

D.P.E. SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-295	20	103

SPECIFICATIONS

DESIGN

A.A.S.H.O. Standard Specifications for Highway Bridges
1969 with Interim Specifications, 1970.
Design includes provision for 1" future wearing surface.

CONTRACT

State of Maine, State Highway Commission Standard
Specifications for Highways and Bridges, Revision of June 1968

LIVE LOADING

HS 20-44 as modified for Interstate.

FOUNDATIONS

Abutments: 148P73 End Bearing Piles, Total Capacity 96 Tons
Design capacity 80 Tons (allowance of 16 Tons for
negative skin friction).
Pier: 123P53 End Bearing Piles, capacity 70 Tons

ALLOWABLE STRESSES

Concrete ($n=10$) $f_c = 1800$ p.s.i.
Reinforcing Steel, A.S.T.M. Designation A615 Grade 60 -
 $f_s = 24,000$ p.s.i.
Structural Steel-Main stringer material A.S.T.M. Designation
A572-50 except as noted, $f_s = 27,000$ p.s.i. for thickness 1/2" and
under. Other steel A.S.T.M. Designation A36 except as noted,
 $f_s = 20,000$ p.s.i.

CONCRETE CLASSIFICATION

All concrete shall be Class "A"

INDEX OF SHEETS

SHEET NO.	TITLE
1.	GENERAL PLAN
2.	APPROACH SECTIONS-PROFILES & QUANTITIES
3.	FOUNDATION SURVEY
4.	BORING DETAILS
5.	BORING DETAILS
6.	BORING DETAILS
7.	FOOTING PLAN-ABUTMENT NO. 1
8.	FOOTING PLAN-ABUTMENT NO. 2
9.	PIER FOOTING PLAN & APPROACH SLABS
10.	ABUTMENT NO. 1 SOUTHBOUND
11.	ABUTMENT NO. 1 NORTHBOUND
12.	ABUTMENT NO. 2 SOUTHBOUND
13.	ABUTMENT NO. 2 NORTHBOUND
14.	MEDIAN WALL, END POST ABUTMENT DETAILS
15.	WINGWALLS-ABUTMENT NO. 1
16.	WINGWALLS-ABUTMENT NO. 2
17.	PIER PLAN
18.	FRAMING PLAN
19.	STRUCTURAL STEEL BLOCKING POINTS
20.	STEEL DETAILS I
21.	STEEL DETAILS II
22.	SUPERSTRUCTURE DETAILS-S.B. ROADWAY
23.	SUPERSTRUCTURE DETAILS-N.B. ROADWAY
24.	MISCELLANEOUS CONCRETE DETAILS
25.	LIGHTING DETAILS
26.	REINFORCING STEEL SCHEDULE
27.	REINFORCING STEEL SCHEDULE
28.	REINFORCING STEEL SCHEDULE

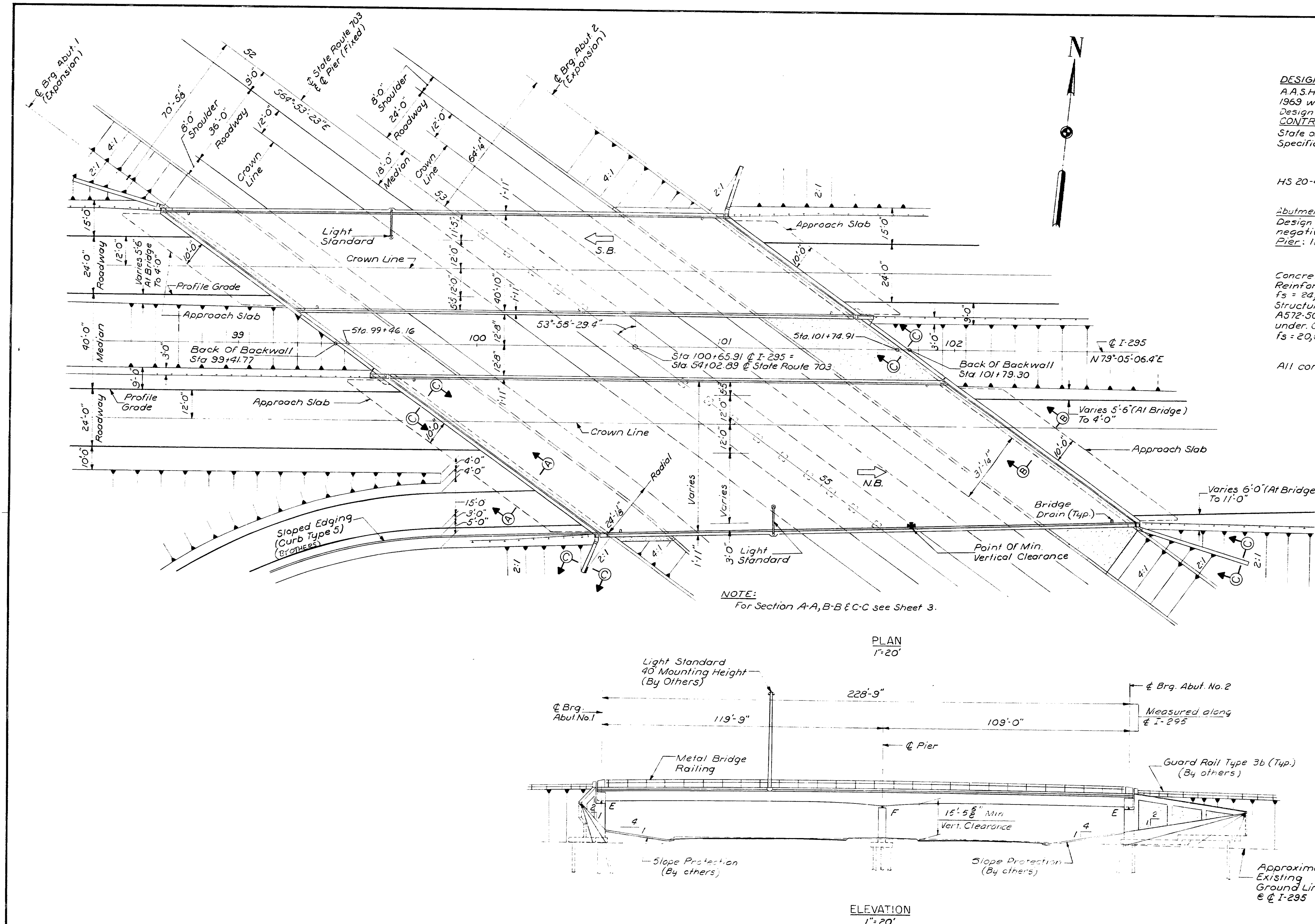
STANDARD DETAIL SHEETS

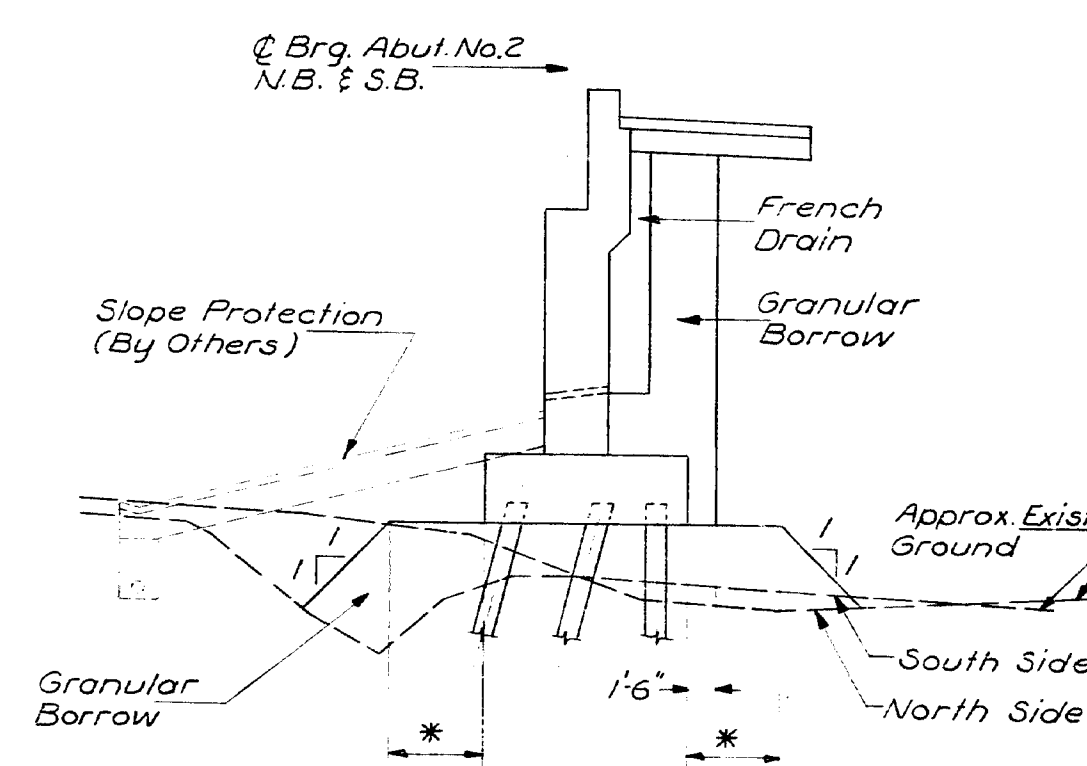
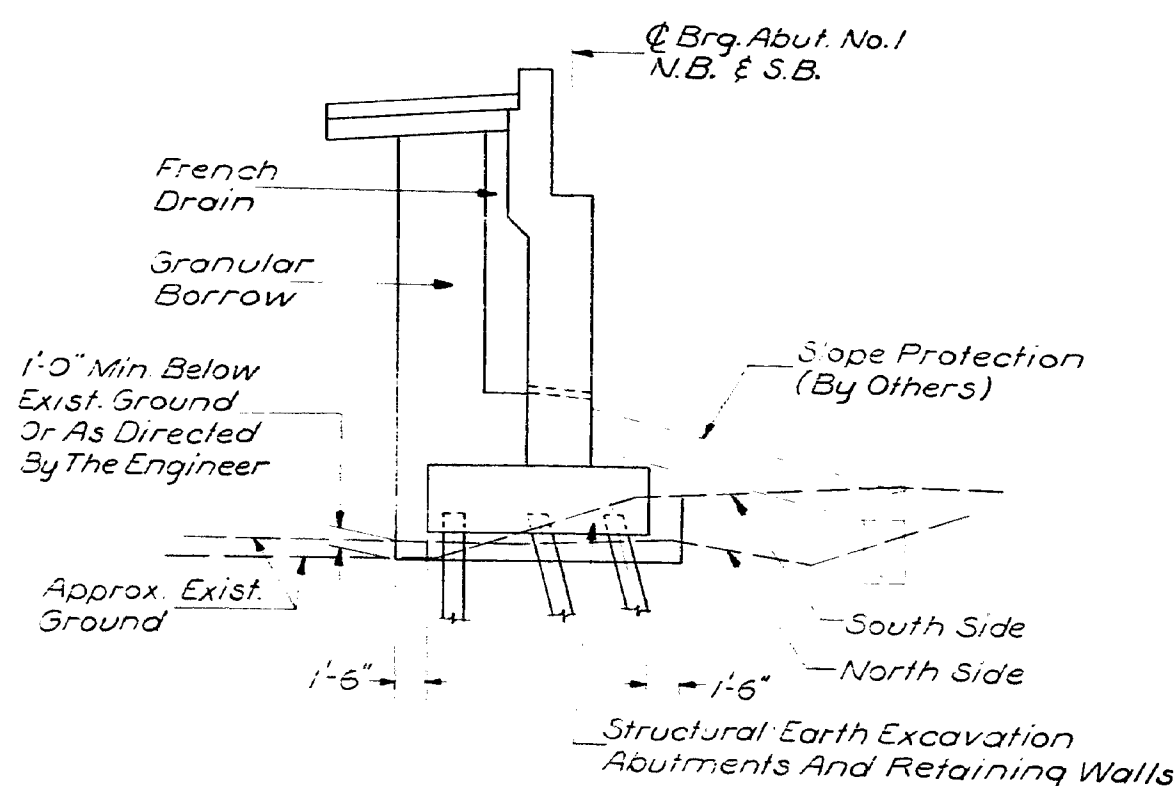
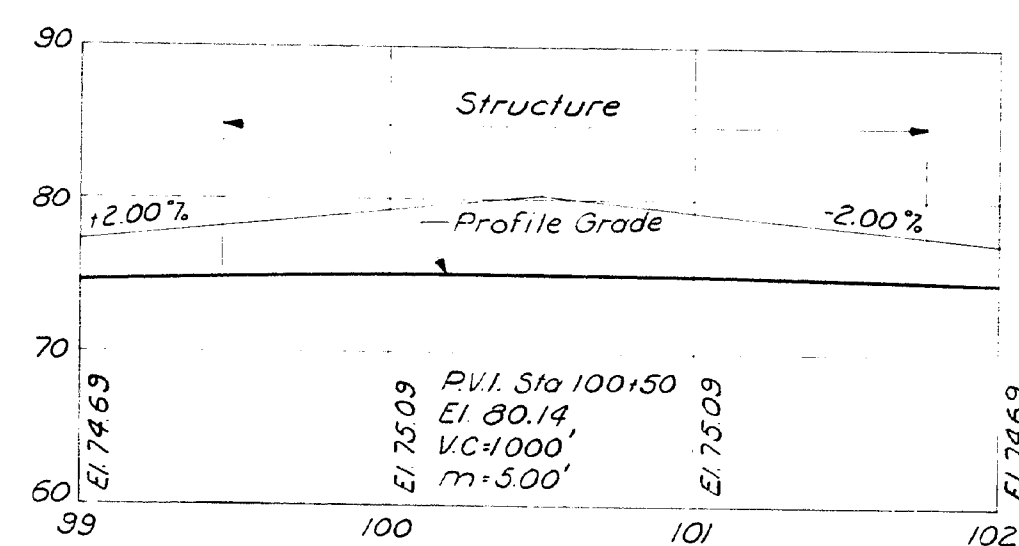
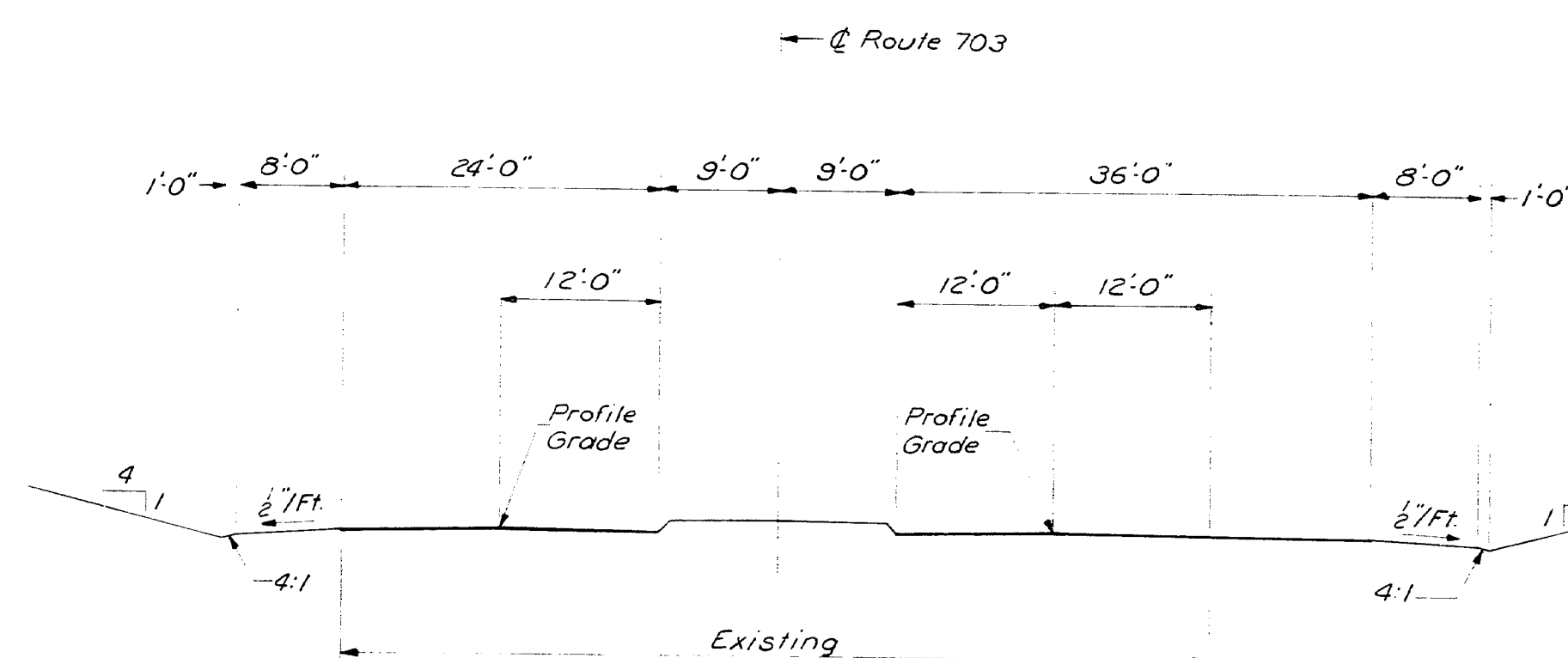
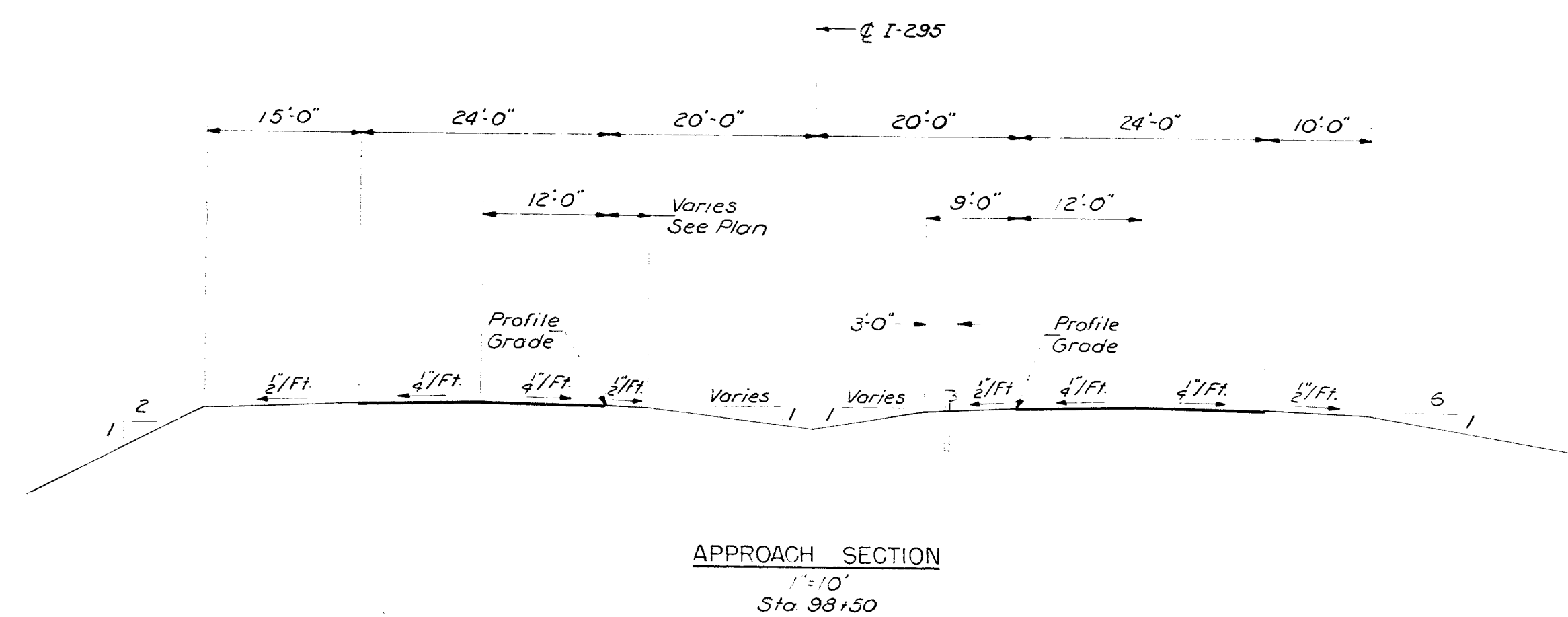
BD101-70	BEARING PEDESTALS JAN, 1970
BD104-66	DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN SEPT. 1966
BD105-64	EXPANSION DAMS April, 1964
BD106-69	ALUMINUM RAILING JAN, 1969 REV. 3-25-70

DESIGN- TRACE- CHECK- G.U.J.	DETAIL- R.D.F.	BRIDGE NO. SURVEY- PLOT-
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
1-295 OVER STATE ROUTE 703		
IN THE CITY OF SOUTH PORTLAND CUMBERLAND COUNTY		
GENERAL PLAN		
SHEET 1 OF 26 AUGUSTA, MAINE JUNE, 1970		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

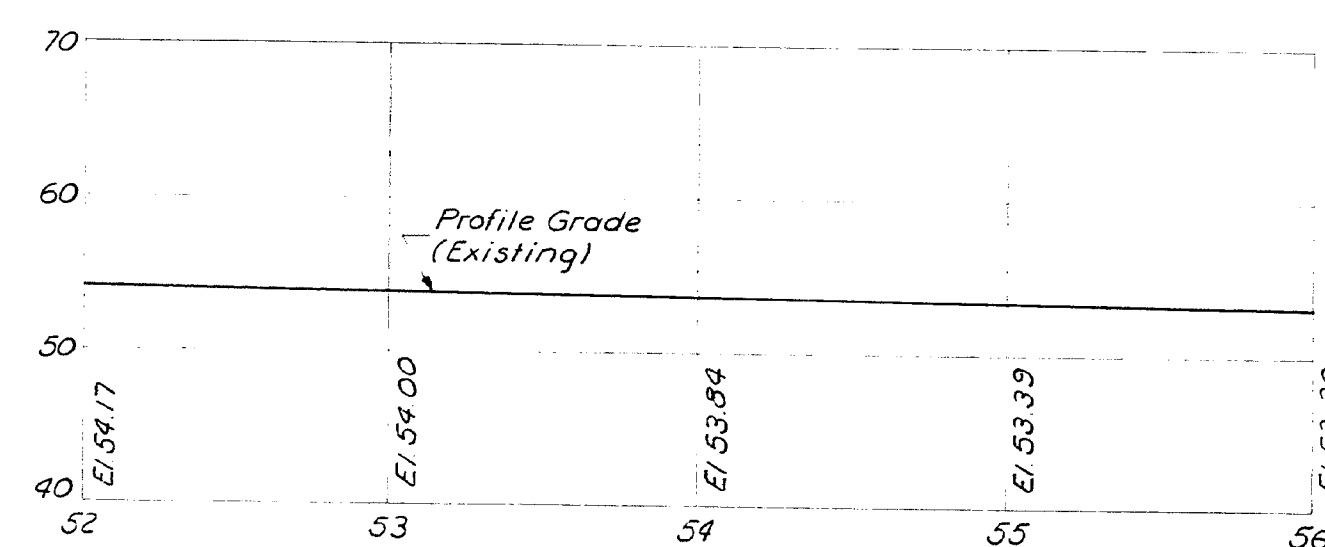
1-295 South Portland 127-49 and





NOTES:

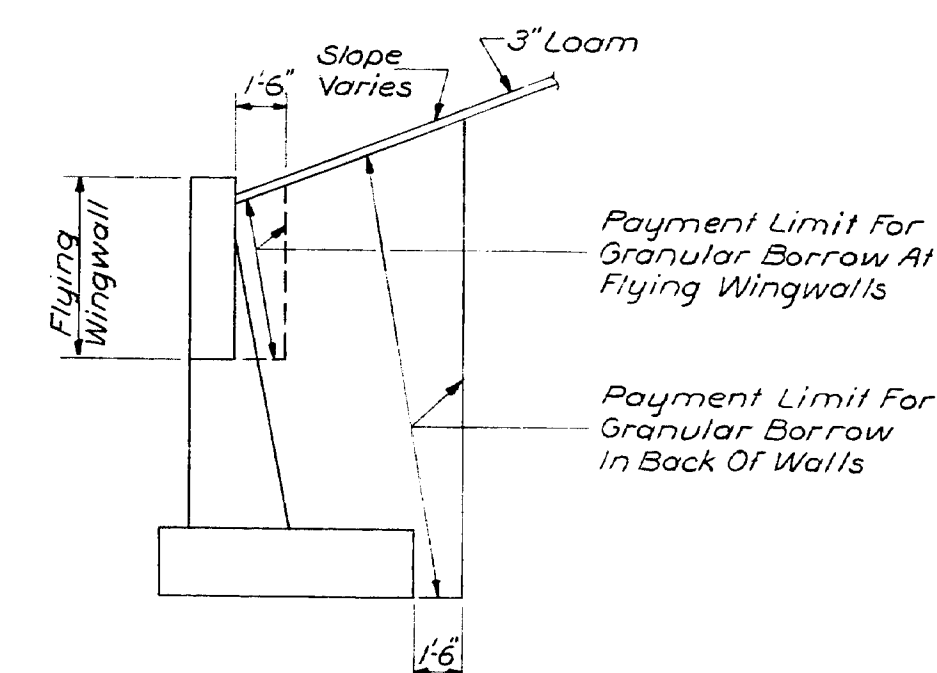
1. * See Footing Plan Sheet 9 for Payment Limits for Granular Borrow under Footings.
2. Payment Limits for Granular Borrow in back of abutments and walls shall extend to 1'-6" beyond ends of wingwalls. See also Plan Median Wall, Sheet 15.



ITEM NO	DESCRIPTION	QUANTITY	UNIT
203.25	Granular Borrow	2820	C.Y.
206.08	Structural Earth Excavation - Abutments & Retaining Walls	230	C.Y.
206.10	Structural Earth Excavation - Piers	680	C.Y.
501.211	Steel H-beam Piles 53 lbs./ft.	1760	L.F.
501.212	Steel H-beam Piles 73 lbs./ft.	6550	L.F.
502.21	Structural Concrete, Abutments & Retaining Walls	1750	C.Y.
502.23	Structural Concrete, Piers	305	C.Y.
502.26	Structural Concrete, Roadway & Sidewalk Slabs On Steel Bridges	1	L.S.
503.12	Reinforcing Steel Fabricated & Delivered	354.200	Lbs.
503.13	Reinforcing Steel, Placing	55 - 200	Lbs.
504.70	Structural Steel, Fabricated & Delivered	1	L.S.
504.71	Structural Steel, Erection	1	L.S.
505.08	Shear Connectors	1	L.S.
505.14	Field Painting, Structural Steel	1	L.S.
507.08	Bridge Railing	1	L.S.
514.06	Curing Box For Concrete Cylinders	995	L.F.
515.20	Protective Coating For Concrete Surfaces	1	Ea.
609.13	Vertical Bridge Curb - Type 1	610	S.F.
638.01	Embedded Work in Structures	940	L.F.
639.09	Field Office, Type B	1	L.S.
		1	Ea.
502.31	Structural Concrete Approach Slabs	1	L.S.
512.06	French Drains	460	C.Y.
650.35	Maintenance of Traffic	L.S.	L.S.

NOTE:

Estimated Quantity of Structural Steel, Fab, Del, Erected & Painted	867,000	Lbs.
Estimated Quantity of Shear Connectors	5,330	Pcs.
Estimated Quantity of Concrete Item 502.26	725	C.Y.
Estimated Quantity of Concrete Item 502.31	83	C.Y.



SECTION C-C
No Scale

DESIGN- TRACE- CHECK- C U J	DETAIL-R.D.F.	BRIDGE NO. PERT- PLOT-
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STATE HIGHWAY COMMISSION
BRIDGE DIVISION

I-295
OVER
STATE ROUTE 703

IN THE CITY OF
SOUTH PORTLAND
CUMBERLAND COUNTY

APPROACH SECTIONS- PROFILE & QUANTITIES

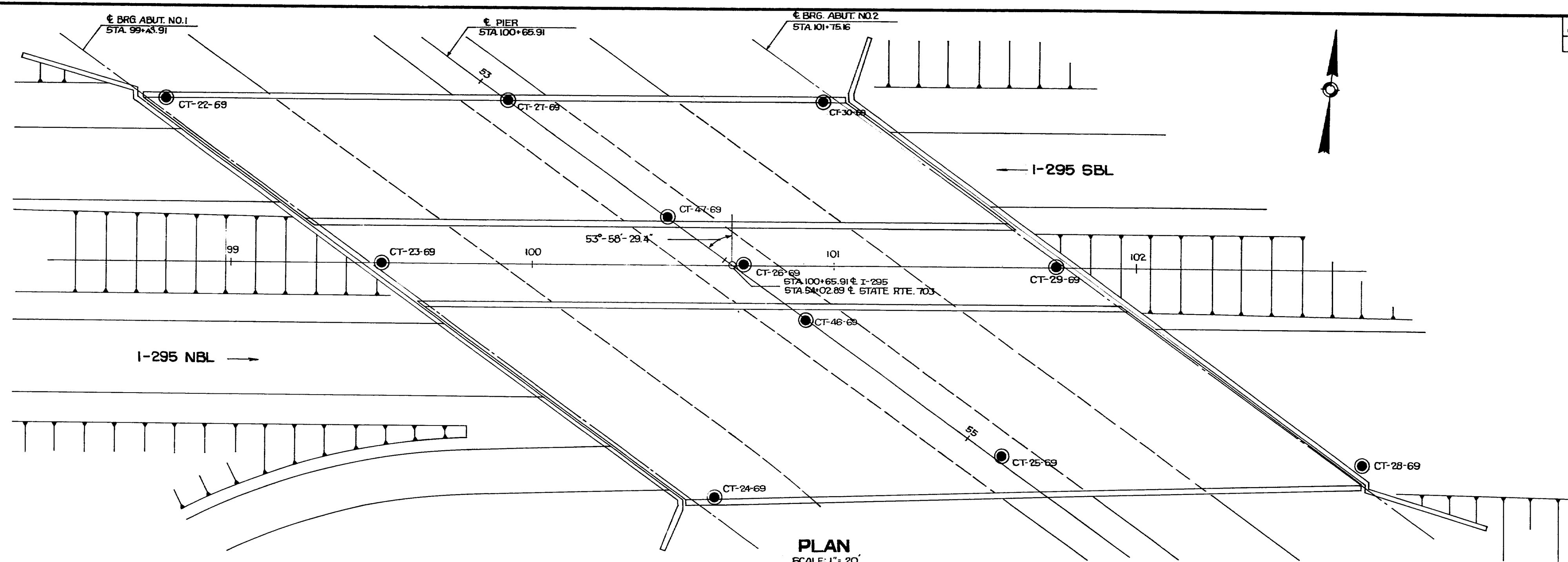
SHEET 2 OF 33 AUGUSTA, MAINE JUNE 1970

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

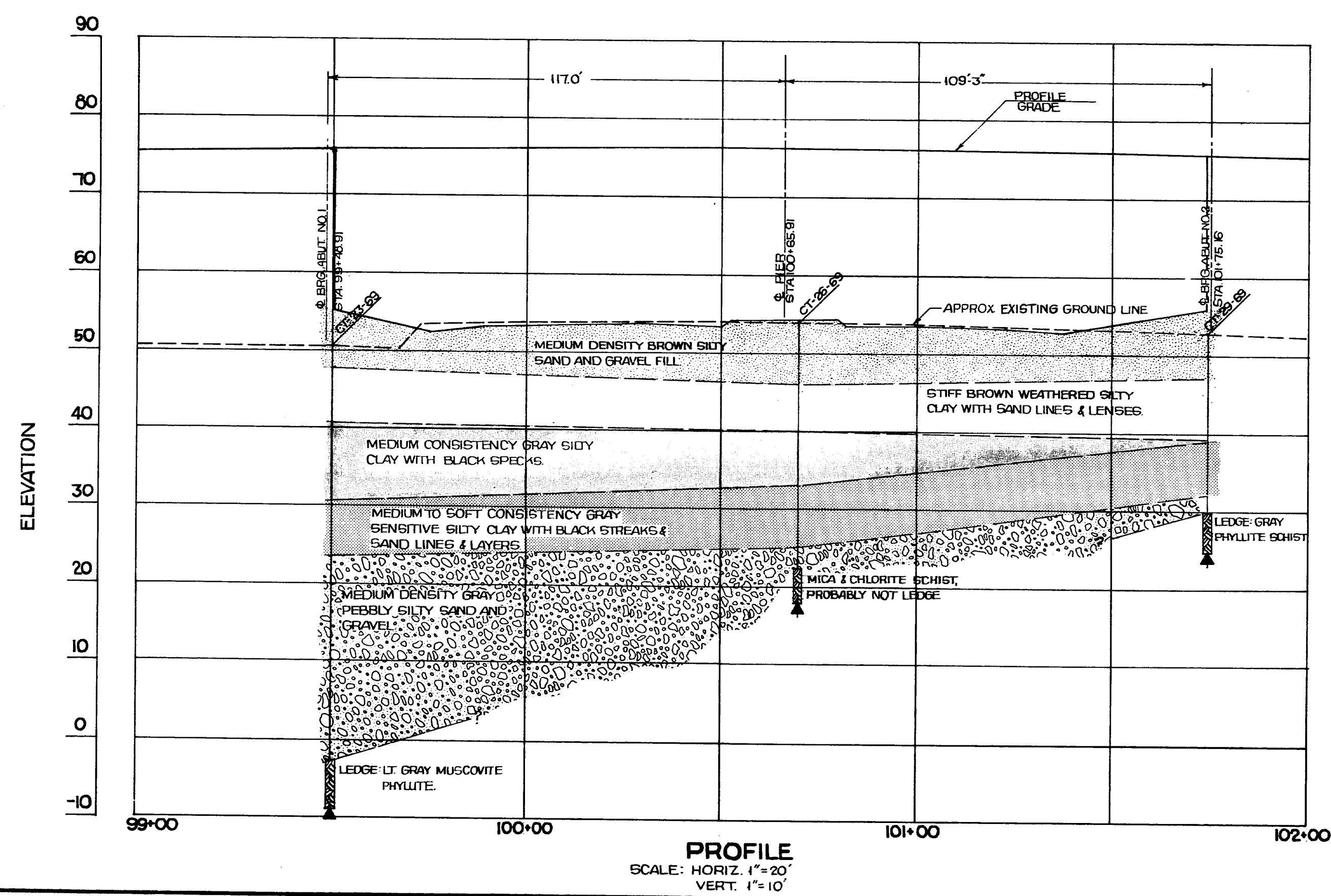
BOSTON

172-50

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	127-51	103	103



PLAN
SCALE: 1" = 20'



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

STATE HIGHWAY COMMISSION

I-295
OVER
STATE ROUTE 703
IN THE TOWN OF
SOUTH PORTLAND
CUMBERLAND COUNTY
FOUNDATION SURVEY

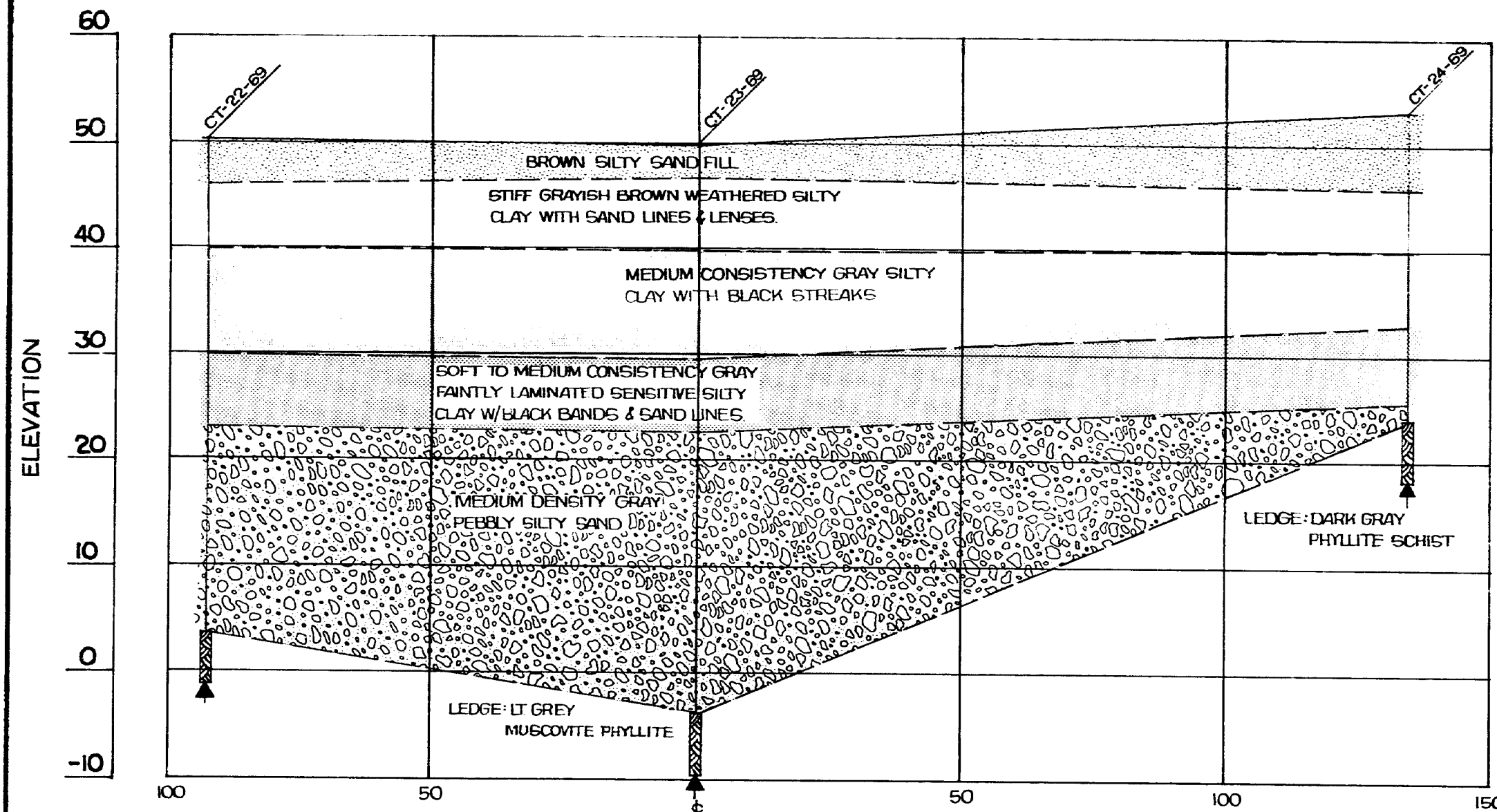
SHEET 3 OF 28 AUGUSTA, MAINE JUNE 1970

PLANS	DESIGN - DETAILED	CHECKED	REVISIONS	FIELD CHANGES
BY				
DATE				

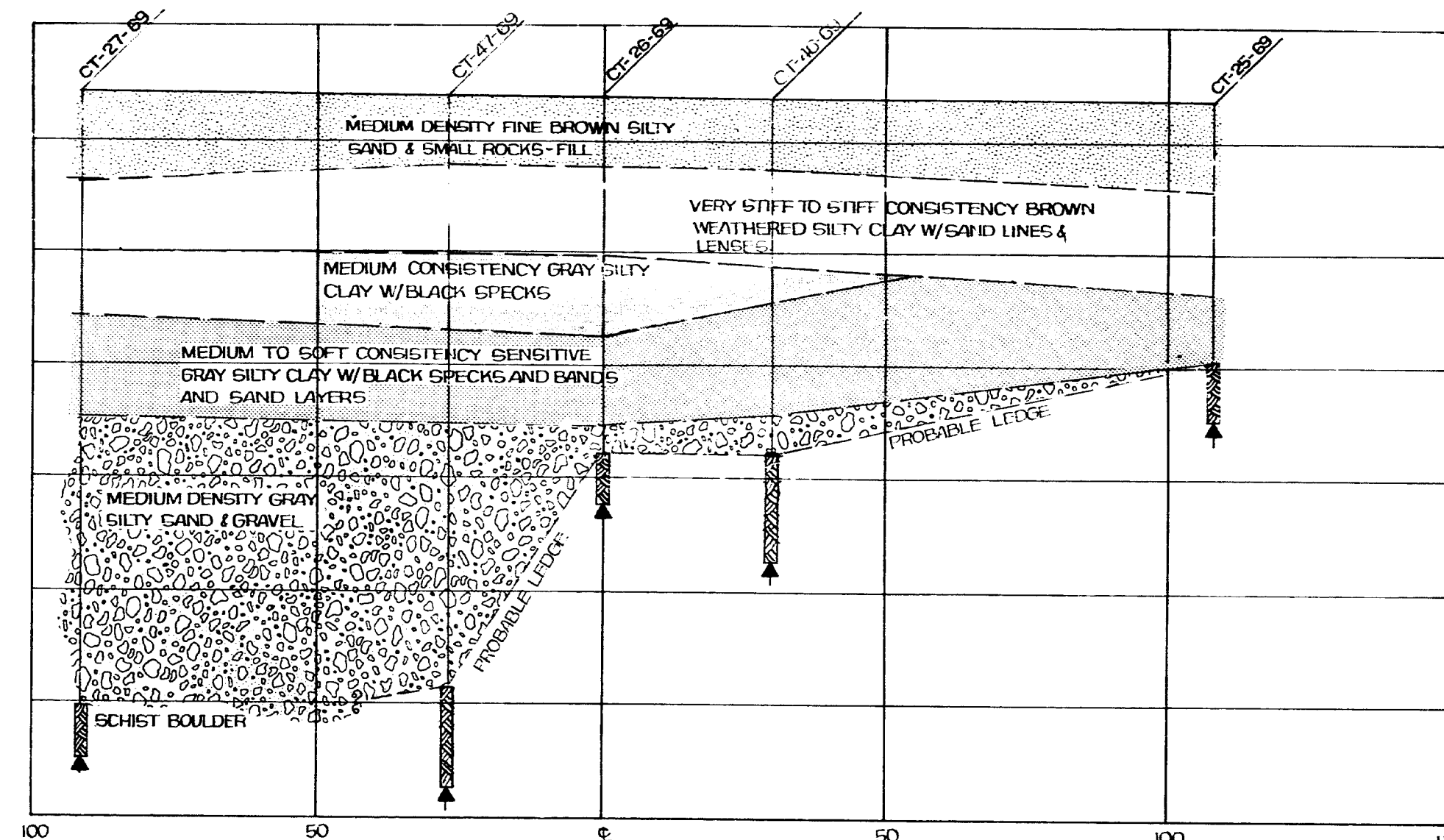
127-51 22

TRANSVERSE SECTIONS

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE		177-52	200

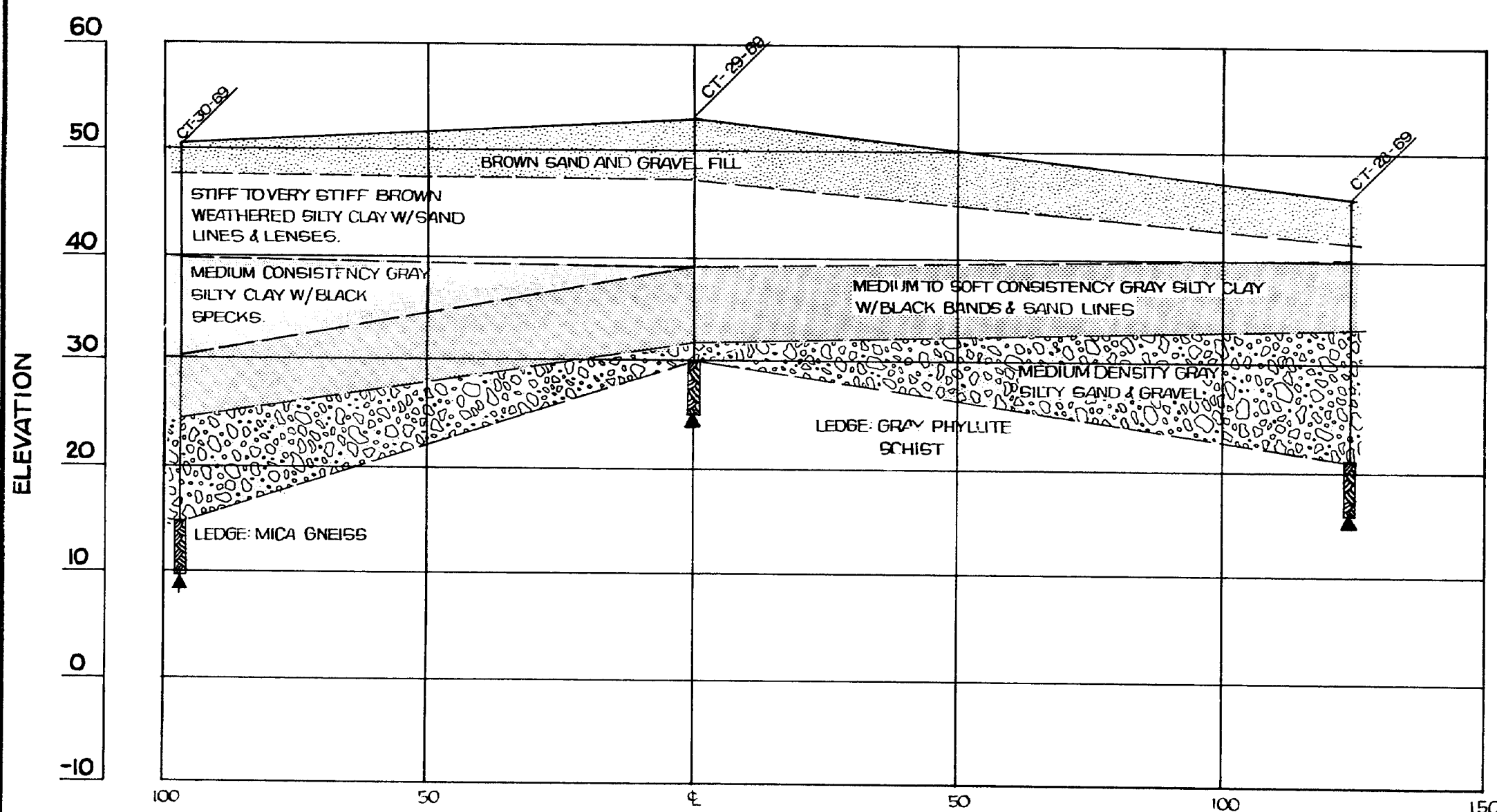


ABUT. NO. 1



PIER NO. 1

- BORING NOTES**
- ALL SAMPLES AND VANES ARE MADE AHEAD OF CASING
 - WATER ELEVATION
 - NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400 FT LBS OF ENERGY PER BLOW
 - LOCATION OF SAMPLE OR SAMPLE ATTEMPT
 - NUMBER AND TYPE OF DRY SAMPLE
 - ID 5 1/4" SAMPLER # 1290'S
 - IC 2" O.D. 16 GA. SEAMLESS TUBING
 - IU 3 1/2" O.D. 16 GA. SEAMLESS TUBING
 - MD UNSUCCESSFUL SAMPLE ATTEMPT AND TYPE OF SAMPLER
 - NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350 FT LBS OF ENERGY PER BLOW
 - H SAMPLING SPOON OR SEAMLESS TUBING DRIVEN BY STATIC WEIGHT OF DRILL RODS AND HAMMER
 - FIELD VANE TEST
 - BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)
 - LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK
- SHEAR NOTES**
- FIELD VANE SHEAR STRENGTHS
 - LABORATORY VANE SHEAR STRENGTHS
 - SHEAR STRENGTHS IN EXCESS OF CAPACITY OF EQUIPMENT
 - ONE HALF UNCONFINED COMPRESSIVE STRENGTHS
- WATER CONTENT NOTES**
- NATURAL WATER CONTENT, GIVEN AS PER CENT OF DRY WEIGHT
 - PLASTIC AND LIQUID LIMITS
 - IGNITION LOSSES ARE GIVEN AS PER CENT OF DRY WEIGHT



ABUT. NO. 2

BORING CT-22⁽⁶⁹⁾ STATION 98+78 54' LT.

	DRIVING RESISTANCE	VANE SHEAR STRENGTH	WATER CONTENT
	BLOWS/FT.	TONS/50 FT.	PERCENT
	20 40	0.4 0.8	20 40
ELEV. 50.5			
IC BROWN SILTY SAND			
IU STIFF CONSISTENCY GRAY WEATHERED SILTY CLAY W/ SOME SAND LINES			
2U MEDIUM TO STIFF CONSISTENCY GRAY SILTY CLAY W/A FEW BLACK STREAKS AND LINES			
3U SAND LAYERS AND BLACK BANDS INCREASING W/DEPTH			
4U H			
ID MEDIUM TO DENSE GRAY CLAYEY SILTY SAND W/ SMALL PEBBLES			
MD			
ND			
3D LEDGE: LT. GRAY MUSCOVITE PHYLLITE HIGH ANGLE FOLIATION			
LEAVE SURFACE 42			

CHANGED TO 2 1/2" CASING.
 ## CHANGED TO 4" CASING.
 ① SLIGHTLY SILTY MEDIUM COARSE SAND

BORING CT-23⁽⁶⁹⁾ STATION 99+50 ±

	DRIVING RESISTANCE	VANE SHEAR STRENGTH	WATER CONTENT
	BLOWS/FT.	TONS/50 FT.	PERCENT
	20 40	0.4 0.8	20 40
ELEV. 50.0			
ID BROWN SAND			
IU MEDIUM CONSISTENCY GRAYISH BROWN WEATHERED SILTY CLAY W/SAND LINES			
2U MEDIUM TO SOFT CONSISTENCY FAINTLY LAMINATED GRAY SILTY CLAY W/BLACK STREAKS			
3U SAND LINES			
4U H			
ID MEDIUM GRAY SILTY SAND AND PEBBLES			
MD			
ND			
3D PROBABLE LEDGE SURFACE 35			
LEAVE SURFACE 42			

CHANGED TO 2 1/2" CASING

DESIGN - DETAIL PD
 CHECKED
 REVISIONS
 FIELD CHANGE

STATE HIGHWAY COMMISSION

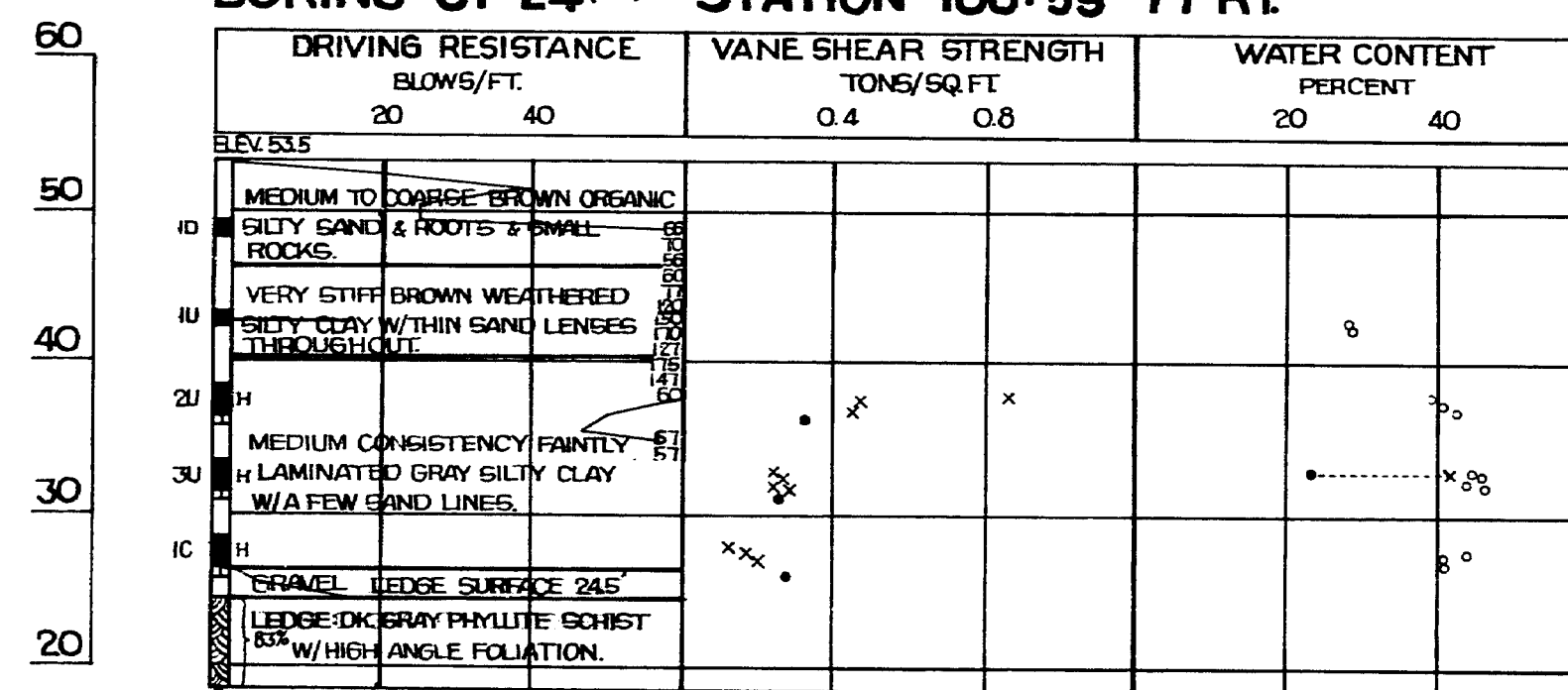
I-295
 OVER
 STATE ROUTE 703
 IN THE TOWN OF
 SOUTH PORTLAND
 CUMBERLAND COUNTY
 BORING DETAILS

SHEET 1 OF 2 AUGUSTA, MAINE JUNE 1970

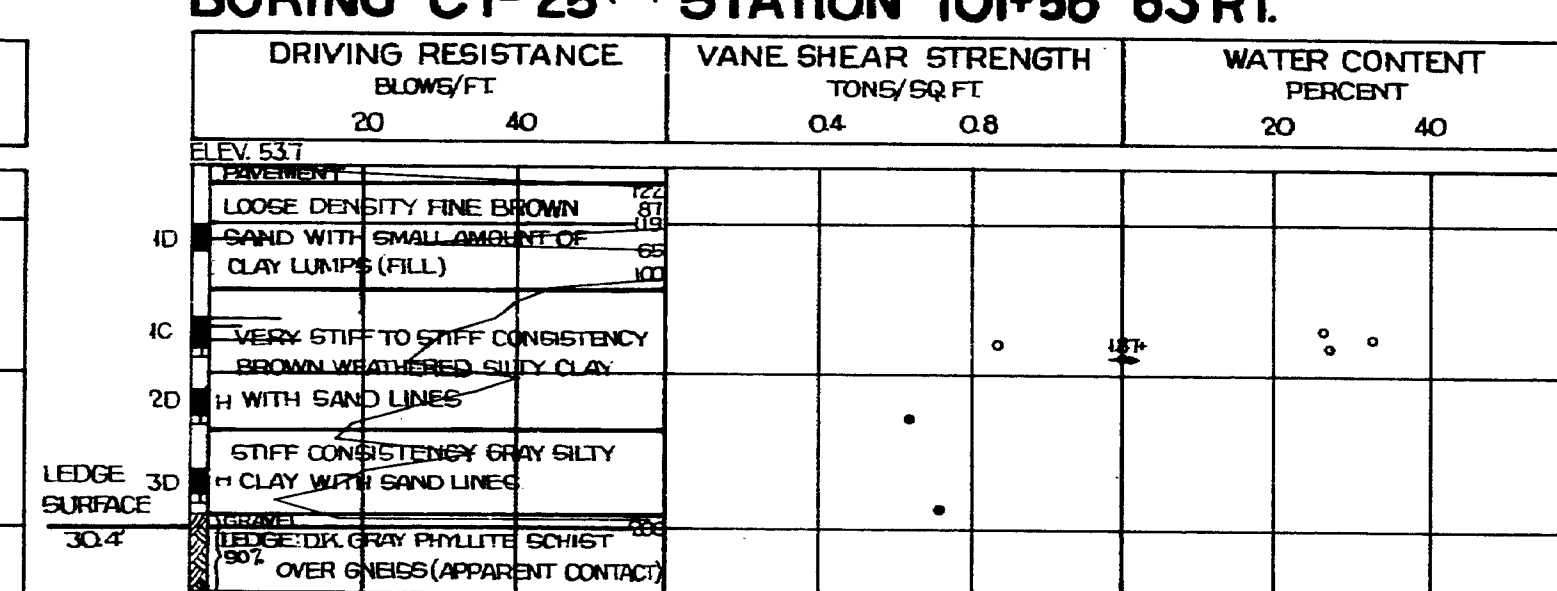
177-52

R. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		24	103

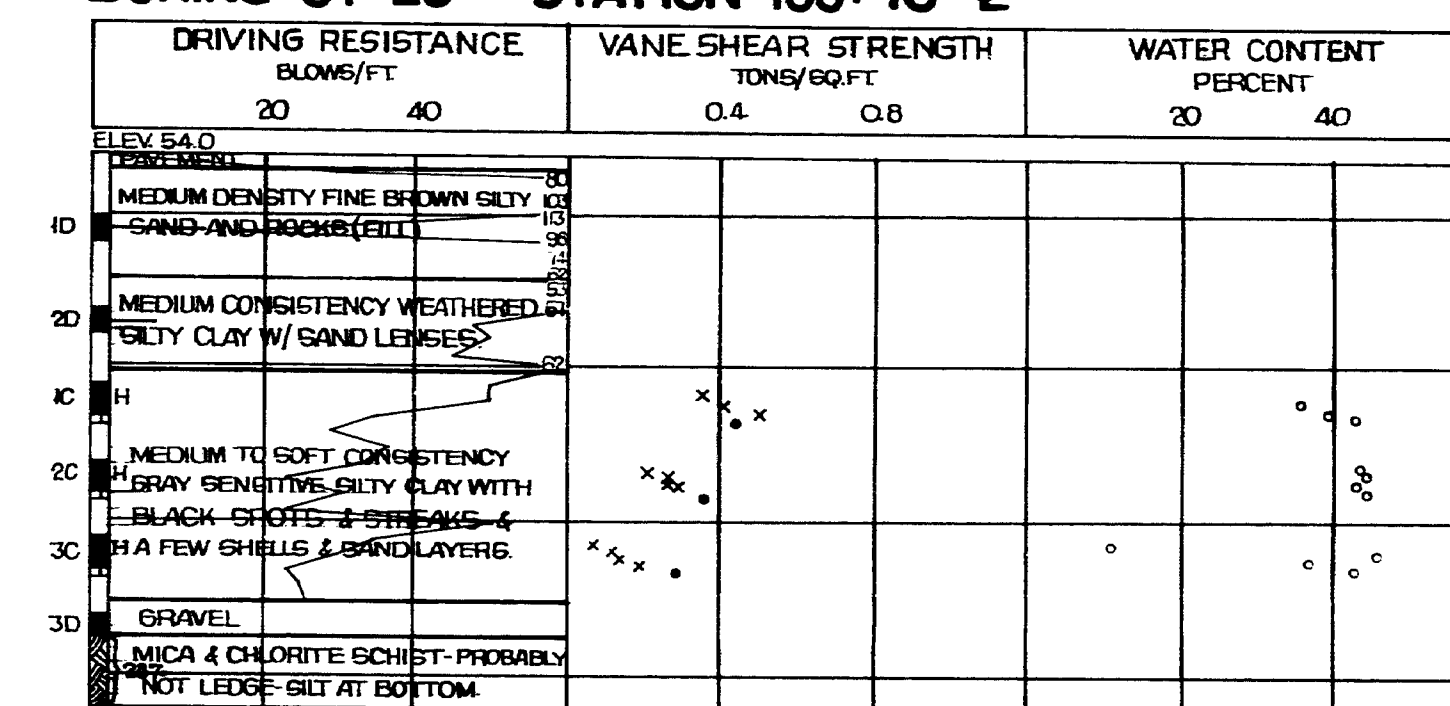
BORING CT-24⁽⁶⁹⁾ STATION 100+59 77' RT.



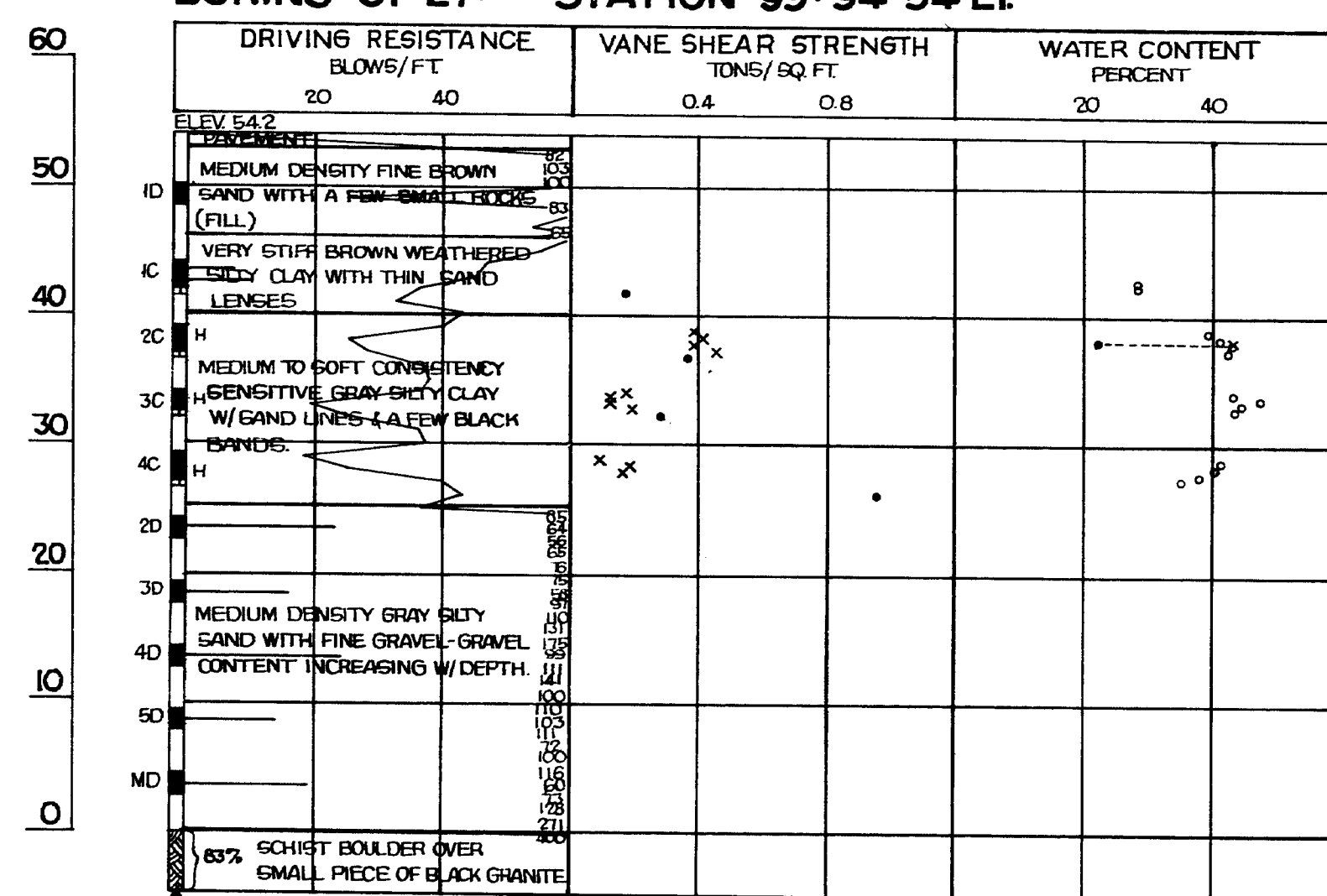
BORING CT-25⁽⁶⁹⁾ STATION 101+56 63' RT.



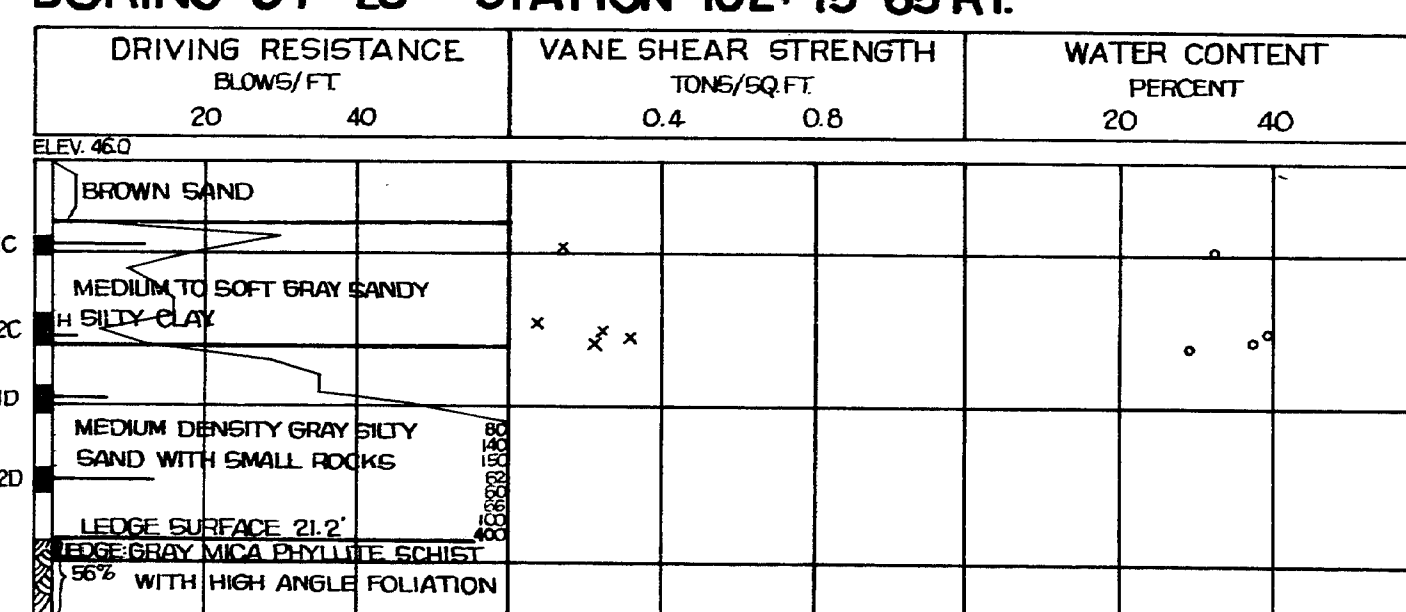
BORING CT-26⁽⁶⁹⁾ STATION 100+70 6'



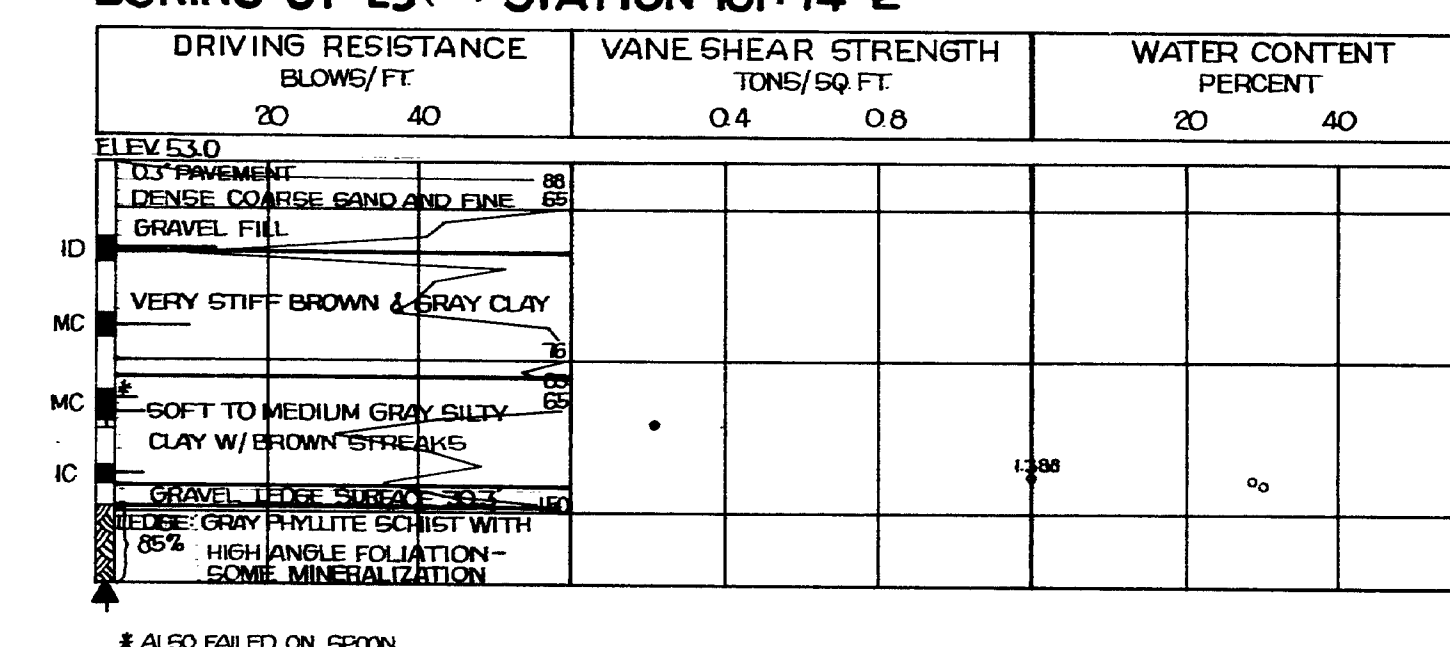
BORING CT-27⁽⁶⁹⁾ STATION 99+94 54' LT.



BORING CT-28⁽⁶⁹⁾ STATION 102+75 65' RT.

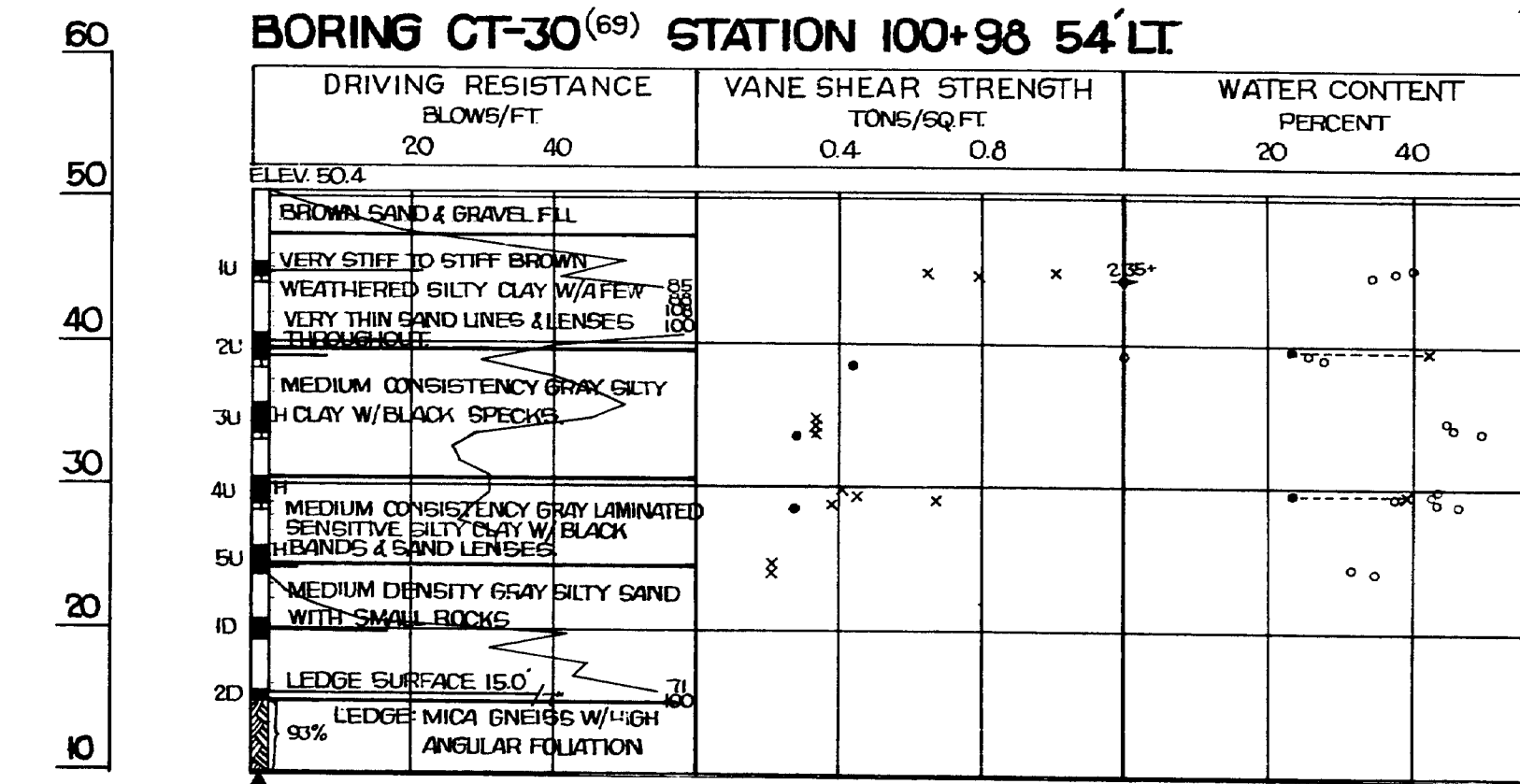


BORING CT-29⁽⁶⁹⁾ STATION 101+74 6'



* ALSO FAILED ON SPOON

BORING CT-30⁽⁶⁹⁾ STATION 100+98 54' LT.



DESIGN - DETAILED	BY	DATE
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE HIGHWAY COMMISSION

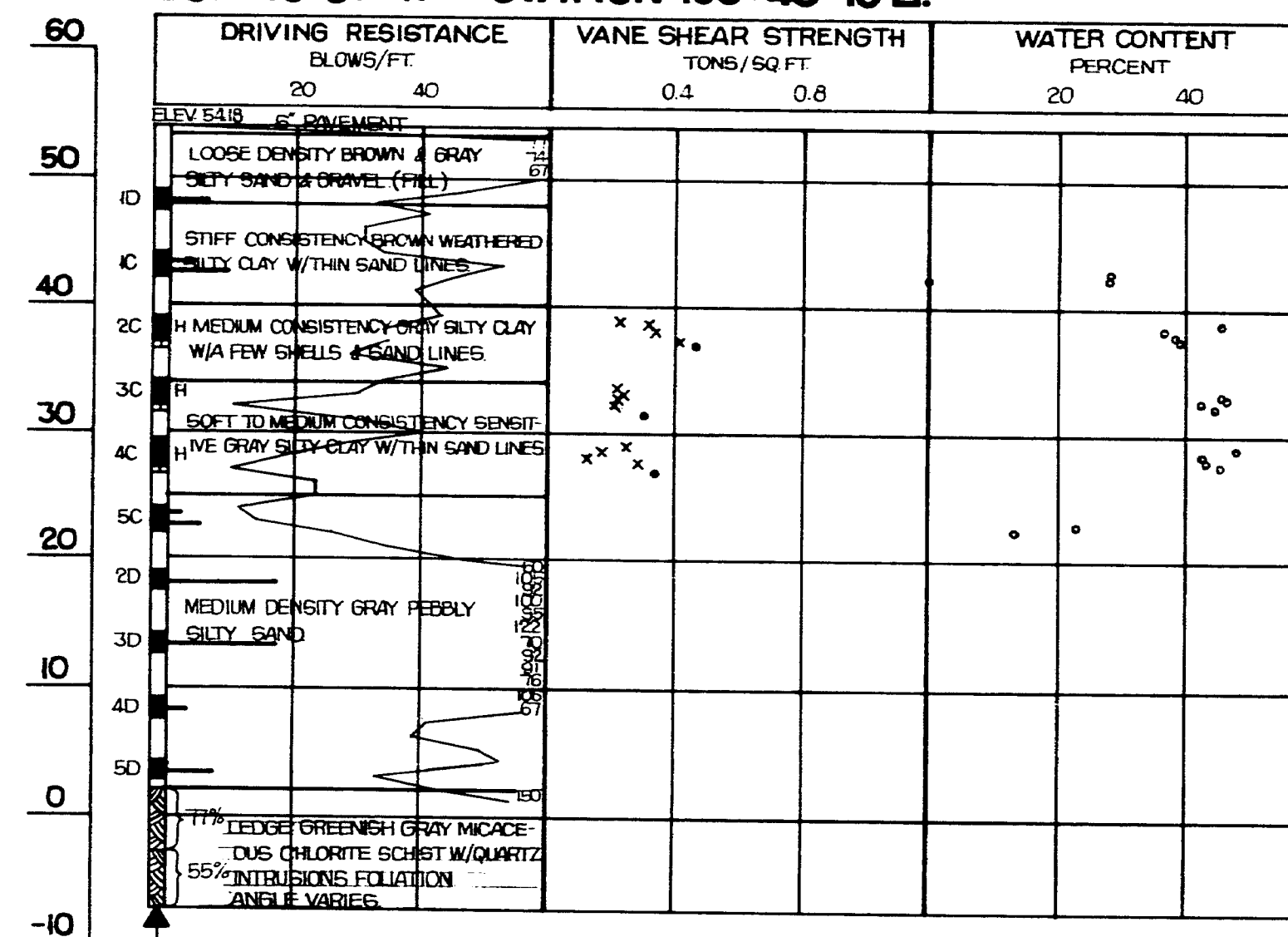
**I-295
OVER
STATE ROUTE 703
IN THE TOWN OF
SOUTH PORTLAND
CUMBERLAND COUNTY
BORING DETAILS**

SHEET 2 OF 28 AUGUSTA, MAINE JUNE 1970

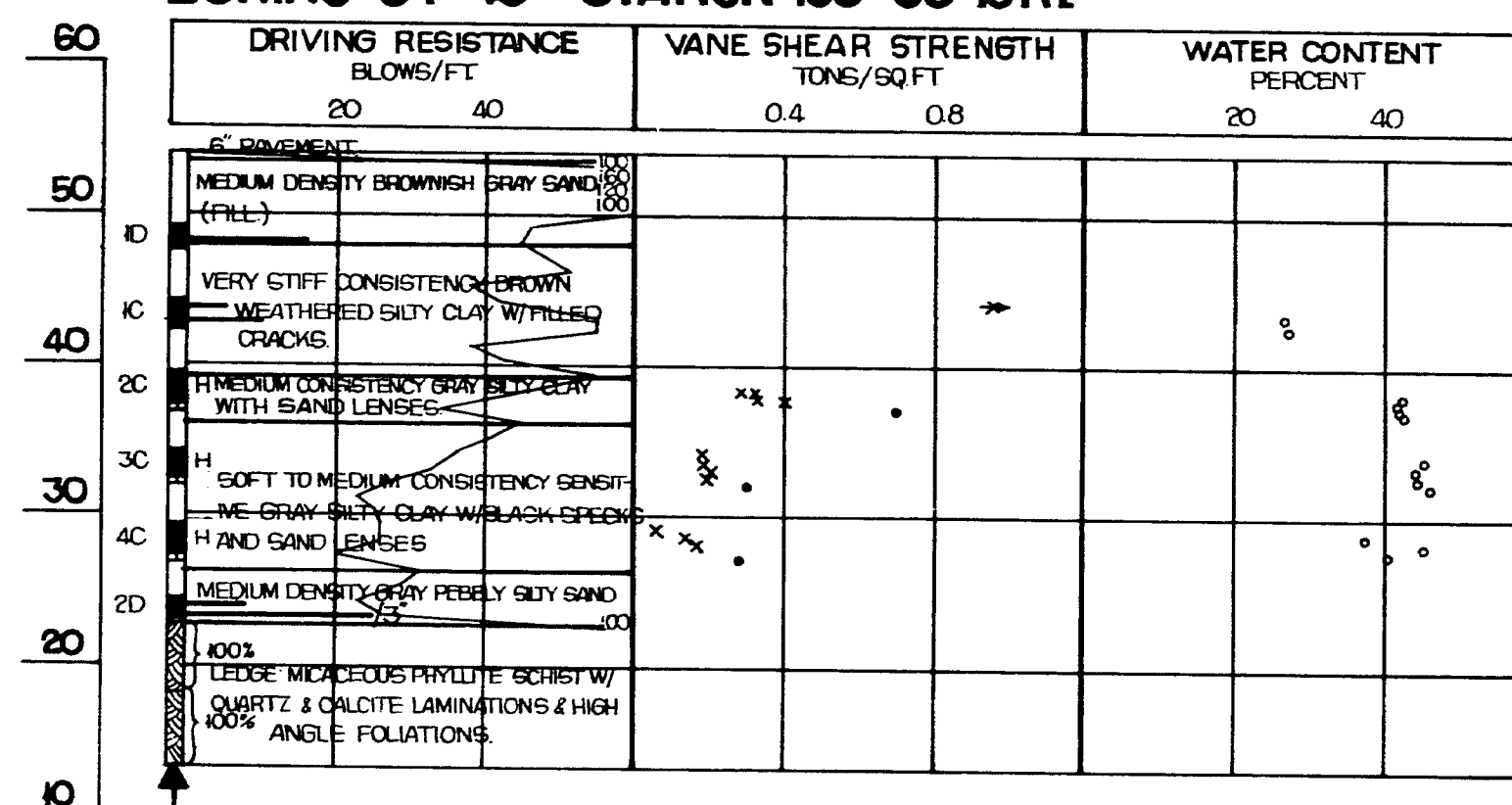
177-53

B. P. E. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	179-54	23	23

BORING CT-47⁽⁶⁹⁾ STATION 100+45 16' LT.



BORING CT-46⁽⁶⁹⁾ STATION 100+90 18' RT.



STATE HIGHWAY COMMISSION

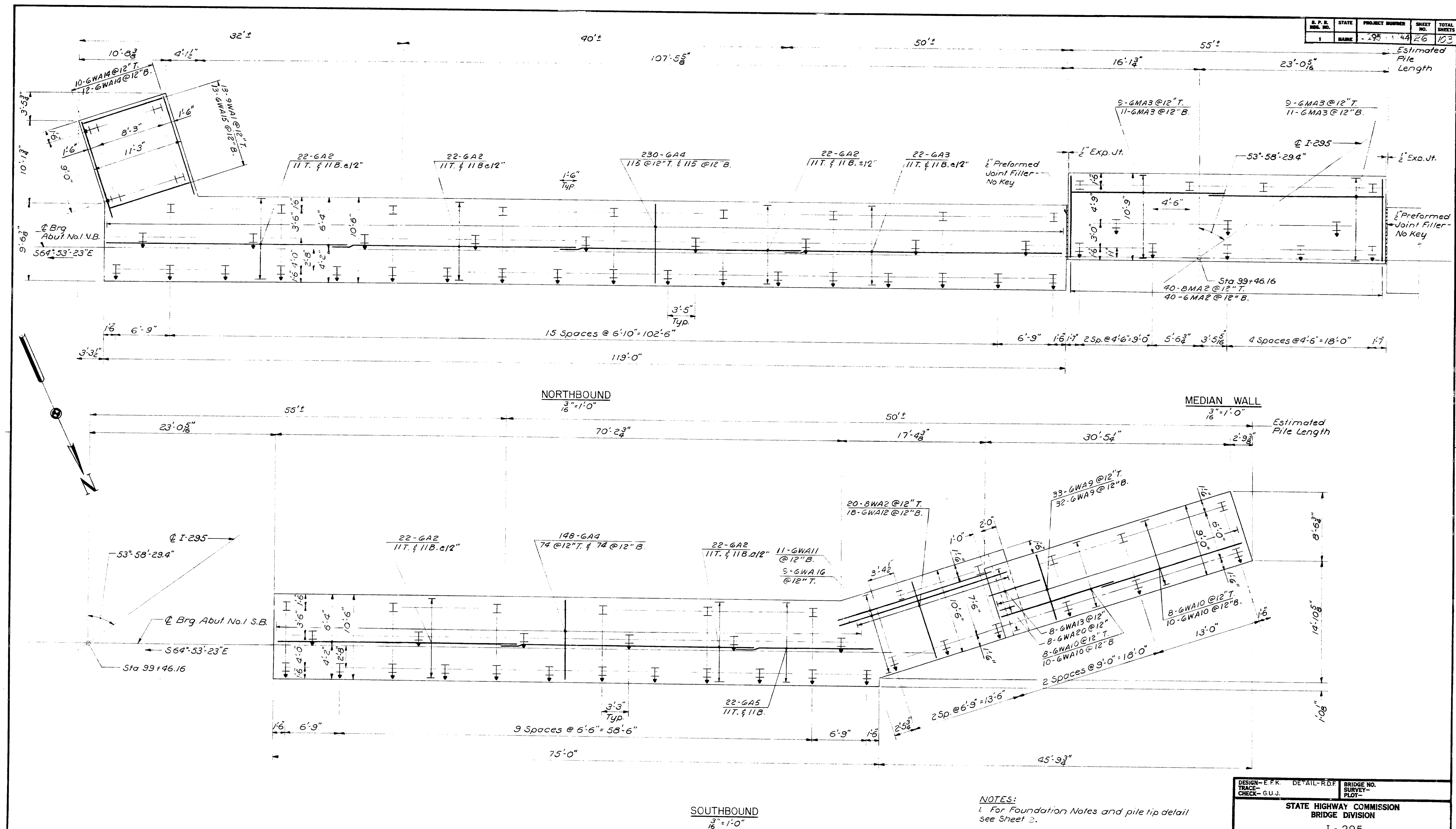
I-295
OVER
STATE ROUTE 703
IN THE TOWN OF
SOUTH PORTLAND
CUMBERLAND COUNTY
BORING DETAIL

SHEET 6 OF 23 AUGUSTA, MAINE JUNE 1970

I-295 SOUTHBOROUGH 179-54 and

S.P.E. DES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	199-65	26	103

Estimated
Pile
Length



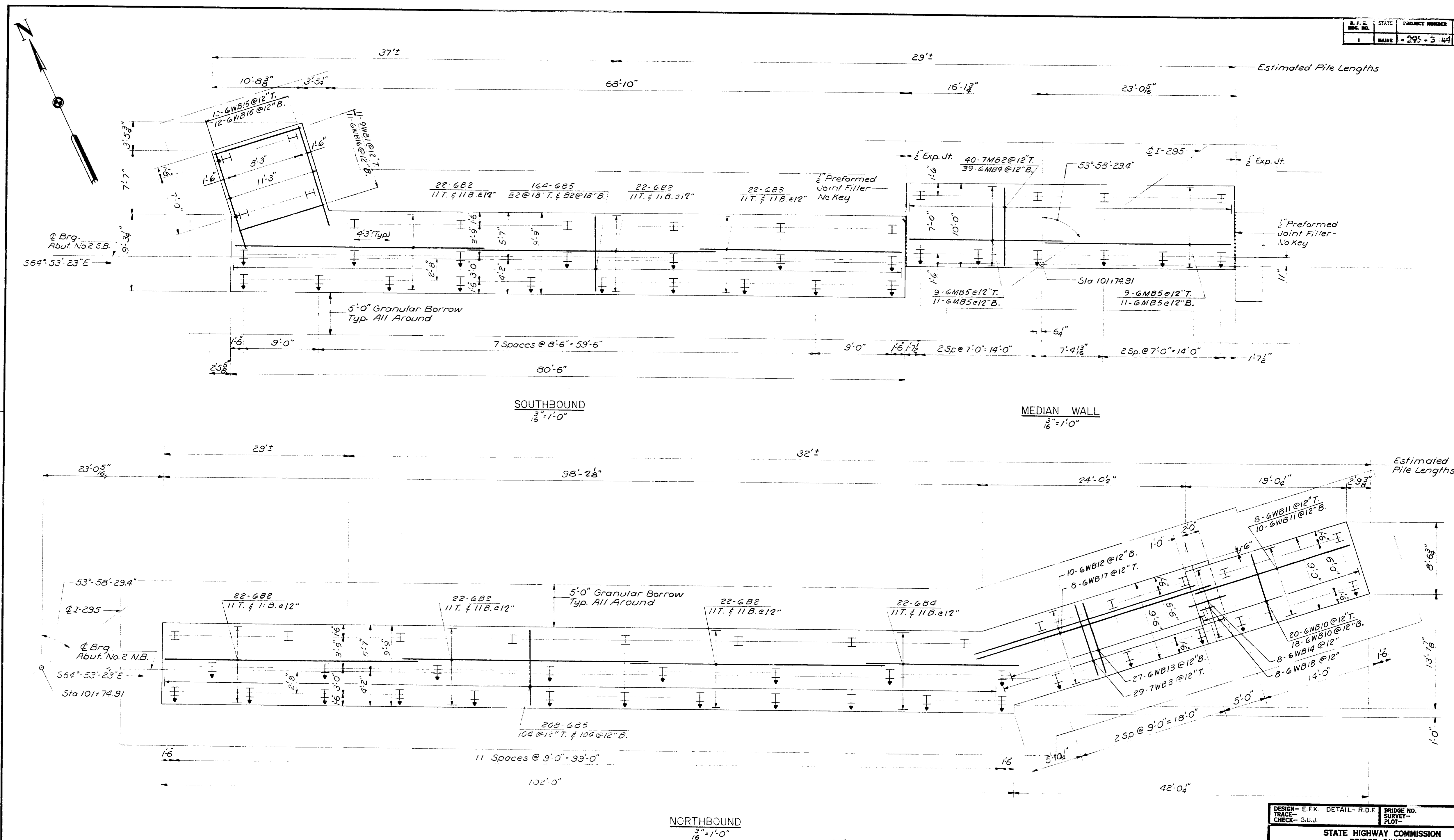
NOTES:
1. For Foundation Notes and pile tip detail see Sheet 3.

DESIGN - E.F.R.	DETAIL - R.D.F.	BRIDGE NO.
TRACE - G.U.J.	SURVEY -	1-295
CHECK - G.U.J.	PLOT -	OVER
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
I-295		
OVER		
STATE ROUTE 703		
IN THE CITY OF		
SOUTH PORTLAND		
CUMBERLAND COUNTY		
FOOTING PLAN - ABUTMENT NO. 1		
SHEET 7 OF 28 AUGUSTA, MAINE JUNE 1970		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON BIRMINGHAM CITY

I-295 Scarborough - Sp... 199-65

DATE	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-3-44	ET	103



NOTES:
1. For Foundation Notes and pile tip detail see Sheet C.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

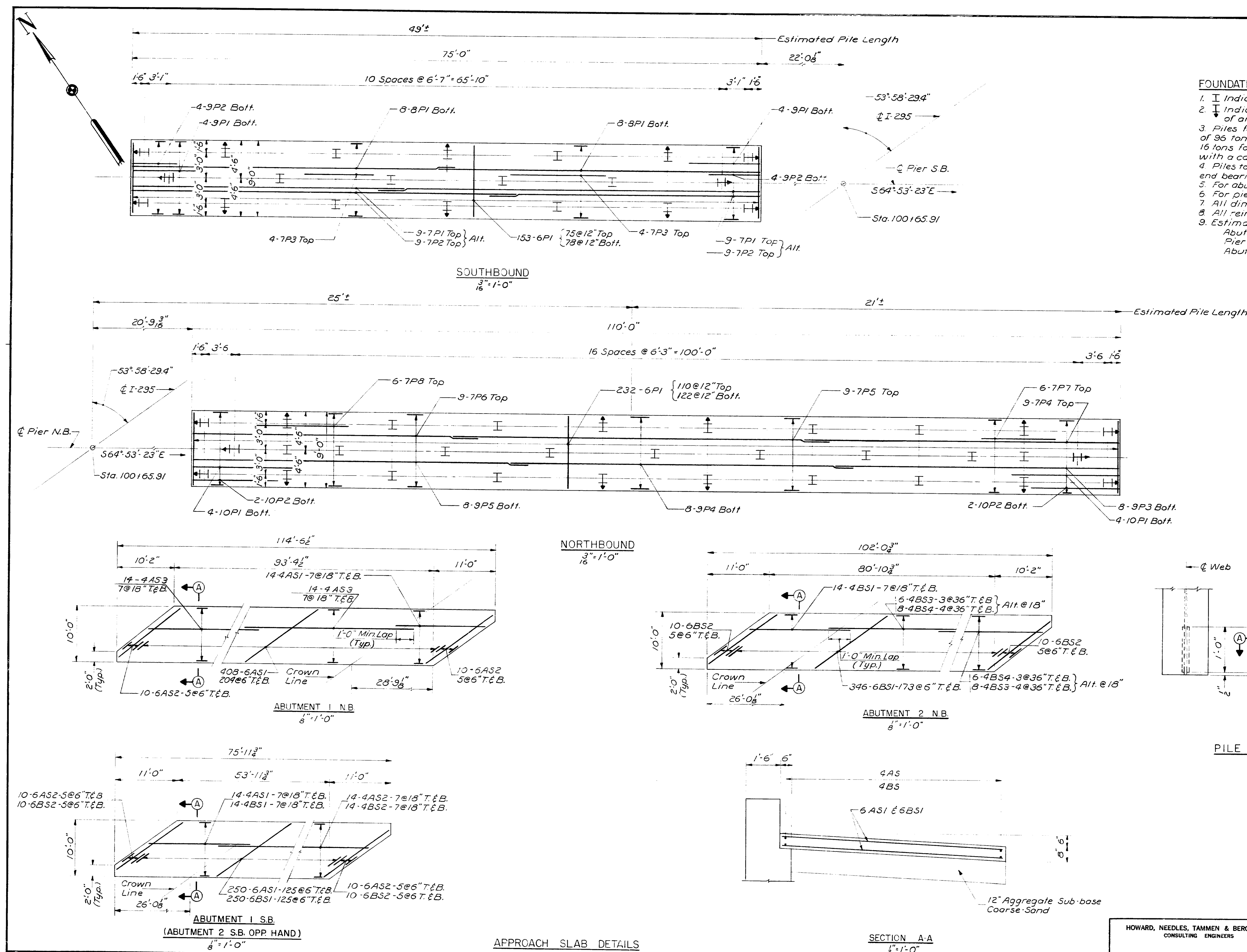
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TRACE - G.U.J.	SURVEY -	1-295
CHECK - G.U.J.	PLOT -	OVER
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
STATE ROUTE 703		
IN THE CITY OF		
SOUTH PORTLAND		
CUMBERLAND COUNTY		
FOOTING PLAN - ABUTMENT NO. 2		
SHEET 3 OF 23 AUGUSTA, MAINE JUNE 1970		

I-295 Scarborough - 199-56d

S. P. E. SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-295-3	4	103

FOUNDATION NOTES:

1. \perp Indicates vertical piles.
2. ∇ Indicates battered piles, battered 3:12 in direction of arrow.
3. Piles for abutments are 14BP73 with a total capacity of 96 tons. Design capacity of 80 tons, allowance of 16 tons for negative skin friction. Piles for piers are 12BP53 with a capacity of 70 tons.
4. Piles to be driven to ledge or practical refusal to develop end bearing.
5. For abutment details, see Sheets 10 to 16.
6. For pier details, see Sheet 17.
7. All dimensions shown are at bottom of footing.
8. All reinforcing steel to have 3" clearance.
9. Estimated pile lengths:
Abut. 1 - 23 @ 32', 20 @ 40', 53 @ 50' & 31 @ 55'
Pier - 20 @ 49', 15 @ 25' & 16 @ 21'
Abut. 2 - 24 @ 37', 38 @ 29' & 47 @ 32'

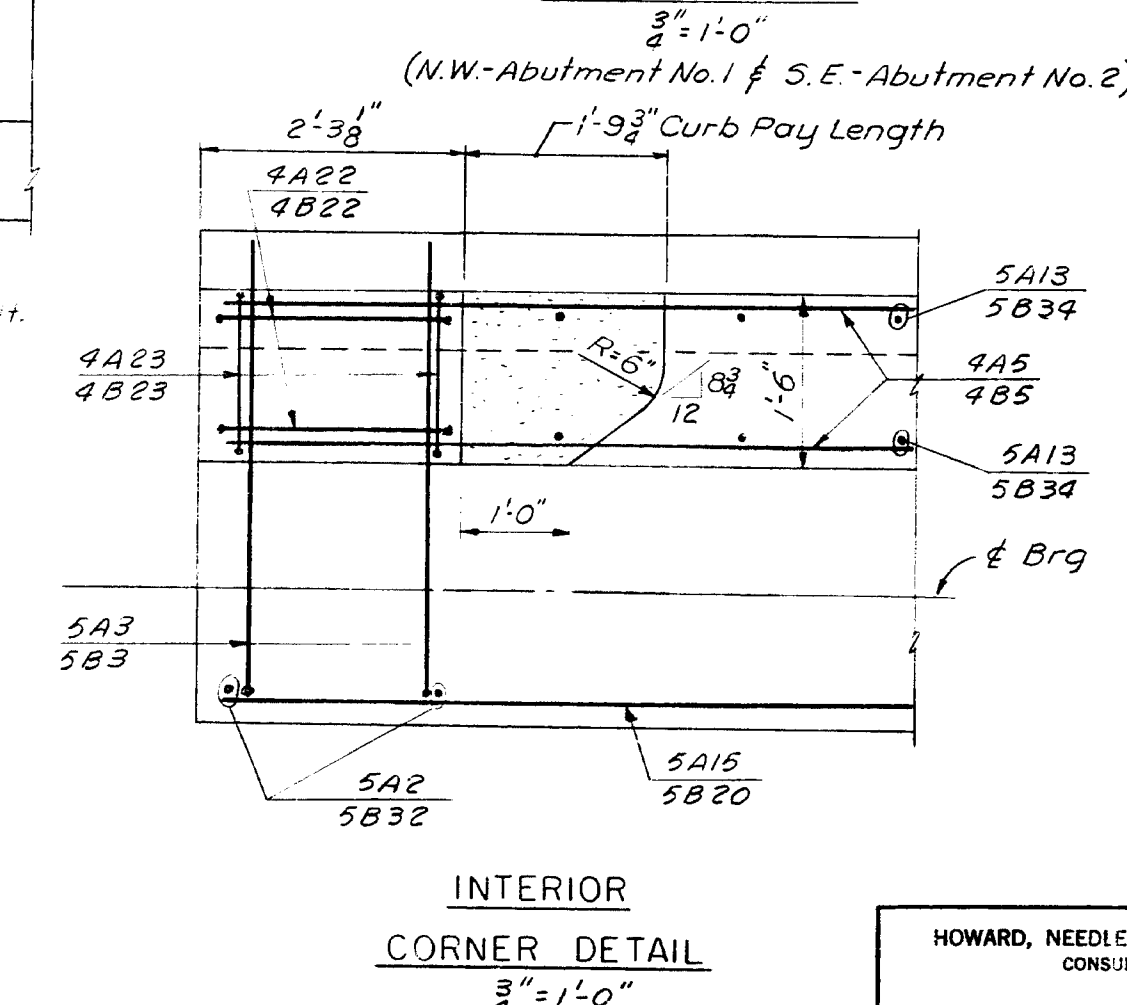
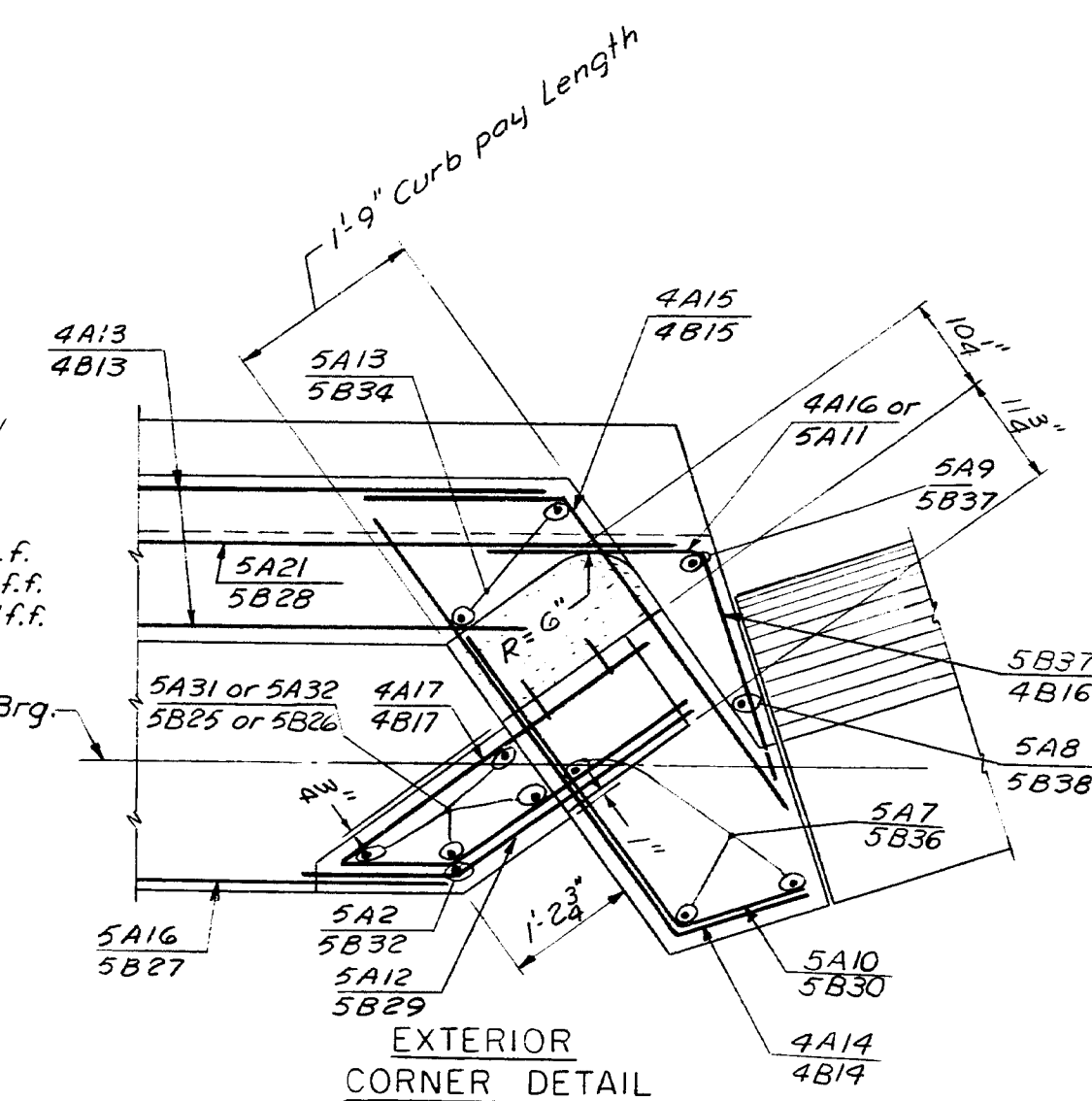
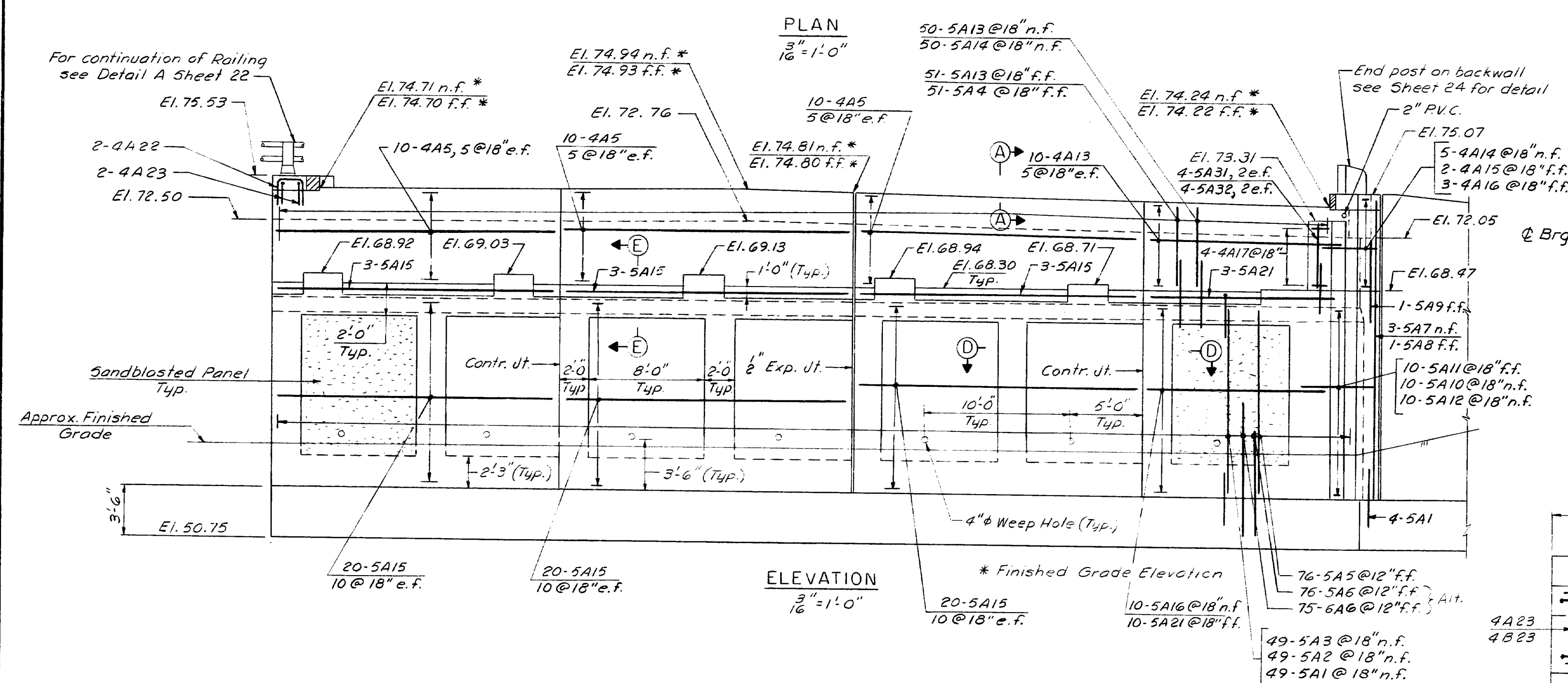
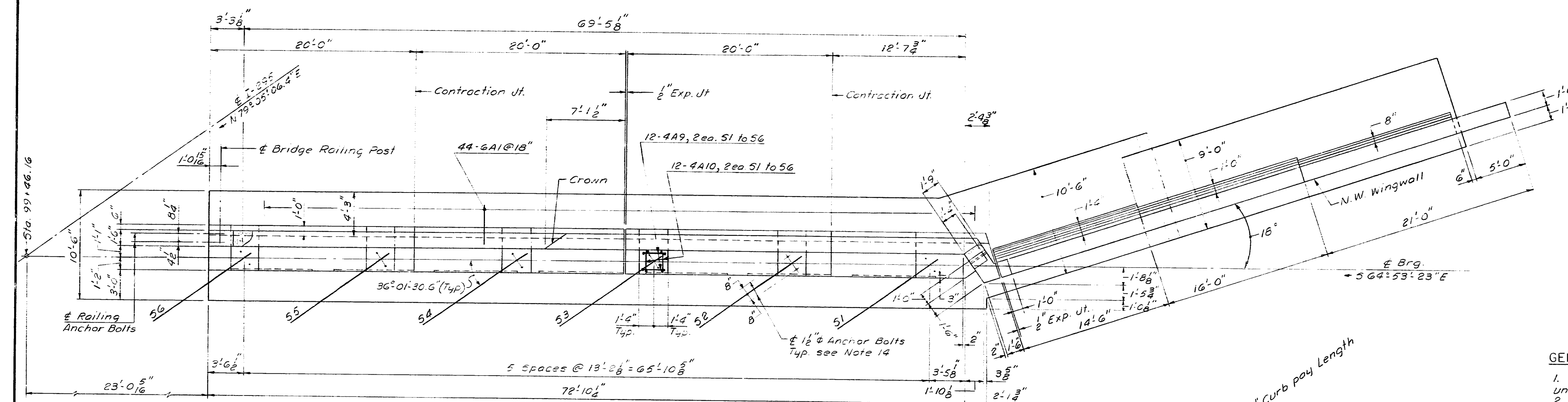


DESIGN - E.F.K.	DETAIL - R.D.F.	BRIDGE NO.
TRACE - G.U.J.	PLOT -	1-295
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
OVER		
STATE ROUTE 703		
IN THE CITY OF		
SOUTH PORTLAND		
CUMBERLAND COUNTY		
PIER FOOTING PLAN & APPROACH SLABS		
SHEET 4 OF 28 AUGUSTA, MAINE JUNE 1970		

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

I-295 Scarborough Southbound

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEET
1	MAINE	1-295-3(44)	29	10



- GENERAL NOTES:

1. Abutment backwalls shall not be placed until after superstructure concrete is placed.

2. Place reinforcing to clear anchor bolt.
3. Reinforcing steel to have 2" minimum cover unless otherwise noted.

4. n.f. denotes near face; f.f. denotes far face and e.f. denotes each face.
5. For Footing Plans, see Sheets 7 & 8.

6. For Wingwall Elevations and Section see Sheet 16.

8. For Abutment Section and Median Wall Details, see Sheet 14.

9. For details of Joints, see Sheet
10. For Section D-D and Section E-E
Sheet 24.

11. Exposed areas shall be given a sand-
or blasted or rubbed finish as indicated on
the elevation. For additional information

12. Face of backwall and top of bridge seat (including areas under bearing

seat (including areas under bearing assemblies) to be coated with "Protect Coating for Concrete Surfaces". See "Sealing, Priming, and Coating".

13. Dress bearing pad areas 1" larger all around than masonry plates to exact elevations shown.

14. For Bearing Pedestals and Anchor Bolt details, see Sheet 21. Bearing Pedestals at Abutments shall be Type EPC-30 and shall be

ABUTMENTS shall be Type EPC-3A and shall be placed normal to respective girders.

DESIGN- E.F.K. DETAIL- J.M.M.
TRACE-
CHECK- G.U.J.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

I - 295

STATE ROUTE 703

IN THE CITY OF

CUMBERLAND COUNTY

ABUTMENT NO.1 SOUTHBOUND

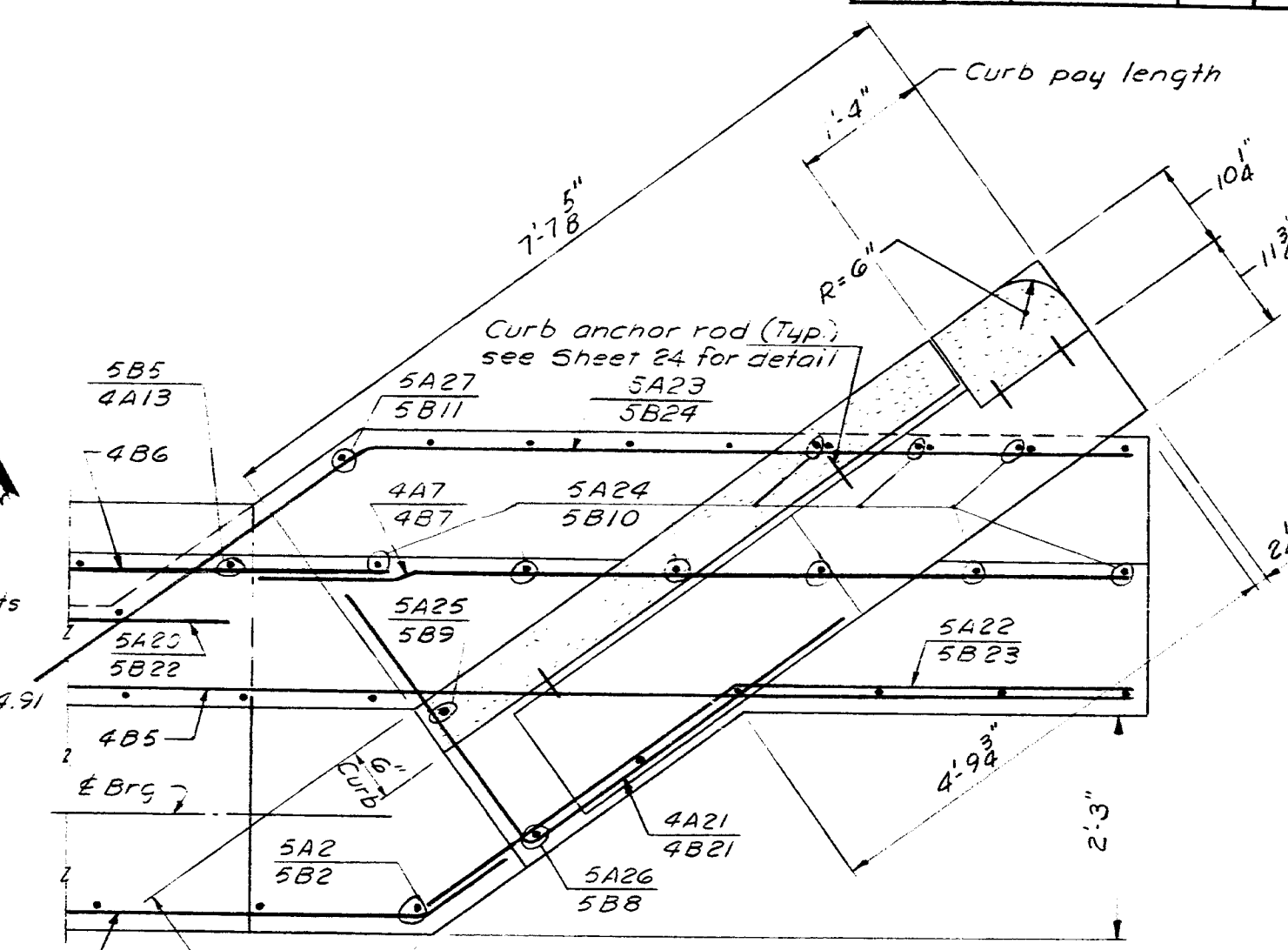
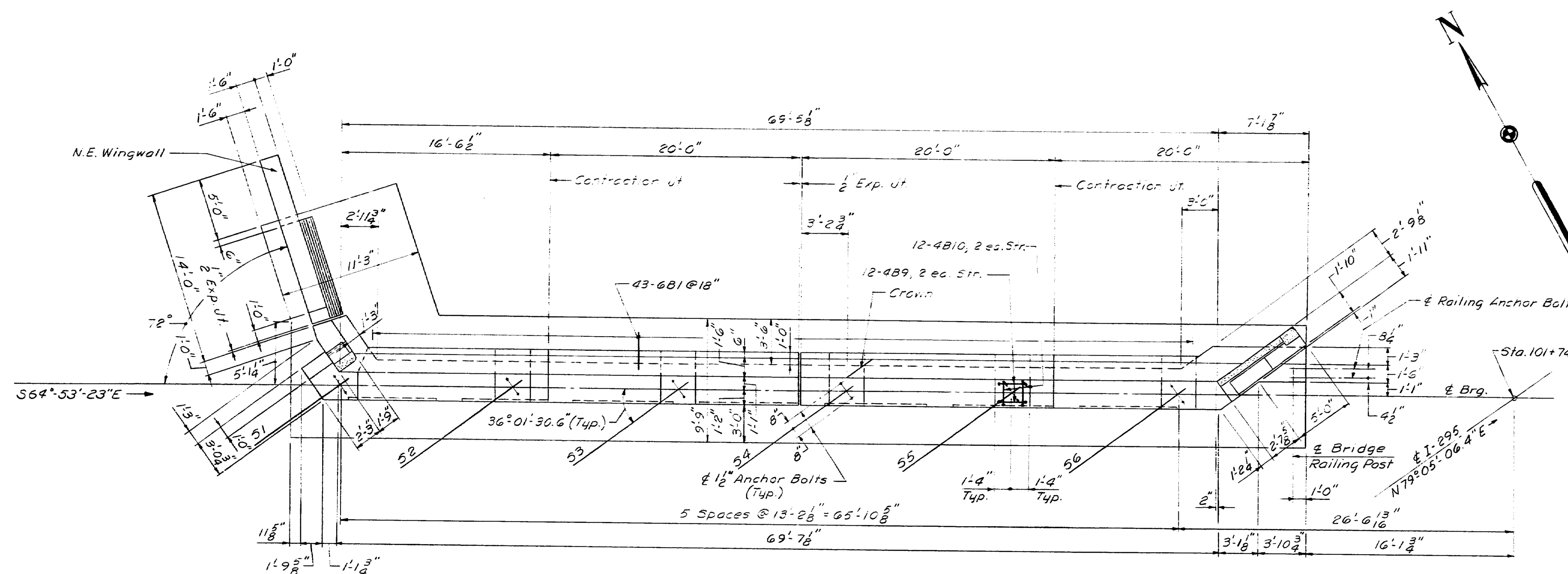
SHEET 10 OF 28 AUGUSTA, MAINE JUNE 1970

HOWARD, NEEDLES, TAMMEN & BERGENDORF
CONSULTING ENGINEERS

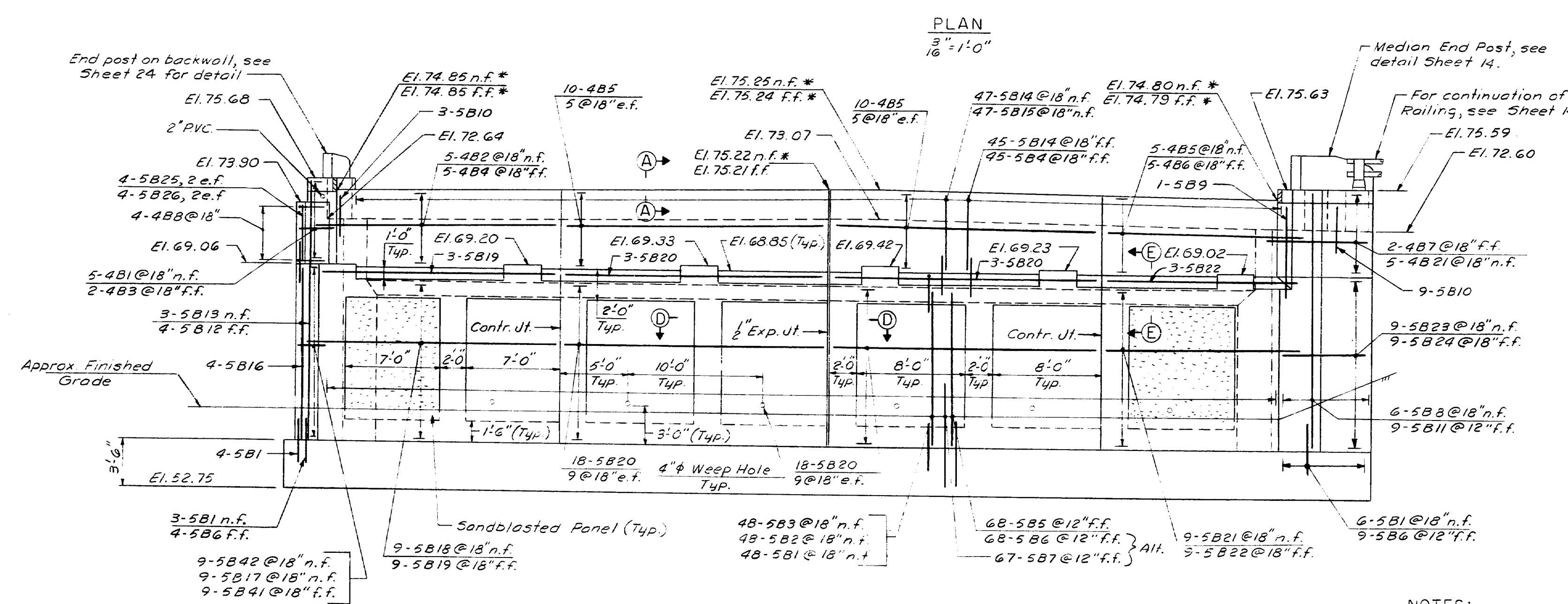
NEW YORK BOSTON KANSAS CITY

T-290 Scarborough - South Portland 122-58

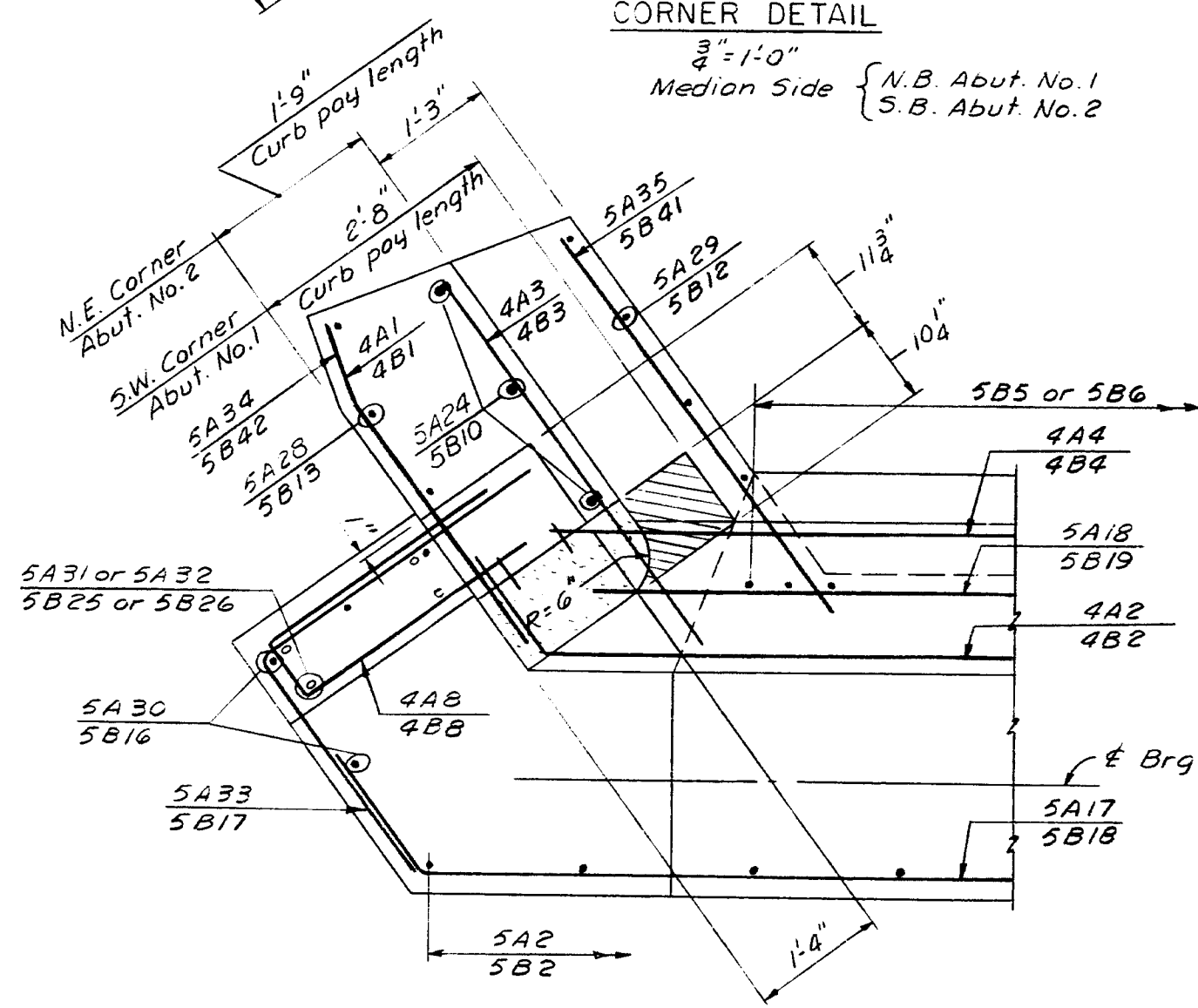
S. F. E.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-295 S. 4A	31	103



INTERIOR
CORNER DETAIL
3' x 1'0"
Median Side { N.B. Abut. No. 1
S.B. Abut. No. 2



ELEVATION
3/8" = 1'0"
* Finished Grade Elevations



EXTERIOR
CORNER DETAIL
3' x 1'0"
S.W. Abut. No. 1 & N.E. Abut. No. 2

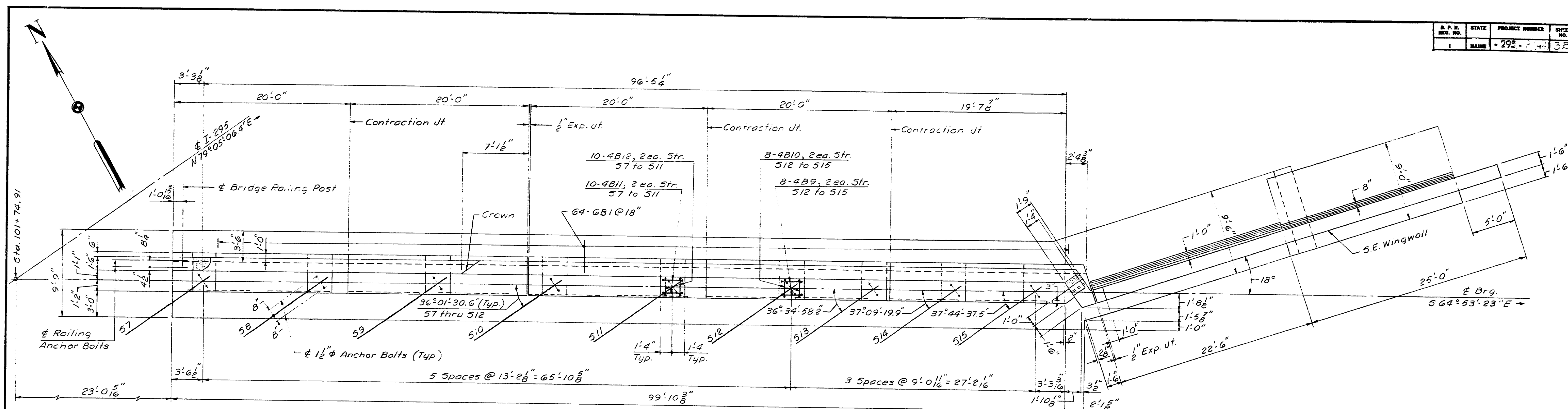
- NOTES:
- For General Notes, see Sheet 10.
 - For Wingwall Elevations and Sections see Sheet 16.

DESIGN - E.F.K. DETAIL - J.M.M.	BRIDGE NO.
CHECK - G.U.J.	SURVEY -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
I - 295 OVER	
STATE ROUTE 703 IN THE CITY OF	
SOUTH PORTLAND	
CUMBERLAND COUNTY	
ABUTMENT NO. 2 SOUTHBOUND	
SHEET 12 OF 28 AUGUSTA, MAINE JUNE 1970	

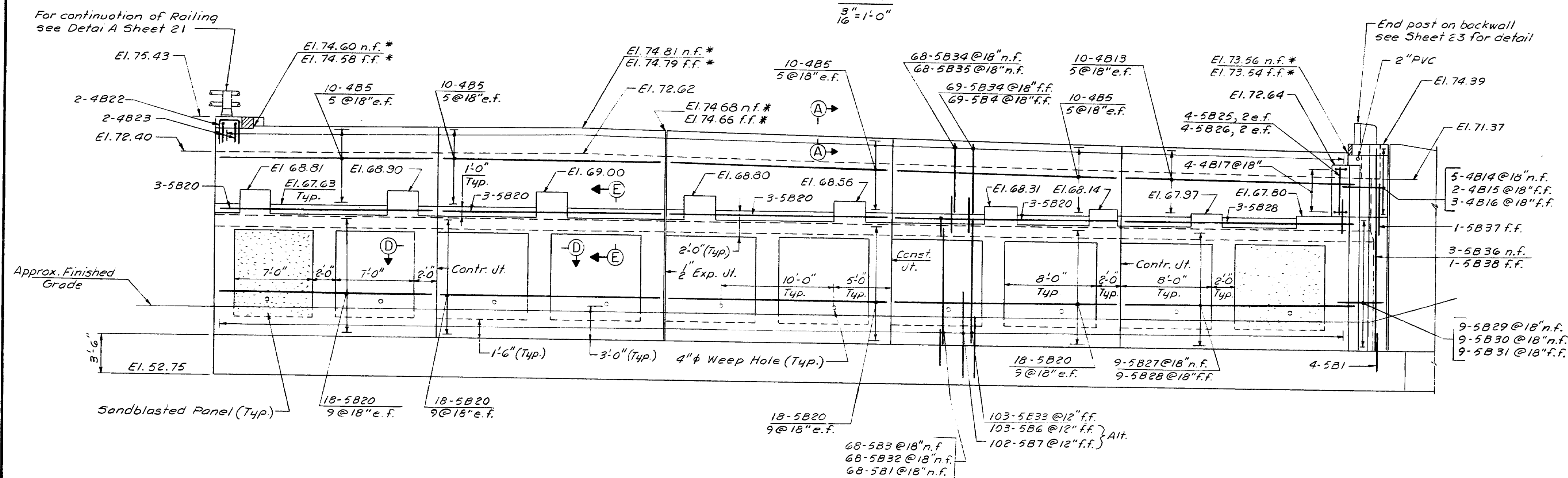
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

I-295 Scarborough - South 179-60

S.P.D. SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295	32	103



PLAN
3/16" = 1'-0"



ELEVATION
3/16" = 1'-0"

* Finished Grade Elevations

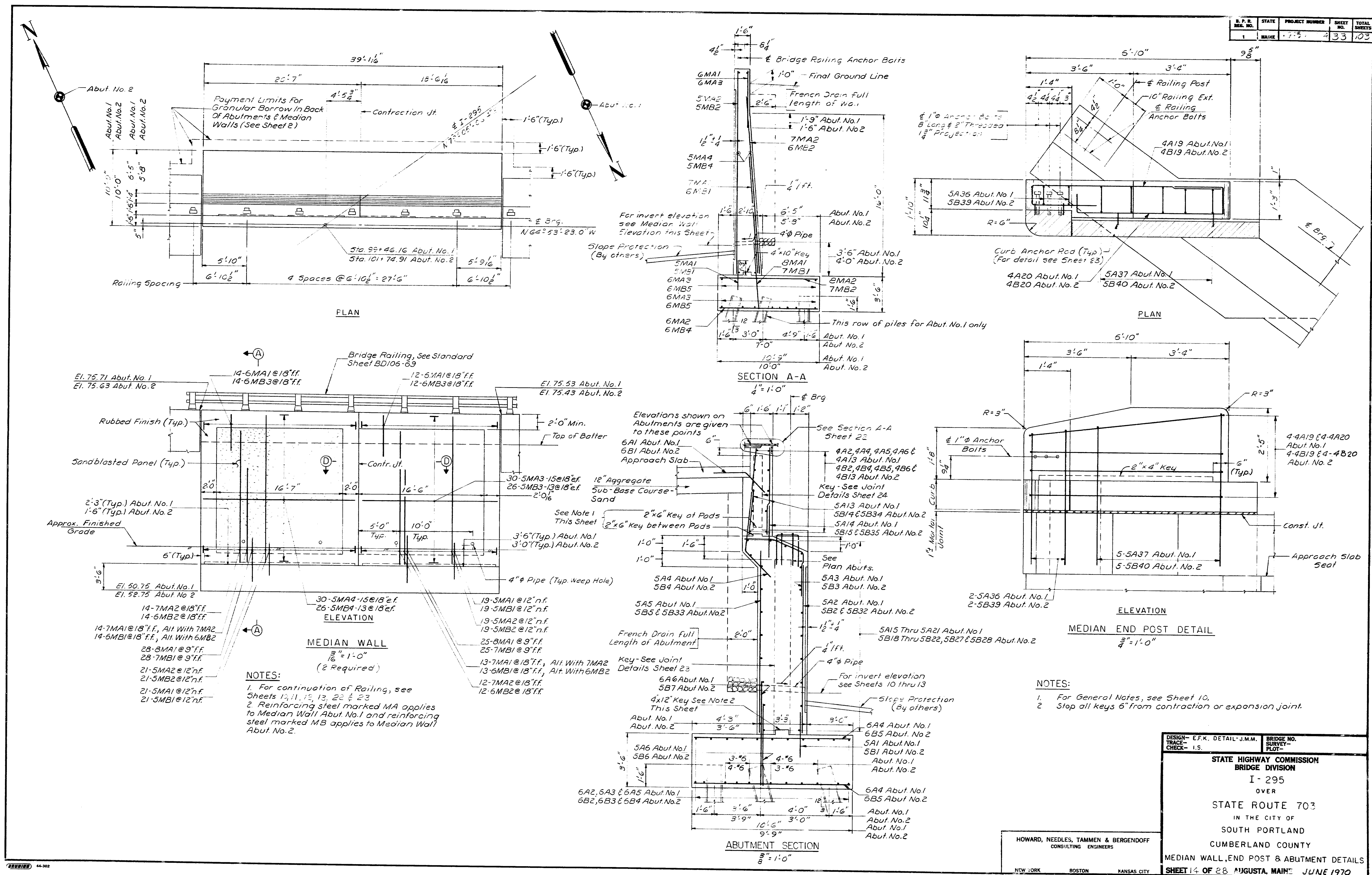
NOTES:

1. For General Notes, see Sheet 10.
2. For Wingwall Elevations and Sections, see Sheet 16.
3. For Corner Details, see Sheets 10 and 12.

HOWARD, NEEDLES, TAMMEN & BERGENCOFF
CONSULTING ENGINEERS

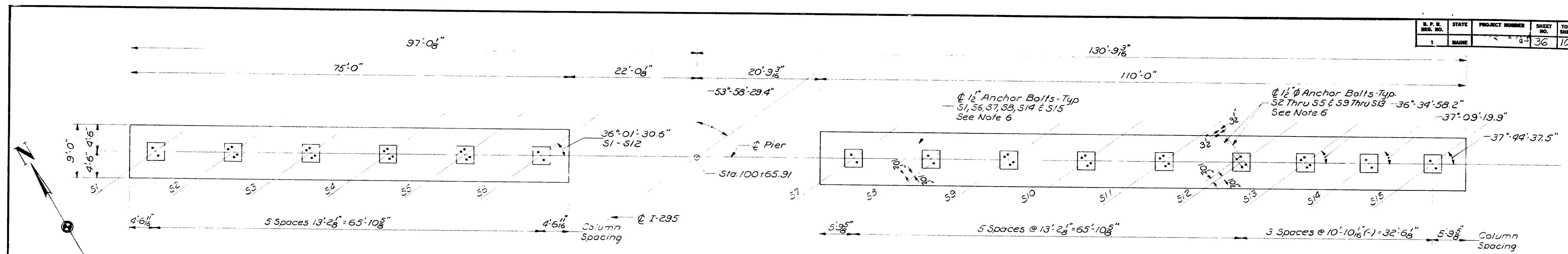
NEW YORK BOSTON KANSAS CITY

DESIGN - E.F.K. DETAIL - J.M.M.	BRIDGE NO.
TRACE - G.U.J.	SURVEY -
CHECK -	PLOT -
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
I-295 OVER	
STATE ROUTE 703 IN THE CITY OF SOUTH PORTLAND CUMBERLAND COUNTY	
ABUTMENT NO. 2 NORTHBOUND	
SHEET 13 OF 28 AUGUSTA, MAINE JUNE 1970	



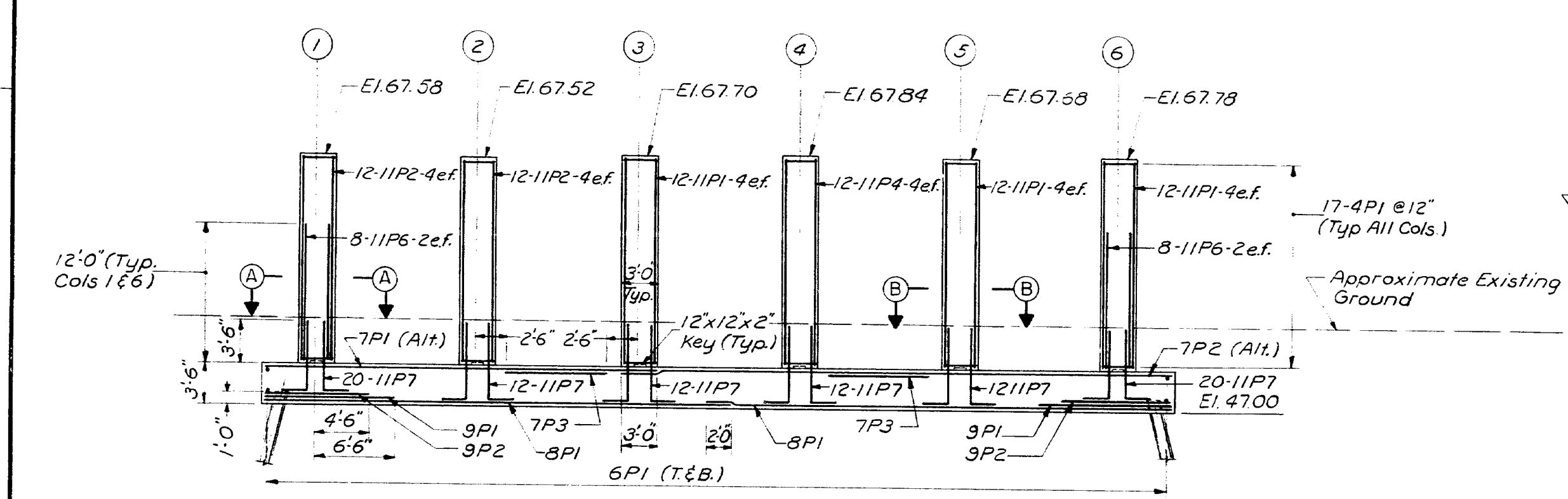
T-295 Scarborough - South Portland 122-64

S. P. E. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	4-295	36	123

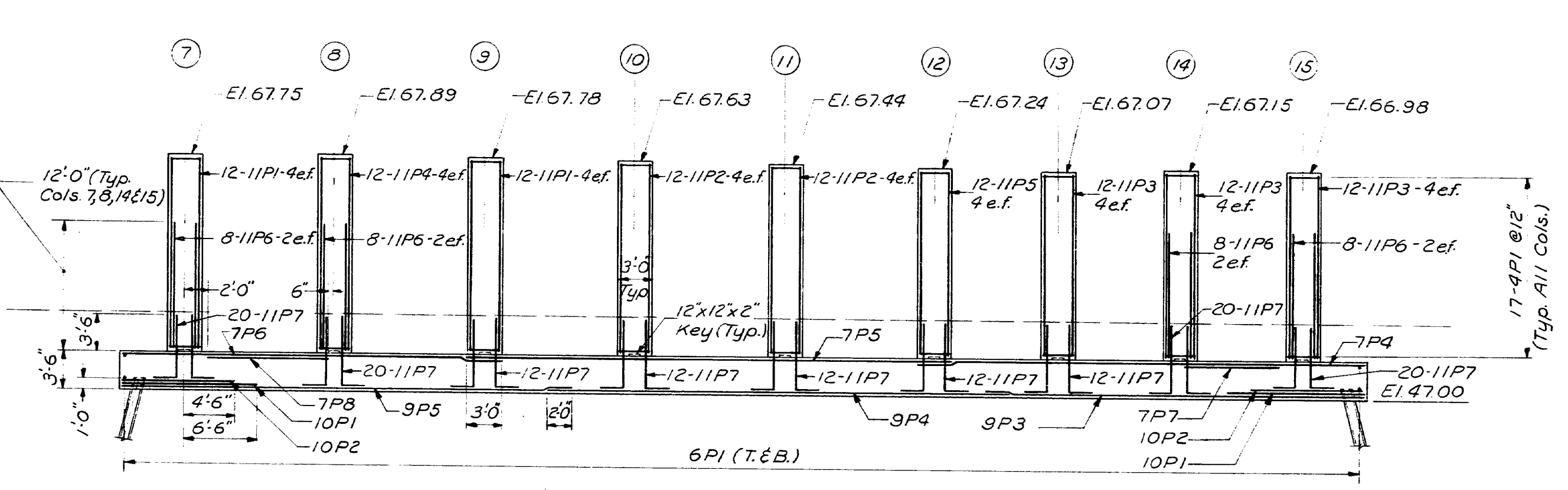


PLAN - SOUTHBOUND
1"=1'-0"

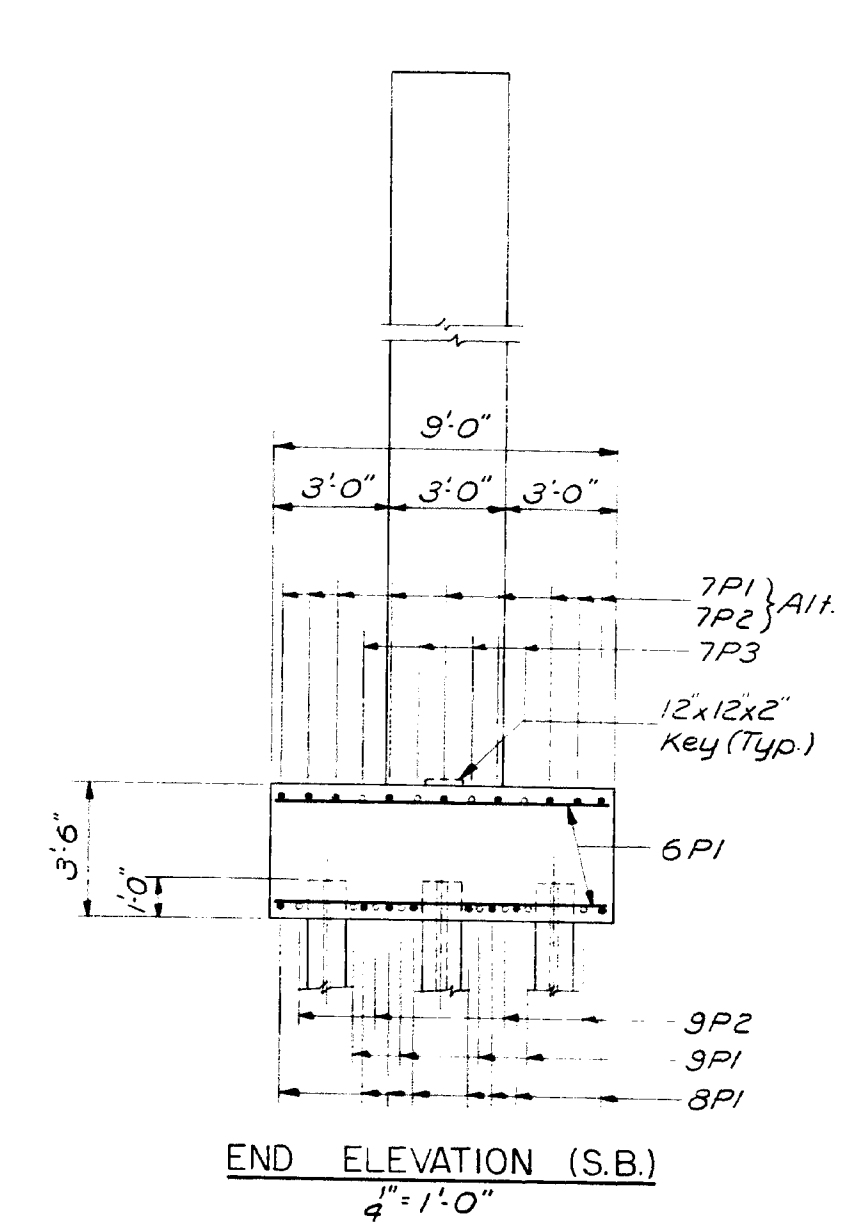
PLAN - NORTHBOUND
1"=1'-0"



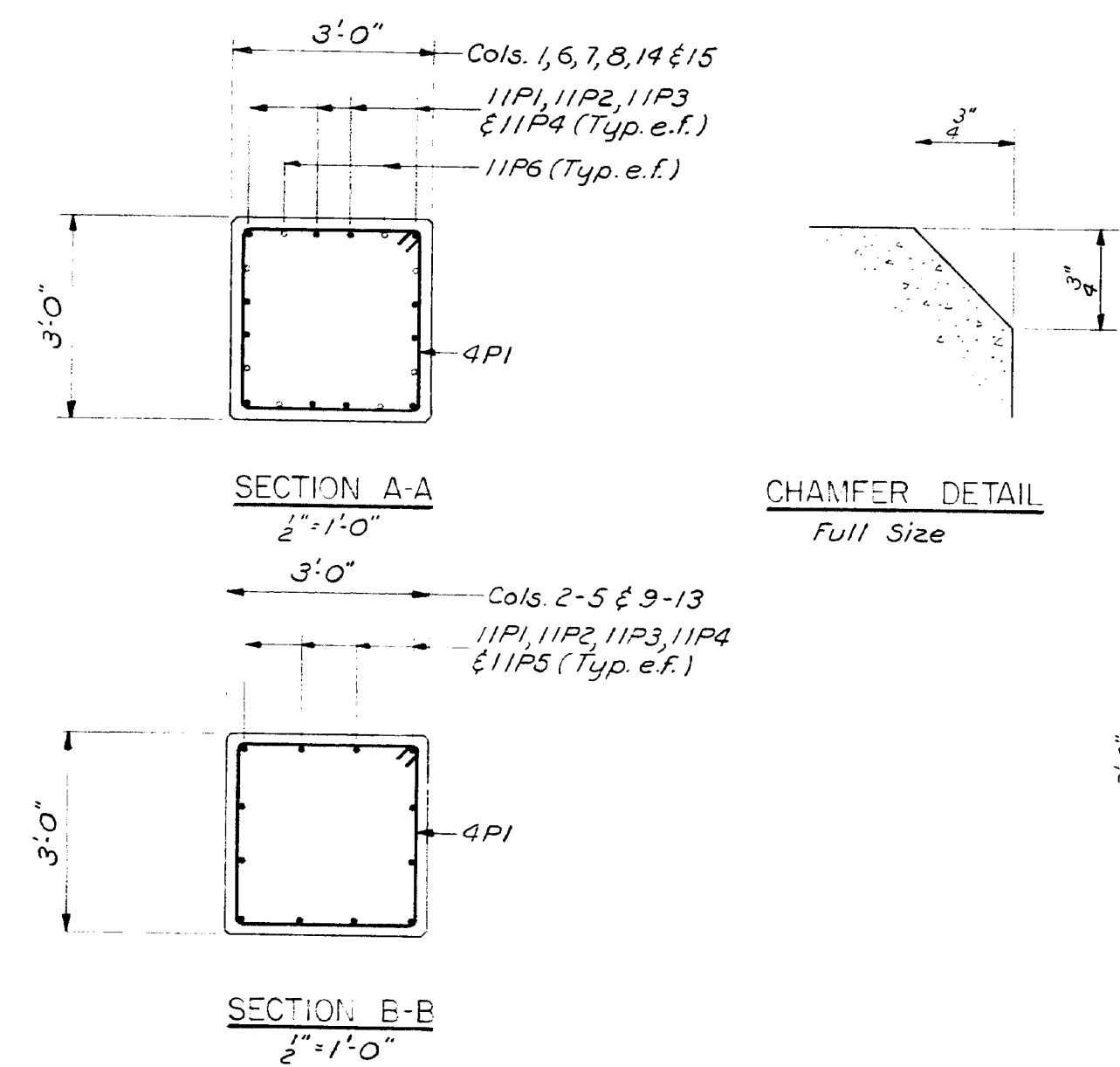
ELEVATION - SOUTHBOUND
1"=1'-0"



ELEVATION - NORTHBOUND
1"=1'-0"



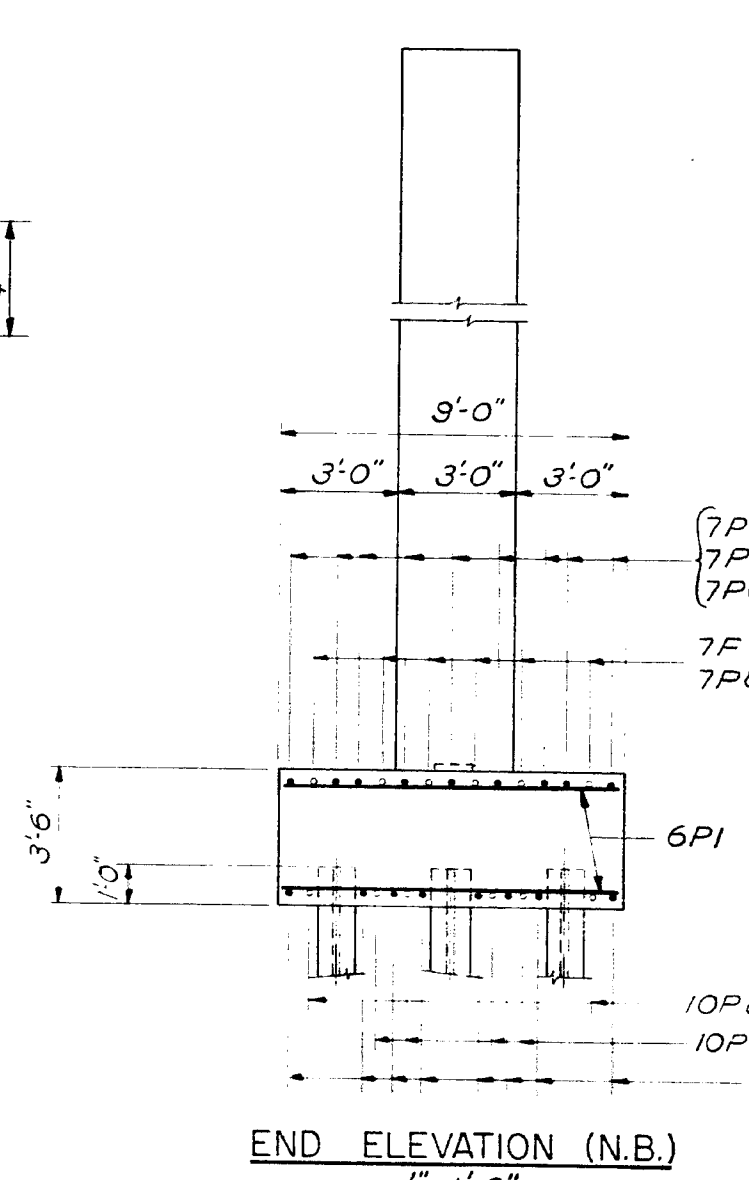
END ELEVATION (S.B.)
1"=1'-0"



SECTION A-A
1"=1'-0"

SECTION B-B
1"=1'-0"

CHAMFER DETAIL
Full Size



END ELEVATION (N.B.)
1"=1'-0"

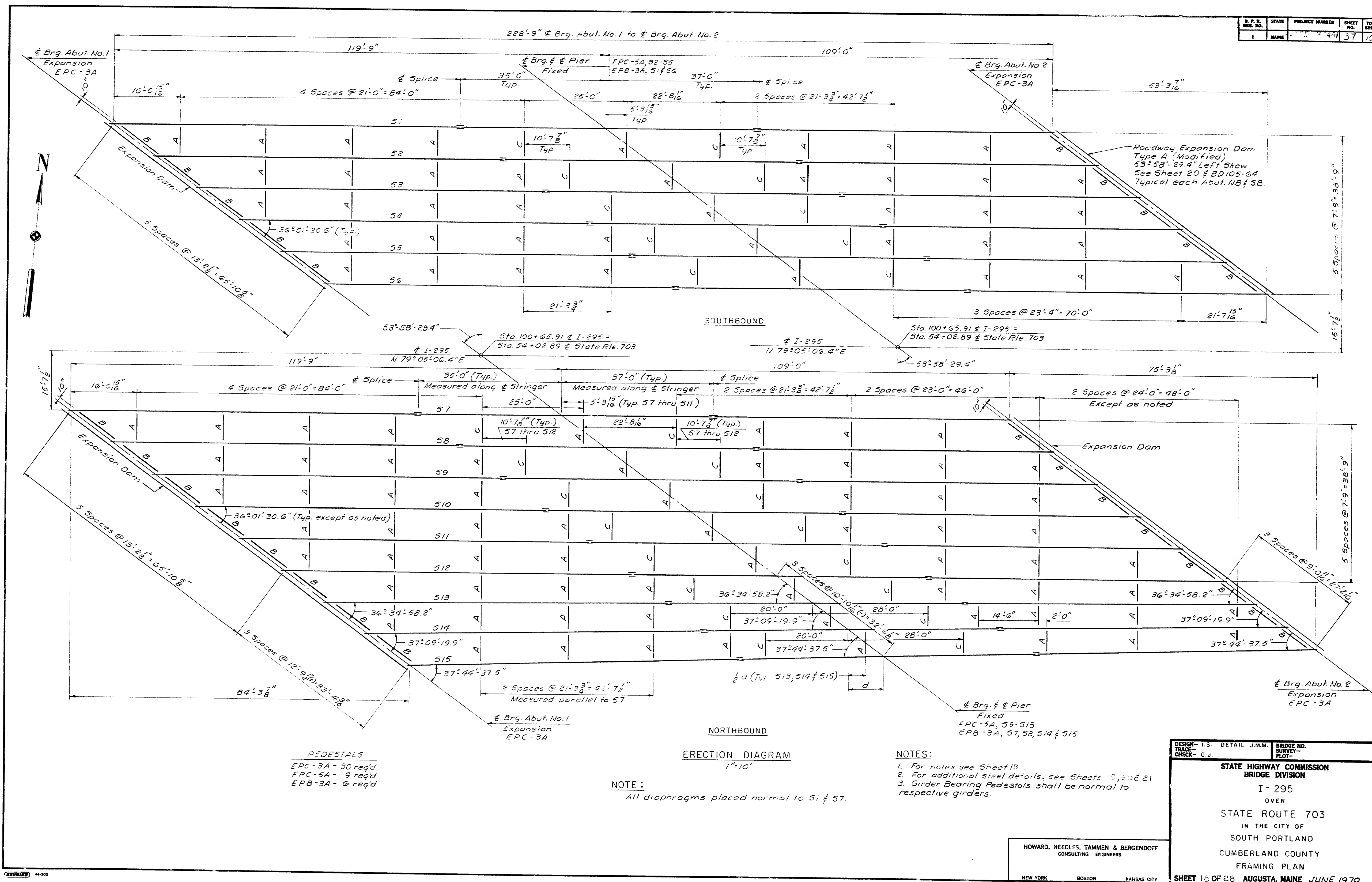
- GENERAL NOTES:
- For Footing Plan and Footing Reinforcing Steel see Sheet 3.
 - Dress bearing pad areas 1" larger all around than masonry plates to exact elevations shown.
 - Reinforcing steel to have 2" minimum cover except 3" for footings.
 - Place reinforcing steel to clear anchor bolts.
 - All exposed corners to have 3" chamfer, see detail this sheet.
 - For Bearing Pedestals and Anchor Bolt Details see Sheet 21. Bearing Pedestals shall be placed normal to respective girders.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

DESIGN - E.F.K.	DETAIL - R.D.F.	BRIDGE NO.
TRACE - G.U.J.	SURVEY -	1-295
CHECK - G.U.J.	PLOT -	OVER
STATE HIGHWAY COMMISSION BRIDGE DIVISION		
STATE ROUTE 703 IN THE CITY OF SOUTH PORTLAND CUMBERLAND COUNTY PIER PLAN		
SHEET 17 OF 28 AUGUSTA, MAINE JUNE 1970		

I-295 Scarborough - 177-65d

S. P. E. No.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	471	37	103



PEDESTALS
 EPC-3A - 30 req'd
 FPC-3A - 9 req'd
 EPB-3A - 6 req'd

NOTE:
 All diaphragms placed normal to 51 & 57.

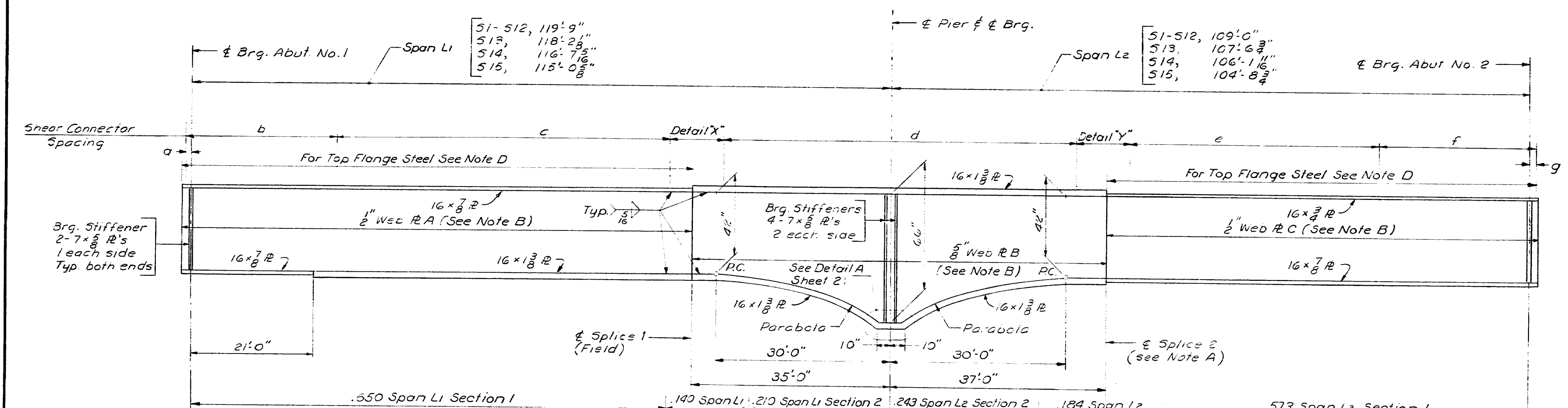
NOTES:
 1. For notes see Sheet 19.
 2. For additional steel details, see Sheets 13, 20 & 21.
 3. Girder Bearing Pedestals shall be normal to respective girders.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
 CONSULTING ENGINEERS
 NEW YORK BOSTON KANSAS CITY

DESIGN - I.S. DETAIL J.M.M. BRIDGE NO. 1295
 TRACE - G.J. SURVEY - PLOT -
 STATE HIGHWAY COMMISSION
 BRIDGE DIVISION
 I-295
 OVER
 STATE ROUTE 703
 IN THE CITY OF
 SOUTH PORTLAND
 CUMBERLAND COUNTY
 FRAMING PLAN
 SHEET 16 OF 28 AUGUSTA, MAINE JUNE 1970

I-295 Scarborough 197-66

S. P. E.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1295	38	103

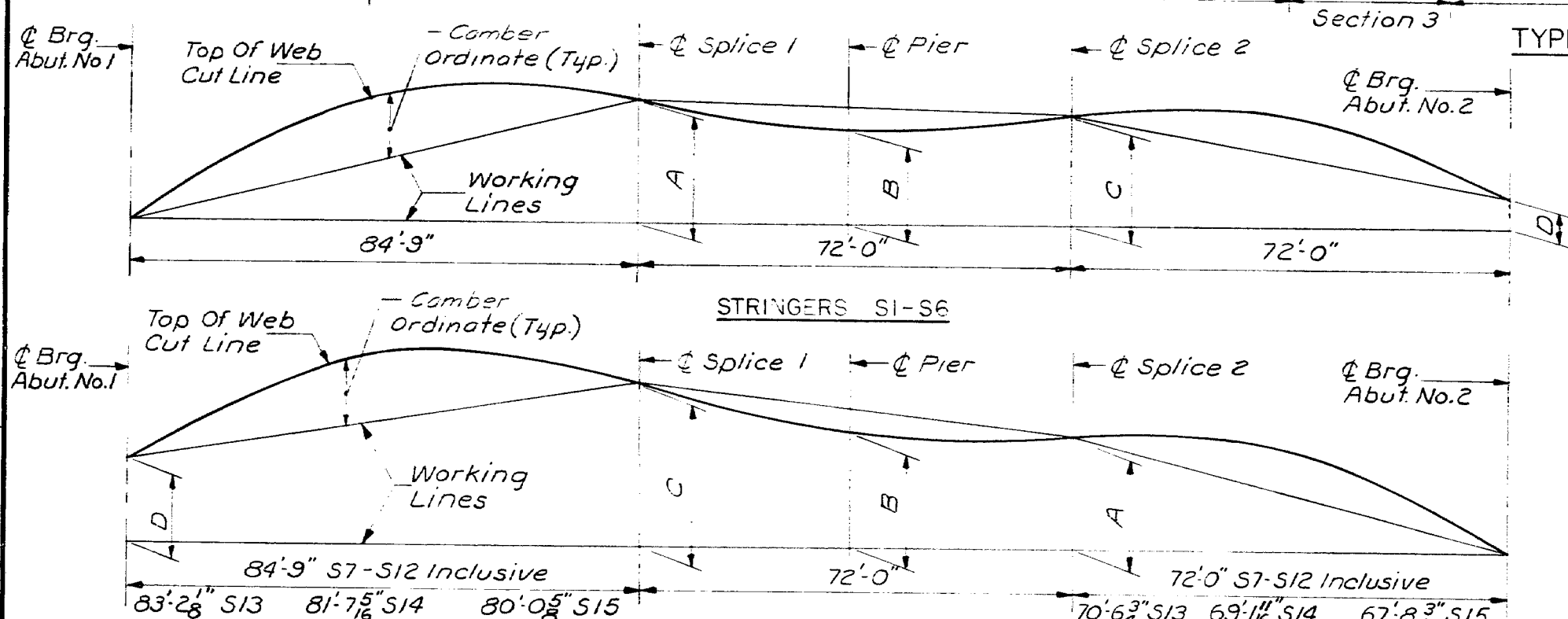


REFERENCES

Blocking Detail - see Sheet 21.
Diaphragms - see Note C, this Sheet, and Sheet 21.
Pedestals - see Standard Details BD 101-70 and Sheet 21.
Expansion Dam - see Standard Details BD 105-64 and Sheet 21.
Shear Connectors - see Standard Details BD 104-66 and Sheet 21.
For additional steel details, see Sheet 20 & 21.

SPECIFICATION

Fabrication and Erection: State of Maine Standards Specifications, Highways and Bridges Revision of June 1968.
Design and Details: A.A.S.H.O. Standard Specifications for Highway Bridges 1969 with Interim Specifications 1970.
Materials: Stringer flanges, webs and splices shall conform to A.S.T.M. Designation A572-50 except as noted in Typical Stringer Elevation. All other structural steel shall conform to A.S.T.M. Designation A-36, unless otherwise noted.
Welding: Specifications for Welded Highway and Railway Bridges, American Welding Society (AWS-D2.0-69) as modified by the appropriate special provisions.



TYPICAL STRINGER ELEVATION
No Scale

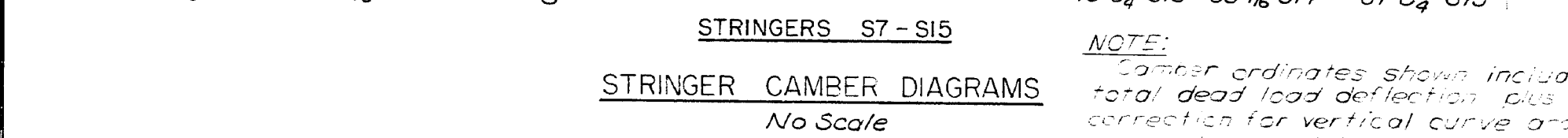
DIMENSIONS A, B, C & D FOR CAMBER DIAGRAM

Str. No.	A	B	C	D
S1	512	570	710	590
S2	572	520	610	490
S3	542	470	550	390
S4	502	410	490	290
S5	442	360	420	190
S6	437	310	375	100
S7	395	400	572	290
S8	435	450	637	390
S9	465	490	697	480
S10	495	540	757	580
S11	525	580	817	680
S12	565	640	892	780
S13	545	640	907	810
S14	560	640	907	830
S15	555	640	907	840

SHEAR CONNECTOR SPACING (2-7/8" Ø STUDS / ROW)

	S1-S12	S13	S14	S15
a	0	1 1/2"	0 1/8"	2 3/8"
b	25 Sps @ 12" = 25'-0"	26 Sps @ 11 1/2" = 25'-5 1/2"	25 Sps @ 12" = 25'-0"	25 Sps @ 11 3/4" = 24'-5 3/4"
c	45 Sps @ 15" = 56'-3"	45 Sps @ 14 1/2" = 54'-4 1/2"	44 Sps @ 14 1/2" = 53'-2"	44 Sps @ 14 1/4" = 52'-3"
x	(See Detail "X") 6'-6"	(See Detail "X") 6'-6"	(See Detail "X") 6'-6"	(See Detail "X") 6'-6"
d	33 Sps @ 24" = 66'-0"	33 Sps @ 24" = 66'-0"	33 Sps @ 24" = 66'-0"	33 Sps @ 24" = 66'-0"
y	(See Detail "Y") 6'-3"	(See Detail "Y") 6'-3"	(See Detail "Y") 6'-3"	(See Detail "Y") 6'-3"
e	35 Sps @ 15" = 43'-9"	35 Sps @ 14 3/4" = 43'-0"	34 Sps @ 14 1/2" = 41'-1"	32 Sps @ 15" = 40'-0"
f	25 Sps @ 12" = 25'-0"	25 Sps @ 11 3/4" = 24'-5 3/4"	25 Sps @ 12" = 25'-0"	25 Sps @ 11 3/4" = 24'-5 3/4"
g	0	2 1/4"	2 5/8"	0

(For Details "X" and "Y", See Sheet 20)



STRINGER CAMBER DIAGRAMS
No Scale

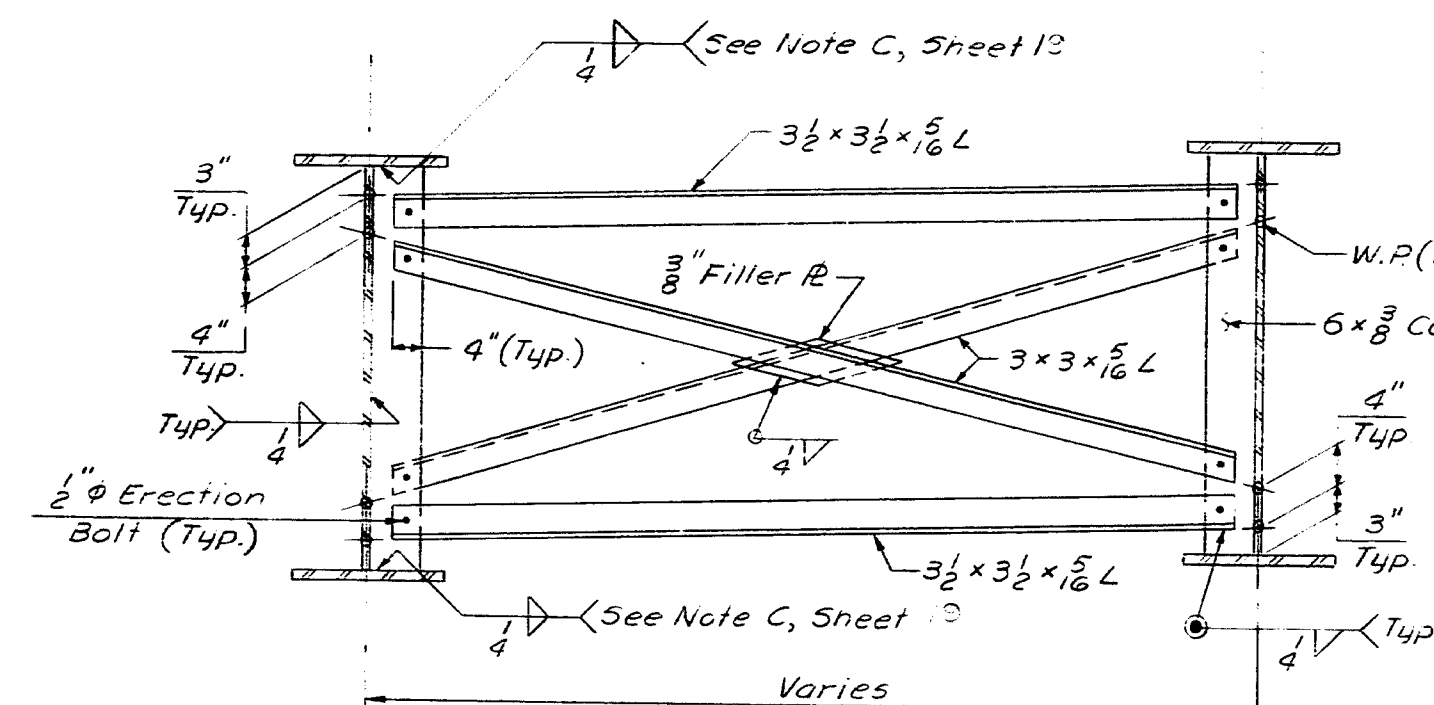
NOTE: Camber ordinates shown include total dead load deflection plus correction for vertical curve and cross slope variations as applicable.

Str. No.	125	250	375	500	625	750	875	125	250	375	500	625	750	875	125	250	375	500	625	750	875
S1-S6	1.31	2.34	2.97	3.25	2.99	2.44	1.43	-0.56	-0.76	-0.81	-0.82	-0.77	-0.65	-0.44	0.88	1.55	1.91	2.01	1.91	1.64	0.86
S7-S12	1.43	2.30	3.03	3.28	3.09	2.35	1.43	-0.56	-0.76	-0.81	-0.82	-0.77	-0.65	-0.44	0.34	1.57	1.95	2.11	1.95	1.46	0.80
S13-S15	1.13	2.16	2.77	3.10	2.66	2.28	1.35	-0.54	-0.75	-0.79	-0.78	-0.78	-0.63	-0.34	1.00	1.55	1.69	2.05	1.91	1.58	0.80

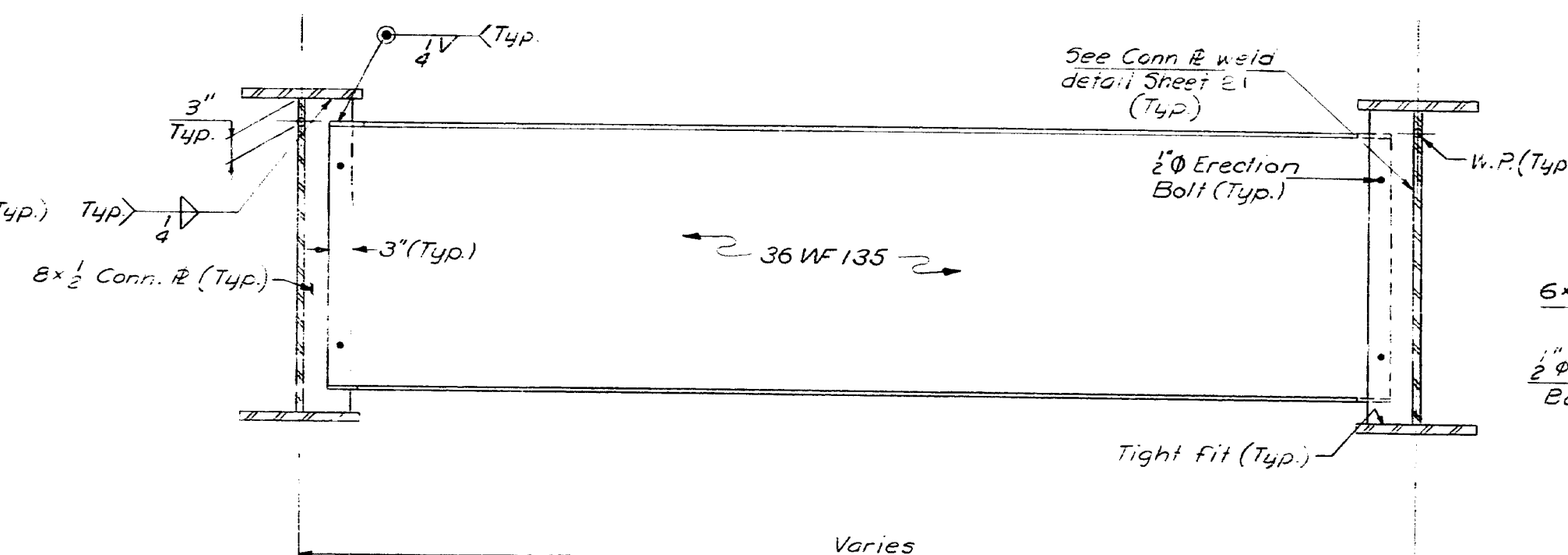
NOTE: All dimensions are horizontal or vertical; camber ordinates are in inches, dimensions A-D are in feet.

BOTTOM OF SLAB ELEVATIONS AT BLOCKING POINTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Str. No.	‡ Brg Abut. No. 1	L1										‡ Brg and Pier	L2										‡ Brg Abut. No. 2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
		.1	.2	.3	.4	.5	.6	.7	.8	.9	.10		.1	.2	.3	.4	.5	.6	.7	.8	.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
51	73.43	73.61	73.77	73.89	73.97	74.02	74.03	74.02	74.00	73.99	74.00	74.02	74.06	74.11	74.16	74.20	74.22	74.21	74.17	74.10	74.02	73.97	73.94	73.91	73.88	73.85	73.82	73.79	73.76	73.73	73.70	73.67	73.64	73.61	73.58	73.55	73.52	73.49	73.46	73.43	73.40	73.37	73.34	73.31	73.28	73.25	73.22	73.19	73.16	73.13	73.10	73.07	73.04	73.01	72.98	72.95	72.92	72.89	72.86	72.83	72.80	72.77	72.74	72.71	72.68	72.65	72.62	72.59	72.56	72.53	72.50	72.47	72.44	72.41	72.38	72.35	72.32	72.29	72.26	72.23	72.20	72.17	72.14	72.11	72.08	72.05	72.02	71.99	71.96	71.93	71.90	71.87	71.84	71.81	71.78	71.75	71.72	71.69	71.66	71.63	71.60	71.57	71.54	71.51	71.48	71.45	71.42	71.39	71.36	71.33	71.30	71.27	71.24	71.21	71.18	71.15	71.12	71.09	71.06	71.03	71.00	70.97	70.94	70.91	70.88	70.85	70.82	70.79	70.76	70.73	70.70	70.67	70.64	70.61	70.58	70.55	70.52	70.49	70.46	70.43	70.40	70.37	70.34	70.31	70.28	70.25	70.22	70.19	70.16	70.13	70.10	70.07	70.04	70.01	69.98	69.95	69.92	69.89	69.86	69.83	69.80	69.77	69.74	69.71	69.68	69.65	69.62	69.59	69.56	69.53	69.50	69.47	69.44	69.41	69.38	69.35	69.32	69.29	69.26	69.23	69.20	69.17	69.14	69.11	69.08	69.05	69.02	68.99	68.96	68.93	68.90	68.87	68.84	68.81	68.78	68.75	68.72	68.69	68.66	68.63	68.60	68.57	68.54	68.51	68.48	68.45	68.42	68.39	68.36	68.33	68.30	68.27	68.24	68.21	68.18	68.15	68.12	68.09	68.06	68.03	68.00	67.97	67.94	67.91	67.88	67.85	67.82	67.79	67.76	67.73	67.70	67.67	67.64	67.61	67.58	67.55	67.52	67.49	67.46	67.43	67.40	67.37	67.34	67.31	67.28	67.25	67.22	67.19	67.16	67.13	67.10	67.07	67.04	67.01	66.98	66.95	66.92	66.89	66.86	66.83	66.80	66.77	66.74	66.71	66.68	66.65	66.62	66.59	66.56	66.53	66.50	66.47	66.44	66.41	66.38	66.35	66.32	66.29	66.26	66.23	66.20	66.17	66.14	66.11	66.08	66.05	66.02	65.99	65.96	65.93	65.90	65.87	65.84	65.81	65.78	65.75	65.72	65.69	65.66	65.63	65.60	65.57	65.54	65.51	65.48	65.45	65.42	65.39	65.36	65.33	65.30	65.27	65.24	65.21	65.18	65.15	65.12	65.09	65.06	65.03	65.00	64.97	64.94	64.91	64.88	64.85	64.82	64.79	64.76	64.73	64.70	64.67	64.64	64.61	64.58	64.55	64.52	64.49	64.46	64.43	64.40	64.37	64.34	64.31	64.28	64.25	64.22	64.19	64.16	64.13	64.10	64.07	64.04	64.01	63.98	63.95	63.92	63.89	63.86	63.83	63.80	63.77	63.74	63.71	63.68	63.65	63.62	63.59	63.56	63.53	63.50	63.47	63.44	63.41	63.38	63.35	63.32	63.29	63.26	63.23	63.20	63.17	63.14	63.11	63.08	63.05	63.02	62.99	62.96	62.93	62.90	62.87	62.84	62.81	62.78	62.75	62.72	62.69	62.66	62.63	62.60	62.57	62.54	62.51	62.48	62.45	62.42	62.39	62.36	62.33	62.30	62.27	62.24	62.21	62.18	62.15	62.12	62.09	62.06	62.03	62.00	61.97	61.94	61.91	61.88	61.85	61.82	61.79	61.76	61.73	61.70	61.67	61.64	61.61	61.58	61.55	61.52	61.49	61.46	61.43	61.40	61.37	61.34	61.31	61.28	61.25	61.22	61.19	61.16	61.13	61.10	61.07	61.04	61.01	60.98	60.95	60.92	60.89	60.86	60.83	60.80	60.77	60.74	60.71	60.68	60.65	60.62	60.59	60.56	60.53	60.50	60.47	60.44	60.41	60.38	60.35	60.32	60.29	60.26	60.23	60.20	60.17	60.14	60.11	60.08	60.05	60.02	59.99	59.96	59.93	59.90	59.87	59.84	59.81	59.78	59.75	59.72	59.69	59.66	59.63	59.60	59.57	59.54	59.51	59.48	59.45	59.42	59.39	59.36	59.33	59.30	59.27	59.24	59.21	59.18	59.15	59.12	59.09	59.06	59.03	59.00	58.97	58.94	58.91	58.88	58.85	58.82	58.79	58.76	58.73	58.70	58.67	58.64	58.61	58.58	58.55	58.52	58.49	58.46	58.43	58.40	58.37	58.34	58.31	58.28	58.25	58.22	58.19	58.16	58.13	58.10	58.07	58.04	58.01	57.98	57.95	57.92	57.89	57.86	57.83	57.80	57.77	57.74	57.71	57.68	57.65	57.62	57.59	57.56	57.53	57.50	57.47	57.44	57.41	57.38	57.35	57.32	57.29	57.26	57.23	57.20	57.17	57.14	57.11	57.08	57.05	57.02	56.99	56.96	56.93	56.90	56.87	56.84	56.81	56.78	56.75	56.72	56.69	56.66	56.63	56.60	56.57	56.54	56.51	56.48	56.45	56.42	56.39	56.36	56.33	56.30	56.27	56.24	56.21	56.18	56.15	56.12	56.09	56.06	56.03	56.00	55.97	55.94	55.91	55.88	55.85	55.82	55.79	55.76	55.73	55.70	55.67	55.64	55.61	55.58	55.55	55.52	55.49	55.46	55.43	55.40	55.37	55.34	55.31	55.28	55.25	55.22	55.19	55.16	55.13	55.10	55.07	55.04	55.01	54.98	54.95	54.92	54.89	54.86	54.83	54.80	54.77	54.74	54.71	54.68	54.65	54.62	54.59	54.56	54.53	54.50	54.47	54.44	54.41	54.38	54.35	54.32	54.29	54.26	54.23	54.20	54.17	54.14	54.11	54.08	54.05	54.02	53.99	53.96	53.93	53.90	53.87	53.84	53.81	53.78	53.75	53.72	53.69	53.66	53.63	53.60	53.57	53.54	53.51	53.48	53.45	53.42	53.39	53.36	53.33	53.30	53.27	53.24	53.21	53.18	53.15	53.12	53.09	53.06	53.03	53.00	52.97	52.94	52.91	52.88	52.85	52.82	52.79	52.76	52.73	52.70	52.67	52.64	52.61	52.58	52.55	52.52	52.49	52.46	52.43	52.40	52.37	52.34	52.31	52.28	52.25	52.22	52.19	52.16	52.13	52.10	52.07	52.04	52.01	51.98	51.95	51.92	51.89	51.86	51.83	51.80	51.77	51.74	51.71	51.68	51.65	51.62	51.59	51.56	51.53	51.50	51.47	51.44	51.41	51.38	51.35	51.32	51.29	51.26	51.23	51.20	51.17	51.14	51.11	51.08	51.05	51.02	50.99	50.96	50.93	50.90	50.87	50.84	50.81	50.78	50.75	50.72	50.69	50.66	50.63	50.60	50.57	50.54	50.51	50.48	50.45	50.42	50.39	50.36	50.33	50.30	50.27	50.24	50.21	50.18	50.15	50.12	50.09	50.06	50.03	50.00	49.97	49.94	49.91	49.88	49.85	49.82	49.79	49.76	49.73	49.70	49.67	49.64	49.61	49.58	49.55	49.52	49.49	49.46	49.43	49.40	49.37	49.34	49.31	49.28	49.25	49.22	49.19	49.16	49.13	49.10	49.07	49.04	49.01	48.98	48.95	48.92	48.89	48.86	48.83	48.80	48.77	48.74	48.71	48.68	48.65	48.62	48.59	48.56	48.53	48.50	48.47	48.44	48.41	48.38	48.35	48.32	48.29	48.26	48.23	48.20	48.17	48.14	48.11	48.08	48.05	48.02	47.99	47.96	47.93	47.90	47.87	47.84	47.81	47.78	47.75	47.72	47.69	47.66	47.63	47.60	47.57	47.54	47.51	47.48	47.45	47.42	47.39	47.36	47.33	47.30	47.27	47.24	47.21	47.18	47.15	47.12	47.09	47.06	47.03	47.00	46.97	46.94	46.91	46.88	46.85	46.82	46.79	46.76	46.73	46.70	46.67	46.64	46.61	46.58	46.55	46.52	46.49	46.46	46.43	46.40	46.37	46.34	46.31	46.28	46.25	46.22	46.19	46.16	46.13	46.10	46.07	46.04	46.01	45.98	45.95	45.92	45.89	45.86	45.83	45.80	45.77	45.74	45.71	45.68	45.65	45.62	45.59	45.56	45.53	45.50	45.47	45.44	45.41	45.38	45.35	45.32	45.29	45.26	45.23	45.20	45.17	45.14	45.11	45.08	45.05	45.02	44.99	44.96	44.93	44.90	44.87	44.84	44.81	44.78	44.75	44.72	44.69	44.66	44.63	44.60	44.57	44.54	44.51	44.48	44.45	44.42	44.39	44.36	44.33	44.30	44.27	44.24	44.21	44.18	44.15	44.12	44.09	44.06	44.03	44.00	43.97	43.94	43.91	43.88	43.85	43.82	43.79	43.76	43.73	43.70	43.67	43.64	43.61	43.58	43.55	43.52	43.49	43.46	43.43	43.40	43.37	43.34	43.31	43.28	43.25	43.22	43.19	43.16	43.13	43.10	43.07	43.04	43.01	42.98	42.95	42.92	42.89	42.86	42.83	42.80	42.77	42.74	42.71	42.68	42.65	42.62	42.59	42.56	42.53	42.50	42.47	42.44	42.41	42.38	42.35	42.32	42.29	42.26	42.23	42.20	42.17	42.14	42.11	42.08	42.05	42.02	41.99	41.96	41.93	41.90	41.87	41.84	41.81	41.78	41.75	41.72	41.69	41.66	41.63	41.60	41.57	41.54	41.51	41.48	41.45	41.42	41.39	41.36	41.33	41.30	41.27	41.24	41.21	41.18	41.15	41.12	41.09	41.06	41.03	41.00	40.97	40.94	40.91	40.88	40.85	40.82	40.79	40.76	40.73	40.70	40.67	40.64	40.61	40.58	40.55	40.52	40.49	40.46	40.43	40.40	40.37	40.34	40.31	40.28	40.25	40.22	40.19	40.16	40.13	40.10	40.07	40.04	40.01	39.98	39.95	39.92	39.89	39.86	39.83	39.80	39.77	39.74	39.71	39.68	39.65	39.62	39.59	39.56	39.53	39.50	39.47	39.44	39.41	39.38	39.35	39.32	39.29	39.26	39.23	39.20	39.17	39.14	39.11	39.08	39.05	39.02	38.99	38.96	38.93	38.90	38.87	38.84	38.81	38.78	38.75	38.72	38.69	38.66	38.63	38.60	38.57	38.54	38.51	38.48	38.45	38.42	38.39	38.36	38.33	38.30	38.27	38.24	38.21

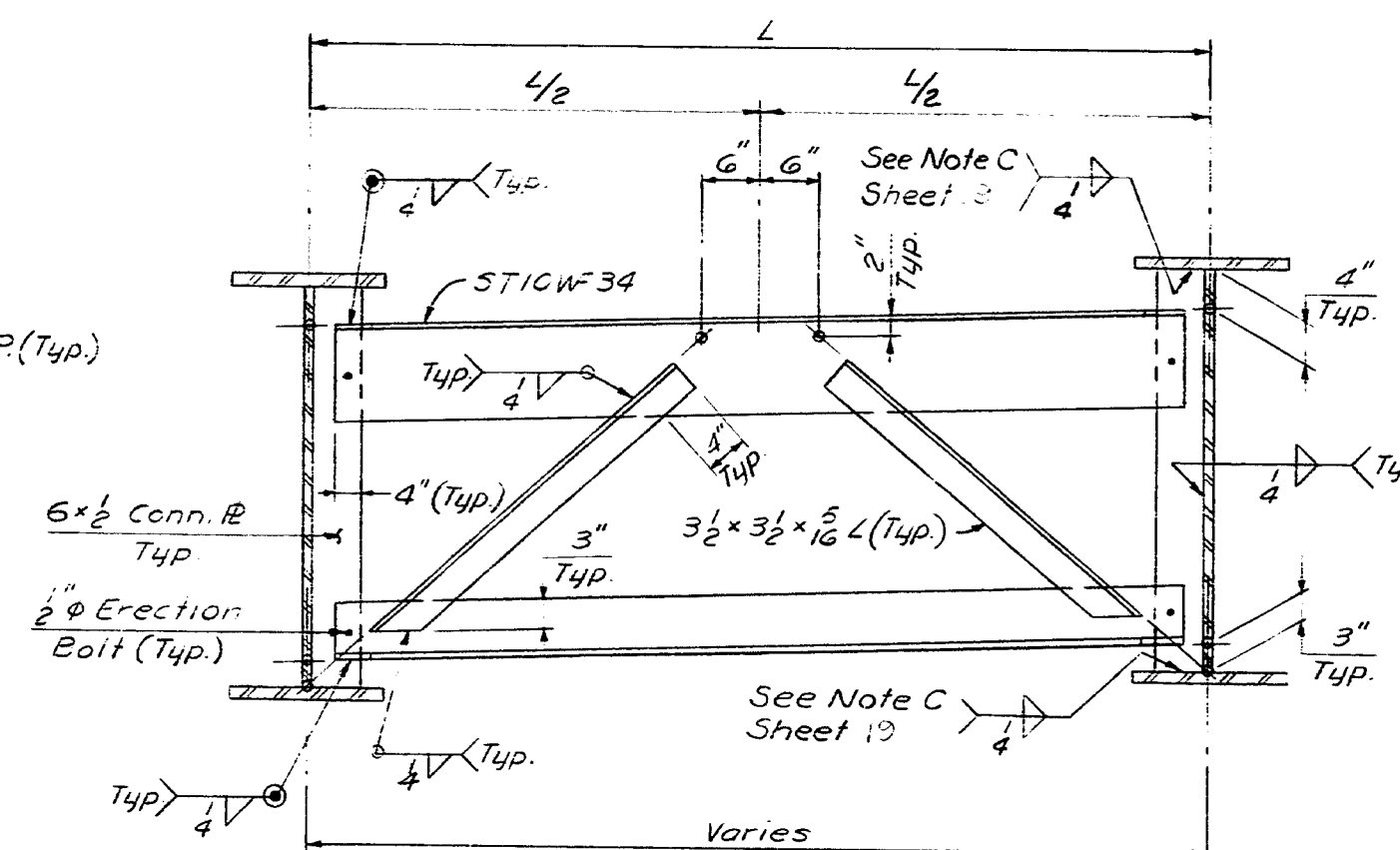
R. P. E.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1377-68	39	103



TYPE A DIAPHRAGM
3/4" = 1'-0"

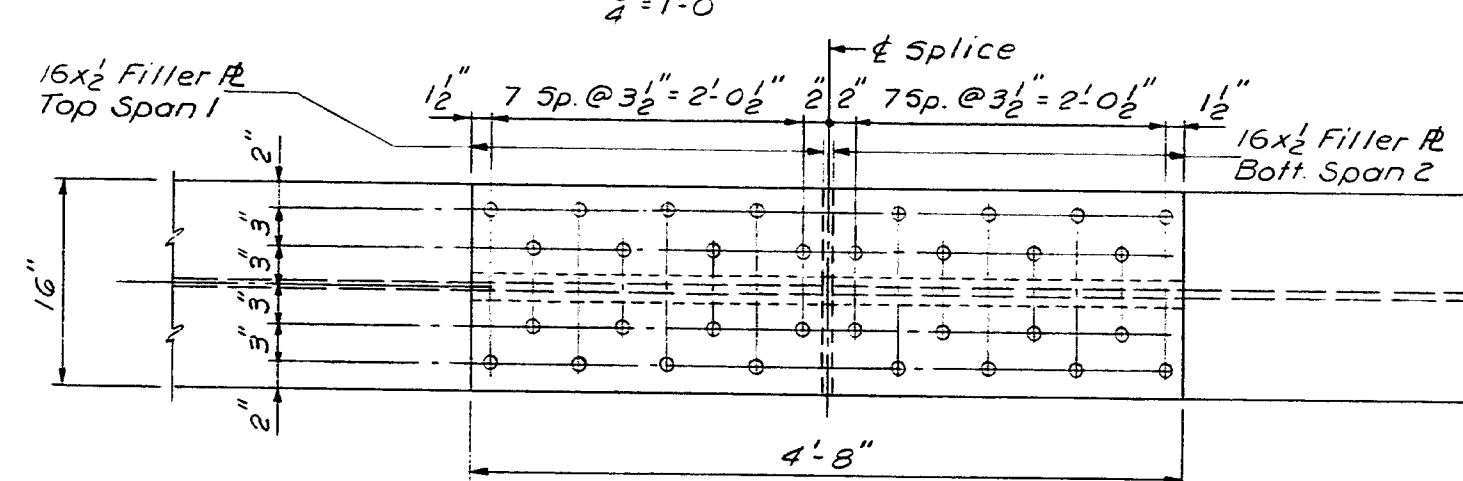


TYPE B DIAPHRAGM
3/4" = 1'-0"

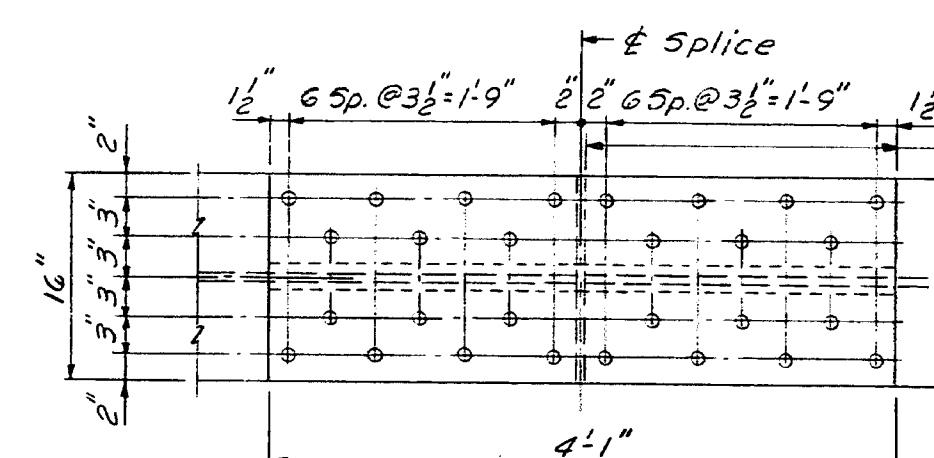


TYPE C DIAPHRAGM
3/4" = 1'-0"

NOTE:
Holes for erection bolts for diaphragms Type A, B & C shall be enlarged or field drilled as required to allow field adjustment prior to field welding shown.

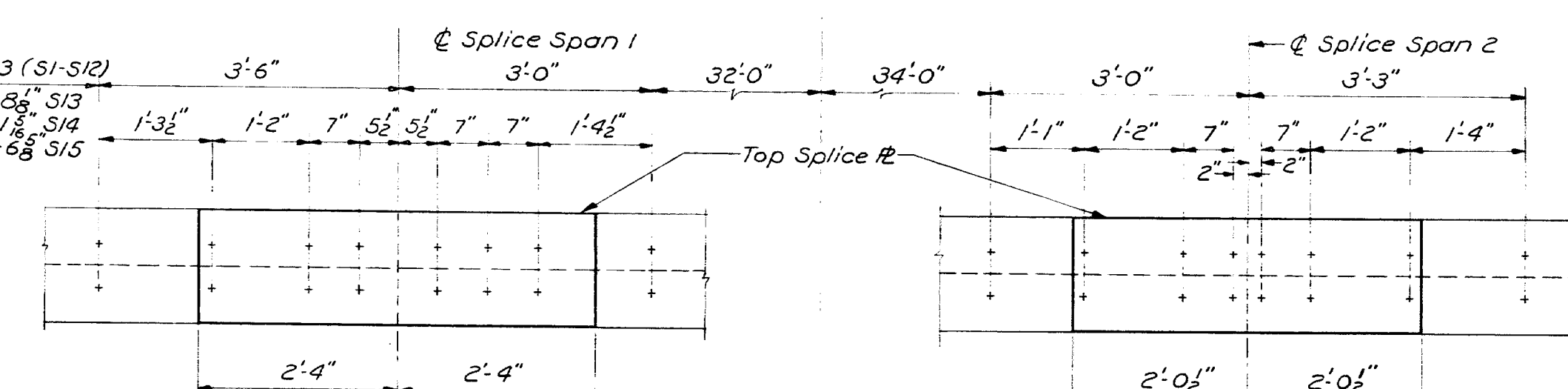


PLAN



PLAN

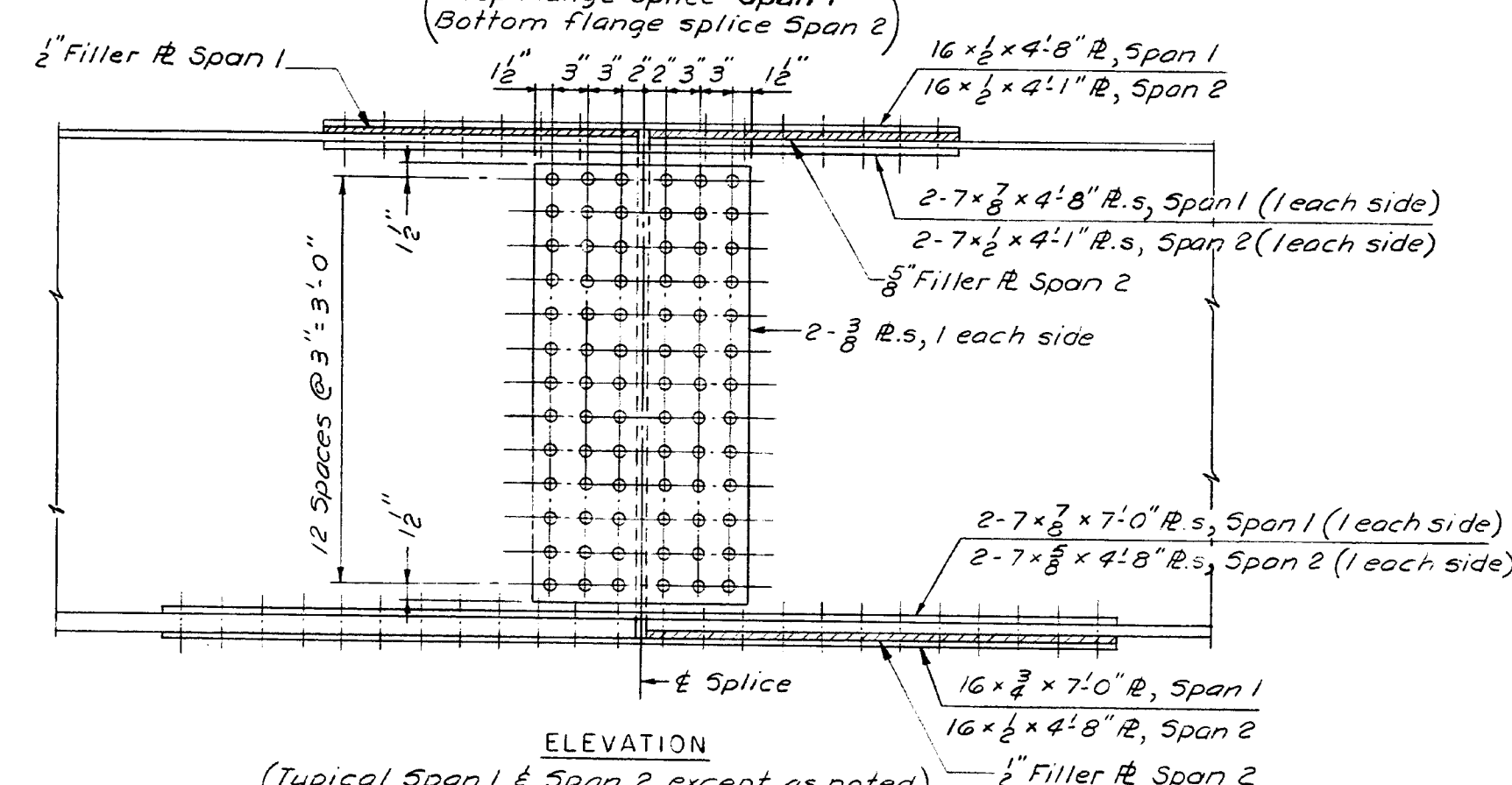
(Top Flange Splice Span 2)



DETAIL "X"

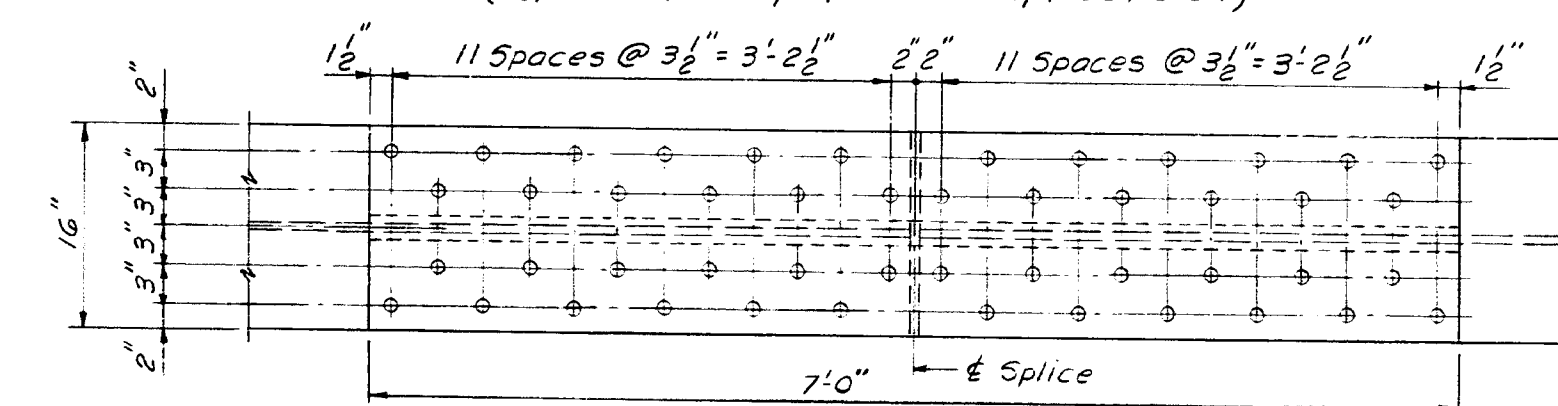
SHEAR CONNECTOR SPACING AT SPLICES
3/4" = 1'-0"

DETAIL "Y"



ELEVATION

(Typical Span 1 & Span 2 except as noted)



PLAN

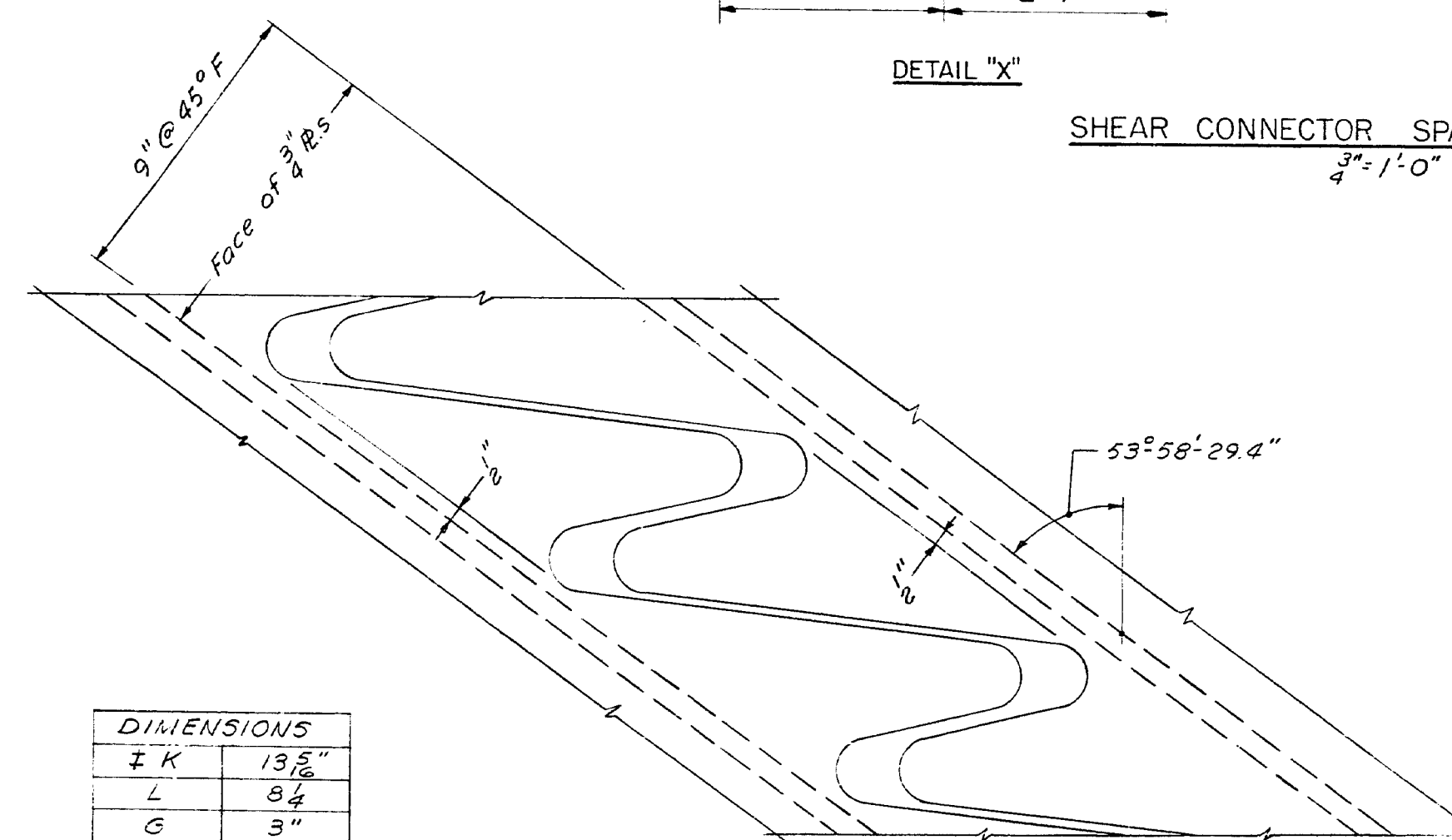
(Bottom Flange Splice Span 1)

TYPICAL SPLICE DETAILS
1" = 1'-0"

NOTE:
1 1/2" Holes for 3/4" H.S. bolts
1" = 1'-0"

DIMENSIONS	
F K	13 1/2"
L	8 1/2"
G	3"
H	3 1/2"
K @ 45°	15 1/2"
J @ 45°	28"
Q	28"

NOTE:
For additional details see Standard Detail Sheet BD 105-64



ROADWAY EXPANSION DAM

(Type A Modified)

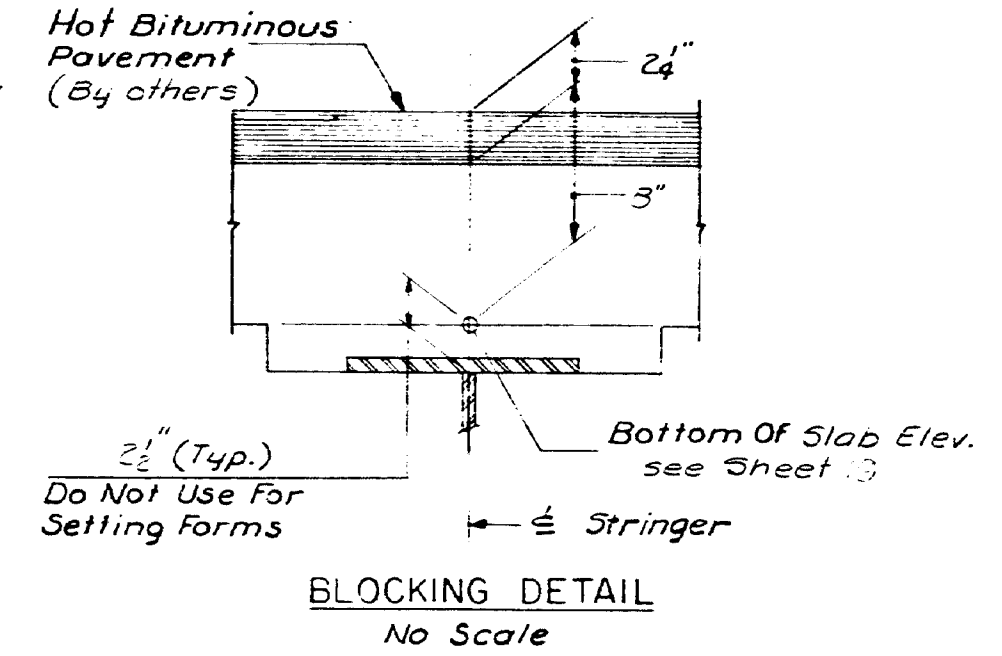
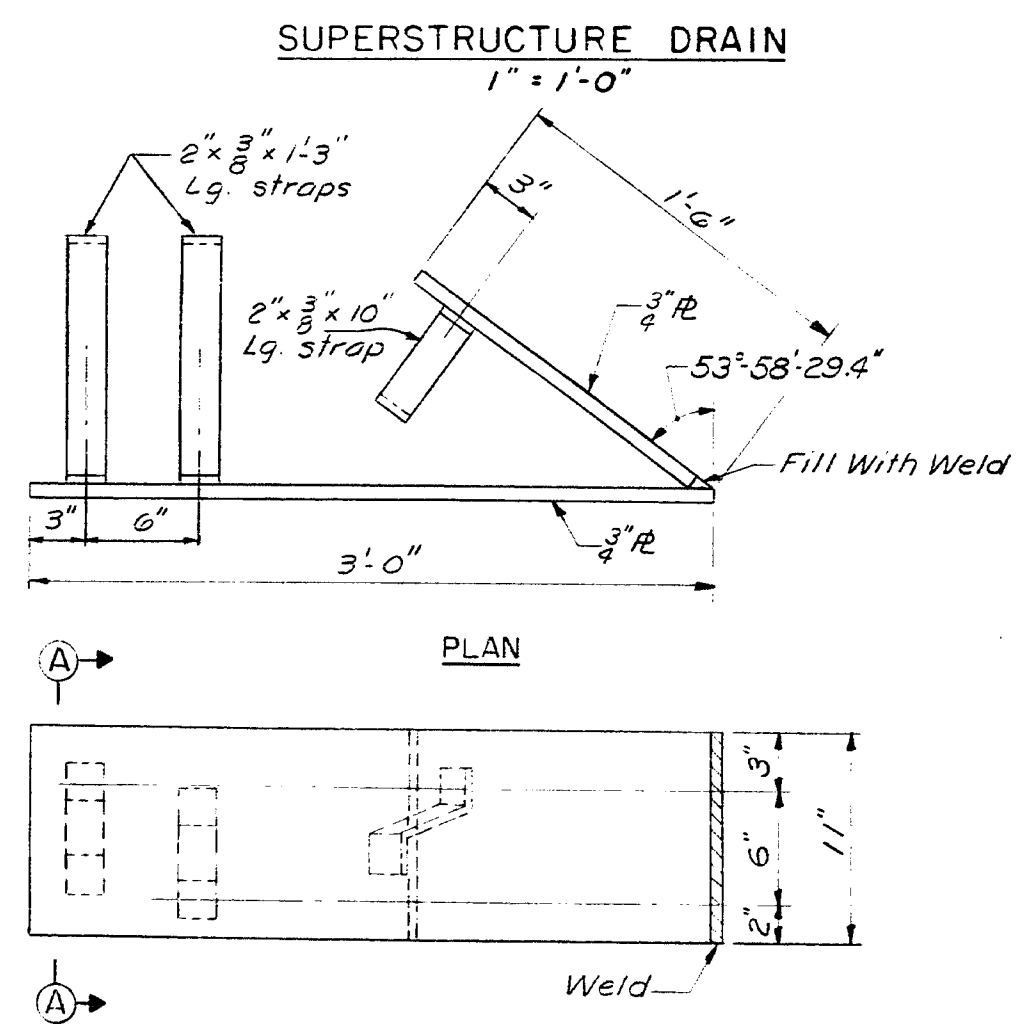
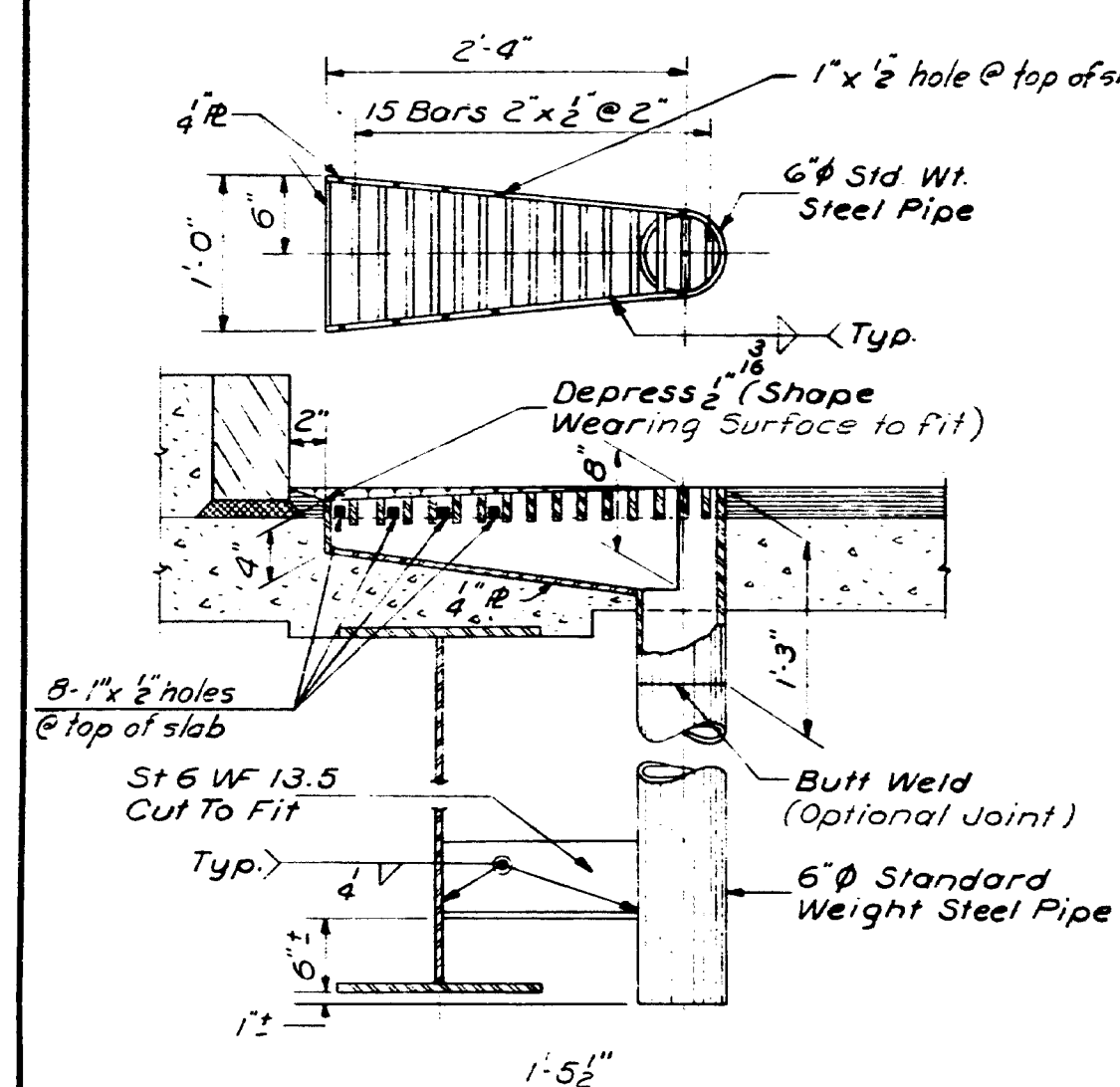
HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS

NEW YORK BOSTON KANSAS CITY

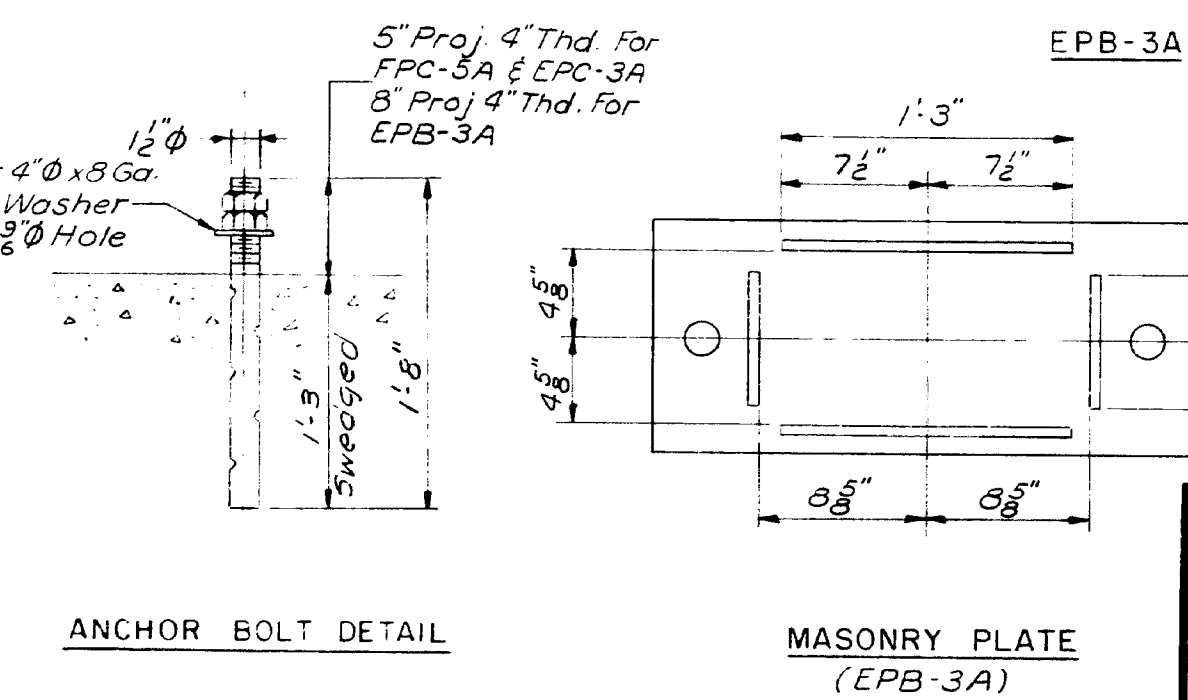
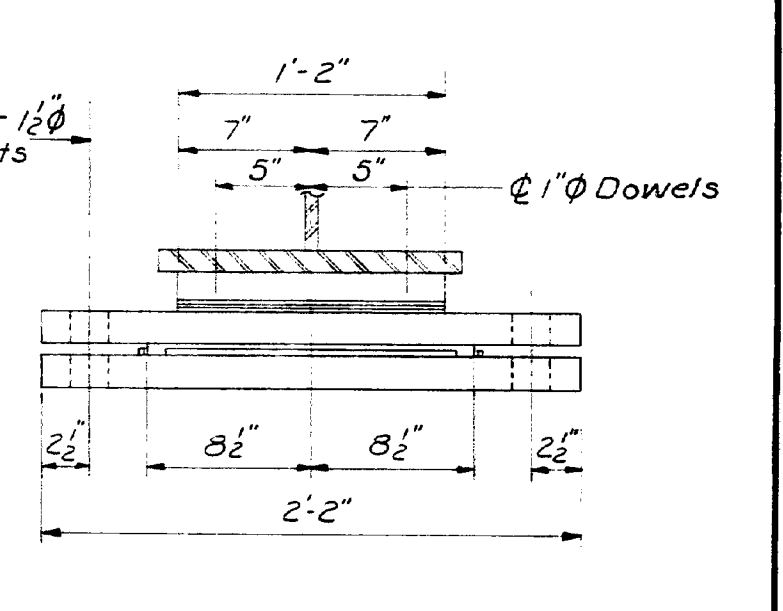
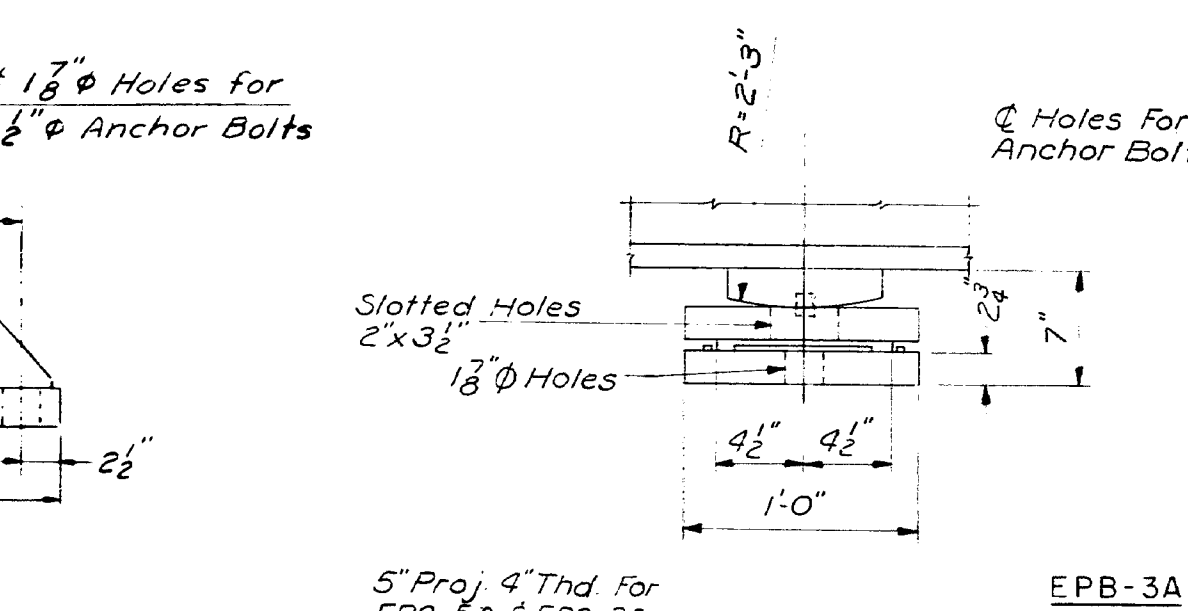
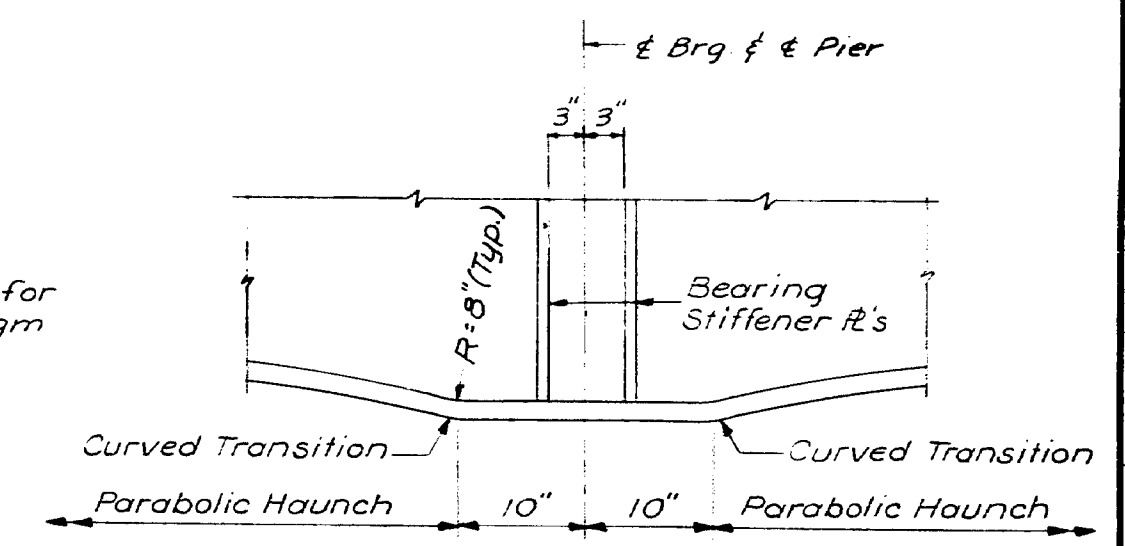
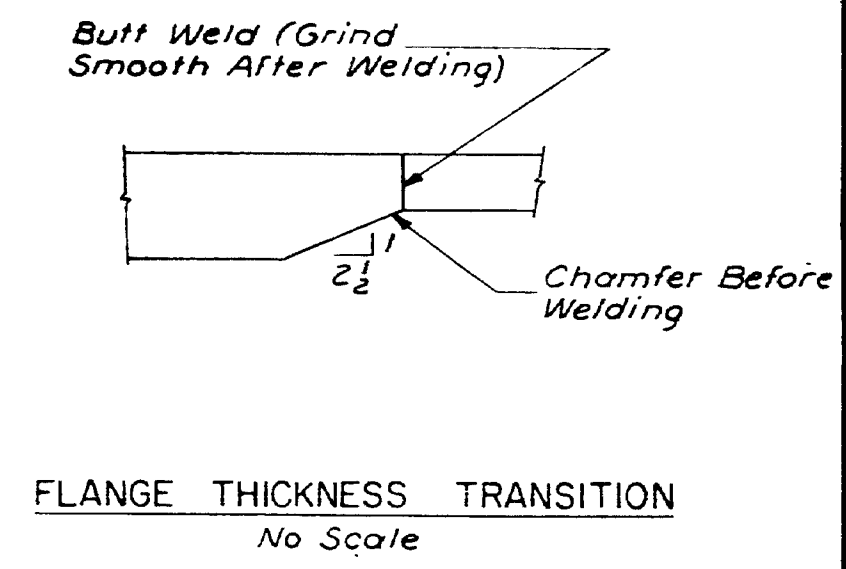
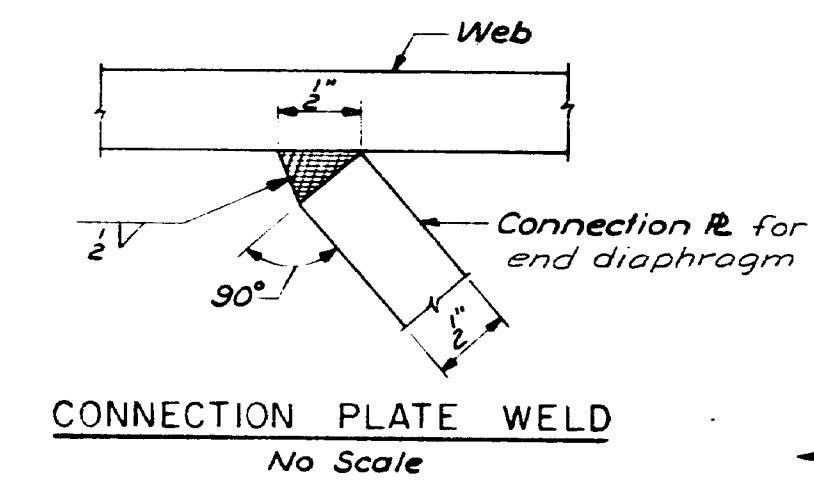
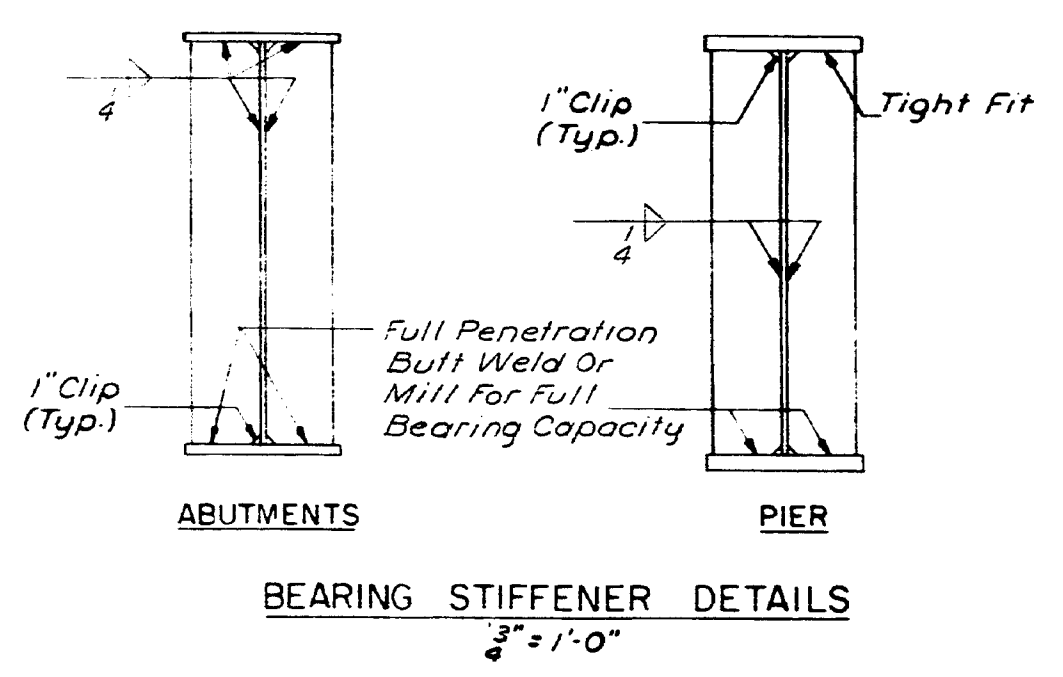
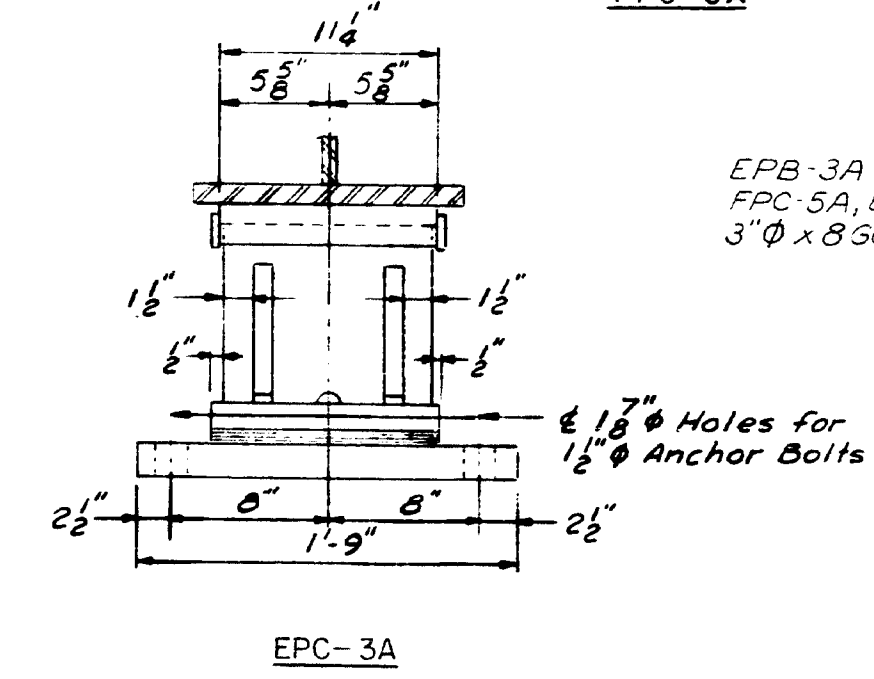
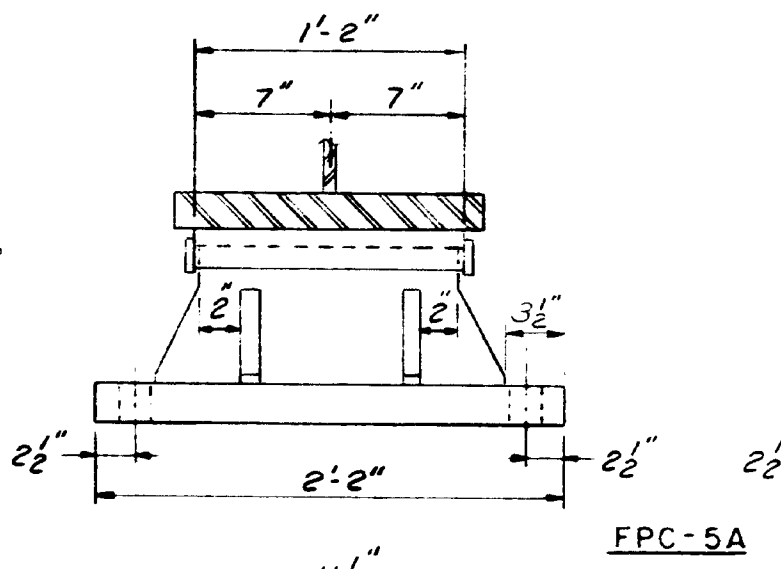
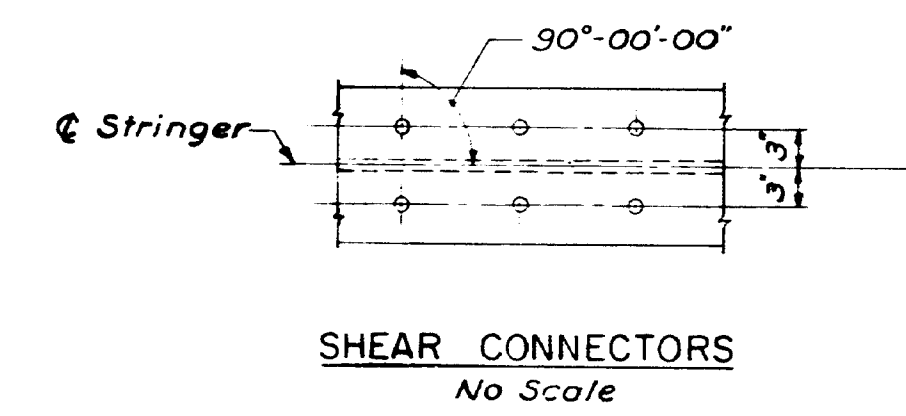
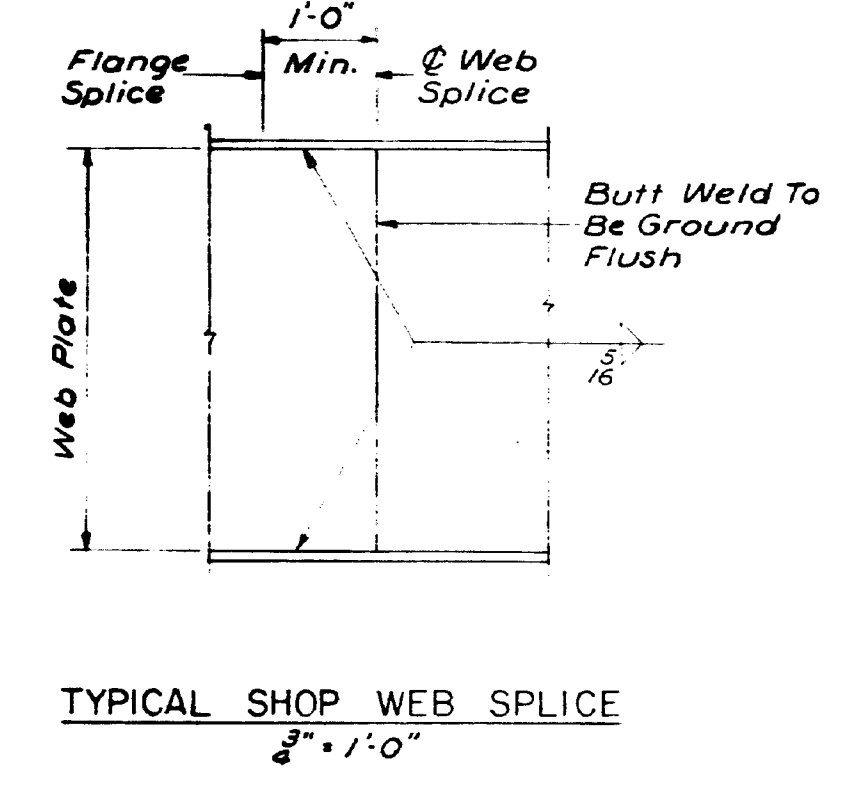
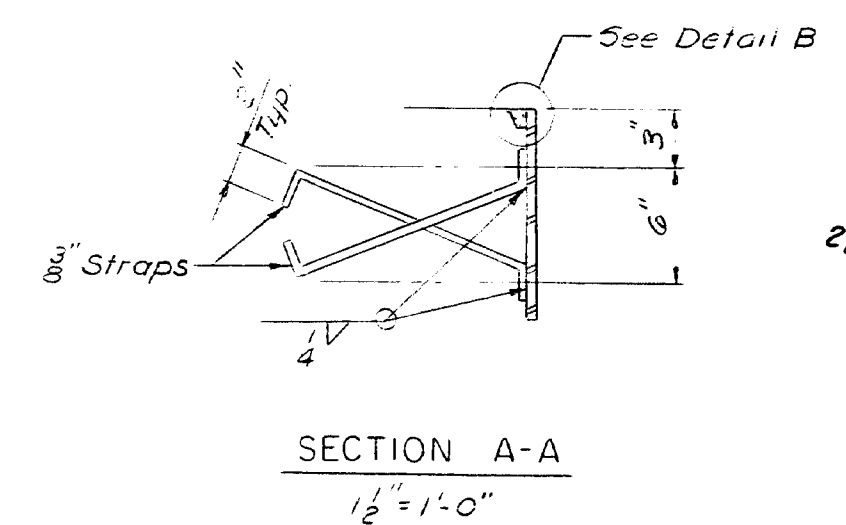
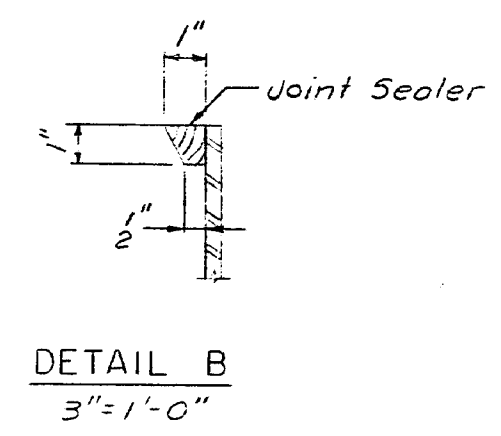
DESIGN - E.F.R.	DETAIL - J.M.M.	BRIDGE NO.
CHECK - I.S.		SURVEY -
STATE HIGHWAY COMMISSION		
BRIDGE DIVISION		
I-295		
OVER		
STATE ROUTE 703		
IN THE CITY OF		
SOUTH PORTLAND		
CUMBERLAND COUNTY		
STEEL DETAILS I		
SHEET 20 OF 28		

I-295 Scarborough 1377-68

S. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	40	103	



NOTE
To compensate for dead load deflections, as well as possible irregularities in beams, set the bottom of slab elevations at the points indicated before any of the slab formwork is started. See Subsection 502.10 (a) of the Standard Specifications, Revision of June 1968.



STANDARD PEDESTAL MODIFICATION
1/2\"/>

MASONRY PLATE (EPB-3A)

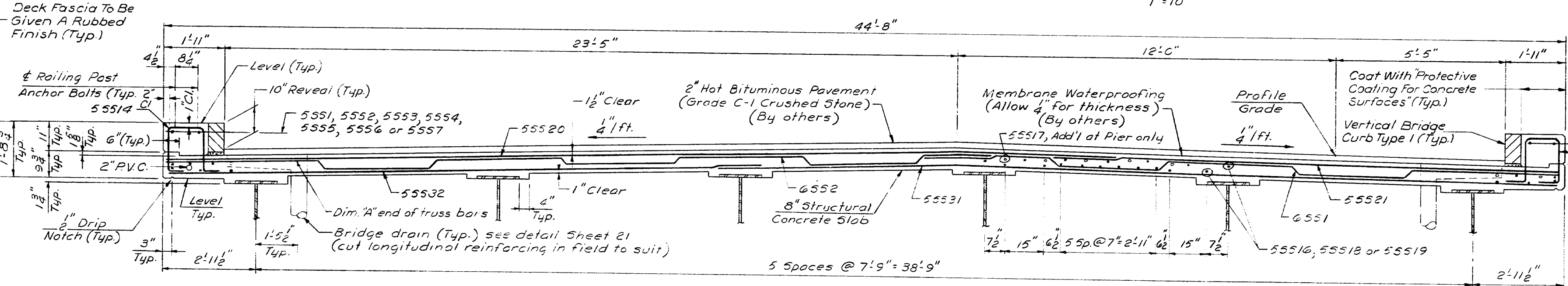
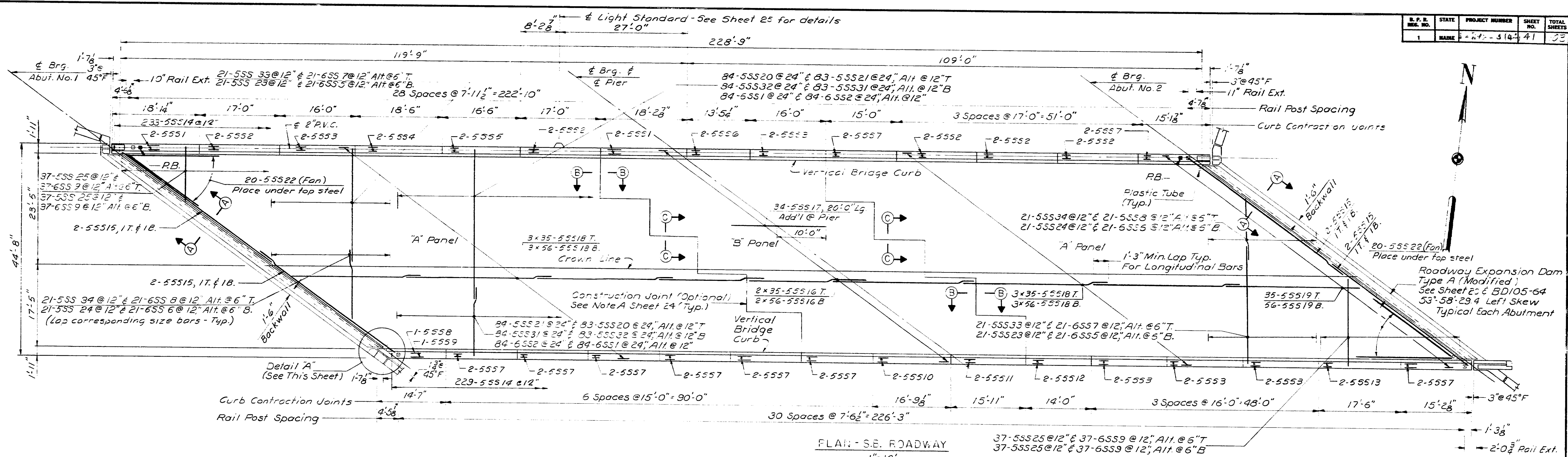
NOTE:
For dimensions and details not shown see EPC-3, EPB-3 & FPC-5 & anchor bolt detail Standard Detail Sheet BD101-70

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

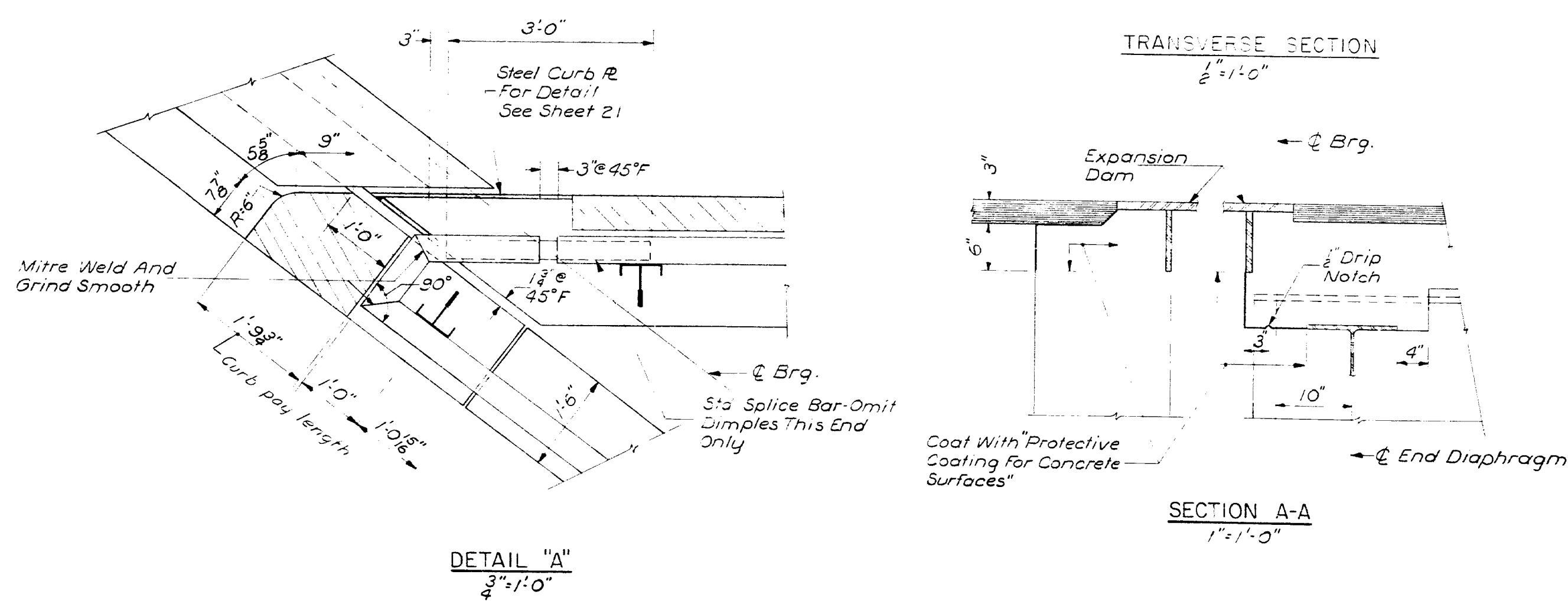
DESIGN- TRACE- CHECK- REF.	DETAIL- I.S.	BRIDGE NO. SURVEY- PLOT-
STATE HIGHWAY COMMISSION BRIDGE DIVISION I - 295 OVER STATE ROUTE 703 IN THE CITY OF SOUTH PORTLAND CUMBERLAND COUNTY STEEL DETAILS II SHEET 21 OF 28 AUGUSTA, MAINE JUNE 1970		

I-295 Scarsden and South 177-69

F.P.E.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-295	41	53



- GENERAL SUPERSTRUCTURE NOTES**
- At joints in curbs and vertical bridge curbs over piers, use preformed expansion joint filler. At all other curb joints, break the bond between concrete surfaces with a clear approved form oil. Form "V" groove on outside face of curb and slab at each vertical joint. Provide joints in vertical bridge curb at safety walk construction joints.
 - For Section B-B, C-C, curb detail and "V" groove detail see Sheet 24.
 - For bridge rail, see standard details BD106-69 Aluminum Rail. Maximum length of rail shall not be greater than two panels.
 - Place concrete in "A" panels before placing concrete in "B" panels. See Note "A" Sheet 24.
 - Vertical Bridge Curb will be paid for under Item 609.13.
 - Reinforcing steel to have 2" minimum cover unless otherwise shown.
 - For lighting details see Sheet 25.
 - For end post detail on superstructure see Sheet 24.



DECK REINFORCING PLACING PATTERN

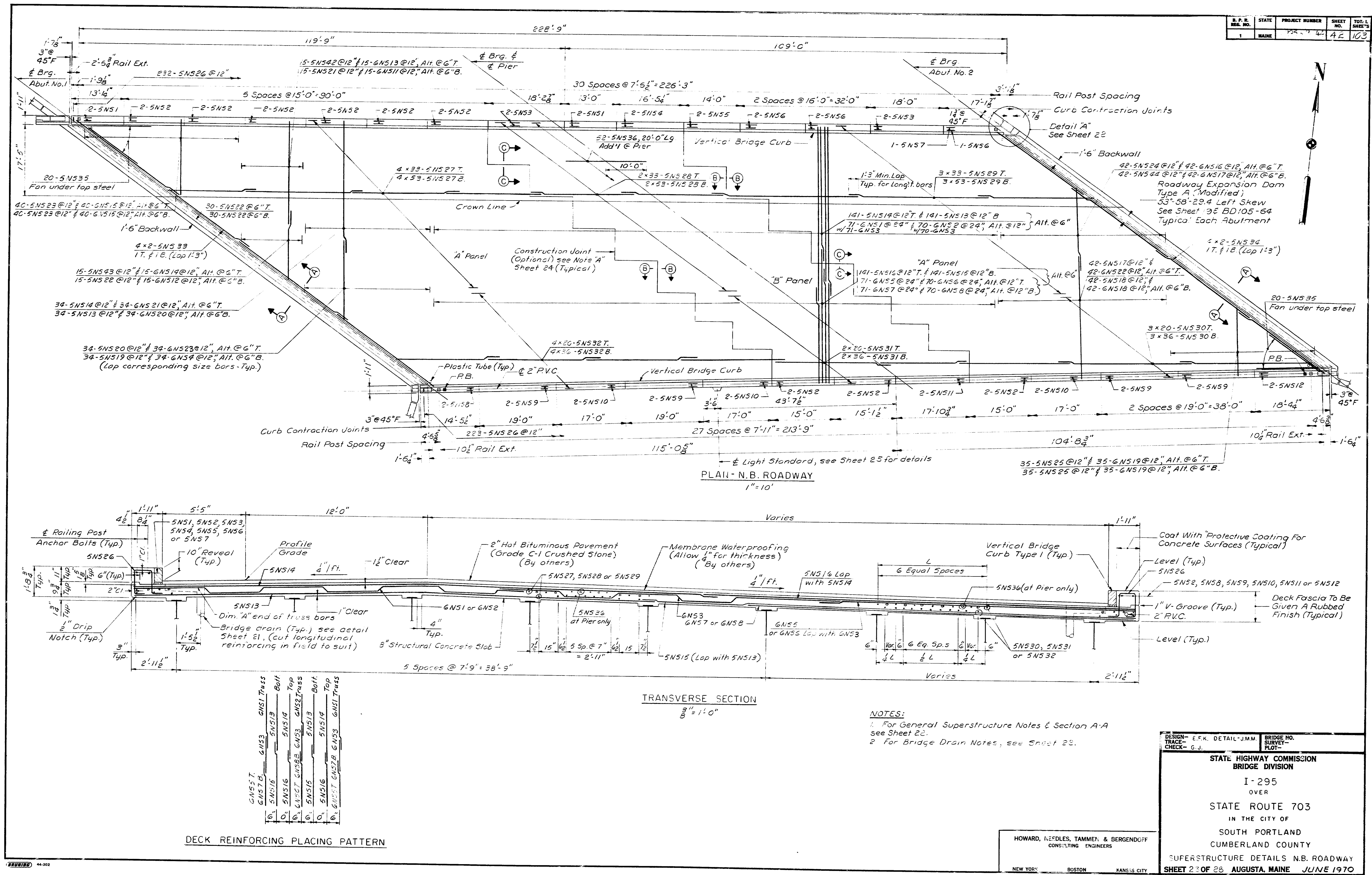
Truss	Top	Bottom
6551	5551	5551
6552	5552	5552
6553	5553	5553
6554	5554	5554
6555	5555	5555
6556	5556	5556
6557	5557	5557

- BRIDGE DRAIN NOTES**
- One bridge drain each side of each abutment N.B. and S.B. (B required)
 - Drains shall be placed so that they are at least 5'-0" clear of abutments, exact position to be determined in the field. For approximate location see Sheet 1.

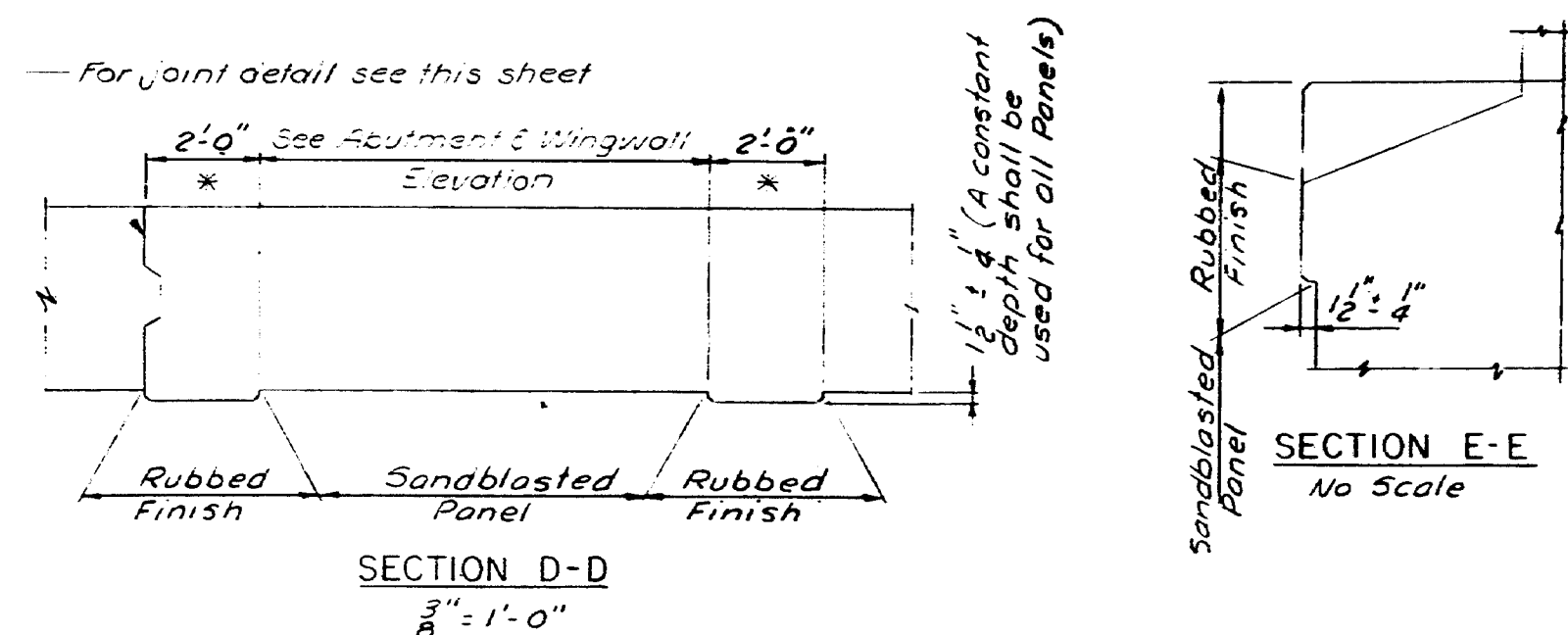
DESIGN	E.F.K. DETAIL J.M.M.	BRIDGE NO.	
CHECK	G.J.	SURVEY	
STATE HIGHWAY COMMISSION BRIDGE DIVISION			
I-295 OVER			
STATE ROUTE 703 IN THE CITY OF SOUTH PORTLAND CUMBERLAND COUNTY			
SUPERSTRUCTURE DETAILS S.B. ROADWAY			
SHEET 28 OF 28 AUGUSTA, MAINE JUNE 1970			

HOWARD, NEEDLES, TAMM & BERGENDOFF
CONSULTING ENGINEERS
NEW YORK BOSTON KANSAS CITY

177-80



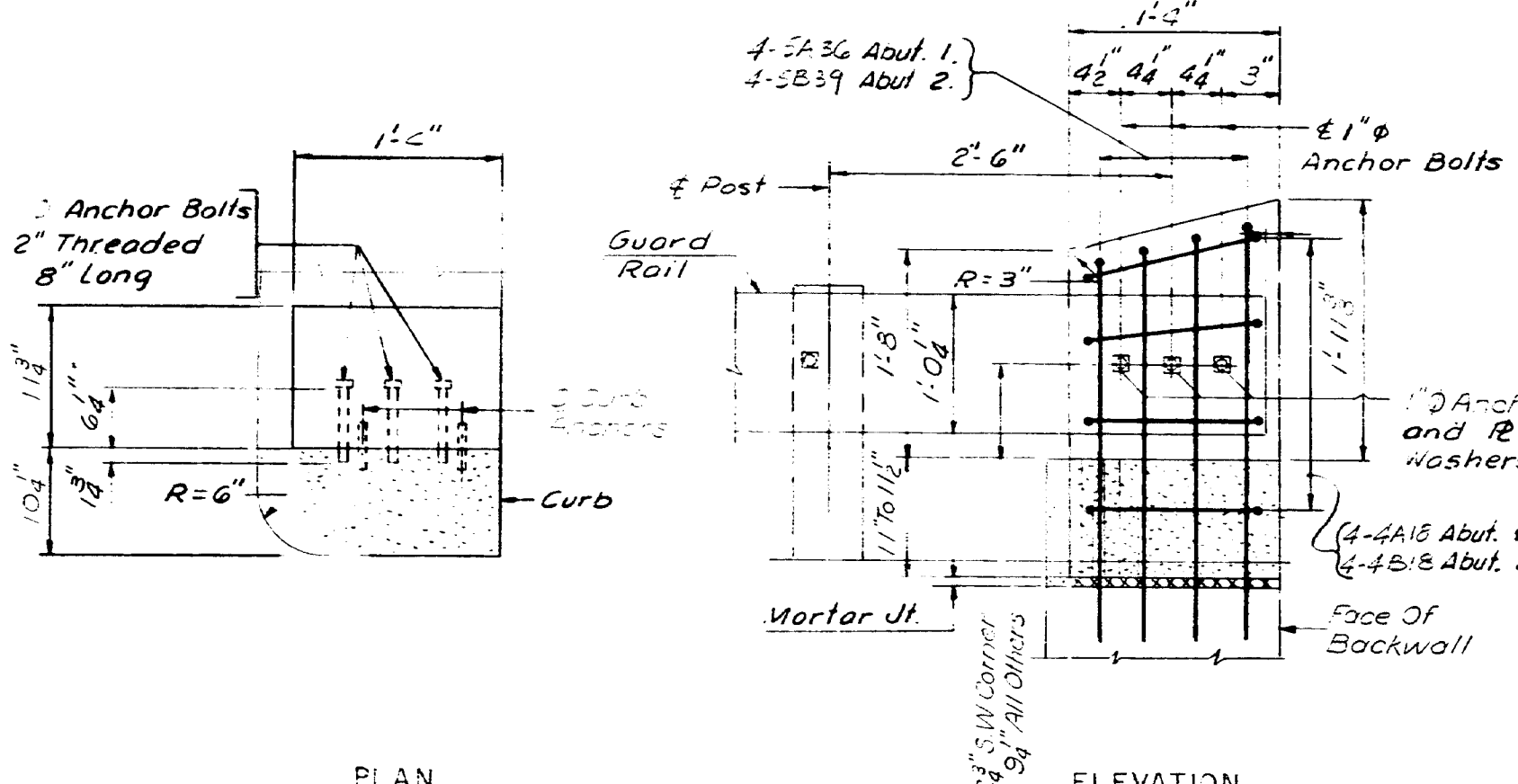
S. P. R. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		43	53



* Typical except as shown on abutment & wingwall elevations.

NOTES FOR ARCHITECTURAL TREATMENT

Special care shall be exercised so that form joints at exposed face of concrete shall be tight.
 All surfaces so designated on the plans shall be sandblasted.
 Architectural Treatment shall be carried to a depth as shown on Sheet's 11 thru 17.
 Before sandblasting, all fins and projections in the concrete shall be removed and all holes patched to create a surface of uniform texture.
 At the time concrete is placed, the contractor shall cast 3 sample slabs (2' x 2' x 4"). Prior to sandblasting, the samples shall be sandblasted, each at a different degree of penetration, with a maximum depth of 3/8 inch approximately, and under the direction of the Engineer. The most desirable sample will be chosen by the Engineer, and the designated areas shall be sandblasted to match this sample.
 Concrete shall not be sandblasted for at least 28 days after placement.
 The contractor shall take all necessary steps to protect materials and equipment from damage by the sandblasting operation. Personnel shall be properly equipped; sandblast hood for operator, and respirators and goggles shall be provided for all personnel exposed to dust.
 Payment for sandblasting shall be included in the contract unit price for Item 502.21, (Structural Concrete, Abutments and Retaining Walls.)
 In order to insure a consistent surface texture for the areas to be architecturally treated, concrete aggregate shall be taken from the same source and portland cement shall be from the same manufacturer thru-out the entire placement of the abutment wings and breastwalls.



PLAN

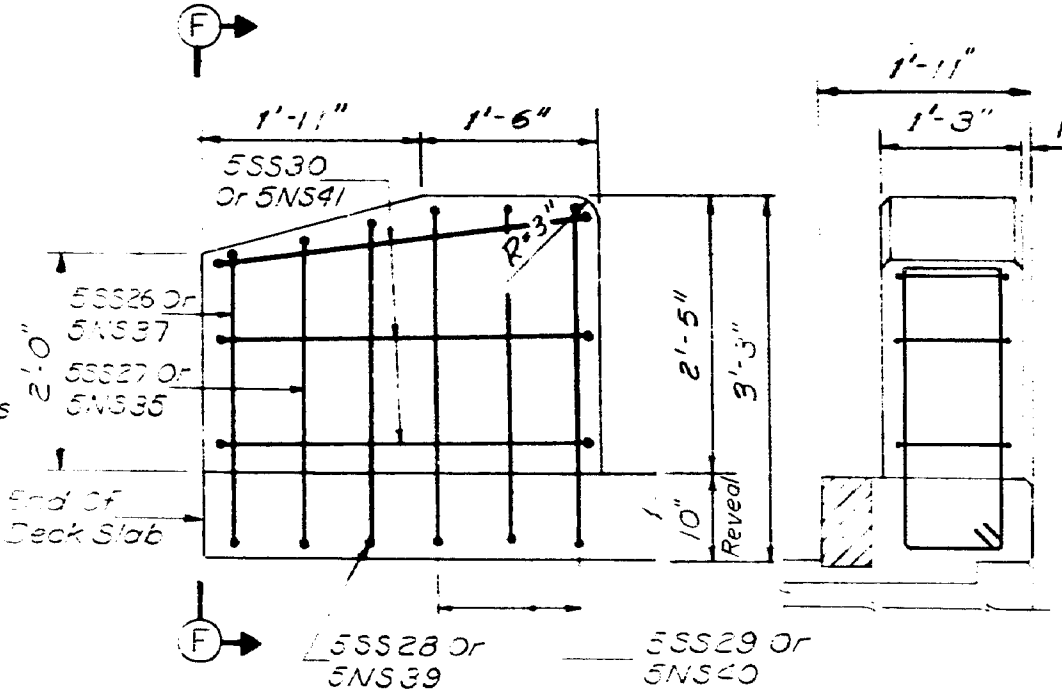
ON BACKWALL
1/2" = 1'-0"

NOTE:

Curb shown for N.W., N.E. and S.E. corners see Sheet 13 for Curb at S.W. corner.
 For Median End Post Detail see Sheet 14.

NOTES FOR END POST DETAIL (ON BACKWALL ONLY)

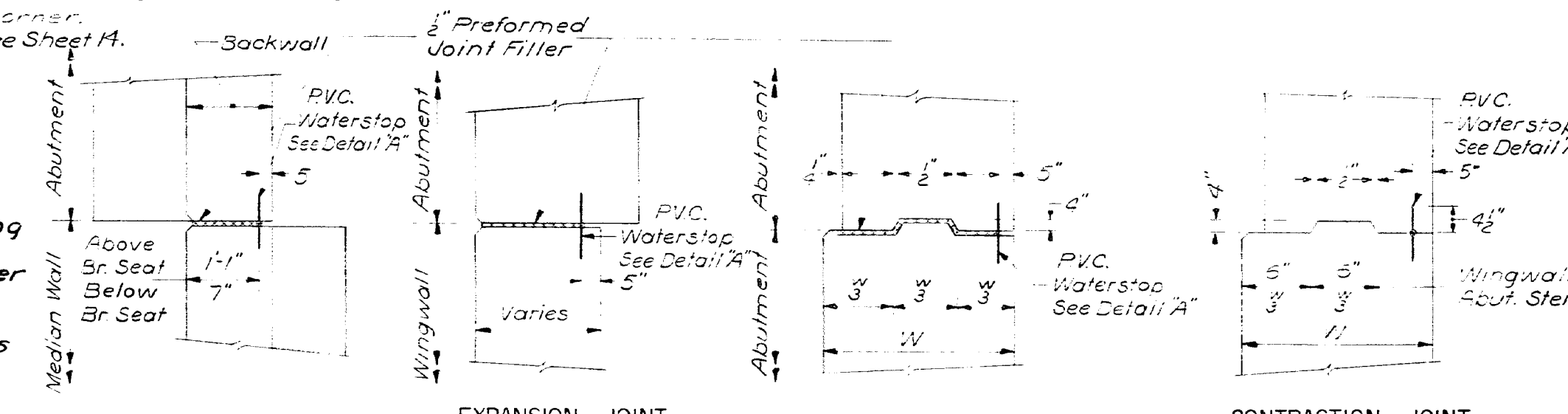
- Three anchor bolts required to each end post, bolts to be furnished with hex head, nut and washer. All parts to be galvanized. Payment for acquiring and installing anchor bolts shall be incidental to Item 502-21 (Structural Concrete Abutments and Retaining Walls).
- Concrete in Rail End Post shall be paid for under Item 502-21 (Structural Concrete Abutments and Retaining Walls).
- For detail of R washer "3" see Standard Details Guard Rail August 1969 ②.



ELEVATION

ON SUPERSTRUCTURE
3/8" = 1'-0"

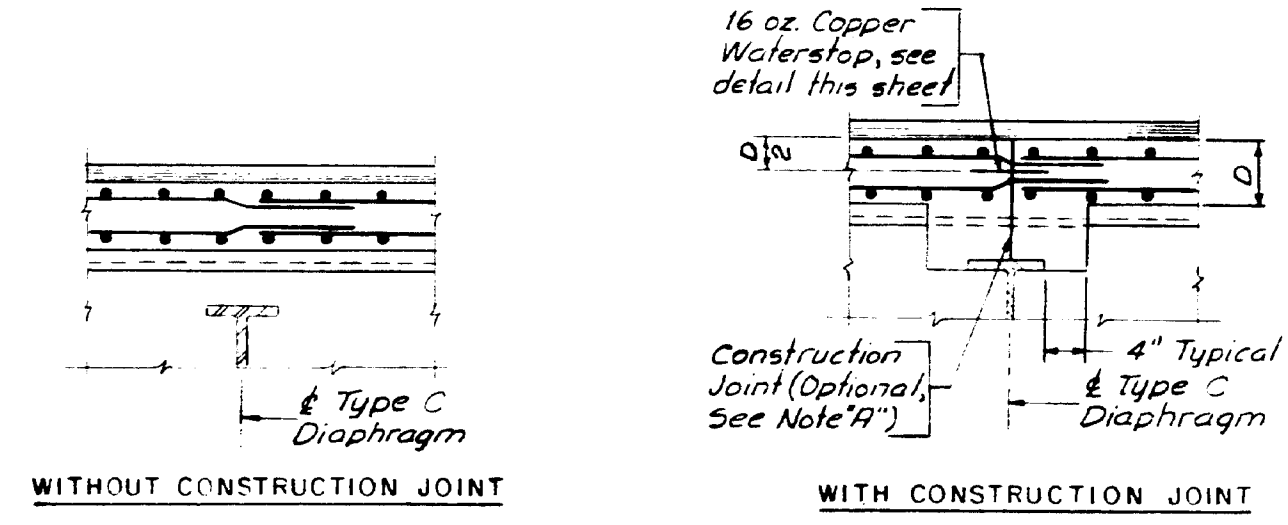
END POST DETAILS (Typical Except At Median)



EXPANSION JOINT

JOINT DETAILS
No Scale

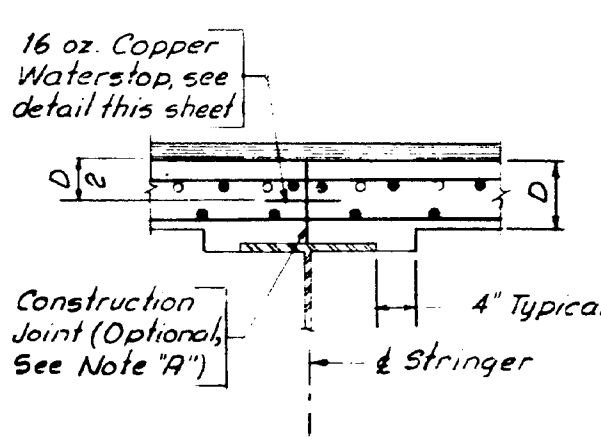
CONTRACTION JOINT



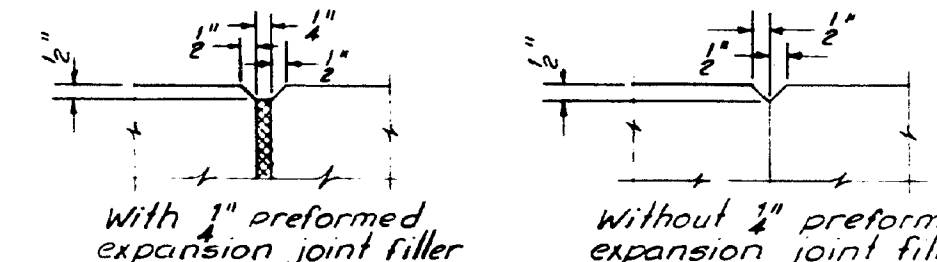
SECTION B-B
3/8" = 1'-0"

NOTE "A"

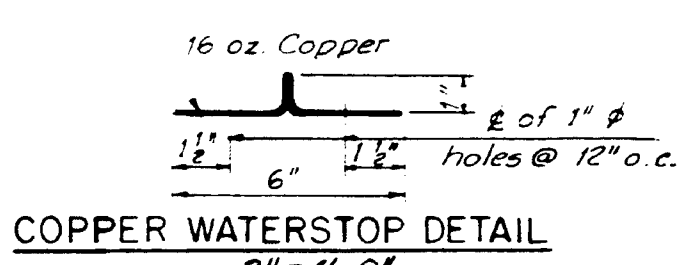
As an alternate and at the contractors option, the deck concrete may be placed in one continuous operation thus eliminating slab construction joints and waterstops. Continuous placing of concrete in the deck shall be made with the use of an acceptable set-retarder and liquid concrete curing compound. Payment for set-retarder shall be in accordance with Section 302 of the Standard Specifications. Payment for the liquid curing compound to be incidental to the various contract items.



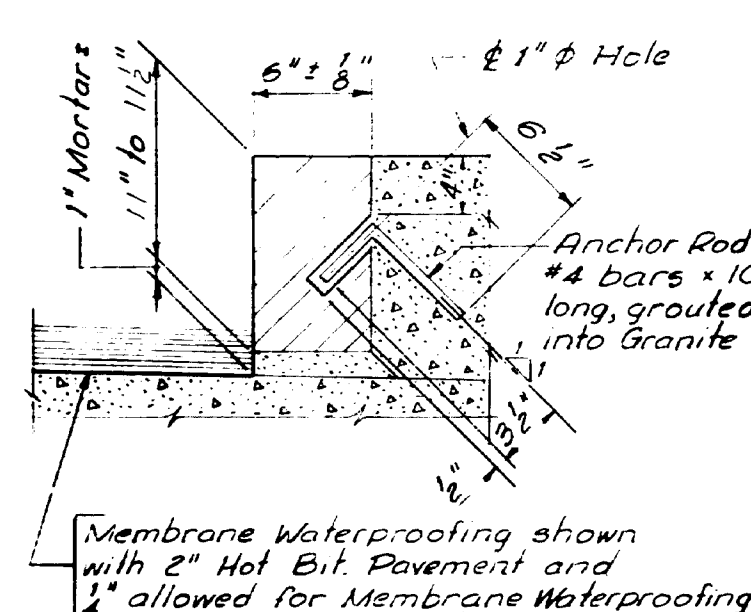
SECTION C-C
3/8" = 1'-0"



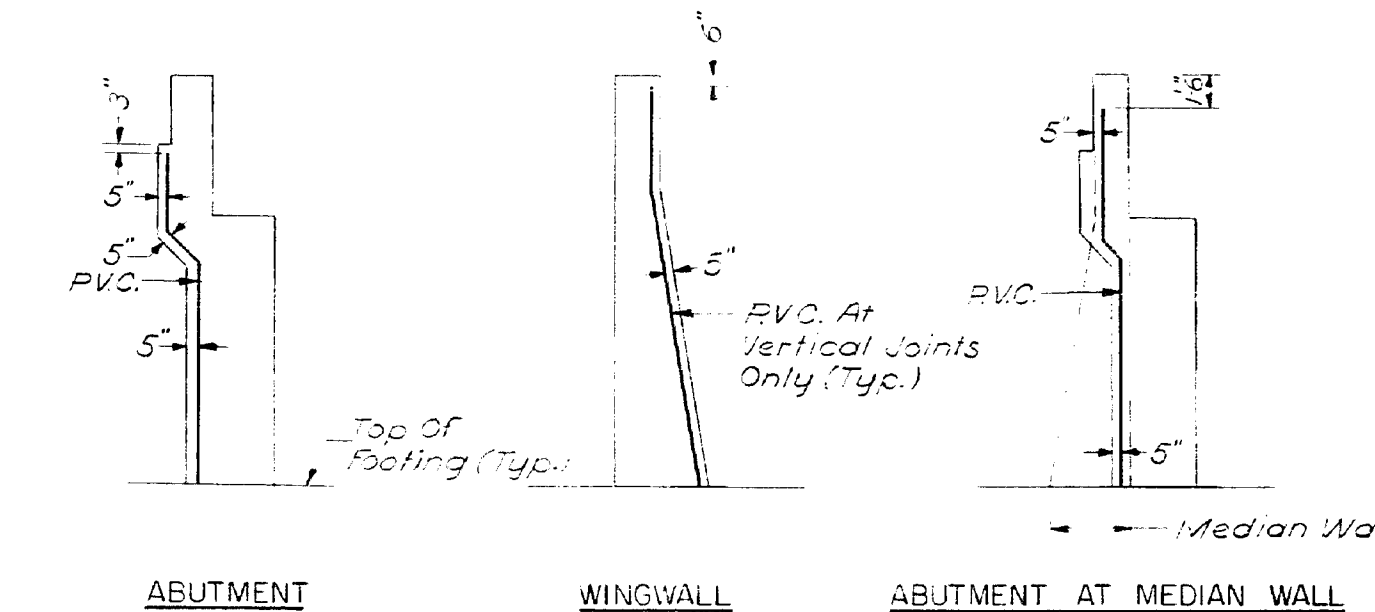
1" V GROOVE
3/8" = 1'-0"



COPPER WATERSTOP DETAIL
3/8" = 1'-0"



TYPICAL CURB SECTION
1/2" = 1'-0"



LIMITS OF P.V.C. WATERSTOP
No Scale

DESIGN-TRACE-CHECK	DETAILS	BRIDGE NO. SURVEY- PLOT
304		
STATE HIGHWAY COMMISSION BRIDGE DIVISION I - 295 OVER STATE ROUTE 703 IN THE CITY OF SOUTH PORTLAND CUMBERLAND COUNTY MISCELLANEOUS CONCRETE DETAILS		
HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS NEW YORK BOSTON KANSAS CITY		
SHEET 2- OF 28 AUGUSTA, MAINE JUNE 1970		

177-92

MARK	SIZE	NO.	LENGTH	TYPE	DIMENSIONS				INCR.	LOCATION AND REMARKS
					A	B	C	D		
ABUTMENT NO. 1										
4A1	4	5	3'-10	103	3'-0	10	3			Backwall
4A2	4	5	16'-0	103	14'-9	1'-3	1'-0			"
4A3	4	2	4'-3	Str.						"
4A4	4	5	14'-9	Str.						"
4A5	4	75	19'-8	Str.						"
4A6	4	5	12'-9	Str.						"
4A7	4	2	8'-9	Str.						Backwall
4A8	4	4	6'-8	102	8	3'-0	3'-0			Closure Wall
4A9	4	20	6'-2	102	2'-2	2'-0	2'-0			Pads
4A10	4	20	5'-9	102	1'-9	2'-0	2'-0			"
4A11	4	10	8'-8	102	2'-2	3'-3	3'-3			"
4A12	4	10	8'-3	102	1'-9	3'-3	3'-3			Pads
4A13	4	10	13'-6	Str.						Backwall
4A14	4	5	5'-10	103	4'-7	1'-3	1'-2 1/2			"
4A15	4	2	4'-9	103	3'-6	1'-3	1'-0			"
4A16	4	3	3'-6	103	2'-3	1'-3	1'-2			Backwall
4A17	4	4	7'-1	106	2'-6	3'-5	8	1'-2		Closure Wall
4A18	4	8	4'-1	100	7 1/2	1'-0	5			End Post
4A19	4	4	9'-3 1/2	102	7 1/2	2'-2	6'-6			" "
4A20	4	4	8'-0	102	11	1'-3	5'-2	8		End Post
4A21	4	5	6'-9	102	3'-0	3'-9				Stem
4A22	4	2	6'-10	102	1'-10	2'-6	2'-6			"
4A23	4	2	5'-10	102	1'-2	2'-4	2'-4			Stem
5A1	5	139	3'-0	Str.						Stem Dowels
5A2	5	122	12'-10	Str.						Stem
5A3	5	122	5'-0	105	1'-6	2'-3	1'-0	1'-3		Stem
5A4	5	127	5'-2	105	2'-10	2'-4	1'-10 1/2			Backwall Dowels
5A5	5	179	13'-1	Str.						Stem
5A6	5	192	5'-2	Str.						Stem Dowels
5A7	5	3	20'-7	Str.						Stem
5A8	5	1	17'-8	Str.						"
5A9	5	1	4'-9	Str.						"
5A10	5	10	4'-6	103	3'-3	1'-3	1'-2			"
5A11	5	10	3'-6	103	2'-3	1'-3	1'-2 1/2			"
5A12	5	10	3'-8	103	2'-5	1'-3	9			Stem
5A13	5	252	5'-7	Str.						Backwall
5A14	5	125	3'-6	Str.						Backwall Dowels
5A15	5	161	19'-8	Str.						Backwall
5A16	5	10	12'-3	Str.						Stem
5A17	5	10	17'-0	103	15'-9	1'-3	1'-0			"
5A18	5	13	16'-0	Str.						"
5A19	5	10	14'-1	103	12'-10	1'-3	9			"
5A20	5	13	11'-1	Str.						"
5A21	5	13	14'-8	Str.						"
5A22	5	10	7'-8	103	3'-11	3'-9	2'-2 1/2			"
5A23	5	10	11'-8	103	7'-5	4'-3	2'-5 1/2			"
5A24	5	12	4'-3	Str.						"
5A25	5	1	6'-10	Str.						"
5A26	5	6	21'-2	Str.						"
5A27	5	9	18'-2	Str.						"
5A28	5	3	20'-10	Str.						"
5A29	5	4	17'-10	Str.						"
5A30	5	4	14'-2	Str.						Stem
5A31	5	8	2'-6	Str.						Closure Wall
5A32	5	8	4'-8	Str.						Closure Wall
5A33	5	10	5'-11	102	2'-8	3'-3				Stem
5A34	5	10	3'-10	103	3'-0	10	3			"
5A35	5	10	4'-9	Str.						Stem
5A36	5	10	6'-7 1/2	102	7 1/2	3'-0	3'-0			End Post
5A37	5	5	8'-3	102	11	3'-8	3'-8			End Post
6A1	6	114	3'-6	103	1'-9	1'-9	1'-3			Approach Slab Dowels
6A2	6	110	30'-0	Str.						Footings
6A3	6	22	33'-0	Str.						"
6A4	6	378	10'-0	Str.						"
6A5	6	22	17'-9	Str.						Footings
6A6	6	178	8'-3	Str.						Stem

MARK	SIZE	NO.	LENGTH	TYPE	DIMENSIONS				INCR.	LOCATION AND REMARKS
					A	B	C	D		
ABUTMENT NO. 2										
4B1	4	5	3'10	103	3'0	10	3			
4B2	4	5	17'7	103	16'4	1'3	1'0			Backwall
4B3	4	2	4'3	Str.						"
4B4	4	5	16'4	Str.						"
4B5	4	65	19'8	Str.						"
4B6	4	5	12'9	Str.						"
4B7	4	2	8'9	Str.						"
4B8	4	4	6'8	102	8	3'0	3'0			Backwall
4B9	4	20	6'2	102	2'2	2'0	2'0			Closure Wall
4B10	4	20	5'9	102	1'9	2'0	2'0			Pads
4B11	4	10	8'8	102	2'2	3'3	3'3			"
4B12	4	10	8'3	102	1'9	3'3	3'3			"
4B13	4	10	20'6"	Str.						Pads
4B14	4	5	5'10	103	4'7	1'3	1'2 1/2			Backwall
4B15	4	2	4'9	103	3'6	1'3	1'0			"
4B16	4	3	3'6	103	2'3	1'3	1'2			"
4B17	4	4	7'1	106	2'6	3'5	8	1'2		Backwall
4B18	4	8	4'1	100	7 1/2	1'0	5			Closure Wall
4B19	4	4	9'3 1/2	102	7 1/2	2'2	6'6			End Post
4B20	4	4	8'0	102	11	1'3	5'2	8		End Post Med.
4B21	4	5	6'9	102	3'0	3'9				End Post Med.
4B22	4	2	6'10	102	1'10	2'6	2'6			Stem
4B23	4	2	5'10	102	1'2	2'4	2'4			"
										Stem
5B1	5	133	3'0	Str.						Stem Dowels
5B2	5	48	11'5	Str.						Stem
5B3	5	116	5'0	105	1'6	2'3	1'0	1'3		"
5B4	5	114	5'2	105	2'10	2'4	1'10 1/2			"
5B5	5	68	11'7	Str.						Stem
5B6	5	171	5'2	Str.						Stem Dowels
5B7	5	170	6'8	Str.						Stem
5B8	5	6	19'2	Str.						"
5B9	5	1	6'10	Str.						"
5B10	5	12	4'3	Str.						"
5B11	5	9	16'2	Str.						"
5B12	5	4	16'0	Str.						"
5B13	5	3	19'3	Str.						Stem
5B14	5	92	5'6	Str.						Backwall
5B15	5	47	3'6	Str.						"
5B16	5	4	12'7	Str.						Backwall
5B17	5	9	5'11	102	2'8	3'3				Stem
5B18	5	9	18'7	103	17'4	1'3	1'0			"
5B19	5	12	16'0	Str.						"
5B20	5	126	19'8	Str.						"
5B21	5	9	14'1	103	12'10	1'3	9			"
5B22	5	12	11'1	Str.						"
5B23	5	9	7'8	103	3'11	3'9	2'2 1/2			"
5B24	5	9	11'8	103	7'5	4'3	2'5 1/2			Stem
5B25	5	8	2'6	Str.						Closure Wall Dowels
5B26	5	8	4'8	Str.						Closure Wall
5B27	5	9	19'5	Str.						Stem
5B28	5	12	20'6	Str.						"
5B29	5	9	3'8	103	2'5	1'3	9			"
5B30	5	9	4'6	103	3'3	1'3	1'2 1/2			"
5B31	5	9	3'6	103	2'3	1'3	1'2 1/2			"
5B32	5	68	10'2	Str.						Stem
5B33	5	103	10'4	Str.						Stem
5B34	5	137	5'7	Str.						Backwall
5B35	5	68	3'8	Str.						Backwall
5B36	5	3	17'11	Str.						Stem
5B37	5	1	5'0	Str.						"
5B38	5	1	14'11	Str.						Stem
5B39	5	10	6'7 1/2	102	7 1/2	3'0	3'0			End Post
5B40	5	5	8'3	102	11	3'8	3'8			End Post Med.
5B41	5	9	4'9	Str.						Stem
5B42	5	9	3'10	103	3'0	10	3			Stem
6B1	6	107	3'6	103	1'9	1'9	1'3			Approach Slab Dowels
6B2	6	110	30'0	Str.						Footings
6B3	6	22	23'0	Str.						"
6B4	6	22	16'3	Str.						"
6B5	6	372	9'3	Str.						Footings

RES. NO.		NAME		NO.	
1		1		45	

MARK	SIZE	NO.	LENGTH	TYPE	DIMENSIONS				INCR.	LOCATION AND REMARKS
					A	B	C	D		
PIERS										
4P1	4	255	11'-5	100	2'-8	2'-8	4 1/2			Column Ties
6P1	6	385	8'-6	Str.						Footings
7P1	7	9	32'-2	Str.						Footings
7P2	7	9	45'-3	Str.						"
7P3	7	8	8'-2	Str.						"
7P4	7	9	39'-6	Str.						"
7P5	7	9	42'-6	Str.						"
7P6	7	9	33'-5	Str.						"
7P7	7	6	8'-5	Str.						"
7P8	7	6	10'-9	Str.						Footings
8P1	8	16	38'-3	Str.						Footings
9P1	9	8	10'-9	Str.						Footings
9P2	9	8	8'-9	Str.						"
9P3	9	8	33'-8	Str.						"
9P4	9	8	40'-5	Str.						"
9P5	9	8	39'-6	Str.						Footings
10P1	10	8	12'-1	Str.						Footings
10P2	10	4	10'-1	Str.						Footings
11P1	11	60	17'-0	Str.						Column
11P2	11	48	16'-9	Str.						"
11P3	11	36	16'-3	Str.						"
11P4	11	24	17'-2	Str.						"
11P5	11	12	16'-6	Str.						"
11P6	11	48	12'-0	Str.						Column
11P7	11	228	8'-7	107		2'-0	6'-7			Footings Dowels
APPROACH SLABS ABUTMENT NO. 1										
4A51	4	14	29'-0	Str.						
4A52	4	14	39'-3	Str.						
4A53	4	28	40'-2	Str.						
6A51	6	658	16'-6	Str.						
6A52	6	40	13'-2 to 16'-6	Str.				10		8 Groups of 5 each
APPROACH SLABS ABUTMENT NO. 2										
4B51	4	28	29'-0	Str.						
4B52	4	14	39'-3	Str.						
4B53	4	14	40'-0	Str.						
4B54	4	14	26'-3	Str.						
6B51	6	596	16'-6	Str.						
6B52	6	40	13'-2 to 16'-6	Str.				10		8 Groups of 5 each

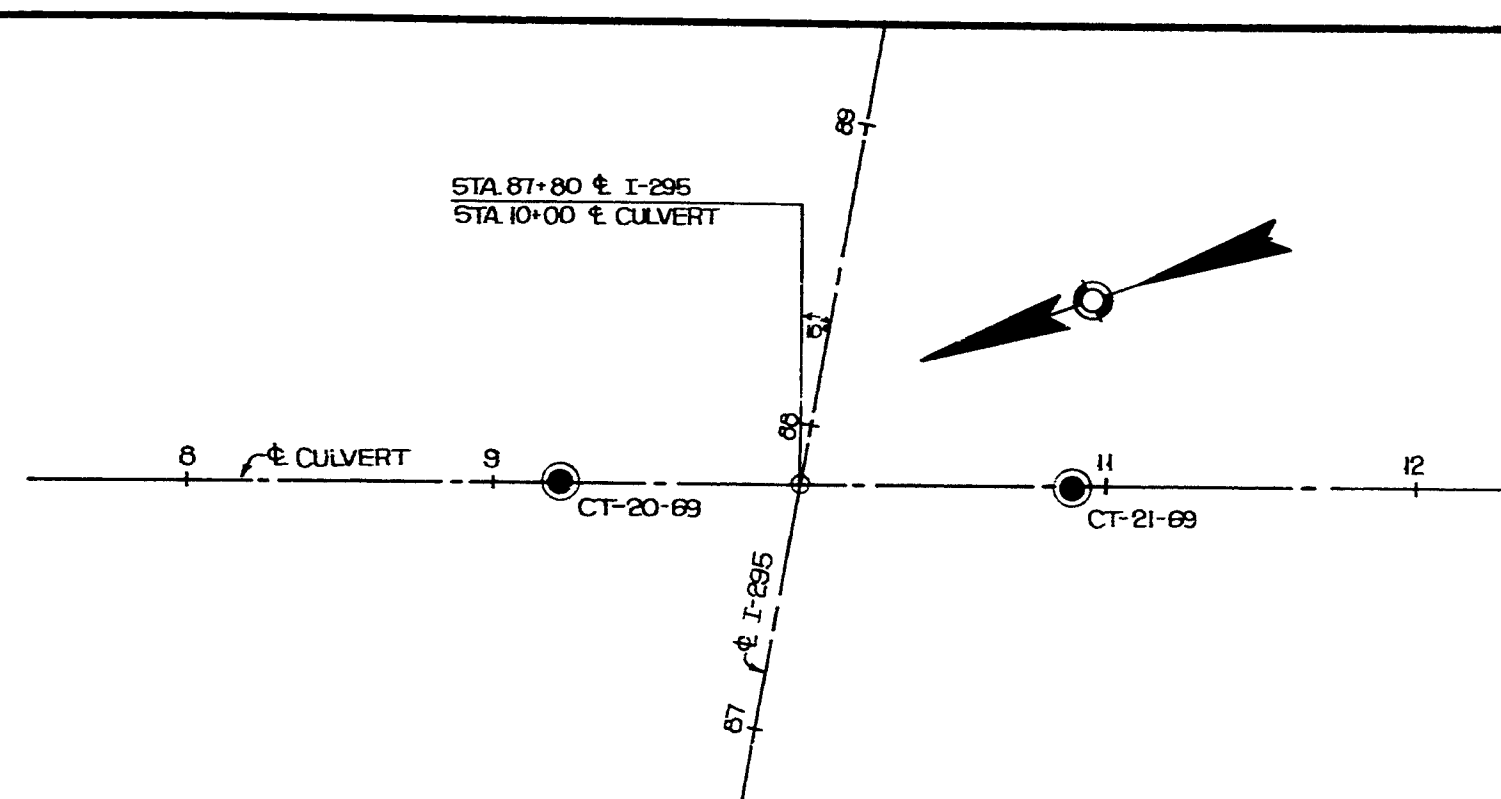
MARK	SIZE	NO.	LENGTH	TYPE	DIMENSIONS				INCR.	LOCATION AND REMARKS
					A	B	C	D		
WING WALLS - ABUTMENT NO. 1										
5WA1	5	60	2'-6	Str.						Stem Dowel
5WA2	5	12	20'-9 to 6'-0	Str.					5 1/2	Stem
5WA3	5	12	10'-9 to 5'-9	Str.					1'-0	Stem 2 Groups of 6
5WA4	5	2	18'-2	103	17'-2	1'-0	5			Stem
5WA5	5	2	7'-9	Str.						"
5WA6	5	18	11'-0	Str.						"
5WA7	5	22	7'-0	Str.						Stem
5WA8	5	10	16'-6 to 2'-0	Str.					3'-7 1/2	Stem 2 Groups of 5
5WA9	5	2	14'-3	103	13'-3	1'-0	2			Stem
5WA10	5	2	15'-8	Str.						"
5WA11	5	2	20'-8	Str.						"
5WA12	5	15	20'-6 to 18'-6	Str.					1 1/2	"
5WA13	5	26	14'-1	Str.						"
5WA14	5	17	15'-6 to 13'-0	Str.					1 1/2	"
5WA15	5	18	15'-8	Str.						"
5WA16	5	16	13'-0 to 10'-9	Str.					1 1/2	"
5WA17	5	16	15'-2	Str.						"
5WA18	5	12	7'-8 to 6'-0	Str.					4	"
5WA19	5	2	8'-0	Str.						"
5WA20	5	2	13'-0	Str.						"
5WA21	5	2	8'-6	Str.						Stem
6WA1	6	8	13'-6	Str.						Stem
6WA2	6	8	10'-3 to 5'-6	Str.					8 1/2	"
6WA3	6	43	5'-0	Str.						"
6WA4	6	11	4'-6	Str.						"
6WA5	6	11	13'-6	Str.						"
6WA6	6	11	5'-0 to 2'-8	Str.					2 1/2	"
6WA7	6	11	9'-6	Str.						"
6WA8	6	11	6'-6 to 4'-3	Str.					2 3/4	Stem
6WA9	6	65	8'-6	Str.						Footling
6WA10	6	36	16'-6	Str.						"
6WA11	6	11	21'-0	Str.						"
6WA12	6	18	10'-0	Str.						"
6WA13	6	8	9'-10	103	1'-6	6'-10	6'-0	1'-6		"
6WA14	6	22	12'-0	Str.						"
6WA15	6	13	10'-9	Str.						"
6WA16	6	9	23'-0	Str.						Footling
6WA17	6	15	6'-0 to 4'-0	Str.					1 1/2	Stem
6WA18	6	9	8'-3	Str.						"
6WA19	6	10	17'-6	Str.						Stem
6WA20	6	8	7'-6	107	1'-6		6'-0			Footling
7WA1	7	7	9'-6	Str.						Stem
7WA2	7	19	7'-3	Str.						Stem
8WA1	8	15	7'-6	Str.						Stem
8WA2	8	20	10'-0	Str.						Footling
9WA1	9	13	10'-9	Str.						Footling
MEDIAN WALL - ABUTMENT NO. 1										
5MA1	5	40	2'-6	Str.						Dowel
5MA2	5	40	21'-1	Str.						Stem
5MA3	5	30	18'-2	Str.						"
5MA4	5	30	20'-3	Str.						Stem
6MA1	6	26	6'-9	Str.						Stem
6MA2	6	40	10'-3	Str.						Footling
6MA3	6	40	20'-3	Str.						Footling
7MA1	7	27	8'-3	Str.						Stem
7MA2	7	26	17'-9	Str.						Stem
8MA1	8	53	6'-9	Str.						Dowel
8MA2	8	40	10'-3	Str.						Footling

MARK	SIZE	NO.	LENGTH	TYPE	DIMENSIONS				INCR.	LOCATION AND REMARKS
					A	B	C	D		
WINGWALLS ~ ABUTMENT NO. 2										
5WB1	5	53	2'-6	Str.						Stem Dowel
5WB2	5	9	19'-0 to 15'-0	Str.					6	Stem
5WB3	5	12	12'-0 to 6'-0	Str.					1'-2 1/2	Stem 2 Groups of 6
5WB4	5	2	15'-3	103	14'-5	10	4 1/2			Stem
5WB5	5	18	8'-1	Str.						Stem
5WB6	5	8	13'-6 to 2'-0	Str.					3'-10	Stem 2 Groups of 4
5WB7	5	2	8'-0	Str.						Stem
5WB8	5	10	7'-0	Str.						"
5WB9	5	23	17'-10 to 4'-8	Str.					1 1/2	"
5WB10	5	2	22'-6	103	21'-8	10	1 1/2			"
5WB11	5	22	22'-1	Str.						"
5WB12	5	26	11'-6 to 8'-0	Str.					1 1/2	"
5WB13	5	2	25'-0	Str.						"
5WB14	5	12	24'-8	Str.						"
5WB15	5	2	18'-0	Str.						"
5WB16	5	2	9'-0	Str.						"
5WB17	5	2	13'-0	Str.						Stem
6WB1	6	6	13'-6	Str.						Stem
6WB2	6	6	8'-8 to 4'-10	Str.					9 1/4	"
6WB3	6	15	6'-3	Str.						"
6WB4	6	15	13'-6	Str.						"
6WB5	6	15	7'-5 to 4'-0	Str.					3	"
6WB6	6	27	5'-0	Str.						"
6WB7	6	14	8'-9	Str.						"
6WB8	6	14	5'-0 to 2'-3	Str.					2 1/2	"
6WB9	6	3	8'-6 to 8'-0	Str.					3	Stem
6WB10	6	38	8'-6	Str.						Footing
6WB11	6	18	19'-6	Str.						"
6WB12	6	10	28'-0	Str.						"
6WB13	6	27	9'-0	Str.						"
6WB14	6	8	9'-10	103	1'-6	6'-10	6'-0	1'-6		"
6WB15	6	22	13'-0	Str.						"
6WB16	6	11	10'-9	Str.						"
6WB17	6	8	30'-0	Str.						"
6WB18	6	8	7'-6	107	1'-6		6'-0			Footing
7WB1	7	5	9'-6	Str.						Stem
7WB2	7	30	6'-3	Str.						Stem
7WB3	7	29	9'-0	Str.						Footing
8WB1	8	11	7'-6	Str.						Stem
9WB1	9	11	10'-9	Str.						Footing
MEDIAN WALL ~ ABUTMENT NO. 2										
5MB1	5	40	2'-6	Str.						Dowel
5MB2	5	40	19'-0	Str.						Stem
5MB3	5	26	18'-2	Str.						"
5MB4	5	26	20'-3	Str.						Stem
6MB1	6	27	8'-3	Str.						Stem
6MB2	6	26	17'-6	Str.						"
6MB3	6	26	4'-6	Str.						Stem
6MB4	6	39	9'-6	Str.						Footing
6MB5	6	40	20'-3	Str.						Footing
7MB1	7	53	7'-3	Str.						Dowel
7MB2	7	40	9'-6	Str.						Footing

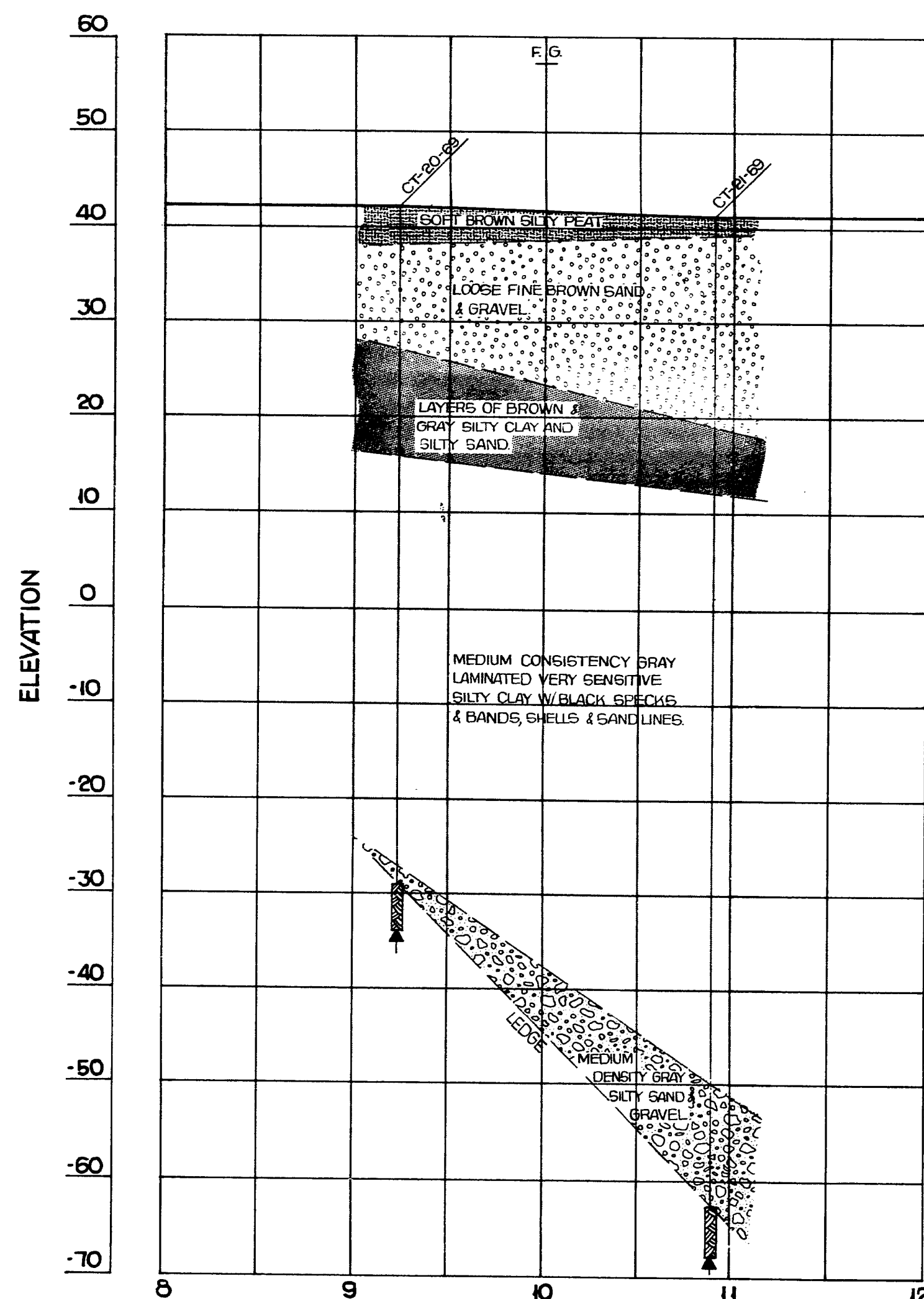
					B. P. R. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	
					1	MAINE	8-240-3	46	103	
MARK	SIZE	NO.	LENGTH	TYPE	DIMENSIONS				INCR.	LOCATION AND REMARKS
					A	B	C	D		
SUPERSTRUCTURE - SOUTHBOUND										
5SS1	5	4	17'-9	Str.						Curb
5SS2	5	10	16'-8	Str.						"
5SS3	5	10	15'-8	Str.						"
5SS4	5	2	18'-2	Str.						"
5SS5	5	2	16'-2	Str.						"
5SS6	5	2	13'-1	Str.						"
5SS7	5	18	14'-8	Str.						"
5SS8	5	1	13'-0	Str.						"
5SS9	5	1	12'-3	Str.						"
5SS10	5	2	16'-5	Str.						"
5SS11	5	2	15'-7	Str.						"
5SS12	5	2	13'-8	Str.						"
5SS13	5	2	17'-2	Str.						"
5SS14	5	462	4'-10	101	1'-0	1'-5	6	6		Curb
5SS15	5	8	36'-9	Str.						End Transverse
5SS16	5	182	19'-0	Str.						Longitudinal
5SS17	5	34	20'-0	Str.						"
5SS18	5	546	30'-0	Str.						"
5SS19	5	97	25'-0	Str.						Longitudinal
5SS20	5	167	30'-0	Str.						Transverse
5SS21	5	167	15'-6	Str.						Transverse
5SS22	5	40	20'-0	Str.						Corners
5SS23	5	42	27'-0	Str.						Transverse
5SS24	5	42	19'3 1/2	Str.					10 3/8	Transverse-2 Groups of 21
5SS25	5	148	26'0 to 2'0	Str.					8	Transverse-4 Groups of 37
5SS26	5	2	7'-2	100	9 1/2	2'-4	5 1/2			End Post
5SS27	5	2	7'-5	100	9 1/2	2'-5 1/2	5 1/2			"
5SS28	5	2	7'-9	100	9 1/2	2'-7 1/2	5 1/2			"
5SS29	5	6	8'-0	100	9 1/2	2'-9	5 1/2			"
5SS30	5	6	8'-9	100	10 1/2	3'-0 1/2	5 1/2			End Post
5SS31	5	167	27'-0	Str.						Transverse
5SS32	5	167	19'-3	Str.						"
5SS33	5	42	22'-10	Str.						Transverse
5SS34	5	42	22'0 to 2'0	Str.					1'-0 1/2	Transverse - 2 Groups of 21
6SS1	6	168	20'-11	110	4'-8 3/4	3'-1 1/4	3'-9 3/4	3'-10 3/4		Transverse-Lap Dimension D
6SS2	6	168	27'-5	111	4'-8 3/4	3'-1 1/4	3'-9 3/4	2'-3 3/4		Transverse-Lap Dimension D
6SS3	6	3	5'-4	101	1'-6	1'-5	6	6		Curb@Lighting Standard
6SS4	6	3	5'-8	104	1'-2	2'-3	1'-7	2'-3		Curb@Lighting Standard
6SS5	6	42	27'-2	Str.						Transverse
6SS6	6	42	19'-5 to 2'0	Str.					10 1/2	Transverse-2 Groups of 21
6SS7	6	42	22'-11	Str.						Transverse
6SS8	6	42	22'11 to 2'0	Str.					1'-0 3/8	Transverse-2 Groups of 21
6SS9	6	148	26'-2 to 2'0	Str.					8 1/2	Transverse-4 Groups of 37

NOTE:
For bent bar details

S.P.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-295	75	103

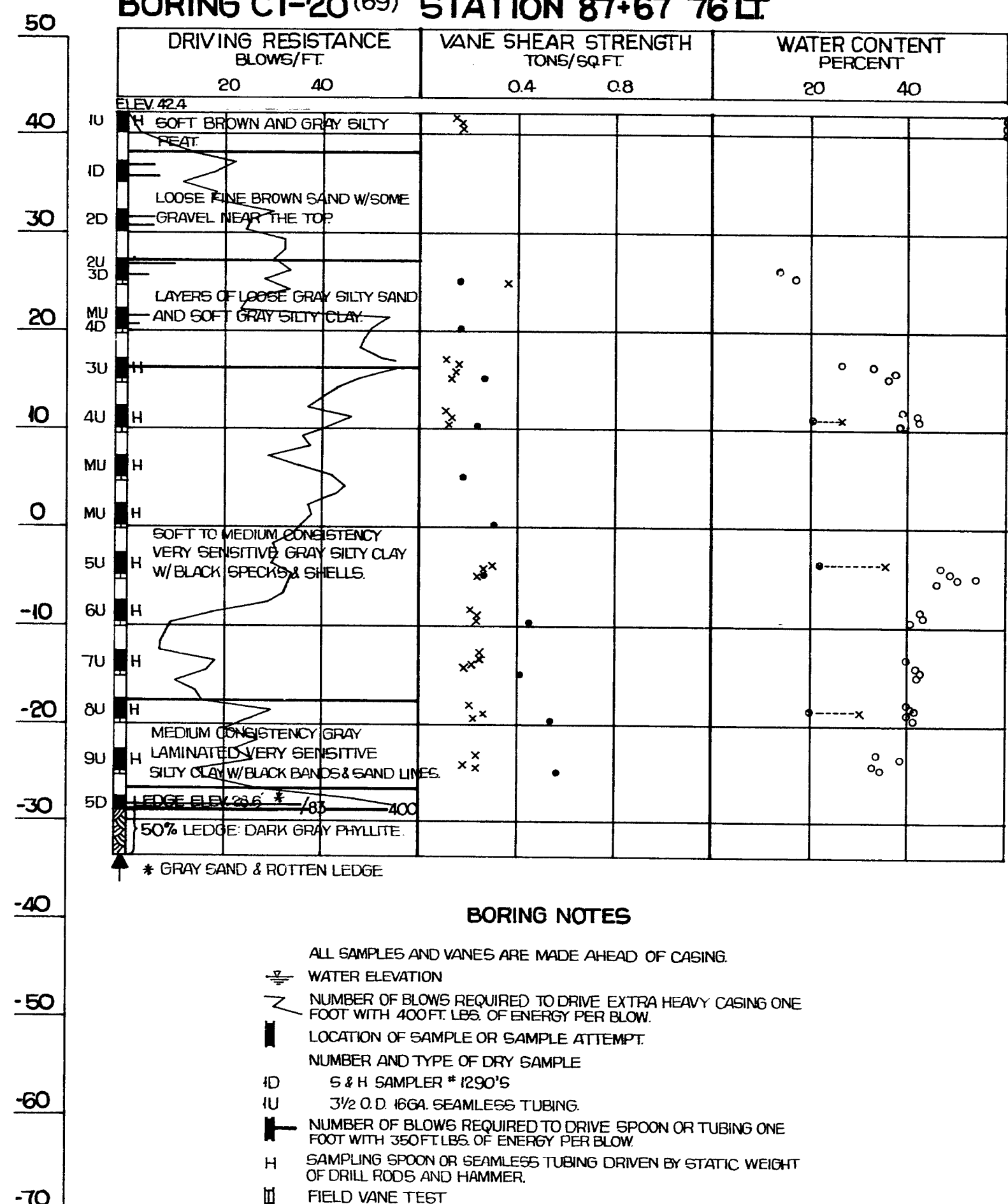


PLAN
SCALE: 1" = 50'



PROFILE
SCALE: 1" = 50' HORIZ.
1" = 10' VERT.

BORING CT-20 (69) STATION 87+67 76' LT



BORING NOTES

- ALL SAMPLES AND VANES ARE MADE AHEAD OF CASING.
- WATER ELEVATION
- NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400 FT. LBS. OF ENERGY PER BLOW.
- LOCATION OF SAMPLE OR SAMPLE ATTEMPT.
- NUMBER AND TYPE OF DRY SAMPLE
- 5 & H SAMPLER # 1290'S
- 3/2 O.D. 16GA. SEAMLESS TUBING
- NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350 FT. LBS. OF ENERGY PER BLOW
- SAMPLING SPOON OR SEAMLESS TUBING DRIVEN BY STATIC WEIGHT OF DRILL RODS AND HAMMER.
- FIELD VANE TEST
- BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA.)
- LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK.

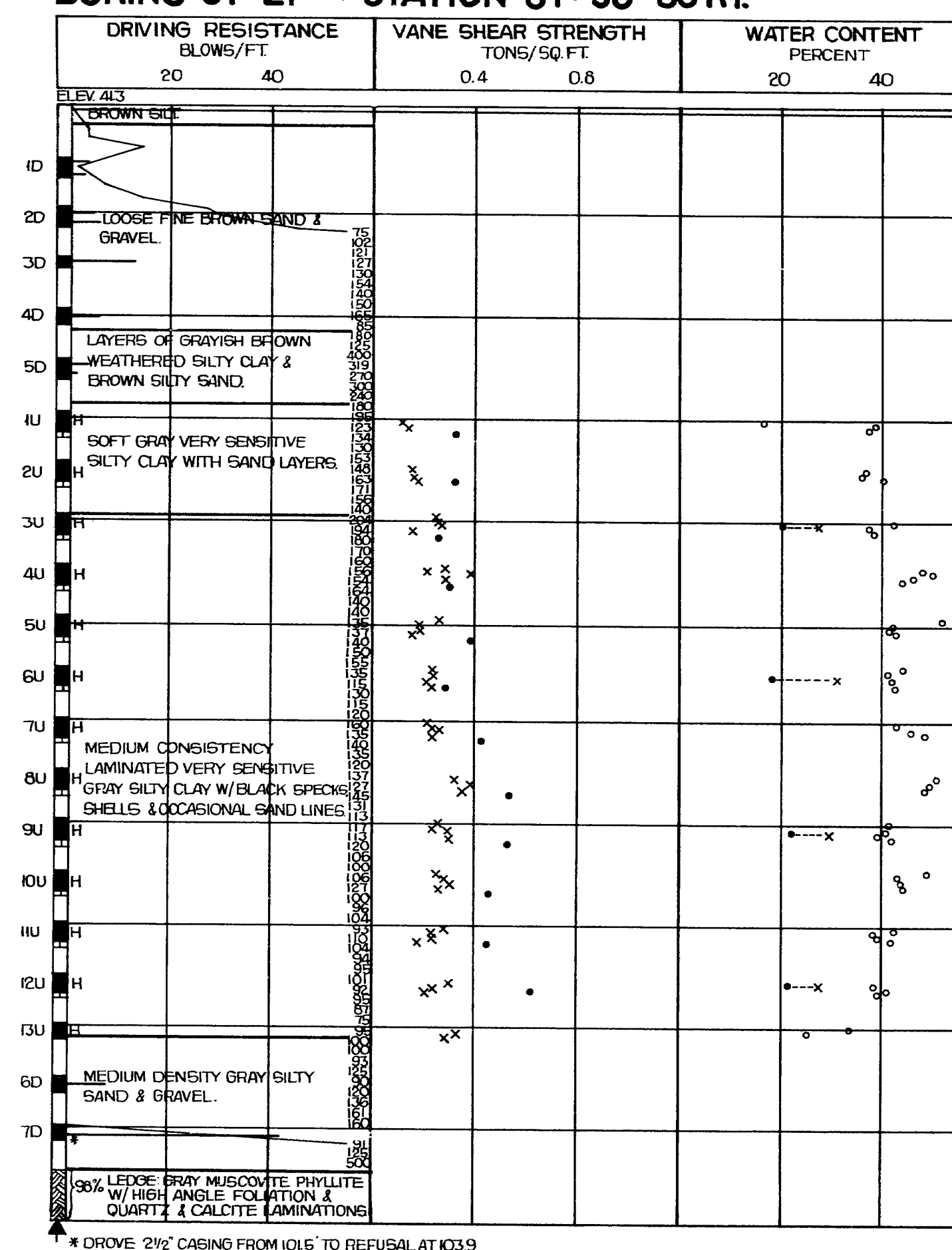
SHEAR NOTES

- FIELD VANE SHEAR STRENGTHS
- x LABORATORY VANE SHEAR STRENGTHS

WATER CONTENT NOTES

- o NATURAL WATER CONTENTS, GIVEN AS PER CENT OF DRY WEIGHT
- o-x PLASTIC AND LIQUID LIMIT
- IGNITION LOSSES ARE GIVEN AS PER CENT OF DRY WEIGHT.

BORING CT-21 (69) STATION 87+96 88' RT.



STATE HIGHWAY COMMISSION

I-295
OVER
RED BROOK
IN THE TOWN OF
SOUTH PORTLAND
CUMBERLAND COUNTY
FOUNDATION SURVEY

SHEET OF AUGUSTA, MAINE

Scarborough - SOUTH PORTLAND 1-295