COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		B.P.R. REGN'L DIVISION	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
35.9	0.0			4 WIS.	1	

INDEX OF SHEETS

SHEET NO. 1 TITLE
SHEET NO. 2 ESTIMATE OF QUANTITIES
SHEET NO. 3 PLAN-PROFILE
SHEET NO. 4 LAYOUT and PIERS
SHEET NO. 5 ABUTMENTS
SHEET NO. 6 SUPERSTRUCTURE
SHEET NO. 7 RAILING

STATE OF WISCONSIN

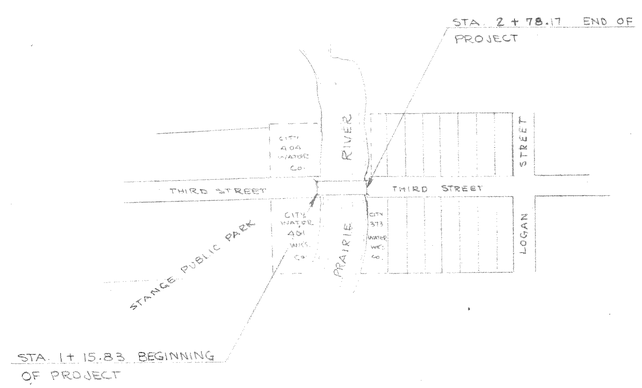
CITY OF MERRILL · WISCONSIN

PLAN AND PROFILE OF PROPOSED

THIRD STREET BRIDGE
THIRD STREET - CITY OF MERRILL

LINCOLN COUNTY

SCALES { PLAN 1 IN. 100 FT.
PROFILE HOR. 1 IN. - 100 FT. VERT. 1 IN. - 10 FT.



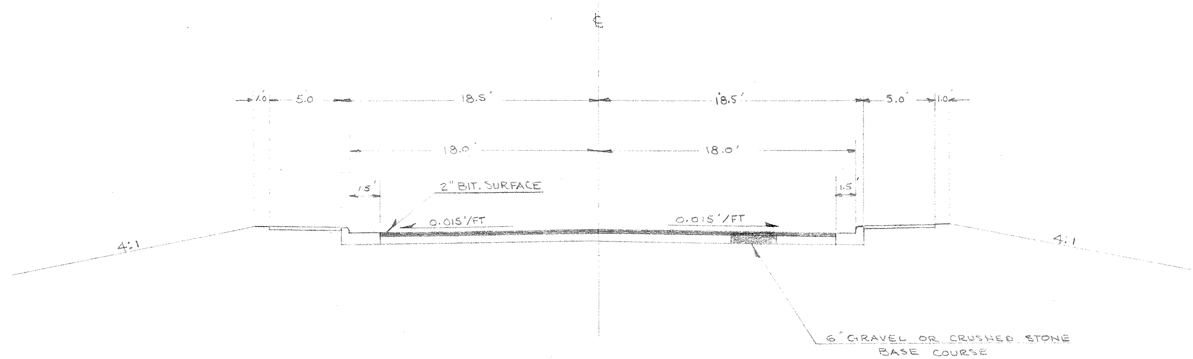
LAYOUT

SCALE 0 200 400 FEET

ESTIMATE OF QUANTITIES

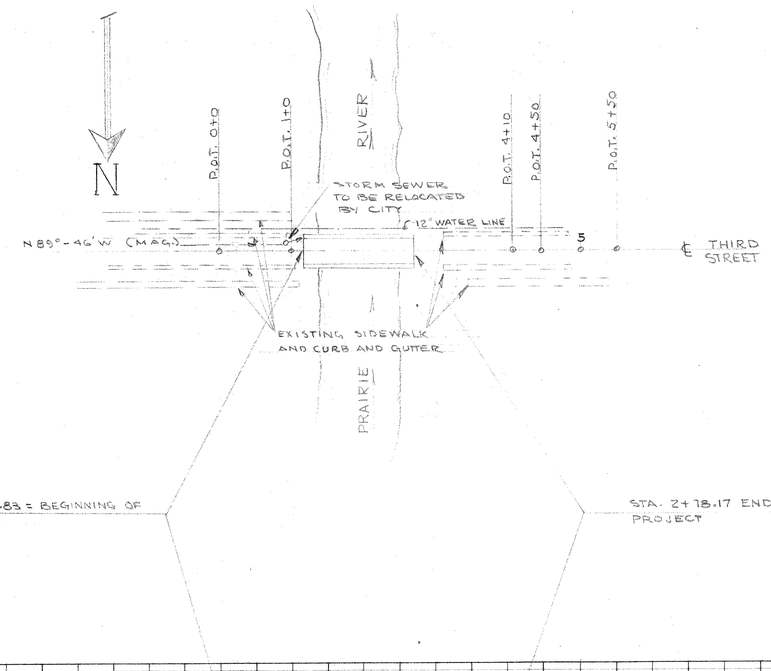
THIS PROJECT IS TO BE EXECUTED UNDER THE STANARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE HIGHWAY COMMISSION OF WISCONSIN — EDITION OF 1957 APPROVED AUGUST 9, 1957

	STATION TO STATION		NET LENGTH OF CENTER LINE	REMOVING OLD BRIDGE STA.	EXCAVATION FOR STRUCTURES, BRIDGES	GRANULAR BACK FILL	CONCRETE MASONRY, BRIDGES	BAR STEEL REINFORCEMENT, BRIDGES	CAST-IN-PLACE CONCRETE PILING DELIVERED	CAST-IN-PLACE CONCRETE PILING DRIVEN	STEEL RAILING	HEAVY RIPRAP
		ITEM NO.		2104-21	2107-1	2110-1	2401-1	2406-1	2505-2	2505-3	2510-2	2512-2
		UNIT	LIN. FT	L.S.	C.Y.	C.Y.	C.Y.	LB.	LIN.FT.	LIN.FT.	LIN.FT	C.Y.
	STA. 1+15.83 —	2+78.17	162.33	1	160	55	461.4	88,282	1085	1020	321	150



TYICAL SECTION AT BRIDGE APPROACH

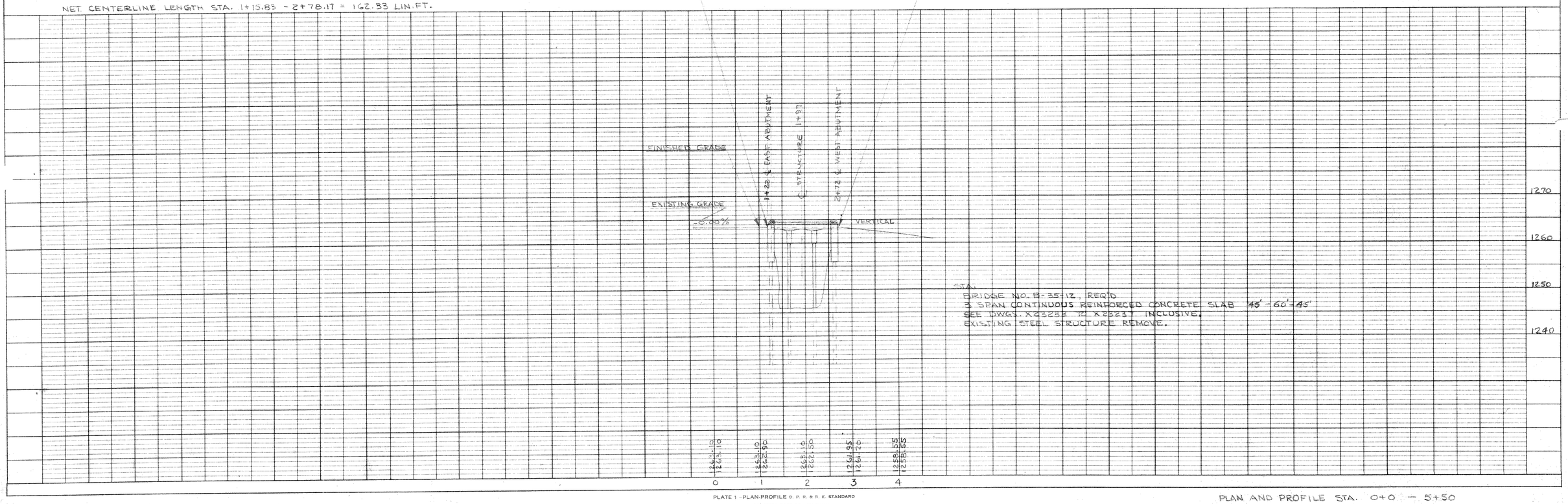
B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4		3	



BENCH MARKS

№	STATION	DESCRIPTION	ELEV.
1	1+32	NORTH RIM M.H. # 552 COVER 16' LT	1262.54
2	0+0	NORTH RIM M.H. # 551 COVER 4' LT	1262.95

NET CENTERLINE LENGTH STA. 1+15.83 - 2+78.17 = 162.33 LIN.FT.



STA.
BRIDGE NO. B-35-12, REQ'D
3 SPAN CONTINUOUS REINFORCED CONCRETE SLAB 45'-60'-45'
SEE DWGS. X23232 TO X23237 INCLUSIVE.
EXISTING STEEL STRUCTURE REMOVE.

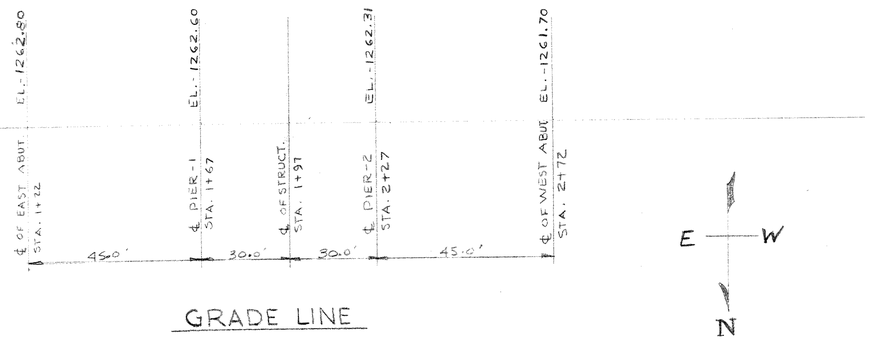
PLATE 1 - PLAN-PROFILE O. P. R. & R. E. STANDARD
THE FREDERICK POST CO., CHICAGO

PLAN AND PROFILE STA. 0+0 — 5+50

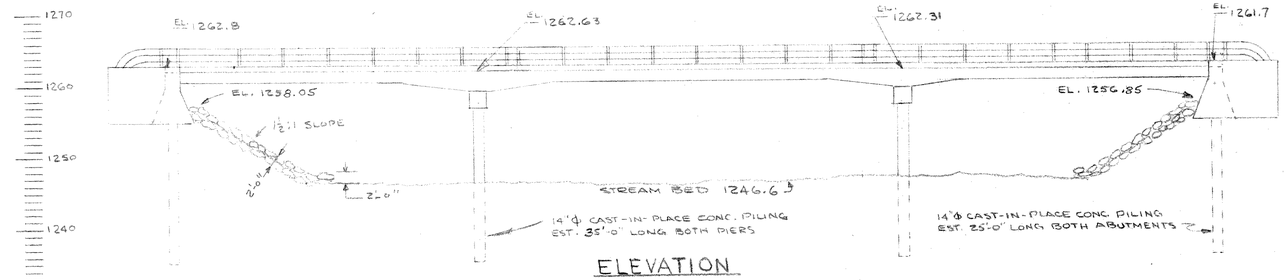
PLAN
NOTE BOOK No.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY
DATE

PROFILE
NOTE BOOK No.
SURVEYED
PLOTTED
GRADES CHECKED
ALIGNMENT
STRUCTURE NOTATIONS CHECKED
DATE

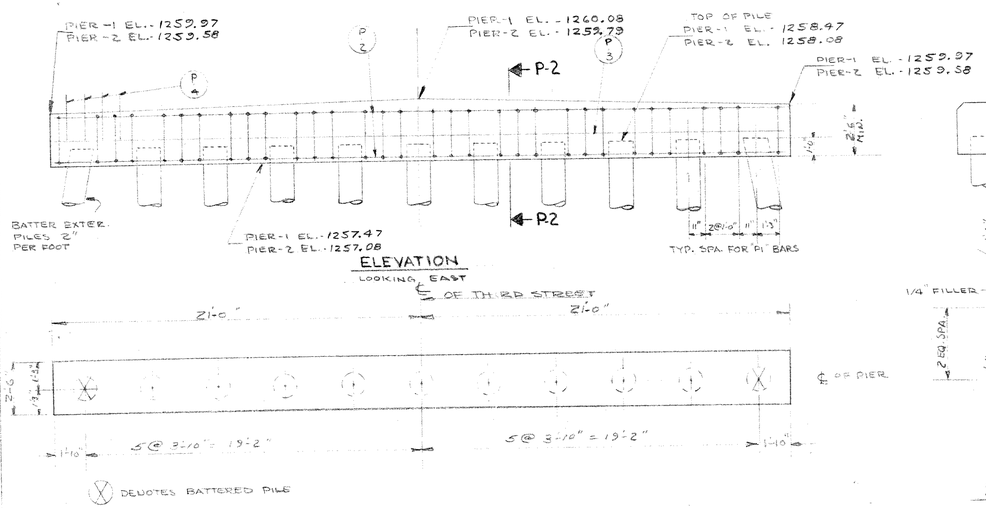
COUNTY & HIGHWAY	ROUTE & SECTION	CLASS & AGREEMENT STATE	FEDERAL	B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
35.9	0.0	3.6		4		4	



GRADE LINE

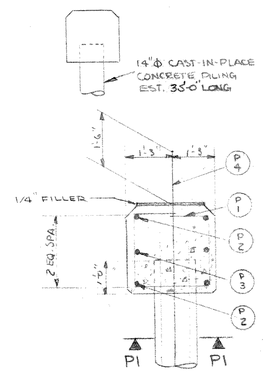


ELEVATION

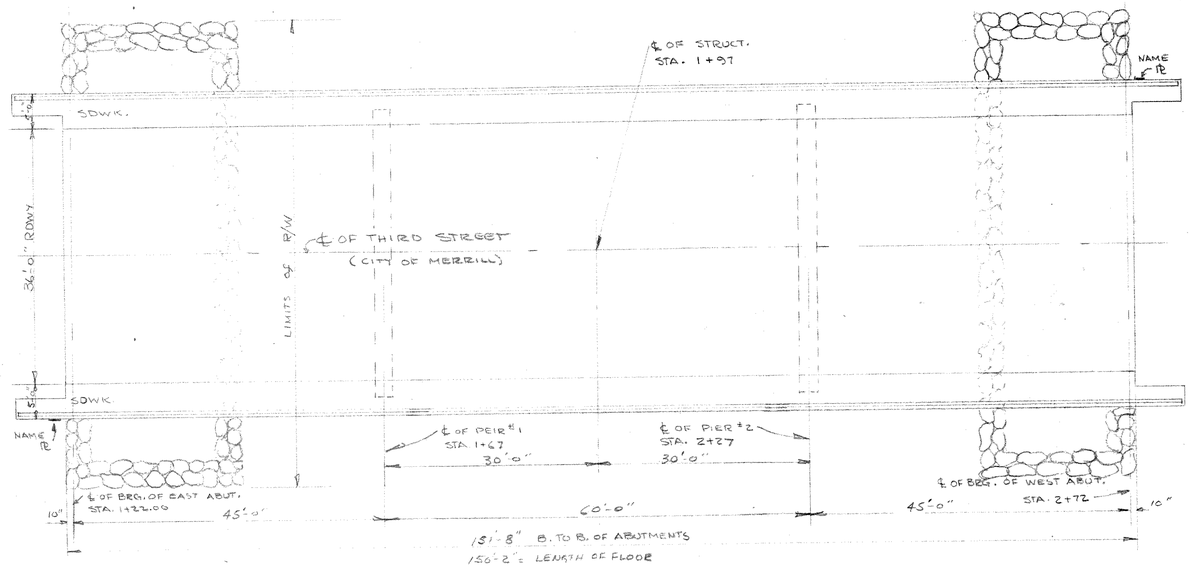


ELEVATION
LOOKING EAST
℄ OF TH. RD. STREET

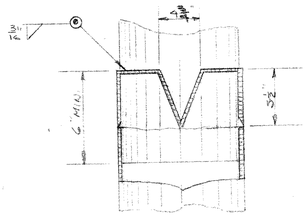
PLAN



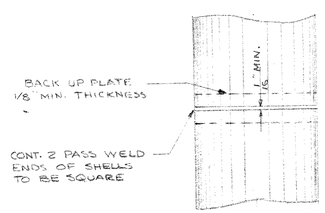
SECTION P2



PLAN

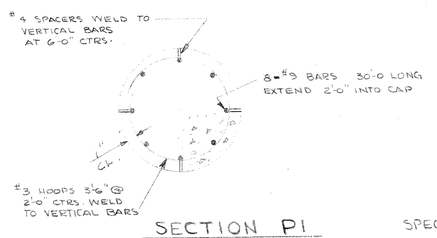


FLUTED PILE



PIPE PILE

PILE SPLICE DETAILS



SECTION P1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
ALL CONCRETE, MASONRY SHALL BE GRADE 'AA'.
BEVEL EXPOSED EDGES OF CONCRETE 1" UNLESS OTHERWISE SPECIFIED.
BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED.
THE USE OF STRUCTURAL GRADE BAR STEEL REINFORCEMENT IS PROHIBITED.
THE ABUTMENTS SHALL BE RIPRAPPED AS SHOWN ABOVE IN ELEVATION AND ON DWG. Nº

PILING AT PIERS AND ABUTMENTS SHALL BE 14" Φ CAST-IN-PLACE CONCRETE PILING ESTIMATED 35'-0" and 25'-0" Long. PILING AT ABUTMENTS SHALL BE DRIVEN TO A MINIMUM BEARING VALUE OF 30 TONS PER PILE AND A MINIMUM BEARING VALUE OF 37 TONS PER PILE AT PIERS.

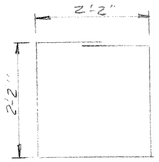
EXISTING STRUCTURE
SUPERSTRUCTURE (1-SPAN AT 134') Steel
STONE MASONRY ABUTMENTS

NEW STRUCTURE
THREE SPAN CONT. R.C. SLAB (45'-0", 60'-0", 45'-0") WITH A 36'-0" CLEAR ROWY. AND 2-4'-0" CLEAR SDWK. ON BOTH SIDES.
SUBSTRUCTURES - R.C. SILL TYPE ABUTS. ON CAST-IN-PLACE PILES AND PIER CAP ON CAST-IN-PLACE PILES.

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT 1558#

POUR	MARK	Nº	SIZE	LENGTH	SPACING	LOCATION	DET.
	P1	64	4	9'-9"	SHOWN	CAP - STIRRUPS	A
	P2	8	5	41'-6"	"	" - LONGITUDINAL	
	P3	4	4	41'-6"	"	" - "	
	P4	82	5	3'-0	1'-0	" & SUPERSTRUCTURE	



DETAIL 'A'

TOTAL ESTIMATED QUANTITIES

BID ITEMS	UNIT.	SUPER.	PIERS	E. ABUT.	W. ABUT.	TOTAL
REMOVING OLD BRIDGE	L.S.	-	-	-	-	1
EXCAVATION FOR STRUCTURES	C.Y.	-	-	90'	70'	160'
GRANULAR BACKFILL	C.Y.	-	-	25	30	55
CONCRETE MASONRY	C.Y.	389	20.2	26.1	26.1	461.4
BAR STEEL REINFORCEMENT	L.B.	84,252	1558	1236	1236	88,282
CAST-IN-PLACE CONC. PILING DELV.	L.F.	-	735	175	175	1085
CAST-IN-PLACE CONC. PILING DRIVEN	L.F.	-	680	170	170	1020
STEEL RAILING	L.F.	321	-	-	-	321
HEAVY RIPRAP	C.Y.	-	-	70	80	150
NON-BID ITEMS						
FILLER	SIZE	1/2+1/4	-	-	-	1/2+1/4
ALUM. OR ZINC PLATES	S.F.	11	-	-	-	11

LIST OF DRAWING

1. LAYOUT & PIERS	SHEET 4
2. SUPERSTRUCTURE	SHEET
3. RAILING.	SHEET
4. ABUTMENTS	SHEET
5. SUBSURFACE EXPLORATION	SHEET

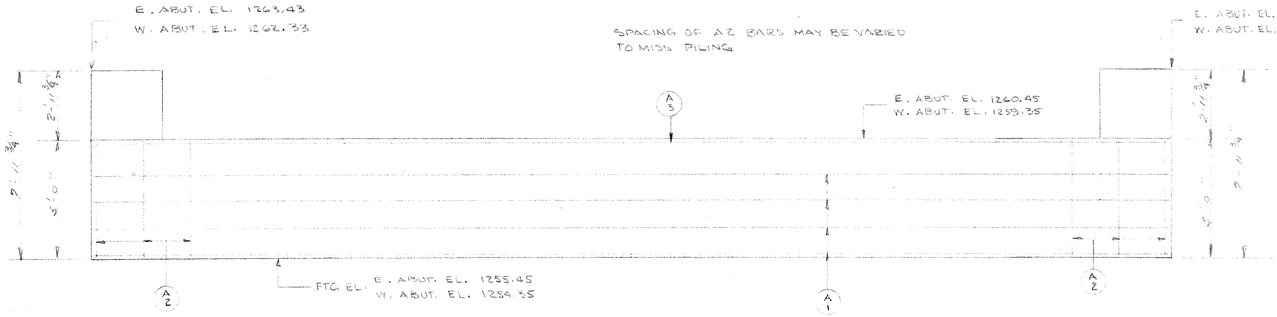
REVISED

LAYOUT & PIERS

CO. LINCOLN	TN. MERRILL	STA. 1+22 STA. 2+72
SECTION 11	TOWN 31N	RANGE 6E
DESIGN SPEC. AASHO. 57	LOADING H-20	CONST. SPEC. 1957
DATE 4-8-61	DESIGN W.N.W.	DR. SEP CK'D W.N.W.

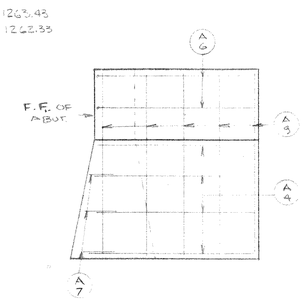
STRUCTURE B-35-12 SHEET 4

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEET
4		5	



ELEVATION

PILING NOT SHOWN



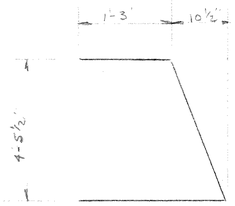
WING ELEVATION

BILL OF BARS

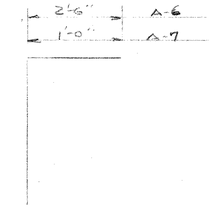
2472#

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

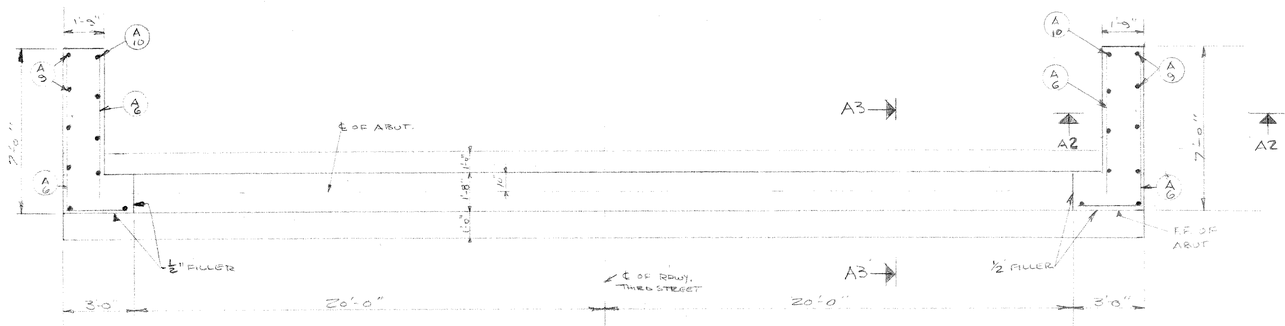
POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET
ABUTMENTS	A1	40	4	42'-0"	SHOWN	LONG. BODY	
	A2	84	4	8'-0"	2-0	BODY STIRRUPS	A
	A3	4	6	42'-0"	SHOWN	LONG. TOP OF BODY	
	A4	16	4	6'-9"	1-6	WINGS HORIZ. F.F.	
	A6	8	4	9'-0"	1-6	WING 2 " F.F	B
	A9	12	4	3'-0"	SHOWN	CORNER OF WINGS & BODY	B
	A8	24	4	7'-6"	1-6	WINGS VERT.	
	A10	16	4	7'-3"	1-6	WING 2 " B.F.	
	A11	84	5	3'-6"	1-0	DOWELS INTO SUPER.	



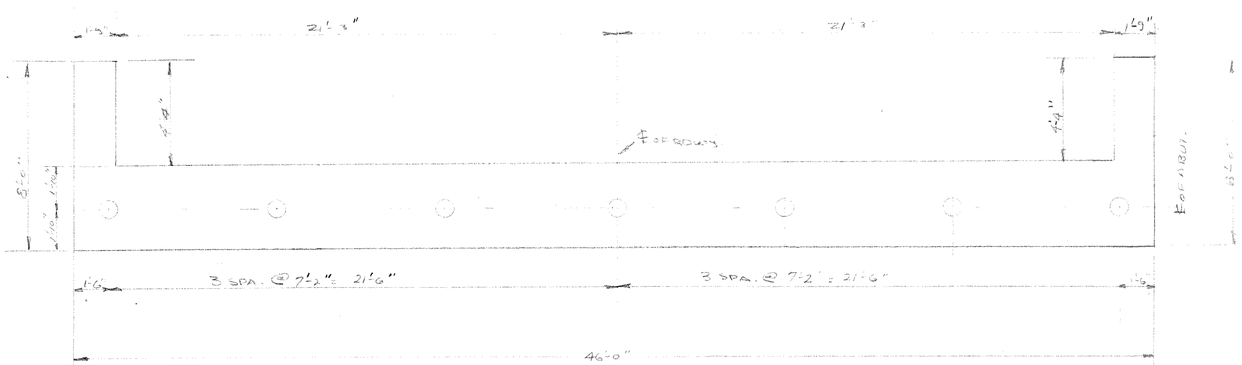
DETAIL "A"



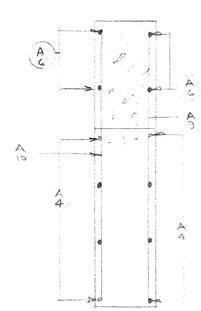
DETAIL "B"



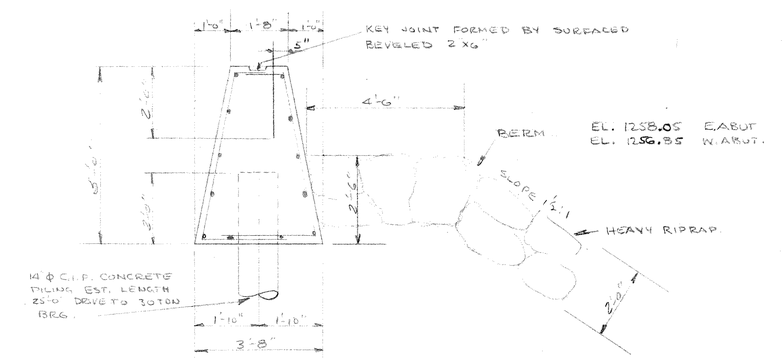
PLAN



FOOTING PLAN



SECTION A2

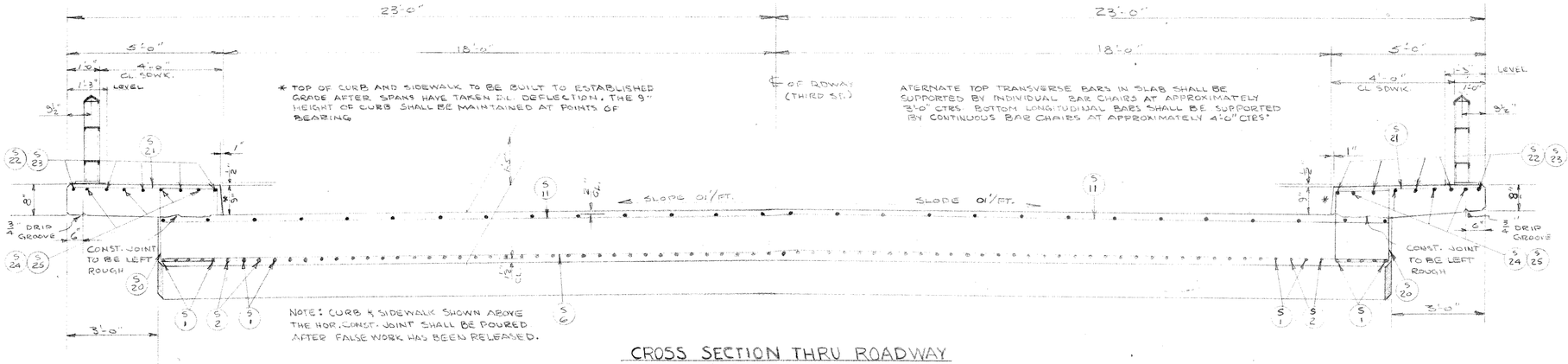


SECTION A3

CONTRACTOR MAY LEAVE PART OF OLD ABUTMENT IN PLACE BELOW WHERE SLOPE INTERSECTS THE OLD ABUTMENT.

REVISED	ABUTMENTS		
	DESIGN SPEC. AASHO 57	LOADING H20	CONST. SPEC. 1957
	DATE 5-6-62 DESIGN W.J.W.	DRAWN	CK'D W.J.W.
STRUCTURE B-35-12		SHEET 5	

BPR DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEET
4		6	



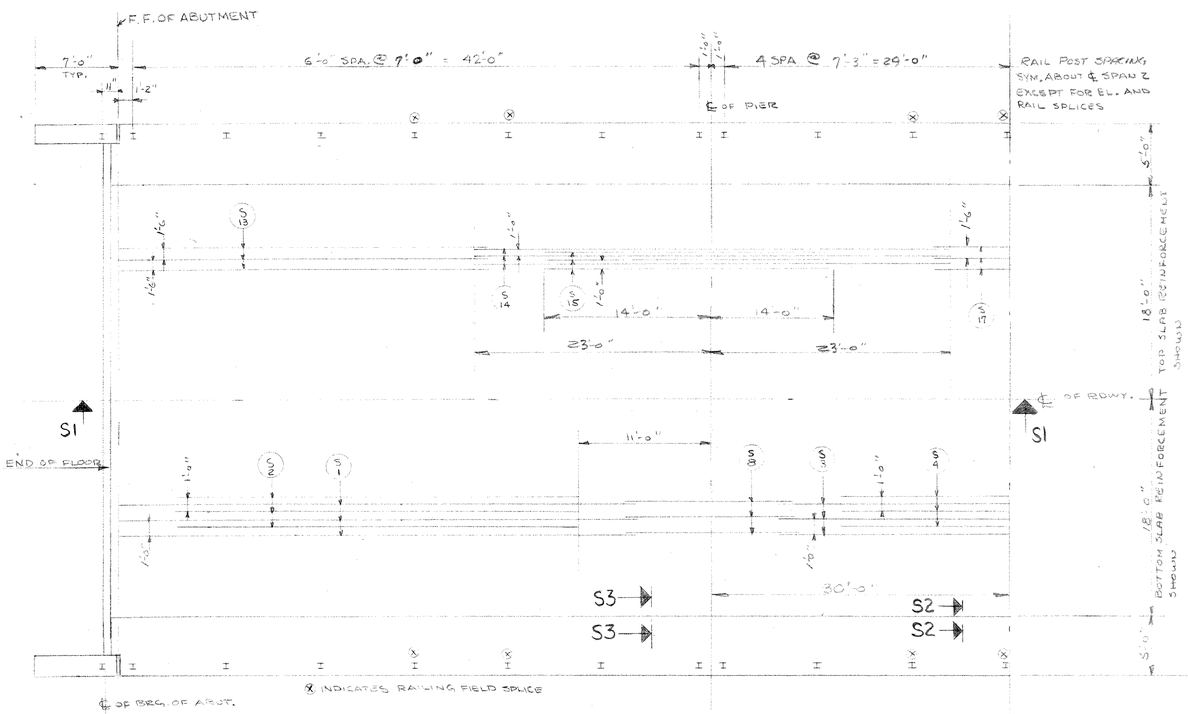
CROSS SECTION THRU ROADWAY

LOOKING WEST

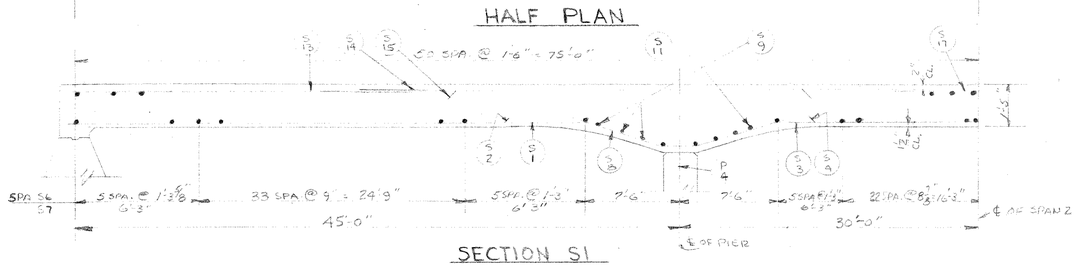
BILL OF BARS 84,252

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

PCS	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
	S1	90	10	38'-0"	1'-0	BOTTOM OF SLAB - LONG. - SPANS 1 & 3	
	S2	72	10	~~38~~ 38'-0"	1'-0	" " " " 1 & 3	
	S3	31	10	38'-0"	1'-0	" " " " " 2	
	S4	31	10	38'-0"	1'-0	" " " " " 2	
	S5	5	10	40'-0"	SHOWN	" " " AT SIDEWALK SPAN	
	S6	141	5	39'-6"	"	TRANSVERSE - BOTTOM OF SLAB	
	S8	66	5	19'-0"	1'-0	LONG. AT HAUNCH	A
	S9	16	4	39'-6"	SHOWN	TRANSVERSE - BOTTOM OF HAUNCH	
	S11	181	4	39'-6"	1'-6	TOP TRANSVERSE	
	S13	52	4	38'-9"	1'-6	LONG. TOP OF SLAB - SPANS 1 & 3	
	S14	78	11	37'-0"	1'-0	" " " " PIERS 1 & 2	
	S15	62	11	37'-0"	1'-0	" " " " " "	
	S16	24	11	40'-0"	SHOWN	TOP OF SLAB BY SIDEWALK PIERS 1 & 2	
	S17	26	4	12'-0"	1'-6	" " " SPAN 2	
	S20	300	5	7'-6"	1'-0	SIDEWALK	B
	S21	296	5	5'-9"	1'-0	"	C
	S22	40	5	25'-0"	SHOWN	CURB & SDWK SPAN 1 & 3	
	S23	20	5	25'-3"	"	" " " 2	
	S24	16	5	8'-0"	"	SPANS 1 & 3 AT PIERS 1 & 2	
	S25	16	5	16'-6	"	" 2 " " "	

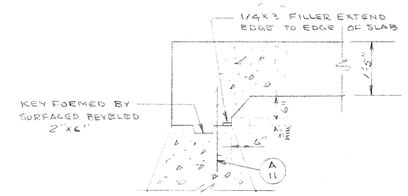


HALF PLAN



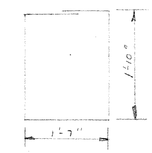
SECTION S1

ALL SLAB THICKNESS DIMENSIONS SHOWN ARE MINIMUM. ANY TOLERANCE NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES SHALL BE PLUS (+).



DETAIL AT ABUTMENT

DETAIL "A"

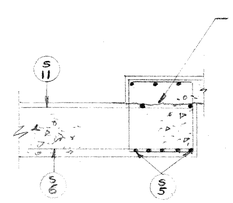


DETAIL "B"

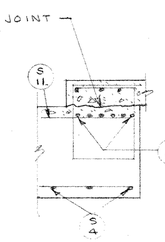
DETAIL "C"

DEAD LOAD DEFLECTION DIAGRAM

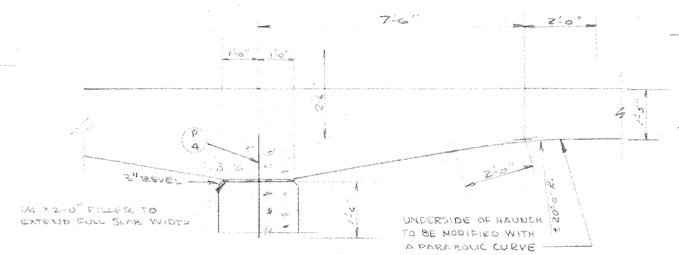
TO PROVIDE FOR DEAD LOAD DEFLECTION AND TO ALLOW FOR FUTURE PLASTIC FLOW, CAMBER SPAN 1, 3/4 @ 1/4 PT., 15/16 @ 1/2 PT., 14 @ 3/4 PT. CAMBER SPAN 2, 11/16 @ 1/4 PT., 13/16 @ 1/2 PT. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT. CAMBER SHALL CONFORM TO AN ARC OF A CIRCLE.



SECTION S2



SECTION S3

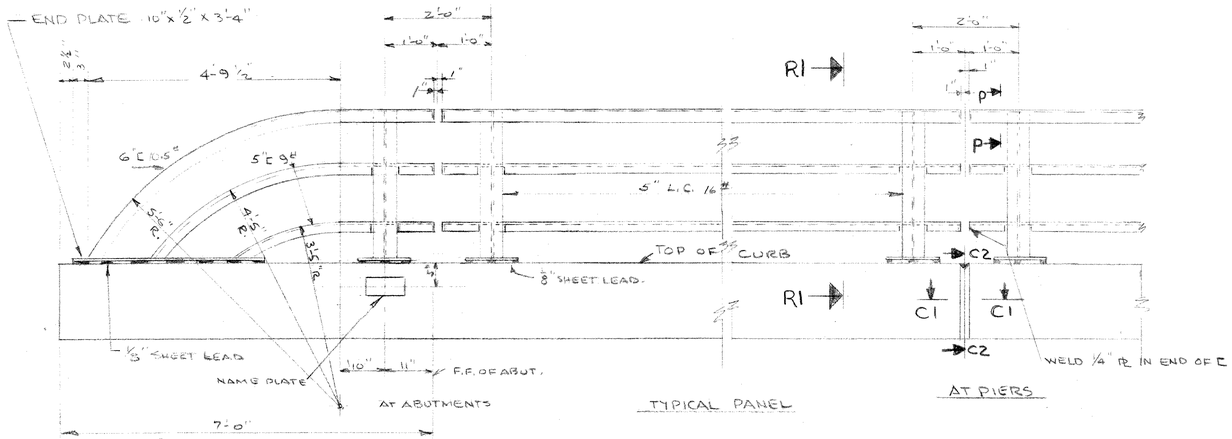


DETAIL AT PIERS

REVISED		
	SUPERSTRUCTURE	
	DESIGN SPEC. AASHO 57	LOADING H20	CONST. SPEC. 1957
	DATE 5-5-62	DESIGN W.J.W.	DRAWN	CK. W.J.W.
STRUCTURE B-35-12	SHEET 6	

B.P.R. DIVISION	PROJECT	SHEET NO.	TOTAL SHEETS
4		7	

NOTE: THE END SECTION MAY BE FABRICATED BY WELDING 4 PLATES INSTEAD OF BENDING ⊏s AS SHOWN

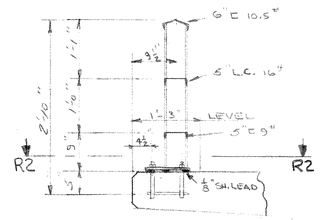


AT ABUTMENTS

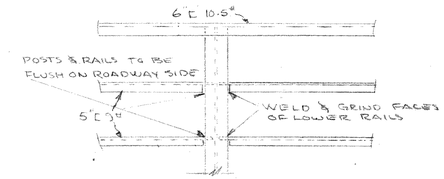
TYPICAL PANEL

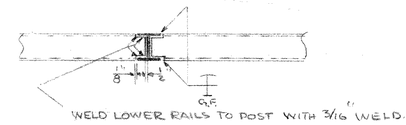
AT PIERS

PART ELEVATION

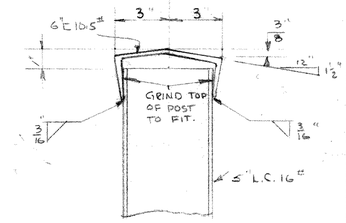


SECTION - R1

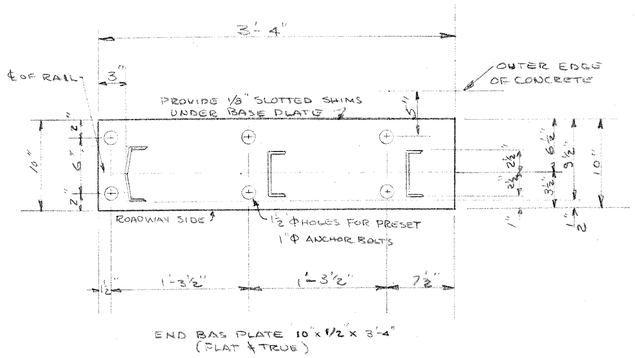




RAIL CONNECTIONS

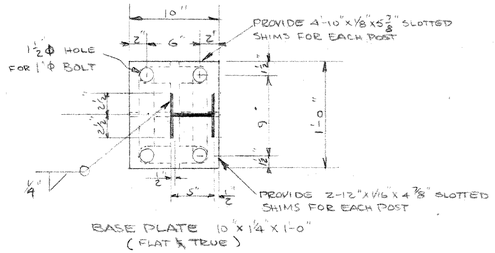


SECTION P



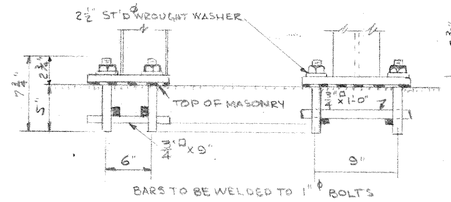
END BAS PLATE 10"x1/2"x3'-4" (FLAT & TRUE)

PART PLAN OF END SECTION



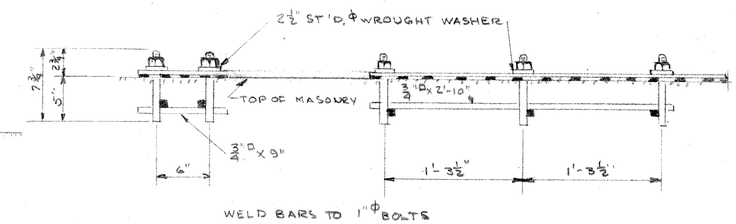
BASE PLATE 10"x1/4"x1-0" (FLAT & TRUE)

SECTION R2



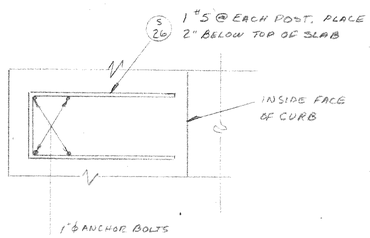
BARS TO BE WELDED TO 1" ϕ BOLTS

POST ANCHORS



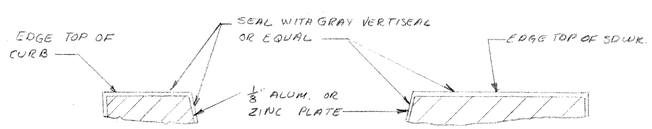
WELD BARS TO 1" ϕ BOLTS

END PLATE ANCHORS



DETAIL AT RAIL POST

UNDER POSTS ON SPAN ONLY

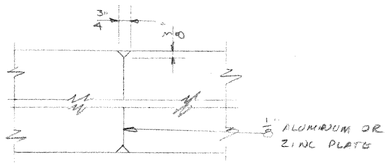


SECTION C2

THRU CURB

SECTION C2

THRU SDWK.



SECTION C1

REVISED			
	RAILING		
	DESIGN SPEC. A.A. SH.O. 57	LOADING H-20	SPEC. 1957
	DATE 5-7-62 DESIGN W.J.W.	DRAWN	CHK W.J.W.
STRUCTURE		SHEET 7	