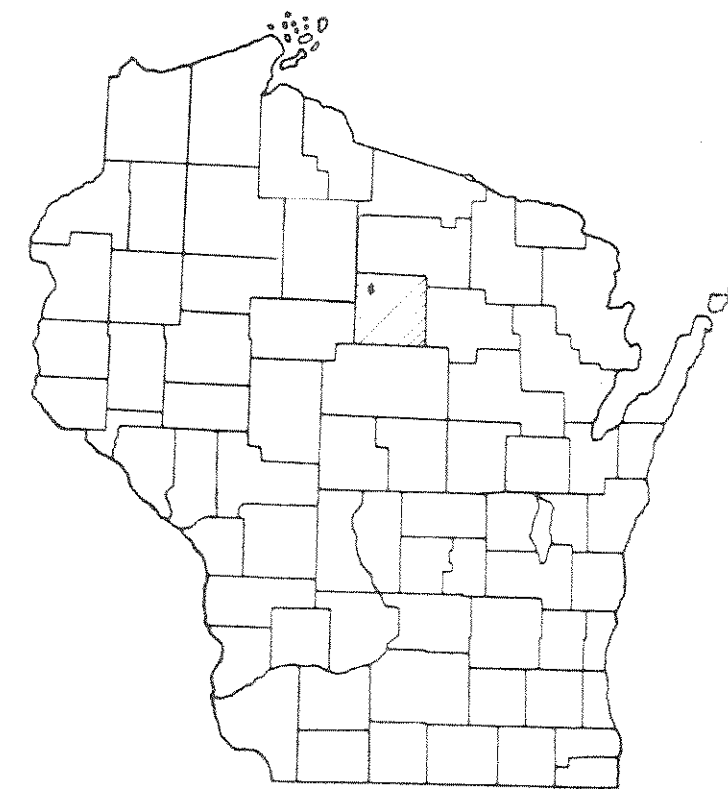


INDEX OF SHEETS

SHEET NO. 1	TITLE
SHEET NO.	TYPICAL CROSS SECTIONS
SHEET NO.	ESTIMATE OF QUANTITIES
SHEET NO.	MISCELLANEOUS QUANTITIES
SHEET NO.	RIGHT OF WAY PLAT
SHEET NO.	PLAN AND PROFILE STA. 6+34.83 TO STA. 7+47.00
SHEET NO.	STANDARD DETAILS
SHEET NO.	DRAINAGE STRUCTURES
SHEET NO.	CROSS SECTIONS



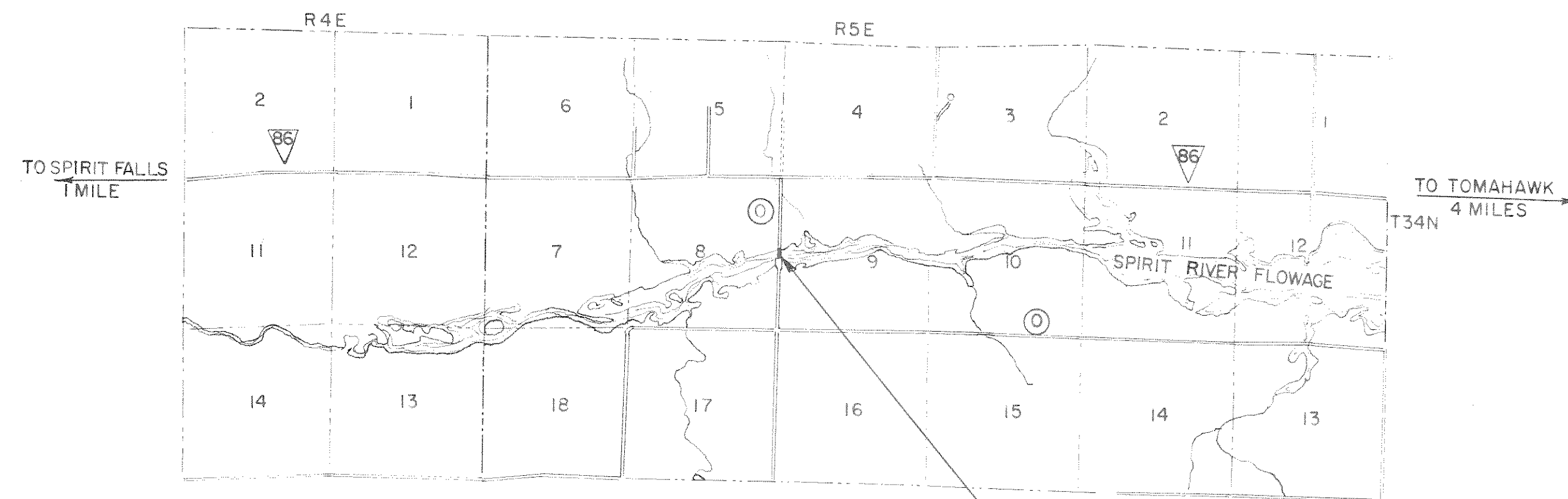
STATE OF WISCONSIN
STATE HIGHWAY COMMISSION OF WISCONSIN

PLAN AND PROFILE OF PROPOSED

C.T.H."E"- S.T.H."86"
SPIRIT RIVER BRIDGE
C.T.H."O"
LINCOLN COUNTY
PROJECT EO-0 (7)

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT		S.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
		LOCAL	FEDERAL			
35.6	0.0	3.7		4 WIS.	1	

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.



STA. 6+34.83 - STA. 7+47.00
PROJECT EO-0 (7)
BRIDGE NO. B-35-3

LAYOUT

SCALE 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.021 MI.

CONVENTIONAL SIGNS

STATE LINE	-----	CULVERTS IN PLACE	-----
COUNTY LINE	-----	CULVERTS REQUIRED	-----
TOWNSHIP OR RANGE LINE	-----	DROP INLET	-----
SECTION LINE	-----	POWER POLE	-----
NEW RIGHT OF WAY LINE	-----	TELEPHONE OR TELEGRAPH POLE	-----
PRESENT RIGHT OF WAY LINE	-----	RIGHT OF WAY MARKERS	-----
WIRE FENCE { WOVEN	-----	REFERENCE STAKE FOR HUBS ONLY	-----
{ BARBED	-----	MARSH	-----
LOT LINE	-----	HEDGE	-----
CORPORATE OR CITY LIMITS	-----	TREES	-----
PROPERTY LINE	-----	GROUND ELEVATION	DATUM LINE 73.9
TRAVELED WAY OR P.E.	-----	GRADE ELEVATION	DATUM LINE 75.16
RAILROADS	-----		
BASE OR SURVEY LINE	-----		

STATE HIGHWAY COMMISSION OF WISCONSIN
MADISON, WIS.

SURVEYOR: L. SPARKS
DIVISION COMPUTER: MC NOWN
DISTRICT CHECKER: M. HESS

NOTE BOOK: 204
M. O. CHECKER:
CORRECT:

CORRECT: _____
DATE: _____ DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL:
DATE: _____ ENGINEER OF DESIGN

APPROVED: _____
DATE: _____ STATE HIGHWAY ENGINEER

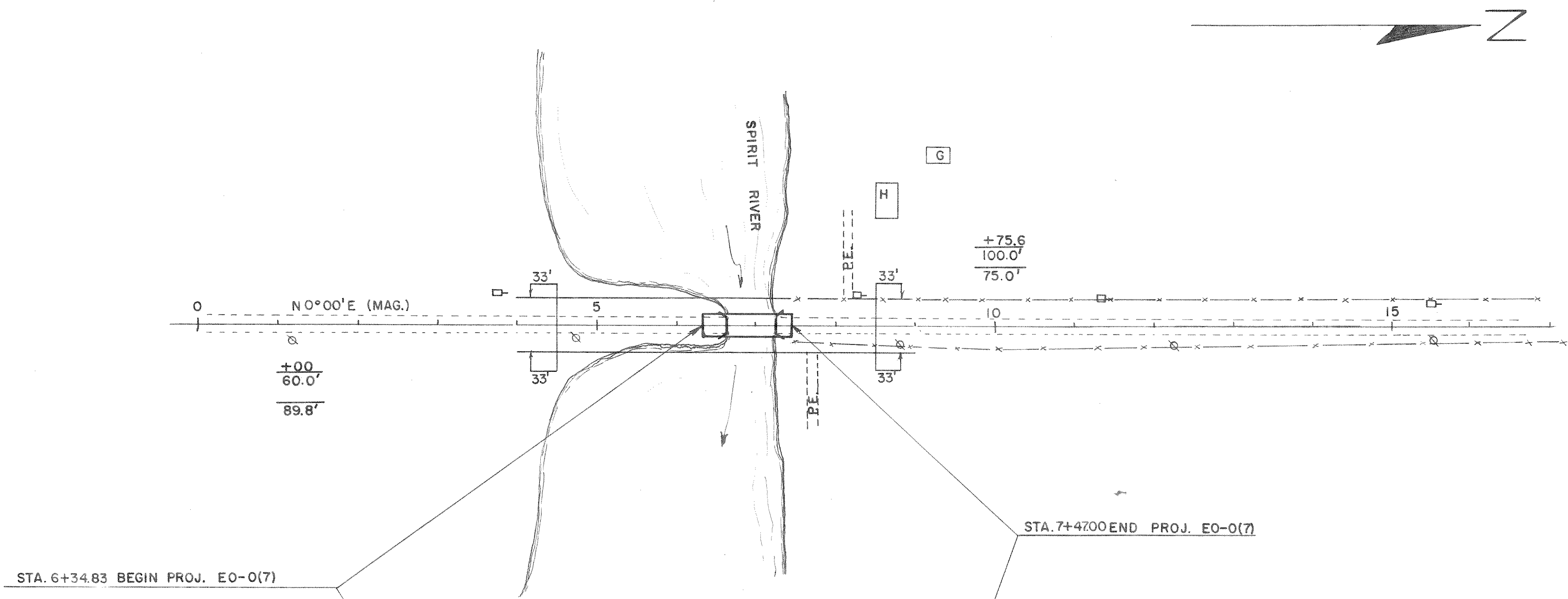
DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED: _____
DATE: _____
DIVISION ENGINEER

S. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	EO-0(7)		

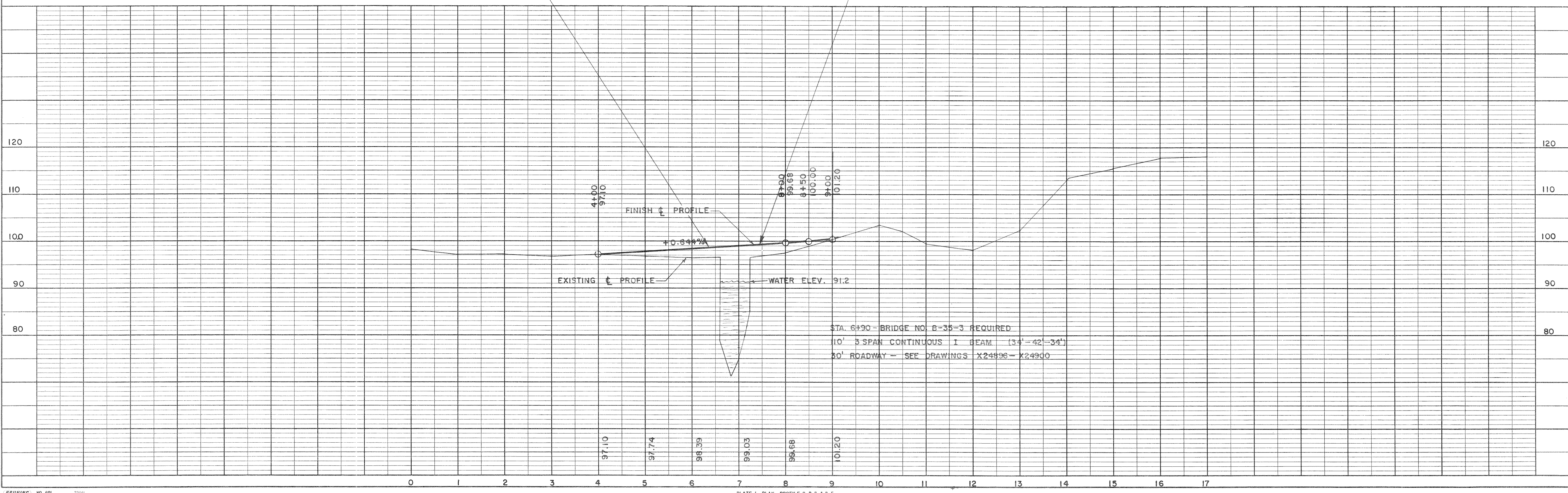
PLAN
 SURVEYED BY L. SPARKS
 PLOTTED BY L. SPARKS
 CHECKED BY L. SPARKS
 NO. 204

PROFILE
 SURVEYED BY L. SPARKS
 PLOTTED BY L. SPARKS
 CHECKED BY L. SPARKS
 NO. 204



BENCH MARKS

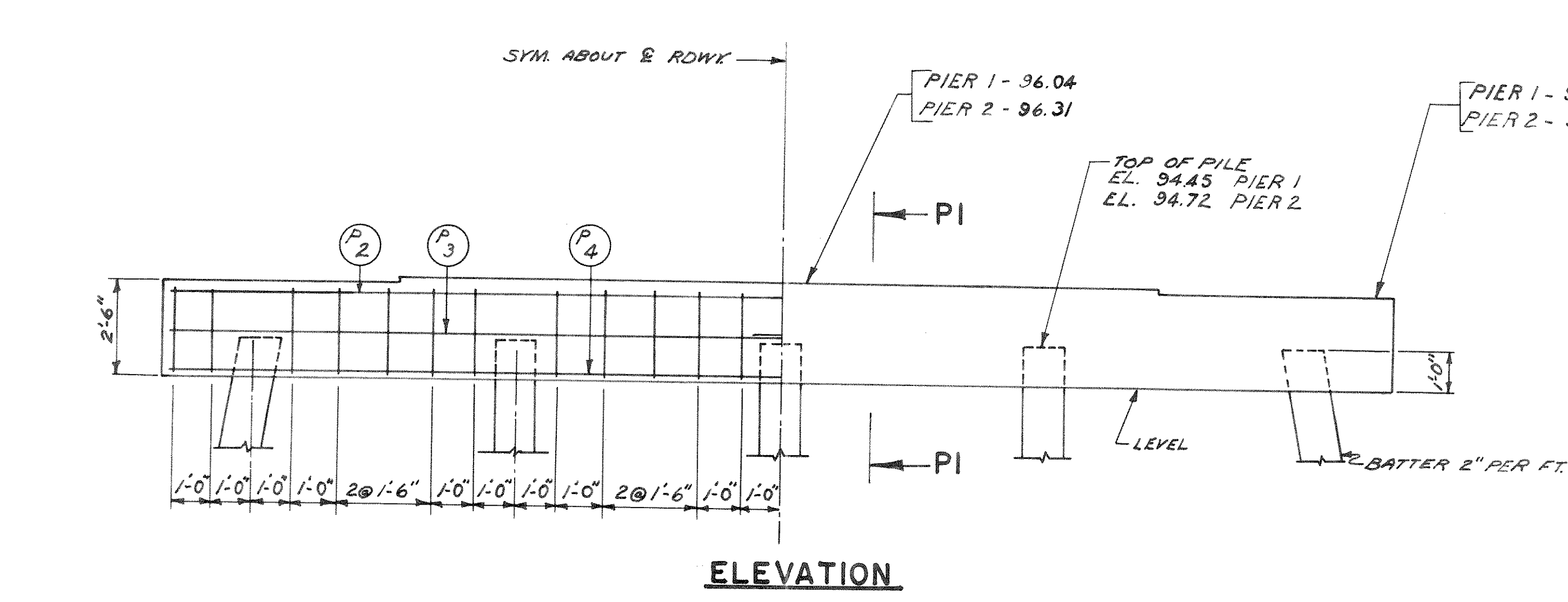
NO.	STATION	DESCRIPTION	ELEV.
2	8+70	SPIKE IN 18" ELM 115' LT.	108.38
3	2+60	SPIKE IN 6" ELM 45' RT.	92.82



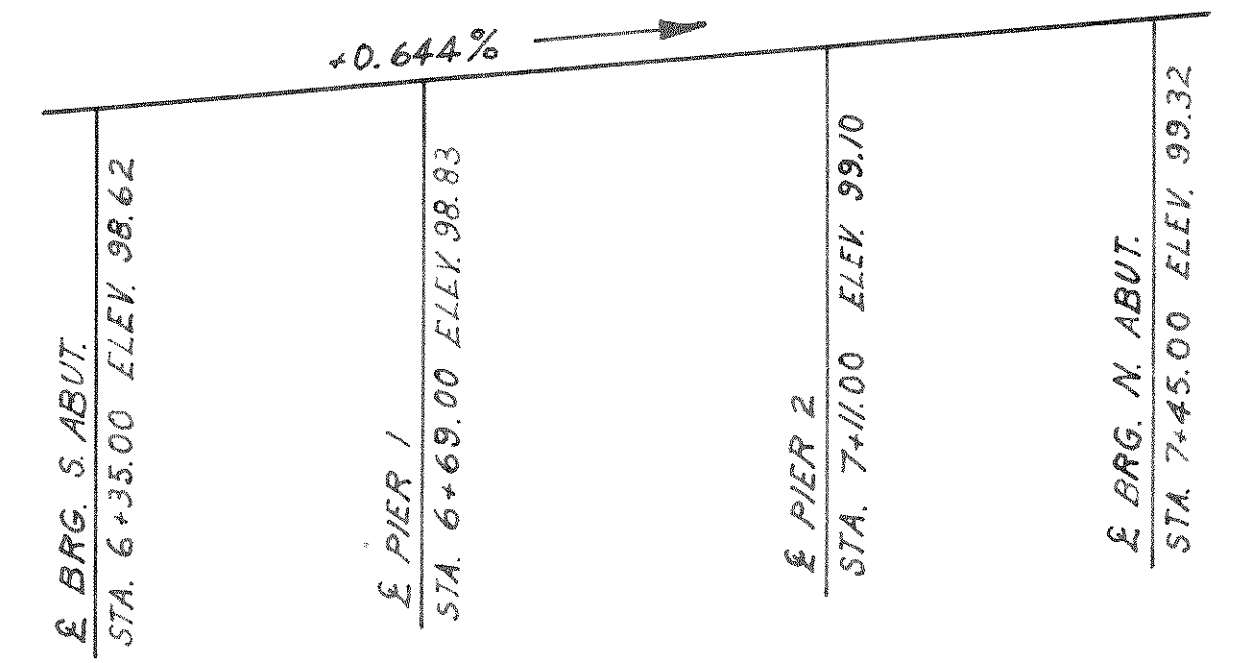
35.6 0.0 3.7

BENCH MARK

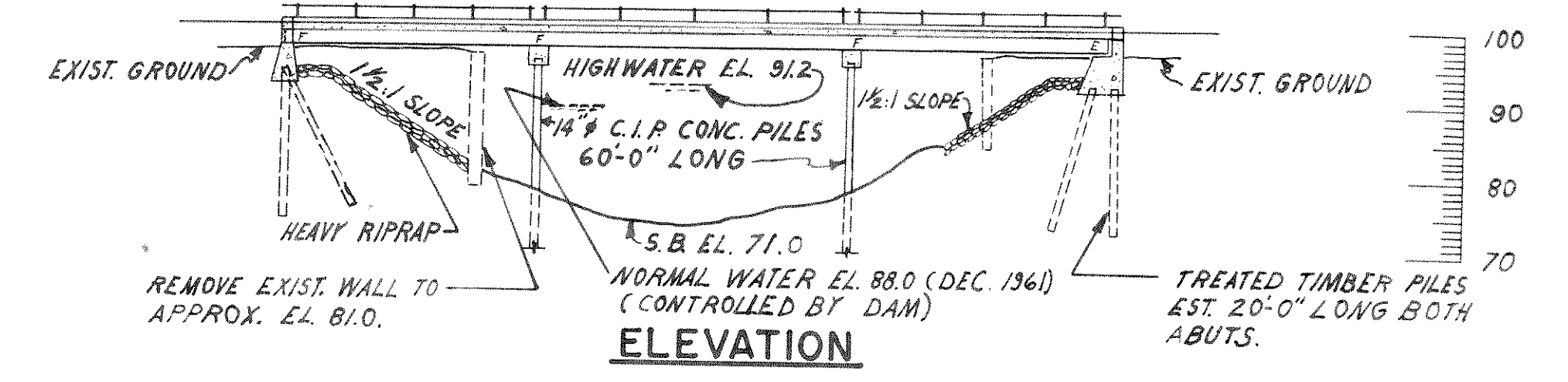
NO.	STA.	DESCRIPTION	ELEV.
2	8+70	SPIKE IN 18" ELM. 115' LT.	108.38



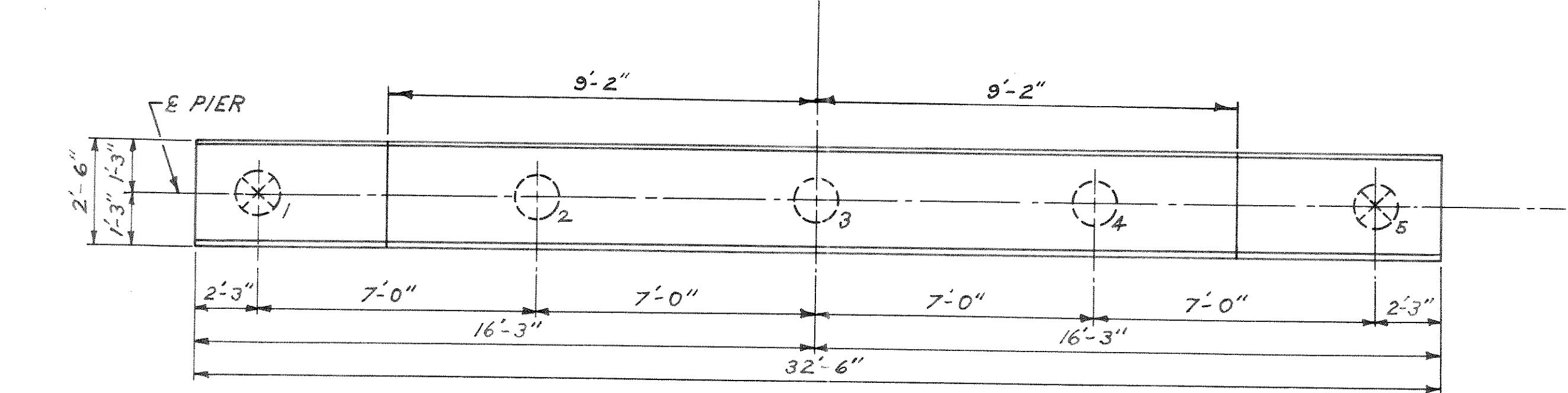
ELEVATION



PROFILE
C.T.H. "0"



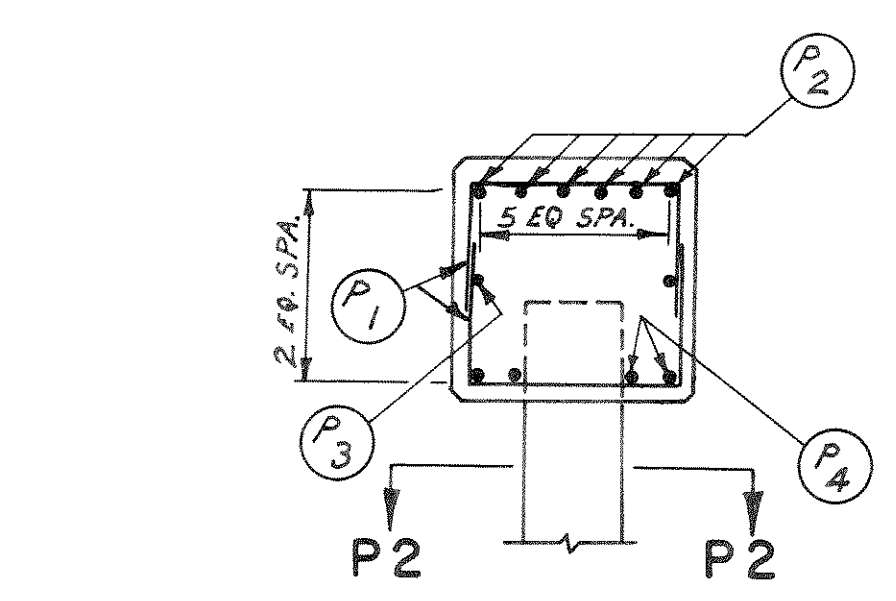
ELEVATION



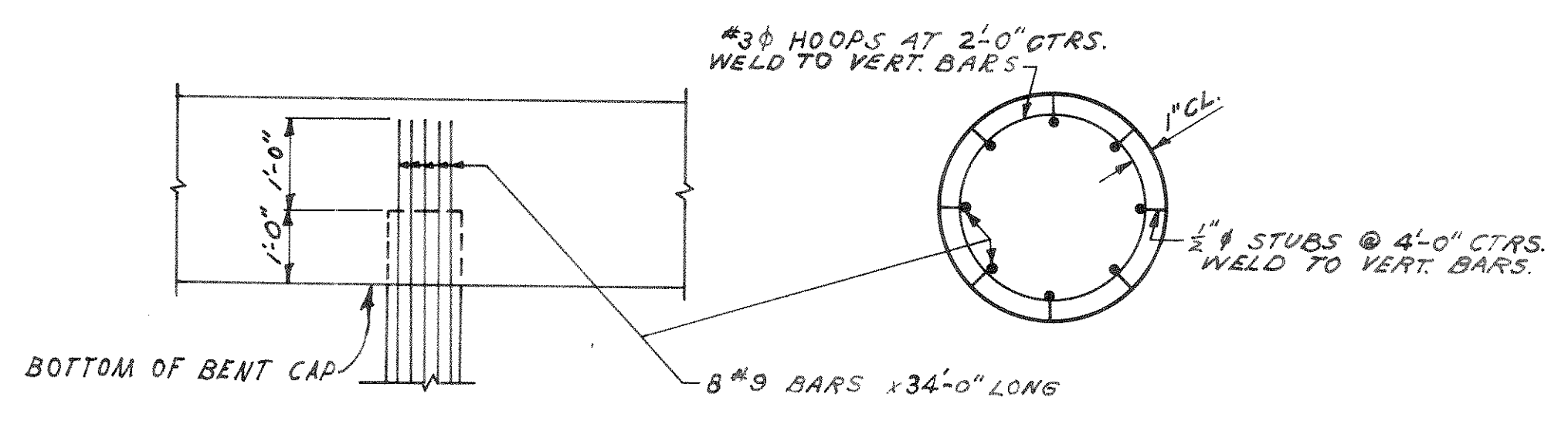
PLAN
(LOOKING NORTH)

GENERAL NOTES
 DRAWINGS SHALL NOT BE SCALED.
 ALL CONCRETE MASONRY SHALL BE GRADE "AA" $f_c = 1400$ PSI.
 BEVEL EXPOSED EDGES OF CONCRETE 1" 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.
 PILING AT THE ABUTMENTS SHALL BE TREATED TIMBER PILES 20'-0" LONG ESTIMATED, AND DRIVEN TO A MINIMUM BEARING VALUE OF 10 TONS PER PILE.
 PILING AT PIERS SHALL BE 14" ϕ CAST-IN-PLACE CONCRETE PILES 60'-0" LONG, AND DRIVEN TO A MINIMUM BEARING VALUE OF 40 TONS PER PILE.
 ALL FIELD CONNECTIONS SHALL BE $\frac{3}{4}$ " ϕ HIGH TENSILE STRENGTH BOLTS.
 "EXCAVATION FOR STRUCTURES" HAS BEEN COMPUTED FROM THE ORIGINAL GROUND LINE. SEE SHEETS X24899 & X24900 FOR LIMITS OF EXCAVATION.

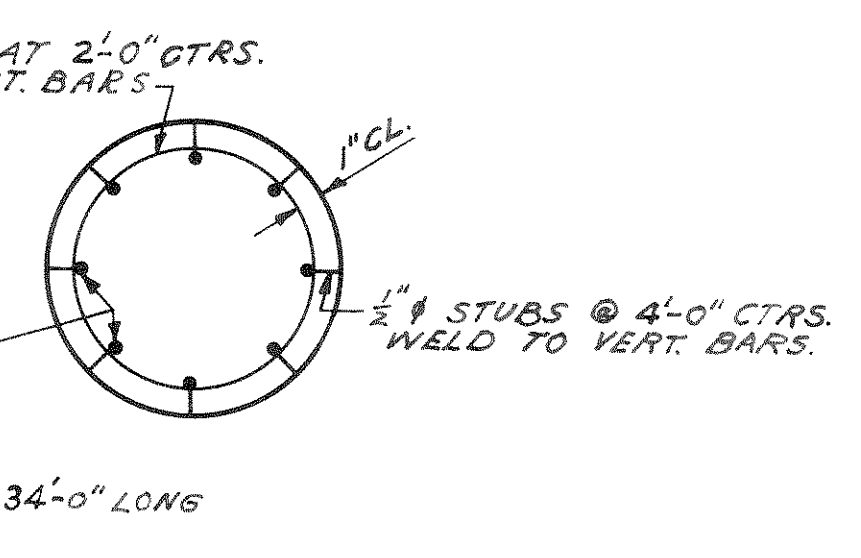
\otimes DENOTES BATTERED PILE



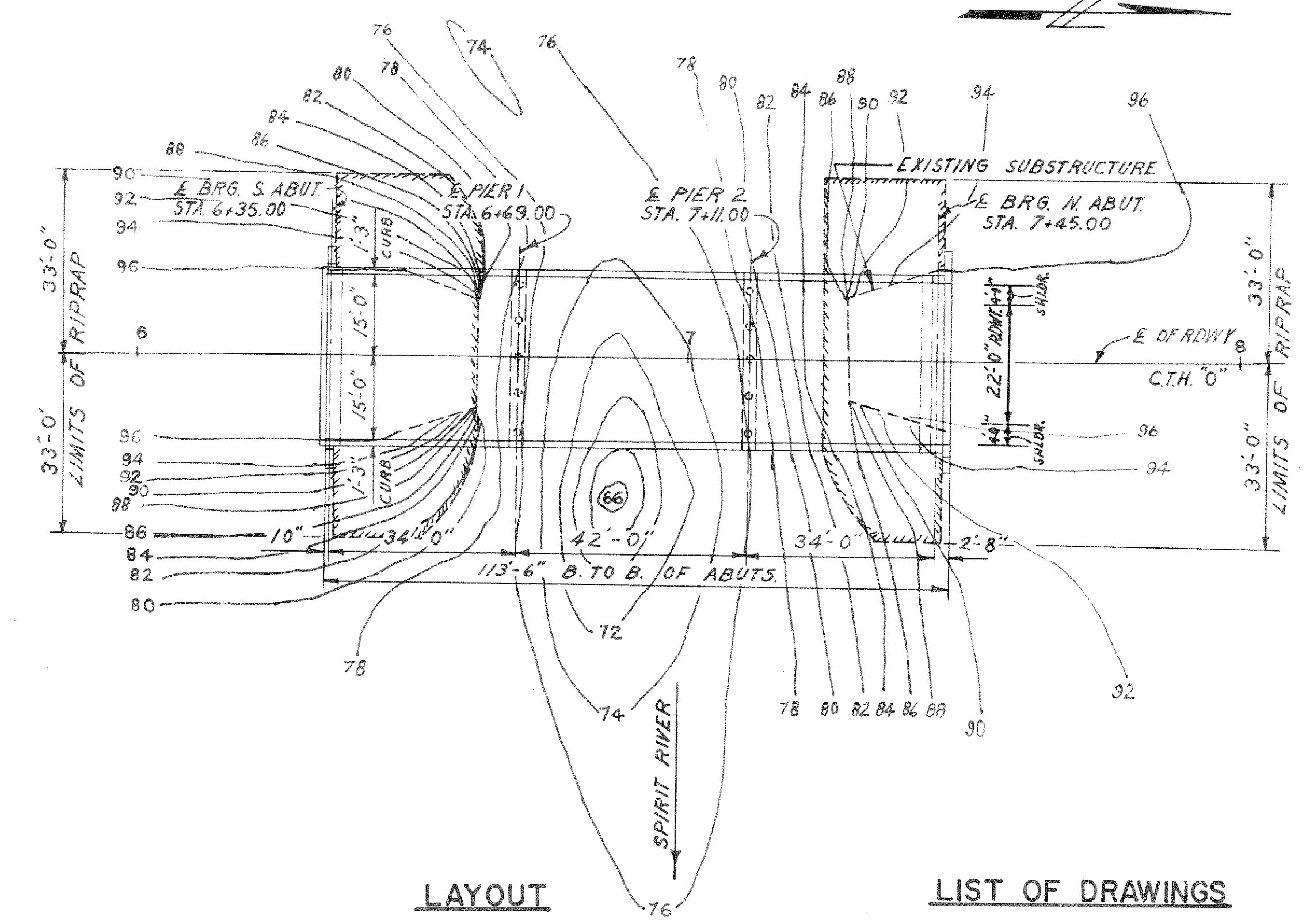
SECTION P1



PILE DETAIL



SECTION P2



LAYOUT

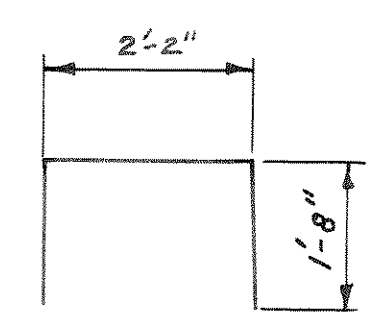
LIST OF DRAWINGS

1. LAYOUT & PIERS	X 24894
2. SUPERSTRUCTURE	X 24895
3. LONG SECTION & BEARINGS	X 24896
4. EXPANSION JOINT & RAILING	X 24897
5. FLOOR DRAINS	X 24898
6. SOUTH ABUTMENT	X 24899
7. NORTH ABUTMENT	X 24900

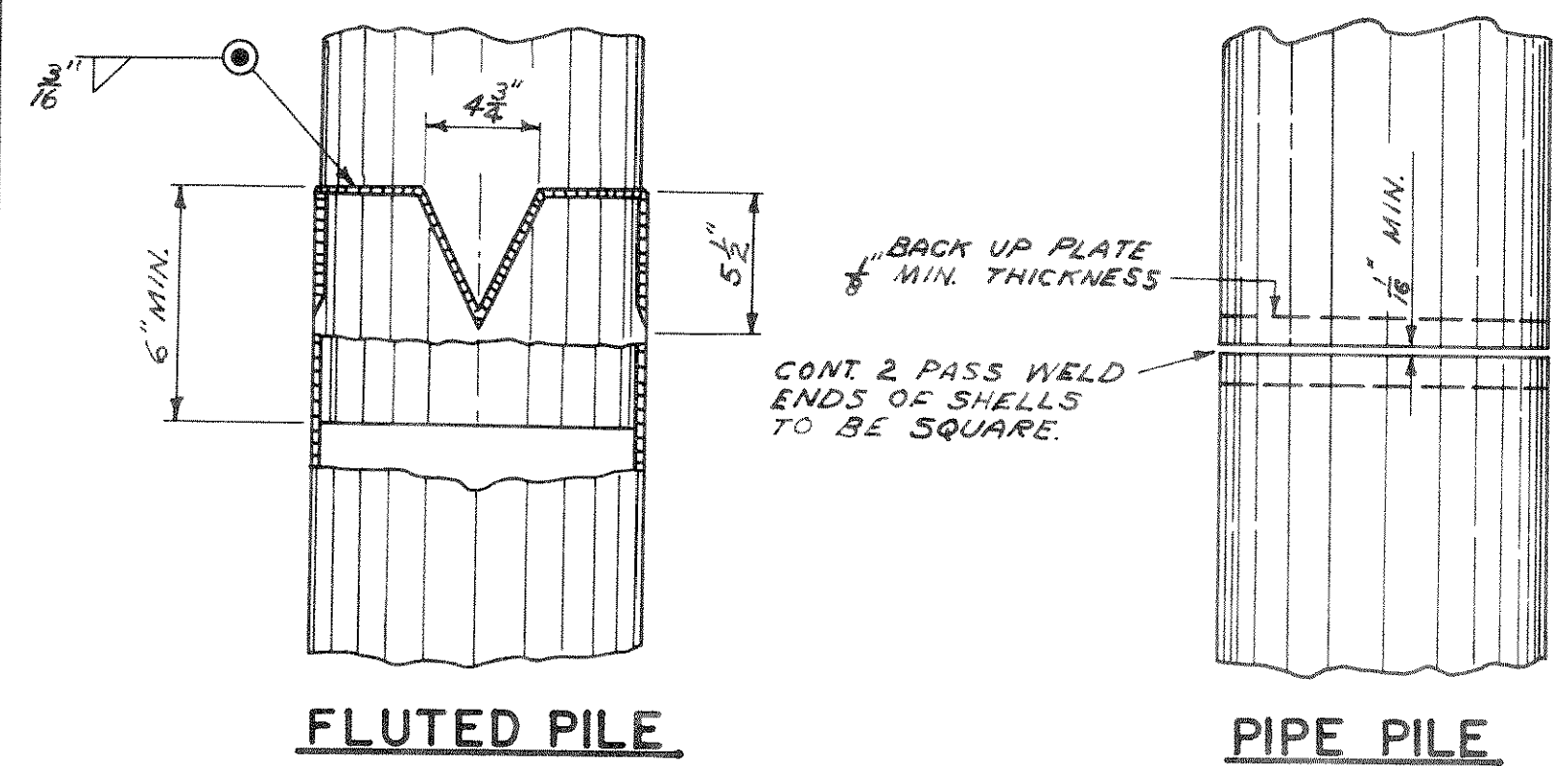
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT.

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
P1	36	4	5-6	SHOWN		PIER CAP - STIRRUPS	A
P2	12	5	32-0	"	"	" TOP	
P3	8	4	16-6	"	"	" SIDES	
P4	8	5	32-0	"	"	" BOTTOM	



DETAIL A



FLUTED PILE

PIPE PILE

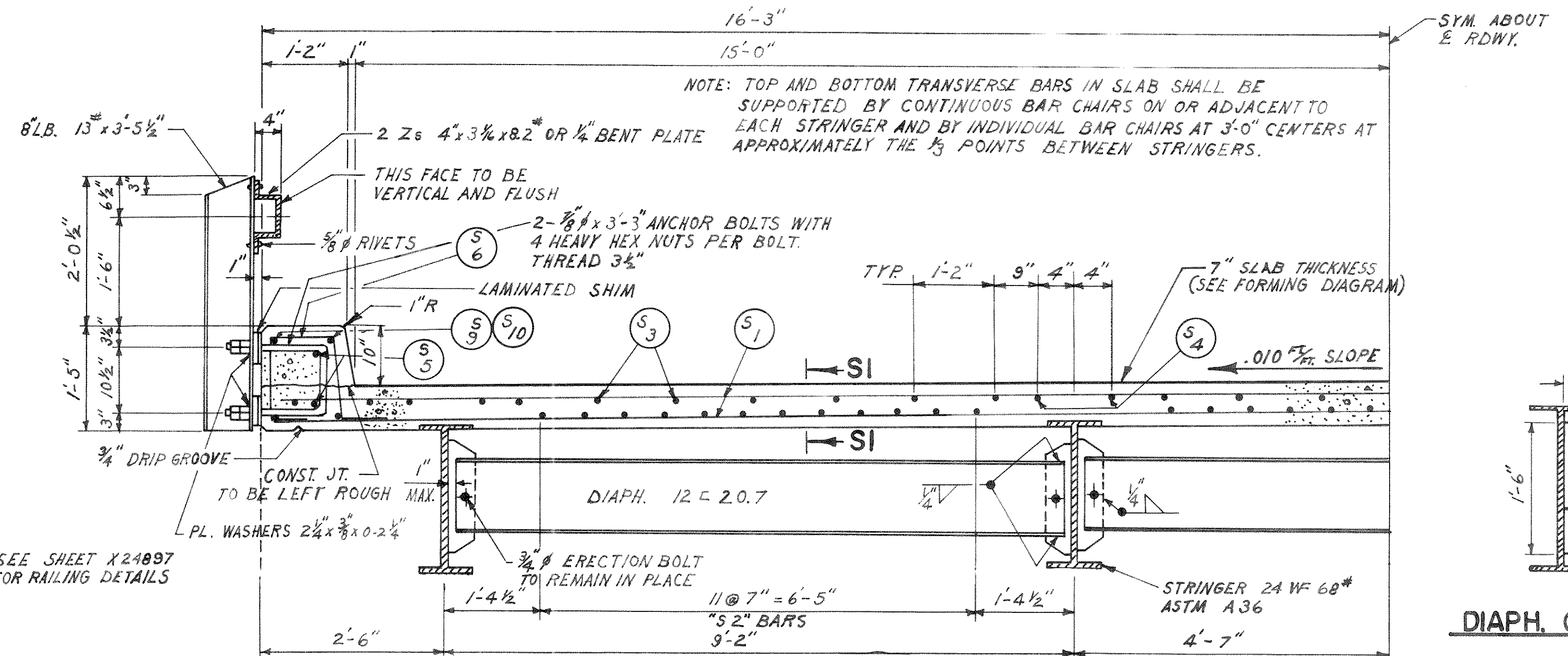
PILE SPLICE DETAIL

ESTIMATED QUANTITIES

BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	PIER 1	PIER 2	NORTH ABUT.	TOTAL
REMOVING OLD BRIDGE	L.S.						1
EXCAVATION FOR STRUCTURES	C.Y.		5.5			60	115
CONCRETE MASONRY	C.Y.	90.2	19.8	7.7	7.7	39.2	164.6
BAR STEEL REINFORCEMENT	L.B.	28360	870	555	555	1270	31610
STRUCTURAL CARBON STEEL	L.B.	36000					36000
* UNTREATED TIMBER TEST PILING	L.S.						1
TREATED TIMBER PILING - DELIVERED	L.F.		200			200	400
TREATED TIMBER PILING - DRIVEN	L.F.		200			200	400
CAST-IN-PLACE CONCRETE PILING - DELIVERED	L.F.			300	300		600
CAST-IN-PLACE CONCRETE PILING - DRIVEN	L.F.			205	205		410
STEEL RAILING	L.F.	233					233
BEARING PADS	S.F.	11.2					11.2
LUBRICATED BRONZE PLATES	L.B.	28.0					28.0
HEAVY RIPRAP	C.Y.		140			90	230
FLOOR DRAINS	E.A.	4					4
STRUCTURAL LOW ALLOY STEEL	L.B.	3500					3500
NON BID ITEM - FILLER	SIZE	1/2"					1/2"

* DRIVE ONE 35'-0" UNTREATED TEST PILE AT EACH ABUTMENT

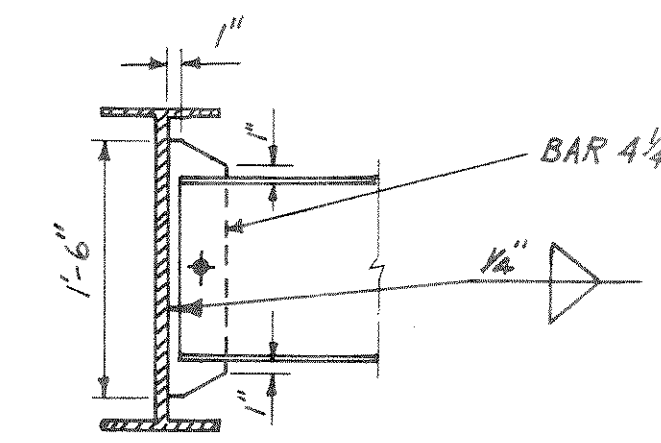
STATE HIGHWAY COMMISSION OF WISCONSIN
LAYOUT & PIERS
 CO. LINCOLN TOMAHAWK STA. 6+90.00
 SECTION 8 & 9 TOWN 34 N RANGE 5E
 DESIGN BY AASHO. 1961 LOADING H-15 CONST. SPEC. 1957
 DATE 3-16-62 DESIGNED BY J.B. DRAWN L.V.G. CHD. DEP.
 SUBMITTED BY H. B. Schultz
 APPROVED BY E. C. Rutzler
 STATE HIGHWAY ENGINEER



HALF CROSS SECTION THRU ROADWAY

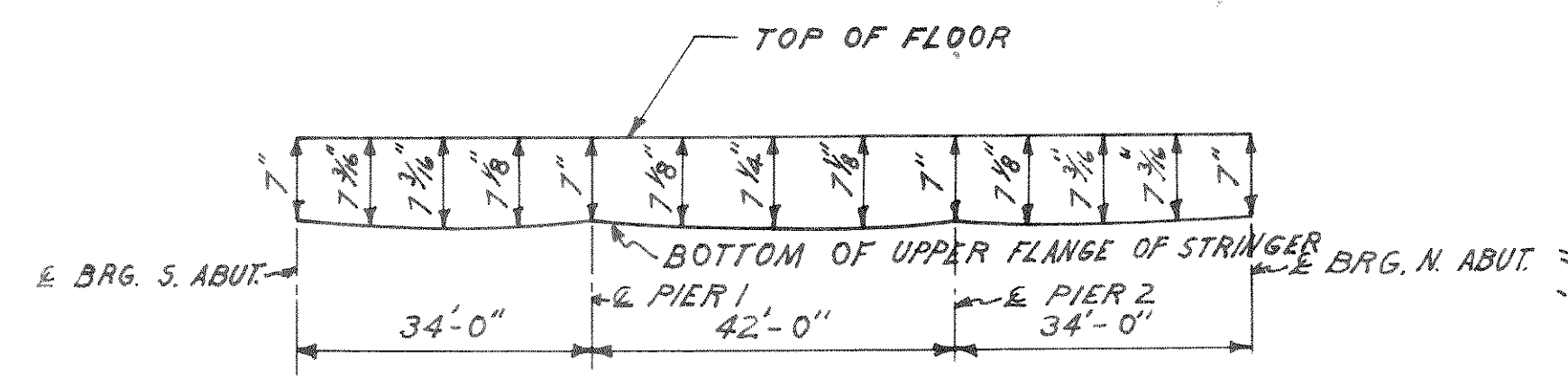
TOP OF CURB TO BE BUILT TO ESTABLISHED GRADE AFTER SPAN HAS TAKEN DEAD LOAD DEFLECTION. THE 10" HEIGHT OF CURB IS TO BE MAINTAINED AT POINTS OF BEARINGS.

DIAPH. CONN. DETAILS



SECTION S2

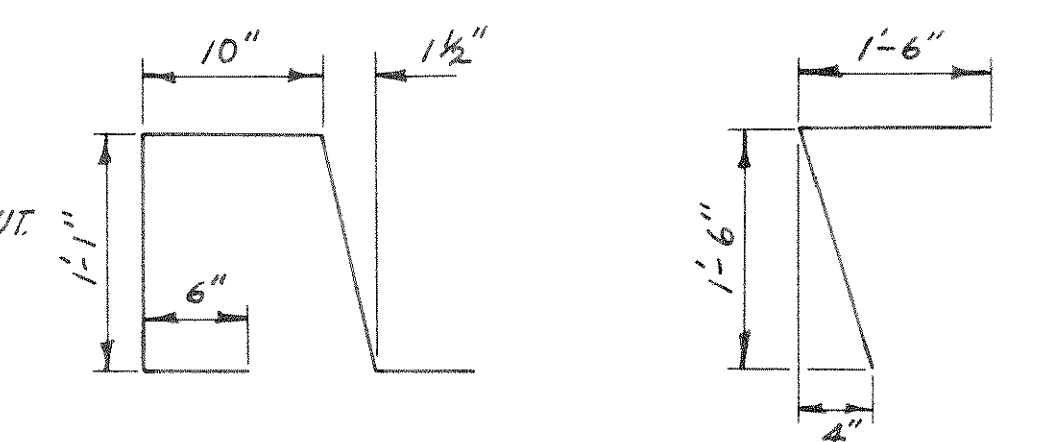
(SHOWING DEFLECTION JOINT IN CURB AT PIERS)



FORMING DIAGRAM

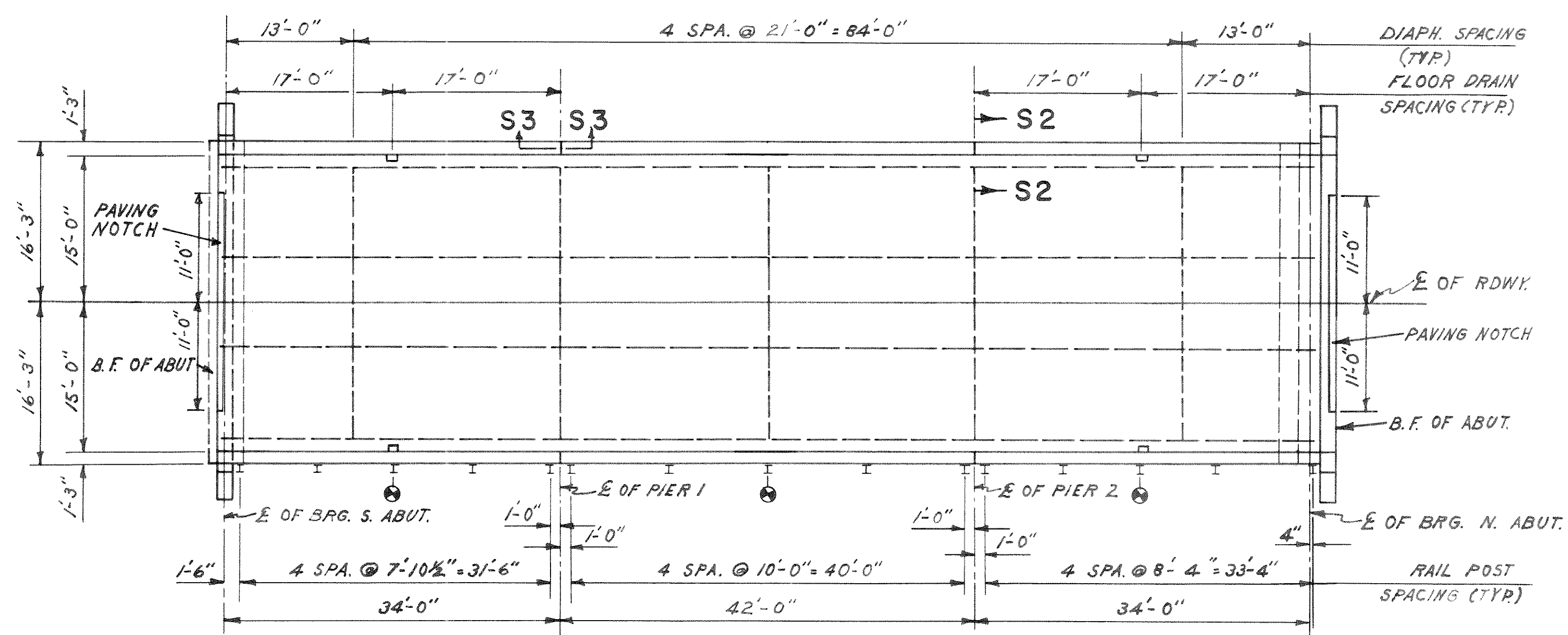
SLAB THICKNESSES SHOWN ARE THEORETICAL AND MAY NEED TO BE CHANGED TO COMPENSATE FOR VARIATION IN STRINGERS AND OTHER CONSTRUCTION DISCREPANCIES.

SPLICE DETAIL



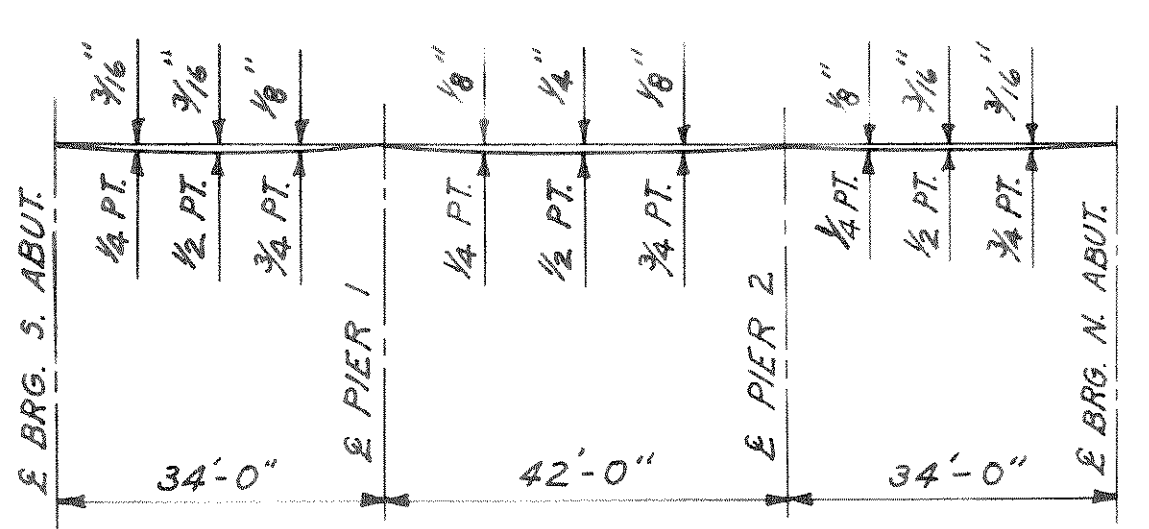
DETAIL A

DETAIL B



PLAN

● DENOTES PERMISSIBLE FIELD SPLICE IN RAILING



DEFLECTION DIAGRAM

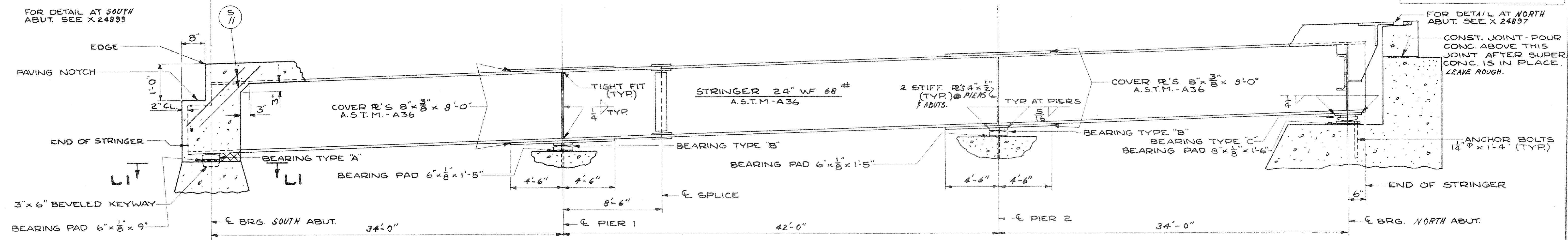
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

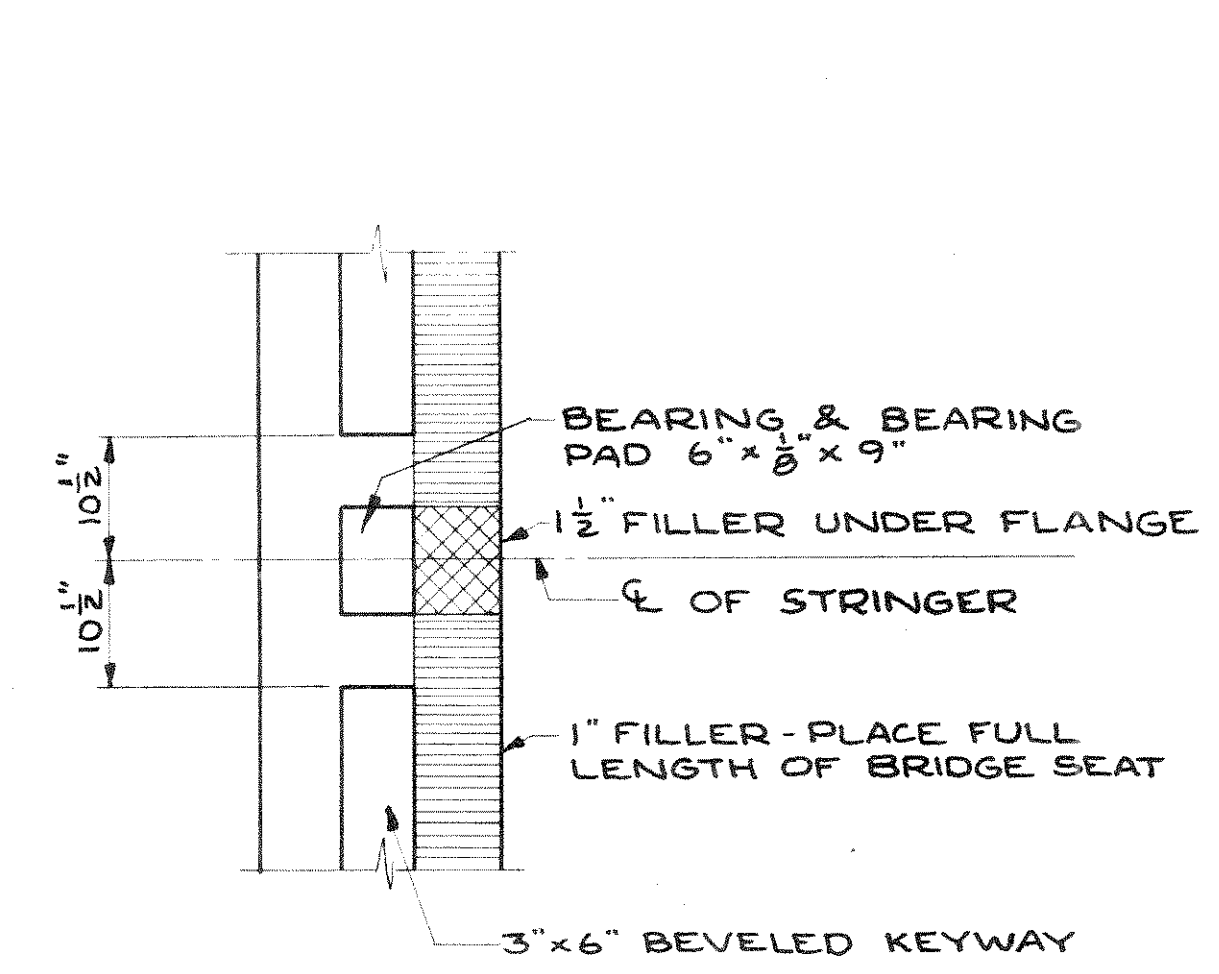
28,360#

POUR MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
S1	377	6	32-0	7	SLAB-TRANS.	
S2	160	5	28-6	7	" - LONG. - BOTTOM	
S3	100	5	28-6	1-2	" - " - TOP	
S4	16	5	15-0	8	" - (SYM. ABT. E OF PIERS)	
S5	60	6	4-6	SHOWN	" - CURB (SYM. ABT. E OF POST)	
S6	224	5	4-3	1-0	" - " - VERT.	A
S7	3	4	8-9	SHOWN	DIAPH. AT ABUT. (NORTH)	
S8	18	5	3-0	1-6	" - " - " - " - B	
S9	16	6	17-6	SHOWN	CURB - LONG. SPAN 1/3	
S10	8	6	21-6	"	" - " - " - 2	
S11	54	5	2-0	1-0	SLAB AT ABUT. (SOUTH)	

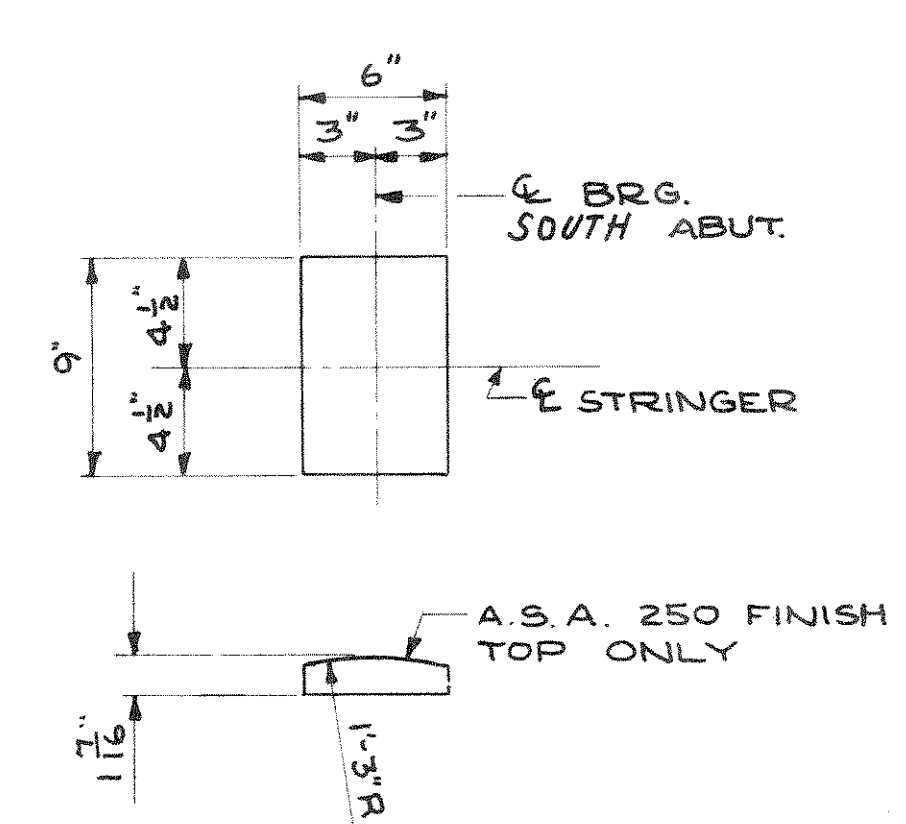
REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
SUPERSTRUCTURE	
DESIGN SPEC. A.A.S.H.O. 1961 LOADING H-15 CONST. 1957	
DATE 3-16-62 DESIGN J. B. DRAWN Z.J.G. C. DEF.	
STRUCTURE B-35-3	SHEET 2 OF 7



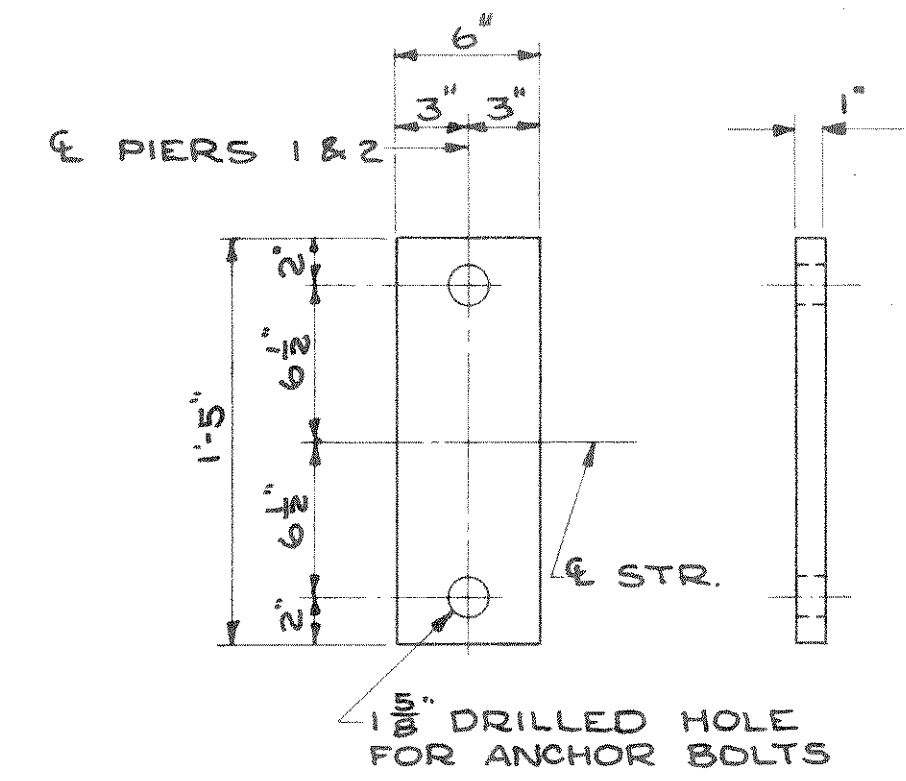
LONGITUDINAL SECTION



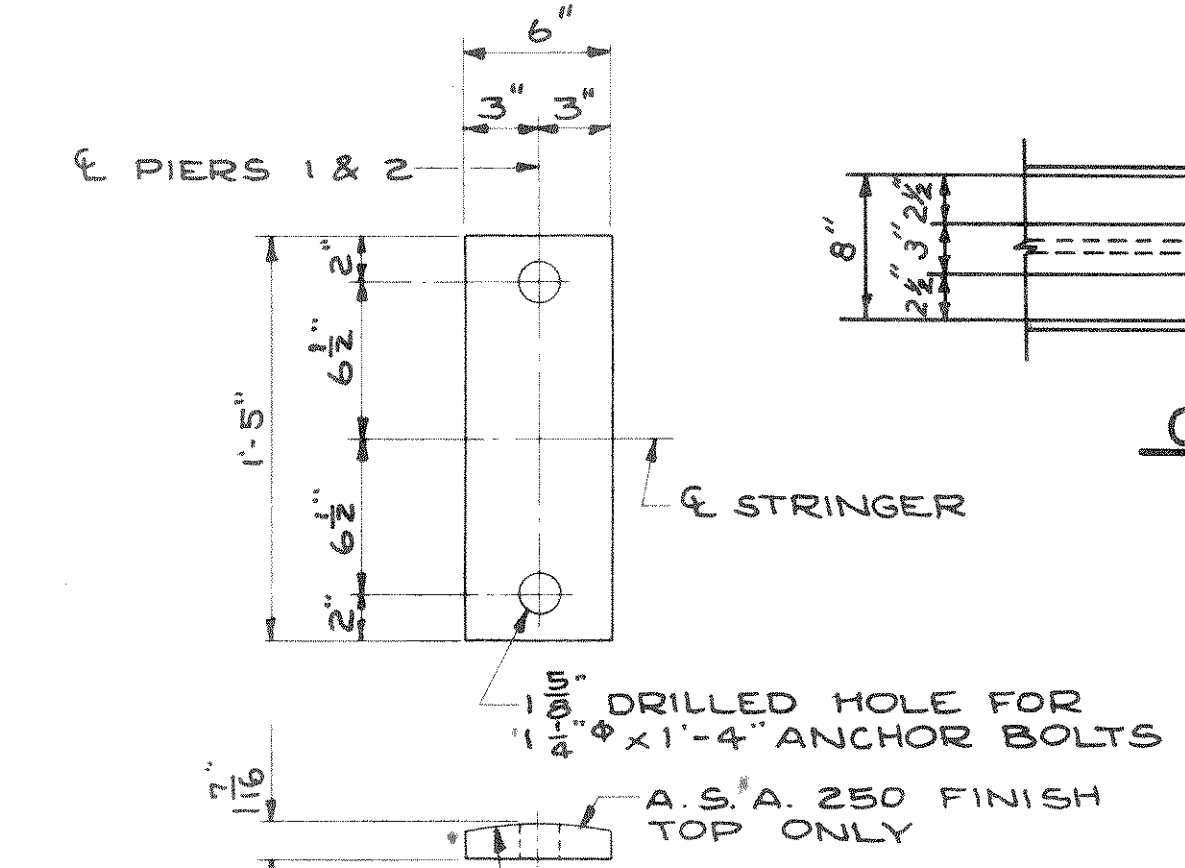
SECTION LI



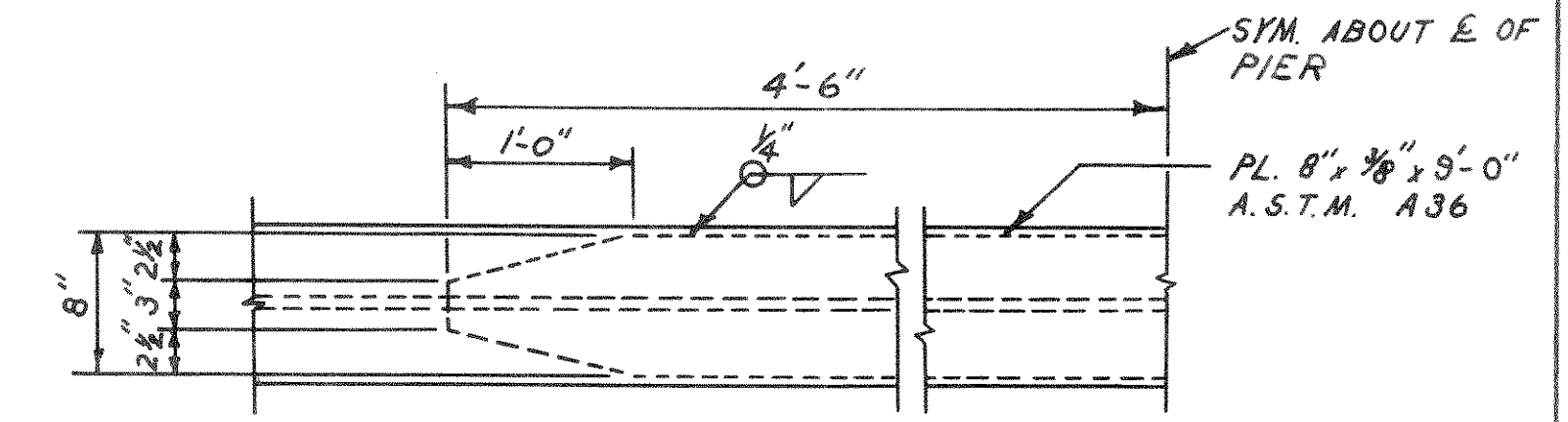
BEARING "A"
(4 REQ'D.)



TOP R "B"



ROCKER R "B"

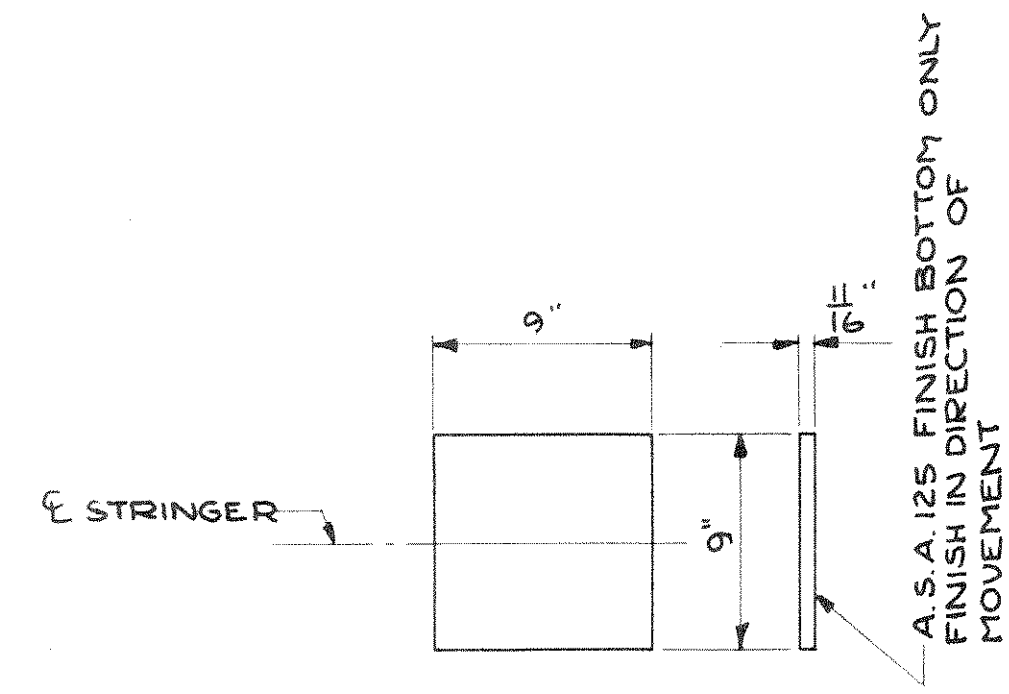


COVER PLATE DETAIL

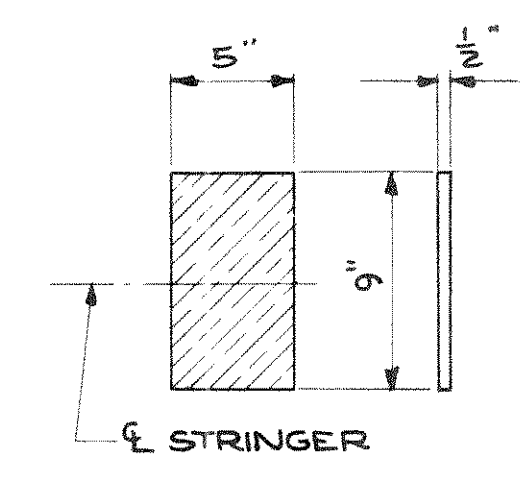
BEARING "B"
(8 REQ'D.)

BEARING NOTES

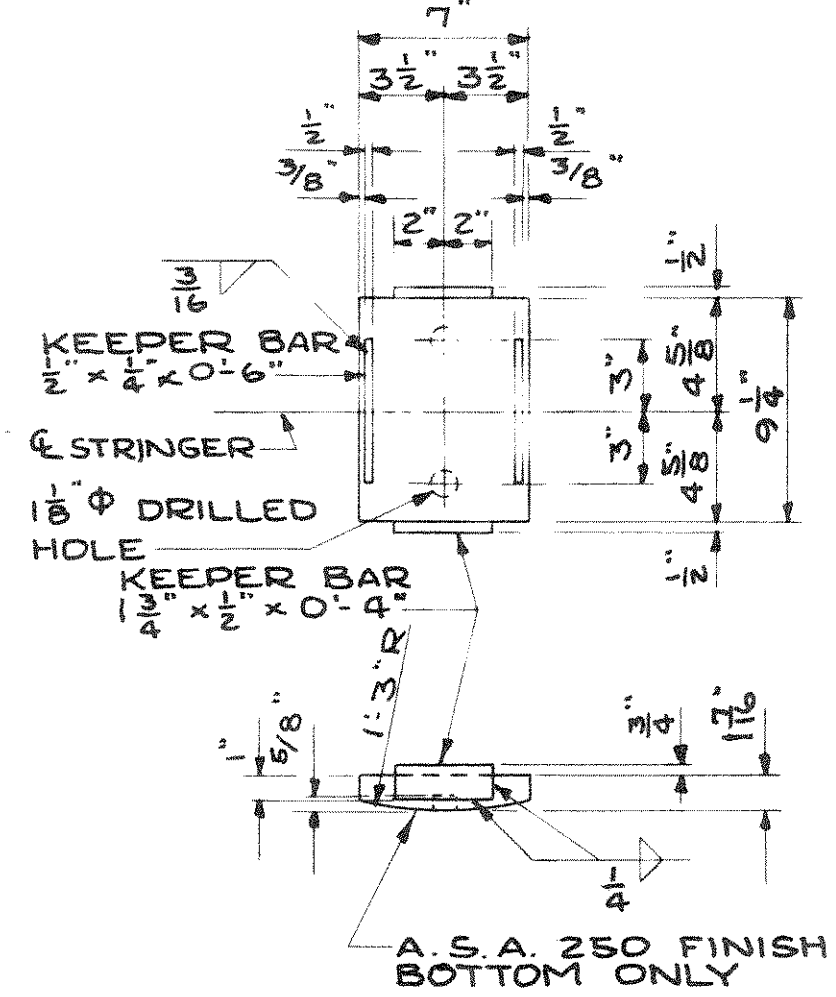
ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH & FREE FROM WARP & ALL EDGES SMOOTH, STRAIGHT & VERTICAL.
 ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.
 ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE 1 1/4" STANDARD WROUGHT WASHER & ONE HEX. NUT PER BOLT.
 PINTLES SHALL BE MACHINED TO A DRIVING FIT. CHAMFER TOP OF PINTLE 1/8".
 LUBRICATE TOP SURFACES ONLY OF BRONZE PLATES.
 ALL MATERIAL EXCEPT ANCHOR BOLTS, NUTS & WASHERS SHALL BE MADE OF COR-TEN, MAYARI R OR OTHER STEEL OF EQUAL CORROSIVE RESISTANCE. THE KEEPER BARS & PINTLES MAY BE MADE OF COPPER BEARING STEEL OR STEEL CONFORMING TO A.S.T.M. A 441. THE TOP 4 1/2" OF ANCHOR BOLTS, WASHERS & NUTS SHALL BE GALVANIZED.
 ALL MATERIALS IN BEARINGS, EXCEPTING BRONZE PLATES & BEARING PADS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR STRUCTURAL LOW ALLOY STEEL.



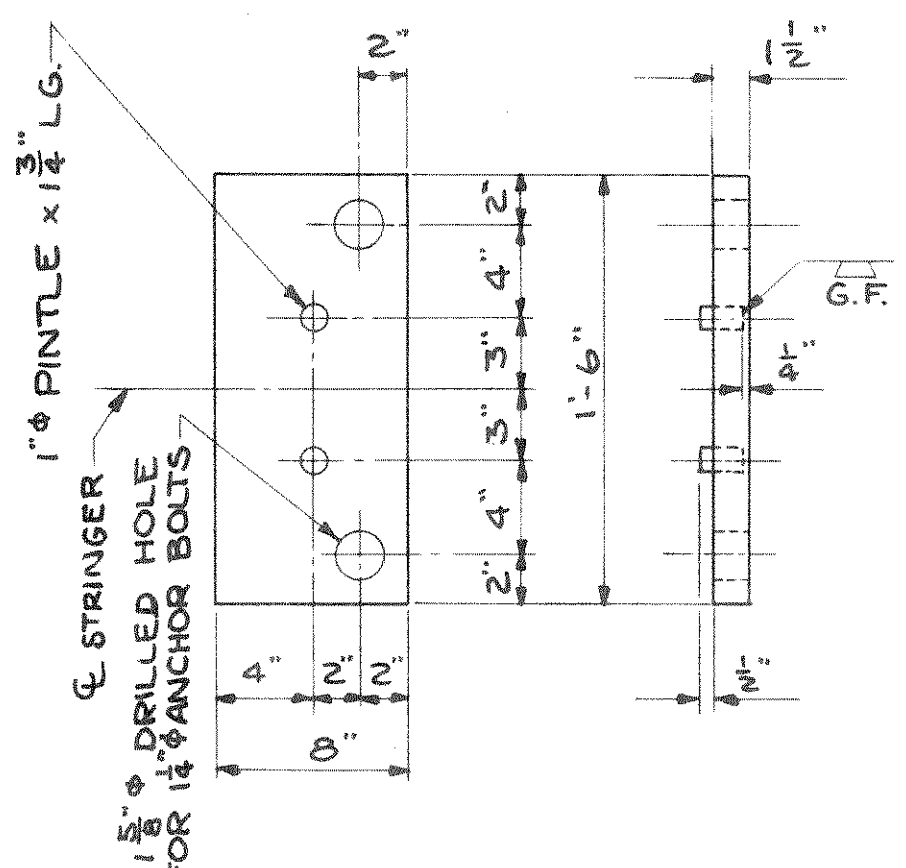
TOP R "C"



LUB. BR. R "C"



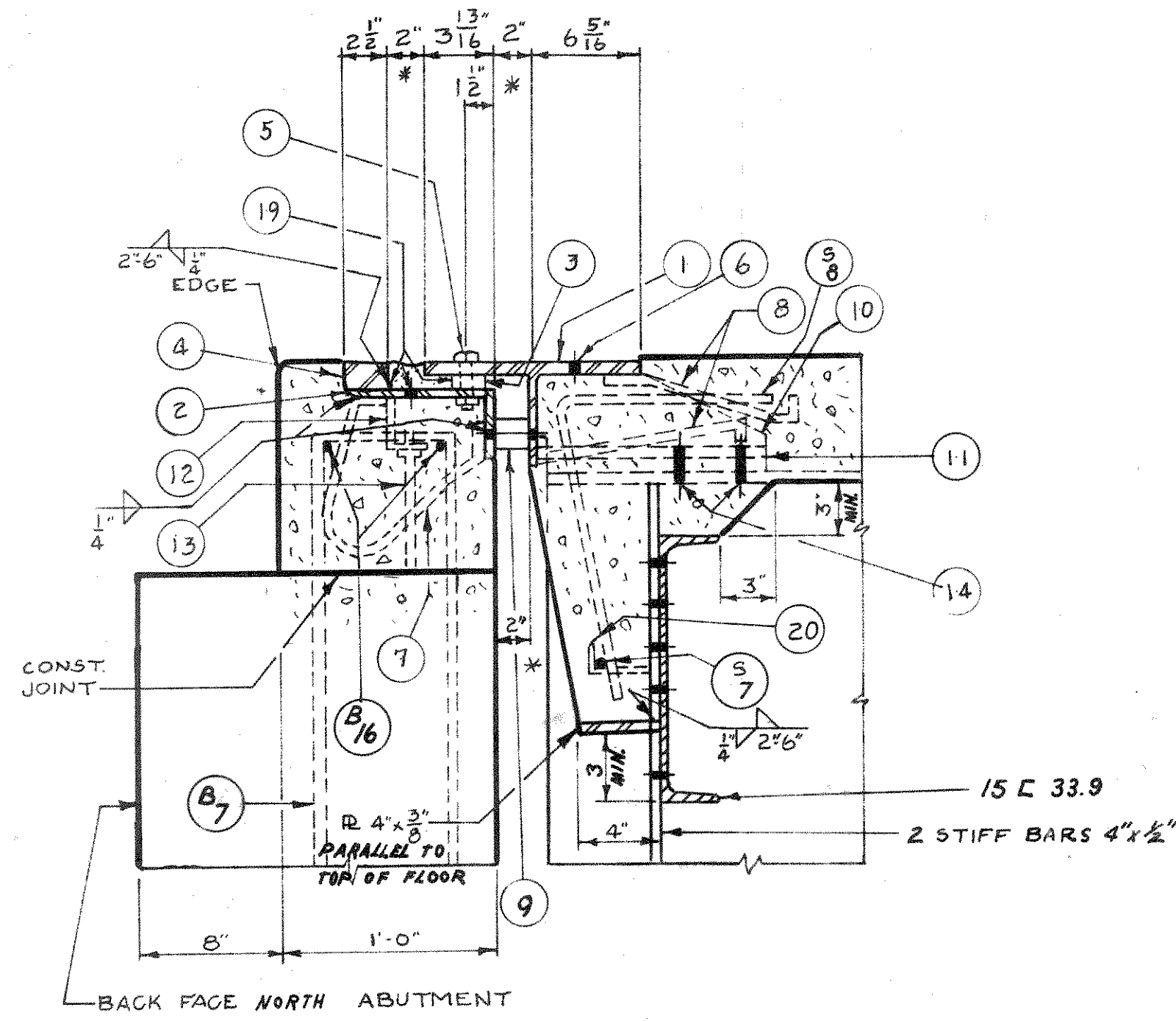
ROCKER R "C"



MASONRY R "C"

BEARING "C"
(4 REQ'D.)

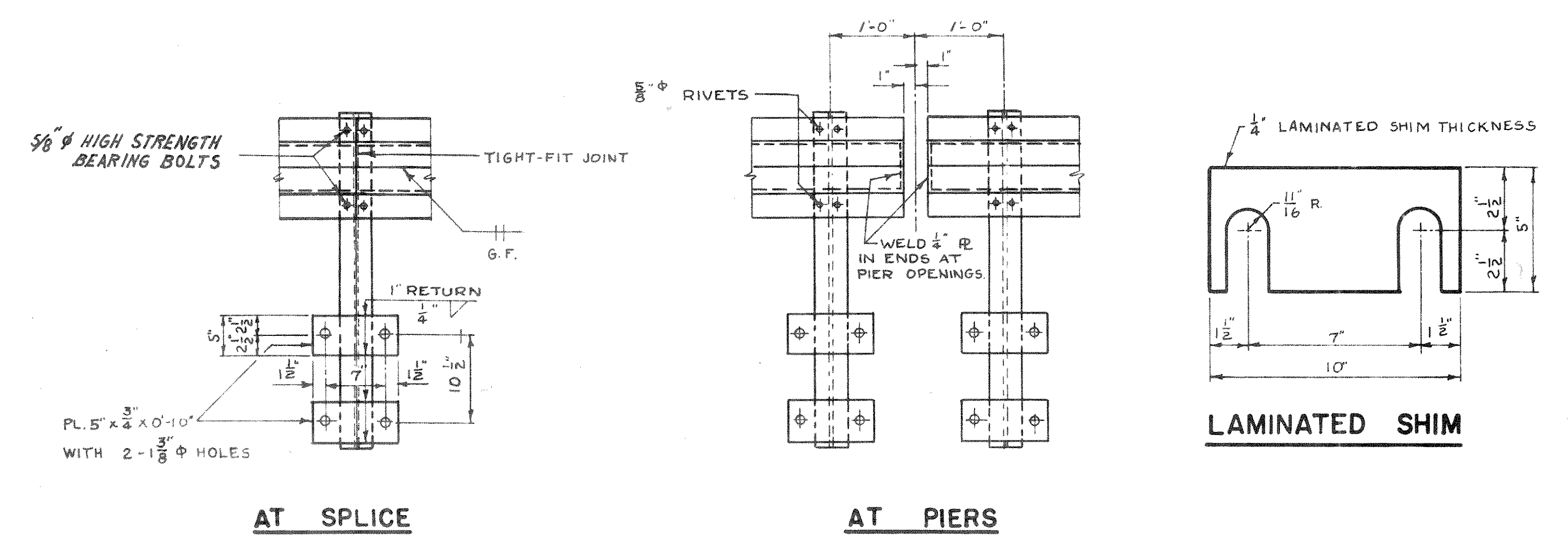
REV. REC.	STATE HIGHWAY COMMISSION OF WISCONSIN
	LONG. SECT. & BEARINGS
	DRAWN BY: A.A.S.H.O. '61 / L.O.A.D. 4-15 / 1957
	DATE: 3-16-62 / DESIGN: ST'D. / DRAWN: L.V.G. / DEF:
STRUCTURE	B-35-3
SHEET	3 7



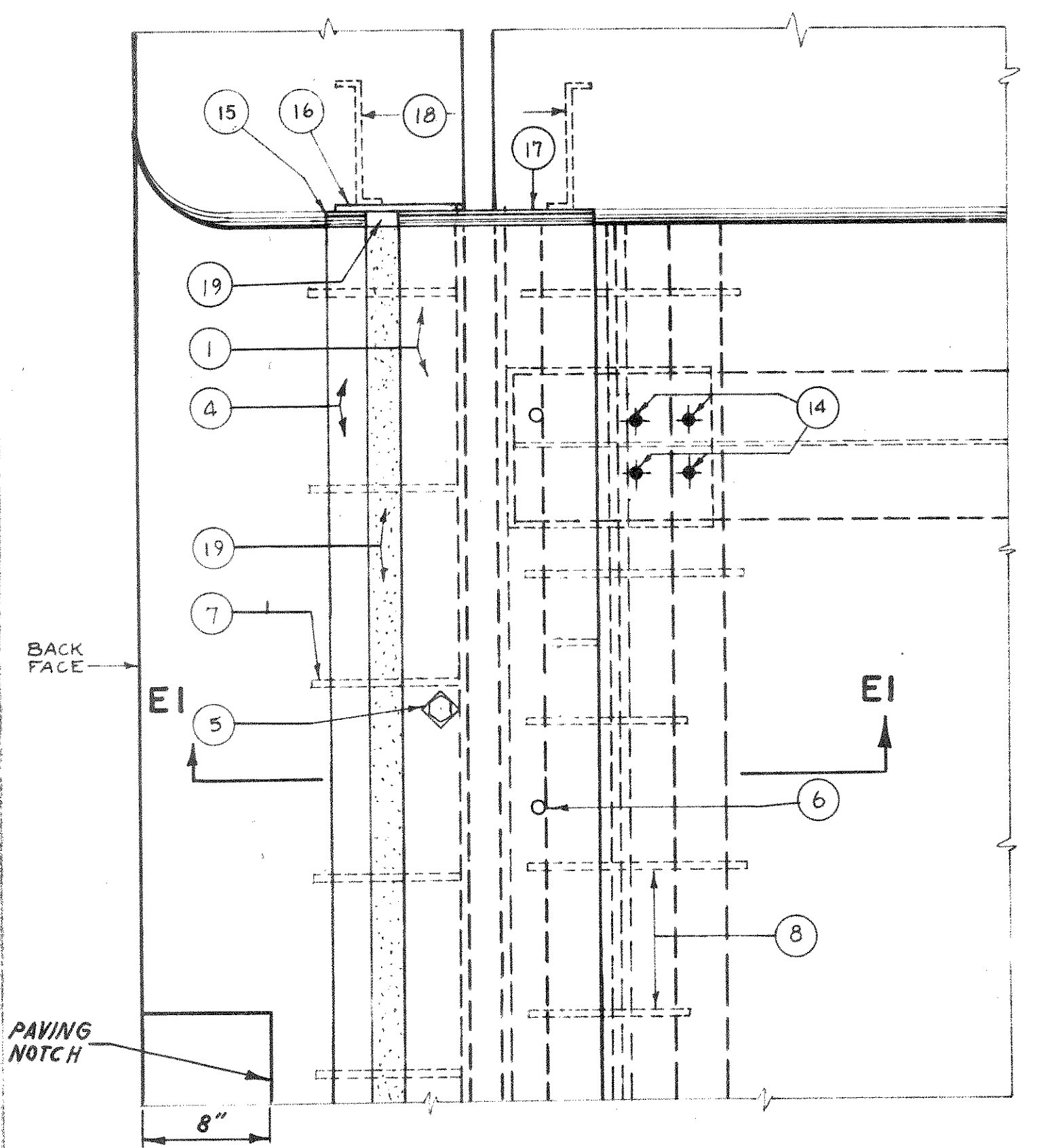
SECTION EI

EXPANSION JOINT DETAILS

* 2" OPENING @ 60°F. REMOVE BOLTS (#5 LEGEND) IMMEDIATELY AFTER CONCRETE HAS SET & FILL HOLES WITH HOT POURED ELASTIC TYPE JOINT SEALER.



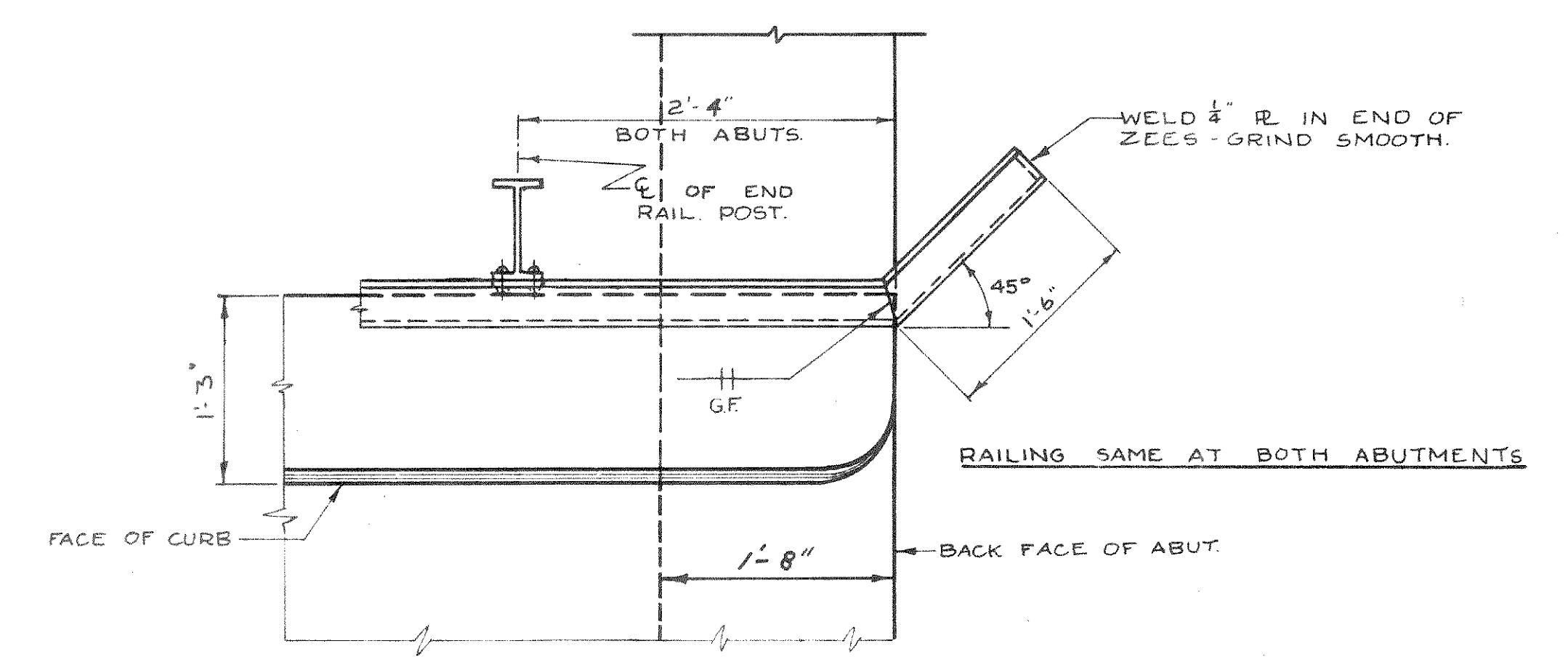
RAILING DETAILS



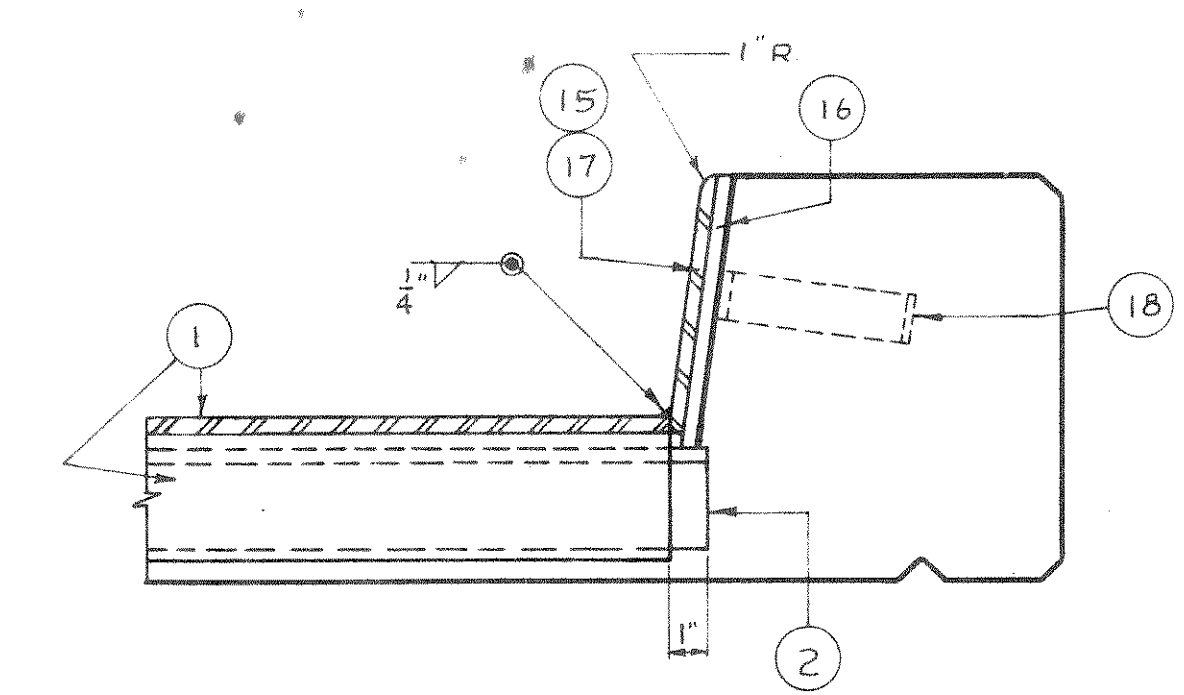
PART PLAN

LEGEND

- * 1. S.T. 6" WF 39.5# x 30'-0" (EXP TEE)
 - * 2. L 6" x 4" x 1/2" x 30'-2"
 - * 3. BAR 2" x 3/4" x 30'-0" WELD TO L#2 WITH 2 LINES 1/4" FILLET WELD 2@6.
 - * 4. BAR 2 1/2" x 1 1/2" x 30'-0"
 - 5. 1/2" BOLT WITH SQ. NUT @ 2'-0" CTRS. GREASE FOR EASY REMOVAL. 1 1/2" x 1 1/4" SLOTTED HOLE IN EXP. TEE. LONG DIMENSIONS OF HOLE PARALLEL TO C OF RDWY.
 - 6. 1 1/2" VENT HOLES @ 2'-0" CTRS.
 - 7. 1/2" BENT BAR @ 1'-0" CTRS. WELD TO L#2.
 - 8. 1/2" BENT BAR @ 3' ALT CTRS. BETWEEN STRINGERS. WELD TO S.T.#1.
 - 9. 1/2" HOLES @ 3'-0" CTRS. BLOCK & BOLT FOR SHIPMENT WITH PIPE SLEEVE.
 - 10. S.T. 5" WF 24.5# 1/4" FILLET WELD TO FLANGE & STEM OF EXP. TEE - N.S. & F.S.
 - 11. 1/8" MINIMUM LAMINATED SHIM.
 - 12. L 3" x 2 1/2" x 3/8" x 0'-3" @ 3'-0" CTRS. WELD TO L#2.
 - 13. 1/2" ADJUSTING BOLT. WELD NUT TO L 3" x 2 1/2" x 3/8" @ 3'-0" CTRS.
 - 14. HOLES FOR 2 1/2" ERECTION BOLTS. DRILL HOLES IN STRINGER FLANGE IN FIELD.
 - * 15. R 2 1/2" x 3/8" WELD TO R #16. & BAR #4.
 - * 16. R 8" x 3/8"
 - * 17. R 12 1/2" x 3/8" WELD TO #1
 - 18. ANCHOR BAR 2" x 3/8" x 1'-0" WELD TO R #16 & R #17.
 - 19. AFTER CONCRETE HAS SET, FILL JOINT WITH HOT POURED ELASTIC TYPE JOINT SEALER. APPLY ONE COAT OF BITUMASTIC 1/16" THICK TO THIS SURFACE.
 - 20. #4 BAR, BENT, 3 PER C WELD TO C.
- ALL ITEMS MARKED WITH ASTERISK SHALL BE MADE OF CORTEN, MAYARI R OR OTHER STEEL OF EQUAL CORROSIVE RESISTANCE. STEEL IN EXPANSION JOINT SHALL BE PAID FOR AS "STRUCTURAL LOW ALLOY STEEL."



PART PLAN AT SOUTH ABUTMENT



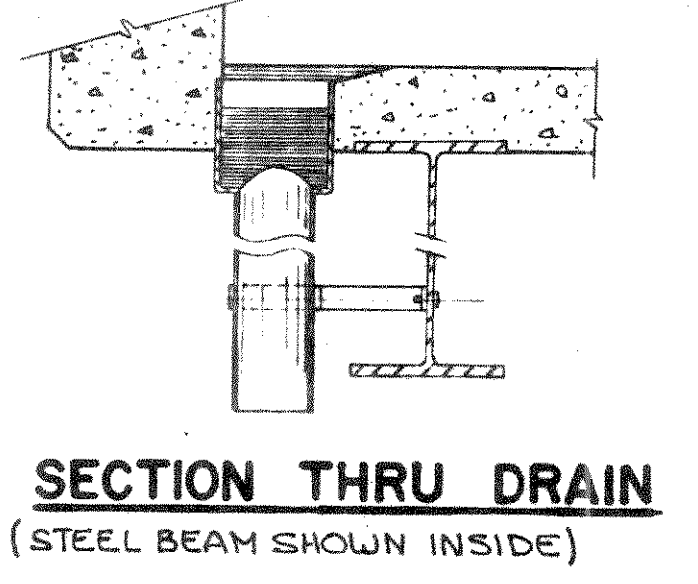
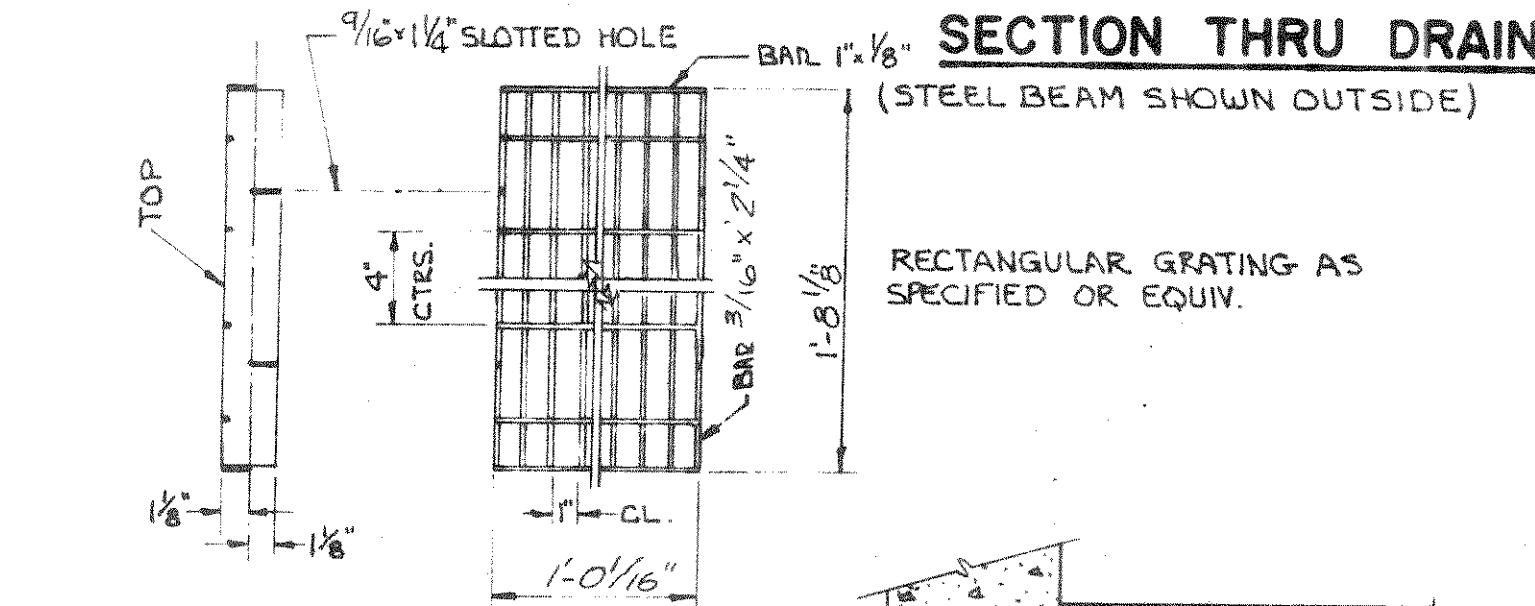
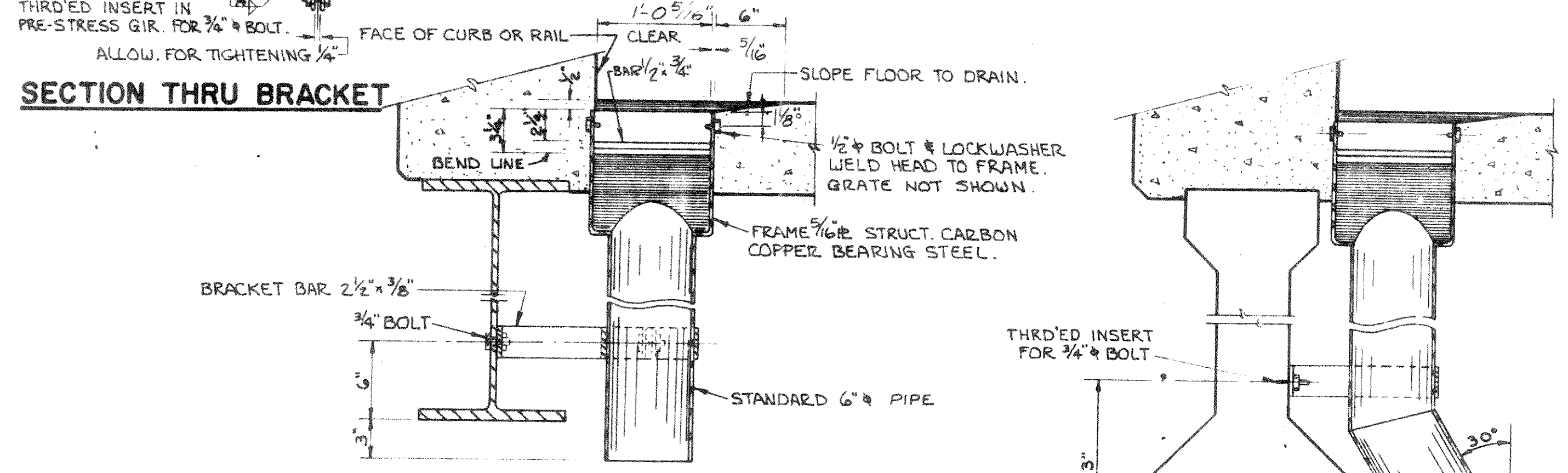
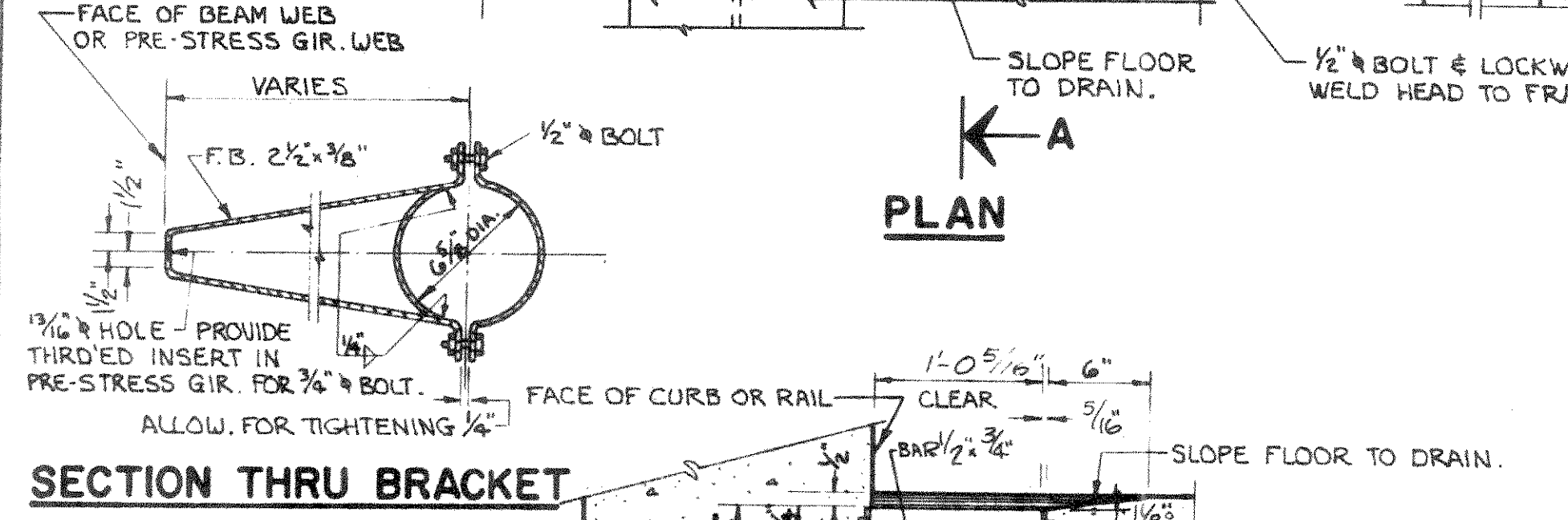
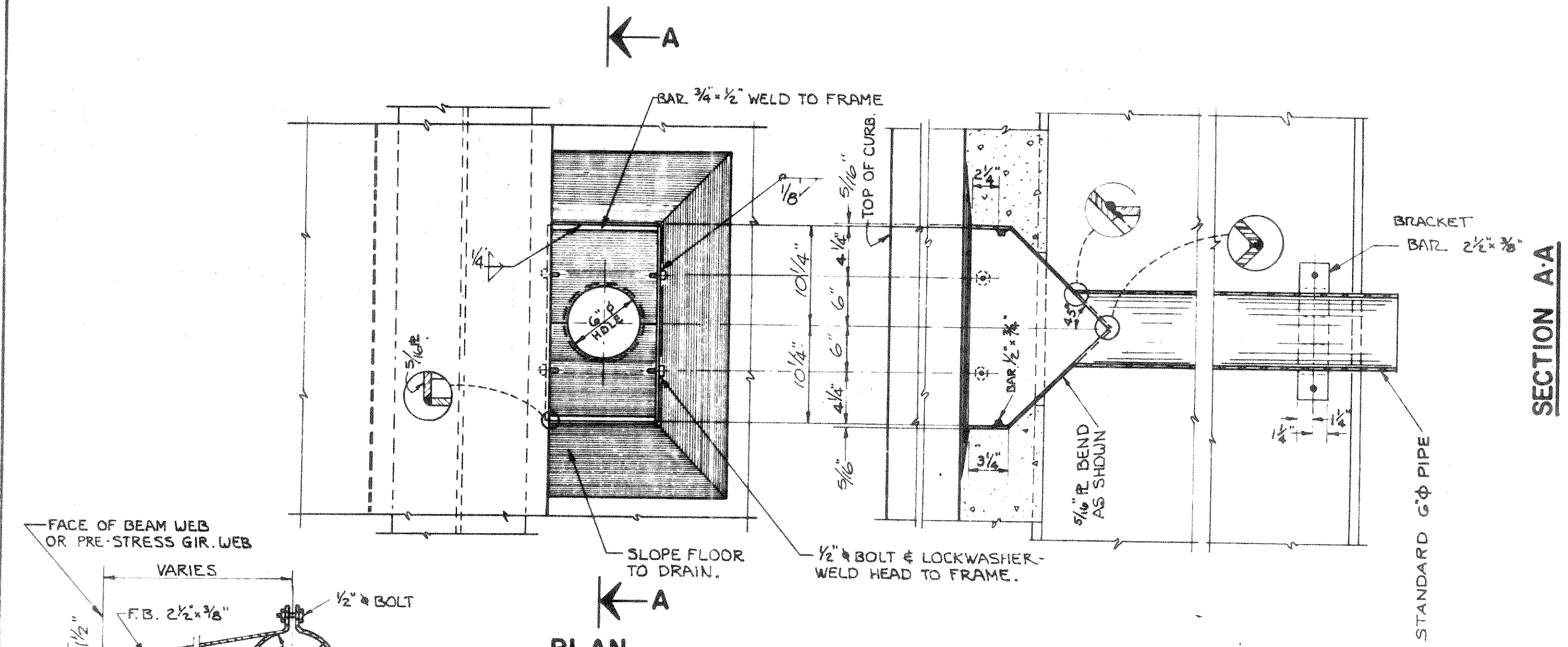
CURB DETAIL

EXPANSION JOINT SHALL BE BUILT TO CONFORM TO ROADWAY CROWN AND GRADE.

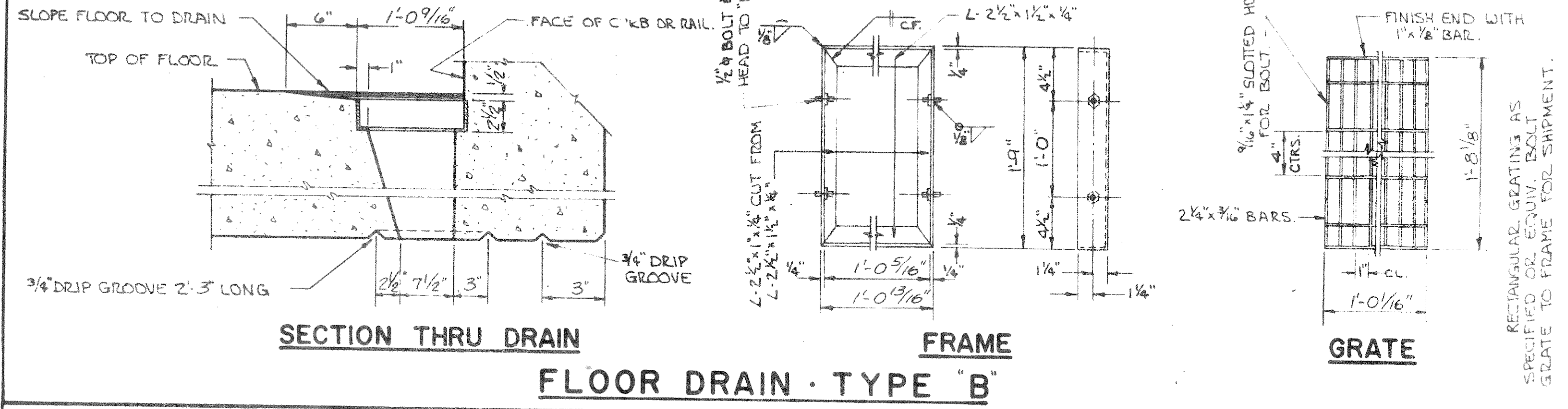
STATE HIGHWAY COMMISSION OF WISCONSIN	
EXPANSION JOINT & RAILING	
DESIGNED BY: A.A.S.H.O. 1961	REVISED: H-15 (REV) 1957
DATE: 3-16-62	BY: J.B. DRAWN: L.J.G. CHECKED: DEF
STRUCTURE: B-35-3	SHEET: 4 OF 7

FLOOR DRAIN TYPE	NO. REQ'D
TYPE "A"	4
TYPE "B"	

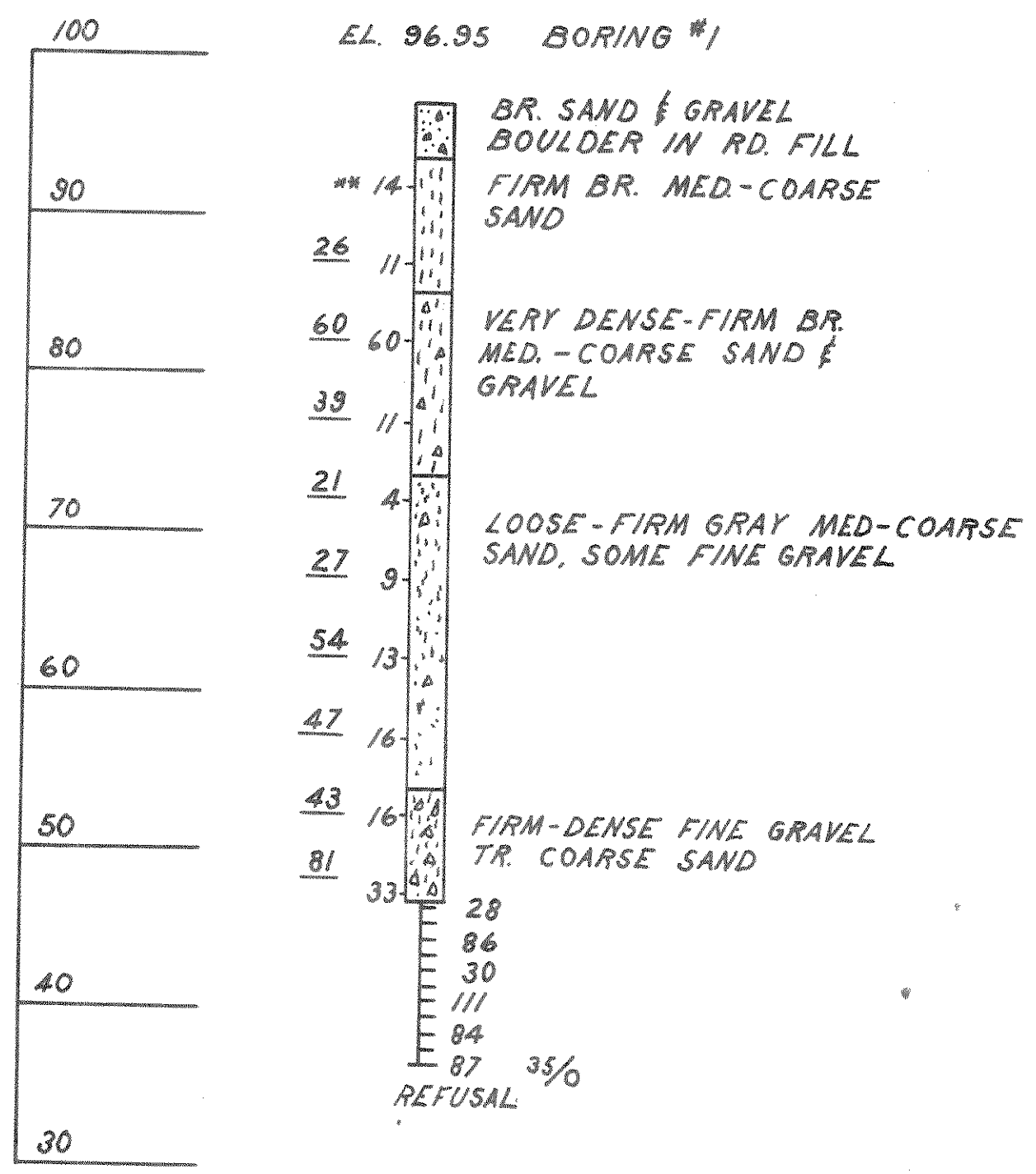
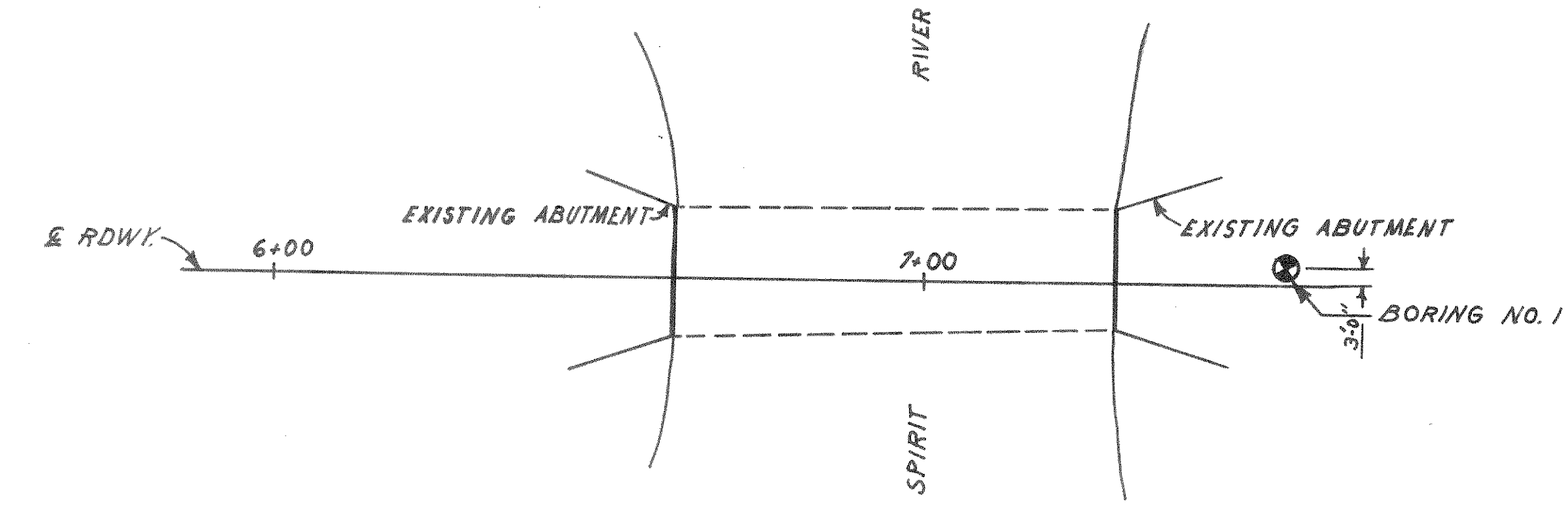
B.P.M. DIVISION	PROJECT	TOTAL SHEETS
4		



FLOOR DRAIN - TYPE "A"



FLOOR DRAIN - TYPE "B"



LEGEND OF BORING OPERATIONS

BLOWS PER FOOT USING 140# WT. WITH A 30" FALL

AVERAGE CASING 7

BLOWS PER FOOT USING 350# WT. WITH A 24" FALL

NO GROUND WATER ABOVE INDICATED ELEV.

LEGEND OF PROBINGS

GROUND ELEVATION

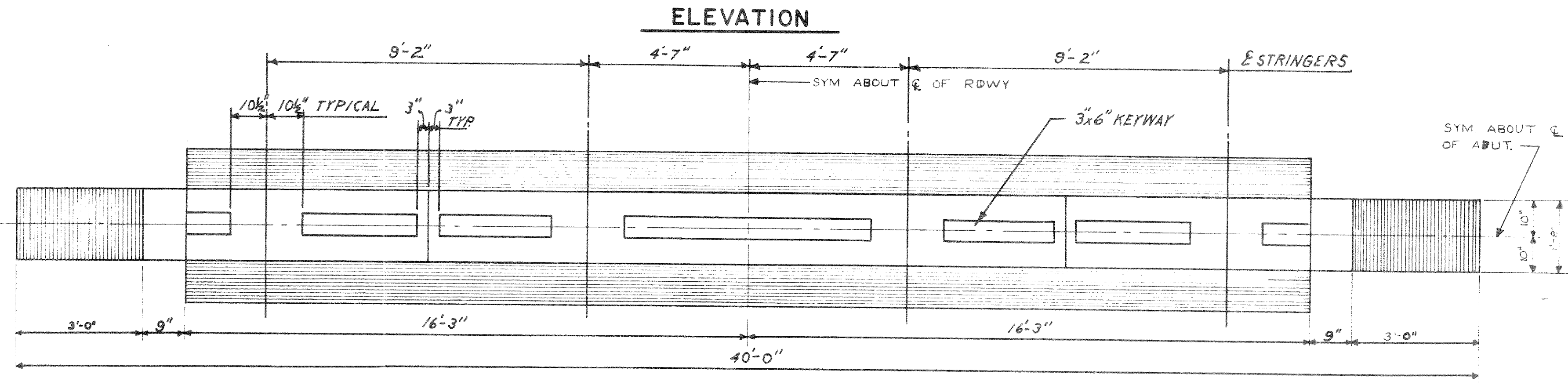
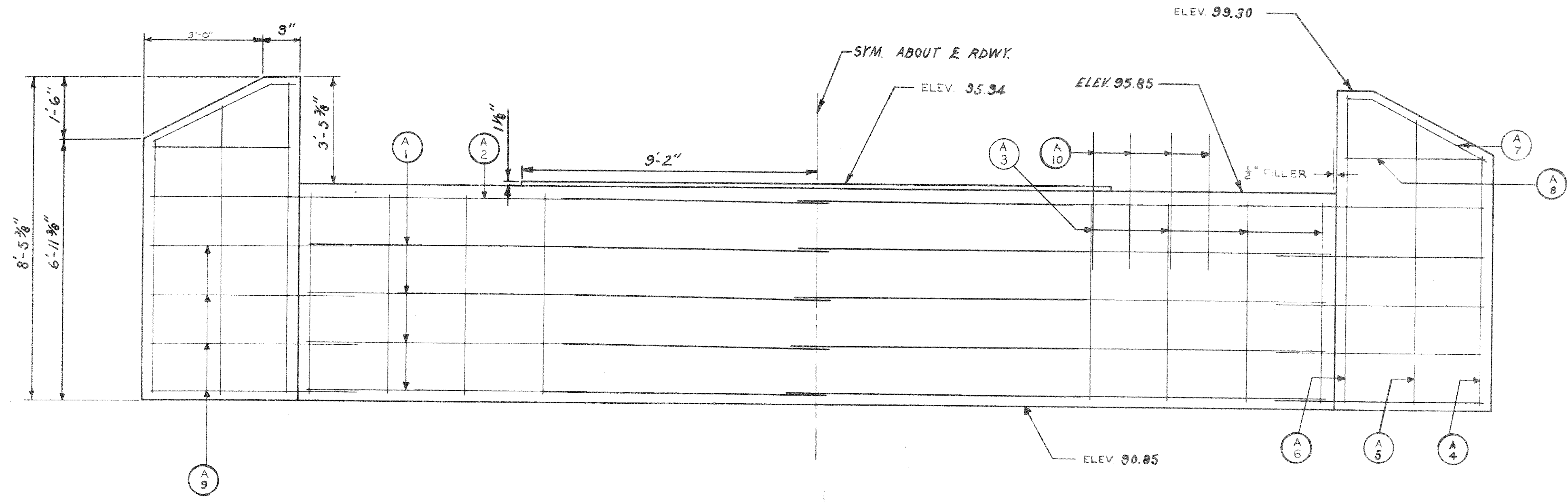
PROBING NUMBER

BLOWS PER FOOT OF PENETRATION

95/6" = 95 BLOWS FOR 6" PENETRATION PROBING TAKEN WITH A 350# WT. AND 18" FALL ON 20" OD POINT

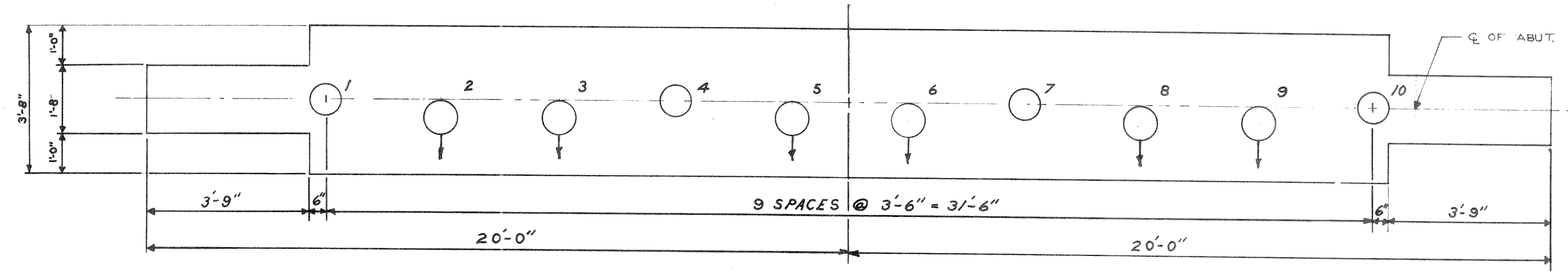
SUBSURFACE EXPLORATION

STATE HIGHWAY COMMISSION OF WISCONSIN		
FLOOR DRAIN DETAILS		
DESIGNED BY	AASHO 1961	REVISED
DRAWN BY	STD	DATE
DATE	3-16-62	35
STRICTURE	B 35 3	SHEET 5 OF 7



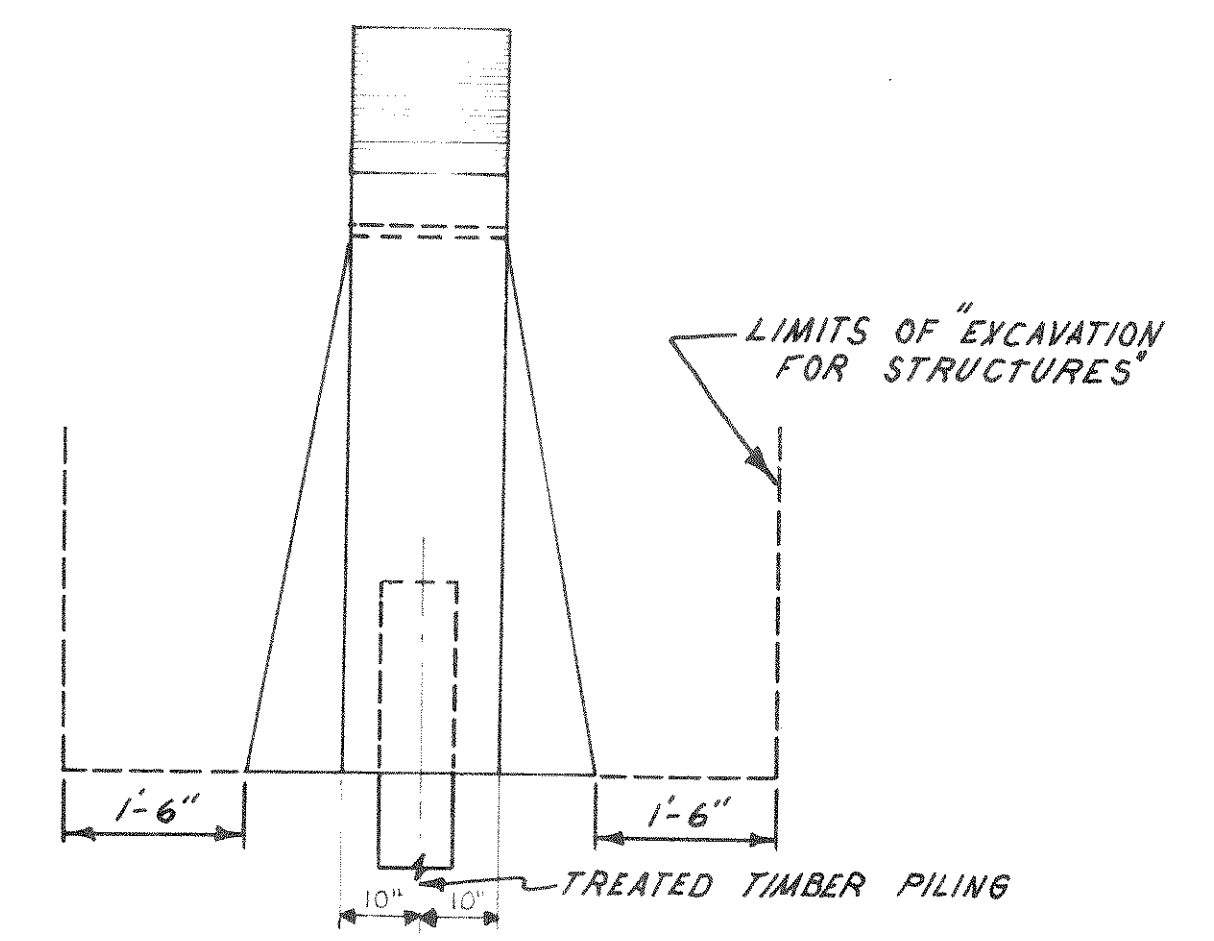
ELEVATION

PLAN

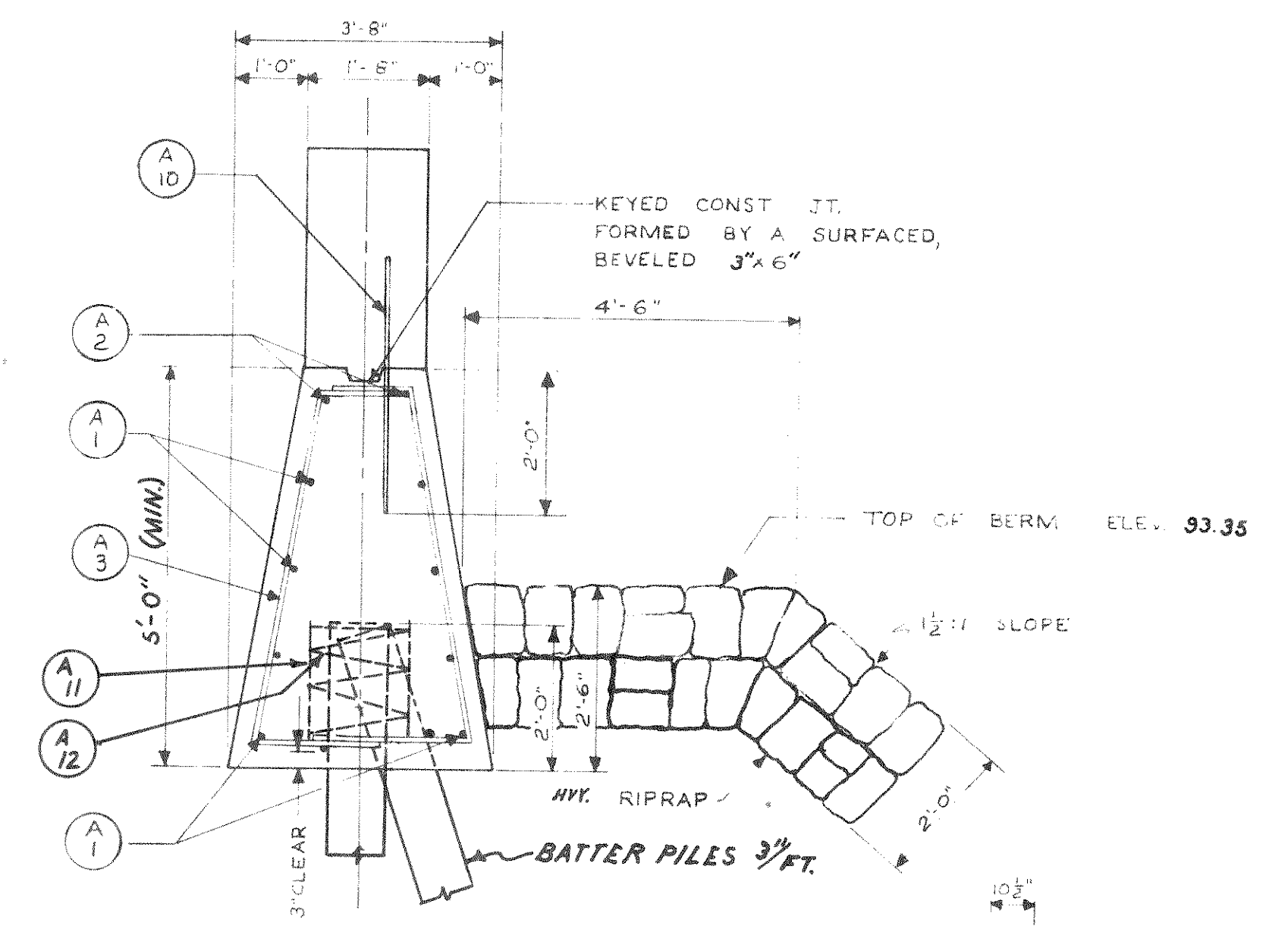


FOOTING PLAN
(SHOWING PILING SPACING)
(LOOKING SOUTH)

○ DENOTES BATTERED PILING
↗ DIRECTION OF BATTER



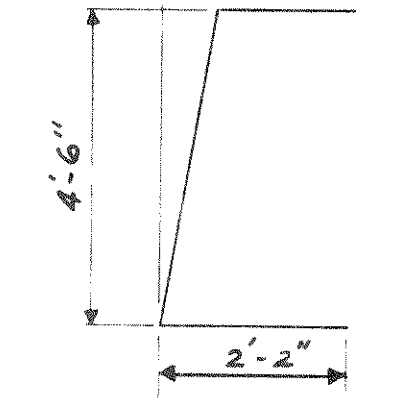
END VIEW



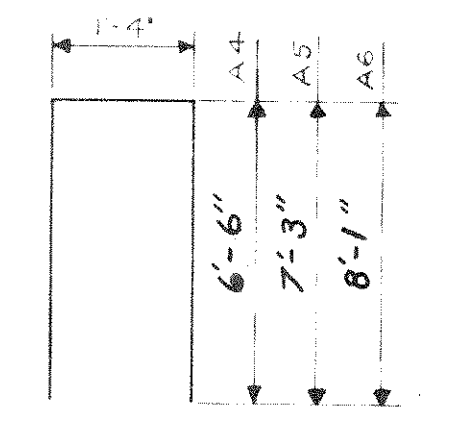
SECTION THRU ABUTMENT

BILL OF BARS 870 #
DIMENSIONING IN BENDING DETAILS ARE OUT TO OUT

POUR	MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
BODY AND WINGS	A1	20	4	16-6	SHOWN	BODY HORIZONTAL	
	A2	4	6	20-6	SHOWN	BODY HORIZONTAL	
	A3	34	4	7-9	2'-0"	BODY VERTICAL	A
	A4	2	4	14-3	SHOWN	WING VERTICAL	B
	A5	2	4	15-9	SHOWN	WING VERTICAL	B
	A6	2	4	17-6	SHOWN	WING VERTICAL	B
	A7	4	4	3-9	SHOWN	WING HORIZONTAL	
	A8	4	4	3-3	SHOWN	WING HORIZONTAL	
	A9	16	4	5-0	SHOWN	WING HORIZONTAL	
	A10	33	5	4-0	1'-0"	BODY VERT.	
	A11	20	4	2-3	SHOWN	" - 2 PER PILE	
	A12	10	2	28-0	"	" - 5 WRAPS 21"D. SPIRAL	



DETAIL A



DETAIL B

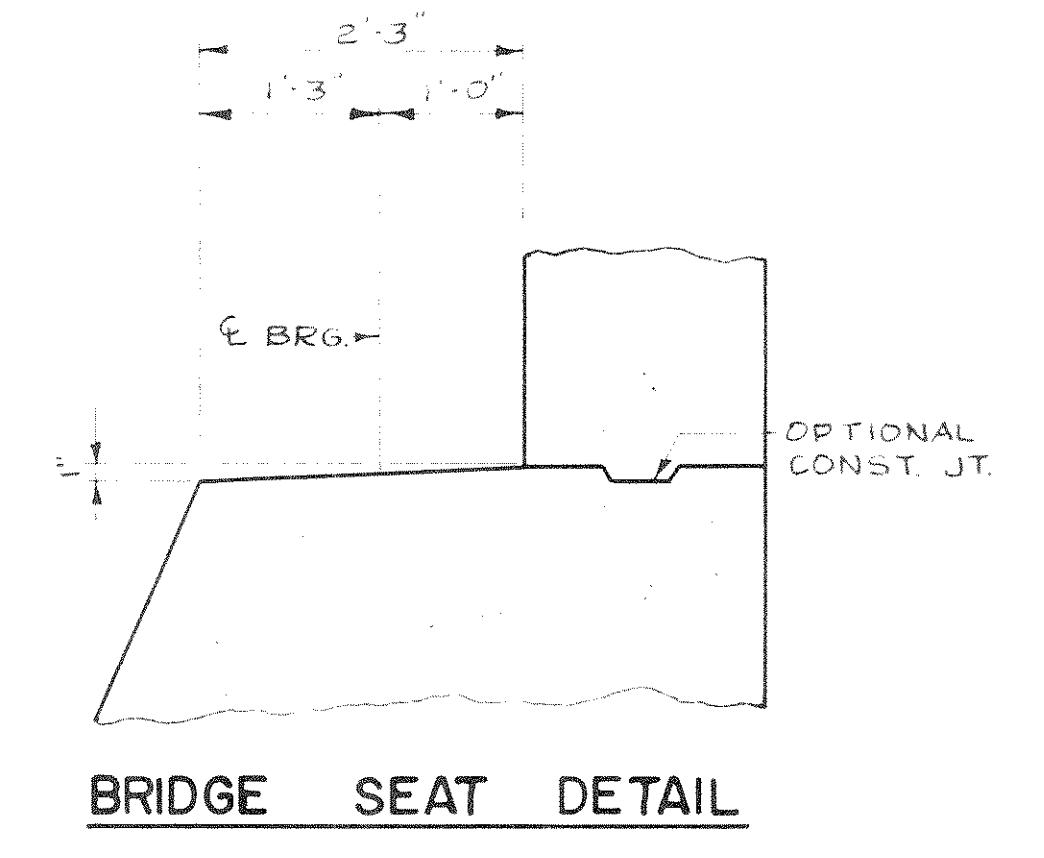
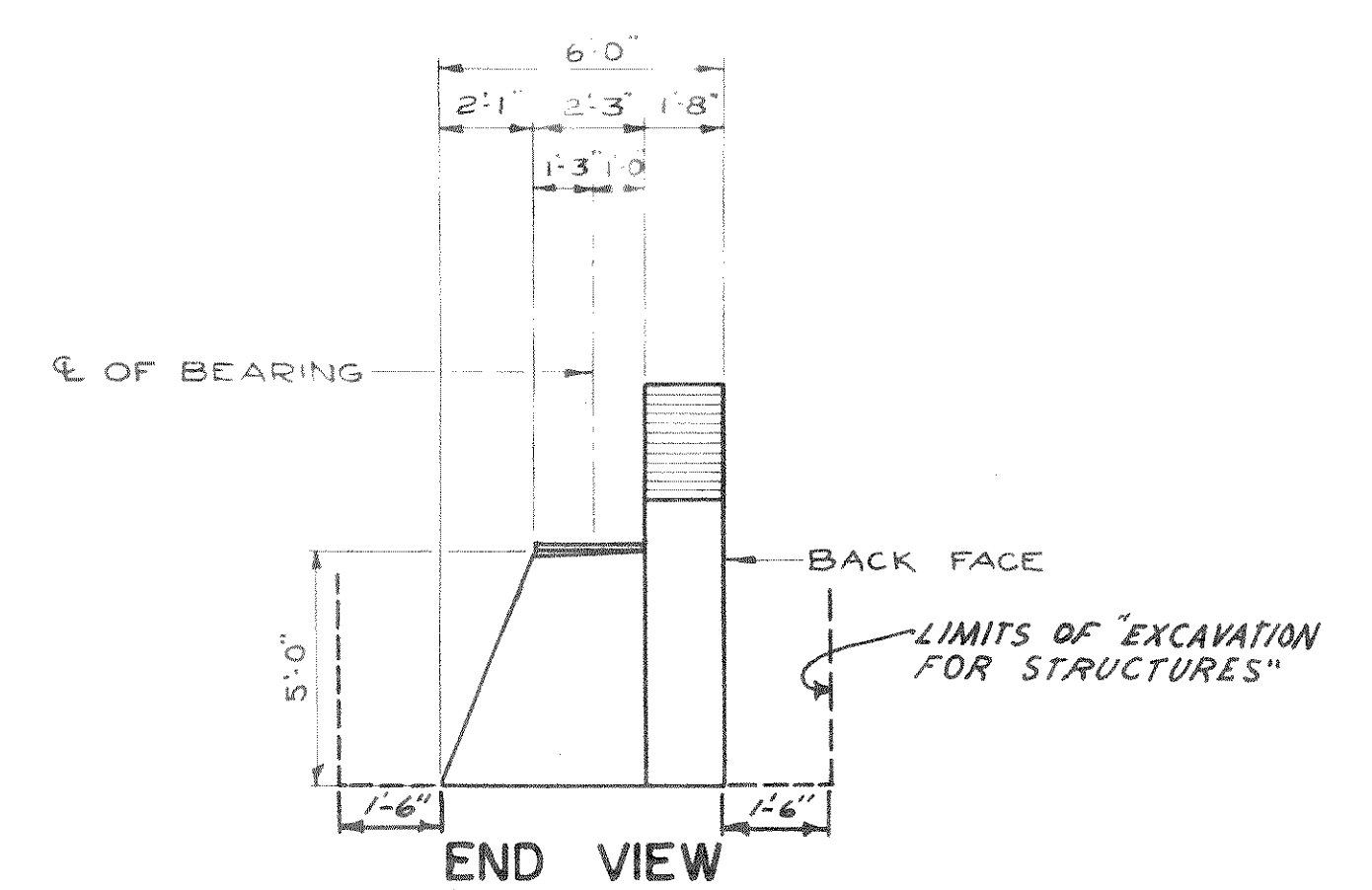
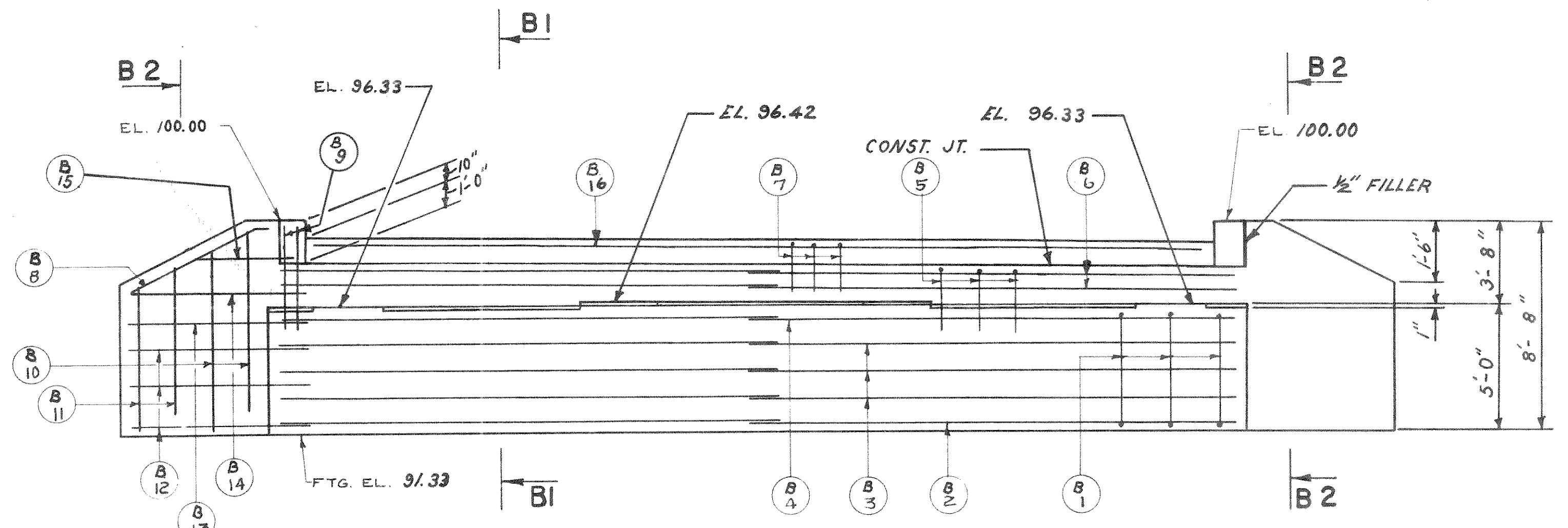
REVISED STATE HIGHWAY COMMISSION OF WISCONSIN

SOUTH ABUTMENT

DESIGNED BY A.A.S.H.D. 6/7 LEADERSHIP H-15 1957

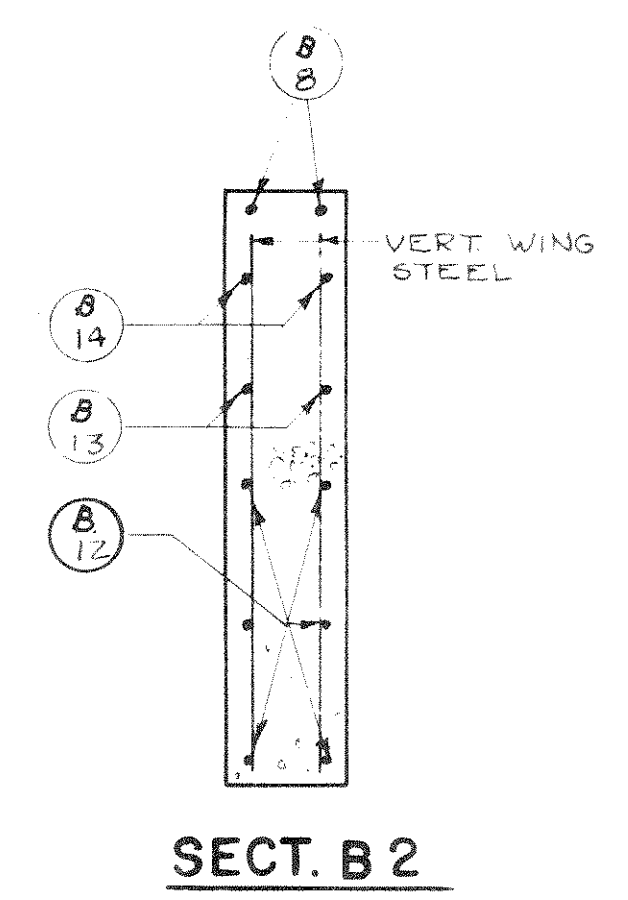
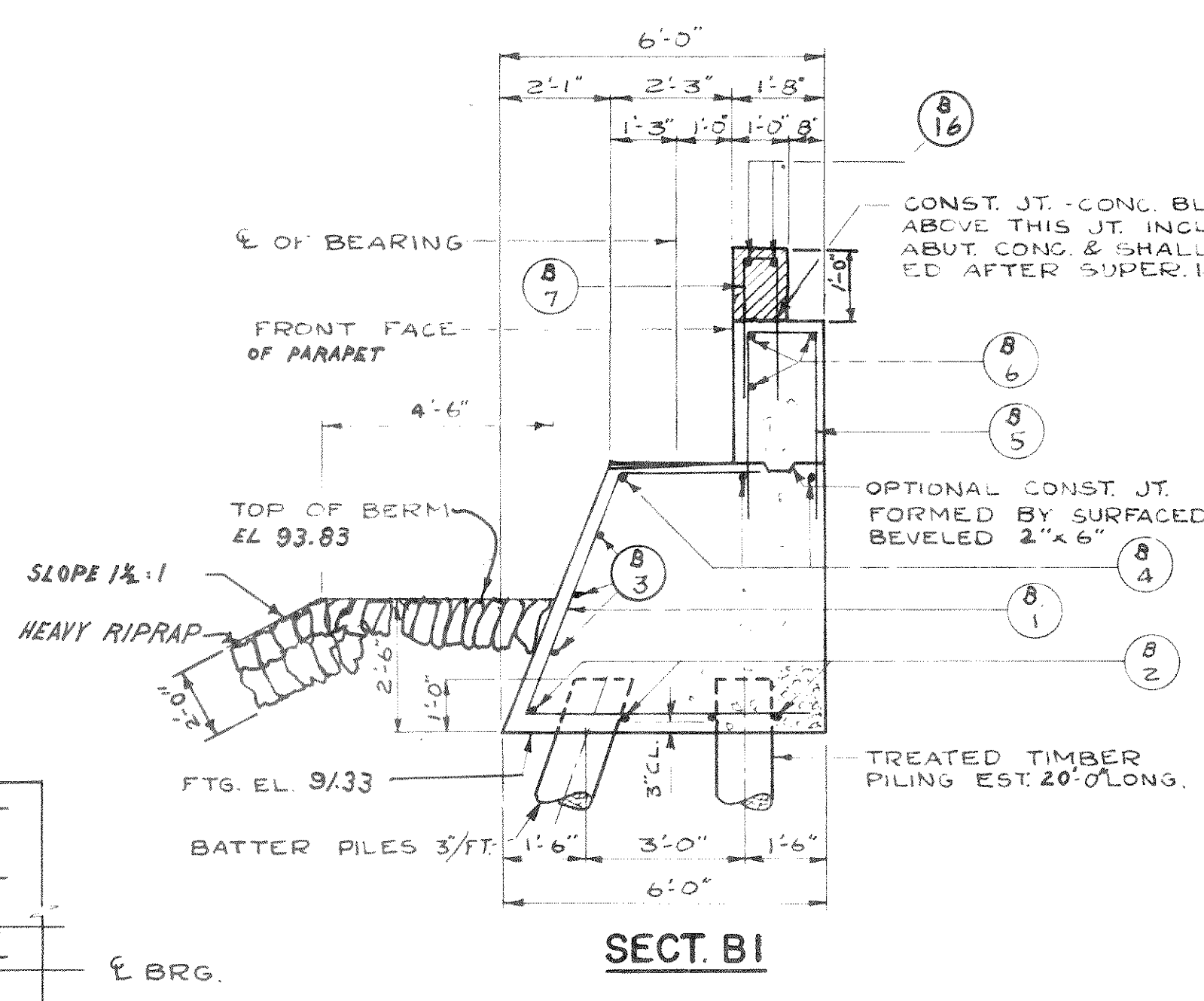
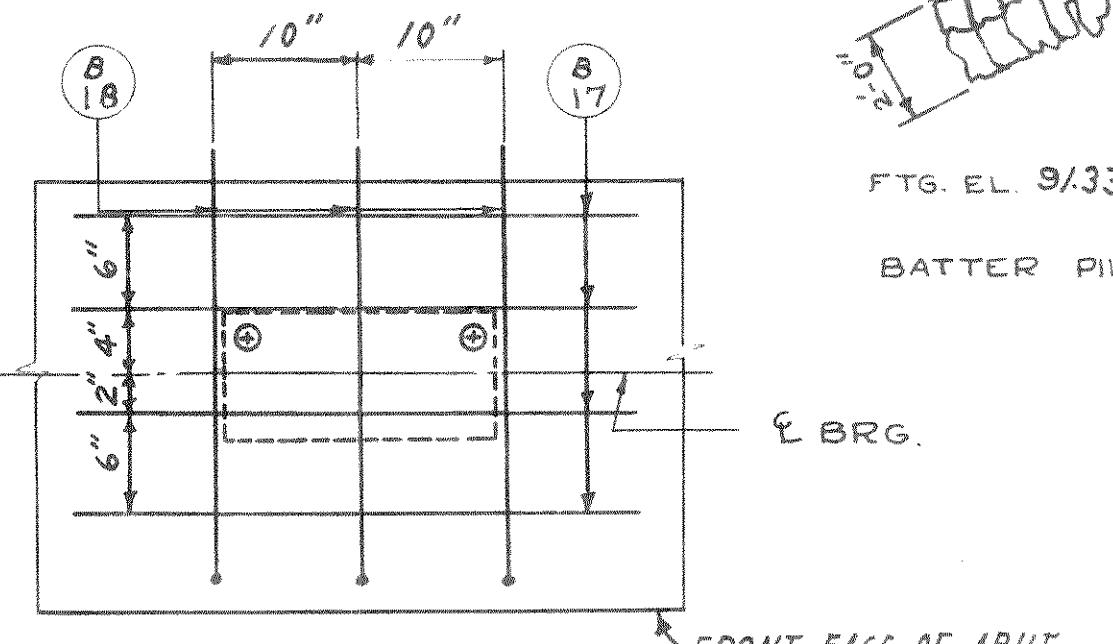
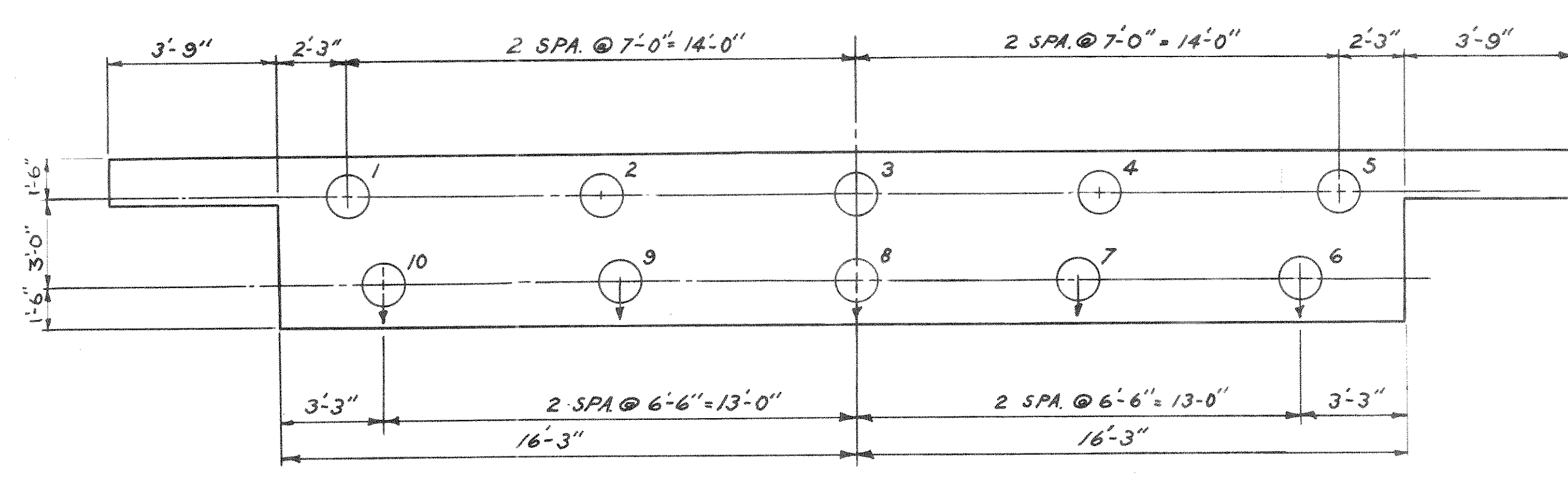
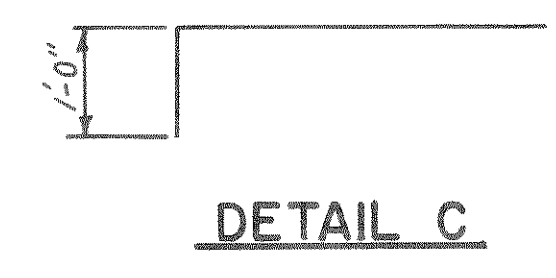
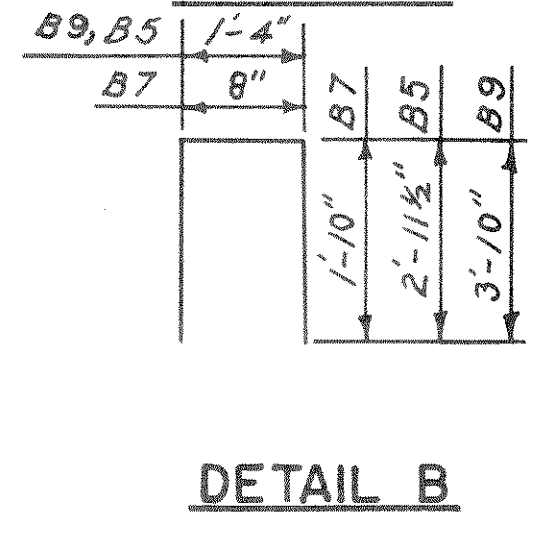
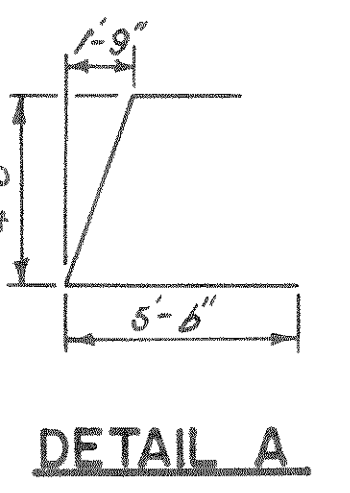
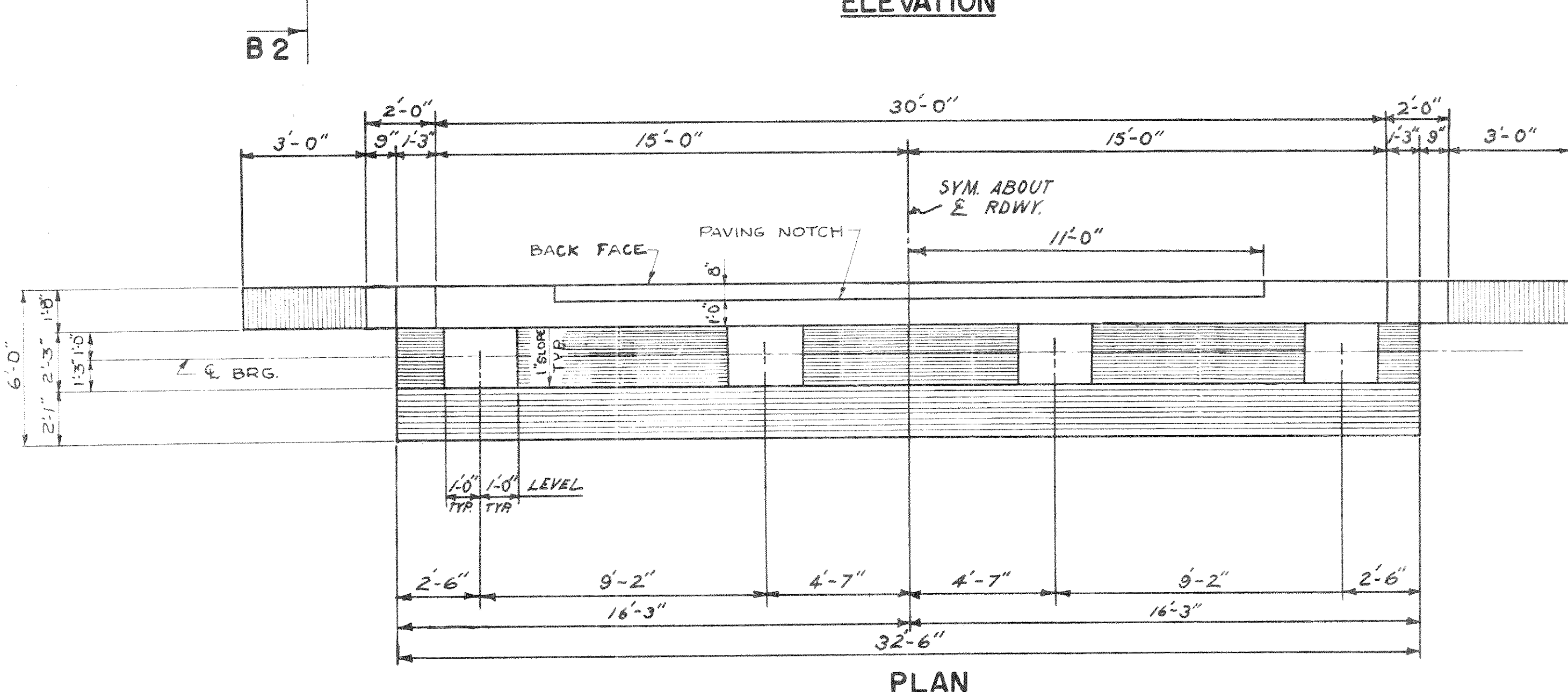
DATE 3-16-62 DESIGNED BY J.B. DRAWN BY J.G. CHECKED BY

STRUCTURE **B - 35 - 3** SHEET **6** OF **7**



BILL OF BARS 1270 #
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT

POUR MARK	NO.	SIZE	LENGTH	SPACING	LOCATION	DET.
B1	17	4	13-0	2-0	BODY - STIRRUP	A
B2	8	4	16-6	SHOWN	" - HORIZ.	
B3	6	4	16-6	"	"	
B4	6	6	16-6	"	"	
B5	20	5	7-3	1-6	PARAPET - STIRRUP	B
B6	6	4	16-6	SHOWN	" - HORIZ.	
B7	30	5	4-9	1-0	" - STIRRUP	B
B8	4	4	3-6	SHOWN	WINGS - TOP	
B9	4	4	9-0	"	" - VERT.	B
B10	8	4	7-9	1-0	" - " BOTH FACES	
B11	8	4	6-9	1-0	" - " " "	
B12	12	4	5-0	1-6	" - HORIZ.	"
B13	4	6	5-6	SHOWN	" - " " "	
B14	4	4	5-0	1-6	" - " " "	
B15	4	4	3-6	1-6	" - VERT	"
B16	8	4	7-9	SHOWN	PARAPET - HORIZ. DO NOT LAP	
B17	16	4	3-0	"	GRID	
B18	12	4	3-0	"	"	C



○ DENOTES BATTERED PILING & DIRECTION OF BATTER

REVISED	STATE HIGHWAY COMMISSION OF WISCONSIN
NORTH ABUTMENT	
DESIGN SPEC. A.A.S.H.O. 61	LOADING H15
DATE 3-16-62	DESIGN J. B. DRAWN L. J. G. CHECK D. E. F.
STRUCTURE B-35-3	SHEET 7 OF 7