

INDEX OF SHEETS

- NO. 1 TITLE
- NO. 1 TYPICAL CROSS SECTIONS
- NO. 2 ESTIMATE OF QUANTITIES
- NO. NONE MISCELLANEOUS QUANTITIES
- NO. NONE RIGHT OF WAY PLAT
- NO. 3 PLAN AND PROFILE STA. 6+00 TO STA. 27+90
- NO. 4-5 STANDARD DETAILS
- NO. 6-7 DRAINAGE STRUCTURES
- NO. 8-10 CROSS SECTIONS

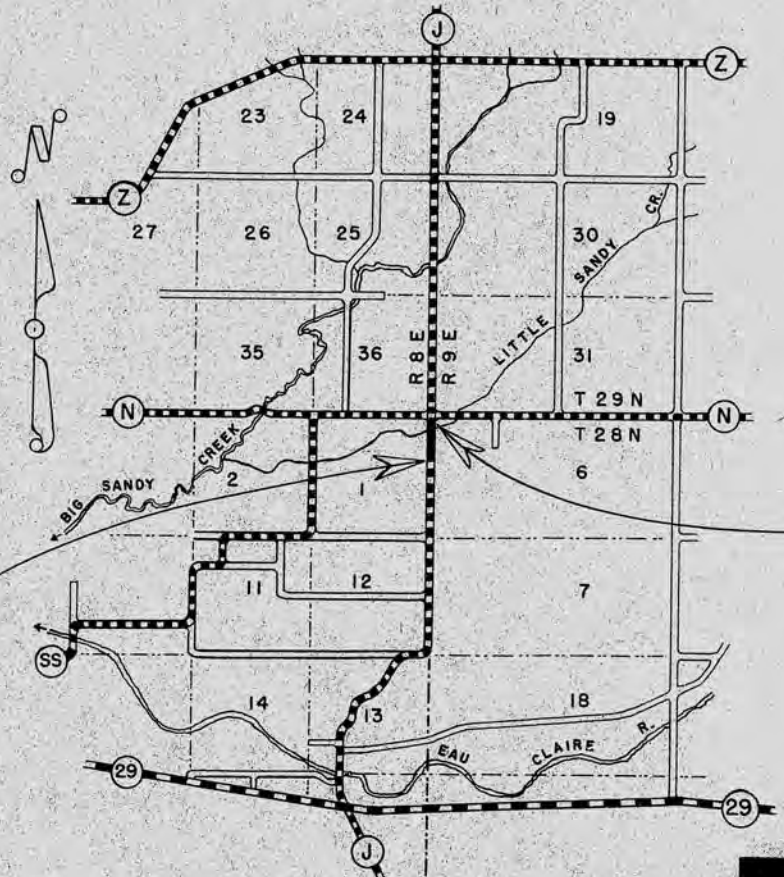
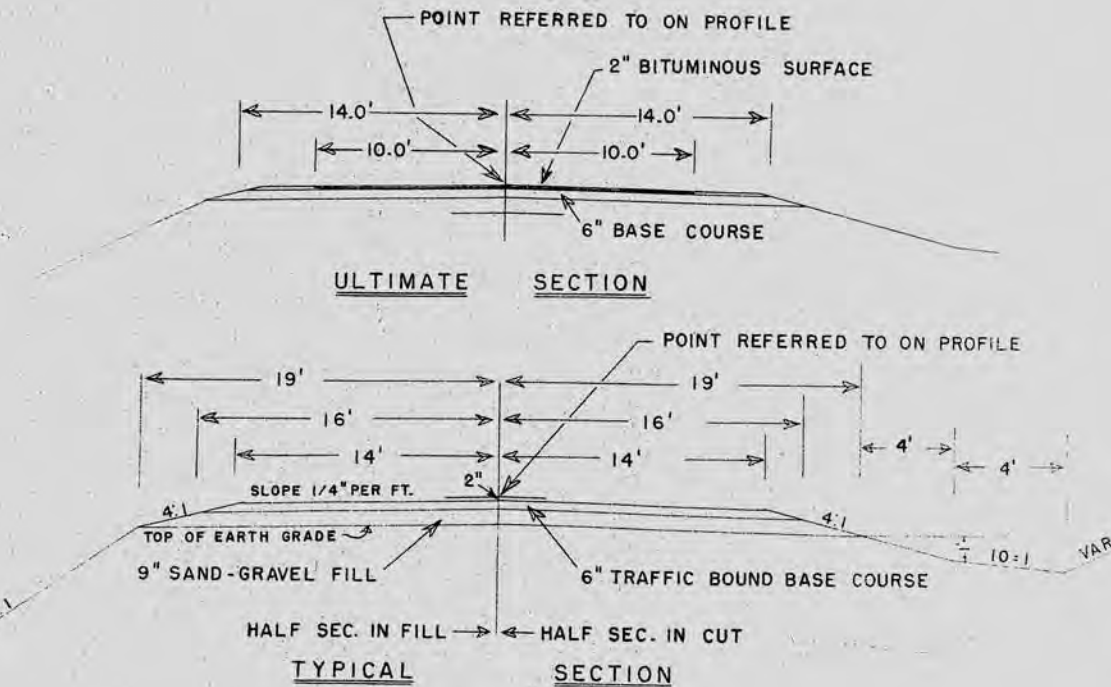
COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		FEDERAL DIVISION OFFICE	SHEET NUMBER	TOTAL SHEETS
		STATE	FEDERAL			
37.6	531.0		11.4	WIS. 4	1	10

STATE OF WISCONSIN  
STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED  
**S.T.H. 29 - S.T.H. 52**  
KNEISL BRIDGE & APPROACHES  
MARATHON COUNTY  
**PROJECT S 0531 (4)**

C. T. H. "J"

SCALES { PLAN 1 IN. = 100 FT.  
PROFILE HOR. 1 IN. = 100 FT. VERT. 1 IN. = 10 FT.  
CROSS SECTIONS HOR. 1 IN. = 5 FT. VERT. 1 IN. = 5 FT.



BEGINNING OF PROJECT  
STA. 6+00.0 - 2202.3' SOUTH OF NE COR. SEC. 1

END OF PROJECT  
STA. 27+90.0 - 12.3' SOUTH OF NE COR. SEC. 1

CONVENTIONAL SIGNS

- |                   |       |                               |                  |
|-------------------|-------|-------------------------------|------------------|
| LINE              | ----- | CULVERTS IN PLACE             | -----            |
| LINE              | ----- | CULVERTS REQUIRED             | -----            |
| P OR RANGE LINE   | ----- | DROP INLET                    | -----            |
| LINE              | ----- | POWER POLE                    | -----            |
| FT OF WAY LINE    | ----- | TELEPHONE OR TELEGRAPH POLE   | -----            |
| RIGHT OF WAY LINE | ----- | RIGHT OF WAY MARKERS          | -----            |
| WOVEN             | ----- | REFERENCE STAKE FOR HUBS ONLY | -----            |
| BARBED            | ----- | MARSH                         | -----            |
| TE OR CITY LIMITS | ----- | HEDGE                         | -----            |
| Y LINE            | ----- | TREES                         | -----            |
| D WAY OR P.E.     | ----- | GROUND ELEVATION              | DATUM LINE 73.9  |
| S                 | ----- | GRADE ELEVATION               | DATUM LINE 75.16 |
| SURVEY LINE       | ----- |                               |                  |

LAYOUT

SCALE 1 MILE

TOTAL NET LENGTH OF CENTERLINE - 0.475 MI.

APPROVED FOR  
*Marathon County*  
Date *11/29/56*  
County Highway Commissioner Title

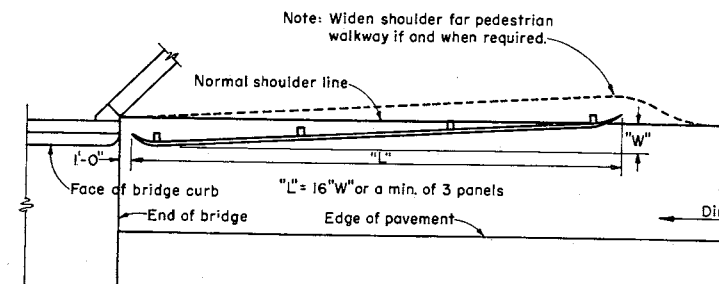
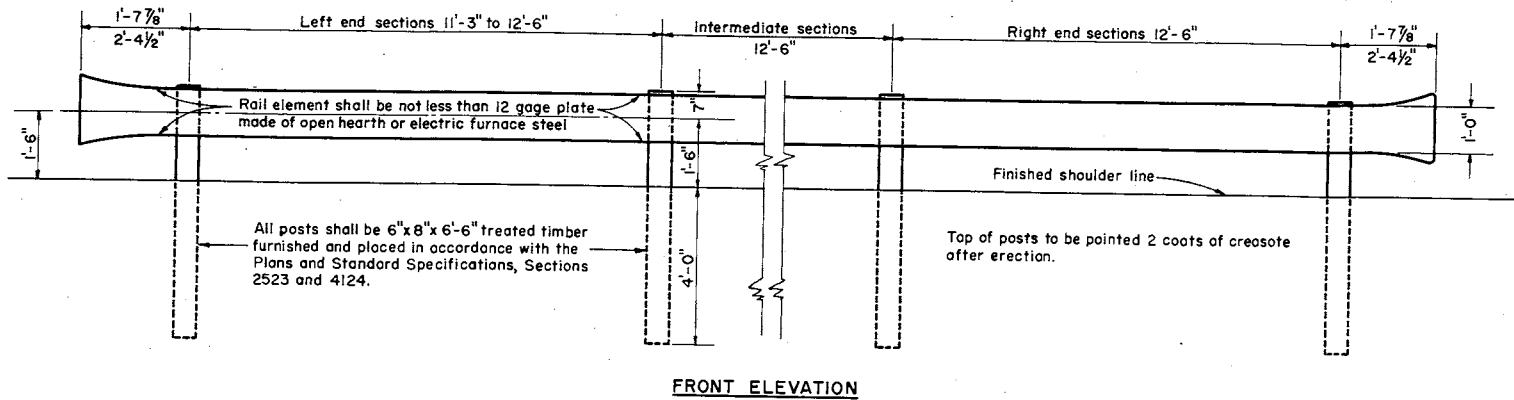
STATE HIGHWAY COMMISSION OF WISCONSIN  
MADISON, WISCONSIN

SURVEYOR: C.E.C. DISTRICT COMPUTER: CAL DISTRICT CHECKER: M. D. CHICKER

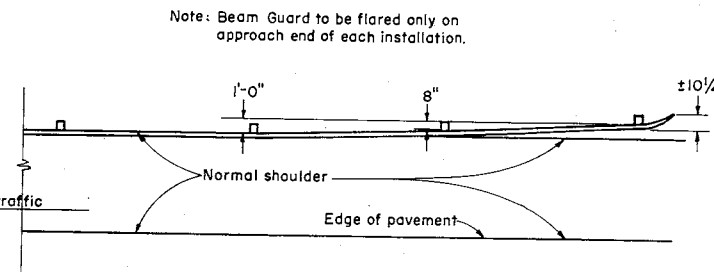
DATE: 11/10/56  
RECOMMENDED FOR APPROVAL: 11/15/56  
DATE: 11/15/56

DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

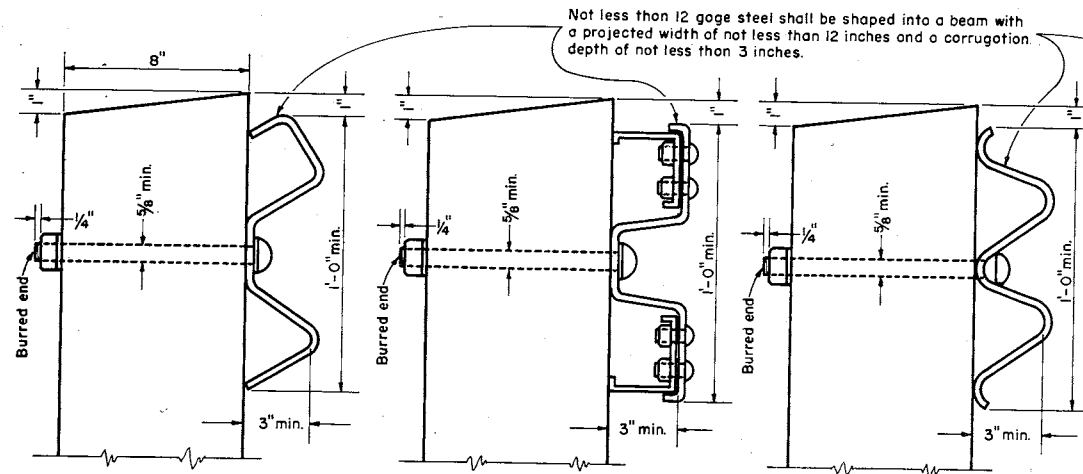
APPROVED: [Signature] DATE: [ ]



LOCATION DIAGRAM FOR BRIDGE APPROACHES

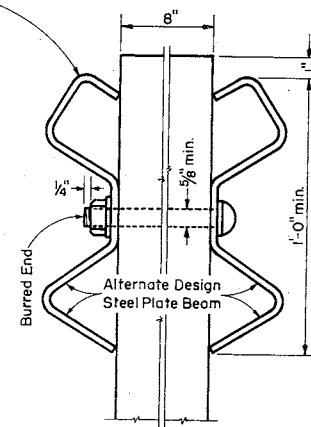


LOCATION DIAGRAM FOR INTERMEDIATE SECTIONS



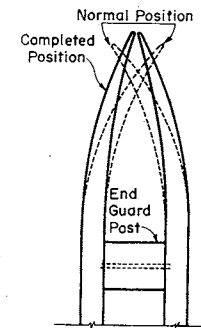
SIDE ELEVATIONS

ALTERNATE DESIGNS-STEEL PLATE BEAM GUARD (CLASS "B")



SIDE ELEVATION

ALTERNATE DESIGN - STEEL PLATE BEAM (MEDIAN) GUARD (CLASS "B")



PLAN VIEW TERMINAL SECTIONS

**GENERAL NOTES**

Details of construction not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and applicable Special Provisions. The Steel Plate Beam Guard shall consist of plate made of open hearth or electric furnace steel. Plates shall be blanked to proper shape, fabricated and ready for assembly when received in the field. The plates shall be true to plan dimensions and of uniform section. Warped or deformed plates will be rejected. The edges of the plates shall be rolled or rounded so that they present no sharp edges. All connections and splices shall be formed with flat round headed bolts, or similar detail, so that no appreciable projection will be presented on the traffic side of the guard. The rail element shall be spliced by lapping in the direction of traffic or by butt joint with splice plate. The holes in the plate near the post shall be slotted to facilitate erection and to make provision for expansion and contraction. Plate ends in lap splices or plate ends and splice plate in butt splices shall make contact throughout the entire area of the splice.

**TESTS**

The elongation of a 2 inch specimen of the steel plate used in the rail element shall be not less than 12% when tested in tension. The minimum tensile strength of the rail element shall, when tested in conjunction with splices and end connections, be 50,000 pounds. The rail element when loaded as a simple beam, freely supported at each end on 12'-6" centers, shall support a concentrated load of 2,000 pounds, applied at the center point, with a maximum deflection of 3 1/2 inches and shall support a concentrated load of 2,400 pounds, tested in like manner, with a maximum deflection of 5 1/2 inches.

**PAINTING**

**SHOP COAT**

Promptly following fabrication, the plates for steel rail element shall be thoroughly cleaned and shall be painted with a Red Lead Primer, or if an alternate of Red Lead Oxide Rust Inhibitive Primer or equivalent is used, the Engineer's prior approval shall be obtained. All parts, hardware and appurtenant fittings for the complete Beam Guard assembly shall likewise be painted when not furnished as galvanized.

**FIELD COAT**

Following erection, the steel rail elements and all parts, hardware and appurtenant fittings shall be painted in accordance with the Standard Specifications for Aluminum Paint, Section 4125.

Any damaged areas occurring to the shop coat during transportation or erection shall be cleaned and painted with an approved Rust Inhibitive Primer prior to any field coat painting.

Where the steel plate elements make contact with post mountings etc. all such areas which are impossible to paint after erection, shall be painted prior to erection.

All threaded portions of fittings and fasteners, and cut ends of bolts shall be painted as specified or as directed by the Engineer.

**ALTERNATE DESIGNS**

Manufacturers may submit to the Engineer, for approval, designs for "Steel Plate Beam Guard" other than those shown on this drawing, providing that such alternate designs shall conform to the same physical tests and inspection requirements prescribed on this drawing for "Class 'B' Steel Plate Beam Guard."

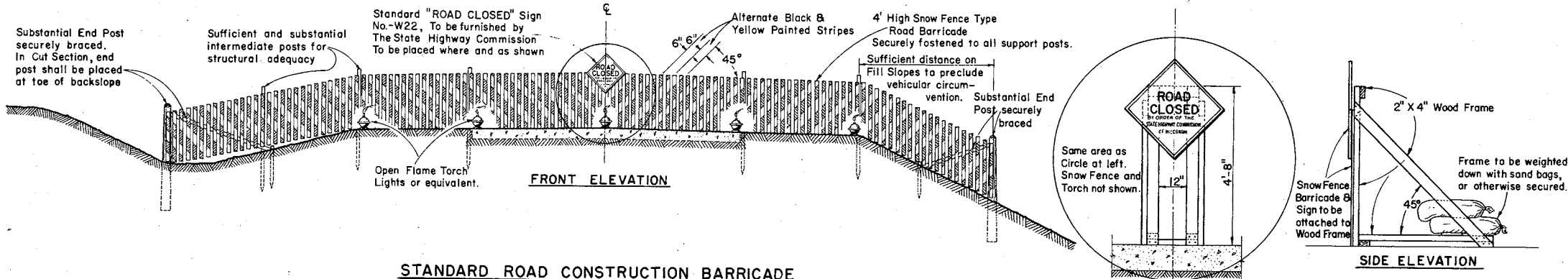
**MEASUREMENT & PAYMENT**

The items of "Class 'B' Steel Plate Beam Guard" and "Class 'B' Steel Plate Beam (Median) Guard" shall be measured and paid for at the contract unit price per linear foot, measured in place by length in linear feet from end to end of Steel Plate or Steel Plates, which price shall be full compensation for furnishing all materials and performing all installation work to completion in accordance with the Plans and the Standard Specifications, Sections 2523 and 4124.

**BID ITEMS**

No. 2523-6 Steel Plate Beam Guard (Class "B").....Lin. Ft.  
No. 2523-7 Steel Plate Beam (Median) Guard (Class "B").....Lin. Ft.

<b>CLASS "B"</b>	
<b>STEEL PLATE BEAM GUARD &amp; STEEL PLATE BEAM (MEDIAN) GUARD</b>	
STATE HIGHWAY COMMISSION OF WISCONSIN	
RECOMMENDED FOR APPROVAL:	
12-21-53 DATE	<i>J. D. Piltz</i> ENGINEER OF DESIGN
APPROVED:	
12/22/53 DATE	<i>Z. L. Rostetter</i> STATE HIGHWAY ENGINEER
PLATE NO. 7-2.4.1	



**STANDARD ROAD CONSTRUCTION BARRICADE**  
**SNOW FENCE TYPE-"A"**

**WOOD FRAME SUPPORT AT C**  
**FOR SNOWFENCE TYPE BARRICADE**  
 When Barricade is Erected on Rigid Type Surfacing

**GENERAL NOTES**

The Contractor shall construct, place and maintain barricades as shown on this drawing and as required by the Standard Specifications Section 1107 for the duration of the project. Barricades shall be painted and structurally maintained for maximum visibility at all times.

Provision shall be made in the construction of barricades to provide for ingress and egress for local access as may be required.

**ALTERNATE DESIGNS**

Contractors may submit to the Engineer for approval, designs for Barricades other than shown on this drawing, and upon the Engineers approval may be used as alternates.

**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.

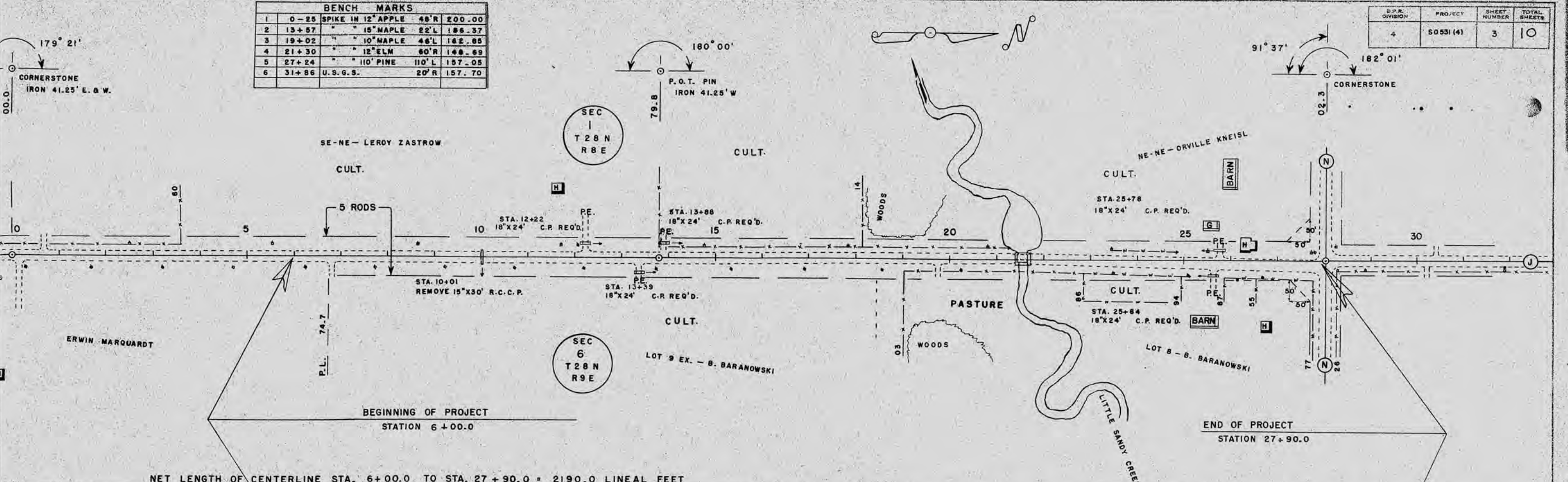
<b>CONSTRUCTION BARRICADE</b>	
STATE HIGHWAY COMMISSION OF WISCONSIN	
RECOMMENDED FOR APPROVAL:	
6/2/55 DATE	<i>J. S. Pelt</i> ENGINEER OF DESIGN
APPROVED:	
6/2/55 DATE	<i>E. C. Rustigen</i> STATE HIGHWAY ENGINEER



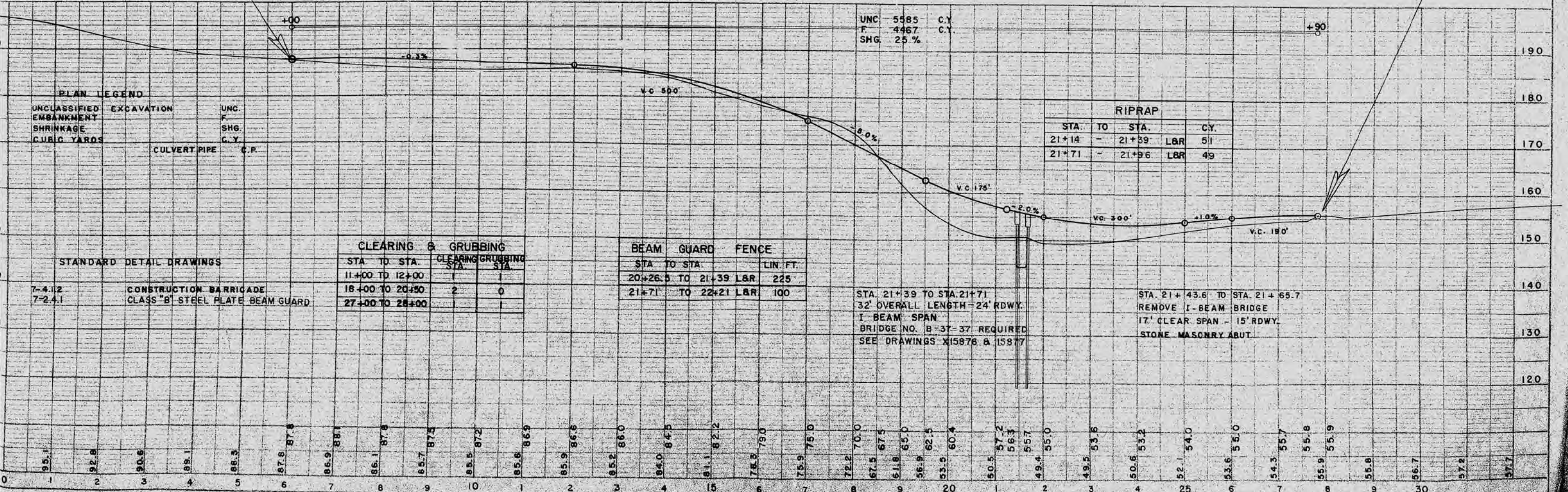
KNEISL BRIDGE - C.T.H. 'J' - MARATHON COUNTY

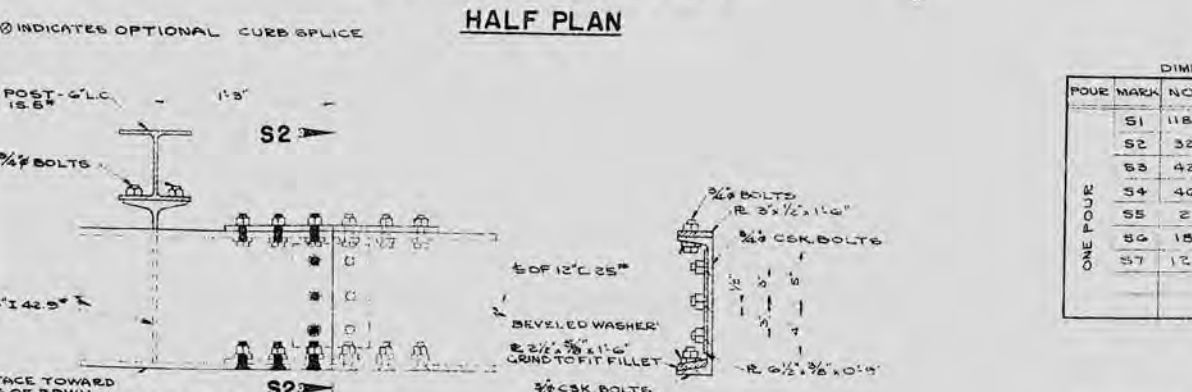
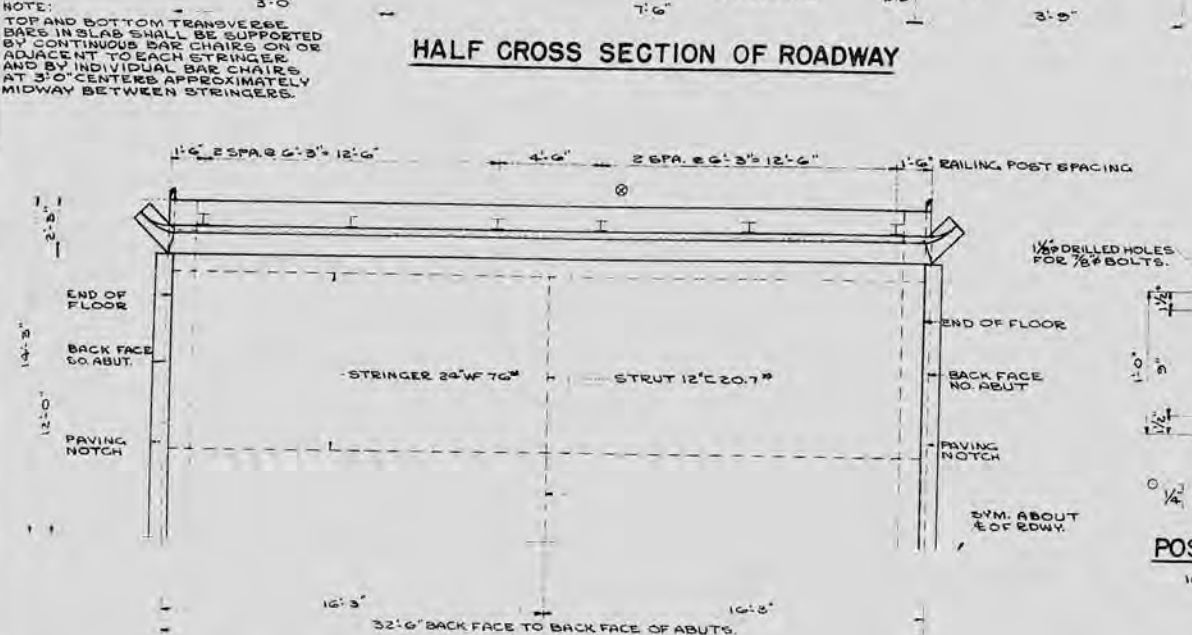
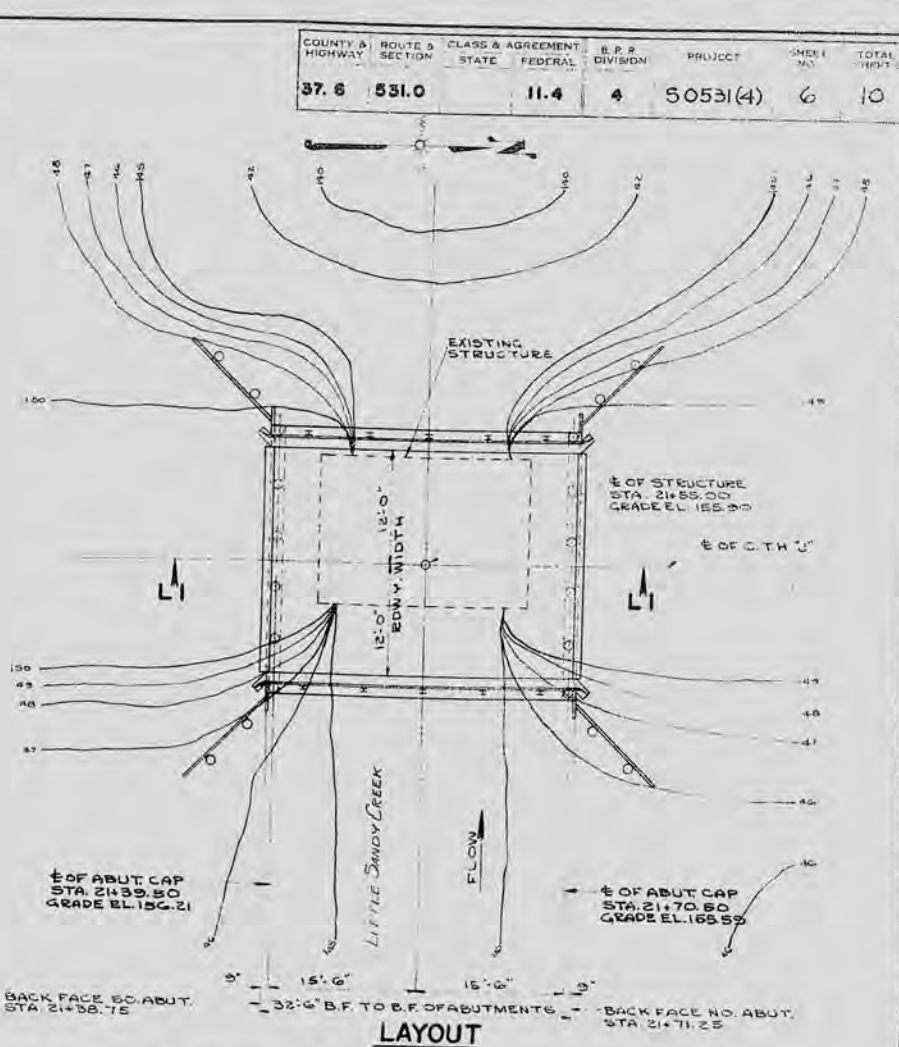
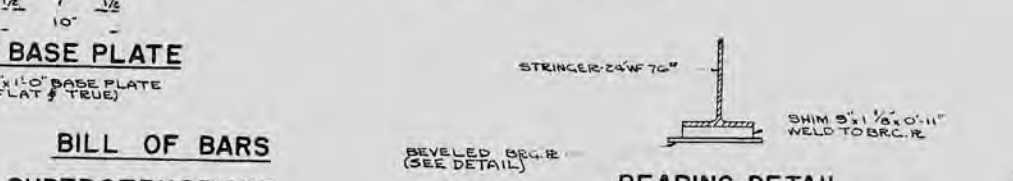
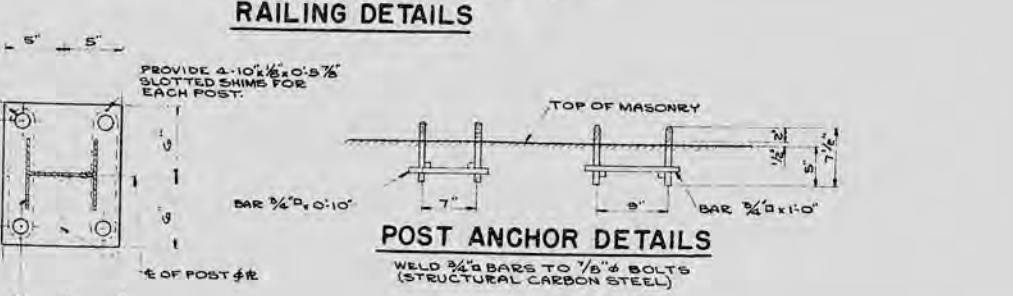
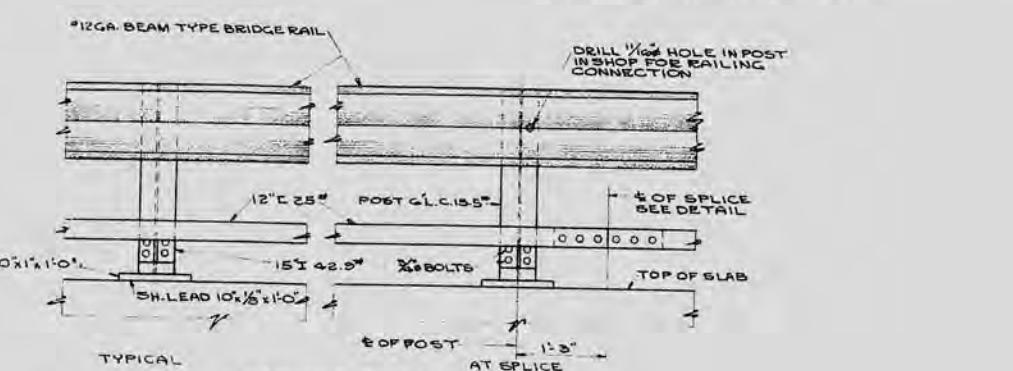
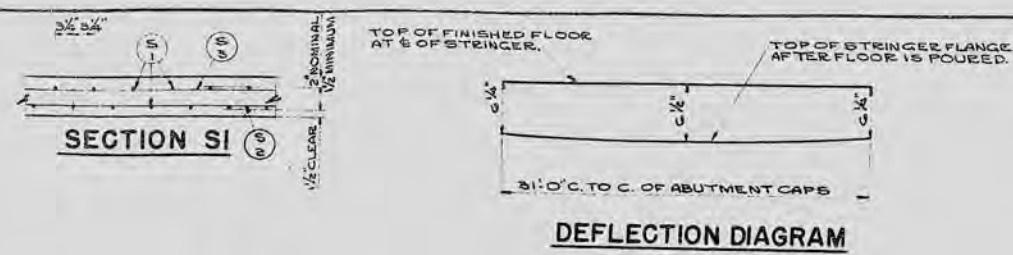
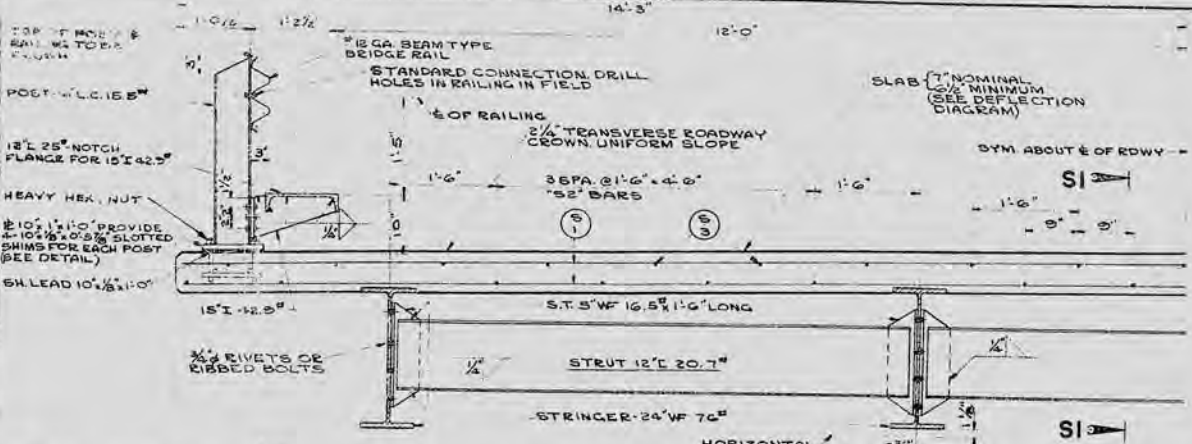
BENCH MARKS			
1	0+25	SPIKE IN 12" APPLE	48'R 200.00
2	13+57	" 15" MAPLE	22'L 186.37
3	19+02	" 10" MAPLE	48'L 162.85
4	21+30	" 12" ELM	60'R 148.69
5	27+24	" 110' PINE	110'L 157.05
6	31+86	U.S.G.S.	20'R 157.70

S.P.E. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	S0531(4)	3	10



NET LENGTH OF CENTERLINE STA. 6+00.0 TO STA. 27+90.0 = 2190.0 LINEAL FEET



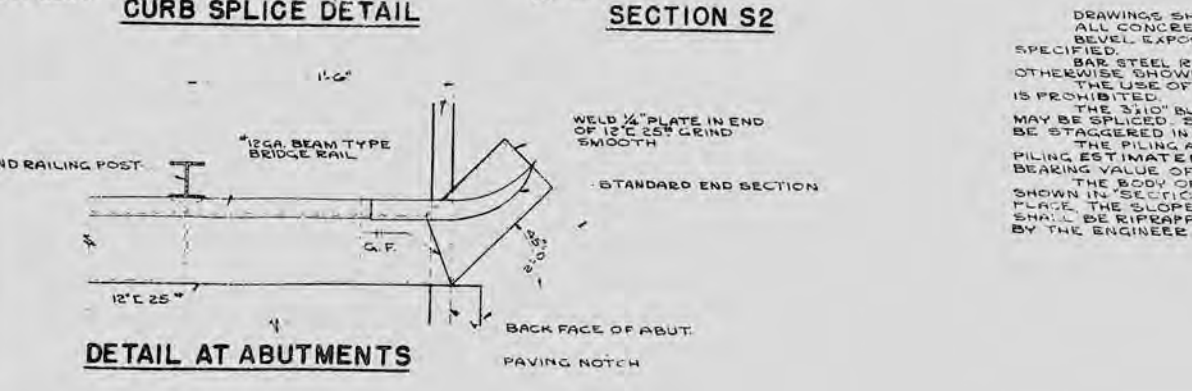
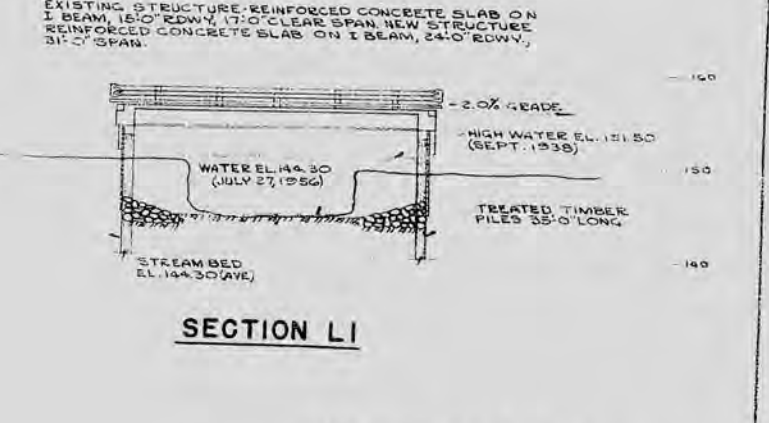
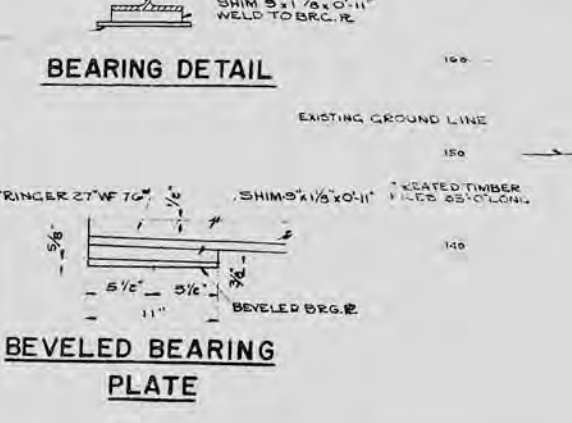


**BILL OF MATERIALS**

**SUPERSTRUCTURE**

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT. 5,030 FT

POUR MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
S1	118	3	28-0	6"	TRANS-FLOOR-TOP & BOTTOM	
S2	32	5	16-0	SHOWN	LONG-FLOOR-BOTTOM	
S3	42	5	16-0	1'-6"	LONG-FLOOR-TOP	
S4	46	3	7-3	1'-0"	LONG-CURTAIN WALL-BEND IN FIELD	
S5	2	4	21-0	SHOWN	TRANS-CURTAIN WALL	
S6	15	5	7-0	SHOWN	TRANS-CURTAIN WALL	
S7	12	5	5-0	SHOWN	TRANS-CURTAIN WALL	



**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.  
ALL CONCRETE MASONRY SHALL BE GRADE 140' BEVEL EXPOSED EDGES OF CONCRETE UNLESS OTHERWISE SPECIFIED.  
BAR STEEL REINFORCEMENT SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.  
THE USE OF STRUCTURAL GRADE BAR STEEL REINFORCEMENT IS PROHIBITED.  
THE 3" x 10" BULKHEAD PLANK IN THE BODY OF THE ABUTMENTS MAY BE SPLICED. SPLICES SHALL BE AT THE E. OF PILES AND SHALL BE STAGGERED IN ADJACENT ABUTMENTS.  
THE PILING AT THE ABUTMENTS SHALL BE TREATED TIMBER PILING ESTIMATED 35' C. TO C. HAD DRIVEN TO A MINIMUM BEARING VALUE OF 15 TONS PER PILE.  
THE BODY OF THE ABUTMENTS SHALL BE RIPRAPPED AS SHOWN IN SECTION LI ON SHEET 15877. AFTER THE FILL IS IN PLACE THE SLOPE OF THE FILL AROUND THE ENDS OF THE WINGS SHALL BE RIPRAPPED TO A MINIMUM THICKNESS OF 1'-0" AS DIRECTED BY THE ENGINEER.

**TOTAL ESTIMATED QUANTITIES**

REMOVING OLD BRIDGE	1 L.S.
EXCAVATION FOR STRUCTURES	950 CY
CONCRETE MASONRY	2400 CY
BAR STEEL REINFORCEMENT	5050 LB
STRUCTURAL CARBON STEEL	14,700 LB
SHEET LEAD	80 LB
SHEET ZINC	29 LB
TREATED LUMBER AND TIMBER	512 MCM
UNTREATED TIMBER TEST PILING (10' x 10')	1 L.S.
TREATED TIMBER PILING DELIVERED	700 LF
TREATED TIMBER PILING DRIVEN	510 LF
PILE SHOES	20 EACH
RIPRAP	550 CY
BEAM TYPE BRIDGE RAIL	70 LF

**LIST OF DRAWINGS**

1-LAYOUT & SUPERSTRUCTURE X15876  
2-ABUTMENTS X15877

THE DESIGN OF THIS STRUCTURE IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AA 5. H.O. EDITION OF 1955.

STATE HIGHWAY COMMISSION OF WISCONSIN

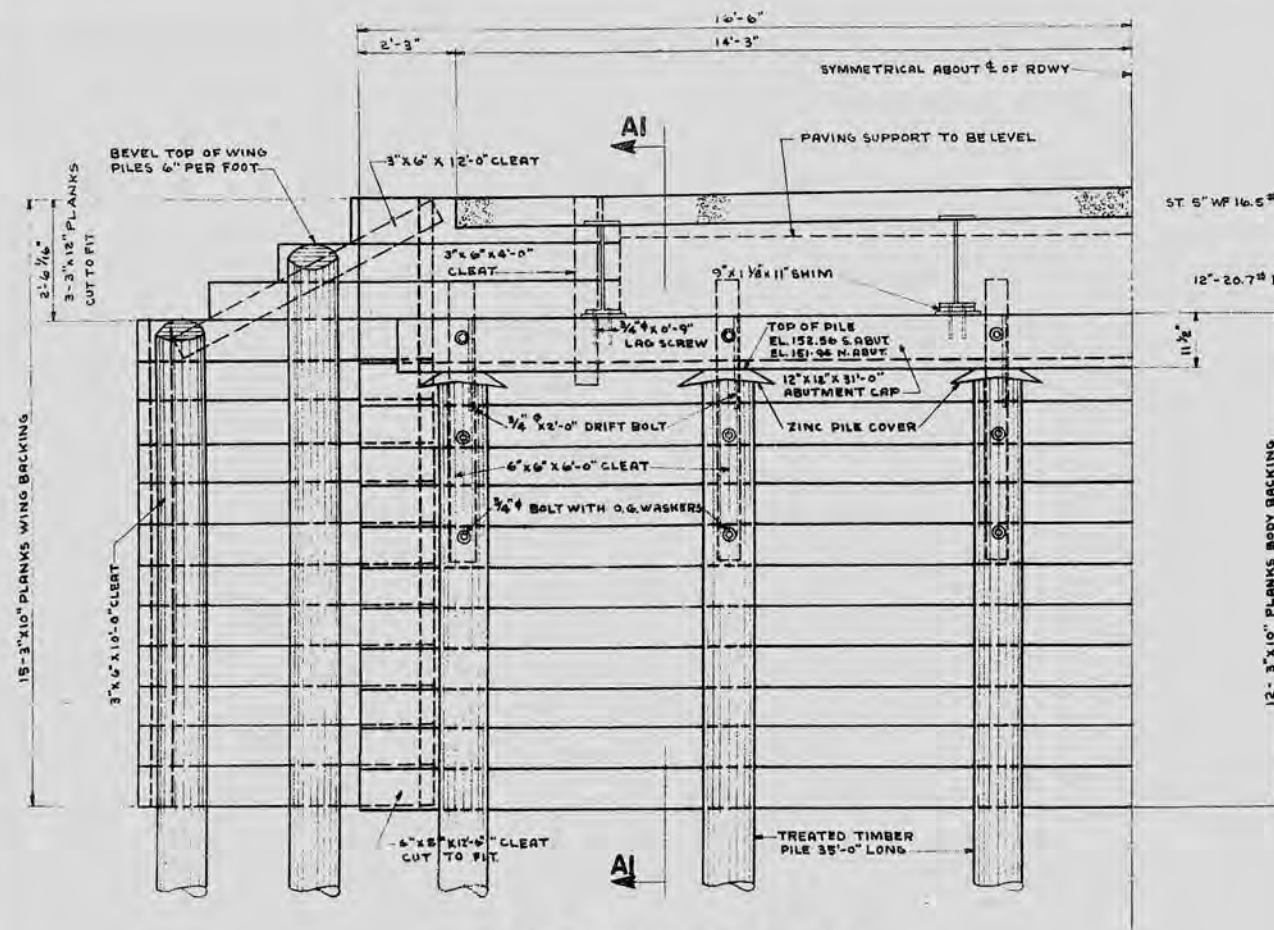
**LAYOUT & SUPERSTRUCTURE**

MARATHON RINGLE & WESTON STA. 21+55.00  
681 28N WISCONSIN 889E  
91256 L.W.F. SPEC. 1951+ LOAD H15

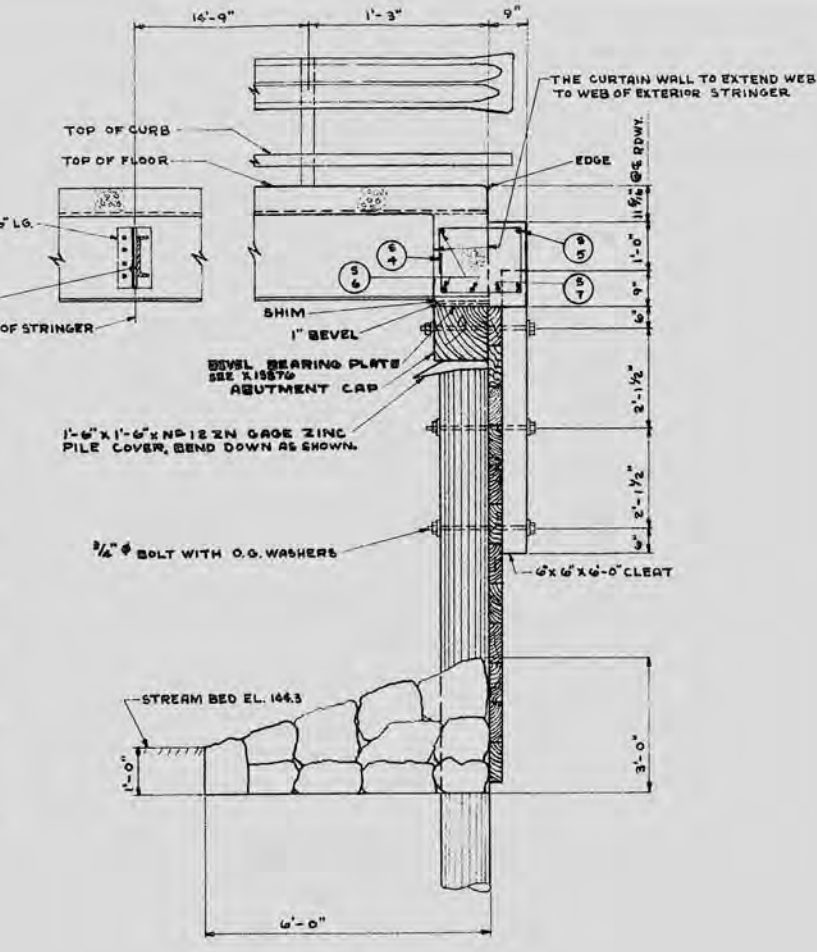
*T. B. Schultz*  
*E. L. Partigan*

STRUCTURE B-37-37 SHEET 1 OF 2

#DRIVE ONE AT LOCATION OF SOUTH ABUTMENT



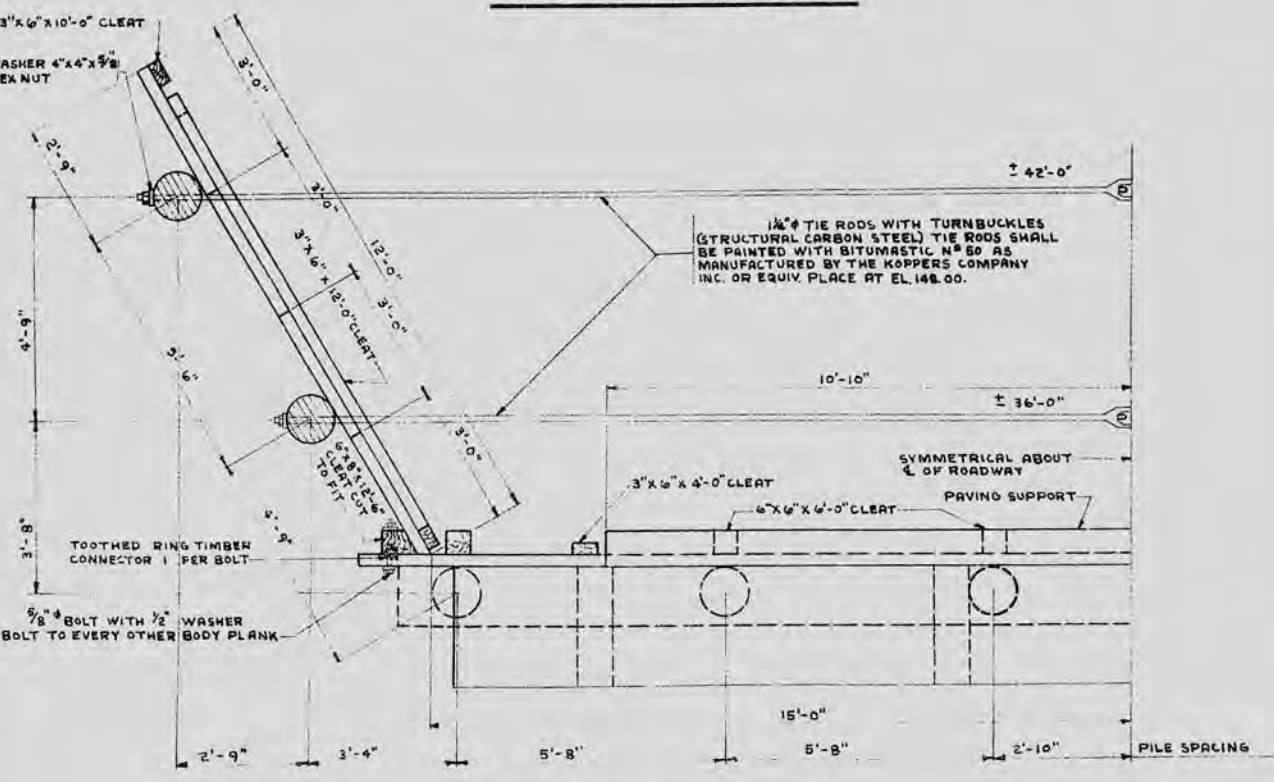
**HALF FRONT ELEVATION**



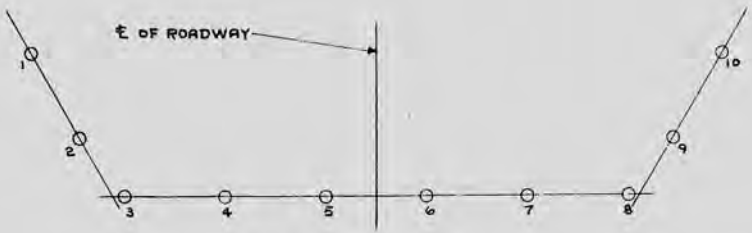
**SECTION AI**

**TREATED LUMBER & TIMBER**

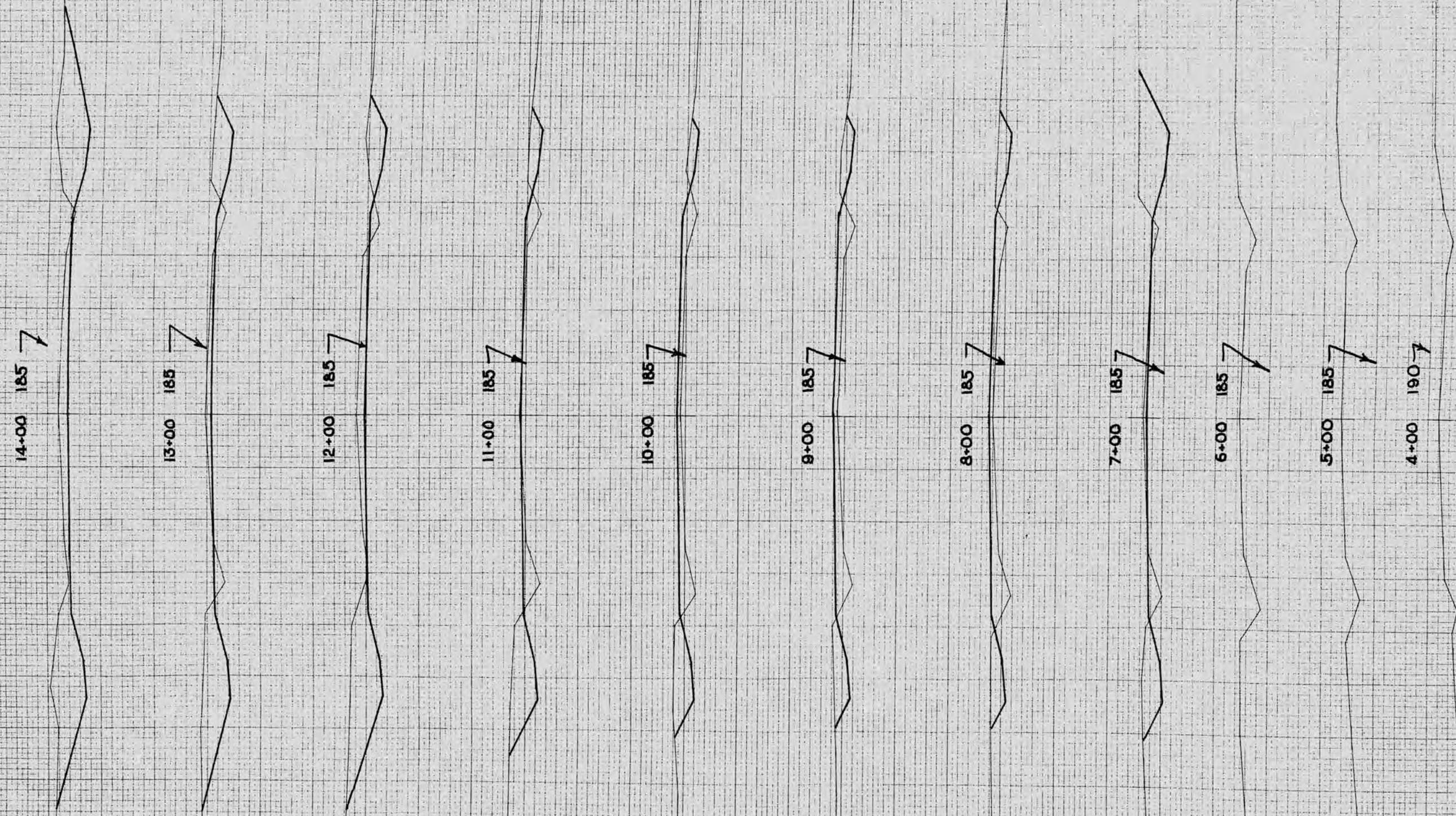
NOM SIZE	NO. OF PIECES	SURFACE	LENGTH	GRADE	LOCATION
3"x6"	4	NONE	12'-0"	1600#J4P	WING CLEAT
	4	"	10'-0"	1600#J4P	"
	4	"	4'-0"	1600#J4P	BODY CLEAT
3"x12"	12	"	5'-8"	1600#J4P	BODY BACKING
	24	"	33'-0"	1600#J4P	" BACKING
3"x10"	48	"	12'-0"	1600#J4P	WING "
	4	"	9'-0"	1600#J4P	" "
	4	"	6'-0"	1600#J4P	" "
	4	"	3'-0"	1600#J4P	" "
6"x6"	12	"	6'-0"	1600#B+S	BODY CLEAT
6"x8"	4	"	12'-0"	1600#B+S	WING CLEAT
12"x12"	2	54S	31'-0"	1600#B+S	ABUTMENT CAP



**HALF PLAN**



**PILE DIAGRAM**



STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNC.		
14+00	13+00	257		
12+00	11+00	211	167	13
10+00	9+00	167	80	28
8+00	7+00	80	63	63
6+00	5+00	63	67	93
4+00	3+00	67	111	104
		76		65
				13
				7
				39
				13
				7

