

SOUNDINGS

- *1. 2' in front of abutment #2 at middle of abutment. No penetration by hand. Rod drove easily to 7.5' below water elev. to refusal & bounce.
- *2. At D.S. corner of Abutment #2 - Same as #1
- *3. At U.S. corner of Abutment #2 - Refusal & bounce 9'-0" below water.
- *4. 15'-0" out from U.S. corner of Abutment #1 - No penetration, probably ledge bottom.
- *5. 7'-0" out from D.S. corner of Abutment #1 - Rod penetrated to 7'-0" below water elev. to refusal & bounce.

Ledge bottom showing adjacent to Abut. #1, of Concrete Arch on U.S. side.

NOTE

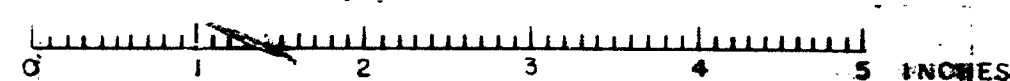
The sounding information given on this sheet was obtained at the time of the survey. For more detailed information see sheet 2A

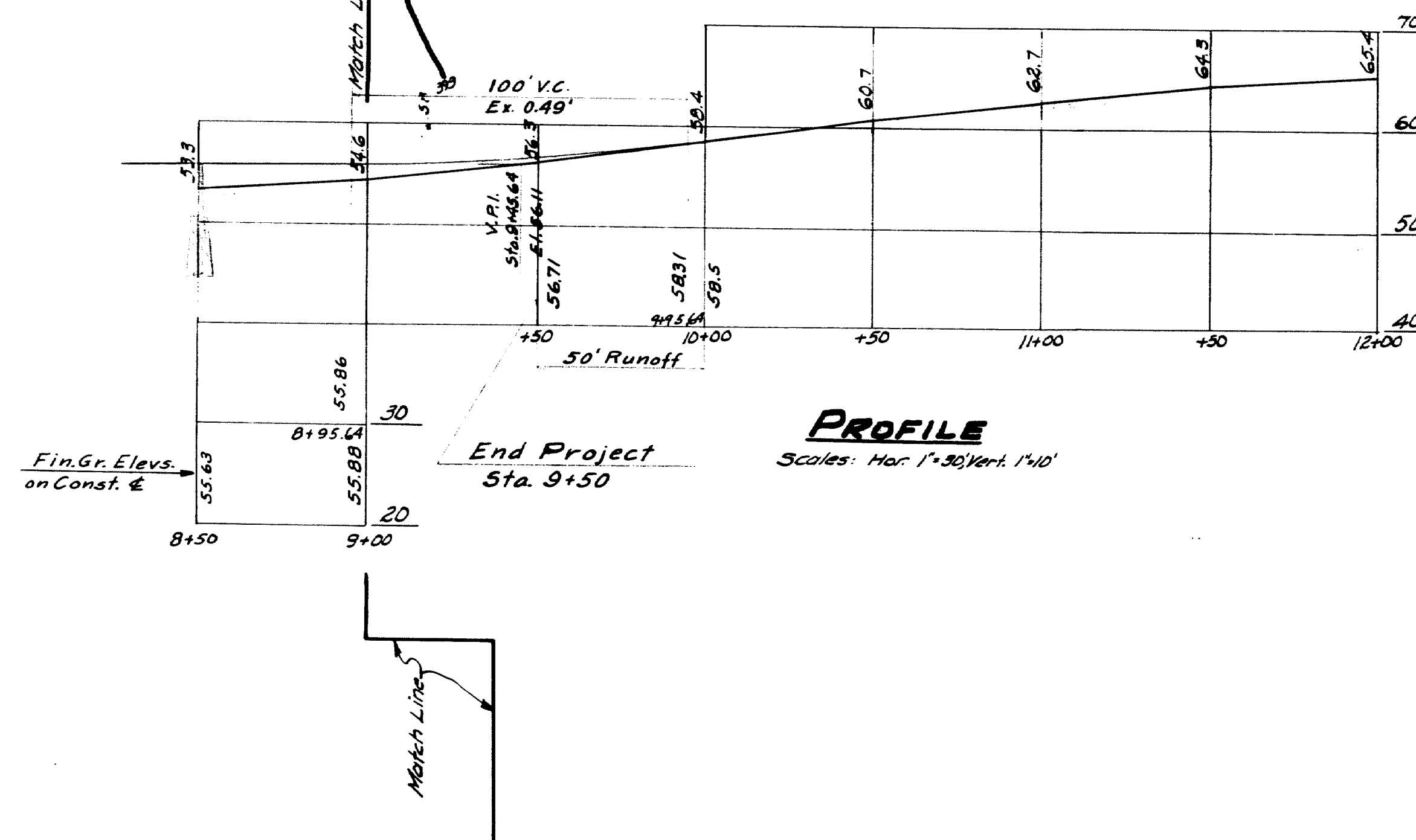
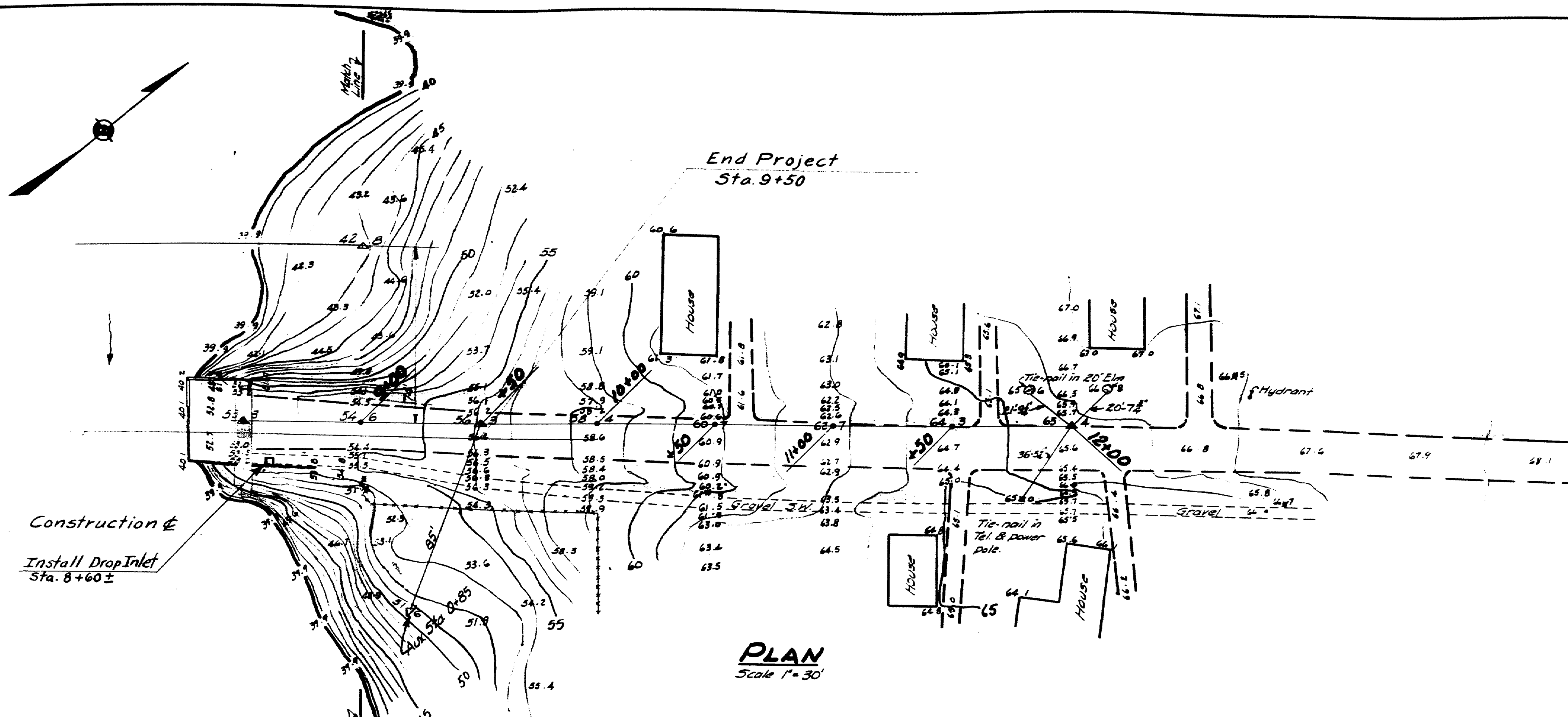
Payment for any necessary unwatering of foundation pits for the abutments of Bridge #2, shall be included in the price paid for Earth excavation, abutments, Bridge No. 2.

Payment for removal of the existing abutments of Bridge No. 2 and for the excavation necessary for placing rip-rap in front of the new abutments, shall be made at the contract unit price per cubic yard for structural earth excavation, abutments, Bridge No. 2.

Payment for removal of the existing pier, Bridge No. 2 shall be made at the contract unit price per cubic yard for Removal of existing pier, Bridge No. 2.

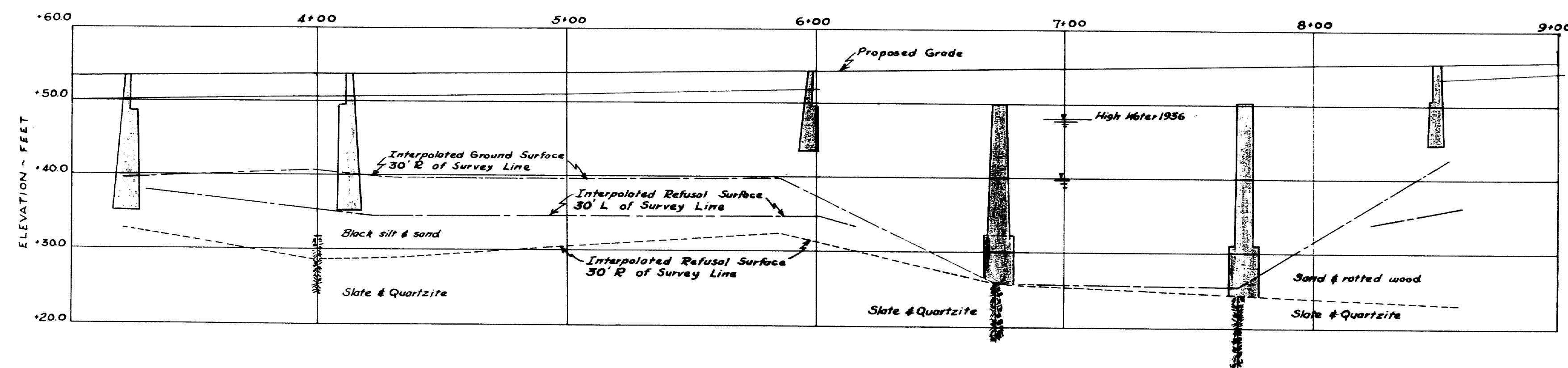
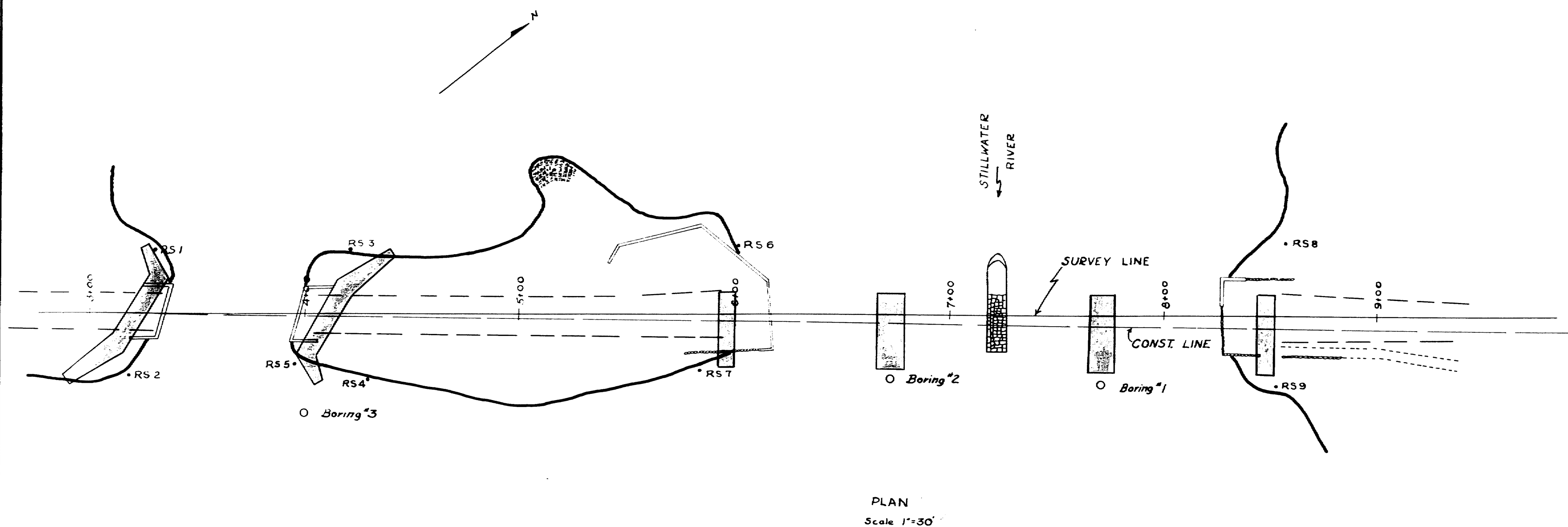
SURVEY - FERGUSON	BRIDGE - 2806
PLOT & TRACE - CLARK	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STILLWATER BRIDGE OVER STILLWATER RIVER IN THE CITY OF OLD TOWN PENOBSCOT COUNTY SURVEY	





SURVEY - FERGUSON	BRIDGE - 2806
PLOT & TRACE - CLARK	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STILLWATER BRIDGE	
OVER	
STILLWATER RIVER	
IN THE CITY OF	
OLD TOWN	
PENOBSCOT COUNTY	
SURVEY	
SHEET 2 OF 18 AUGUSTA, MAINE MAR.	

0 1 2 3 4 5 INCHES



NOTE

The soil stratification illustrated on this drawing has been developed by interpretation of, and interpolation between, the various soil borings. It is, therefore, speculative, and no warranty is implied with respect to the continuity of soil layers, or to the elevations of the soil boundaries except at the actual boring locations. Depths and thicknesses of the latter are subject to the inaccuracies inherent in the drilling methods. The descriptions of the various soil layers are based upon the driller's field classification and upon the engineer's inspection of samples and interpretation of the driller's record.

ROD SOUNDINGS

No Rod Sound.	Ground Elev.	Refusal Elev.
RS #1	39.8	37.9
RS #2	38.4	33.0
RS #3	39.7	34.8
RS #4	39.9	29.4
RS #5	40.9	28.9
RS #6	39.7	34.7
RS #7	40.0	32.4
RS #8	41.2	35.5
RS #9	41.5	34.0

BORING #1
Sta 7+70 27' R

EI + 25.2	
EI + 24.2	Sand & rotted wood
	50%
	25%
	54% Slate & Quartzite
	50%
EI + 14.2	70%

BORING #2
Sta 6+72 25' R

EI + 25.7	
	50%
	75%
	50% Slate & Quartzite
EI + 17.7	33%

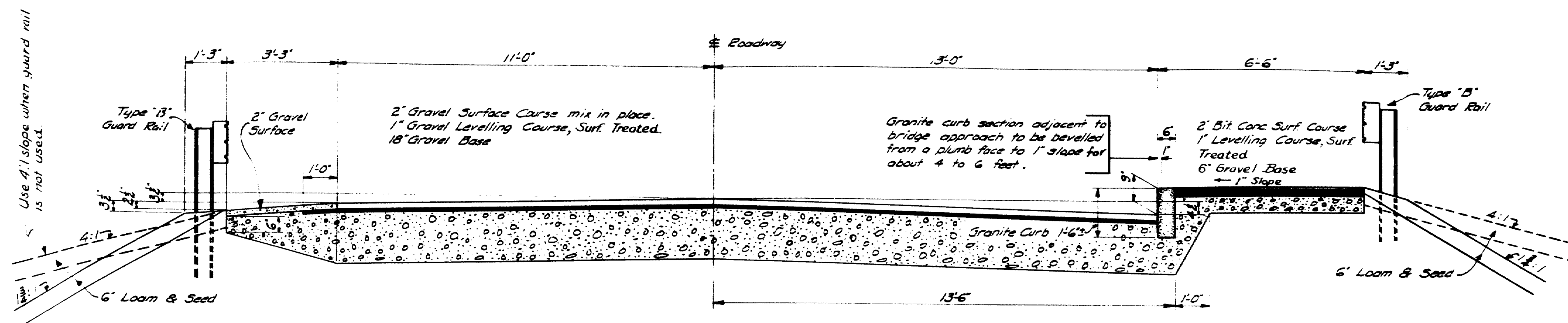
BORING #3
Sta 4+00 48' R

EI + 36.7	
	Black silt and sand
EI + 31.7	
	12%
	75% Slate & Quartzite
	33%
EI + 23.7	58%

Traced from Report of H. Gray, Sole Engineer, by W. J. Morrison. *WJM*
BRIDGE - 2806
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
STILLWATER BRIDGE
OVER
STILLWATER RIVER
IN THE CITY OF
OLD TOWN
PENOBSCOT COUNTY
FOUNDATION DATA
SHEET 2A OF 18 AUGUSTA, MAINE FEB. 1931

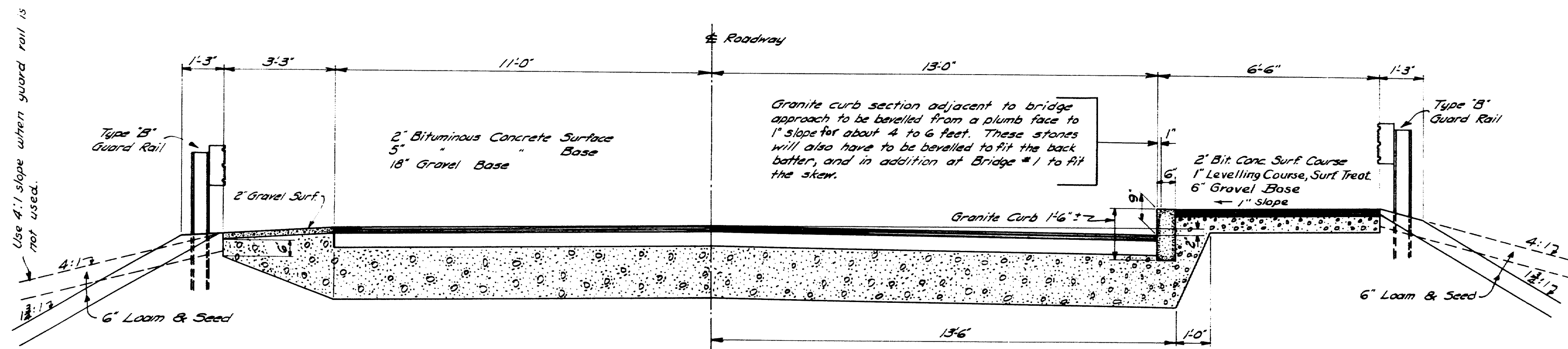
53-135

0 1 2 3 4 5 INCHES



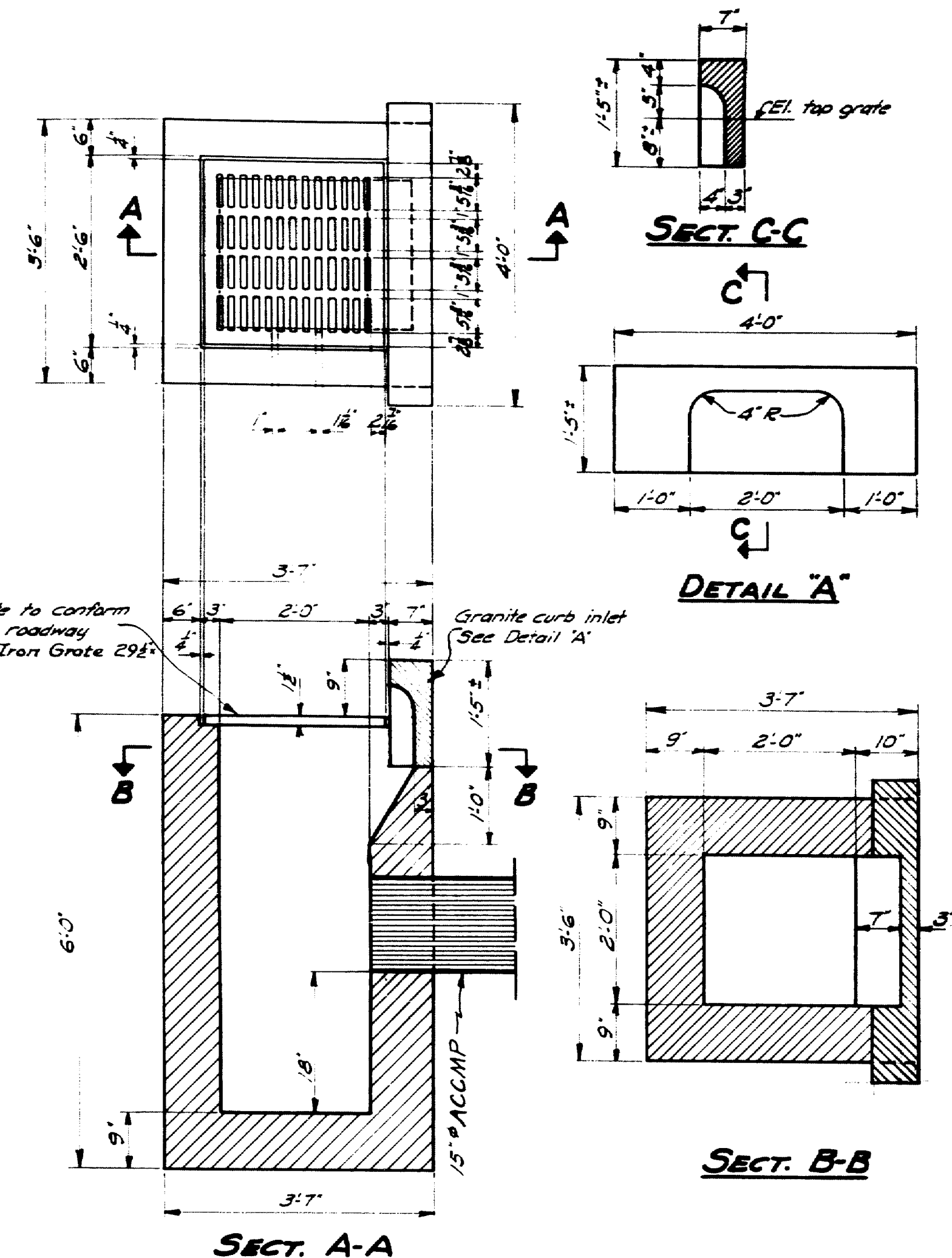
TYPICAL APPROACH SECTION

Sta 1+00 to Abut #1 of bridge #1.
Abut #2 of bridge #2 to Sta 9+50.



TYPICAL APPROACH SECTION

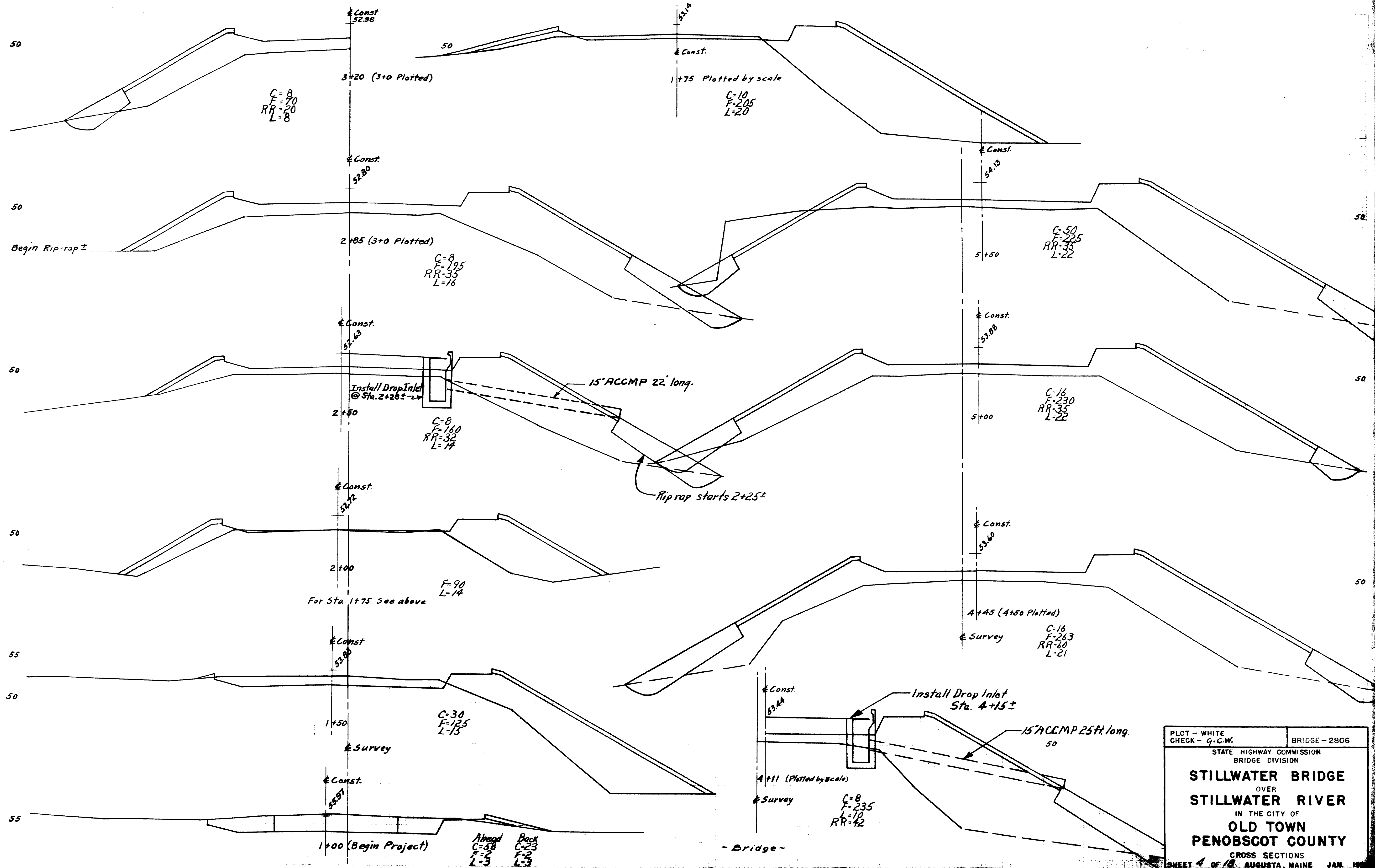
Between the Bridges



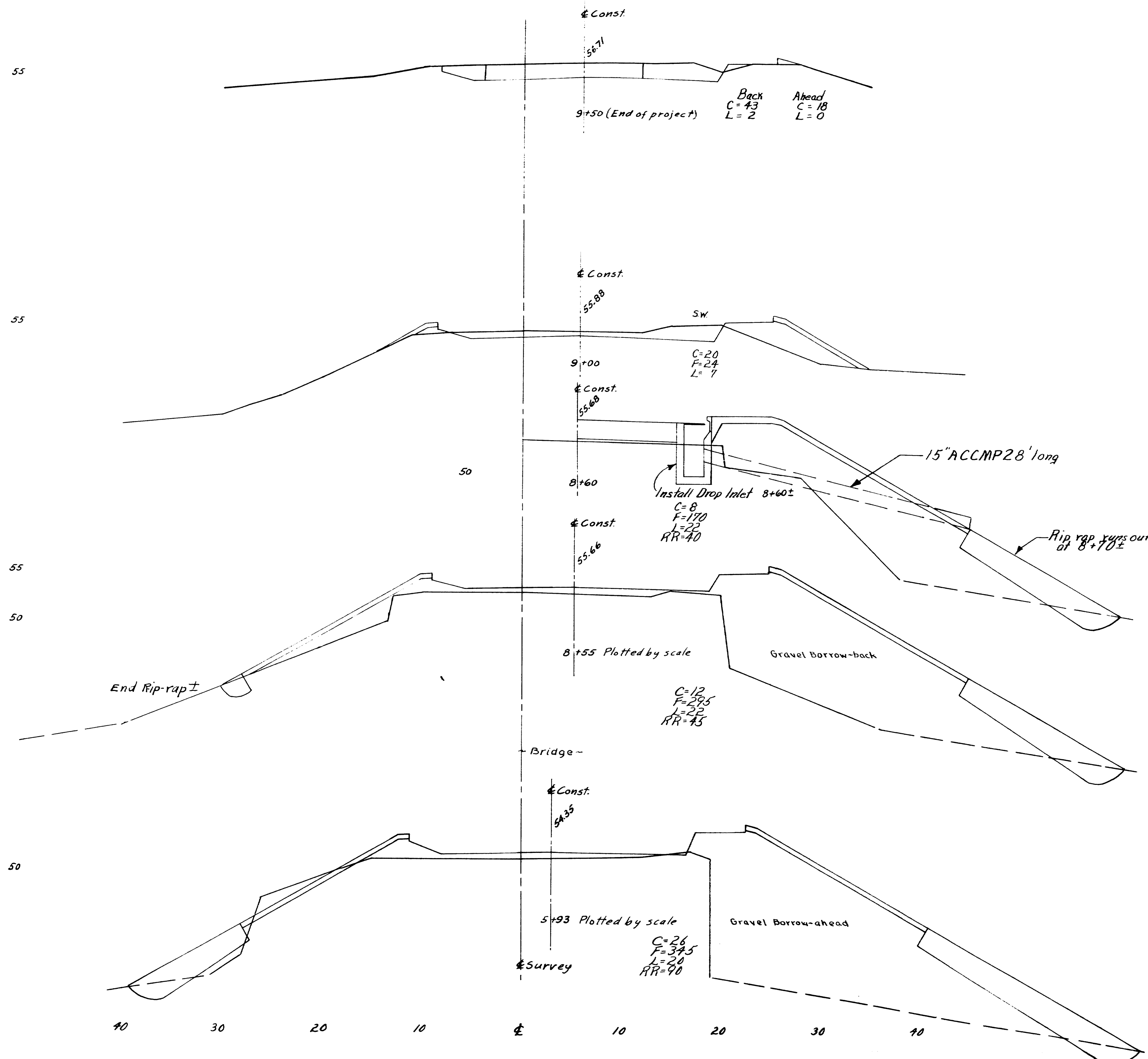
DROP INLET

3- Required

DESIGN - WHITE	BRIDGE - 2806
TRACE - CLARK	
CHECK - G.C.W.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STILLWATER BRIDGE	
OVER	
STILLWATER RIVER	
IN THE CITY OF	
OLD TOWN	
PENOBSCOT COUNTY	
APPROACHES	
SHEET 3 OF 4 AUGUSTA, MAINE JAN	

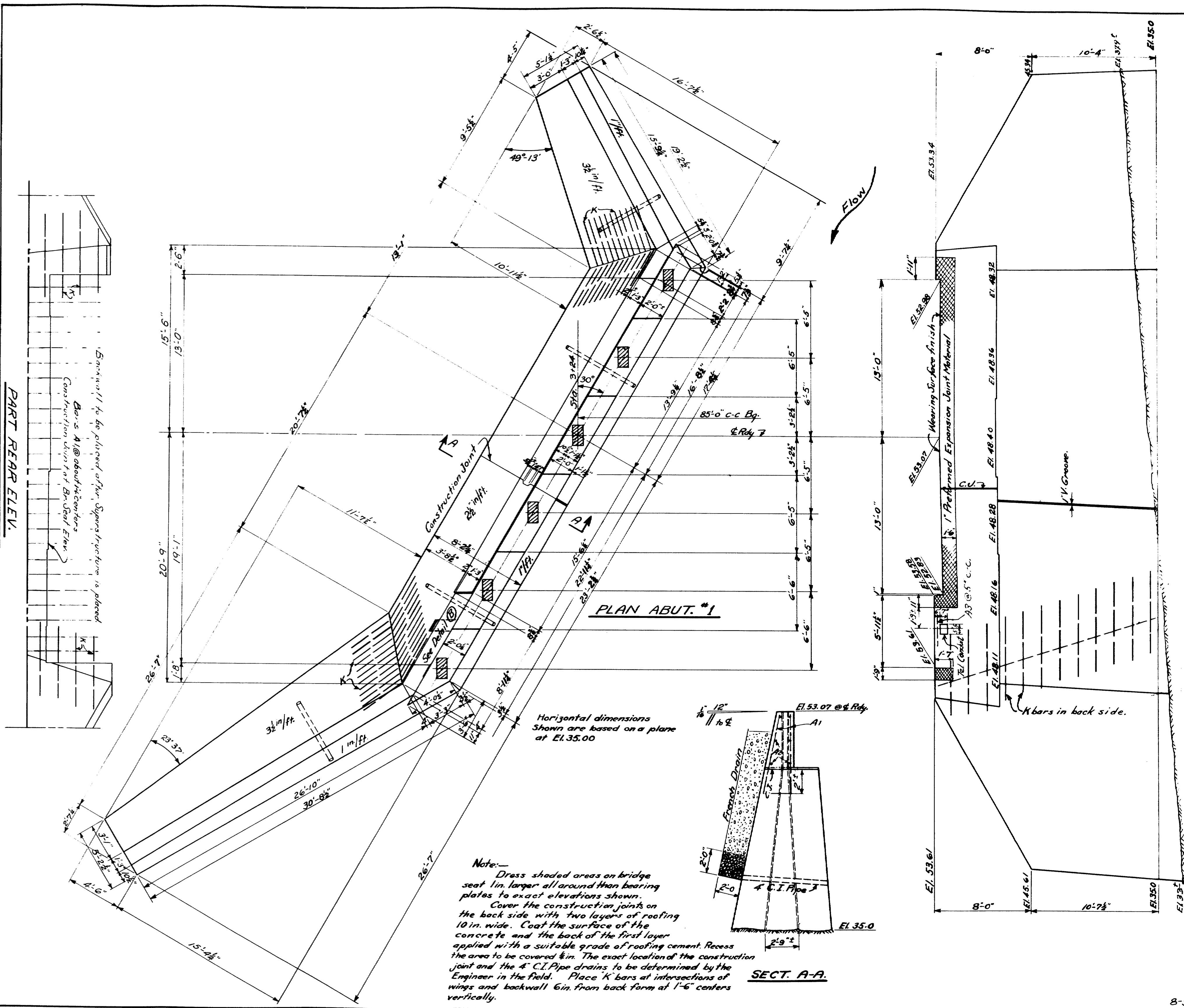


PLOT - WHITE CHECK - G.C.W.	BRIDGE - 2806
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STILLWATER BRIDGE	
OVER	
STILLWATER RIVER	
IN THE CITY OF	
OLD TOWN	
PENOBSCOT COUNTY	
CROSS SECTIONS	
SHEET 4 OF 18 AUGUSTA, MAINE JAN 19	



PLOT - WHITE CHECK - <i>g.c.w.</i>	BRIDGE - 2806
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STILLWATER BRIDGE OVER STILLWATER RIVER IN THE CITY OF OLD TOWN PENOBSCOT COUNTY	
CROSS SECTIONS SHEET 5 OF 18 AUGUSTA, MAINE JAN. 1951	

53-130

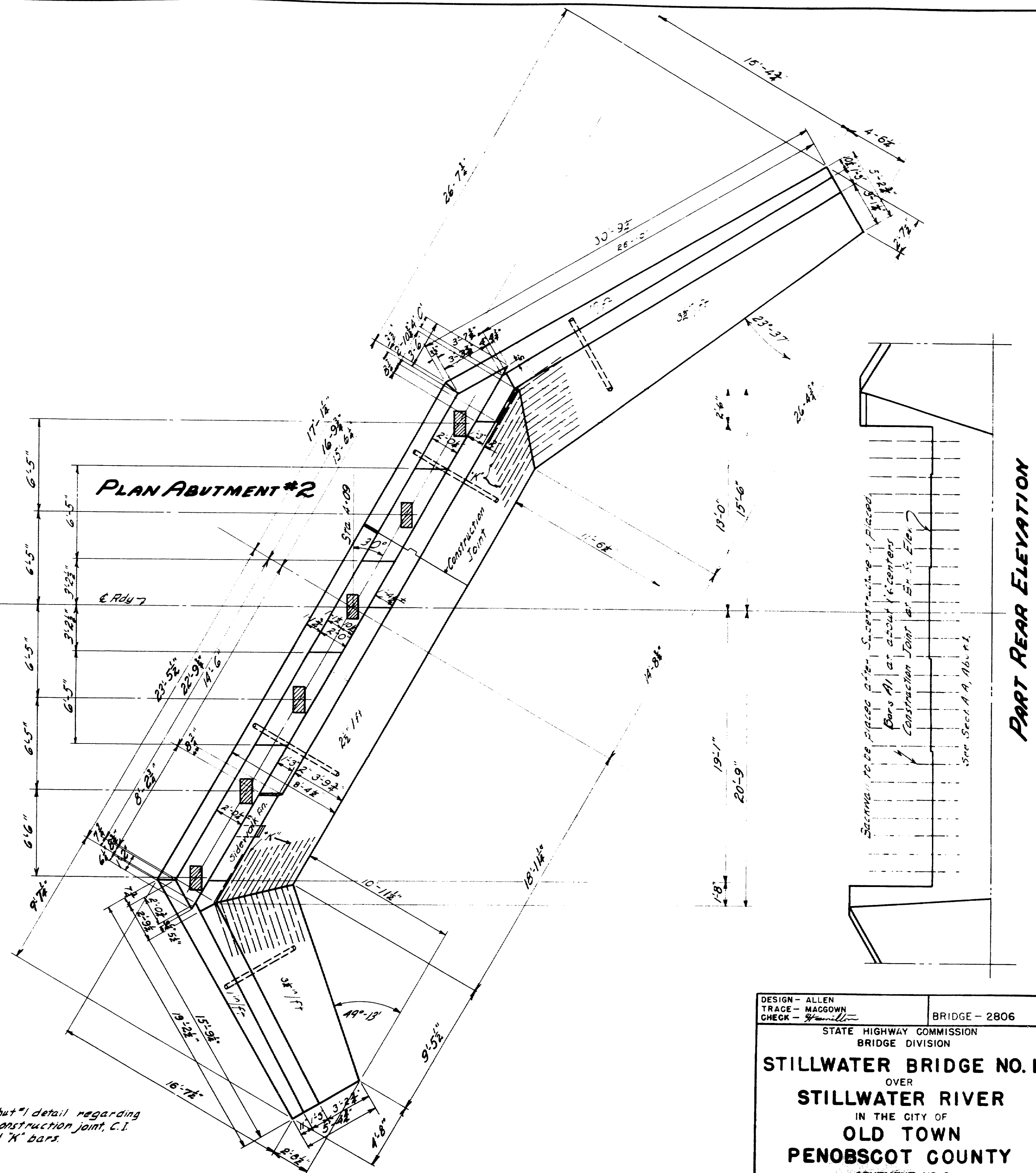
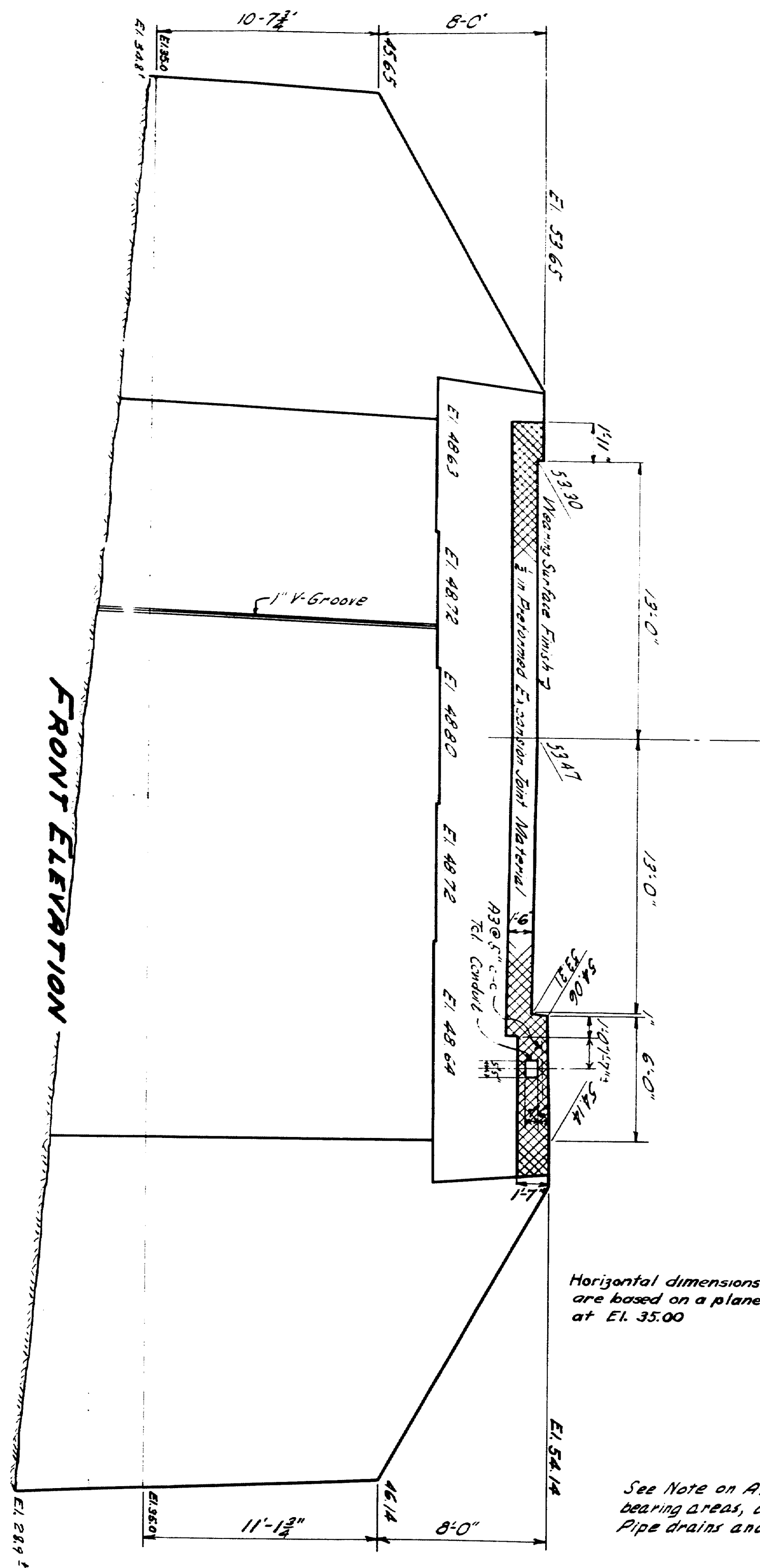


Backfill to be placed after Superstructure is placed.
 Bars A1 @ about 14" centers
 Construction joint at Backfill Elev.

Note:
 Dress shaded areas on bridge seat 1 in. larger all around than bearing plates to exact elevations shown.
 Cover the construction joints on the back side with two layers of roofing 10 in. wide. Coat the surface of the concrete and the back of the first layer applied with a suitable grade of roofing cement. Recess the area to be covered 1/2 in. The exact location of the construction joint and the 4" C.I. Pipe drains to be determined by the Engineer in the field. Place K bars at intersections of wings and backwall 6 in. from back form at 1'-6" centers vertically.

8-51 Revised for telephone conduit

DESIGN - C. ALLEN	BRIDGE - 2806
TRACE - W. CHUTE	
CHECK - J. H. HARRIS	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
STILLWATER BRIDGE NO. 1	
OVER	
STILLWATER RIVER	
IN THE CITY OF	
OLD TOWN	
PENOBSCOT COUNTY	
ABUTMENT NO. 1	
SHEET 6 OF 18	AUGUSTA, MAINE, DEC. 1950



DESIGN - ALLEN
TRACE - MAGGOWN
CHECK - *Hamilton*

BRIDGE - 2806

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

STILLWATER BRIDGE NO. 1

OVER

STILLWATER RIVER

IN THE CITY OF

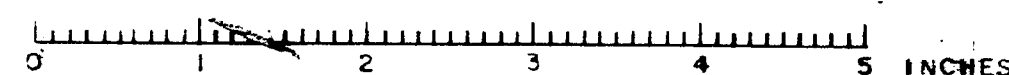
OLD TOWN

PENOBSCOT COUNTY

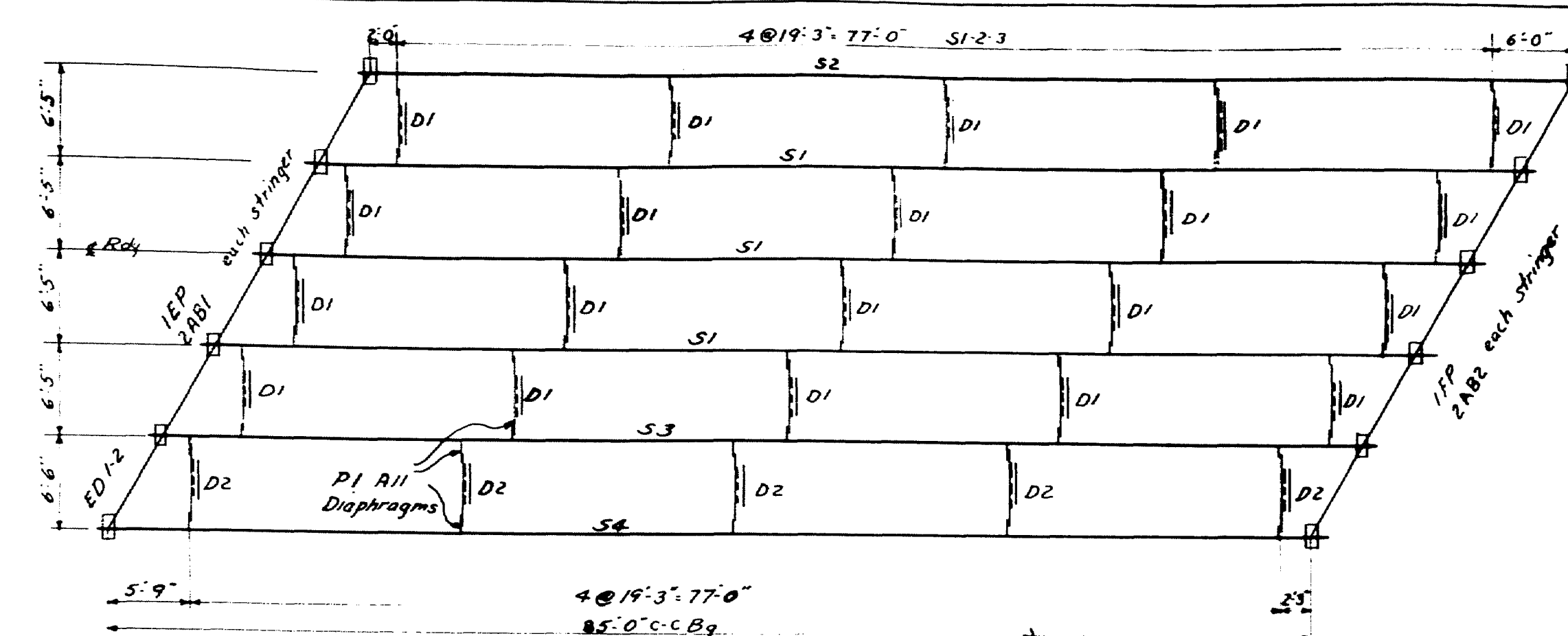
ABUTMENT NO. 2

SHEET 7 OF 16 AUGUSTA, MAINE JAN. 1931

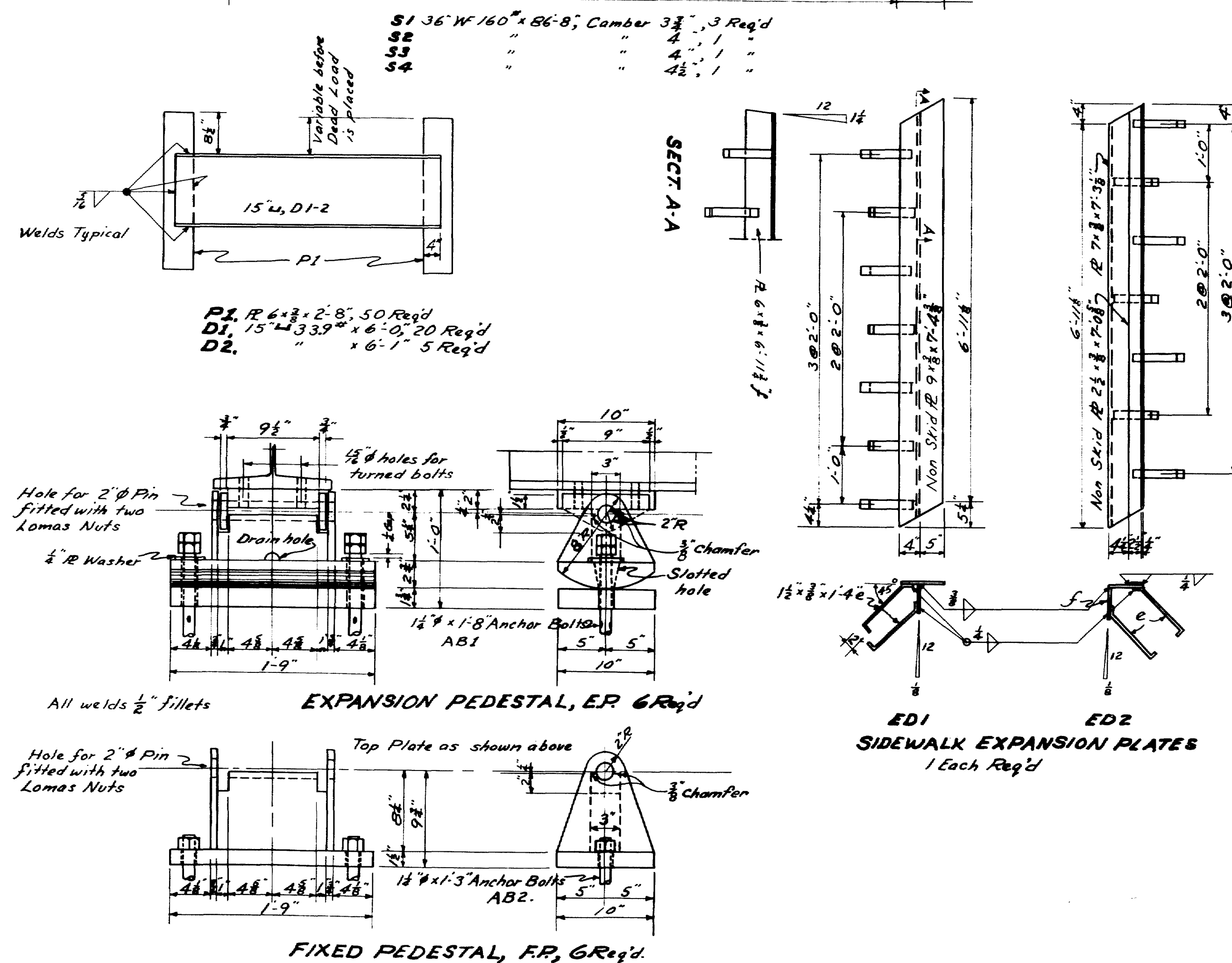
53-140



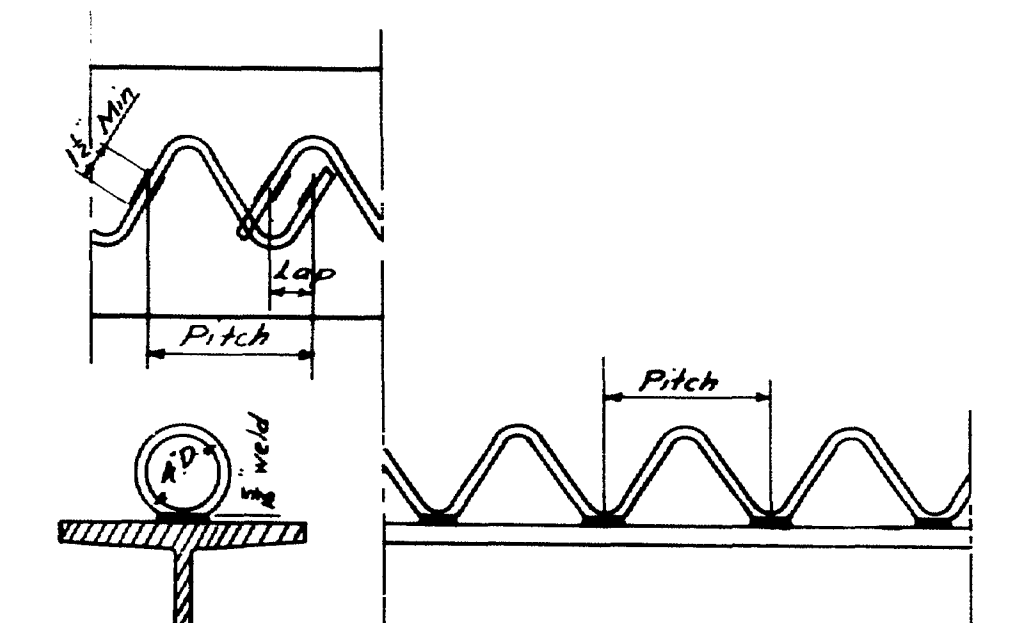
P1 TO STRINGERS.



ERECTION DIAGRAM



NOTE: Spirals to be furnished and installed under construction contract item "Spiral Reinforcement Delivered and Erected."

[illegible]

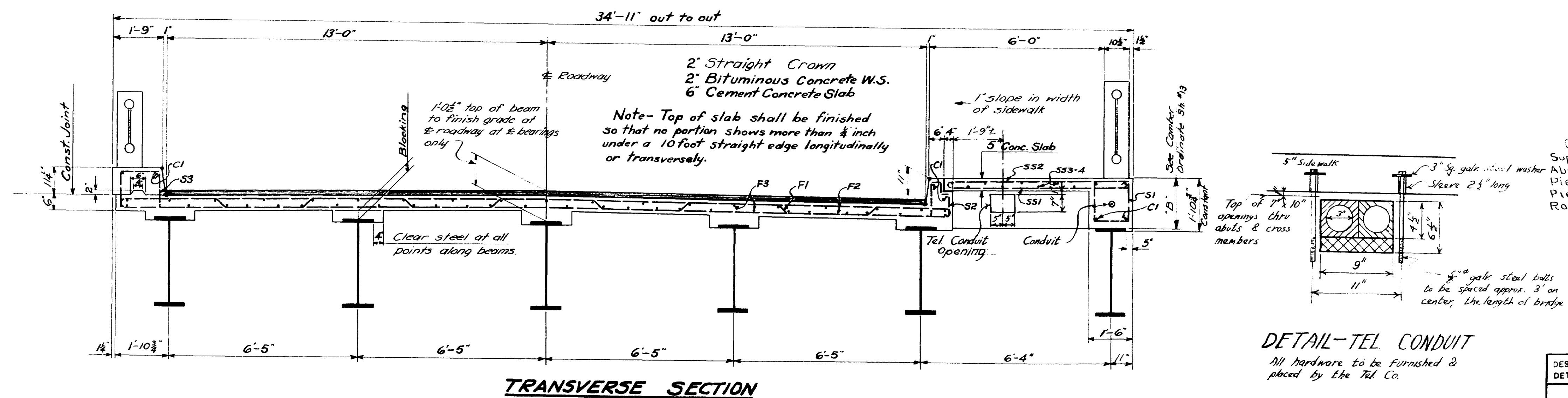
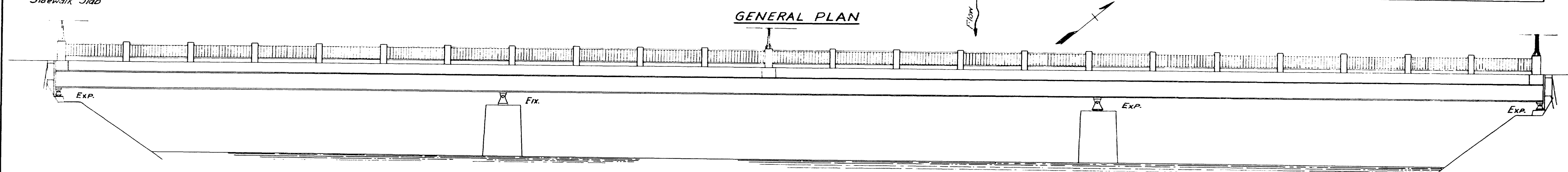
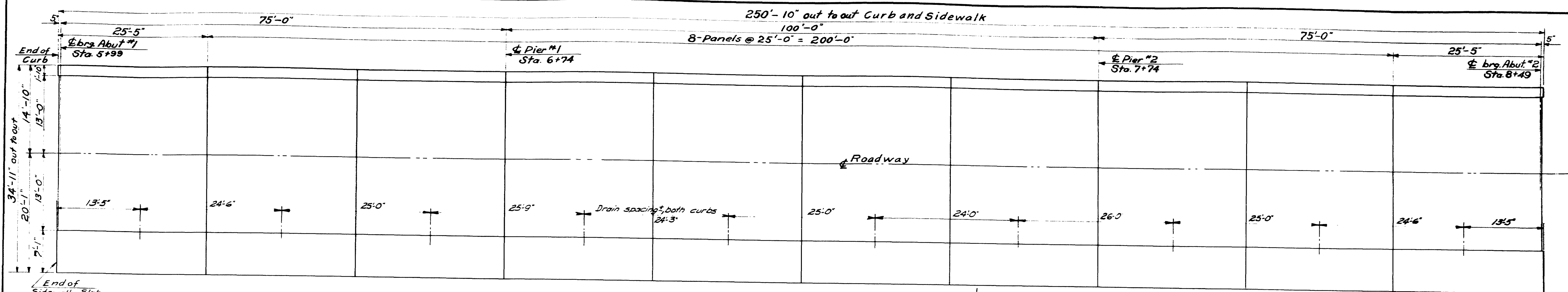
SPIRAL WELDS TO BEAM.

Hand-drawn diagram of a 4x4 grid representing a bridge deck layout. The grid is labeled with "tBg" at the top left and "t Bridge" at the top right. The columns are labeled "SP1", "SP2", "SP3", and "SP4" from left to right. The rows are labeled "SP5", "SP6", "SP7", and "SP8" from top to bottom. The grid is divided into four quadrants by a vertical line between SP2 and SP3, and a horizontal line between SP6 and SP7. The bottom-left quadrant is labeled "7' (51-52-53)" and "6' (54)". The bottom-right quadrant is labeled "t Symm. about".

SPIRAL LOCATION

*SPECIFICATIONS
Maine State Highway Commission Specifications
for Steel Highway Bridges, Nov. 1945.*

DESIGN - ALLEN	BRIDGE - 2806
TRACE - GRAY	
CHECK - <i>Hamilton</i>	
STATE HIGHWAY COMMISSION	
BRIDGE DIVISION	
STILLWATER BRIDGE NO.	
OVER	
STILLWATER RIVER	
IN THE CITY OF	
OLD TOWN	
PENOBSCOT COUNTY	
STRUCTURAL STEEL	
SHEET <i>9</i> OF <i>18</i> AUGUSTA, MAINE JAN. 192 <i>5</i>	



Loading H2O-44
 $f_s = 18,000$; $f_c = 1,000$, $n = 10$

CONCRETE CLASSIFICATION

Superstructure Slab	Class A
for Abutments	Class B
Piers, above seals	Class B
Piers, Seal concrete	Class S
Rail posts	Class Y

DETAIL-TEL. CONDUIT

All hardware to be furnished & placed by the Tel. Co.

DESIGN - HAMILTON
DETAIL - WHITE

TRACE - CHUTE
CHECK *check*

BRIDGE - 2806

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

STILLWATER BRIDGE NO. 2

OVER

STILLWATER RIVER

IN THE CITY OF

OLD TOWN

PENOBSCOT COUNTY

GENERAL PLAN

SHEET *10* OF *10* AUGUSTA, MAINE JAN. 1934

Revised for Tel. Conduit

SHEET 10 OF 10 GENERAL PLAN
AUGUSTA, MAINE JAN. 1951

53-143

PLAN

ABUTMENT #1

END ELEV.- ABUTS.

Where abutments overhang existing fill Gravel Borrow shall be placed to El. 43.18 for #1 and El. 44.43 for #2 before piles are driven.

FRONT ELEVATION

PILE PLAN

Length of pile to be driven shall be determined by soundings after excavation for abutments.

PILE CAP
24 - Required-abuts

Cover the Constr. Joints on the back with 2 layers of heavy roofing 10' wide. Coat the surface of the concrete and between layers as applied with a suitable grade of roofing cement. Recess area to be covered 2'.

CONSTR. JOINT

NOTE: Dress shaded bearing areas to exact elevations and size shown.
Backwalls to be built after structural steel is erected.

SECT.-A-A

Place reinforcing steel in bridge seats to clear anchor bolts.

PLAN

PEAR ELEVATION

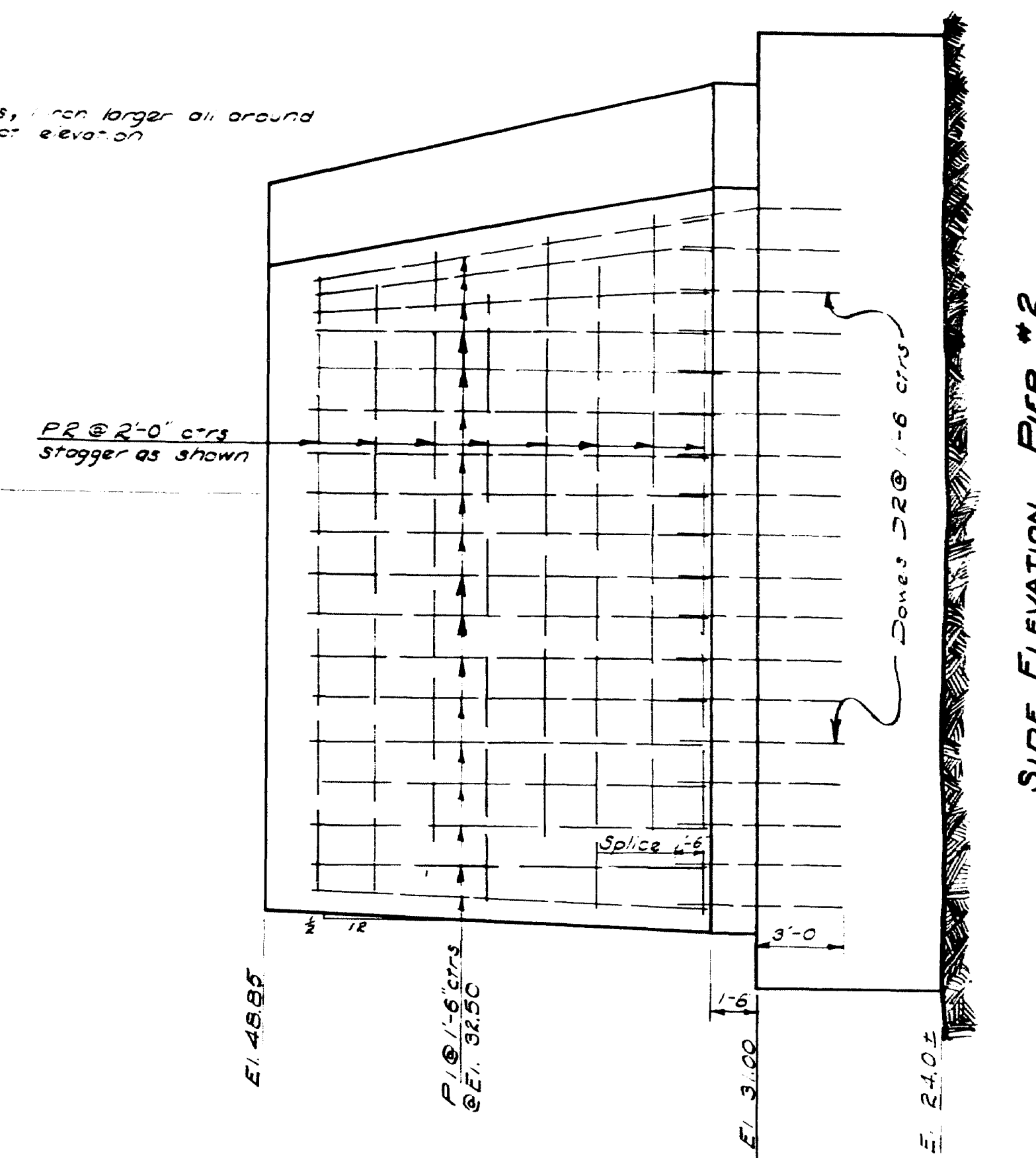
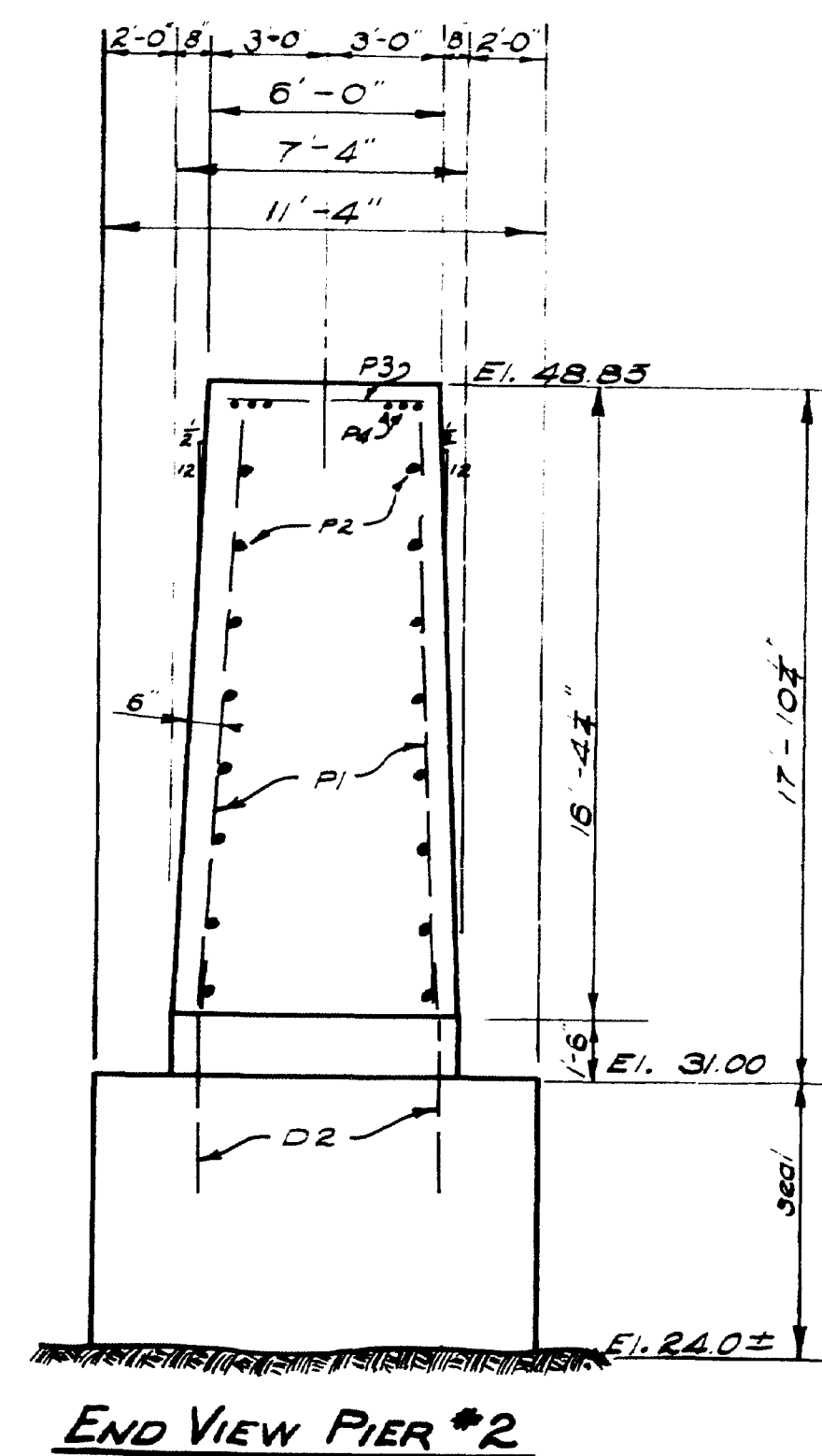
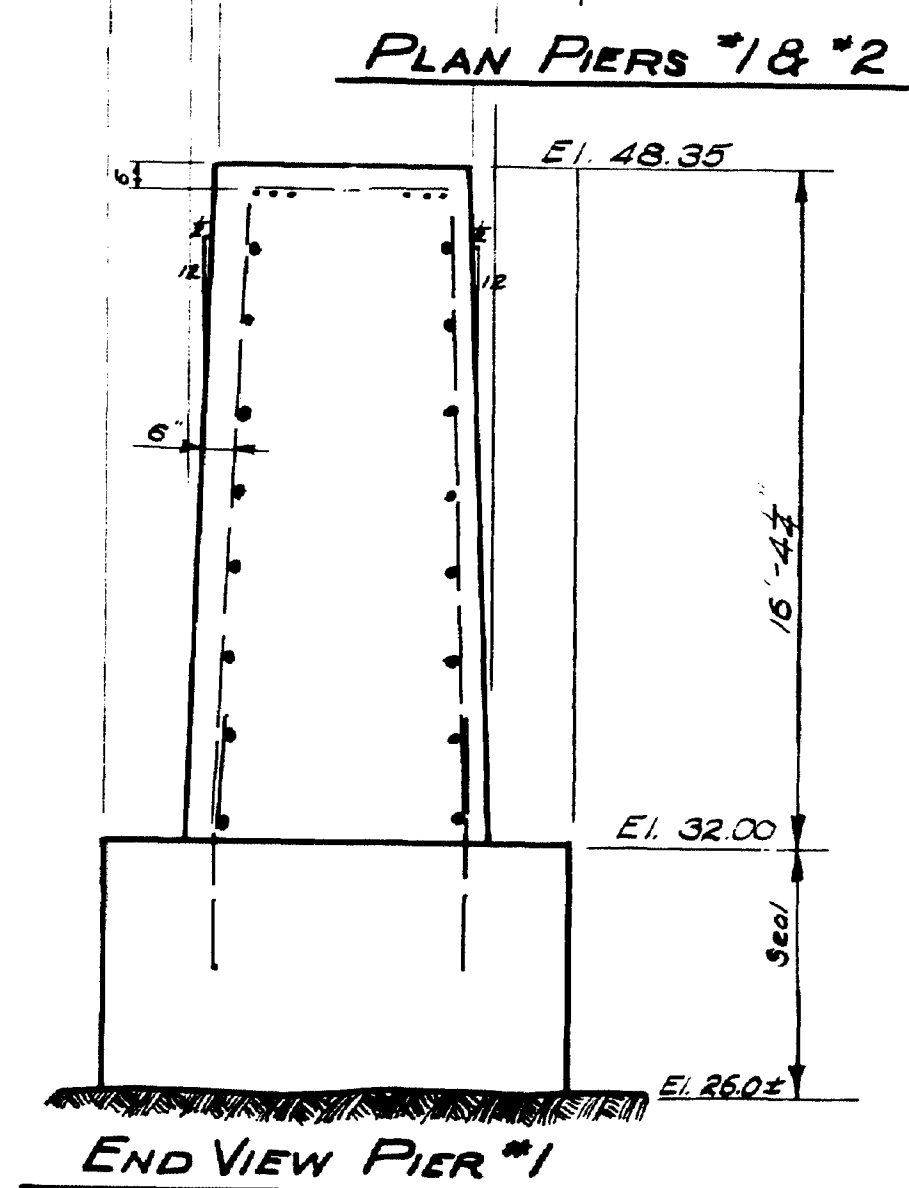
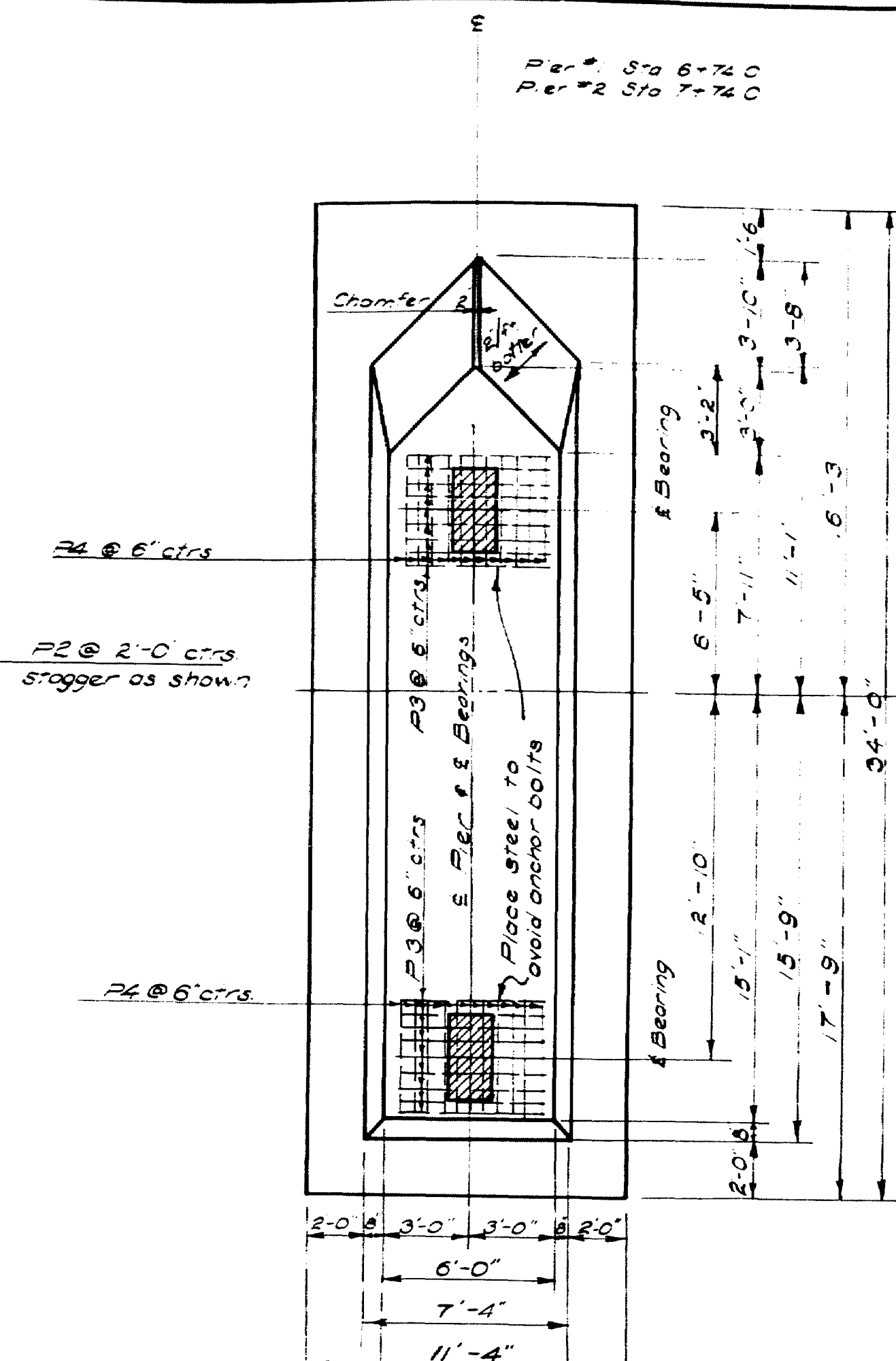
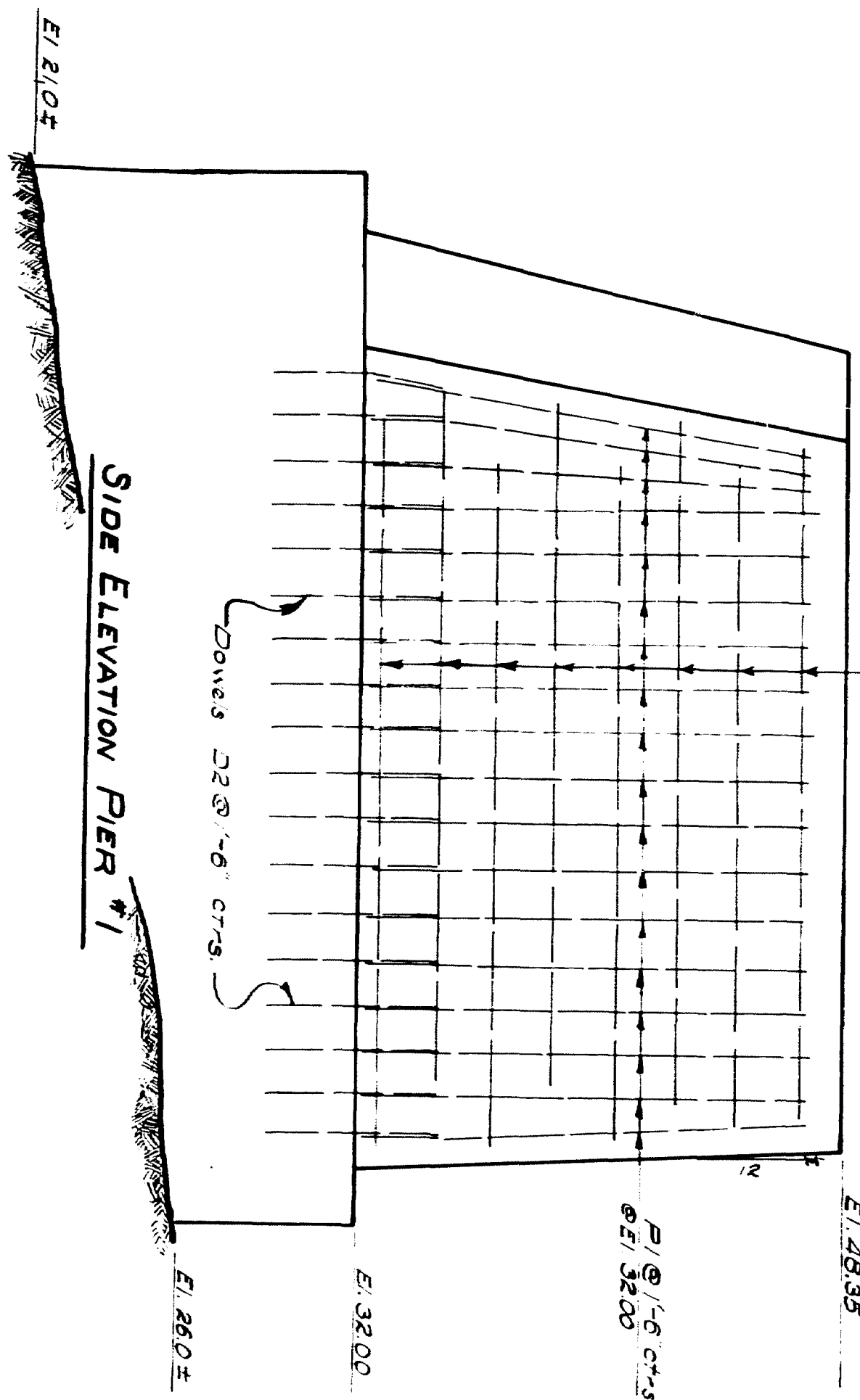
Reinforcing Steel, and pile plan is same as for Abutment #1

DESIGN - HAMILTON TRACE - CLARK
DETAIL - FLYNT CHECK - *JS* BRIDGE - 2806

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

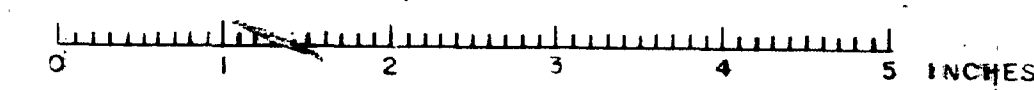
STILLWATER BRIDGE NO. 2
OVER
STILLWATER RIVER
IN THE CITY OF
OLD TOWN
PENOBSCOT COUNTY
ABUTMENTS

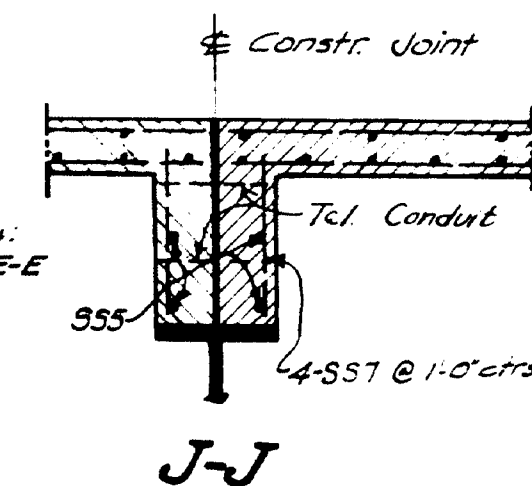
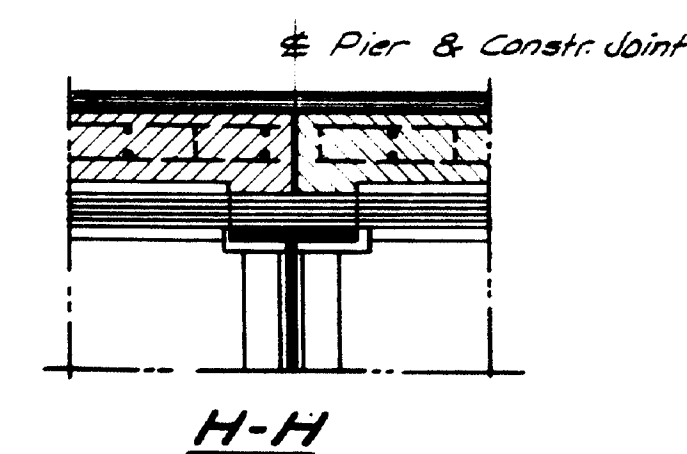
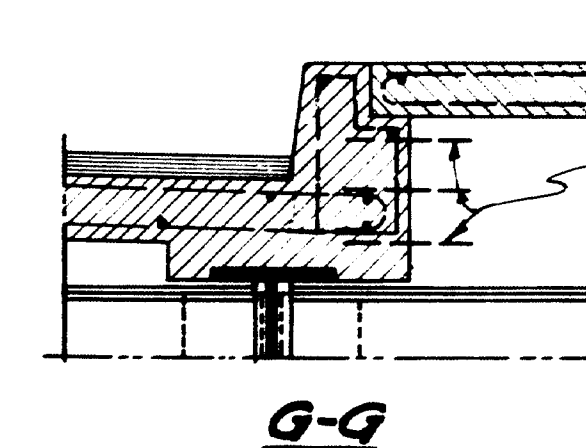
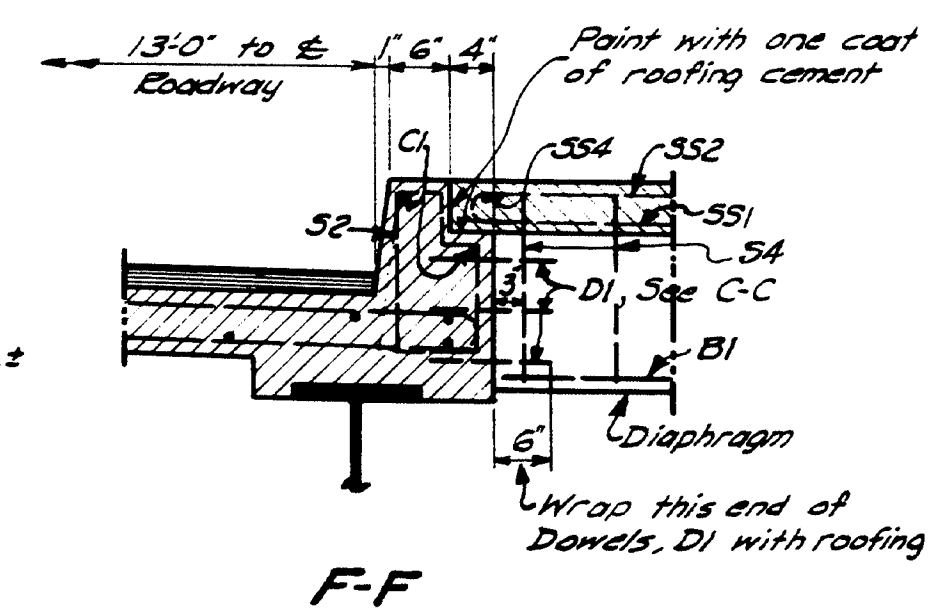
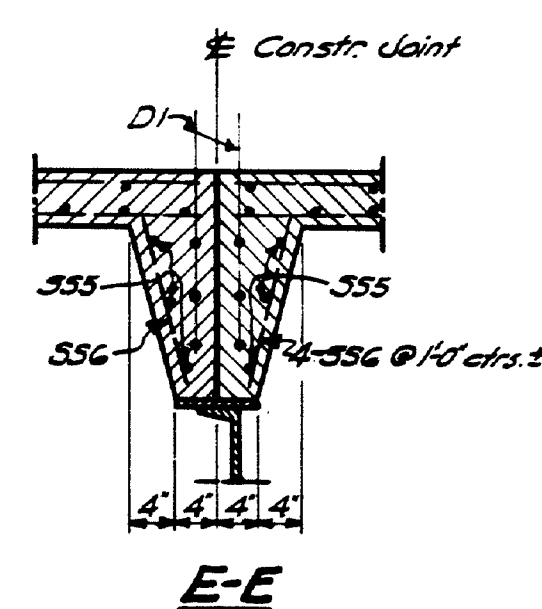
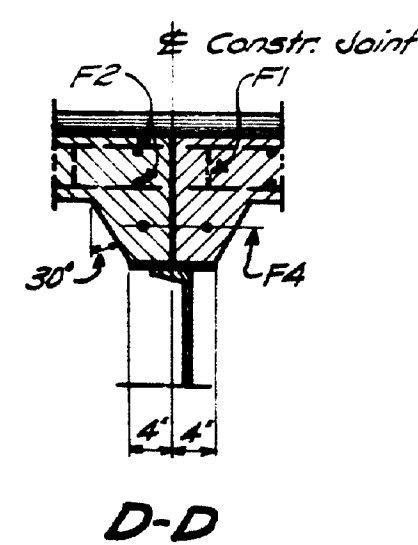
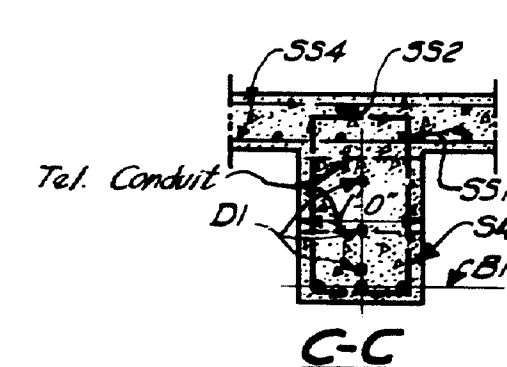
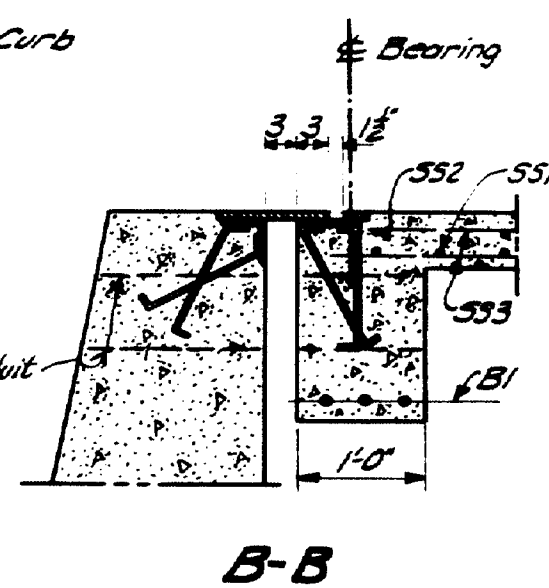
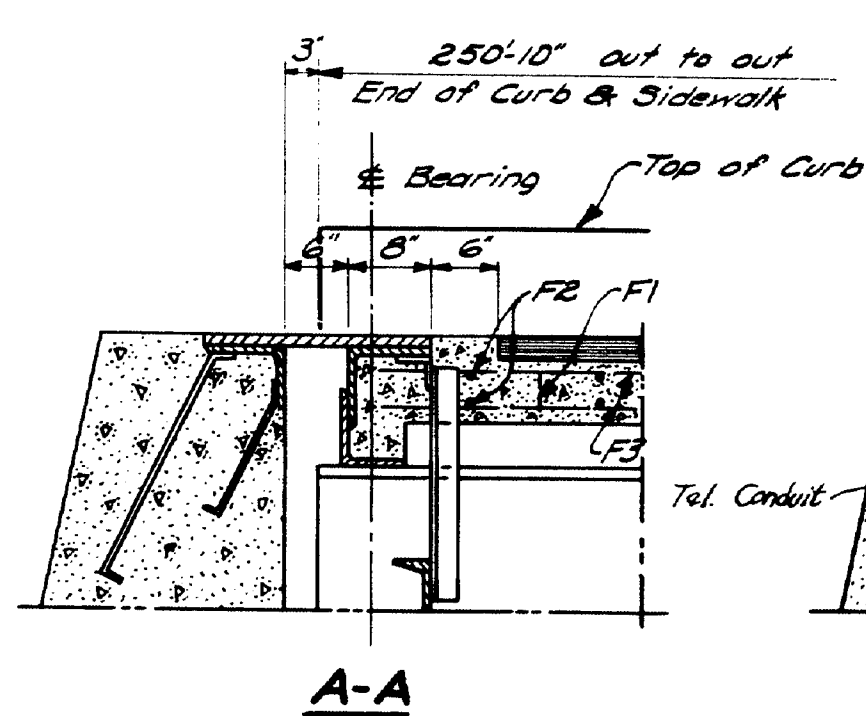
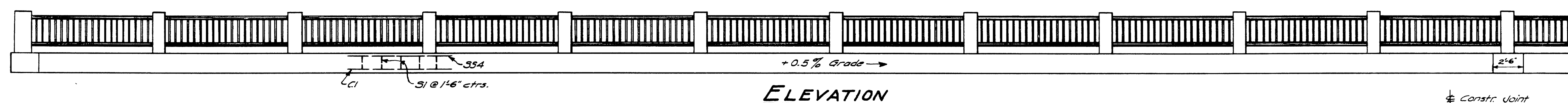
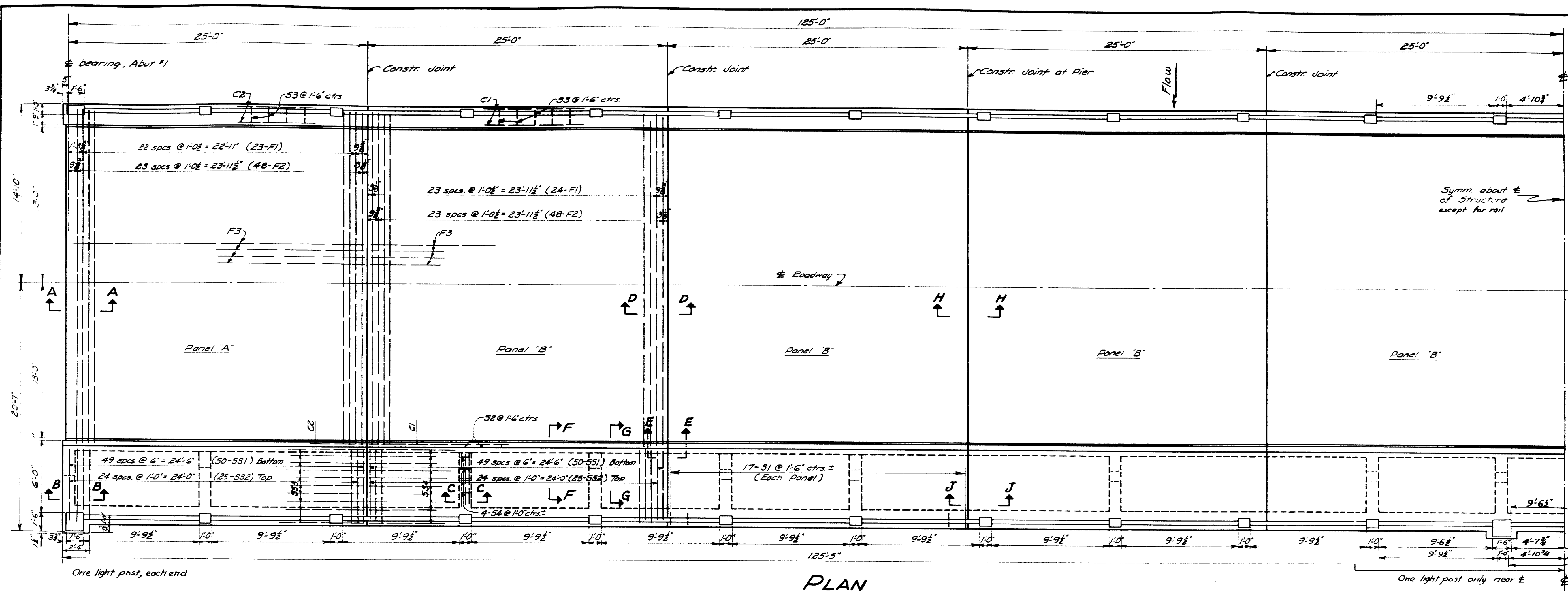
SHEET 11 OF 40 AUGUSTA, MAINE JAN. 1960



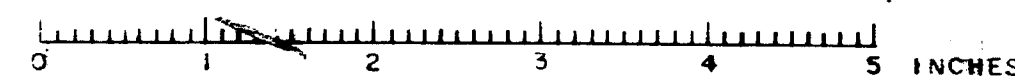
Depth of concrete seal is figured for an assumed water elevation of 40.0 and for ledge as shown. Depth of seal shd. be checked for actual conditions encountered during construction.

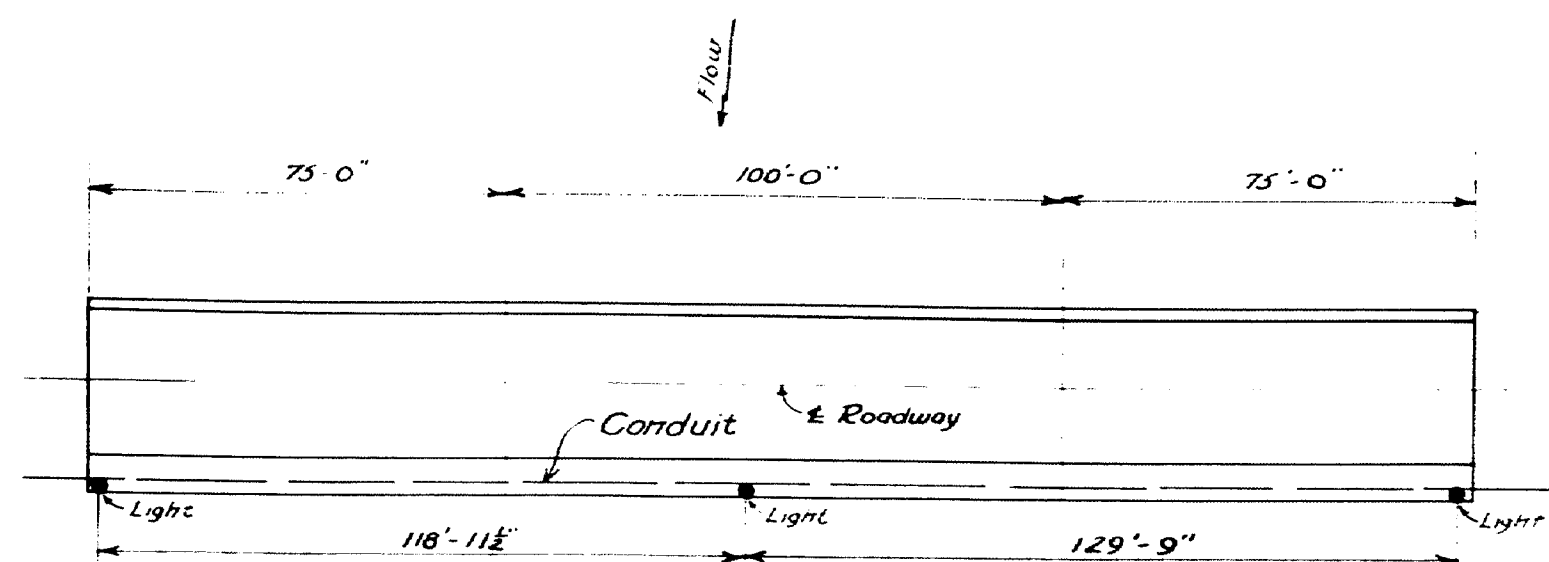
DESIGN-HAMILTON	TRACE-BAILEY	BRIDGE-2806
DETAIL-BAILEY	CHECK-2806	
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
STILLWATER BRIDGE NO. 2		
OVER		
STILLWATER RIVER		
IN THE CITY OF		
OLD TOWN		
PENOBSCOT COUNTY		
PIERS 1 & 2		
SHEET 12 OF 18 AUGUSTA, MAINE JAN 1928		





DESIGN - HAMILTON	TRACE - CLARK	BRIDGE - 2806
DETAIL - WHITE	CHECK - <i>Leach</i>	
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
STILLWATER BRIDGE NO. 1		
OVER		
STILLWATER RIVER		
IN THE CITY OF		
OLD TOWN		
PENOBSCOT COUNTY		
SUPERSTRUCTURE		
SHEET 14 OF 18	AUGUSTA, MAINE	JAN 1961



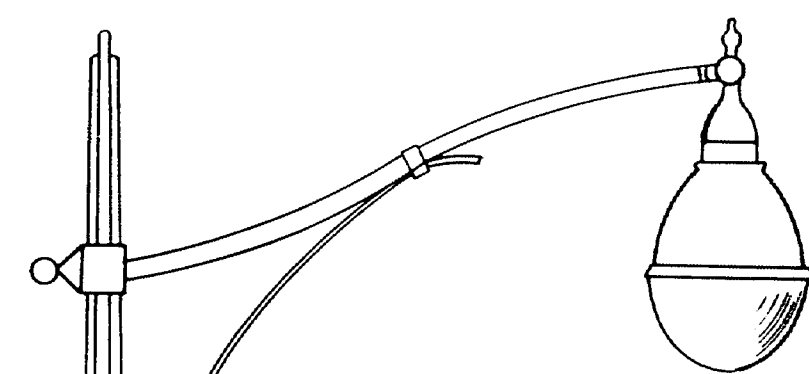


LIGHTING PLAN

Bridge #2
Also see sheet 8, Bridge #1

NOTE

Electric wiring for the lights shall not be part of this contract. However, the contractor shall furnish and install in the conduit a wire to be used in placing the permanent cable.

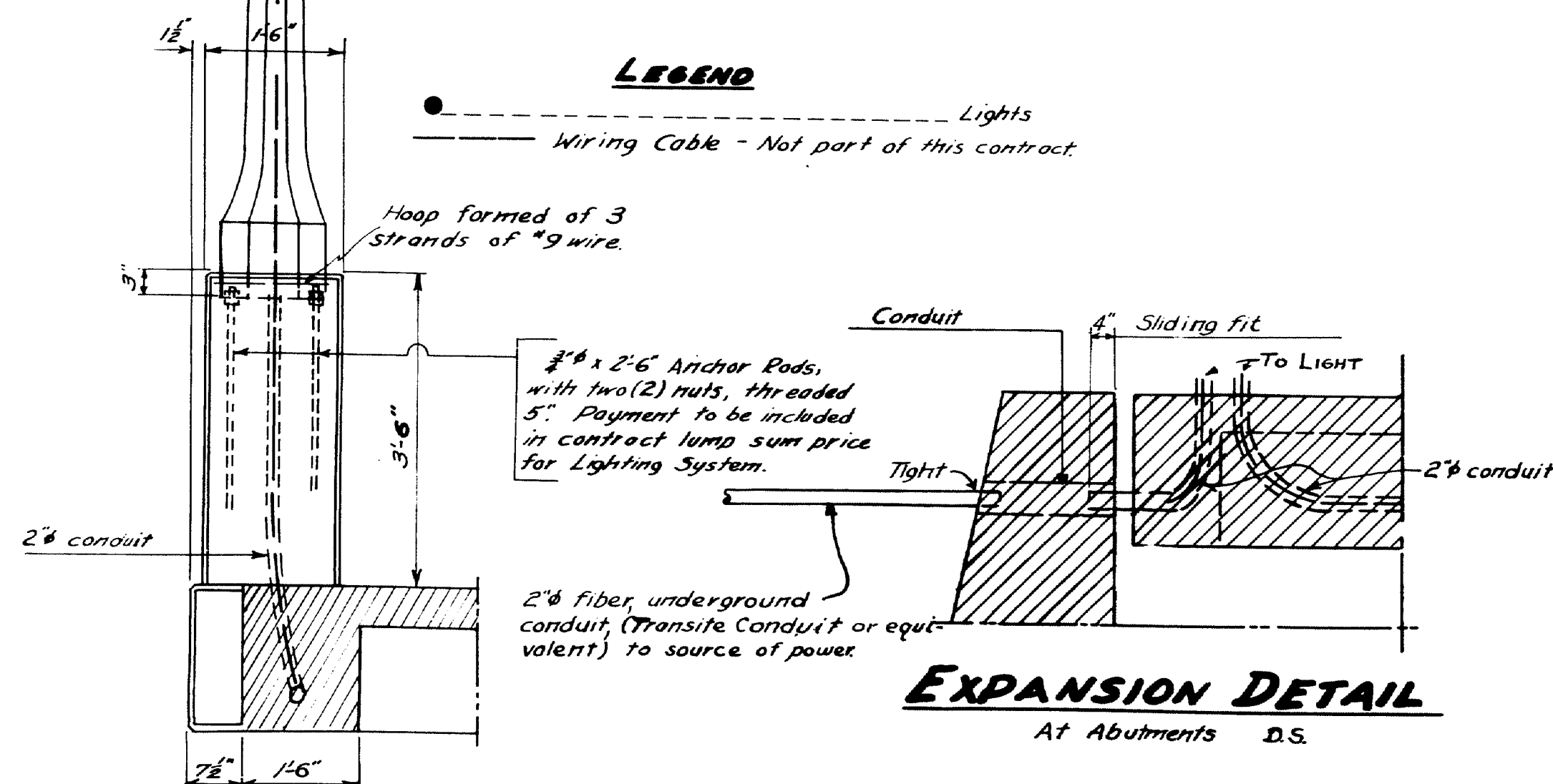


LIGHTING SYSTEM

Five Light Units Required. General Electric Material Listed (2 for Bridge #1; 3 for Bridge #2) Standards with brackets - Hy-Lite Design No. 610-A434 Incandescent Fixture-Form 79-R C-Sym-etric A4 G 142. Equivalent Standards, brackets, and fixtures may be substituted for those listed if approved by the Engineer. All Conduit to be 2" #, fiber, unless noted.

LEGEND

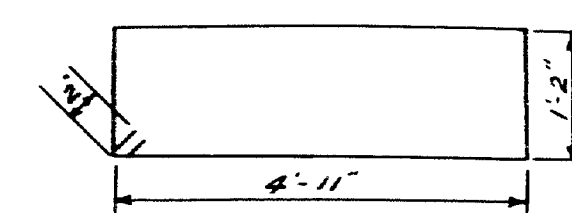
--- Lights
--- Wiring Cable - Not part of this contract



EXPANSION DETAIL

At Abutments D.S.

Abutments



A19

Straight Bars

Mark	No.	Size	Length	Location
A1	44	3/4"	19'-0"	Abutment
A2	32	3/4"	18'-10"	"
A3	38	3/4"	5'-8"	"
A4	36	3/4"	4'-3"	"
A5	8	3/4"	8'-0"	" Wings
A6	8	3/4"	20'-2"	" Backwalls
A7	8	3/4"	23'-0"	"
A8	24	3/4"	24'-2"	"
A9	8	3/4"	7'-0"	" Wings
A10	8	3/4"	5'-0"	" Wings
A11	8	3/4"	7'-0"	"
A12	92	3/8"	6'-9"	" Backwall
A13	8	3/4"	11'-7"	" Wings
A14	8	3/4"	10'-7"	"
A15	8	3/4"	9'-6"	"
A16	8	3/4"	8'-6"	"
A17	8	3/4"	7'-5"	"
A18	8	3/4"	6'-2"	"
A20	8	3/4"	2'-0"	" Over 7"x10" Tel Conduit

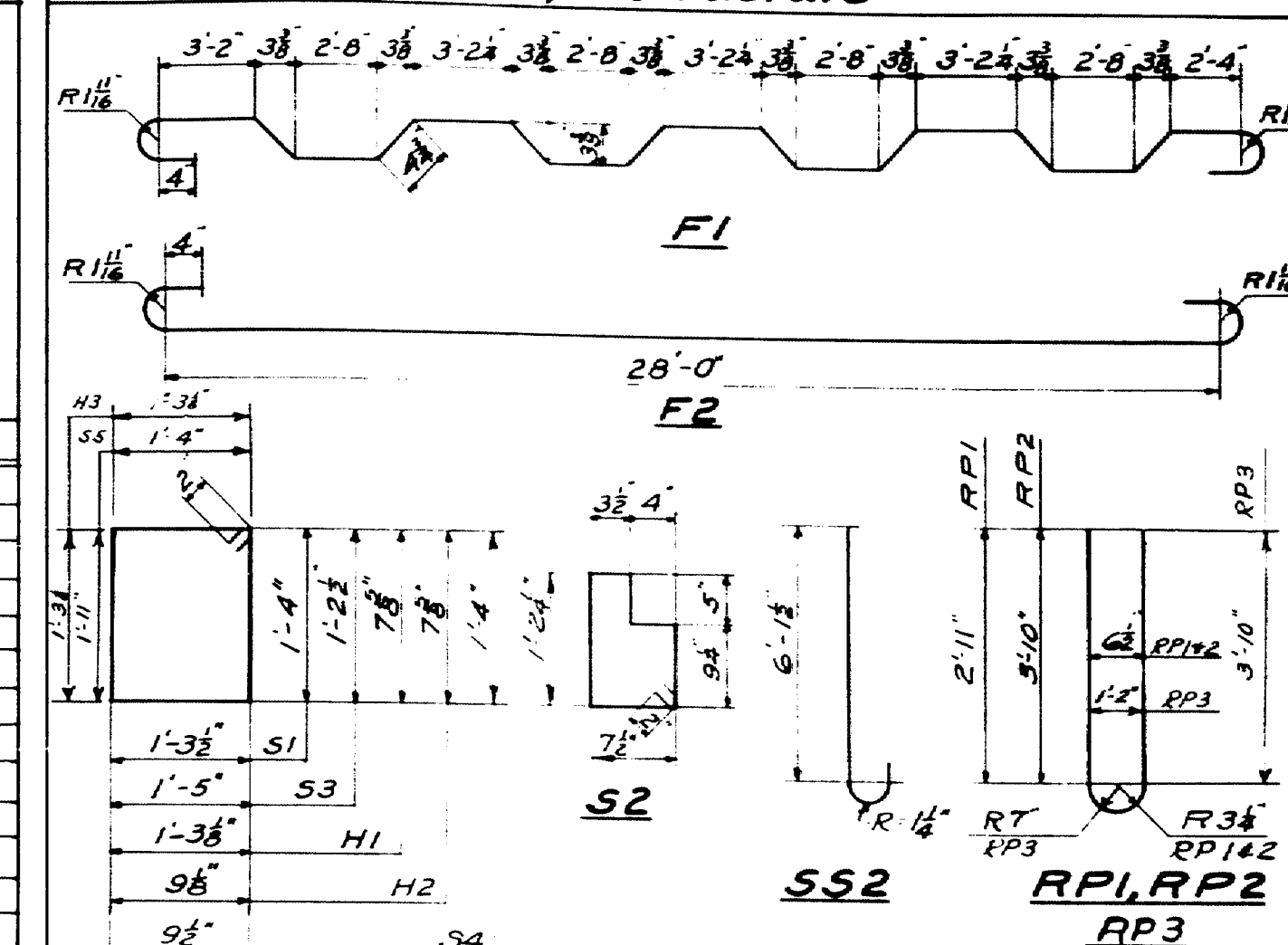
Bent Bars

Mark	No.	Size	Length	Location
A19	24	3/4"	12'-6"	Around Piles

PIERS

Mark	No.	Size	Length	Location
P1	72	3/4"	16'-0"	Pier Shaft
P2	32	3/4"	22'-0"	"
P3	36	3/4"	5'-0"	Bridge Seat Mats
P4	44	3/4"	4'-0"	"
D2	72	3/4"	6'-0"	Pier Seal

Reinforcing Steel Superstructure



SI-S3-S4-H1-H2-S5-H3

Bent Bars

Mark	No.	Size	Length	Location
F1	238	3/8"	30'-5 1/2"	Roadway Slab
F2	480	3/8"	29'-6 1/2"	"
S1	170	1/2"	29'-7"	Sidewalk Fascia Beam
S2	170	1/2"	3'-11 1/2"	Curb Sidewalk Side
S3	170	1/2"	5'-7"	" Roadway
H1	8	3/8"	4'-1"	US Rail Posts at Abuts.
H2	172	3/8"	3'-1"	" " Intermediate
SS2	250	1/2"	6'-9 1/2"	Sidewalk Slab
RP1	48	3/8"	6'-8"	All Rail Posts Roadway Side
RP2	42	3/8"	8'-6"	Inter. " " Sidewalk "
S4	64	3/8"	4'-5"	Sidewalk Diaphragm
S5	6	3/8"	6'-10"	Sidewalk Slab at Lights
H3	12	3/8"	5'-4 1/2"	Rail Posts at Lights
RP3	6	3/8"	9'-6"	" " "

Straight Bars

Mark	No.	Size	Length	Location
F3	450	1/2"	24'-9"	Roadway Slab
F4	14	1/2"	25'-10"	" " at Const.Joint
B1	54	3/8"	5'-0"	Diaphragms
D1	144	3/8"	1'-0"	Dowels Curb to Diaphragm
C1	48	1/2"	24'-9"	Curbs-Int. panels
SS1	500	1/2"	6'-3"	Sidewalk Slab
SS3	20	1/2"	25'-2"	"
SS4	80	1/2"	24'-9"	"
SS5	50	1/2"	5'-10"	At Sidewalk Const.Joint
SS6	56	1/2"	1'-5"	" " " "
SS7	16	1/2"	1'-3"	" " " "
C2	12	1/2"	25'-2"	Curbs-End panels
SS8	6	1/2"	2'-2"	Sidewalk Slab at Lights

NOTE: All reinforcing steel bars to conform to ASTM Specifications A 305-49.

DESIGN-HAMILTON, TRACE-W.J.M.
DETAIL-W.J.M. CHECK [initials] BRIDGE - 2806

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

STILLWATER BRIDGE NO. 2

OVER
STILLWATER RIVER

IN THE CITY OF

OLD TOWN

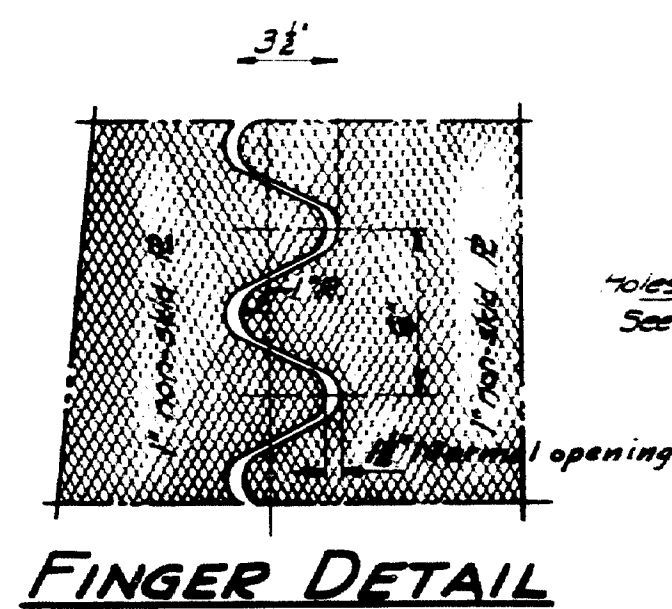
PENOBSCOT COUNTY

REINFORCING STEEL, LIGHTING DETAILS

SHEET 15 OF 18 AUGUSTA, MAINE FEB. 1961

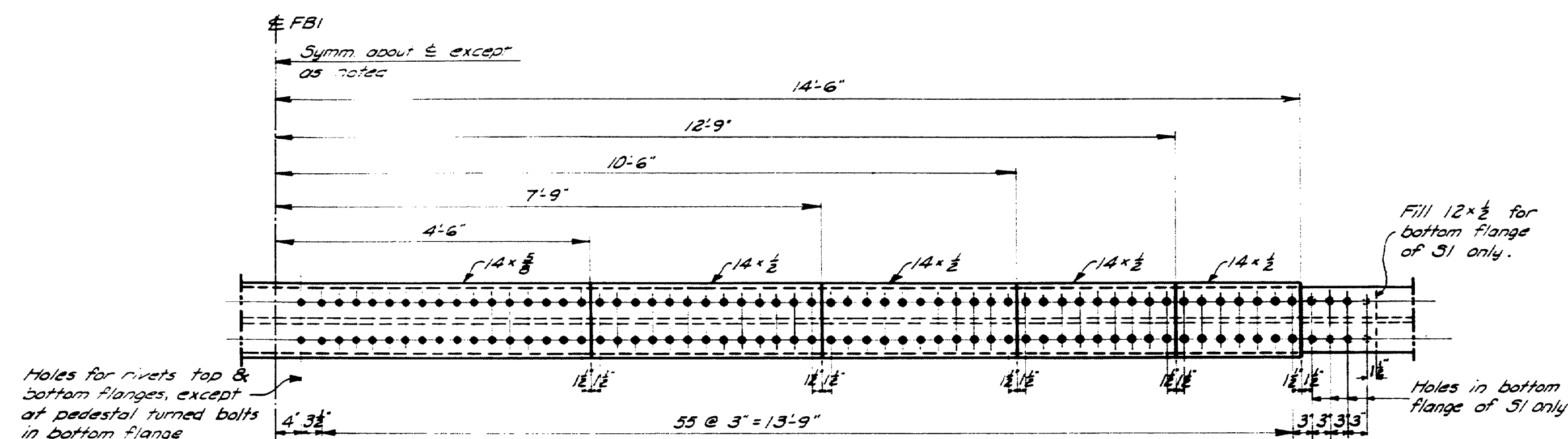
Revised for Tel Conduit

53-148



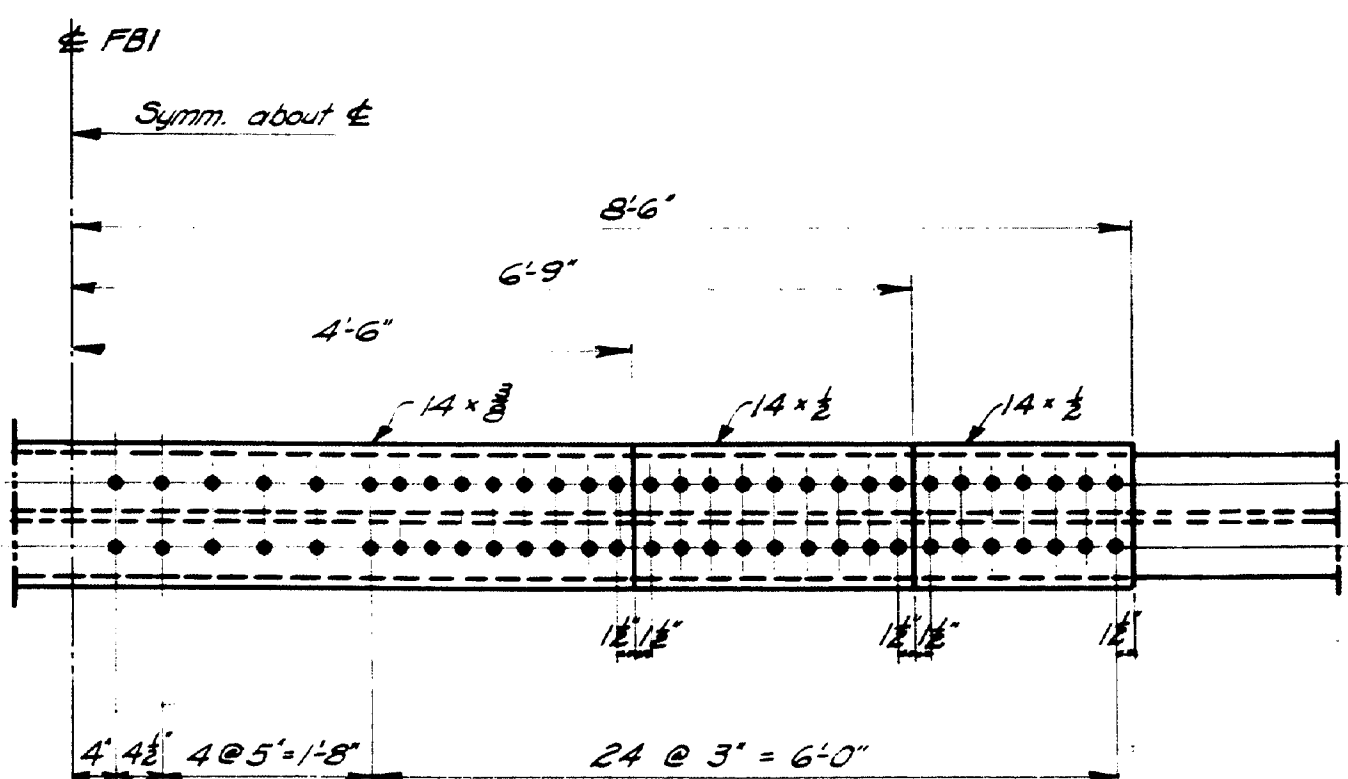
FINGER DETAIL

S1, S3 to FBI
With Pedestal



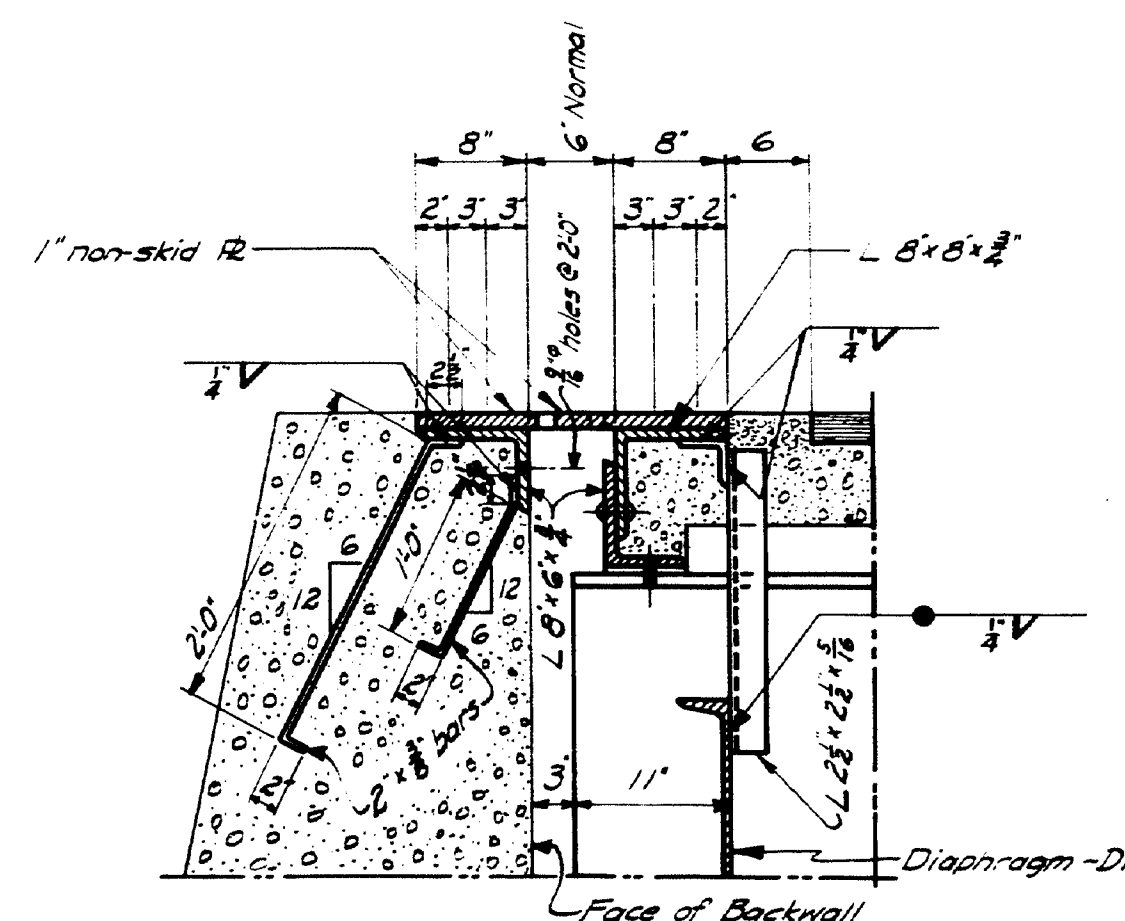
COVER PLATES FOR S1-S3

Note: Top & bottom flanges alike except as noted.

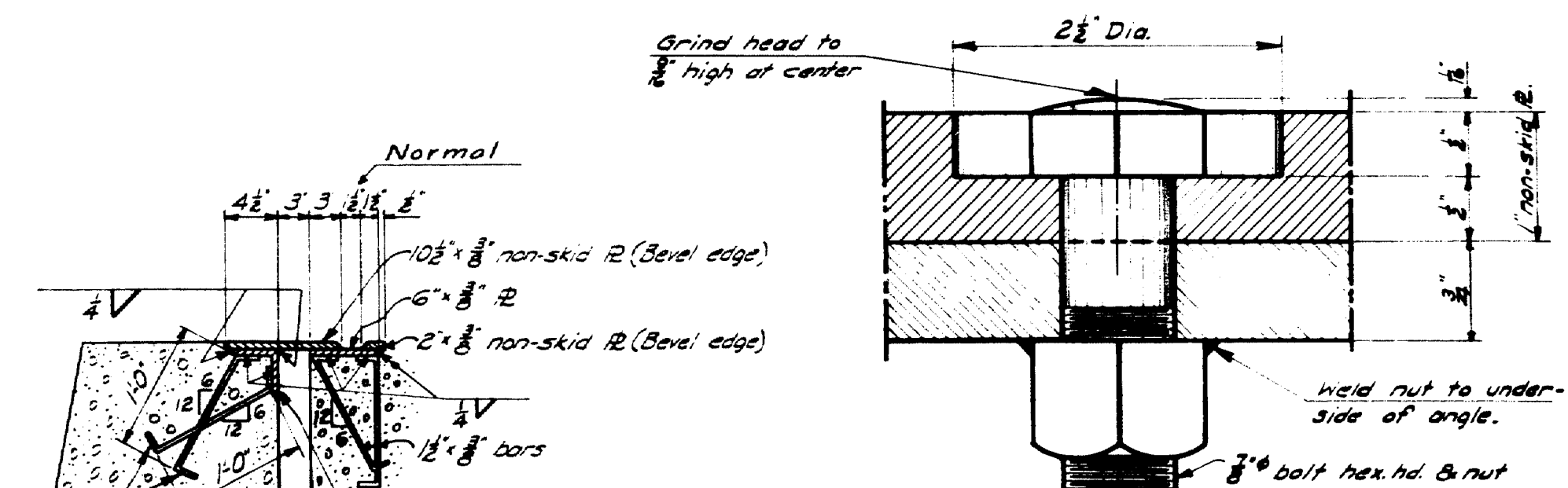


COVER PLATES FOR S2-S4

NOTE: Top & bottom flanges alike

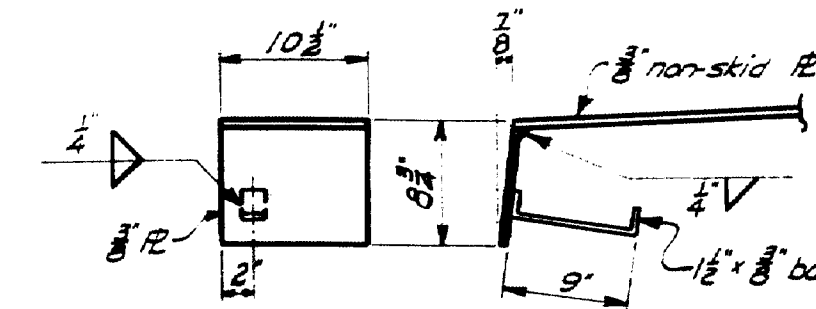


SECT. B-B



DETAIL "A"

SECT. C-C



CURB PLATE

DESIGN - HAMILTON	TRACE - CLARK	BRIDGE - 2806
DETAIL - WHITE	CHECK - <i>Smith</i>	

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

STILLWATER BRIDGE NO. 2

OVER
STILLWATER RIVER

IN THE CITY OF
OLD TOWN
PENOBSCOT COUNTY

EXPANSION & COVER PLATES

SHEET *17* OF *22* AUGUSTA, MAINE JAN. 1951

