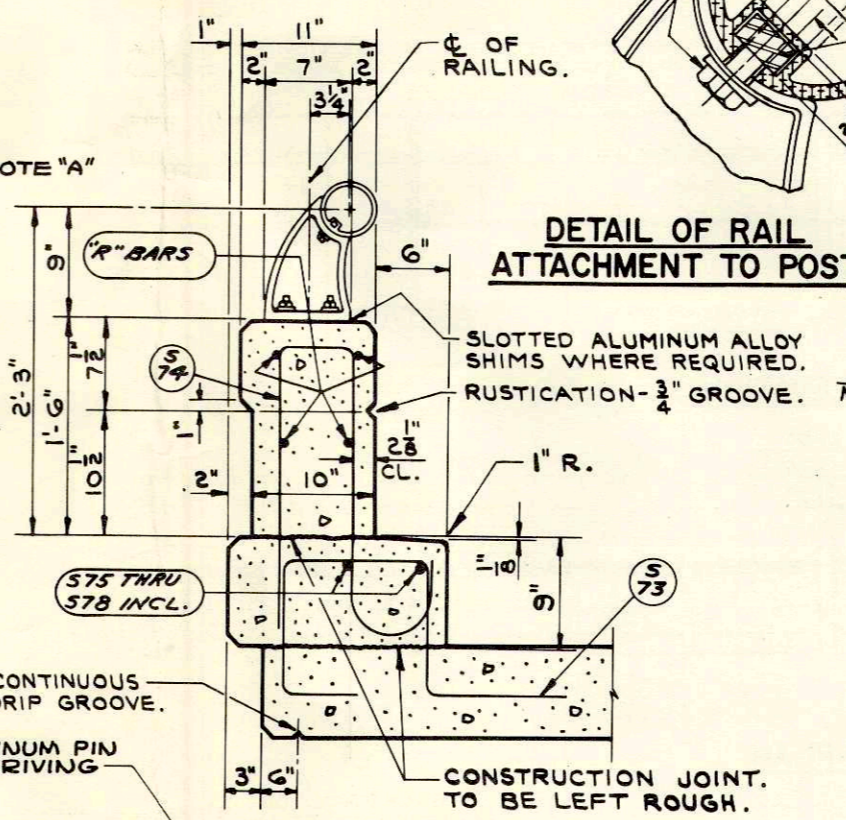
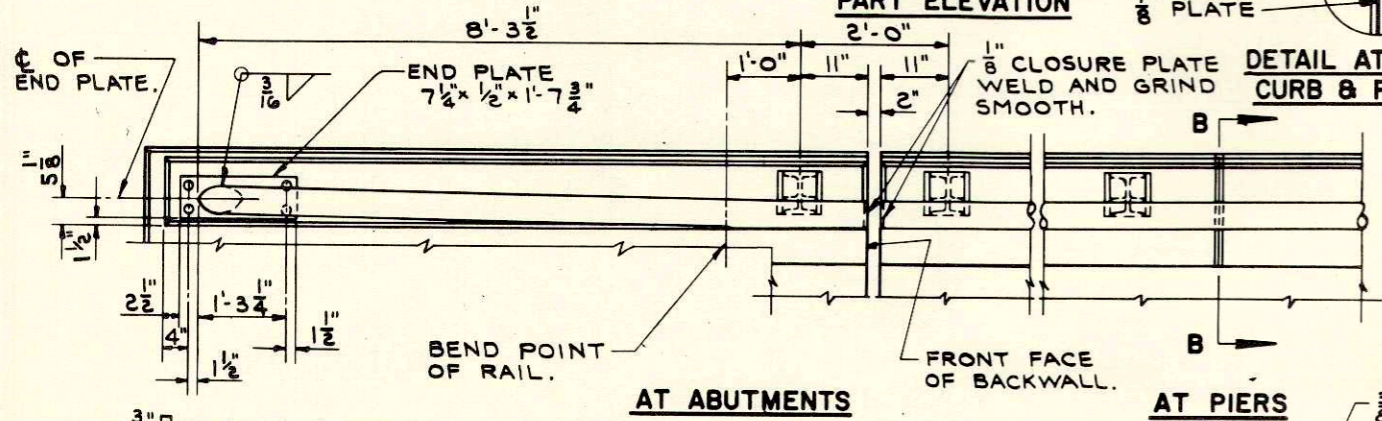
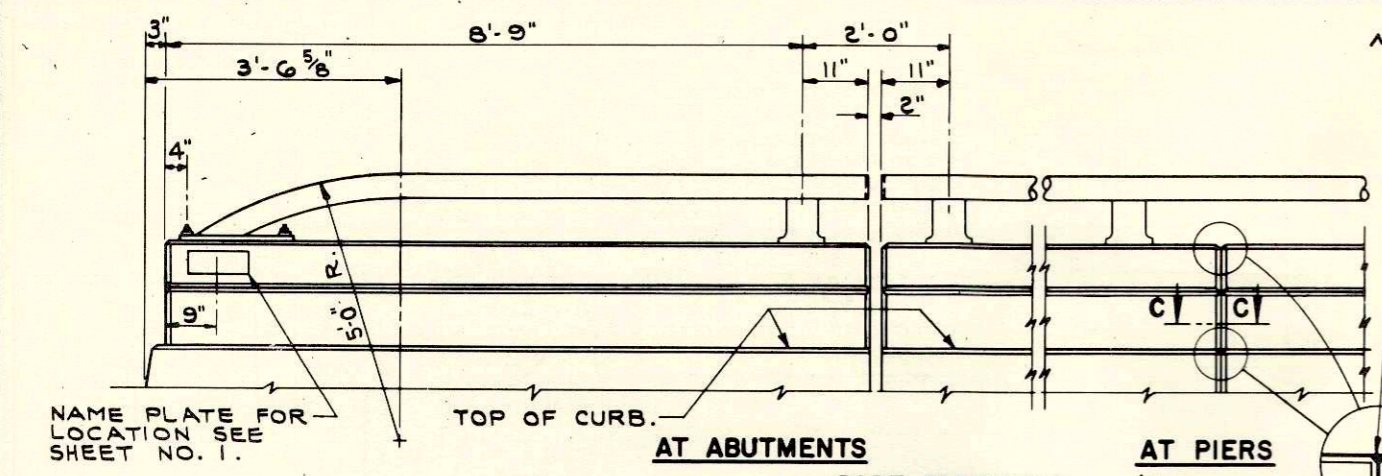
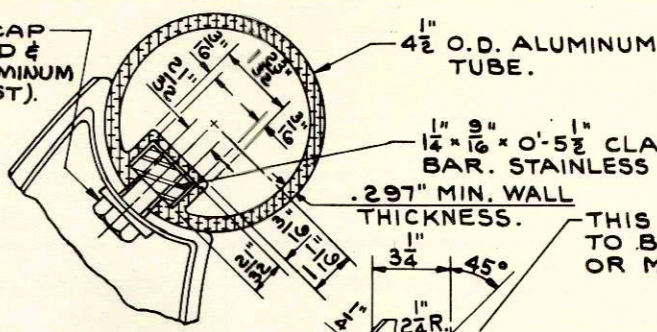
SECTION THRU SOUTH CURB

REVISION	STATE HIGHWAY COMMISSION OF WISCONSIN		
	TUBULAR STEEL RAILING TYPE 'G'		
	DESIGN SPEC. A.A.S.H.O. 6	LOADING	CONSTR. 1963
	DATE 9-11-64	DESIGN J.B.	DRAWN J.T. CRD. RLP
STRUCTURE	B-32-38	SHEET	8 OF 16

DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4	I-90-1122	63	116

NOTE: SECTION THRU NORTH CURB SHOWN. FOR DETAILS OF SOUTH CURB SEE X29436.

5/8" STAINLESS STEEL CAP SCREW AND CURVED & TAPERED CAST ALUMINUM WASHER (2 PER POST).



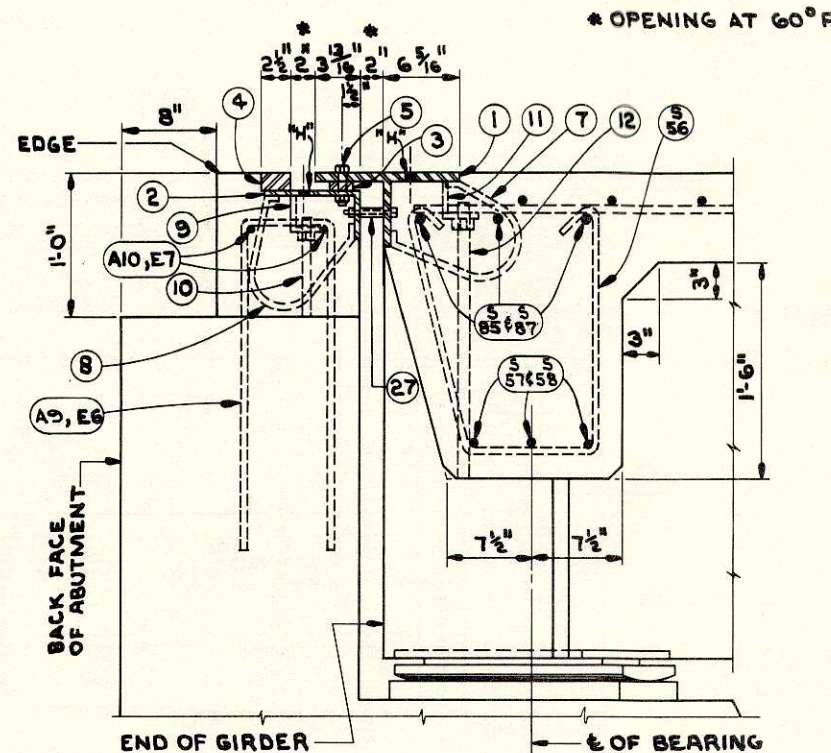
- GENERAL NOTES**
1. WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/2" ZINC OR ALUMINUM PLATE CUT AS SHOWN IN SECTION "B" BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS AND CURBS ARE USED AT THE DEFLECTION JOINTS ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND PLATE SEPARATORS MAY BE OMITTED.
 2. ALL POST SPACINGS ARE TAKEN HORIZONTALLY ALONG C OF RAILING AT BASE OF POSTS.
 3. RAILING SPLICES SHALL BE LOCATED APPROXIMATELY AT 1/4 POINTS BETWEEN POSTS.
 4. ALUMINUM SHIMS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQUIRED FOR ALIGNMENT.
 5. RAILING SHALL BE FABRICATED IN TWO AND THREE PANEL LENGTHS.

NOTE "A": FILL WITH NON-STAINING GRAY TWO COMPONENT POLYSULFIDE LIQUID POLYMER (GUN GRADE) WITH SURFACE PRIMER, MEETING APPROVAL OF THE ENGINEER.

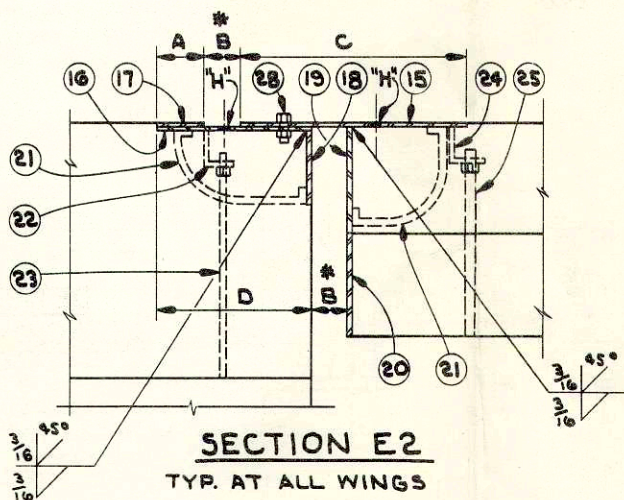
NOTE: THE RAILING SHALL BE FABRICATED TO THE REQUIRED CURVE.

THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MINIMUM OF 0.62 INCHES.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	TUBULAR ALUMINUM RAILING
	TYPE "G"
	DESIGN SPEC. A.A.S.H.O. 64
	LOADING
	CONSTR. SPEC. 1963
	DATE 9-11-64
	DESIGN J.B.
	DRAWN J.T.
	CRD. RLP
STRUCTURE B-32-38	SHEET 9 OF 16



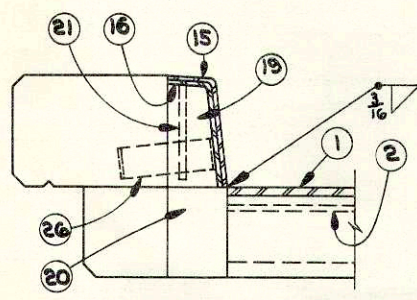
SECTION E1
TYP. BETWEEN GIRDERS



SECTION E2
TYP. AT ALL WINGS

FOR LOCATION OF THESE DIMENSIONS SEE SECTION E2.

WING NO.	DIM. A	DIM. B	DIM. C	DIM. D
1	3 15/16"	3 1/8"	1'-7"	1'-0 1/2"
2	4 5/16"	3 7/16"	1'-8 13/16"	1'-1 3/4"
3	2 1/16"	2 1/8"	1'-1"	8 3/16"
4	2 1/16"	2 3/16"	1'-1 1/8"	8 5/8"



SECTION THRU JOINT AT CURB

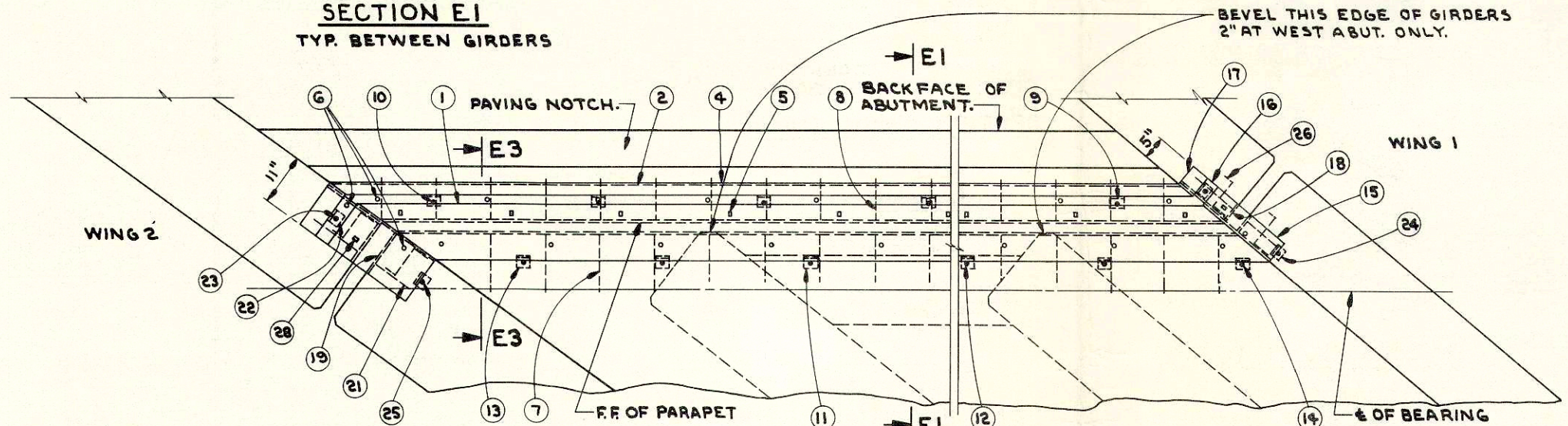
- LEGEND**
1. S.T. 6" WF 39.5# RDWY. WIDTH.
 2. L 8" x 4" x 7/16" RDWY. WIDTH.
 3. BAR 2" x 3/4" RDWY. WIDTH. WELD TO L#2 WITH 2 LINES OF 1/2" FILLET WELD. 2@G.
 4. BAR 2 1/2" x 1 1/2" RDWY. WIDTH. WELD TO L#2 WITH 2 LINES OF 1/2" FILLET WELD. 2@G.
 5. 3/4" BOLT WITH SQ. NUT AT 2'-0" CTRS. TACK WELD NUT TO L#2. GREASE FOR EASY REMOVAL. 1 3/16" x 1 3/8" SLOTTED HOLE IN S.T. #1. LONG DIMENSION OF SLOTTED HOLE TO BE PARALLEL TO C OF ROWY. 1 3/16" HOLE IN BAR #3 & L#2.
 6. VENT HOLES "H" 1 3/16" PLACED AT 2'-0" CTRS ON L#2 ST. 1 AND AT 9" CTRS ON R#2 = 15 & 16.
 7. 5/8" BENT BAR @ 1'-0" CTRS. 2'-3" LONG. WELD TO S.T. #1.
 8. 5/8" BENT BAR @ 1'-0" CTRS. 2'-0" LONG. WELD TO L#2.
 9. L 3" x 2 1/2" x 3/8" @ 3'-0" CTRS. WELD TO L#2 PROVIDE 3/4" HOLE IN 2 1/2" LEG FOR BOLT #10. (3" LONG).
 10. 5/8" BOLT x 2" LONG & NUT. TACK WELD NUT TO L#9.
 11. L 3" x 3" x 3/8" @ 2'-6" CTRS BETWEEN GIRDERS. WELD TO S.T. #1. PROVIDE 1 1/8" HOLE IN LEG FOR BOLT #12. (3" LONG).
 12. 1" BOLT x 1'-11" LONG & NUT. TACK WELD NUT TO L#11.
 13. L 3" x 3" x 3/8" @ 0'-3" @ 2'-6" CTRS. BETWEEN EXT. GIRDERS & CURBS. WELD TO S.T. #1. PROVIDE 1 1/8" HOLE IN LEG FOR BOLT #14.
 14. 1" BOLT x 6" LONG & NUT. TACK WELD NUT TO L#13.
 15. R #7 x 3/8" BEND DOWN FLUSH WITH FACE OF CURB AS SHOWN. WELD TO R#19 AS SHOWN. FIELD WELD TO S.T. #1.
 16. R #2 x 3/8" BEND DOWN FLUSH WITH FACE OF CURB AS SHOWN. WELD TO R#18 AS SHOWN.
 17. R #2 x 3/8" BEND DOWN FLUSH WITH FACE OF CURB AS SHOWN. WELD TO R#16 WITH 1 LINE OF 3/16" FILLET WELD. FIELD WELD TO BAR #4.
 18. 6" x 3/8" R. CUT TO CURB LIMITS AS SHOWN.
 19. 3/8" R. CUT TO CURB LIMITS AS SHOWN. FIELD WELD TO R#20.
 20. 3/8" R. CUT TO CURB LIMITS AS SHOWN. SHOP WELD TO S.T. #1.
 21. 5/8" BENT BAR. 1'-6" LONG. WELD TO R#16 & R#18 AND R#15 & R#19 WITH 3/16" FILLET WELDS ALL AROUND.
 22. L 3" x 2 1/2" x 3/8" x 0'-3". WELD TO R#16. PROVIDE 3/4" HOLE IN 2 1/2" LEG FOR BOLT #23.
 23. 5/8" BOLT x 1'-7" LONG & NUT. TACK WELD NUT TO L#22.
 24. L 3" x 3" x 3/8" x 0'-3". WELD TO R#15. PROVIDE 1 1/8" HOLE IN LEG FOR BOLT #25.
 25. 1" BOLT x 1'-4" LONG & NUT. TACK WELD NUT TO L#15.
 26. ANCHOR BAR. -2 1/2" x 3/8" x 1'-0" L. WELD TO R#15 & R#16.
 27. BLOCK & BOLT FOR SHIPMENT WITH PIPE SLEEVE AND 1/2" BOLT. PROVIDE 3/16" HOLES AT 3'-0" CTRS. IN S.T. #1 & L#2 FOR 1/2" BOLT.
 28. 3/4" BOLT. SAME AS #5 EXCEPT FOR LENGTH.

** SEE SECTION E2 & CORRESPONDING TABLE FOR DIMENSIONS OF PLATE WIDTHS.

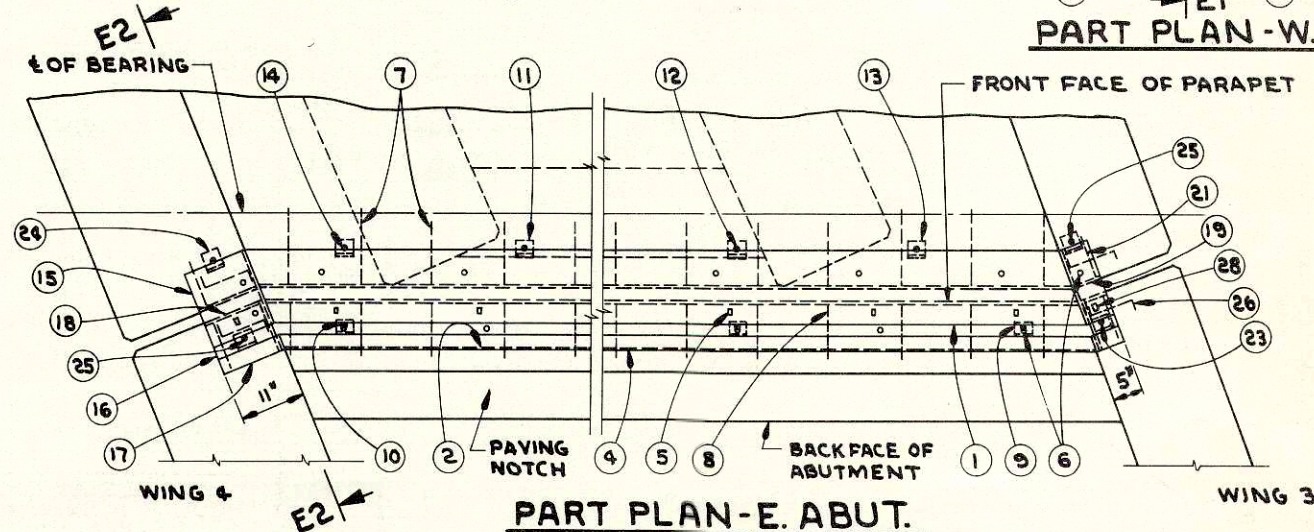
EXPANSION JOINTS SHALL BE BUILT TO CONFORM TO ROADWAY CROWN & GRADE.
ONE FIELD SPLICE SHALL BE PERMITTED IN JOINT AT WEST ABUT. ONLY.

AFTER CONCRETE HAS SET REMOVE BOLTS #5 & #28 AND FILL HOLES WITH HOT POURED ELASTIC TYPE JOINT SEALER.

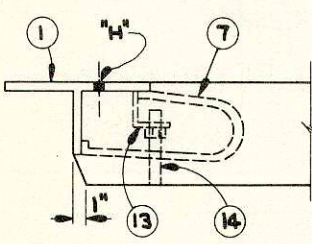
AFTER CONCRETE HAS SET THE JOINT OPENINGS SHALL BE THOROUGHLY CLEANED.
APPLY ± 1/16" COAT OF BITUMASTIC TO METAL SURFACES FORMING THE JOINT AND FILL WITH HOT POURED ELASTIC TYPE JOINT SEALER.



PART PLAN - W. ABUT.



PART PLAN - E. ABUT.



SECTION E3
TYP. AT 8 1/2" SLAB

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	EXPANSION JOINTS		
	DESIGN SPEC. AASH.O. 1-61	LOADING H20-316	CONST. SPEC. 1963
	DATE 9-11-64	DESIGN J.B.	DRAWN G.M. CRD. R.L.P.
STRUCTURE	B-32-38		SHEET 10 OF 16

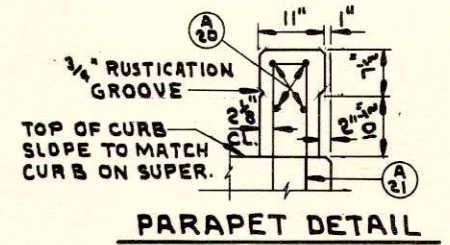
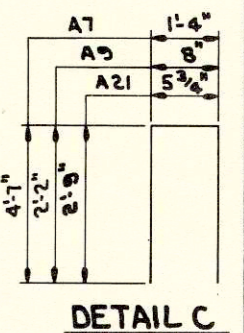
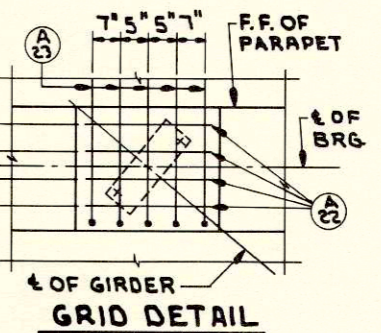
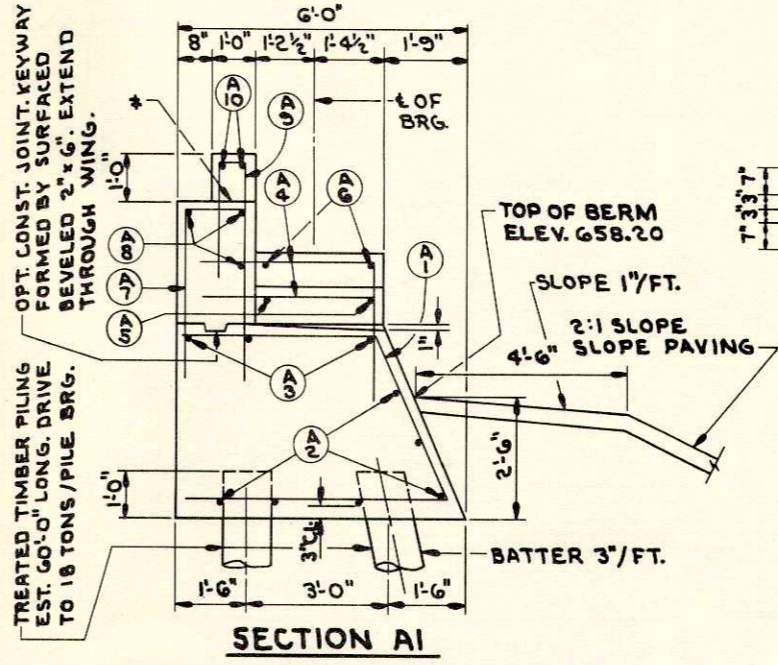
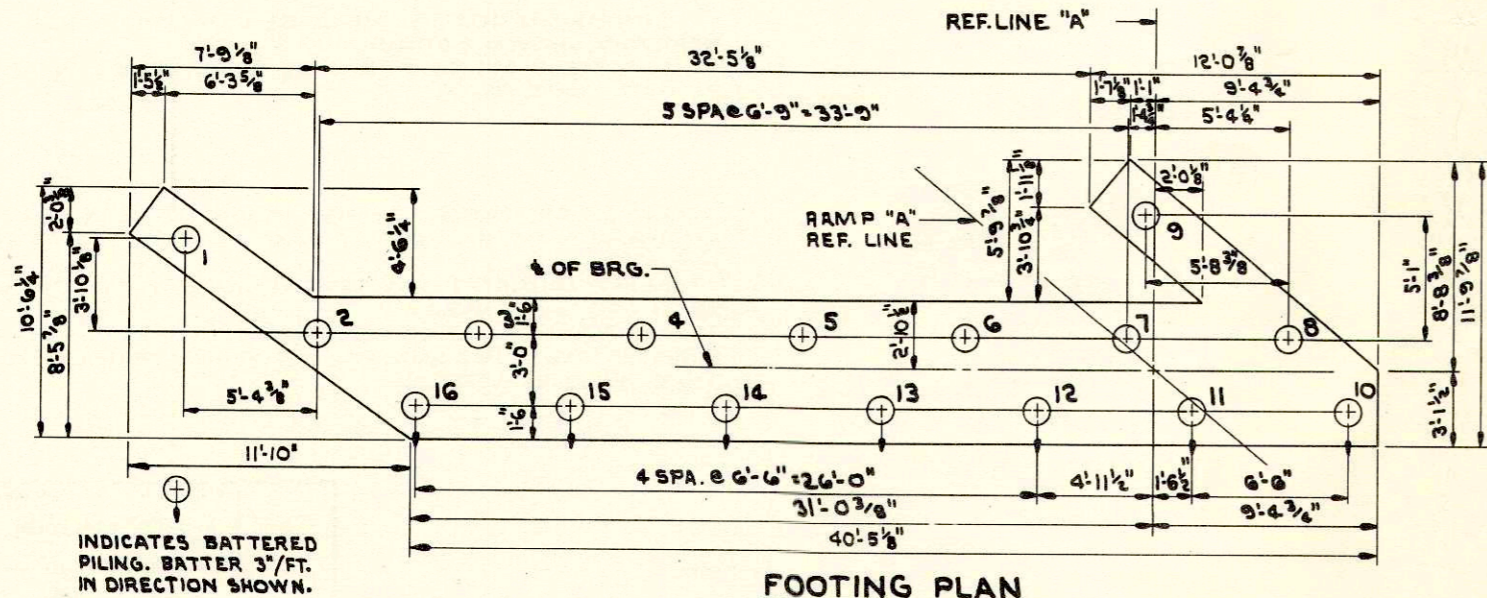
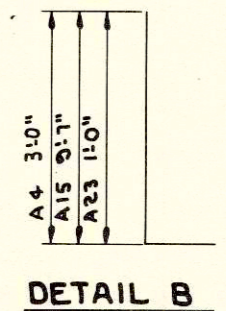
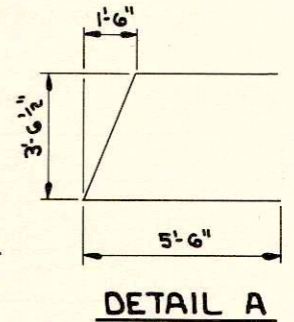
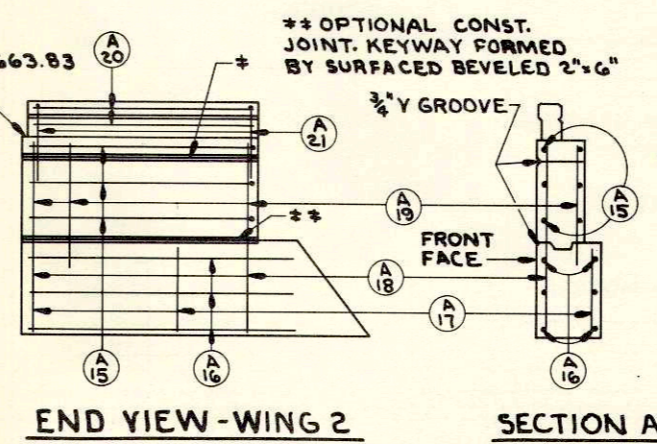
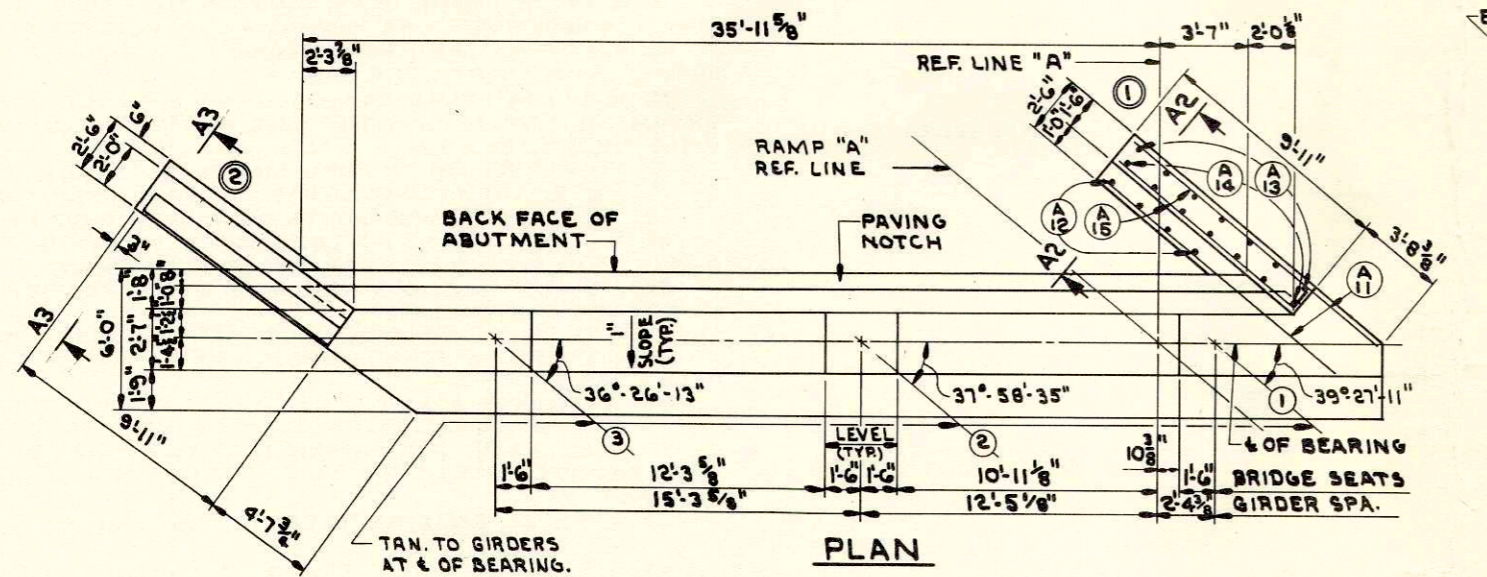
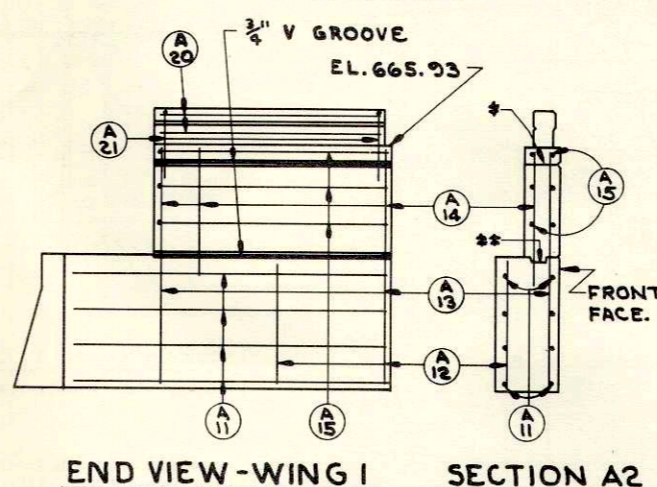
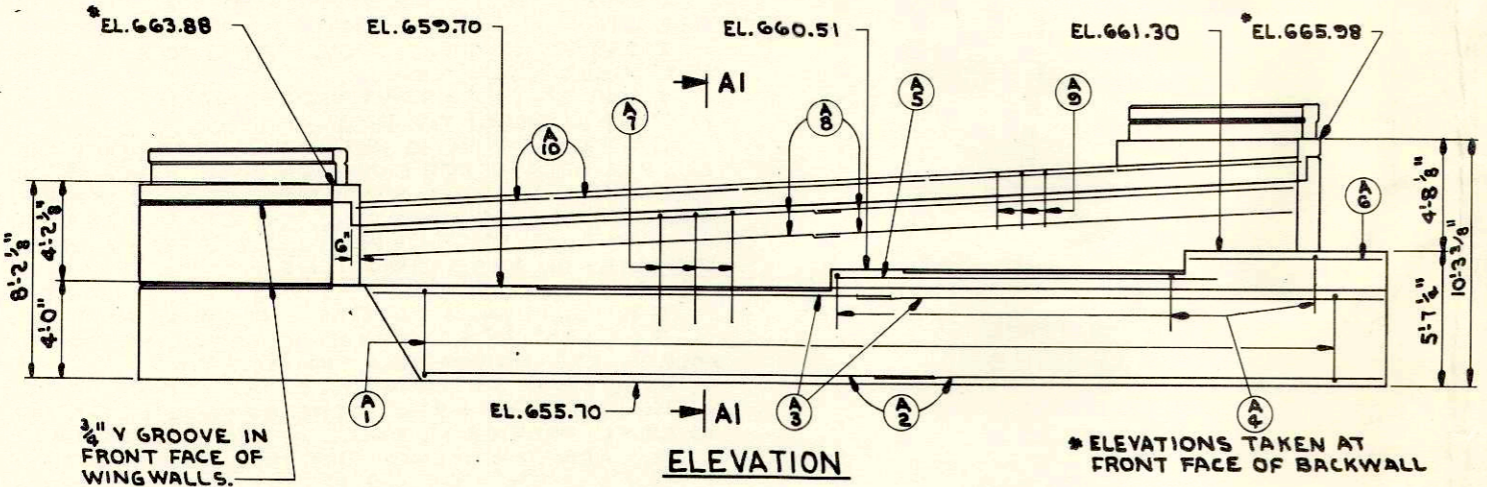
BILL OF BARS

2,090*

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
A1	39	4	12-0	#2-0	BODY	A
A2	12	4	22-0	SHOWN	"	
A3	6	6	22-6	"	"	
A4	23	4	4-3	1-0	BRIDGE SEATS - GIRDERS 1 & 2	B
A5	2	6	16-0	SHOWN	" GIRDER 2	
A6	2	6	8-0	"	" " " 1	
A7	27	5	10-6	1-6	BACKWALL - VERT.	C
A8	6	4	20-3	SHOWN	" - HORIZ.	
A9	40	5	5-0	1-0	PAVING NOTCH - VERT.	C
A10	10	4	7-9	SHOWN	" " - HORIZ.	
A11	8	4	13-3	1-6	WING 1 - HORIZ. - B.F. & F.F.	
A12	4	4	5-3	1-6	" 1 - VERT. - B.F.	
A13	7	4	9-9	1-6	" 1 - " - F.F.	
A14	7	4	5-6	1-6	" 1 - " - B.F.	
A15	12	4	10-9	1-6	WING 2 - HORIZ. - B.F. & F.F.	B
A16	6	4	11-0	1-6	WING 2 - HORIZ. - B.F. & F.F.	
A17	5	4	3-6	1-6	" 2 - VERT. - B.F.	
A18	7	4	7-9	1-6	" 2 " - F.F.	
A19	7	4	5-0	1-6	" 2 " - B.F.	
A20	8	5	9-3	SHOWN	RAILING PARAPET	C
A21	20	5	6-0	1-0	" " " "	
A22	12	4	2-9	SHOWN	GRID	
A23	15	4	4-0	"	"	B

* SPACING OF A1 BARS MAY BE ALTERED TO MISS PILING.



BEFORE DRIVING PILING FILL TO ELEV. 657.87 UPPER LIMIT OF "EXCAVATION FOR STRUCTURES" SHALL NOT EXCEED THIS ELEVATION.

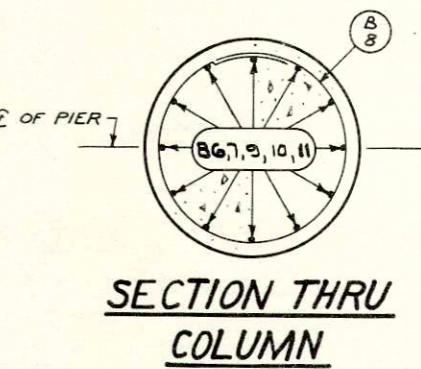
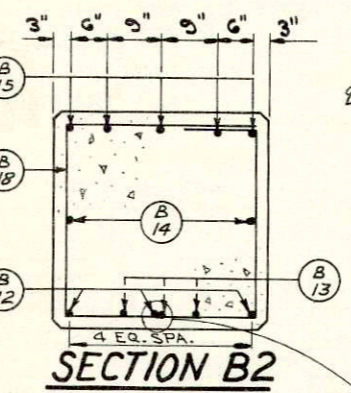
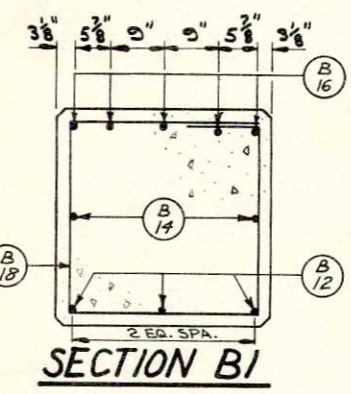
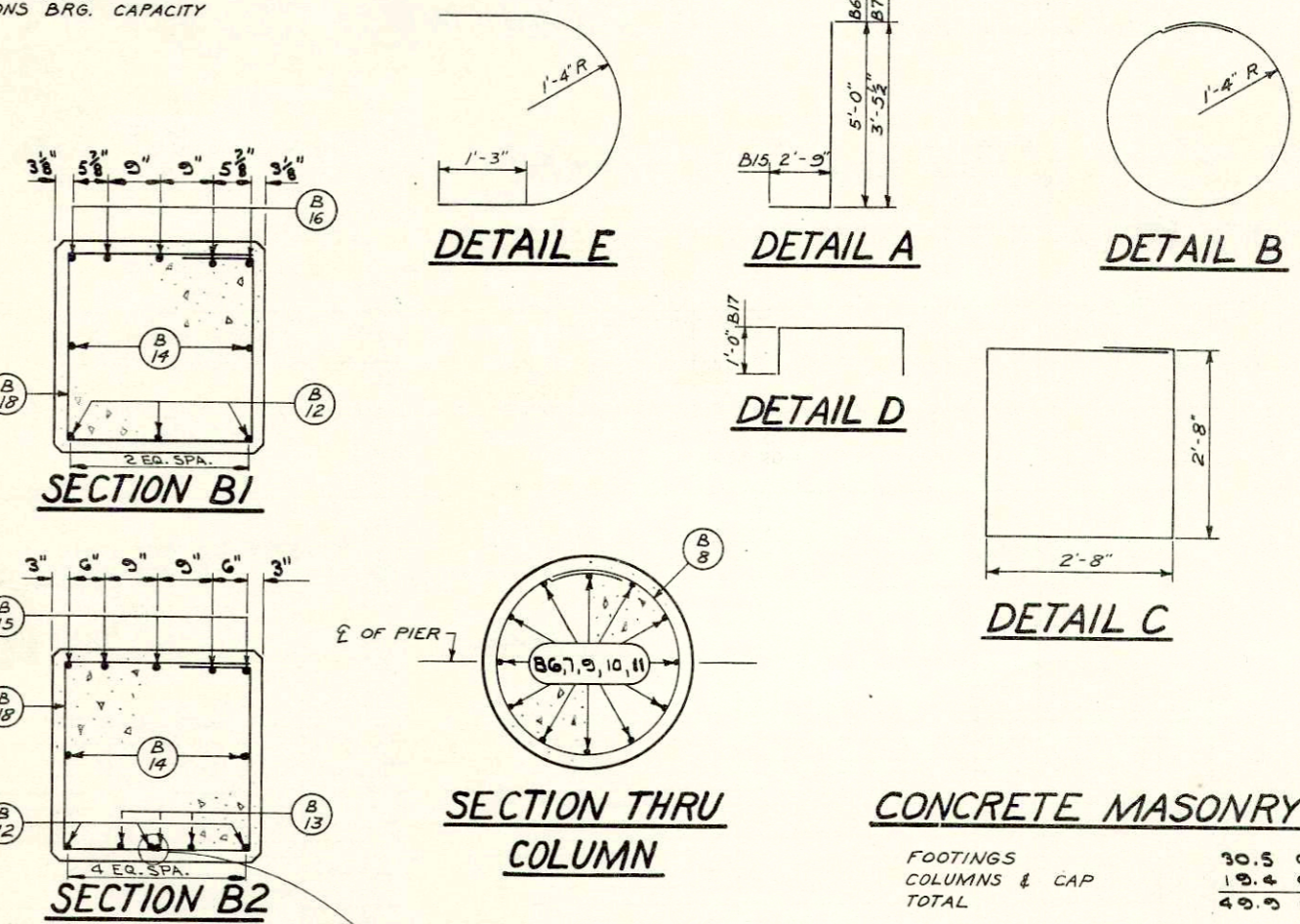
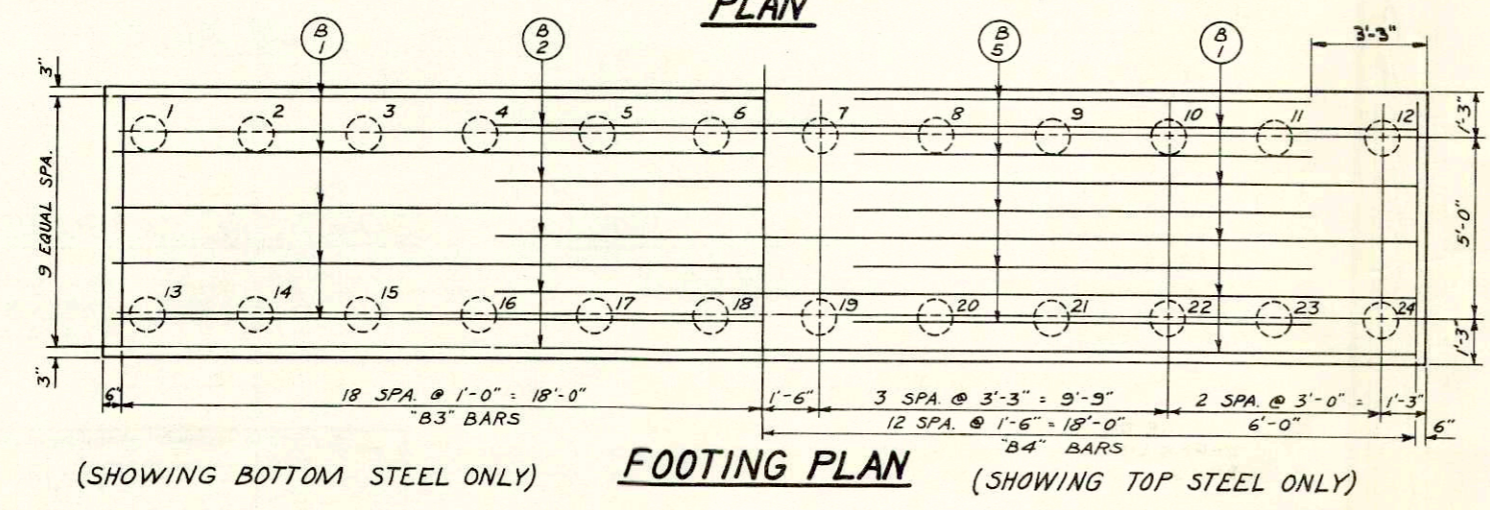
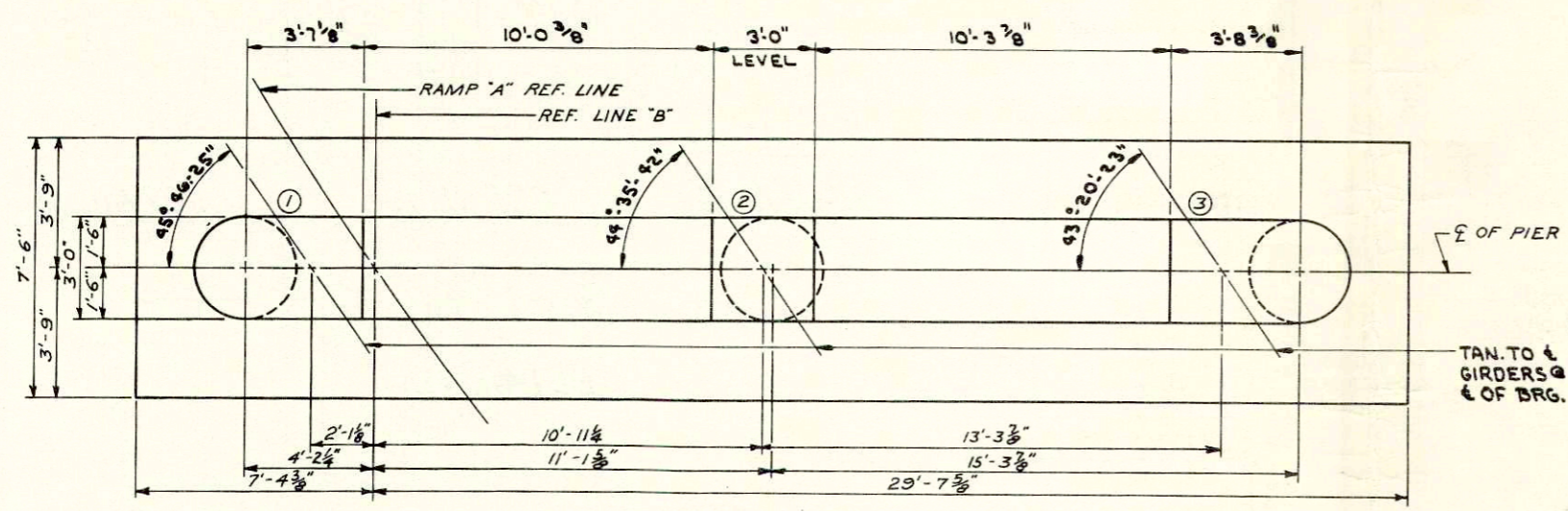
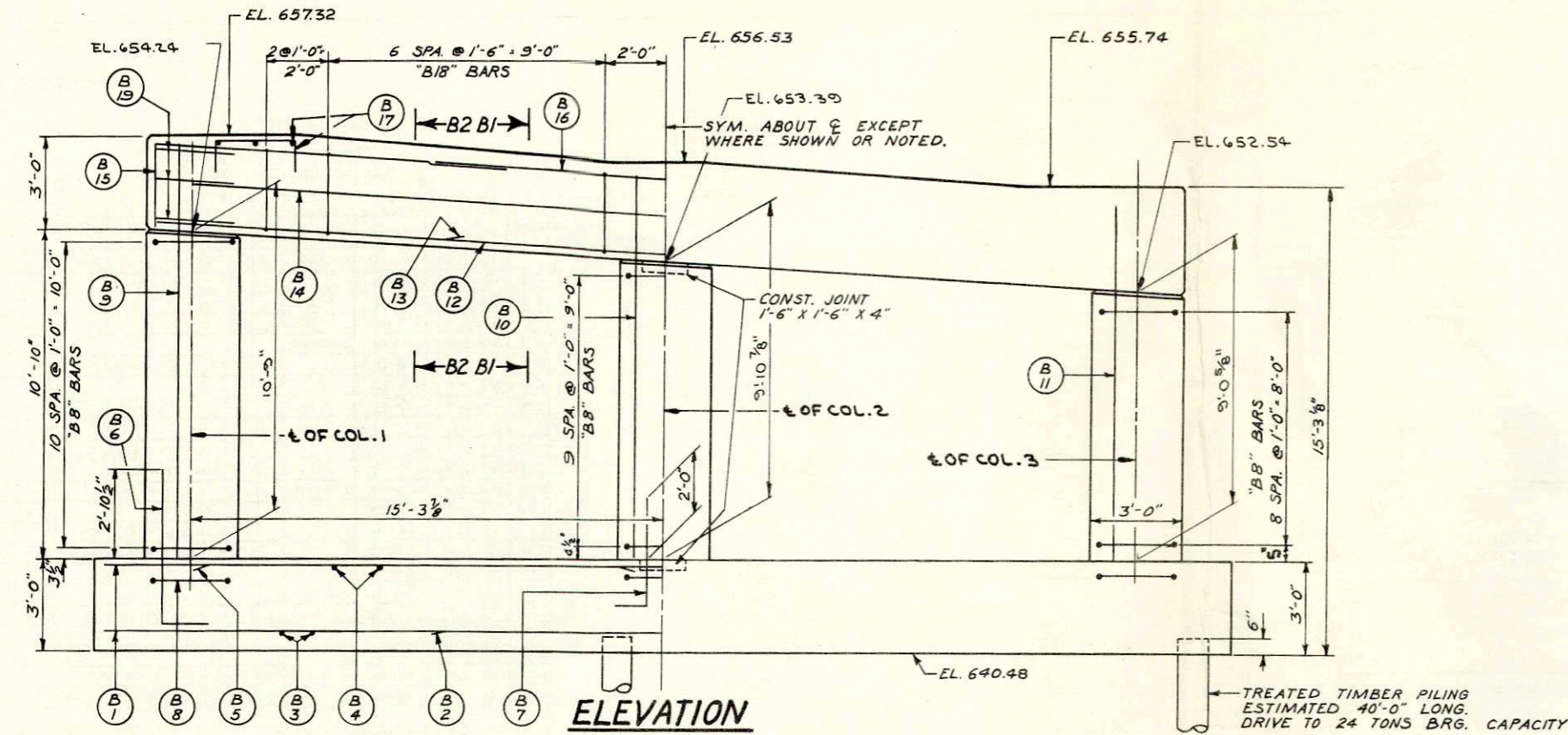
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
WEST ABUTMENT	
DESIGN SPEC. AA.S.H.O.-61	LOADING H20-316
DATE 5-11-64	DESIGN J.R.B. DRAWN G.W.H. C.R.D. R.L.P.
STRUCTURE B-32-38	SHEET 11 OF 16

X29439

BILL OF BARS 8,140

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR MARK	NO	SIZE	LENGTH	SPACING	LOCATION	DET.	
FOOTING	B 1	10	36.6	SHOWN	FOOTING - BOTTOM & TOP		
	B 2	5	15.0	"	"		
	B 3	37	5	7.0	1-0	"	
	B 4	25	4	7.0	1-6	" - TOP	
	B 5	10	11	13.6	SHOWN	"	
	B 6	24	11	5.9	"	& COLUMNS 1 & 3	A
	B 7	12	8	4.0	"	& 2	A
	B 8	3	4	9.6	1-0	" - HOOPS	B
COLUMN & CAP	B 8	30	4	9.6	1-0	COLUMN - HOOPS	B
	B 9	12	11	13.6	SHOWN	" 1 - VERT.	
	B 10	12	8	12.9	"	" 2 - "	
	B 11	12	11	11.9	"	" 3 - "	
	B 12	3	10	30.6	"	CAP - BOTTOM	
	B 13	6	11	10.0	"	"	
	B 14	2	4	30.6	"	" - SIDES	
	B 15	10	7	14.3	"	" - TOP	
	B 16	5	10	15.0	"	" - "	
	B 17	18	4	4.6	"	" - GIRDER BLOCKS	D
	B 18	18	4	11.9	"	" - STIRRUPS	C
B 19	6	5	6.9	"	" - HOOPS - ENDS	E	



CONCRETE MASONRY

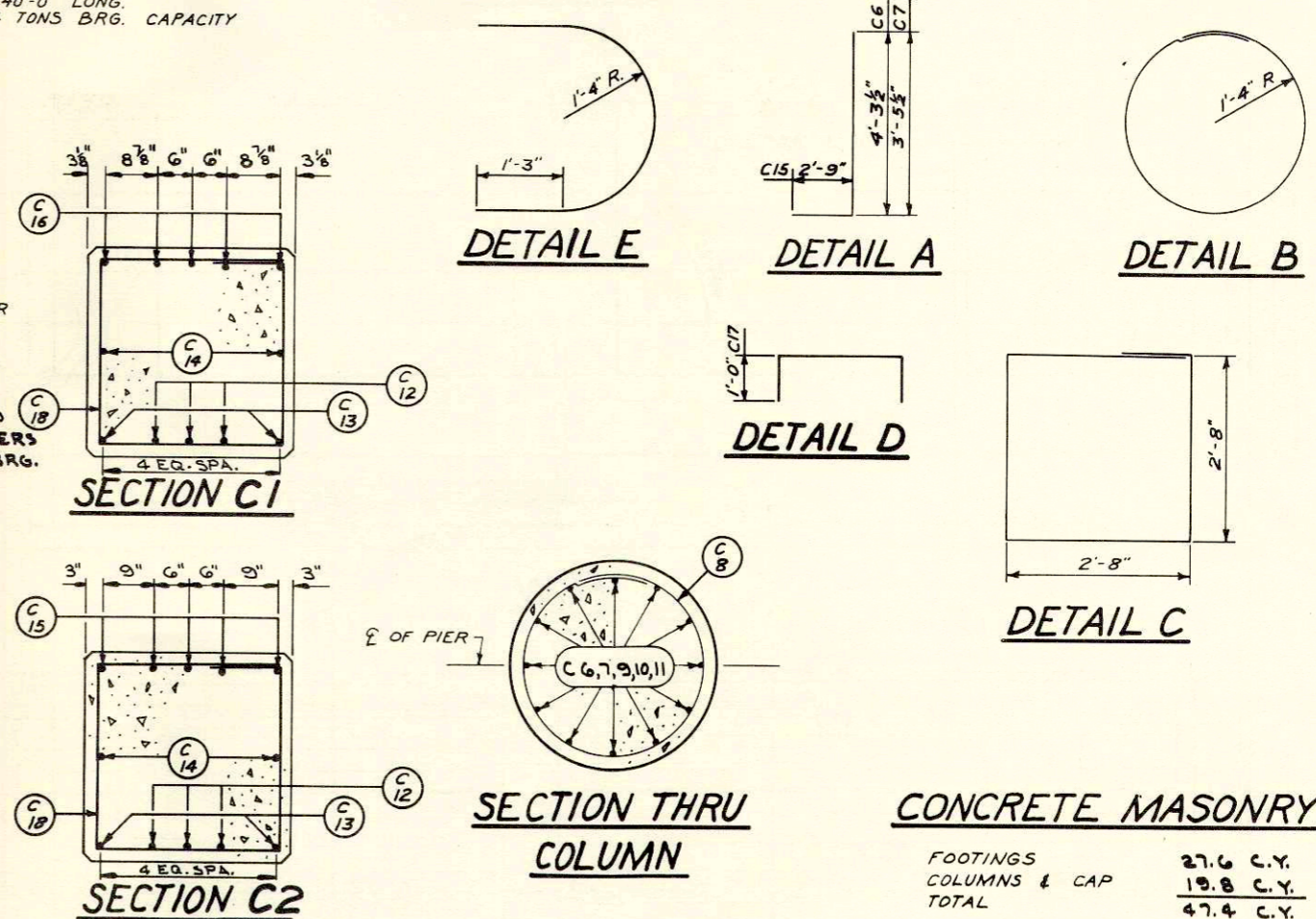
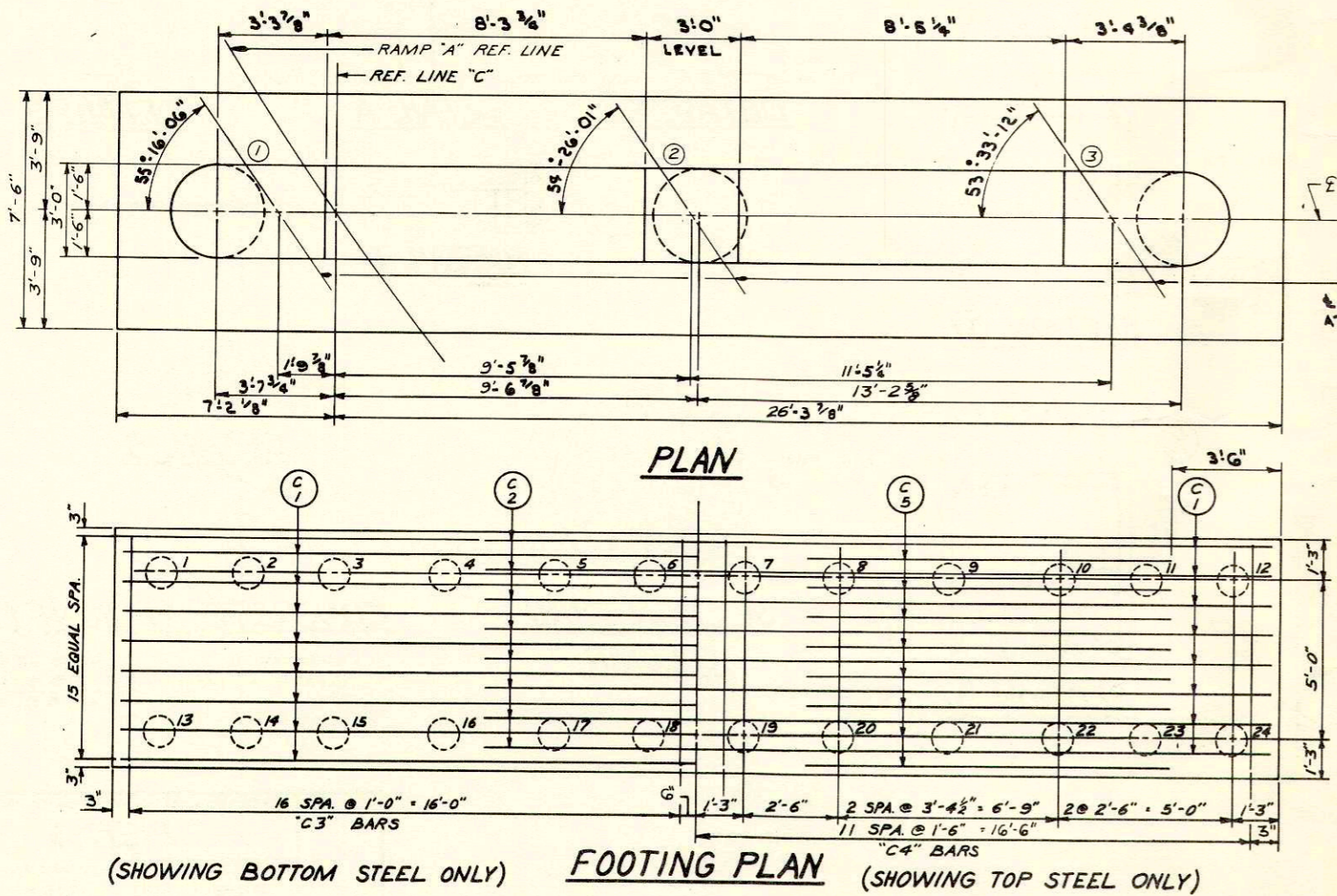
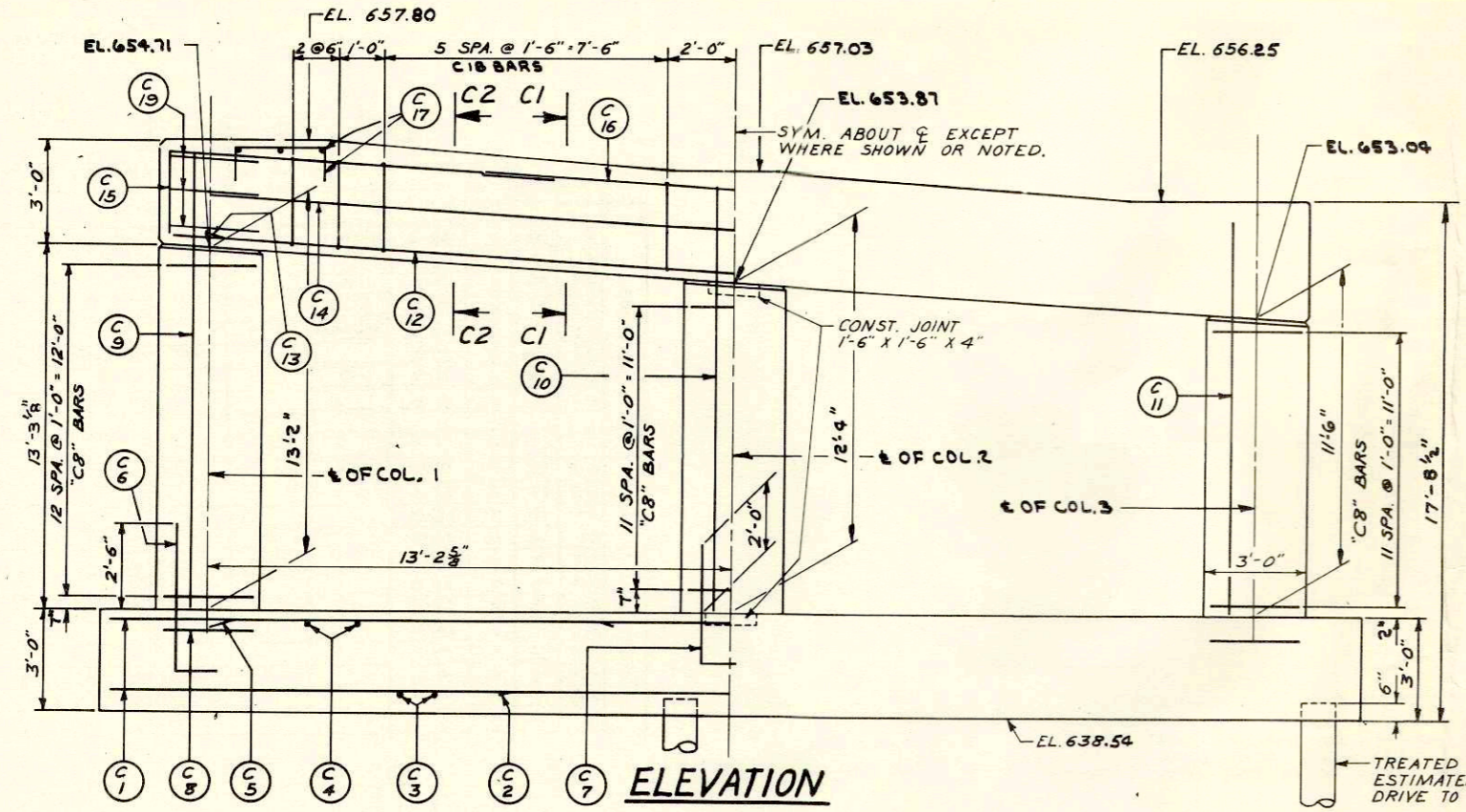
FOOTINGS	30.5 C.Y.
COLUMNS & CAP	19.4 C.Y.
TOTAL	49.9 C.Y.

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN		
	PIER 1		
	DESIGN SPEC. A.A.S.H.O.'61	LOADING H20-S16	CONST. SPEC. 1963
	DATE 9-11-64	DESIGN J.B.	DRAWN J.K.G. CAL. RLP
STRUCTURE	B-32-38	SHEET	12 OF 16

BILL OF BARS 7010

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO	SIZE	LENGTH	SPACING	LOCATION	DET.
FOOTINGS	C1	16	8	33.0	SHOWN	FOOTING - BOTTOM & TOP	
	C2	8	8	13.6	"	"	
	C3	34	5	7.0	1-0	"	
	C4	23	4	7.0	1-6	"	
	C5	16	8	11.6	SHOWN	"	
	C6	24	10	5.0	"	# COLUMN 1 & 3	A
	C7	12	8	4.0	"	# 2	A
	C8	3	4	9.6	1-0	- HOOPS	B
COLUMN & CAP	C8	37	4	9.6	1-0	COLUMNS - HOOPS	B
	C9	12	10	16.0	SHOWN	1 - VERT.	
	C10	12	8	15.0	"	2 - "	
	C11	12	10	14.3	"	3 - "	
	C12	3	10	28.9	"	CAP - BOTTOM	
	C13	2	10	26.6	"	"	
	C14	2	4	26.6	"	- SIDES	
	C15	10	8	12.3	"	- TOP	A
	C16	5	10	15.0	"	"	
	C17	18	4	4.6	"	- GIRDER BLOCKS	D
	C18	18	4	11.9	"	- STIRRUPS	C
C19	6	5	6.9	"	- HOOPS - ENDS	E	



CONCRETE MASONRY

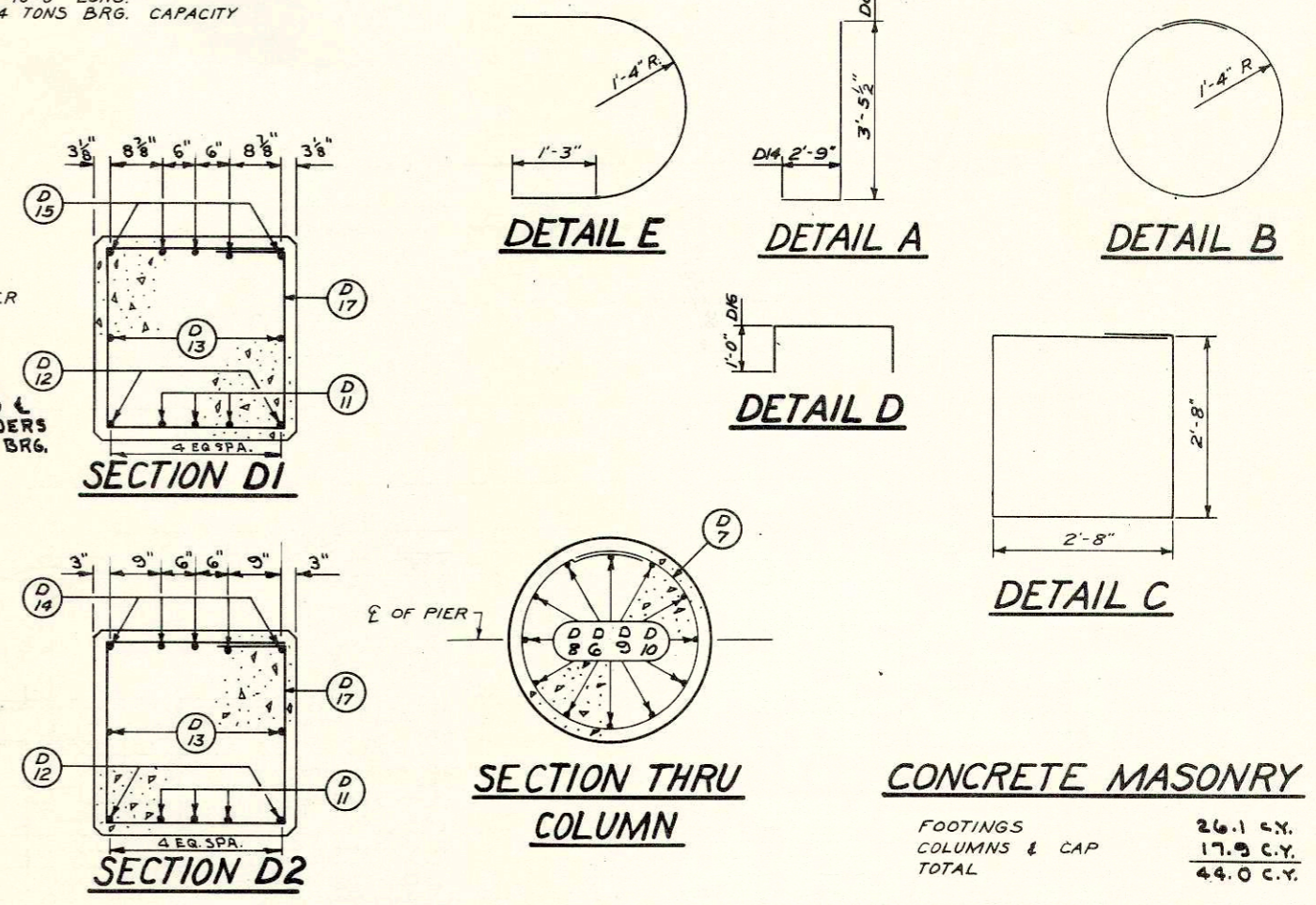
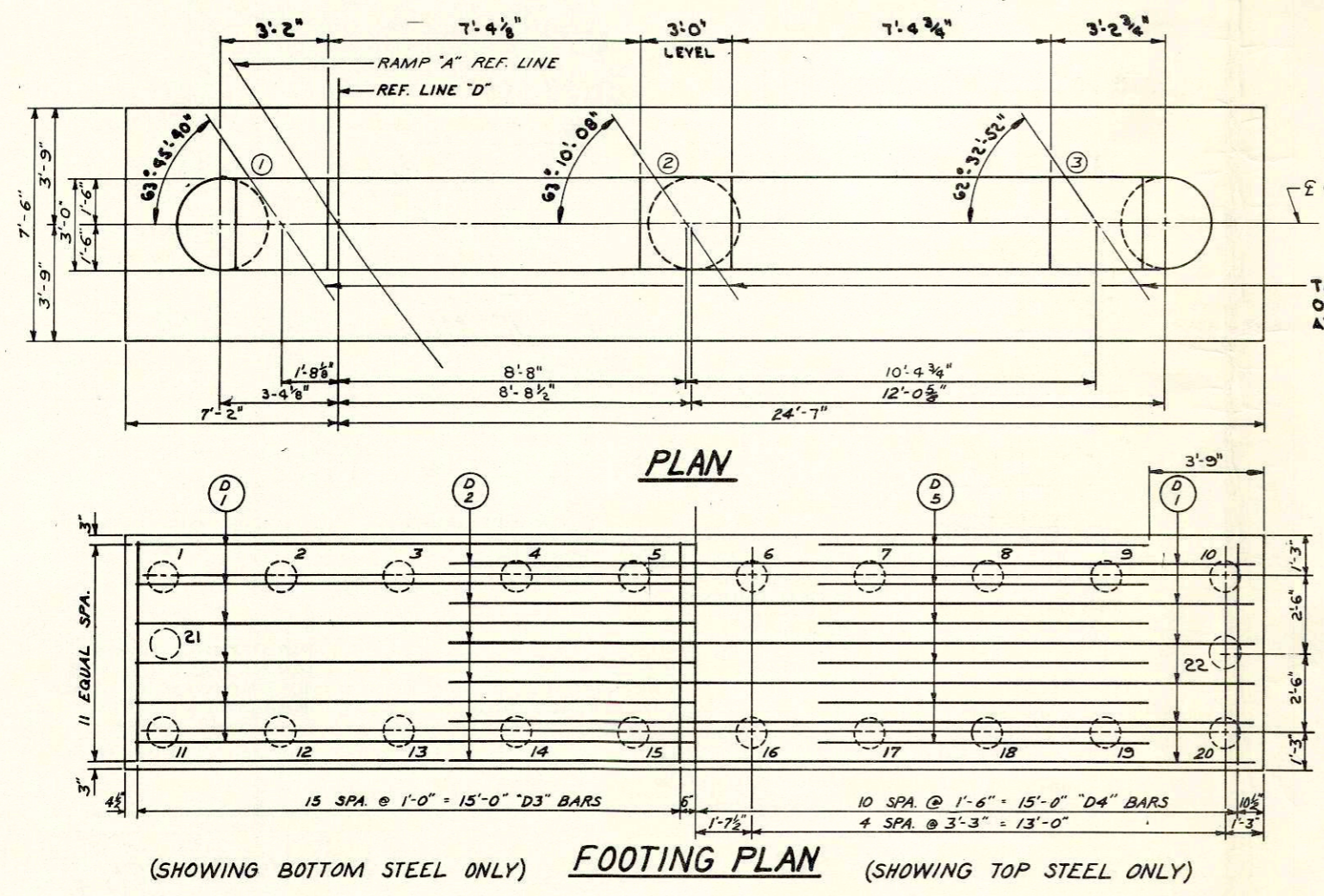
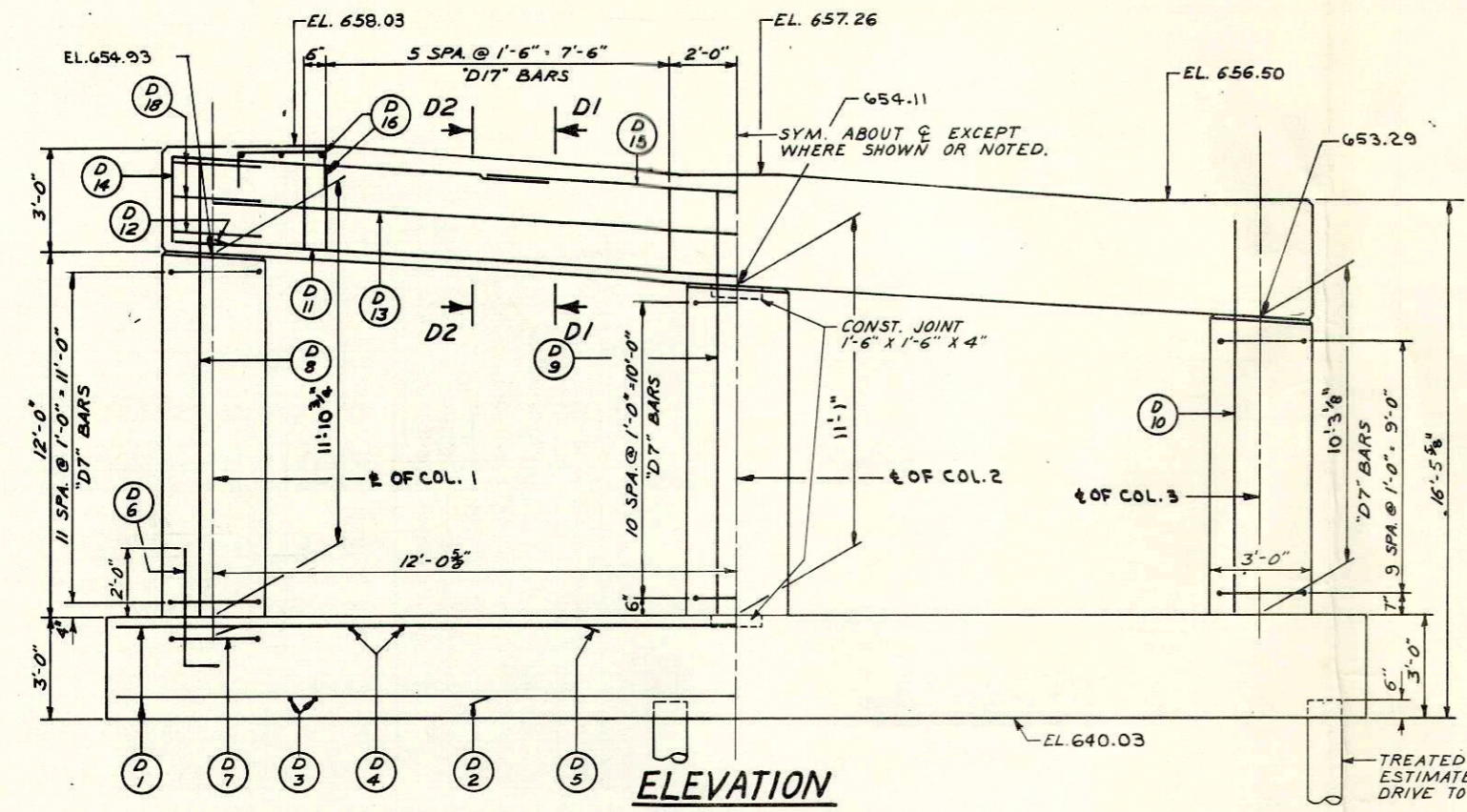
FOOTINGS	27.6 C.Y.
COLUMNS & CAP	19.8 C.Y.
TOTAL	47.4 C.Y.

V29441

BILL OF BARS 5,420[#]

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR MARK	NO	SIZE	LENGTH	SPACING	LOCATION	DET.	
FOOTING	D1	12	9	31-3	SHOWN	FOOTING - BOTTOM & TOP	
	D2	6	9	12-0		"	
	D3	32	5	7-0	1-0	"	
	D4	21	4	7-0	1-6	"	
	D5	12	9	10-6	SHOWN	"	
	D6	36	8	4-0		" & COLUMNS	A
	D7	3	4	9-6	1-0	" - HOOPS	B
COLUMN & CAP	D7	33	4	9-6	1-0	COLUMN - HOOPS	B
	D8	12	8	14-9	SHOWN	" 1 - VERT.	
	D9	12	8	14-0		" 2 - "	
	D10	12	8	13-3		" 3 - "	
	D11	3	10	26-3		CAP - BOTTOM	
	D12	2	10	24-0		"	
	D13	2	4	24-0		" - SIDES	
	D14	10	6	12-6		" - TOP	A
	D15	5	9	12-0		"	
	D16	18	4	4-6		" - GIRDER BLOCK	D
	D17	14	4	11-9		" - STIRRUPS	C
D18	6	5	6-9		" - HOOPS - ENDS	E	



REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
	PIER 3
DESIGN SPEC. A.A.S.H.O.'61	LOADING H20-S16
DATE 9-11-64	DESIGN J.B. DRAWN J.K.G. CKD RLP
STRUCTURE B-32-38	SHEET 14 OF 16

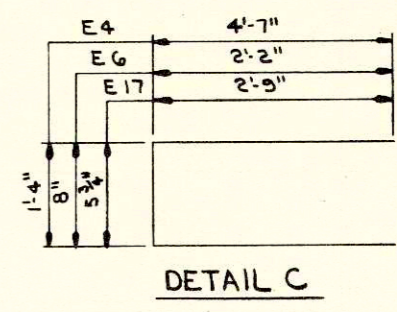
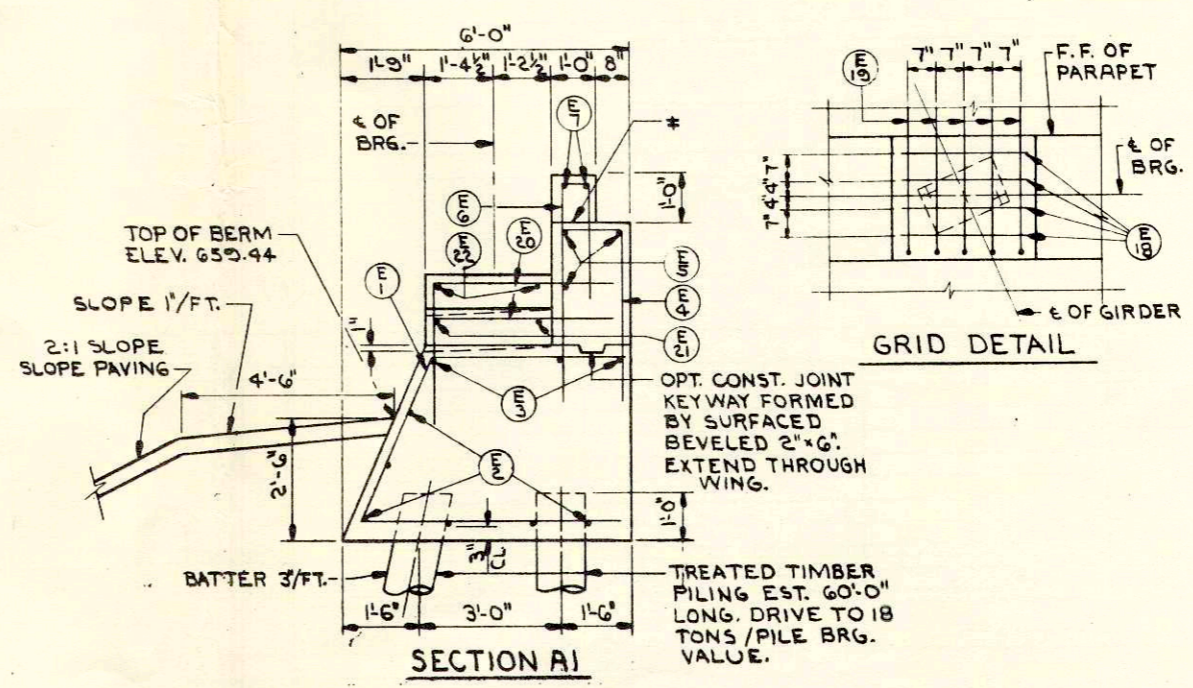
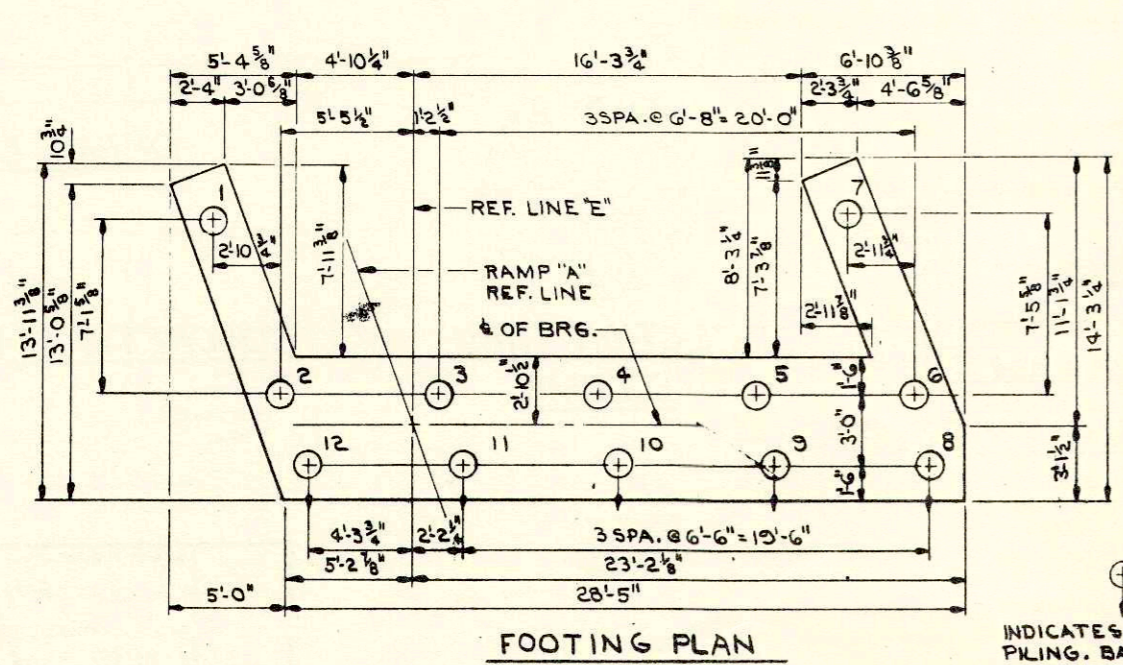
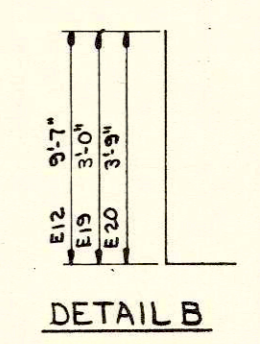
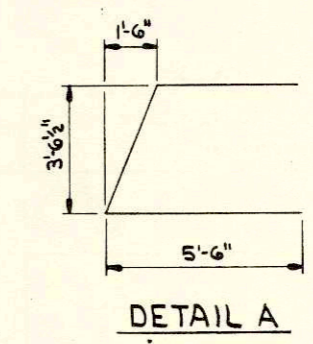
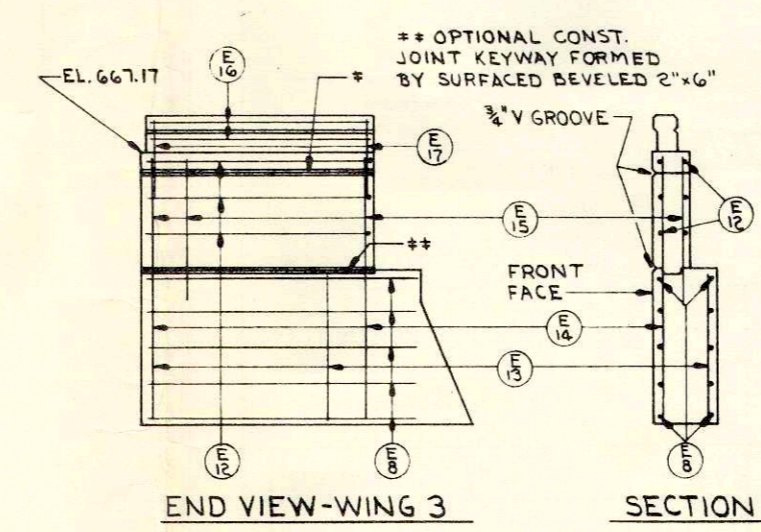
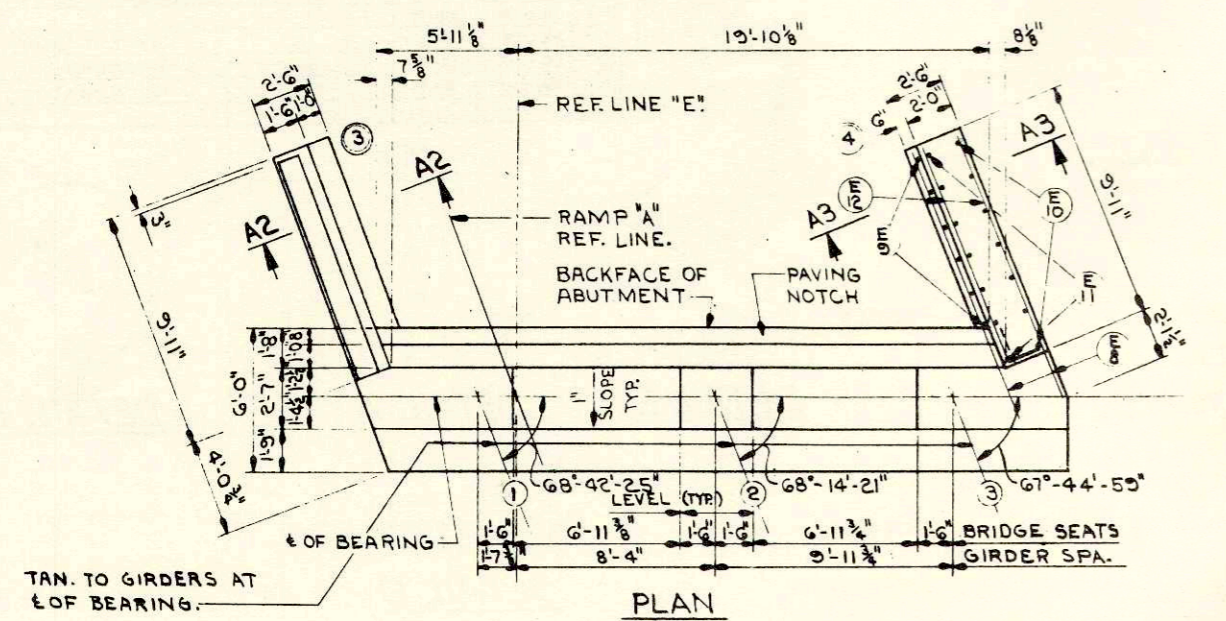
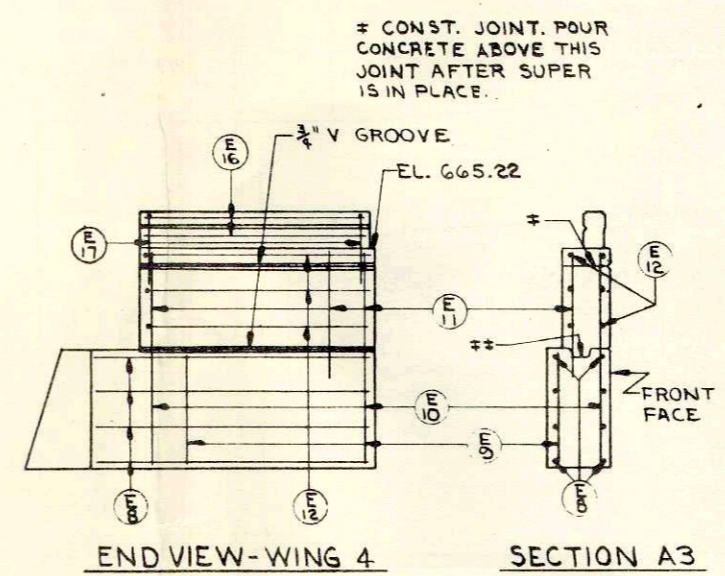
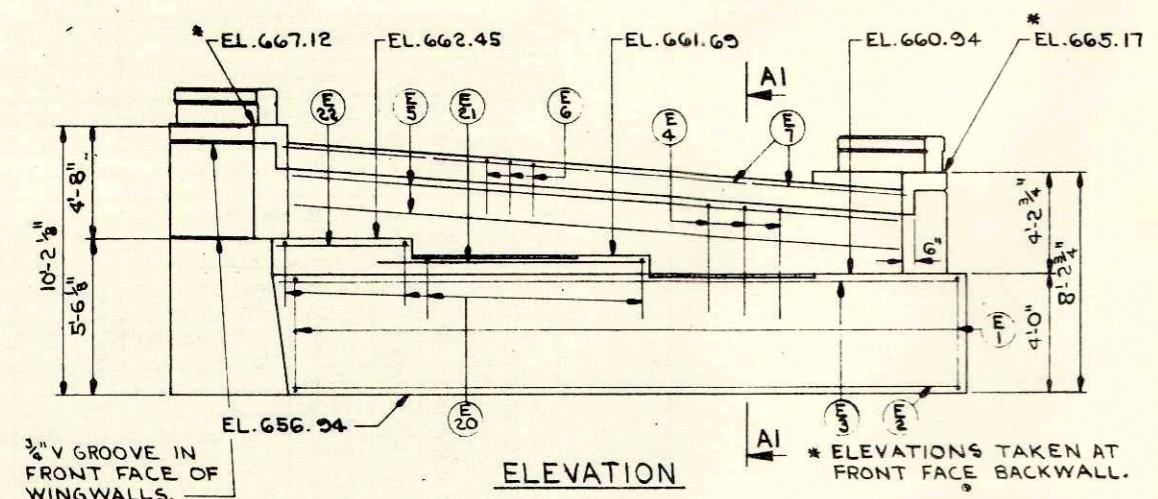
129442

BILL OF BARS 1,540*

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
E1	15	4	12-0	# 2-0	BODY	A
E2	6	4	28-0	SHOWN	"	
E3	3	6	28-6	"	"	
E4	18	5	10-6	1-6	BACKWALL - VERT.	C
E5	3	4	27-9	SHOWN	" - HORIZ.	
E6	26	5	5-0	1-0	PAVING NOTCH - VERT.	C
E7	8	4	6-3	SHOWN	" " - HORIZ.	
E8	18	4	11-9	1-2	WINGS - HORIZ. - B.F. & F.F.	
E9	6	4	3-6	1-6	WING 4 - VERT. - B.F.	
E10	7	4	7-9	1-6	" " " - F.F.	
E11	7	4	5-3	1-6	" " " - B.F.	
E12	12	4	10-9	1-6	WINGS - HORIZ. - B.F. & F.F.	B
E13	6	4	5-0	1-6	WING 3 - VERT. - B.F.	
E14	7	4	9-9	1-6	" " " - F.F.	
E15	7	4	5-9	1-6	" " " - B.F.	
E16	8	5	9-3	SHOWN	RAILING PARAPET	
E17	20	5	6-0	1-0	"	C
E18	12	4	2-9	SHOWN	GRID	
E19	15	4	4-0	"	"	B
E20	16	4	4-9	1-0	BRIDGE SEATS - GIRDERS 1 & 2	B
E21	2	6	11-0	SHOWN	" " GIRDER 2	
E22	2	6	5-3	"	" " " 1	

* SPACING OF E1 BARS MAY BE ALTERED TO MISS PILING.



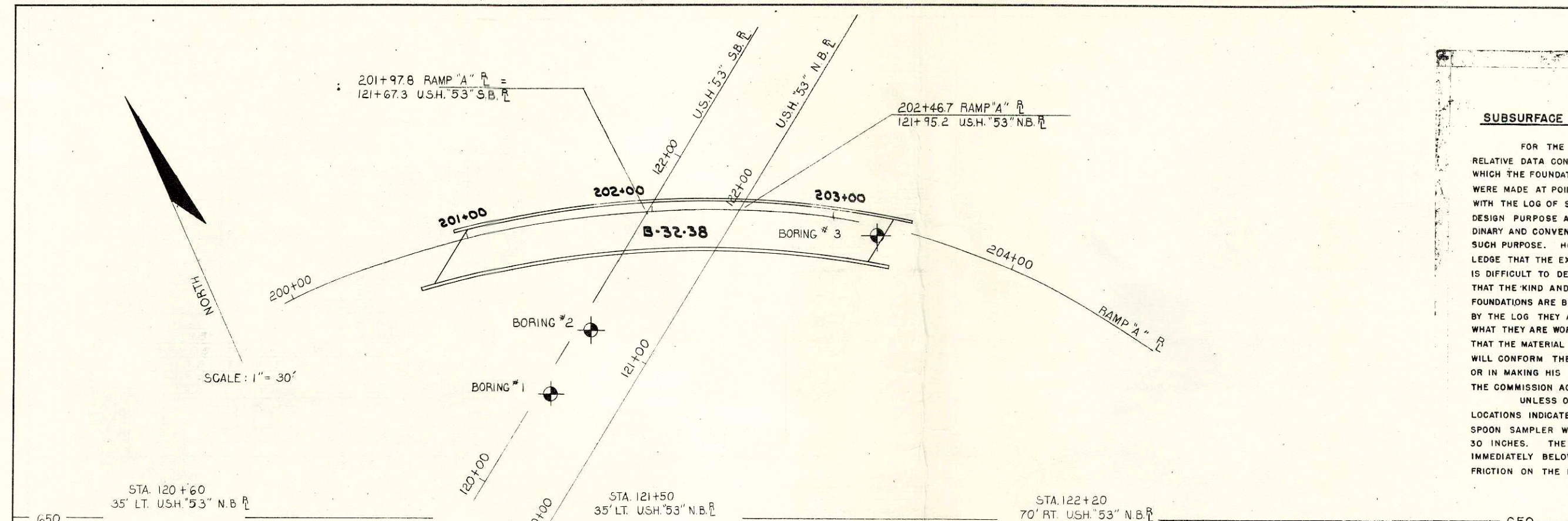
BEFORE DRIVING PILING FILL TO EL. 659.11 UPPER LIMIT OF EXCAVATION FOR STRUCTURES SHALL NOT EXCEED THIS ELEVATION.

INDICATES BATTERED PILING. BATTER 3'/FT. IN DIRECTION SHOWN.

FOR RAILING PARAPET DETAILS SEE X29439 SIMILAR EXCEPT BAR STEEL NOS.

REVISION	STATE HIGHWAY COMMISSION OF WISCONSIN
	EAST ABUTMENT
DESIGN SPEC. A.A.S.H.O. '61	LOADING H20-44
DATE 9-11-64	DESIGN J.B.
STRUCTURE B-32-38	SHEET 15 OF 16

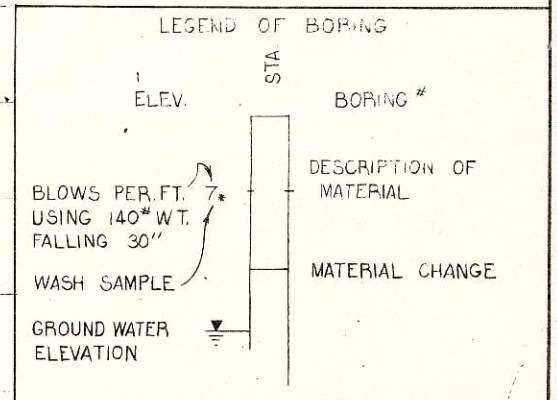
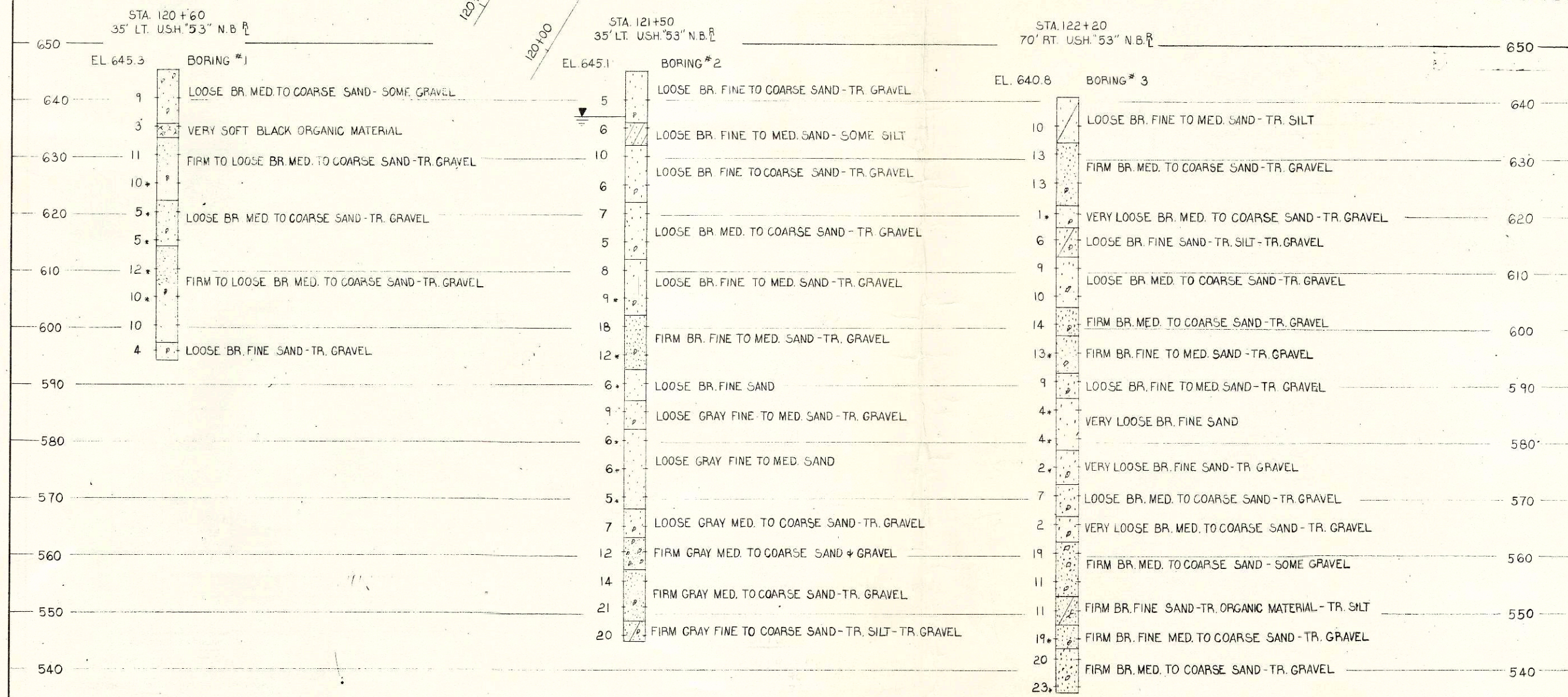
X29443



SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN

FOR THE DESIGN OF THE STRUCTURE FOUNDATION, TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING WITH THE LOG OF SUCH EXPLORATION DATA AS INTERPRETED FOR SUCH DESIGN PURPOSE AS SHOWN. THE EXPLORATIONS WERE MADE BY ORDINARY AND CONVENTIONAL METHODS AND CARE DEEMED ADEQUATE FOR SUCH PURPOSE. HOWEVER, SINCE IT IS A MATTER OF COMMON KNOWLEDGE THAT THE EXACT CHARACTER OF ANY MATERIAL AND ITS REACTION IS DIFFICULT TO DETERMINE FROM SUCH SUBSURFACE EXPLORATION AND THAT THE KIND AND CHARACTER OF MATERIAL AT THE SITE WHERE THE FOUNDATIONS ARE BUILT MAY VARY SUBSTANTIALLY FROM THAT INDICATED BY THE LOG THEY ARE MADE AVAILABLE TO THE BIDDERS SIMPLY FOR WHAT THEY ARE WORTH, WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED THAT THE MATERIAL TO BE ENCOUNTERED IN BUILDING THE FOUNDATION WILL CONFORM THEREWITH. IF THE LOG IS USED BY THE CONTRACTOR IN MAKING HIS BID, IT IS HEREBY EXPRESSLY STIPULATED THAT THE COMMISSION ACCEPTS NO RESPONSIBILITY FOR SAID USE.

UNLESS OTHERWISE SPECIFIED THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" OD X 1.4" ID SPLIT SPOON SAMPLER WITH A 140 LB. HAMMER HAVING A FREE FALL OF 30 INCHES. THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.



REVISION	STATE HIGHWAY COMMISSION OF WISCONSIN		
	SUBSURFACE EXPLORATION		
	DESIGN SPEC. A.A.S.H.O. '61	LOADING H20-516	COUNTY SPEC. 1963
	DATE 9-11-64	DESIGN	DRAWN JAB
STRUCTURE B-32-38		SHEET 16 OF 16	