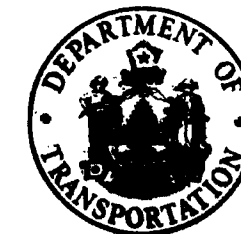


STATE OF MAINE DEPARTMENT OF TRANSPORTATION



BUREAU OF HIGHWAYS PORTLAND

CUMBERLAND COUNTY
MAINE FEDERAL AID INTERSTATE

PROJECT NO. IG-295-3(73) 48

TOTAL LENGTH 0.029 MILES

I-295 OVER

PORTLAND TERMINAL RAILROAD

*As Built 1972-74
P.L.A.*

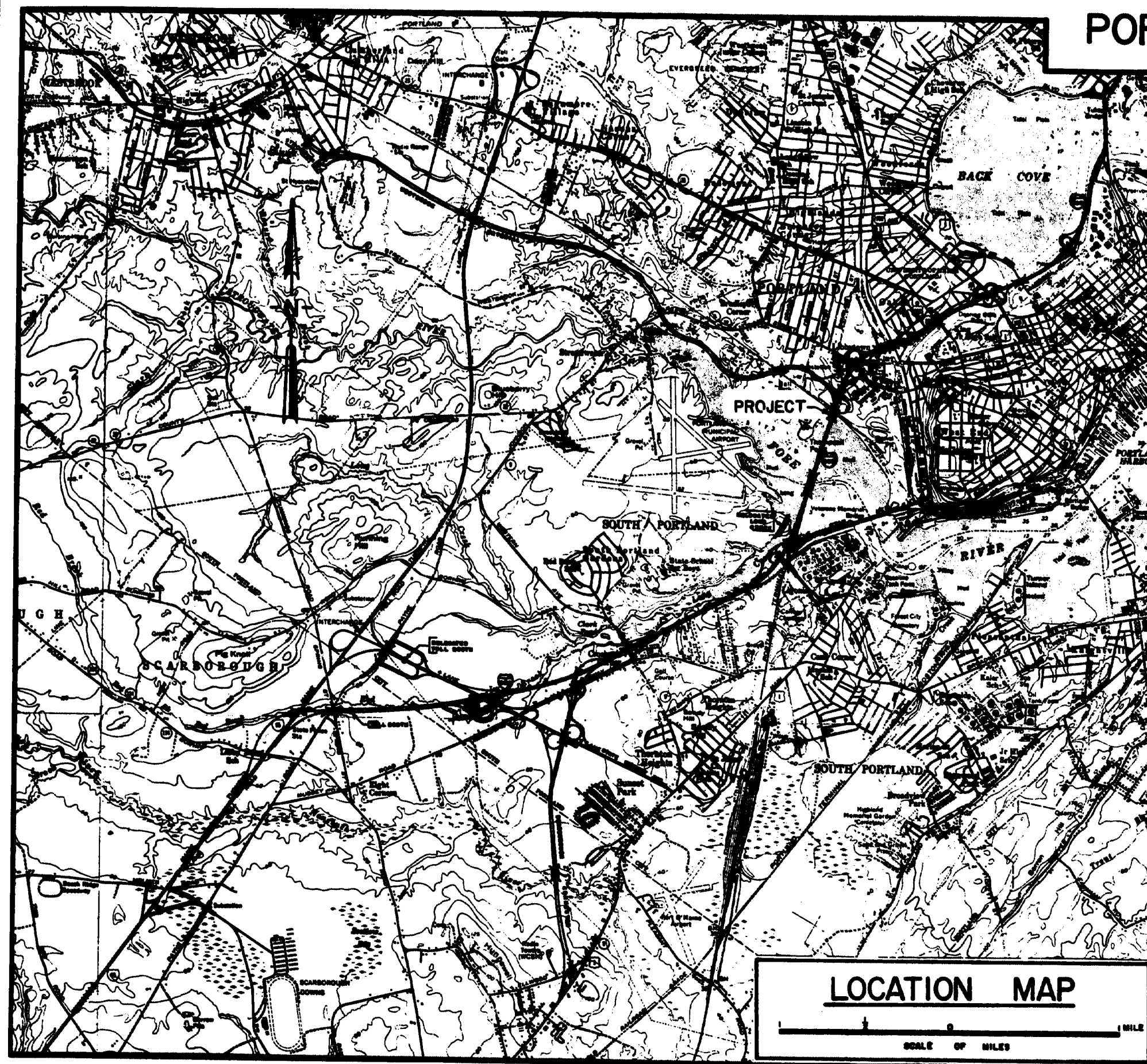
F.H.W.A. DIST. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IG-295-3(73)48	1	36

CONVENTIONAL SIGNS

COUNTY LINES	---	TRAVELLED WAY - PROPOSED	=====
TOWN LINES	---	UNDERGROUND UTILITIES - EXISTING	----
PROPERTY LINES	---	UNDERGROUND UTILITIES - PROPOSED	----
R/W LINES - EXISTING	---	RAILROAD - SINGLE TRACK	=====
R/W LINES - NEW - ACCESS CONTROL	---	RAILROAD - DOUBLE TRACK	=====
R/W LINES - NEW - NO ACCESS CONTROL	---	UTILITY POLE - EXISTING	----
CULVERT - EXISTING	---	UTILITY POLE - JOINT OCCUPANCY	----
CULVERT - PROPOSED	---	PROPOSED UTILITY POLE - TEMPORARY	----
CURBING - EXISTING	---	PROPOSED UTILITY POLE - PERMANENT	----
CURBING - PROPOSED	---	TREES	----
TRAVELLED WAY - EXISTING	=====	WOODS	=====

INDEX OF SHEETS

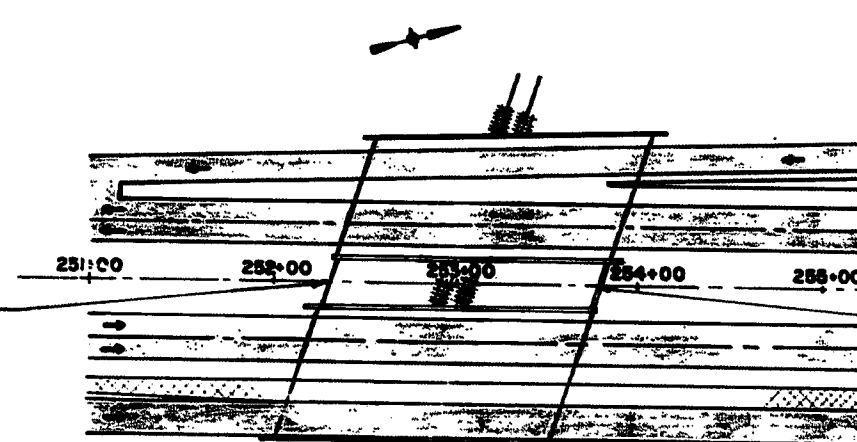
SHEET	CONTENTS
1	TITLE SHEET
2	ESTIMATED QUANTITIES
3	GENERAL PLAN
4-7	SOILS
8-28	STRUCTURAL PLANS
29-30	CROSS-SECTIONS, P.T.R.R.
31	STANDARD DETAILS, BD 104-71.
32	" " BD 106-69
33	" " BD 113-72
34	" " ⑥
35	" " ⑦
36	" " ⑧



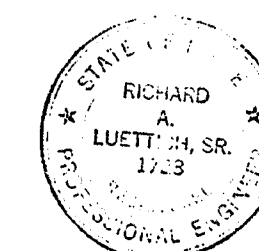
TRAFFIC DATA

A.D.T.	1974	27150
A.D.T.	1994	38780
D.M.V.		3878
T. (% A.D.T.)		6
D. (%)		55
V.		50 MPH
P.S.D. (%)		N/A
18 KIPS		N/A

RESIN PROJECT
BACK OF BACKWALL
STA. 252+27.57



END PROJECT
BACK OF BACKWALL
STA. 255+01.63



APPROVED. Richard A. Luettich, Sr. DATE 2-19-73
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
COMMISSIONER
Richard A. Luettich, Sr. DATE 2-19-73
CHIEF ENGINEER & BUREAU DIRECTOR

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1
APPROVED: _____
DIVISION ENGINEER DATE

NOTE
ALL WORK CONTEMPLATED UNDER THIS CONTRACT
SHALL BE GOVERNED BY AND IN CONFORMITY WITH
THE STANDARD SPECIFICATIONS (REVISION OF
1968) AND SUPPLEMENTS THERETO, EXCEPT AS MOD-
IFIED ON THE PLANS AND IN THE SPECIAL PROVIS-
IONS.

150-159

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	Common Excavation	325	C.Y.
203.25	Granular Borrow	125	C.Y.
206.08	Str. Earth Excav. - Abuts. & Ret. Walls	1080	C.Y.
206.10	Str. Earth Excav. - Piers	675	C.Y.
304.10	Aggregate Subbase Course - Gravel	150	C.Y.
301.22	Steel H-beam Piles 42 lbs./ft.	3,040	L.F.
301.23	Steel H-beam Piles 57 lbs./ft.	9,465	L.F.
302.21	Structural Concrete, Abuts. & Retaining Walls	550	C.Y.
302.23	Structural Concrete, Piers	413	C.Y.
302.26	Structural Concrete, Roadway & Sidewalk Slabs on Steel Bridges	1	L.S.
302.31	Structural Concrete, Approach Slabs	1	L.S.
303.12	Reinforcing Steel, Fab. & Delivered	244,270	Lb.
303.13	Reinforcing Steel, Placing	244,270	Lb.
304.70	Structural Steel, Fab. & Delivered	1	L.S.
304.71	Structural Steel, Erection	1	L.S.
305.08	Shear Connectors	1	L.S.
306.14	Field Painting, Structural Steel	1	L.S.
307.08	Bridge Railing	660	L.F.
* 308.10	Membrane Waterproofing	2,060	S.Y.
513.20	Aggregates For Slope Protection	2,250	S. Y.
513.21	Bituminous Material For Slope Protection	4,500	Gallon
514.06	Curing Box for Concrete Cylinders	1	Each
515.20	Protective Coating for Concrete Surfaces	440	S.Y.
609.13	Vertical Bridge Curb - Type I	640	L.F.
609.17	Sloped Bridge Curb - Type I	308	L.F.
618.15	Temporary Seeding	10	Lb.
619.09	Hay Mulch	3	Unit
629.05	Labor, Straight Time	10	M. Hr.
631.12	All Purpose Excavator (including op.)	10	Hour
631.172	Truck - large (inc. op.)	10	Hour

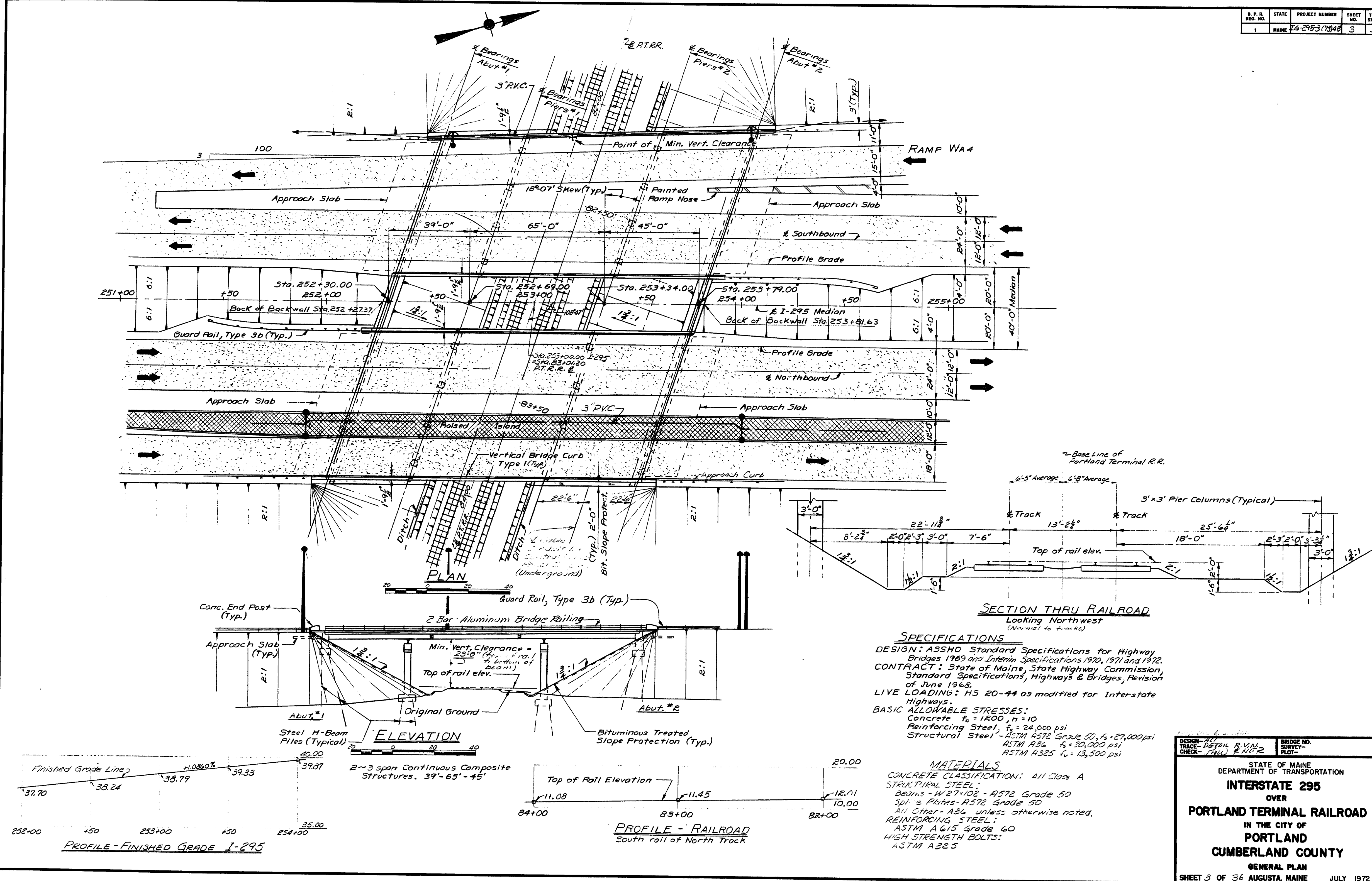
ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
638.01	Embedded Work in Structures	1	L.S.
639.08	Field Office, Type A	1	Each
657.201	Seed and Application, Method A	1	Unit
660.21	On-the-Job Training (Bid)	1000	M.Hr.

* Work to be done by others

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
QUANTITIES
SHEET 2 OF 36 AUGUSTA, MAINE JULY 1972

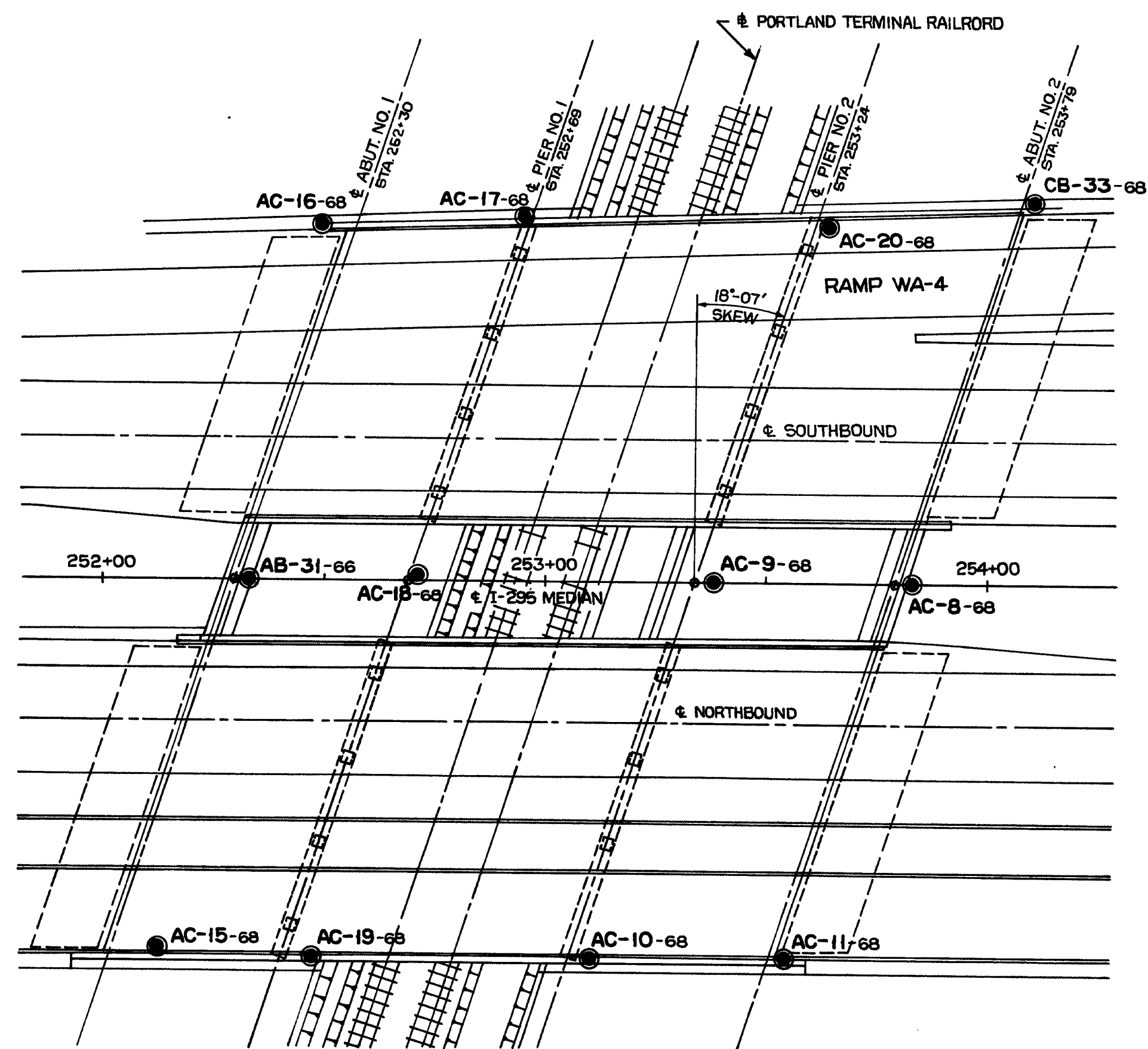
150-160

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	16-2953 (73) 48	3	3

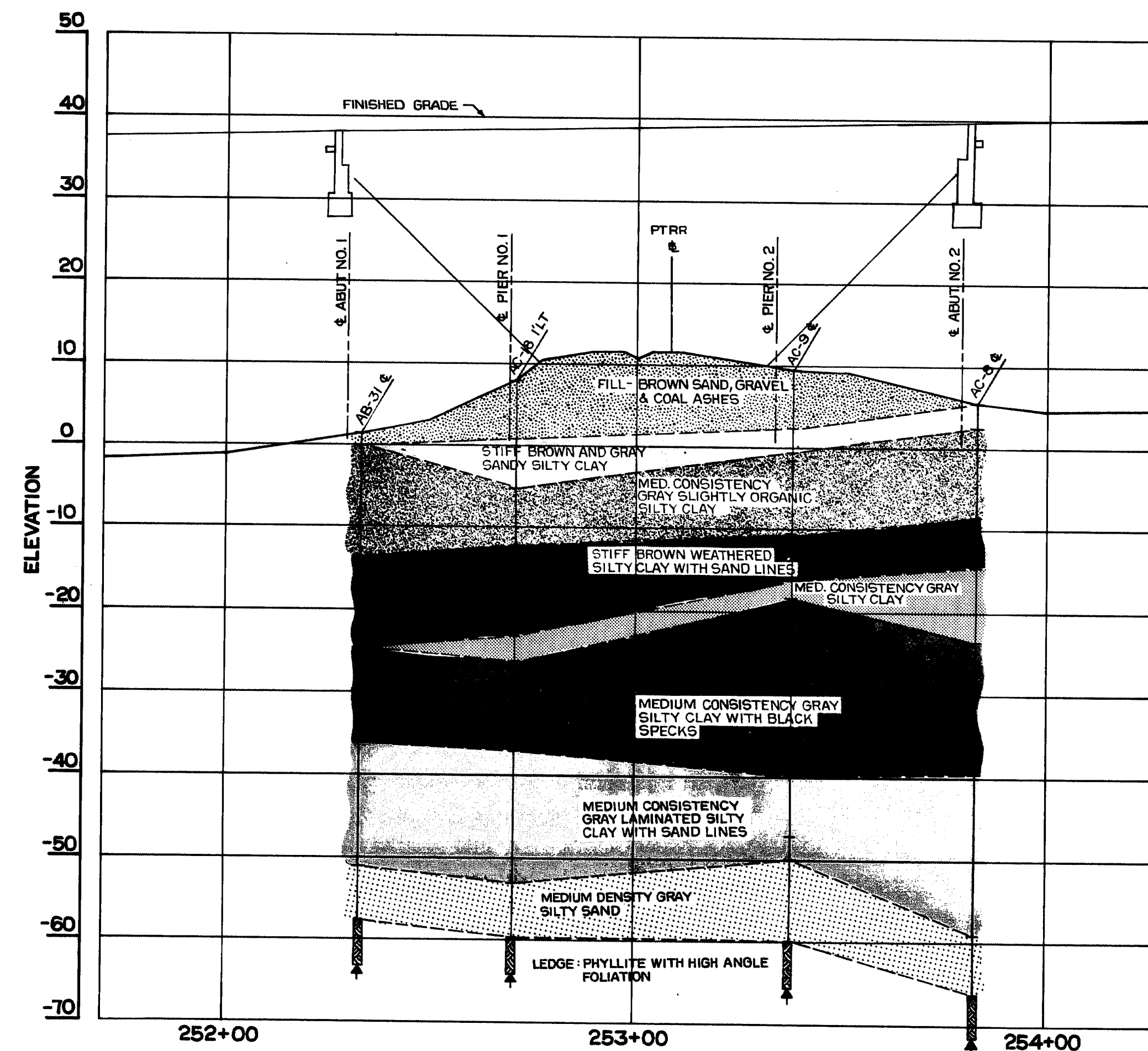


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
GENERAL PLAN
SHEET 3 OF 36 AUGUSTA, MAINE JULY 1972

S. P. R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295/PTRR	4	36



PROFILE
SCALE: 1" = 20'



PROFILE
SCALE: 1" = 20' HORIZ.
1" = 10' VERT.

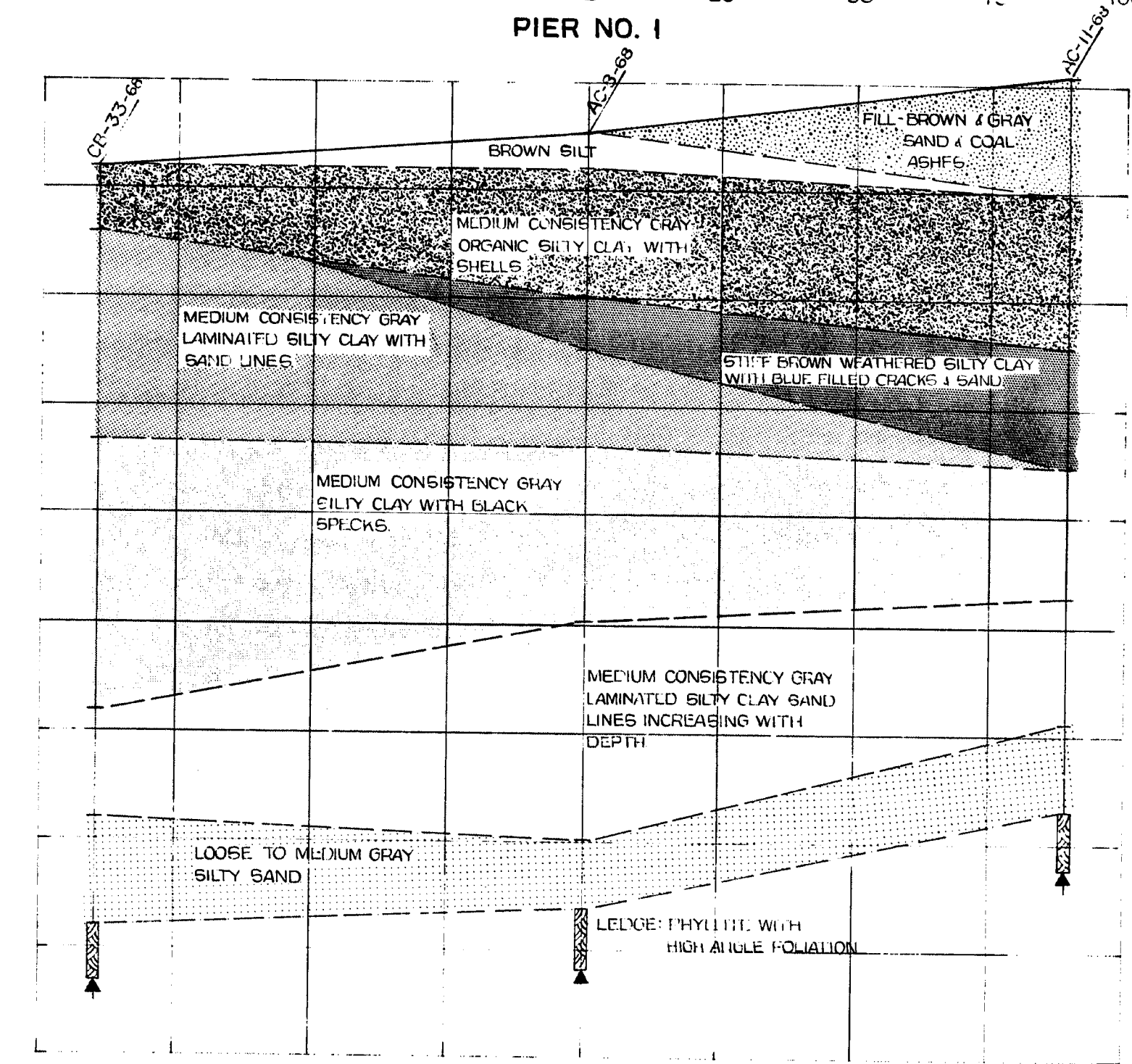
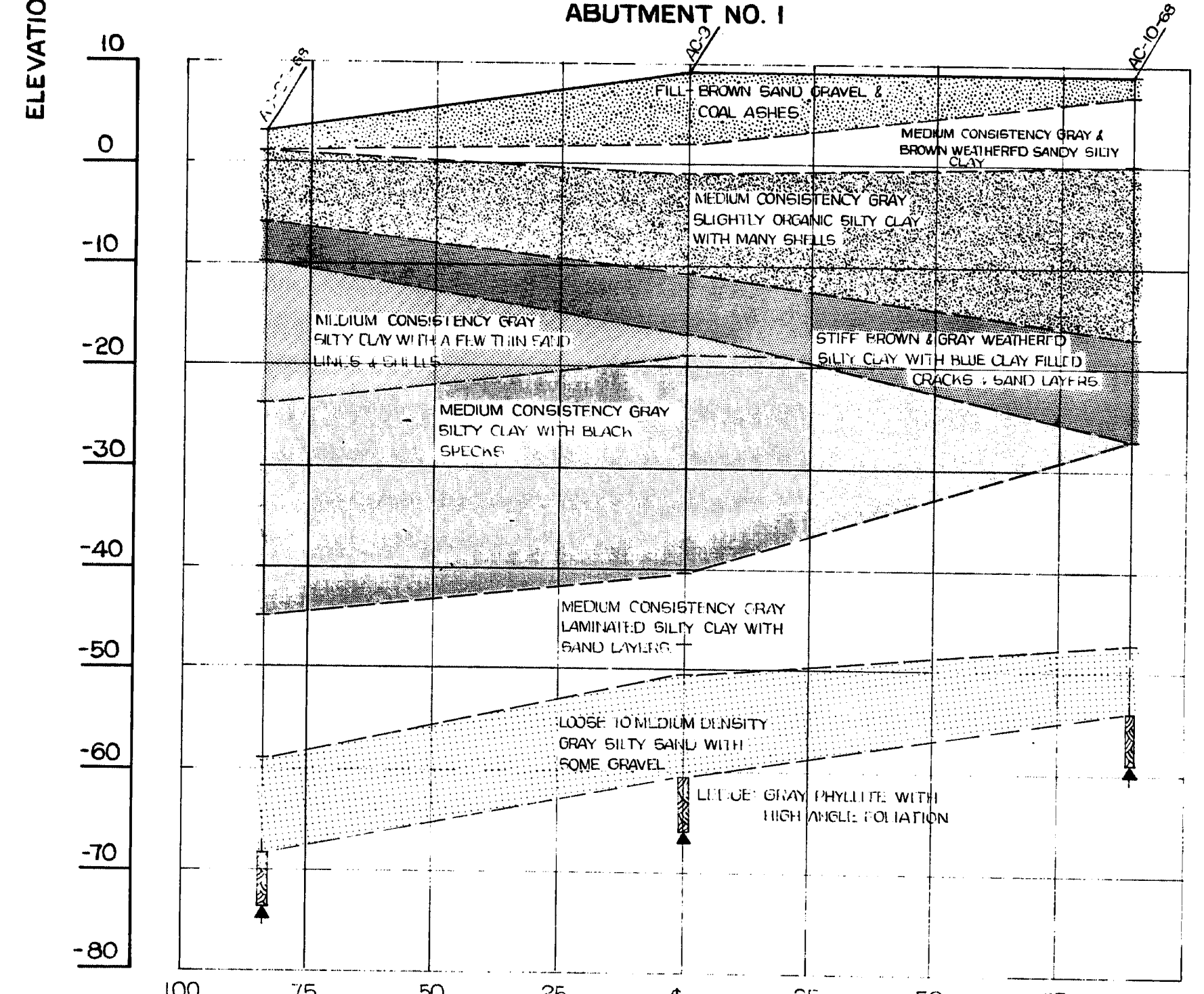
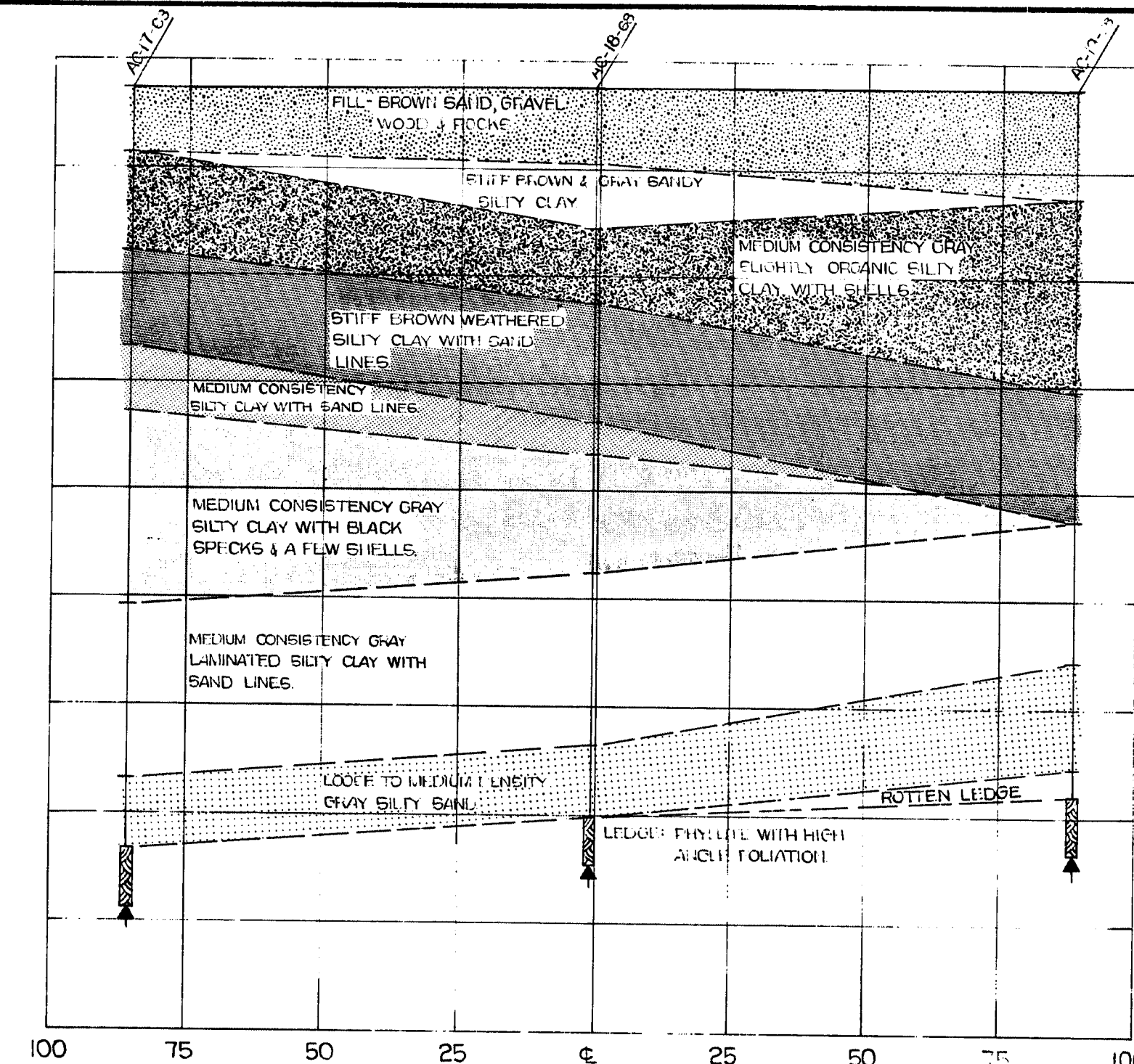
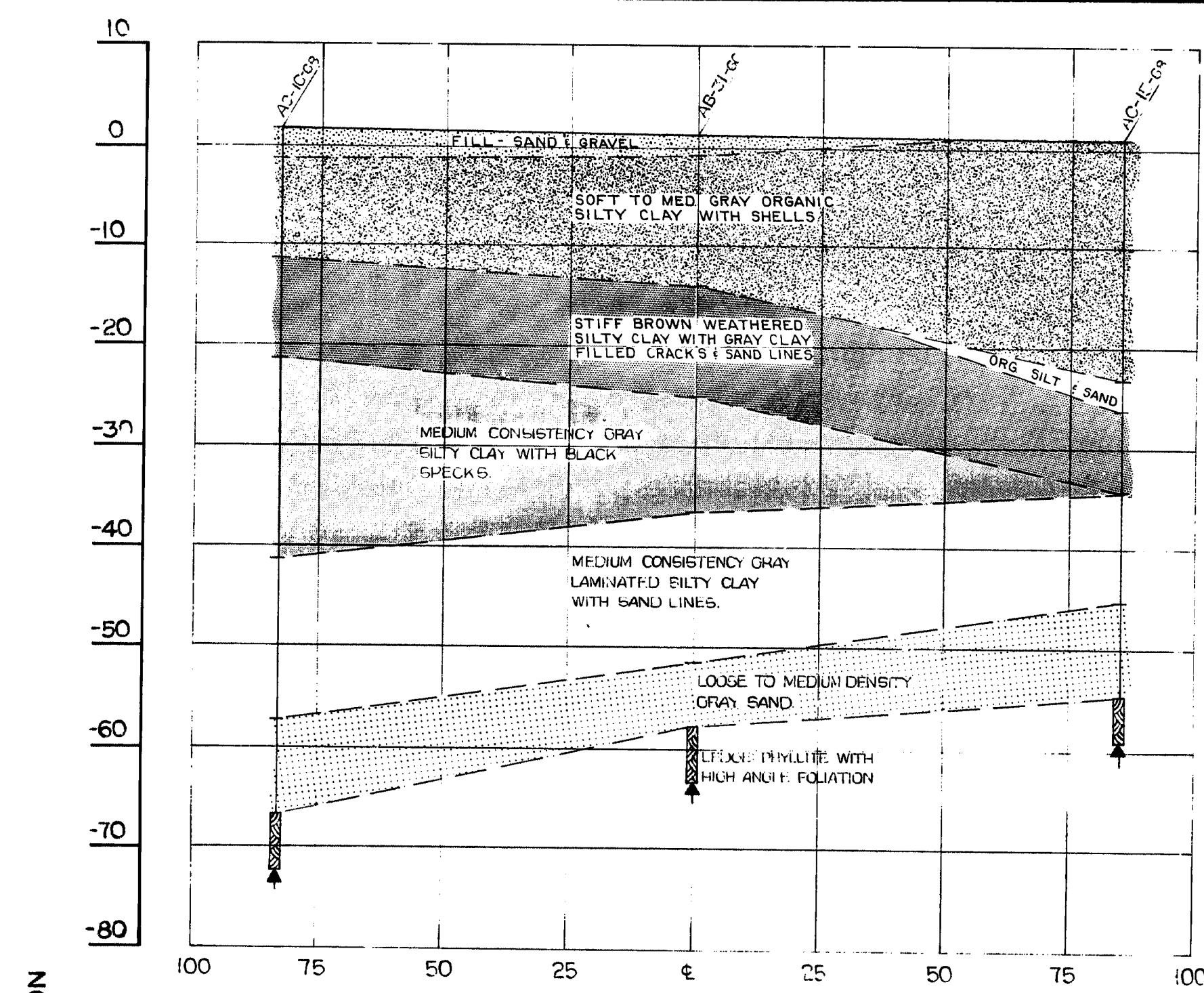
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
I-295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
FOUNDATION SURVEY

SHEET 4 OF 36 AUGUSTA, MAINE JULY 1972

150-162

PLANS	DESIGN - DETAILED	CHECKED	REVISIONS	FIELD CHANGES
BY				
DATE				

REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	16-153(548)	5	56



DESIGN - DETAIL	CHECKED	BY	DATE
PLANS			

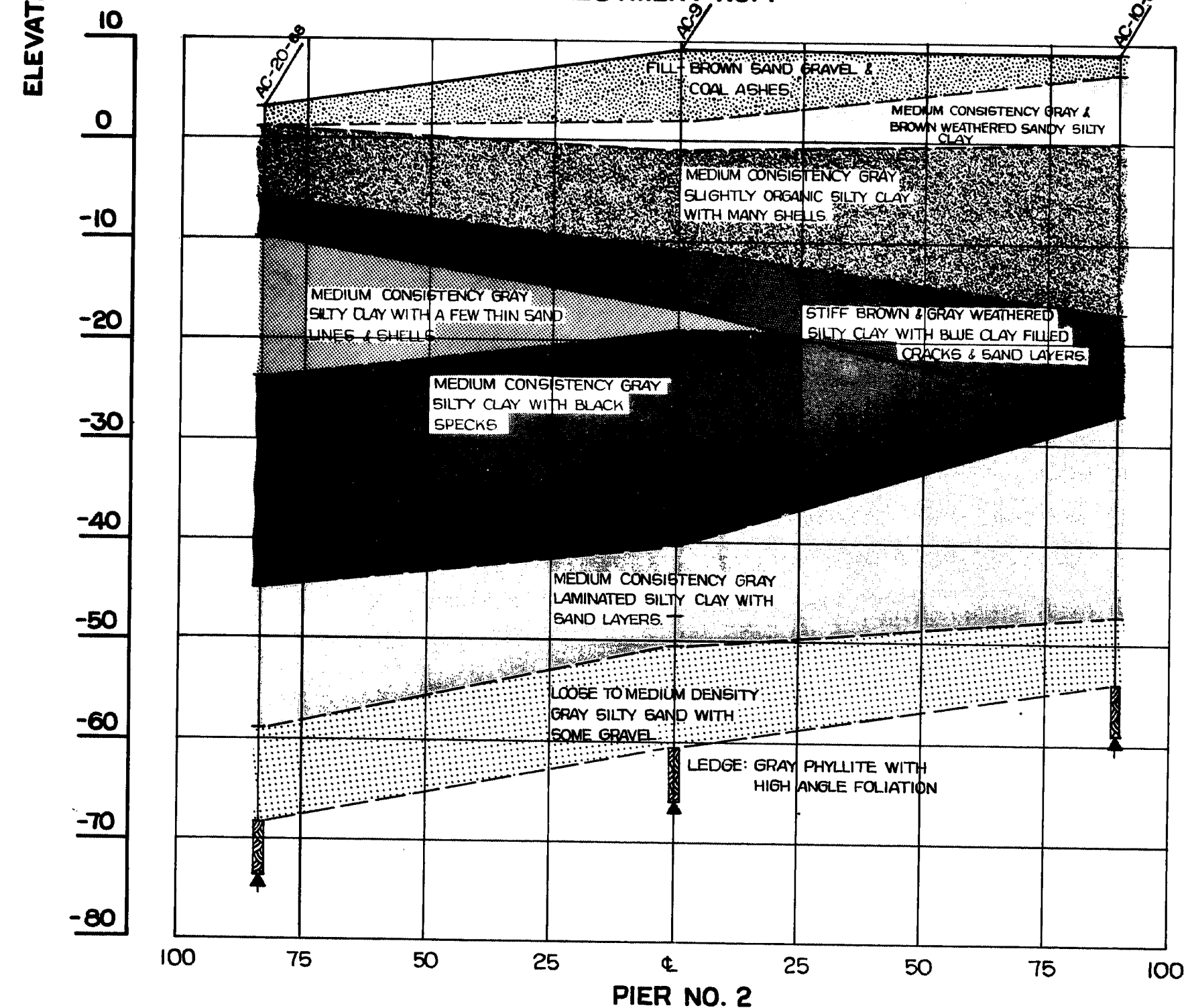
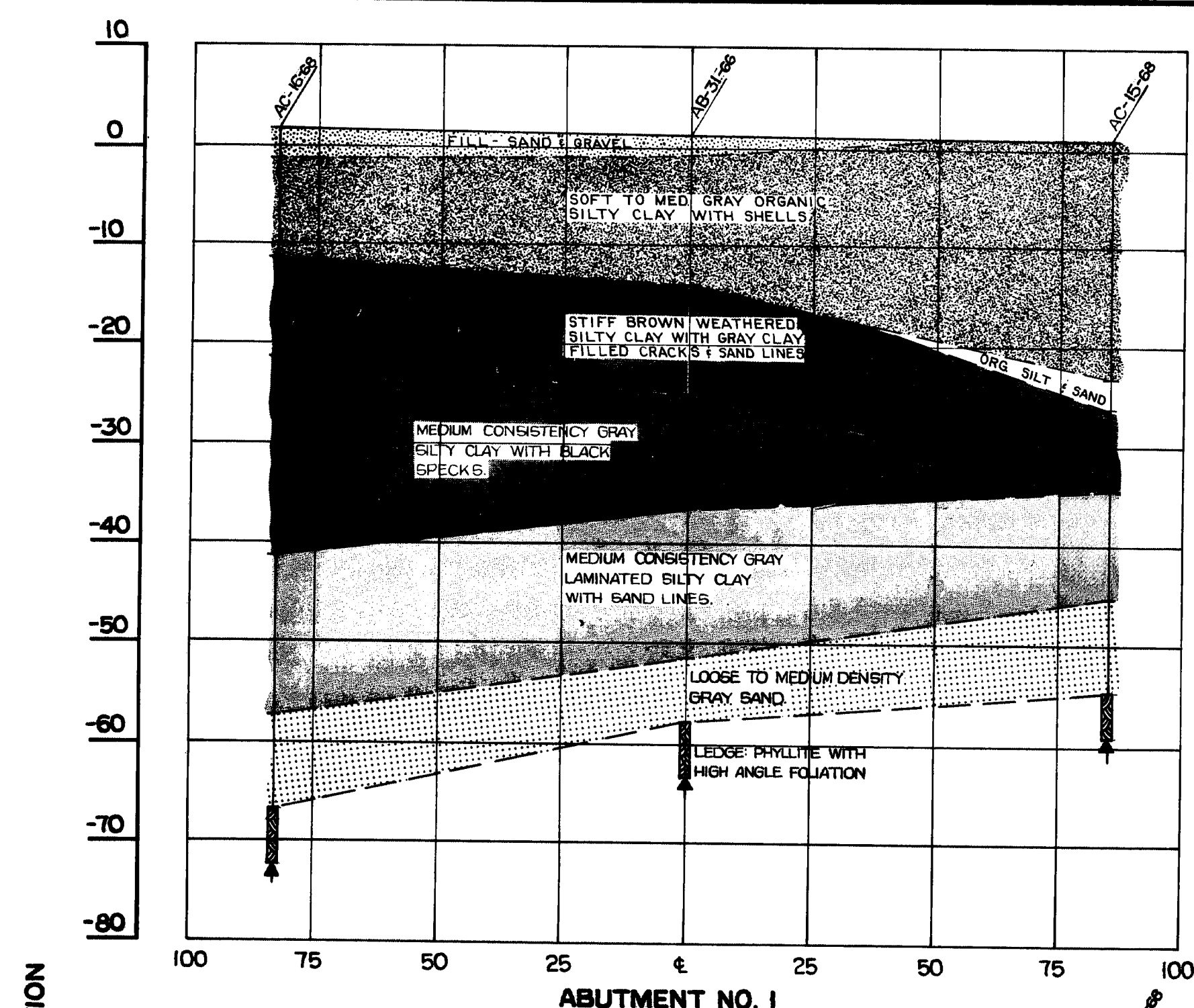
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
I-295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
TRANSVERSE PROFILES

SHEET 5 OF AUGUSTA, MAINE JULY 1972

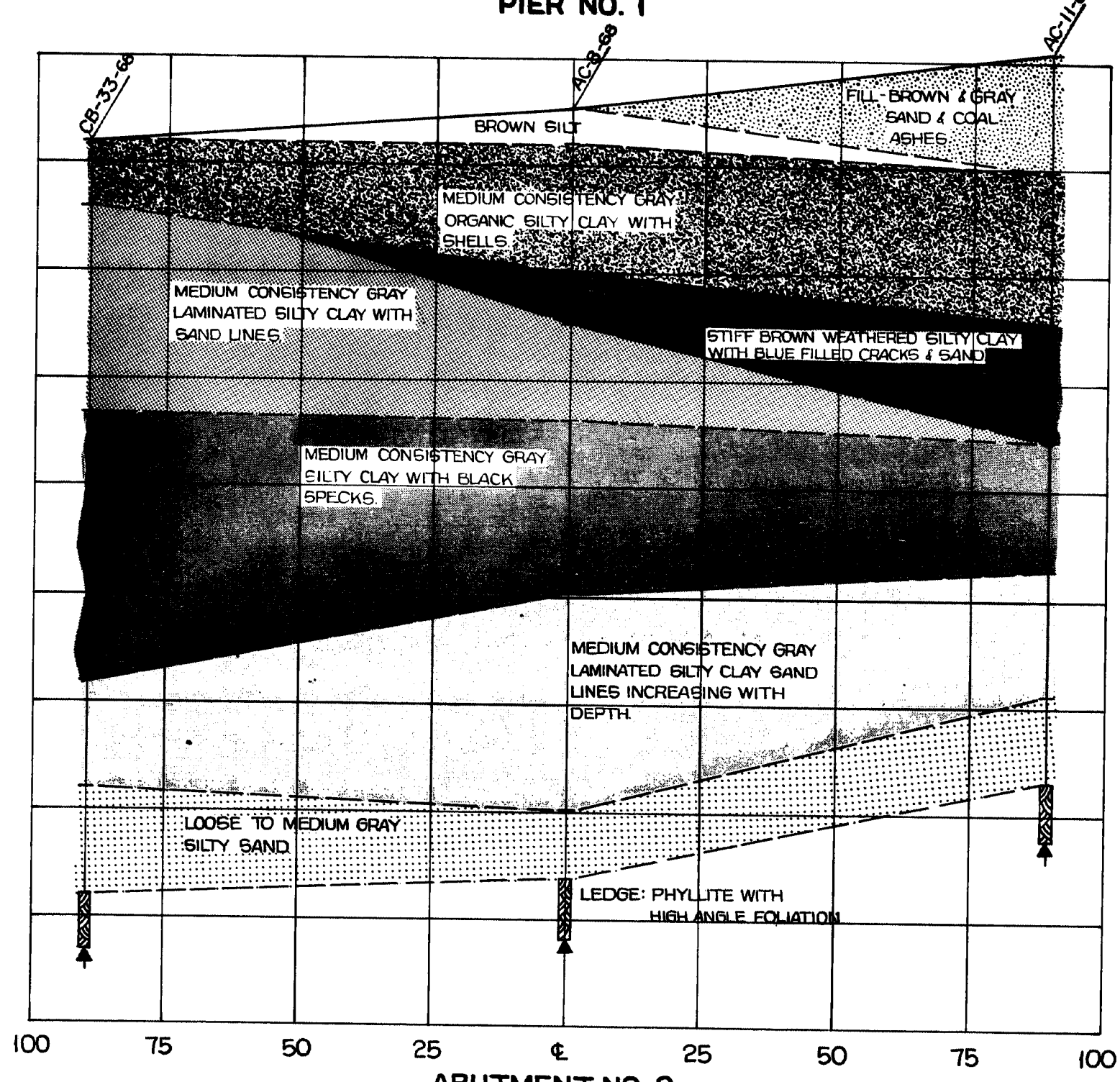
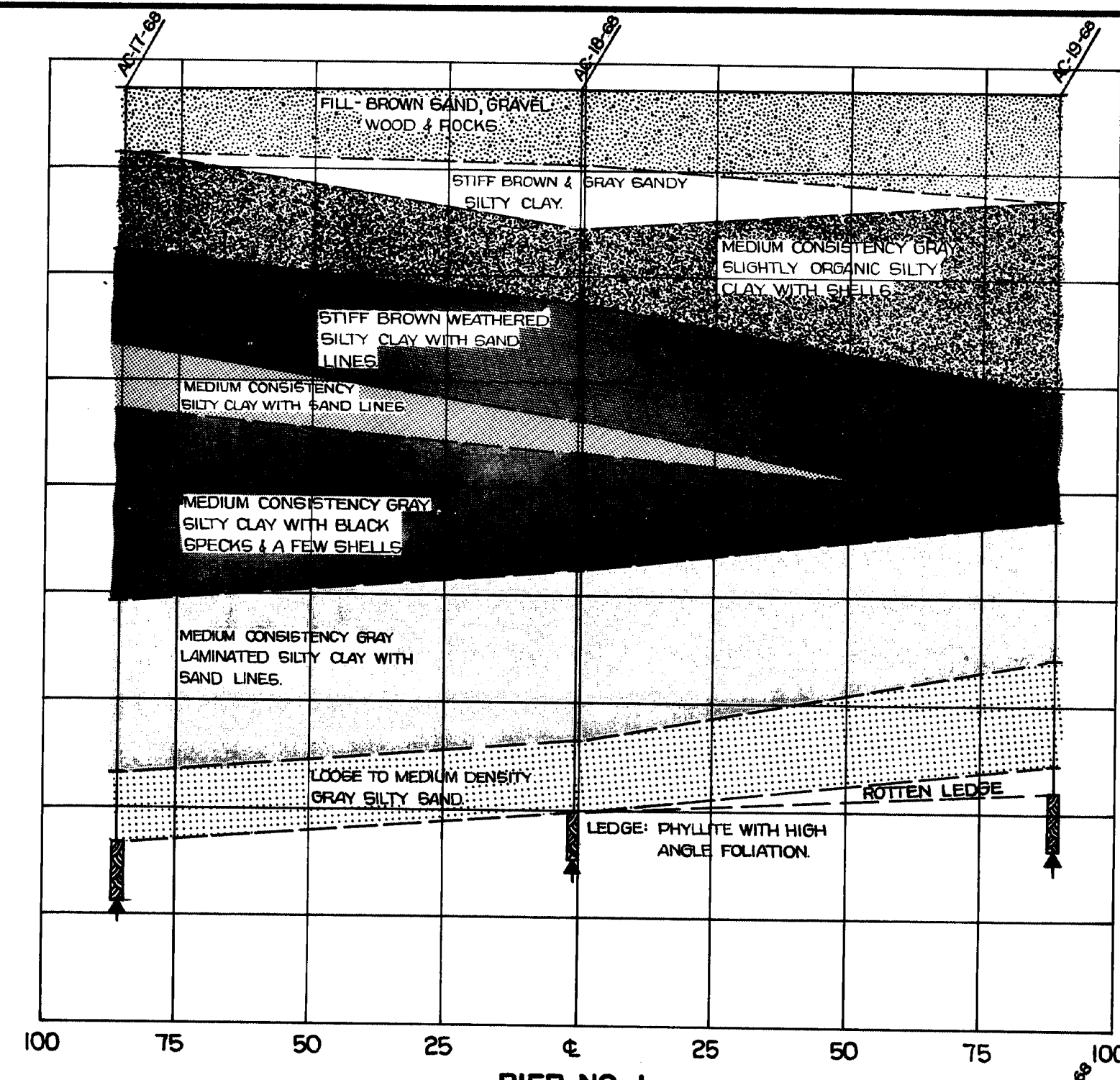
150-163



PLANS	DESIGN - DETAILED RECORD - FIELD CHANGES	BY	DATE



TRANSVERSE PROFILES



TRANSVERSE PROFILES

S.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295-3(15)48	5	36

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
I-295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
TRANSVERSE PROFILES

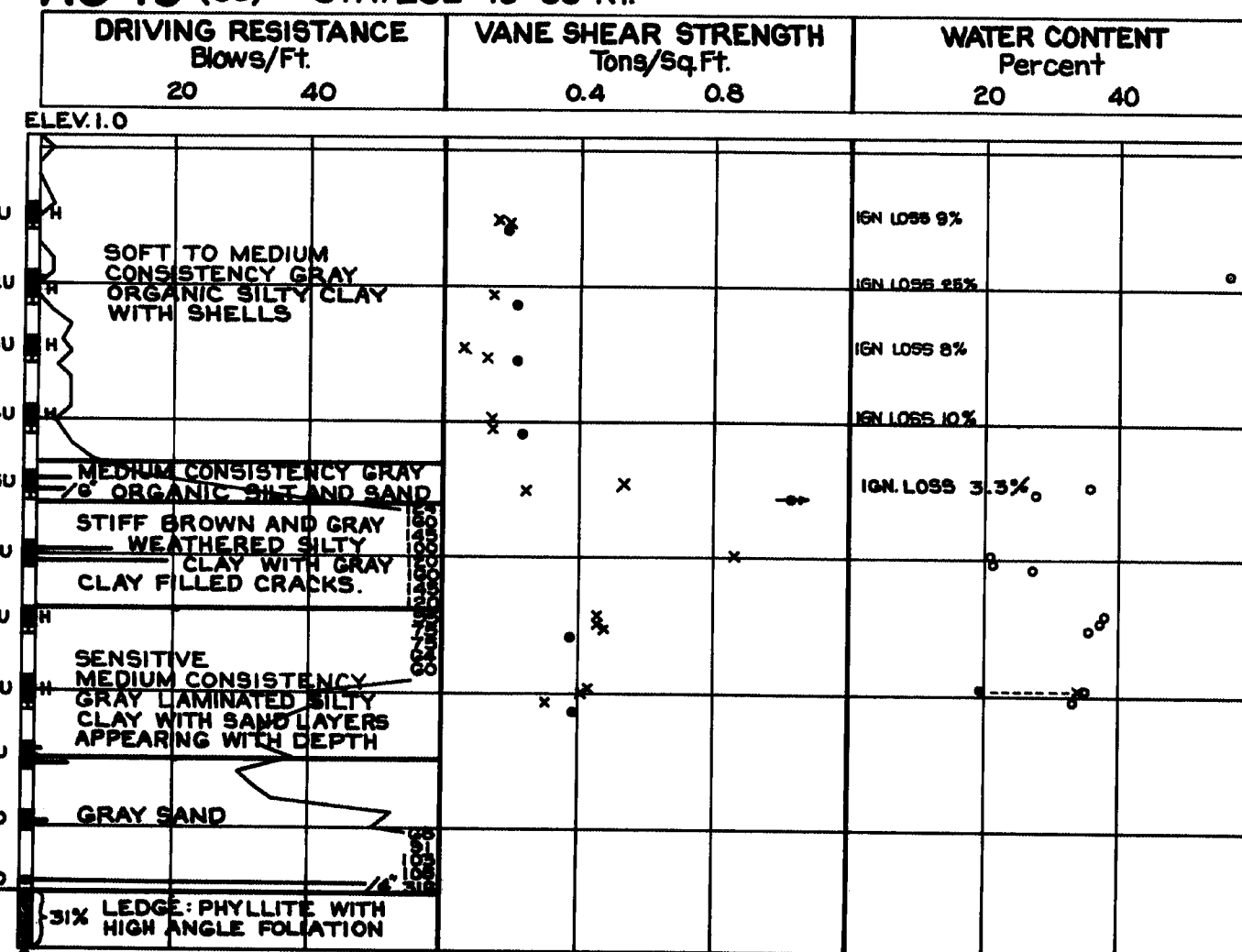
SHEET 5 OF AUGUSTA, MAINE JULY 1972

150-163

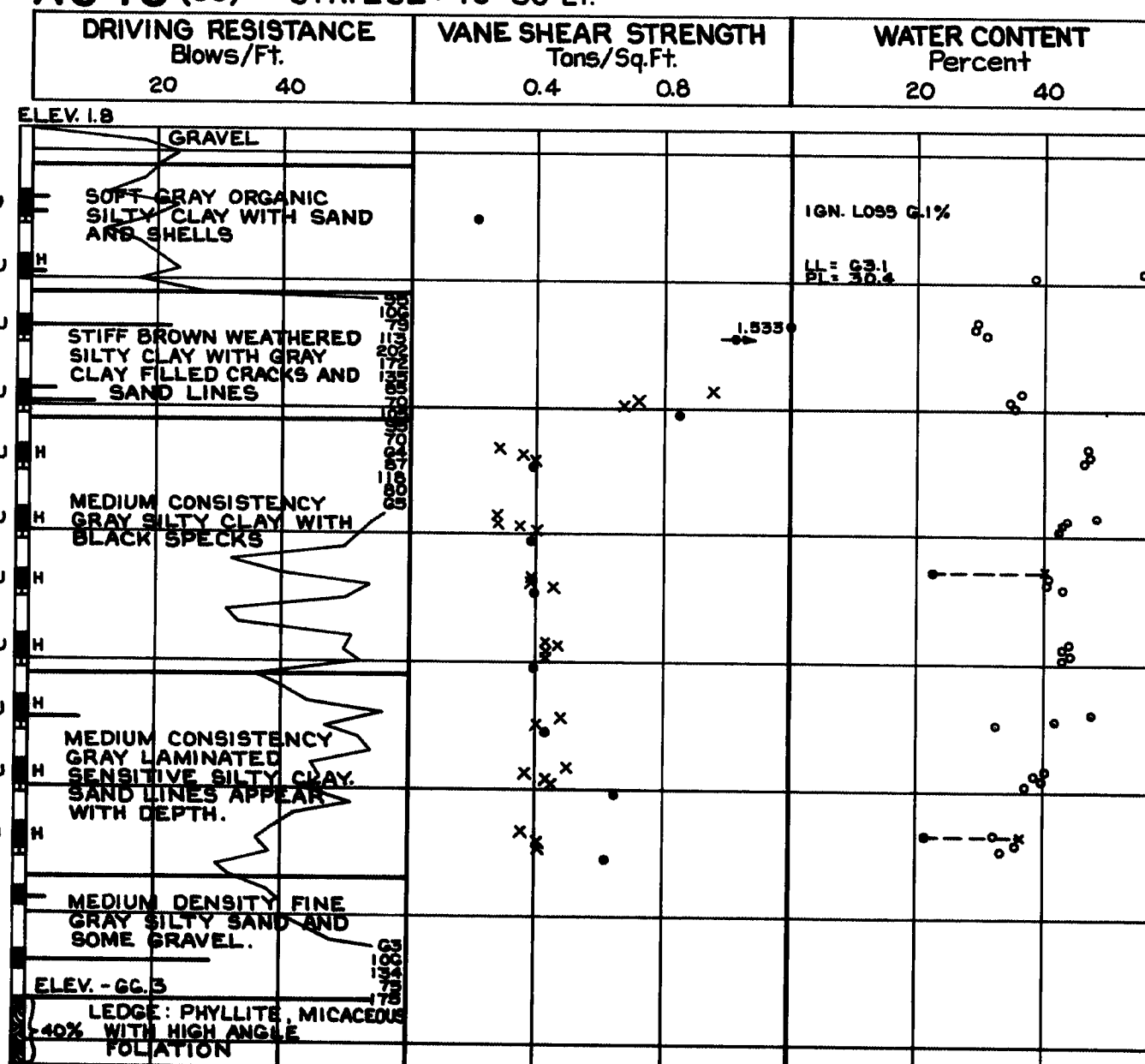
ELEVATION

10
0
-10
-20
-30
-40
-50
-60
-70

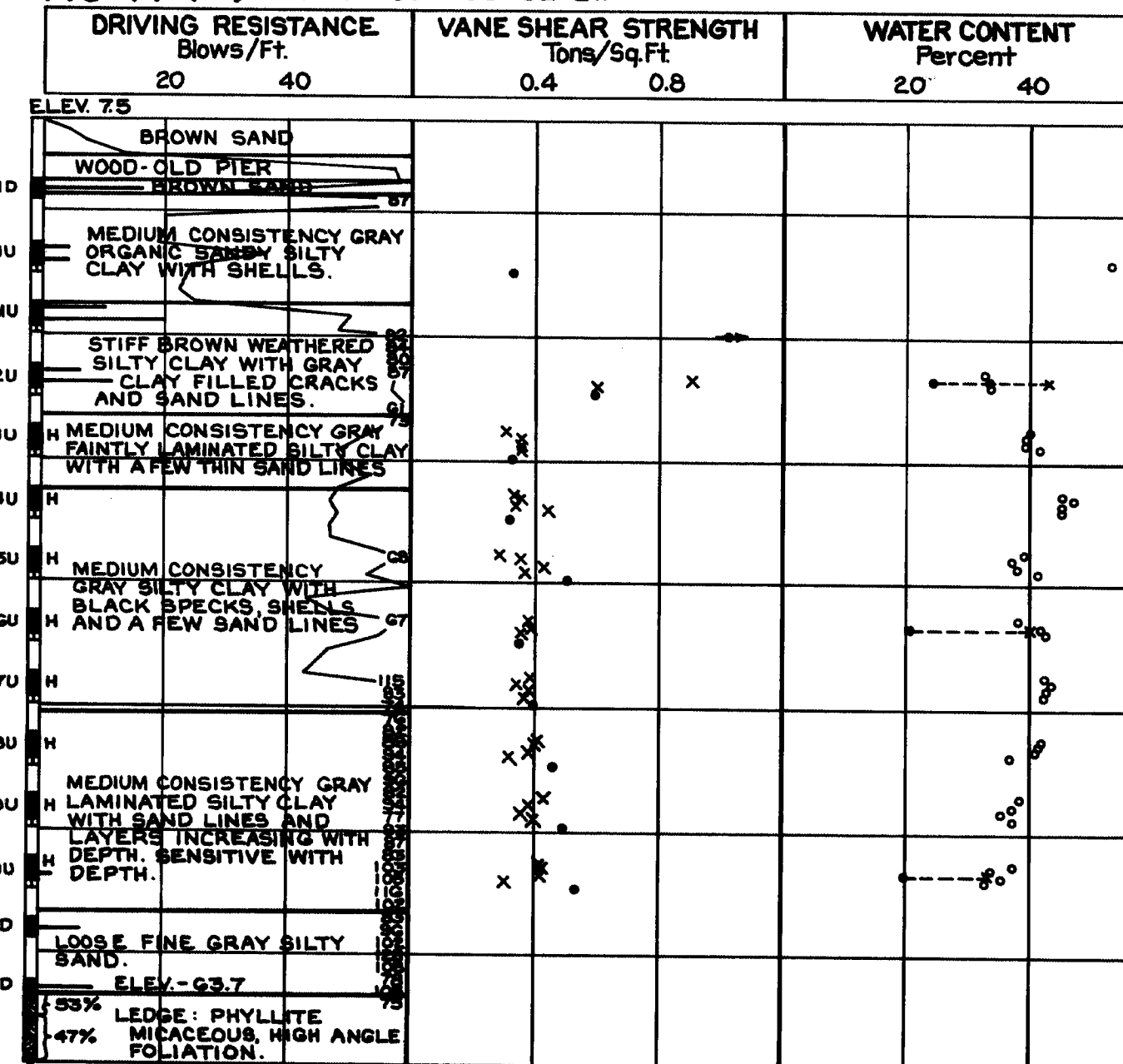
AC-15 (68) STA. 252+13 83' RT.



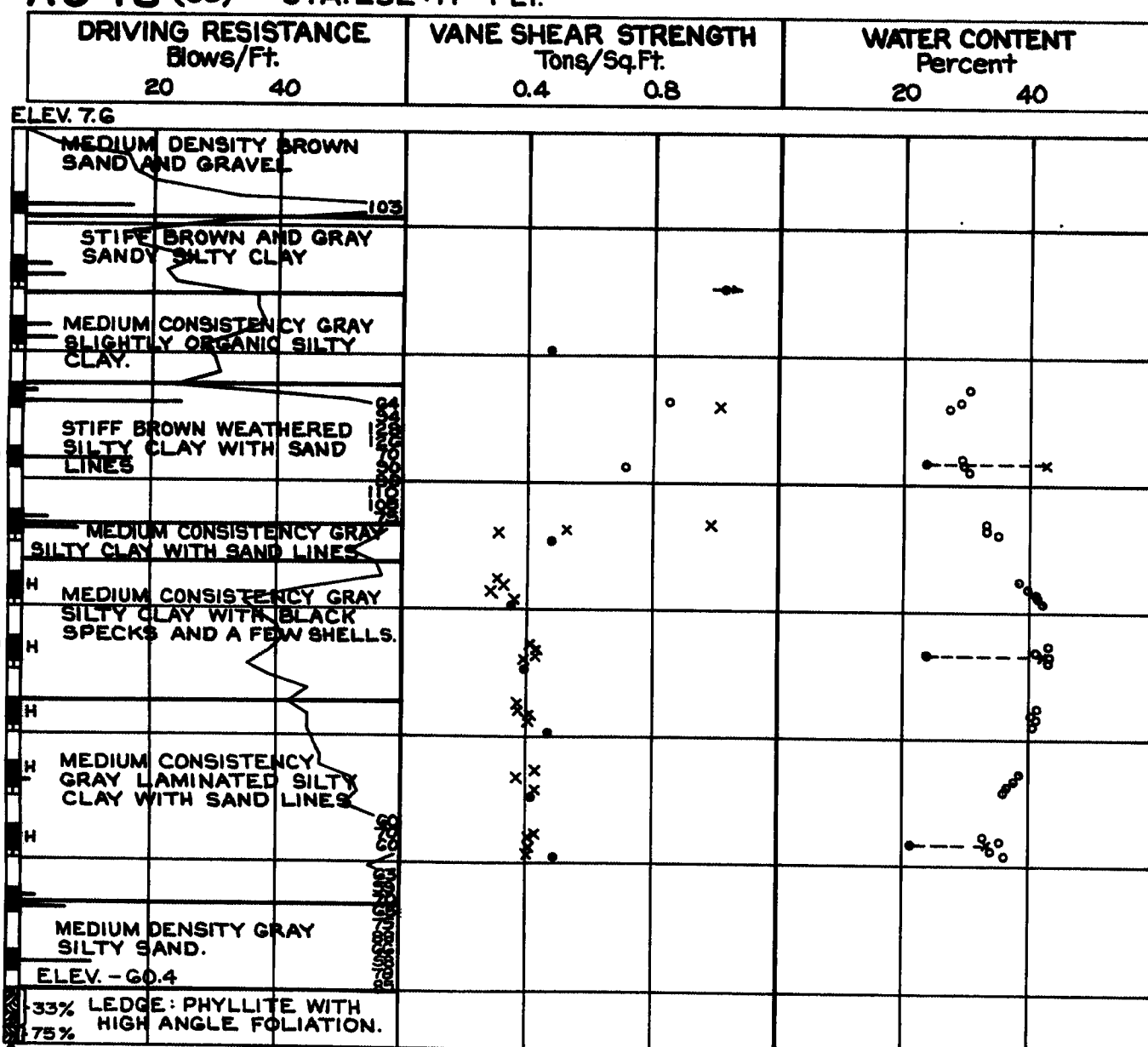
AC-16 (68) STA. 252+49 80' LT.



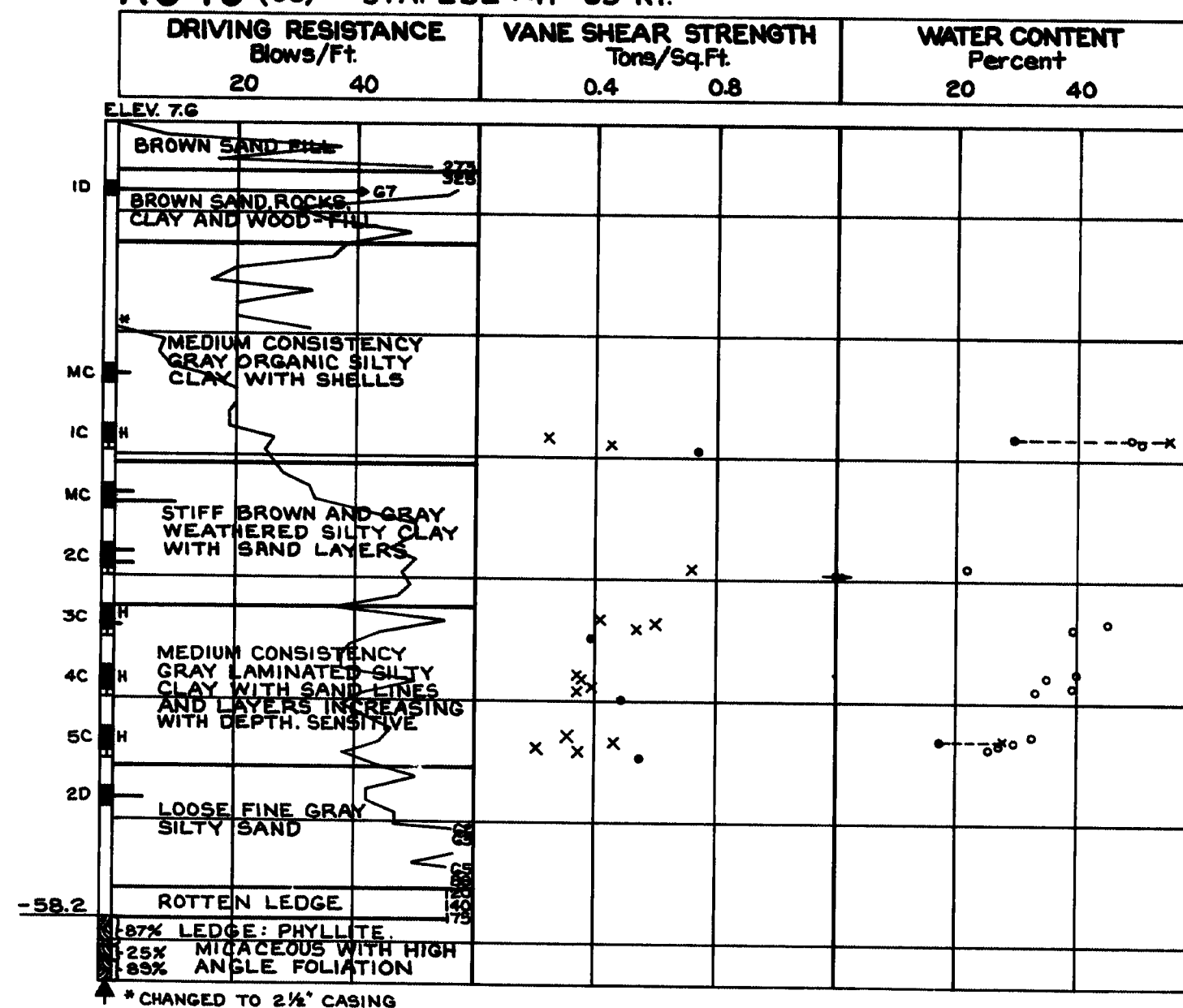
AC-17 (68) STA. 252+95 82' LT.



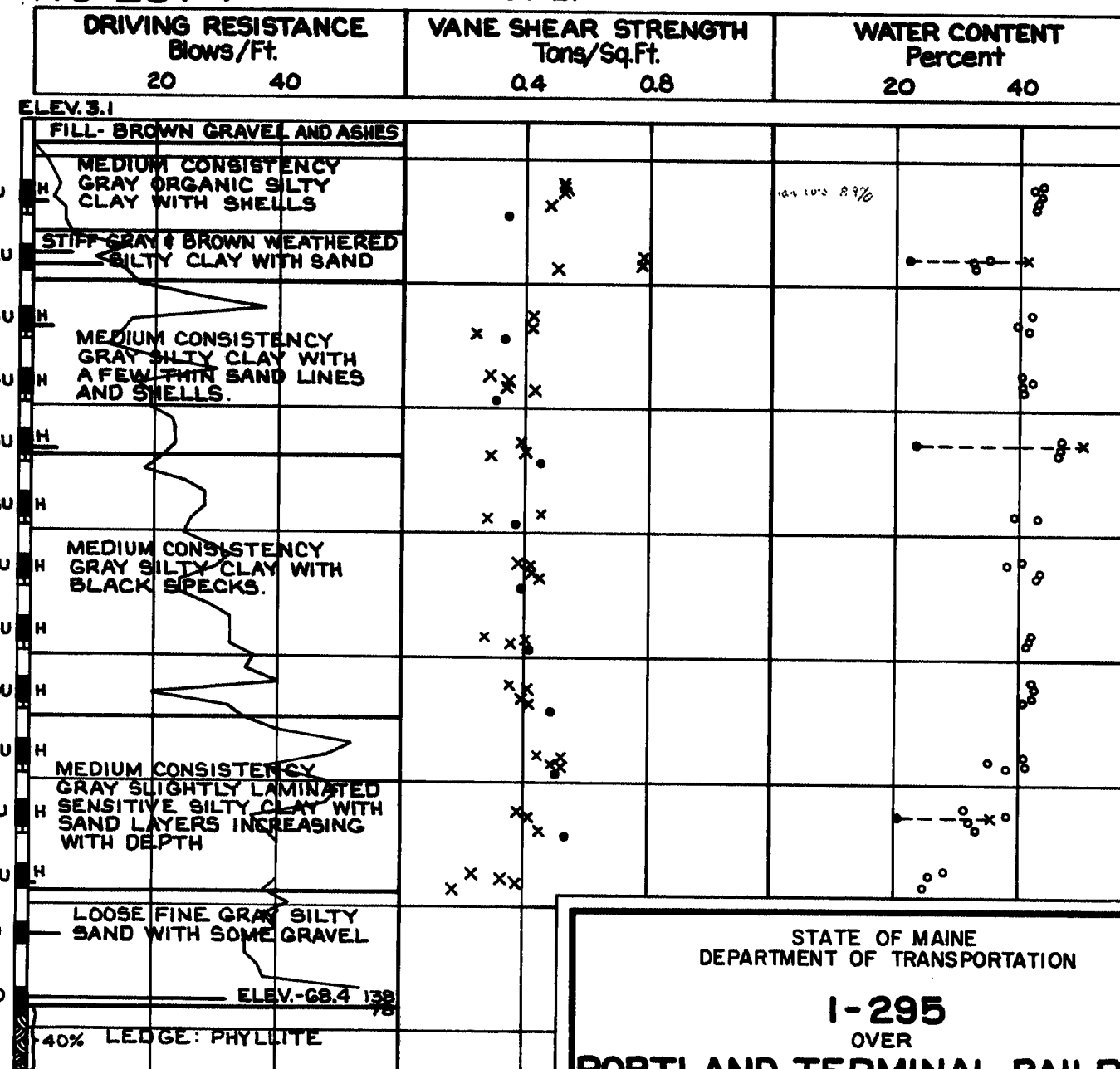
AC-18 (68) STA. 252+71 1' LT.



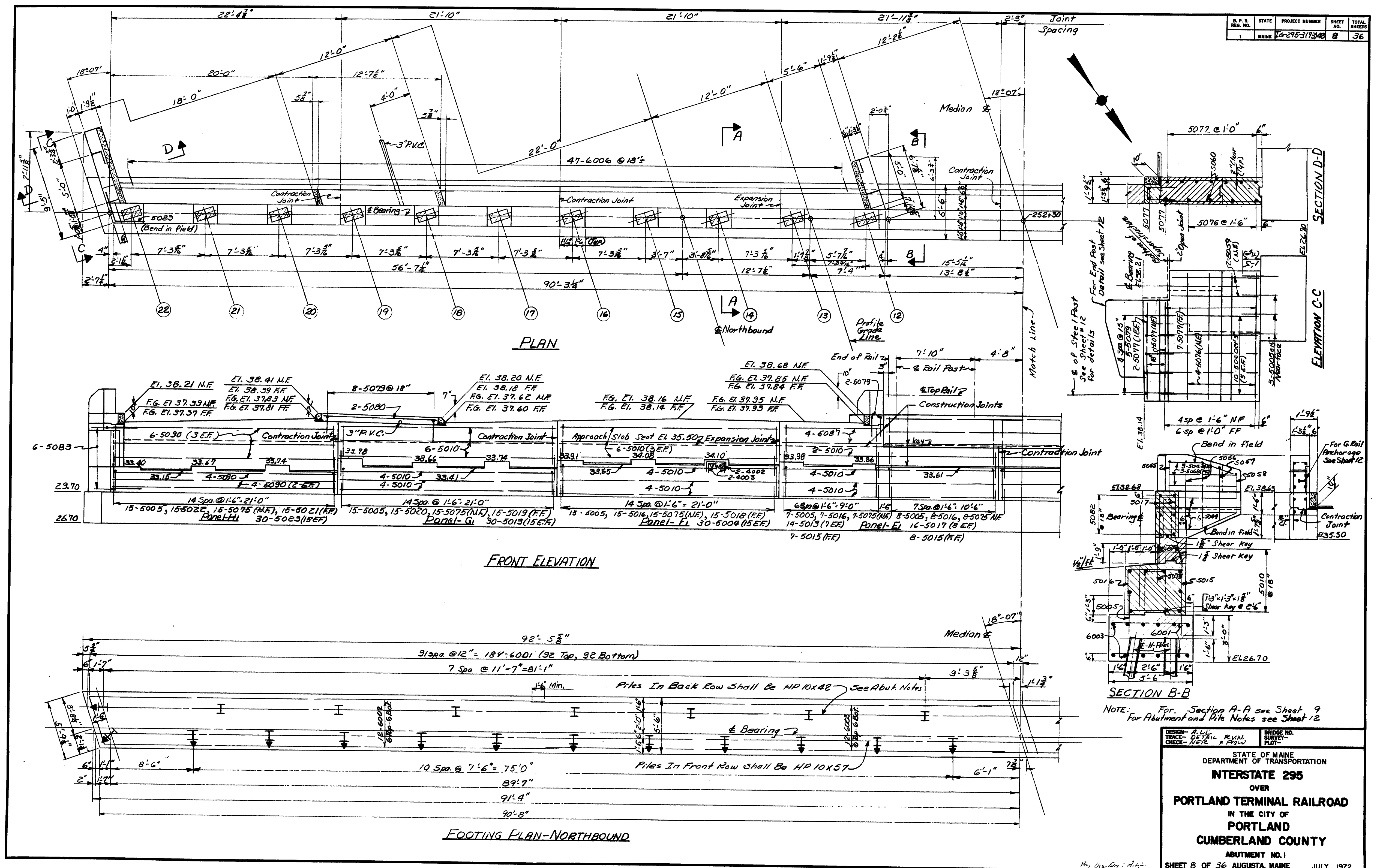
AC-19 (68) STA. 252+47 85' RT.



AC-20 (68) STA. 253+64 80' LT.



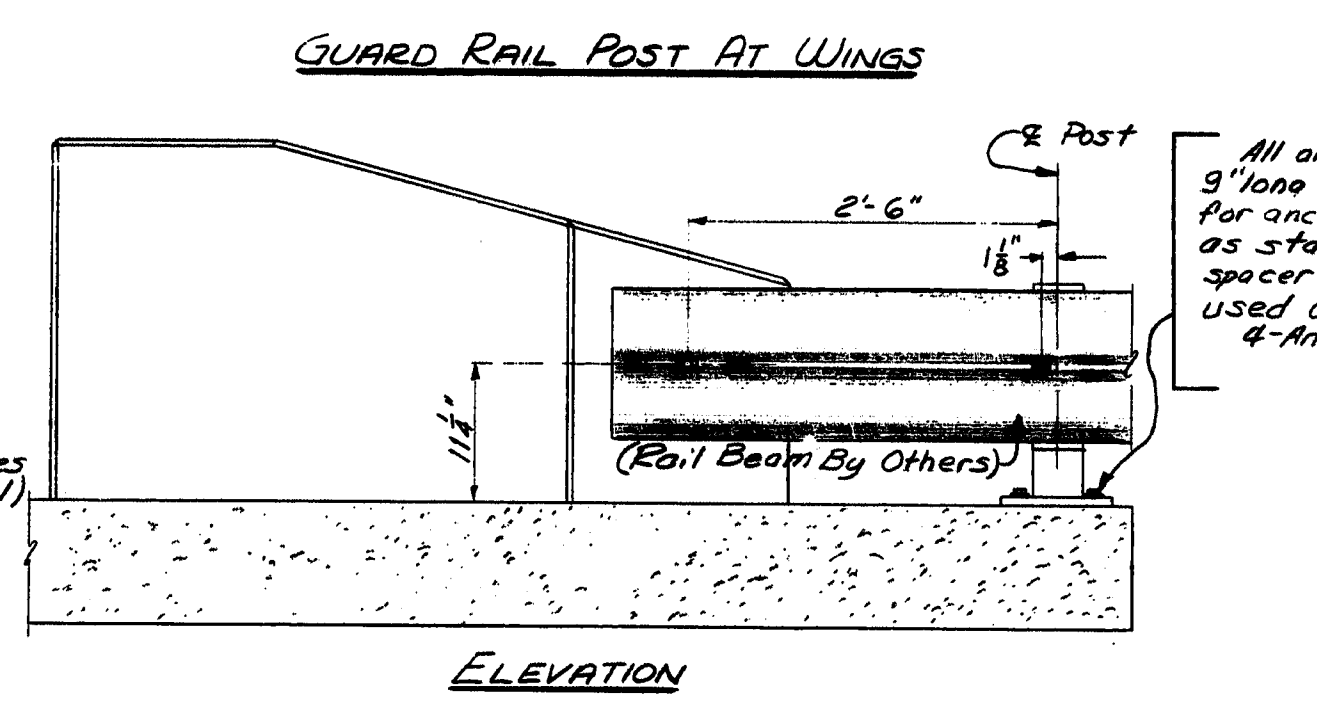
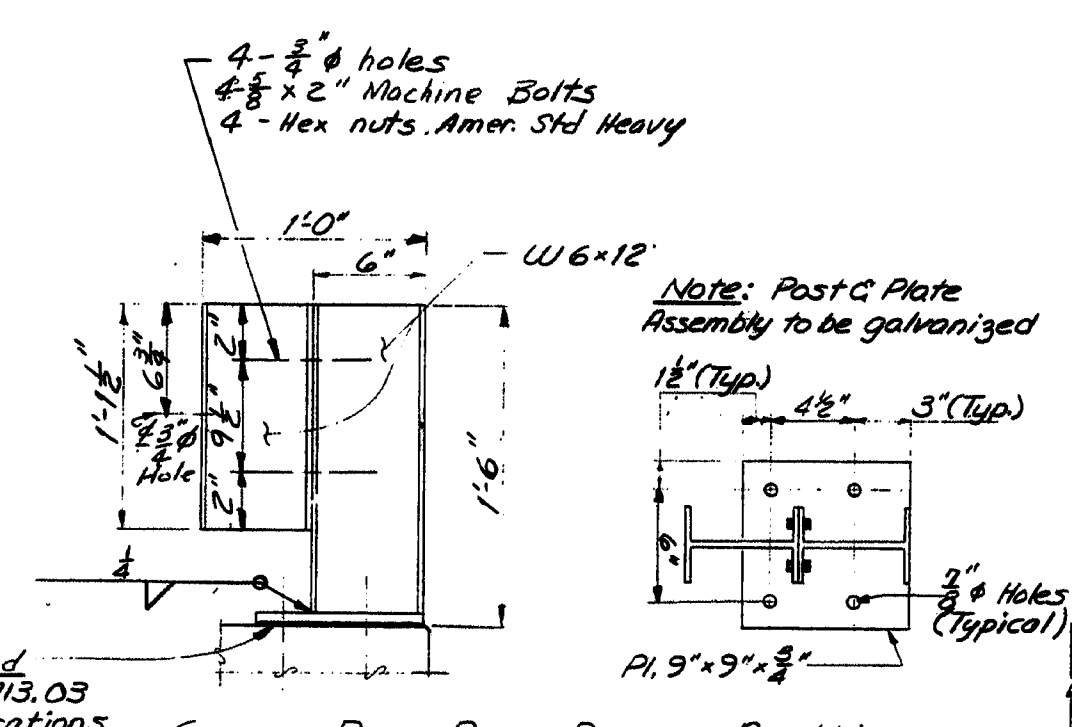
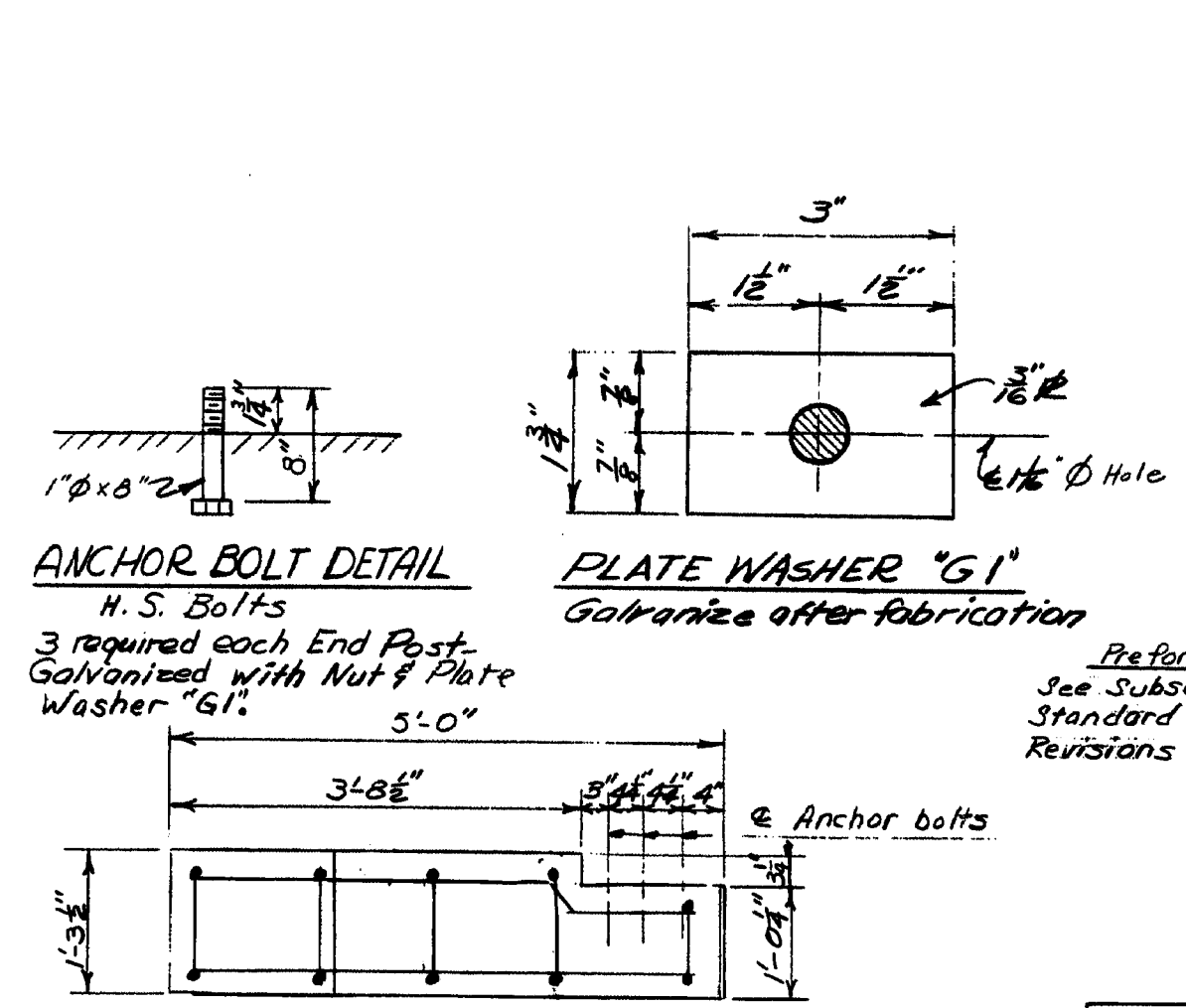
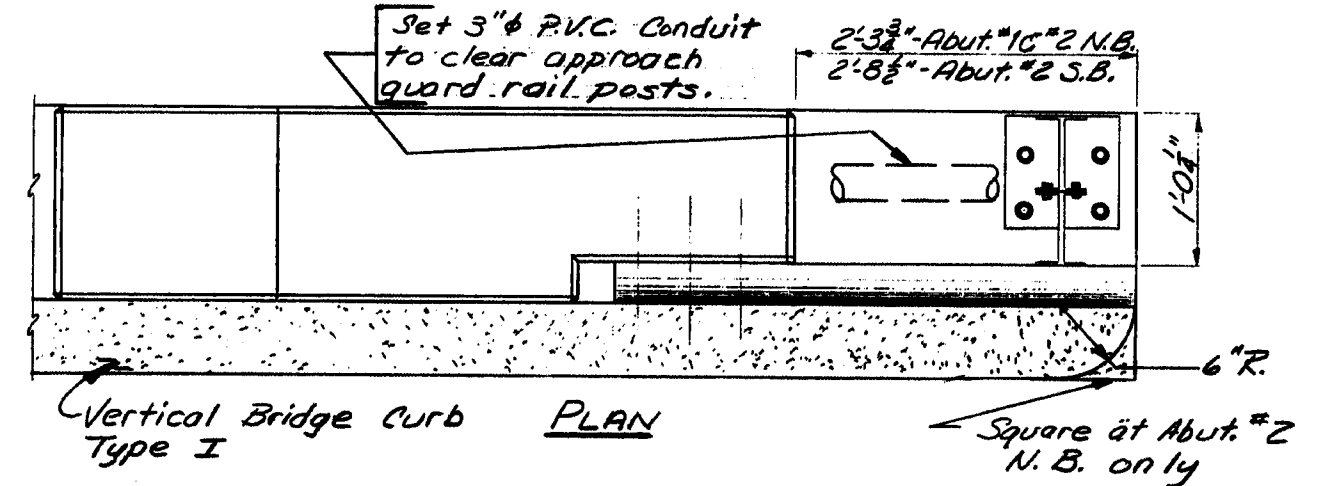
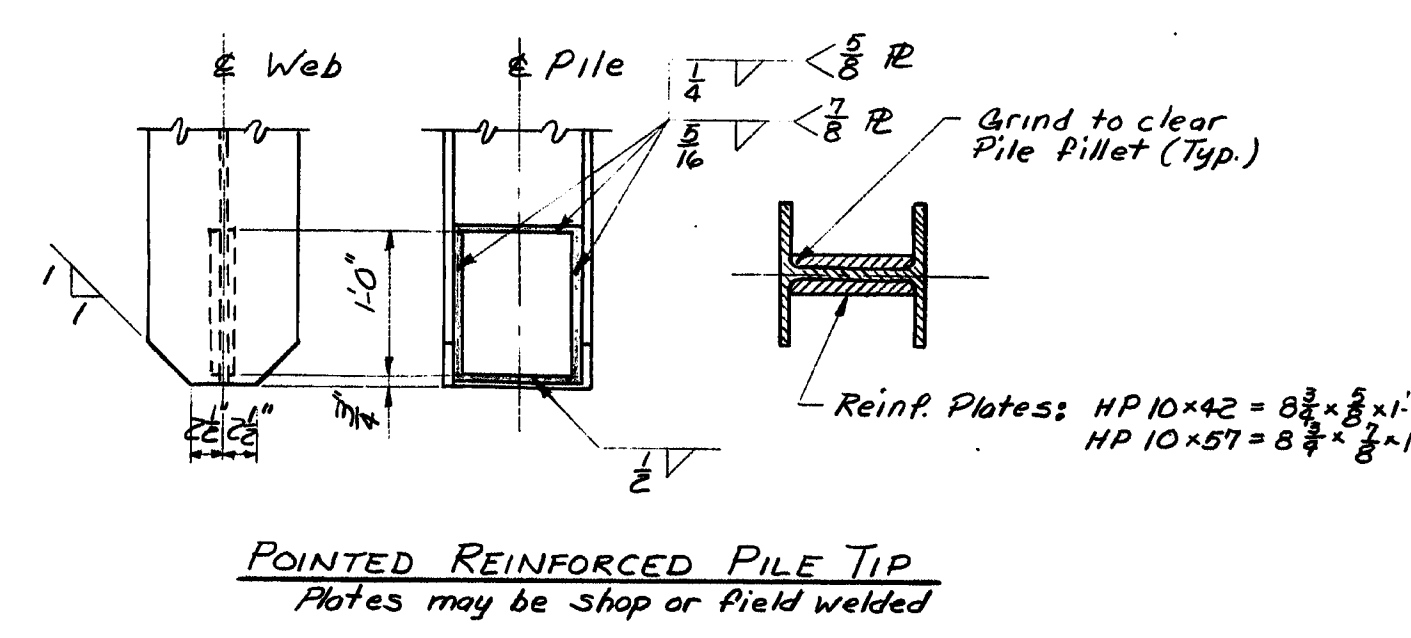
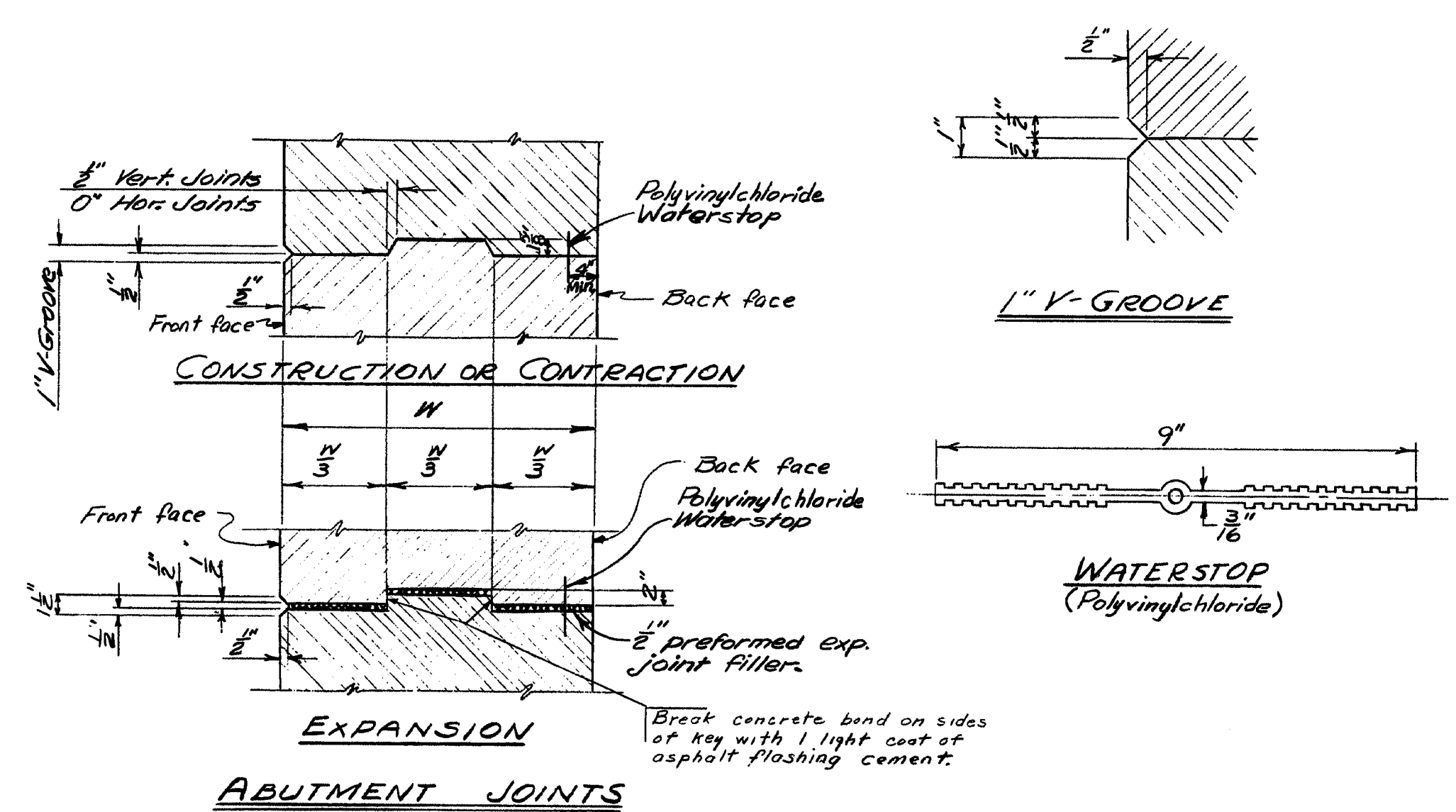
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
1-295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
BORING DETAILS



150-166

GENERAL ABUTMENT NOTES

1. Place reinforcing steel in bridge seats to clear anchor bolts.
2. Reinforcing steel to have 2" clear cover unless noted.
3. Minimum splices and embedments to be 36 bar diameters for reinforcing steel, unless noted.
4. Chamfer all exposed edges of concrete $\frac{1}{4}$ ".
5. Break bond at vertical contraction joint by a method approved by the Engineer.
6. Guard Rail anchor bolts, nut & plate washer "G" shall be furnished under this contract. Payment shall be considered incidental to Item 502.21.
7. For Bearings and preparation of bridge seat see sheet 18. Armored joint details see sheet 20. Slope Protection details see sheet 14.
8. Place concrete in top of Abutment backwall after the Superstructure slab has been placed.
9. Polyvinylchloride waterstops shall be placed in all vertical contraction and expansion joints.
10. Waterstops are not required in horizontal construction joints.
11. Protective Coating for Concrete Surfaces shall be applied to the following areas: Raised Median on Backwall; Top of Concrete curbs; fascia down to drip notch.
12. Construction joints will be allowed in the abutment footings located as close as practicable to the vertical wall joints and clearing pile locations at least 1'-6". Shear keys shall be as detailed on this sheet except that no water stops will be required in the footing joints.

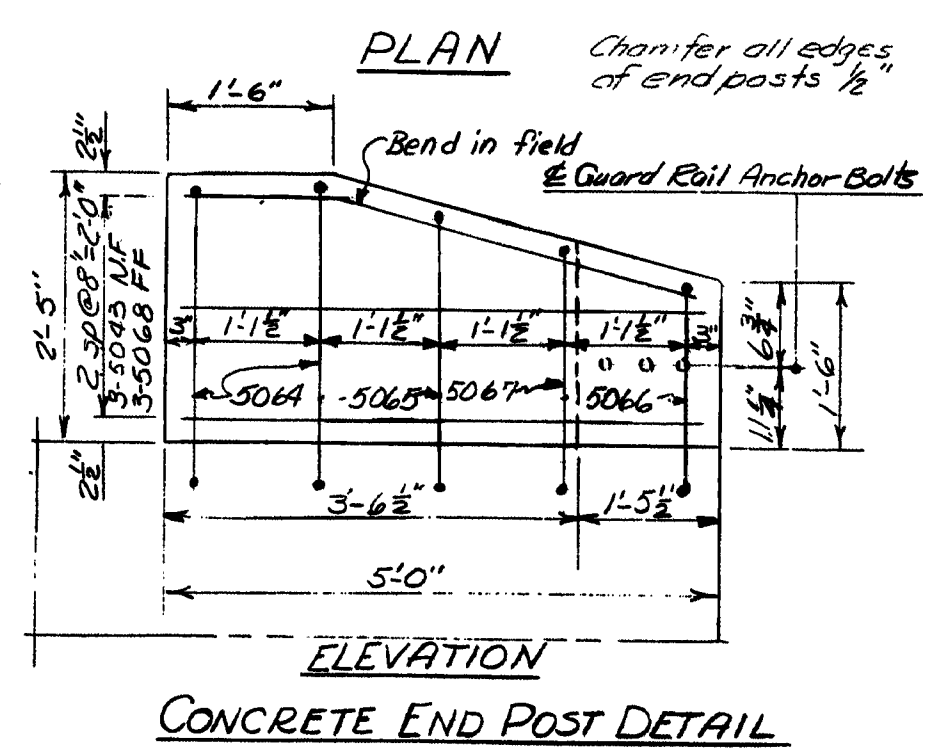


PILE NOTES

1. Front row piles shall be HP 10x57 steel H-Piles. Back row piles shall be HP 10x42.
2. Maximum Pile Loads: HP 10x57 = 76 Tons; HP 10x42 = 55.5 Tons. This pile load includes 29 Tons for negative skin friction. Abuts.
3. Piles marked thus H shall be battered 2" per foot in direction of arrow.
4. Piles shall be driven to ledge or practical refusal.
5. Pile Size: Front Row HP 10x57; Back Row HP 10x42. Abutment #1: 24; Abutment #2: 31.
6. Estimated Pile Length = Abut #1 = 80' to 95' ±; Abut #2 = 85' to 100' ±.
7. All piles shall have pointed reinforced pile tips.

Note: See Pier Sheets for Pier Piles. (Sheet #16)

DEAD LOAD DEFLECTIONS IN FEET																								
SPAN	6'-6"	13'-0"	19'-6"	26'-0"	32'-6"	39'-0"	45'-6"	52'-0"	58'-6"	65'-0"	71'-6"	78'-0"	84'-6"	91'-0"	97'-6"	104'-0"	110'-6"	117'-0"	123'-6"	130'-0"	136'-6"	143'-0"	149'-6"	156'-0"
POINTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
SUPERIMPOSED	0.0000	0.0008	0.0011	0.0014	0.0017	0.0020	0.0023	0.0026	0.0029	0.0032	0.0035	0.0038	0.0041	0.0044	0.0047	0.0050	0.0053	0.0056	0.0059	0.0062	0.0065	0.0068	0.0071	0.0074
STEEL	0.0000	0.0004	0.0005	0.0006	0.0007	0.0008	0.0009	0.0010	0.0011	0.0012	0.0013	0.0014	0.0015	0.0016	0.0017	0.0018	0.0019	0.0020	0.0021	0.0022	0.0023	0.0024	0.0025	0.0026
FLUID	0.0000	0.0029	0.0037	0.0046	0.0054	0.0062	0.0070	0.0078	0.0086	0.0094	0.0102	0.0110	0.0118	0.0126	0.0134	0.0142	0.0150	0.0158	0.0166	0.0174	0.0182	0.0190	0.0198	0.0206



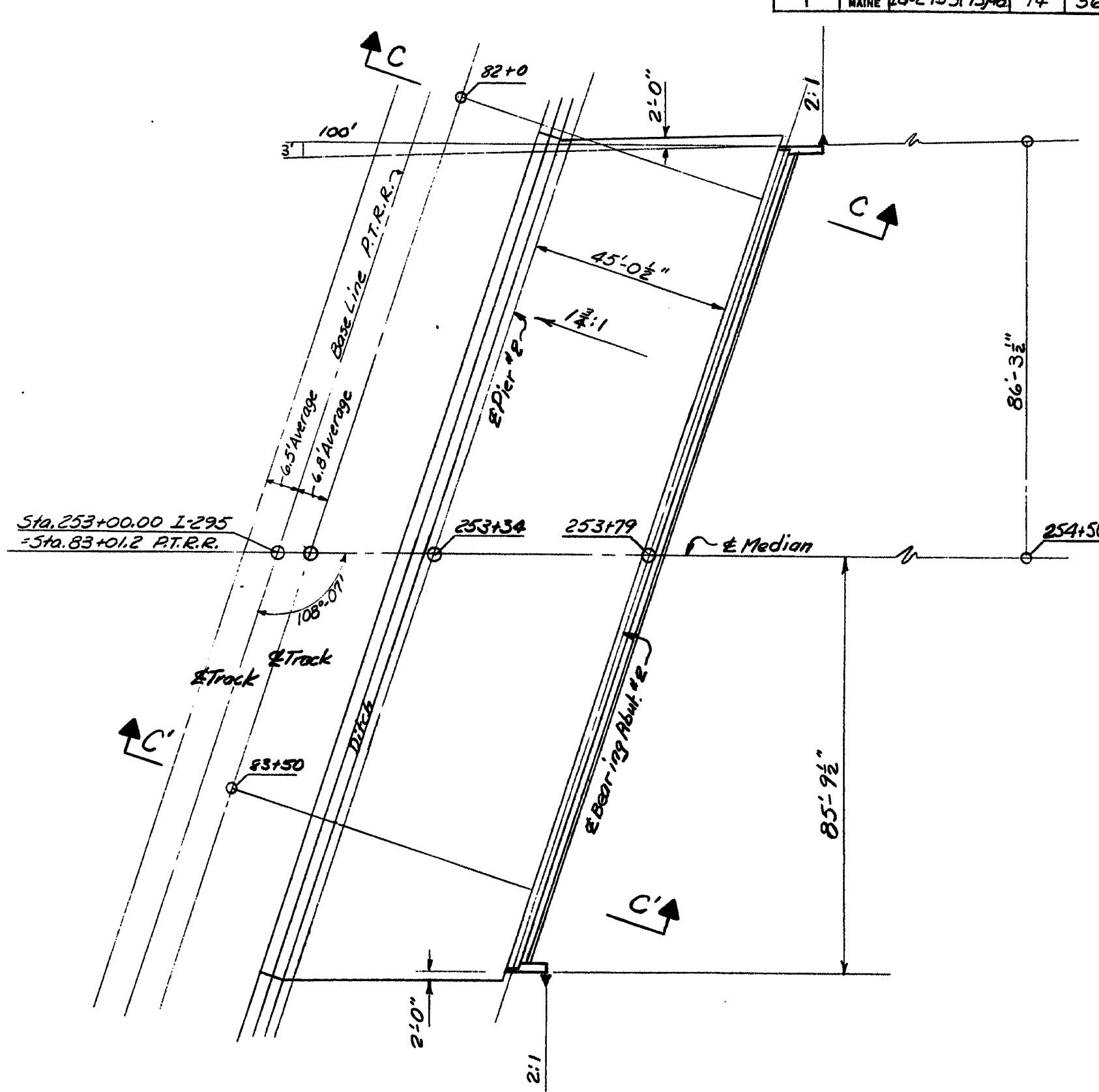
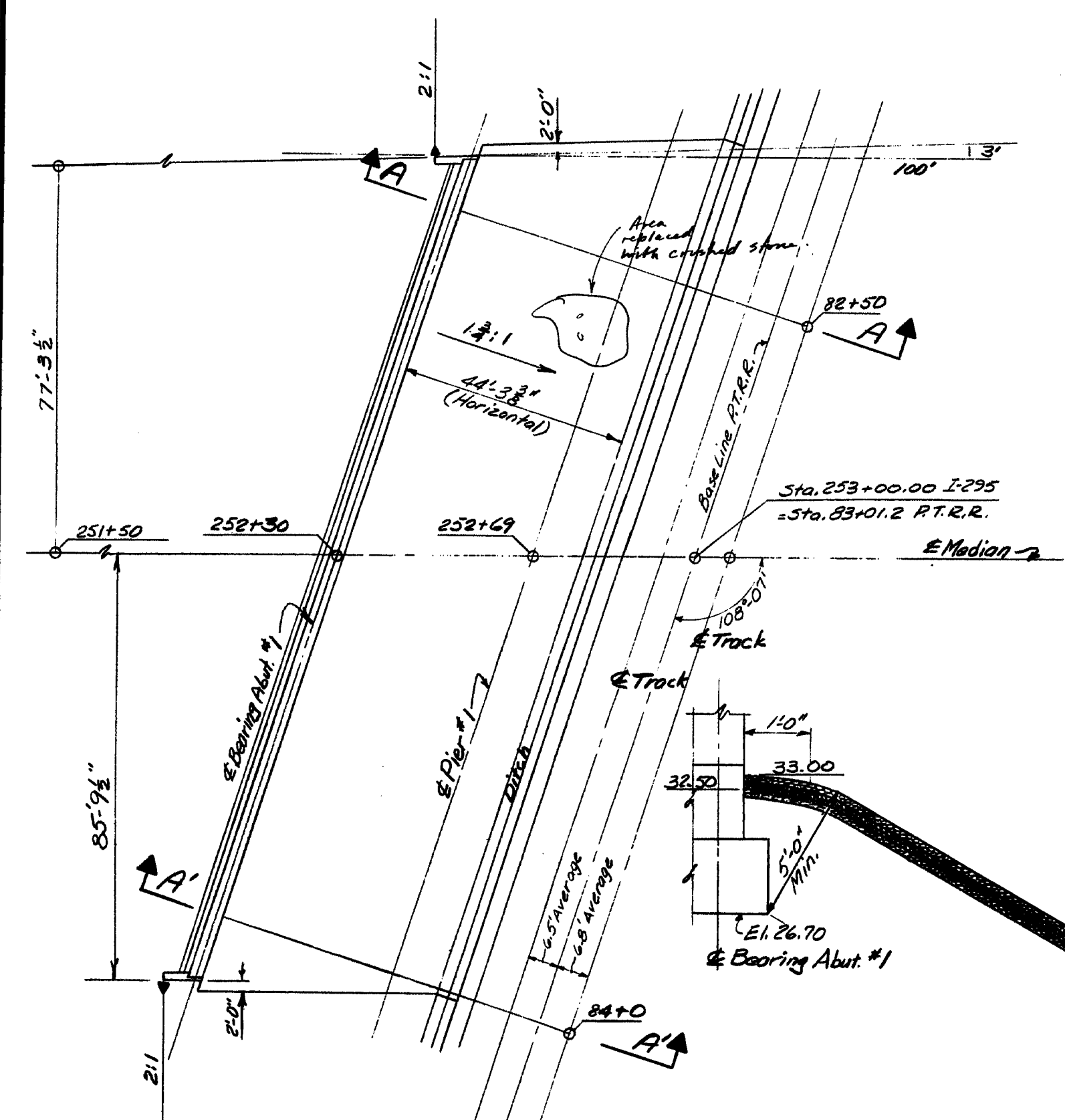
11. For Vertical Bridge Curb details See Sheet #24

8. Alternate Types of Pointed reinforced pile tips may be used if they have at least the cross-sectional area of the pointed reinforced pile tip shown on the plans and are approved by the Engineer.
9. Estimated driven lengths of piles are determined from available soils information with no allowance for pile cut-offs and no allowance for uncertain pile penetration.
10. HP 10x57 piles may be substituted for or spliced onto the HP 10x42 piles shown for the back row. Payment will be made at the contract price for Item 501.212

DESIGN- A.L.L.	BRIDGE NO.
TRACE- DETAIL R.M.N.	SURVEY- PLOT-
CHECK- N.E.R. & J.H.W.	
STATE OF MAINE DEPARTMENT OF TRANSPORTATION INTERSTATE 295 OVER PORTLAND TERMINAL RAILROAD IN THE CITY OF PORTLAND CUMBERLAND COUNTY DETAILS SHEET 12 OF 36 AUGUSTA, MAINE JULY 1972	

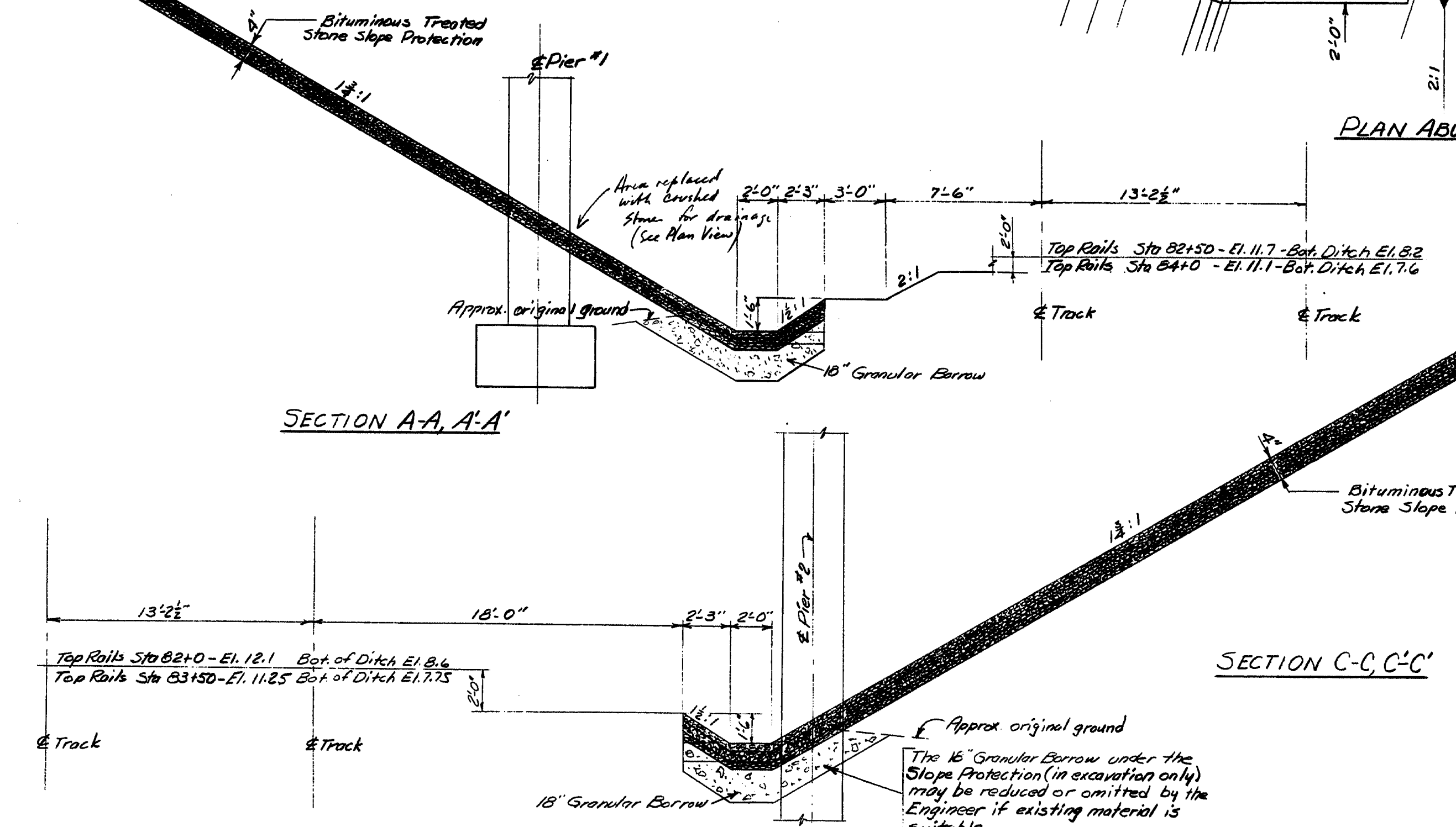
150-170

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	15-245-37348	14	36



Bituminous Treated Stone Slope Protection

SECTION A-A, A'-A'



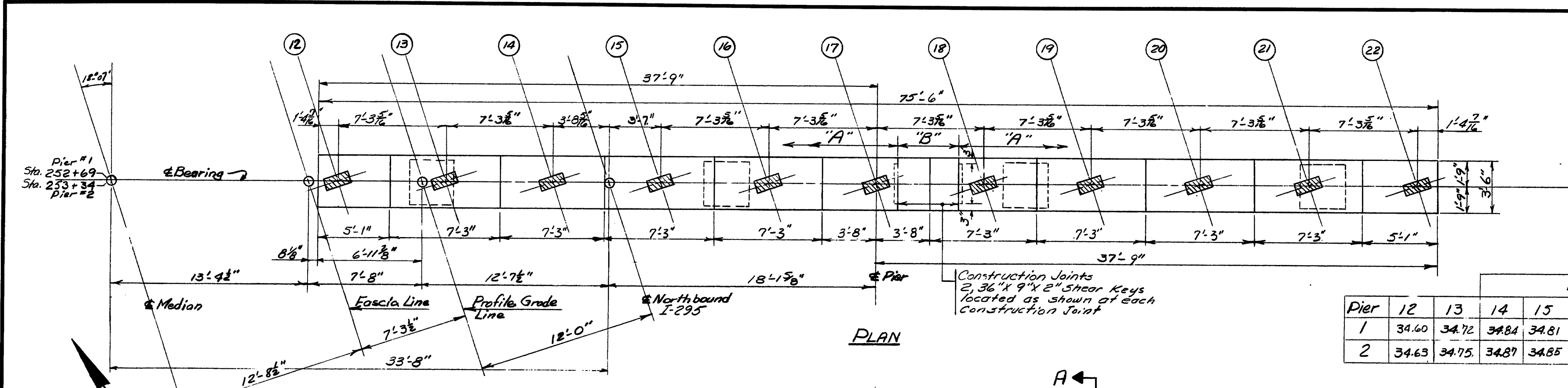
DESIGN: A.L.L.
TRACE: D.E.H.
CHECK: P.M.V.

BRIDGE NO. SURVEY PLOT

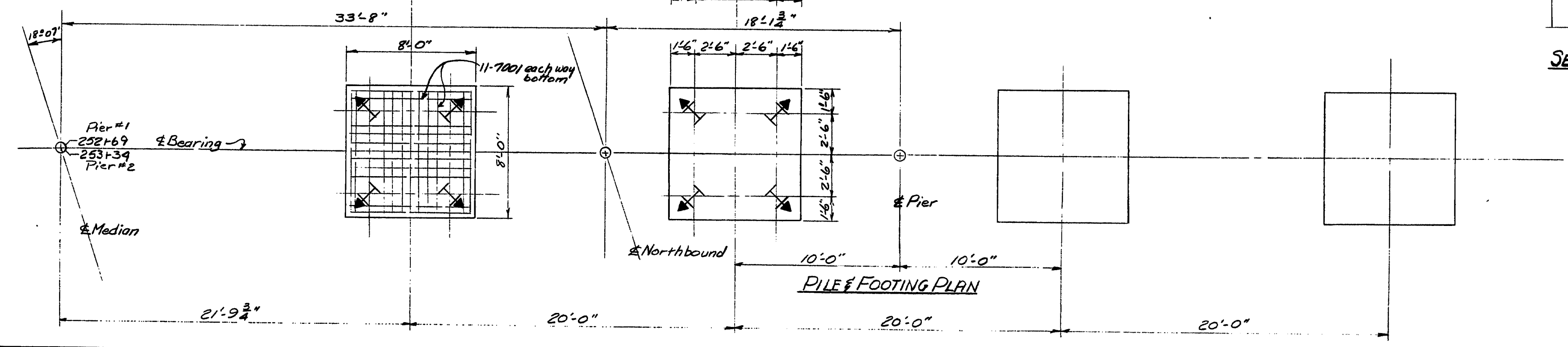
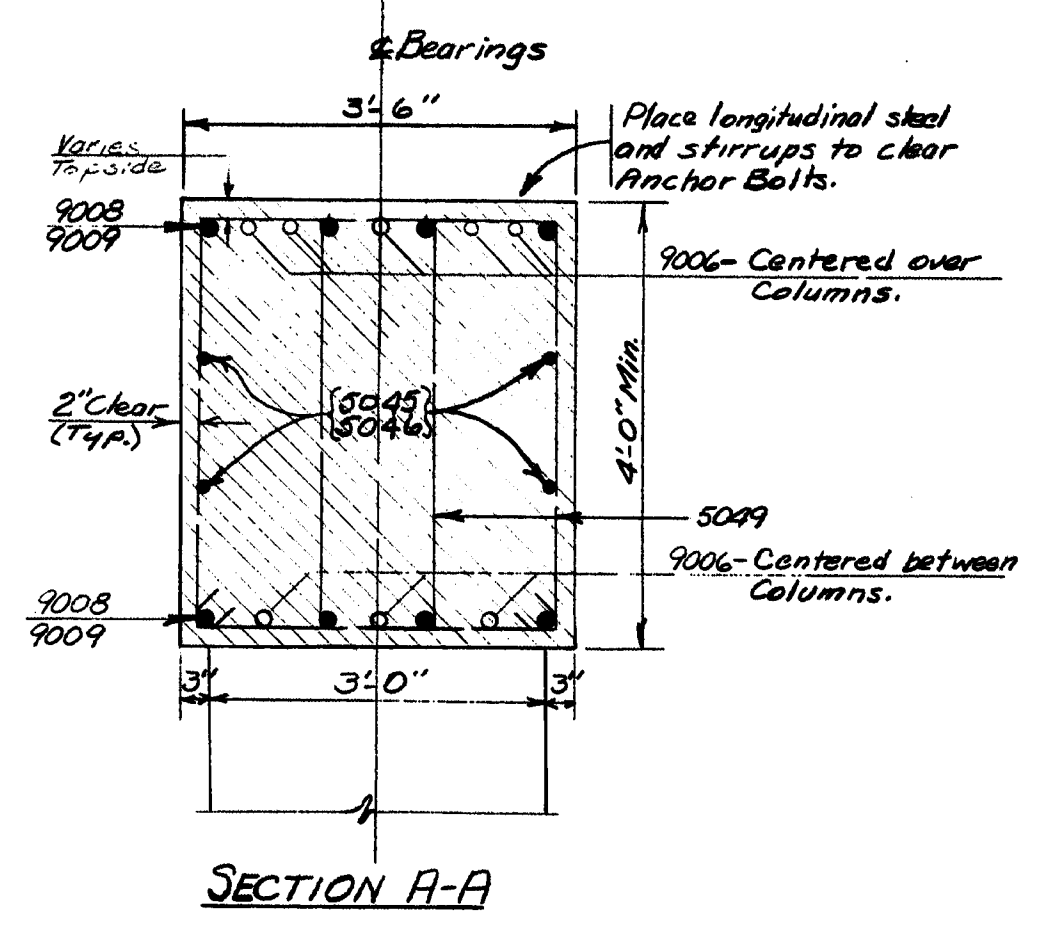
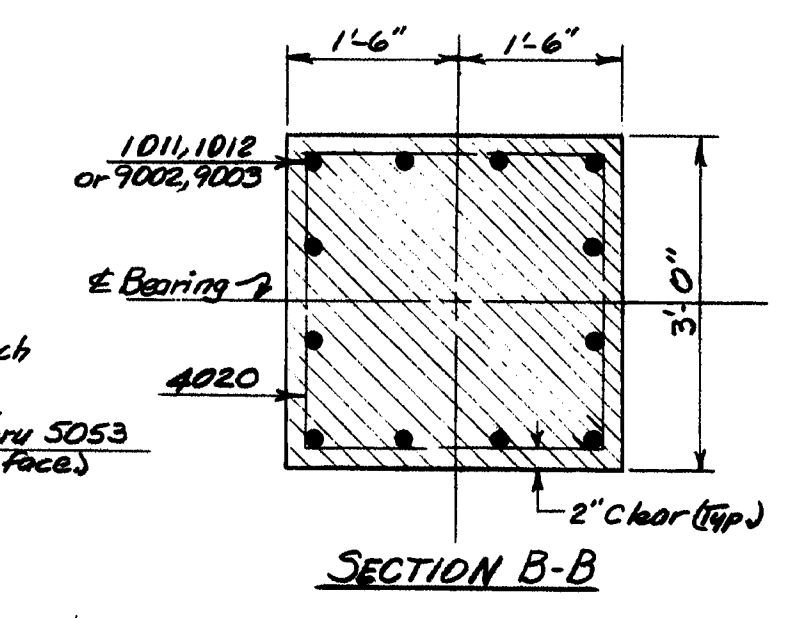
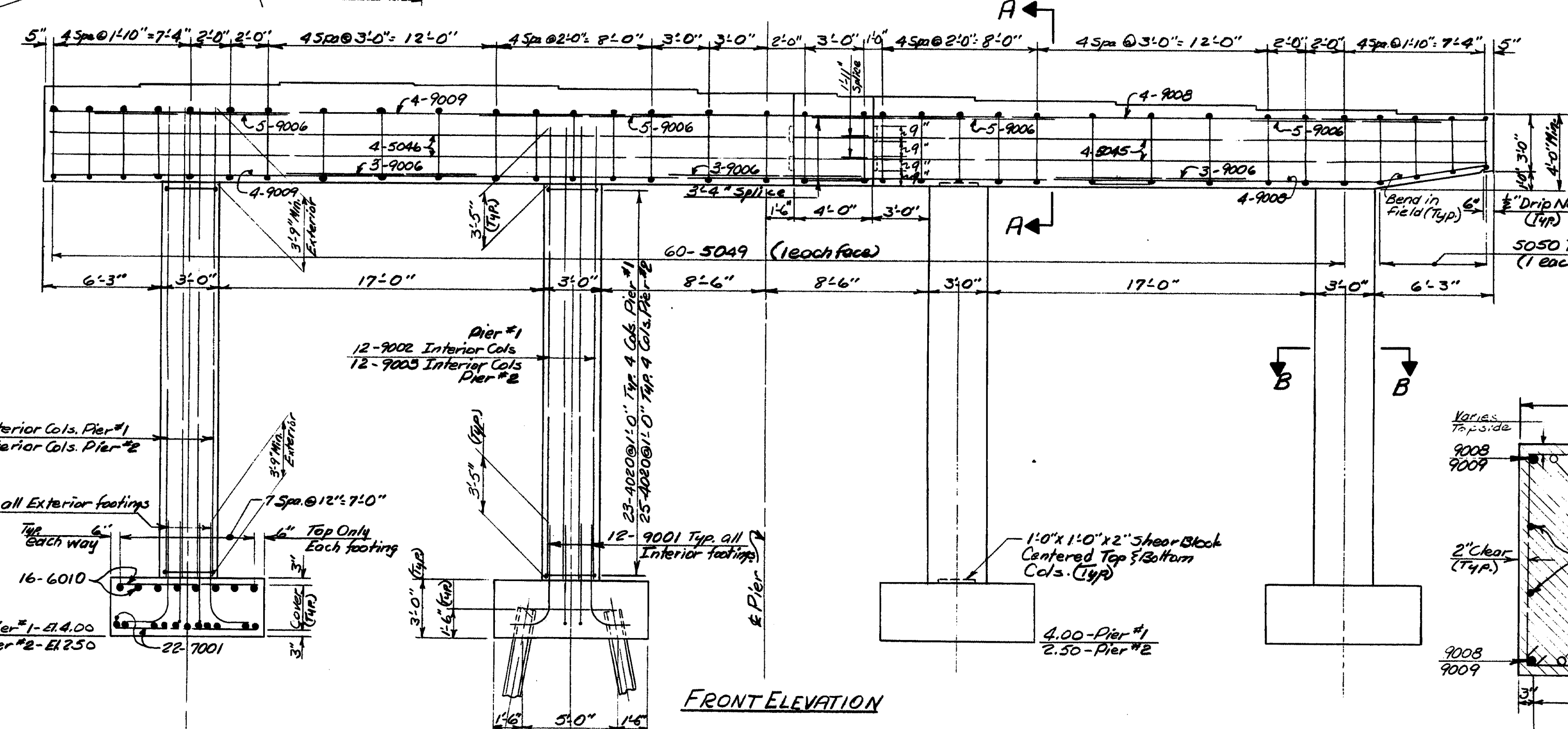
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
SLOPE PROTECTION
SHEET 14 OF 36 AUGUSTA, MAINE JULY 1972

150-172

S.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	16-295-3173H8	15	36



Bridge Seat Elevations												Bottom Cap Elev.
Pier	12	13	14	15	16	17	18	19	20	21	22	
1	34.60	34.72	34.84	34.81	34.81	34.65	34.57	34.51	34.47	34.30	34.13	30.13
2	34.63	34.75	34.87	34.85	34.68	34.51	34.43	34.55	34.50	34.34	34.17	30.17



Notes: For Pile and Pier Notes See Sheet #16

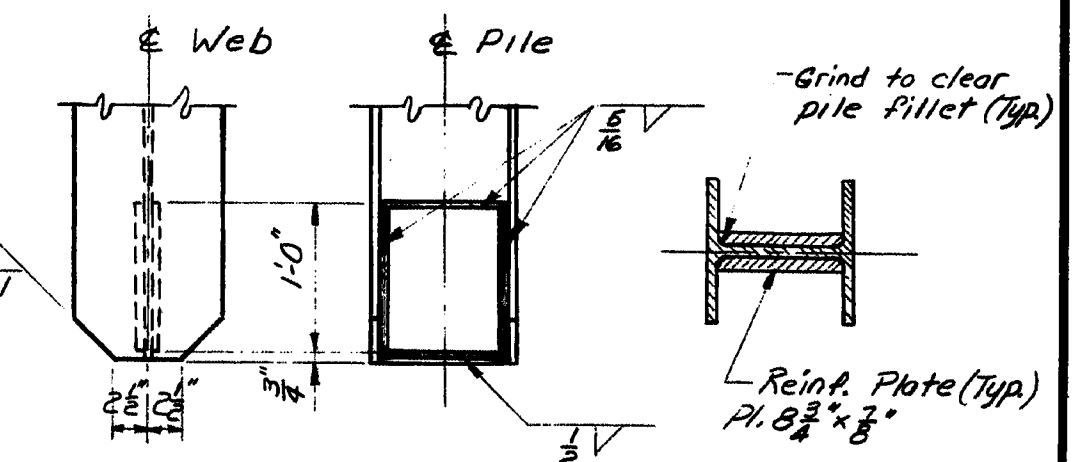
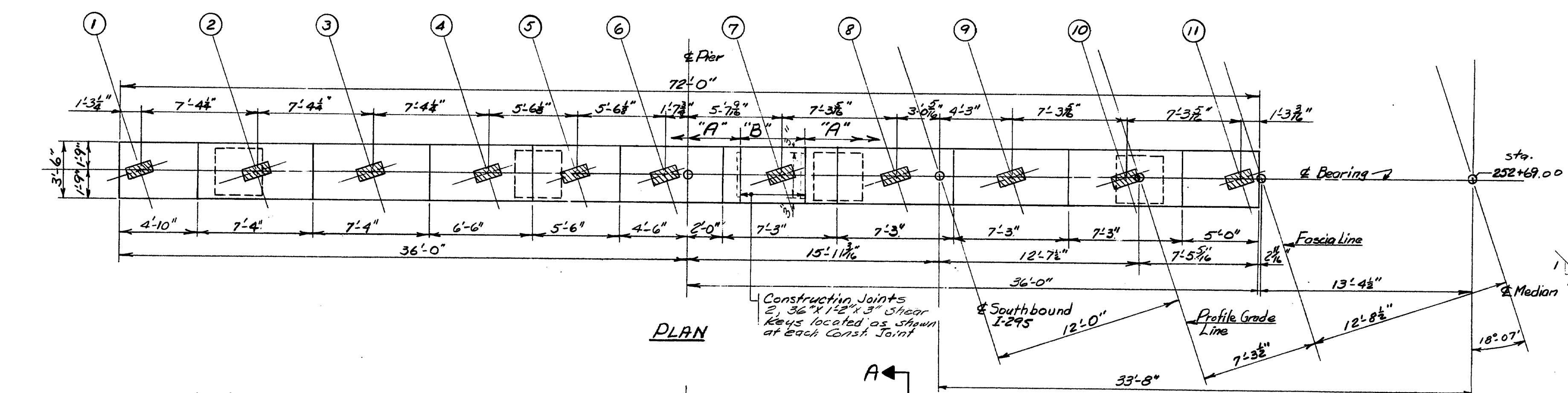
DESIGN: ALL
TRACE: R.V.M.
CHECK: P.W.

BRIDGE NO.
SURVEY
PLOT

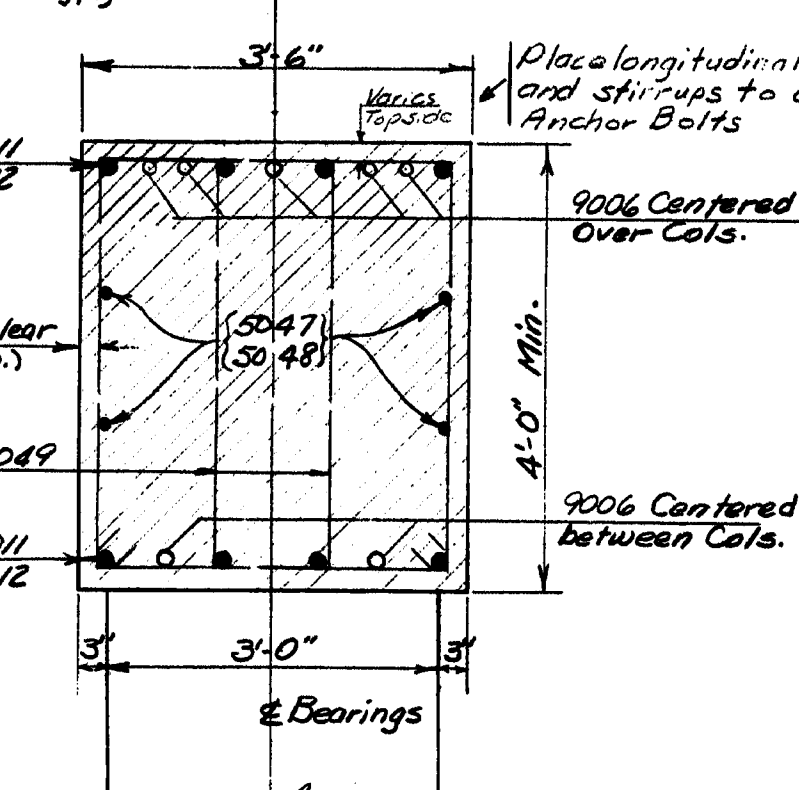
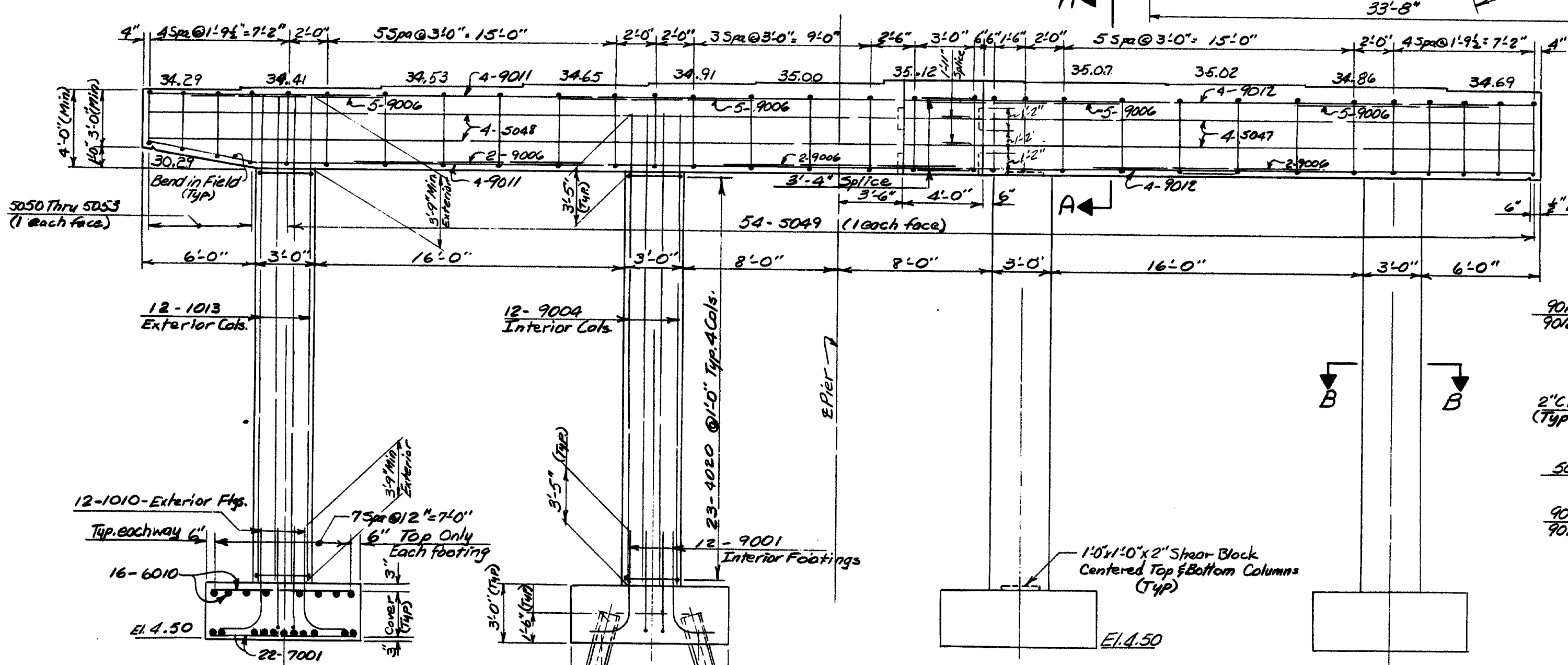
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
PIERS 1 & 2 N.B.
SHEET 15 OF 36 AUGUSTA, MAINE JULY 1972

150-173

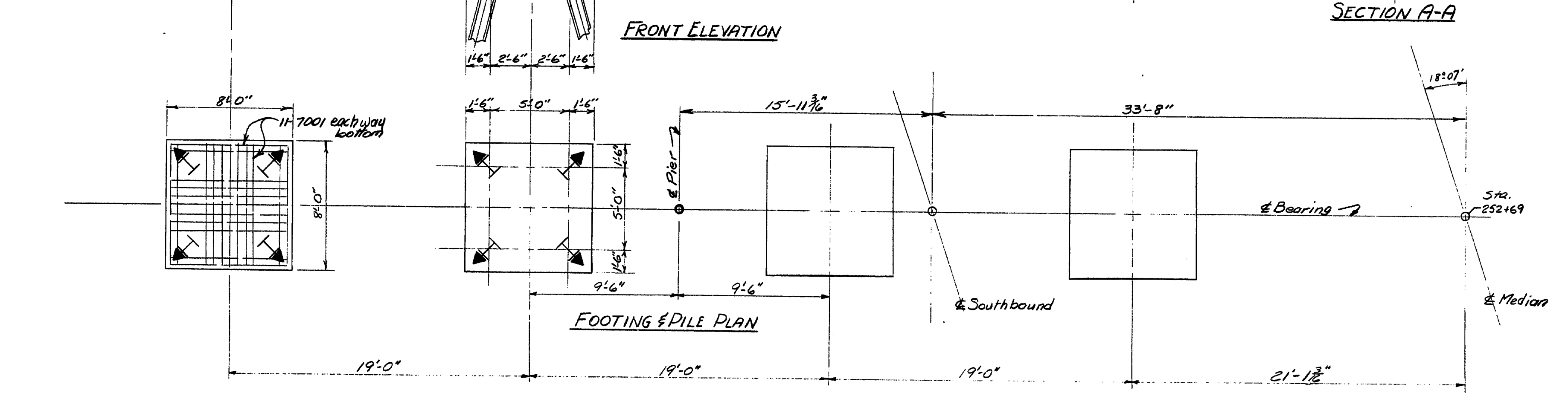
S. P. R. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	76-295-3(73)48	16	36



POINTED REINFORCED PILE TIP
Plates may be shop or field welded



SECTION A-A



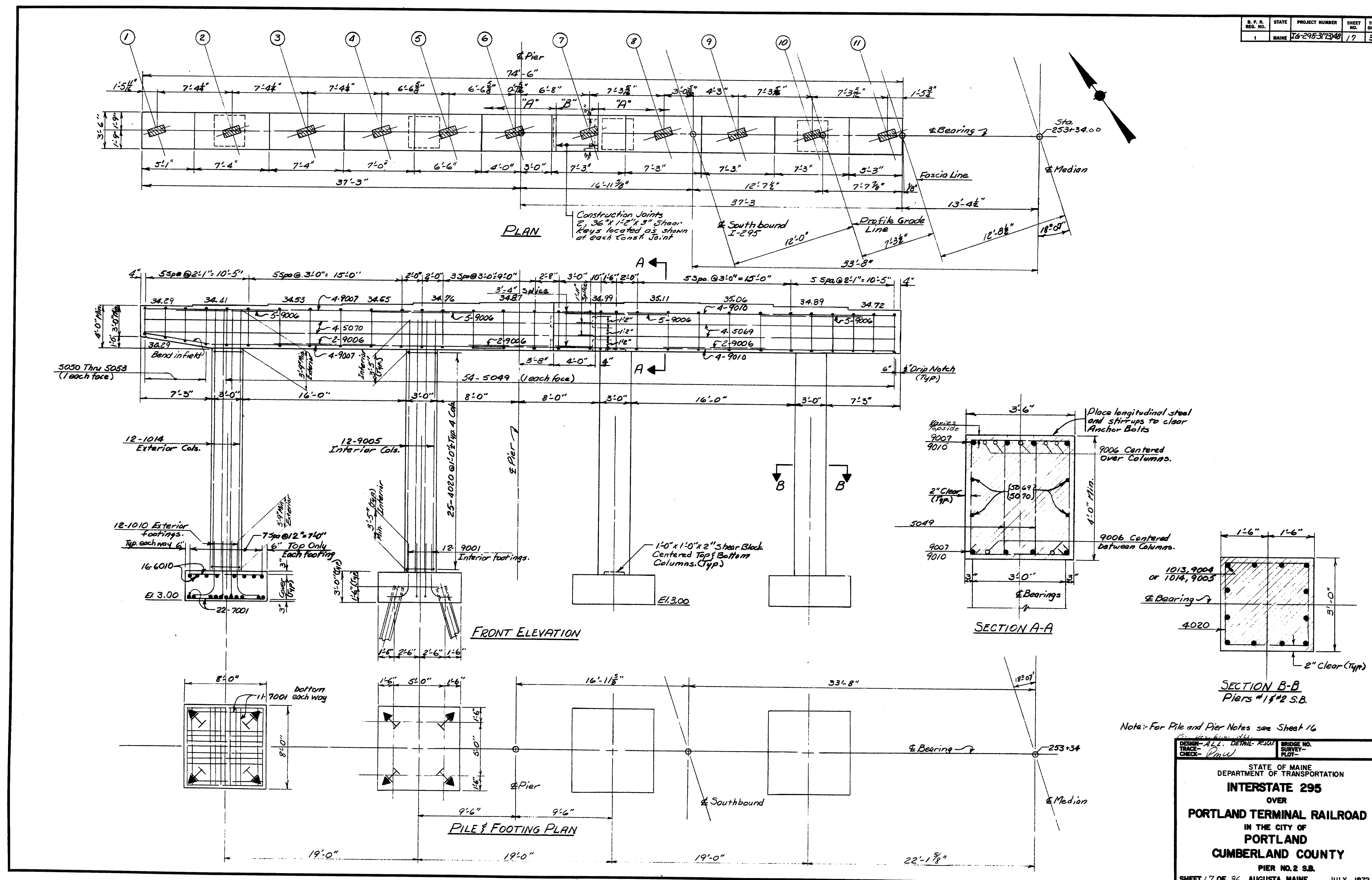
FOOTING & PILE PLAN

- PIER PILE NOTES**
- Piles shall be driven to ledge or practical refusal.
 - All piles shall have pointed reinforced tips.
 - Alternate types of pointed reinforced pile tips may be used if they have at least the cross-sectional area of the pointed reinforced pile tip shown on the plans and are approved by the Engineer.
 - Estimated driven lengths of piles are determined from available soils information with no allowance for pile cut-offs and no allowance for uncertain pile penetration.
 - Estimated length of piles:
Pier #1 S.B. 16 @ 70 feet
Pier #2 S.B. 16 @ 73 feet
Pier #1 N.B. 16 @ 64 feet
Pier #2 N.B. 16 @ 64 feet
 - Piles marked thus, , shall be battered 2 1/4% in the direction of the arrow.
 - Maximum pile load equals: HP10.57* 76 tons, (including 15 tons allowed for negative skin friction).
 - One splice only per pier pile will be allowed.
- PIER NOTES**
- Chamfer all exposed edges of concrete 1/2 inch unless otherwise indicated.
 - Reinforcing steel shall have 2 inches minimum cover unless otherwise indicated.
 - Place reinforcing steel in bridge seats to clear anchor bolts.
 - All reinforcing steel splices and embedments shall be a minimum of 36 bar diameters unless otherwise indicated.
 - Place concrete in Cap Sections A" then wait 7 days before placing Cap Section B".
- For Section B-B see Sheet 17
For Bearing layout see Sheet 18

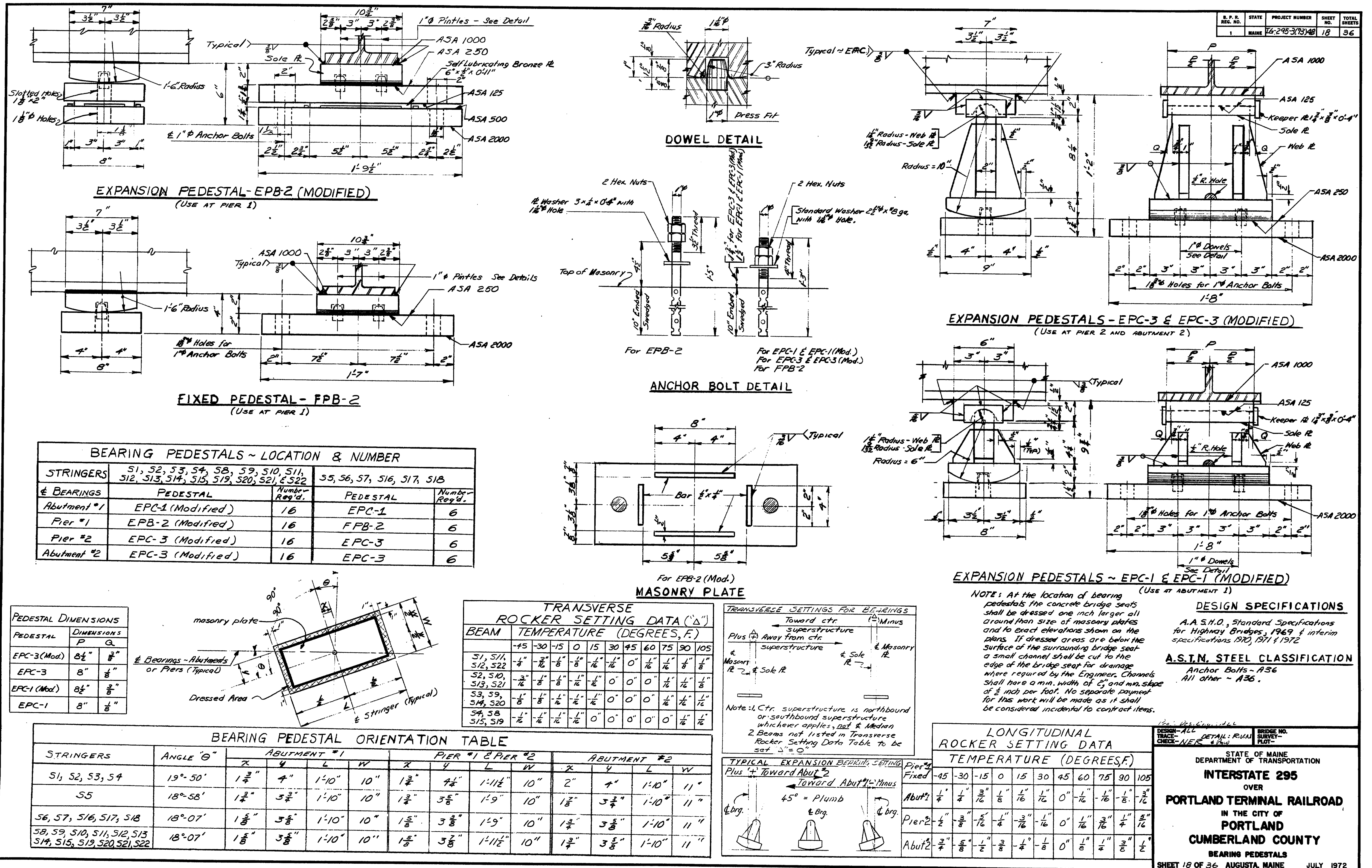
DESIGN - ALL	DETAIL - R.M.	BRIDGE NO.	76-295-3(73)48
TRACE	CHECK - P.M.	SHEET	16
STATE OF MAINE DEPARTMENT OF TRANSPORTATION INTERSTATE 295 OVER PORTLAND TERMINAL RAILROAD IN THE CITY OF PORTLAND CUMBERLAND COUNTY PIER NO. 1 S.B. SHEET 16 OF 36 AUGUSTA, MAINE JULY 1972			

150-174

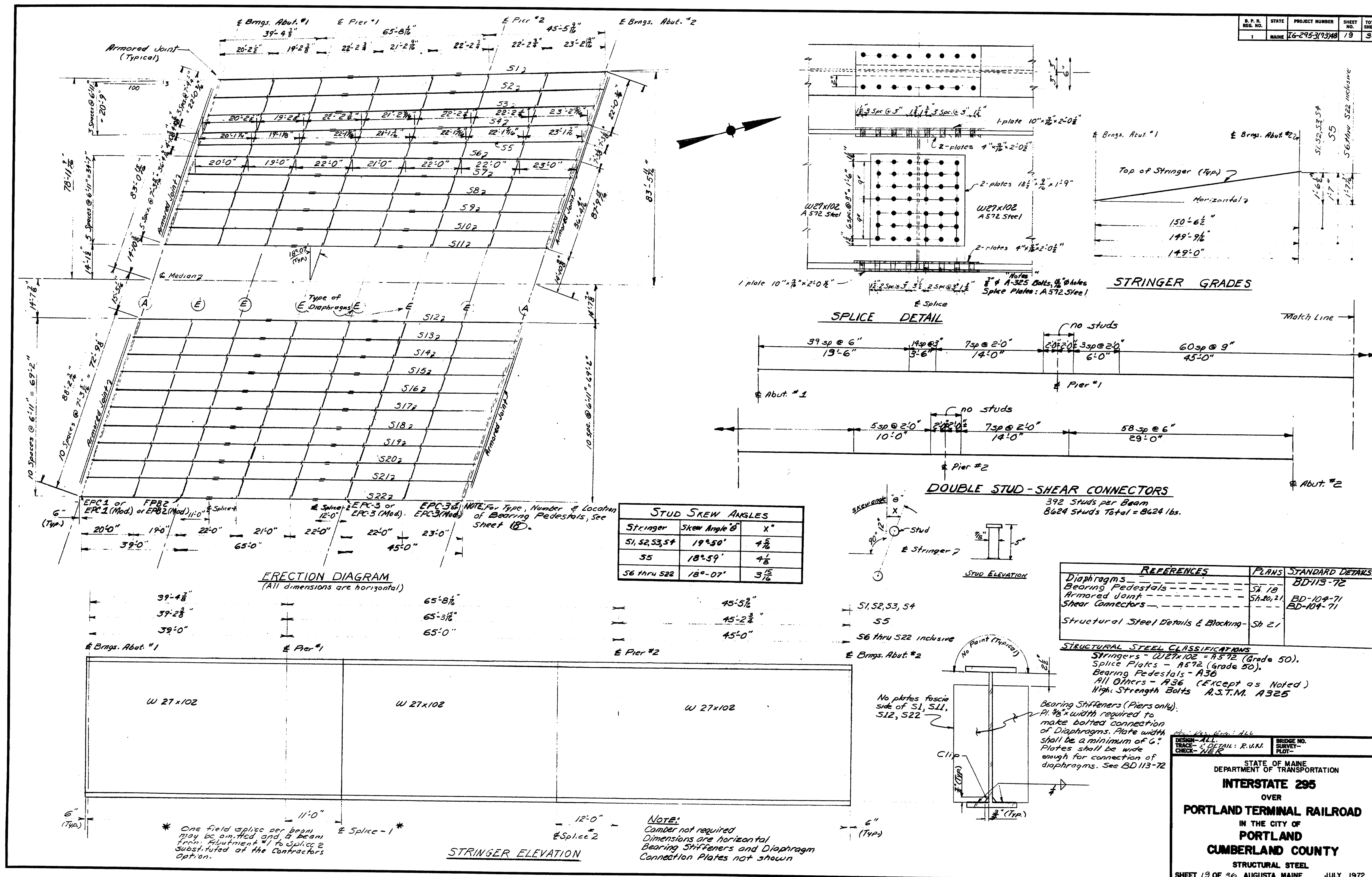
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	16-295-3(23)48	17	36



150-175

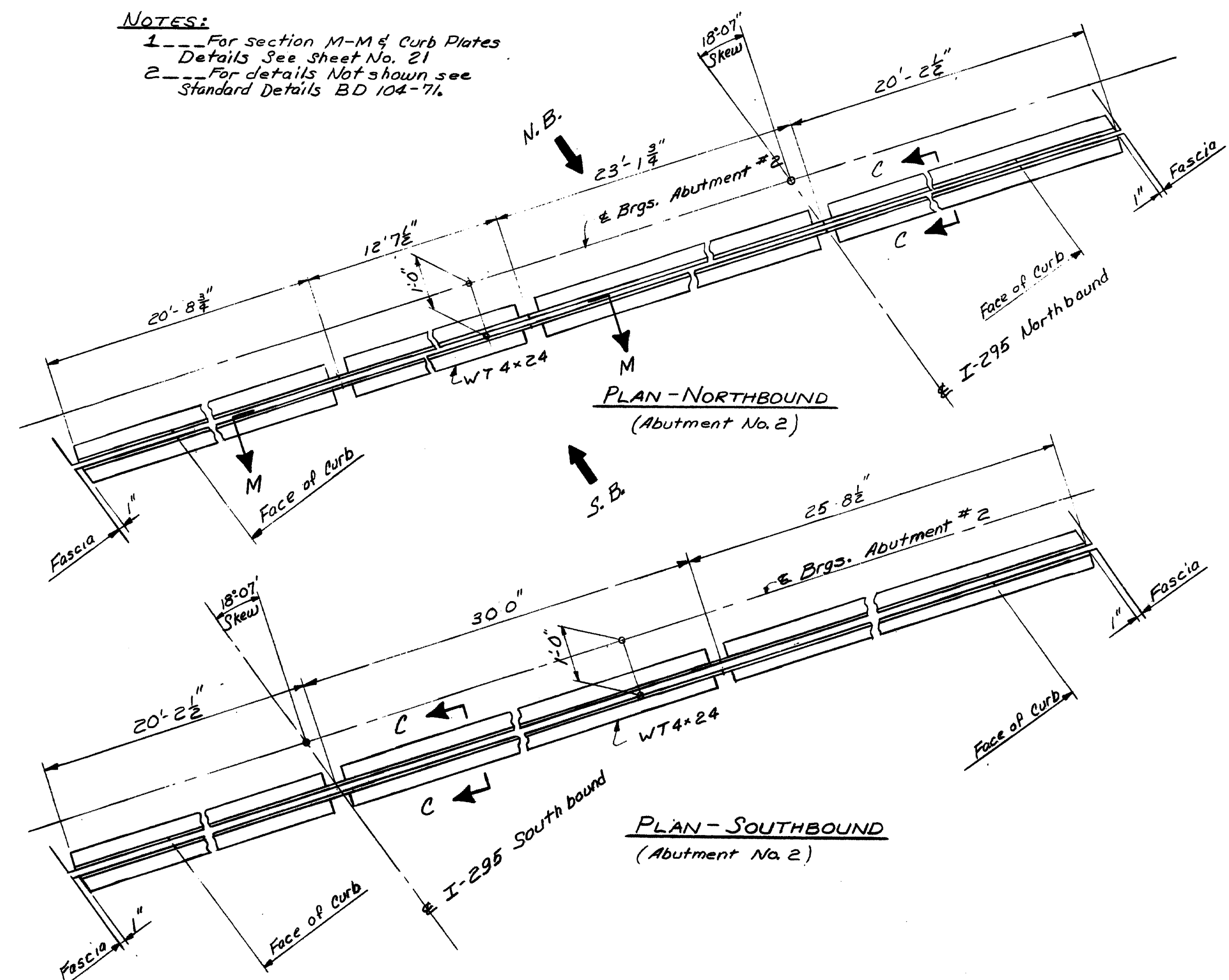


150-176

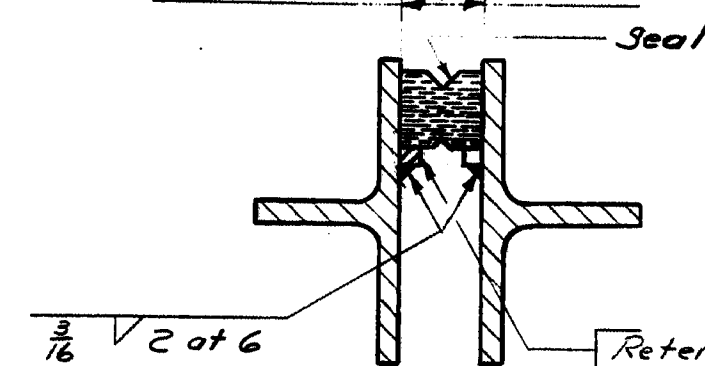


NOTES:

1. For section M-M & Curb Plates Details See Sheet No. 21
2. For details Not shown see Standard Details BD 104-71.



Abutment #1 1 1/4" @ 45° F
Abutment #2 2 1/2" @ 45° F



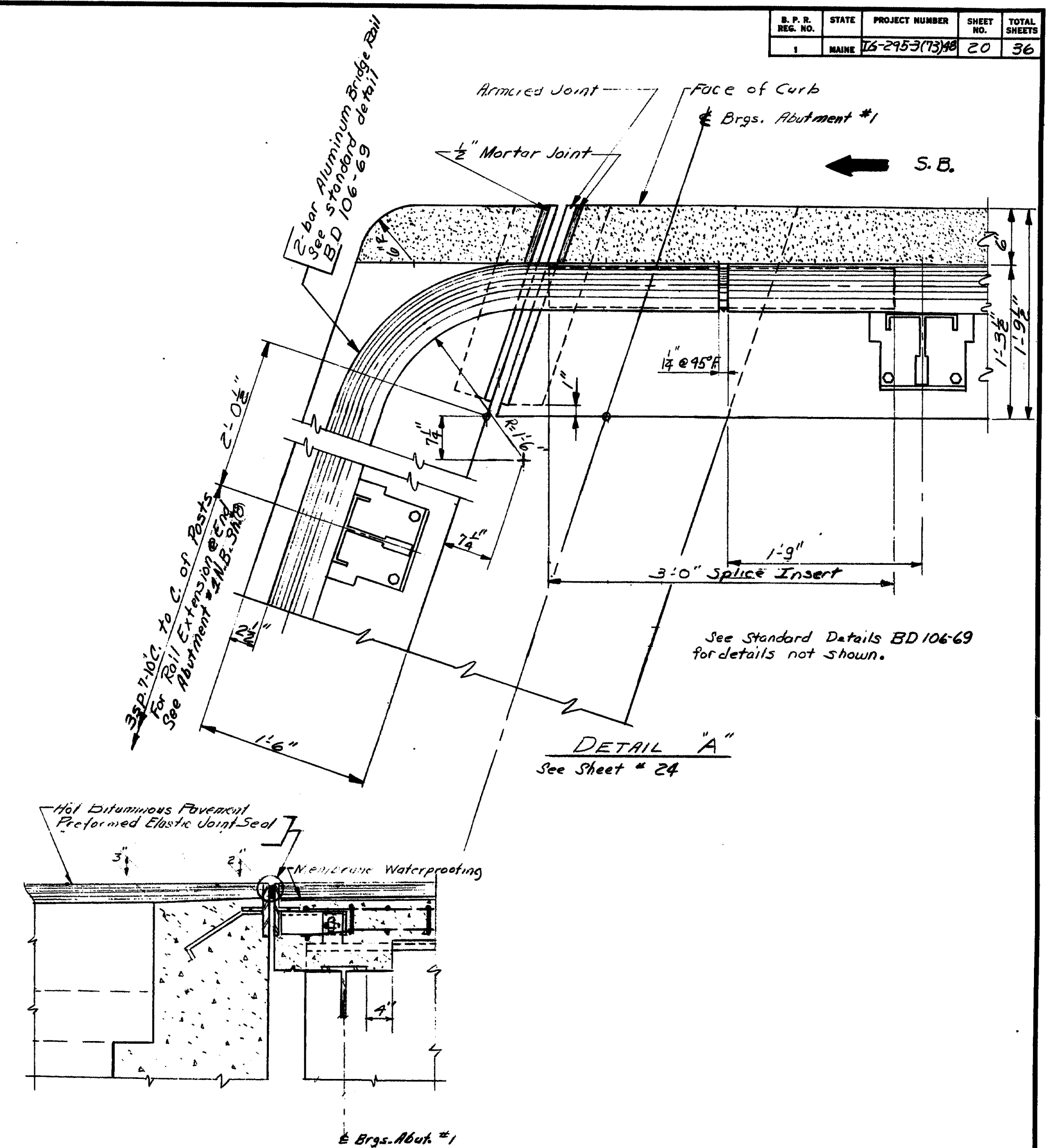
SEAL ARRANGEMENT
(In Armored Joint)

NOTES:

1. The seals furnished shall be as follows:

Location	Type	Movement Rating
Abutment 1	A	1/2"
Abutment 2	B	1 1/8"

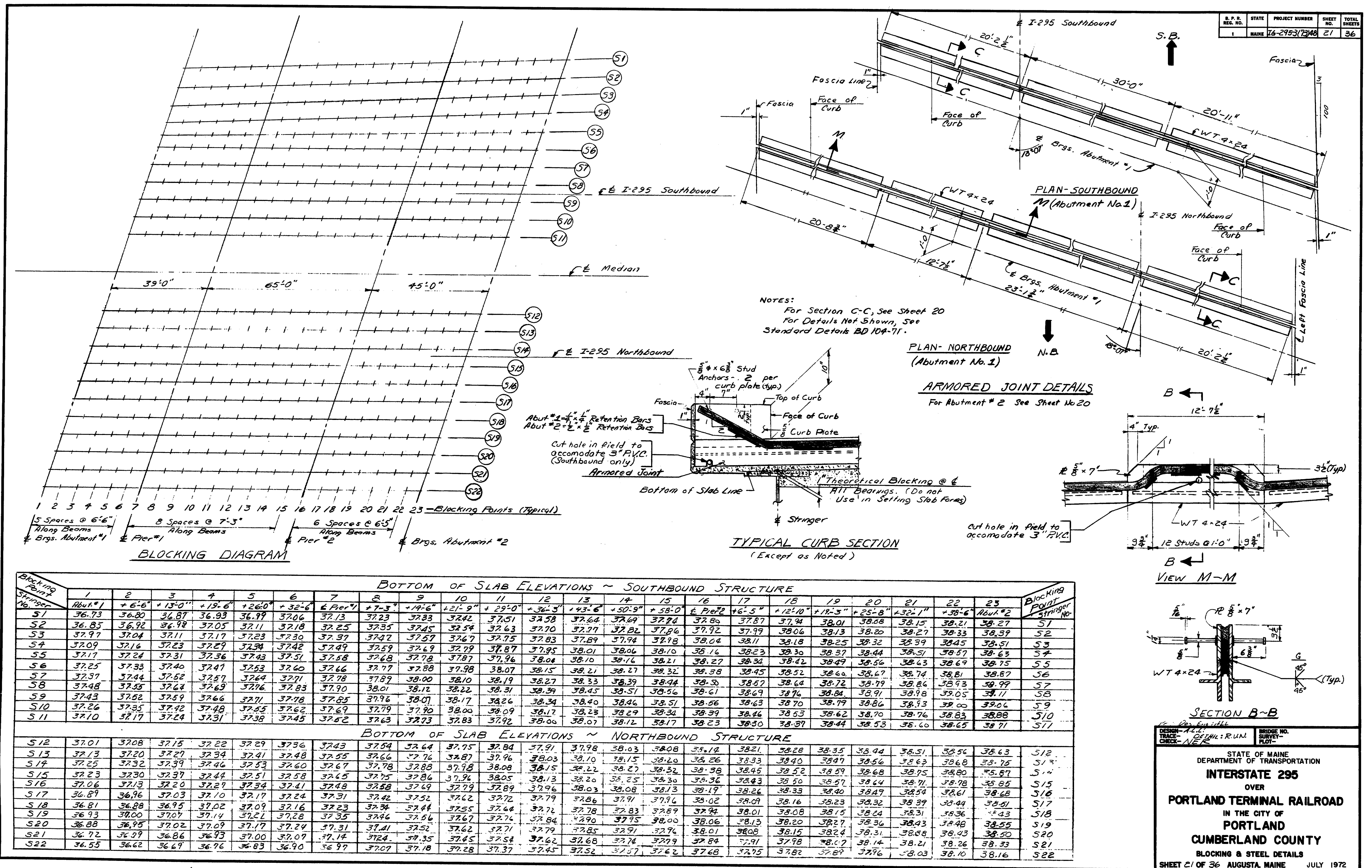
2. The joint openings shown, are for design only and are subject to change due to differences in seals as supplied by various manufacturers. Do not use for setting of joint opening during construction.
3. The seal characteristics shall be submitted to the engineer for approval, prior to the fabrication of the armored joint.



DESIGN - RLL	BRIDGE NO.
TRACE - DETAIL R.V.M.	SURVEY -
CHECK - NER & P.M.W.	PLOT -

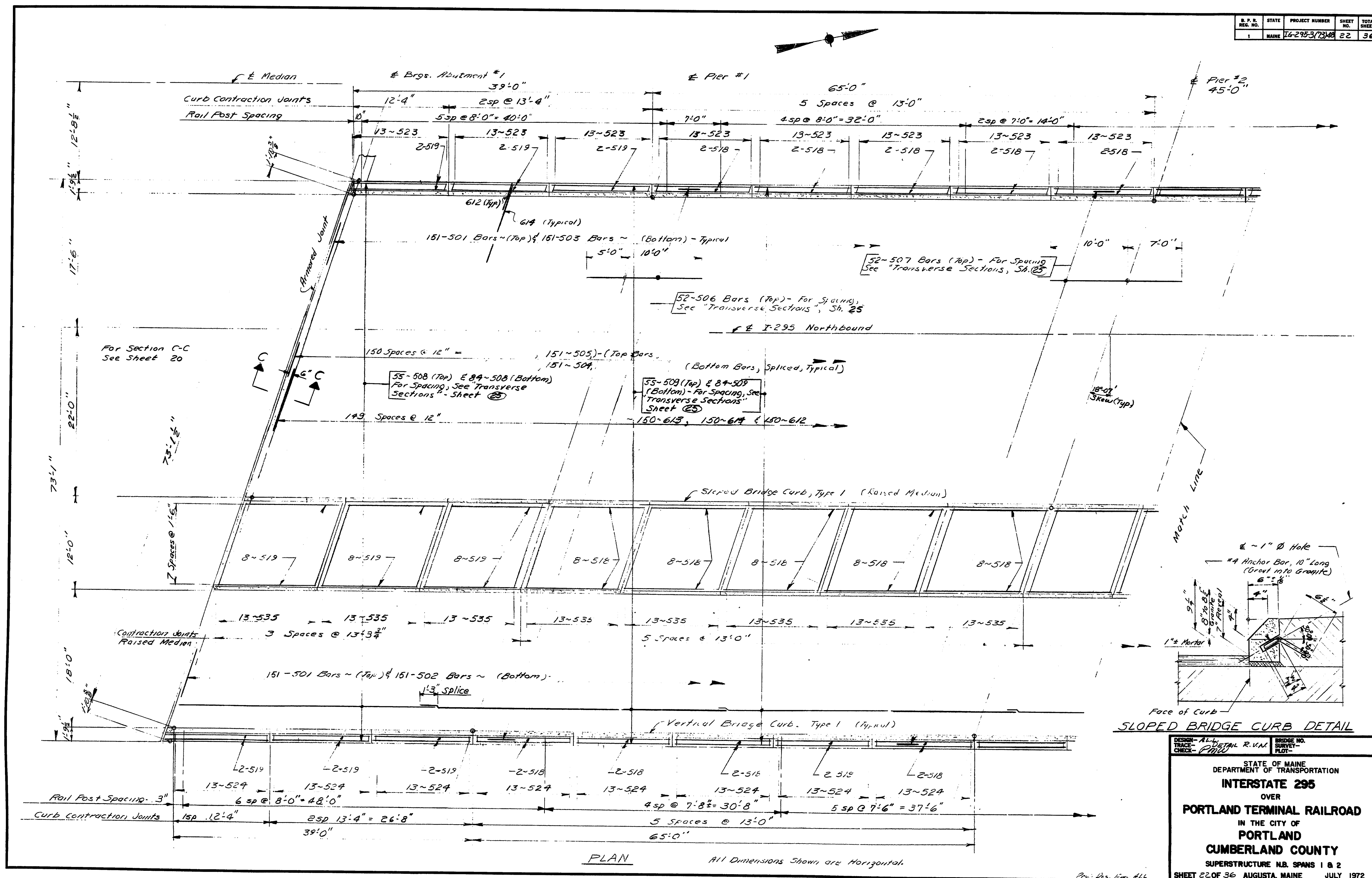
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
ARMORED JOINT ABUT. NO. 2 NB-SB &
SUPERSTRUCTURE DETAILS
SHEET 20 OF 36 AUGUSTA, MAINE JULY 1972

150-178



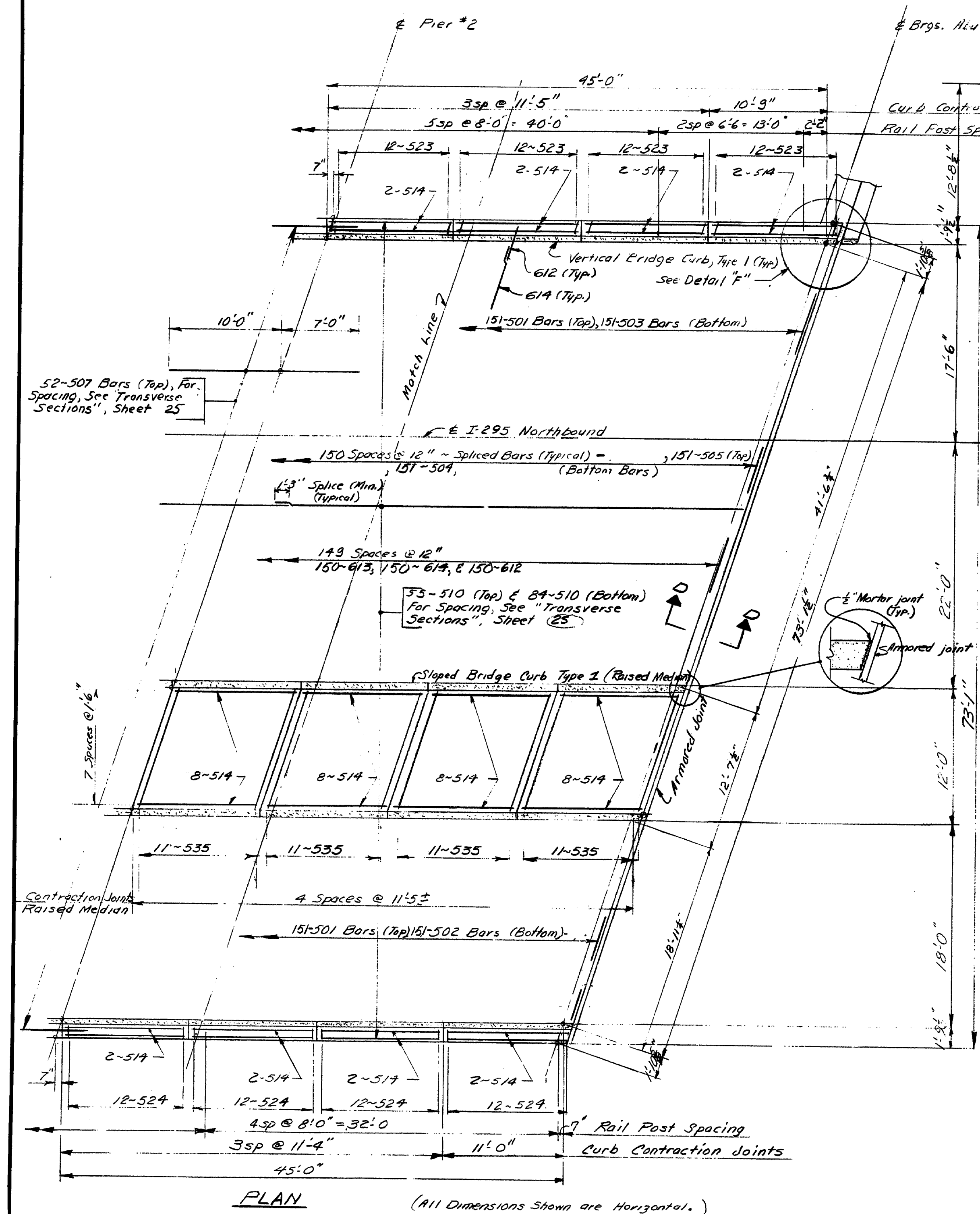
150-179

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	16-295-3/1348	22	36



150-180

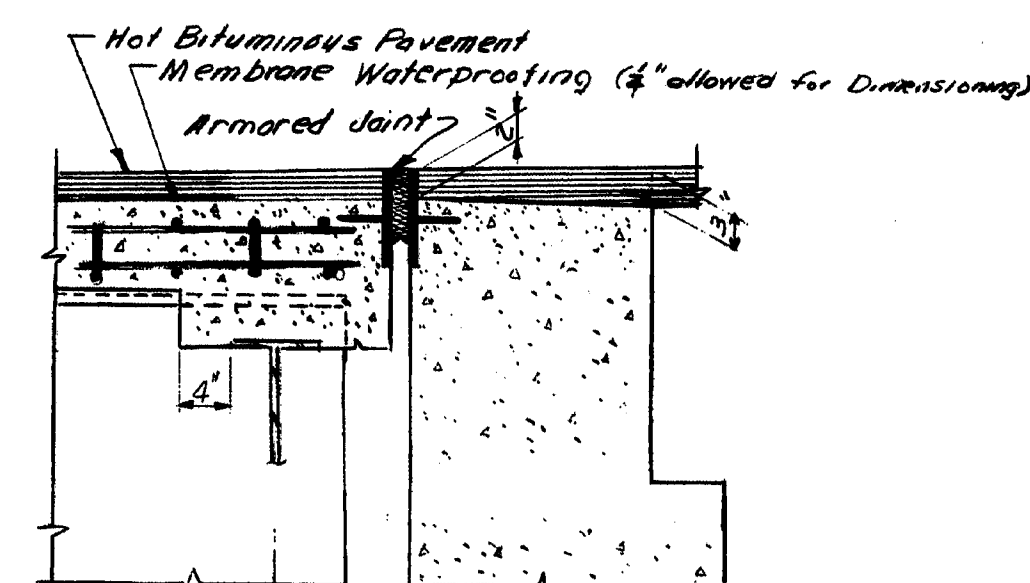
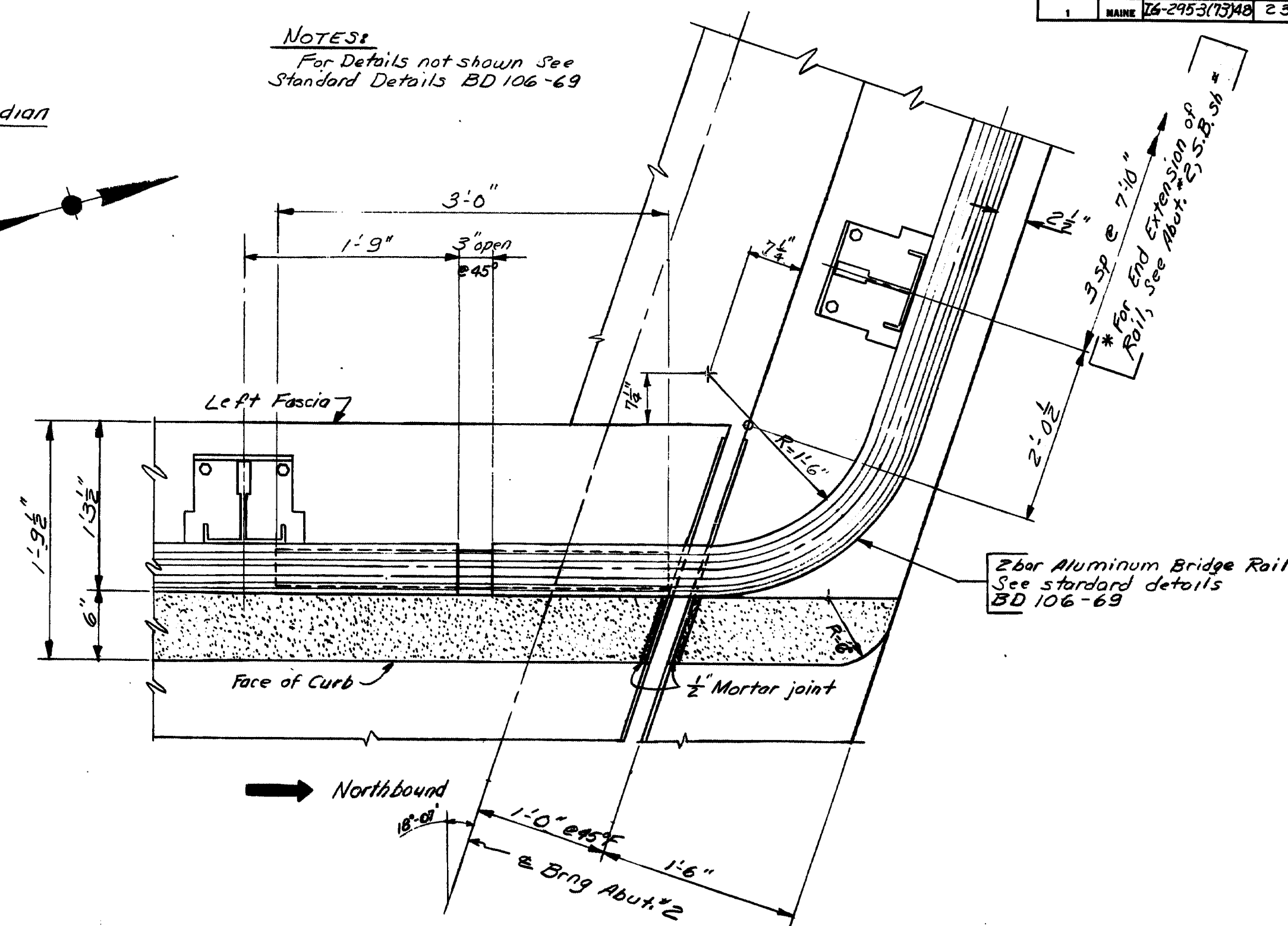
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	76-2953(73)48	23	3



(All Dimensions Shown are Horizontal.)

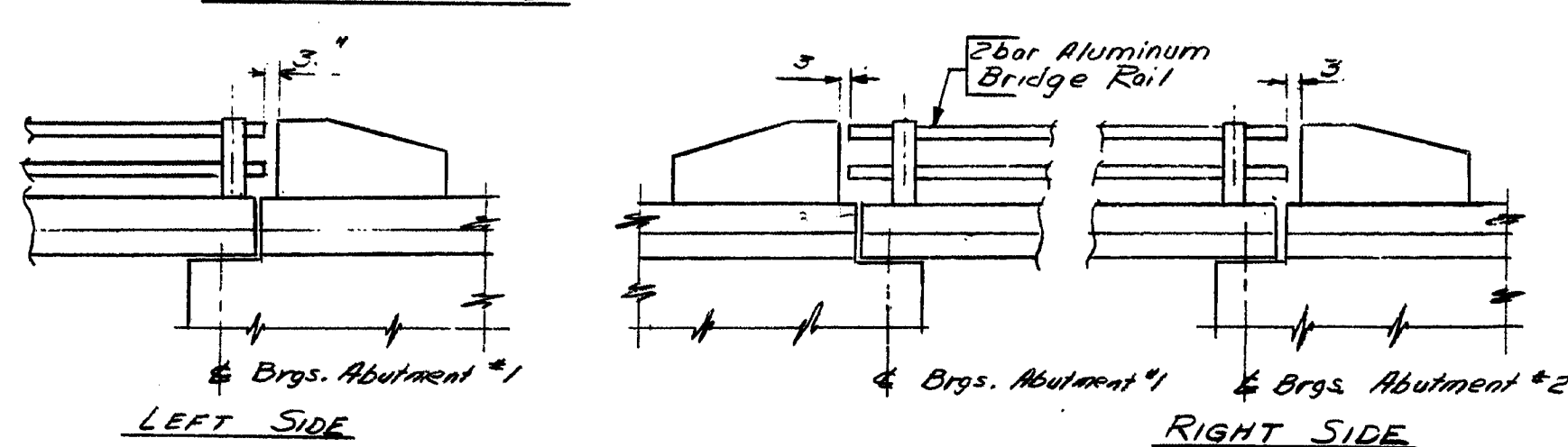
NOTES:

For Details not shown See
Standard Details BD 106-69



& Brqs. Abutment #2

SECTION D-D



LEFT SIDE

RIGHT SIDE

DESIGN- A.L.H.
TRACE- R.V.N.
CHECK- (Pilot)

BRIDGE NO.
SURVEY-
PLOT-STATE OF MAINE
DEPARTMENT OF TRANSPORTATION**INTERSTATE 295**

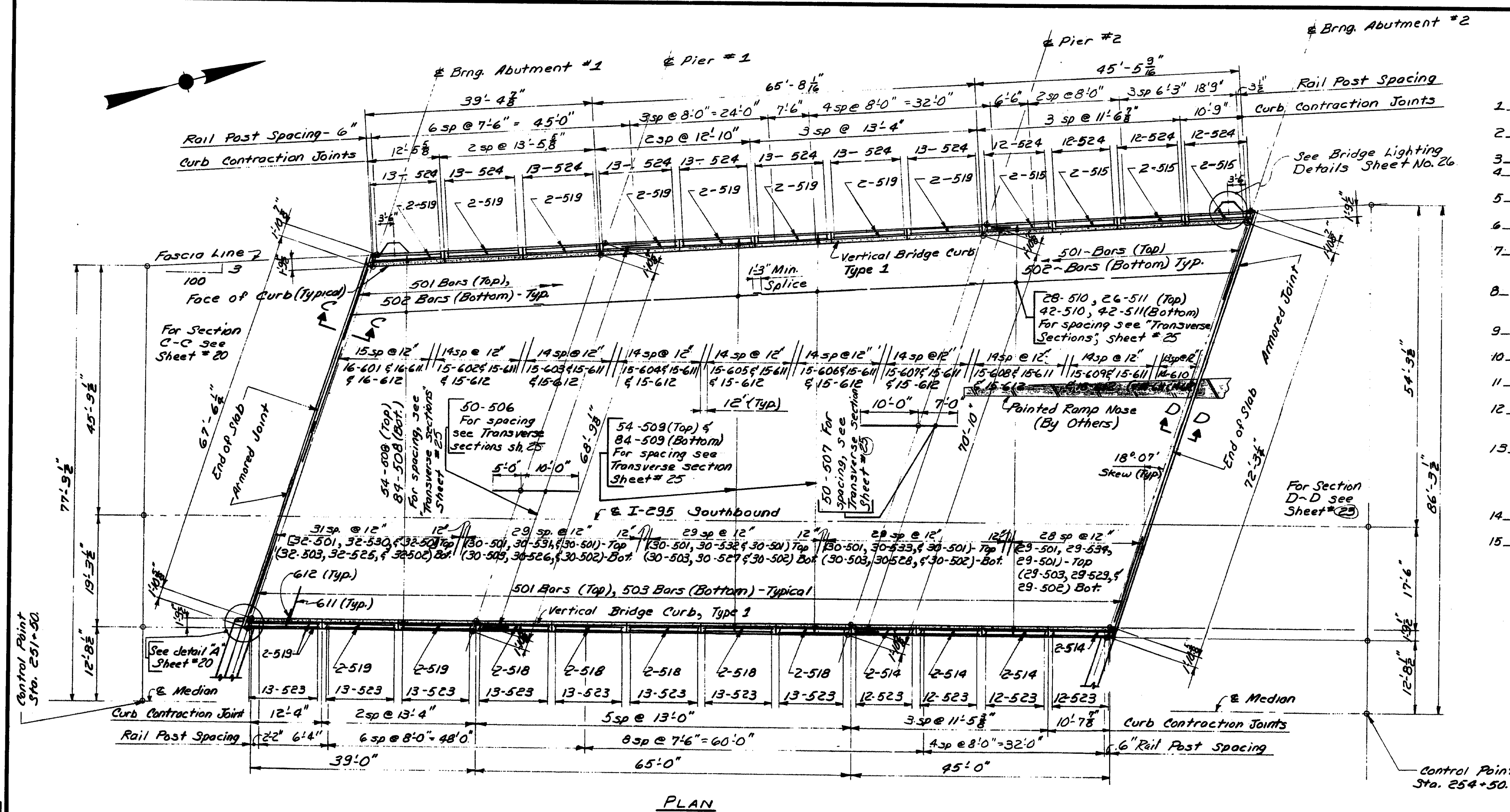
PORTLAND TERMINAL RAILROAD

**IN THE CITY OF
PORTLAND**

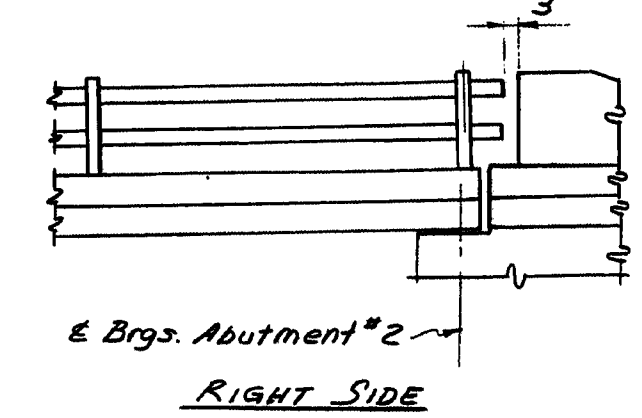
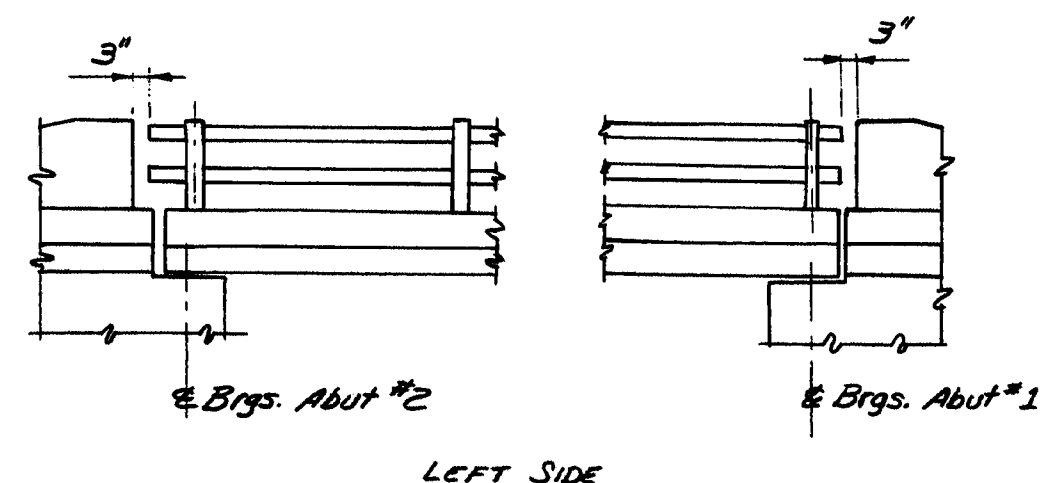
SUPERSTRUCTURE N.B. SPAN NO. 3 & DETAIL.
SHEET 23 OF 36 AUGUSTA, MAINE JULY 1972

150-181

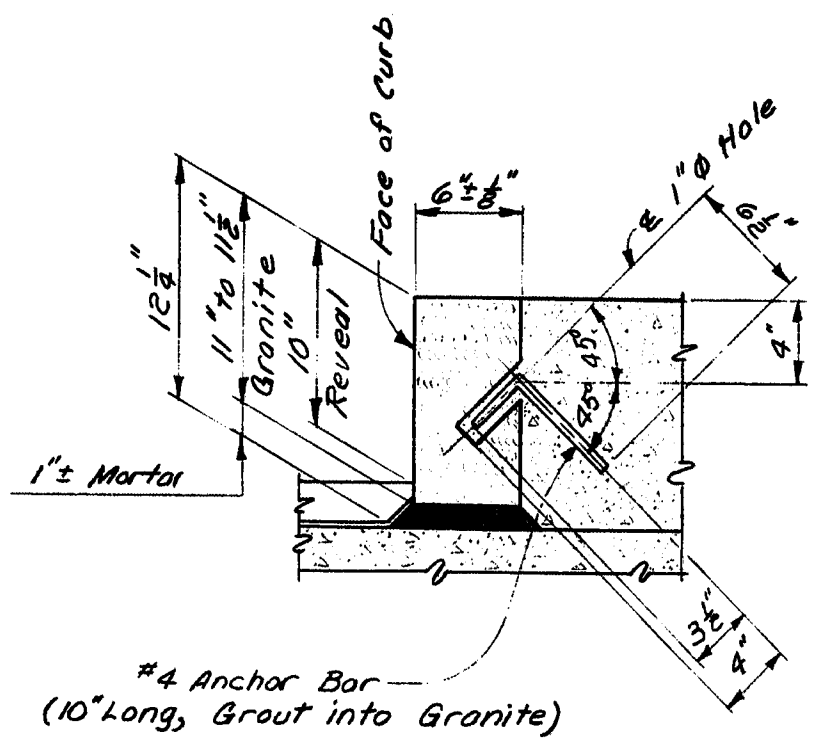
SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	16-2953(848)	24	36



- ### GENERAL SUPERSTRUCTURE NOTES
- For Transverse Sections, 1" V-Groove Details, and Construction Joints in Curbs (Detail "H") See Sheet No. 25
 - For Detail "A", Section C-C, See Sheet No. 20
 - For Sloped Bridge Curb Detail, See Sheet No. 22
 - For Detail "F", Section D-D, & View G-G, and Rail Elevations for Northbound Structure, See Sheet No. 23
 - For Armored Joint Details and Blocking, See Sheet No. 20 & See Sheet No. 21
 - Chamfer all exposed edges of concrete $\frac{1}{4}$ " unless otherwise indicated.
 - Form a 2-inch V-groove on the outside faces of each contraction joint in the curbs, at each construction joint in the slab and at the joint between the curb and slab.
 - Break the bond in contraction joints in the concrete curbs by a method approved by the Engineer. Do not break the bond in construction joints in the superstructure slab.
 - Provide joints in the Vertical Bridge Curb Type 1 & Sloped Bridge Curb Type 2 of each contraction joint in the concrete curb.
 - Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated.
 - Reinforcing steel splices shall be a minimum of 36 bar diameters unless otherwise indicated.
 - Place 1-inch diameter plastic tube drains at 10 foot intervals along the curb of the low sides of the superstructure as described in Subsection 502.17. (2-lines on S.B. & 3-lines on N.B.)
 - The Placement of concrete in Each Superstructure shall be continuous over the Three Spans, Starting @ Abutment #1. The concrete shall be kept plastic (1) complete span back of the span being placed. Approved set retarding admixtures shall be used when authorized by the Engineer.
 - Protective Coating for Concrete Surfaces shall be applied to the following areas: Top of curb, Fascia down to the drip notch & Median.
 - Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.

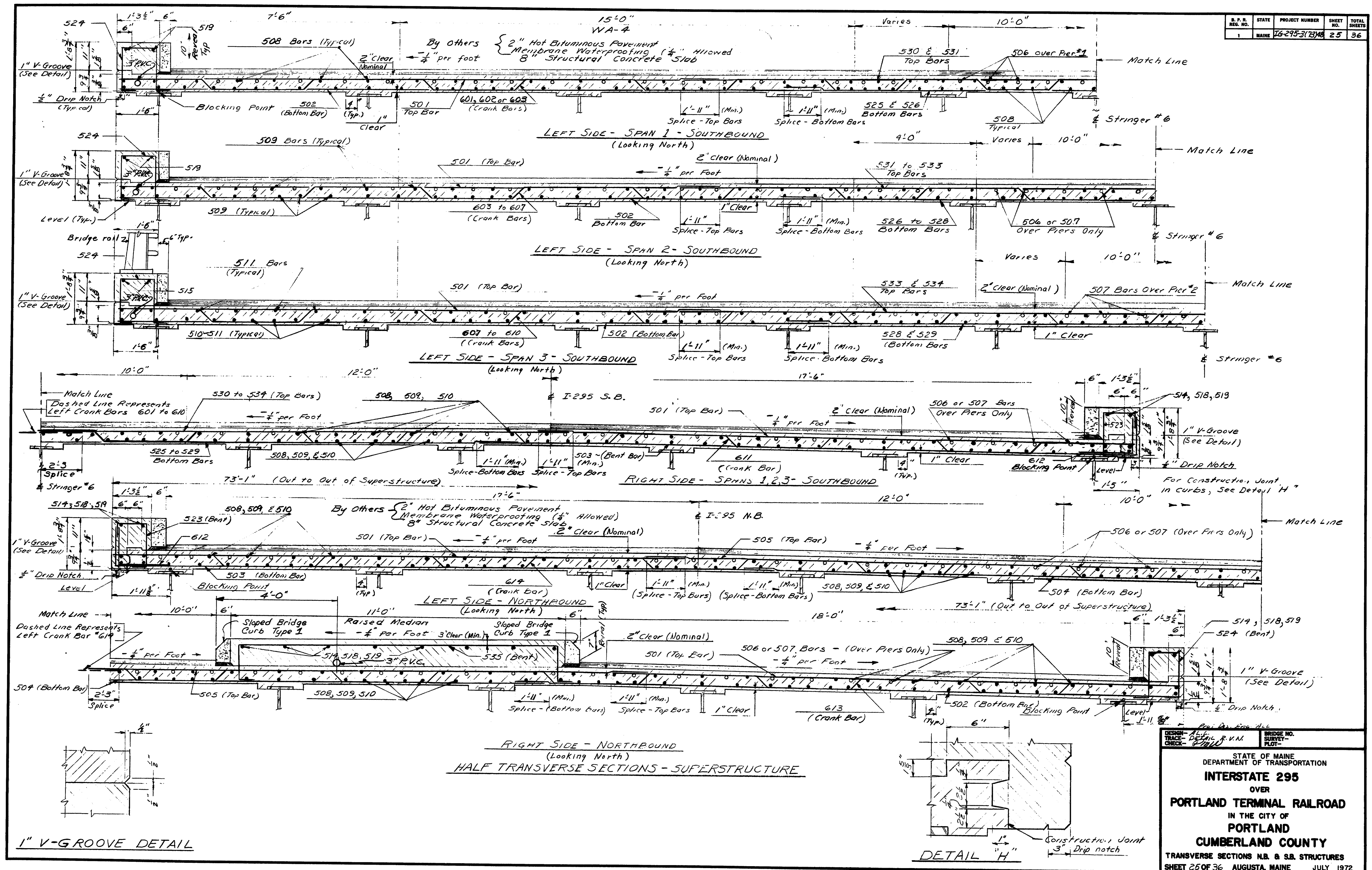


RAILING ELEVATION
SOUTHBOUND STRUCTURE
 For 2-bar Aluminum Bridge Rail
 See Standard detail BD 106-69

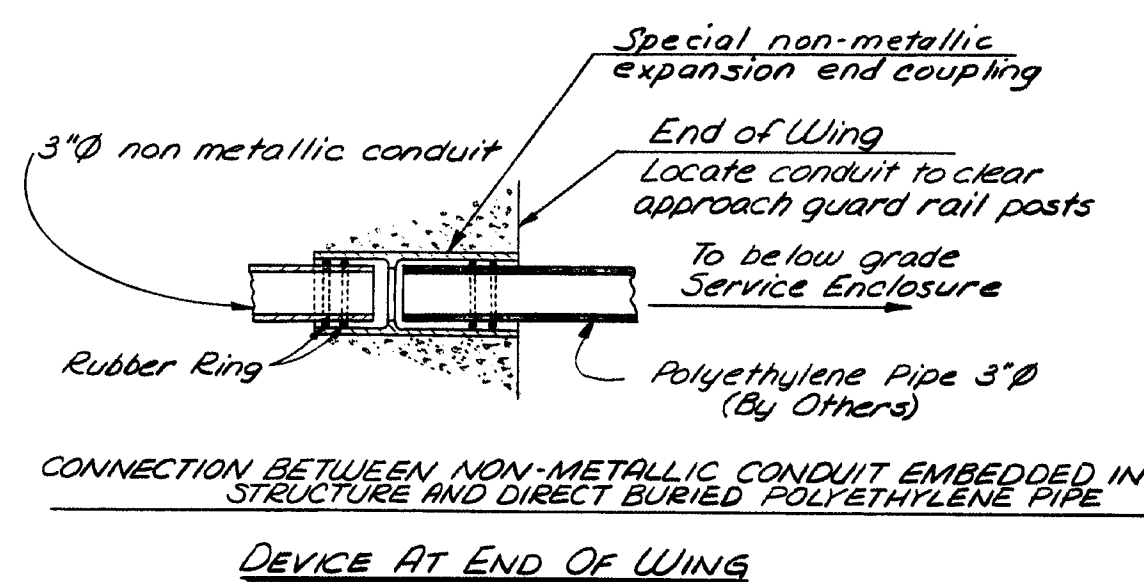


STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
 OVER
PORTLAND TERMINAL RAILROAD
 IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
 S.B. SUPERSTRUCTURE & DETAILS
 SHEET 24 OF 36 AUGUSTA, MAINE JULY 1972

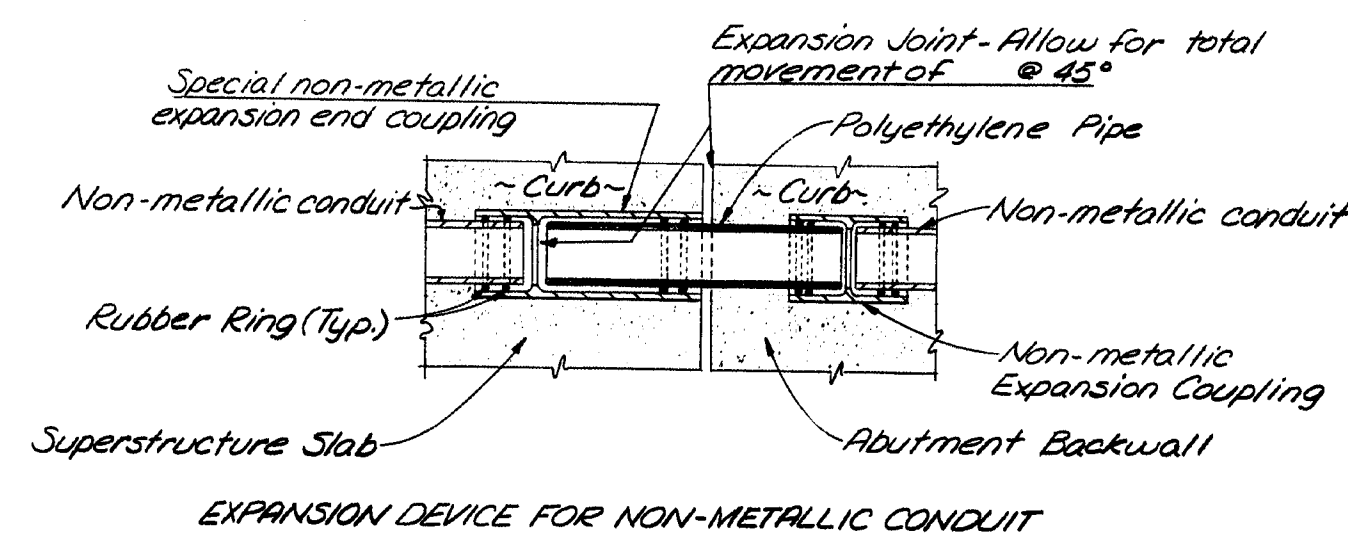
150-182



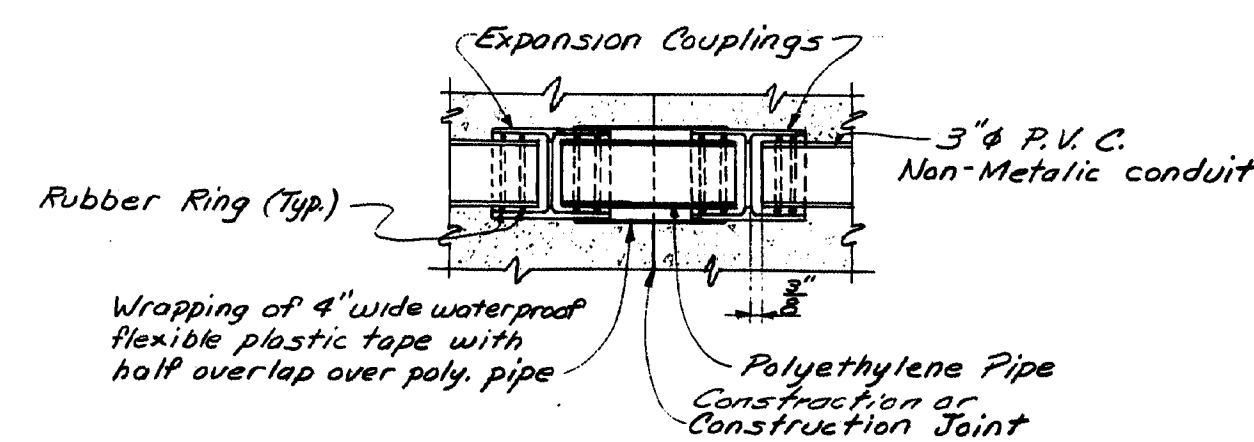
F.R.S.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	14-295-37340	26	36



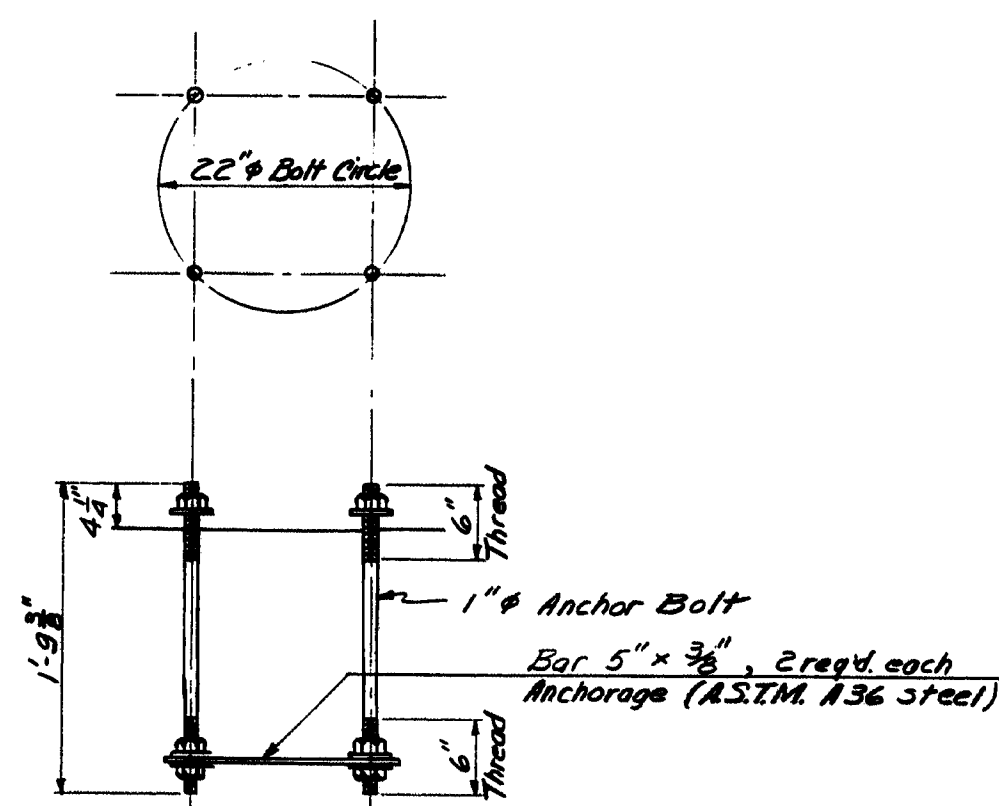
DEVICE AT END OF WINGS



EXPANSION DEVICE FOR NON-METALLIC CONDUIT
AT ABUTMENT AND END OF SLAB

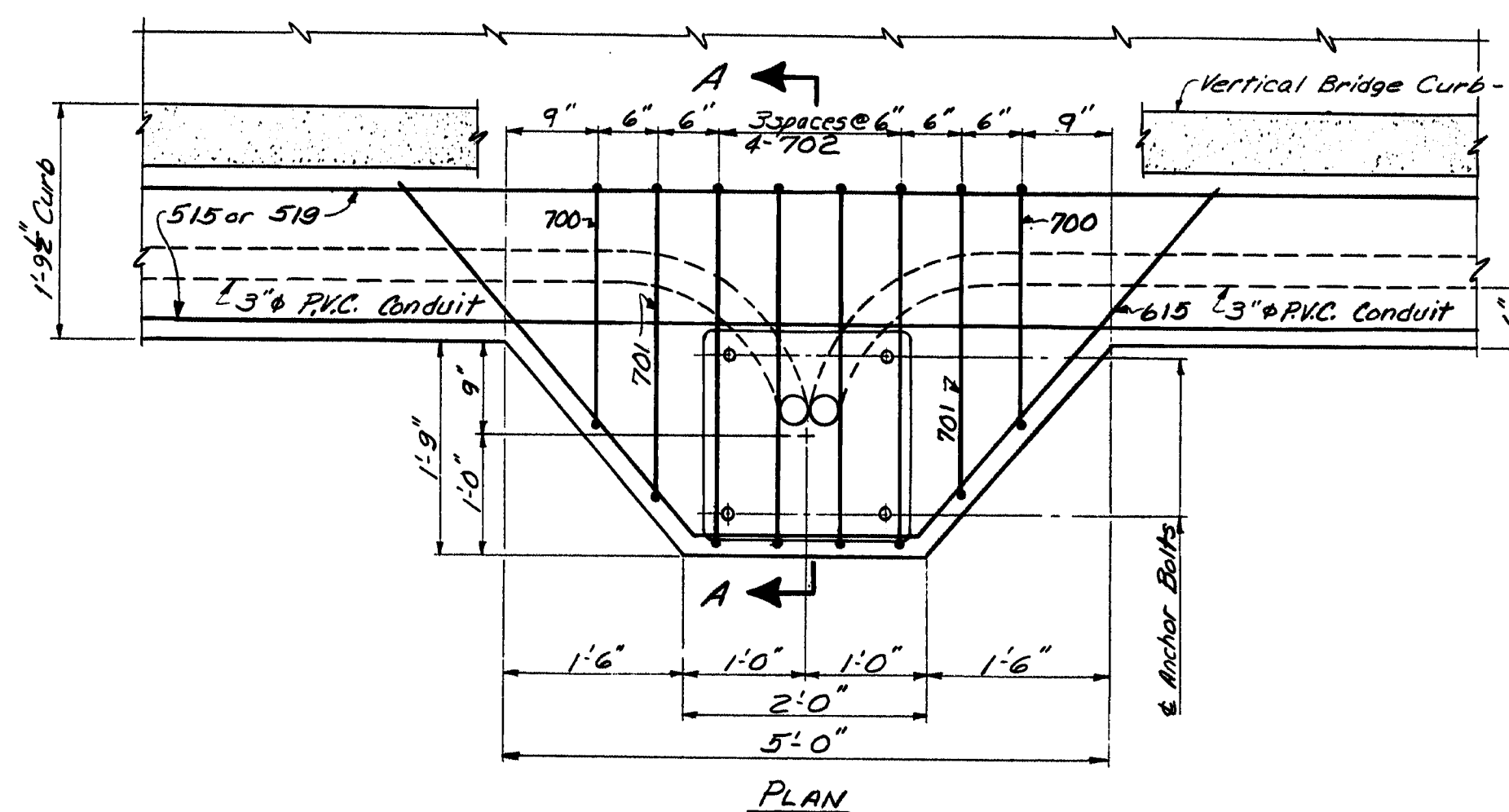


EXPANSION DEVICE
FOR NON-METALLIC CONDUIT
AT CONSTRUCTION JOINTS and
AT CONTRACTION JOINTS

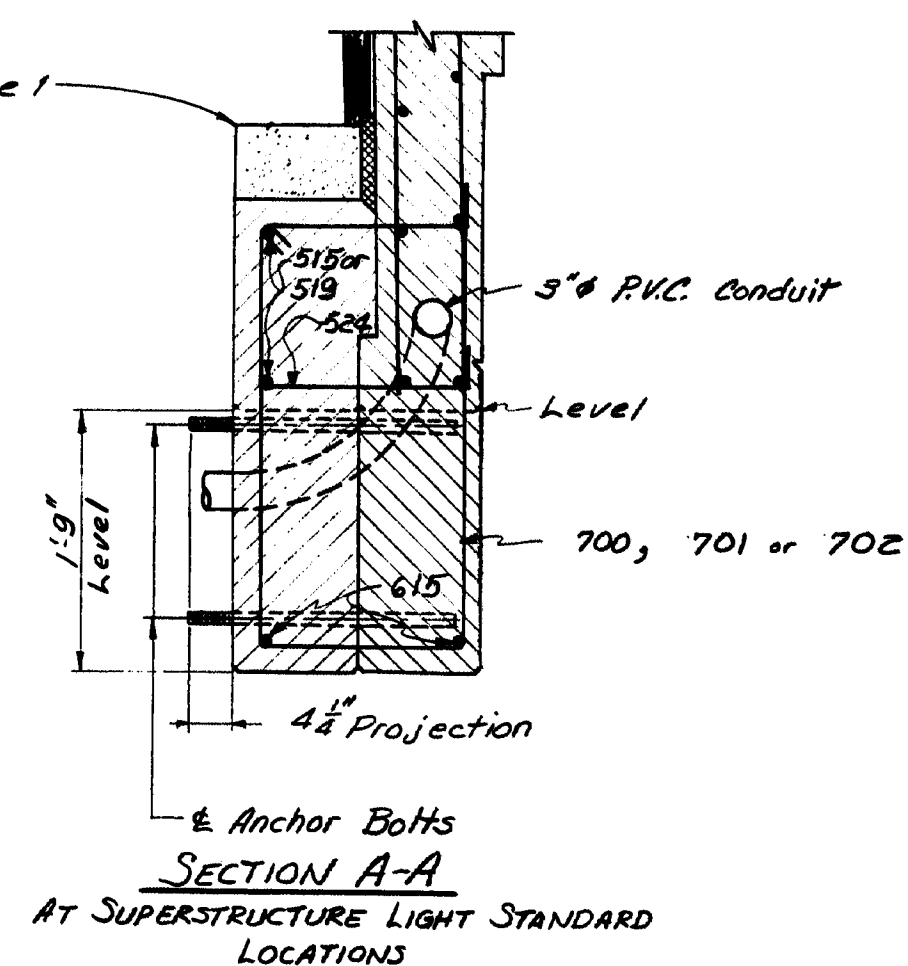


ANCHOR BOLT DETAIL

Anchor Bolts, exposed Hex. Nuts (American Std. Heavy) and washers shall conform to Designation Stainless ASTM A276, Ultimate Tensile Strength 100,000 psi minimum, Elongation 15% minimum. Hex. Nuts embedded in concrete shall conform to Steel Designation ASTM A307.

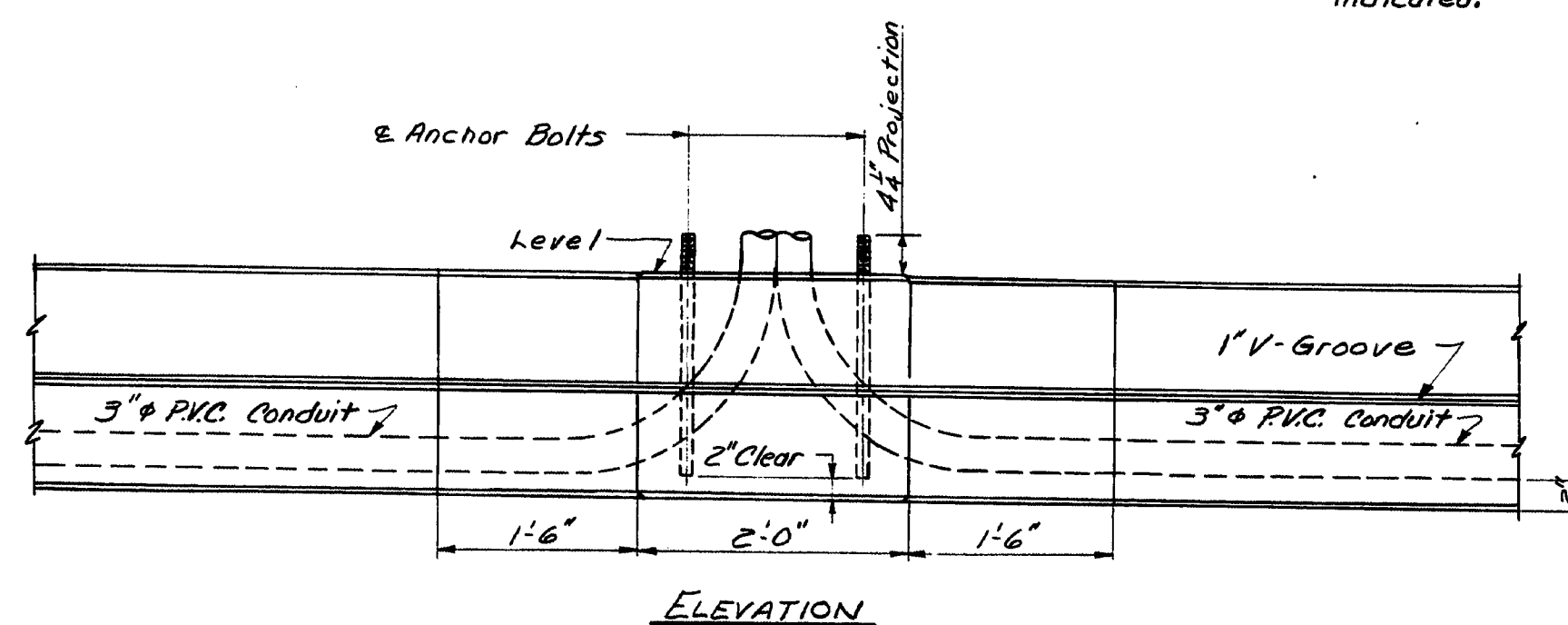


PLAN



SECTION A-A
AT SUPERSTRUCTURE LIGHT STANDARD
LOCATIONS

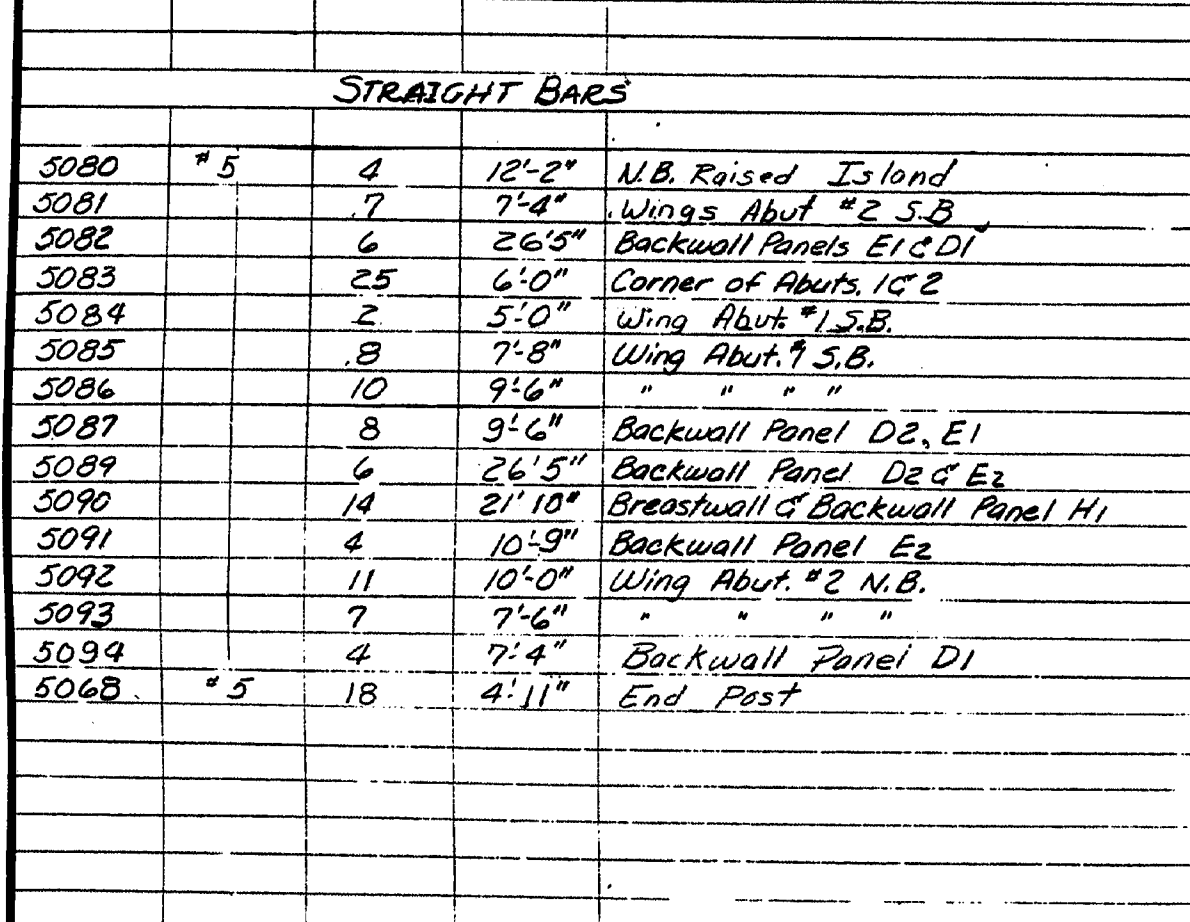
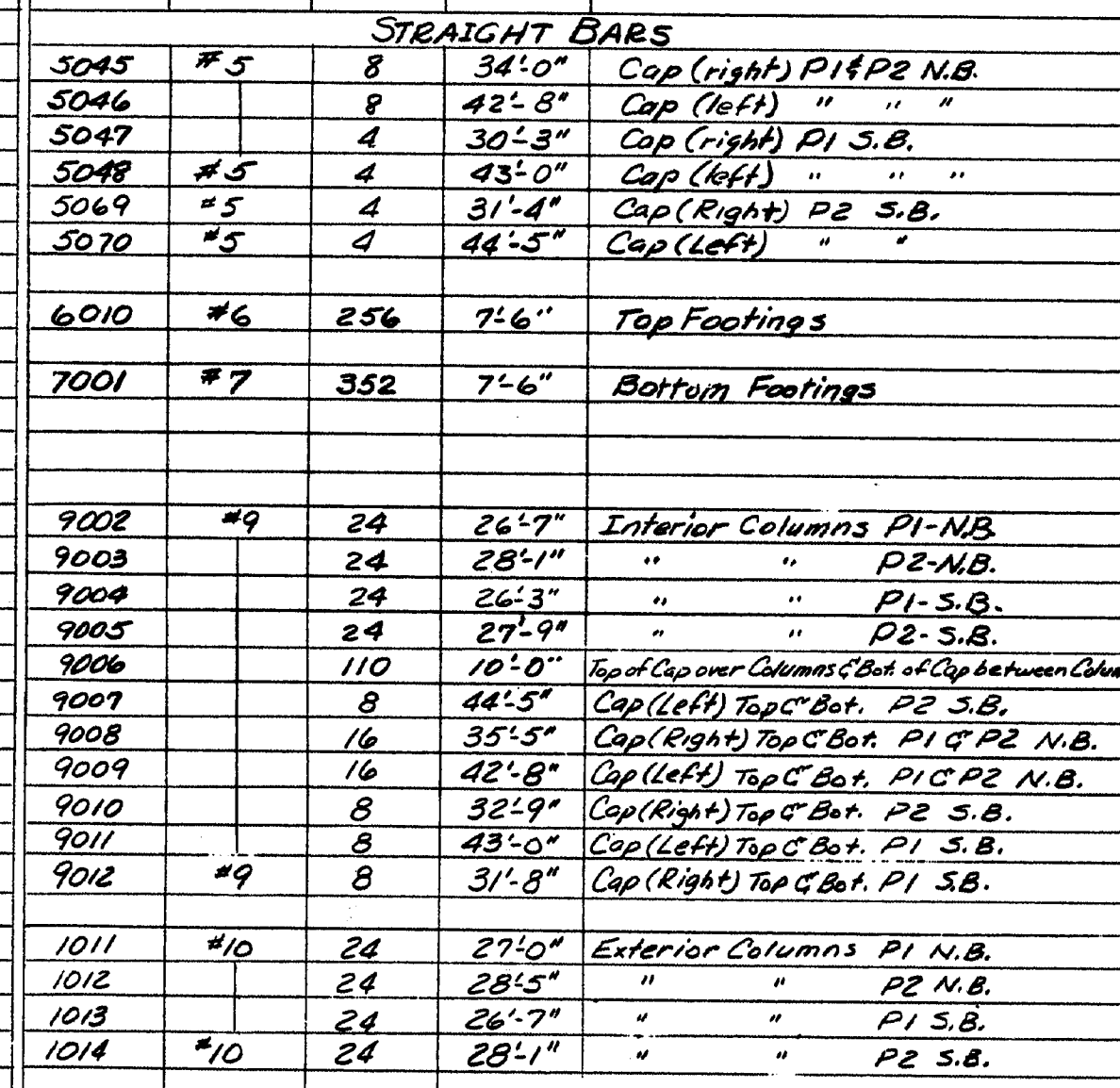
NOTE:
Reinforcing steel shall have 2 inches cover unless otherwise indicated.



ELEVATION

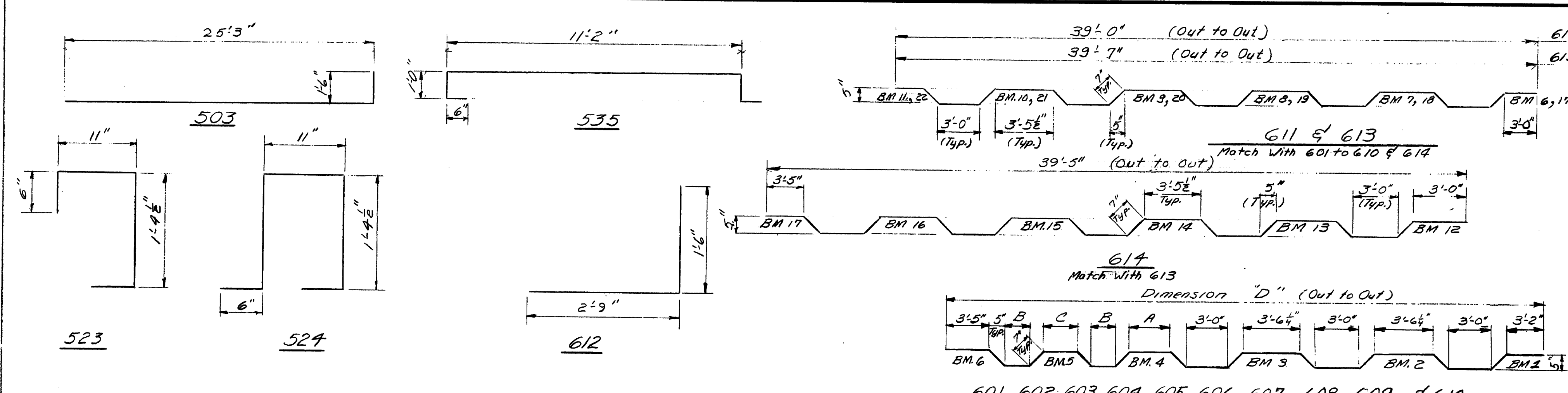
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
BRIDGE LIGHTING DETAILS
SHEET 26 OF 36 AUGUSTA, MAINE JULY 1972

150-184

[illegible]

<u>APPROACH SLABS</u>					
4030	#4	40	35'-3"	#2 S.B.	
4031	#4	40	31'-8"	#1 S.B.	
4032	#4	80	31'-0"	#1/2"x2 N.B.	
6007	#6	1040	14'-6"	N.B. G.S.B.	

Notes: All dimensions are out to out of bar
All hooks shall meet ACI 315-65 requirements
Reinforcing steel shall be ASTM A615 - Grade 60



BENT BARS									
MARK	SIZE	LENGTH	DIMENSIONS				*NUMBER		LOCATION
			"A"	"B"	"C"	"D"	N.B.	S.B.	
503	#5	26'-9"					151	151	Transverse-Main Slab to Inside Curb
523	#5	3'-3"					152	152	Inside Curb
524	#5	7'-8"					152	152	Outside Curb
535	#5	14'-2"					148	148	Raised Median
612	#6	4'-3"					150	150	Transverse-Slab to Inside Curb-Spans 1,2,3
601	#6	37'-2"	2'-10"	1'-9 1/2"	2'-3"	35'-5"	16	16	Transverse - Main Slab - Span 1
602		37'-7"	2'-11"	1'-11"	2'-4 1/2"	35'-11"	15	15	" " " " " 1
603		38'-1"	3'-0"	2'-0 1/2"	2'-6"	36'-4"	15	15	" " " " " 2
604		38'-6"	3'-1"	2'-2"	2'-7 1/2"	36'-10"	15	15	" " " " " 2
605		39'-0"	3'-2"	2'-3 1/2"	2'-9"	37'-3"	15	15	" " " " " 2
606		39'-5"	3'-3"	2'-5"	2'-10 1/2"	37'-9"	15	15	" " " " " 2
607		39'-11"	3'-4"	2'-6 1/2"	3'-0"	38'-2"	15	15	" " " " " 2
608		40'-4"	3'-5"	2'-8"	3'-1 1/2"	38'-8"	15	15	" " " " " 3
609		40'-10"	3'-6"	2'-9 1/2"	3'-5"	39'-1"	15	15	" " " " " 3
610		41'-6"	3'-7"	3'-0"	3'-5 1/2"	39'-10"	14	14	" " " " " 3
611		40'-8"					150	150	" " " " Spans 1,2,3
613		41'-3"					150	150	" " " " " 1,2,3
614	#6	41'-1"					150	150	" " " " " 1,2,3
615	#6	8'-10"					4	4	Light Standards
700	#7	7'-2"					4	4	Light Standards
701	#7	8'-4"					4	4	" " " "
702	#7	9'-0"					8	8	" " " "

Match With 611						
STRAIGHT BARS						
MARK	SIZE	LENGTH	*NUMBER			LOCATION
			N.B.	S.B.	TOTAL	
514	#5	11'-0"	48	8	56	Longitudinal-Curb & Raised Median
515	#5	11'-3"		8	8	Longitudinal-Curb
518	#5	12'-8"	60	10	70	Longitudinal-Curb & Raised Median
519	#5	13'-0"	36	22	58	" " " "
506	#5	15'-0"	52	50	102	Longitudinal - Main Slab - Over Pier #1
507	#5	17'-0"	52	50	102	" " " " " #2
501	#5	20'-0"	302	302	604	Transverse-Main Slab
502		25'-3"	151	151	302	" " "
504		30'-0"	151		151	" " "
505		40'-6"	151		151	" " "
525		25'-6"		32	32	" " "
526		26'-6"		30	30	" " "
527		27'-6"		30	30	" " "
528		28'-6"		30	30	" " "
529		29'-6"		29	29	" " "
530		36'-0"		32	32	" " "
531		37'-0"		30	30	" " "
532		38'-0"		30	30	" " "
533		39'-0"		30	30	" " "
534	#5	40'-0"		29	29	" " "

NOTES: All dimensions are out to out of bar
All hooks shall meet ACI 315-65 requirements
Reinforcing Steel shall be ASTM A615-Grade 60

STATE

PROJECT NUMBER

SHEET NO.

TOTAL SHEETS

1

MAINE

16-215-37348

28

36

1'-4"

1'-9"

2'-4"

2'-8"

700

701

702

700, 701 & 702

3'-6"

3'-6"

2'-3 1/2"

1'-10"

2'-3 1/2"

615

DESIGN

CHECK

DATE

BY

BRIDGE NO.

SURVEY

PLOT

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

INTERSTATE 295

OVER

PORTLAND TERMINAL RAILROAD

IN THE CITY OF

PORTLAND

CUMBERLAND COUNTY

SUPERSTRUCTURE REINFORCING STEEL SCHEDULE

SHEET 28 OF 36

AUGUSTA, MAINE

JULY 1972

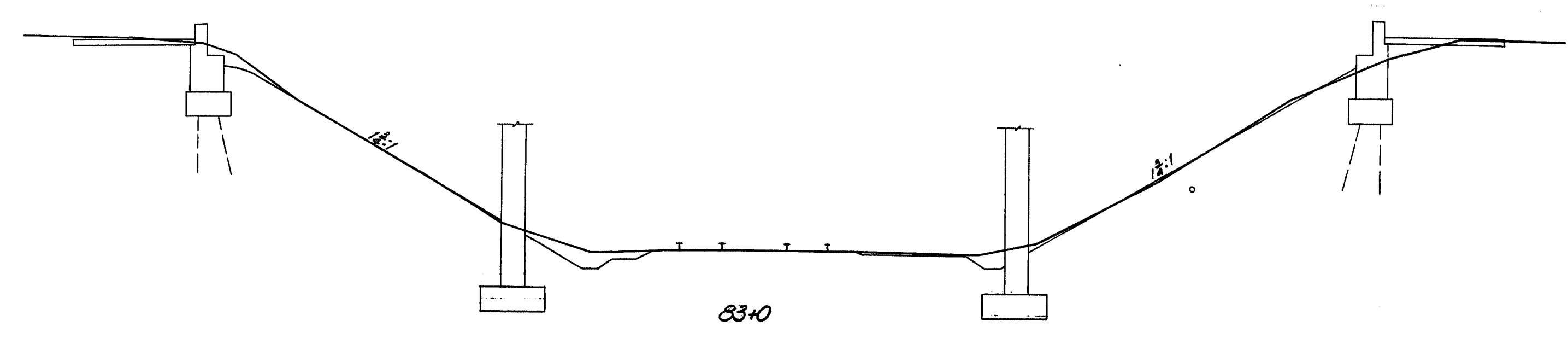
150-186

DATE	26-295-37348	SHEET	29	36
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R.C. Booth 8-15-72/BWL
 SUPERVISOR

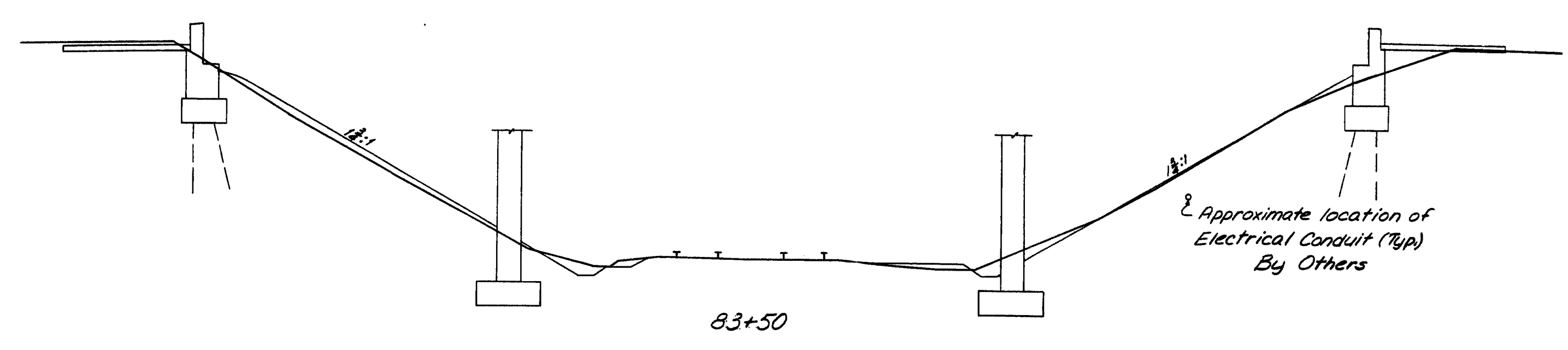
10

10

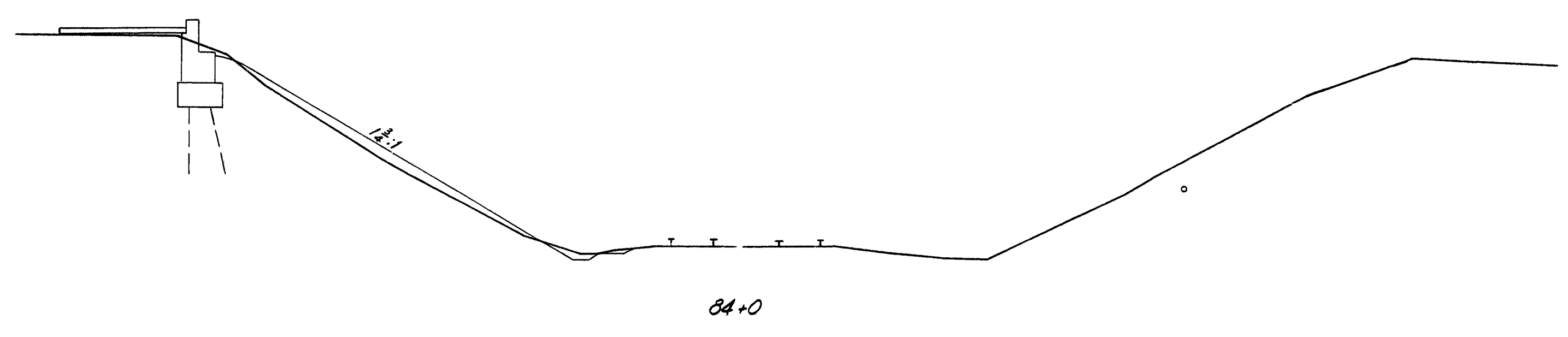


10

10



10



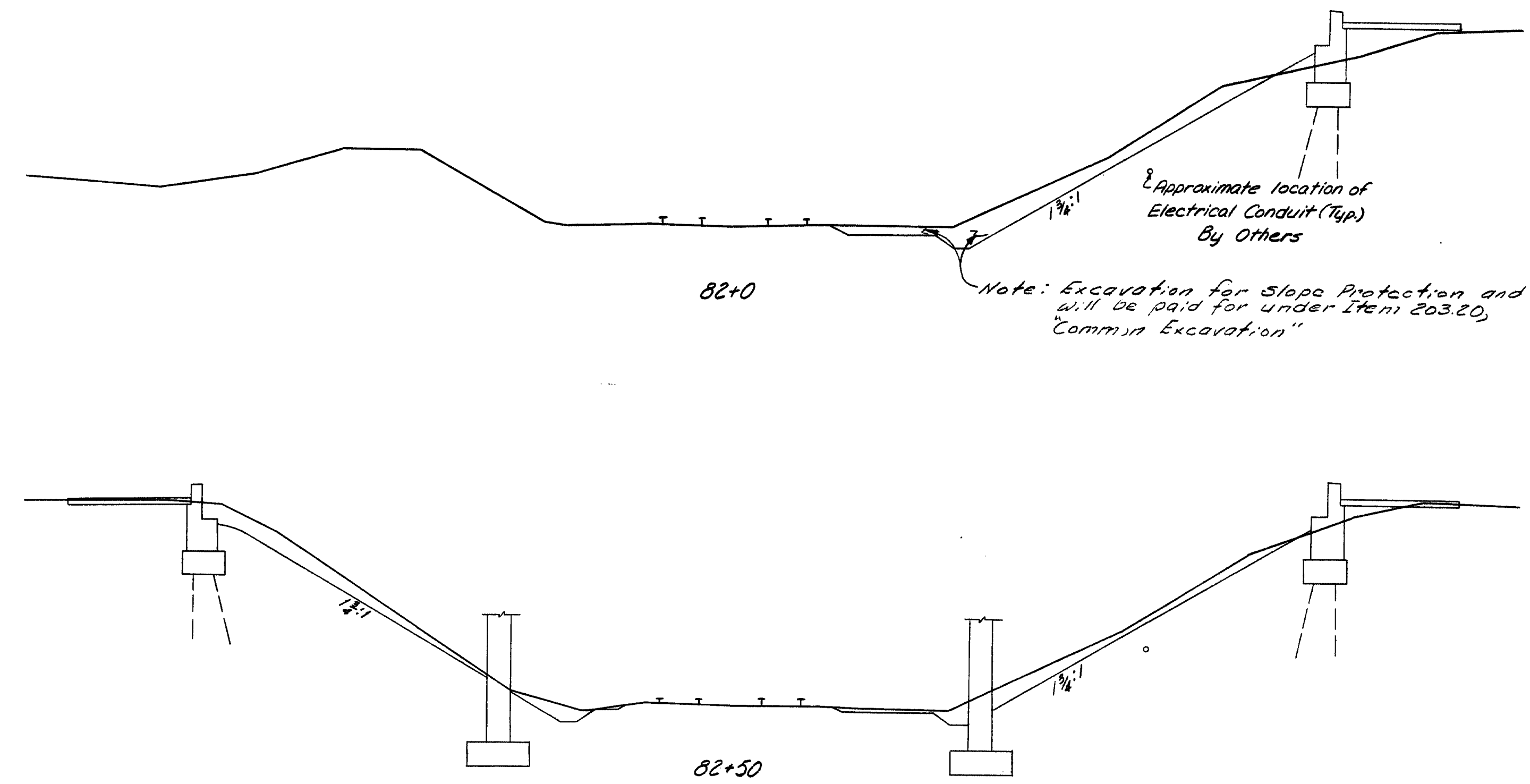
100 80 60 40 20 0 20 40 60 80 100

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
 OVER
PORTLAND TERMINAL RAILROAD
 IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
 CROSS-SECTIONS P.T.R.R.
 SHEET 29 OF 36 AUGUSTA, MAINE JULY 1972

150-187

21073/101
R.C. Burt
10/1/72

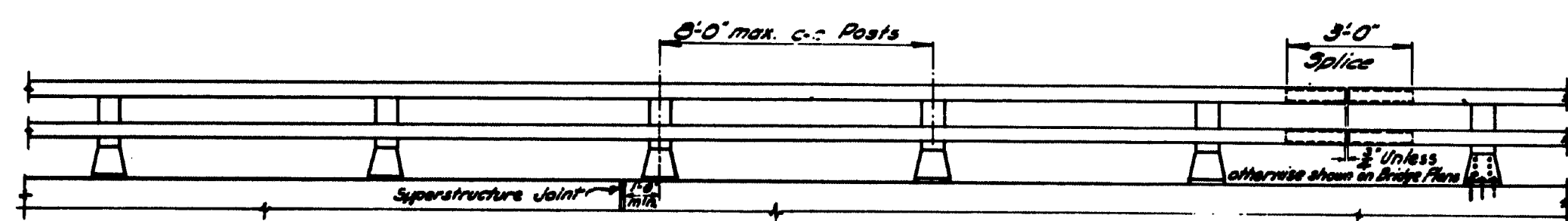
10/1/72
R.C. Burt
10/1/72



NOTE: For Typical Cross Section of P.T.R.R. Track-See Sheet #3

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERSTATE 295
OVER
PORTLAND TERMINAL RAILROAD
IN THE CITY OF
PORTLAND
CUMBERLAND COUNTY
CROSS-SECTIONS P.T.R.R.
SHEET 30 OF 36 AUGUSTA, MAINE JULY 1972

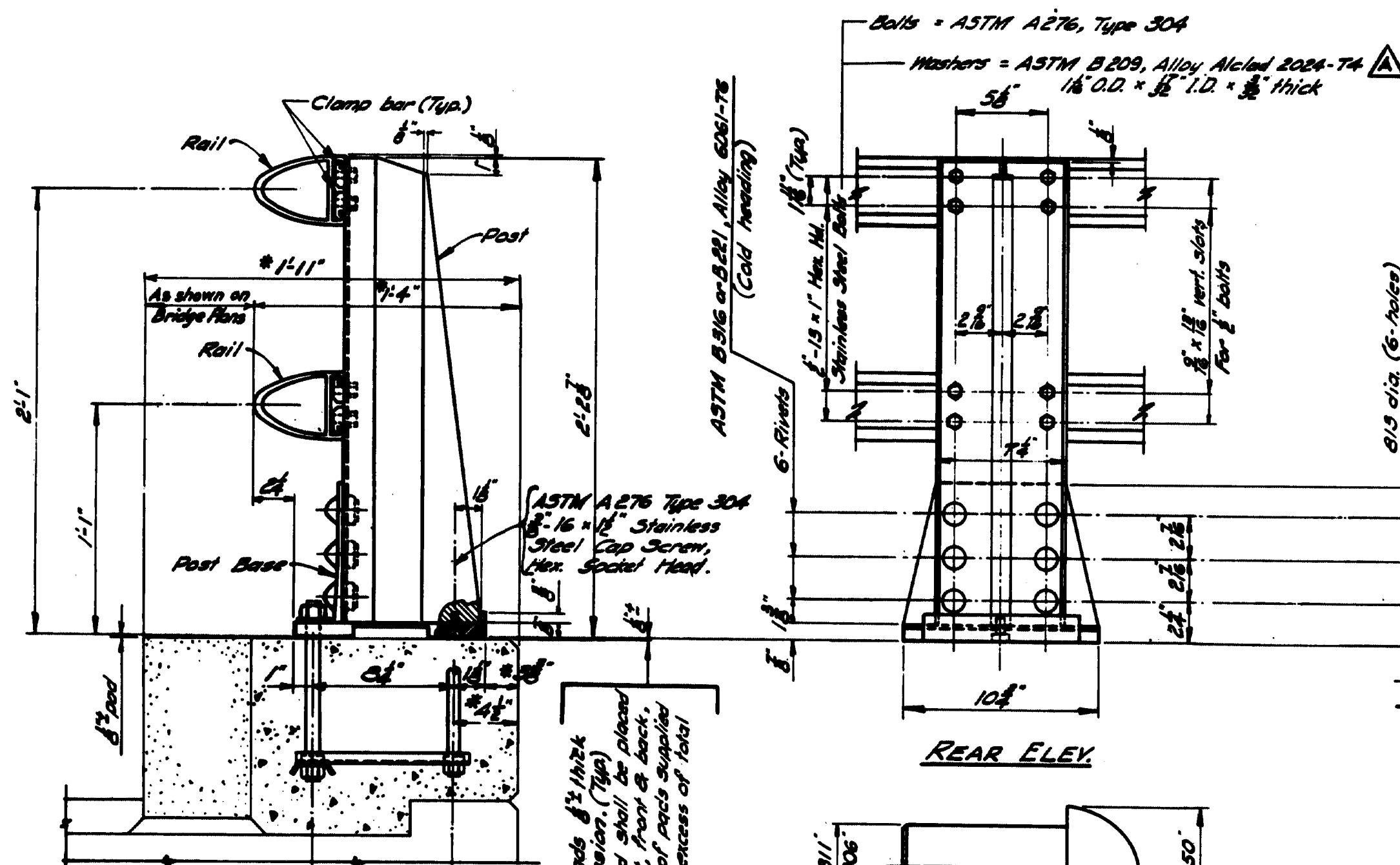
150-108



RAIL - ELEVATION

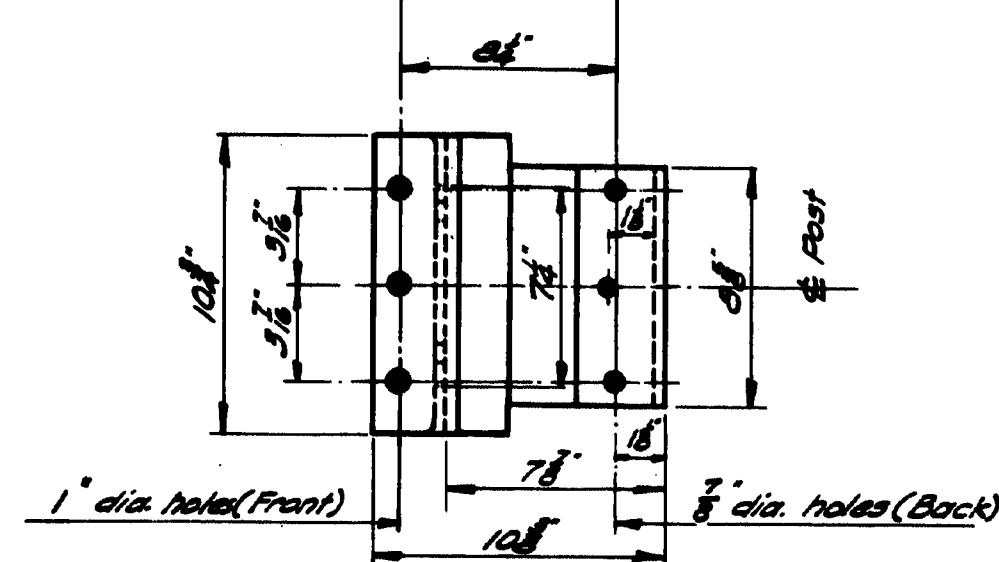
Lengths of rail shall be attached to a minimum of (4) four rail posts, wherever possible, and in any case never less than (2) two.

NOTE: Rail posts are to be set normal to grade unless otherwise shown on Bridge Plans.



BRIDGE RAIL Assembly

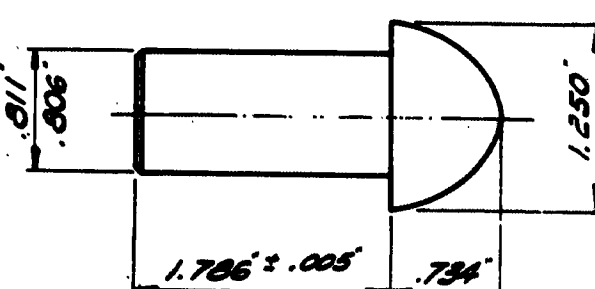
* Preferable minimum dimensions.



POST BASE (Bottom View)

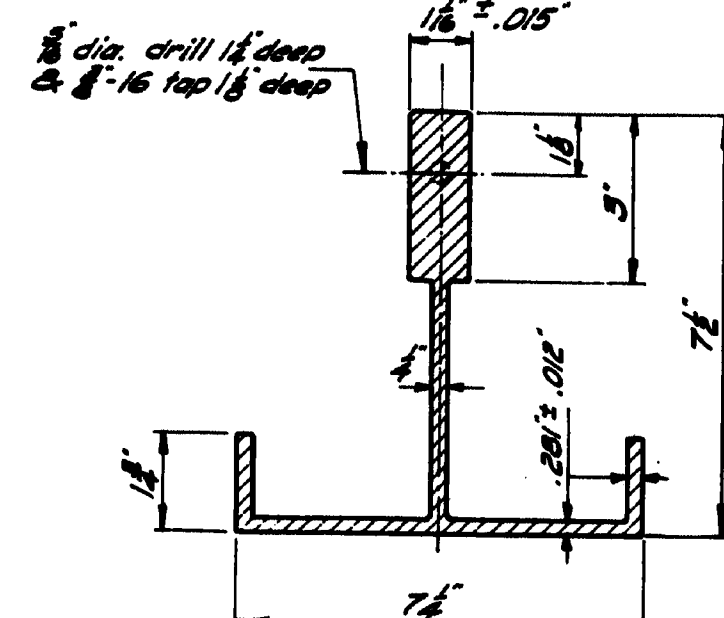
Post & Post Base = ASTM B221, Alloy 6061-T6.

REAR ELEV.

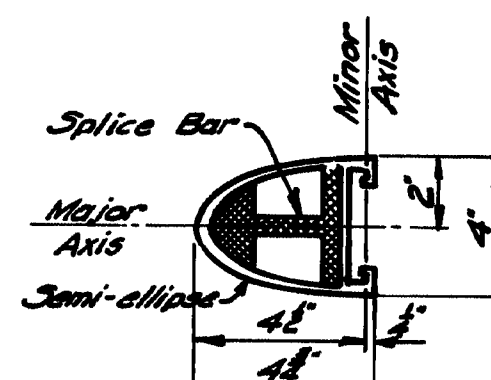


RIVET

Shop rivet rail post to base

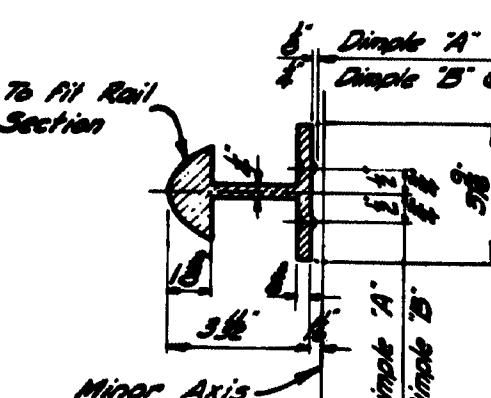


POST SECTION



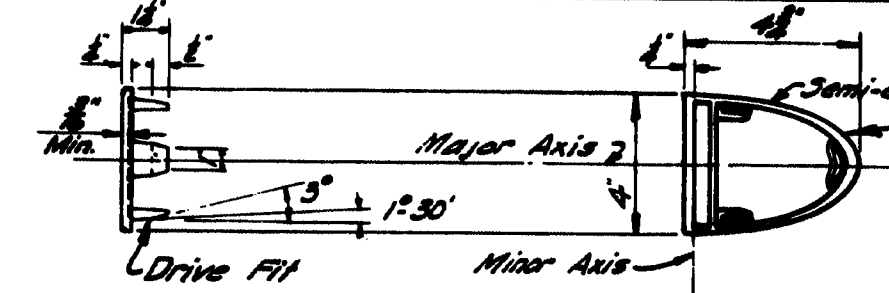
RAIL SECTION

See "Rail Detail"



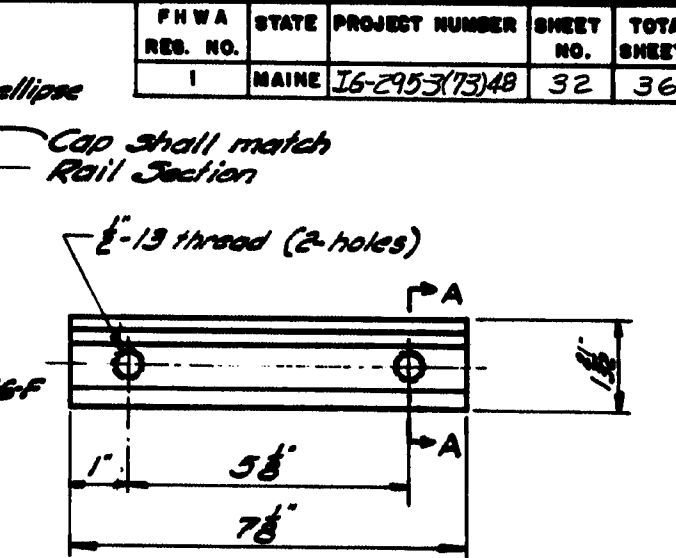
SECTION B-B

Rail, Splice Bar, & Clamp Bar = ASTM B221, Alloy 6061-T6 or 6061-T6.



RAIL CAP

ASTM B26 or B108, Aluminum Assoc. Alloy 43-F or 356-F

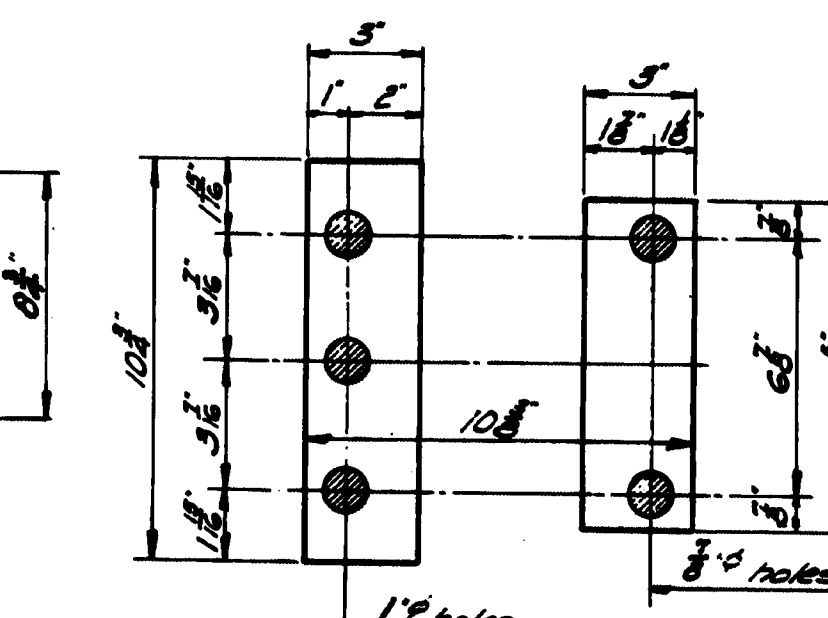


CLAMP BAR

NOTE: An alternate to the dimple system for holding the splice bar in position may be used if approved by the Engineer.

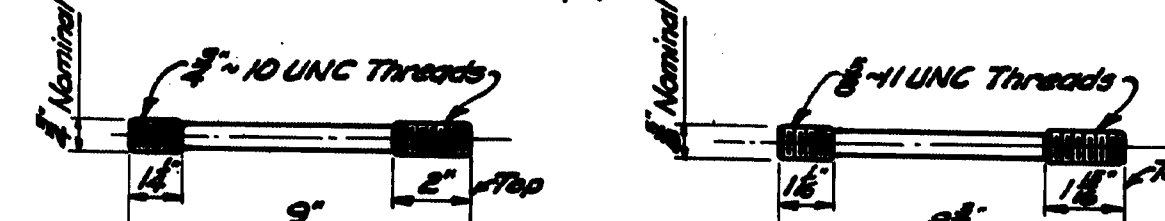
SPLICE BAR

Rail, Splice Bar, & Clamp Bar = ASTM B221, Alloy 6061-T6 or 6061-T6.



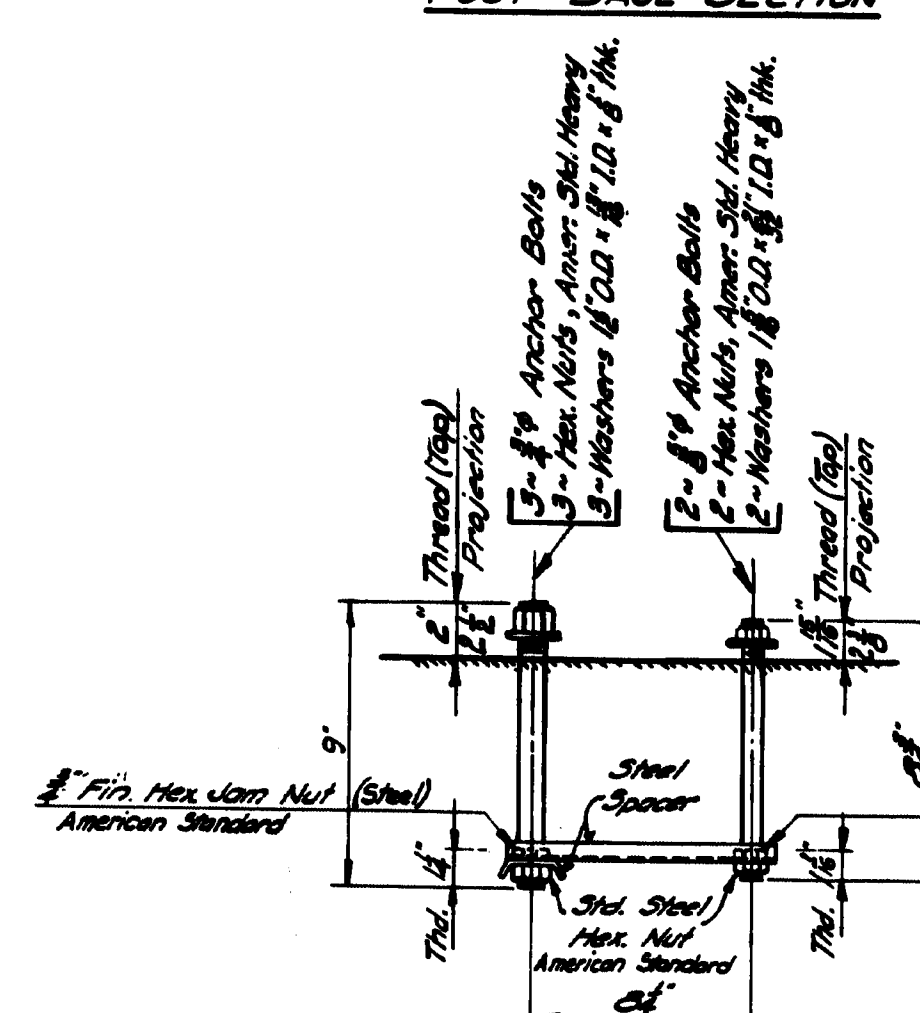
PREFORMED PADS

See Subsection 713.03 Standard Specifications Revision of June 1968 for pad.



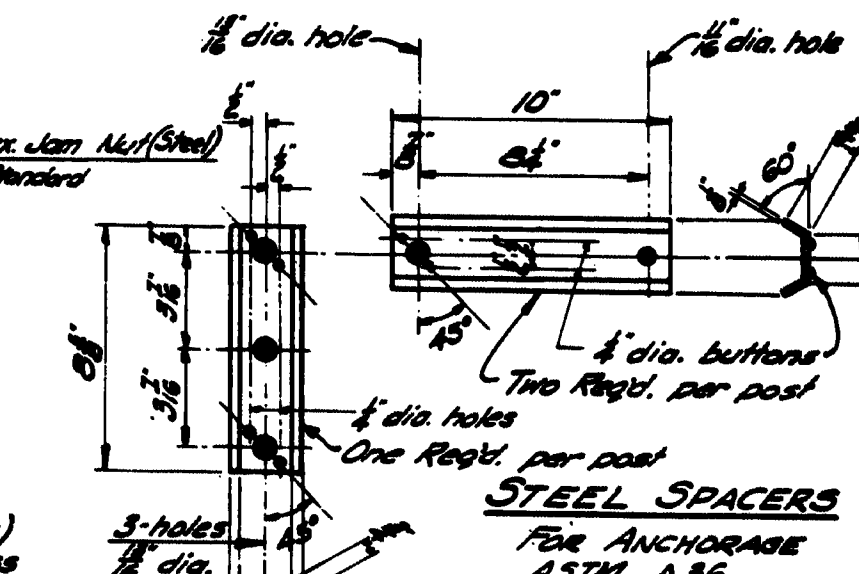
ANCHOR BOLTS

If cut threads are used bolt diameter shall be not less than nominal diameter. If rolled threads are used bolt diameter shall be not less than root diameter of nominal diameter.



RAIL POST ANCHORAGE Assembly

NOTE: Anchor Bolts, exposed Hex. Nuts (Amer. Std. Heavy) and washers shall conform to Designation "Stainless".
* See Supplemental Specification.



STEEL SPACERS

For Anchorage ASTM A36

DESIGN SPECIFICATIONS

A.A.S.H.O. 1969 and Interim Specifications.

MARK	ALTERATIONS
3-25-70	Changed ASTM B221, to include Alloy 6061-T6 for Rail, Splice & Clamp Bars.
	Changed ASTM Designations A276 & B209 A276 to 304 (Stainless Steel) (Rail Anchorage) B209 - T5 to T6 (Washers)
	Changed AASHTO Design Specifications from 1965 to 1969.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

(BD 106 - 69)

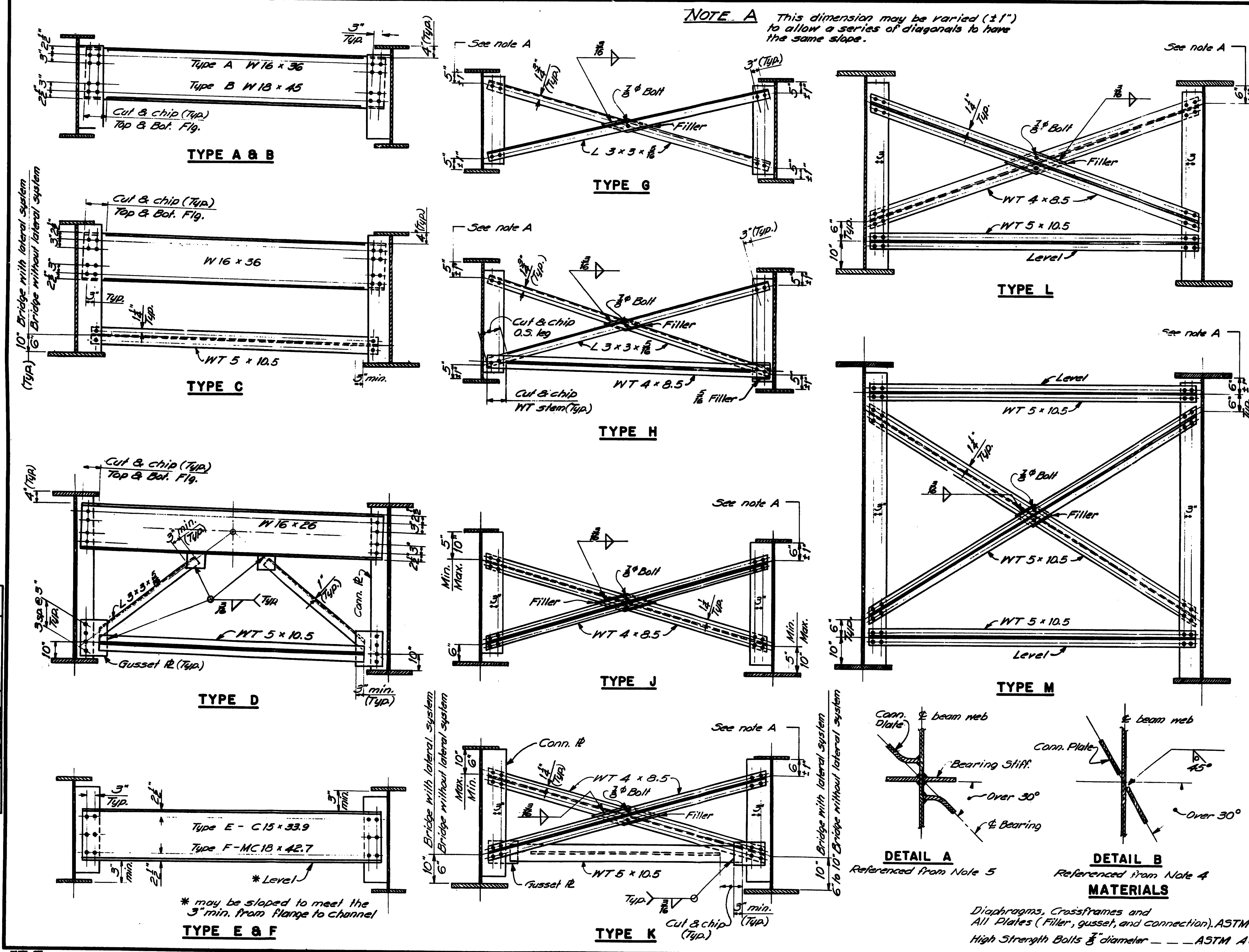
ALUMINUM RAILING

2 - BAR (SEMI-ELLIPTICAL)
EXTRUDED POST

JANUARY 1969

150-190

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	150-191	33	36



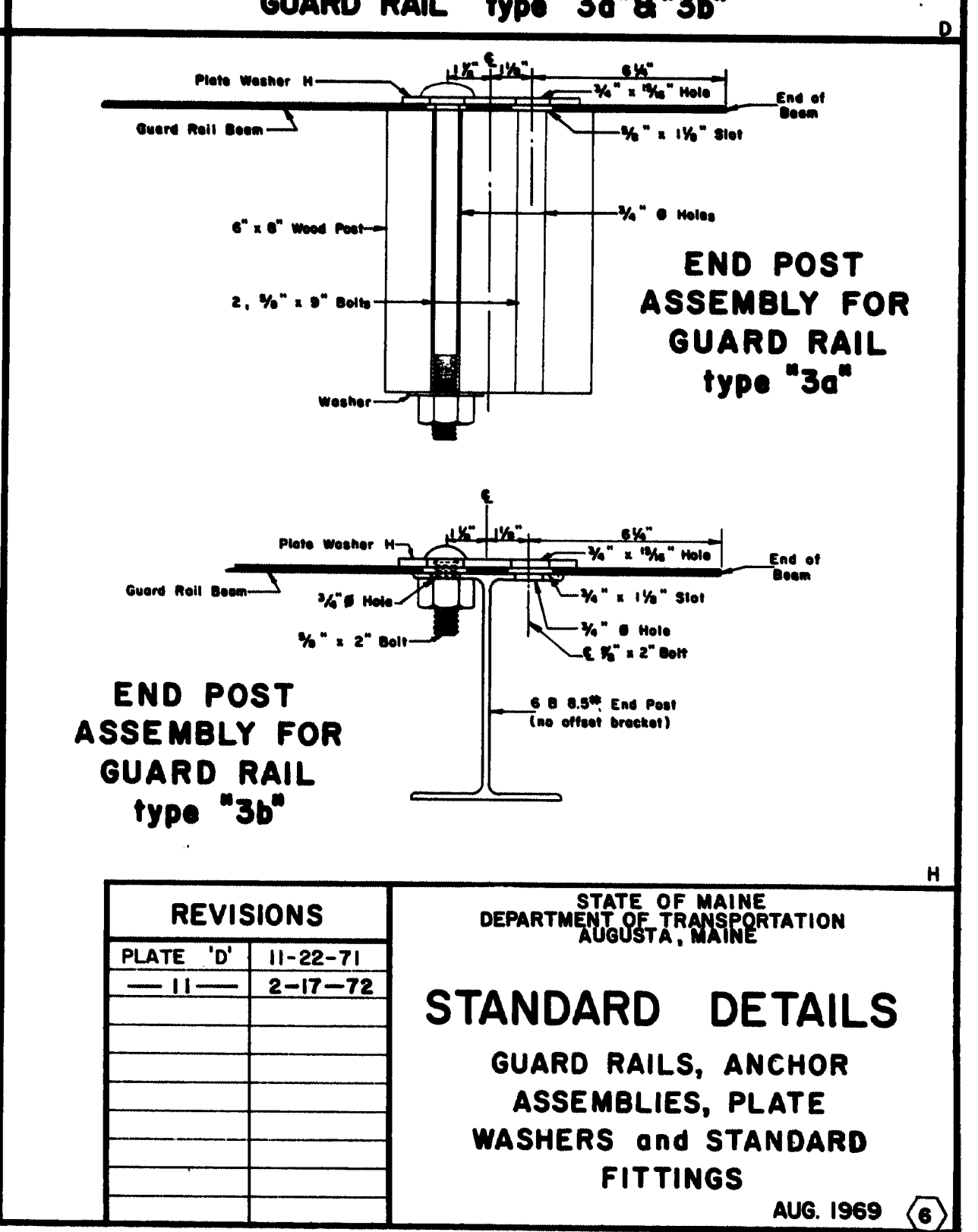
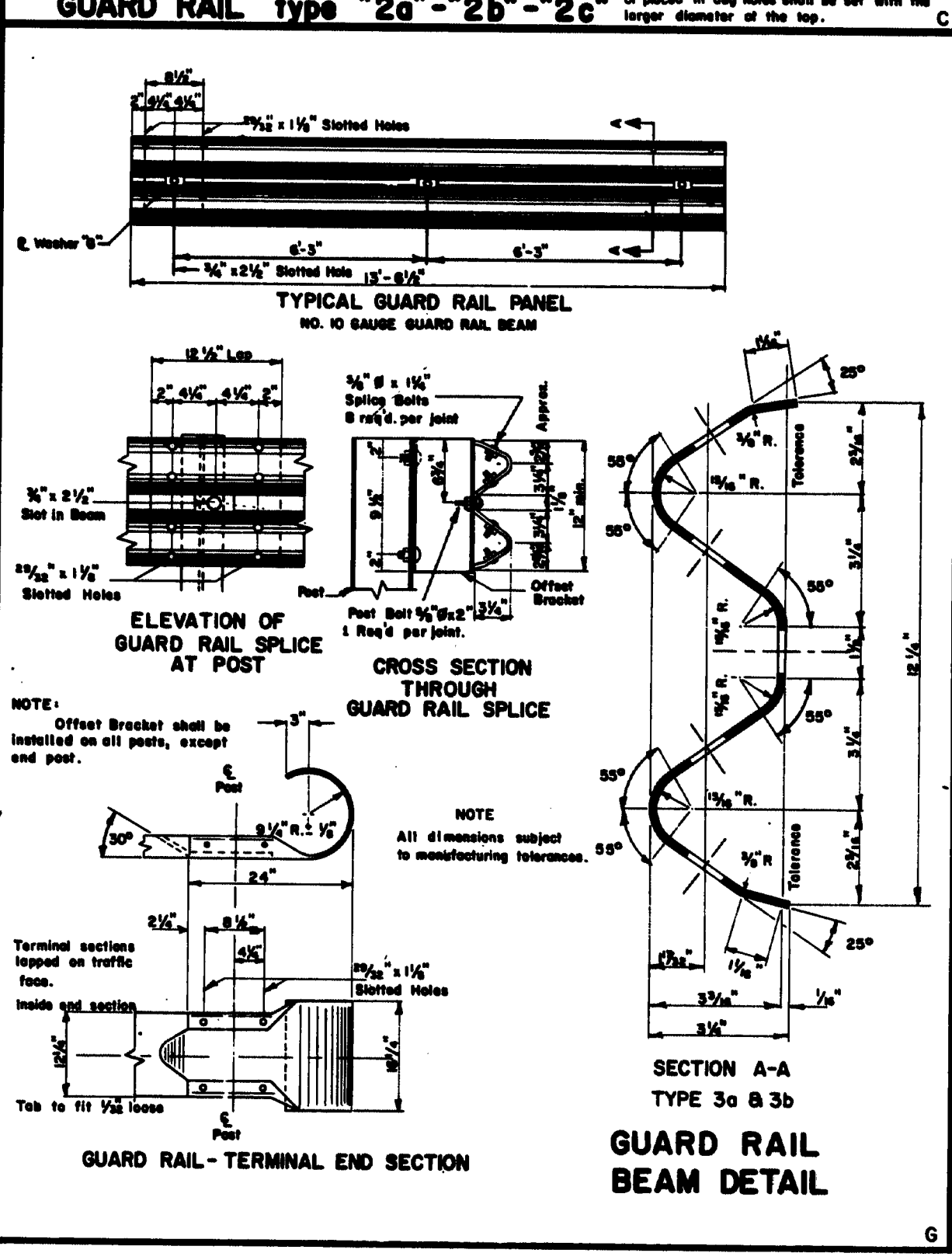
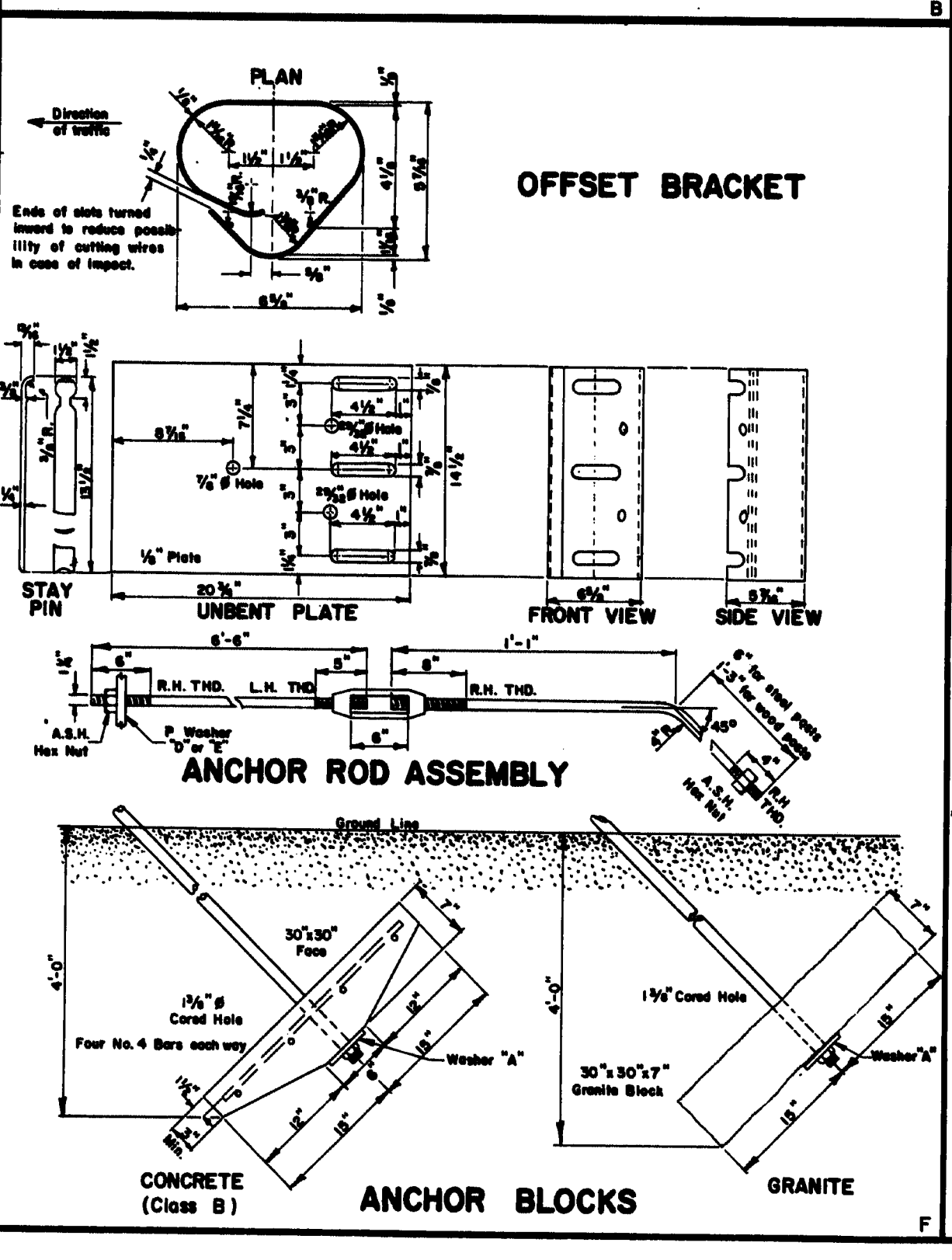
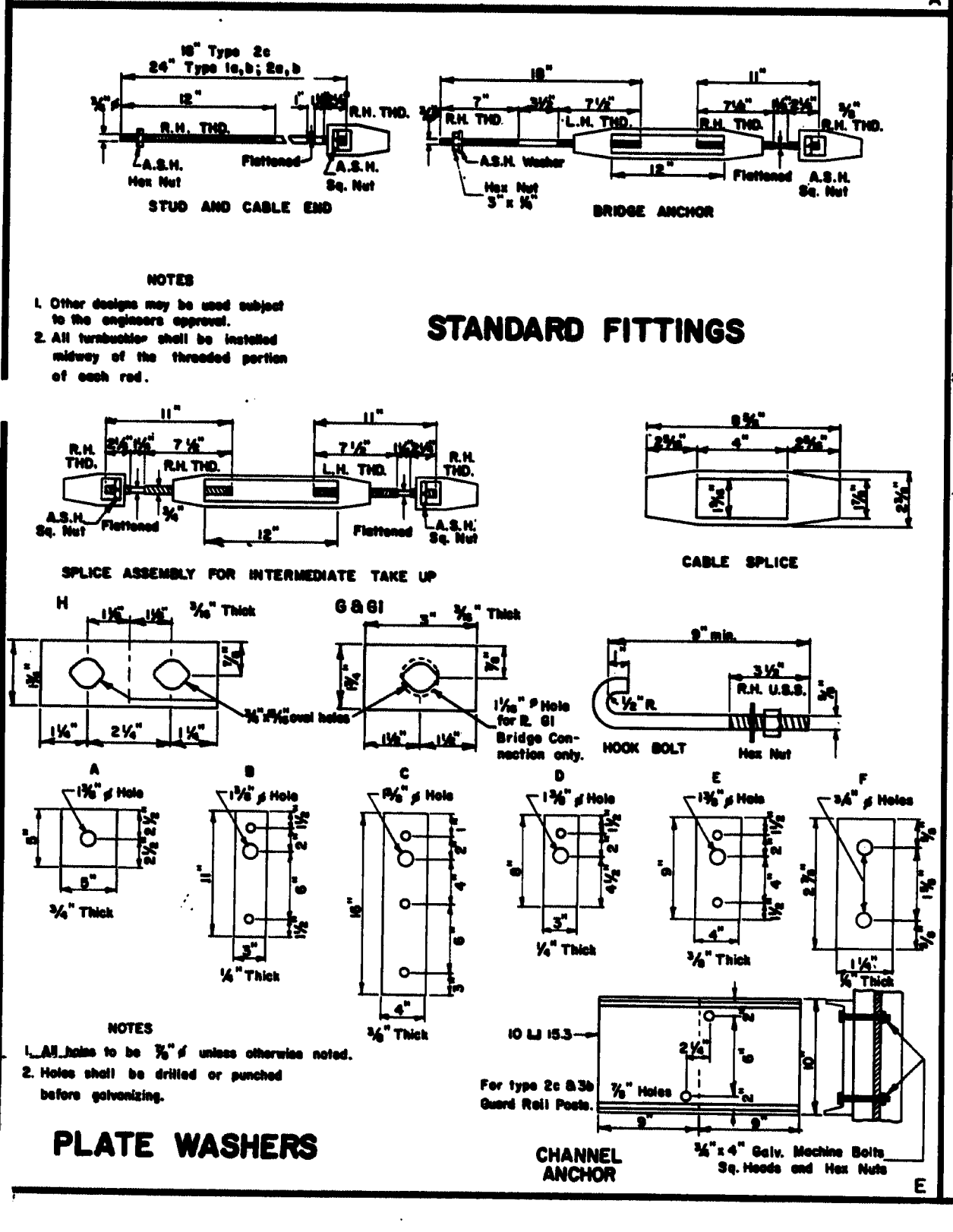
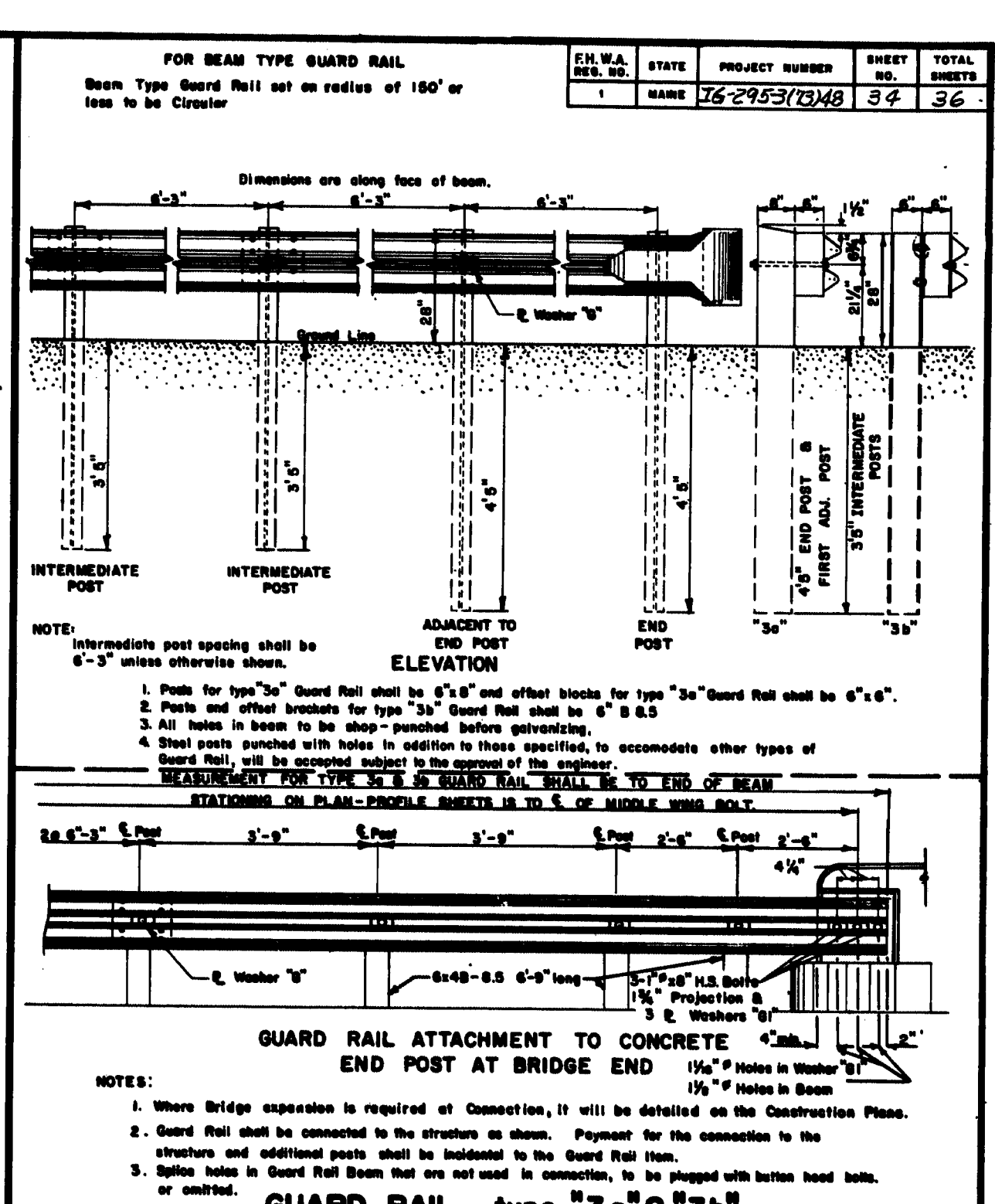
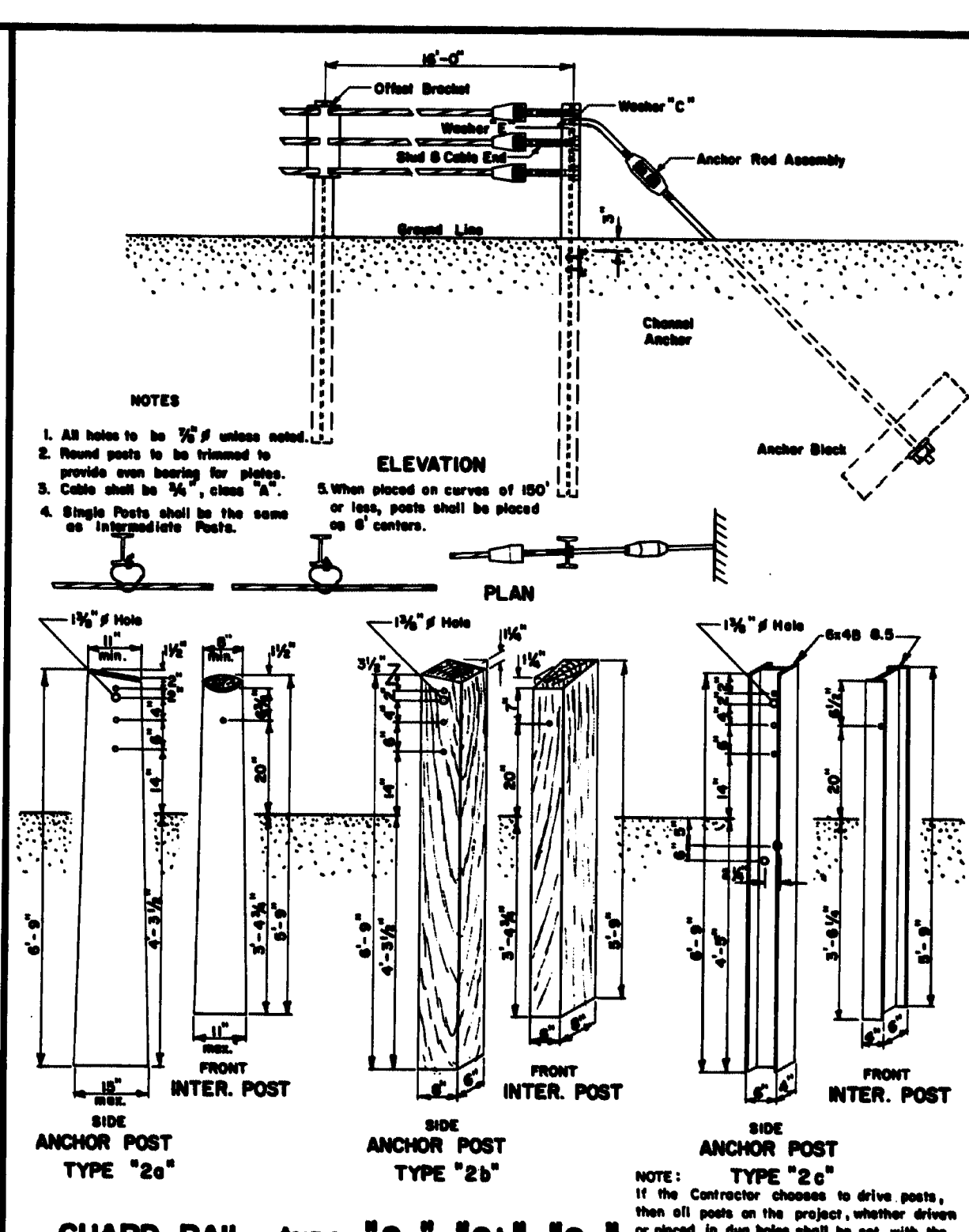
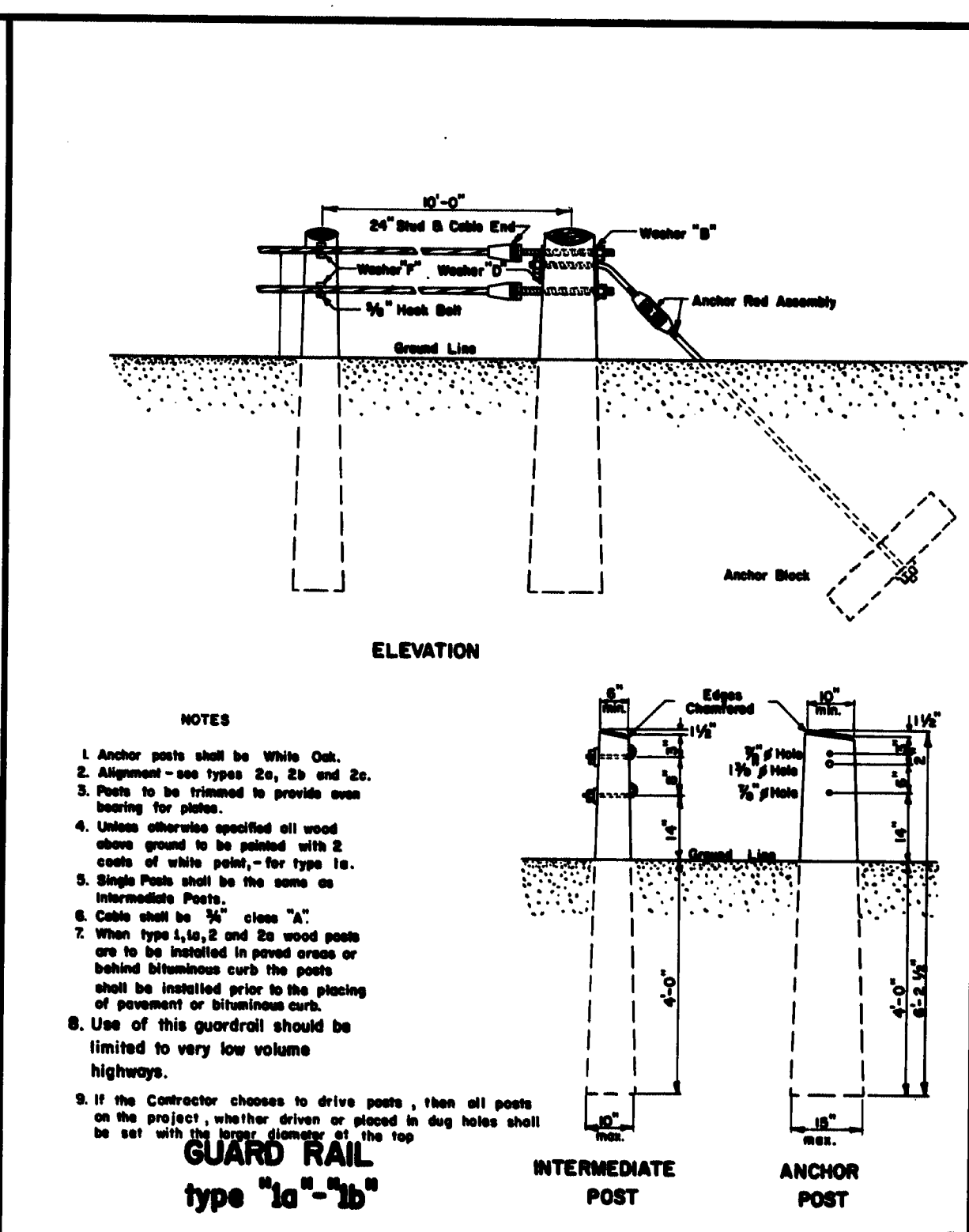
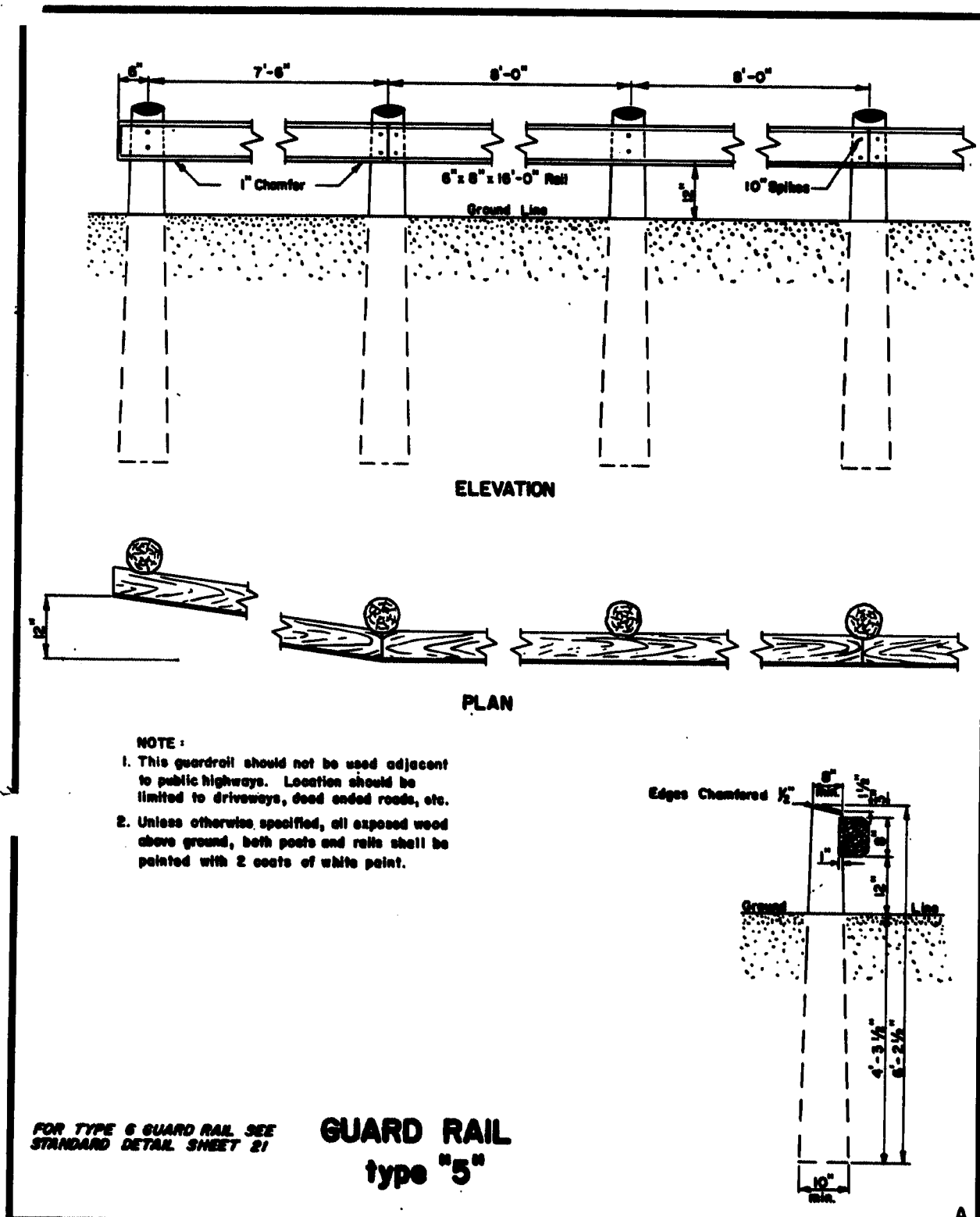
FABRICATION NOTES

- For location and type of diaphragm or crossframe see design details.
 - Holes for 3/8" diameter bolts shall be 1/8" dia. and edge distances shall be 1 1/2" minimum unless otherwise shown.
 - Connection plates and gusset plates shall have a minimum thickness of 3/8" and shall have sufficient width to provide erection clearances. When bearing stiffeners or intermediate stiffeners are used as connection plates, the plate size will be given on the design details.
 - Connection plates shall be fastened to beam and girder webs as follows:
0° to 30° skew... fillet weld both sides.
Over 30° skew... full penetration groove weld (See Detail B) except as indicated in Note 5
Over 45° skew... weld prequalification will be required.
- The skew angle is the angle between the connection plate and a line normal to the beam.
- Bearing stiffeners shall be used as connection plates when the skew is not over 30°. When the skew is over 30° a bent connection plate shall be attached to the web adjacent to the bearing stiffener as shown in Detail A.
 - All fillet weld sizes shall be the minimum for the thickness of metal being joined according to AWS Specifications for Welded Highway & Railway Bridges.
 - Connection plates on welded beams and girders shall extend to the top flange in areas where the top flange is always in compression or when used as a bearing stiffener or intermediate stiffener.
 - Connection plates shall extend to the bottom flange when used as a bearing stiffener, at points where lateral bracing is attached & on welded beams and girders in areas where the bottom flange is always in compression.
 - When a conn. plate is extended to a flange it shall be a paint tight fit except as otherwise indicated on design details.
 - Conn. plates shall be 2" clear from flanges, except as indicated by Notes 7 & 8.
 - Use only those items called for on the design details. In case of conflict between these standard details and the design details, the design details shall be followed.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STANDARD DETAILS
(BD 113 - 72)
DIAPHRAGMS & CROSSFRAMES

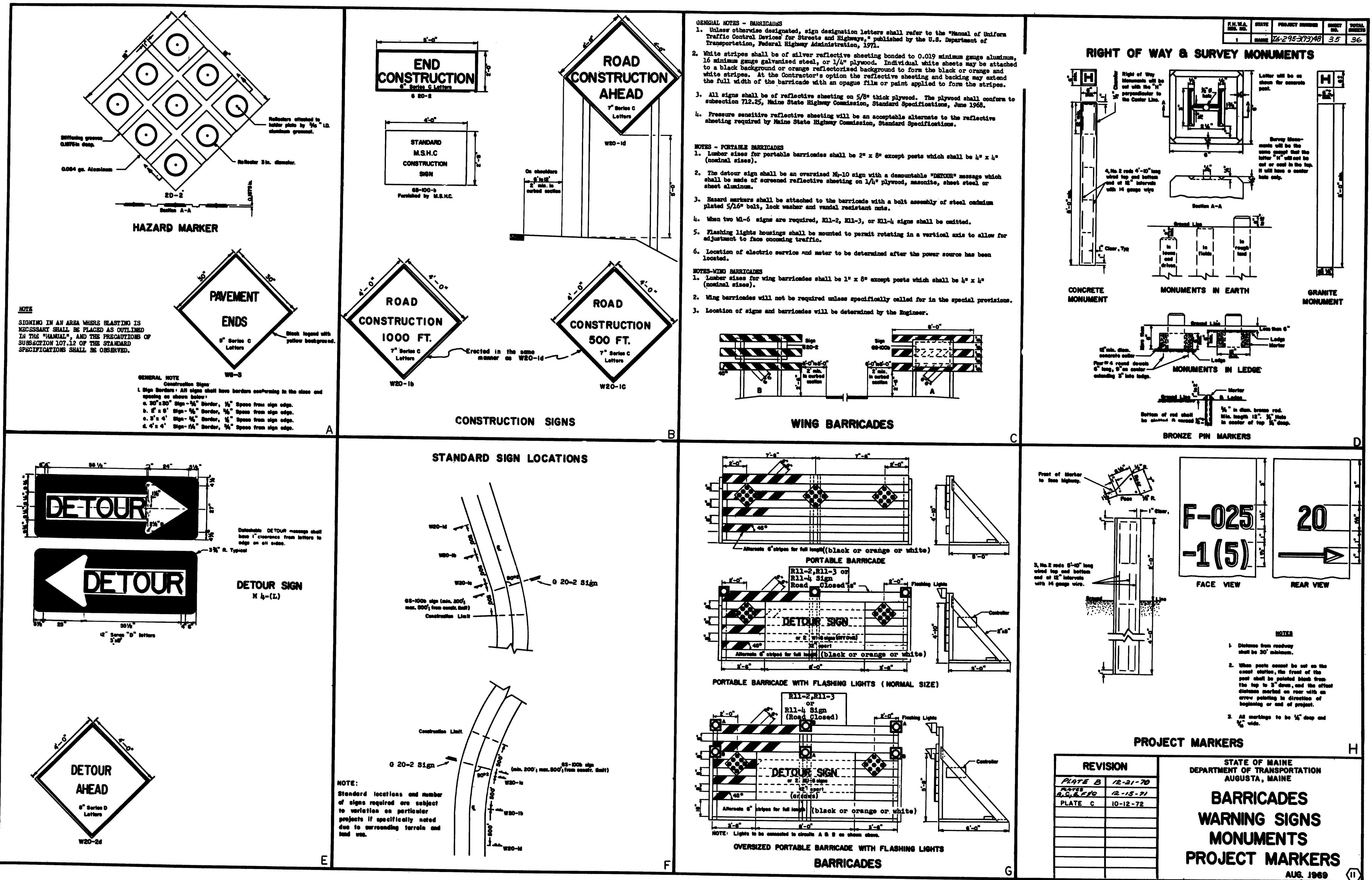
Diaphragms, Crossframes and All Plates (Filler, gusset, and connection). ASTM A36
High Strength Bolts 3/8" diameter — — — ASTM A325

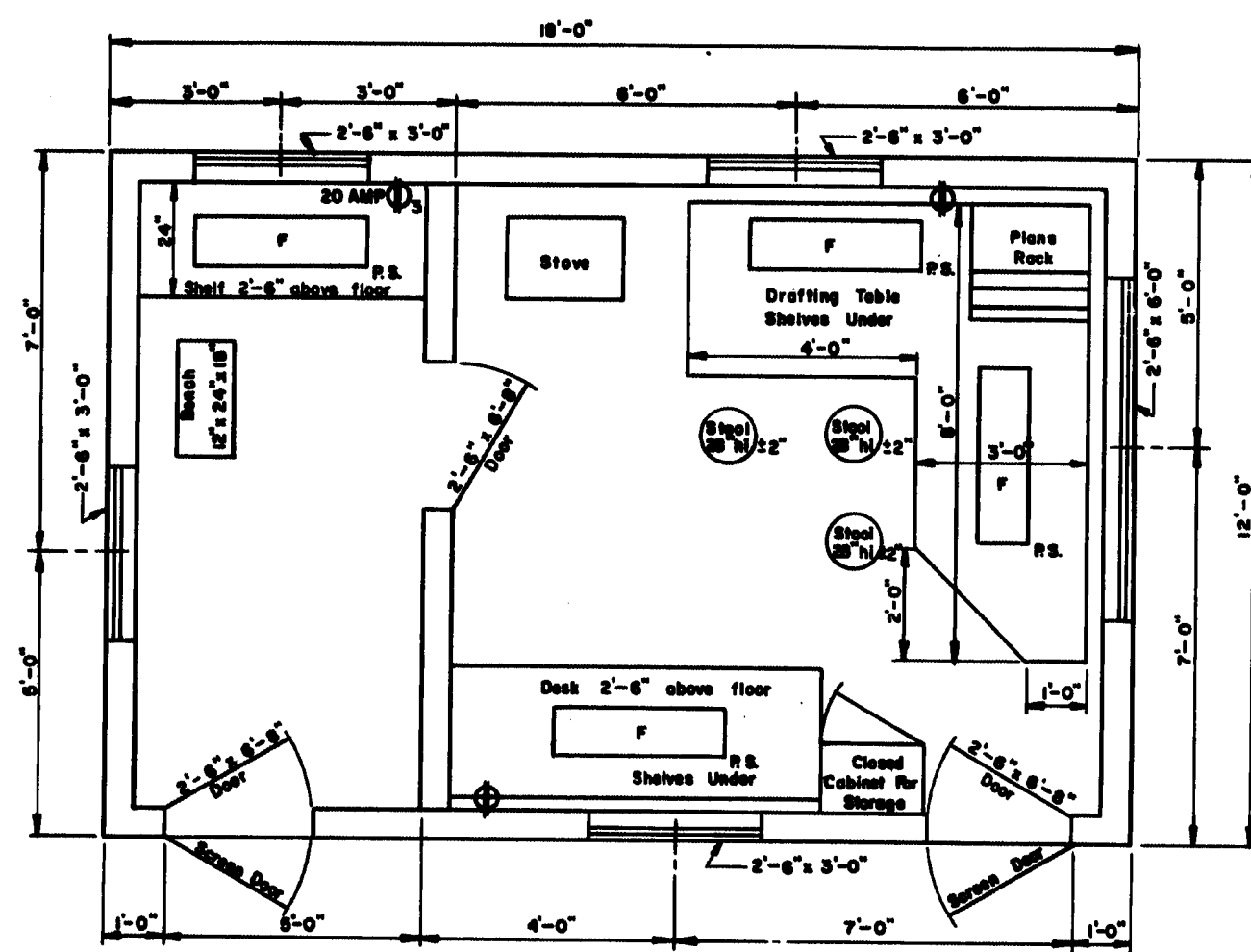
150-191



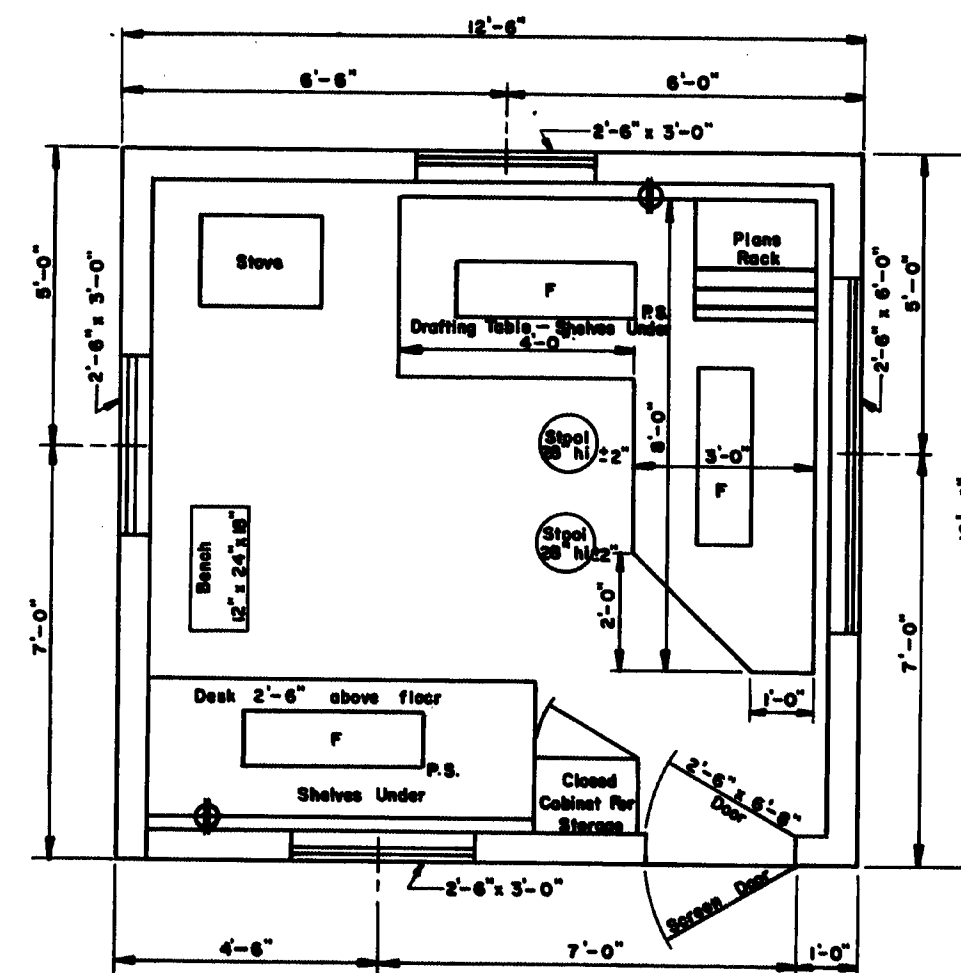
REVISIONS		STATE OF MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	
PLATE "D"	11-22-71	STANDARD DETAILS GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS	
11	2-17-72		
		AUG. 1969	

130-192

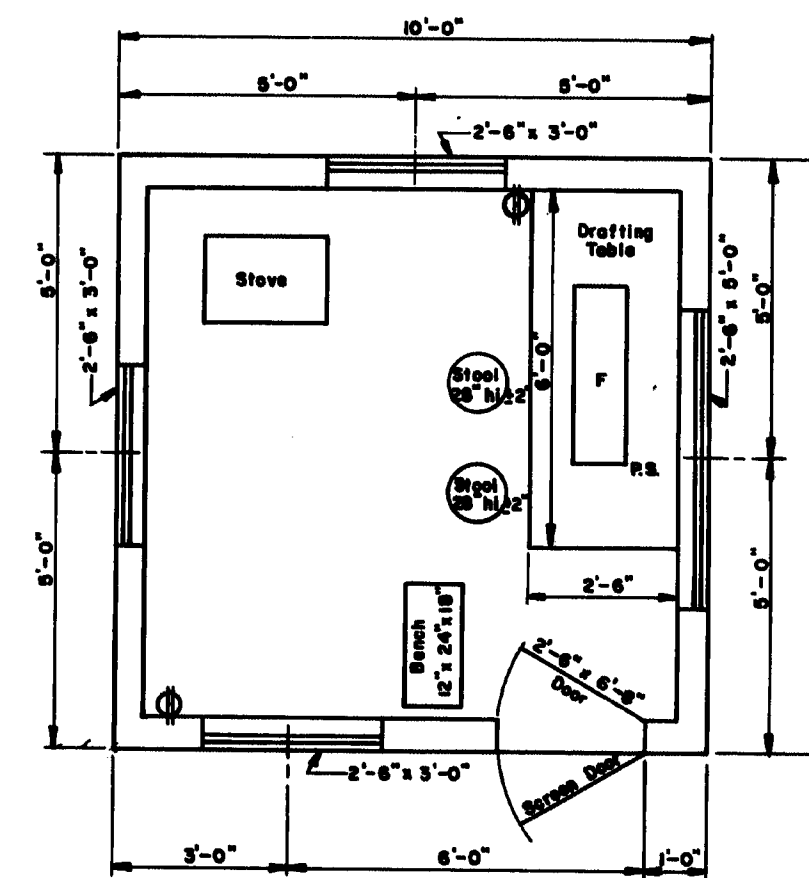




FLOOR PLAN
TYPE "A"

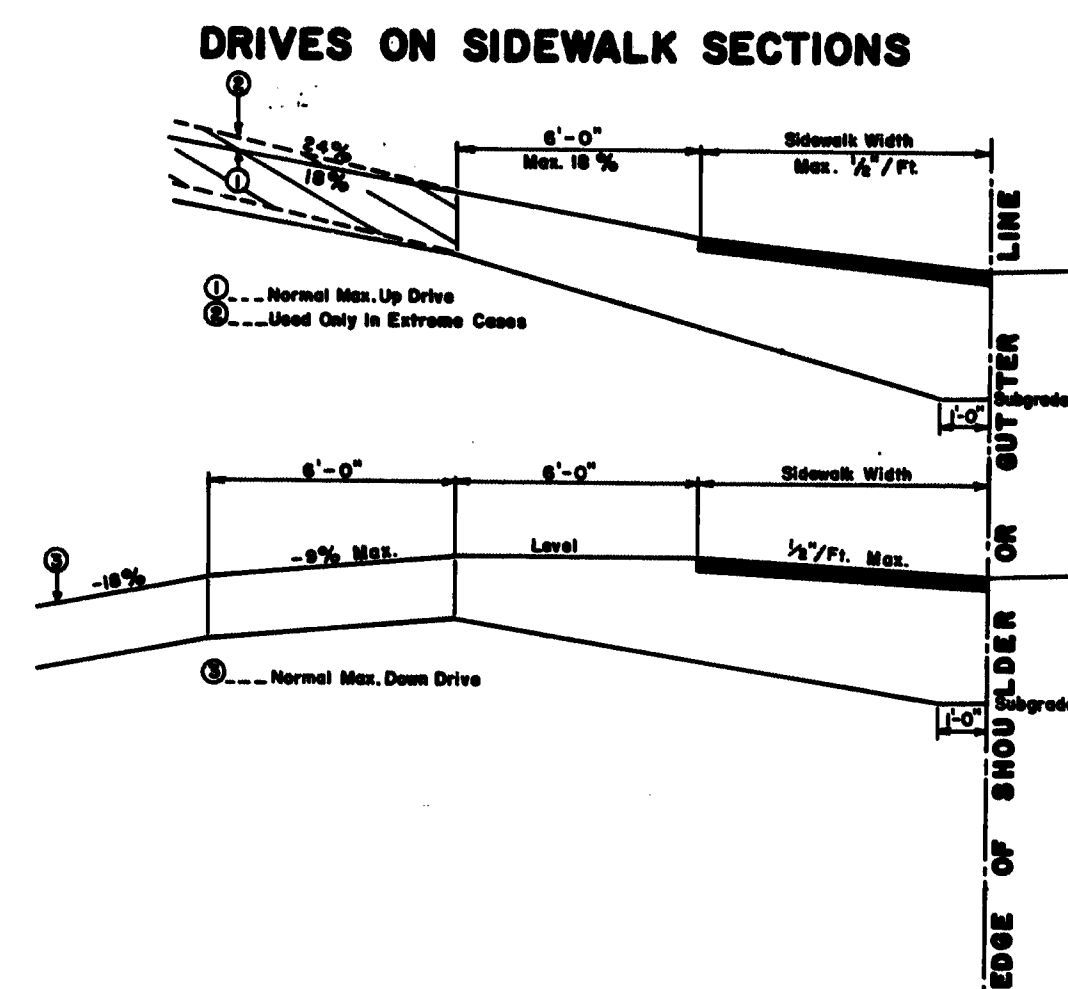


FLOOR PLAN
TYPE "B"

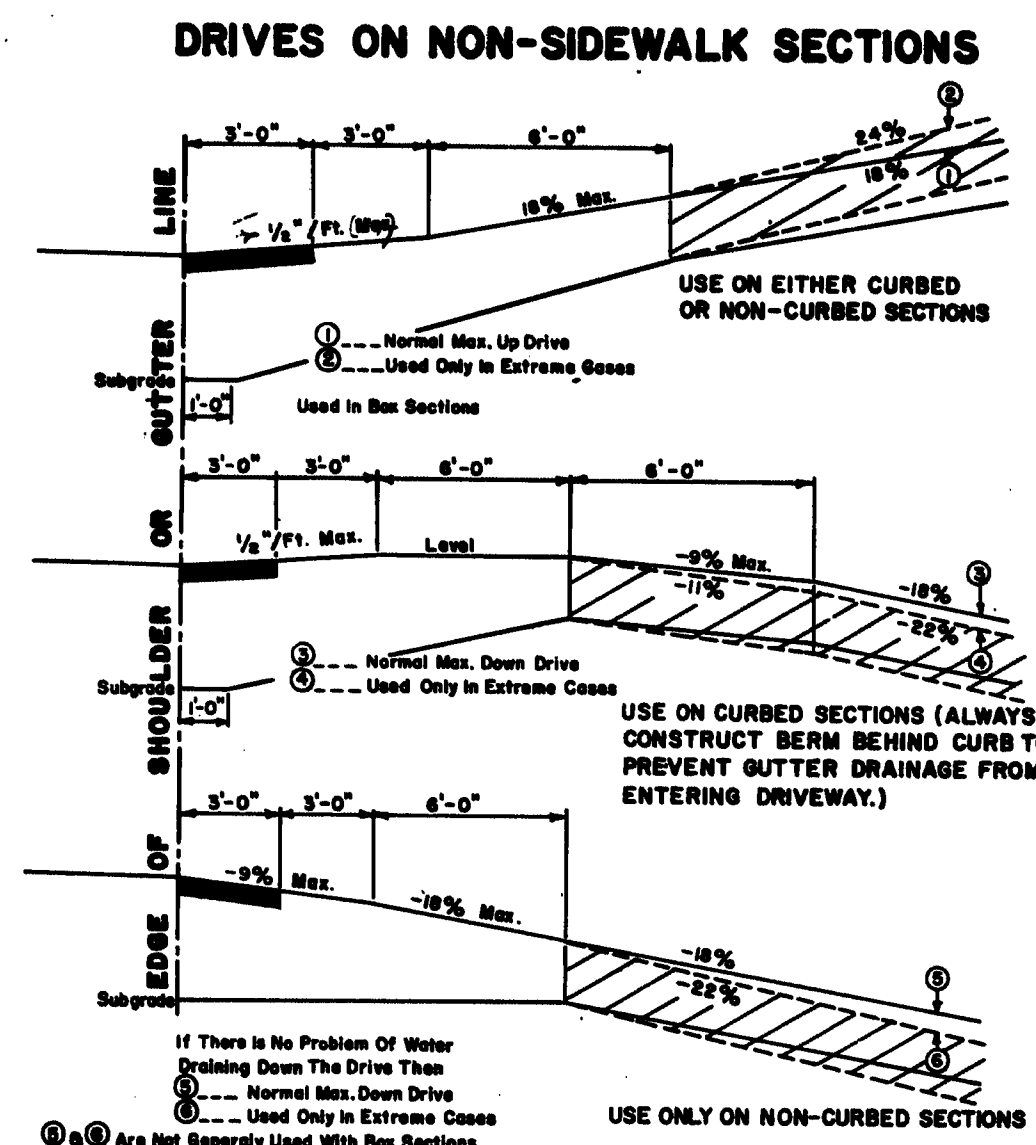


FLOOR PLAN
TYPE "C"

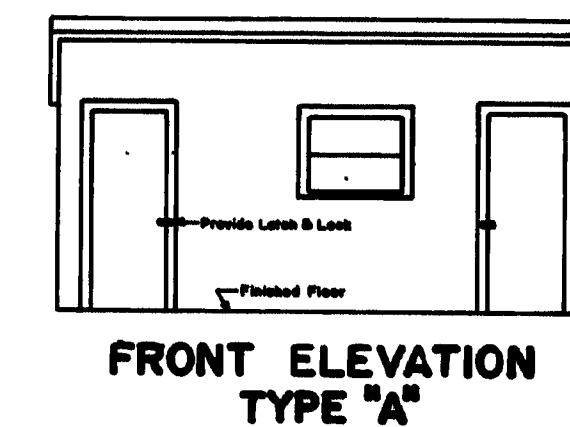
- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from shade to allow prints to hang down behind table when in use.
 - Shelves under desk shall be constructed to receive 1 1/2" x 14" x 25" transfiles.
 - Windows shall be double hung.
 - Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 6" of fireproof material.
 - Continuous 110 volt 60 cycle electric service shall be supplied.
 - The engineer may rearrange the items shown on the plan views during construction of the field office.
 - FURNISHINGS TO BE SUPPLIED:**
 - 2 Straight back chairs for types A and B
 - 1 Bench for types A, B & C
 - 3 Stool for type A
 - 2 Stools for types B & C
 - SYMBOLS:**
 - F Fluorescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
 - P.S. Pull switch
 - ⊕ Duplex wall outlet—15 amp unless otherwise noted.
 - ⊕ Triplex Wall Outlet
 - For the Type "A" Field Office one clean 55 gal. drum shall be supplied, installed on a suitable rack and equipped with a spigot suitable for drawing off water. The drum shall be furnished with water at all times.



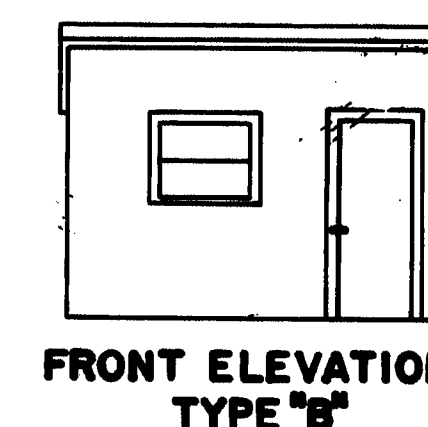
- GENERAL NOTES**
- The sidewalk width shall be paved in all cases.
 - All residential or commercial drives over 10% to be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
 - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
 - When grading drives which are flatter than the maximum profiles the following rule of thumb should be used, do not exceed a grade % change of more than 9% in a 6 foot increment of driveway length. This applies to both up and down profiles.



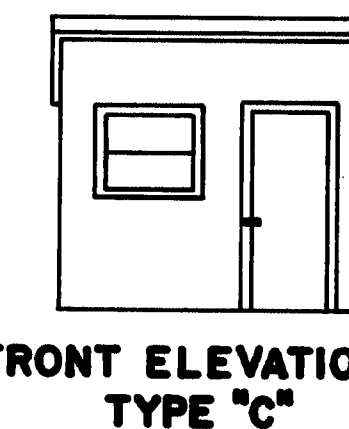
- GENERAL NOTES**
- The first 3' shown as pavement shall be paved only when abutting a paved area.
 - All residential or commercial drives over 10% to be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
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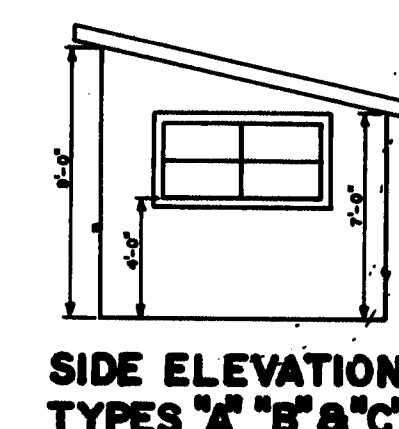
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



FRONT ELEVATION
TYPE "C"



SIDE ELEVATION
TYPES "A" "B" & "C"

REVISIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AUGUSTA, MAINE

STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

AUG. 1969

(12)

150-194